Mesh Model (MMDL)

***Bluetooth*® Test Suite**

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Contents

1 Scope

This Bluetooth document contains the Test Suite Structure (TSS) and test cases to test the implementation of the Bluetooth Mesh Model Specification with the objective to provide a high probability of air interface interoperability between the tested implementation and other manufacturers' Bluetooth devices.

2 References, definitions, and abbreviations

2.1 References

This document incorporates provisions from other publications by dated or undated reference. These references are cited at the appropriate places in the text, and the publications are listed hereinafter. Additional definitions and abbreviations can be found in [1], [2], [3], and [4].

[1] Test Strategy and Terminology Overview

[2] Bluetooth Core Specification, Version 4.0 or later

[3] Mesh Profile Specification, Version 1.0 or later

[4] Mesh Model Specification, Version 1.0 or later

[5] ICS Proforma for Mesh Model

[6] Mesh Device Properties

2.2 Definitions

In this Bluetooth document, the definitions from [1], [2], [3], and [4] apply.

2.3 Abbreviations

In this Bluetooth document, the definitions, acronyms, and abbreviations from [1], [2], [3], and [4] apply.

3 Test Suite Structure (TSS)

3.1 Overview

The Mesh Model Specification requires the support of the Mesh Profile Specification [3].

3.2 Test Strategy

The test objectives are to verify functionality of the Mesh Model Specification within a Bluetooth Host and enable interoperability between Bluetooth Hosts on different devices. The testing approach covers mandatory and optional requirements in the specification and matches these to the support of the IUT as described in the ICS. Any defined test herein is applicable to the IUT if the ICS logical expression defined in the Test Case Mapping Table (TCMT) evaluates to true.

The test equipment provides an implementation of the Radio Controller and the parts of the Host needed to perform the test cases defined in this Test Suite. A Lower Tester acts as the IUT's peer device and interacts with the IUT over-the-air interface. The configuration, including the IUT, needs to implement similar capabilities to communicate with the test equipment. For some test cases, it is necessary to stimulate the IUT from an Upper Tester. In practice, this could be implemented as a special test interface, a Man Machine Interface (MMI), or another interface supported by the IUT.

The Test Suite contains Valid Behavior (BV) tests complemented with Invalid Behavior (BI) tests where required. The test coverage mirrored in the Test Suite Structure is the result of a process that started with catalogued specification requirements that were logically grouped and assessed for testability enabling coverage in defined test purposes.

3.2.1 IUT Response and No Response Timings

The IXIT file defines a value denoted as *IUT Response Timeout*, which is the maximum amount of time between an acknowledged message sent by the Lower Tester and the response from the IUT.

When the Lower Tester sends an acknowledged message to the IUT, the IUT must respond with the appropriate message within *IUT Response Timeout*. Otherwise, the test ends in failure.

When the Lower Tester sends an unacknowledged message to the IUT, the Lower Tester scans for *IUT Response Timeout*. If the IUT sends a response during this time interval, the test ends in failure.

A status message sent by the IUT that matches a request message sent by the Lower Tester is considered a response only if the DST field of the status message and the SRC field of the request message have the same value (the unicast address of the Lower Tester). A status message published to a group or a virtual address is considered an unsolicited message, therefore it does not count as a response.

3.2.2 Power-Up Behavior Tests

Some test cases verify that the IUT maintains specific data in the non-volatile memory and that it restores the data correctly during a power-up sequence, as configured by other Mesh nodes.

To run such test cases, the IUT must be capable to reset when commanded by the Upper Tester and to continue the test procedure after the power up sequence.

3.2.3 Common Behaviors and Procedures

This Test Suite defines common behaviors and procedures in the form of common test cases.

These common test cases are described using parametrized message names and values, known as macros. Macros are written in a unique underscore-and-uppercase notation, e.g.:

- _SET_ACKNOWLEDGED_ stands for an acknowledged SET message name.
- _PARAM_GET_ stands for the parameters of a GET message.
- _INITIAL_CONDITION_ stands for a set of initial conditions.

For each Model-state combination that defines a behavior or procedure that can be described using a common test case, an associated table defines the initial condition, message names and lists of parameters.

A table in a certain subsection is always associated with the common test procedure described in its enclosing section. For example, the tables from 4.4.1.1 to 4.4.1.77 are associated with the common test procedure from 4.4.1.

Each table is then referenced by a Model test case that needs to be executed as part of the test plan. To execute such a test case, the common test case is run by replacing the macros with the messages and parameters described by the associated table.

3.2.4 Table Notation

The “N/A” entry in a table indicates:

- For _INITIAL_CONDITION_: there is no special initial condition, the device is in an idle state, not executing any behavior, and ready to process requests from the Upper Tester or to receive messages from the Lower Tester.
- For message names (such as _GET_ or _SET_ACKNOWLEDGED_): the test procedure steps associated with this message are not executed (either because the message is not supported by the Model or it does not exist).
- For parameter lists (such as _PARAM_GET_): the associated message has no parameters or was marked as “N/A”.
- For a field name in a parameter list: this is an optional message field, and:
  - If this is the parameter of a message sent by the Lower Tester, then the Lower Tester will omit this field.
  - If this is the parameter of a message sent by the IUT, then the IUT is expected to omit this field (otherwise the test ends in failure).

The parameter fields from messages sent by the Lower Tester or by the IUT are described either with a numerical value or with a range of values.

To indicate that the Lower Tester randomly chooses a field value from a set of valid values, or that the IUT is expected to set a field to any value from a set of valid values, the following range notation is used, e.g.: “*{0x00-0x10, 0x12}*”, which is interpreted as “any value from the interval 0x00-0x10, and additionally the value 0x12”.

If a parameter field is described using a range of values, it is often correlated with the values sent or received in a previous message during the test procedure.

For example, when the Lower Tester changes the value of a state on the IUT, the state value it has previously read is excluded from the range of values that the Lower Tester chooses from, e.g.: “*Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level)*”, which is interpreted as “the Level field is set

to any value within the interval 0x0000-0xFFFF, inclusive, excluding the value of the Present Level field from the parameters described by _PARAM_STATUS_0_”.

To indicate a conversion between a field value and a human-readable parameter from an Upper Tester command or report, the “==” symbol is used.

For example, if the Upper Tester sends a command to the IUT containing the parameter “*Transition Time = {Immediate, 100ms-7.5h, Unknown}*”, and the IUT is expected to set a field value based on that parameter, the following notation is used: “*Transition Time = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Transition Time)*”, which is interpreted as “the IUT is expected to set the Transition Time field to a one-octet value equivalent to the Transition Time parameter from the Upper Tester command described by _MMI_PARAM_ORDER_”.

When reading an expression that described a field value, the operators “=”, “!=”, “==”, “<” and “>” have the same priority, therefore the expression is always evaluated from left to right.

If the same macro appears multiple times in a common test case procedure, it has the same value in all occurrences and therefore it has a single entry in the table of values.

3.2.5 Multiple Elements

While the ICS [5] specifies the complete list of Models and Features supported by the IUT, it is possible that more than one Element of the IUT supports the same Model and/or Feature. In such a case, the Lower Tester chooses one of the Elements supporting the Model/Feature and executes the required test, as specified by the Test Case Mapping Table, for that Element.

If a Model has been successfully tested on a single Element, it is considered sufficient proof of conformance to the Mesh Model Specification, and the same Model does not have to be tested again on another Element.

3.2.6 Properties

Some test cases defined in this Test Suite require the Lower Tester to verify the format of Property values returned by the IUT.

To perform a complete verification of the field lengths and values associated with specific Property IDs, the Characteristic Properties document ([6]) is consulted.

3.3 Test groups

The following test groups have been defined:

- General Tests (Section 4.4)
- Generic Server Models (Section 4.4.3)
- Generic Client Models (Section 4.6)
- Sensor Server Models (Section 4.7)
- Sensor Client Models (Section 4.8)
- Time and Scene Server Models (Section 4.9)
- Time and Scene Client Models (Section 4.10)
- Lighting Server Models (Section 4.11)

- Lighting Control Models (Section 4.12)
- Lighting Client Models (Section 4.13)

4 Test cases (TC)

4.1 Introduction

4.1.1 Test case identification conventions

Test cases are assigned unique identifiers per the conventions in [1]. The convention used here is: **<spec abbreviation>/<IUT role>/**<class>/**<feat>**/<func>/<subfunc>/<cap>/**<xx>-<nn>-<y>**.

Identifier Abbreviation	**Spec Identifier <spec abbreviation>**
MMDL	Mesh Model Specification
Identifier Abbreviation	**Role Identifier <IUT role>**
CL	Client Role
SR	Server Role
Identifier Abbreviation	**Model Identifier <model>**
GAP	Generic Admin Property Server
GBAT	Generic Battery Server and Client
GCP	Generic Client Property Server
GDTT	Generic Default Transition Time Server and Client
GLOC	Generic Location Server and Client
GLOCS	Generic Location Setup Server
GLV	Generic Level Server and Client
GMP	Generic Manufacturer Property Server
GOO	Generic OnOff Server and Client
GPL	Generic Power Level Server and Client
GPLS	Generic Power Level Setup Server
GPOO	Generic Power OnOff Server and Client
GPOOS	Generic Power OnOff Setup Server
GPR	Generic Property Client
GUP	Generic User Property Server
LCTL	Light CTL Server and Client
LCTLS	Light CTL Setup Server
LCTLT	Light CTL Temperature Server
LHSL	Light HSL Server and Client
LHSLH	Light HSL Hue Server
LHSLSA	Light HSL Saturation Server
LHSLSE	Light HSL Setup Server
LLC	Light LC Server and Client
LLCLOO	Light LC Light OnOff Server
LLCS	Light LC Setup Server
LLN	Light Lightness Server and Client
LLNS	Light Lightness Setup Server
LXYL	Light xyL Server and Client

Identifier Abbreviation	Spec Identifier <spec abbreviation>
LXYS	Light xyL Setup Server
SCE	Scene Server and Client
SCES	Scene Setup Server
SCH	Scheduler Server and Client
SCHS	Scheduler Setup Server
SNR	Sensor Server and Client
SNRS	Sensor Setup Server
TIM	Time Server and Client
TIMS	Time Setup Server

Table 4.1: Mesh Model TC feature naming conventions

4.1.2 Conformance

When conformance is claimed for a particular specification, all capabilities are to be supported in the specified manner. The mandated tests from this Test Suite depend on the capabilities to which conformance is claimed.

The Bluetooth Qualification Program may employ tests to verify implementation robustness. The level of implementation robustness that is verified varies from one specification to another and may be revised for cause based on interoperability issues found in the market.

Such tests may verify:

- That claimed capabilities may be used in any order and any number of repetitions not excluded by the specification
- That capabilities enabled by the implementations are sustained over durations expected by the use case
- That the implementation gracefully handles any quantity of data expected by the use case
- That in cases where more than one valid interpretation of the specification exists, the implementation complies with at least one interpretation and gracefully handles other interpretations
- That the implementation is immune to attempted security exploits

A single execution of each of the required tests is required to constitute a Pass verdict. However, it is noted that to provide a foundation for interoperability, it is necessary that a qualified implementation consistently and repeatedly pass any of the applicable tests.

In any case, where a member finds an issue with the test plan generated by the Bluetooth SIG qualification tool, with the test case as described in the Test Suite, or with the test system utilized, the member is required to notify the responsible party via an erratum request such that the issue may be addressed.

4.1.3 Pass/Fail verdict conventions

Each test case has an Expected Outcome section. The IUT is granted the Pass verdict when all the detailed pass criteria conditions within the Expected Outcome section are met.

The convention in this Test Suite is that, unless there is a specific set of fail conditions outlined in the test case, the IUT fails the test case as soon as one of the pass criteria conditions cannot be met. If this occurs, the outcome of the test is a Fail verdict.

4.2 Common Server Model Behaviors

This section contains tests that verify common IUT functionality related to Server Models.

For each typical Server Model behavior, a common test case is defined.

For each state supporting a behavior, the common test case is run with the values defined in the associated table.

Each Server Model supporting a state defines a new test case, with a unique TCID, which references the common test case for that state.

4.2.1 Common State Get/Set/Status Behavior

- Test Purpose

  This test procedure verifies common Get/Set/Status behavior for a Server Model on the IUT supporting the _STATE_.

- Initial Condition

  If the values of the _STATE_ are restricted by a bound “range” state, then the latter is set to the maximum possible range supported by the IUT, and the Lower Tester will not try to set the _STATE_ values outside this range.

  If the model being tested supports publishing for the _STATE_, (as indicated by the value of the PUBLISHED parameter below the _STATUS_ parameter in each table), the IUT is configured to publish to a random group or virtual address, and the message publishing expectations in the test procedure will apply.

  If the model being tested supports subscription, the IUT is subscribed to a random group or virtual address.

  Additional initial conditions on the IUT, LT or UT are defined by _INITIAL_CONDITION_.

- Test Procedure

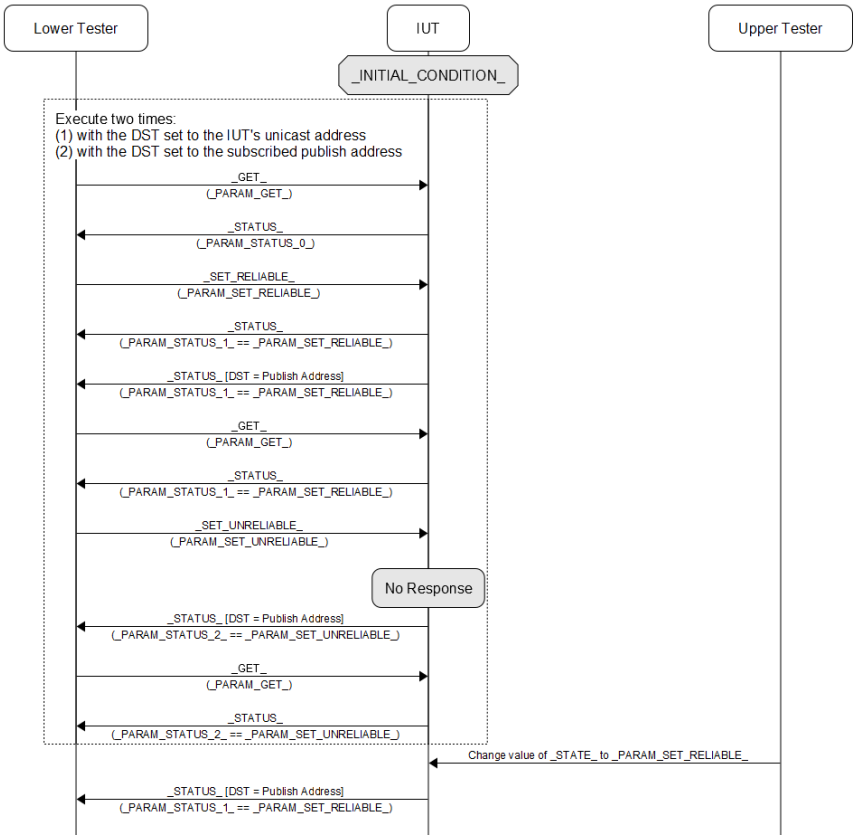

Figure 4.1: Test procedure for the Common State Get/Set/Status Behavior

1. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
2. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.
3. If the state defines a _SET_ACKNOWLEDGED_ message, continue with step 4, else go to step 8.
4. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_ACKNOWLEDGED_.
5. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_. If applicable, the IUT publishes the same message, with the same parameters, to the configured publish address.
6. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
7. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_.
8. If the state defines a _SET_UNACKNOWLEDGED_ message, continue with step 9, else go to step 13.
9. The Lower Tester sends a _SET_UNACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_UNACKNOWLEDGED_.
10. The Lower Tester expects no response message from the IUT. If applicable, the IUT publishes a _STATUS_ message, with parameters defined by _PARAM_STATUS_2_, to the configured publish address.

11. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
12. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_2_.
13. If the model under test does not support subscription, then skip this step; otherwise, repeat steps 1–12, but in the DST field of all messages sent by the Lower Tester, use the group address to which the IUT has been subscribed for the model under test.
14. If the IXIT file indicates that the IUT supports out-of-band triggered state changes, and if the IUT has been configured to publish for the model and state being tested, then the Upper Tester orders the IUT to change the _STATE_ to the value described by _PARAM_SET_ACKNOWLEDGED_, and the Lower Tester expects the IUT to publish a _STATUS_ message, with parameters defined by _PARAM_STATUS_1_, to the configured publish address. Otherwise, skip this step.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

  In steps 5 and 7, if applicable, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_1_.

  In step 10, the IUT does not send any message.

  In step 12, if applicable, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_2_.

  All of the above apply also when the group address is used as DST instead of the unicast address of the IUT.

  If the IUT has been configured to publish for the model being tested, then, in steps 5 (if applicable), 10 (if applicable), and 13 (if applicable), the IUT publishes the _STATUS_ message to the configured publish address, with parameters containing the updated state value.

4.2.1.1 Generic OnOff State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Generic OnOff Get
_PARAM_GET_	N/A
STATUS	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present OnOff = {0x00-0x01} Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	OnOff = {0x00-0x01} != _PARAM_STATUS_0_ (Present OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present OnOff = _PARAM_SET_ACKNOWLEDGED_ (OnOff) Target OnOff = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnOff = {0x00-0x01} != _PARAM_STATUS_1_ (Present OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present OnOff = _PARAM_SET_UNACKNOWLEDGED_ (OnOff) Target OnOff = N/A Remaining Time = N/A

Table 4.2: Common Get/Set/Status Behavior Values for the Generic OnOff State

4.2.1.2 Generic Level State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Generic Level Get
_PARAM_GET_	N/A
STATUS	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Level = {0x0000-0xFFFF} Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_ACKNOWLEDGED_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Level = _PARAM_SET_ACKNOWLEDGED_ (Level) Target Level = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Level = _PARAM_SET_UNACKNOWLEDGED_ (Level) Target Level = N/A Remaining Time = N/A

Table 4.3: Common Get/Set/Status Behavior Values for the Generic Level State

4.2.1.3 Generic Default Transition Time State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Default Transition Time state
_INITIAL_CONDITION_	N/A
GET	Generic Default Transition Time Get
_PARAM_GET_	N/A
STATUS	Generic Default Transition Time Status
PUBLISHED	NO
_PARAM_STATUS_0_	Transition Time = {0x00-0xFF}
_SET_ACKNOWLEDGED_	Generic Default Transition Time Set
_PARAM_SET_ACKNOWLEDGED_	Transition Time = {0b00-0b11} || {0b000000-0b111110} != _PARAM_STATUS_0_ (Transition Time)
_PARAM_STATUS_1_	Transition Time = _PARAM_SET_ACKNOWLEDGED_ (Transition Time)
_SET_UNACKNOWLEDGED_	Generic Default Transition Time Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Transition Time = {0b00-0b11} || {0b000000-0b111110} != _PARAM_STATUS_1_ (Transition Time)
_PARAM_STATUS_2_	Transition Time = _PARAM_SET_UNACKNOWLEDGED_ (Transition Time)

Table 4.4: Common Get/Set/Status Behavior Values for the Generic Default Transition Time State

4.2.1.4 Generic OnPowerUp State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
GET	Generic OnPowerUp Get
_PARAM_GET_	N/A
STATUS	Generic OnPowerUp Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	OnPowerUp = {0x00-0x02}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.5: Common Get/Status Behavior Values for the Generic OnPowerUp State

4.2.1.5 Generic OnPowerUp State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
GET	Generic OnPowerUp Get
_PARAM_GET_	N/A
STATUS	Generic OnPowerUp Status
PUBLISHED	YES
_PARAM_STATUS_0_	OnPowerUp = {0x00-0x02}
_SET_ACKNOWLEDGED_	Generic OnPowerUp Set
_PARAM_SET_ACKNOWLEDGED_	OnPowerUp = {0x00-0x02} != _PARAM_STATUS_0_ (OnPowerUp)
_PARAM_STATUS_1_	OnPowerUp = _PARAM_SET_ACKNOWLEDGED_ (OnPowerUp)
_SET_UNACKNOWLEDGED_	Generic OnPowerUp Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnPowerUp = {0x00-0x02} != _PARAM_STATUS_1_ (OnPowerUp)
_PARAM_STATUS_2_	OnPowerUp = _PARAM_SET_UNACKNOWLEDGED_ (OnPowerUp)

Table 4.6: Common Get/Set/Status Behavior Values for the Generic OnPowerUp State

4.2.1.6 Generic Power Actual State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Generic Power Level Get
_PARAM_GET_	N/A
STATUS	Generic Power Level Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Present Power = {0x0000-0xFFFF} Target Power = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Power = _PARAM_SET_ACKNOWLEDGED_ (Power) Target Power = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Generic Power Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Power = _PARAM_SET_UNACKNOWLEDGED_ (Power) Target Power = N/A Remaining Time = N/A

Table 4.7: Common Get/Set/Status Behavior Values for the Generic Power Actual State

4.2.1.7 Generic Power Last State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Last state
_INITIAL_CONDITION_	N/A
GET	Generic Power Last Get
_PARAM_GET_	N/A
STATUS	Generic Power Last Status
PUBLISHED	NO
_PARAM_STATUS_0_	Power = {0x0001-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.8: Common Get/Status Behavior Values for the Generic Power Last State

4.2.1.8 Generic Power Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Default state
_INITIAL_CONDITION_	N/A
GET	Generic Power Default Get
_PARAM_GET_	N/A
STATUS	Generic Power Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Power = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.9: Common Get/Status Behavior Values for the Generic Power Default State

4.2.1.9 Generic Power Default State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Default state
_INITIAL_CONDITION_	N/A
GET	Generic Power Default Get
_PARAM_GET_	N/A
STATUS	Generic Power Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Power = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Generic Power Default Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Power)
_PARAM_STATUS_1_	Power = _PARAM_SET_ACKNOWLEDGED_ (Power)
_SET_UNACKNOWLEDGED_	Generic Power Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Power)
_PARAM_STATUS_2_	Power = _PARAM_SET_UNACKNOWLEDGED_ (Power)

Table 4.10: Common Get/Set/Status Behavior Values for the Generic Power Default State

4.2.1.10 Generic Power Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A
GET	Generic Power Range Get
_PARAM_GET_	N/A
STATUS	Generic Power Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.11: Common Get/Status Behavior Values for the Generic Power Range State

4.2.1.11 Generic Power Range State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A
GET	Generic Power Range Get
_PARAM_GET_	N/A
STATUS	Generic Power Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Generic Power Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0xFFFF} < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_1_	Status = 0x00 Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)
_SET_UNACKNOWLEDGED_	Generic Power Range Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} != _PARAM_STATUS_1_ (Range Min) *and* > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0xFFFF} != _PARAM_STATUS_1_ (Range Max) *and* < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_2_	Status = 0x00 Range Min = _PARAM_SET_UNACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_UNACKNOWLEDGED_ (Range Max)

Table 4.12: Common Get/Set/Status Behavior Values for the Generic Power Range State

4.2.1.12 Generic Battery State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Battery state
_INITIAL_CONDITION_	N/A
GET	Generic Battery Get
_PARAM_GET_	N/A
STATUS	Generic Battery Status
PUBLISHED	YES
_PARAM_STATUS_0_	Battery Level = {0x00-0x64, 0xFF} Time to Discharge = {0x000000-0xFFFFFF} Time to Charge = {0x000000-0xFFFFFF} Flags = {0b000000-0b111111} || {0b01-0b11}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.13: Common Get/Status Behavior Value for the Generic Battery State

4.2.1.13 Generic Location Global State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Global state
_INITIAL_CONDITION_	N/A
GET	Generic Location Global Get
_PARAM_GET_	N/A
STATUS	Generic Location Global Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Global Latitude = {0x00000000-0xFFFFFFFF} Global Longitude = {0x00000000-0xFFFFFFFF} Global Altitude = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.14: Common Get/Status Behavior Values for the Generic Location Global State

4.2.1.14 Generic Location Global State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Global state
_INITIAL_CONDITION_	N/A
GET	Generic Location Global Get
_PARAM_GET_	N/A
STATUS	Generic Location Global Status
PUBLISHED	YES
_PARAM_STATUS_0_	Global Latitude = {0x00000000-0xFFFFFFFF} Global Longitude = {0x00000000-0xFFFFFFFF} Global Altitude = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Generic Location Global Set
_PARAM_SET_ACKNOWLEDGED_	Global Latitude = {0x00000000-0xFFFFFFFF} != _PARAM_STATUS_0_ (Global Latitude) Global Longitude = {0x00000000-0xFFFFFFFF} != _PARAM_STATUS_0_ (Global Longitude) Global Altitude = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Global Altitude)
_PARAM_STATUS_1_	Global Latitude = _PARAM_SET_ACKNOWLEDGED_ (Global Latitude) Global Longitude = _PARAM_SET_ACKNOWLEDGED_ (Global Longitude) Global Altitude = _PARAM_SET_ACKNOWLEDGED_ (Global Altitude)
_SET_UNACKNOWLEDGED_	Generic Location Global Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Global Latitude = {0x00000000-0xFFFFFFFF} != _PARAM_STATUS_1_ (Global Latitude) Global Longitude = {0x00000000-0xFFFFFFFF} != _PARAM_STATUS_1_ (Global Longitude) Global Altitude = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Global Altitude)
_PARAM_STATUS_2_	Global Latitude = _PARAM_SET_UNACKNOWLEDGED_ (Global Latitude) Global Longitude = _PARAM_SET_UNACKNOWLEDGED_ (Global Longitude) Global Altitude = _PARAM_SET_UNACKNOWLEDGED_ (Global Altitude)

Table 4.15: Common Get/Set/Status Behavior Values for the Generic Location Global State

4.2.1.15 Generic Location Local State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Local state
_INITIAL_CONDITION_	N/A
GET	Generic Location Local Get
_PARAM_GET_	N/A
STATUS	Generic Location Local Status
PUBLISHED	NO
_PARAM_STATUS_0_	Local North = {0x0000-0xFFFF} Local East = {0x0000-0xFFFF} Local Altitude = {0x0000-0xFFFF} Floor Number = {0x00-0xFF} Uncertainty = {0x00-0x01} || {0x00-0xFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.16: Common Get/Status Behavior Values for the Generic Location Local State

4.2.1.16 Generic Location Local State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Local state
_INITIAL_CONDITION_	N/A
GET	Generic Location Local Get
_PARAM_GET_	N/A
STATUS	Generic Location Local Status
PUBLISHED	YES
_PARAM_STATUS_0_	Local North = {0x0000-0xFFFF} Local East = {0x0000-0xFFFF} Local Altitude = {0x0000-0xFFFF} Floor Number = {0x00-0xFF} Uncertainty = {0x00-0x01} || {0x00-0xFF}
_SET_ACKNOWLEDGED_	Generic Location Local Set
_PARAM_SET_ACKNOWLEDGED_	Local North = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Local North) Local East = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Local East) Local Altitude = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Local Altitude) Floor Number = {0x00-0xFF} != _PARAM_STATUS_0_ (Floor Number) Uncertainty = {0x00-0xFF} || {0x00-0xFF} != _PARAM_STATUS_0_ (Uncertainty)
_PARAM_STATUS_1_	Local North = _PARAM_SET_ACKNOWLEDGED_ (Local North) Local East = _PARAM_SET_ACKNOWLEDGED_ (Local East) Local Altitude = _PARAM_SET_ACKNOWLEDGED_ (Local Altitude) Floor Number = _PARAM_SET_ACKNOWLEDGED_ (Floor Number) Uncertainty = _PARAM_SET_ACKNOWLEDGED_ (Uncertainty), ignoring RFU bits
_SET_UNACKNOWLEDGED_	Generic Location Local Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Local North = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Local North) Local East = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Local East) Local Altitude = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Local Altitude) Floor Number = {0x00-0xFF} != _PARAM_STATUS_1_ (Floor Number) Uncertainty = {0x00-0xFF} || {0x00-0xFF} != _PARAM_STATUS_1_ (Uncertainty)
_PARAM_STATUS_2_	Local North = _PARAM_SET_UNACKNOWLEDGED_ (Local North) Local East = _PARAM_SET_UNACKNOWLEDGED_ (Local East) Local Altitude = _PARAM_SET_UNACKNOWLEDGED_ (Local Altitude) Floor Number = _PARAM_SET_UNACKNOWLEDGED_ (Floor Number) Uncertainty = _PARAM_SET_UNACKNOWLEDGED_ (Uncertainty), ignoring RFU bits

Table 4.17: Common Get/Set/Status Behavior Values for the Generic Location Local State

4.2.1.17 Generic User Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic User Properties state
_INITIAL_CONDITION_	N/A
GET	Generic User Properties Get
_PARAM_GET_	N/A
STATUS	Generic User Properties Status
PUBLISHED	NO
_PARAM_STATUS_0_	User Property IDs = Array<{*Property ID*}>
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.18: Common Get/Status Behavior Values for the Generic User Properties State

4.2.1.18 Generic User Property State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	The Generic User Properties state contains the property with the Property ID denoted as *PID*.
GET	Generic User Property Get
_PARAM_GET_	User Property ID = *PID*
STATUS	Generic User Property Status
PUBLISHED	NO
_PARAM_STATUS_0_	User Property ID = *PID* User Access = {0x01-0x03} If User Access = 0x02 User Property Value = N/A Else User Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic User Property Set
_PARAM_SET_ACKNOWLEDGED_	User Property ID = *PID* User Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (User Property Value)
_PARAM_STATUS_1_	User Property ID = *PID* User Access = _PARAM_STATUS_0_ (User Access) If User Access = 0x01 User Property Value = N/A in response to _SET_ACKNOWLEDGED_, then _PARAM_STATUS_0_ (User Property Value) in response to _GET_ Else User Property Value = _PARAM_SET_ACKNOWLEDGED_ (User Property Value)
_SET_UNACKNOWLEDGED_	Generic User Property Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	User Property ID = *PID* User Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (User Property Value)
_PARAM_STATUS_2_	User Property ID = *PID* User Access = _PARAM_STATUS_1_ (User Access) If User Access = 0x01 User Property Value = _PARAM_STATUS_0_ (User Property Value) Else User Property Value = _PARAM_SET_UNACKNOWLEDGED_ (User Property Value)

Table 4.19: Common Get/Set/Status Behavior Values for the Generic User Property State

4.2.1.19 Generic Admin Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Admin Properties state
_INITIAL_CONDITION_	N/A
GET	Generic Admin Properties Get
_PARAM_GET_	N/A
STATUS	Generic Admin Properties Status
PUBLISHED	NO
_PARAM_STATUS_0_	Admin Property IDs = Array<{*Property ID*}>
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.20: Common Get/Status Behavior Values for the Generic Admin Properties State

4.2.1.20 Generic Admin Property State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	The Generic Admin Properties state contains the property with the Property ID denoted as PID.
GET	Generic Admin Property Get
_PARAM_GET_	Admin Property ID = *PID*
STATUS	Generic Admin Property Status
PUBLISHED	NO
_PARAM_STATUS_0_	Admin Property ID = *PID* Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic Admin Property Set
_PARAM_SET_ACKNOWLEDGED_	Admin Property ID = *PID* Admin User Access = {0x00-0x03} != _PARAM_STATUS_0_ (Admin User Access) Admin Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Admin Property Value)
_PARAM_STATUS_1_	Admin Property ID = *PID* Admin User Access = _PARAM_SET_ACKNOWLEDGED_ (Admin User Access) Admin Property Value = _PARAM_SET_ACKNOWLEDGED_ (Admin Property Value)
_SET_UNACKNOWLEDGED_	Generic Admin Property Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Admin Property ID = *PID* Admin User Access = {0x00-0x03} != _PARAM_STATUS_1_ (Admin User Access) Admin Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Admin Property Value)
_PARAM_STATUS_2_	Admin Property ID = PID Admin User Access = _PARAM_SET_UNACKNOWLEDGED_ (Admin User Access) Admin Property Value = _PARAM_SET_UNACKNOWLEDGED_ (Admin Property Value)

Table 4.21: Common Get/Set/Status Behavior Values for the Generic Admin Property State

4.2.1.21 Generic Manufacturer Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Properties state
_INITIAL_CONDITION_	N/A
GET	Generic Manufacturer Properties Get
_PARAM_GET_	N/A
STATUS	Generic Manufacturer Properties Status
PUBLISHED	NO
_PARAM_STATUS_0_	Manufacturer Property IDs = Array<{*Property ID*}>
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.22: Common Get/Status Behavior Values for the Generic Manufacturer Properties State

4.2.1.22 Generic Manufacturer Property State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	The Generic Manufacturer Properties state contains the property with the Property ID denoted as *PID*.
GET	Generic Manufacturer Property Get
_PARAM_GET_	Manufacturer Property ID = *PID*
STATUS	Generic Manufacturer Property Status
PUBLISHED	NO
_PARAM_STATUS_0_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x00-0x01} Manufacturer Property Value = <variable> (valid format, see [6])

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_	Generic Manufacturer Property Set
_PARAM_SET_ACKNOWLEDGED_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x00-0x01} != _PARAM_STATUS_0_ (Manufacturer User Access)
_PARAM_STATUS_1_	Manufacturer Property ID = *PID* Manufacturer User Access = _PARAM_SET_ACKNOWLEDGED_ (Manufacturer User Access) Manufacturer Property Value = _PARAM_STATUS_0_ (Manufacturer Property Value)
_SET_UNACKNOWLEDGED_	Generic Manufacturer Property Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x00-0x01} != _PARAM_STATUS_1_ (Manufacturer User Access)
_PARAM_STATUS_2_	Manufacturer Property ID = *PID* Manufacturer User Access = _PARAM_SET_UNACKNOWLEDGED_ (Manufacturer User Access) Manufacturer Property Value = _PARAM_STATUS_1_ (Manufacturer Property Value)

Table 4.23: Common Get/Set/Status Behavior Values for the Manufacturer Property State

4.2.1.23 Generic Client Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Client Properties state
_INITIAL_CONDITION_	N/A
GET	Generic Client Properties Get
_PARAM_GET_	Client Property ID = {0x0000-0xFFFF}
STATUS	Generic Client Properties Status
PUBLISHED	NO
_PARAM_STATUS_0_	Client Property IDs = Array<{*Property ID*}, all elements are valid Property IDs in ascending order, first element is greater than or equal to _PARAM_GET_ (Client Property ID)
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.24: Common Get/Status Behavior Values for the Generic Client Properties State

4.2.1.24 Sensor Descriptor State Get/Status – All Property IDs

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	N/A
GET	Sensor Descriptor Get
_PARAM_GET_	Property ID = N/A
STATUS	Sensor Descriptor Status
PUBLISHED	NO
_PARAM_STATUS_0_	*Array* < Sensor Property ID = {*Property ID*} Sensor Positive Tolerance = {0x000-0xFFF} Sensor Negative Tolerance = {0x000-0xFFF} Sensor Sampling Function = {0x00-0x07} Sensor Measurement Period = {0x00-0xFF} Sensor Update Interval = {0x00-0xFF} >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.25: Common Get/Status Behavior Values for the Sensor Descriptor State – All Property IDs

4.2.1.25 Sensor Descriptor State Get/Status – Single Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Descriptor Get
_PARAM_GET_	Property ID = *PID*
STATUS	Sensor Descriptor Status
PUBLISHED	NO
_PARAM_STATUS_0_	Sensor Property ID = _PARAM_GET_ (Property ID) Sensor Positive Tolerance = {0x000-0xFFF} Sensor Negative Tolerance = {0x000-0xFFF} Sensor Sampling Function = {0x00-0x07} Sensor Measurement Period = {0x00-0xFF} Sensor Update Interval = {0x00-0xFF}
_SET_ACKNOWLEDGED_	N/A

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.26: Common Get/Status Behavior Values for the Sensor Descriptor State – Single Property ID

4.2.1.26 Sensor Cadence State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*. The Sensor Cadence state has been configured for *PID.*
GET	Sensor Cadence Get
_PARAM_GET_	Property ID = *PID*
STATUS	Sensor Cadence Status
PUBLISHED	NO
_PARAM_STATUS_0_	Property ID = _PARAM_GET_ (Property ID) Fast Cadence Period Log = (7bit) {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Cadence Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Property ID = _PARAM_STATUS_0_ (Property ID) Fast Cadence Period Log = {0x00-0x0F} != _PARAM_STATUS_0_ (Fast Cadence Period Log) Status Trigger Type = {0b0, 0b1} != _PARAM_STATUS_0_ (Status Trigger Type) Status Trigger Delta Down = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Status Trigger Delta Down) Status Trigger Delta Up = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Status Trigger Delta Up) Status Min Log = {0x00-0x1A} != _PARAM_STATUS_0_ (Status Trigger Min Log) Fast Cadence Low = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Fast Cadence Low) Fast Cadence High = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Fast Cadence High)
_PARAM_STATUS_1_	Property ID = _PARAM_SET_ACKNOWLEDGED_ (Property ID) Fast Cadence Period Log = _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence Period Log) Status Trigger Type = _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Type) Status Trigger Delta Down = _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Delta Down) Status Trigger Delta Up = _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Delta Up) Status Min Log = _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Min Log) Fast Cadence Low = _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence Low) Fast Cadence Low = _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence Low)
_SET_UNACKNOWLEDGED_	Sensor Cadence Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Property ID = _PARAM_STATUS_0_ (Property ID) Fast Cadence Period Log = {0x00-0x0F} != _PARAM_STATUS_1_ (Fast Cadence Period Log) Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Status Trigger Delta Down) Status Trigger Delta Up = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Status Trigger Delta Up) Status Min Log = {0x00-0xFF} != _PARAM_STATUS_1_ (Status Trigger Min Log) Fast Cadence Low = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Fast Cadence Low) Fast Cadence High = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Fast Cadence High)
_PARAM_STATUS_2_	Property ID = _PARAM_SET_UNACKNOWLEDGED_ (Property ID) Fast Cadence Period Log = _PARAM_SET_ UNACKNOWLEDGED (Fast Cadence Period Log) Status Trigger Type = _PARAM_SET_ UNACKNOWLEDGED (Status Trigger Type) Status Trigger Delta Down = _PARAM_SET_ UNACKNOWLEDGED (Status Trigger Delta Down) Status Trigger Delta Up = _PARAM_SET_ UNACKNOWLEDGED (Status Trigger Delta Up) Status Min Log = _PARAM_SET_ UNACKNOWLEDGED (Status Trigger Min Log) Fast Cadence Low = _PARAM_SET_ UNACKNOWLEDGED (Fast Cadence Low) Fast Cadence Low = _PARAM_SET_ UNACKNOWLEDGED (Fast Cadence Low)

Table 4.27: Common Get/Set/Status Behavior Values for the Sensor Cadence State

4.2.1.27 Sensor Setting State Settings Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Settings state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Settings Get
_PARAM_GET_	Sensor Property ID = *PID*
STATUS	Sensor Settings Status
PUBLISHED	NO
_PARAM_STATUS_0_	Sensor Property ID = _PARAM_GET_ (Sensor Property ID) Sensor Setting Property IDs = *Array*< {*Sensor Setting Property ID*} > or N/A
_SET_ACKNOWLEDGED_	N/A

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.28: Common Get/Status Behavior Values for the Sensor Settings State

4.2.1.28 Sensor Setting State Setting Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*, and the Sensor Setting state contains setting data for the Sensor Setting Property ID denoted as *SPID*, associated with *PID*.
GET	Sensor Setting Get
_PARAM_GET_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID*
STATUS	Sensor Setting Status
PUBLISHED	NO
_PARAM_STATUS_0_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Access = {0x01, 0x03} Sensor Setting Raw = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Setting Set
_PARAM_SET_ACKNOWLEDGED_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Raw = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Sensor Setting Raw)
_PARAM_STATUS_1_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Access = _PARAM_STATUS_0_ (Sensor Setting Access) IF Sensor Setting Access = 0x01 Sensor Setting Raw = N/A ELSE Sensor Setting Raw = _PARAM_SET_ACKNOWLEDGED_ (Sensor Setting Raw)
_SET_UNACKNOWLEDGED_	Sensor Setting Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Raw = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Sensor Setting Raw)
_PARAM_STATUS_2_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Access = _PARAM_SET_UNACKNOWLEDGED_ (Sensor Setting Access) IF Sensor Setting Access = 0x01 Sensor Setting Raw = N/A ELSE Sensor Setting Raw = _PARAM_SET_UNACKNOWLEDGED_ (Sensor Setting Raw)

Table 4.29: Common Setting Get/Set/Status Behavior Values for the Sensor Setting State

4.2.1.29 Sensor Data State Get/Status – All Property IDs

State/Message/Parameter	Value(s)
STATE	Sensor Raw state
_INITIAL_CONDITION_	N/A
GET	Sensor Get
_PARAM_GET_	Property ID = N/A
STATUS	Sensor Status
PUBLISHED	YES
_PARAM_STATUS_0_	Marshalled Sensor Data = Array< MPID (valid format, see [4] Section 4.2.14), <variable> (valid format, see [6]) >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.30: Common Get/Status Behavior Values for the Sensor Data State – All Property IDs

4.2.1.30 Sensor Data State Get/Status – Single Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Raw state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Get
_PARAM_GET_	Property ID = *PID*

State/Message/Parameter	Value(s)
STATUS	Sensor Status
PUBLISHED	YES
_PARAM_STATUS_0_	Marshalled Sensor Data = [MPID (*PID*) (valid format, see [4] Section 4.2.14), <variable> (valid format, see [6])]
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.31: Common Get/Status Behavior Values for the Sensor Data State – Single Property ID

4.2.1.31 Sensor Series Column State Series Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Series Get
_PARAM_GET_	Property ID = *PID* Raw Value A1 = N/A Raw Value A2 = N/A
STATUS	Sensor Series Status
PUBLISHED	YES
_PARAM_STATUS_0_	Property ID = *PID* Property Raw Value List = *Array* Raw Value A = <variable> (valid format, see [6]) Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6]) > or N/A
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.32: Common Series Get/Status Behavior Values for the Sensor Series Column State

4.2.1.32 Sensor Series Column State Column Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as PID. The Sensor Series Column state contains a measurement on the Sensor Raw Value A value denoted as *Raw A*, associated with PID.
GET	Sensor Column Get
_PARAM_GET_	Property ID = *PID* Raw Value A = *Raw A*
STATUS	Sensor Column Status
PUBLISHED	YES
_PARAM_STATUS_0_	Property ID = *PID* Raw Value A = *Raw A* Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6])
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.33: Common Column Get/Status Behavior Values for the Sensor Series Column State

4.2.1.33 Time State Get/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	Time Get
_PARAM_GET_	N/A
STATUS	Time Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Either: TAI Seconds = 0x0000000000 Subsecond = N/A Uncertainty = N/A Time Authority = N/A TAI-UTC Delta = N/A Time Zone Offset = N/A Or: TAI Seconds = {0x0000000001-0xFFFFFFFFFF} Subsecond = {0x00-0xFF} Uncertainty = {0x00-0xFF} Time Authority = {0b0-0b1} TAI-UTC Delta = (15-bit) {0x0000-0x7FFF} Time Zone Offset = {0x00-0xFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.34: Common Time Get/Status Behavior Values for the Time State

4.2.1.34 Time State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	Time Get
_PARAM_GET_	N/A
STATUS	Time Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Either: TAI Seconds = 0x0000000000 Subsecond = N/A Uncertainty = N/A Time Authority = N/A TAI-UTC Delta = N/A Time Zone Offset = N/A Or: TAI Seconds = {0x0000000001-0xFFFFFFFFFF} Subsecond = {0x00-0xFF} Uncertainty = {0x00-0xFF} Time Authority = {0b0-0b1} TAI-UTC Delta = (15-bit) {0x0000-0x7FFF} Time Zone Offset = {0x00-0xFF}
_SET_ACKNOWLEDGED_	Time Set
_PARAM_SET_ACKNOWLEDGED_	TAI Seconds = {0x0000000001-0xFFFFFFFFFF} != _PARAM_STATUS_0_ (TAI Seconds) Subsecond = {0x00-0xFF} != _PARAM_STATUS_0_ (Subsecond) Uncertainty = {0x00-0xFF} != _PARAM_STATUS_0_ (Uncertainty) Time Authority = {0b0-0b1} != _PARAM_STATUS_0_ (Time Authority) TAI-UTC Delta = (15-bit) {0x0000-0x7FFF} != _PARAM_STATUS_0_ (TAI-UTC Delta) Time Zone Offset = {0x00-0xFF} != _PARAM_STATUS_0_ (Time Zone Offset)
_PARAM_STATUS_1_	TAI Seconds [after _GET] >= TAI Seconds [after _SET_ACKNOWLEDGED_] >= _PARAM_SET_ACKNOWLEDGED_ (TAI Seconds) [Assume time may increase between messages] Subsecond = {0x00-0xFF} Uncertainty >= _PARAM_SET_ACKNOWLEDGED_ (Uncertainty) Time Authority = _PARAM_SET_ACKNOWLEDGED_ (Time Authority) TAI-UTC Delta = _PARAM_SET_ACKNOWLEDGED_ (TAI-UTC Delta) Time Zone Offset = _PARAM_SET_ACKNOWLEDGED_ (Time Zone Offset)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.35: Common Time Get/Set/Status Behavior Values for the Time State

4.2.1.35 Time State Zone Change Get/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	Time Zone Get
_PARAM_GET_	N/A
STATUS	Time Zone Status
PUBLISHED	NO
_PARAM_STATUS_0_	Time Zone Offset Current = {0x00-0xFF} Time Zone Offset New = {0x00-0xFF} TAI of Zone Change = {0x0000000000–0xFFFFFFFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.36: Common Zone Change Get/Set/Status Behavior Values for the Time State

4.2.1.36 Time State Zone Change Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	Time Zone Get
_PARAM_GET_	N/A
STATUS	Time Zone Status
PUBLISHED	NO
_PARAM_STATUS_0_	Time Zone Offset Current = {0x00-0xFF} Time Zone Offset New = {0x00-0xFF} TAI of Zone Change = {0x0000000000–0xFFFFFFFFFF}
_SET_ACKNOWLEDGED_	Time Zone Set
_PARAM_SET_ACKNOWLEDGED_	Time Zone Offset New = {0x00-0xFF} != _PARAM_STATUS_0_ (Time Zone Offset New) TAI of Zone Change = {0x0000000001–0xFFFFFFFFFF} != _PARAM_STATUS_0_ (TAI of Zone Change)
_PARAM_STATUS_1_	Time Zone Offset Current = {0x00-0xFF} Time Zone Offset New = _PARAM_SET_ACKNOWLEDGED_ (Time Zone Offset New) TAI of Zone Change ≤ _PARAM_SET_ACKNOWLEDGED_ (TAI of Zone Change)

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.37: Common Zone Change Get/Set/Status Behavior Values for the Time State

4.2.1.37 Time State TAI-UTC Delta Get/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	TAI-UTC Delta Get
_PARAM_GET_	N/A
STATUS	TAI-UTC Delta Status
PUBLISHED	NO
_PARAM_STATUS_0_	TAI-UTC Delta Current = {0x0000-0x7FFF} TAI-UTC Delta New = {0x0000-0x7FFF} TAI of Delta Change = {0x0000000000–0xFFFFFFFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.38: Common TAI-UTC-Delta Get/Status Behavior Values for the Time State

4.2.1.38 Time State TAI-UTC Delta Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
GET	TAI-UTC Delta Get
_PARAM_GET_	N/A
STATUS	TAI-UTC Delta Status
PUBLISHED	NO
_PARAM_STATUS_0_	TAI-UTC Delta Current = {0x0000-0x7FFF} TAI-UTC Delta New = {0x0000-0x7FFF} TAI of Delta Change = {0x0000000000–0xFFFFFFFFFF}
_SET_ACKNOWLEDGED_	TAI-UTC Delta Set
_PARAM_SET_ACKNOWLEDGED_	TAI-UTC Delta New = {0x0000-0x7FFF} != _PARAM_STATUS_0_ (TAI-UTC Delta New) TAI of Delta Change = {0x0000000001–0xFFFFFFFFFF} != _PARAM_STATUS_0_ (TAI of Delta Change)

State/Message/Parameter	Value(s)
_PARAM_STATUS_1_	TAI-UTC Delta Current = {0x0000-0x7FFF} TAI-UTC Delta New = _PARAM_SET_ACKNOWLEDGED_ (TAI-UTC Delta New) TAI of Delta Change ≤ _PARAM_SET_ACKNOWLEDGED_ (TAI of Delta Change)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.39: Common TAI-UTC-Delta Get/Set/Status Behavior Values for the Time State

4.2.1.39 Time Role State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Time Role state
_INITIAL_CONDITION_	N/A
GET	Time Role Get
_PARAM_GET_	N/A
STATUS	Time Role Status
PUBLISHED	NO
_PARAM_STATUS_0_	Time Role = {0x00-0x03}
_SET_ACKNOWLEDGED_	Time Role Set
_PARAM_SET_ACKNOWLEDGED_	Time Role = {0x00-0x03} != _PARAM_STATUS_0_ (Time Role)
_PARAM_STATUS_1_	Time Role = _PARAM_SET_ACKNOWLEDGED_ (Time Role)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.40: Common Get/Set/Status Behavior Values for the Time Role State

4.2.1.40 Scene Register State Scene Get/Recall/Status

State/Message/Parameter	Value(s)
STATE	Scene Register state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00. The Scene Register state contains a number of N stored scenes, where N is at least 2 and at most 16.
GET	Scene Get
_PARAM_GET_	N/A
STATUS	Scene Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Status Code = 0x00 Current Scene = {0x0000, scene_number_1, scene_number_2, …, scene_number_N} Target Scene = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Scene Recall
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {scene_number_1, scene_number_2, …, scene_number_N} != _PARAM_STATUS_0_ (Current Scene) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Status Code = 0x00 Current Scene = _PARAM_SET_ACKNOWLEDGED_ (Scene Number) Target Scene = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Scene Recall Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {scene_number_1, scene_number_2, …, scene_number_N} != _PARAM_STATUS_1_ (Current Scene) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Status Code = 0x00 Current Scene = _PARAM_SET_UNACKNOWLEDGED_ (Scene Number) Target Scene = N/A Remaining Time = N/A

Table 4.41: Common Scene Get/Recall/Status Behavior Values for the Scene Register State

4.2.1.41 Scene Register State Scene Register Get/Status

State/Message/Parameter	Value(s)
STATE	Scene Register state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00. The Scene Register state contains a number of N stored scenes, where N is at least 2 and at most 14.
GET	Scene Register Get
_PARAM_GET_	N/A
STATUS	Scene Register Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Status Code = 0x00 Current Scene = {0x0000, scene_number_1, scene_number_2, …, scene_number_N} Scenes=array< scene_number_1, scene_number_2, …, scene_number_N>
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.42: Common Scene Register Get/Status Behavior Values for the Scene Register State

4.2.1.42 Scene Register State Scene Register Get/Store/Status

State/Message/Parameter	Value(s)
STATE	Scene Register state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00. The Scene Register state contains a number of N stored scenes, where N is at least 2 and at most 14.
GET	Scene Register Get
_PARAM_GET_	N/A
STATUS	Scene Register Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Current Scene = { scene_number_1, scene_number_2, …, scene_number_N} Scenes=array< scene_number_1, scene_number_2, …, scene_number_N>
_SET_ACKNOWLEDGED_	Scene Store
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} not in {scene_number_1, scene_number_2, …, scene_number_N}
_PARAM_STATUS_1_	Status Code = 0x00 Current Scene = _PARAM_STATUS_0_ (Current Scene) Scenes=array< scene_number_1, scene_number_2, …, scene_number_N, _PARAM_SET_ACKNOWLEDGED_0_ (Scene Number)>
_SET_UNACKNOWLEDGED_	Scene Store Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} not in {scene_number_1, scene_number_2, …, scene_number_N}
_PARAM_STATUS_2_	Status Code = 0x00 Current Scene = _PARAM_STATUS_0_ (Current Scene) Scenes=array< scene_number_1, scene_number_2, …, scene_number_N, _PARAM_SET_ACKNOWLEDGED_ (Scene Number), _PARAM_SET_UNACKNOWLEDGED_ (Scene Number)>

Table 4.43: Common Scene Register Get/Store/Status Behavior Values for the Scene Register State

4.2.1.43 Scene Register State Scene Register Get/Delete/Status

State/Message/Parameter	Value(s)
STATE	Scene Register state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00. The Scene Register state contains a number of N stored scenes, where N is at least 3 and at most 16.
GET	Scene Register Get
_PARAM_GET_	N/A
STATUS	Scene Register Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Current Scene = {0x0000, scene_number_1, scene_number_2, …, scene_number_N} Scenes = array<scene_number_1, scene_number_2, …, scene_number_N>
_SET_ACKNOWLEDGED_	Scene Delete
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {scene_number_1, scene_number_2, …, scene_number_N} != _PARAM_STATUS_0_(Current Scene)
_PARAM_STATUS_1_	Status Code = 0x00 Current Scene = _PARAM_STATUS_0_ (Current Scene) Scenes = _PARAM_STATUS_0_ (Scenes) excluding _PARAM_SET_ACKNOWLEDGED_ (Scene Number)
_SET_UNACKNOWLEDGED_	Scene Delete Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {_PARAM_STATUS_1_ (Scenes)} != _PARAM_STATUS_1_(Current Scene)
_PARAM_STATUS_2_	Status Code = 0x00 Current Scene = _PARAM_STATUS_0_ (Current Scene) Scenes = _PARAM_STATUS_1_ (Scenes) excluding _PARAM_SET_UNACKNOWLEDGED_ (Scene Number)

Table 4.44: Common Get/Delete/Status Values for the Scene Register State

4.2.1.44 Scheduler Register State Get/Status

State/Message/Parameter	Value(s)
STATE	Scheduler Register state
_INITIAL_CONDITION_	N/A
GET	Scheduler Get
_PARAM_GET_	N/A
STATUS	Scheduler Status
PUBLISHED	NO
_PARAM_STATUS_0_	Schedules = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.45: Common Get/Status Behavior Values for the Scheduler Register State

4.2.1.45 Scheduler Register State Action Get/Status

State/Message/Parameter	Value(s)
STATE	Scheduler Register state
_INITIAL_CONDITION_	N/A
GET	Scheduler Action Get
_PARAM_GET_	Index = {0x00-0x0F}
STATUS	Scheduler Action Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	Index = _PARAM_GET_ (Index) Schedule Register = IF action is defined for the Index: {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} ELSE: N/A
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.46: Common Action Get/Status Behavior Values for the Scheduler State

4.2.1.46 Scheduler Register State Action Get/Set/Status

Execute the generic procedure twice, with the following values for parameter _ACTION_:

- First iteration: _ACTION_ = {0x0 - 0x2}
- Second iteration: _ACTION_ = 0xF

State/Message/Parameter	Value(s)
STATE	Scheduler Register state
_INITIAL_CONDITION_	N/A
GET	Scheduler Action Get
_PARAM_GET_	Index = {0x00-0x0F}
STATUS	Scheduler Action Status
PUBLISHED	YES
_PARAM_STATUS_0_	Index = _PARAM_GET_ (Index) Schedule Register = IF action is defined for the Index: {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} ELSE: N/A
_SET_ACKNOWLEDGED_	Scheduler Action Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Index = {0x0-0xF} != _PARAM_STATUS_0_ (Index) Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || _ACTION_ || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Schedule Register)
_PARAM_STATUS_1_	Index = _PARAM_SET_ACKNOWLEDGED_ (Index) Schedule Register = _PARAM_SET_ACKNOWLEDGED_ (Schedule Register)
_SET_UNACKNOWLEDGED_	Scheduler Action Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Index = {0x0-0xF} != _PARAM_STATUS_1_ (Index) Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || _ACTION_ || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Schedule Register)
_PARAM_STATUS_2_	Index = _PARAM_SET_UNACKNOWLEDGED_ (Index) Schedule Register = IF _ACTION_ is not 0xF: _PARAM_SET_UNACKNOWLEDGED_ (Schedule Register) ELSE: N/A

Table 4.47: Common Action Get/Set/Status Behavior Values for the Scheduler State

4.2.1.47 Light Lightness Actual State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light Lightness Get
_PARAM_GET_	N/A
STATUS	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Lightness = {0x0000-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light Lightness Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light Lightness Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A Delay = N/A

Table 4.48: Common Get/Set/Status Behavior Values for the Light Lightness Actual State

4.2.1.48 Light Lightness Linear State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light Lightness Linear Get
_PARAM_GET_	N/A
STATUS	Light Lightness Linear Status
PUBLISHED	NO - Light Lightness Status instead
_PARAM_STATUS_0_	Present Lightness = {0x0000-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light Lightness Linear Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A Delay = N/A

Table 4.49: Common Get/Set/Status Behavior Values for the Light Lightness Liner State

4.2.1.49 Light Lightness Last State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Last state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Last Get
_PARAM_GET_	N/A
STATUS	Light Lightness Last Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0001-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.50: Common Get//Status Behavior Values for the Light Lightness Last State

4.2.1.50 Light Lightness Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Default Get
_PARAM_GET_	N/A
STATUS	Light Lightness Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.51: Common Get/Status Behavior Values for the Light Lightness Default State

4.2.1.51 Light Lightness Default State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Default Get
_PARAM_GET_	N/A
STATUS	Light Lightness Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light Lightness Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Lightness)
_PARAM_STATUS_1_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness)
_SET_UNACKNOWLEDGED_	Light Lightness Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Lightness)
_PARAM_STATUS_2_	Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness)

Table 4.52: Common Get/Set/Status Behavior Values for the Light Lightness Default State

4.2.1.52 Light Lightness Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Range Get
_PARAM_GET_	N/A
STATUS	Light Lightness Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.53: Common Get/Status Behavior Values for the Light Lightness Range State

4.2.1.53 Light Lightness Range State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Range Get
_PARAM_GET_	N/A
STATUS	Light Lightness Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light Lightness Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0xFFFF} < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_1_	Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)
_SET_UNACKNOWLEDGED_	Light Lightness Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} != _PARAM_STATUS_1_ (Range Min) *and* > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0xFFFF} != _PARAM_STATUS_1_ (Range Max) *and* < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_2_	Range Min = _PARAM_SET_UNACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_UNACKNOWLEDGED_ (Range Max)

Table 4.54: Common Get/Set/Status Behavior Values for the Light Lightness Range State

4.2.1.54 Light CTL State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light CTL Get
_PARAM_GET_	N/A

State/Message/Parameter	Value(s)
STATUS	Light CTL Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present CTL Lightness = {0x0000-0xFFFF} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_ (Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present CTL Lightness = _PARAM_SET_ACKNOWLEDGED_ (CTL Lightness) Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_1_ (Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present CTL Lightness = _PARAM_SET_UNACKNOWLEDGED_ (CTL Lightness) Present CTL Temperature = _PARAM_SET_UNACKNOWLEDGED_ (CTL Temperature) Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A

Table 4.55: Common Get/Set/Status Behavior Values for the Light CTL State

4.2.1.55 Light CTL Temperature State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light CTL Temperature Get
_PARAM_GET_	N/A
STATUS	Light CTL Temperature Status
PUBLISHED	NO - Light CTL Status instead
_PARAM_STATUS_0_	Present CTL Temperature = {0x0320-0x4E20} Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light CTL Temperature Set
_PARAM_SET_ACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_ (Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_ACKNOWLEDGED_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light CTL Temperature Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_1_ (Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present CTL Temperature = _PARAM_SET_UNACKNOWLEDGED_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_UNACKNOWLEDGED_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A

Table 4.56: Common Get/Set/Status Behavior Values for the Light CTL Temperature State

4.2.1.56 Light CTL Temperature Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
GET	Light CTL Temperature Range Get
_PARAM_GET_	N/A
STATUS	Light CTL Temperature Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Range Min = {0x0320-0x4E20} || {0xFFFF} Range Max = {0x0320-0x4E20} || {0xFFFF} ≥ Range Min
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.57: Common Get/Status Behavior Values for the Light CTL Temperature Range State

4.2.1.57 Light CTL Temperature Range State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
GET	Light CTL Temperature Range Get
_PARAM_GET_	N/A

State/Message/Parameter	Value(s)
STATUS	Light CTL Temperature Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Range Min = {0x0320-0x4E20} || {0xFFFF} Range Max = {0x0320-0x4E20} || {0xFFFF} ≥ Range Min
_SET_ACKNOWLEDGED_	Light CTL Temperature Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0320-0x4E20} || {0xFFFF} > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0x4E20} || {0xFFFF} < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_1_	Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)
_SET_UNACKNOWLEDGED_	Light CTL Temperature Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0320-0x4E20} || {0xFFFF} != _PARAM_STATUS_1_ (Range Min) *and* > _PARAM_STATUS_0_ (Range Min) Range Max = {Range Min-0x4E20} || {0xFFFF} != _PARAM_STATUS_1_ (Range Max) *and* < _PARAM_STATUS_0_ (Range Max)
_PARAM_STATUS_2_	Range Min = _PARAM_SET_UNACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_UNACKNOWLEDGED_ (Range Max)

Table 4.58: Common Get/Set/Status Behavior Values for the Light CTL Temperature Range State

4.2.1.58 Light CTL Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Default state
_INITIAL_CONDITION_	N/A
GET	Light CTL Default Get
_PARAM_GET_	N/A
STATUS	Light CTL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} Temperature = {0x0320-0x4E20} Delta UV = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.59: Common Get/Status Behavior Values for the Light CTL Default State

4.2.1.59 Light CTL Default State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Default state
_INITIAL_CONDITION_	N/A
GET	Light CTL Default Get
_PARAM_GET_	N/A
STATUS	Light CTL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} Temperature = {0x0320-0x4E20} Delta UV = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light CTL Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Lightness) Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_ (Temperature) Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Delta UV)
_PARAM_STATUS_1_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Temperature = _PARAM_SET_ACKNOWLEDGED_ (Temperature) Delta UV = _PARAM_SET_ACKNOWLEDGED_ (Delta UV)
_SET_UNACKNOWLEDGED_	Light CTL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Lightness) Temperature = {0x0320-0x4E20} != _PARAM_STATUS_1_ (Temperature) Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Delta UV)
_PARAM_STATUS_2_	Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness) Temperature = _PARAM_SET_UNACKNOWLEDGED_ (Temperature) Delta UV = _PARAM_SET_UNACKNOWLEDGED_ (Delta UV)

Table 4.60: Common Get/Set/Status Behavior Values for the Light CTL Default State

4.2.1.60 Light HSL State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light HSL Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Light HSL Status
PUBLISHED	YES
_PARAM_STATUS_0_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Set
_PARAM_SET_ACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	HSL Lightness = _PARAM_SET_ACKNOWLEDGED_ (HSL Lightness) HSL Hue = _PARAM_SET_ACKNOWLEDGED_ (HSL Hue) HSL Saturation = _PARAM_SET_ACKNOWLEDGED_ (HSL Saturation) Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light HSL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A
_PARAM_STATUS_2_	HSL Lightness = _PARAM_SET_UNACKNOWLEDGED_ (HSL Lightness) HSL Hue = _PARAM_SET_UNACKNOWLEDGED_ (HSL Hue) HSL Saturation = _PARAM_SET_UNACKNOWLEDGED_ (HSL Saturation) Remaining Time = N/A

Table 4.61: Common Get/Set/Status Behavior Values for the Light HSL State

4.2.1.61 Light HSL State Target Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light HSL Target Get
_PARAM_GET_	N/A
STATUS	Light HSL Target Status
PUBLISHED	NO
_PARAM_STATUS_0_	HSL Lightness Target = {0x0000-0xFFFF} HSL Hue Target = {0x0000-0xFFFF} HSL Saturation Target = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.62: Common Target Get/Status Behavior Values for the Light HSL State

4.2.1.62 Light HSL Hue State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light HSL Hue Get
_PARAM_GET_	N/A
STATUS	Light HSL Hue Status
PUBLISHED	NO - Light HSL Status instead
_PARAM_STATUS_0_	Present Hue = {0x0000-0xFFFF} Target Hue = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Hue Set
_PARAM_SET_ACKNOWLEDGED_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_1_	Present Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Target Hue = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light HSL Hue Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Hue = _PARAM_SET_UNACKNOWLEDGED_ (Hue) Target Hue = N/A Remaining Time = N/A

Table 4.63: Common Get/Set/Status Behavior Values for the Light HSL Hue State

4.2.1.63 Light HSL Saturation State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light HSL Saturation Get
_PARAM_GET_	N/A
STATUS	Light HSL Saturation Status
PUBLISHED	NO - Light HSL Status instead
_PARAM_STATUS_0_	Present Saturation = {0x0000-0xFFFF} Target Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Saturation Set
_PARAM_SET_ACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Saturation = PARAM_SET_ACKNOWLEDGED_ (Saturation) Target Saturation = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light HSL Saturation Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Present Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Saturation = PARAM_SET_UNACKNOWLEDGED_ (Saturation) Target Saturation = N/A Remaining Time = N/A

Table 4.64: Common Get/Set/Status Behavior Values for the Light HSL Saturation State

4.2.1.64 Light HSL Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Default state
_INITIAL_CONDITION_	N/A
GET	Light HSL Default Get
_PARAM_GET_	N/A
STATUS	Light HSL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} Hue = {0x0000-0xFFFF} Saturation = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.65: Common Get/Status Behavior Values for the Light HSL Default State

4.2.1.65 Light HSL Default State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Default state
_INITIAL_CONDITION_	N/A
GET	Light HSL Default Get
_PARAM_GET_	N/A
STATUS	Light HSL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} Hue = {0x0000-0xFFFF} Saturation = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light HSL Default Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Lightness) Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Hue) Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Saturation)
_PARAM_STATUS_1_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Saturation = _PARAM_SET_ACKNOWLEDGED_ (Saturation)
_SET_UNACKNOWLEDGED_	Light HSL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Lightness) Hue = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Hue) Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Saturation)
_PARAM_STATUS_2_	Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness) Hue = _PARAM_SET_UNACKNOWLEDGED_ (Hue) Saturation = _PARAM_SET_UNACKNOWLEDGED_ (Saturation)

Table 4.66: Common Get/Set/Status Behavior Values for the Light HSL Default State

4.2.1.66 Light HSL Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Range state
_INITIAL_CONDITION_	N/A
GET	Light HSL Range Get
_PARAM_GET_	N/A
STATUS	Light HSL Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Hue Range Min = {0x0000-0xFFFF} Hue Range Max = {Hue Range Min-0xFFFF} Saturation Range Min = {0x0000-0xFFFF} Saturation Range Max = {Saturation Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.67: Common Get/Status Behavior Values for the Light HSL Range State

4.2.1.67 Light HSL Range State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Range state
_INITIAL_CONDITION_	N/A
GET	Light HSL Range Get
_PARAM_GET_	N/A
STATUS	Light HSL Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 Hue Range Min = {0x0000-0xFFFF} Hue Range Max = {Hue Range Min-0xFFFF} Saturation Range Min = {0x0000-0xFFFF} Saturation Range Max = {Saturation Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light HSL Range Set
_PARAM_SET_ACKNOWLEDGED_	Hue Range Min = {0x0000-0xFFFF} > _PARAM_STATUS_0_ (Hue Range Min) Hue Range Max = {Hue Range Min-0xFFFF} < _PARAM_STATUS_0_ (Hue Range Max) Saturation Range Min = {0x0000-0xFFFF} > _PARAM_STATUS_0_ (Saturation Range Min) Saturation Range Max = {Saturation Range Min-0xFFFF} < _PARAM_STATUS_0_ (Saturation Range Max)
_PARAM_STATUS_1_	Status Code = 0x00 Hue Range Min = _PARAM_SET_ACKNOWLEDGED_ (Hue Range Min) Hue Range Max = _PARAM_SET_ACKNOWLEDGED_ (Hue Range Max) Saturation Range Min = _PARAM_SET_ACKNOWLEDGED_ (Saturation Range Min) Saturation Range Max = _PARAM_SET_ACKNOWLEDGED_ (Saturation Range Max)
_SET_UNACKNOWLEDGED_	Light HSL Range Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Hue Range Min = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Hue Range Min) *and* > _PARAM_STATUS_0_ (Hue Range Min) Hue Range Max = {Hue Range Min-0xFFFF} != _PARAM_STATUS_1_ (Hue Range Max) *and* < _PARAM_STATUS_0_ (Hue Range Max) Saturation Range Min = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Saturation Range Min) *and* > _PARAM_STATUS_0_ (Saturation Range Min) Saturation Range Max = {Saturation Range Min-0xFFFF} != _PARAM_STATUS_1_ (Saturation Range Max) *and* < _PARAM_STATUS_0_ (Saturation Range Max)
_PARAM_STATUS_2_	Status Code = 0x00 Hue Range Min = _PARAM_SET_UNACKNOWLEDGED_ (Hue Range Min) Hue Range Max = _PARAM_SET_UNACKNOWLEDGED_ (Hue Range Max) Saturation Range Min = _PARAM_SET_UNACKNOWLEDGED_ (Saturation Range Min) Saturation Range Max = _PARAM_SET_UNACKNOWLEDGED_ (Saturation Range Max)

Table 4.68: Common Get/Set/Status Behavior Values for the Light HSL Range State

4.2.1.68 Light xyL State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light xyL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light xyL Get
_PARAM_GET_	N/A
STATUS	Light xyL Status
PUBLISHED	YES
_PARAM_STATUS_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light xyL Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	xyL Lightness = _PARAM_SET_ACKNOWLEDGED_ (xyL Lightness) xyL x = _PARAM_SET_ACKNOWLEDGED_ (xyL x) xyL y = _PARAM_SET_ACKNOWLEDGED_ (xyL y) Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light xyL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	xyL Lightness = _PARAM_SET_UNACKNOWLEDGED_ (xyL Lightness) xyL x = _PARAM_SET_UNACKNOWLEDGED_ (xyL x) xyL y = _PARAM_SET_UNACKNOWLEDGED_ (xyL y) Remaining Time = N/A

Table 4.69: Common Get/Set/Status Behavior Values for the Light xyL State

4.2.1.69 Light xyL State Target Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL state
_INITIAL_CONDITION_	N/A
GET	Light xyL Target Get
_PARAM_GET_	N/A
STATUS	Light xyL Target Status
PUBLISHED	NO
_PARAM_STATUS_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A

Table 4.70: Common Target Get/Status Behavior Values for the Light xyL State

4.2.1.70 Light xyL Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Default state
_INITIAL_CONDITION_	N/A
GET	Light xyL Default Get
_PARAM_GET_	N/A
STATUS	Light xyL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.71: Common Get/Status Behavior Values for the Light xyL Default State

4.2.1.71 Light xyL Default State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Default state
_INITIAL_CONDITION_	N/A
GET	Light xyL Default Get
_PARAM_GET_	N/A
STATUS	Light xyL Default Status
PUBLISHED	NO
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light xyL Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y)
_PARAM_STATUS_1_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) xyL x = _PARAM_SET_ACKNOWLEDGED_ (xyL x) xyL y = _PARAM_SET_ACKNOWLEDGED_ (xyL y)
_SET_UNACKNOWLEDGED_	Light xyL Default Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL y)
_PARAM_STATUS_2_	Lightness = _PARAM_SET_UNACKNOWLEDGED_ (Lightness) xyL x = _PARAM_SET_UNACKNOWLEDGED_ (xyL x) xyL y = _PARAM_SET_UNACKNOWLEDGED_ (xyL y)

Table 4.72: Common Get/Set/Status Behavior Values for the Light xyL Default State

4.2.1.72 Light xyL Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Range state
_INITIAL_CONDITION_	N/A
GET	Light xyL Range Get
_PARAM_GET_	N/A
STATUS	Light xyL Range Status
PUBLISHED	NO
_PARAM_STATUS_0_	Status Code = 0x00 xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max = {xyL x Range Min-0xFFFF} xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {xyL y Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_PARAM_STATUS_1_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_STATUS_2_	N/A

Table 4.73: Common Get/Status Behavior Values for the Light xyL Range State

4.2.1.73 Light xyL Range State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Range state
_INITIAL_CONDITION_	N/A
GET	Light xyL Range Get
_PARAM_GET_	N/A
STATUS	Light xyL Range Status
PUBLISHED	NO

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max = {xyL x Range Min-0xFFFF} xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {xyL y Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light xyL Range Set
_PARAM_SET_ACKNOWLEDGED_	xyL x Range Min = {0x0000-0xFFFF} > _PARAM_STATUS_0_ (xyL x Range Min) xyL x Range Max = {xyL x Range Min-0xFFFF} < _PARAM_STATUS_0_ (xyL x Range Max) xyL y Range Min = {0x0000-0xFFFF} > _PARAM_STATUS_0_ (xyL y Range Min) xyL y Range Max = {xyL y Range Min-0xFFFF} < _PARAM_STATUS_0_ (xyL y Range Max)
_PARAM_STATUS_1_	xyL x Range Min = _PARAM_SET_ACKNOWLEDGED_ (xyL x Range Min) xyL x Range Max = _PARAM_SET_ACKNOWLEDGED_ (xyL x Range Max) xyL y Range Min = _PARAM_SET_ACKNOWLEDGED_ (xyL y Range Min) xyL y Range Max = _PARAM_SET_ACKNOWLEDGED_ (xyL y Range Max)
_SET_UNACKNOWLEDGED_	Light xyL Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL x Range Min = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL x Range Min) *and* > _PARAM_STATUS_0_ (xyL x Range Min) xyL x Range Max = {xyL x Range Min-0xFFFF} != _PARAM_STATUS_1_ (xyL x Range Max) *and* < _PARAM_STATUS_0_ (xyL x Range Max) xyL y Range Min = {0x0000-0xFFFF} != _PARAM_STATUS_1_ (xyL y Range Min) *and* > _PARAM_STATUS_0_ (xyL y Range Min) xyL y Range Max = {xyL y Range Min-0xFFFF} != _PARAM_STATUS_1_ (xyL y Range Max) *and* < _PARAM_STATUS_0_ (xyL y Range Max)
_PARAM_STATUS_2_	xyL x Range Min = _PARAM_SET_UNACKNOWLEDGED_ (xyL x Range Min) xyL x Range Max = _PARAM_SET_UNACKNOWLEDGED_ (xyL x Range Max) xyL y Range Min = _PARAM_SET_UNACKNOWLEDGED_ (xyL y Range Min) xyL y Range Max = _PARAM_SET_UNACKNOWLEDGED_ (xyL y Range Max)

Table 4.74: Common Get/Set/Status Behavior Values for the Light xyL Range State

4.2.1.74 Light LC Mode State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC Mode state
_INITIAL_CONDITION_	N/A
GET	Light LC Mode Get
_PARAM_GET_	N/A
STATUS	Light LC Mode Status
PUBLISHED	NO
_PARAM_STATUS_0_	Mode = {0x00-0x01}
_SET_ACKNOWLEDGED_	Light LC Mode Set
_PARAM_SET_ACKNOWLEDGED_	Mode = {0x00-0x01} != _PARAM_STATUS_0_ (Mode)
_PARAM_STATUS_1_	Mode = _PARAM_SET_ACKNOWLEDGED_ (Mode)
_SET_UNACKNOWLEDGED_	Light LC Mode Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Mode = {0x00-0x01} != _PARAM_STATUS_1_ (Mode)
_PARAM_STATUS_2_	Mode = _PARAM_SET_UNACKNOWLEDGED_ (Mode)

Table 4.75: Common Get/Set/Status Behavior Values for the Light LC Mode State

4.2.1.75 Light LC Occupancy Mode State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC OM state
_INITIAL_CONDITION_	N/A
GET	Light LC OM Get
_PARAM_GET_	N/A
STATUS	Light LC OM Status
PUBLISHED	NO
_PARAM_STATUS_0_	Mode = {0x00-0x01}
_SET_ACKNOWLEDGED_	Light LC OM Set
_PARAM_SET_ACKNOWLEDGED_	Mode = {0x00-0x01} != _PARAM_STATUS_0_ (Mode)
_PARAM_STATUS_1_	Mode = _PARAM_SET_ACKNOWLEDGED_ (Mode)
_SET_UNACKNOWLEDGED_	Light LC OM Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Mode = {0x00-0x01} != _PARAM_STATUS_1_ (Mode)
_PARAM_STATUS_2_	Mode = _PARAM_SET_UNACKNOWLEDGED_ (Mode)

Table 4.76: Common Get/Set/Status Behavior Values for the Light LC Occupancy Mode State

4.2.1.76 Light LC Light OnOff State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light LC Property states are set such that the transitions of the Light LC Light OnOff state are immediate by default (transition time of zero).

State/Message/Parameter	Value(s)
GET	Light LC Light OnOff Get
_PARAM_GET_	N/A
STATUS	Light LC Light OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Light OnOff = {0x00-0x01} Target Light OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set
_PARAM_SET_ACKNOWLEDGED_	Light OnOff = {0x00-0x01} != _PARAM_STATUS_0_ (Present Light OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Light OnOff = _PARAM_SET_ACKNOWLEDGED_ (Light OnOff) Target Light OnOff = N/A Remaining Time = N/A
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light OnOff = {0x00-0x01} != _PARAM_STATUS_1_ (Present Light OnOff) TID = {0x00-0xFF} Remaining Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Light OnOff = _PARAM_SET_UNACKNOWLEDGED_ (Light OnOff) Target Light OnOff = N/A Remaining Time = N/A

Table 4.77: Common Get/Set/Status Behavior Values for the Light LC Light OnOff State

4.2.1.77 Light LC Property State Get/Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Light LC Property IDs list contains the Property ID denoted as *PID*.
GET	Light LC Property Get
_PARAM_GET_	Light LC Property ID = *PID*
STATUS	Light LC Property Status
PUBLISHED	NO
_PARAM_STATUS_0_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Light LC Property Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_0_ (Light LC Property Value)
_PARAM_STATUS_1_	Light LC Property ID = *PID* Light LC Property Value = _PARAM_SET_ACKNOWLEDGED_ (Light LC Property Value)
_SET_UNACKNOWLEDGED_	Light LC Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6]) != _PARAM_STATUS_1_ (Light LC Property Value)
_PARAM_STATUS_2_	Light LC Property ID = *PID* Light LC Property Value = _PARAM_SET_UNACKNOWLEDGED_ (Light LC Property Value)

Table 4.78: Common Get/Set/Status Behavior Values for the Light LC Property State

4.2.2 Common State Binding Behaviors

This section contains common test procedures for the following types of binding behavior:

1. Two-way binding: two states are bound such that whenever one of them changes, the other one updates itself based on the binding relationship.
2. Range binding: a “main” state is bound to a “range” state such that the “range” state restricts the possible values of the “main” state whenever the “main” state changes. More precisely, the “main” state cannot change to a non-zero value below the minimum value specified by the “range” state, and it cannot change to a non-zero value above the maximum value specified by the “range” state.
3. OnPowerUp binding: a “main” state is bound to the OnPowerUp state such that during the power-up sequence (e.g., following a device reset), the “main” state sets itself to an initial value based on the combination of the OnPowerUp state value, an associated “default” state value and an associated “restore” state value.

4.2.2.1 Common State Two-Way Binding Behavior

- Test Purpose

  This test procedure verifies common two-way binding behavior for two Server Models on the IUT supporting the bound states _STATE_A_ and _STATE_B_.

- Initial Condition

  If the values of the _STATE_A_ or _STATE_B_ are restricted by a bound “range” state, then the latter is set to the maximum possible range supported by the IUT, and the Lower Tester will not try to set the _STATE_ values outside this range.

  If the models being tested support publishing for one or both states being tested (as indicated by the value of the PUBLISHED parameter below the _STATUS_A_ and _STATUS_B_ parameters in each table), the IUT is configured to publish to a random group or virtual address for each model, and the message publishing expectations in the test procedure will apply. The two publish addresses are different.

  Additional initial conditions on the IUT, LT, or UT are defined by _INITIAL_CONDITION_.

- Test Procedure

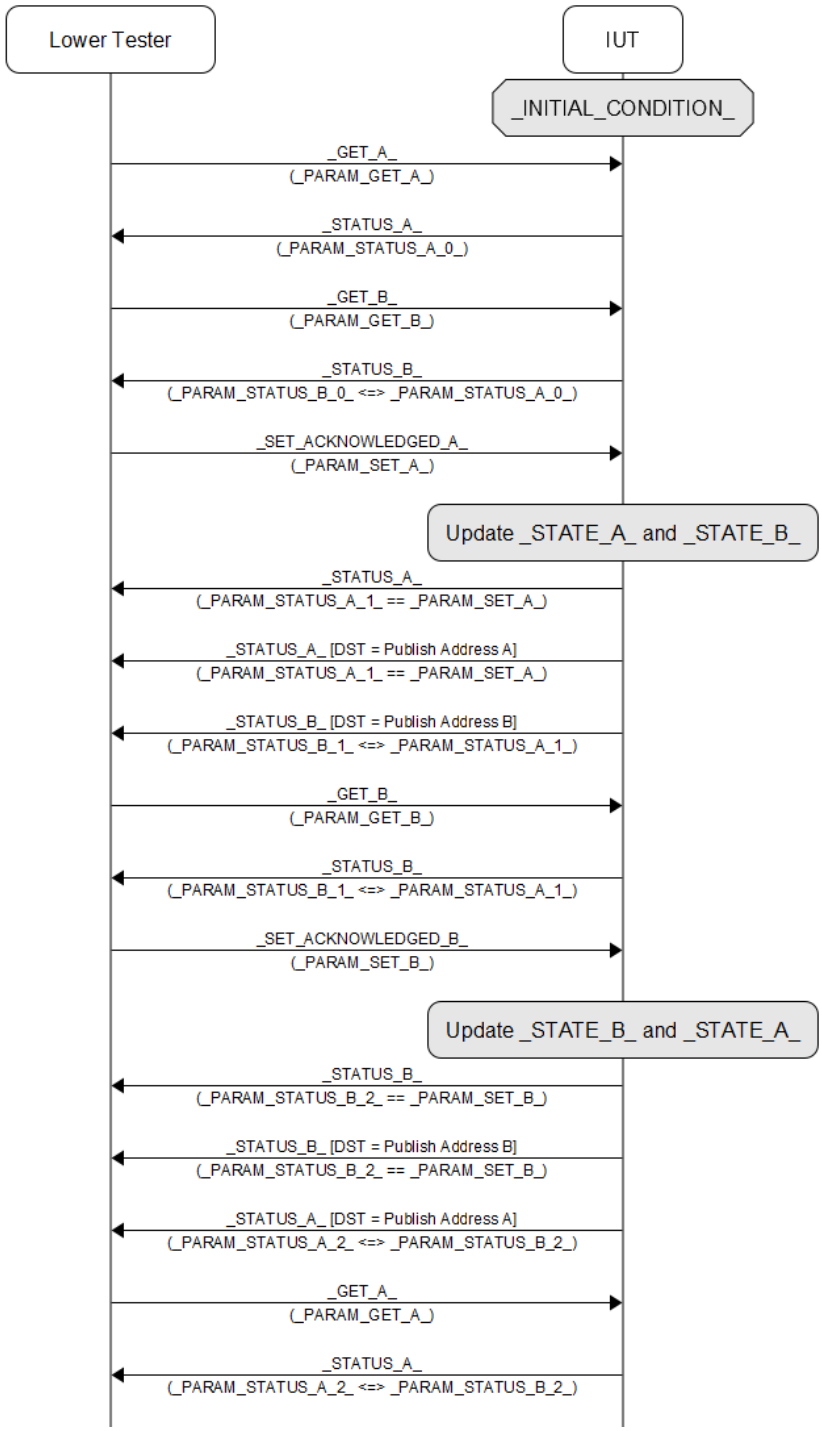

Figure 4.2: Test procedure for the Common State Two-Way Binding Behavior

1. The Lower Tester sends a _GET_A_ message to the IUT with parameters defined by _PARAM_GET_A_.
2. The Lower Tester expects the IUT to respond with a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_0_.
3. The Lower Tester sends a _GET_B_ message to the IUT with parameters defined by _PARAM_GET_B_.

4. The Lower Tester expects the IUT to respond with a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_0_.
5. The Lower Tester sends a _SET_ACKNOWLEDGED_A_ message to the IUT with parameters defined by _PARAM_SET_A_.
6. The Lower Tester expects the IUT to respond with a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_1_. If applicable, the IUT publishes the same message, with the same parameters, to the publish address configured for the corresponding model, and also publishes the _STATUS_B_ message, with parameters defined by _PARAM_STATUS_B_1_, to the publish address configured for the other model.
7. The Lower Tester sends a _GET_B_ message to the IUT with parameters defined by _PARAM_GET_B_.
8. The Lower Tester expects the IUT to respond with a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_1_, indicating a change in _STATE_B_ as a result of the change in _STATE_A_.
9. The Lower Tester sends a _SET_ACKNOWLEDGED_B_ message to the IUT with parameters defined by _PARAM_SET_B_.
10. The Lower Tester expects the IUT to respond with a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_2_. If applicable, the IUT publishes the same message, with the same parameters, to the publish address configured for the corresponding model, and also publishes the _STATUS_A_ message, with parameters defined by _PARAM_STATUS_A_2_, to the publish address configured for the other model.
11. The Lower Tester sends a _GET_A_ message to the IUT with parameters defined by _PARAM_GET_A_.
12. The Lower Tester expects the IUT to respond with a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_2_, indicating a change in _STATE_A_ as a result of the change in _STATE_B_.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_0_.

  In step 4, the IUT sends a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_0_.

  In step 6, the IUT sends a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_1_.

  In step 8, the IUT sends a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_1_.

  In step 10, the IUT sends a _STATUS_B_ message with parameters defined by _PARAM_STATUS_B_2_.

  In step 12, the IUT sends a _STATUS_A_ message with parameters defined by _PARAM_STATUS_A_2_.

  If the IUT has been configured to publish for the models being tested, then, in steps 6 and 10, the IUT publishes both status messages to the configured publish addresses, respectively, with parameters containing the updated state values.

4.2.2.1.1 Generic Power Actual and Generic Level State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Generic Power Actual state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Generic Power Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Power = {0x0000-0xFFFF} Target Power = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = _PARAM_STATUS_A_0_ (Present Power) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Power Level Set
_PARAM_SET_A_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Power = _PARAM_SET_A_ (Power) Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = _PARAM_STATUS_A_1_ (Present Power) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Power = _PARAM_STATUS_B_2_ (Present Level) + 32768 Target Power = N/A Remaining Time = N/A

Table 4.79: Binding Behavior Values for the Generic Power Actual and the Generic Level States

4.2.2.1.2 Generic Power Actual and Generic OnOff State Binding – Simple Scenario 1

State/Message/Parameter	Value(s)
_STATE_A_	Generic Power Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Power Actual state is equal to 0x0000.
_GET_A_	Generic Power Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Power Level Set
_PARAM_SET_A_	Power = {0x0001-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Power = _PARAM_SET_A_ (Power) Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A

Table 4.80: Binding Behavior Values for the Generic Power Actual and Generic OnOff States - Scenario 1

4.2.2.1.3 Generic Power Actual and Generic OnOff State Binding – Simple Scenario 2

State/Message/Parameter	Value(s)
_STATE_A_	Generic Power Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Power Actual state is not equal to 0x0000.
_GET_A_	Generic Power Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Power = {0x0001-0xFFFF} Target Power = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Power Level Set
_PARAM_SET_A_	Power = {0x0001-0xFFFF} != _PARAM_STATUS_A_0_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Power = _PARAM_SET_A_ (Power) Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 [_STATUS_B_ not published in step 6] Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A

Table 4.81: Binding Behavior Values for the Generic Power Actual and Generic OnOff States - Scenario 2

4.2.2.1.4 Generic Power Actual and Generic OnOff State Binding – Using Last Value

State/Message/Parameter	Value(s)
_STATE_A_	Generic Power Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Power Actual state is not equal to 0x0000. The Generic Power Default state is equal to 0x0000.
_GET_A_	Generic Power Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Power = {0x0001-0xFFFF} Target Power = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Power Level Set
_PARAM_SET_A_	Power = 0x0000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Power = _PARAM_STATUS_A_0_ (Present Power) Target Power = N/A Remaining Time = N/A

Table 4.82: Binding Behavior Values for the Generic Power Actual and Generic OnOff States - Using Last Value

4.2.2.1.5 Generic Power Actual and Generic OnOff State Binding – Using Default Value

State/Message/Parameter	Value(s)
_STATE_A_	Generic Power Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Power Actual state is not equal to 0x0000. The Generic Power Default state is not equal to 0x0000 and the Lower Tester has previously obtained and stored its value.
_GET_A_	Generic Power Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Power = {0x0001-0xFFFF} Target Power = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Power Level Set
_PARAM_SET_A_	Power = 0x0000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_2_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Power = stored value of the Generic Power Default state Target Power = N/A Remaining Time = N/A

Table 4.83: Binding Behavior Values for the Generic Power Actual and Generic OnOff States - Using Default Value

4.2.2.1.6Generic Level and Generic OnOff State Implicit Binding – Simple Scenario 1

State/Message/Parameter	Value(s)
_STATE_A_	Generic Level state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Level state is equal to 0x8000.
_GET_A_	Generic Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Level = 0x8000 Target Level = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Level Set
_PARAM_SET_A_	Level = {0x0000-0xFFFF} != 0x8000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Level = _PARAM_SET_A_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Level = 0x8000 Target Level = N/A Remaining Time = N/A

Table 4.84: Binding Behavior Values for the Generic Level and Generic OnOff States - Scenario 1

4.2.2.1.7Generic Level and Generic OnOff State Implicit Binding – Simple Scenario 2

State/Message/Parameter	Value(s)
_STATE_A_	Generic Level state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Generic Level state is not equal to 0x8000.
_GET_A_	Generic Level Get
_PARAM_GET_A_	N/A
_STATUS_A_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Level = {0x0000-0xFFFF} != 0x8000 Target Level = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Generic Level Set
_PARAM_SET_A_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Level) and != 0x8000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Level = _PARAM_SET_A_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 [_STATUS_B_ not published in step 6] Target OnOff = N/A Remaining Time = N/A

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Level = 0x8000 Target Level = N/A Remaining Time = N/A

Table 4.85: Binding Behavior Values for the Generic Level and Generic OnOff States - Scenario 2

4.2.2.1.8Light Lightness Actual and Light Lightness Linear State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Light Lightness Linear state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Lightness = {0x0000-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Light Lightness Linear Get
_PARAM_GET_B_	N/A
_STATUS_B_	Light Lightness Linear Status
PUBLISHED	NO
_PARAM_STATUS_B_0_	Present Lightness = {0x0000-0xFFFF} = 65535 * SQR(_PARAM_STATUS_A_0_ (Present Lightness) / 65535) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set
_PARAM_SET_A_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_1_	Present Lightness = 65535 * SQR(_PARAM_STATUS_A_1_ (Present Lightness) / 65535) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Light Lightness Linear Set
_PARAM_SET_B_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Lightness = _PARAM_SET_B_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = 65535 * SQRT(_PARAM_STATUS_B_2_ (Present Lightness) / 65535) Target Lightness = N/A Remaining Time = N/A Delay = N/A

Table 4.86: Binding Behavior Values for the Light Lightness Actual and Light Lightness Linear States

4.2.2.1.9Light Lightness Actual and Generic Level State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Lightness = {0x0000-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = _PARAM_STATUS_A_0_ (Present Lightness) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set

State/Message/Parameter	Value(s)
_PARAM_SET_A_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = _PARAM_STATUS_A_1_ (Present Lightness) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = _PARAM_STATUS_B_2_ (Present Level) + 32768 Target Lightness = N/A Remaining Time = N/A

Table 4.87: Binding Behavior Values for the Light Lightness Actual and Generic Level States

4.2.2.1.10 Light Lightness Actual and Generic OnOff State Binding – Simple Scenario 1

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light Lightness Actual state is equal to 0x0000.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_0_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set
_PARAM_SET_A_	Lightness = {0x0001-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A

Table 4.88: Binding Behavior Values for the Light Lightness Actual and Generic OnOff States - Scenario 1

4.2.2.1.11 Light Lightness Actual and Generic OnOff State Binding – Simple Scenario 2

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light Lightness Actual state is not equal to 0x0000.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Lightness = {0x0001-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set
_PARAM_SET_A_	Lightness = {0x0001-0xFFFF} != _PARAM_STATUS_A_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 [_STATUS_B_ not published in step 6] Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A

Table 4.89: Binding Behavior Values for the Light Lightness Actual and Generic OnOff States - Scenario 2

4.2.2.1.12 Light Lightness Actual and Generic OnOff State Binding – Using Last Value

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light Lightness Actual state is not equal to 0x0000. The Light Lightness Default state is equal to 0x0000.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Lightness = {0x0001-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A

State/Message/Parameter	Value(s)
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set
_PARAM_SET_A_	Lightness = 0x0000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = _PARAM_STATUS_A_0_ (Present Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.90: Binding Behavior Values for the Light Lightness Actual and Generic OnOff States - Using Last Value

4.2.2.1.13 Light Lightness Actual and Generic OnOff State Binding – Using Default Value

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Actual state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light Lightness Actual state is not equal to 0x0000. The Light Lightness Default state is not equal to 0x0000 and the Lower Tester has previously obtained and stored its value.
_GET_A_	Light Lightness Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_A_0_	Present Lightness = {0x0001-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Set
_PARAM_SET_A_	Lightness = 0x0000 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = stored value of the Light Lightness Default state Target Lightness = N/A Remaining Time = N/A

Table 4.91: Binding Behavior Values for the Light Lightness Actual and Generic OnOff States - Using Default Value

4.2.2.1.14 Light Lightness Linear and Generic OnOff State Implicit Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Linear state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light Lightness Linear state is equal to 0x0000.
_GET_A_	Light Lightness Linear Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Linear Status

State/Message/Parameter	Value(s)
PUBLISHED	NO - Light Lightness Status instead
_PARAM_STATUS_A_0_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Linear Set
_PARAM_SET_A_	Lightness = {0x0001-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A

Table 4.92: Binding Behavior Values for the Light Lightness Linear and Generic OnOff States

4.2.2.1.15 Light Lightness Linear and Generic Level State Implicit Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light Lightness Linear state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light Lightness Linear Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light Lightness Linear Status

State/Message/Parameter	Value(s)
PUBLISHED	No - Light Lightness Status instead
_PARAM_STATUS_A_0_	Present Lightness = {0x0000-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = 65535 * SQRT(_PARAM_STATUS_A_0_ (Present Lightness) / 65535) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light Lightness Linear Set
_PARAM_SET_A_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Lightness = _PARAM_SET_A_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = 65535 * SQRT(_PARAM_STATUS_A_1_ (Present Lightness) / 65535) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Lightness = 65535 * SQR((_PARAM_STATUS_B_2_ (Present Level) + 32768) / 65535) Target Lightness = N/A Remaining Time = N/A

Table 4.93: Binding Behavior Values for the Light Lightness Linear and Generic Level States

4.2.2.1.16 Light CTL Lightness and Light Lightness Actual State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light CTL Lightness state
_STATE_B_	Light Lightness Actual state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light CTL Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light CTL Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present CTL Lightness = {0x0000-0xFFFF} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_GET_B_	Light Lightness Get
_PARAM_GET_B_	N/A
_STATUS_B_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Lightness = _PARAM_STATUS_A_0_(Present CTL Lightness) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light CTL Set
_PARAM_SET_A_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present CTL Lightness = _PARAM_SET_A_ (CTL Lightness) Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Lightness = _PARAM_STATUS_A_1_(Present CTL Lightness) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Light Lightness Set
_PARAM_SET_B_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_2_	Present Lightness = _PARAM_SET_B_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present CTL Lightness = _PARAM_STATUS_B_2_(Present Lightness) Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A

Table 4.94: Binding Behavior Values for the Light CTL Lightness and Light Lightness Actual States

4.2.2.1.17 Light CTL Temperature and Generic Level State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light CTL Temperature state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The values of the Light CTL Temperature Range Min and Light CTL Temperature Range Max states are denoted as T_MIN and T_MAX, respectively.
_GET_A_	Light CTL Temperature Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light CTL Temperature Status
PUBLISHED	No - Light CTL Status instead
_PARAM_STATUS_A_0_	Present CTL Temperature = {T_MIN-T_MAX} Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = N/A Target Delta UV = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = IF T_MAX != T_MIN: Round((_PARAM_STATUS_A_0_ (Present CTL Temperature) – T_MIN) * 65535 / (T_MAX – T_MIN) - 32768) ELSE: 0 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light CTL Temperature Set

State/Message/Parameter	Value(s)
_PARAM_SET_A_	CTL Temperature = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present CTL Temperature = _PARAM_SET_A_ (CTL Temperature) Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = N/A Target Delta UV = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = IF T_MAX != T_MIN: Round((_PARAM_STATUS_A_1_ (Present CTL Temperature) – T_MIN) * 65535 / (T_MAX – T_MIN) - 32768) ELSE: 0 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present CTL Temperature = T_MIN + Round((_PARAM_STATUS_B_2_ (Present Level) + 32768) * (T_MAX – T_MIN) / 65535) Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = N/A Target Delta UV = N/A Remaining Time = N/A

Table 4.95: Binding Behavior Values for the Light CTL Temperature and Generic Level States

4.2.2.1.18 Light LC Light OnOff and Generic OnOff State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light LC Light OnOff state
_STATE_B_	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. The Light LC Property states are set such that the transitions of the Light LC Light OnOff state are immediate by default (transition time of zero).
_GET_A_	Light LC Light OnOff Get

State/Message/Parameter	Value(s)
_PARAM_GET_A_	N/A
_STATUS_A_	Light LC Light OnOff Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	Present Light OnOff = {0x00-0x01} Target Light OnOff = N/A Remaining Time = N/A
_GET_B_	Generic OnOff Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present OnOff = _PARAM_STATUS_A_0_ (Present Light OnOff) Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light LC Light OnOff Set
_PARAM_SET_A_	Light OnOff = {0x00-0x01} != _PARAM_STATUS_A_0_ (Present Light OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Light OnOff = _PARAM_SET_A_ (Light OnOff) Target Light OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present OnOff = _PARAM_STATUS_A_1_ (Present Light OnOff) Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic OnOff Set
_PARAM_SET_B_	OnOff = {0x00-0x01} != _PARAM_STATUS_B_1_ (Present OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present OnOff = _PARAM_SET_B_ (OnOff) Target OnOff = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Light OnOff = _PARAM_STATUS_B_2_ (Present OnOff) Target Light OnOff = N/A Remaining Time = N/A

Table 4.96: Binding Behavior Values for the Light LC Light OnOff and Generic OnOff States

4.2.2.1.19 Light HSL Hue and Generic Level State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light HSL Hue state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light HSL Hue Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light HSL Hue Status
PUBLISHED	No - Light HSL Status instead
_PARAM_STATUS_A_0_	Present Hue = {0x0000-0xFFFF} Target Hue = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = _PARAM_STATUS_A_0_ (Present Hue) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light HSL Hue Set
_PARAM_SET_A_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Hue = _PARAM_SET_A_ (Hue) Target Hue = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = _PARAM_STATUS_A_1_ (Present Hue) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Hue = _PARAM_STATUS_B_2_ (Present Level) + 32768 Target Hue = N/A Remaining Time = N/A

Table 4.97: Binding Behavior Values for the Light HSL Hue and Generic Level State

4.2.2.1.20 Light HSL Saturation and Generic Level State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light HSL Saturation state
_STATE_B_	Generic Level state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light HSL Saturation Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light HSL Saturation Status
PUBLISHED	NO - Light HSL Status instead
_PARAM_STATUS_A_0_	Present Saturation = {0x0000-0xFFFF} Target Saturation = N/A Remaining Time = N/A
_GET_B_	Generic Level Get
_PARAM_GET_B_	N/A
_STATUS_B_	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Level = _PARAM_STATUS_A_0_ (Present Saturation) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light HSL Saturation Set
_PARAM_SET_A_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	Present Saturation = _PARAM_SET_A_ (Saturation) Target Saturation = N/A Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Level = _PARAM_STATUS_A_1_ (Present Saturation) - 32768 Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Generic Level Set

State/Message/Parameter	Value(s)
_PARAM_SET_B_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Level = _PARAM_SET_B_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	Present Saturation = _PARAM_STATUS_B_2_ (Present Level) + 32768 Target Saturation = N/A Remaining Time = N/A

Table 4.98: Binding Behavior Values for the Light HSL Saturation and Generic Level State

4.2.2.1.21 Light HSL Lightness and Light Lightness Actual State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light HSL Lightness state
_STATE_B_	Light Lightness Actual state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light HSL Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light HSL Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_GET_B_	Light Lightness Get
_PARAM_GET_B_	N/A
_STATUS_B_	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_B_0_	Present Lightness = _PARAM_STATUS_A_0_(HSL Lightness) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light HSL Set
_PARAM_SET_A_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_A_1_	HSL Lightness = _PARAM_SET_A_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_PARAM_STATUS_B_1_	Present Lightness = _PARAM_STATUS_A_1_(HSL Lightness) Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Light Lightness Set
_PARAM_SET_B_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	Present Lightness = _PARAM_SET_B_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_A_2_	HSL Lightness = _PARAM_STATUS_B_2_(Present Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A

Table 4.99: Binding Behavior Values for the Light HSL Lightness and Light Lightness Actual States

4.2.2.1.22 Light xyL Lightness and Light HSL Lightness State Binding

State/Message/Parameter	Value(s)
_STATE_A_	Light xyL Lightness state
_STATE_B_	Light HSL Lightness state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT.
_GET_A_	Light xyL Get
_PARAM_GET_A_	N/A
_STATUS_A_	Light xyL Status
PUBLISHED	YES
_PARAM_STATUS_A_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A
_GET_B_	Light HSL Get
_PARAM_GET_B_	N/A
_STATUS_B_	Light HSL Status
PUBLISHED	YES

State/Message/Parameter	Value(s)
_PARAM_STATUS_B_0_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_A_	Light xyL Set
_PARAM_SET_A_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_A_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_A_1_	xyL Lightness = _PARAM_SET_A_ (xyL Lightness) xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A
_PARAM_STATUS_B_1_	HSL Lightness = _PARAM_STATUS_A_1_ (xyL Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_B_	Light HSL Set
_PARAM_SET_B_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_B_1_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_B_2_	HSL Lightness = _PARAM_SET_B_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_PARAM_STATUS_A_2_	xyL Lightness = _PARAM_STATUS_B_2_ (HSL Lightness) xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A

Table 4.100: Binding Behavior Values for the Light xyL Lightness and Light HSL LightnessStates

4.2.2.2 Common State Range Binding Behavior

- Test Purpose

  This test procedure verifies common range binding behavior for a Server Model on the IUT supporting the _STATE_ bound to a composite state that describes a restrictive range for its values. This composite state contains the _RANGE_MIN_ state and the _RANGE_MAX_ state.

- Initial Condition

  There is no state transition in progress on the IUT.

  If the Generic Default Transition Time state is supported, its value is set to 0.

  Additional initial conditions on the IUT, LT or UT are defined by _INITIAL_CONDITION_.

- Test Procedure

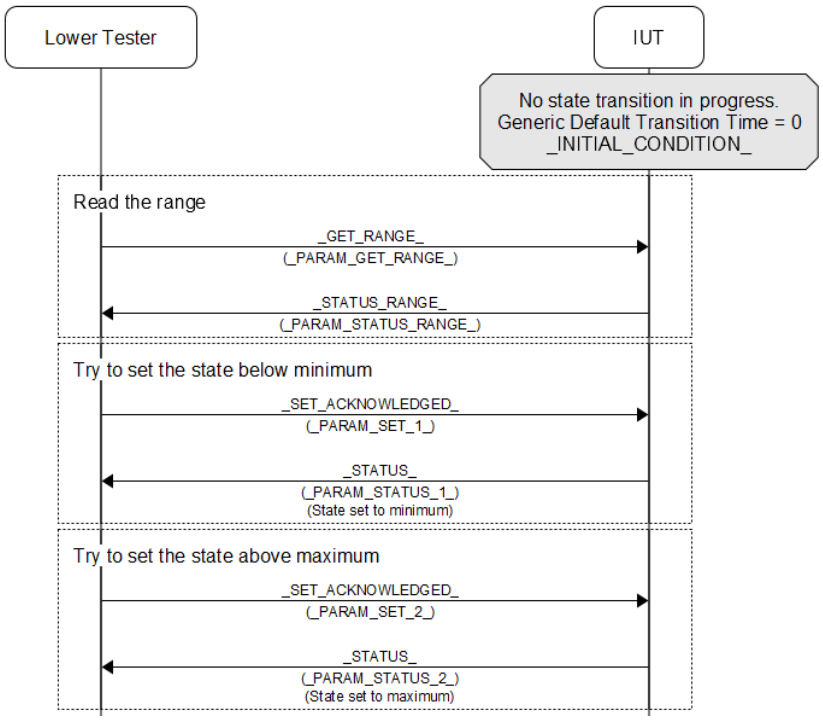

Figure 4.3: Test Procedure for the Common State Range Binding Behavior

1. The Lower Tester sends a _GET_RANGE_ message to the IUT with parameters defined by _PARAM_GET_RANGE_.
2. The Lower Tester expects the IUT to respond with a _STATUS_RANGE_ message with parameters defined by _PARAM_STATUS_RANGE_.
3. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_1_.
4. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_.
5. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_2_.
6. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_2_.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_RANGE_ message with parameters defined by _PARAM_STATUS_RANGE_.

  In step 4, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_1_.

  In step 6, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_2_.

4.2.2.2.1 Generic Power Actual and Generic Power Range State Binding

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_RANGE_MIN_	Generic Power Range Min
_RANGE_MAX_	Generic Power Range Max
_INITIAL_CONDITION_	The Generic Power Range state satisfies the condition: 0x0001 < Generic Power Range Min < Generic Power Range Max < 0xFFFF.
_GET_RANGE_	Generic Power Range Get
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Generic Power Range Status
_PARAM_STATUS_RANGE_	Status Code = 0x00 Range Min = Generic Power Range Min Range Max = Generic Power Range Max
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_1_	Power = {0x0001-0xFFFF} < _PARAM_STATUS_RANGE_ (Range Min) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Power Level Status
_PARAM_STATUS_1_	Present Power = _PARAM_STATUS_RANGE_ (Range Min) Target Power = N/A Remaining Time = N/A
_PARAM_SET_2_	Power = {0x0001-0xFFFF} > _PARAM_STATUS_RANGE_ (Range Max) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Power = _PARAM_STATUS_RANGE_ (Range Max) Target Power = N/A Remaining Time = N/A

Table 4.101: Binding Behavior Values for the Generic Power Actual and Generic Power Range States

4.2.2.2.2 Light Lightness Actual and Light Lightness Range State Binding

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_RANGE_MIN_	Light Lightness Range Min
_RANGE_MAX_	Light Lightness Range Max
_INITIAL_CONDITION_	The Light Lightness Range state satisfies the condition: 0x0001 < Light Lightness Range Min < Light Lightness Range Max < 0xFFFF.
_GET_RANGE_	Light Lightness Range Get
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Light Lightness Range Status
_PARAM_STATUS_RANGE_	Status Code = 0x00 Range Min = Light Lightness Range Min Range Max = Light Lightness Range Max
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_1_	Lightness = {0x0001-0xFFFF} < _PARAM_STATUS_RANGE_ (Range Min) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light Lightness Status
_PARAM_STATUS_1_	Present Lightness = _PARAM_STATUS_RANGE_ (Range Min) Target Lightness = N/A Remaining Time = N/A
_PARAM_SET_2_	Lightness = {0x0001-0xFFFF} > _PARAM_STATUS_RANGE_ (Range Max) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Lightness = _PARAM_STATUS_RANGE_ (Range Max) Target Lightness = N/A Remaining Time = N/A

Table 4.102: Range Binding Behavior Values for the Light Lightness Actual and Light Lightness Range States

4.2.2.2.3 Light CTL Temperature and Light CTL Temperature Range State Binding

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_RANGE_MIN_	Light CTL Temperature Range Min
_RANGE_MAX_	Light CTL Temperature Range Max

State/Message/Parameter	Value(s)
_INITIAL_CONDITION_	The Light CTL Temperature Range state is instantiated on the IUT Element denoted as Element A. This Element supports the Light CTL Server Model. The Light CTL Temperature Range state satisfies the condition: 0x0320 < Light CTL Temperature Range Min < Light CTL Temperature Range Max < 0x4E20. The Light CTL Temperature state is instantiated on the IUT Element denoted as Element B. This Element supports the Light CTL Temperature Server Model.
_GET_RANGE_	Light CTL Temperature Range Get (sent to Element A)
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Light CTL Temperature Range Status (received from Element A)
_PARAM_STATUS_RANGE_	Status Code = 0x00 Range Min = Light CTL Temperature Range Min Range Max = Light CTL Temperature Range Max
_SET_ACKNOWLEDGED_	Light CTL Temperature Set (sent to Element B)
_PARAM_SET_1_	CTL Temperature = {0x0320-0x4E20} < _PARAM_STATUS_RANGE_ (Range Min) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light CTL Temperature Status (received from Element B)
_PARAM_STATUS_1_	Present CTL Temperature = _PARAM_STATUS_RANGE_ (Range Min) Present CTL Delta UV = _PARAM_SET_1_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_PARAM_SET_2_	CTL Temperature = {0x0320-0x4E20} > _PARAM_STATUS_RANGE_ (Range Max) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present CTL Temperature = _PARAM_STATUS_RANGE_ (Range Max) Present CTL Delta UV = _PARAM_SET_2_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A

Table 4.103: Binding Behavior Values for the Light CTL Temperature and Light CTL Temperature Range States

4.2.2.2.4 Light HSL Hue and Light HSL Hue Range State Binding

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_RANGE_MIN_	Light HSL Hue Range Min
_RANGE_MAX_	Light HSL Hue Range Max
_INITIAL_CONDITION_	The Light HSL Hue Range state is instantiated on the IUT Element denoted as Element A. This Element supports the Light HSL Server Model. The Light HSL Hue Range state satisfies the condition: 0x0000 < Light HSL Hue Range Min < Light HSL Hue Range Max < 0xFFFF. The Light HSL Hue state is instantiated on the IUT Element denoted as Element B. This Element supports the Light HSL Hue Server Model.
_GET_RANGE_	Light HSL Range Get (sent to Element A)
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Light HSL Range Status (received from Element A)
_PARAM_STATUS_RANGE_	Status Code = 0x00 Hue Range Min = Light HSL Hue Range Min Hue Range Max = Light HSL Hue Range Max Saturation Range Min = {0x0000-0xFFFF} Saturation Range Max = {0x0000-0xFFFF} > Saturation Range Min
_SET_ACKNOWLEDGED_	Light HSL Hue Set (sent to Element B)
_PARAM_SET_1_	Hue = {0x0000-0xFFFF} < _PARAM_STATUS_RANGE_ (Hue Range Min) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light HSL Hue Status (received from Element B)
_PARAM_STATUS_1_	Present Hue = _PARAM_STATUS_RANGE_ (Hue Range Min) Target Hue = N/A Remaining Time = N/A
_PARAM_SET_2_	Hue = {0x0000-0xFFFF} > _PARAM_STATUS_RANGE_ (Hue Range Max) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Hue = _PARAM_STATUS_RANGE_ (Hue Range Max) Target Hue = N/A Remaining Time = N/A

Table 4.104: Binding Behavior Values for the Light HSL Hue and Light HSL Hue Range States

4.2.2.2.5 Light HSL Saturation and Light HSL Saturation Range State Binding

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_RANGE_MIN_	Light HSL Saturation Range Min
_RANGE_MAX_	Light HSL Saturation Range Max
_INITIAL_CONDITION_	The Light HSL Saturation Range state is instantiated on the IUT Element denoted as Element A. This Element supports the Light HSL Server Model. The Light HSL Saturation Range state satisfies the condition: 0x0000 < Light HSL Saturation Range Min < Light HSL Saturation Range Max < 0xFFFF. The Light HSL Saturation state is instantiated on the IUT Element denoted as Element B. This Element supports the Light HSL Saturation Server Model.
_GET_RANGE_	Light HSL Range Get (sent to Element A)
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Light HSL Range Status (received from Element A)
_PARAM_STATUS_RANGE_	Status Code = 0x00 Hue Range Min = {0x0000-0xFFFF} Hue Range Max = {0x0000-0xFFFF} > Hue Range Min Saturation Range Min = Light HSL Saturation Range Min Saturation Range Max = Light HSL Saturation Range Max
_SET_ACKNOWLEDGED_	Light HSL Saturation Set (sent to Element B)
_PARAM_SET_1_	Saturation = {0x0000-0xFFFF} < _PARAM_STATUS_RANGE_ (Saturation Range Min) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light HSL Saturation Status (received from Element B)
_PARAM_STATUS_1_	Present Saturation = _PARAM_STATUS_RANGE_ (Saturation Range Min) Target Saturation = N/A Remaining Time = N/A
_PARAM_SET_2_	Saturation = {0x0000-0xFFFF} > _PARAM_STATUS_RANGE_ (Saturation Range Max) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	Present Saturation = _PARAM_STATUS_RANGE_ (Saturation Range Max) Target Saturation = N/A Remaining Time = N/A

Table 4.105: Binding Behavior Values for the Light HSL Saturation and Light HSL Saturation Range States

4.2.2.2.6 Light xyL and Light xyL Range State Binding

State/Message/Parameter	Value(s)
STATE	Light xyL state
_RANGE_MIN_	Light xyL Range Min
_RANGE_MAX_	Light xyL Range Max
_INITIAL_CONDITION_	The Light xyL Range state satisfies the conditions: 0x0000 < Light xyL x Range Min < Light xyL x Range Max < 0xFFFF and 0x0000 < Light xyL y Range Min < Light xyL y Range Max < 0xFFFF.
_GET_RANGE_	Light xyL Range Get
_PARAM_GET_RANGE_	N/A
_STATUS_RANGE_	Light xyL Range Status
_PARAM_STATUS_RANGE_	Status Code = 0x00 xyL x Range Min = Light xyL x Range Min xyL x Range Max = Light xyL x Range Max xyL y Range Min = Light xyL y Range Min xyL y Range Max = Light xyL y Range Max
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_1_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} < _PARAM_STATUS_RANGE_ (xyL x Range Min) xyL y = {0x0000-0xFFFF} < _PARAM_STATUS_RANGE_ (xyL y Range Min) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light xyL Status
_PARAM_STATUS_1_	xyL Lightness = _PARAM_SET_1_ (xyL Lightness) xyL x = _PARAM_STATUS_RANGE_ (xyL x Range Min) xyL y = _PARAM_STATUS_RANGE_ (xyL y Range Min) Remaining Time = N/A
_PARAM_SET_2_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} > _PARAM_STATUS_RANGE_ (xyL x Range Max) xyL y = {0x0000-0xFFFF} > _PARAM_STATUS_RANGE_ (xyL y Range Max) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_2_	xyL Lightness = _PARAM_SET_2_ (xyL Lightness) xyL x = _PARAM_STATUS_RANGE_ (xyL x Range Max) xyL y = _PARAM_STATUS_RANGE_ (xyL y Range Max) Remaining Time = N/A

Table 4.106: Binding Behavior Values for the Light xyL and Light xyL Range States

4.2.2.3 Common State OnPowerUp Binding Behavior

- Test Purpose

  This test procedure verifies common on-power-up binding behavior for an IUT supporting the Generic Power OnOff Server Model, the _STATE_ bound to the OnPowerUp state, and the _STATE_DEFAULT_.

- Initial Condition

  If the values of the _STATE_ are restricted by a bound “range” state, then the latter is set to the maximum possible range supported by the IUT, and the Lower Tester will not try to set the _STATE_ values outside this range.

  There is no state transition in progress on the IUT.

  If the Generic Default Transition Time state is supported, its value is set to 0.

  The _STATE_DEFAULT_ state is set to non-zero values.

  If the model being tested supports publishing for the _STATE_ (as indicated by the value of the PUBLISHED parameter below the _STATUS_ parameter in each table), the IUT is configured to publish to a random group or virtual address, and the message publishing expectations in the test procedure will apply.

  Additional initial conditions on the IUT, LT, or UT are defined by _INITIAL_CONDITION_.

- Test Procedure

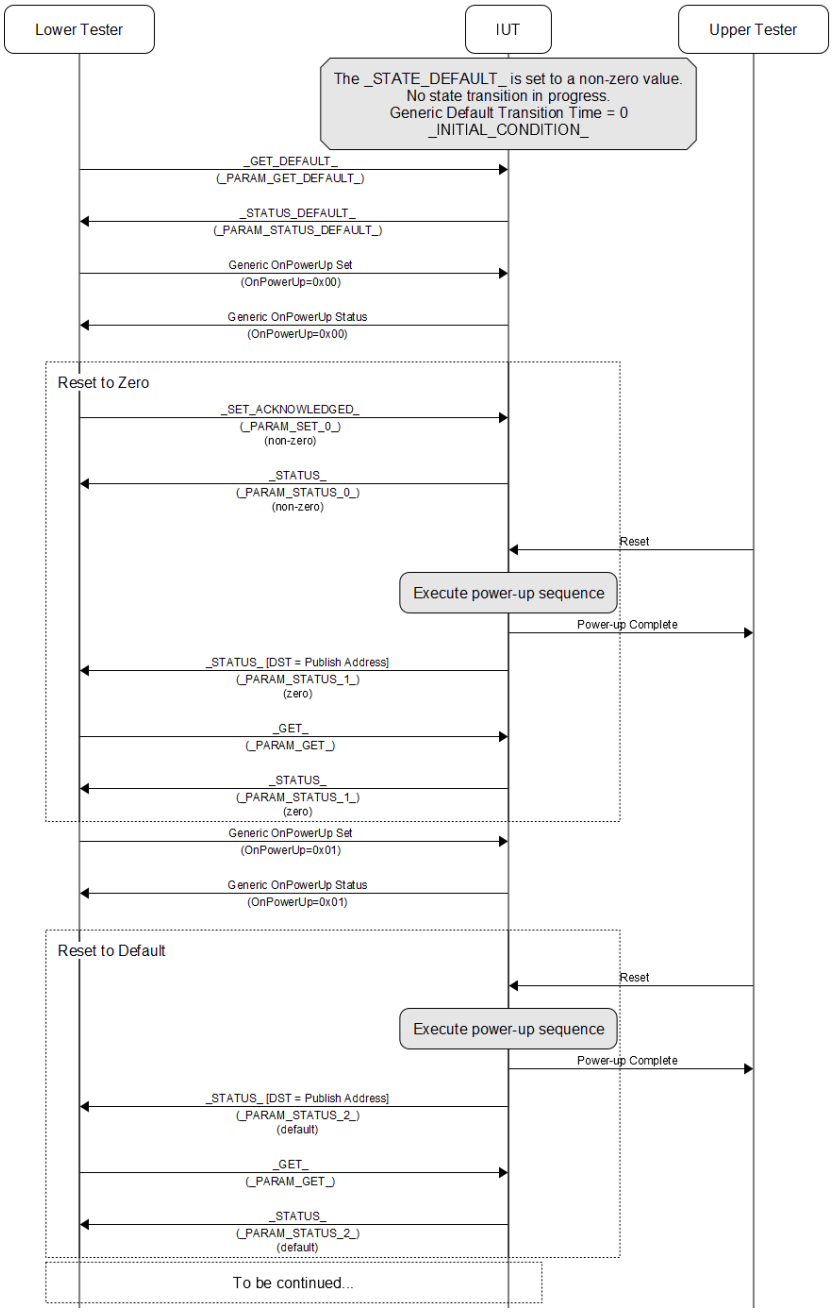

Figure 4.4: Test Procedure for the Common State OnPowerUp Binding Behavior – Page 1 of 2

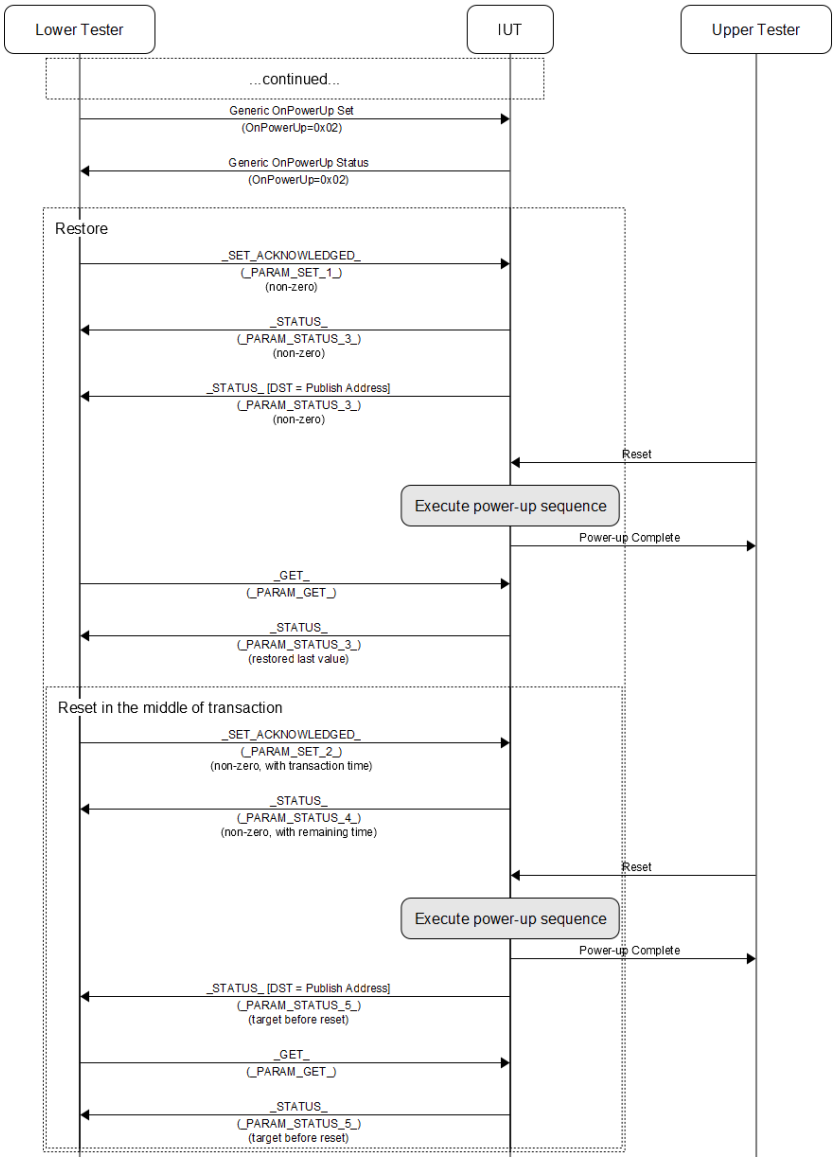

Figure 4.5: Test Procedure for the Common State OnPowerUp Binding Behavior – Page 2 of 2

1. The Lower Tester sends a _GET_DEFAULT_ message to the IUT with parameters defined by _PARAM_GET_DEFAULT_.
2. The Lower Tester expects the IUT to respond with a _STATUS_DEFAULT_ message with parameters defined by _PARAM_STATUS_DEFAULT_.
3. The Lower Tester sends a Generic OnPowerUp Set message to the IUT with the OnPowerUp field set to 0x00.
4. The Lower Tester expects the IUT to respond with a Generic OnPowerUp Status message with the OnPowerUp field set to 0x00.
5. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_0_ (setting the state to a non-zero value).
6. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

7. The Upper Tester orders the IUT to reset itself and after the IUT has executed its power up sequence, if applicable, the Lower Tester expects the IUT to publish a _STATUS_ message with parameters defined by _PARAM_STATUS_1_ to the configured publish address.
8. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_ and expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_ (indicating the state has been reset to zero or default).
9. The Lower Tester sends a Generic OnPowerUp Set message to the IUT with the OnPowerUp field set to 0x01.
10. The Lower Tester expects the IUT to respond with a Generic OnPowerUp Status message with the OnPowerUp field set to 0x01.
11. The Upper Tester orders the IUT to reset itself and after the IUT has executed its power up sequence, if applicable, the Lower Tester expects the IUT to publish a _STATUS_ message with parameters defined by _PARAM_STATUS_2_ to the configured publish address.
12. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_ and expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_2_ (indicating the state has been reset to the default value).
13. The Lower Tester sends a Generic OnPowerUp Set message to the IUT with the OnPowerUp field set to 0x02.
14. The Lower Tester expects the IUT to respond with a Generic OnPowerUp Status message with the OnPowerUp field set to 0x02.
15. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_1_ (setting the state to a non-zero value different than the default value).
16. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_3_, and, if applicable, to publish the same message, with the same parameters, to the configured publish address.
17. The Upper Tester orders the IUT to reset itself and after the IUT has executed its power up sequence, the Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
18. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_3_ (indicating the state has been restored to the value before the reset).
19. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_2_ (starting a transition to another value).
20. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_4_.
21. The Upper Tester orders the IUT to reset itself before the transition is complete. After the IUT has executed its power up sequence, if applicable, the Lower Tester expects the IUT to publish a _STATUS_ message with parameters defined by _PARAM_STATUS_5_ to the configured publish address.
22. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_ and expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_5_ (indicating the state has been reset to the target value of the transition started in step 19).

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_DEFAULT_ message to the Lower Tester with parameters defined by _PARAM_STATUS_DEFAULT_.

  In steps 4, 10, and 14, the IUT sends a Generic OnPowerUp Status message to the Lower Tester with the OnPowerUp field set to, respectively, 0x00, 0x01 and 0x02.

  In steps 6, 8, 12, 16, 18, 20, and 22, the IUT sends a _STATUS_ message to the Lower Tester with parameters defined by, respectively, _PARAM_STATUS_0_, _PARAM_STATUS_1_, _PARAM_STATUS_2_, _PARAM_STATUS_3_, _PARAM_STATUS_3_, _PARAM_STATUS_4_, _PARAM_STATUS_5_.

  If the IUT has been configured to publish for the model being tested, then, in steps 7, 11, 16, and 21, the IUT publishes the _STATUS_ message to the configured publish address, with parameters containing the updated state value.

4.2.2.3.1 Generic Power Actual and Generic OnPowerUp State Binding

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_STATE_DEFAULT_	Generic Power Default state
_INITIAL_CONDITION_	N/A
_GET_DEFAULT_	Generic Power Default Get
_PARAM_GET_DEFAULT_	N/A
_STATUS_DEFAULT_	Generic Power Default Status
_PARAM_STATUS_DEFAULT_	Power = {0x0001-0xFFFF}
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_0_	Power = {0x0001-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Power = _PARAM_SET_0_ (Power) Target Power = N/A Remaining Time = N/A
GET	Generic Power Level Get
_PARAM_GET_	N/A
_PARAM_STATUS_1_	Present Power = 0x0000 Target Power = N/A Remaining Time = N/A
_PARAM_STATUS_2_	Present Power = _PARAM_STATUS_DEFAULT_ (Power) Target Power = N/A Remaining Time = N/A

State/Message/Parameter	Value(s)
_PARAM_SET_1_	Power = {0x0001-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_3_	Present Power = _PARAM_SET_1_ (Power) Target Power = N/A Remaining Time = N/A
_PARAM_SET_2_	Power = {0x0000-0xFFFF} != _PARAM_SET_1_ (Power) and != _PARAM_STATUS_DEFAULT_ (Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = 0x00
_PARAM_STATUS_4_	Present Power = _PARAM_STATUS_3_ (Present Power) Target Power = _PARAM_SET_2_ (Power) Remaining Time ≤ _PARAM_SET_2_ (Transition Time)
_PARAM_STATUS_5_	Present Power = _PARAM_SET_2_ (Power) Target Power = N/A Remaining Time = N/A

Table 4.107: Binding Behavior Values for the Generic Power Actual and Generic OnPowerUp States

4.2.2.3.2 Light Lightness Actual and Generic OnPowerUp State Binding

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_STATE_DEFAULT_	Light Lightness Default state
_INITIAL_CONDITION_	N/A
_GET_DEFAULT_	Light Lightness Default Get
_PARAM_GET_DEFAULT_	N/A
_STATUS_DEFAULT_	Light Lightness Default Status
_PARAM_STATUS_DEFAULT_	Lightness = {0x0001-0xFFFF}
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_0_	Lightness = {0x0001-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Lightness = _PARAM_SET_0_ (Lightness) Target Lightness = N/A Remaining Time = N/A
GET	Light Lightness Get
_PARAM_GET_	N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_1_	Present Lightness = 0x0000 Target Lightness = N/A Remaining Time = N/A
_PARAM_STATUS_2_	Present Lightness = _PARAM_STATUS_DEFAULT_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_SET_1_	Lightness = {0x0001-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_3_	Present Lightness = _PARAM_SET_1_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_SET_2_	Lightness = {0x0000-0xFFFF} != _PARAM_SET_1_ (Lightness) and != _PARAM_STATUS_DEFAULT_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = 0x00
_PARAM_STATUS_4_	Present Lightness = _PARAM_STATUS_3_ (Present Lightness) Target Lightness = _PARAM_SET_2_ (Lightness) Remaining Time ≤ _PARAM_SET_2_ (Transition Time)
_PARAM_STATUS_5_	Present Lightness = _PARAM_SET_2_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.108: Binding Behavior Values for the Light Lightness Actual and Generic OnPowerUp States

4.2.2.3.3 Light CTL and Generic OnPowerUp State Binding

State/Message/Parameter	Value(s)
STATE	Light CTL state (Light CTL Temperature and Light CTL Delta UV)
_STATE_DEFAULT_	Light CTL Temperature Default and Light CTL Delta UV Default states
_INITIAL_CONDITION_	The Light CTL Temperature Default and Light CTL Delta UV Default states are instantiated on the IUT Element supporting the Light CTL Server Model, denoted as Element A. The Light CTL Temperature and the Light CTL Delta UV states are instantiated on the IUT Element supporting the Light CTL Temperature Server Model, denoted as Element B.
_GET_DEFAULT_	Light CTL Default Get (sent to Element A)
_PARAM_GET_DEFAULT_	N/A
_STATUS_DEFAULT_	Light CTL Default Status (received from Element A)

State/Message/Parameter	Value(s)
_PARAM_STATUS_DEFAULT_	Lightness = {0x0000-0xFFFF} Temperature = {0x0320-0x4E20} Delta UV = {0x0001-0xFFFF}
_SET_ACKNOWLEDGED_	Light CTL Temperature Set (sent to Element B)
_PARAM_SET_0_	CTL Temperature = {0x0320-0x4E20} CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light CTL Temperature Status (received from Element B)
PUBLISHED	NO - Light CTL Status instead
_PARAM_STATUS_0_	Present CTL Temperature = _PARAM_SET_0_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_0_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
GET	Light CTL Temperature Get (sent to Element B)
_PARAM_GET_	N/A
_PARAM_STATUS_1_	(Note that OnPowerUp=0x00 means Default for this state) Present CTL Temperature = _PARAM_STATUS_DEFAULT_ (Temperature) Present CTL Delta UV = _PARAM_STATUS_DEFAULT_ (Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_PARAM_STATUS_2_	Present CTL Temperature = _PARAM_STATUS_DEFAULT_ (Temperature) Present CTL Delta UV = _PARAM_STATUS_DEFAULT_ (Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_PARAM_SET_1_	CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_DEFAULT_(Temperature) CTL Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_(Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_3_	Present CTL Temperature = _PARAM_SET_1_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_1_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_PARAM_SET_2_	CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_DEFAULT_(Temperature) CTL Delta UV = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_(Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = 0x00
_PARAM_STATUS_4_	Present CTL Temperature = _PARAM_STATUS_3_ (CTL Temperature) Present CTL Delta UV = _PARAM_STATUS_3_ (CTL Delta UV) Target CTL Temperature = _PARAM_SET_2_ (CTL Temperature) Target CTL Delta UV = _PARAM_SET_2_ (CTL Delta UV) Remaining Time ≤ _PARAM_SET_2_ (Transition Time)
_PARAM_STATUS_5_	Present CTL Temperature = _PARAM_SET_2_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_2_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A

Table 4.109: Binding Behavior Values for the Light CTL and Generic OnPowerUp States

4.2.2.3.4 Light HSL and Generic OnPowerUp State Binding

State/Message/Parameter	Value(s)
STATE	Light HSL state (Light HSL Hue and Light HSL Saturation)
_STATE_DEFAULT_	Light HSL Hue Default and Light HSL Saturation Default states
_INITIAL_CONDITION_	The Light HSL Hue Default and Light HSL Saturation Default states are instantiated on the IUT Element supporting the Light HSL Server Model, denoted as Element A. The Light HSL Hue and the Light HSL Saturation states are instantiated on the IUT Elements supporting the Light HSL Hue Server Model and Light HSL Saturation Server Models. All messages are exchanged with Element A.
_GET_DEFAULT_	Light HSL Default Get
_PARAM_GET_DEFAULT_	N/A
_STATUS_DEFAULT_	Light HSL Default Status
_PARAM_STATUS_DEFAULT_	Lightness = {0x0000-0xFFFF} Hue = {0x0000-0xFFFF} Saturation = {0x0000-0xFFFF}

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_	Light HSL Set
_PARAM_SET_0_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light HSL Status
PUBLISHED	YES
_PARAM_STATUS_0_	HSL Lightness = _PARAM_SET_0_ (HSL Lightness) HSL Hue = _PARAM_SET_0_ (HSL Hue) HSL Saturation = _PARAM_SET_0_ (HSL Saturation) Remaining Time = N/A
GET	Light HSL Get
_PARAM_GET_	N/A
_PARAM_STATUS_1_	(Note that OnPowerUp=0x00 means Default for this state) HSL Lightness = 0x0000 HSL Hue = _PARAM_STATUS_DEFAULT_ (Hue) HSL Saturation = _PARAM_STATUS_DEFAULT_ (Saturation) Remaining Time = N/A
_PARAM_STATUS_2_	HSL Lightness = _PARAM_STATUS_DEFAULT_ (Lightness) HSL Hue = _PARAM_STATUS_DEFAULT_ (Hue) HSL Saturation = _PARAM_STATUS_DEFAULT_ (Saturation) Remaining Time = N/A
_PARAM_SET_1_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_3_	HSL Lightness = _PARAM_SET_1_ (HSL Lightness) HSL Hue = _PARAM_SET_1_ (HSL Hue) HSL Saturation = _PARAM_SET_1_ (HSL Saturation) Remaining Time = N/A
_PARAM_SET_2_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110}

State/Message/Parameter	Value(s)
_PARAM_STATUS_4_	HSL Lightness = _PARAM_STATUS_3_ (HSL Lightness) HSL Hue = _PARAM_STATUS_3_ (HSL Hue) HSL Saturation = _PARAM_STATUS_3_ (HSL Saturation) Remaining Time ≤ _PARAM_SET_2_ (Transition Time)
_PARAM_STATUS_5_	HSL Lightness = _PARAM_SET_2_ (HSL Lightness) HSL Hue = _PARAM_SET_2_ (HSL Hue) HSL Saturation = _PARAM_SET_2_ (HSL Saturation) Remaining Time = N/A

Table 4.110: Binding Behavior Values for the Light HSL and Generic OnPowerUp States

4.2.2.3.5 Light xyL and Generic OnPowerUp State Binding

State/Message/Parameter	Value(s)
STATE	Light xyL state (Light xyL x and Light xyL y)
_STATE_DEFAULT_	Light xyL x Default and Light xyL y Default states
_INITIAL_CONDITION_	N/A
_GET_DEFAULT_	Light xyL Default Get
_PARAM_GET_DEFAULT_	N/A
_STATUS_DEFAULT_	Light xyL Default Status
_PARAM_STATUS_DEFAULT_	Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light xyL Status
PUBLISHED	YES
_PARAM_STATUS_0_	xyL Lightness = _PARAM_SET_0_ (xyL Lightness) xyL x = _PARAM_SET_0_ (xyL x) xyL y = _PARAM_SET_0_ (xyL y) Remaining Time = N/A
GET	Light xyL Get
_PARAM_GET_	N/A
_PARAM_STATUS_1_	(Note that OnPowerUp=0x00 means Default for this state) xyL Lightness = 0x0000 xyL x = _PARAM_STATUS_DEFAULT_ (xyL x) xyL y = _PARAM_STATUS_DEFAULT_ (xyL y) Remaining Time = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	xyL Lightness = _PARAM_STATUS_DEFAULT_ (Lightness) xyL x = _PARAM_STATUS_DEFAULT_ (xyL x) xyL y = _PARAM_STATUS_DEFAULT_ (xyL y) Remaining Time = N/A
_PARAM_SET_1_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_3_	xyL Lightness = _PARAM_SET_1_ (xyL Lightness) xyL x = _PARAM_SET_1_ (xyL x) xyL y = _PARAM_SET_1_ (xyL y) Remaining Time = N/A
_PARAM_SET_2_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_DEFAULT_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110}
_PARAM_STATUS_4_	xyL Lightness = _PARAM_STATUS_3_ (xyL Lightness) xyL x = _PARAM_STATUS_3_ (xyL x) xyL y = _PARAM_STATUS_3_ (xyL y) Remaining Time ≤ _PARAM_SET_2_ (Transition Time)
_PARAM_STATUS_5_	xyL Lightness = _PARAM_SET_2_ (xyL Lightness) xyL x = _PARAM_SET_2_ (xyL x) xyL y = _PARAM_SET_2_ (xyL y) Remaining Time = N/A

Table 4.111: Binding Behavior Values for the Light xyL and Generic OnPowerUp States

4.2.3 Common State Transition Behavior

- Test Purpose

  This test procedure verifies common state transitioning behavior for a Server Model on the IUT supporting the _STATE_.

- Initial Condition

  If the values of the _STATE_ are restricted by a bound “range” state, then the latter is set to the maximum possible range supported by the IUT, and the Lower Tester will not try to set the _STATE_ values outside this range.

  If the IUT supports the Generic Default Transition Time state, the value of the Default Transition Number of Steps field is in the range 0x01-0x3E.

  No state transition is in progress on the IUT.

  If the model being tested supports publishing for the _STATE_ (as indicated by the value of the PUBLISHED parameter below the _STATUS_ parameter in each table), the IUT is configured to publish to a random group or virtual address, and the message publishing expectations in the test procedure will apply.

  Additional initial conditions on the IUT, LT, or UT are defined by _INITIAL_CONDITION_.

- Test Procedure

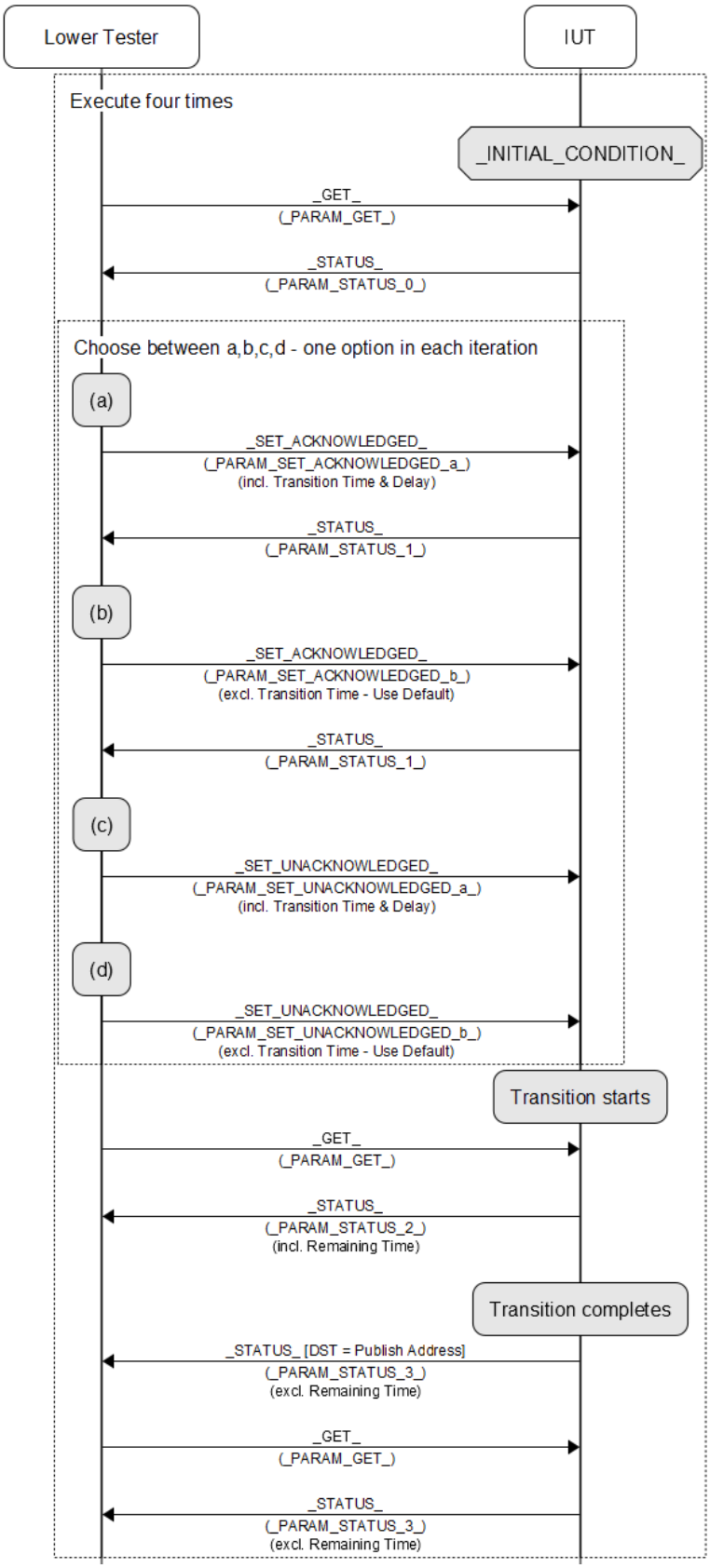

Figure 4.6: Test procedure for the Common State Transition Behavior

If the Generic Default Transition Time state is supported, then steps 1–8 are executed four times, one time for each option (a–d) in step 3. Otherwise, steps 1–8 are executes two times, choosing options a and c in step 3.

1. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
2. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.
3. The Lower Tester sends:
    a) A _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_ACKNOWLEDGED_a_, including a transition time and an execution delay. The execution delay should be a large enough value to allow the tester to verify that the status expected in step 4 is sent before the delay expires.
    b) A _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_ACKNOWLEDGED_b_, not including a transition time and an execution delay. The IUT is expected to use the default transition time and a delay of 0.
    c) A _SET_UNACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_UNACKNOWLEDGED_c_, including a transition time and an execution delay.
    d) A _SET_UNACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_UNACKNOWLEDGED_d_, not including a transition time and an execution delay. The IUT is expected to use the default transition time and a delay of 0.
4. If the _SET_ACKNOWLEDGED_ message was used in step 3, the Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_ before the requested execution delay time has passed after the receipt of the _SET_ACKNOWLEDGED_ message; otherwise, the Lower Tester expects no response from the IUT.
5. The Lower Tester resends the _GET_ message after the requested delay time and before the transition time requested at step 3 expires.
6. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_2_, indicating a state transition is still in progress.
7. If the model being tested supports publishing and the _STATE_ is not a binary state or it is not transitioning from 0 to 1, then the Lower Tester expects the IUT to publish the _STATUS_ message to the configured publish address, with parameters defined by _PARAM_STATUS_3_, when the transition time requested at step 3 expires.
8. The Lower Tester resends the _GET_ message after the transition time requested at step 3 expires.
9. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_3_.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

  In step 4, if a _SET_ACKNOWLEDGED_ message was sent in step 3, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_1_. The time interval between the

STATUS message and the _SET_ACKNOWLEDGED_ message is equal to the delay requested in step 3.

In step 6, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_2_.

If the IUT has been configured to publish for the model being tested, then, in step 8, the IUT publishes a _STATUS_ message with parameters defined by _PARAM_STATUS_3_ to the configured publish address.

In step 9, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_3_.

4.2.3.1 Generic OnOff State Transition

Execute the generic test procedure twice.

a) First round:

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	The Generic OnOff state is equal to 0x00.
GET	Generic OnOff Get
_PARAM_GET_	N/A
STATUS	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic OnOff Set
_PARAM_SET_ACKNOWLEDGED_a_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_1_	Present OnOff = 0x00 Target OnOff = 0x01 Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present OnOff = 0x01 Target OnOff = 0x01 Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A

Table 4.112: Common Transition Behavior Values for the Generic OnOff State – 0 to 1

b) Second round:

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	The Generic OnOff state is equal to 0x01.
GET	Generic OnOff Get
_PARAM_GET_	N/A
STATUS	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present OnOff = 0x01 Target OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic OnOff Set
_PARAM_SET_ACKNOWLEDGED_a_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_d_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present OnOff = 0x01 Target OnOff = 0x00 Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present OnOff = 0x01 Target OnOff = 0x00 Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present OnOff = 0x00 Target OnOff = N/A Remaining Time = N/A

Table 4.113: Common Transition Behavior Values for the Generic OnOff State – 1 to 0

4.2.3.2 Generic Level State Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
GET	Generic Level Get
_PARAM_GET_	N/A
STATUS	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Level = {0x0000-0xFFFF} Target Level = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_ACKNOWLEDGED_a_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_c_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Level = _PARAM_STATUS_0_ (Present Level) Target Level = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Level) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present Level = between _PARAM_STATUS_0_ (Level) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Target Level = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Level = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Target Level = N/A Remaining Time = N/A

Table 4.114: Common Transition Behavior Values for the Generic Level State

4.2.3.3 Generic Level State Delta Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
GET	Generic Level Get
_PARAM_GET_	N/A
STATUS	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Level = {0x0000-0xFFFF} Target Level = N/A Remaining Time = N/A

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_	Generic Delta Set
_PARAM_SET_ACKNOWLEDGED_a_	Delta Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Delta Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic Delta Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Delta Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Delta Level = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Level = _PARAM_STATUS_0_ (Present Level) Target Level = _PARAM_STATUS_0_ (Present Level) + _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Level) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present Level = between _PARAM_STATUS_0_ (Level) and _PARAM_STATUS_0_ (Present Level) + _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Target Level = _PARAM_STATUS_0_ (Present Level) + _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Level = _PARAM_STATUS_0_ (Present Level) + _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Target Level = N/A Remaining Time = N/A

Table 4.115: Common Delta Transition Behavior Values for the Generic Level State

4.2.3.4 Generic Power Actual State Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
GET	Generic Power Level Get
_PARAM_GET_	N/A
STATUS	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Power = {0x0000-0xFFFF} Target Power = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_ACKNOWLEDGED_a_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic Power Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Power = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Power = _PARAM_STATUS_0_ (Present Power) Target Power = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Power) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	Present Power = between _PARAM_STATUS_0_ (Power) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Level) Target Power = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Power) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Power = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Power) Target Power = N/A Remaining Time = N/A

Table 4.116: Common Transition Behavior Values for the Generic Power Actual State

4.2.3.5 Scene Register State Transition

State/Message/Parameter	Value(s)
STATE	Scene Register state
_INITIAL_CONDITION_	Two scenes with the numbers *SceneNumber1* and *SceneNumber2* in the range 0x0001-0xFFFF are stored in the IUT's Scene Register state. No scene is active on the IUT.
GET	Scene Get
_PARAM_GET_	N/A
STATUS	Scene Status
PUBLISHED	YES
_PARAM_STATUS_0_	Status Code = 0x00 Current Scene = 0x0000 Target Scene = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Scene Recall
_PARAM_SET_ACKNOWLEDGED_a_	Scene Number = *SceneNumber1* TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Scene Number = *SceneNumber2* TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Scene Recall Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_c_	Scene Number = *SceneNumber1* TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Scene Number = *SceneNumber2* TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Status Code = 0x00 Current Scene = 0x0000 Target Scene = (a) *SceneNumber1* or (b) *SceneNumber2* Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Status Code = 0x00 Current Scene = 0x0000 Target Scene = (a,c) *SceneNumber1* or (b,d) *SceneNumber2* Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Status Code = 0x00 Current Scene = (a,c) *SceneNumber1* or (b,d) *SceneNumber2* Target Scene = N/A Remaining Time = N/A

Table 4.117: Common Transition Behavior Values for the Scene Register State

4.2.3.6 Light Lightness Actual State Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Get
_PARAM_GET_	N/A
STATUS	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Lightness = {0x0001-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light Lightness Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_a_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light Lightness Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Lightness = _PARAM_STATUS_0_ (Present Lightness) Target Lightness = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Lightness) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present Lightness = between _PARAM_STATUS_0_ (Lightness) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Target Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.118: Common Transition Behavior Values for the Light Lightness Actual State

4.2.3.7 Light Lightness Linear State Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Linear Get
_PARAM_GET_	N/A
STATUS	Light Lightness Linear Status
PUBLISHED	NO - Light Lightness Status instead
_PARAM_STATUS_0_	Present Lightness = {0x0001-0xFFFF} Target Lightness = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_ACKNOWLEDGED_a_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light Lightness Linear Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Lightness = _PARAM_STATUS_0_ (Present Lightness) Target Lightness = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Lightness) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	Present Lightness = between _PARAM_STATUS_0_ (Lightness) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Target Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.119: Common Transition Behavior Values for the Light Lightness Linear State

4.2.3.8 Light CTL State Transition

State/Message/Parameter	Value(s)
STATE	Light CTL state
_INITIAL_CONDITION_	N/A
GET	Light CTL Get
_PARAM_GET_	N/A
STATUS	Light CTL Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present CTL Lightness = {0x0000-0xFFFF} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_a_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_(Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_(Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} Delay = {0x01-0xFF}

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_b_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_(Present CTL Lightness) CTL Temperature = {0x0320-0x4E20}!= _PARAM_STATUS_0_(Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_(Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_(Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	CTL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_(Present CTL Lightness) CTL Temperature = {0x0320-0x4E20} != _PARAM_STATUS_0_(Present CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present CTL Lightness = _PARAM_STATUS_0_ (Present CTL Lightness) Target CTL Lightness = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (CTL Lightness) Present CTL Temperature = _PARAM_STATUS_0_ (Present CTL Temperature) Target CTL Temperature = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (CTL Temperature) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	Present CTL Lightness = between _PARAM_STATUS_0_ (Present CTL Lightness) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Lightness) Target CTL Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Lightness) Present CTL Temperature = between _PARAM_STATUS_0_ (Present CTL Temperature) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Temperature) Target CTL Temperature = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Temperature) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present CTL Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Lightness) Target CTL Lightness = N/A Present CTL Temperature = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (CTL Temperature) Target CTL Temperature = N/A Remaining Time = N/A

Table 4.120: Common Transition Behavior Values for the Light CTL State

4.2.3.9 Light HSL State Transition

State/Message/Parameter	Value(s)
STATE	Light HSL state
_INITIAL_CONDITION_	N/A
GET	Light HSL Get
_PARAM_GET_	N/A
STATUS	Light HSL Status
PUBLISHED	YES
_PARAM_STATUS_0_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_a_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light HSL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	HSL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	HSL Lightness = _PARAM_STATUS_0_ (HSL Lightness) HSL Hue = _PARAM_STATUS_0_ (HSL Hue) HSL Saturation = _PARAM_STATUS_0_ (HSL Saturation) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	HSL Lightness = between _PARAM_STATUS_0_ (HSL Lightness) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Lightness) HSL Hue = between _PARAM_STATUS_0_ (HSL Hue) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Hue) HSL Saturation = between _PARAM_STATUS_0_ (HSL Saturation) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Saturation) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	HSL Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Lightness) HSL Hue = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Hue) HSL Saturation = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (HSL Saturation) Remaining Time = N/A

Table 4.121: Common Transition Behavior Values for the Light HSL State

4.2.3.10 Light HSL Hue State Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
GET	Light HSL Hue Get
_PARAM_GET_	N/A
STATUS	Light HSL Hue Status
PUBLISHED	NO - Light HSL Status instead
_PARAM_STATUS_0_	Present Hue = {0x0000-0xFFFF} Target Hue = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Hue Set
_PARAM_SET_ACKNOWLEDGED_a_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_b_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light HSL Hue Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Hue = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Hue = _PARAM_STATUS_0_ (Present Hue) Target Hue = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Hue) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present Hue = between _PARAM_STATUS_0_ (Present Hue) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Hue) Target Hue = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Hue) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Hue = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Hue) Target Hue = N/A Remaining Time = N/A

Table 4.122: Common Transition Behavior Values for the Light HSL Hue State

4.2.3.11 Light HSL Saturation State Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
GET	Light HSL Saturation Get
_PARAM_GET_	N/A
STATUS	Light HSL Saturation Status
PUBLISHED	NO - Light HSL Status instead
_PARAM_STATUS_0_	Present Saturation = {0x0000-0xFFFF} Target Saturation = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light HSL Saturation Set
_PARAM_SET_ACKNOWLEDGED_a_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light HSL Saturation Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	Saturation = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (Present Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Saturation = _PARAM_STATUS_0_ (Present Saturation) Target Saturation = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Saturation) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	Present Saturation = between _PARAM_STATUS_0_ (Present Saturation) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Saturation) Target Saturation = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Saturation) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Saturation = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Saturation) Target Hue = N/A Remaining Time = N/A

Table 4.123: Common Transition Behavior Values for the Light HSL Saturation State

4.2.3.12 Light xyL State Transition

State/Message/Parameter	Value(s)
STATE	Light xyL state
_INITIAL_CONDITION_	N/A
GET	Light xyL Get
_PARAM_GET_	N/A
STATUS	Light xyL Status
PUBLISHED	YES
_PARAM_STATUS_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_ACKNOWLEDGED_a_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light xyL Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_c_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_STATUS_0_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	xyL Lightness = _PARAM_STATUS_0_ (xyL Lightness) xyL x = _PARAM_STATUS_0_ (xyL x) xyL y = _PARAM_STATUS_0_ (xyL y) Remaining Time = {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	xyL Lightness = between _PARAM_STATUS_0_ (xyL Lightness) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL Lightness) xyL x = between _PARAM_STATUS_0_ (xyL x) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL x) xyL y = between _PARAM_STATUS_0_ (xyL y) and _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL y) Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	xyL Lightness = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL Lightness) xyL x = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL x) xyL y = _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (xyL y) Remaining Time = N/A

Table 4.124: Common Transition Behavior Values for the Light xyL State

4.2.3.13 Light LC Light OnOff State Transition

Execute the generic test procedure twice.

a) First round:

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	The Light LC Property states are set such that a non-zero transition time is used for default transitions of the Light LC Light OnOff state. These values are used in steps 3-b and 3-d, instead of the Generic Default Transition Time state values. The Light LC Light OnOff state is equal to 0x00.
GET	Light LC Light OnOff Get
_PARAM_GET_	N/A
STATUS	Light LC Light OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Light OnOff = 0x00 Target Light OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set
_PARAM_SET_ACKNOWLEDGED_a_	Light OnOff = 0x01 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Light OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_UNACKNOWLEDGED_d_	OnOff = 0x01 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Light OnOff = 0x00 Target Light OnOff = N/A OR 0x01 Remaining Time = N/A OR {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay

State/Message/Parameter	Value(s)
_PARAM_STATUS_2_	Present Light OnOff = 0x01 Target Light OnOff = 0x01 Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Light OnOff = 0x01 Target Light OnOff = N/A Remaining Time = N/A

Table 4.125: Common Transition Behavior Values for the Light LC Light OnOff State – 0 to 1

b) Second round:

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	The Light LC Property states are set such that a non-zero transition time is used for default transitions of the Light LC Light OnOff state. These values are used in steps 3-b and 3-d, instead of the Generic Default Transition Time state values. The Light LC Light OnOff state is equal to 0x01.
GET	Light LC Light OnOff Get
_PARAM_GET_	N/A
STATUS	Light LC Light OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Light OnOff = 0x01 Target Light OnOff = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set
_PARAM_SET_ACKNOWLEDGED_a_	Light OnOff = 0x00 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}
_PARAM_SET_ACKNOWLEDGED_b_	Light OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_c_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} Delay = {0x01-0xFF}

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_d_	OnOff = 0x00 TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Light OnOff = 0x01 Target Light OnOff = N/A OR 0x00 Remaining Time = N/A OR {0b00-0b11} || {0b000001-0b111110} = _PARAM_SET_ACKNOWLEDGED_[a|b]_ (Transition Time) + D, where 0 ≤ D ≤ Delay
_PARAM_STATUS_2_	Present Light OnOff = 0x01 Target Light OnOff = 0x00 Remaining Time = {0b00-0b11} || {0b000001-0b111110} < _PARAM_SET_[UN]ACKNOWLEDGED_[a|b|c|d]_ (Transition Time)
_PARAM_STATUS_3_	Present Light OnOff = 0x00 Target Light OnOff = N/A Remaining Time = N/A

Table 4.126: Common Transition Behavior Values for the Light LC Light OnOff State – 1 to 0

4.2.4 Common Get/Set/Status Invalid Parameter Behavior

- Test Purpose

  This test procedure verifies common invalid behavior for a Server Model on the IUT supporting the _STATE_.

- Initial Condition

  The initial condition of the Server is defined by _INITIAL_CONDITION_.

- Test Procedure

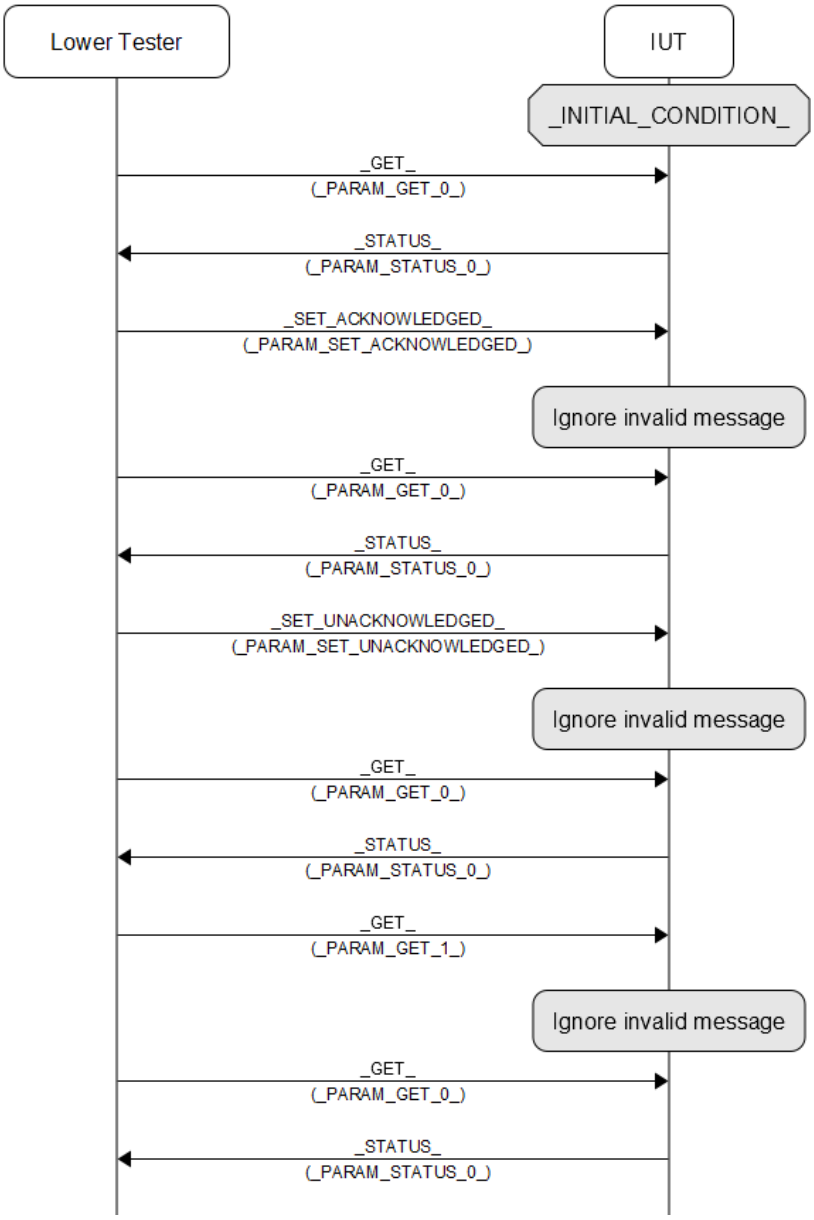

Figure 4.7: Test procedure for the Common Get/Set/Status Invalid Parameter Behavior

1. The Lower Tester sends a _GET_ message to the IUT with valid parameters defined by _PARAM_GET_0_.
2. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.
3. If the state defines a _SET_ACKNOWLEDGED_ message and the message can contain invalid parameter values or combinations, continue with step 4, else go to step 8.
4. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with invalid parameters defined by _PARAM_SET_ACKNOWLEDGED_.
5. The Lower Tester expects no response from the IUT.

6. The Lower Tester sends a _GET_ message to the IUT with valid parameters defined by _PARAM_GET_0_.
7. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.
8. If the state defines a _SET_UNACKNOWLEDGED_ message and the message can contain invalid parameter values or combinations, continue with step 9, else go to step 13.
9. The Lower Tester sends a _SET_UNACKNOWLEDGED_ message to the IUT with invalid parameters defined by _PARAM_SET_UNACKNOWLEDGED_.
10. The Lower Tester expects no response from the IUT.
11. The Lower Tester sends a _GET_ message to the IUT with valid parameters defined by _PARAM_GET_0_.
12. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.
13. If the _GET_ message can contain invalid parameter values or combinations, continue with step 14, else end the test.
14. The Lower Tester sends a _GET_ message to the IUT with invalid parameters defined by _PARAM_GET_1_.
15. The Lower Tester expects no response from the IUT.
16. The Lower Tester sends a _GET_ message to the IUT with valid parameters defined by _PARAM_GET_0_.
17. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

- Expected Outcome

  Pass verdict

  In steps 2, 7 (if applicable), 12 (if applicable), and 17 (if applicable), the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

  In steps 5 (if applicable), 10 (if applicable), and 15 (if applicable), the IUT does not send any message.

4.2.4.1 Generic OnOff State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Generic OnOff Get
_PARAM_GET_0_	N/A
STATUS	Generic OnOff Status
_PARAM_STATUS_0_	Present OnOff = {0x00-0x01} Remaining Time = N/A
_SET_ACKNOWLEDGED_	Generic OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	OnOff = {0x02-0xFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnOff = {0x02-0xFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_GET_1_	N/A

Table 4.127: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic OnOff State

4.2.4.2 Generic Default Transition Time State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic Default Transition Time state
_INITIAL_CONDITION_	The value of the Default Transition Number of Steps field is not equal to 0x3F.
GET	Generic Default Transition Time Get
_PARAM_GET_0_	N/A
STATUS	Generic Default Transition Time Status
_PARAM_STATUS_0_	Transition Time = {0b00-0b11} || {0b000000-0b111110}
_SET_ACKNOWLEDGED_	Generic Default Transition Time Set
_PARAM_SET_ACKNOWLEDGED_	Transition Time = {0b00-0b11} || 0b111111
_SET_UNACKNOWLEDGED_	Generic Default Transition Time Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Transition Time = {0b00-0b11} || 0b111111
_PARAM_GET_1_	N/A

Table 4.128: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic Default Transition Time State

4.2.4.3 Generic OnPowerUp State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
GET	Generic OnPowerUp Get
_PARAM_GET_0_	N/A
STATUS	Generic OnPowerUp Status
_PARAM_STATUS_0_	Present OnPowerUp = {0x00-0x02}
_SET_ACKNOWLEDGED_	Generic OnPowerUp Set
_PARAM_SET_ACKNOWLEDGED_	OnPowerUp = {0x03-0xFF}
_SET_UNACKNOWLEDGED_	Generic OnPowerUp Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	OnPowerUp = {0x03-0xFF}
_PARAM_GET_1_	N/A

Table 4.129: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic OnPowerUp State

4.2.4.4 Generic Power Range State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A
GET	Generic Power Range Get
_PARAM_GET_0_	N/A
STATUS	Generic Power Range Status
_PARAM_STATUS_0_	Status = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Generic Power Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0002-0xFFFF} Range Max < (Range Min – 1) or The Lower Tester chooses 0 for any of the fields below and sets the other field to a valid value. Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_SET_UNACKNOWLEDGED_	Generic Power Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0002-0xFFFF} Range Max < (Range Min – 1) or The Lower Tester chooses 0 for any of the fields below and sets the other field to a valid value. Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_PARAM_GET_1_	N/A

Table 4.130: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic Power Range State

4.2.4.5 Generic User Property State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	The Generic User Properties state contains the writable property with the Property ID denoted as *PID*.
GET	Generic User Property Get
_PARAM_GET_0_	User Property ID = *PID*
STATUS	Generic User Property Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	User Property ID = *PID* User Access = {0x01-0x03} User Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic User Property Set
_PARAM_SET_ACKNOWLEDGED_	User Property ID = *PID* User Property Value = <variable> (invalid format, see [6])
_SET_UNACKNOWLEDGED_	Generic User Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	User Property ID = *PID* User Property Value = <variable> (invalid format, see [6])
_PARAM_GET_1_	User Property ID = 0x0000

Table 4.131: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic User Property State

4.2.4.6 Generic Admin Property State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	The Generic Admin Properties state contains the property with the Property ID denoted as PID.
GET	Generic Admin Property Get
_PARAM_GET_0_	Admin Property ID = *PID*
STATUS	Generic Admin Property Status
_PARAM_STATUS_0_	Admin Property ID = *PID* Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic Admin Property Set
_PARAM_SET_ACKNOWLEDGED_	Admin Property ID = *PID* The Lower Tester randomly chooses one of the following parameters and sets it to an invalid value, while setting the rest of the parameters to valid values: Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])
_SET_UNACKNOWLEDGED_	Generic Admin Property Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Admin Property ID = PID The Lower Tester randomly chooses one of the following parameters and sets it to an invalid value, while setting the rest of the parameters to valid values: Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])
_PARAM_GET_1_	Admin Property ID = 0x0000

Table 4.132: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic Admin Property State

4.2.4.7 Generic Manufacturer Property State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	The Generic Manufacturer Properties state contains the property with the Property ID denoted as *PID*.
GET	Generic Manufacturer Property Get
_PARAM_GET_0_	Manufacturer Property ID = *PID*
STATUS	Generic Manufacturer Property Status
_PARAM_STATUS_0_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x00-0x01} Manufacturer Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic Manufacturer Property Set
_PARAM_SET_ACKNOWLEDGED_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x02-0xFF}
_SET_UNACKNOWLEDGED_	Generic Manufacturer Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Manufacturer Property ID = *PID* Manufacturer User Access = {0x02-0xFF}
_PARAM_GET_1_	Manufacturer Property ID = 0x0000

Table 4.133: Common Get/Set/Status Invalid Parameter Behavior Values for the Generic Manufacturer Property State

4.2.4.8 Sensor Descriptor State Get/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	N/A
GET	Sensor Descriptor Get
_PARAM_GET_0_	Property ID = N/A
STATUS	Sensor Descriptor Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_0_	*Array* < Sensor Property ID = {*Property ID*} Sensor Positive Tolerance = {0x000-0xFFF} Sensor Negative Tolerance = {0x000-0xFFF} Sensor Sampling Function = {0x00-0x07} Sensor Measurement Period = {0x00-0xFF} Sensor Update Interval = {0x00-0xFF} >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	Property ID = 0x0000

Table 4.134: Common Get/Set/Status Invalid Parameter Behavior Values for the Sensor Descriptor State

4.2.4.9 Sensor Cadence State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*. The Sensor Cadence state has been configured for *PID.*
GET	Sensor Cadence Get
_PARAM_GET_0_	Property ID = *PID*
STATUS	Sensor Cadence Status
_PARAM_STATUS_0_	Property ID = *PID* Fast Cadence Period Log = {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Cadence Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Property ID = *PID* The Lower Tester randomly chooses one of the following parameters and sets it to an invalid value, while setting the rest of the parameters to valid values: Fast Cadence Period Log = {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_SET_UNACKNOWLEDGED_	Sensor Cadence Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Property ID = *PID* The Lower Tester randomly chooses one of the following parameters and sets it to an invalid value, while setting the rest of the parameters to valid values: Fast Cadence Period Log = {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_PARAM_GET_1_	Property ID = 0x0000

Table 4.135: Common Get/Set/Status Invalid Parameter Behavior Values for the Sensor Cadence State

4.2.4.10 Sensor Setting State Settings Get/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Settings Get
_PARAM_GET_0_	Sensor Property ID = *PID*
STATUS	Sensor Settings Status
_PARAM_STATUS_0_	Sensor Property ID = *PID* Sensor Setting Property IDs = *Array*< {*Sensor Setting Property ID*} >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	Sensor Property ID = 0x0000

Table 4.136: Common Settings Get/Status Invalid Parameter Behavior Values for the Sensor Setting State

4.2.4.11 Sensor Setting State Setting Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*, and the Sensor Setting state contains setting data for the Sensor Setting Property ID denoted as *SPID*, associated with *PID*.
GET	Sensor Setting Get
_PARAM_GET_0_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID*
STATUS	Sensor Setting Status
_PARAM_STATUS_0_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Access = {0x01, 0x03} Sensor Setting Raw = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Setting Set
_PARAM_SET_ACKNOWLEDGED_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Raw = <variable> (invalid format, see [6])
_SET_UNACKNOWLEDGED_	Sensor Setting Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Sensor Property ID = *PID* Sensor Setting Property ID = *SPID* Sensor Setting Raw = <variable> (invalid format, see [6])
_PARAM_GET_1_	The Lower Tester randomly chooses between the following combinations of field values: Sensor Property ID = *PID* Sensor Setting Property ID = 0x0000 or Sensor Property ID = 0x0000 Sensor Setting Property ID = *SPID*

Table 4.137: Common Setting Get/Set/Status Invalid Parameter Behavior Values for the Sensor Setting State

4.2.4.12 Sensor Data State Get/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Data state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
GET	Sensor Get
_PARAM_GET_0_	Property ID = N/A
STATUS	Sensor Status
_PARAM_STATUS_0_	Marshalled Sensor Data = Array MPID (valid format, see [4] Section 4.2.14), <variable> (valid format, see [6]) >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	Property ID = 0x0000

Table 4.138: Common Get/Status Invalid Parameter Behavior Values for the Sensor Data State

4.2.4.13 Sensor Series Column State Series Get/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*.
GET	Sensor Series Get
_PARAM_GET_0_	Property ID = *PID* Raw Value A1 = N/A Raw Value A2 = N/A
STATUS	Sensor Series Status
_PARAM_STATUS_0_	Property ID = *PID* Property Raw Value List = *Array*< Raw Value A = <variable> (valid format, see [6]) Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6]) >
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	Property ID = 0x0000 Raw Value A1 = N/A Raw Value A2 = N/A

Table 4.139: Common Series Get/Status Invalid Parameter Behavior Values for the Sensor Series Column State

4.2.4.14 Sensor Series Column State Column Get/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*. The Sensor Series Column state contains a measurement on the Sensor Raw Value A value denoted as *Raw A*, associated with *PID*.
GET	Sensor Column Get
_PARAM_GET_0_	Property ID = *PID* Raw Value A = *Raw A*
STATUS	Sensor Column Status
_PARAM_STATUS_0_	Property ID = *PID* Raw Value A = *Raw A* Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6])
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	Property ID = 0x0000 Raw Value A = *Raw A*

Table 4.140: Common Column Get/Status Invalid Parameter Behavior Values for the Sensor Series Column State

4.2.4.15 Time Role State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Sensor Data state
_INITIAL_CONDITION_	N/A
GET	Time Role Get
_PARAM_GET_0_	N/A
STATUS	Time Role Status
_PARAM_STATUS_0_	Time Role = {0x00-0x03}
_SET_ACKNOWLEDGED_	Time Role Set
_PARAM_SET_ACKNOWLEDGED_	Time Role = {0x04-0xFF}
_SET_UNACKNOWLEDGED_	N/A
_PARAM_SET_UNACKNOWLEDGED_	N/A
_PARAM_GET_1_	N/A

Table 4.141: Common Get/Set/Status Invalid Parameter Behavior Values for the Time Role State

4.2.4.16 Scheduler Register State Action Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Scheduler Register state
_INITIAL_CONDITION_	N/A
GET	Scheduler Action Get
_PARAM_GET_0_	Index = {0x00-0x0F}
STATUS	Scheduler Action Status
_PARAM_STATUS_0_	Index = _PARAM_GET_0_ (Index) Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Scheduler Action Set
_PARAM_SET_ACKNOWLEDGED_	Index = {0x0-0xF} The Lower Tester randomly chooses an invalid value for any of the fields below, and sets the other fields to valid values: Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF}
_SET_UNACKNOWLEDGED_	Scheduler Action Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Index = {0x0-0xF} The Lower Tester randomly chooses an invalid value for any of the fields below, and sets the other fields to valid values: Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF}
_PARAM_GET_1_	Index = {0x10-0xFF}

Table 4.142: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Scheduler Register State

4.2.4.17 Light Lightness Range State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
GET	Light Lightness Range Get
_PARAM_GET_0_	N/A
STATUS	Light Lightness Range Status
_PARAM_STATUS_0_	Range Min = {0x0001-0xFFFF} Range Max = {Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light Lightness Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0002-0xFFFF} Range Max < (Range Min – 1) or The Lower Tester chooses 0 for any of the fields below and sets the other field to a valid value. Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_SET_UNACKNOWLEDGED_	Light Lightness Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0002-0xFFFF} Range Max < (Range Min – 1) or The Lower Tester chooses 0 for any of the fields below and sets the other field to a valid value. Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_PARAM_GET_1_	N/A

Table 4.143: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light Lightness State

4.2.4.18 Light CTL State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light CTL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light CTL Get
_PARAM_GET_0_	N/A
STATUS	Light CTL Status
_PARAM_STATUS_0_	Present CTL Lightness = {0x0000-0xFFFF} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light CTL Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	CTL Lightness = {0x0000-0xFFFF} CTL Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Lightness = {0x0000-0xFFFF} CTL Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_GET_1_	N/A

Table 4.144: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light CTL State

4.2.4.19 Light CTL Temperature State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light CTL state
_INITIAL_CONDITION_	There is no state transition in progress on the IUT. If the Generic Default Transition Time state is supported, its value is set to 0x00.
GET	Light CTL Temperature Get
_PARAM_GET_0_	N/A
STATUS	Light CTL Temperature Status
_PARAM_STATUS_0_	Present CTL Temperature = {0x0320-0x4E20} Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_	CTL Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	CTL Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A
_PARAM_GET_1_	N/A

Table 4.145: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light CTL Temperature State

4.2.4.20 Light CTL Temperature Range State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
GET	Light CTL Temperature Range Get
_PARAM_GET_0_	N/A
STATUS	Light CTL Temperature Range Status
_PARAM_STATUS_0_	Range Min = {0x0320-0x4E20} || {0xFFFF} Range Max = {0x0320-0x4E20} || {0xFFFF} ≥ Range Min
_SET_ACKNOWLEDGED_	Light CTL Temperature Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0320-0x4E20} Range Max < Range Min or The Lower Tester randomly chooses an invalid value for any of the fields below, and sets the other fields to valid values: Range Min = {0x0320-0x4E20} Range Max = {0x0320-0x4E20}
_SET_UNACKNOWLEDGED_	Light CTL Temperature Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0320-0x4E20} Range Max < Range Min or The Lower Tester randomly chooses an invalid value for any of the fields below, and sets the other fields to valid values: Range Min = {0x0320-0x4E20} Range Max = {0x0320-0x4E20}
_PARAM_GET_1_	N/A

Table 4.146: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light CTL Temperature State

4.2.4.21 Light CTL Default State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light CTL Default state
_INITIAL_CONDITION_	N/A
GET	Light CTL Default Get
_PARAM_GET_0_	N/A
STATUS	Light CTL Default Status
_PARAM_STATUS_0_	Lightness = {0x0000-0xFFFF} Temperature = {0x0320-0x4E20} Delta UV = {0x0000-0xFFFF}
_SET_ACKNOWLEDGED_	Light CTL Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} Delta UV = {0x0000-0xFFFF}
_SET_UNACKNOWLEDGED_	Light CTL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} Temperature = {0x0000-0x031F, 0x4E21-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (Temperature) Delta UV = {0x0000-0xFFFF}
_PARAM_GET_1_	N/A

Table 4.147: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light CTL Default State

4.2.4.22 Light HSL Range State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light HSL Range state
_INITIAL_CONDITION_	N/A
GET	Light HSL Range Get
_PARAM_GET_0_	N/A
STATUS	Light HSL Range Status
_PARAM_STATUS_0_	Hue Range Min = {0x0000-0xFFFF} Hue Range Max = {Hue Range Min-0xFFFF} Saturation Range Min = {0x0000-0xFFFF} Saturation Range Max = {Saturation Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light HSL Range Set
_PARAM_SET_ACKNOWLEDGED_	Hue Range Min = {0x0001-0xFFFF} Hue Range Max < (Hue Range Min – 1) Saturation Range Min = {0x0001-0xFFFF} Saturation Range Max < (Saturation Min – 1)
_SET_UNACKNOWLEDGED_	Light HSL Range Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	Hue Range Min = {0x0001-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (Hue Range Min) Hue Range Max < (Hue Range Min – 1) Saturation Range Min = {0x0001-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (Saturation Range Min) Saturation Range Max < (Saturation Min – 1)
_PARAM_GET_1_	N/A

Table 4.148: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light HSL Range State

4.2.4.23 Light xyL Range State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light xyL Range state
_INITIAL_CONDITION_	N/A
GET	Light xyL Range Get
_PARAM_GET_0_	N/A
STATUS	Light xyL Range Status
_PARAM_STATUS_0_	xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max = {xyL x Range Min-0xFFFF} xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {xyL y Range Min-0xFFFF}
_SET_ACKNOWLEDGED_	Light xyL Range Set
_PARAM_SET_ACKNOWLEDGED_	xyL x Range Min = {0x0001-0xFFFF} xyL x Range Max < (xyL x Range Min – 1) xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {xyL y Range Min-0xFFFF} or xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max = (xyL x Range Min-0xFFFF) xyL y Range Min = {0x0001-0xFFFF} xyL y Range Max < (xyL y Range Min – 1)
_SET_UNACKNOWLEDGED_	Light xyL Range Set Unacknowledged

State/Message/Parameter	Value(s)
_PARAM_SET_UNACKNOWLEDGED_	xyL x Range Min = {0x0001-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (xyL x Range Min) xyL x Range Max < (xyL x Range Min – 1) xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {xyL y Range Min-0xFFFF} or xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max < (xyL x Range Min-0xFFFF) xyL y Range Min = {0x0001-0xFFFF} != _PARAM_SET_ACKNOWLEDGED_ (xyL y Range Min) xyL y Range Max < (xyL y Range Min – 1)
_PARAM_GET_1_	N/A

Table 4.149: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light xyL Range State

4.2.4.24 Light LC Property State Get/Set/Status Invalid Parameters

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Light LC Property IDs list contains the Property ID denoted as *PID*.
GET	Light LC Property Get
_PARAM_GET_0_	Light LC Property ID = *PID*
STATUS	Light LC Property Status
_PARAM_STATUS_0_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Light LC Property Set
_PARAM_SET_ACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = <variable> (invalid format based on [6])
_SET_UNACKNOWLEDGED_	Light LC Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = <variable> (invalid format based on [6])
_PARAM_GET_1_	Light LC Property ID = 0x0000 or not in the list of Light LC Property IDs

Table 4.150: Common Action Get/Set/Status Invalid Parameter Behavior Values for the Light LC Property State

4.2.5 Common Get/Set/Status Unknown Property ID Behavior

- Test Purpose

  This test procedure verifies unknown Property ID behavior for a Server supporting the _STATE_.

- Initial Condition

  The initial condition of the Server is defined by _INITIAL_CONDITION_.

- Test Procedure

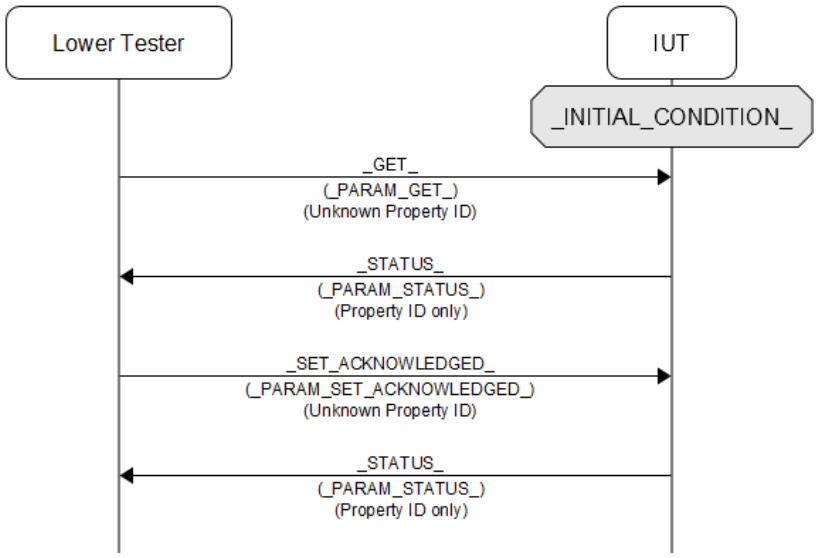

Figure 4.8: Test procedure for the Common Get/Set/Status Unknown Property ID Behavior

1. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
2. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_.
3. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_ACKNOWLEDGED_.
4. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_.

- Expected Outcome

  Pass verdict

  In steps 2 and 4, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_.

4.2.5.1 Generic User Property State Get/Set/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Generic User Properties.
GET	Generic User Property Get
_PARAM_GET_	User Property ID = *Unknown Property ID*
STATUS	Generic User Property Status
_PARAM_STATUS_	User Property ID = *Unknown Property ID* User Access = N/A User Property Value = N/A

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_	Generic User Property Set
_PARAM_SET_ACKNOWLEDGED_	User Property ID = *Unknown Property ID* User Property Value = <variable> (valid format, see [6])

Table 4.151: Common Get/Set/Status Unknown Property ID Behavior Values for the Generic User Property State

4.2.5.2 Generic Admin Property State Get/Set/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Generic Admin Properties.
GET	Generic Admin Property Get
_PARAM_GET_	Admin Property ID = *Unknown Property ID*
STATUS	Generic Admin Property Status
_PARAM_STATUS_	Admin Property ID = *Unknown Property ID* Admin User Access = N/A Admin Property Value = N/A
_SET_ACKNOWLEDGED_	Generic Admin Property Set
_PARAM_SET_ACKNOWLEDGED_	Admin Property ID = *Unknown Property ID* Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])

Table 4.152: Common Get/Set/Status Unknown Property ID Behavior Values for the Generic Admin Property State

4.2.5.3 Generic Manufacturer Property State Get/Set/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Generic Manufacturer Properties.
GET	Generic Manufacturer Property Get
_PARAM_GET_	Manufacturer Property ID = *Unknown Property ID*
STATUS	Generic Manufacturer Property Status
_PARAM_STATUS_	Manufacturer Property ID = *Unknown Property ID* Manufacturer User Access = N/A Manufacturer Property Value = N/A
_SET_ACKNOWLEDGED_	Generic Manufacturer Property Set
_PARAM_SET_ACKNOWLEDGED_	Manufacturer Property ID = *Unknown Property ID* Manufacturer User Access = {0x00-0x01}

Table 4.153: Common Get/Set/Status Unknown Property ID Behavior Values for the Generic Manufacturer Property State

4.2.5.4 Sensor Descriptor State Get/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Descriptor Get
_PARAM_GET_	Property ID = *Unknown Property ID*
STATUS	Sensor Descriptor Status
_PARAM_STATUS_	Descriptor = *Unknown Property ID*
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

Table 4.154: Common Get/Status Unknown Property ID Behavior Values for the Sensor Descriptor State

4.2.5.5 Sensor Cadence State Get/Set/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Cadence Get
_PARAM_GET_	Property ID = *Unknown Property ID*
STATUS	Sensor Cadence Status
_PARAM_STATUS_	Property ID = *Unknown Property ID* Retransmit Count = N/A Retransmit Interval Steps = N/A Fast Cadence Period Log = N/A Status Trigger Type = N/A Status Trigger Delta Down = N/A Status Trigger Delta Up = N/A Status Min Log = N/A Fast Cadence Low = N/A Fast Cadence High = N/A
_SET_ACKNOWLEDGED_	Sensor Cadence Set
_PARAM_SET_ACKNOWLEDGED_	Property ID = *Unknown Property ID* Retransmit Count = {0b000-0b111} Retransmit Interval Steps = {0b00000-0b11111} Fast Cadence Period Log = {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])

Table 4.155: Common Get/Status Unknown Property ID Behavior Values for the Sensor Cadence State

4.2.5.6 Sensor Setting State Settings Get/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Settings Get
_PARAM_GET_	Sensor Property ID = *Unknown Property ID*
STATUS	Sensor Settings Status
_PARAM_STATUS_	Sensor Property ID = *Unknown Property ID* Sensor Setting Property IDs = N/A
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

Table 4.156: Common Settings Get/Status Unknown Property ID Behavior Values for the Sensor Setting State

4.2.5.7 Sensor Setting State Setting Get/Set/Status Unknown Sensor Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Setting Get
_PARAM_GET_	Sensor Property ID = *Unknown Property ID* Sensor Setting Property ID = {*Property ID*}
STATUS	Sensor Setting Status
_PARAM_STATUS_	Sensor Property ID = *Unknown Property ID* Sensor Setting Property ID = _PARAM_GET_ (Sensor Setting Property ID) Sensor Setting Access = N/A Sensor Setting Raw = N/A
_SET_ACKNOWLEDGED_	Sensor Setting Set
_PARAM_SET_ACKNOWLEDGED_	Sensor Property ID = *Unknown Property ID* Sensor Setting Property ID = {*Property ID*} Sensor Setting Raw = <variable> (valid format, see [6]) != _PARAM_STATUS_ (Sensor Setting Raw)

Table 4.157: Common Setting Get/Set/Status Unknown Sensor Property ID Behavior Values for the Sensor Setting State

4.2.5.8 Sensor Setting State Setting Get/Set/Status Unknown Sensor Setting Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *PID,* that is in the IUT's list of Sensor Property IDs, and a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Setting Property IDs associated with *PID*.

State/Message/Parameter	Value(s)
GET	Sensor Setting Get
_PARAM_GET_	Sensor Property ID = *PID* Sensor Setting Property ID = *Unknown Property ID*
STATUS	Sensor Setting Status
_PARAM_STATUS_	Sensor Property ID = *PID* Sensor Setting Property ID = *Unknown Property ID* Sensor Setting Access = N/A Sensor Setting Raw = N/A
_SET_ACKNOWLEDGED_	Sensor Setting Set
_PARAM_SET_ACKNOWLEDGED_	Sensor Property ID = *PID* Sensor Setting Property ID = *Unknown Property ID* Sensor Setting Raw = <variable> (valid format, see [6]) != _PARAM_STATUS_ (Sensor Setting Raw)

Table 4.158: Common Setting Get/Set/Status Unknown Sensor Setting Property ID Behavior Values for the Sensor Setting State

4.2.5.9 Sensor Data State Get/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Data state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Get
_PARAM_GET_	Property ID = *Unknown Property ID*
STATUS	Sensor Status
_PARAM_STATUS_	Marshalled Sensor Data = [MPID (Length = 0, Property ID = *Unknown Property ID*), Raw Value = N/A]
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

Table 4.159: Common Get/Status Unknown Property ID Behavior Values for the Sensor Data State

4.2.5.10 Sensor Series Column State Series Get/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Series Get
_PARAM_GET_	Property ID = *Unknown Property ID* Raw Value X1 =N/A Raw Value X2 = N/A
STATUS	Sensor Series Status
_PARAM_STATUS_	Property ID = *Unknown Property ID* *Array*< Raw Value X, Column Width 1, Raw Value > = N/A

State/Message/Parameter	Value(s)
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

Table 4.160: Common Series Get/Status Unknown Property ID Behavior Values for the Sensor Series Column State

4.2.5.11 Sensor Series Column State Column Get/Status Unknown Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	The Lower Tester randomly selects a Property ID, denoted as *Unknown Property ID*, that is not in the IUT's list of Sensor Property IDs.
GET	Sensor Column Get
_PARAM_GET_	Property ID = *Unknown Property ID* Raw Value X = <variable> (valid format, see [6])
STATUS	Sensor Column Status
_PARAM_STATUS_	Property ID = *Unknown Property ID* Raw Value X = _PARAM_GET_ (Raw Value X) Column Width = N/A Raw Value Y = N/A
_SET_ACKNOWLEDGED_	N/A
_PARAM_SET_ACKNOWLEDGED_	N/A

Table 4.161: Common Column Get/Status Unknown Property ID Behavior Values for the Sensor Series Column State

4.2.6 Common Scene Store/Recall Behavior

- Test Purpose

  This test procedure verifies Scene Store/Recall behavior for a Server supporting the _STATE_ and the Scene Setup Server Model.

- Initial Condition

  If the values of the _STATE_ are restricted by a bound "range" state, then the latter is set to the maximum possible range supported by the IUT, and the Lower Tester will not try to set the _STATE_ values outside this range.

  There is no state transition in progress on the IUT.

  If the Generic Default Transition Time state is supported, its value is set to 0.

  If the model being tested supports publishing for the _STATE_ (as indicated by the value of the PUBLISHED parameter below the _STATUS_ parameter in each table), the IUT is configured to publish to a random group or virtual address, and the message publishing expectations in the test procedure will apply.

  Additional initial conditions on the Server are defined by _INITIAL_CONDITION_.

- Test Procedure

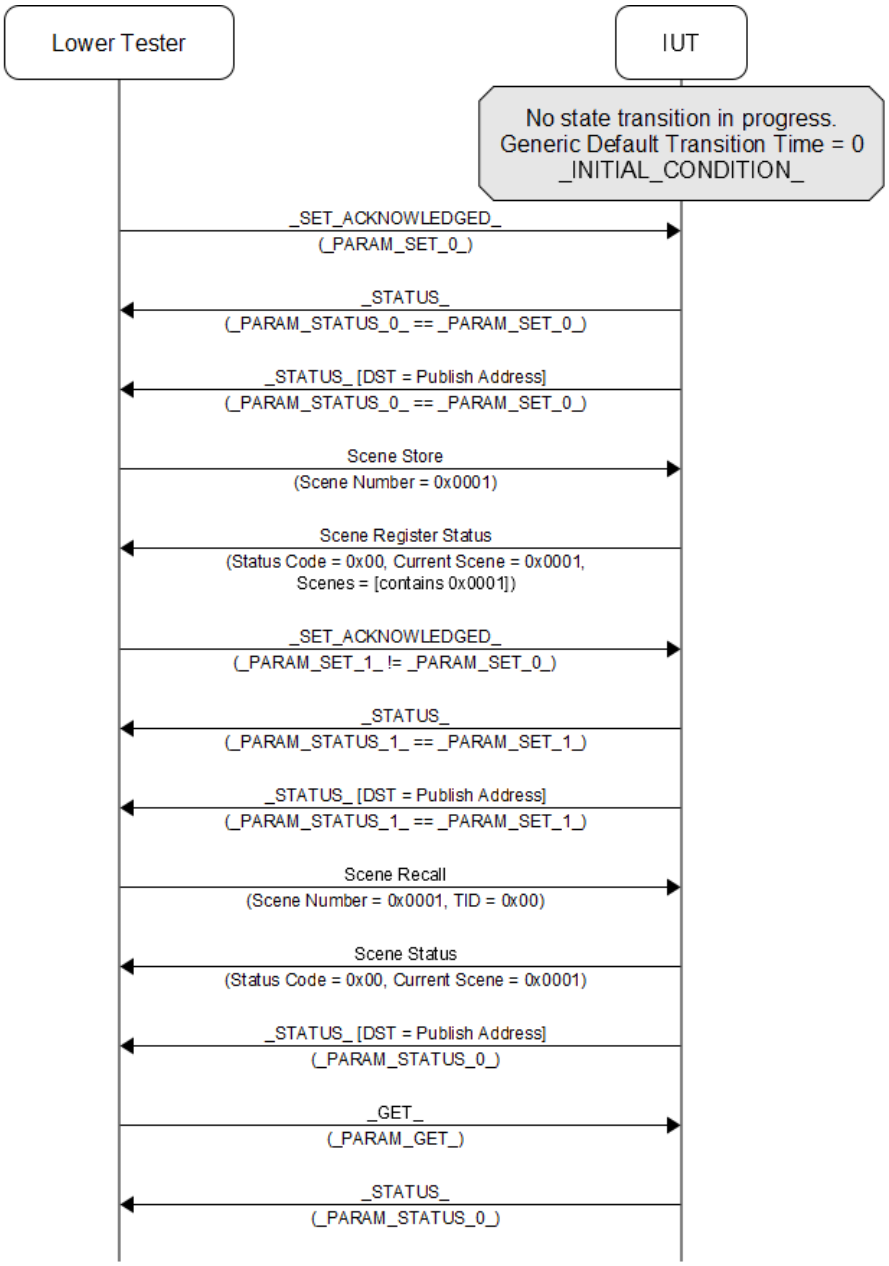

Figure 4.9: Test procedure for the Common Scene Store/Recall Behavior

1. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_0_.
2. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_. If applicable, the IUT publishes the same message, with the same parameters, to the configured publish address.
3. The Lower Tester sends a Scene Store message to the IUT with the Scene Number field set to 0x0001.
4. The Lower Tester expects the IUT to respond with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.

5. The Lower Tester sends a _SET_ACKNOWLEDGED_ message to the IUT with parameters defined by _PARAM_SET_1_.
6. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_1_. If applicable, the IUT publishes the same message, with the same parameters, to the configured publish address.
7. The Lower Tester sends a Scene Recall message to the IUT with the Scene Number field set to 0x0001, the TID field set to 0x00 and no optional fields.
8. The Lower Tester expects the IUT to respond with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001 and no optional fields. If applicable, the IUT also publishes a _STATUS_ message, with parameters defined by _PARAM_STATUS_0_, to the configured publish address.
9. The Lower Tester sends a _GET_ message to the IUT with parameters defined by _PARAM_GET_.
10. The Lower Tester expects the IUT to respond with a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

- Note

  All scene messages in this test case are sent to the address of the same element of the IUT where the _STATE_ is present, if the Scene Setup Server model is supported on that element. Otherwise, the messages are sent to the closest element with a smaller address that supports the Scene Setup Server model.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

  In step 4, the IUT sends a Scene Register Status message to the Lower Tester with the Status Code field set to 0x00, the Current Scene field set to 0x0000 and the Scenes field set to a list containing the value 0x0001.

  In step 6, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_1_.

  In step 8, the IUT sends a Scene Status message to the Lower Tester with the Status Code field set to 0x00, the Current Scene field set to 0x0001 and no optional fields.

  In step 10, the IUT sends a _STATUS_ message with parameters defined by _PARAM_STATUS_0_.

  If the IUT has been configured to publish for the model being tested, then, in steps 2, 6, and 8, the IUT publishes the _STATUS_ message to the configured publish address, with parameters containing the updated state value.

4.2.6.1 Generic OnOff State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Generic OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_0_	OnOff = {0x00-0x01} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic OnOff Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present OnOff = _PARAM_SET_0_ (OnOff) Target OnOff = N/A Remaining Time = N/A
_PARAM_SET_1_	OnOff = {0x00-0x01} != _PARAM_SET_0_ (OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present OnOff = _PARAM_SET_1_ (OnOff) Target OnOff = N/A Remaining Time = N/A
GET	Generic OnOff Get
_PARAM_GET_	N/A

Table 4.162: Common Scene Store/Recall Behavior Values for the Generic OnOff State

4.2.6.2 Generic Level State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_0_	Level = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Level = _PARAM_SET_0_ (Level) Target Level = N/A Remaining Time = N/A
_PARAM_SET_1_	Level = {0x0000-0xFFFF} != _PARAM_SET_0_ (Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Level = _PARAM_SET_1_ (Level) Target Level = N/A Remaining Time = N/A
GET	Generic Level Get
_PARAM_GET_	N/A

Table 4.163: Common Scene Store/Recall Behavior Values for the Generic Level State

4.2.6.3 Generic Power Actual State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_0_	Power = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Power Level Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Power = _PARAM_SET_0_ (Power) Target Power = N/A Remaining Time = N/A
_PARAM_SET_1_	Power = {0x0000-0xFFFF} != _PARAM_SET_0_ (Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Power = _PARAM_SET_1_ (Power) Target Power = N/A Remaining Time = N/A
GET	Generic Power Level Get
_PARAM_GET_	N/A

Table 4.164: Common Scene Store/Recall Behavior Values for the Generic Power Actual State

4.2.6.4 Light Lightness Actual State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_0_	Lightness = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light Lightness Status
PUBLISHED	YES
_PARAM_STATUS_0_	Present Lightness = _PARAM_SET_0_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_SET_1_	Lightness = {0x0000-0xFFFF} != _PARAM_SET_0_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
_PARAM_STATUS_1_	Present Lightness = _PARAM_SET_1_ (Lightness) Target Lightness = N/A Remaining Time = N/A
GET	Light Lightness Get
_PARAM_GET_	N/A

Table 4.165: Common Scene Store/Recall Behavior Values for the Light Lightness Actual State

4.2.6.5 Light Lightness Linear State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_0_	Lightness = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light Lightness Linear Status
PUBLISHED	NO - Light Lightness Status instead
_PARAM_STATUS_0_	Present Lightness = _PARAM_SET_0_ (Lightness) Target Lightness = N/A Remaining Time = N/A
_PARAM_SET_1_	Lightness = {0x0000-0xFFFF} != _PARAM_SET_0_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	Present Lightness = _PARAM_SET_1_ (Lightness) Target Lightness = N/A Remaining Time = N/A
GET	Light Lightness Linear Get
_PARAM_GET_	N/A

Table 4.166: Common Scene Store/Recall Behavior Values for the Light Lightness Linear State

4.2.6.6 Light xyL State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light xyL state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Light xyL Set

State/Message/Parameter	Value(s)
_PARAM_SET_0_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light xyL Status
PUBLISHED	YES
_PARAM_STATUS_0_	xyL Lightness = _PARAM_SET_0_ (xyL Lightness) xyL x = _PARAM_SET_0_ (xyL x) xyL y = _PARAM_SET_0_ (xyL y) Remaining Time = N/A
_PARAM_SET_1_	xyL Lightness = {0x0000-0xFFFF} != _PARAM_SET_0_ (xyL Lightness) xyL x = {0x0000-0xFFFF} != _PARAM_SET_0_ (xyL x) xyL y = {0x0000-0xFFFF} != _PARAM_SET_0_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
_PARAM_STATUS_1_	xyL Lightness = _PARAM_SET_1_ (xyL Lightness) xyL x = _PARAM_SET_1_ (xyL x) xyL y = _PARAM_SET_1_ (xyL y) Remaining Time = N/A
GET	Light xyL Get
_PARAM_GET_	N/A

Table 4.167: Common Scene Store/Recall Behavior Values for the Light xyL State

4.2.6.7 Light LC Mode State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light LC Mode state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Light LC Mode Set
_PARAM_SET_0_	Mode = {0x00-0x01}
STATUS	Light LC Mode Status
PUBLISHED	NO
_PARAM_STATUS_0_	Mode = _PARAM_SET_0_ (Mode)
_PARAM_SET_1_	Mode = {0x00-0x01} != _PARAM_SET_0_ (Mode)
_PARAM_STATUS_1_	Mode = _PARAM_SET_1_ (Mode)
GET	Light LC Mode Get
_PARAM_GET_	N/A

Table 4.168: Common Scene Store/Recall Behavior Values for the Light LC Mode State

4.2.6.8 Light LC Property State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Light LC Property IDs list contains the Property ID denoted as *PID*.
_SET_ACKNOWLEDGED_	Light LC Property Set
_PARAM_SET_0_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6])
STATUS	Light LC Property Status
PUBLISHED	NO
_PARAM_STATUS_0_	Light LC Property ID = *PID* Light LC Property Value = _PARAM_SET_0_ (Light LC Property Value)
_PARAM_SET_1_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6]) != _PARAM_SET_0_ (Light LC Property Value)
_PARAM_STATUS_1_	Light LC Property ID = *PID* Light LC Property Value = _PARAM_SET_1_ (Light LC Property Value)
GET	Light LC Property Get
_PARAM_GET_	Light LC Property ID = *PID*

Table 4.169: Common Scene Store/Recall Behavior Values for the Light LC Property State

4.2.6.9 Light LC Occupancy Mode State Scene Store/Recall

State/Message/Parameter	Value(s)
STATE	Light LC Occupancy Mode state
_INITIAL_CONDITION_	N/A
_SET_ACKNOWLEDGED_	Light LC OM Set
_PARAM_SET_0_	Mode = {0x00-0x01}
STATUS	Light LC OM Status
PUBLISHED	NO
_PARAM_STATUS_0_	Mode = _PARAM_SET_0_ (Mode)
_PARAM_SET_1_	Mode = {0x00-0x01} != _PARAM_SET_0_ (Mode)
_PARAM_STATUS_1_	Mode = _PARAM_SET_1_ (Mode)
GET	Light LC OM Get
_PARAM_GET_	N/A

Table 4.170: Common Scene Store/Recall Behavior Values for the Light LC Occupancy Mode State

4.2.7 Common Secondary Element Behavior

- Test Purpose

  This Test Procedure verifies that the IUT supporting the _STATE_ on at least one secondary element correctly handles messages with the DST field set to the all-nodes address.

- Initial Condition
  - There is no state transition in progress on the IUT.
  - If the IUT supports states that are bound to the _STATE_ and to range-defining states, then the latter are set to the maximum intervals.
  - The values of the _STATE_ instances on secondary elements are all different than at least one arbitrary value within the valid range. For example, if the valid range for the _STATE_ is {0, 1, 2}, then all instance values are different than 0, or all instance values are different than 1, or all instance values are different than 2.
  - Additional initial conditions on the IUT, Lower Tester or Upper Tester are defined by _INITIAL_CONDITION_.

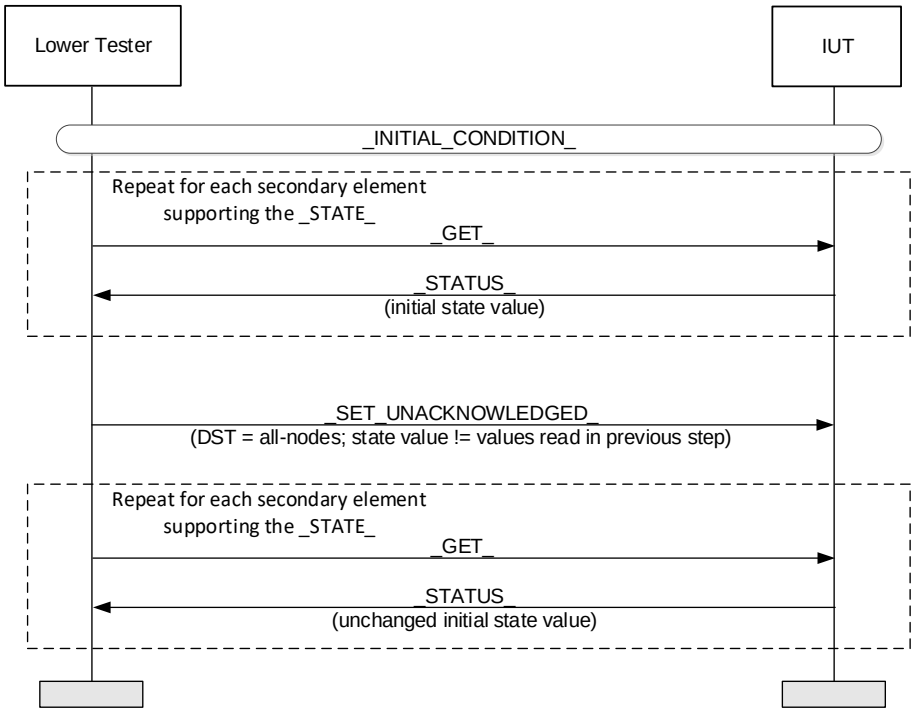

Figure 4.10: Test procedure for Common Secondary Element Behavior

- Test Procedure
  1. For each secondary element on the IUT supporting the _STATE_, the Lower Tester sends a _GET_ message (using the element's unicast address in the DST field, and valid parameters) and expects a _STATUS_ message in response with valid parameters.
  2. The Lower Tester sends a _SET_UNACKNOWLEDGED_ message, with the DST field set to the all-nodes address and parameters containing a state value different than all values received in step 1; the message parameters indicate an immediate transition. The IUT confirms to the Upper Tester that it has received the message.
  3. The Lower Tester repeats step 1 and expects to receive all _STATUS_ messages with the same parameters as in the first iteration.
- Expected Outcome

  Pass verdict

  The IUT does not change the value of the _STATE_ on the applicable secondary elements.

4.2.7.1 Generic OnOff State on Secondary Elements

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
GET	Generic OnOff Get
STATUS	Generic OnOff Status
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged

Table 4.171: Common Secondary Element Behavior Values for the Generic OnOff State

4.2.7.2 Generic Level State on Secondary Elements

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
GET	Generic Level Get
STATUS	Generic Level Status
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged

Table 4.172: Common Secondary Element Behavior Values for the Generic Level State

4.3 Common Client Model Procedures

This section contains tests that verify common IUT functionality related to Client Models.

For each typical Client Model procedure, a common test case is defined.

For each state supporting a procedure, the common test case is run with the values defined in the associated table.

Each Client Model acting on a state defines a new test case, with a unique TCID, which references the common test case for that state.

- Notes

  The symbol “==” is used in the Client Model procedure tables to indicate a transformation from a numerical value contained by a field in _PARAM_STATUS_ to an actual value in _MMI_PARAM_REPORT_, based on formulas and interpretations defined in the referenced sections from the specification. Therefore, it is verified that the IUT can correctly interpret numerical values in status messages.

4.3.1 Common Get/Status Procedure

- Test Purpose

  This test procedure verifies common Get/Status procedures performed by a Client on a Server supporting the _STATE_.

- Initial Condition

  The initial condition of the Client is defined by _INITIAL_CONDITION_.

- Test Procedure

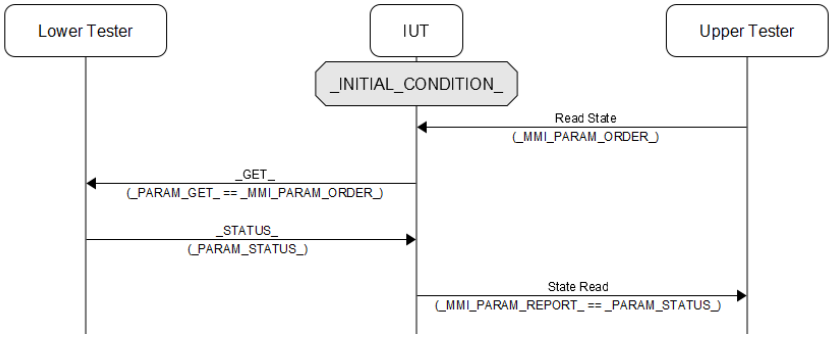

Figure 4.11: Test procedure for the Common Get/Status Procedure

1. The Upper Tester orders the IUT to read the value of the _STATE_ on the Lower Tester with parameters defined by _MMI_PARAM_ORDER_.
2. The Lower Tester expects the IUT to send a _GET_ message with parameters defined by _PARAM_GET_.
3. The Lower Tester responds with a _STATUS_ message with parameters defined by _PARAM_STATUS_.
4. The Upper Tester expects the IUT to report that it has received a _STATE_ value defined by _MMI_PARAM_REPORT_.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _GET_ message with parameters defined by _PARAM_GET.

  In step 4, the IUT reports a _STATE_ value defined by _MMI_PARAM_REPORT_.

4.3.1.1 Generic OnOff State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic OnOff Get
_PARAM_GET_	N/A
STATUS	Generic OnOff Status
_PARAM_STATUS_	Present OnOff = {0x00-0x01} Target OnOff = N/A Remaining Time = N/A
_MMI_PARAM_REPORT_	OnOff = {OFF, ON} == _PARAM_STATUS_ (Present OnOff)

Table 4.173: Common Get/Status Procedure Values for the Generic OnOff State

4.3.1.2 Generic Level State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	N/A
GET	Generic Level Get
_PARAM_GET_	N/A
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000-0xFFFF} Target Level = {0x0000-0xFFFF} != Present Level Remaining Time = {0b00-0b11} || {0b000001-0b111111}
_MMI_PARAM_REPORT_	Present Level = {(-32768)-32767} == _PARAM_STATUS_ (Present Level) Target Level = {(-32768)-32767} == _PARAM_STATUS_ (Target Level) Remaining Time = {100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.174: Common Get/Status Procedure Values for the Generic Level State

4.3.1.3 Generic Default Transition Time State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Default Transition Time state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Default Transition Time Get
_PARAM_GET_	N/A
STATUS	Generic Default Transition Time Status
_PARAM_STATUS_	Transition Time = {0b00-0b11} || {0b000000-0b111110}
_MMI_PARAM_REPORT_	Transition Time = {Immediate, 100ms-10.5h} == _PARAM_STATUS_ (Transition Time)

Table 4.175: Common Get/Status Procedure Values for the Generic Default Transition Time State

4.3.1.4 Generic OnPowerUp State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic OnPowerUp Get
_PARAM_GET_	N/A
STATUS	Generic OnPowerUp Status
_PARAM_STATUS_	OnPowerUp = {0x00-0x02}
_MMI_PARAM_REPORT_	OnPowerUp = {Off, Default, Restore} == _PARAM_STATUS_ (OnPowerUp)

Table 4.176: Common Get/Status Procedure Values for the Generic OnPowerUp State

4.3.1.5 Generic Power Actual State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Power Level Get
_PARAM_GET_	N/A
STATUS	Generic Power Level Status
_PARAM_STATUS_	Present Power = {0x0000–0xFFFF} Target Power = {0x0000–0xFFFF} != Present Power Remaining Time = {0b00-0b11} || {0b000001-0b111111}
_MMI_PARAM_REPORT_	Present Power = {0%-100%} == _PARAM_STATUS_ (Present Power) Target Power = {0%-100%} == _PARAM_STATUS_ (Target Power) Remaining Time = {100ms-10.5h, Unknown}

Table 4.177: Common Get/Status Procedure Values for the Generic Power Actual State

4.3.1.6 Generic Power Last State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Last state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Power Last Get
_PARAM_GET_	N/A
STATUS	Generic Power Last Status
_PARAM_STATUS_	Power = {0x0001-0xFFFF}
_MMI_PARAM_REPORT_	Power = {(100/65535)%-100%} == _PARAM_STATUS_ (Power)

Table 4.178: Common Get/Status Procedure Values for the Generic Power Last State

4.3.1.7 Generic Power Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Power Default Get
_PARAM_GET_	N/A
STATUS	Generic Power Default Status
_PARAM_STATUS_	Power = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Power = {Last, (100/65535)%-100%} == _PARAM_STATUS_ (Power)

Table 4.179: Common Get/Status Procedure Values for the Generic Power Default State

4.3.1.8 Generic Power Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Power Range Get
_PARAM_GET_	N/A
STATUS	Generic Power Range Status
_PARAM_STATUS_	Status Code = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_MMI_PARAM_REPORT_	Status = Success Range Min = {1–65535} == _PARAM_STATUS_ (Range Min) Range Max = {1–65535} == _PARAM_STATUS_ (Range Max)

Table 4.180: Common Get/Status Procedure Values for the Generic Power Range State

4.3.1.9 Generic Battery State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Battery state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Battery Get
_PARAM_GET_	N/A
STATUS	Generic Battery Status
_PARAM_STATUS_	Battery Level = {0x00-0x64, 0xFF} Time to Discharge = {0x000000-0xFFFFFF} Time to Charge = {0x000000-0xFFFFFF} Flags = 0x00-0x0F
_MMI_PARAM_REPORT_	Battery Level = {0%-100%, unknown} == _PARAM_STATUS_ (Battery Level) Time to Discharge = {0–31.92 years, unknown} == _PARAM_STATUS_ (Time to Discharge) Time to Charge = {0–31.92 years, unknown} == _PARAM_STATUS_ (Time to Charge) Flags = {Presence || Indicator || Charging || Serviceability} == _PARAM_STATUS_ (Flags)

Table 4.181: Common Get/Status Procedure Values for the Generic Battery State

4.3.1.10 Generic Location Global State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Global state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Location Global Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Generic Location Global Status
_PARAM_STATUS_	Global Latitude = {0x00000000-0xFFFFFFFF} Global Longitude = {0x00000000-0xFFFFFFFF} Global Altitude = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Global Latitude = {(-90°)-90°, not configured} == _PARAM_STATUS_ (Global Latitude) Global Longitude = {(-180°)-180°, not configured} == _PARAM_STATUS_ (Global Longitude) Global Altitude = {(-32768)–32765 meters, above 32765, not configured} == _PARAM_STATUS_ (Global Altitude)

Table 4.182: Common Get/Status Procedure Values for the Generic Location Global State

4.3.1.11 Generic Location Local State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Local state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Location Local Get
_PARAM_GET_	N/A
STATUS	Generic Location Local Status
_PARAM_STATUS_	Local North = {0x0000-0xFFFF} Local East = {0x0000-0xFFFF} Local Altitude = {0x0000-0xFFFF} Floor Number = {0x00-0xFF} Uncertainty = {0x00-0x01} || {0x00-0xFF}
_MMI_PARAM_REPORT_	Local North = {(-32767)–32767 decimeters, not configured} == _PARAM_STATUS_ (Local North) Local East = {(-32767)–32767 decimeters, not configured} == _PARAM_STATUS_ (Local East) Local Altitude = {(-32768)–32765 decimeters, above 32765, not configured} == _PARAM_STATUS_ (Local Altitude) Floor Number = {floors -20 and below, (-19)–231, floors 232 and above, floor 1 ground floor, no floor configured} == _PARAM_STATUS_ (Floor Number) Uncertainty = {stationary | mobile, 0.125–4096 seconds, 0.125 – 4096 meters} == _PARAM_STATUS_ (Uncertainty)

Table 4.183: Common Get/Status Procedure Values for the Generic Location Local State

4.3.1.12 Generic User Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic User Properties state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic User Properties Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Generic User Properties Status
_PARAM_STATUS_	User Property IDs = Array<{*Property ID*}>
_MMI_PARAM_REPORT_	User Property IDs = Array<{*Property ID*}> == _PARAM_STATUS_ (User Property IDs)

Table 4.184: Common Get/Status Procedure Values for the Generic User Properties State

4.3.1.13 Generic User Property State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	User Property ID = {*Property ID*}
GET	Generic User Property Get
_PARAM_GET_	User Property ID = {*Property ID*} = _MMI_PARAM_ORDER_ (User Property ID)
STATUS	Generic User Property Status
_PARAM_STATUS_	User Property ID = _PARAM_GET_ (User Property ID) User Access = {0x01-0x03} User Property Value = <variable> (valid format, see [6])
_MMI_PARAM_REPORT_	User Property ID == _PARAM_STATUS_ (User Property ID) User Access = {Property can be read, Property can be written, Property can be read and written} == _PARAM_STATUS_ (User Access) User Property Value == _PARAM_STATUS_ (User Property Value)

Table 4.185: Common Get/Status Procedure Values for the Generic User Property State

4.3.1.14 Generic Admin Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Admin Properties state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Admin Properties Get
_PARAM_GET_	N/A
STATUS	Generic Admin Properties Status
_PARAM_STATUS_	Admin Property IDs = Array<{*Property ID*}>
_MMI_PARAM_REPORT_	Admin Property IDs = Array<{*Property ID*}> == _PARAM_STATUS_ (Admin Property IDs)

Table 4.186: Common Get/Status Procedure Values for the Generic Admin Properties State

4.3.1.15 Generic Admin Property State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Admin Property ID = {*Property ID*}
GET	Generic Admin Property Get
_PARAM_GET_	Admin Property ID = {*Property ID*} = _MMI_PARAM_ORDER_ (Admin Property ID)
STATUS	Generic Admin Property Status
_PARAM_STATUS_	Admin Property ID = _PARAM_GET_ (Admin Property ID) Admin User Access = {0x00-0x03} Admin Property Value = <variable> (valid format, see [6])
_MMI_PARAM_REPORT_	Admin Property ID == _PARAM_STATUS_ (Admin Property ID) Admin User Access = {not a Generic User Property, Property can be read, Property can be written, Property can be read and written} == _PARAM_STATUS_ (Admin User Access) Admin Property Value == _PARAM_STATUS_ (Admin Property Value)

Table 4.187: Common Get/Status Procedure Values for the Generic Admin Property State

4.3.1.16 Generic Manufacturer Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Properties state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Generic Manufacturer Properties Get
_PARAM_GET_	N/A
STATUS	Generic Manufacturer Properties Status
_PARAM_STATUS_	Manufacturer Property IDs = Array<{*Property ID*}>
_MMI_PARAM_REPORT_	Manufacturer Property IDs = Array<{*Property ID*}> == _PARAM_STATUS_ (Manufacturer Property IDs)

Table 4.188: Common Get/Status Procedure Values for the Generic Manufacturer Properties State

4.3.1.17 Generic Manufacturer Property State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Manufacturer Property ID = {*Property ID*}
GET	Generic Manufacturer Property Get
_PARAM_GET_	Manufacturer Property ID = {*Property ID*} = _MMI_PARAM_ORDER_ (Manufacturer Property ID)
STATUS	Generic Manufacturer Property Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Manufacturer Property ID = _PARAM_GET_ (Manufacturer Property ID) Manufacturer User Access = {0x00, 0x01} Manufacturer Property Value = <variable> (valid format, see [6])
_MMI_PARAM_REPORT_	Manufacturer Property ID == _PARAM_STATUS (Manufacturer Property ID) Manufacturer User Access = {not a Generic User Property, Property can be read} == _PARAM_STATUS_ (Manufacturer User Access) Manufacturer Property Value == _PARAM_STATUS_ (Manufacturer Property Value)

Table 4.189: Common Get/Status Procedure Values for the Generic Manufacturer Property State

4.3.1.18 Generic Client Properties State Get/Status

State/Message/Parameter	Value(s)
STATE	Generic Client Properties state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Starting Property ID = {*0x0000-0xFFFF*}
GET	Generic Client Properties Get
_PARAM_GET_	Client Property ID = _MMI_PARAM_ORDER_ (Starting Property ID)
STATUS	Generic Client Properties Status
_PARAM_STATUS_	Client Property IDs = Array<{*Property ID*}, all elements are valid Property IDs in ascending order, first element is greater than or equal to _PARAM_GET_ (Client Property ID)
_MMI_PARAM_REPORT_	Client Property IDs == _PARAM_STATUS_ (Client Property IDs)

Table 4.190: Common Get/Status Procedure Values for the Generic Client Properties State

4.3.1.19 Sensor Descriptor State Get/Status – All Property IDs

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	All Property IDs
GET	Sensor Descriptor Get
_PARAM_GET_	Property ID = N/A
STATUS	Sensor Descriptor Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Descriptor = Array< Sensor Property ID = {*Property ID*}, Sensor Positive Tolerance = {0x000-0xFFF}, Sensor Negative Tolerance = {0x000-0xFFF}, Sensor Sampling Function = {0x00-0x07}, Sensor Measurement Period = {0x00-0xFF}, Sensor Update Interval = {0x00-0xFF} >
_MMI_PARAM_REPORT_	Descriptor = Array< Sensor Property ID = {*Property ID*}, Sensor Positive Tolerance = {Unspecified, (100/4095)%-100%}, Sensor Negative Tolerance = {Unspecified, (100/4095)%-100%}, Sensor Sampling Function = {Unspecified, Instantaneous, Arithmetic Mean, RMS, Maximum, Minimum, Accumulated, Count}, Sensor Measurement Period = {Not applicable, 1 second–22371.77 hours}, Sensor Update Interval = {Not applicable, 1 second–22371.77 hours} > == _PARAM_STATUS_ (Descriptor)

Table 4.191: Common Get/Status Procedure Values for the Sensor Descriptor State – All Property IDs

4.3.1.20 Sensor Descriptor State Get/Status – Single Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Descriptor state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = {*Property ID*}
GET	Sensor Descriptor Get
_PARAM_GET_	Property ID = _MMI_PARAM_ORDER_ (Property ID)
STATUS	Sensor Descriptor Status
_PARAM_STATUS_	Descriptor = [Sensor Property ID = _PARAM_GET_ (Property ID) Sensor Positive Tolerance = {0x000-0xFFF} Sensor Negative Tolerance = {0x000-0xFFF} Sensor Sampling Function = {0x00-0x07} Sensor Measurement Period = {0x00-0xFF} Sensor Update Interval = {0x00-0xFF}]
_MMI_PARAM_REPORT_	Descriptor = [Sensor Property ID = {*Property ID*}, Sensor Positive Tolerance = {Unspecified, (100/4095)%-100%}, Sensor Negative Tolerance = {Unspecified, (100/4095)%-100%}, Sensor Sampling Function = {Unspecified, Instantaneous, Arithmetic Mean, RMS, Maximum, Minimum, Accumulated, Count}, Sensor Measurement Period = {Not applicable, 1 second–22371.77 hours}, Sensor Update Interval = {Not applicable, 1 second–22371.77 hours}] == _PARAM_STATUS_ (Descriptor)

Table 4.192: Common Get/Status Procedure Values for the Sensor Descriptor State – Single Property ID

4.3.1.21 Sensor Cadence State Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = {*Property ID*}
GET	Sensor Cadence Get
_PARAM_GET_	Property ID = _MMI_PARAM_ORDER_ (Property ID)
STATUS	Sensor Cadence Status
_PARAM_STATUS_	Property ID = _PARAM_GET_ (Property ID) Fast Cadence Period Log = (7bit) {0x00-0x0F} Status Trigger Type = {0b0, 0b1} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {0x00-0x1A} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_MMI_PARAM_REPORT_	Property ID == _PARAM_STATUS_ (Property ID) Fast Cadence Period Log = {1-2^{15}} == _PARAM_STATUS_ (Fast Cadence Period Log) Status Trigger Type = {Format defined by Property ID, Fixed Format} == _PARAM_STATUS_ (Status Trigger Type) Status Trigger Delta Down == _PARAM_STATUS_ (Status Trigger Delta Down) Status Trigger Delta Up == _PARAM_STATUS_ (Status Trigger Delta Up) Status Min Log = {1-2^{26}} == _PARAM_STATUS_ (Status Min Log) Fast Cadence Low == _PARAM_STATUS_ (Fast Cadence Low) Fast Cadence High == _PARAM_STATUS_ (Fast Cadence High)

Table 4.193: Common Get/Status Procedure Values for the Sensor Cadence State

4.3.1.22 Sensor Settings State Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Settings state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Sensor Property ID = {*Property ID*}
GET	Sensor Settings Get
_PARAM_GET_	Sensor Property ID = _MMI_PARAM_ORDER_ (Sensor Property ID)
STATUS	Sensor Settings Status
_PARAM_STATUS_	Sensor Property ID = _PARAM_GET_ (Sensor Property ID) Sensor Setting Property IDs = Array< {Sensor Setting Property ID} >
_MMI_PARAM_REPORT_	Sensor Property ID == _PARAM_STATUS_ (Sensor Property ID) Setting Property IDs == _PARAM_STATUS_ (Sensor Setting Property IDs)

Table 4.194: Common Settings Get/Status Procedure Values for the Sensor Setting State

4.3.1.23 Sensor Setting State Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Sensor Property ID = {*Property ID*} Sensor Setting Property ID = {*Setting Property ID*}
GET	Sensor Setting Get
_PARAM_GET_	Sensor Property ID = _MMI_PARAM_ORDER_ (Sensor Property ID) Sensor Setting Property ID = _MMI_PARAM_ORDER_ (Sensory Setting Property ID)
STATUS	Sensor Setting Status
_PARAM_STATUS_	Sensor Property ID = _PARAM_GET_ (Sensor Property ID) Sensor Setting Property ID = _PARAM_GET_ (Sensor Setting Property ID) Sensor Setting Access = {0x01, 0x03} Sensor Setting Raw = <variable> (valid format, see [6])
_MMI_PARAM_REPORT_	Sensor Property ID = {*Property ID*} == _PARAM_STATUS_ (Sensor Property ID) Setting Property ID = {*Setting Property ID*} == _PARAM_STATUS_ (Setting Property ID) Sensor Setting Access = {The Property can be read, The Property can be read and written} == _PARAM_STATUS_ (Sensor Setting Access) Sensor Setting Raw == _PARAM_STATUS_ (Sensor Setting Raw)

Table 4.195: Common Setting Get/Status Procedure Values for the Sensor Setting State

4.3.1.24 Sensor Data State Get/Status – All Property IDs

State/Message/Parameter	Value(s)
STATE	Sensor Data state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	All Property IDs
GET	Sensor Get
_PARAM_GET_	Property ID = N/A
STATUS	Sensor Status
_PARAM_STATUS_	Marshalled Sensor Data = Array< MPID (valid format, see [4] Section 4.2.14), <variable> (valid format, see [6]) >
_MMI_PARAM_REPORT_	Sensor Data == _PARAM_STATUS_ (Marshalled Sensor Data)

Table 4.196: Common Get/Status Procedure Values for the Sensor Data State – All Property IDs

4.3.1.25 Sensor Data State Get/Status – Single Property ID

State/Message/Parameter	Value(s)
STATE	Sensor Data state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Property ID = {*Property ID*}
GET	Sensor Get
_PARAM_GET_	Property ID = _MMI_PARAM_ORDER_ (Property ID)
STATUS	Sensor Status
_PARAM_STATUS_	Marshalled Sensor Data = [MPID (_PARAM_GET_ (Property ID)) (valid format, see [4] Section 4.2.14), <variable> (valid format, see [6])]
_MMI_PARAM_REPORT_	Sensor Data == _PARAM_STATUS_ (Marshalled Sensor Data)

Table 4.197: Common Get/Status Procedure Values for the Sensor Data State – Single Property ID

4.3.1.26 Sensor Series Column State Column Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = {*Property ID*} Raw Value A = {*Value A*}
GET	Sensor Column Get
_PARAM_GET_	Property ID = _MMI_PARAM_ORDER_ (Property ID) Raw Value A = _MMI_PARAM_ORDER_ (Raw Value A)
STATUS	Sensor Column Status
_PARAM_STATUS_	Property ID = _PARAM_GET_ (Property ID) Raw Value A = _PARAM_GET_ (Raw Value A) Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6])
_MMI_PARAM_REPORT_	Property ID == _PARAM_STATUS_ (Property ID) Raw Value A == _PARAM_STATUS_ (Raw Value A) Raw Value B == _PARAM_STATUS_ (Raw Value B) Raw Value C == _PARAM_STATUS_ (Raw Value C)

Table 4.198: Common Column Get/Status Procedure Values for the Sensor Column State

4.3.1.27 Sensor Series Column State Series Get/Status

State/Message/Parameter	Value(s)
STATE	Sensor Series Column state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = {*Property ID*} Raw Value A1 = <variable> (valid format, see [6]), minimum value Raw Value A2 = <variable> (valid format, see [6]), maximum value
GET	Sensor Series Get

State/Message/Parameter	Value(s)
_PARAM_GET_	Property ID = _MMI_PARAM_ORDER_ (Property ID) Raw Value A1 = _MMI_PARAM_ORDER_ (Raw Value A1) Raw Value A2 = _MMI_PARAM_ORDER_ (Raw Value A2)
STATUS	Sensor Series Status
_PARAM_STATUS_	Property ID = _PARAM_GET_ (Property ID) Property Raw Value List = *Array* Raw Value A = <variable> (valid format, see [6]) Raw Value B = <variable, present only if applicable to PID> (valid format, see [6]) Raw Value C = <variable, present only if applicable to PID> (valid format, see [6]) >
_MMI_PARAM_REPORT_	Property ID == _PARAM_STATUS_ (Property ID) Property Raw Value List == _PARAM_STATUS_ (Property Raw Value List)

Table 4.199: Common Series Get/Status Procedure Values for the Sensor Series Column State

4.3.1.28 Time State Get/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Time Get
_PARAM_GET_	N/A
STATUS	Time Status
_PARAM_STATUS_	TAI Seconds = {0x0000000001-0xFFFFFFFFFF} Subsecond = {0x00-0xFF} Uncertainty = {0x00-0xFF} Time Authority = {0b0-0b1} TAI-UTC Delta = {0x0000-0x7FFF} Time Zone Offset = {0x00-0xFF}
_MMI_PARAM_REPORT_	TAI Seconds = {yyyy-mm-dd hh:min:sec UTC} == _PARAM_STATUS_ (TAI Seconds) Subsecond = {0-0.99609} == _PARAM_STATUS_ (Subsecond) Uncertainty = {0-(more than 2.55 seconds)} == _PARAM_STATUS_ (Uncertainty) Time Authority = {No Time Authority, Time Authority} == _PARAM_STATUS_ (Time Authority) TAI-UTC Delta = {(-255)-32512} == _PARAM_STATUS_ (TAI-UTC Delta) Time Zone Offset = {(-64)-191} == _PARAM_STATUS_ (Time Zone Offset)

Table 4.200: Common Get/Status Procedure Values for the Time State

4.3.1.29 Time Zone State Get/Status

State/Message/Parameter	Value(s)
STATE	Time Zone Offset Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Time Zone Get
_PARAM_GET_	N/A
STATUS	Time Zone Status
_PARAM_STATUS_	Time Zone Offset Current = {0x00-0xFF} Time Zone Offset New = {0x00-0xFF} TAI of Zone Change = {0x0000000000-0xFFFFFFFFFF}
_MMI_PARAM_REPORT_	Time Zone Offset Current = {(-64)-191} == _PARAM_STATUS_ (Time Zone Offset Current) Time Zone Offset New = {(-64)-191} == _PARAM_STATUS_ (Time Zone Offset New) TAI Of Zone Change = {yyyy-mm-dd hh:min:sec Time Zone} == _PARAM_STATUS_ (TAI Of Change)

Table 4.201: Common Get/Status Procedure Values for the Time Zone Offset Current State

4.3.1.30 TAI-UTC Delta New State Get/Status

State/Message/Parameter	Value(s)
STATE	TAI-UTC Delta New state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	TAI-UTC Delta Get
_PARAM_GET_	N/A
STATUS	TAI-UTC Delta Status
_PARAM_STATUS_	TAI-UTC Delta Current = {0x0000-0x7FFF} TAI-UTC Delta New = {0x0000-0x7FFF} TAI Of Delta Change = {0x0000000000-0xFFFFFFFFFF}
_MMI_PARAM_REPORT_	TAI-UTC Delta Current = {(-255)-32512} == _PARAM_STATUS_ (TAI-UTC Delta Current) TAI-UTC Delta New = {(-255)-32512} == _PARAM_STATUS_ (TAI-UTC Delta New) TAI Of Delta Change = {yyyy-mm-dd hh:min:sec Time Zone} == _PARAM_STATUS_ (TAI Of Delta Change)

Table 4.202: Common Get/Status Procedure Values for the TAI-UTC Delta New State

4.3.1.31 Time Role State Get/Status

State/Message/Parameter	Value(s)
STATE	Time Role state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Time Role Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Time Role Status
_PARAM_STATUS_	Time Role = {0x00-0x03}
_MMI_PARAM_REPORT_	Time Role = {None, Mesh Time Authority, Mesh time Relay, Mesh Time Client} == _PARAM_STATUS_ (Time Role)

Table 4.203: Common Get/Status Procedure Values for the Time Role State

4.3.1.32 Scene Register State Scene Get/Status

State/Message/Parameter	Value(s)
STATE	Scene Register Current Status state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Scene Get
_PARAM_GET_	N/A
STATUS	Scene Status
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = {0x0000-0xFFFF} Target Scene = {0x0001-0xFFFF} Remaining Time = {0b00-0b11} || {0b000001-0b111111}
_MMI_PARAM_REPORT_	Status Code = {Success, Scene Register Full, Scene Not Found} == _PARAM_STATUS_ (Status Code) Current Scene = {0-65535} == _PARAM_STATUS_ (Current Scene) Target Scene = {1-65535} == _PARAM_STATUS_ (Target Scene) Remaining Time = {100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.204: Common Get/Status Procedure Values for the Scene Register Current Status State

4.3.1.33 Scene Register State Scene Register Get/Status

State/Message/Parameter	Value(s)
STATE	Scenes Register state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Scene Register Get
_PARAM_GET_	N/A
STATUS	Scene Register Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = {0x0000-0xFFFF} Scenes = {scene_number_1, scene_number_2, … scene_number_N} Where N is up to 16.
_MMI_PARAM_REPORT_	Status Code = {Success, Action is not defined, Invalid Register Index} == _PARAM_STATUS_ (Status Code) Current Scene = {None, 1-65535} == _PARAM_STATUS_ (Current Scene) Scenes = {scene_number_1, scene_number_2, … scene_number_N} Where N is up to 16.

Table 4.205: Common Get/Status Procedure Values for the Scene Register State

4.3.1.34 Scheduler Register State Get/Status

State/Message/Parameter	Value(s)
STATE	Scheduler Register state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Scheduler Get
_PARAM_GET_	N/A
STATUS	Scheduler Status
_PARAM_STATUS_	Schedules = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Schedules = {0x0000-0xFFFF} == _PARAM_STATUS_ (Schedules)

Table 4.206: Common Get/Status Procedure Values for the Scheduler Register State

4.3.1.35 Scheduler Action State Get/Status

State/Message/Parameter	Value(s)
STATE	Scheduler Action state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Index = {0-15}
GET	Scheduler Action Get
_PARAM_GET_	Index = _MMI_PARAM_ORDER_ (Index)
STATUS	Scheduler Action Status
_PARAM_STATUS_	Index = {0x0-0xF} Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Index = {0-15} == _PARAM_STATUS_ (Index) Schedule Register = {yyyy-mm-dd hh:min:sec | Mondays, Tuesdays, Wednesdays, Thursdays, Fridays, Saturdays, Sundays | Turn Off, Turn On, Scene Recall, No action | Immediate, 100ms-10.5h | No Scene, Scene Number} == _PARAM_STATUS_ (Schedule Register)

Table 4.207: Common Get/Status Procedure Values for the Scheduler Action State

4.3.1.36 Light Lightness Actual State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light Lightness Get
_PARAM_GET_	N/A
STATUS	Light Lightness Status
_PARAM_STATUS_	Present Lightness = {0x0000-0xFFFF} Target Lightness = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present Lightness = {Off, 1-65535} == _PARAM_STATUS_ (Present Lightness) Target Lightness = {Off, 1-65535} == _PARAM_STATUS_ (Target Lightness) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.208: Common Get/Status Procedure Values for the Light Lightness Actual State

4.3.1.37 Light Lightness Linear State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light Lightness Linear Get
_PARAM_GET_	N/A
STATUS	Light Lightness Linear Status
_PARAM_STATUS_	Present Lightness = {0x0000-0xFFFF} Target Lightness = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present Lightness = {Off, 1-65535} == _PARAM_STATUS_ (Present Lightness) Target Lightness = {Off, 1-65535} == _PARAM_STATUS_ (Target Lightness) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.209: Common Get/Status Procedure Values for the Light Lightness Linear State

4.3.1.38 Light Lightness Last State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Last state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light Lightness Last Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Light Lightness Last Status
_PARAM_STATUS_	Lightness = {0x0001-0xFFFF}
_MMI_PARAM_REPORT_	Lightness = {1-65535} == _PARAM_STATUS_ (Lightness)

Table 4.210: Common Get/Status Procedure Values for the Light Lightness Last State

4.3.1.39 Light Lightness Default State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light Lightness Default Get
_PARAM_GET_	N/A
STATUS	Light Lightness Default Status
_PARAM_STATUS_	Lightness = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Lightness = {0-65535} == _PARAM_STATUS_ (Lightness)

Table 4.211: Light Lightness Default State Get/Status

4.3.1.40 Light Lightness Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light Lightness Range Get
_PARAM_GET_	N/A
STATUS	Light Lightness Range Status
_PARAM_STATUS_	Status Code = 0x00 Range Min = {0x0001-0xFFFF} Range Max = {0x0001-0xFFFF}
_MMI_PARAM_REPORT_	Status = Success Range Min = {1-65535} == _PARAM_STATUS_ (Range Min) Range Max = {1-65535} == _PARAM_STATUS_ (Range Max)

Table 4.212: Common Get/Status Procedure Values for the Light Lightness Range State

4.3.1.41 Light CTL States Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light CTL Get

State/Message/Parameter	Value(s)
_PARAM_GET_	N/A
STATUS	Light CTL Status
_PARAM_STATUS_	Present CTL Lightness = {0x0000-0xFFFF} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = {0x0000-0xFFFF} Target CTL Temperature = {0x0320-0x4E20} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present CTL Lightness = {0-65535} == _PARAM_STATUS_ (Present CTL Lightness) Present CTL Temperature = {800-20000} == _PARAM_STATUS_ (Present CTL Temperature) Target CTL Lightness = {0-65535} == _PARAM_STATUS_ (Target CTL Lightness) Target CTL Temperature = {800-20000} == _PARAM_STATUS_ (Target CTL Temperature) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.213: Common Get/Status Procedure Values for the Light CTL States

4.3.1.42 Light CTL Temperature State Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light CTL Temperature Get
_PARAM_GET_	N/A
STATUS	Light CTL Temperature Status
_PARAM_STATUS_	Present CTL Temperature = {0x0320-0x4E20} Present CTL Delta UV = {0x8000-0x7FFF} Target CTL Temperature = {0x0320-0x4E20} Target CTL Delta UV = {0x8000-0x7FFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present CTL Temperature = {800-20000} == _PARAM_STATUS_ (Present CTL Temperature) Present CTL Delta UV = {(-1)-1)} Target CTL Temperature = {800-20000} == _PARAM_STATUS_ (Target CTL Temperature) Target CTL Delta UV = {(-1)-1)} Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.214: Common Get/Status Procedure Values for the Light CTL Temperature State

4.3.1.43 Light CTL Temperature Range State Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light CTL Temperature Range Get
_PARAM_GET_	N/A
STATUS	Light CTL Temperature Range Status
_PARAM_STATUS_	Status Code = 0x00 Range Min = {0x0320-0x4E20} Range Max = {0x0320-0x4E20} ≥ (Range Min)
_MMI_PARAM_REPORT_	Status = Success Range Min = {800-20000} == _PARAM_STATUS_ (Range Min) Range Max = {800-20000} == _PARAM_STATUS_ (Range Max)

Table 4.215: Common Get/Status Procedure Values for the Light CTL Temperature Range State

4.3.1.44 Light CTL Default States Get/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Default Lightness state, Light CTL Default Temperature state, Light CTL Default Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light CTL Default Get
_PARAM_GET_	N/A
STATUS	Light CTL Default Status
_PARAM_STATUS_	Lightness = {0x0001-0xFFFE} Temperature = {0x0320-0x4E20} Delta UV = {0x8000-0x7FFF}
_MMI_PARAM_REPORT_	Lightness = {1-65534} == _PARAM_STATUS_ (Lightness) Temperature = {800-20000} == _PARAM_STATUS_ (Temperature) Delta UV = {(-1)-1)} == _PARAM_STATUS_ (Delta UV)

Table 4.216: Common Get/Status Procedure Values for the Light CTL Default States

4.3.1.45 Light HSL States Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Get
_PARAM_GET_	N/A
STATUS	Light HSL Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	HSL Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (HSL Lightness) HSL Hue = {0-360} == _PARAM_STATUS_ (HSL Hue) HSL Saturation = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (HSL Saturation) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.217: Common Get/Status Procedure Values for the Light HSL State

4.3.1.46 Light HSL Target States Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Target Lightness state, Light HSL Target Hue state, Light HSL Target Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Target Get
_PARAM_GET_	N/A
STATUS	Light HSL Target Status
_PARAM_STATUS_	HSL Lightness = {0x0000-0xFFFF} HSL Hue = {0x0000-0xFFFF} HSL Saturation = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	HSL Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (HSL Lightness) HSL Hue = {0-360} == _PARAM_STATUS_ (HSL Hue) HSL Saturation = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (HSL Saturation) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.218: Common Get/Status Procedure Values for the Light HSL Target States

4.3.1.47 Light HSL Hue State Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Hue Get
_PARAM_GET_	N/A
STATUS	Light HSL Hue Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Present Hue = {0x0000-0xFFFF} Target Hue = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present Hue = {0-360} == _PARAM_STATUS_ (Present Hue) Target Hue = {0-360} == _PARAM_STATUS_ (Target Hue) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.219: Common Get/Status Procedure Values for the Light HSL Hue State

4.3.1.48 Light HSL Saturation State Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Saturation Get
_PARAM_GET_	N/A
STATUS	Light HSL Saturation Status
_PARAM_STATUS_	Present Saturation = {0x0000-0xFFFF} Target Saturation = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present Saturation = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (Present Saturation) Target Saturation = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (Target Saturation) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.220: Common Get/Status Procedure Values for the Light HSL Saturation State

4.3.1.49 Light HSL Default States Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Light Lightness Default state, Light HSL Hue Default state, Light HSL Saturation Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Default Get
_PARAM_GET_	N/A
STATUS	Light HSL Default Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Lightness = {0x0000-0xFFFF} Hue = {0x0000-0xFFFF} Saturation = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (Lightness) Hue = {0-360} == _PARAM_STATUS_ (Hue) Saturation = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (Saturation)

Table 4.221: Common Get/Status Procedure Values for the Light HSL Default States

4.3.1.50 Light HSL Range States Get/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Hue Range state, Light HSL Saturation Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light HSL Range Get
_PARAM_GET_	N/A
STATUS	Light HSL Range Status
_PARAM_STATUS_	Hue Range Min = {0x0000-0xFFFF} Hue Range Max = {0x0000-0xFFFF} Saturation Range Min = {0x0000-0xFFFF} Saturation Range Max = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Hue Range Min = {0-360} == _PARAM_STATUS_ (Hue Range Min) Hue Range Max = {0-360} == _PARAM_STATUS_ (Hue Range Max) Saturation Range Min = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ (Saturation Range Min) Saturation Range Max = {Lowest, 1-65534, Highest} == _PARAM_STATUS_ Saturation Range Max)

Table 4.222: Common Get/Status Procedure Values for the Light HSL Range States

4.3.1.51 Light xyL States Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light xyL Get
_PARAM_GET_	N/A
STATUS	Light xyL Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	xyL Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (xyL Lightness) xyL x = {0-1} == _PARAM_STATUS_ (xyL x) xyL y = {0-1} == _PARAM_STATUS_ (xyL y) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.223: Common Get/Status Procedure Values for the Light xyL States

4.3.1.52 ResumLight xyL Target States Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light xyL Target Get
_PARAM_GET_	N/A
STATUS	Light xyL Target Status
_PARAM_STATUS_	Target xyL Lightness = {0x0000-0xFFFF} Target xyL x = {0x0000-0xFFFF} Target xyL y = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Target xyL Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (Target xyL Lightness) Target xyL x = {0-1} == _PARAM_STATUS_ (Target xyL x) Target xyL y = {0-1} == _PARAM_STATUS_ (Target xyL y) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.224: Common Get/Status Procedure Values for the Light xyL Target State

4.3.1.53 Light xyL Default States Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light xyL Default Get
_PARAM_GET_	N/A
STATUS	Light xyL Default Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	Lightness = {Off,1-65534, Highest} == _PARAM_STATUS_ (Lightness) xyL x = {0-1} == _PARAM_STATUS_ (xyL x) xyL y = {0-1} == _PARAM_STATUS_ (xyL y)

Table 4.225: Common Get/Status Procedure Values for the Light xyL Default States

4.3.1.54 Light xyL Range States Get/Status

State/Message/Parameter	Value(s)
STATE	Light xyL x Range state, Light xyL y Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light xyL Range Get
_PARAM_GET_	N/A
STATUS	Light xyL Range Status
_PARAM_STATUS_	xyL x Range Min = {0x0000-0xFFFF} xyL x Range Max = {0x0000-0xFFFF} xyL y Range Min = {0x0000-0xFFFF} xyL y Range Max = {0x0000-0xFFFF}
_MMI_PARAM_REPORT_	xyL x Range Min = {0-1} == _PARAM_STATUS_ (xyL x Range Min) xyL x Range Max = {0-1} == _PARAM_STATUS_ (xyL x Range Max) xyL y Range Min = {0-1} == _PARAM_STATUS_ (xyL y Range Min) xyL y Range Max = {0-1} == _PARAM_STATUS_ (xyL y Range Max)

Table 4.226: Common Get/Status Procedure Values for the Light xyL Range States

4.3.1.55 Light LC Mode State Get/Status

State/Message/Parameter	Value(s)
STATE	Light LC Mode state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light LC Mode Get
_PARAM_GET_	N/A
STATUS	Light LC Mode Status
_PARAM_STATUS_	Mode = {0b0-0b1}
_MMI_PARAM_REPORT_	Mode = {Off, On} == _PARAM_STATUS_ (Mode)

Table 4.227: Common Get/Status Procedure Values for the Light LC Mode State

4.3.1.56 Light LC Occupancy Mode State Get/Status

State/Message/Parameter	Value(s)
STATE	Light LC Occupancy Mode state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light LC OM Get
_PARAM_GET_	N/A
STATUS	Light LC OM Status
_PARAM_STATUS_	Mode = {0b0-0b1}
_MMI_PARAM_REPORT_	Mode = {No transition, May Transition} == _PARAM_STATUS_ (Mode)

Table 4.228: Common Get/Status Procedure Values for the Light LC Occupancy Mode State

4.3.1.57 Light LC Light OnOff State Get/Status

State/Message/Parameter	Value(s)
STATE	Light LC OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	N/A
GET	Light LC OnOff Get
_PARAM_GET_	N/A
STATUS	Light LC OnOff Status
_PARAM_STATUS_	Present Light OnOff = {0b0-0b1} Target Light OnOff = {0b0-0b1} Remaining Time = {0b00-0b11} || {0b000000-0b111111}
_MMI_PARAM_REPORT_	Present Light OnOff = {Off|Standby, Occupancy|Run|Prolong} == _PARAM_STATUS_ (Present Light OnOff) Target Light OnOff = {Off|Standby, Occupancy|Run|Prolong} == _PARAM_STATUS_ (Target Light OnOff) Remaining Time = {Immediate, 100ms-10.5h, Unknown} == _PARAM_STATUS_ (Remaining Time)

Table 4.229: Common Get/Status Procedure Values for the Light LC Phase State

4.3.1.58 Light LC Property State Get/Status

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Lower Tester randomly chooses a Property ID, denoted as PID, from the list of Light LC Property IDs.
_MMI_PARAM_ORDER_	Light LC Property ID = *PID*
GET	Light LC Property Get
_PARAM_GET_	Light LC Property ID = *PID*
STATUS	Light LC Property Status

State/Message/Parameter	Value(s)
_PARAM_STATUS_	Light LC Property ID = *PID* Light LC Property Value = Array<>
_MMI_PARAM_REPORT_	Light LC Property ID = PID Light LC Property Value = Array<> == _PARAM_STATUS_ (Light LC Property Value)

Table 4.230: Common Get/Status Procedure Values for the Light LC Property State

4.3.2 Common Set/Status Procedure

- Test Purpose

  This test procedure verifies common Set/Status Client procedures performed by a Client on a Server supporting the _STATE_.

- Initial Condition

  The initial condition of the Client is defined by _INITIAL_CONDITION_.

- Test Procedure

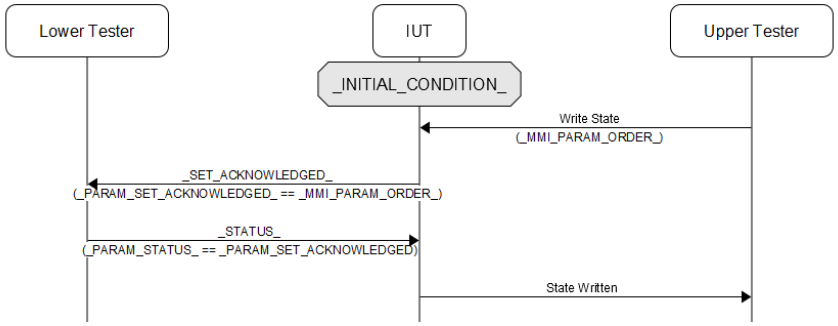

Figure 4.12: Test procedure for the Common Set/Status Procedure

1. The Upper Tester orders the IUT to reliably set the _STATE_ on the Lower Tester to a value defined by _MMI_PARAM_ORDER_.
2. The Lower Tester expects the IUT to send a _SET_ACKNOWLEDGED_ message with parameters defined by _PARAM_SET_ACKNOWLEDGED_.
3. The Lower Tester responds with a _STATUS_ message with parameters defined by _PARAM_STATUS_.
4. The Upper Tester expects the IUT to report that it has successfully set the new value of the _STATE_ on the Lower Tester.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _SET_ACKNOWLEDGED_ message with parameters defined by _PARAM_SET_ACKNOWLEDGED_.

  In step 4, the IUT reports that it has successfully set the new value of the _STATE_ on the Lower Tester.

4.3.2.1 Generic OnOff State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Use default transition settings
_SET_ACKNOWLEDGED_	Generic OnOff Set
_PARAM_SET_ACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic OnOff Status
_PARAM_STATUS_	Present OnOff = _PARAM_SET_ACKNOWLEDGED_ (OnOff) Target OnOff = N/A Remaining Time = N/A

Table 4.231: Common Set/Status Procedure Values for the Generic OnOff State

4.3.2.2 Generic OnOff State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Force immediate transition
_SET_ACKNOWLEDGED_	Generic OnOff Set
_PARAM_SET_ACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Generic OnOff Status
_PARAM_STATUS_	Present OnOff = _PARAM_SET_ACKNOWLEDGED_ (OnOff) Target OnOff = N/A Remaining Time = N/A

Table 4.232: Common Set/Status Procedure Values for the Generic OnOff State

4.3.2.3 Generic OnOff State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Generic OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Generic OnOff Status
_PARAM_STATUS_	Present OnOff = 0x01 Target OnOff = _PARAM_SET_ACKNOWLEDGED_ (OnOff) Remaining Time ≤ _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.233: Common Set/Status Procedure Values for the Generic OnOff State

4.3.2.4 Generic Level State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Use default transition settings
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_ACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = _PARAM_SET_ACKNOWLEDGED_ (Level) Target Level = N/A Remaining Time = N/A

Table 4.234: Common Set/Status Procedure Values for the Generic Level State

4.3.2.5 Generic Level State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Force immediate transition
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_ACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

State/Message/Parameter	Value(s)
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = _PARAM_SET_ACKNOWLEDGED_ (Level) Target Level = N/A Remaining Time = N/A

Table 4.235: Common Set/Status Procedure Values for the Generic Level State

4.3.2.6 Generic Level State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Generic Level Set
_PARAM_SET_ACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000, 0xFFFF} Target Level = _PARAM_SET_ACKNOWLEDGED_ (Level) Remaining Time ≤ _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.236: Common Set/Status Procedure Values for the Generic Level State

4.3.2.7 Generic Default Transition Time State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Default Transition Time state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Transition Time = {Immediate, 100ms-7.5h, Unknown}
_SET_ACKNOWLEDGED_	Generic Default Transition Time Set
_PARAM_SET_ACKNOWLEDGED_	Transition Time = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Transition Time)
STATUS	Generic Default Transition Time Status
_PARAM_STATUS_	Transition Time = _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.237: Common Set/Status Procedure Values for the Generic Default Transition Time State

4.3.2.8 Generic OnPowerUp State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnPowerUp = {OFF, Default, Restore}
_SET_ACKNOWLEDGED_	Generic OnPowerUp Set
_PARAM_SET_ACKNOWLEDGED_	OnPowerUp = {0x00-0x02} == _MMI_PARAM_ORDER_ (OnPowerUp)
STATUS	Generic OnPowerUp Status
_PARAM_STATUS_	OnPowerUp = {0x00-0x02} = _PARAM_SET_ACKNOWLEDGED_ (OnPowerUp)

Table 4.238: Common Set/Status Procedure Values for the Generic OnPowerUp State

4.3.2.9 Generic Power Actual State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Use default transition settings
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Power Level Status
_PARAM_STATUS_	Present Power = _PARAM_SET_ACKNOWLEDGED_(Power) Target Power = N/A Remaining Time = N/A

Table 4.239: Common Set/Status Procedure Values for the Generic Power Actual State – Default Transition

4.3.2.10 Generic Power Actual State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Force immediate transition
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

State/Message/Parameter	Value(s)
STATUS	Generic Power Level Status
_PARAM_STATUS_	Present Power = _PARAM_SET_ACKNOWLEDGED_(Power) Target Power = N/A Remaining Time = N/A

Table 4.240: Common Set/Status Procedure Values for the Generic Power Actual State – Immediate Transition

4.3.2.11 Generic Power Actual State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Generic Power Level Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Generic Power Level Status
_PARAM_STATUS_	Present Power = {0x0000-0xFFFF} Target Power = _PARAM_SET_ACKNOWLEDGED_ (Power) Remaining Time ≤ _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.241: Common Set/Status Procedure Values for the Generic Power Actual State – Custom Transition

4.3.2.12 Generic Power Default State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {Use Last, (1/65535)%-100%}
_SET_ACKNOWLEDGED_	Generic Power Default Set
_PARAM_SET_ACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power)
STATUS	Generic Power Default Status
_PARAM_STATUS_	Power = _PARAM_SET_ACKNOWLEDGED_(Power)

Table 4.242: Common Set/Status Procedure Values for the Generic Power Default State

4.3.2.13 Generic Power Range State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Range Min = {1–65535} Range Max = {1–65535} > Range Min
_SET_ACKNOWLEDGED_	Generic Power Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Max)
STATUS	Generic Power Range Status
_PARAM_STATUS_	Status = 0x00 Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)

Table 4.243: Common Set/Status Procedure Values for the Generic Power Range State

4.3.2.14 Generic Location Global State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Global state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Global Latitude = {(-90)-90, not configured} Global Longitude = {(-180)-180, not configured} Global Altitude = {(-32768)–32765, above 32765, not configured}
_SET_ACKNOWLEDGED_	Generic Location Global Set
_PARAM_SET_ACKNOWLEDGED_	Global Latitude = {0x00000000-0xFFFFFFFF} == _MMI_PARAM_ORDER_ (Global Latitude) Global Longitude = {0x00000000-0xFFFFFFFF} == _MMI_PARAM_ORDER_ (Global Longitude) Global Altitude = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Global Altitude)
STATUS	Generic Location Global Status
_PARAM_STATUS_	Global Latitude = _PARAM_SET_ACKNOWLEDGED_ (Global Latitude) Global Longitude = _PARAM_SET_ACKNOWLEDGED_ (Global Longitude) Global Altitude = _PARAM_SET_ACKNOWLEDGED_ (Global Altitude)

Table 4.244: Common Set/Status Procedure Values for the Generic Location Global State

4.3.2.15 Generic Location Local State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Location Local state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Local North = {(-32767)–32767, not configured} Local East = {(-32767)–32767, not configured} Local Altitude = {(-32768)–32765, above 32765, not configured} Floor Number = {floors -20 and below, (-19)–232, floors 232 and above, floor 1 ground floor, no floor configured} Uncertainty = stationary | mobile, {0.125–4096s}, {0.125–4096m}
_SET_ACKNOWLEDGED_	Generic Location Local Set
_PARAM_SET_ACKNOWLEDGED_	Local North = {0x0000-0xFFFF) == _MMI_PARAM_ORDER_ (Local North) Local East = {0x0000-0xFFFF) == _MMI_PARAM_ORDER_ (Local East) Local Altitude = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Local Altitude) Floor Number = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Floor Number) Uncertainty = {0x00-0x01} || {0x00-0xFF} == _MMI_PARAM_ORDER_(Uncertainty)
STATUS	Generic Location Local Status
_PARAM_STATUS_	Local North = _PARAM_SET_ACKNOWLEDGED_ (Local North) Local East = _PARAM_SET_ACKNOWLEDGED_ (Local East) Local Altitude = _PARAM_SET_ACKNOWLEDGED_ (Local Altitude) Floor Number = _PARAM_SET_ACKNOWLEDGED_(Floor Number) Uncertainty = _PARAM_SET_ACKNOWLEDGED_ (Uncertainty)

Table 4.245: Common Set/Status Procedure Values for the Generic Location Local State

4.3.2.16 Generic User Property State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	User Property ID = {*Property ID*} User Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic User Property Set
_PARAM_SET_ACKNOWLEDGED_	User Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (User Property ID) User Property Value == _MMI_PARAM_ORDER_ (User Property Value)

State/Message/Parameter	Value(s)
STATUS	Generic User Property Status
_PARAM_STATUS_	User Property ID = {*Property ID*} == _PARAM_SET_ACKNOWLEDGED_ (Manufacturer Property ID) User Access = {0x01-0x03} User Property Value = _PARAM_SER_ACKNOWLEDGED_ (User Property Value)

Table 4.246: Common Set/Status Procedure Values for the Generic User Property State

4.3.2.17 Generic Admin Property State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	The Generic Admin Properties state contains the property with the Property ID denoted as PID.
_MMI_PARAM_ORDER_	Admin Property ID = {*Property ID*} Admin User Access = {not a Generic User Property, Property can be read} Admin Property Value = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Generic Admin Property Set
_PARAM_SET_ACKNOWLEDGED_	Admin Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (Admin Property ID) Admin User Access = {0x00-0x03} == _MMI_PARAM_ORDER_ (Admin User Access) Admin Property Value = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Admin Property Value)
STATUS	Generic Admin Property Status
_PARAM_STATUS_	Admin Property ID = _PARAM_SET_ACKNOWLEDGED_ (Admin Property ID) Admin User Access = _PARAM_SET_ACKNOWLEDGED_ (Admin User Access) Admin Property Value = _PARAM_SET_ACKNOWLEDGED_ (Admin Property Value)

Table 4.247: Common Set/Status Procedure Values for the Generic Admin Property State

4.3.2.18 Generic Manufacturer Property State Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Manufacturer Property ID = {*Property ID*} Manufacturer User Access = {not a Generic User Property, Property can be read}
_SET_ACKNOWLEDGED_	Generic Manufacturer Property Set
_PARAM_SET_ACKNOWLEDGED_	Manufacturer Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (Manufacturer Property ID) Manufacturer User Access = {0x00-0x01} == _MMI_PARAM_ORDER_ (Manufacturer User Access)

State/Message/Parameter	Value(s)
STATUS	Generic Manufacturer Property Status
_PARAM_STATUS_	Manufacturer Property ID = _PARAM_SET_ACKNOWLEDGED_ (Manufacturer Property ID) Manufacturer User Access = _PARAM_SET_ACKNOWLEDGED_ (Manufacturer User Access) Manufacturer Property Value = <variable> (valid format, see [6])

Table 4.248: Common Set/Status Procedure Values for the Generic Manufacturer Property State

4.3.2.19 Generic Level State Delta Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Use default transition settings
_SET_ACKNOWLEDGED_	Generic Delta Set
_PARAM_SET_ACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000-0xFFFF} Target Level = N/A Remaining Time = N/A

Table 4.249: Common Set/Status Procedure Values for the Generic Level State - Delta

4.3.2.20 Generic Level State Delta Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Force immediate transition
_SET_ACKNOWLEDGED_	Generic Delta Set
_PARAM_SET_ACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

State/Message/Parameter	Value(s)
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000-0xFFFF} Target Level = N/A Remaining Time = N/A

Table 4.250: Common Set/Status Procedure Values for the Generic Level State - Delta

4.3.2.21 Generic Level State Delta Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Generic Delta Set
_PARAM_SET_ACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000, 0xFFFF} Target Level = Present Level + _PARAM_SET_ACKNOWLEDGED_ (Delta Level) Remaining Time ≤ _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.251: Common Set/Status Procedure Values for the Generic Level State - Delta

4.3.2.22 Generic Level State Move Set/Status

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Generic Move Set
_PARAM_SET_ACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

State/Message/Parameter	Value(s)
STATUS	Generic Level Status
_PARAM_STATUS_	Present Level = {0x0000, 0xFFFF} Target Level = Present Level + _PARAM_SET_ACKNOWLEDGED_ (Delta Level) Remaining Time ≤ _PARAM_SET_ACKNOWLEDGED_ (Transition Time)

Table 4.252: Common Set/Status Procedure Values for the Generic Level State - Move

4.3.2.23 Sensor Cadence State Set/Status

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = {*Property ID*} Fast Cadence Period Log = {1-2^{15}} Status Trigger Type = {Format defined by Property ID, Fixed Format} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {1-2^{16}} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Cadence Set
_PARAM_SET_ACKNOWLEDGED_	Property ID == _MMI_PARAM_ORDER_ (Property ID) Fast Cadence Period Log = (7bit) {0x00-0x0F} == _MMI_PARAM_ORDER_ (Fast Cadence Period Log) Status Trigger Type = {0b0, 0b1} == _MMI_PARAM_ORDER_ (Status Trigger Type) Status Trigger Delta Down == _MMI_PARAM_ORDER_ (Status Trigger Delta Down) Status Trigger Delta Up == _MMI_PARAM_ORDER_ (Status Trigger Delta Up) Fast Cadence Low == _MMI_PARAM_ORDER_ (Fast Cadence Low) Fast Cadence High == _MMI_PARAM_ORDER_ (Fast Cadence High)

State/Message/Parameter	Value(s)
STATUS	Sensor Cadence Status
_PARAM_STATUS_	Property ID == _PARAM_SET_ACKNOWLEDGED_ (Property ID) Fast Cadence Period Log == _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence Period Log) Status Trigger Type == _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Type) Status Trigger Delta Down == _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Delta Down) Status Trigger Delta Up == _PARAM_SET_ACKNOWLEDGED_ (Status Trigger Delta Up) Fast Cadence Low == _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence Low) Fast Cadence High == _PARAM_SET_ACKNOWLEDGED_ (Fast Cadence High)

Table 4.253: Common Set/Status Procedure Values for the Sensor Cadence State

4.3.2.24 Sensor Setting State Set/Status

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Sensor Property ID = {*Property ID*} Sensor Setting Property ID = {*Setting Property ID*} Setting Raw = <variable> (valid format, see [6])
_SET_ACKNOWLEDGED_	Sensor Setting Set
_PARAM_SET_ACKNOWLEDGED_	Sensor Property ID == _MMI_PARAM_ORDER_ (Sensor Property ID) Sensor Setting Property IDs == _MMI_PARAM_ORDER_ (Sensor Setting Property ID) Setting Raw == _MMI_PARAM_ORDER_ (Setting Raw)
STATUS	Sensor Setting Status
_PARAM_STATUS_	Sensor Property ID = _PARAM_SET_ACKNOWLEDGED_ (Sensor Property ID) Sensor Setting Property ID = _PARAM_SET_ACKNOWLEDGED_ (Sensor Setting Property ID) Sensor Setting Access = 0x03 Setting Raw = _PARAM_SET_ACKNOWLEDGED_ (Setting Raw)

Table 4.254: Common Set/Status Procedure Values for the Sensor Settings State

4.3.2.25 Time State Set/Status

State/Message/Parameter	Value(s)
STATE	Time state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	TAI Seconds = {yyyy-mm-dd hh:min:sec UTC} Subsecond = {0-0.99609} Uncertainty = {0-(more than 2.55 seconds)} Time Authority = {No Time Authority, Time Authority} TAI-UTC Delta = {(-255)-32512} Time Zone Offset = {(-64)-191}
_SET_ACKNOWLEDGED_	Time Set
_PARAM_SET_ACKNOWLEDGED_	TAI Seconds = {0x0000000000-0xFFFFFFFFFF} == _MMI_PARAM_ORDER_ (TAI Seconds) Subsecond = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Subsecond) Uncertainty = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Uncertainty) Time Authority = {0b0-0b1} == _MMI_PARAM_ORDER_ (Time Authority) TAI-UTC Delta = {0x0000-0x7FFF} == _MMI_PARAM_ORDER_ (TAI-UTC Delta) Time Zone Offset = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Time Zone Offset)
STATUS	Time Status
_PARAM_STATUS_	TAI Seconds = _PARAM_SET_ACKNOWLEDGED_ (TAI Seconds) Subsecond = _PARAM_SET_ACKNOWLEDGED_ (Subsecond) Uncertainity = _PARAM_SET_ACKNOWLEDGED_ (Uncertanity) Time Authority = _PARAM_SET_ACKNOWLEDGED_ (Time Authority) TAI-UTC Delta = _PARAM_SET_ACKNOWLEDGED_ (TAI-UTC Delta) Time Zone Offset = _PARAM_SET_ACKNOWLEDGED_ (Time Zone Offset)

Table 4.255: Common Set/Status Procedure Values for the Time State

4.3.2.26 Time Zone State Set/Status

State/Message/Parameter	Value(s)
STATE	Time Zone Offset Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Time Zone Offset New = {(-64)-191} TAI Of Zone Change = {yyyy-mm-dd hh:min:sec Time Zone}
_SET_ACKNOWLEDGED_	Time Zone Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Time Zone Offset New = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Time Zone Offset New) TAI Of Change = {0x0000000000-0xFFFFFFFFFF} == _MMI_PARAM_ORDER_ (TAI Of Change)
STATUS	Time Zone Change Status
_PARAM_STATUS_	Time Zone Offset Current = {0x00-0xFF} Time Zone Offset New = _PARAM_SET_ACKNOWLEDGED_ (Time Zone Offset New) Time Authority Distance = _PARAM_SET_ACKNOWLEDGED_ (Time Authority Distance)

Table 4.256: Common Set/Status Procedure Values for the Time Zone State

4.3.2.27 TAI-UTC Delta State Set/Status

State/Message/Parameter	Value(s)
STATE	Time Zone Offset Current
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	TAI-UTC Delta New = {(-255)-32512} TAI Of Delta Change = {yyyy-mm-dd hh:min:sec Time Zone}
_SET_ACKNOWLEDGED_	TAI-UTC Delta Set
_PARAM_SET_ACKNOWLEDGED_	TAI-UTC Delta New = {0x0000-0x7FFF} == _MMI_PARAM_ORDER_ (TAI-UTC Delta New) TAI Of Delta Change = {0x0000000000-0xFFFFFFFFFF} == _MMI_PARAM_ORDER_ (TAI Of Delta Change)
STATUS	TAI-UTC Delta Status
_PARAM_STATUS_	TAI-UTC Delta Current = _PARAM_SET_ACKNOWLEDGED_ (TAI-UTC Delta Current) TAI-UTC Delta New = _PARAM_SET_ACKNOWLEDGED_ (TAI-UTC Delta New) TAI Of Delta Change = _PARAM_SET_ACKNOWLEDGED_ (TAI Of Delta Change)

Table 4.257: Common Set/Status Procedure Values for the TAI-UTC Delta State

4.3.2.28 Time Role State Set/Status

State/Message/Parameter	Value(s)
STATE	Time Role state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Time Role = {None, Mesh Time Authority, Mesh time Relay, Mesh Time Client}
_SET_ACKNOWLEDGED_	Time Role Set
_PARAM_SET_ACKNOWLEDGED_	Time Role = {0x00-0x03} == _MMI_PARAM_ORDER_ (Time Role)
STATUS	Time Role Status
_PARAM_STATUS_	Time Role = _PARAM_SET_ACKNOWLEDGED_ (Time Role)

Table 4.258: Common Set/Status Procedure Values for the Time Role State

4.3.2.29 Scene Store/Status

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535}
_SET_ACKNOWLEDGED_	Scene Store
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number)
STATUS	Scene Register Status
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = _MMI_PARAM_ORDER_ (Scene Number) Scenes = {scene_number_1, scene_number_2, … scene_number_N} Where N is up to 16.

Table 4.259: Common Store/Status Procedure Values for the Scene Register State

4.3.2.30 Scene Recall/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Use default transition settings
_SET_ACKNOWLEDGED_	Scene Recall
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Scene Status
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = _PARM_SET_ACKNOWLEDGED_ (Scene Number) Target Scene = N/A Remaining Time = N/A

Table 4.260: Common Recall/Status Procedure Values for the Scene Register State – Default Transition

4.3.2.31 Scene Recall/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Force immediate transition
_SET_ACKNOWLEDGED_	Scene Recall

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0
STATUS	Scene Status
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = _PARAM_SET_ACKNOWLEDGED_ (Scene Number) Target Scene = N/A Remaining Time = N/A

Table 4.261: Common Recall/Status Procedure Values for the Scene Register State – Immediate Transition

4.3.2.32 Scene Recall/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Scene Recall
_PARAM_SET_ACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Scene Status
_PARAM_STATUS_	Status Code = {0x00-0x02} Current Scene = {0x0000-0xFFFF} Target Scene = _PARAM_SET_ACKNOWLEDGED_ (Scene Number) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.262: Common Recall/Status Procedure Values for the Scene Register State – Custom Transition

4.3.2.33 Scheduler Action State Set/Status

State/Message/Parameter	Value(s)
STATE	Scheduler Action state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Index = {0-15} Schedule Register = {yyyy-mm-dd hh:min:sec | Mondays, Tuesdays, Wednesdays, Thursdays, Fridays, Saturdays, Sundays | Turn Off, Turn On, Scene Recall, No action | Immediate, 100ms-10.5h | No Scene, Scene Number}
_SET_ACKNOWLEDGED_	Scheduler Action Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Index = {0x00-0x0F} == _MMI_PARAM_ORDER_ (Index) Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Schedule Register)
STATUS	Scheduler Action Status
_PARAM_STATUS_	Index = _PARAM_SET_ACKNOWLEDGED_ (Index) Schedule Register = _PARAM_SET_ACKNOWLEDGED_ (Schedule Register)

Table 4.263: Common Set/Status Procedure Values for the Scheduler Action State

4.3.2.34 Light Lightness Actual State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Use default transition settings
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light Lightness Status
_PARAM_STATUS_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.264: Common Set/Status Procedure Values for the Light Lightness Current State – Default Transition

4.3.2.35 Light Lightness Actual State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Force immediate transition
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

State/Message/Parameter	Value(s)
STATUS	Light Lightness Status
_PARAM_STATUS_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.265: Common Set/Status Procedure Values for the Light Lightness Current State – Immediate Transition

4.3.2.36 Light Lightness Actual State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light Lightness Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light Lightness Status
_PARAM_STATUS_	Present Lightness = {0x0000-0xFFFF} Target Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.266: Common Set/Status Procedure Values for the Light Lightness Current State – Custom Transition

4.3.2.37 Light Lightness Linear State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Use default transition settings
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
STATUS	Light Lightness Linear Status
_PARAM_STATUS_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.267: Common Set/Status Procedure Values for the Light Lightness Linear State – Default Transition

4.3.2.38 Light Lightness Linear State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Force immediate transition
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light Lightness Linear Status
_PARAM_STATUS_	Present Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Target Lightness = N/A Remaining Time = N/A

Table 4.268: Common Set/Status Procedure Values for the Light Lightness Linear State – Immediate Transition

4.3.2.39 Light Lightness Linear State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light Lightness Linear Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

State/Message/Parameter	Value(s)
STATUS	Light Lightness Linear Status
_PARAM_STATUS_	Present Lightness = {0x0000-0xFFFF} Target Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.269: Common Set/Status Procedure Values for the Light Lightness Linear State

4.3.2.40 Light Lightness Default State Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {1-65535}
_SET_ACKNOWLEDGED_	Light Lightness Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (Lightness)
STATUS	Light Lightness Default Status
_PARAM_STATUS_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness)

Table 4.270: Common Set/Status Procedure Values for the Light Lightness Default State

4.3.2.41 Light Lightness Range State Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Range Min = {1-65535} Range Max = {1-65535}
_SET_ACKNOWLEDGED_	Light Lightness Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Max)
STATUS	Light Lightness Range Status
_PARAM_STATUS_	Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)

Table 4.271: Common Set/Status Procedure Values for the Light Lightness Range State

4.3.2.42 Light CTL States Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Use default transition settings
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light CTL Status
_PARAM_STATUS_	Present CTL Lightness = _PARAM_SET_ACKNOWLEDGED_ (CTL Lightness) Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A

Table 4.272: Common Set/Status Procedure Values for the Light CTL States – Default Transition

4.3.2.43 Light CTL States Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Force immediate transition
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

State/Message/Parameter	Value(s)
STATUS	Light CTL Status
_PARAM_STATUS_	Present CTL Lightness = _PARAM_SET_ACKNOWLEDGED_ (CTL Lightness) Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Target CTL Lightness = N/A Target CTL Temperature = N/A Remaining Time = N/A

Table 4.273: Common Set/Status Procedure Values for the Light CTL States – Immediate Transition

4.3.2.44 Light CTL States Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Light CTL Set
_PARAM_SET_ACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light CTL Status
_PARAM_STATUS_	Present CTL Lightness = {0x0001-0xFFFE} Present CTL Temperature = {0x0320-0x4E20} Target CTL Lightness = _PARAM_SET_ACKNOWLEDGED_ (CTL Lightness) Target CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.274: Common Set/Status Procedure Values for the Light CTL States – Custom Transition

4.3.2.45 Light CTL Temperature State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Use default transition settings
_SET_ACKNOWLEDGED_	Light CTL Temperature Set
_PARAM_SET_ACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light CTL Temperature Status
_PARAM_STATUS_	Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A

Table 4.275: Common Set/Status Procedure Values for the Light CTL Temperature State – Default Transition

4.3.2.46 Light CTL Temperature State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Force immediate transition
_SET_ACKNOWLEDGED_	Light CTL Temperature Set
_PARAM_SET_ACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light CTL Temperature Status
_PARAM_STATUS_	Present CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Present CTL Delta UV = _PARAM_SET_ACKNOWLEDGED_ (CTL Delta UV) Target CTL Temperature = N/A Target CTL Delta UV = N/A Remaining Time = N/A

Table 4.276: Common Set/Status Procedure Values for the Light CTL Temperature State – Immediate Transition

4.3.2.47 Light CTL Temperature State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_ACKNOWLEDGED_	Light CTL Temperature Set
_PARAM_SET_ACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light CTL Temperature Status
_PARAM_STATUS_	Present CTL Temperature = {0x0320-0x4E20} Present CTL Delta UV = {0x0000-0xFFFF} Target CTL Temperature = _PARAM_SET_ACKNOWLEDGED_ (CTL Temperature) Target CTL Delta UV = _PARAM_SET_ACKNOWLEDGED_ (CTL Delta UV) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.277: Common Set/Status Procedure Values for the Light CTL Temperature State – Custom Transition

4.3.2.48 Light CTL Temperature Range State Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Range Min = {800-20000} Range Max = {800-20000}
_SET_ACKNOWLEDGED_	Light CTL Temperature Range Set
_PARAM_SET_ACKNOWLEDGED_	Range Min = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Range Max)
STATUS	Light CTL Temperature Range Status
_PARAM_STATUS_	Range Min = _PARAM_SET_ACKNOWLEDGED_ (Range Min) Range Max = _PARAM_SET_ACKNOWLEDGED_ (Range Max)

Table 4.278: Common Set/Status Procedure Values for the Light CTL Temperature Range State

4.3.2.49 Light CTL Default States Set/Status

State/Message/Parameter	Value(s)
STATE	Light CTL Default Lightness state, Light CTL Default Temperature state, Light CTL Default Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {1-65534} Temperature = {800-20000} Delta UV = {(-1)-1)}
_SET_ACKNOWLEDGED_	Light CTL Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (Lightness) Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Temperature) Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta UV)
STATUS	Light CTL Default Status
_PARAM_STATUS_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Temperature = _PARAM_SET_ACKNOWLEDGED_ (Temperature) Delta UV = _PARAM_SET_ACKNOWLEDGED_ (Delta UV)

Table 4.279: Common Set/Status Procedure Values for the Light CTL Default State

4.3.2.50 Light HSL States Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Use default transition settings
_SET_ACKNOWLEDGED_	Light HSL Set
_PARAM_SET_ACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

State/Message/Parameter	Value(s)
STATUS	Light HSL Status
_PARAM_STATUS_	HSL Lightness = _PARAM_SET_ACKNOWLEDGED_ (HSL Lightness) HSL Hue = _PARAM_SET_ACKNOWLEDGED_ (HSL Hue) HSL Saturation = _PARAM_SET_ACKNOWLEDGED_ (HSL Saturation) Remaining Time = N/A

Table 4.280: Common Set/Status Procedure Values for the Light HSL States – Default Transition

4.3.2.51 Light HSL States Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Force immediate transition
_SET_ACKNOWLEDGED_	Light HSL Set
_PARAM_SET_ACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light HSL Status
_PARAM_STATUS_	HSL Lightness = _PARAM_SET_ACKNOWLEDGED_ (HSL Lightness) HSL Hue = _PARAM_SET_ACKNOWLEDGED_ (HSL Hue) HSL Saturation = _PARAM_SET_ACKNOWLEDGED_ (HSL Saturation) Remaining Time = N/A

Table 4.281: Common Set/Status Procedure Values for the Light HSL States – Immediate Transition

4.3.2.52 Light HSL States Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light HSL Set
_PARAM_SET_ACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light HSL Status
_PARAM_STATUS_	HSL Lightness = _PARAM_SET_ACKNOWLEDGED_ (HSL Lightness) HSL Hue = _PARAM_SET_ACKNOWLEDGED_ (HSL Hue) HSL Saturation = _PARAM_SET_ACKNOWLEDGED_ (HSL Saturation) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.282: Common Set/Status Procedure Values for the Light HSL States – Custom Transition

4.3.2.53 Light HSL Hue States Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Use default transition settings
_SET_ACKNOWLEDGED_	Light HSL Hue Set
_PARAM_SET_ACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light HSL Hue Status
_PARAM_STATUS_	Present Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Target Hue = N/A Remaining Time = N/A

Table 4.283: Common Set/Status Procedure Values for the Light Hue States – Default Transition

4.3.2.54 Light HSL Hue States Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Force immediate transition
_SET_ACKNOWLEDGED_	Light HSL Hue Set
_PARAM_SET_ACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light HSL Hue Status
_PARAM_STATUS_	Present Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Target Hue = N/A Remaining Time = N/A

Table 4.284: Common Set/Status Procedure Values for the Light Hue States – Immediate Transition

4.3.2.55 Light HSL Hue States Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light HSL Hue Set
_PARAM_SET_ACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light HSL Hue Status
_PARAM_STATUS_	Present Hue = {0x0000-0xFFFF} Target Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.285: Common Set/Status Procedure Values for the Light Hue States – Custom Transition

4.3.2.56 Light HSL Saturation State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Use default transition settings
_SET_ACKNOWLEDGED_	Light HSL Saturation Set
_PARAM_SET_ACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light HSL Saturation Status
_PARAM_STATUS_	Present Saturation = _PARAM_SET_ACKNOWLEDGED_ (Saturation) Target Saturation = N/A Remaining Time = N/A

Table 4.286: Common Set/Status Procedure Values for the Light HSL Saturation State – Default Transition

4.3.2.57 Light HSL Saturation State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Force immediate transition
_SET_ACKNOWLEDGED_	Light HSL Saturation Set
_PARAM_SET_ACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light HSL Saturation Status
_PARAM_STATUS_	Present Saturation = _PARAM_SET_ACKNOWLEDGED_ (Saturation) Target Saturation = N/A Remaining Time = N/A

Table 4.287: Common Set/Status Procedure Values for the Light HSL Saturation State – Immediate Transition

4.3.2.58 Light HSL Saturation State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light HSL Saturation Set
_PARAM_SET_ACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)
STATUS	Light HSL Saturation Status
_PARAM_STATUS_	Present Saturation = {0x0000-0xFFFF} Target Saturation = _PARAM_SET_ACKNOWLEDGED_ (Saturation) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.288: Common Set/Status Procedure Values for the Light HSL Saturation State – Custom Transition

4.3.2.59 Light HSL Default States Set/Status

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state, Light HSL Hue Default state, Light HSL Saturation Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off,1-65534, Highest} Hue = {0-360} Saturation = {Lowest, 1-65534, Highest}
_SET_ACKNOWLEDGED_	Light HSL Default Set
_PARAM_SET_ACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation)
STATUS	Light HSL Default Status
_PARAM_STATUS_	Lightness = _PARAM_SET_ACKNOWLEDGED_ (Lightness) Hue = _PARAM_SET_ACKNOWLEDGED_ (Hue) Saturation = _PARAM_SET_ACKNOWLEDGED_ (Saturation)

Table 4.289: Common Set/Status Procedure Values for the Light HSL Default State

4.3.2.60 Light HSL Range State Set/Status

State/Message/Parameter	Value(s)
STATE	Light HSL Range state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Hue Range Min = {0-360} Hue Range Max = {0-360} Saturation Range Min = {Lowest, 1-65534, Highest} Saturation Range Max = {Lowest, 1-65534, Highest}
_PARAM_SET_ACKNOWLEDGED_	Light HSL Range Set
_PARAM_SET_	Hue Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue Range Min) Hue Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue Range Max) Saturation Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation Range Min) Saturation Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation Range Max)
STATUS	Light HSL Range Status
_PARAM_STATUS_	Hue Range Min = _PARAM_SET_ACKNOWLEDGED_ (Hue Range Min) Hue Range Max = _PARAM_SET_ACKNOWLEDGED_ (Hue Range Max) Saturation Range Min = _PARAM_SET_ACKNOWLEDGED_ (Saturation Range Min) Saturation Range Max = _PARAM_SET_ACKNOWLEDGED_ (Saturation Range Max)

Table 4.290: Common Set/Status Procedure Values for the Light HSL Range State

4.3.2.61 Light xyL States Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Use default transition settings
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_ACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light xyL Status
_PARAM_STATUS_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A

Table 4.291: Common Set/Status Procedure Values for the Light xyL States – Default Transition

4.3.2.62 Light xyL States Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Force immediate transition
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_ACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light xyL Status
_PARAM_STATUS_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = N/A

Table 4.292: Common Set/Status Procedure Values for the Light xyL States – Immediate Transition

4.3.2.63 Light xyL States Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light xyL Set
_PARAM_SET_ACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

State/Message/Parameter	Value(s)
STATUS	Light xyL Status
_PARAM_STATUS_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF} Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.293: Common Set/Status Procedure Values for the Light xyL States – Custom Transition

4.3.2.64 Light xyL Default States Set/Status

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness Default state, Light xyL x Default state, Light xyL y Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1}
_SET_ACKNOWLEDGED_	Light xyL Default Set
_PARAM_SET_ACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y)
STATUS	Light xyL Default Status
_PARAM_STATUS_	xyL Lightness = {0x0000-0xFFFF} xyL x = {0x0000-0xFFFF} xyL y = {0x0000-0xFFFF}

Table 4.294: Common Set/Status Procedure Values for the Light xyL Default States

4.3.2.65 Light xyL Range States Set/Status

State/Message/Parameter	Value(s)
STATE	Light xyL x Range state, Light xyL y Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL x Range Min = {0-1} xyL x Range Max = {0-1} xyL y Range Min = {0-1} xyL y Range Max = {0-1}
_SET_ACKNOWLEDGED_	Light xyL Range Set
_PARAM_SET_ACKNOWLEDGED_	xyL x Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x Range Min) xyL x Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x Range Max) xyL y Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y Range Min) xyL y Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y Range Max)

State/Message/Parameter	Value(s)
STATUS	Light xyL Range Status
_PARAM_STATUS_	xyL x Range Min = _PARAM_SET_ACKNOWLEDGED_ (xyL x Range Min) xyL x Range Max = _PARAM_SET_ACKNOWLEDGED_ (xyL x Range Max) xyL y Range Min = _PARAM_SET_ACKNOWLEDGED_ (xyL y Range Min) xyL y Range Max = _PARAM_SET_ACKNOWLEDGED_ (xyL y Range Max)

Table 4.295: Common Set/Status Procedure Values for the Light xyL Range State

4.3.2.66 Light LC Mode State Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC Mode state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Mode = {Off, On}
_SET_ACKNOWLEDGED_	Light LC Mode Set
_PARAM_SET_ACKNOWLEDGED_	Mode = {0b0-0b1} == _MMI_PARAM_ORDER_ (Mode)
STATUS	Light LC Mode Status
_PARAM_STATUS_	Mode = _PARAM_SET_ACKNOWLEDGED_ (Mode)

Table 4.296: Common Set/Status Procedure Values for the Light LC Mode State

4.3.2.67 Light LC Occupancy Mode State Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC OM state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Mode = {No transition, May Transition}
_SET_ACKNOWLEDGED_	Light LC OM Set
_PARAM_SET_ACKNOWLEDGED_	Mode = {0b0-0b1} == _MMI_PARAM_ORDER_ (Mode)
STATUS	Light LC OM Status
_PARAM_STATUS_	Mode = _PARAM_SET_ACKNOWLEDGED_ (Mode)

Table 4.297: Common Set/Status Procedure Values for the Light LC Occupancy Mode State

4.3.2.68 Light LC Light OnOff State Set/Status – Default Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Use default transition settings
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set

State/Message/Parameter	Value(s)
_PARAM_SET_ACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A
STATUS	Light LC Light OnOff Status
_PARAM_STATUS_	Present Light OnOff = _PARAM_SET_ACKNOWLEDGED_ (Light OnOff) Target Light OnOff = N/A Remaining Time = N/A

Table 4.298: Common Set/Status Procedure Values for the Light LC Light OnOff State – Default Transition

4.3.2.69 Light LC Light OnOff State Set/Status – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Force immediate transition
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set
_PARAM_SET_ACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00
STATUS	Light LC Light OnOff Status
_PARAM_STATUS_	Present Light OnOff = _PARAM_SET_ACKNOWLEDGED_ (Light OnOff) Target Light OnOff = N/A Remaining Time = N/A

Table 4.299: Common Set/Status Procedure Values for the Light LC Light OnOff State – Immediate Transition

4.3.2.70 Light LC Light OnOff State Set/Status – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_ACKNOWLEDGED_	Light LC Light OnOff Set
_PARAM_SET_ACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

State/Message/Parameter	Value(s)
STATUS	Light LC Light OnOff Status
_PARAM_STATUS_	Present Light OnOff = {0b0-0b1} Target Light OnOff = _PARAM_SET_ACKNOWLEDGED_ (Light OnOff) Remaining Time = {0b00-0b11} || {0b000000-0b111110}

Table 4.300: Common Set/Status Procedure Values for the Light LC Light OnOff State – Custom Transition

4.3.2.71 Light LC Property State Set/Status

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Lower Tester randomly chooses a Property ID, denoted as PID, from the list of Light LC Property IDs.
_MMI_PARAM_ORDER_	Light LC Property ID = *PID* Light LC Property Value = Array<>
_SET_ACKNOWLEDGED_	Light LC Property Set
_PARAM_SET_ACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = Array<> == _MMI_PARAM_ORDER_ (Light LC Property Value)
STATUS	Light LC Property Status
_PARAM_STATUS_	Light LC Property ID = *PID* Light LC Property Value = _PARAM_SET_ACKNOWLEDGED_ (Light LC Property Value)

Table 4.301: Common Set/Status Procedure Values for the Light LC Property State

4.3.3 Common Set Unacknowledged Procedure

- Test Purpose

  This test procedure verifies common Set Unacknowledged Client procedures performed by a Client on a Server supporting the _STATE_.

- Initial Condition

  The initial condition of the Client is defined by _INITIAL_CONDITION_.

- Test Procedure

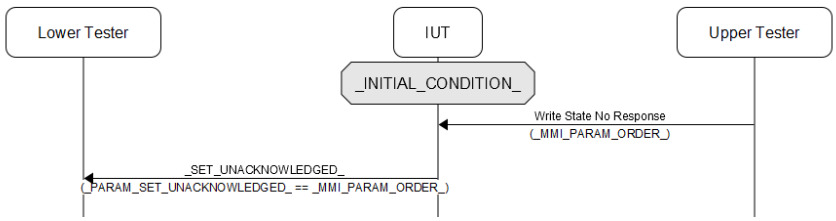

Figure 4.13: Test procedure for the Common Set Unacknowledged Procedure

1. The Upper Tester orders the IUT to unreliably set the _STATE_ on the Lower Tester to a value defined by _MMI_PARAM_ORDER_.
2. The Lower Tester expects the IUT to send a _SET_UNACKNOWLEDGED_ message with parameters defined by _PARAM_SET_UNACKNOWLEDGED_.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a _SET_UNACKNOWLEDGED_ message with parameters defined by _PARAM_SET_UNACKNOWLEDGED_.

- Notes

  This test procedure is illustrated in Figure 4.13.

4.3.3.1 Generic OnOff State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Use default transition settings
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.302: Common Set Unacknowledged Procedure Values for the Generic OnOff State

4.3.3.2 Generic OnOff State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Force immediate transition
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.303: Common Set Unacknowledged Procedure Values for the Generic OnOff State

4.3.3.3 Generic OnOff State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic OnOff state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	OnOff = {OFF, ON} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_UNACKNOWLEDGED_	Generic OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnOff = {0x00, 0x01} == _MMI_PARAM_ORDER_ (OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.304: Common Set Unacknowledged Procedure Values for the Generic OnOff State

4.3.3.4 Generic Level State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Use default transition settings
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.305: Common Set Unacknowledged Procedure Values for the Generic Level State

4.3.3.5 Generic Level State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Force immediate transition
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.306: Common Set Unacknowledged Procedure Values for the Generic Level State

4.3.3.6 Generic Level State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_UNACKNOWLEDGED_	Generic Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.307: Common Set Unacknowledged Procedure Values for the Generic Level State

4.3.3.7 Generic Default Transition Time State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Default Transition Time state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Transition Time = {Immediate, 100ms-7.5h, Unknown}
_SET_UNACKNOWLEDGED_	Generic Default Transition Time Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Transition Time = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Transition Time)

Table 4.308: Common Set Unacknowledged Procedure Values for the Generic Default Transition Time State

4.3.3.8 Generic OnPowerUp State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic OnPowerUp state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	OnPowerUp = {OFF, Default, Restore}
_SET_UNACKNOWLEDGED_	Generic OnPowerUp Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	OnPowerUp = {0x00-0x02} == _MMI_PARAM_ORDER_ (OnPowerUp)

Table 4.309: Common Set Unacknowledged Procedure Values for the Generic OnPowerUp State

4.3.3.9 Generic Power Actual State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Use default transition settings

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Generic Power Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.310: Common Set Unacknowledged Procedure Values for the Generic Level State

4.3.3.10 Generic Power Actual State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Force immediate transition
_SET_UNACKNOWLEDGED_	Generic Power Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_(Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.311: Common Set Unacknowledged Procedure Values for the Generic Level State

4.3.3.11 Generic Power Actual State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Power Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {0-100%} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_UNACKNOWLEDGED_	Generic Power Level Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Power) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000001-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.312: Common Set Unacknowledged Procedure Values for the Generic Power Actual State

4.3.3.12 Generic Power Default State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Power Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Power = {Use Last, (1/65535)%-100%}

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Generic Power Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Power = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Power)

Table 4.313: Common Set Unacknowledged Procedure Values for the Generic Power Default State

4.3.3.13 Generic Power Range State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Power Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Range Min = {1–65535} Range Max = {1–65535} > Range Min
_SET_UNACKNOWLEDGED_	Generic Power Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Max)

Table 4.314: Common Set Unacknowledged Procedure Values for the Generic Power Range State

4.3.3.14 Generic Location Global State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Location Global state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Global Latitude = {(-90)-90, not configured} Global Longitude = {(-180)-180, not configured} Global Altitude = {(-32768)–32765, above 32765, not configured}
_SET_UNACKNOWLEDGED_	Generic Location Global Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Global Latitude = {0x00000000-0xFFFFFFFF} == _MMI_PARAM_ORDER_ (Global Latitude) Global Longitude = {0x00000000-0xFFFFFFFF} == _MMI_PARAM_ORDER_ (Global Longitude) Global Altitude = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Global Altitude)

Table 4.315: Common Set Unacknowledged Procedure Values for the Generic Location Global State

4.3.3.15 Generic Location Local State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Location Local state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Local North = {(-32767)–32767, not configured} Local East = {(-32767)–32767, not configured} Local Altitude = {(-32768)–32765, above 32765, not configured} Floor Number = {floors -20 and below, (-19)–232, floors 232 and above, floor 1 ground floor, no floor configured} Uncertainty = stationary | mobile, {0.125–4096s}, {0.125–4096m}
_SET_UNACKNOWLEDGED_	Generic Location Local Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Local North = {0x0000-0xFFFF) == _MMI_PARAM_ORDER_ (Local North) Local East = {0x0000-0xFFFF) == _MMI_PARAM_ORDER_ (Local East) Local Altitude = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Local Altitude) Floor Number = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Floor Number) Uncertainty = {0x00-0x01} || {0x00-0xFF} == _MMI_PARAM_ORDER_ (Uncertainty)

Table 4.316: Common Set Unacknowledged Procedure Values for the Generic Location Local State

4.3.3.16 Generic User Property State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic User Property state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	User Property ID = {*Property ID*} User Property Value = <variable> (valid format, see [6])
_SET_UNACKNOWLEDGED_	Generic User Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	User Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (User Property ID) User Property Value == _MMI_PARAM_ORDER_ (User Property Value)

Table 4.317: Common Set Unacknowledged Procedure Values for the Generic User Property State

4.3.3.17 Generic Admin Property State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Admin Property state
_INITIAL_CONDITION_	The Generic Admin Properties state contains the property with the Property ID denoted as PID.
_MMI_PARAM_ORDER_	Admin Property ID = {*Property ID*} Admin User Access = {not a Generic User Property, Property can be read} Admin Property Value = <variable> (valid format, see [6])

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Generic Admin Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Admin Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (Admin Property ID) Admin User Access = {0x00-0x03} == _MMI_PARAM_ORDER_ (Admin User Access) Admin Property Value = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Admin Property Value)

Table 4.318: Common Set Unacknowledged Procedure Values for the Generic Admin Property State

4.3.3.18 Generic Manufacturer Property State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Manufacturer Property state
_INITIAL_CONDITION_	The Generic Manufacturer Properties state contains the property with the Property ID denoted as *PID*.
_MMI_PARAM_ORDER_	Manufacturer Property ID = {*Property ID*} Manufacturer User Access = {not a Generic User Property, Property can be read}
_SET_UNACKNOWLEDGED_	Generic Manufacturer Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Manufacturer Property ID = {*Property ID*} == _MMI_PARAM_ORDER_ (Manufacturer Property ID) Manufacturer User Access = {0x00-0x01} == _MMI_PARAM_ORDER_ (Manufacturer User Access)

Table 4.319: Common Set Unacknowledged Procedure Values for the Generic Manufacturer Property State

4.3.3.19 Generic Level State Delta Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Use default transition settings
_SET_UNACKNOWLEDGED_	Generic Delta Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.320: Common Set Unacknowledged Procedure Values for the Generic Level State - Delta

4.3.3.20 Generic Level State Delta Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Force immediate transition
_SET_UNACKNOWLEDGED_	Generic Delta Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.321: Common Set Unacknowledged Procedure Values for the Generic Level State - Delta

4.3.3.21 Generic Level State Delta Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_UNACKNOWLEDGED_	Generic Delta Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.322: Common Set Unacknowledged Procedure Values for the Generic Level State - Delta

4.3.3.22 Generic Level State Move Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Generic Level state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Delta Level = {(-32768)-32767} Transition Time = {100ms-10.5h} Delay = {0-1275ms}
_SET_UNACKNOWLEDGED_	Generic Move Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Delta Level = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta Level) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.323: Common Set Unacknowledged Procedure Values for the Generic Level State - Move

4.3.3.23 Sensor Cadence State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Sensor Cadence state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Property ID = *PID* Fast Cadence Period Log = {1-2^{15}} Status Trigger Type = {Format defined by Property ID, Fixed Format} Status Trigger Delta Down = <variable> (valid format, see [6]) Status Trigger Delta Up = <variable> (valid format, see [6]) Status Min Log = {1-2^{26}} Fast Cadence Low = <variable> (valid format, see [6]) Fast Cadence High = <variable> (valid format, see [6])
_SET_UNACKNOWLEDGED_	Sensor Cadence Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Property ID == _MMI_PARAM_ORDER_ (Property ID) Fast Cadence Period Log = (7bit) {0x00-0x0F} == _MMI_PARAM_ORDER_ (Fast Cadence Period Log) Status Trigger Type = {0b0, 0b1} == _MMI_PARAM_ORDER_ (Status Trigger Type) Status Trigger Delta Down = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Status Trigger Delta Down) Status Trigger Delta Up = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Status Trigger Delta Up) Fast Cadence Low = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Fast Cadence Low) Fast Cadence High = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Fast Cadence High)

Table 4.324: Common Set Unacknowledged Procedure Values for the Sensor Cadence State

4.3.3.24 Sensor Setting State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Sensor Setting state
_INITIAL_CONDITION_	The Sensor Property IDs list on the IUT contains the Property ID denoted as *PID*, and the Sensor Setting state contains setting data for the Sensor Setting Property ID denoted as *SPID*, associated with *PID*.
_MMI_PARAM_ORDER_	Sensor Property ID = *PID* Setting Property IDs = *SPID* Setting Raw = (valid format, see [6])

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Sensor Setting Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Sensor Property ID == _MMI_PARAM_ORDER_ (Sensor Property ID) Setting Property ID == _MMI_PARAM_ORDER_ (Setting Property ID) Setting Raw == _MMI_PARAM_ORDER_ (Setting Raw)

Table 4.325: Common Set Unacknowledged Procedure Values for the Sensor Setting State

4.3.3.25 Scene Store Unacknowledged

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535}
_SET_UNACKNOWLEDGED_	Scene Store Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number)

Table 4.326: Common Store Unacknowledged Procedure Values for Scene Register State

4.3.3.26 Scene Recall Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Use default transition settings
_SET_UNACKNOWLEDGED_	Scene Recall Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.327: Common Recall Unacknowledged Procedure Values for Scene Register State – Default Transition

4.3.3.27 Scene Recall Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Force immediate transition

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Scene Recall Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.328: Common Recall Unacknowledged Procedure Values for Scene Register State – Immediate Transition

4.3.3.28 Scene Recall Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Current state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Scene Number = {1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Scene Recall Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Scene Number = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Scene Number) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.329: Common Recall Unacknowledged Procedure Values for Scene Register State – Default Transition

4.3.3.29 Scheduler Action State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Scheduler Action state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Index = {0-15} Schedule Register = {yyyy-mm-dd hh:min:sec | Mondays, Tuesdays, Wednesdays, Thursdays, Fridays, Saturdays, Sundays | Turn Off, Turn On, Scene Recall, No action | Immediate, 100ms-10.5h | No Scene, Scene Number} Status Code = {success, action is not defined}

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Scheduler Action Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Index = {0x00-0x0F} == _MMI_PARAM_ORDER_ (Index) Schedule Register = {0b0000000-0b1100100} || {0x000-0xFFF} || {0b00000-0b11111} || {0b00000-0b11001} || {0b000000-0b111111} || {0b000000-0b111111} || {0b0000000-0b1111111} || {0x0, 0x01, 0x2, 0xF} || [{0b00-0b11} || {0b000000-0b111110}] || {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Schedule Register) Status Code = {0x00-0x02} == _MMI_PARAM_ORDER_ (Status Code)

Table 4.330: Common Set Unacknowledged Procedure Values for the Scheduler Action State

4.3.3.30 Light Lightness Actual State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Use default transition settings
_SET_UNACKNOWLEDGED_	Light Lightness Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.331: Common Set Unacknowledged Procedure Values for the Light Lightness Current State – Default Transition

4.3.3.31 Light Lightness Actual State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Force immediate transition
_SET_UNACKNOWLEDGED_	Light Lightness Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.332: Common Set Unacknowledged Procedure Values for the Light Lightness Current State – Immediate Transition

4.3.3.32 Light Lightness Actual State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Actual state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light Lightness Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.333: Common Set Unacknowledged Procedure Values for the Light Lightness Current State – Custom Transition

4.3.3.33 Light Lightness Linear State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Use default transition settings
_SET_UNACKNOWLEDGED_	Light Lightness Linear Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.334: Common Set Unacknowledged Procedure Values for the Light Lightness Linear State – Default Transition

4.3.3.34 Light Lightness Linear State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Force immediate transition

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light Lightness Linear Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.335: Common Set Unacknowledged Procedure Values for the Light Lightness Linear State – Immediate Transition

4.3.3.35 Light Lightness Linear State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light Lightness Linear state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off, 1-65535} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light Lightness Linear Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.336: Common Set Unacknowledged Procedure Values for the Light Lightness Linear State – Custom Transition

4.3.3.36 Light Lightness Default State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {1-65535}
_SET_UNACKNOWLEDGED_	Light Lightness Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (Lightness)

Table 4.337: Common Set Unacknowledged Procedure Values for the Light Lightness Default State

4.3.3.37 Light Lightness Range State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light Lightness Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Range Min = {1-65535} Range Max = {1-65535}

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light Lightness Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0001-0xFFFF} == _MMI_PARAM_ORDER_ (Range Max)

Table 4.338: Common Set Unacknowledged Procedure Values for the Light Lightness Range State

4.3.3.38 Light CTL States Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Use default transition settings
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.339: Common Set Unacknowledged Procedure Values for the Light CTL States – Default Transition

4.3.3.39 Light CTL States Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Force immediate transition

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.340: Common Set Unacknowledged Procedure Values for the Light CTL States – Immediate Transition

4.3.3.40 Light CTL States Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Lightness state, Light CTL Temperature state, Light CTL Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Lightness = {1-65534} CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light CTL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (CTL Lightness) CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.341: Common Set Unacknowledged Procedure Values for the Light CTL States – Custom Transition

4.3.3.41 Light CTL Temperature State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Use default transition settings

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light CTL Temperature Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.342: Common Set Unacknowledged Procedure Values for the Light CTL Temperature State – Default Transition

4.3.3.42 Light CTL Temperature State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000} CTL Delta UV = {(-1)-1)} Force immediate transition
_SET_UNACKNOWLEDGED_	Light CTL Temperature Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.343: Common Set Unacknowledged Procedure Values for the Light CTL Temperature State – Immediate Transition

4.3.3.43 Light CTL Temperature State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	CTL Temperature = {800-20000K} CTL Delta UV = {(-1)-1)} Transition Time = {100ms-10.5h} Delay = {0-1275ms}

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light CTL Temperature Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	CTL Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (CTL Temperature) CTL Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (CTL Delta UV) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.344: Common Set Unacknowledged Procedure Values for the Light CTL Temperature State – Custom Transition

4.3.3.44 Light CTL Temperature Range State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light CTL Temperature Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Range Min = {800-20000} Range Max = {800-20000}
_SET_UNACKNOWLEDGED_	Light CTL Temperature Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Range Min = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Range Min) Range Max = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Range Max)

Table 4.345: Common Set Unacknowledged Procedure Values for the Light CTL Temperature Range State

4.3.3.45 Light CTL Default States Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light CTL Default Lightness state, Light CTL Default Temperature state, Light CTL Default Delta UV state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {1-65534} Temperature = {800-20000} Delta UV = {(-1)-1}
_SET_UNACKNOWLEDGED_	Light CTL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0001-0xFFFE} == _MMI_PARAM_ORDER_ (Lightness) Temperature = {0x0320-0x4E20} == _MMI_PARAM_ORDER_ (Temperature) Delta UV = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Delta UV)

Table 4.346: Common Set Unacknowledged Procedure Values for the Light CTL Default States

4.3.3.46 Light HSL States Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Use default transition settings
_SET_UNACKNOWLEDGED_	Light HSL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.347: Common Set Unacknowledged Procedure Values for the Light HSL States – Default Transition

4.3.3.47 Light HSL States Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Force immediate transition
_SET_UNACKNOWLEDGED_	Light HSL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.348: Common Set Unacknowledged Procedure Values for the Light HSL States – Immediate Transition

4.3.3.48 Light HSL States Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Lightness state, Light HSL Hue state, Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	HSL Lightness = {Off,1-65534, Highest} HSL Hue = {0-360} HSL Saturation = {Lowest, 1-65534, Highest} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light HSL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	HSL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Lightness) HSL Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Hue) HSL Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (HSL Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.349: Common Set Unacknowledged Procedure Values for the Light HSL States – Custom Transition

4.3.3.49 Light HSL Hue State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Use default transition settings
_SET_UNACKNOWLEDGED_	Light HSL Set Hue Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.350: Common Set Unacknowledged Procedure Values for the Light HSL Hue State – Default Transition

4.3.3.50 Light HSL Hue State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Force immediate transition

State/Message/Parameter	Value(s)
_SET_UNACKNOWLEDGED_	Light HSL Set Hue Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.351: Common Set Unacknowledged Procedure Values for the Light HSL Hue State – Immediate Transition

4.3.3.51 Light HSL Hue State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Hue state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue = {0-360} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light HSL Set Hue Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.352: Common Set Unacknowledged Procedure Values for the Light HSL Hue State – Custom Transition

4.3.3.52 Light HSL Saturation State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Use default transition settings
_SET_UNACKNOWLEDGED_	Light HSL Saturation Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.353: Common Set Unacknowledged Procedure Values for the Light HSL Saturation State – Default Transition

4.3.3.53 Light HSL Saturation State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Force immediate transition
_SET_UNACKNOWLEDGED_	Light HSL Saturation Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.354: Common Set Unacknowledged Procedure Values for the Light HSL Saturation State – Immediate Transition

4.3.3.54 Light HSL Saturation State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light HSL Saturation state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Saturation = {Lowest, 1-65534, Highest} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light HSL Saturation Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.355: Common Set Unacknowledged Procedure Values for the Light HSL Saturation State – Custom Transition

4.3.3.55 Light HSL Default States Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state, Light HSL Hue Default state, Light HSL Saturation Default state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Lightness = {Off,1-65534, Highest} Hue = {0-360} Saturation = {Lowest, 1-65534, Highest}
_SET_UNACKNOWLEDGED_	Light HSL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Lightness) Hue = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue) Saturation = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation)

Table 4.356: Common Set Unacknowledged Procedure Values for the Light HSL Default States

4.3.3.56 Light HSL Range States Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light HSL Hue Range state, Light HSL Saturation Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Hue Range Min = {0-360} Hue Range Max = {0-360} Saturation Range Min = {Lowest, 1-65534, Highest} Saturation Range Max = {Lowest, 1-65534, Highest}
_SET_UNACKNOWLEDGED_	Light HSL Set Range Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Hue Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue Range Min) Hue Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Hue Range Max) Saturation Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation Range Min) Saturation Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (Saturation Range Max)

Table 4.357: Common Set Unacknowledged Procedure Values for the Light HSL Range States

4.3.3.57 Light xyL States Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Use default transition settings
_SET_UNACKNOWLEDGED_	Light xyL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = N/A Delay =N/A

Table 4.358: Common Set Unacknowledged Procedure Values for the Light xyL States – Default Transition

4.3.3.58 Light xyL States Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Force immediate transition
_SET_UNACKNOWLEDGED_	Light xyL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.359: Common Set Unacknowledged Procedure Values for the Light xyL States – Immediate Transition

4.3.3.59 Light xyL States Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light xyL Lightness state, Light xyL x state, Light xyL y state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light xyL Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition Time) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.360: Common Set Unacknowledged Procedure Values for the Light xyL States – Custom Transition

4.3.3.60 Light xyL Default States Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light Lightness Default state, Light xyL x Default state, Light xyL y Default state
_INITIAL_CONDITION_	N/A

State/Message/Parameter	Value(s)
_MMI_PARAM_ORDER_	xyL Lightness = {Off,1-65534, Highest} xyL x = {0-1} xyL y = {0-1}
_SET_UNACKNOWLEDGED_	Light xyL Default Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL Lightness = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL Lightness) xyL x = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x) xyL y = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y)

Table 4.361: Common Set Unacknowledged Procedure Values for the Light xyL Default States

4.3.3.61 Light xyL Range States Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light xyL x Range state, Light xyL y Range state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	xyL x Range Min = {0-1} xyL x Range Max = {0-1} xyL y Range Min = {0-1} xyL y Range Max = {0-1}
_SET_UNACKNOWLEDGED_	Light xyL Range Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	xyL x Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x Range Min) xyL x Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL x Range Max) xyL y Range Min = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y Range Min) xyL y Range Max = {0x0000-0xFFFF} == _MMI_PARAM_ORDER_ (xyL y Range Max)

Table 4.362: Common Set Unacknowledged Procedure Values for the Light xyL Range States

4.3.3.62 Light LC Mode State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light LC Mode state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Mode = {Off, On}
_SET_UNACKNOWLEDGED_	Light LC Mode Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Mode = {0b0-0b1} == _MMI_PARAM_ORDER_ (Mode)

Table 4.363: Common Set Unacknowledged Procedure Values for the Light LC Mode State

4.3.3.63 Light LC Occupancy Mode State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light LC Occupancy Mode state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Mode = {No transition, May Transition}
_SET_UNACKNOWLEDGED_	Light LC Occupancy Mode Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Mode = {0b0-0b1} == _MMI_PARAM_ORDER_ (Mode)

Table 4.364: Common Set Unacknowledged Procedure Values for the Light LC Occupancy Mode State

4.3.3.64 Light LC Light OnOff State Set Unacknowledged – Default Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Use default transition settings
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = N/A Delay = N/A

Table 4.365: Common Set Unacknowledged Procedure Values for the Light LC Light OnOff State – Default Transition

4.3.3.65 Light LC Light OnOff State Set Unacknowledged – Immediate Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Force immediate transition
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000} Delay = 0x00

Table 4.366: Common Set Unacknowledged Procedure Values for the Light LC Light OnOff State – Immediate Transition

4.3.3.66 Light LC Light OnOff State Set Unacknowledged – Custom Transition

State/Message/Parameter	Value(s)
STATE	Light LC Light OnOff state
_INITIAL_CONDITION_	N/A
_MMI_PARAM_ORDER_	Light OnOff = {Off|Standby, Occupancy|Run|Prolong} Transition Time = {100ms-10.5h} Delay = {0-1.275ms}
_SET_UNACKNOWLEDGED_	Light LC Light OnOff Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light OnOff = {0b0-0b1} == _MMI_PARAM_ORDER_ (Light OnOff) TID = {0x00-0xFF} Transition Time = {0b00-0b11} || {0b000000-0b111110} == _MMI_PARAM_ORDER_ (Transition) Delay = {0x00-0xFF} == _MMI_PARAM_ORDER_ (Delay)

Table 4.367: Common Set Unacknowledged Procedure Values for the Light LC Light OnOff State – Custom Transition

4.3.3.67 Light LC Property State Set Unacknowledged

State/Message/Parameter	Value(s)
STATE	Light LC Property state
_INITIAL_CONDITION_	The Lower Tester randomly chooses a Property ID, denoted as PID, from the list of Light LC Property IDs.
_MMI_PARAM_ORDER_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6])
_SET_UNACKNOWLEDGED_	Light LC Property Set Unacknowledged
_PARAM_SET_UNACKNOWLEDGED_	Light LC Property ID = *PID* Light LC Property Value = <variable> (valid format, see [6]) == _MMI_PARAM_ORDER_ (Light LC Property Value)

Table 4.368: Common Set Unacknowledged Procedure Values for the Light LC Property State

4.4 General Test Cases

4.4.1 General Prerequisites

4.4.1.1 IUT Elements and Addresses

The Lower Tester maintains a list of all Elements of the IUT, together with their unicast addresses and list of supported Models. These addresses and associated lists of Model IDs are provided in the IXIT file.

Throughout a test case, the Lower Tester uses the same unicast address as source field value in the messages it produces. This unicast address must be different than all unicast addresses of the IUT's Elements. The Lower Tester uses continuously increasing sequence numbers for each own unicast address, starting with 0, throughout the entire test session. The Lower Tester may choose to use a single own unicast address for the entire test session.

Unless otherwise stated explicitly in the test case, when the Lower Tester sends a message to the IUT, it chooses one of the Elements on the IUT that supports the Model which is being tested, and sets the

destination field of the message to the unicast address of that Element. When the Lower Tester expects a response from the IUT within the same test case, the response is expected to have the source field set to the same Element unicast address, and the destination field set to the unicast address used by the Lower Tester when sending the initial message.

When a Client Model test case is executed, it usually begins with a command from the Upper Tester to the IUT that effectively orders the IUT to send a certain message. Although not explicitly listed in the table, all these commands will include the unicast address of the Lower Tester that the IUT must use in the DST field of the message.

4.4.1.2 Security Keys

The IXIT file must provide a unique network key and IV Index combination that will be used throughout the entire test session to encrypt the Network PDUs.

In addition, the IXIT file must specify either an application key or the device key as bound to each supported Model. It is possible that multiple Models use the same application key, as long as the rules defined by the Mesh Profile Specification ([3]) and the Mesh Model Specification ([4]) are followed.

4.4.2 Composition Data

This section defines a test case that verifies that the Model IDs listed in the IUT's Composition Data match the Models declared as supported in the ICS Proforma ([5]).

MMDL/SR-CL/COMP/BV-01-C [Composition Data and Model IDs]

- Test Purpose

  This Test Procedure verifies that the Composition Data returned by the IUT contains the model IDs of all supported models.

- Reference

  [3] 4.2.1, 4.3.2.4, 4.3.2.5, 4.4.1

- Initial Condition

  - The number of elements of the IUT and their unicast addresses are available in the IXIT file.

- Test Procedure

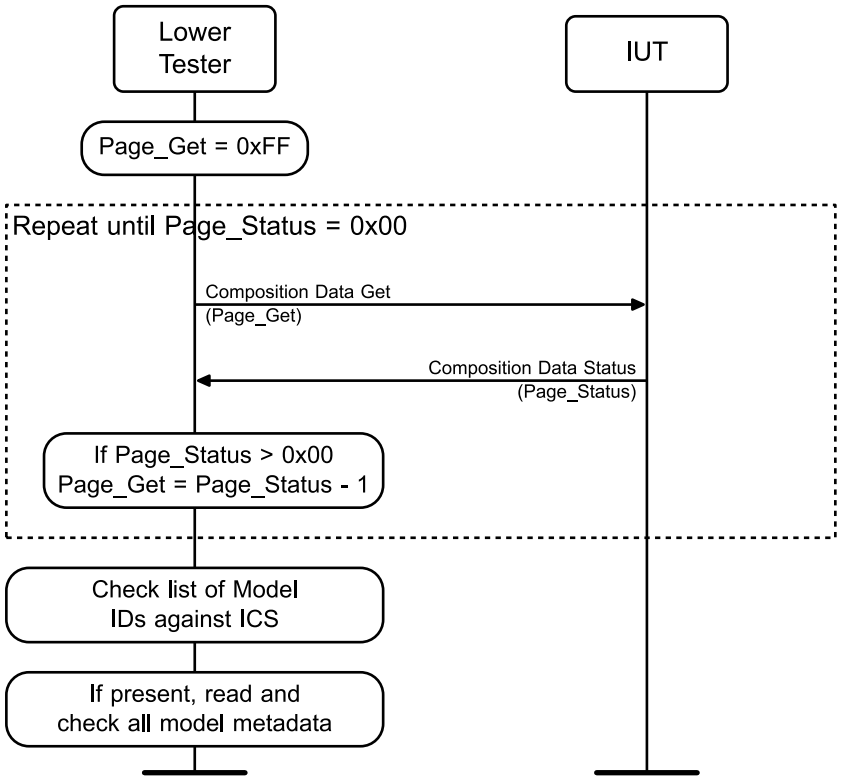

Figure 4.14: MMDL/SR-CL/COMP/BV-01-C [Composition Data and Model IDs]

1. The Lower Tester sends a Composition Data Get message with the Page field set to 0xFF.
2. The Lower Tester expects the IUT to respond with a Composition Data Status message with valid fields.
3. The Lower Tester repeats steps 1–2, setting the Page field in step 1 to the most recent Page field value returned in step 2, decremented by 1, until it receives a Page field value of 0. The Lower Tester stores all model IDs for each element on the IUT.
4. If the Large Composition Data Server model ID has been found in the composition data of the IUT, the Lower Tester reads all Model Metadata pages and checks that the metadata found for each model (if any) is properly formatted.

- Expected Outcome

  Pass verdict

  In each iteration through step 2, the IUT sends a Composition Data Status message with valid fields.

  All Models declared as supported in the ICS file ([5]) have their Model IDs listed in the Composition Data. Each Model ID is associated with at least one Element in the IXIT file and is bound to an application key or to the device key.

  If a model that extends other models is supported by an Element, as indicated by the presence of its Model ID in that Element's composition data, then all its parent models are also supported on the same Element and have their Model IDs listed in that Element's composition data. This verification is performed independently for each Element on the IUT.

  If the IUT supports model metadata (as indicated by the presence of the Large Composition Data Server model in the IUT's composition data), then all metadata that is included in the Model Metadata

pages is properly formatted, and each metadata of SIG-defined models follows the requirements of each model as defined in [4].

4.4.3 Multiple Elements

This section contains tests applicable when the IUT supports multiple elements.

MMDL/SR/MLTEL/BV-01-C [Processing Generic OnOff Messages to All-Nodes]

- Reference

  [4] 6.5.1

  Execute the common test case using the values from 4.2.7.1 Generic OnOff State on Secondary Elements.

MMDL/SR/MLTEL/BV-02-C [Processing Generic Level Messages to All-Nodes]

- Reference

  [4] 6.4.3, 6.4.6

  Execute the common test case using the values from 4.2.7.2 Generic Level State on Secondary Elements.

4.5 Generic Server Models

4.5.1 Generic OnOff Server

MMDL/SR/GOO/BV-01-C [Generic OnOff State Get/Set/Status Behavior]

- Reference

  [4] 3.1.1, 3.2.1, 3.3.1

  Execute the common test case using the values from 4.2.1.1 Generic OnOff State Get/Set/Status.

MMDL/SR/GOO/BV-02-C [Generic OnOff State Transition Behavior]

- Reference

  [4] 3.1.1, 3.2.1, 3.3.1

  Execute the common test case using the values from 4.4.3.1 Generic OnOff State Transition.

MMDL/SR/GOO/BV-03-C [Generic OnOff State Scene Store/Recall Behavior]

- Reference

  [4] 3.1.1, 3.2.1, 3.3.1, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.1 Generic OnOff State Scene Store/Recall.

MMDL/SR/GOO/BI-01-C [Generic OnOff State Invalid Parameter Behavior]

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

  Execute the common test case using the values from 4.2.4.1 Generic OnOff State Get/Set/Status Invalid Parameters.

4.5.2 Generic Level Server

MMDL/SR/GLV/BV-01-C [Generic Level State Get/Set/Status Behavior]

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

  Execute the common test case using the values from 4.2.1.2 Generic Level State Get/Set/Status.

MMDL/SR/GLV/BV-02-C [Generic Level State Transition Behavior]

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

  Execute the common test case using the values from 4.2.3.2 Generic Level State Transition.

MMDL/SR/GLV/BV-03-C [Generic Level State Delta Behavior – Basic]

- Test Purpose

  This test procedure verifies basic Generic Level Delta Set / Set Unacknowledged behavior on the IUT supporting the Generic Level Server Model.

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

- Initial Condition

  There is no state transition in progress on the IUT.

  If the IUT supports the Generic Default Transition Time state, its value is set to 0x00.

- Test Procedure

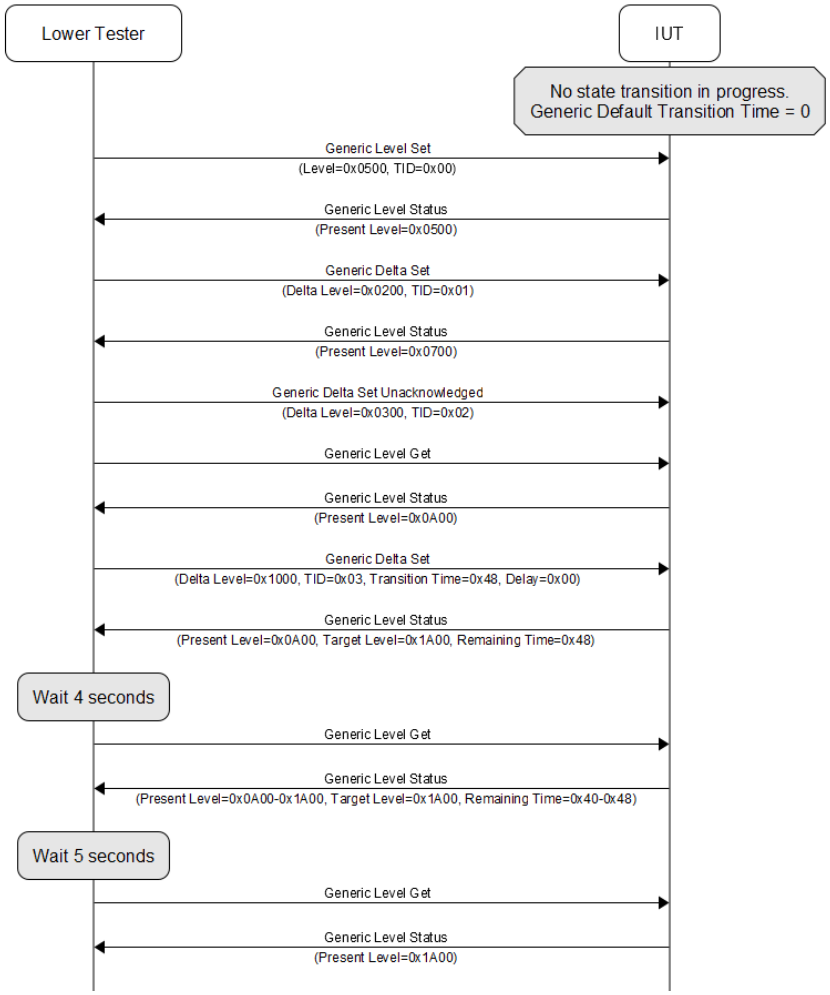

Figure 4.15: MMDL/SR/GLV/BV-03-C [Generic Level State Delta Behavior – Basic]

1. The Lower Tester sends a Generic Level Set message to the IUT with the Level field set to 0x0500, the TID field set to 0x00 and no optional fields.
2. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0500 and no optional fields.
3. The Lower Tester sends a Generic Delta Set message to the IUT with the Delta Level field set to 0x0200, the TID field set to 0x01 and no optional fields.
4. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0700 and no optional fields.
5. The Lower Tester sends a Generic Delta Set Unacknowledged message to the IUT with the Delta Level field set to 0x0300, the TID field set to 0x02 and no optional fields, and then it sends a Generic Level Get message to the IUT.
6. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0A00 and no optional fields.
7. The Lower Tester sends a Generic Delta Set message to the IUT with the Delta Level field set to 0x1000, the TID field set to 0x03, the Transition Time field set to 0x48 (8 seconds) and the Delay field set to 0x00.

8. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0A00, the Target Level field set to 0x1A00 and the Remaining Time field set to 0x48.
9. After approximately 4 seconds, the Lower Tester sends a Generic Level Get message to the IUT.
10. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set in the (0x0A00, 0x1A00) interval, the Target Level field set to 0x1A00 and the Remaining Time field set in the (0x40-0x48) interval.
11. After another 5 seconds, the Lower Tester sends a Generic Level Get message to the IUT.
12. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1A00 and no optional fields.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0500. The message does not contain the optional Target Level and Remaining Time fields.

  In step 4, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0700. The message does not contain the optional Target Level and Remaining Time fields.

  In step 6, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0A00. The message does not contain the optional Target Level and Remaining Time fields.

  In step 8, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0A00, the Target Level field set to 0x1A00 and the Remaining Time field set to 0x48.

  In step 10, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set in the interval (0x0A00, 0x1A00), the Target Level field set to 0x1A00 and the Remaining Time field set in the interval (0x40, 0x48).

  In step 12, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x1A00. The message does not contain the optional Target Level and Remaining Time fields.

MMDL/SR/GLV/BV-04-C [Generic Level State Delta Behavior – Transaction]

- Test Purpose

  This test procedure verifies transactional Generic Level Delta Set / Set Unacknowledged behavior on the IUT supporting the Generic Level Server Model.

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

- Initial Condition

  There is no state transition in progress on the IUT.

  If the IUT supports the Generic Default Transition Time state, its value is set to 0x00.

- Test Procedure

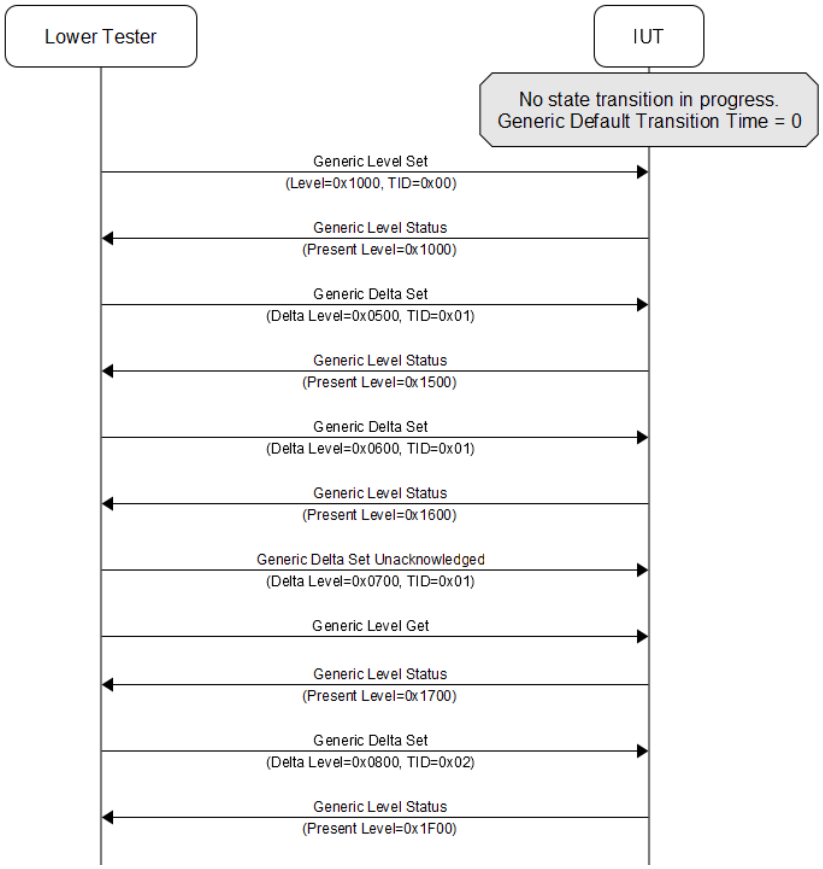

Figure 4.16: MMDL/SR/GLV/BV-04-C [Generic Level State Delta Behavior – Transaction]

1. The Lower Tester sends a Generic Level Set message to the IUT with the Level field set to 0x1000, the TID field set to 0x00 and no optional fields.
2. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1000 and no optional fields.
3. The Lower Tester sends a Generic Delta Set message to the IUT with the Delta Level field set to 0x0500, the TID field set to 0x01 and no optional fields.
4. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1500 and no optional fields.
5. The Lower Tester sends a Generic Delta Set message to the IUT with the Delta Level field set to 0x0600, the TID field set to 0x01 and no optional fields.
6. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1600 and no optional fields.
7. The Lower Tester sends a Generic Delta Set Unacknowledged message to the IUT with the Delta Level field set to 0x0700, the TID field set to 0x01 and no optional fields, and then it sends a Generic Level Get message to the IUT.
8. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1700 and no optional fields.

9. The Lower Tester sends a Generic Delta Set message to the IUT with the Delta Level field set to 0x0800, the TID field set to 0x02 and no optional fields.
10. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x1F00 and no optional fields.

- Expected Outcome

  Pass verdict

  In steps 2, 4, 6, 8, and 10, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x1000, 0x1500, 0x1600, 0x1700 and 0x1F00, respectively. The message does not contain the optional Target Level and Remaining Time fields.

MMDL/SR/GLV/BV-05-C [Generic Level State Delta Transition Behavior]

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

  Execute the common test case using the values from 4.2.3.3 Generic Level State Delta Transition.

MMDL/SR/GLV/BV-06-C [Generic Level State Move Behavior]

- Test Purpose

  This test procedure verifies basic Generic Level Move Set / Set Unacknowledged behavior on the IUT supporting the Generic Level Server Model.

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2

- Initial Condition

  There is no state transition in progress on the IUT.

  If the IUT supports the Generic Default Transition Time state, its value is set to 0x00.

- Test Procedure

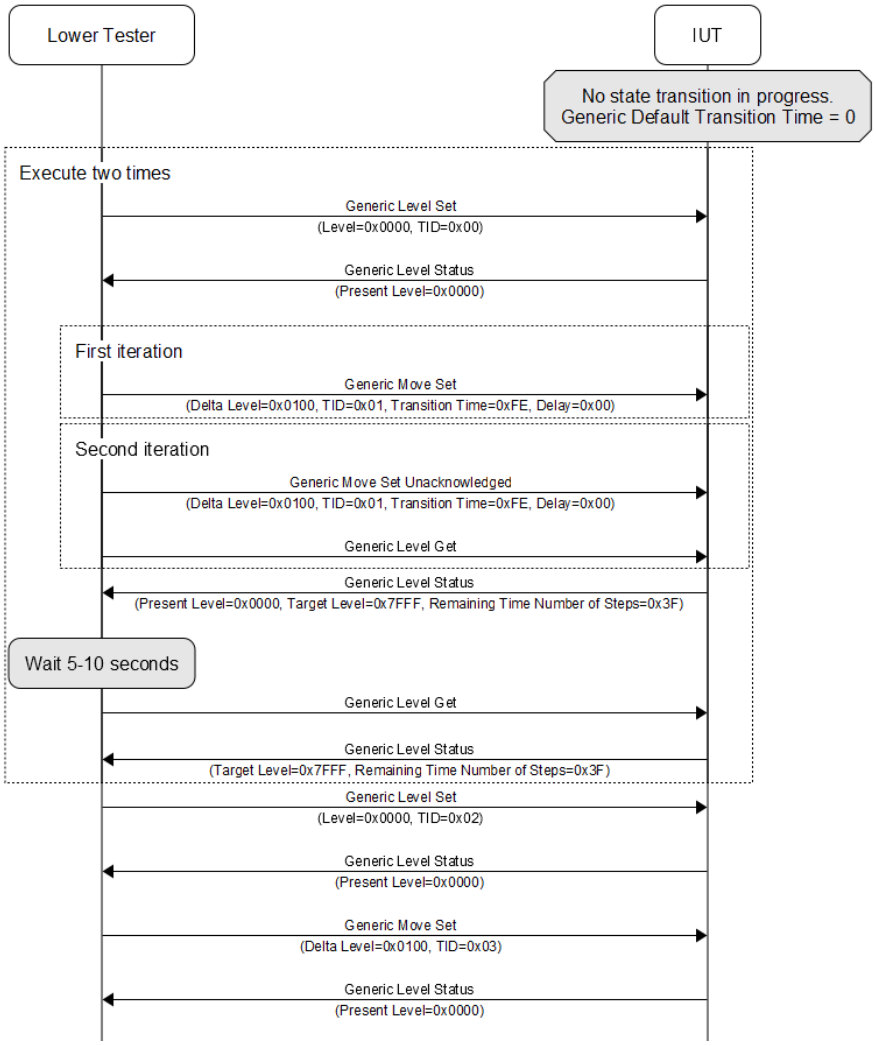

Figure 4.17: MMDL/SR/GLV/BV-06-C [Generic Level State Move Behavior]

1. The Lower Tester sends a Generic Level Set message to the IUT with the Level field set to 0x0000, the TID field set to 0x00 and no optional fields.
2. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0000 and no optional fields.
3. The Lower Tester sends a Generic Move Set message to the IUT with the Delta Level field set to 0x0100, the TID field set to 0x01, the Transition Time field set to 0xFE and the Delay field set to 0x00.
4. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Target Level field set to 0x7FFF and the Number of Steps field from the Remaining Time field set to 0x3F.
5. After a random time interval (5-10 seconds), the Lower Tester sends a Generic Level Get message to the IUT.
6. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Target Level field set to 0x7FFF, and the Number of Steps field from the Remaining Time field set to 0x3F.

7. The Lower Tester sends a Generic Level Set message to the IUT with the Level field set to 0x0000, the TID field set to 0x02 and no optional fields.
8. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0000 and no optional fields.
9. The Lower Tester sends a Generic Move Set message to the IUT with the Delta Level field set to 0x0100, the TID field set to 0x03, and omitting the Transition Time and Delay fields.
10. The Lower Tester expects the IUT to respond with a Generic Level Status message with the Present Level field set to 0x0000 and no optional fields.
11. Repeat steps 1–6, but in step 3 use a Generic Move Set Unacknowledged message with the same parameters followed immediately by a Generic Level Get message.

- Expected Outcome

  Pass verdict

  In all passes through step 2 and in step 8, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0000. The message does not contain the optional Target Level and Remaining Time fields.

  In all passes through steps 4 and 6, the IUT sends a Generic Level Status message to the Lower Tester with the Target Level field set to 0x7FFF, and the Number of Steps field from the Remaining Time field set to 0x3F.

  In step 10, the IUT sends a Generic Level Status message to the Lower Tester with the Present Level field set to 0x0000 and no optional fields.

MMDL/SR/GLV/BV-07-C [Generic Level State Scene Store/Recall Behavior]

- Reference

  [4] 3.1.2, 3.2.2, 3.3.2, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.2 Generic Level State Scene Store/Recall.

4.5.3 Generic Default Transition Time Server

MMDL/SR/GDTT/BV-01-C [Generic Default Transition Time State Get/Set/Status Behavior]

- Reference

  [4] 3.1.3, 3.2.3, 3.3.3

  Execute the common test case using the values from 4.2.1.3 Generic Default Transition Time State Get/Set/Status.

MMDL/SR/GDTT/BI-01-C [Generic Default Transition Time State Invalid Parameter Behavior]

- Reference

  [4] 3.1.3, 3.2.3, 3.3.3

  Execute the common test case using the values from 4.2.4.2 Generic Default Transition Time State Get/Set/Status Invalid Parameters.

4.5.4 Generic Power OnOff Server

MMDL/SR/GPOO/BV-01-C [Generic OnPowerUp State Get/Status Behavior]

- Reference

  [4] 3.1.4, 3.2.4, 3.3.4

  Execute the common test case using the values from 4.2.1.4 Generic OnPowerUp State Get/Status.

MMDL/SR/GPOO/BV-02-C [Generic OnOff State Power-Up Behavior – Off]

- Test Purpose

  This test procedure verifies the power-up behavior on the IUT supporting the Generic Power OnOff Server Model when the Generic OnPowerUp state is set to Off.

- Reference

  [4] 3.1.4, 3.2.4, 3.3.5

- Initial Condition

  - The Generic OnPowerUp state is set to 0x00.
  - There is no state transition in progress on the IUT.

- Test Procedure

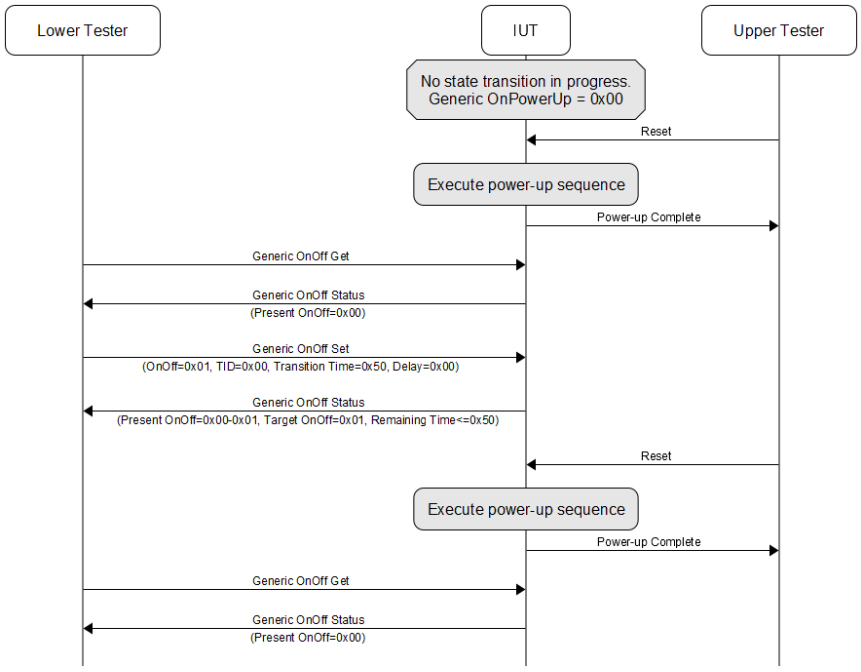

Figure 4.18: MMDL/SR/GPOO/BV-02-C [Generic OnOff State Power-Up Behavior – Off]

1. The Upper Tester orders the IUT to reset itself.
2. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
3. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x00 and no optional fields.

4. The Lower Tester sends a Generic OnOff Set message to the IUT with the OnOff field set to 0x01, the TID set to 0x00, the Transition Time field set to 0x50 (16 seconds) and the Delay field set to 0x00.
5. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Target OnOff field set to 0x01 and the Remaining Time field set to 0x50 or less.
6. The Upper Tester orders the IUT to reset itself before the transition is complete.
7. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
8. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x00 and no optional fields.

- Expected Outcome

  Pass verdict

  In steps 3 and 8, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x00 and no optional fields.

  In step 5, the IUT sends a Generic OnOff Status message to the Lower Tester with the Target OnOff field set to 0x01 and the Remaining Time field set to 0x50 or less.

MMDL/SR/GPOO/BV-03-C [Generic OnOff State Power-Up Behavior – Default]

- Test Purpose

  This test procedure verifies the power-up behavior on the IUT supporting the Generic Power OnOff Server Model when the Generic OnPowerUp state is set to Default.

- Reference

  [4] 3.1.4, 3.2.4, 3.3.5

- Initial Condition

  - The Generic OnPowerUp state is set to 0x01.
  - There is no state transition in progress on the IUT.

- Test Procedure

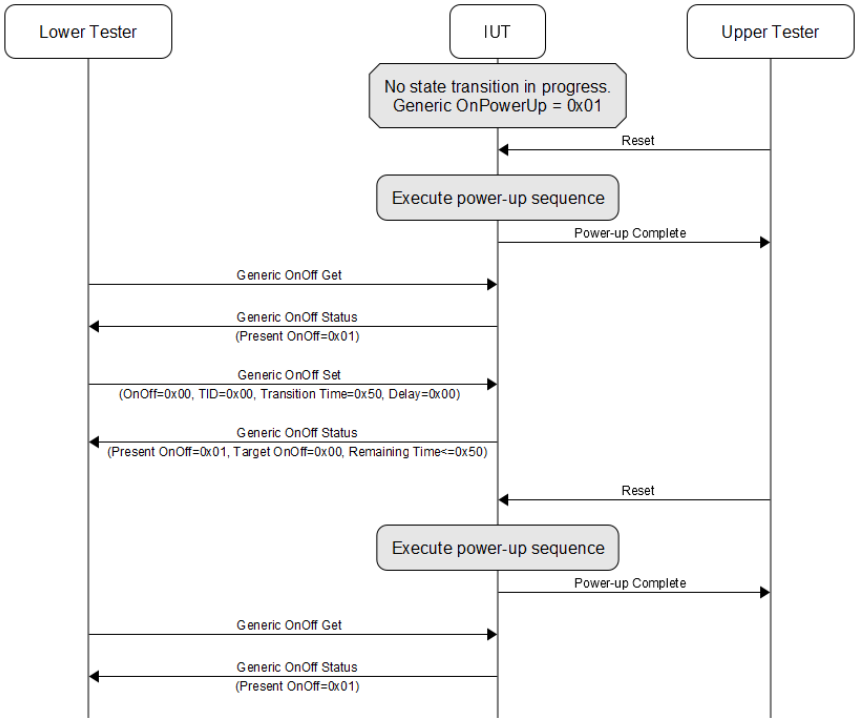

Figure 4.19: MMDL/SR/GPOO/BV-03-C [Generic OnOff State Power-Up Behavior – Default]

1. The Upper Tester orders the IUT to reset itself.
2. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
3. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x01 and no optional fields.
4. The Lower Tester sends a Generic OnOff Set message to the IUT with the OnOff field set to 0x00, the TID set to 0x00, the Transition Time field set to 0x50 (16 seconds) and the Delay field set to 0x00.
5. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x01, the Target OnOff field set to 0x00 and the Remaining Time field set to 0x50 or less.
6. The Upper Tester orders the IUT to reset itself before the transition is complete.
7. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
8. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x01 and no optional fields.

- Expected Outcome

  Pass verdict

  In steps 3 and 8, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x01 and no optional fields.

  In step 5, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x01, the Target OnOff field set to 0x00 and the Remaining Time field set to 0x50 or less.

MMDL/SR/GPOO/BV-04-C [Generic OnOff State Power-Up Behavior – Restore]

- Test Purpose

  This test procedure verifies the power-up behavior on the IUT supporting the Generic Power OnOff Server Model when the Generic OnPowerUp state is set to Restore.

- Reference

  [4] 3.1.4, 3.2.4, 3.3.5

- Initial Condition

  - The Generic OnPowerUp state is set to 0x02.
  - The Generic OnOff state is set to 0x01.
  - There is no state transition in progress on the IUT.

- Test Procedure

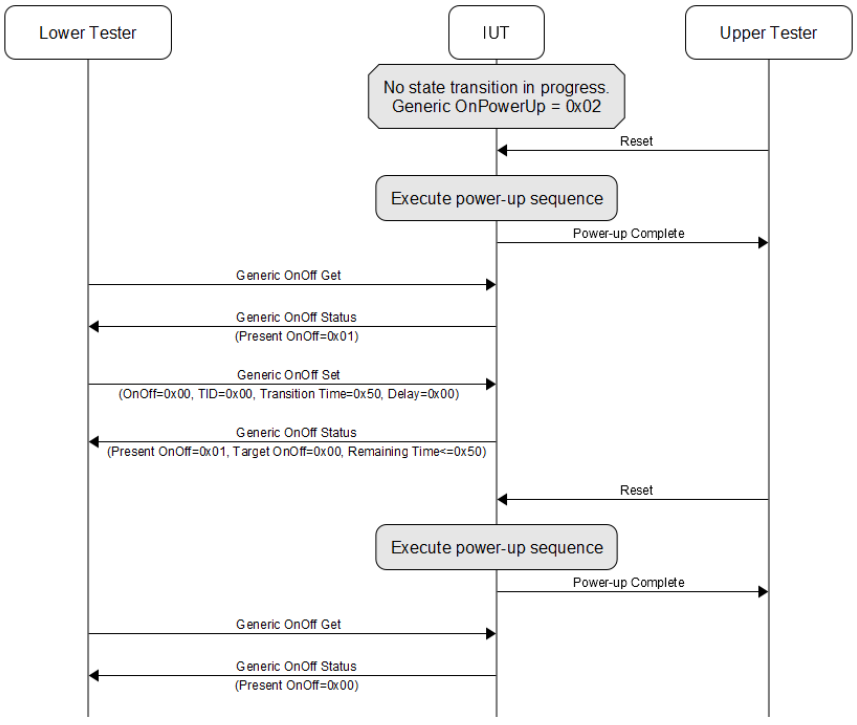

Figure 4.20: MMDL/SR/GPOO/BV-04-C [Generic OnOff State Power-Up Behavior – Restore]

1. The Upper Tester orders the IUT to reset itself.
2. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
3. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x01 and no optional fields.
4. The Lower Tester sends a Generic OnOff Set message to the IUT with the OnOff field set to 0x00, the TID set to 0x00, the Transition Time field set to 0x50 (16 seconds) and the Delay field set to 0x00.
5. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x01, the Target OnOff field set to 0x00 and the Remaining Time field set to 0x50 or less.
6. The Upper Tester orders the IUT to reset itself before the transition is complete.
7. After the IUT has been reset and it has executed its power up sequence, the Lower Tester sends a Generic OnOff Get message to the IUT.
8. The Lower Tester expects the IUT to respond with a Generic OnOff Status message with the Present OnOff field set to 0x00 and no optional fields.

- Expected Outcome

  Pass verdict

  In step 3, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x01 and no optional fields.

  In step 5, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x01, the Target OnOff field set to 0x00 and the Remaining Time field set to 0x50.

  In step 8, the IUT sends a Generic OnOff Status message to the Lower Tester with the Present OnOff field set to 0x00 and no optional fields.

4.5.5 Generic Power OnOff Setup Server

MMDL/SR/GPOOS/BV-01-C [Generic OnPowerUp State Get/Set/Status Behavior]

- Reference

  [4] 3.1.4, 3.2.4, 3.3.5

  Execute the common test case using the values from 4.2.1.5 Generic OnPowerUp State Get/Set/Status.

MMDL/SR/GPOOS/BI-01-C [Generic OnPowerUp State Invalid Parameter Behavior]

- Reference

  [4] 3.1.4, 3.2.4, 3.3.5

  Execute the common test case using the values from 4.2.4.3 Generic OnPowerUp State Get/Set/Status Invalid Parameters.

4.5.6 Generic Power Level Server

MMDL/SR/GPL/BV-01-C [Generic Power Actual State Get/Set/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.1.6 Generic Power Actual State Get/Set/Status.

MMDL/SR/GPL/BV-02-C [Generic Power Last State Get/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.1.7 Generic Power Last State Get/Status.

MMDL/SR/GPL/BV-03-C [Generic Power Default State Get/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.1.8 Generic Power Default State Get/Status.

MMDL/SR/GPL/BV-04-C [Generic Power Range State Get/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.1.10 Generic Power Range State Get/Status.

MMDL/SR/GPL/BV-05-C [Generic Power Actual State Binding With Generic Level]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.1 Generic Power Actual and Generic Level State Binding.

MMDL/SR/GPL/BV-06-C [Generic Power Actual State Binding With Generic OnOff – Scenario 1]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.2 Generic Power Actual and Generic OnOff State Binding – Simple Scenario 1.

MMDL/SR/GPL/BV-07-C [Generic Power Actual State Binding With Generic OnOff – Scenario 2]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.3 Generic Power Actual and Generic OnOff State Binding – Simple Scenario 2.

MMDL/SR/GPL/BV-08-C [Generic Power Actual State Binding With Generic OnOff – Using Last Value]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.4 Generic Power Actual and Generic OnOff State Binding – Using Last Value.

MMDL/SR/GPL/BV-09-C [Generic Power Actual State Binding With Generic OnOff – Using Default Value]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.5 Generic Power Actual and Generic OnOff State Binding – Using Default Value.

MMDL/SR/GPL/BV-10-C [Generic Power Actual State Binding With Generic Power Range]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.2.1 Generic Power Actual and Generic Power Range State Binding.

MMDL/SR/GPL/BV-11-C [Generic Power Actual State Transition Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.3.4 Generic Power Actual State Transition.

MMDL/SR/GPL/BV-12-C [Generic Level State Implicit Binding With Generic OnOff – Scenario 1]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.6 Generic Level and Generic OnOff State Implicit Binding – Simple Scenario 1.

MMDL/SR/GPL/BV-13-C [Generic Level State Implicit Binding With Generic OnOff – Scenario 2]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.1.7 Generic Level and Generic OnOff State Implicit Binding – Simple Scenario 2.

MMDL/SR/GPL/BV-14-C [Generic Power Actual State Power-Up Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6

  Execute the common test case using the values from 4.2.2.3.1 Generic Power Actual and Generic OnPowerUp State Binding.

MMDL/SR/GPL/BV-15-C [Generic Power Actual State Scene Store/Recall Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.6, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.3 Generic Power Actual State Scene Store/Recall.

4.5.7 Generic Power Level Setup Server

MMDL/SR/GPLS/BV-01-C [Generic Power Default State Get/Set/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.7

  Execute the common test case using the values from 4.2.1.9 Generic Power Default State Get/Set/Status.

MMDL/SR/GPLS/BV-02-C [Generic Power Range State Get/Set/Status Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.7

  Execute the common test case using the values from 4.2.1.11 Generic Power Range State Get/Set/Status.

MMDL/SR/GPLS/BI-01-C [Generic Power Range State Invalid Parameter Behavior]

- Reference

  [4] 3.1.5, 3.2.5, 3.3.7

  Execute the common test case using the values from 4.2.4.4 Generic Power Range State Get/Set/Status Invalid Parameters.

4.5.8 Generic Battery Server

MMDL/SR/GBAT/BV-01-C [Generic Battery State Get/Status Behavior]

- Reference

  [4] 3.1.6, 3.2.6, 3.3.8

  Execute the common test case using the values from 4.2.1.12 Generic Battery State Get/Status.

4.5.9 Generic Location Server

MMDL/SR/GLOC/BV-01-C [Generic Location Global State Get/Status Behavior]

- Reference

  [4] 3.1.7, 3.2.7, 3.3.9

  Execute the common test case using the values from 4.2.1.13 Generic Location Global State Get/Status.

MMDL/SR/GLOC/BV-02-C [Generic Location Local State Get/Status Behavior]

- Reference

  [4] 3.1.7, 3.2.7, 3.3.9

  Execute the common test case using the values from 4.2.1.15 Generic Location Local State Get/Status.

4.5.10 Generic Location Setup Server

MMDL/SR/GLOCS/BV-01-C [Generic Location Global State Get/Set/Status Behavior]

- Reference

  [4] 3.1.7, 3.2.7, 3.3.10

  Execute the common test case using the values from 4.2.1.14 Generic Location Global State Get/Set/Status.

MMDL/SR/GLOCS/BV-02-C [Generic Location Local State Get/Set/Status Behavior]

- Reference

  [4] 3.1.7, 3.2.7, 3.3.10

  Execute the common test case using the values from 4.2.1.16 Generic Location Local State Get/Set/Status.

4.5.11 Generic User Property Server

MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior]

- Reference

  [4] 3.1.8, 3.2.8, 3.3.11

  Execute the common test case using the values from 4.2.1.17 Generic User Properties State Get/Status.

MMDL/SR/GUP/BV-02-C [Generic User Property State Get/Set/Status Behavior]

- Reference

  [4] 3.1.8, 3.2.8, 3.3.11

  Obtain the Generic User Properties list on the IUT by executing the procedure described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior].

  For each Property ID in the Generic User Properties list, execute the common test case using the values from 4.2.1.18 Generic User Property State Get/Set/Status. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/GUP/BV-03-C [Generic User Property State Get/Set/Status Unknown Property ID Behavior]

- Reference

  [4] 3.1.8, 3.2.8, 3.3.11

  Obtain the Generic User Properties list on the IUT by executing the procedure described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior].

  Execute the common test case using the values from 4.2.5.1 Generic User Property State Get/Set/Status Unknown Property ID.

MMDL/SR/GUP/BI-01-C [Generic User Property State Invalid Parameter Behavior]

- Reference

  [4] 3.1.8, 3.2.8, 3.3.11

  Obtain the Generic User Properties list on the IUT by executing the procedure described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior].

  For each Property ID in the Generic User Properties list, execute the common test case using the values from 4.2.4.5 Generic User Property State Get/Set/Status Invalid Parameters. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

4.5.12 Generic Admin Property Server

MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior]

- Reference

  [4] 3.1.9, 3.2.8, 3.3.12

  Execute the common test case using the values from 4.2.1.19 Generic Admin Properties State Get/Status.

MMDL/SR/GAP/BV-02-C [Generic Admin Property State Get/Set/Status Behavior]

- Reference

  [4] 3.1.9, 3.2.8, 3.3.12

  Obtain the Generic Admin Properties list on the IUT by executing the procedure described in MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior].

For each Property ID in the Generic Admin Properties list, execute the common test case using the values from 4.2.1.20 Generic Admin Property State Get/Set/Status. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/GAP/BV-03-C [Generic Admin Property State Get/Set/Status Unknown Property ID Behavior]

- Reference

  [4] 3.1.9, 3.2.8, 3.3.12

  Obtain the Generic Admin Properties list on the IUT by executing the procedure described in MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior].

  Execute the common test case using the values from 4.2.5.2 Generic Admin Property State Get/Set/Status Unknown Property ID.

MMDL/SR/GAP/BV-04-C [Generic Admin Properties – Control User Access]

- Test Purpose

  This test procedure verifies Property user access control on the IUT supporting the Generic Admin Server Model.

- Reference

  [4] 3.1.8, 3.1.9, 3.2.8, 3.3.11, 3.3.12

- Initial Condition

  The IUT contains at least one Generic User Property and at least one Generic Admin Property that is not a User Property.

- Test Procedure

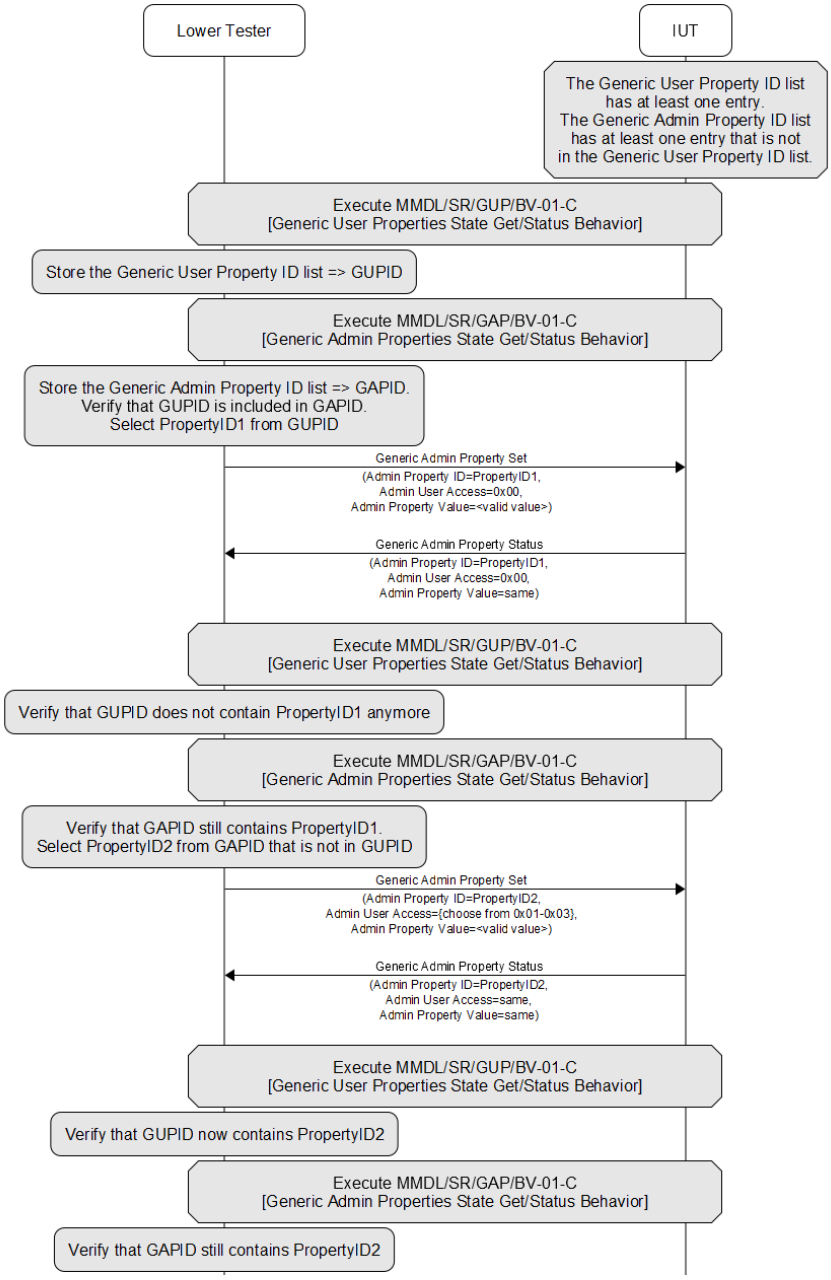

Figure 4.21: MMDL/SR/GAP/BV-04-C [Generic Admin Properties – Control User Access]

1. The Lower Tester executes the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior] to obtain the list of Generic User Property IDs and the list of Generic Admin Property IDs. The Lower Tester checks that the first list is included in the second one.
2. The Lower Tester sends a Generic Admin Property Set message to the IUT, with the Admin Property ID field set to a Property ID from the Generic User Properties list, the Admin User Access field set to 0x00 and the Admin Property Value field set to a valid value (see [6]).
3. The Lower Tester expects the IUT to respond with a Generic Admin Property Status with all field values matching the corresponding fields from the Generic Admin Property Set message received in step 2.

4. The Lower Tester executes again the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior]. The Lower Tester verifies that the list of Generic Admin Property IDs has not changed, but the Property ID selected in step 2 has been removed from the list of Generic User Property IDs.
5. The Lower Tester sends a Generic Admin Property Set message to the IUT, with the Admin Property ID field set to a Property ID from the Generic Admin Properties list different than the Property ID selected in step 2, the Admin User Access field set to a valid value in the interval 0x01-0x03 and the Admin Property Value field set to a valid value (see [6]).
6. The Lower Tester expects the IUT to respond with a Generic Admin Property Status with all field values matching the corresponding fields from the Generic Admin Property Set message received in step 5.
7. The Lower Tester executes again the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior]. The Lower Tester verifies that the list of Generic Admin Property IDs has not changed, but the Property ID selected in step 5 has been added to the list of Generic User Property IDs.

- Expected Outcome

  Pass verdict

  In step 1, all Property IDs returned by the IUT in the Generic User Properties list is also present in the returned Generic Admin Properties list.

  In steps 3 and 6, the IUT sends a Generic Admin Property Status message with the fields set to the corresponding field values from the Generic Admin Property Set message received in step 2 and step 5, respectively.

  In step 4, the IUT returns the same Generic Admin Properties list as in step 1, but the returned Generic User Properties list does not contain the Property ID selected in step 2.

  In step 7, the IUT returns the same Generic Admin Properties list as in steps 1 and 4, but the returned Generic User Properties list contains the Property ID selected in step 5 in addition to those contained in step 4.

MMDL/SR/GAP/BI-01-C [Generic Admin Property State Invalid Parameter Behavior]

- Reference

  [4] 3.1.9, 3.2.8, 3.3.12

  Obtain the Generic Admin Properties list on the IUT by executing the procedure described in MMDL/SR/GAP/BV-01-C [Generic Admin Properties State Get/Status Behavior].

  For each Property ID in the Generic Admin Properties list, execute the common test case using the values from 4.2.4.6 Generic Admin Property State Get/Set/Status Invalid Parameters. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

4.5.13 Generic Manufacturer Property Server

MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior]

- Reference

  [4] 3.1.10, 3.2.8, 3.3.13

  Execute the common test case using the values from 4.2.1.21 Generic Manufacturer Properties State Get/Status.

MMDL/SR/GMP/BV-02-C [Generic Manufacturer Property State Get/Set/Status Behavior]

- Reference

  [4] 3.1.10, 3.2.8, 3.3.13

  Obtain the Generic Manufacturer Properties list on the IUT by executing the procedure described in MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior].

  For each Property ID in the Generic Manufacturer Properties list, execute the common test case using the values from 4.2.1.22 Generic Manufacturer Property State Get/Set/Status. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/GMP/BV-03-C [Generic Manufacturer Property State Get/Set/Status Unknown Property ID Behavior]

- Reference

  [4] 3.1.10, 3.2.8, 3.3.13

  Obtain the Generic Manufacturer Properties list on the IUT by executing the procedure described in MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior].

  Execute the common test case using the values from 4.2.5.3 Generic Manufacturer Property State Get/Set/Status Unknown Property ID.

MMDL/SR/GMP/BV-04-C [Generic Manufacturer Properties – Control User Access]

- Test Purpose

  This test procedure verifies Property user access control on the IUT supporting the Generic Manufacturer Server Model.

- Reference

  [4] 3.1.8, 3.1.10, 3.2.8, 3.3.11, 3.3.13

- Initial Condition

  The IUT contains at least one Generic User Property and at least one Generic Manufacturer Property that is not a User Property.

- Test Procedure

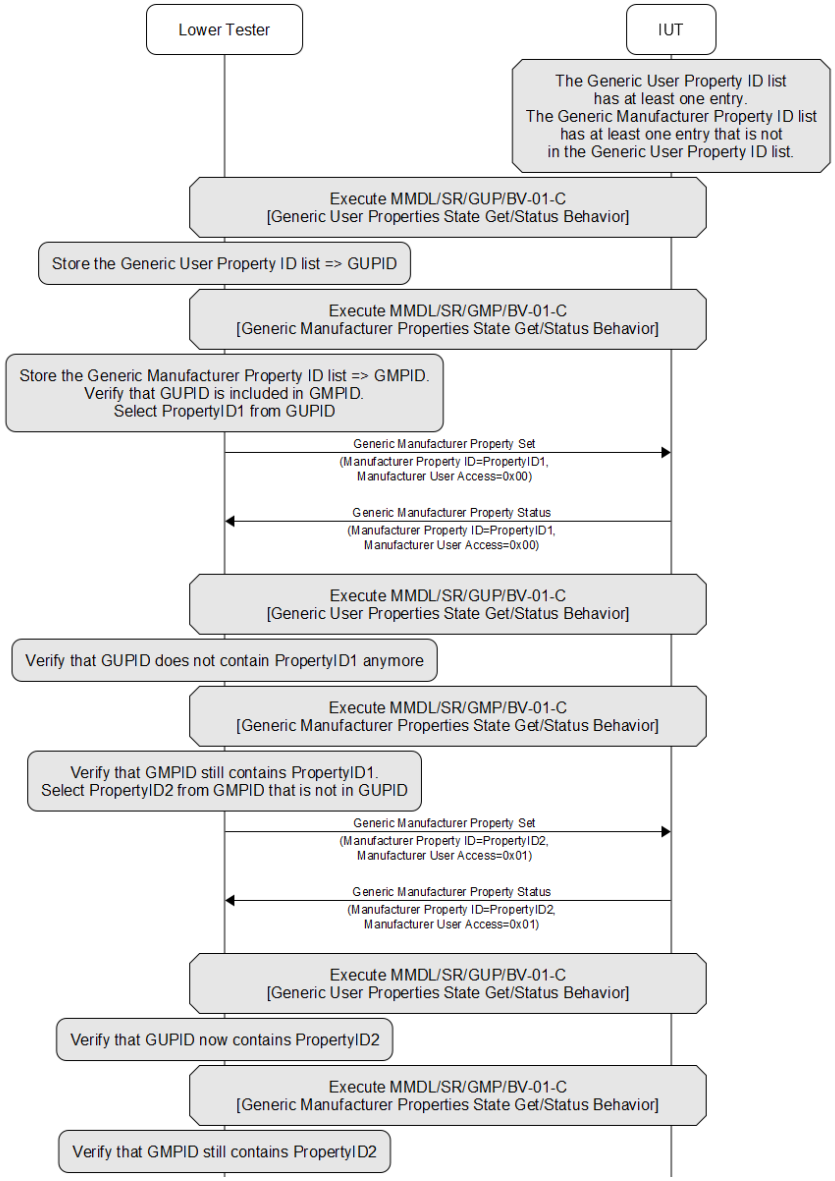

Figure 4.22: MMDL/SR/GMP/BV-04-C [Generic Manufacturer Properties – Control User Access]

1. The Lower Tester executes the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior] to obtain the list of Generic User Property IDs and the list of Generic Manufacturer Property IDs. The Lower Tester checks that the first list is included in the second one.
2. The Lower Tester sends a Generic Manufacturer Property Set message to the IUT, with the Manufacturer Property ID field set to a Property ID from the Generic User Properties list and the Manufacturer User Access field set to 0x00.
3. The Lower Tester expects the IUT to respond with a Generic Manufacturer Property Status with field values matching the corresponding fields from the Generic Manufacturer Property Set message received in step 2 and the Manufacturer Property Value field set to a valid value (see [6]).

4. The Lower Tester executes again the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior]. The Lower Tester verifies that the list of Generic Manufacturer Property IDs has not changed, but the Property ID selected in step 2 has been removed from the list of Generic User Property IDs.
5. The Lower Tester sends a Generic Manufacturer Property Set message to the IUT, with the Manufacturer Property ID field set to a Property ID from the Generic Manufacturer Properties list different than the Property ID selected in step 2 and the Manufacturer User Access field set to 0x01.
6. The Lower Tester expects the IUT to respond with a Generic Manufacturer Property Status with field values matching the corresponding fields from the Generic Manufacturer Property Set message received in step 5 and the Manufacturer Property Value field set to a valid value (see [6]).
7. The Lower Tester executes again the procedures described in MMDL/SR/GUP/BV-01-C [Generic User Properties State Get/Status Behavior] and MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior]. The Lower Tester verifies that the list of Generic Manufacturer Property IDs has not changed, but the Property ID selected in step 5 has been added to the list of Generic User Property IDs.

- Expected Outcome

  Pass verdict

  In step 1, all Property IDs returned by the IUT in the Generic User Properties list is also present in the returned Generic Manufacturer Properties list.

  In steps 3 and 6, the IUT sends a Generic Manufacturer Property Status message with the fields set to the corresponding field values from the Generic Manufacturer Property Set message received in step 2 and step 5, respectively, and the Manufacturer Property Value field set to a valid value (see [6]).

  In step 4, the IUT returns the same Generic Manufacturer Properties list as in step 1, but the returned Generic User Properties list does not contain the Property ID selected in step 2.

  In step 7, the IUT returns the same Generic Manufacturer Properties list as in steps 1 and 4, but the returned Generic User Properties list contains the Property ID selected in step 5 in addition to those contained in step 4.

MMDL/SR/GMP/BI-01-C [Generic Manufacturer Property State Invalid Parameter Behavior]

- Reference

  [4] 3.1.10, 3.2.8, 3.3.13

  Obtain the Generic Manufacturer Properties list on the IUT by executing the procedure described in MMDL/SR/GMP/BV-01-C [Generic Manufacturer Properties State Get/Status Behavior].

  For each Property ID in the Generic Manufacturer Properties list, execute the common test case using the values from 4.2.4.7 Generic Manufacturer Property State Get/Set/Status Invalid Parameters. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

4.5.14 Generic Client Property Server

MMDL/SR/GCP/BV-01-C [Generic Client Properties State Get/Status Behavior]

- Reference

  [4] 3.1.11, 3.2.8, 3.3.14

  Execute the common test case using the values from 4.2.1.23 Generic Client Properties State Get/Status.

4.6 Generic Client Models

4.6.1 Generic OnOff Client

MMDL/CL/GOO/BV-01-C [Generic OnOff State Get/Status Procedure]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.1.1 Generic OnOff State Get/Status.

MMDL/CL/GOO/BV-02-C [Generic OnOff State Set/Status Procedure – Default Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.2.1 Generic OnOff State Set/Status – Default Transition.

MMDL/CL/GOO/BV-03-C [Generic OnOff State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.2.2 Generic OnOff State Set/Status – Immediate Transition.

MMDL/CL/GOO/BV-04-C [Generic OnOff State Set/Status Procedure – Custom Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.2.3 Generic OnOff State Set/Status – Custom Transition.

MMDL/CL/GOO/BV-05-C [Generic OnOff State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.3.1 Generic OnOff State Set Unacknowledged – Default Transition.

MMDL/CL/GOO/BV-06-C [Generic OnOff State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.3.2 Generic OnOff State Set Unacknowledged – Immediate Transition.

MMDL/CL/GOO/BV-07-C [Generic OnOff State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 3.1.1, 3.2.1, 3.4.1

  Execute the common test case using the values from 4.3.3.3 Generic OnOff State Set Unacknowledged – Custom Transition.

4.6.2 Generic Level Client

MMDL/CL/GLV/BV-01-C [Generic Level State Get/Status Procedure]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.1.2 Generic Level State Get/Status.

MMDL/CL/GLV/BV-02-C [Generic Level State Set/Status Procedure – Default Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.4 Generic Level State Set/Status – Default Transition.

MMDL/CL/GLV/BV-03-C [Generic Level State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.5 Generic Level State Set/Status – Immediate Transition.

MMDL/CL/GLV/BV-04-C [Generic Level State Set/Status Procedure – Custom Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.6 Generic Level State Set/Status – Custom Transition.

MMDL/CL/GLV/BV-05-C [Generic Level State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.4 Generic Level State Set Unacknowledged – Default Transition.

MMDL/CL/GLV/BV-06-C [Generic Level State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.5 Generic Level State Set Unacknowledged – Immediate Transition.

MMDL/CL/GLV/BV-07-C [Generic Level State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.6 Generic Level State Set Unacknowledged – Custom Transition.

MMDL/CL/GLV/BV-08-C [Generic Level State Delta Set/Status Procedure – Default Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.19 Generic Level State Delta Set/Status – Default Transition.

MMDL/CL/GLV/BV-09-C [Generic Level State Delta Set/Status Procedure – Immediate Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.20 Generic Level State Delta Set/Status – Immediate Transition.

MMDL/CL/GLV/BV-10-C [Generic Level State Delta Set/Status Procedure – Custom Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.21 Generic Level State Delta Set/Status – Custom Transition.

MMDL/CL/GLV/BV-11-C [Generic Level State Delta Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.19 Generic Level State Delta Set Unacknowledged – Default Transition.

MMDL/CL/GLV/BV-12-C [Generic Level State Delta Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.20 Generic Level State Delta Set Unacknowledged – Immediate Transition.

MMDL/CL/GLV/BV-13-C [Generic Level State Delta Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.21 Generic Level State Delta Set Unacknowledged – Custom Transition.

MMDL/CL/GLV/BV-14-C [Generic Level State Move Set/Status Procedure]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.2.22 Generic Level State Move Set/Status.

MMDL/CL/GLV/BV-15-C [Generic Level State Move Set Unacknowledged Procedure]

- Reference

  [4] 3.1.2, 3.2.2, 3.4.2

  Execute the common test case using the values from 4.3.3.22 Generic Level State Move Set Unacknowledged.

4.6.3 Generic Default Transition Time Client

MMDL/CL/GDTT/BV-01-C [Generic Default Transition Time State Get/Status Procedure]

- Reference

  [4] 3.1.3, 3.2.3, 3.4.3

  Execute the common test case using the values from 4.3.1.3 Generic Default Transition Time State Get/Status.

MMDL/CL/GDTT/BV-02-C [Generic Default Transition Time State Set/Status Procedure]

- Reference

  [4] 3.1.3, 3.2.3, 3.4.3

  Execute the common test case using the values from 4.3.2.7 Generic Default Transition Time State Set/Status.

MMDL/CL/GDTT/BV-03-C [Generic Default Transition Time State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.3, 3.2.3, 3.4.3

  Execute the common test case using the values from 4.3.3.7 Generic Default Transition Time State Set .

4.6.4 Generic Power OnOff Client

MMDL/CL/GPOO/BV-01-C [Generic OnPowerUp State Get/Status Procedure]

- Reference

  [4] 3.1.4, 3.2.4, 3.4.4

  Execute the common test case using the values from 4.3.1.4 Generic OnPowerUp State Get/Status.

MMDL/CL/GPOO/BV-02-C [Generic OnPowerUp State Set/Status Procedure]

- Reference

  [4] 3.1.4, 3.2.4, 3.4.4

  Execute the common test case using the values from 4.3.2.8 Generic OnPowerUp State Set/Status.

MMDL/CL/GPOO/BV-03-C [Generic OnPowerUp State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.4, 3.2.4, 3.4.4

  Execute the common test case using the values from 4.3.3.8 Generic OnPowerUp State Set .

4.6.5 Generic Power Level Client

MMDL/CL/GPL/BV-01-C [Generic Power Actual State Get/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.1.5 Generic Power Actual State Get/Status.

MMDL/CL/GPL/BV-02-C [Generic Power Actual State Set/Status Procedure – Default Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.2.9 Generic Power Actual State Set/Status – Default Transition.

MMDL/CL/GPL/BV-03-C [Generic Power Actual State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.2.10 Generic Power Actual State Set/Status – Immediate Transition.

MMDL/CL/GPL/BV-04-C [Generic Power Actual State Set/Status Procedure – Custom Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.2.11 Generic Power Actual State Set/Status – Custom Transition.

MMDL/CL/GPL/BV-05-C [Generic Power Actual State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.3.9 Generic Power Actual State Set Unacknowledged – Default Transition.

MMDL/CL/GPL/BV-06-C [Generic Power Actual State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.3.10 Generic Power Actual State Set Unacknowledged – Immediate Transition.

MMDL/CL/GPL/BV-07-C [Generic Power Actual State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.3.11 Generic Power Actual State Set Unacknowledged – Custom Transition.

MMDL/CL/GPL/BV-08-C [Generic Power Last State Get/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.1.6 Generic Power Last State Get/Status.

MMDL/CL/GPL/BV-09-C [Generic Power Default State Get/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.1.7 Generic Power Default State Get/Status.

MMDL/CL/GPL/BV-10-C [Generic Power Default State Set/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.2.12 Generic Power Default State Set/Status.

MMDL/CL/GPL/BV-11-C [Generic Power Default State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.3.12 Generic Power Default State Set .

MMDL/CL/GPL/BV-12-C [Generic Power Range State Get/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.1.8 Generic Power Range State Get/Status.

MMDL/CL/GPL/BV-13-C [Generic Power Range State Set/Status Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.2.13 Generic Power Range State Set/Status.

MMDL/CL/GPL/BV-14-C [Generic Power Range State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.5, 3.2.5, 3.4.5

  Execute the common test case using the values from 4.3.3.13 Generic Power Range State Set .

4.6.6 Generic Battery Client

MMDL/CL/GBAT/BV-01-C [Generic Battery State Get/Status Procedure]

- Reference

  [4] 3.1.6, 3.2.6, 3.4.6

  Execute the common test case using the values from 4.3.1.9 Generic Battery State Get/Status.

4.6.7 Generic Location Client

MMDL/CL/GLOC/BV-01-C [Generic Location Global State Get/Status Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.1.10 Generic Location Global State Get/Status.

MMDL/CL/GLOC/BV-02-C [Generic Location Global State Set/Status Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.2.14 Generic Location Global State Set/Status.

MMDL/CL/GLOC/BV-03-C [Generic Location Global State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.3.14 Generic Location Global State Set Unacknowledged.

MMDL/CL/GLOC/BV-04-C [Generic Location Local State Get/Status Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.1.11 Generic Location Local State Get/Status.

MMDL/CL/GLOC/BV-05-C [Generic Location Local State Set/Status Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.2.15 Generic Location Local State Set/Status.

MMDL/CL/GLOC/BV-06-C [Generic Location Local State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.7, 3.2.7, 3.4.7

  Execute the common test case using the values from 4.3.3.15 Generic Location Local State Set Unacknowledged.

4.6.8 Generic Property Client

MMDL/CL/GPR/BV-01-C [Generic User Properties State Get/Status Procedure]

- Reference

  [4] 3.1.8, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.12 Generic User Properties State Get/Status.

MMDL/CL/GPR/BV-02-C [Generic User Property State Get/Status Procedure]

- Reference

  [4] 3.1.8, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.13 Generic User Property State Get/Status.

MMDL/CL/GPR/BV-03-C [Generic User Property State Set/Status Procedure]

- Reference

  [4] 3.1.8, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.2.16 Generic User Property State Set/Status.

MMDL/CL/GPR/BV-04-C [Generic User Property State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.8, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.3.16 Generic User Property State Set Unacknowledged.

MMDL/CL/GPR/BV-05-C [Generic Admin Properties State Get/Status Procedure]

- Reference

  [4] 3.1.9, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.14 Generic Admin Properties State Get/Status.

MMDL/CL/GPR/BV-06-C [Generic Admin Property State Get/Status Procedure]

- Reference

  [4] 3.1.9, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.15 Generic Admin Property State Get/Status.

MMDL/CL/GPR/BV-07-C [Generic Admin Property State Set/Status Procedure]

- Reference

  [4] 3.1.9, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.2.17 Generic Admin Property State Set/Status.

MMDL/CL/GPR/BV-08-C [Generic Admin Property State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.9, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.3.17 Generic Admin Property State Set Unacknowledged.

MMDL/CL/GPR/BV-09-C [Generic Manufacturer Properties State Get/Status Procedure]

- Reference

  [4] 3.1.10, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.16 Generic Manufacturer Properties State Get/Status.

MMDL/CL/GPR/BV-10-C [Generic Manufacturer Property State Get/Status Procedure]

- Reference

  [4] 3.1.10, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.17 Generic Manufacturer Property State Get/Status.

MMDL/CL/GPR/BV-11-C [Generic Manufacturer Property State Set/Status Procedure]

- Reference

  [4] 3.1.10, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.2.18 Generic Manufacturer Property State Set/Status.

MMDL/CL/GPR/BV-12-C [Generic Manufacturer Property State Set Unacknowledged Procedure]

- Reference

  [4] 3.1.10, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.3.18 Generic Manufacturer Property State Set Unacknowledged.

MMDL/CL/GPR/BV-13-C [Generic Client Properties State Get/Status Procedure]

- Reference

  [4] 3.1.11, 3.2.8, 3.4.7

  Execute the common test case using the values from 4.3.1.18 Generic Client Properties State Get/Status.

4.7 Sensor Server Models

4.7.1 Sensor Server Model

MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs]

- Reference

  [4] 4.1.1, 4.2, 4.3.1

  Execute the common test case using the values from 4.2.1.24 Sensor Descriptor State Get/Status – All Property IDs.

MMDL/SR/SNR/BV-02-C [Sensor Descriptor State Get/Status Behavior – Single Property ID]

- Reference

  [4] 4.1.1, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, execute the common test case using the values from 4.2.1.25 Sensor Descriptor State Get/Status – Single Property ID. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNR/BV-03-C [Sensor Descriptor State Get/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.1, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.5.4 Sensor Descriptor State Get/Status Unknown Property ID.

MMDL/SR/SNR/BV-04-C [Sensor Data State Get/Status Behavior – All Property IDs]

- Reference

  [4] 4.1.4, 4.2, 4.3.1

  Execute the common test case using the values from 4.2.1.29 Sensor Data State Get/Status – All Property IDs.

MMDL/SR/SNR/BV-05-C [Sensor Data State Get/Status Behavior – Single Property ID]

- Reference

  [4] 4.1.4, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, execute the common test case using the values from 4.2.1.29 Sensor Data State Get/Status – All Property IDs. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNR/BV-06-C [Sensor Data State Get/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.4, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.5.9 Sensor Data State Get/Status Unknown Property ID.

MMDL/SR/SNR/BV-07-C [Sensor Series Column State Series Get/Status Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, execute the common test case using the values from 4.2.1.31 Sensor Series Column State Series Get/Status. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNR/BV-08-C [Sensor Series Column State Series Get/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.1.31 Sensor Series Column State Series Get/Status.

MMDL/SR/SNR/BV-09-C [Sensor Series Column State Column Get/Status Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, obtain the list of Sensor Series Column Raw Value X values by executing the procedure described in MMDL/SR/SNR/BV-07-C [Sensor Series Column State Series Get/Status Behavior]. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

  For each iteration of the previous step, if a non-empty list of measurements was returned for the selected Property ID, execute the common test case using the values from 4.2.1.32 Sensor Series Column State Column Get/Status.

MMDL/SR/SNR/BV-10-C [Sensor Series Column State Column Get/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.5.11 Sensor Series Column State Column Get/Status Unknown Property ID.

MMDL/SR/SNR/BI-01-C [Sensor Descriptor State Get/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.1, 4.2, 4.3.1

  Execute the common test case using the values from 4.2.4.8 Sensor Descriptor State Get/Status Invalid Parameters.

MMDL/SR/SNR/BI-02-C [Sensor Data State Get/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.4, 4.2, 4.3.1

  Execute the common test case using the values from 4.2.4.12 Sensor Data State Get/Status Invalid Parameters.

MMDL/SR/SNR/BI-03-C [Sensor Series Column State Series Get/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For any Property ID randomly selected from the Sensor Property IDs list, execute the common test case using the values from 4.2.4.13 Sensor Series Column State Series Get/Status Invalid Parameters.

MMDL/SR/SNR/BI-04-C [Sensor Series Column State Column Get/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.5, 4.2, 4.3.1

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For any Property ID randomly selected from the Sensor Property IDs list, obtain the list of Sensor Series Column Raw Value X values by executing the procedure described in MMDL/SR/SNR/BV-07-C [Sensor Series Column State Series Get/Status Behavior].

  For each iteration of the previous step, if a non-empty list of measurements was returned for the selected Property ID , execute the common test case using the values from 4.2.4.14 Sensor Series Column State Column Get/Status Invalid Parameters.

4.7.2 Sensor Setup Server Model

MMDL/SR/SNRS/BV-01-C [Sensor Cadence State Get/Set/Status Behavior]

- Reference

  [4] 4.1.3, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, check the IXIT file to verify that the Sensor Cadence state is supported for that Property ID. If it is supported, then execute the common Get/Set/Status test case using the values from Section 4.2.1.26 Sensor Cadence State Get/Set/Status; otherwise, execute the common Get/Set/Status Unknown Property ID test using the values from Section 4.2.5.5 Sensor Cadence State Get/Set/Status Unknown Property ID, but ignoring the initial condition of the generic test and using the current Property ID as the *Unknown Property ID* parameter. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values, covering both cases (Sensor Cadence state supported and unsupported) if possible.

MMDL/SR/SNRS/BV-02-C [Sensor Cadence State Get/Set/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.3, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.5.5 Sensor Cadence State Get/Set/Status Unknown Property ID.

MMDL/SR/SNRS/BV-03-C [Sensor Setting State Settings Get/Status Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, execute the common test case using the values from 4.2.1.27 Sensor Setting State Settings Get/Status. If the list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNRS/BV-04-C [Sensor Setting State Settings Get/Status Unknown Property ID Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  Execute the common test case using the values from 4.2.5.6 Sensor Setting State Settings Get/Status Unknown Property ID.

MMDL/SR/SNRS/BV-05-C [Sensor Setting State Setting Get/Set/Status Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, obtain the list of Sensor Setting Property IDs by executing the procedure described in MMDL/SR/SNRS/BV-03-C [Sensor Setting State Settings Get/Status Behavior]. If the Sensor Property IDs list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

  For each Property ID selected in the previous step, if a non-empty list of Setting Property IDs was returned, then for each Setting Property ID associated with that Sensor Property ID, execute the common test case using the values from 4.2.1.28 Sensor Setting State Setting Get/Set/Status. If the Setting Property IDs list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNRS/BV-06-C [Sensor Setting State Setting Get/Set/Status Unknown Sensor Property ID Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For any Property ID randomly selected from the Sensor Property IDs list, obtain the list of Sensor Setting Property IDs by executing the procedure described in MMDL/SR/SNRS/BV-04-C [Sensor Setting State Settings Get/Status Unknown Property ID Behavior].

  For the selected Property ID in the Sensor Property IDs list, if a non-empty list of Setting Property IDs was returned, then for any Setting Property ID associated with that Sensor Property ID, execute the common test case using the values from 4.2.5.7 Sensor Setting State Setting Get/Set/Status Unknown Sensor Property ID.

MMDL/SR/SNRS/BV-07-C [Sensor Setting State Setting Get/Set/Status Unknown Sensor Setting Property ID Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For any Property ID randomly selected from the Sensor Property IDs list, obtain the list of Sensor Setting Property IDs by executing the procedure described in MMDL/SR/SNRS/BV-04-C [Sensor Setting State Settings Get/Status Unknown Property ID Behavior].

  For the selected Property ID in the Sensor Property IDs list, execute the common test case using the values from 4.2.5.8 Sensor Setting State Setting Get/Set/Status Unknown Sensor Setting Property ID.

MMDL/SR/SNRS/BV-08-C [Periodic Publishing of Sensor Data]

- Test Purpose

  This test procedure verifies that the IUT supporting the Sensor Setup Server Model publishes sensor data periodically as configured by the Configuration Client and by the Sensor Client.

- Reference

  [4] 4.1.2, 4.2, 4.3.2

- Initial Condition

  - The Lower Tester has obtained the list of Sensor Property IDs on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].
  - The IXIT file contains the range of supported property values for at least one Property ID supported by the IUT. The Lower Tester will run the test procedure using that Property ID. If more properties have a specified range in the IXIT, then the Lower Tester chooses one at random.
  - The Lower Tester has access to the device key of the IUT.

- Test Procedure

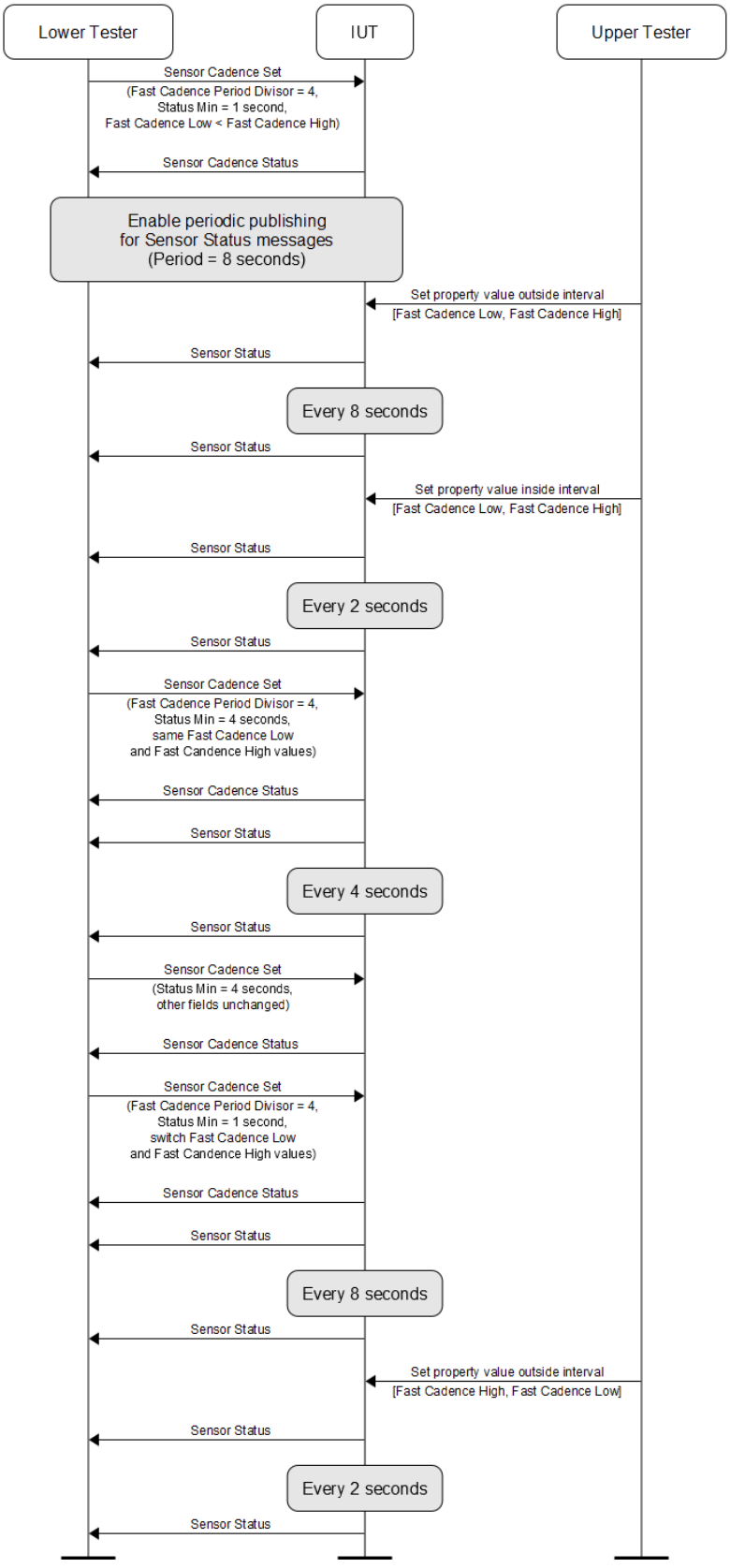

Figure 4.23: MMDL/SR/SNRS/BV-08-C [Periodic Publishing of Sensor Data]

1. The Lower Tester sends a Sensor Cadence Set message to the IUT, with the Property ID field set to the selected value (see initial condition), the Fast Cadence Period Divisor field set to 0x02 (divisor equal to 4), the Status Min Interval field to 0x0A (1024 ms), the Fast Cadence Low field set to a value lower than the Fast Cadence High field (both fields set to valid values), and all other fields set to valid values. The IUT responds with a Sensor Cadence Status message with the same fields and values as the Sensor Cadence Set message sent by the Lower Tester.
2. The Lower Tester configures the IUT to publish Sensor Status messages periodically to a valid group or virtual address, setting the value of the publish period to 8 seconds.
3. The Upper Tester orders the IUT to set the value of the selected property outside the interval defined by the Fast Cadence Low and Fast Cadence High fields from step 1. The Lower Tester expects the IUT to publish Sensor Status messages, containing the selected property ID and the requested property value, every 8 seconds.
4. The Upper Tester orders the IUT to set the value of the selected property inside the interval defined by the Fast Cadence Low and Fast Cadence High fields from step 1. The Lower Tester expects the IUT to publish Sensor Status messages, containing the selected property ID and the requested property value, every 2 seconds.
5. Repeat step 1 using the same values, except setting the Status Min Interval field to 0x0C (4096 ms). The Lower Tester expects the IUT to change the frequency of the published Sensor Status messages, containing the selected property ID and the property value requested in step 4, such that the interval between any two consecutive Status messages is greater than 4 seconds, but not greater than 6 seconds.
6. Repeat step 1 using the same values, except switching the values of the Fast Cadence Low and Fast Cadence High fields. The Lower Tester expects the IUT to change the frequency of the published Sensor Status messages, containing the selected property ID and the property value requested in step 4, to one message every 8 seconds.
7. The Upper Tester orders the IUT to set the value of the selected property outside the interval defined by the Fast Cadence High and Fast Cadence Low fields from step 6 (the High value is smaller than the Low value). The Lower Tester expects the IUT to change the frequency of the published Sensor Status messages, containing the selected property ID and the requested property, to one message every 2 seconds.

- Expected Outcome

  Pass verdict

  The IUT publishes the Sensor Status messages periodically, correctly increasing the frequency when the property value is inside the interval defined by the Fast Cadence Low and Fast Cadence High states (or outside the interval, if the numerical order of the states is reversed), but with a period at least equal to the Status Min Interval state.

MMDL/SR/SNRS/BV-09-C [Triggered Publishing of Sensor Data]

- Test Purpose

  This test procedure verifies that the IUT supporting the Sensor Setup Server Model publishes sensor data when a property value satisfies pre-configured trigger conditions.

- Reference

  [4] 4.1.2, 4.2, 4.3.2

- Initial Condition

  - The Lower Tester has obtained the list of Sensor Property IDs on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].
  - The IXIT file contains the range of supported property values for at least one Property ID supported by the IUT. The Lower Tester will run the test procedure using that Property ID. If more properties have a specified range in the IXIT, then the Lower Tester chooses one at random.
  - The Lower Tester has access to the device key of the IUT.
  - The IUT is not configured to publish sensor data periodically.

- Test Procedure

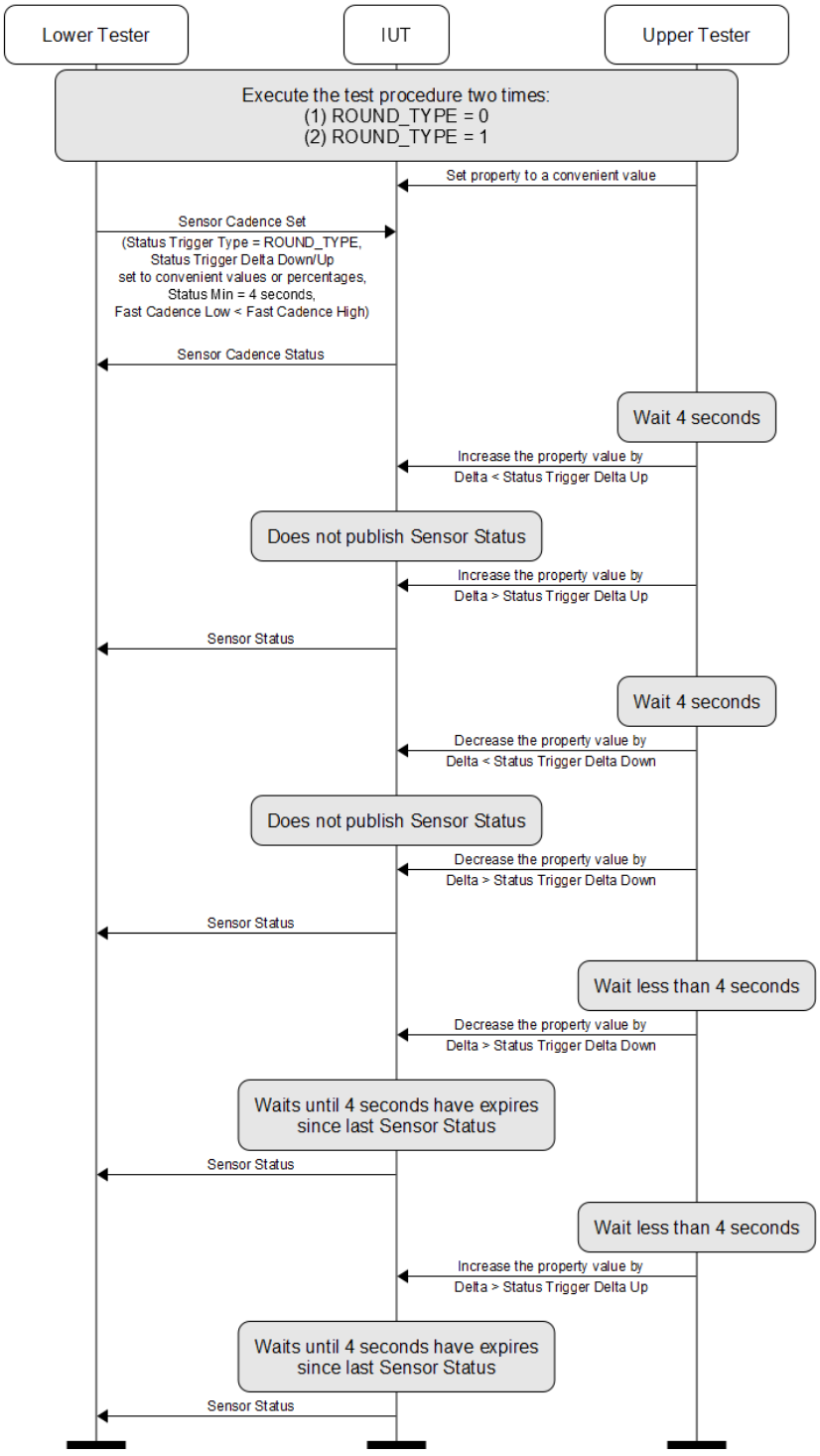

Figure 4.24: MMDL/SR/SNRS/BV-09-C [Triggered Publishing of Sensor Data]

1. The Upper Tester orders the IUT to set the value of the selected property to a conveniently-chosen value in the supported range.
2. The Lower Tester sends a Sensor Cadence Set message to the IUT, with the Property ID field set to the selected value (see initial condition), the Status Trigger Type field set to 0b0 (unit defined by the Format Type of the property), the Status Trigger Delta Down and Status Trigger Delta Up

field set to convenient values, the Status Min Interval field set to 0x0C (approximately 4 seconds), and all other fields set to valid values. The IUT responds with a Sensor Cadence Status message with the same fields and values as the Sensor Cadence Set message sent by the Lower Tester.

3. After at least 4 seconds, the Upper Tester orders the IUT to increase the value of the selected property with a quantity that is smaller than the value of the Status Trigger Delta Up from step 2. If the IUT publishes a Sensor Status message, the test ends with a Fail Verdict.
4. The Upper Tester orders the IUT to increase the value of the selected property with a quantity that is larger than the value of the Status Trigger Delta Up from step 2.
5. The Lower Tester expects the IUT to publish a Sensor Status message containing the new value (the value set in step 1, plus the two quantities added in steps 3 and 4).
6. After at least 4 seconds, the Upper Tester orders the IUT to decrease the value of the selected property with a quantity that is smaller than the value of the Status Trigger Delta Down from step 2. If the IUT publishes a Sensor Status message, the test ends with a Fail Verdict.
7. The Upper Tester orders the IUT to decrease the value of the selected property with a quantity that is larger than the value of the Status Trigger Delta Down from step 2.
8. The Lower Tester expects the IUT to publish a Sensor Status message containing the new value (the value published by the IUT in step 5, minus the two quantities added in steps 6 and 7).
9. Immediately after receiving the Sensor Status message in step 8, repeat step 7.
10. The Lower Tester expects the IUT to wait until 4 seconds have passed since sending the last Sensor Status message, and then to publish a new Sensor Status message containing the new value. If the IUT publishes a Sensor Status message earlier than 4 seconds since the last published message, the test ends with a Fail Verdict.
11. Immediately after receiving the Sensor Status message in step 10, repeat step 4.
12. The Lower Tester expects the IUT to wait until 4 seconds have passed since sending the last Sensor Status message, and then to publish a new Sensor Status message containing the new value. If the IUT publishes a Sensor Status message earlier than 4 seconds since the last published message, the test ends with a Fail Verdict.
13. Repeat steps 1–12, but in step 2 use a Status Trigger Type value of 0b1 (unitless, multiple of 0.01 percent) and Status Trigger Delta Down and Status Trigger Delta Up values set to convenient multiples of 0.01 percent. In steps 3, 4, 6, 7, 9, and 11, the trigger quantities are computed by multiplying these percentages with the value of the state at that moment.

- Expected Outcome

  Pass verdict

  The IUT publishes Sensor Status messages only when the changed quantities are larger than the configured trigger values in the specified direction, but maintains the configured minimum interval between consecutive messages.

MMDL/SR/SNRS/BV-10-C [Sensor Cadence Status when Cadence Not Configured]

- Test Purpose

  This test procedure verifies that the IUT supporting the Sensor Setup Server Model sends a correct Sensor Cadence Status message in response to a Sensor Cadence Get message when the Sensor Cadence state has not been configured.

- Reference

  [4] Section 4.1.2, 4.2, 4.3.2

- Initial Condition

  - The Lower Tester has obtained the list of Sensor Property IDs on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].
  - Based on the IXIT file, the Lower Tester selects a Property ID for which the Sensor Cadence state is supported.
  - The Sensor Cadence state has not been configured yet for the selected Property ID.

- Test Procedure

  1. The Lower Tester sends a Sensor Cadence Get message to the IUT with the selected Property ID.
  2. The IUT responds with a Sensor Candence Status message with the Property ID field set to the selected Property ID and all other fields omitted.

- Expected Outcome

  Pass verdict

  The IUT sends a correct Sensor Candence Status message, omitting all fields besides the Property ID.

MMDL/SR/SNRS/BI-01-C [Sensor Cadence State Get/Set/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.3, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, check the IXIT file to verify that the Sensor Cadence state is supported for that Property ID. If it is supported, then execute the common test case using the values from 4.2.4.9 Sensor Cadence State Get/Set/Status Invalid Parameters. If the list contains more than three Property IDs for which the Sensor Cadence state is supported, then execute the referenced procedure only for three randomly selected values.

MMDL/SR/SNRS/BI-02-C [Sensor Setting State Settings Get/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For any Property ID randomly selected from the Sensor Property IDs list, execute the common test case using the values from 4.2.4.10 Sensor Setting State Settings Get/Status Invalid Parameters.

MMDL/SR/SNRS/BI-03-C [Sensor Setting State Setting Get/Set/Status Invalid Parameter Behavior]

- Reference

  [4] 4.1.2, 4.2, 4.3.2

  Obtain the Sensor Property IDs list on the IUT, e.g., by executing the procedure described in MMDL/SR/SNR/BV-01-C [Sensor Descriptor State Get/Status Behavior – All Property IDs].

  For each Property ID in the Sensor Property IDs list, obtain the list of Sensor Setting Property IDs by executing the procedure described in MMDL/SR/SNRS/BV-03-C [Sensor Setting State Settings Get/Status Behavior]. If the Sensor Property IDs list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

  For each Property ID selected in the previous step, if a non-empty list of Setting Property IDs was returned, then for each Setting Property ID associated with that Sensor Property ID, execute the common test case using the values from 4.2.4.11 Sensor Setting State Setting Get/Set/Status Invalid Parameters. If the Setting Property IDs list contains more than three Property IDs, then execute the referenced procedure only for three randomly selected values.

4.8 Sensor Client Models

4.8.1 Sensor Client

MMDL/CL/SNR/BV-01-C [Sensor Descriptor State Get/Status Procedure – All Property IDs]

- Reference

  [4] 4.1.1, 4.2.1, 4.2.2, 4.4.1

  Execute the common test case using the values from 4.3.1.19 Sensor Descriptor State Get/Status – All Property IDs.

MMDL/CL/SNR/BV-02-C [Sensor Descriptor State Get/Status Procedure – Single Property ID]

- Reference

  [4] 4.1.1, 4.2.1, 4.2.2, 4.4.1

  Execute the common test case using the values from 4.3.1.20 Sensor Descriptor State Get/Status – Single Property ID.

MMDL/CL/SNR/BV-03-C [Sensor Cadence State Get/Status Procedure]

- Reference

  [4] 4.1.3, 4.2.3, 4.2.6, 4.4.1

  Execute the common test case using the values from 4.3.1.21 Sensor Cadence State Get/Status.

MMDL/CL/SNR/BV-04-C [Sensor Cadence State Set/Status Procedure]

- Reference

  [4] 4.1.3, 4.2.4, 4.2.6, 4.4.1

  Execute the common test case using the values from 4.3.2.23 Sensor Cadence State Set/Status.

MMDL/CL/SNR/BV-05-C [Sensor Cadence Set Unacknowledged Procedure]

- Reference

  [4] 4.1.3, 4.2.5, 4.4.1

  Execute the common test case using the values from 4.3.3.23 Sensor Cadence State Set .

MMDL/CL/SNR/BV-06-C [Sensor Settings State Get/Status Procedure]

- Reference

  [4] 4.1.2, 4.2.7, 4.2.8, 4.4.1

  Execute the common test case using the values from 4.3.1.22 Sensor Settings State Get/Status.

MMDL/CL/SNR/BV-07-C [Sensor Setting State Get/Status Procedure]

- Reference

  [4] 4.1.2, 4.2.9, 4.2.12, 4.4.1

  Execute the common test case using the values from 4.3.1.23 Sensor Setting State Get/Status.

MMDL/CL/SNR/BV-08-C [Sensor Setting State Set/Status Procedure]

- Reference

  [4] 4.1.2, 4.2.10, 4.2.12, 4.4.1

  Execute the common test case using the values from 4.3.2.24 Sensor Setting State Set/Status.

MMDL/CL/SNR/BV-09-C [Sensor Setting State Set Unacknowledged Procedure]

- Reference

  [4] 4.1.2, 4.2.11, 4.4.1

  Execute the common test case using the values from 4.3.3.24 Sensor Setting State Set Unacknowledged.

MMDL/CL/SNR/BV-10-C [Sensor Data State Get/Status Procedure – All Property IDs]

- Reference

  [4] 4.1.4, 4.2.13, 4.2.14, 4.4.1

  Execute the common test case using the values from 4.3.1.24 Sensor Data State Get/Status – All Property IDs.

MMDL/CL/SNR/BV-11-C [Sensor Data State Get/Status Procedure – Single Property ID]

- Reference

  [4] 4.1.4, 4.2.13, 4.2.14, 4.4.1

  Execute the common test case using the values from 4.3.1.25 Sensor Data State Get/Status – Single Property ID.

MMDL/CL/SNR/BV-12-C [Sensor Column State Get/Status Procedure]

- Reference

  [4] 4.1.5, 4.2.15, 4.2.16, 4.4.1

  Execute the common test case using the values from 4.3.1.26 Sensor Series Column State Column Get/Status.

MMDL/CL/SNR/BV-13-C [Sensor Series State Get/Status Procedure]

- Reference

  [4] 4.1.5, 4.2.17, 4.2.18, 4.4.1

  Execute the common test case using the values from 4.3.1.27 Sensor Series Column State Series Get/Status.

4.9 Time and Scene Server Models

4.9.1 Time Server

MMDL/SR/TIM/BV-01-C [Time State Get/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.1

  Execute the common test case using the values from 4.2.1.33 Time State Get/Status.

MMDL/SR/TIM/BV-02-C [Time State Zone Change Get/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.1

  Execute the common test case using the values from 4.2.1.35 Time State Zone Change Get/Status.

MMDL/SR/TIM/BV-03-C [Time State TAI-UTC Delta Get/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.1

  Execute the common test case using the values from 4.2.1.37 Time State TAI-UTC Delta Get/Status.

4.9.2 Time Setup Server

MMDL/SR/TIMS/BV-01-C [Time State Get/Set/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.2

  Execute the common test case using the values from 4.2.1.34 Time State Get/Set/Status.

MMDL/SR/TIMS/BV-02-C [Time State Zone Change Get/Set/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.2

  Execute the common test case using the values from 4.2.1.36 Time State Zone Change Get/Set/Status.

MMDL/SR/TIMS/BV-03-C [Time State TAI-UTC Delta Get/Set/Status Behavior]

- Reference

  [4] 5.1.1, 5.2.1, 5.3.2

  Execute the common test case using the values from 4.2.1.38 Time State TAI-UTC Delta Get/Set/Status.

MMDL/SR/TIMS/BV-04-C [Time Role State Get/Set/Status Behavior]

- Reference

  [4] 5.1.2, 5.2.1, 5.3.2

  Execute the common test case using the values from 4.2.1.39 Time Role State Get/Set/Status.

MMDL/SR/TIMS/BI-01-C [Time Role State Get/Set/Status Invalid Parameter Behavior]

- Reference

  [4] 5.1.2, 5.2.1, 5.3.2

  Execute the common test case using the values from 4.2.4.15 Time Role State Get/Set/Status Invalid Parameters.

4.9.3 Scene Server

MMDL/SR/SCE/BV-01-C [Scene Register State Scene Get/Recall/Status Behavior]

- Reference

  [4] 5.1.3, 5.2.2, 5.3.3

  Execute the common test case using the values from 4.2.1.40 Scene Register State Scene Get/Recall/Status.

MMDL/SR/SCE/BV-02-C [Scene Register State Scene Register Get/Status Behavior]

- Reference

  [4] 5.1.3, 5.2.2, 5.3.3

  Execute the common test case using the values from 4.2.1.41 Scene Register State Scene Register Get/Status.

MMDL/SR/SCE/BV-03-C [Scene Register State Transition]

- Reference

  [4] 5.1.3, 5.2.2, 5.3.3

  Execute the common test case using the values from 4.2.3.5 Scene Register State Transition.

4.9.4 Scene Setup Server

MMDL/SR/SCES/BV-01-C [Scene Register State Scene Register Get/Store/Status Behavior]

- Reference

  [4] 5.1.3, 5.2.2, 5.3.4

  Execute the common test case using the values from 4.2.1.42 Scene Register State Scene Register Get/Store/Status.

MMDL/SR/SCES/BV-02-C [Scene Register State Scene Register Get/Delete/Status Behavior]

- Reference

  [4] 5.1.3, 5.2.2, 5.3.4

  Execute the common test case using the values from 4.2.1.43 Scene Register State Scene Register Get/Delete/Status.

4.9.5 Scheduler Server

MMDL/SR/SCH/BV-01-C [Scheduler Register State Get/Status Behavior]

- Reference

  [4] 5.1.4, 5.2.3, 5.3.5

  Execute the common test case using the values from 4.2.1.44 Scheduler Register State Get/Status.

MMDL/SR/SCH/BV-02-C [Scheduler Register State Action Get/Status Behavior]

- Reference

  [4] 5.1.4, 5.2.3, 5.3.5

  Execute the common test case using the values from 4.2.1.45 Scheduler Register State Action Get/Status.

4.9.6 Scheduler Setup Server

MMDL/SR/SCHS/BV-01-C [Scheduler Register State Action Get/Set/Status Behavior]

- Reference

  [4] 5.1.4, 5.2.3, 5.3.6

  Execute the common test case using the values from 4.2.1.46 Scheduler Register State Action Get/Set/Status.

MMDL/SR/SCHS/BI-01-C [Scheduler Register State Action Get/Set/Status Invalid Parameter Behavior]

- Reference

  [4] 5.1.4, 5.2.3, 5.3.6

  Execute the common test case using the values from 4.2.4.16 Scheduler Register State Action Get/Set/Status Invalid Parameters.

4.10 Time and Scene Client Models

4.10.1 Time Client

MMDL/CL/TIM/BV-01-C [Time State Get/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.1, 5.1.1.3, 5.4.1

  Execute the common test case using the values from 4.3.1.28 Time State Get/Status.

MMDL/CL/TIM/BV-02-C [Time State Set/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.2, 5.1.1.3, 5.4.1

  Execute the common test case using the values from 4.3.2.25 Time State Set/Status.

MMDL/CL/TIM/BV-03-C [Time Zone State Get/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.5, 5.2.1.7, 5.4.1

  Execute the common test case using the values from 4.3.1.29 Time Zone State Get/Status.

MMDL/CL/TIM/BV-04-C [Time Zone State Set/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.6, 5.2.1.7, 5.4.1

  Execute the common test case using the values from 4.3.2.26 Time Zone State Set/Status.

MMDL/CL/TIM/BV-05-C [TAI-UTC Delta State Get/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.8, 5.1.1.10, 5.4.1

  Execute the common test case using the values from 4.3.1.30 TAI-UTC Delta New State Get/Status.

MMDL/CL/TIM/BV-06-C [TAI-UTC Delta State Set/Status Procedure]

- Reference

  [4] 5.1.1, 5.2.1.9, 5.1.1.10, 5.4.1

  Execute the common test case using the values from 4.3.2.27 TAI-UTC Delta State Set/Status.

MMDL/CL/TIM/BV-07-C [Time Role State Get/Status Procedure]

- Reference

  [4] 5.1.2, 5.2.1.11, 5.2.1.13, 5.4.1

  Execute the common test case using the values from 4.3.1.31 Time Role State Get/Status.

MMDL/CL/TIM/BV-08-C [Time Role State Set/Status Procedure]

- Reference

  [4] 5.1.2, 5.2.1.11, 5.2.1.13, 5.4.1

  Execute the common test case using the values from 4.3.2.28 Time Role State Set/Status.

4.10.2 Scene Client

MMDL/CL/SCE/BV-01-C [Scene State Get/Status Procedure]

- Reference

  [4] 5.1.3, 5.2.2.5, 5.2.2.6, 5.4.2

  Execute the common test case using the values from 4.3.1.32 Scene Register State Scene Get/Status.

MMDL/CL/SCE/BV-02-C [Scene Register State Get/Status Procedure]

- Reference

  [4] 5.1.3, 5.2.2.7, 5.2.2.8, 5.4.2

  Execute the common test case using the values from 4.3.1.33 Scene Register State Scene Register Get/Status.

MMDL/CL/SCE/BV-03-C [Scene Store/Status Procedure]

- Reference

  [4] 5.1.3, 5.2.2.1, 5.2.2.8, 5.4.2

  Execute the common test case using the values from 4.3.2.29 Scene Store/Status.

MMDL/CL/SCE/BV-04-C [Scene Store Unacknowledged Procedure]

- Reference

  [4] 5.1.3, 5.2.2.2, 5.4.2

  Execute the common test case using the values from 4.3.3.25 Scene Store Unacknowledged.

MMDL/CL/SCE/BV-05-C [Scene Recall/Status Procedure – Default Transition]

- Reference

  [4] 5.1.3, 5.2.2.3, 5.2.2.6, 5.4.2

  Execute the common test case using the values from 4.3.2.30 Scene Recall/Status – Default Transition.

MMDL/CL/SCE/BV-06-C [Scene Recall/Status Procedure – Immediate Transition]

- Reference

  [4] 5.1.3, 5.2.2.3, 5.2.2.6, 5.4.2

  Execute the common test case using the values from 4.3.2.31 Scene Recall/Status – Immediate Transition.

MMDL/CL/SCE/BV-07-C [Scene Recall/Status Procedure – Custom Transition]

- Reference

  [4] 5.1.3, 5.2.2.3, 5.2.2.6, 5.4.2

  Execute the common test case using the values from 4.3.2.32 Scene Recall/Status – Custom Transition.

MMDL/CL/SCE/BV-08-C [Scene Recall Unacknowledged Procedure – Default Transition]

- Reference

  [4] 5.1.3, 5.2.2.4, 5.4.2

  Execute the common test case using the values from 4.3.3.26 Scene Recall Unacknowledged – Default Transition.

MMDL/CL/SCE/BV-09-C [Scene Recall Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 5.1.3, 5.2.2.4, 5.4.2

  Execute the common test case using the values from 4.3.3.27 Scene Recall Unacknowledged – Immediate Transition.

MMDL/CL/SCE/BV-10-C [Scene Recall Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 5.1.3, 5.2.2.4, 5.4.2

  Execute the common test case using the values from 4.3.3.28 Scene Recall Unacknowledged – Custom Transition.

4.10.3 Scheduler Client

MMDL/CL/SCH/BV-01-C [Scheduler State Get/Status Procedure]

- Reference

  [4] 5.1.4, 5.2.3.1, 5.2.3.2, 5.4.3

  Execute the common test case using the values from 4.3.1.34 Scheduler Register State Get/Status.

MMDL/CL/SCH/BV-02-C [Scheduler Action State Get/Status Procedure]

- Reference

  [4] 5.1.4, 5.2.3.3, 5.2.3.6, 5.4.3

  Execute the common test case using the values from 4.3.1.35 Scheduler Action State Get/Status.

MMDL/CL/SCH/BV-03-C [Scheduler Action State Set/Status Procedure]

- Reference

  [4] 5.1.4, 5.2.3.4, 5.2.3.6, 5.4.3

  Execute the common test case using the values from 4.3.2.33 Scheduler Action State Set/Status.

MMDL/CL/SCH/BV-04-C [Scheduler Action State Set Unacknowledged Procedure]

- Reference

  [4] 5.1.4, 5.2.3.5, 5.4.3

  Execute the common test case using the values from 4.3.3.29 Scheduler Action State Set Unacknowledged.

4.11 Lighting Server Models

4.11.1 Light Lightness Server

MMDL/SR/LLN/BV-01-C [Light Lightness Actual State Get/Set/Status Behavior]

- Reference

  [4] 6.1.2.2, 6.3.1.1, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.4.

  Execute the common test case using the values from 4.2.1.47 Light Lightness Actual State Get/Set/Status.

MMDL/SR/LLN/BV-02-C [Light Lightness Linear State Get/Set/Status Behavior]

- Reference

  [4] 6.1.2.1, 6.3.1.5, 6.3.1.6, 6.3.1.7, 6.3.1.8, 6.4.1

  Execute the common test case using the values from 4.2.1.48 Light Lightness Linear State Get/Set/Status.

MMDL/SR/LLN/BV-03-C [Light Lightness Last State Get/Status Behavior]

- Reference

  [4] 6.1.2.3, 6.3.1.9, 6.3.1.12, 6.4.1

  Execute the common test case using the values from 4.2.1.49 Light Lightness Last State Get/Status.

MMDL/SR/LLN/BV-04-C [Light Lightness Default State Get/Status Behavior]

- Reference

  [4] 6.1.2.4, 6.3.1.13, 6.3.1.14, 6.3.1.15, 6.3.1.16, 6.4.1

  Execute the common test case using the values from 4.2.1.50 Light Lightness Default State Get/Status.

MMDL/SR/LLN/BV-05-C [Light Lightness Range State Get/Status Behavior]

- Reference

  [4] 6.1.2.5, 6.3.1.17, 6.3.1.18, 6.3.1.19, 6.3.1.20, 6.4.1

  Execute the common test case using the values from 4.2.1.52 Light Lightness Range State Get/Status.

MMDL/SR/LLN/BV-06-C [Light Lightness Actual State Binding with Light Lightness Linear]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.8 Light Lightness Actual and Light Lightness Linear State Binding.

MMDL/SR/LLN/BV-07-C [Light Lightness Actual State Binding with Generic Level]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.9 Light Lightness Actual and Generic Level State Binding.

MMDL/SR/LLN/BV-08-C [Light Lightness Actual State Binding with Generic OnOff – Scenario 1]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.10 Light Lightness Actual and Generic OnOff State Binding – Simple Scenario 1.

MMDL/SR/LLN/BV-09-C [Light Lightness Actual State Binding with Generic OnOff – Scenario 2]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.11 Light Lightness Actual and Generic OnOff State Binding – Simple Scenario 2.

MMDL/SR/LLN/BV-10-C [Light Lightness Actual State Binding with Generic OnOff – Using Last Value]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.12 Light Lightness Actual and Generic OnOff State Binding – Using Last Value.

MMDL/SR/LLN/BV-11-C [Light Lightness Actual State Binding with Generic OnOff – Using Default Value]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.13 Light Lightness Actual and Generic OnOff State Binding – Using Default Value.

MMDL/SR/LLN/BV-12-C [Light Lightness Linear State Implicit Binding with Generic OnOff]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.14 Light Lightness Linear and Generic OnOff State Implicit Binding.

MMDL/SR/LLN/BV-13-C [Light Lightness Linear State Implicit Binding with Generic Level]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.1.15 Light Lightness Linear and Generic Level State Implicit Binding.

MMDL/SR/LLN/BV-14-C [Light Lightness Actual State Binding with Light Lightness Range]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.2.2 Light Lightness Actual and Light Lightness Range State Binding.

MMDL/SR/LLN/BV-15-C [Light Lightness Actual State Transition]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.4.3.6 Light Lightness Actual State Transition.

MMDL/SR/LLN/BV-16-C [Light Lightness Linear State Transition]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.3.7 Light Lightness Linear State Transition.

MMDL/SR/LLN/BV-17-C [Light Lightness Actual State Power-Up Behavior]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1

  Execute the common test case using the values from 4.2.2.3.2 Light Lightness Actual and Generic OnPowerUp State Binding.

MMDL/SR/LLN/BV-18-C [Light Lightness Actual State Scene Store/Recall Behavior]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.4 Light Lightness Actual State Scene Store/Recall.

MMDL/SR/LLN/BV-19-C [Light Lightness Linear State Scene Store/Recall Behavior]

- Reference

  [4] 6.1.2, 6.3.1, 6.4.1, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.5 Light Lightness Linear State Scene Store/Recall.

MMDL/SR/LLN/BV-20-C [Light Lightness Actual Dim-to-dark Behavior]

- Test Purpose

  Verify that the IUT supporting the Light Lightness Server Model correctly implements GL Delta transactions across the minimum value defined by the Light Lightness Range state.

- Reference

  [4] 6.4.1, 6.1.2.2.2

- Initial Condition

  - The Light Lightness Range state on the IUT has been set to the values denoted as RANGE_MIN and RANGE_MAX, such that RANGE_MIN < RANGE_MAX / 2. If metadata is not available, the tester can read the range state directly to get the ranges. If the range state values are set to Unknown, it could be inferred that there are no range constraints.
  - The Generic Default Transition Time state for the Generic Default Transition Time Server, instantiated on the element of the Light Lightness Server Model under test, is set to 0.

- Test Procedure

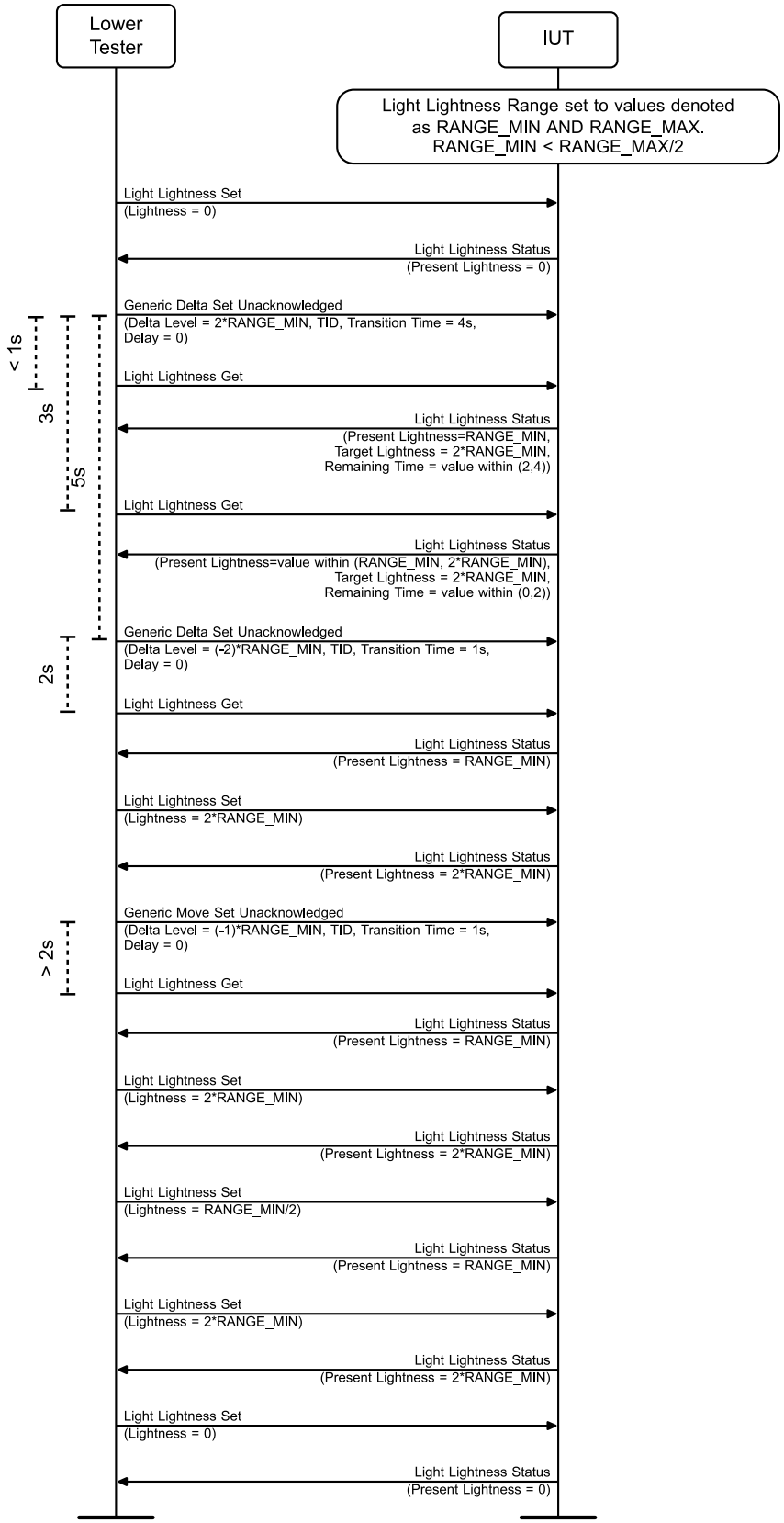

Figure 4.25: MMDL/SR/LLN/BV-20-C [Light Lightness Actual Dim-to-dark Behavior]

1. The Lower Tester sends a Light Lightness Set message with the Lightness field set to 0 and no other fields, and the IUT responds with a Light Lightness Status message with the Present Lightness set to 0 and no other fields.
2. The Lower Tester sends a Generic Delta Set Unacknowledged message with the Delta Level field set to 2 * RANGE_MIN, the TID field set to a new value, the Transition Time field set to 4 seconds, and the Delay field set to 0.
3. Within 1 second after step 2, the Lower Tester sends a Light Lightness Get message and the IUT responds with a Light Lightness Status message with the Present Lightness field set to RANGE_MIN, the Target Lightness field set to 2 * RANGE_MIN, and the Remaining Time field set to a valid value within the interval (2, 4).
4. After 3 seconds have passed since step 2, the Lower Tester sends a Light Lightness Get message and the IUT responds with a Light Lightness Status message with the Present Lightness field set to a value within the interval (RANGE_MIN, 2 * RANGE_MIN), the Target Lightness field set to 2 * RANGE_MIN, and the Remaining Time field set to a valid value within the interval (0, 2).
5. After 5 seconds have passed since step 2, the Lower Tester sends a Generic Delta Set Unacknowledged message with the Delta Level field set to (-2) * RANGE_MIN, the TID field set to the same value as in step 2, the Transition Time field set to 1 second, and the Delay field set to 0.
6. After 2 seconds have passed since step 5, the Lower Tester sends a Light Lightness Get message and the IUT responds with a Light Lightness Status message with the Present Lightness field set to RANGE_MIN and no other fields.
7. The Lower Tester sends a Light Lightness Set message with the Lightness field set to 2 * RANGE_MIN and no other fields, and the IUT responds with a Light Lightness Status message with the Present Lightness set to 2 * RANGE_MIN and no other fields.
8. The Lower Tester sends a Generic Move Set Unacknowledged message with the Delta Level field set to (-1) * RANGE_MIN, the TID field set to a new value, the Transition Time field set to 1 second, and the Delay field set to 0.
9. After at least 2 seconds have passed since step 8, the Lower Tester sends a Light Lightness Get message and the IUT responds with a Light Lightness Status message with the Present Lightness field set to RANGE_MIN and the other fields either missing or set to valid values.
10. Repeat step 7.
11. The Lower Tester sends a Light Lightness Set message with the Lightness field set to RANGE_MIN / 2 and no other fields, and the IUT responds with a Light Lightness Status message with the Present Lightness set to RANGE_MIN and no other fields.
12. Repeat step 7.
13. The Lower Tester sends a Light Lightness Set message with the Lightness field set to 0 and no other fields, and the IUT responds with a Light Lightness Status message with the Present Lightness set to 0 and no other fields.

- Expected Outcome

  Pass verdict

  The IUT responds with the expected field values.

4.11.2 Light Lightness Setup Server

MMDL/SR/LLNS/BV-01-C [Light Lightness Default State Get/Set/Status Behavior]

- Reference

  [4] 6.1.2.4, 6.3.1.14, 6.3.1.15, 6.3.1.16, 6.4.1

  Execute the common test case using the values from 4.2.1.51 Light Lightness Default State Get/Set/Status.

MMDL/SR/LLNS/BV-02-C [Light Lightness Range State Get/Set/Status Behavior]

- Reference

  [4] 6.1.2.5, 6.3.1.18, 6.3.1.19, 6.3.1.20, 6.4.1

  Execute the common test case using the values from 4.2.1.53 Light Lightness Range State Get/Set/Status.

MMDL/SR/LLNS/BI-01-C [Light Lightness Range State Invalid Parameter Behavior]

- Reference

  [4] 6.1.2.5, 6.3.1.18, 6.3.1.19, 6.3.1.20, 6.4.1

  Execute the common test case using the values from 4.2.4.17 Light Lightness Range State Get/Set/Status Invalid Parameters.

4.11.3 Light CTL Server

MMDL/SR/LCTL/BV-01-C [Light CTL State Get/Set/Status]

- Reference

  [4] 6.1.3, 6.3.2.1, 6.3.2.2, 6.3.2.3, 6.3.2.4, 6.4.3

  Execute the common test case using the values from 4.2.1.54 Light CTL State Get/Set/Status.

MMDL/SR/LCTL/BV-02-C [Light CTL Temperature Range State Get/Status]

- Reference

  [4] 6.1.3, 6.3.2.9, 6.3.2.10, 6.3.2.11, 6.3.2.12, 6.4.3

  Execute the common test case using the values from 4.2.1.56 Light CTL Temperature Range State Get/Status.

MMDL/SR/LCTL/BV-03-C [Light CTL Default State Get/Status]

- Reference

  [4] 6.1.3, 6.3.2.13, 6.3.2.14, 6.3.2.15, 6.3.2.16, 6.4.3

  Execute the common test case using the values from 4.2.1.58 Light CTL Default State Get/Status.

MMDL/SR/LCTL/BV-04-C [Light CTL Lightness State Binding with Light Lightness Actual]

- Reference

  [4] 6.1.3, 6.3.2, 6.4.3

  Execute the common test case using the values from 4.2.2.1.16 Light CTL Lightness and Light Lightness Actual State Binding.

MMDL/SR/LCTL/BV-05-C [Light CTL State Transition]

- Reference

  [4] 6.1.3, 6.3.2, 6.4.3

  Execute the common test case using the values from 4.2.3.8 Light CTL State Transition.

MMDL/SR/LCTL/BV-06-C [Light CTL State Power-Up Behavior]

- Reference

  [4] 6.1.3, 6.3.2, 6.4.3

  Execute the common test case using the values from 4.2.2.3.3 Light CTL and Generic OnPowerUp State Binding.

MMDL/SR/LCTL/BV-07-C [Light CTL State Scene Store/Recall Behavior]

- Test Purpose

  Verify Scene Store/Recall behavior for the Light CTL composite state.

- Reference

  [4] 6.1.3, 6.3.2, 6.4.3, 5.3.3, 5.3.4

- Initial Condition
  - There is no state transition in progress on the IUT.
  - If the Generic Default Transition Time state is supported, its value is set to 0.
  - The IUT is configured to publish for the Light CTL Server model to a random group or virtual address.
  - The following elements on the IUT have been identified by the Lower Tester using the Composition Data:
    - SSS_Main is the element containing the instance of the Scene Setup Server model that applies to the instance of the Light CTL Server model under test.
    - SSS_Temperature is the element containing the instance of the Scene Setup Server model that applies to the associated Light CTL Temperature Server model instance.

- Test Procedure

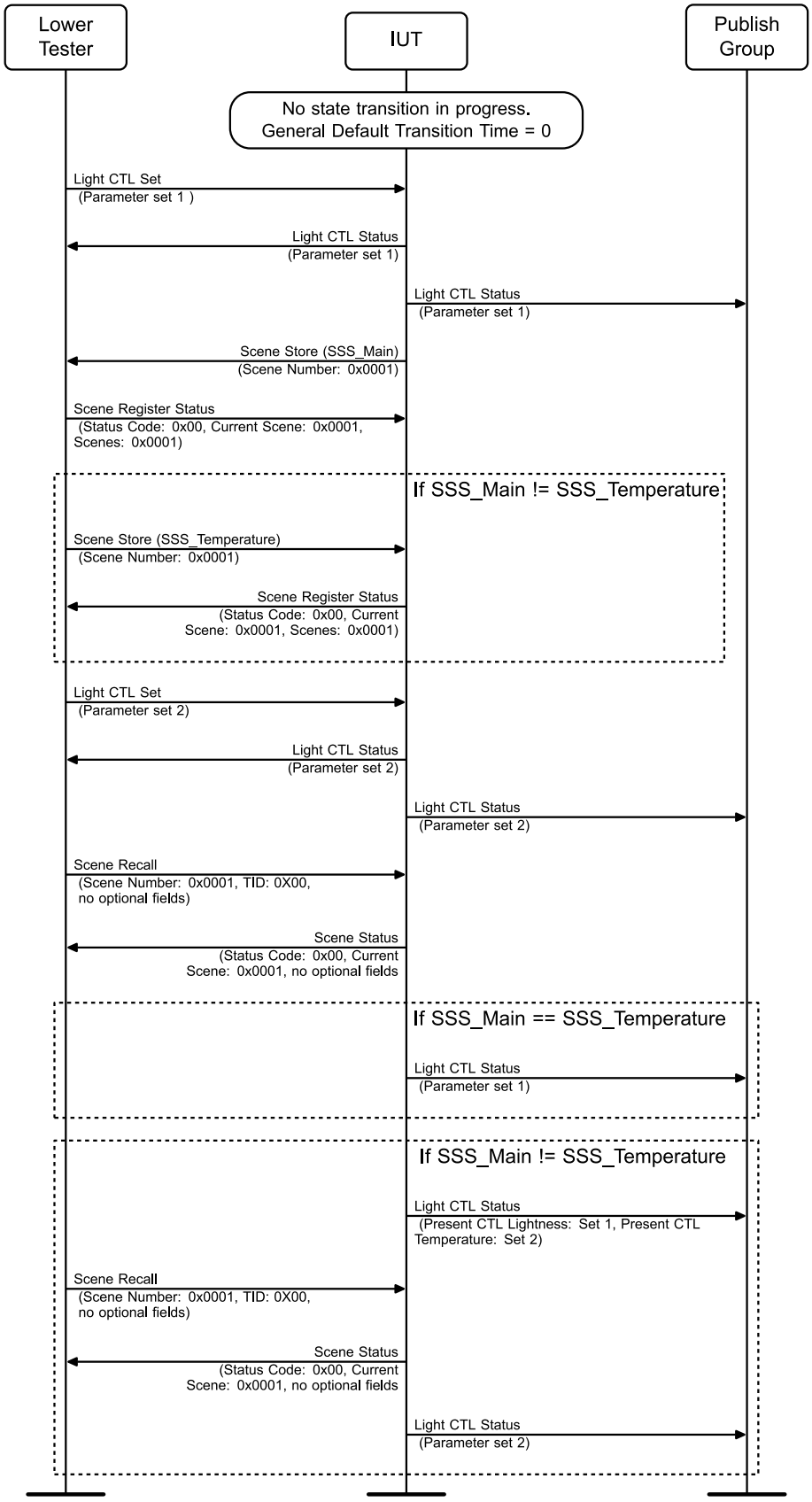

Figure 4.26: Test procedure for the Light CTL State Scene Store/Recall Behavior]

1. The Lower Tester sends a Light CTL Set message to the IUT with parameters within the supported ranges, and the IUT responds with a Light CTL Status message with parameters mirroring the ones from the request, and publishes the same message, with the same parameters, to the configured publish address.
2. The Lower Tester sends a Scene Store message to SSS_Main on the IUT with the Scene Number field set to 0x0001, and the IUT responds with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.
3. If SSS_Main != SSS_Temperature, the Lower Tester sends a Scene Store message to SSS_Temperature on the IUT with the Scene Number field set to 0x0001, and the IUT responds with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.
4. The Lower Tester sends a Light CTL Set message to the IUT with all parameters different than the ones in step 1, and the IUT responds with a Light CTL Status message with parameters mirroring the ones from the request, and publishes the same message, with the same parameters, to the configured publish address.
5. The Lower Tester sends a Scene Recall message to SSS_Main on the IUT with the Scene Number field set to 0x0001, the TID field set to 0x00 and no optional fields, and the IUT responds with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and no optional fields.
6. If SSS_Main == SSS_Temperature, then the IUT publishes a Light CTL Status message to the configured publish address, with all parameters equal to the ones in step 1.
7. If SSS_Main != SSS_Temperature, then:
    a. The IUT publishes a Light CTL Status message to the configured publish address, with the Present CTL Lightness parameter equal to the one in step 1 and the Present CTL Temperature parameter equal to the one in step 4.
    b. The Lower Tester sends a Scene Recall message to SSS_Temperature on the IUT with the Scene Number field set to 0x0001, the TID field set to 0x00 and no optional fields, and the IUT responds with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and no optional fields.
    c. The IUT publishes a Light CTL Status message to the configured publish address, with all parameters equal to the ones in step 1.

- Expected Outcome

  Pass verdict

  The IUT sends all expected messages with the expected field values.

MMDL/SR/LCTL/BI-01-C [Light CTL State Invalid Parameter Behavior]

- Reference

  [4] 6.1.3, 6.3.2.1, 6.3.2.2, 6.3.2.3, 6.3.2.4, 6.4.3

  Execute the common test case using the values from 4.2.4.18 Light CTL State Get/Set/Status Invalid Parameters.

4.11.4 Light CTL Temperature Server

MMDL/SR/LCTLT/BV-01-C [Light CTL Temperature State Get/Set/Status]

- Reference

  [4] 6.1.3, 6.3.2.5, 6.3.2.6, 6.3.2.7, 6.3.2.8, 6.4.3

  Execute the common test case using the values from 4.2.1.55 Light CTL Temperature State Get/Set/Status.

MMDL/SR/LCTLT/BV-02-C [Light CTL Temperature State Binding With Generic Level]

- Reference

  [4] 6.1.3, 6.3.2, 6.4.4

  Execute the common test case using the values from 4.2.2.1.17 Light CTL Temperature and Generic Level State Binding.

MMDL/SR/LCTLT/BV-03-C [Light CTL Temperature State Binding With Light CTL Temperature Range]

- Reference

  [4] 6.1.3, 6.3.2, 6.4.4

  Execute the common test case using the values from 4.2.2.2.3 Light CTL Temperature and Light CTL Temperature Range State Binding.

MMDL/SR/LCTLT/BI-01-C [Light CTL Temperature State Invalid Parameter Behavior]

- Reference

  [4] 6.1.3, 6.3.2.5, 6.3.2.6, 6.3.2.7, 6.3.2.8, 6.4.3

  Execute the common test case using the values from 4.2.4.19 Light CTL Temperature State Get/Set/Status Invalid Parameters.

4.11.5 Light CTL Setup Server

MMDL/SR/LCTLS/BV-01-C [Light CTL Temperature Range State Get/Set/Status]

- Reference

  [4] 6.1.3, 6.3.2.9, 6.3.2.10, 6.3.2.11, 6.3.2.12, 6.4.4

  Execute the common test case using the values from 4.2.1.57 Light CTL Temperature Range State Get/Set/Status.

MMDL/SR/LCTLS/BV-02-C [Light CTL Default State Get/Set/Status]

- Reference

  [4] 6.1.3, 6.3.2.13, 6.3.2.14, 6.3.2.15, 6.3.2.16, 6.4.4

  Execute the common test case using the values from 4.2.1.59 Light CTL Default State Get/Set/Status.

MMDL/SR/LCTLS/BI-01-C [Light CTL Temperature Range State Invalid Parameter Behavior]

- Reference

  [4] 6.1.3, 6.3.2.9, 6.3.2.10, 6.3.2.11, 6.3.2.12, 6.4.4

  Execute the common test case using the values from 4.2.4.20 Light CTL Temperature Range State Get/Set/Status Invalid Parameters.

MMDL/SR/LCTLS/BI-02-C [Light CTL Default State Invalid Parameter Behavior]

- Reference

  [4] 6.1.3, 6.3.2.13, 6.3.2.14, 6.3.2.15, 6.3.2.16, 6.4.4

  Execute the common test case using the values from 4.2.4.21 Light CTL Default State Get/Set/Status Invalid Parameters.

4.11.6 Light HSL Server

MMDL/SR/LHSL/BV-01-C [Light HSL State Get/Set/Status]

- Reference

  [4] 6.1.4, 6.3.3.1, 6.3.3.2, 6.3.3.3, 6.3.3.4, 6.4.5

  Execute the common test case using the values from 4.4.1.60 Light HSL State Get/Set/Status.

MMDL/SR/LHSL/BV-02-C [Light HSL Target State Get/Status]

- Reference

  [4] 6.1.4, 6.3.3.5, 6.3.3.6, 6.4.5

  Execute the common test case using the values from 4.2.1.61 Light HSL State Target Get/Status.

MMDL/SR/LHSL/BV-03-C [Light HSL Default State Get/Status]

- Reference

  [4] 6.1.4, 6.3.3.15, 6.3.3.16, 6.3.3.17, 6.3.3.18, 6.4.5

  Execute the common test case using the values from 4.2.1.64 Light HSL Default State Get/Status.

MMDL/SR/LHSL/BV-04-C [Light HSL Range State Get/Status]

- Reference

  [4] 6.1.4, 6.3.3.20, 6.3.3.21, 6.3.3.22, 6.4.5

  Execute the common test case using the values from 4.2.1.66 Light HSL Range State Get/Status.

MMDL/SR/LHSL/BV-05-C [Light HSL Lightness State Binding With Light Lightness Actual]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.1.21 Light HSL Lightness and Light Lightness Actual State Binding.

MMDL/SR/LHSL/BV-06-C [Light HSL State Transition]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.3.9 Light HSL State Transition.

MMDL/SR/LHSL/BV-07-C [Light HSL State Scene Store/Recall Behavior]

- Test Purpose

  Verify Scene Store/Recall behavior for the Light HSL composite state.

- Reference

  [4] 6.1.4, 6.3.3, 5.2.2

- Initial Condition
  - There is no state transition in progress on the IUT.
  - If the Generic Default Transition Time state is supported, its value is set to 0.
  - The IUT is configured to publish for the Light HSL Server model to a random group or virtual address.
  - The following elements on the IUT have been identified by the Lower Tester using the Composition Data:
    - SSS_Main is the element containing the instance of the Scene Setup Server model that applies to the instance of the Light HSL Server model under test.
    - SSS_Hue is the element containing the instance of the Scene Setup Server model that applies to the associated Light HSL Hue Server model instance.
    - SSS_Saturation is the element containing the instance of the Scene Setup Server model that applies to the associated Light HSL Saturation Server model instance.

- Test Procedure

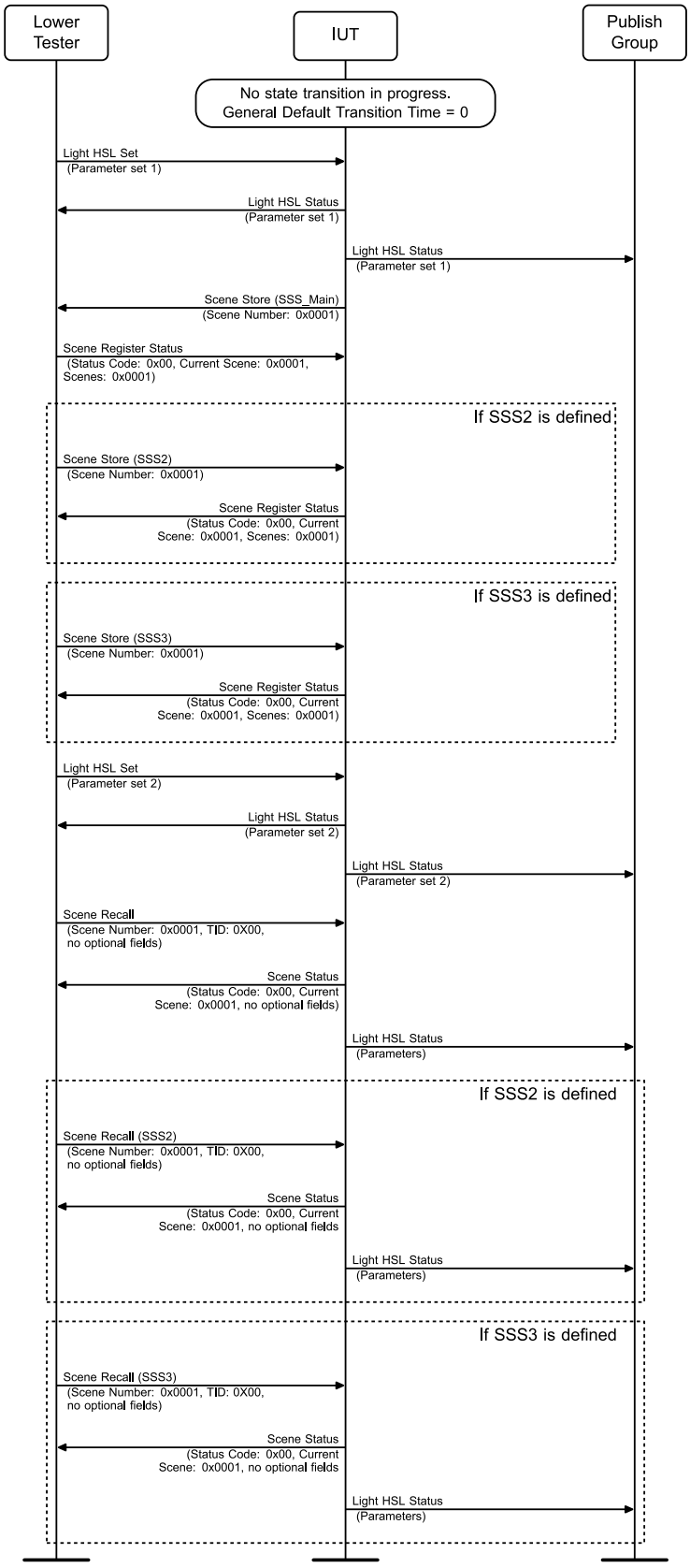

Figure 4.27: Test procedure for the Light HSL State Scene Store/Recall Behavior

Execute the applicable variation of the test procedure defined in Table 4.369, depending on the element order on the IUT, described in the Condition column.

Var.	Condition	SSS2	SSS3	Main Set	Extended Set
1	SSS_Main == SSS_Hue == SSS_Saturation	-	-	Lightness, Hue, Saturation	Lightness, Hue, Saturation
2	SSS_Main == SSS_Hue < SSS_Saturation	SSS_Saturation	-	Lightness, Hue	Lightness, Hue, Saturation
3	SSS_Main == SSS_Saturation < SSS_Hue	SSS_Hue	-	Lightness, Saturation	Lightness, Hue, Saturation
4	SSS_Main < SSS_Hue == SSS_Saturation	SSS_Hue	-	Lightness	Lightness, Hue, Saturation
5	SSS_Main < SSS_Hue < SSS_Saturation	SSS_Hue	SSS_Saturation	Lightness	Lightness, Hue
6	SSS_Main < SSS_Saturation < SSS_Hue	SSS_Saturation	SSS_Hue	Lightness	Lightness, Saturation

Table 4.369: Test variations for Light HSL State Scene Store/Recall Behavior

1. The Lower Tester sends a Light HSL Set message to the IUT with parameters within the supported ranges, and the IUT responds with a Light HSL Status message with parameters mirroring the ones from the request, and publishes the same message, with the same parameters, to the configured publish address.
2. The Lower Tester sends a Scene Store message to SSS_Main on the IUT with the Scene Number field set to 0x0001, and the IUT responds with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.
3. If SSS2 is defined in Table 4.369, the Lower Tester sends a Scene Store message to SSS2 on the IUT with the Scene Number field set to 0x0001, and the IUT responds with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.
4. If SSS3 is defined in Table 4.369, the Lower Tester sends a Scene Store message to SSS3 on the IUT with the Scene Number field set to 0x0001, and the IUT responds with a Scene Register Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and the Scenes field set to a list containing 0x0001.
5. The Lower Tester sends a Light HSL Set message to the IUT with all parameters different than the ones in step 1, and the IUT responds with a Light HSL Status message with parameters mirroring the ones from the request, and publishes the same message, with the same parameters, to the configured publish address.
6. The Lower Tester sends a Scene Recall message to SSS_Main on the IUT with the Scene Number field set to 0x0001, the TID field set to 0x00, and no optional fields, and the IUT responds with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and no optional fields.
7. The IUT publishes a Light HSL Status message to the configured publish address, with the parameters indicated in the Main Set column of Table 4.369 (with the “Present HSL” prefix) equal to the ones in step 1, and all other parameters equal to the ones in step 5.

8. If SSS2 is defined in Table 4.369, then:
    a. The Lower Tester sends a Scene Recall message to SSS2 on the IUT with the Scene Number field set to 0x0001 and the TID field set to 0x00, and no optional fields, and the IUT responds with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and no optional fields.
    b. The IUT publishes a Light HSL Status message to the configured publish address, with the parameters indicated in the Extended Set column of Table 4.369 (with the “Present HSL” prefix) equal to the ones in step 1, and all other parameters equal to the ones in step 5.
9. If SSS3 is defined in Table 4.369, then:
    a. The Lower Tester sends a Scene Recall message to SSS3 on the IUT with the Scene Number field set to 0x0001 and the TID field set to 0x00, and no optional fields, and the IUT responds with a Scene Status message with the Status Code field set to 0x00, the Current Scene field set to 0x0001, and no optional fields.
    b. The IUT publishes a Light HSL Status message to the configured publish address, with all parameters equal to the ones in step 1.

- Expected Outcome

  Pass verdict

  The IUT sends all expected messages with the expected field values.

MMDL/SR/LHSL/BV-08-C [Light HSL State Power-Up Behavior]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.3.4 Light HSL and Generic OnPowerUp State Binding.

4.11.7 Light HSL Hue Server

MMDL/SR/LHSLH/BV-01-C [Light HSL Hue State Get/Set/Status]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.1.62 Light HSL Hue State Get/Set/Status.

MMDL/SR/LHSLH/BV-02-C [Light HSL Hue State Binding With Generic Level]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.1.19 Light HSL Hue and Generic Level State Binding.

MMDL/SR/LHSLH/BV-03-C [Light HSL Hue State Binding With Light HSL Hue Range]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.2.4 Light HSL Hue and Light HSL Hue Range State Binding.

MMDL/SR/LHSLH/BV-04-C [Light HSL Hue State Transition]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.3.10 Light HSL Hue State Transition.

4.11.8 Light HSL Saturation Server

MMDL/SR/LHSLSA/BV-01-C [Light HSL Saturation State Get/Set/Status]

- Reference

  [4] 6.1.4, 6.3.3.11, 6.3.3.12, 6.3.3.13, 6.3.3.14, 6.4.5

  Execute the common test case using the values from 4.2.1.63 Light HSL Saturation State Get/Set/Status.

MMDL/SR/LHSLSA/BV-02-C [Light HSL Saturation State Binding With Generic Level]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.1.20 Light HSL Saturation and Generic Level State Binding.

MMDL/SR/LHSLSA/BV-03-C [Light HSL Saturation State Binding With Light HSL Saturation Range]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.2.5 Light HSL Saturation and Light HSL Saturation Range State Binding.

MMDL/SR/LHSLSA/BV-04-C [Light HSL Saturation State Transition]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.3.11 Light HSL Saturation State Transition.

4.11.9 Light HSL Setup Server

MMDL/SR/LHSLSE/BV-01-C [Light HSL Default State Get/Set/Status]

- Reference

  [4] 6.1.4, 6.3.3.16. 6.3.3.17, 6.3.3.18, 6.4.6

  Execute the common test case using the values from 4.2.1.65 Light HSL Default State Get/Set/Status.

MMDL/SR/LHSLSE/BV-02-C [Light HSL Range State Get/Set/Status]

- Reference

  [4] 6.1.4, 6.3.3.20, 6.3.3.21, 6.3.3.22, 6.4.6

  Execute the common test case using the values from 4.2.1.67 Light HSL Range State Get/Set/Status.

MMDL/SR/LHSLSE/BI-01-C [Light HSL Range State Invalid Parameter Behavior]

- Reference

  [4] 6.1.4, 6.3.3.20, 6.3.3.21, 6.3.3.22, 6.4.6

  Execute the common test case using the values from 4.2.4.22 Light HSL Range State Get/Set/Status Invalid Parameters.

4.11.10 Light xyL Server

MMDL/SR/LXYL/BV-01-C [Light xyL State Get/Set/Status]

- Reference

  [4] 6.1.5, 6.3.4.1, 6.3.4.2, 6.3.4.3, 6.3.4.4, 6.4.7

  Execute the common test case using the values from 4.2.1.68 Light xyL State Get/Set/Status.

MMDL/SR/LXYL/BV-02-C [Light xyL State Target Get/Status]

- Reference

  [4] 6.1.5, 6.3.4.1, 6.3.4.2, 6.3.4.3, 6.3.4.4, 6.4.7

  Execute the common test case using the values from 4.2.1.69 Light xyL State Target Get/Status.

MMDL/SR/LXYL/BV-03-C [Light xyL Default State Get/Status]

- Reference

  [4] 6.1.5, 6.3.4.7, 6.3.4.8, 6.3.4.9, 6.3.4.10, 6.4.7

  Execute the common test case using the values from 4.2.1.70 Light xyL Default State Get/Status.

MMDL/SR/LXYL/BV-04-C [Light xyL Range State Get/Status]

- Reference

  [4] 6.1.5, 6.3.4.11, 6.3.4.12, 6.3.4.13, 6.3.4.14, 6.4.7

  Execute the common test case using the values from 4.2.1.72 Light xyL Range State Get/Status.

MMDL/SR/LXYL/BV-05-C [Light xyL Lightness State Binding With Light HSL Lightness]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.1.22 Light xyL Lightness and Light HSL Lightness State Binding.

MMDL/SR/LXYL/BV-06-C [Light xyL State Binding With Light xyL Range]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.2.6 Light xyL and Light xyL Range State Binding.

MMDL/SR/LXYL/BV-07-C [Light xyL State Transition]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.3.12 Light xyL State Transition.

MMDL/SR/LXYL/BV-08-C [Light xyL State Power-Up Behavior]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.8, 6.3.3.9, 6.3.3.10, 6.4.5

  Execute the common test case using the values from 4.2.2.3.5 Light xyL and Generic OnPowerUp State Binding.

MMDL/SR/LXYL/BV-09-C [Light xyL State Scene Store/Recall Behavior]

- Reference

  [4] 6.1.5, 6.3.4, 5.2.2

  Execute the common test case using the values from 4.2.6.6 Light xyL State Scene Store/Recall.

4.11.11 Light xyL Setup Server

MMDL/SR/LXYS/BV-01-C [Light xyL Default State Get/Set/Status]

- Reference

  [4] 6.1.5, 6.3.4.2, 6.3.4.3, 6.3.4.4, 6.4.8

  Execute the common test case using the values from 4.2.1.71 Light xyL Default State Get/Set/Status.

MMDL/SR/LXYS/BV-02-C [Light xyL Range State Get/Set/Status]

- Reference

  [4] 6.1.5, 6.3.4.12, 6.3.4.13, 6.3.4.14, 6.4.8

  Execute the common test case using the values from 4.2.1.73 Light xyL Range State Get/Set/Status.

MMDL/SR/LXYS/BI-01-C [Light xyL Range State Invalid Parameter Behavior]

- Reference

  [4] 6.1.5, 6.3.4.12, 6.3.4.13, 6.3.4.14, 6.4.8

  Execute the common test case using the values from 4.2.4.23 Light xyL Range State Get/Set/Status Invalid Parameters.

4.12 Lighting Control Models

4.12.1 Light LC Server

MMDL/SR/LLC/BV-01-C [Light LC Mode State Get/Set/Status]

- Reference

  [4] 6.2.3, 6.3.5.1.1, 6.3.5.1.2, 6.3.5.1.3, 6.3.5.1.4, 6.5.1

  Execute the common test case using the values from 4.2.1.74 Light LC Mode State Get/Set/Status.

MMDL/SR/LLC/BV-02-C [Light LC Occupancy Mode State Get/Set/Status]

- Reference

  [4] 6.2.3, 6.3.5, 6.5.1

  Execute the common test case using the values from 4.2.1.75 Light LC Occupancy Mode State Get/Set/Status.

MMDL/SR/LLC/BV-03-C [Light LC Light OnOff State Get/Set/Status]

- Reference

  [4] 6.2.3, 6.3.5, 6.5.1

  Execute the common test case using the values from 4.2.1.76 Light LC Light OnOff State Get/Set/Status.

MMDL/SR/LLC/BV-04-C [Light LC Light OnOff State Transition]

- Reference

  [4] 6.2.3, 6.3.5, 6.5.1

  Execute the common test case using the values from 4.2.3.13 Light LC Light OnOff State Transition.

MMDL/SR/LLC/BV-05-C [Light LC Mode State Scene Store/Recall Behavior]

- Reference

  [4] 6.2.3, 6.3.5.1.1, 6.3.5.1.2, 6.3.5.1.3, 6.3.5.1.4, 6.5.1, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.7 Light LC Mode State Scene Store/Recall.

MMDL/SR/LLC/BV-06-C [State Machine Behavior – Manual On and Timeout]

- Test Purpose

  This test procedure verifies that the IUT supporting the Light LC Server Model updates its state machine in response to Light LC Light OnOff messages.

- Reference

  [4] 6.2.3, 6.3.6, 6.5.3

- Initial Condition

  - The Light LC state machine is in Off state.
  - The Light LC state machine is configured such that when it reaches the Fade On state and no other messages are received, the total time to return to the Standby state is smaller than 5 seconds.
  - If the IUT supports the Generic Default Transition Time state, its value is set to 0.
  - The Light LC Property states are set such that the transitions of the Light LC Light OnOff state are immediate by default (transition time of zero).
  - The Light LC Ambient LuxLevel state value does not change throughout the duration of the test.

- Test Procedure

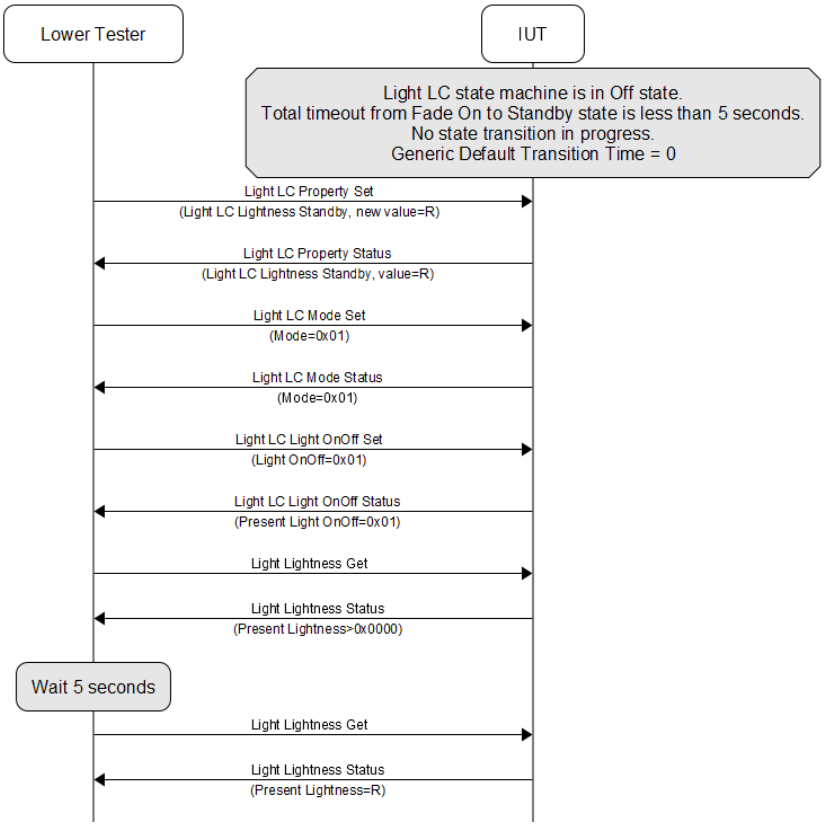

Figure 4.28: MMDL/SR/LLC/BV-06-C [State Machine Behavior – Manual On and Timeout]

1. The Lower Tester sends a Light LC Property Set message to the IUT, setting the Light LC Lightness Standby state to a random, non-zero value in the interval [15946, 65535].
2. The Lower Tester expects the IUT to respond with a Light LC Property Status message, confirming the change in the Light LC Lightness Standby state.
3. The Lower Tester sends a Light LC Mode Set message with the Mode field set to 0x01.
4. The Lower Tester expects the IUT to respond with a Light LC Mode Status message with the Mode field set to 0x01.

5. The Lower Tester sends a Light LC Light OnOff Set message with the Light OnOff field set to 0x01 and no optional fields.
6. The Lower Tester expects the IUT to respond with a Light LC Light OnOff Status message with the Present Light OnOff field set to 0x01 and no optional fields.
7. The Lower Tester sends a Light Lightness Get message to the IUT.
8. The Lower Tester expects the IUT to respond with a Light Lightness Status message with the Present Lightness field set to a value greater than 0x0000 and no optional fields.
9. After at least 5 seconds, the Lower Tester sends a Light Lightness Get message to the IUT.
10. The Lower Tester expects the IUT to respond with a Light Lightness Status message with the Present Lightness field set to the value generated in step 1 and no optional fields.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a Light LC Property Status message to the Lower Tester indicating that the new value of the Light LC Lightness Standby state has been accepted.

  In step 4, the IUT sends a Light LC Mode Status message to the Lower Tester with the Mode field set to 0x01.

  In step 6, the IUT sends a Light LC Light OnOff Status message to the Lower Tester with the Present Light OnOff field set to 0x01 and no optional fields.

  In step 8, the IUT sends a Light Lightness Status message to the Lower Tester with the Present Lightness field set to a value greater than 0x0000 and no optional fields.

  In step 10, the IUT sends a Light Lightness Status message to the Lower Tester with the Present Lightness field set to the value received in step 1 (with +/-1 accuracy) and no optional fields.

MMDL/SR/LLC/BV-07-C [State Machine Behavior – Occupancy On and Timeout]

- Test Purpose

  This test procedure verifies that the IUT supporting the Light LC Server Model updates its state machine in response to Light LC Light OnOff messages.

- Reference

  [4] 6.2.3, 6.3.6, 6.5.3

- Initial Condition

  - The Light LC state machine is in Off state.
  - The Light LC state machine is configured such that when it reaches the Fade On state and no other messages are receives, the total time to return to the Standby state is smaller than 5 seconds.
  - If the IUT supports the Generic Default Transition Time state, its value is set to 0.

- Test Procedure

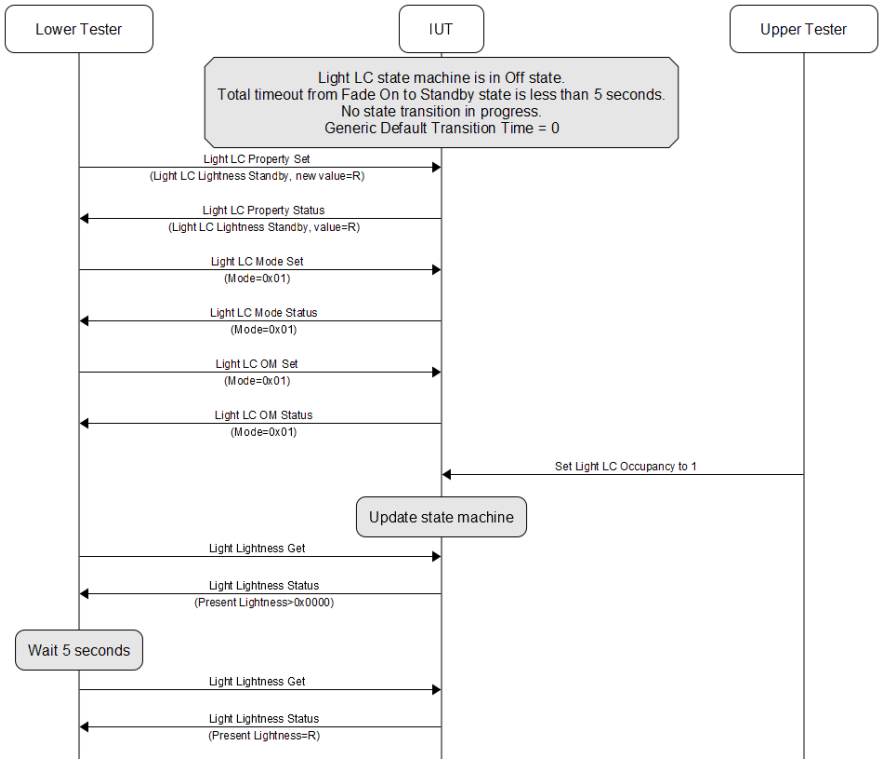

Figure 4.29: MMDL/SR/LLC/BV-07-C [State Machine Behavior – Occupancy On and Timeout]

1. The Lower Tester sends a Light LC Property Set message to the IUT, setting the Light LC Lightness Standby state to a random, non-zero value in the interval [15946, 65535].
2. The Lower Tester expects the IUT to respond with a Light LC Property Status message, confirming the change in the Light LC Lightness Standby state.
3. The Lower Tester sends a Light LC Mode Set message with the Mode field set to 0x01.
4. The Lower Tester expects the IUT to respond with a Light LC Mode Status message with the Mode field set to 0x01.
5. The Lower Tester sends a Light LC OM Set message with the Mode field set to 0x01.
6. The Lower Tester expects the IUT to respond with a Light LC OM Status message with the Mode field set to 0x01.
7. The Upper Tester orders the IUT to change its Light LC Occupancy state to 1, simulating that occupancy has been reported by occupancy sensors.
8. The Lower Tester sends a Light Lightness Get message to the IUT.
9. The Lower Tester expects the IUT to respond with a Light Lightness Status message with the Present Lightness field set to a value greater than 0x0000 and no optional fields.
10. After at least 5 seconds, the Lower Tester sends a Light Lightness Get message to the IUT.
11. The Lower Tester expects the IUT to respond with a Light Lightness Status message with the Present Lightness field set to the value generated in step 1 and no optional fields.

- Expected Outcome

  Pass verdict

  In step 2, the IUT sends a Light LC Property Status message to the Lower Tester, indicating that the new value of the Light LC Lightness Standby state has been accepted.

  In step 4, the IUT sends a Light LC Mode Status message to the Lower Tester with the Mode field set to 0x01.

In step 6, the IUT sends a Light LC OM Status message to the Lower Tester with the Mode field set to 0x01.

In step 9, the IUT sends a Light Lightness Status message to the Lower Tester with the Present Lightness field set to a value greater than 0x0000 and no optional fields.

In step 11, the IUT sends a Light Lightness Status message to the Lower Tester with the Present Lightness field set to the value received in step 1 (with +/-1 accuracy) and no optional fields.

MMDL/SR/LLC/BV-08-C [Light LC Light OnOff State Binding with Generic OnOff]

- Reference

  [4] 6.2.3, 6.3.5, 6.5.1

  Execute the common test case using the values from 4.2.2.1.18 Light LC Light OnOff and Generic OnOff State Binding.

MMDL/SR/LLC/BV-09-C [Light LC Occupancy Mode State Scene Store/Recall Behavior]

- Reference

  [4] 6.2.3, 6.3.5.2, 6.5.1, 5.3.3, 5.3.4

  Execute the common test case using the values from 4.2.6.9 Light LC Occupancy Mode State Scene Store/Recall.

MMDL/SR/LLC/BV-10-C [Light LC Light OnOff State Scene Store/Recall Behavior]

- Test Purpose

  This test procedure verifies that the IUT supporting the Light LC Server Model stores and recalls the correct values for the Light LC Light OnOff state.

- Reference

  [4] 6.5.1.3, 5.3.3, 5.3.4

- Initial Condition

  - The Light LC Property states are set such that the Light LC state machine on the IUT can easily be moved into any state where it stays long enough to process Scene Store messages.

- Test Procedure

  Execute steps 1–6 for each row in Table 4.370.

  1. The Lower Tester sets the Light LC Mode state on the IUT to the value specified in Table 4.370, “Mode” column, for this round.
  2. The Lower Tester moves the IUT into the state specified in Table 4.370, “State” column, for this round.
  3. While the IUT is in the state from the previous step, the Lower Tester sends a Scene Store message to the IUT with a new Scene Number and expects a Scene Register Status message in response, confirming that the new scene has been stored.
  4. If the Light LC Mode state value is 0x00, the Lower Tester changes it to 0x01; otherwise, the Lower Tester moves the IUT into a different state than the one in step 2.

5. The Lower Tester sends a Scene Recall message with the same Scene Number as in step 2 and expects a Scene Status message in response, confirming that the new scene has been restored.
6. The Lower Tester sends a Light LC Light OnOff Get message to the IUT and expects a Light LC Light OnOff Status message in response, with the Present Light OnOff field set to the value specified in Table 4.370, “Value” column, for this round.

Round	Mode	State	Value
1	0x01	Standby	0x00
2	0x01	Fade On	0x01
3	0x01	Run	0x01
4	0x01	Fade	0x01
5	0x01	Prolong	0x01
6	0x01	Fade Standby Auto	0x00
7	0x01	Fade Standby Manual	0x00
8	0x00	Off	0x00

Table 4.370: Values for Light LC Light OnOff Scene Store/Recall Operations

- Expected Outcome

  Pass verdict

  The restored value for the Light LC Light OnOff state matches the expected value based on the state of the Light LC state machine when the scene was stored.

MMDL/SR/LLC/BV-11-C [Light LC Server Power-Up Behavior]

- Test Purpose

  This test procedure verifies that the IUT supporting the Light LC Server Model correctly executes the power up behavior based on the value of the OnPowerUp and Light LC Mode states.

- Reference

  [4] 6.5.1.2, 3.3.5

- Initial Condition

  - The Light LC Mode state on the IUT is set to 0x00.
  - The Default Transition Time state on the IUT is set to 0x00.
  - The following Light LC Property states are set to 300 ms: Light LC Time Fade On, Light LC Time Run On, Light LC Time Fade, Light LC Time Prolong, Light LC Time Standby Auto, Light LC Time Standby Manual.

- Test Procedure

  Execute steps 1–7 for each row in Table 4.371. Bring the IUT back to the Initial Condition after each round has been executed.

  1. The Lower Tester sends a Generic OnPowerUp Set message with the OnPowerUp field set to the value indicated in the “OnPowerUp” column of Table 4.371 for this round, and the IUT responds with a Generic OnPowerUp Status message with the OnPowerUp field set to the same value.
  2. The Lower Tester sends a Light LC Property Set message with the Light LC Property ID field identifying the property specified in the “Property” column of Table 4.371 for this round, and the

Light LC Property Value field set to 20 seconds (correctly encoded as described in the property definition), and the IUT responds with a Light LC Property Status message with the same field values. If multiple properties are specified, repeat this step for each property.

3. The Lower Tester sends a Light LC Mode Set message with the Mode field set to the value indicated in the “Last Mode” column of Table 4.371 for this round, and the IUT responds with a Light LC Mode Status message with the Mode field set to the same value.
4. If the value indicated in the “Light ON” column of Table 4.371 for this round, is “Yes”, then the Lower Tester sends a Light LC Light OnOff Set message with the Light OnOff field set to 0x01, the TID set to a new value, and the Transition Time and Delay fields omitted, and the IUT responds with a Light LC Light OnOff Status message with the Target Light OnOff set to 0x01 and Remaining Time set to a valid value.
5. The Lower Tester sends a Light LC OM Set message with the Mode field set to a random valid value, and the IUT responds with a Light LC OM Status message with the Mode field set to the same value.
6. The Lower Tester follows the instruction listed in the “Action” column of Table 4.371 for this round, in order to bring the IUT into the desired state (specified in parenthesis).
7. The IUT is reset.
8. After the IUT has completed its power-up procedure, the Lower Tester sends a Light LC Mode Get message and the IUT responds with a Light LC Mode Status message with the Mode field set to the value specified in the “New Mode” column of Table 4.371 for this round.
9. The Lower Tester sends a Light LC OM Get message and the IUT responds with a Light LC OM Status message with the Mode field set to the same value set in step 5 for this round.
10. The Lower Tester sends a Light LC Light OnOff Get message and the IUT responds with a Light LC Light OnOff Status message with the Light OnOff field set to the value specified in the “Light LC Light OnOff” column of Table 4.371 for this round.
11. If the value indicated in the “OnPowerUp” column of Table 4.371 for this round, is 0x02, and the value indicated in the “Light LC Light OnOff” column for this round is 0x01, then the Lower Tester waits for 25 seconds, then sends another Light LC Light OnOff Get message, and the IUT responds with a Light LC Light OnOff Status message with the Light OnOff field set to 0x00.

Round	On Power Up	Property	Last Mode	Light ON	Action	New Mode	Light LC Light OnOff
1	0x00	<skip>	0x01	<skip>	<skip> (Standby)	0x00	0x00
2	0x01	<skip>	0x01	<skip>	<skip> (Standby)	0x00	0x00
3	0x02	<skip>	0x01	<skip>	<skip> (Standby)	0x01	0x00
4	0x02	Light LC Time Fade On	0x01	Yes	<skip> (Fade On)	0x01	0x01
5	0x02	Light LC Time Run On	0x01	Yes	Wait for 1.5 seconds (Run)	0x01	0x01
6	0x02	Light LC Time Fade	0x01	Yes	Wait for 1.5 seconds (Fade)	0x01	0x01

Round	On Power Up	Property	Last Mode	Light ON	Action	New Mode	Light LC Light OnOff
7	0x02	Light LC Time Prolong	0x01	Yes	Wait for 1.5 seconds (Prolong)	0x01	0x01
8	0x02	Light LC Time Standby Auto	0x01	Yes	Wait for 1.5 seconds (Fade Standby Auto)	0x01	0x00
9	0x02	Light LC Time Run On, Light LC Time Standby Manual	0x01	Yes	Send Light LC Light OnOff Set [Light OnOff = 0x00, TID = new value, other fields omitted] and IUT responds with Light LC Light OnOff Status [Present Light OnOff = 0x01, Target Light OnOff = 0x00, Remaining Time = valid value]. (Fade Standby Manual)	0x01	0x00
10	0x02	<skip>	0x00	<skip>	<skip> (Off)	0x00	0x00

Table 4.371: Values for Light LC Server Power-Up Operations

- Expected Outcome

  Pass verdict

  The restored values for the Light LC states match the expected values for each round.

MMDL/SR/LLC/BV-12-C [Update Occupancy on Sensor Status]

- Test Purpose

  Verify that the IUT supporting the Light LC Server Model correctly updates the Light LC Occupancy state value when receiving a Sensor Status message.

- Reference

  [4] 6.5.1.7.1

- Initial Condition

  - The Light LC Mode and Light LC Occupancy Mode states on the IUT are set to 0x01.
  - The Light LC Time Occupancy Delay state is set to 10 seconds.
  - The Light LC Time Fade On state is set to 3 seconds.
  - The Light LC Time Run On state is set to 10 seconds.
  - The Light LC Lightness Standby state is set to a random value.
  - The Light LC Lightness On state is set to a random value greater than the Light LC Lightness Standby state.
  - The Light LC Occupancy state on the IUT is 0b0.

- The Light LC Time Prolong state is set to 0 ms.
- The Light LC Time Fade state is set to 0 ms.
- The Light LC Time Fade Standby Auto state is set to 0 ms.

- Test Procedure

  Execute steps 1–5 for each row in Table 4.372.

Round	Property	Value	Lightness
1	Motion Sensed	Greater than 0	Light LC Lightness On
2	People Count	Greater than 0	Light LC Lightness On
3	Presence Detected	Greater than 0	Light LC Lightness On
4	Time Since Motion Sensed	1 second	Light LC Lightness On
5	Motion Sensed	0	Light LC Lightness Standby
6	People Count	0	Light LC Lightness Standby
7	Presence Detected	0	Light LC Lightness Standby
8	Time Since Motion Sensed	11 seconds	Light LC Lightness Standby

Table 4.372: Rounds for MESH/SR/LLC/BV-12-C [Update Occupancy on Sensor Status]

1. The Lower Tester sends a Sensor Status message to the IUT with the Marshalled Sensor Data field containing the Sensor Property ID and Sensor Raw Value described in the “Property” and “Value” columns of Table 4.372, respectively.
2. After 5 seconds have passed since sending the Sensor Status, the Lower Tester sends a Light Lightness Get message to the IUT.
3. The IUT responds with a Light Lightness Status message with the Present Lightness field set to the value of the Light LC Lightness Standby state and no optional fields.
4. After 15 seconds have passed since sending the Sensor Status, the Lower Tester sends another Light Lightness Get message to the IUT.
5. The IUT responds with a Light Lightness Status message with the Present Lightness field set to the value equal to the state described in “Lightness” column of Table 4.372, and no optional fields.

- Expected Outcome

  Pass verdict

  The IUT changes the value of the Light LC Occupancy state only when the applicable condition is met, and only after the configured delay.

MMDL/SR/LLC/BV-13-C [Light LC Light PI regulator]

- Test Purpose

  Verify that the IUT supporting the Light LC Server Model implements Light PI regulator.

- Reference

  [4] 6.2.6, 6.4.1.3

- Initial Condition
  - The following states on the IUT are set to specified values:
    - The Light Lightness Range state on the IUT has been set to the values denoted as RANGE_MIN and RANGE_MAX obtained from the corresponding metadata values for Light Lightness Server. If metadata is not available, the tester can read the range state directly to get the ranges. If the range state values are set to Unknown, it could be inferred that there are no range constraints.
    - The Light LC Mode state is 0.
    - The Light Lightness Actual state is set to 0.
    - Set the following state values:

State	Value
Light LC Time Fade On	1000 ms
Light LC Time Run	7000 ms
Light LC Time Fade	1000 ms
Light LC Time Prolong	0 ms
Light LC Time Fade Standby Auto	1000 ms
Light LC Lightness On	0
Light LC Lightness Prolong	0
Light LC Lightness Standby	0
Light LC Ambient Lux Level On	100
Light LC Ambient Lux Level Prolong	50
Light LC Ambient Lux Level Standby	0
Light LC Regulator Kiu	130
Light LC Regulator Kid	80
Light LC Regulator Kpu	130
Light LC Regulator Kpd	80
Light LC Regulator Accuracy	2%

- Test Procedure

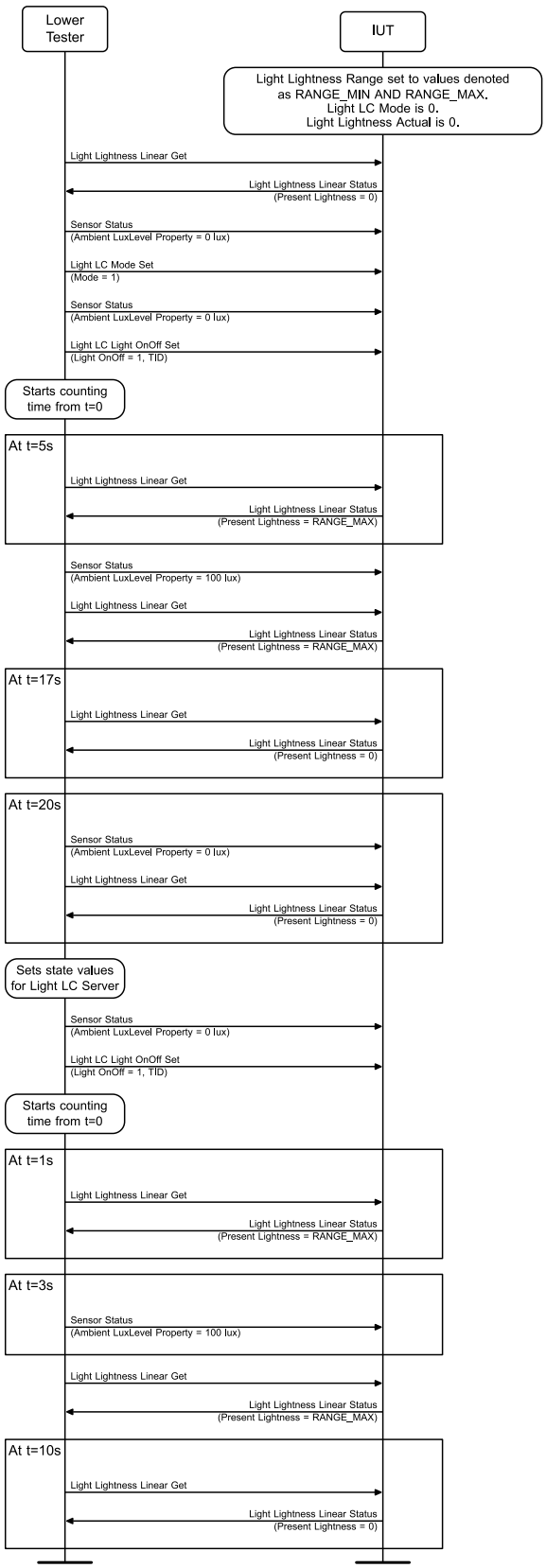

Figure 4.30: MMDL/SR/LLC/BV-13-C [Light LC Light PI regulator]

1. The Lower Tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to 0.
2. The Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 0.
3. The Lower Tester sends a Light LC Mode Set message with the Mode field set to 1.
4. Immediately after step 2, the Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 0 lux.
5. The Lower Tester sends a Light LC Light OnOff Set message with Light OnOff field set to 1, TID field is set to a valid value, and no other optional fields. At this point, the Lower Tester starts counting time from t = 0.
6. At t = 6 seconds, tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to RANGE_MAX.
7. Immediately after step 5, the Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 100 lux.
8. Immediately after step 6, the Lower Tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to RANGE_MAX.
9. At t = 17 seconds, tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to 0.
10. At t = 20 seconds, the Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 0 lux.
11. Immediately after step 9, the Lower Tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to 0.
12. Now, the Lower Tester sets the following state values for the Light LC Server:

State	Value
Light LC Regulator Kiu	1000
Light LC Regulator Kid	1000
Light LC Regulator Kpu	1000
Light LC Regulator Kpd	1000

13. The Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 0 lux.
14. After step 13, the Lower Tester sends a Light LC Light OnOff Set message with the Light OnOff field set to 1, the TID field set to a valid value, and no other optional fields. At this point, the Lower Tester starts counting time from t = 0.
15. At t = 1 second, the tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to RANGE_MAX.
16. At t = 3 seconds, the Lower Tester sends a Sensor Status message with Ambient LuxLevel Property value set to 100 lux.
17. Immediately after step 16, the Lower Tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to RANGE_MAX.
18. At t = 10 seconds, tester sends a Light Lightness Linear Get message and the IUT responds with a Light Lightness Linear Status message with the Present Lightness field set to 0.

- Expected Outcome

  Pass verdict

  The IUT responds with the expected field values.

4.12.2 Light LC Setup Server

MMDL/SR/LLCS/BV-01-C [Light LC Property State Get/Set/Status]

- Reference

  [4] 6.2.3, 6.3.6, 6.5.3

  For three randomly selected Light LC Properties defined in [4] Section 6.2.4, execute the common test case using the values from 4.2.1.77 Light LC Property State Get/Set/Status.

MMDL/SR/LLCS/BV-02-C [Light LC Property State Scene Store/Recall Behavior]

- Reference

  [4] 6.2.3, 6.3.6, 6.5.3, 5.3.3, 5.3.4

  For three randomly selected Light LC Properties defined in [4] Section 6.2.4, execute the common test case using the values from 4.2.6.8 Light LC Property State Scene Store/Recall.

MMDL/SR/LLCS/BI-01-C [Light LC Property State Invalid Parameter Behavior]

- Reference

  [4] 6.2.3, 6.3.6, 6.5.3

  Execute the common test case using the values from 4.2.4.24 Light LC Property State Get/Set/Status Invalid Parameters.

4.13 Lighting Client Models

4.13.1 Light Lightness Client

MMDL/CL/LLN/BV-01-C [Light Lightness Actual State Get/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.1, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.1.36 Light Lightness Actual State Get/Status.

MMDL/CL/LLN/BV-02-C [Light Lightness Actual State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.2, 6.3.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.2.34 Light Lightness Actual State Set/Status – Default Transition.

MMDL/CL/LLN/BV-03-C [Light Lightness Actual State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.2, 6.3.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.2.35 Light Lightness Actual State Set/Status – Immediate Transition.

MMDL/CL/LLN/BV-04-C [Light Lightness Actual State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.2, 6.3.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.2.36 Light Lightness Actual State Set/Status – Custom Transition.

MMDL/CL/LLN/BV-05-C [Light Lightness Actual State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.3.30 Light Lightness Actual State Set Unacknowledged – Default Transition.

MMDL/CL/LLN/BV-06-C [Light Lightness Actual State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.3.31 Light Lightness Actual State Set Unacknowledged – Immediate Transition.

MMDL/CL/LLN/BV-07-C [Light Lightness Actual State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.2, 6.3.1.4, 6.6.1

  Execute the common test case using the values from 4.3.3.32 Light Lightness Actual State Set Unacknowledged – Custom Transition.

MMDL/CL/LLN/BV-08-C [Light Lightness Linear State Get/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.5, 6.3.1.8, 6.6.1

  Execute the common test case using the values from 4.3.1.37 Light Lightness Linear State Get/Status.

MMDL/CL/LLN/BV-09-C [Light Lightness Linear State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.2, 6.3.1.6, 6.3.1.8, 6.6.1

  Execute the common test case using the values from 4.3.2.37 Light Lightness Linear State Set/Status – Default Transition.

MMDL/CL/LLN/BV-10-C [Light Lightness Linear State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.2, 6.3.1.6, 6.3.1.8, 6.6.1

  Execute the common test case using the values from 4.3.2.38 Light Lightness Linear State Set/Status – Immediate Transition.

MMDL/CL/LLN/BV-11-C [Light Lightness Linear State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.2, 6.3.1.6, 6.3.1.8, 6.6.1

  Execute the common test case using the values from 4.3.2.39 Light Lightness Linear State Set/Status – Custom Transition.

MMDL/CL/LLN/BV-12-C [Light Lightness Linear State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.2, 6.3.1.7, 6.6.1

  Execute the common test case using the values from 4.3.3.33 Light Lightness Linear State Set Unacknowledged – Default Transition.

MMDL/CL/LLN/BV-13-C [Light Lightness Linear State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.2, 6.3.1.7, 6.6.1

  Execute the common test case using the values from 4.3.3.34 Light Lightness Linear State Set Unacknowledged – Immediate Transition.

MMDL/CL/LLN/BV-14-C [Light Lightness Linear State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.2, 6.3.1.7, 6.6.1

  Execute the common test case using the values from 4.3.3.35 Light Lightness Linear State Set Unacknowledged – Custom Transition.

MMDL/CL/LLN/BV-15-C [Light Lightness Last State Get/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.9, 6.3.1.10, 6.6.1

  Execute the common test case using the values from 4.3.1.38 Light Lightness Last State Get/Status.

MMDL/CL/LLN/BV-16-C [Light Lightness Default State Get/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.11, 6.3.1.14, 6.6.1

  Execute the common test case using the values from 4.3.1.39 Light Lightness Default State Get/Status.

MMDL/CL/LLN/BV-17-C [Light Lightness Default State Set/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.12, 6.3.1.14, 6.6.1

  Execute the common test case using the values from 4.3.2.40 Light Lightness Default State Set/Status.

MMDL/CL/LLN/BV-18-C [Light Lightness Default State Set Unacknowledged Procedure]

- Reference

  [4] 6.1.2, 6.3.1.13, 6.6.1

  Execute the common test case using the values from 4.3.3.36 Light Lightness Default State Set .

MMDL/CL/LLN/BV-19-C [Light Lightness Range State Get/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.15, 6.3.1.18, 6.6.1

  Execute the common test case using the values from 4.3.1.40 Light Lightness Range State Get/Status.

MMDL/CL/LLN/BV-20-C [Light Lightness Range State Set/Status Procedure]

- Reference

  [4] 6.1.2, 6.3.1.16, 6.3.1.18, 6.6.1

  Execute the common test case using the values from 4.3.2.41 Light Lightness Range State Set/Status.

MMDL/CL/LLN/BV-21-C [Light Lightness Range State Set Unacknowledged Procedure]

- Reference

  [4] 6.1.2, 6.3.1.17, 6.6.1

  Execute the common test case using the values from 4.3.3.37 Light Lightness Range State Set Unacknowledged.

4.13.2 Light CTL Client

MMDL/CL/LCTL/BV-01-C [Light CTL States Get/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.1, 6.3.2.4, 6.6.2

  Execute the common test case using the values from 4.3.1.41 Light CTL States Get/Status.

MMDL/CL/LCTL/BV-02-C [Light CTL States Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.3, 6.3.2.2, 6.3.2.4, 6.6.2

  Execute the common test case using the values from 4.3.2.42 Light CTL States Set/Status – Default Transition.

MMDL/CL/LCTL/BV-03-C [Light CTL States Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.3, 6.3.2.2, 6.3.2.4, 6.6.2

  Execute the common test case using the values from 4.3.2.43 Light CTL States Set/Status – Immediate Transition.

MMDL/CL/LCTL/BV-04-C [Light CTL States Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.3, 6.3.2.2, 6.3.2.4, 6.6.2

  Execute the common test case using the values from 4.3.2.44 Light CTL States Set/Status – Custom Transition.

MMDL/CL/LCTL/BV-05-C [Light CTL States Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.3, 6.3.2.3, 6.6.2

  Execute the common test case using the values from 4.3.3.38 Light CTL States Set Unacknowledged – Default Transition.

MMDL/CL/LCTL/BV-06-C [Light CTL States Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.3, 6.3.2.3, 6.6.2

  Execute the common test case using the values from 4.3.3.39 Light CTL States Set Unacknowledged – Immediate Transition.

MMDL/CL/LCTL/BV-07-C [Light CTL States Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.3, 6.3.2.3, 6.6.2

  Execute the common test case using the values from 4.3.3.40 Light CTL States Set Unacknowledged – Custom Transition.

MMDL/CL/LCTL/BV-08-C [Light CTL Temperature State Get/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.5, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.1.42 Light CTL Temperature State Get/Status.

MMDL/CL/LCTL/BV-09-C [Light CTL Temperature State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.3, 6.3.2.6, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.2.45 Light CTL Temperature State Set/Status – Default Transition.

MMDL/CL/LCTL/BV-10-C [Light CTL Temperature State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.3, 6.3.2.6, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.2.46 Light CTL Temperature State Set/Status – Immediate Transition.

MMDL/CL/LCTL/BV-11-C [Light CTL Temperature State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.3, 6.3.2.6, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.2.47 Light CTL Temperature State Set/Status – Custom Transition.

MMDL/CL/LCTL/BV-12-C [Light CTL Temperature State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.3, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.3.41 Light CTL Temperature State Set Unacknowledged – Default Transition.

MMDL/CL/LCTL/BV-13-C [Light CTL Temperature State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.3, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.3.42 Light CTL Temperature State Set Unacknowledged – Immediate Transition.

MMDL/CL/LCTL/BV-14-C [Light CTL Temperature State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.3, 6.3.2.8, 6.6.2

  Execute the common test case using the values from 4.3.3.43 Light CTL Temperature State Set Unacknowledged – Custom Transition.

MMDL/CL/LCTL/BV-15-C [Light CTL Default States Get/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.13, 6.3.2.16, 6.6.2

  Execute the common test case using the values from 4.3.1.44 Light CTL Default States Get/Status.

MMDL/CL/LCTL/BV-16-C [Light CTL Default States Set/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.14, 6.3.2.16, 6.6.2

  Execute the common test case using the values from 4.3.2.49 Light CTL Default States Set/Status.

MMDL/CL/LCTL/BV-17-C [Light CTL Default States Set Unacknowledged Procedure]

- Reference

  [4] 6.1.3, 6.3.2.15, 6.6.2

  Execute the common test case using the values from 4.3.3.45 Light CTL Default States Set .

MMDL/CL/LCTL/BV-18-C [Light CTL Temperature Range State Get/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.9, 6.3.2.12, 6.6.2

  Execute the common test case using the values from 4.3.1.43 Light CTL Temperature Range State Get/Status.

MMDL/CL/LCTL/BV-19-C [Light CTL Temperature Range State Set/Status Procedure]

- Reference

  [4] 6.1.3, 6.3.2.10, 6.3.2.12, 6.6.2

  Execute the common test case using the values from 4.3.2.48 Light CTL Temperature Range State Set/Status.

MMDL/CL/LCTL/BV-20-C [Light CTL Temperature Range State Set Unacknowledged Procedure]

- Reference

  [4] 6.1.3, 6.3.2.11, 6.6.2

  Execute the common test case using the values from 4.3.3.44 Light CTL Temperature Range State Set Unacknowledged.

4.13.3 Light HSL Client

MMDL/CL/LHSL/BV-01-C [Light HSL States Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.1, 6.3.3.4, 6.6.3

  Execute the common test case using the values from 4.3.1.45 Light HSL States Get/Status.

MMDL/CL/LHSL/BV-02-C [Light HSL States Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.2, 6.3.3.4, 6.6.3

  Execute the common test case using the values from 4.3.2.50 Light HSL States Set/Status – Default Transition.

MMDL/CL/LHSL/BV-03-C [Light HSL States Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.2, 6.3.3.4, 6.6.3

  Execute the common test case using the values from 4.3.2.51 Light HSL States Set/Status – Immediate Transition.

MMDL/CL/LHSL/BV-04-C [Light HSL States Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.2, 6.3.3.4, 6.6.3

  Execute the common test case using the values from 4.3.2.52 Light HSL States Set/Status – Custom Transition.

MMDL/CL/LHSL/BV-05-C [Light HSL States Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.3, 6.6.3

  Execute the common test case using the values from 4.3.3.46 Light HSL States Set Unacknowledged – Default Transition.

MMDL/CL/LHSL/BV-06-C [Light HSL States Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.3, 6.6.3

  Execute the common test case using the values from 4.3.3.47 Light HSL States Set Unacknowledged – Immediate Transition.

MMDL/CL/LHSL/BV-07-C [Light HSL States Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.3, 6.6.3

  Execute the common test case using the values from 4.3.3.48 Light HSL States Set Unacknowledged – Custom Transition.

MMDL/CL/LHSL/BV-08-C [Light HSL Target States Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.5, 6.3.3.6, 6.6.3

  Execute the common test case using the values from 4.3.1.46 Light HSL Target States Get/Status.

MMDL/CL/LHSL/BV-09-C [Light HSL Default States Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.15, 6.3.3.18, 6.6.3

  Execute the common test case using the values from 4.3.1.49 Light HSL Default States Get/Status.

MMDL/CL/LHSL/BV-10-C [Light HSL Default States Set/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.16, 6.3.3.18, 6.6.3

  Execute the common test case using the values from 4.3.2.59 Light HSL Default States Set/Status.

MMDL/CL/LHSL/BV-11-C [Light HSL Default States Set Unacknowledged Procedure]

- Reference

  [4] 6.1.4, 6.3.3.17, 6.6.3

  Execute the common test case using the values from 4.3.3.55 Light HSL Default States Set Unacknowledged.

MMDL/CL/LHSL/BV-12-C [Light HSL Range States Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.19, 6.3.3.22, 6.6.3

  Execute the common test case using the values from 4.3.1.50 Light HSL Range States Get/Status.

MMDL/CL/LHSL/BV-13-C [Light HSL Range State Set/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.20, 6.3.3.22, 6.6.3

  Execute the common test case using the values from 4.3.2.60 Light HSL Range State Set/Status.

MMDL/CL/LHSL/BV-14-C [Light HSL Range States Set Unacknowledged Procedure]

- Reference

  [4] 6.1.4, 6.3.3.21, 6.6.3

  Execute the common test case using the values from 4.3.3.56 Light HSL Range States Set Unacknowledged.

MMDL/CL/LHSL/BV-15-C [Light HSL Hue State Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.7, 6.3.3.10, 6.6.3

  Execute the common test case using the values from 4.3.1.47 Light HSL Hue State Get/Status.

MMDL/CL/LHSL/BV-16-C [Light HSL Hue State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.8, 6.3.3.10, 6.6.3

  Execute the common test case using the values from 4.3.2.53 Light HSL Hue States Set/Status – Default Transition.

MMDL/CL/LHSL/BV-17-C [Light HSL Hue State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.8, 6.3.3.10, 6.6.3

  Execute the common test case using the values from 4.3.2.54 Light HSL Hue States Set/Status – Immediate Transition.

MMDL/CL/LHSL/BV-18-C [Light HSL Hue State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.8, 6.3.3.10, 6.6.3

  Execute the common test case using the values from 4.3.2.55 Light HSL Hue States Set/Status – Custom Transition.

MMDL/CL/LHSL/BV-19-C [Light HSL Hue State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.9, 6.6.3

  Execute the common test case using the values from 4.3.3.49 Light HSL Hue State Set Unacknowledged – Default Transition.

MMDL/CL/LHSL/BV-20-C [Light HSL Hue State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.9, 6.6.3

  Execute the common test case using the values from 4.3.3.50 Light HSL Hue State Set Unacknowledged – Immediate Transition.

MMDL/CL/LHSL/BV-21-C [Light HSL Hue State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.9, 6.6.3

  Execute the common test case using the values from 4.3.3.51 Light HSL Hue State Set Unacknowledged – Custom Transition.

MMDL/CL/LHSL/BV-22-C [Light HSL Saturation State Get/Status Procedure]

- Reference

  [4] 6.1.4, 6.3.3.11, 6.3.3.14, 6.6.3

  Execute the common test case using the values from 4.3.1.48 Light HSL Saturation State Get/Status.

MMDL/CL/LHSL/BV-23-C [Light HSL Saturation State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.12, 6.3.3.14, 6.6.3

  Execute the common test case using the values from 4.3.2.56 Light HSL Saturation State Set/Status – Default Transition.

MMDL/CL/LHSL/BV-24-C [Light HSL Saturation State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.12, 6.3.3.14, 6.6.3

  Execute the common test case using the values from 4.3.2.57 Light HSL Saturation State Set/Status – Immediate Transition.

MMDL/CL/LHSL/BV-25-C [Light HSL Saturation State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.12, 6.3.3.14, 6.6.3

  Execute the common test case using the values from 4.3.2.58 Light HSL Saturation State Set/Status – Custom Transition.

MMDL/CL/LHSL/BV-26-C [Light HSL Saturation State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.4, 6.3.3.13, 6.6.3

  Execute the common test case using the values from 4.3.3.52 Light HSL Saturation State Set Unacknowledged – Default Transition.

MMDL/CL/LHSL/BV-27-C [Light HSL Saturation State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.4, 6.3.3.13, 6.6.3

  Execute the common test case using the values from 4.3.3.53 Light HSL Saturation State Set Unacknowledged – Immediate Transition.

MMDL/CL/LHSL/BV-28-C [Light HSL Saturation State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.4, 6.3.3.13, 6.6.3

  Execute the common test case using the values from 4.3.3.54 Light HSL Saturation State Set Unacknowledged – Custom Transition.

4.13.4 Light xyL Client

MMDL/CL/LXYL/BV-01-C [Light xyL States Get/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.1, 6.3.4.4, 6.6.4

  Execute the common test case using the values from 4.3.1.51 Light xyL States Get/Status.

MMDL/CL/LXYL/BV-02-C [Light xyL States Set/Status Procedure – Default Transition]

- Reference

  [4] 6.1.5, 6.3.4.2, 6.3.4.4, 6.6.4

  Execute the common test case using the values from 4.3.2.61 Light xyL States Set/Status – Default Transition.

MMDL/CL/LXYL/BV-03-C [Light xyL States Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.1.5, 6.3.4.2, 6.3.4.4, 6.6.4

  Execute the common test case using the values from 4.3.2.62 Light xyL States Set/Status – Immediate Transition.

MMDL/CL/LXYL/BV-04-C [Light xyL States Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.1.5, 6.3.4.2, 6.3.4.4, 6.6.4

  Execute the common test case using the values from 4.3.2.63 Light xyL States Set/Status – Custom Transition.

MMDL/CL/LXYL/BV-05-C [Light xyL States Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.1.5, 6.3.4.3, 6.6.4

  Execute the common test case using the values from 4.3.3.57 Light xyL States Set Unacknowledged – Default Transition.

MMDL/CL/LXYL/BV-06-C [Light xyL States Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.1.5, 6.3.4.3, 6.6.4

  Execute the common test case using the values from 4.3.3.58 Light xyL States Set Unacknowledged – Immediate Transition.

MMDL/CL/LXYL/BV-07-C [Light xyL States Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.1.5, 6.3.4.3, 6.6.4

  Execute the common test case using the values from 4.3.3.59 Light xyL States Set Unacknowledged – Custom Transition.

MMDL/CL/LXYL/BV-08-C [Light xyL Target States Get/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.7, 6.3.4.10, 6.6.4

  Execute the common test case using the values from 4.3.1.52 ResumLight xyL Target States Get/Status.

MMDL/CL/LXYL/BV-09-C [Light xyL Default States Get/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.7, 6.3.4.10, 6.6.4

  Execute the common test case using the values from 4.3.1.53 Light xyL Default States Get/Status.

MMDL/CL/LXYL/BV-10-C [Light xyL Default States Set/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.8, 6.3.4.10, 6.6.4

  Execute the common test case using the values from 4.3.2.64 Light xyL Default States Set/Status.

MMDL/CL/LXYL/BV-11-C [Light xyL Default States Set Unacknowledged Procedure]

- Reference

  [4] 6.1.5, 6.3.4.9, 6.6.4

  Execute the common test case using the values from 4.3.3.60 Light xyL Default States Set Unacknowledged.

MMDL/CL/LXYL/BV-12-C [Light xyL Range State Get/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.11, 6.3.4.14, 6.6.4

  Execute the common test case using the values from 4.3.1.54 Light xyL Range States Get/Status.

MMDL/CL/LXYL/BV-13-C [Light xyL Range States Set/Status Procedure]

- Reference

  [4] 6.1.5, 6.3.4.12, 6.3.4.14, 6.6.4

  Execute the common test case using the values from 4.3.2.65 Light xyL Range States Set/Status.

MMDL/CL/LXYL/BV-14-C [Light xyL Range States Set Unacknowledged Procedure]

- Reference

  [4] 6.1.5, 6.3.4.13, 6.6.4

  Execute the common test case using the values from 4.3.3.61 Light xyL Range States Set Unacknowledged.

4.13.5 Light LC Client

MMDL/CL/LLC/BV-01-C [Light LC Mode State Get/Status Procedure]

- Reference

  [4] 6.2.3.1, 6.3.5.1.1, 6.3.5.1.4, 6.6.5

  Execute the common test case using the values from 4.3.1.55 Light LC Mode State Get/Status.

MMDL/CL/LLC/BV-02-C [Light LC Mode State Set/Status Procedure]

- Reference

  [4] 6.2.3.1, 6.3.5.1.2, 6.3.5.1.4, 6.6.5

  Execute the common test case using the values from 4.3.2.66 Light LC Mode State Set/Status.

MMDL/CL/LLC/BV-03-C [Light LC Mode State Set Unacknowledged Procedure]

- Reference

  [4] 6.2.3.1, 6.3.5.1.3, 6.6.5

  Execute the common test case using the values from 4.3.3.62 Light LC Mode State Set Unacknowledged.

MMDL/CL/LLC/BV-04-C [Light LC Occupancy Mode State Get/Status Procedure]

- Reference

  [4] 6.2.3.2, 6.3.5.2.1, 6.3.5.2.4, 6.6.5

  Execute the common test case using the values from 4.3.1.56 Light LC Occupancy Mode State Get/Status.

MMDL/CL/LLC/BV-05-C [Light LC Occupancy Mode State Set/Status Procedure]

- Reference

  [4] 6.2.3.2, 6.3.5.2.2, 6.3.5.2.4, 6.6.5

  Execute the common test case using the values from 4.3.2.67 Light LC Occupancy Mode State Set/Status.

MMDL/CL/LLC/BV-06-C [Light LC Occupancy Mode State Set Unacknowledged Procedure]

- Reference

  [4] 6.2.3.2, 6.3.5.2.3, 6.6.5

  Execute the common test case using the values from 4.3.3.63 Light LC Occupancy Mode State Set Unacknowledged.

MMDL/CL/LLC/BV-07-C [Light LC Light OnOff State Get/Status Procedure]

- Reference

  [4] 6.2.3.3, 6.3.5.3.1, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.1.57 Light LC Light OnOff State Get/Status.

MMDL/CL/LLC/BV-08-C [Light LC Light OnOff State Set/Status Procedure – Default Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.2, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.2.68 Light LC Light OnOff State Set/Status – Default Transition.

MMDL/CL/LLC/BV-09-C [Light LC Light OnOff State Set/Status Procedure – Immediate Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.2, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.2.69 Light LC Light OnOff State Set/Status – Immediate Transition.

MMDL/CL/LLC/BV-10-C [Light LC Light OnOff State Set/Status Procedure – Custom Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.2, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.2.70 Light LC Light OnOff State Set/Status – Custom Transition.

MMDL/CL/LLC/BV-11-C [Light LC Light OnOff State Set Unacknowledged Procedure – Default Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.3.64 Light LC Light OnOff State Set Unacknowledged – Default Transition.

MMDL/CL/LLC/BV-12-C [Light LC Light OnOff State Set Unacknowledged Procedure – Immediate Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.3.65 Light LC Light OnOff State Set Unacknowledged – Immediate Transition.

MMDL/CL/LLC/BV-13-C [Light LC Light OnOff State Set Unacknowledged Procedure – Custom Transition]

- Reference

  [4] 6.2.3.3, 6.3.5.3.4, 6.6.5

  Execute the common test case using the values from 4.3.3.66 Light LC Light OnOff State Set Unacknowledged – Custom Transition.

MMDL/CL/LLC/BV-14-C [Light LC Property State Get/Status Procedure]

- Reference

  [4] 6.2.4, 6.3.6.1, 6.3.6.4, 6.6.5

  Execute the common test case using the values from 4.3.1.58 Light LC Property State Get/Status.

MMDL/CL/LLC/BV-15-C [Light LC Property State Set/Status Procedure]

- Reference

  [4] 6.2.4, 6.3.6.2, 6.3.6.4, 6.6.5

  Execute the common test case using the values from 4.3.2.71 Light LC Property State Set/Status.

MMDL/CL/LLC/BV-16-C [Light LC Property State Set Unacknowledged Procedure]

- Reference

  [4] 6.2.4, 6.3.6.3, 6.6.5

  Execute the common test case using the values from 4.3.3.67 Light LC Property State Set Unacknowledged.

5 Test case mapping

The Test Case Mapping Table (TCMT) maps test cases to specific requirements in the ICS. The IUT is tested in all roles for which support is declared in the ICS document.

The columns for the TCMT are defined as follows:

Item: Contains a logical expression based on specific entries from the associated ICS document. Contains a logical expression (using the operators AND, OR, NOT as needed) based on specific entries from the applicable ICS document(s). The entries are in the form of y/x references, where y corresponds to the table number and x corresponds to the feature number as defined in the ICS document for Mesh Model [5].

Feature: A brief, informal description of the feature being tested.

Test Case(s): The applicable test case identifiers, required for Bluetooth Qualification, if the corresponding y/x references defined in the Item column are supported. Further details about the function of the TCMT are elaborated in [1].

For the purpose and structure of the ICS/IXIT, refer to [1].

Item	Feature	Test Case(s)
MMDL 1a/2	Mesh Model Specification	MMDL/SR-CL/COMP/BV-01-C
MMDL 2/1	Generic OnOff Server Model	MMDL/SR/GOO/BV-01-C MMDL/SR/GOO/BV-02-C MMDL/SR/GOO/BI-01-C
MMDL 2/1 AND MMDL 14/4	Generic OnOff Server Model Scene Setup Server Model	MMDL/SR/GOO/BV-03-C
MMDL 2/2	Generic Level Server Model	MMDL/SR/GLV/BV-01-C MMDL/SR/GLV/BV-02-C MMDL/SR/GLV/BV-03-C MMDL/SR/GLV/BV-04-C MMDL/SR/GLV/BV-05-C MMDL/SR/GLV/BV-06-C
MMDL 2/2 AND MMDL 14/4	Generic Level Server Model Scene Setup Server Model	MMDL/SR/GLV/BV-07-C
MMDL 2/3	Generic Default Transition Time Server Model	MMDL/SR/GDTT/BV-01-C MMDL/SR/GDTT/BI-01-C
MMDL 2/4	Generic Power OnOff Server Model	MMDL/SR/GPOO/BV-01-C MMDL/SR/GPOO/BV-02-C MMDL/SR/GPOO/BV-03-C MMDL/SR/GPOO/BV-04-C
MMDL 2/5	Generic Power OnOff Setup Server Model	MMDL/SR/GPOOS/BV-01-C MMDL/SR/GPOOS/BI-01-C

Item	Feature	Test Case(s)
MMDL 2/6	Generic Power Level Server Model	MMDL/SR/GPL/BV-01-C MMDL/SR/GPL/BV-02-C MMDL/SR/GPL/BV-03-C MMDL/SR/GPL/BV-04-C MMDL/SR/GPL/BV-05-C MMDL/SR/GPL/BV-06-C MMDL/SR/GPL/BV-07-C MMDL/SR/GPL/BV-08-C MMDL/SR/GPL/BV-09-C MMDL/SR/GPL/BV-10-C MMDL/SR/GPL/BV-11-C MMDL/SR/GPL/BV-12-C MMDL/SR/GPL/BV-13-C
MMDL 2/6 AND MMDL 2/5	Generic Power Level Server Model - Generic Power OnOff Setup Server Model	MMDL/SR/GPL/BV-14-C
MMDL 2/6 AND MMDL 14/4	Generic Power Level Server Model - Scene Setup Server Model	MMDL/SR/GPL/BV-15-C
MMDL 2/7	Generic Power Level Setup Server Model	MMDL/SR/GPLS/BV-01-C MMDL/SR/GPLS/BV-02-C MMDL/SR/GPLS/BI-01-C
MMDL 2/8	Generic Battery Server Model	MMDL/SR/GBAT/BV-01-C
MMDL 2/9	Generic Location Server Model	MMDL/SR/GLOC/BV-01-C MMDL/SR/GLOC/BV-02-C
MMDL 2/10	Generic Location Setup Server Model	MMDL/SR/GLOCS/BV-01-C MMDL/SR/GLOCS/BV-02-C
MMDL 2/11	Generic User Property Server Model	MMDL/SR/GUP/BV-01-C MMDL/SR/GUP/BV-02-C MMDL/SR/GUP/BV-03-C MMDL/SR/GUP/BI-01-C
MMDL 2/12	Generic Admin Property Server Model	MMDL/SR/GAP/BV-01-C MMDL/SR/GAP/BV-02-C MMDL/SR/GAP/BV-03-C MMDL/SR/GAP/BV-04-C MMDL/SR/GAP/BI-01-C
MMDL 2/13	Generic Manufacturer Property Server Model	MMDL/SR/GMP/BV-01-C MMDL/SR/GMP/BV-02-C MMDL/SR/GMP/BV-03-C MMDL/SR/GMP/BV-04-C MMDL/SR/GMP/BI-01-C
MMDL 2/14	Generic Client Property Server Model	MMDL/SR/GCP/BV-01-C
MMDL 3/1 AND MMDL 4/1	Generic OnOff Client Model - Generic OnOff Get/Status Procedure	MMDL/CL/GOO/BV-01-C
MMDL 3/1 AND MMDL 4/2	Generic OnOff Client Model - Generic OnOff Set/Status Procedure	MMDL/CL/GOO/BV-02-C MMDL/CL/GOO/BV-03-C MMDL/CL/GOO/BV-04-C

Item	Feature	Test Case(s)
MMDL 3/1 AND MMDL 4/3	Generic OnOff Client Model - Generic OnOff Set Unacknowledged Procedure	MMDL/CL/GOO/BV-05-C MMDL/CL/GOO/BV-06-C MMDL/CL/GOO/BV-07-C
MMDL 3/2 AND MMDL 5/1	Generic Level Client Model - Generic Level Get/Status Procedure	MMDL/CL/GLV/BV-01-C
MMDL 3/2 AND MMDL 5/2	Generic Level Client Model - Generic Level Set/Status Procedure	MMDL/CL/GLV/BV-02-C MMDL/CL/GLV/BV-03-C MMDL/CL/GLV/BV-04-C
MMDL 3/2 AND MMDL 5/3	Generic Level Client Model - Generic Level Set Unacknowledged Procedure	MMDL/CL/GLV/BV-05-C MMDL/CL/GLV/BV-06-C MMDL/CL/GLV/BV-07-C
MMDL 3/2 AND MMDL 5/4	Generic Level Client Model - Generic Delta Set/Status Procedure	MMDL/CL/GLV/BV-08-C MMDL/CL/GLV/BV-09-C MMDL/CL/GLV/BV-10-C
MMDL 3/2 AND MMDL 5/5	Generic Level Client Model - Generic Delta Set Unacknowledged Procedure	MMDL/CL/GLV/BV-11-C MMDL/CL/GLV/BV-12-C MMDL/CL/GLV/BV-13-C
MMDL 3/2 AND MMDL 5/6	Generic Level Client Model - Generic Move Set/Status Procedure	MMDL/CL/GLV/BV-14-C
MMDL 3/2 AND MMDL 5/7	Generic Level Client Model - Generic Move Set Unacknowledged Procedure	MMDL/CL/GLV/BV-15-C
MMDL 3/3 AND MMDL 6/1	Generic Default Transition Time Client Model - Generic Default Transition Time Get/Status Procedure	MMDL/CL/GDTT/BV-01-C
MMDL 3/3 AND MMDL 6/2	Generic Default Transition Time Client Model - Generic Default Transition Time Set/Status Procedure	MMDL/CL/GDTT/BV-02-C
MMDL 3/3 AND MMDL 6/3	Generic Default Transition Time Client Model - Generic Default Transition Time Set Unacknowledged Procedure	MMDL/CL/GDTT/BV-03-C
MMDL 3/4 AND MMDL 7/1	Generic Power OnOff Client Model - Generic OnPowerUp Get/Status Procedure	MMDL/CL/GPOO/BV-01-C
MMDL 3/4 AND MMDL 7/2	Generic Power OnOff Client Model - Generic OnPowerUp Set/Status Procedure	MMDL/CL/GPOO/BV-02-C
MMDL 3/4 AND MMDL 7/3	Generic Power OnOff Client Model - Generic OnPowerUp Set Unacknowledged Procedure	MMDL/CL/GPOO/BV-03-C
MMDL 3/5 AND MMDL 8/1	Generic Power Level Client Model - Generic Power Level Get/Status Procedure	MMDL/CL/GPL/BV-01-C
MMDL 3/5 AND MMDL 8/2	Generic Power Level Client Model - Generic Power Level Set/Status Procedure	MMDL/CL/GPL/BV-02-C MMDL/CL/GPL/BV-03-C MMDL/CL/GPL/BV-04-C

Item	Feature	Test Case(s)
MMDL 3/5 AND MMDL 8/3	Generic Power Level Client Model - Generic Power Level Set Unacknowledged Procedure	MMDL/CL/GPL/BV-05-C MMDL/CL/GPL/BV-06-C MMDL/CL/GPL/BV-07-C
MMDL 3/5 AND MMDL 8/4	Generic Power Level Client Model - Generic Power Last Get/Status Procedure	MMDL/CL/GPL/BV-08-C
MMDL 3/5 AND MMDL 8/5	Generic Power Level Client Model - Generic Power Default Get/Status Procedure	MMDL/CL/GPL/BV-09-C
MMDL 3/5 AND MMDL 8/6	Generic Power Level Client Model - Generic Power Default Set/Status Procedure	MMDL/CL/GPL/BV-10-C
MMDL 3/5 AND MMDL 8/7	Generic Power Level Client Model - Generic Power Default Set Unacknowledged Procedure	MMDL/CL/GPL/BV-11-C
MMDL 3/5 AND MMDL 8/8	Generic Power Level Client Model - Generic Power Range Get/Status Procedure	MMDL/CL/GPL/BV-12-C
MMDL 3/5 AND MMDL 8/9	Generic Power Level Client Model - Generic Power Range Set/Status Procedure	MMDL/CL/GPL/BV-13-C
MMDL 3/5 AND MMDL 8/10	Generic Power Level Client Model - Generic Power Range Set Unacknowledged Procedure	MMDL/CL/GPL/BV-14-C
MMDL 3/6	Generic Battery Client Model	MMDL/CL/GBAT/BV-01-C
MMDL 3/7 AND MMDL 9/1	Generic Location Client Model - Generic Location Global Get/Status Procedure	MMDL/CL/GLOC/BV-01-C
MMDL 3/7 AND MMDL 9/2	Generic Location Client Model - Generic Location Global Set/Status Procedure	MMDL/CL/GLOC/BV-02-C
MMDL 3/7 AND MMDL 9/3	Generic Location Client Model - Generic Location Global Set Unacknowledged Procedure	MMDL/CL/GLOC/BV-03-C
MMDL 3/7 AND MMDL 9/4	Generic Location Client Model - Generic Location Local Get/Status Procedure	MMDL/CL/GLOC/BV-04-C
MMDL 3/7 AND MMDL 9/5	Generic Location Client Model - Generic Location Local Set/Status Procedure	MMDL/CL/GLOC/BV-05-C
MMDL 3/7 AND MMDL 9/6	Generic Location Client Model - Generic Location Local Set Unacknowledged Procedure	MMDL/CL/GLOC/BV-06-C
MMDL 3/8 AND MMDL 10/1	Generic Property Client Model - Generic User Properties Get/Status Procedure	MMDL/CL/GPR/BV-01-C
MMDL 3/8 AND MMDL 10/2	Generic Property Client Model - Generic User Property Get/Status Procedure	MMDL/CL/GPR/BV-02-C

Item	Feature	Test Case(s)
MMDL 3/8 AND MMDL 10/3	Generic Property Client Model - Generic User Property Set/Status Procedure	MMDL/CL/GPR/BV-03-C
MMDL 3/8 AND MMDL 10/4	Generic Property Client Model - Generic User Property Set Unacknowledged Procedure	MMDL/CL/GPR/BV-04-C
MMDL 3/8 AND MMDL 10/5	Generic Property Client Model - Generic Admin Properties Get/Status Procedure	MMDL/CL/GPR/BV-05-C
MMDL 3/8 AND MMDL 10/6	Generic Property Client Model - Generic Admin Property Get/Status Procedure	MMDL/CL/GPR/BV-06-C
MMDL 3/8 AND MMDL 10/7	Generic Property Client Model - Generic Admin Property Set/Status Procedure	MMDL/CL/GPR/BV-07-C
MMDL 3/8 AND MMDL 10/8	Generic Property Client Model - Generic Admin Property Set Unacknowledged Procedure	MMDL/CL/GPR/BV-08-C
MMDL 3/8 AND MMDL 10/9	Generic Property Client Model - Generic Manufacturer Properties Get/Status Procedure	MMDL/CL/GPR/BV-09-C
MMDL 3/8 AND MMDL 10/10	Generic Property Client Model - Generic Manufacturer Property Get/Status Procedure	MMDL/CL/GPR/BV-10-C
MMDL 3/8 AND MMDL 10/11	Generic Property Client Model - Generic Manufacturer Property Set/Status Procedure	MMDL/CL/GPR/BV-11-C
MMDL 3/8 AND MMDL 10/12	Generic Property Client Model - Generic Manufacturer Property Set Unacknowledged Procedure	MMDL/CL/GPR/BV-12-C
MMDL 3/8 AND MMDL 10/13	Generic Property Client Model - Generic Client Properties Get/Status Procedure	MMDL/CL/GPR/BV-13-C
MMDL 11/1	Sensor Server Model	MMDL/SR/SNR/BV-01-C MMDL/SR/SNR/BV-02-C MMDL/SR/SNR/BV-03-C MMDL/SR/SNR/BV-04-C MMDL/SR/SNR/BV-05-C MMDL/SR/SNR/BV-06-C MMDL/SR/SNR/BV-07-C MMDL/SR/SNR/BV-08-C MMDL/SR/SNR/BV-09-C MMDL/SR/SNR/BV-10-C MMDL/SR/SNR/BI-01-C MMDL/SR/SNR/BI-02-C MMDL/SR/SNR/BI-03-C MMDL/SR/SNR/BI-04-C

Item	Feature	Test Case(s)
MMDL 11/2	Sensor Setup Server Model	MMDL/SR/SNRS/BV-01-C MMDL/SR/SNRS/BV-02-C MMDL/SR/SNRS/BV-03-C MMDL/SR/SNRS/BV-04-C MMDL/SR/SNRS/BV-05-C MMDL/SR/SNRS/BV-06-C MMDL/SR/SNRS/BV-07-C MMDL/SR/SNRS/BV-08-C MMDL/SR/SNRS/BV-09-C MMDL/SR/SNRS/BI-01-C MMDL/SR/SNRS/BI-02-C MMDL/SR/SNRS/BI-03-C
MMDL 11/2 AND NOT MMDL 0b/1	Sensor Setup Server Model within Mesh Model Specification version 1.1 or later	MMDL/SR/SNRS/BV-10-C
MMDL 12/1 AND MMDL 13/1	Sensor Client Model - Sensor Descriptor Get/Status Procedure	MMDL/CL/SNR/BV-01-C MMDL/CL/SNR/BV-02-C
MMDL 12/1 AND MMDL 13/2	Sensor Client Model - Sensor Cadence Get/Status Procedure	MMDL/CL/SNR/BV-03-C
MMDL 12/1 AND MMDL 13/3	Sensor Client Model - Sensor Cadence Set/Status Procedure	MMDL/CL/SNR/BV-04-C
MMDL 12/1 AND MMDL 13/4	Sensor Client Model - Sensor Cadence Set Unacknowledged Procedure	MMDL/CL/SNR/BV-05-C
MMDL 12/1 AND MMDL 13/5	Sensor Client Model - Sensor Settings Get/Status Procedure	MMDL/CL/SNR/BV-06-C
MMDL 12/1 AND MMDL 13/6	Sensor Client Model - Sensor Setting Get/Status Procedure	MMDL/CL/SNR/BV-07-C
MMDL 12/1 AND MMDL 13/7	Sensor Client Model - Sensor Setting Set/Status Procedure	MMDL/CL/SNR/BV-08-C
MMDL 12/1 AND MMDL 13/8	Sensor Client Model - Sensor Setting Set Unacknowledged Procedure	MMDL/CL/SNR/BV-09-C
MMDL 12/1 AND MMDL 13/9	Sensor Client Model - Sensor Data Get/Status Procedure	MMDL/CL/SNR/BV-10-C MMDL/CL/SNR/BV-11-C
MMDL 12/1 AND MMDL 13/10	Sensor Client Model - Sensor Column Get/Status Procedure	MMDL/CL/SNR/BV-12-C
MMDL 12/1 AND MMDL 13/11	Sensor Client Model - Sensor Series Get/Status Procedure	MMDL/CL/SNR/BV-13-C
MMDL 14/1	Time Server Model	MMDL/SR/TIM/BV-01-C MMDL/SR/TIM/BV-02-C MMDL/SR/TIM/BV-03-C
MMDL 14/2	Time Setup Server Model	MMDL/SR/TIMS/BV-01-C MMDL/SR/TIMS/BV-02-C MMDL/SR/TIMS/BV-03-C MMDL/SR/TIMS/BV-04-C MMDL/SR/TIMS/BI-01-C

Item	Feature	Test Case(s)
MMDL 14/3	Scene Server Model	MMDL/SR/SCE/BV-01-C MMDL/SR/SCE/BV-02-C MMDL/SR/SCE/BV-03-C
MMDL 14/4	Scene Setup Server Model	MMDL/SR/SCES/BV-01-C MMDL/SR/SCES/BV-02-C
MMDL 14/5	Scheduler Server Model	MMDL/SR/SCH/BV-01-C MMDL/SR/SCH/BV-02-C
MMDL 14/6	Scheduler Setup Server Model	MMDL/SR/SCHS/BV-01-C MMDL/SR/SCHS/BI-01-C
MMDL 15/1 AND MMDL 16/1	Time Client Model - Time Get/Status Procedure	MMDL/CL/TIM/BV-01-C
MMDL 15/1 AND MMDL 16/2	Time Client Model - Time Set/Status Procedure	MMDL/CL/TIM/BV-02-C
MMDL 15/1 AND MMDL 16/3	Time Client Model - Time Zone Get/Status Procedure	MMDL/CL/TIM/BV-03-C
MMDL 15/1 AND MMDL 16/4	Time Client Model - Time Zone Set/Status Procedure	MMDL/CL/TIM/BV-04-C
MMDL 15/1 AND MMDL 16/5	Time Client Model - TAI-UTC Delta Get/Status Procedure	MMDL/CL/TIM/BV-05-C
MMDL 15/1 AND MMDL 16/6	Time Client Model - TAI-UTC Delta Set/Status Procedure	MMDL/CL/TIM/BV-06-C
MMDL 15/1 AND MMDL 16/7	Time Client Model - Time Role Get/Status Procedure	MMDL/CL/TIM/BV-07-C
MMDL 15/1 AND MMDL 16/8	Time Client Model - Time Role Set/Status Procedure	MMDL/CL/TIM/BV-08-C
MMDL 15/2 AND MMDL 17/1	Scene Client Model - Scene Get/Status Procedure	MMDL/CL/SCE/BV-01-C
MMDL 15/2 AND MMDL 17/2	Scene Client Model - Scene Register Get/Status Procedure	MMDL/CL/SCE/BV-02-C
MMDL 15/2 AND MMDL 17/3	Scene Client Model - Scene Store/Status Procedure	MMDL/CL/SCE/BV-03-C
MMDL 15/2 AND MMDL 17/4	Scene Client Model - Scene Store Unacknowledged Procedure	MMDL/CL/SCE/BV-04-C
MMDL 15/2 AND MMDL 17/5	Scene Client Model - Scene Recall/Status Procedure	MMDL/CL/SCE/BV-05-C MMDL/CL/SCE/BV-06-C MMDL/CL/SCE/BV-07-C
MMDL 15/2 AND MMDL 17/6	Scene Client Model - Scene Recall Unacknowledged Procedure	MMDL/CL/SCE/BV-08-C MMDL/CL/SCE/BV-09-C MMDL/CL/SCE/BV-10-C
MMDL 15/3 AND MMDL 18/1	Scheduler Client Model - Scheduler Get/Status Procedure	MMDL/CL/SCH/BV-01-C
MMDL 15/3 AND MMDL 18/2	Scheduler Client Model - Scheduler Action Get/Status Procedure	MMDL/CL/SCH/BV-02-C
MMDL 15/3 AND MMDL 18/3	Scheduler Client Model - Scheduler Action Set/Status Procedure	MMDL/CL/SCH/BV-03-C

Item	Feature	Test Case(s)
MMDL 15/3 AND MMDL 18/4	Scheduler Client Model - Scheduler Action Set Unacknowledged Procedure	MMDL/CL/SCH/BV-04-C
MMDL 19/1	Light Lightness Server Model	MMDL/SR/LLN/BV-01-C MMDL/SR/LLN/BV-02-C MMDL/SR/LLN/BV-03-C MMDL/SR/LLN/BV-04-C MMDL/SR/LLN/BV-05-C MMDL/SR/LLN/BV-06-C MMDL/SR/LLN/BV-07-C MMDL/SR/LLN/BV-08-C MMDL/SR/LLN/BV-09-C MMDL/SR/LLN/BV-10-C MMDL/SR/LLN/BV-11-C MMDL/SR/LLN/BV-12-C MMDL/SR/LLN/BV-13-C MMDL/SR/LLN/BV-14-C MMDL/SR/LLN/BV-15-C MMDL/SR/LLN/BV-16-C
MMDL 19/1 AND MMDL 0d/1	Light Lightness Server Model in Version 1.1 or later	MMDL/SR/LLN/BV-20-C
MMDL 19/1 AND MMDL 2/5	Light Lightness Server Model - Generic Power OnOff Setup Server Model	MMDL/SR/LLN/BV-17-C
MMDL 19/1 AND MMDL 14/4	Light Lightness Server Model - Scene Setup Server Model	MMDL/SR/LLN/BV-18-C MMDL/SR/LLN/BV-19-C
MMDL 19/2	Light Lightness Setup Server Model	MMDL/SR/LLNS/BV-01-C MMDL/SR/LLNS/BV-02-C MMDL/SR/LLNS/BI-01-C
MMDL 19/3	Light CTL Server Model	MMDL/SR/LCTL/BV-01-C MMDL/SR/LCTL/BV-02-C MMDL/SR/LCTL/BV-03-C MMDL/SR/LCTL/BV-04-C MMDL/SR/LCTL/BV-05-C MMDL/SR/LCTL/BI-01-C
MMDL 19/3 AND MMDL 2/5	Light CTL Server Model - Generic Power OnOff Setup Server Model	MMDL/SR/LCTL/BV-06-C
MMDL 19/3 AND MMDL 14/4	Light CTL Server Model - Scene Setup Server Model	MMDL/SR/LCTL/BV-07-C
MMDL 19/4	Light CTL Temperature Server Model	MMDL/SR/LCTLT/BV-01-C MMDL/SR/LCTLT/BV-02-C MMDL/SR/LCTLT/BV-03-C MMDL/SR/LCTLT/BI-01-C
MMDL 19/5	Light CTL Setup Server Model	MMDL/SR/LCTLS/BV-01-C MMDL/SR/LCTLS/BV-02-C MMDL/SR/LCTLS/BI-01-C MMDL/SR/LCTLS/BI-02-C

Item	Feature	Test Case(s)
MMDL 19/6	Light HSL Server Model	MMDL/SR/LHSL/BV-01-C MMDL/SR/LHSL/BV-02-C MMDL/SR/LHSL/BV-03-C MMDL/SR/LHSL/BV-04-C MMDL/SR/LHSL/BV-05-C MMDL/SR/LHSL/BV-06-C
MMDL 19/6 AND MMDL 14/4	Light HSL Server Model - Scene Setup Server Model	MMDL/SR/LHSL/BV-07-C
MMDL 19/6 AND MMDL 2/5	Light HSL Server Model - Generic Power OnOff Setup Server Model	MMDL/SR/LHSL/BV-08-C
MMDL 19/7	Light HSL Hue Server Model	MMDL/SR/LHSLH/BV-01-C MMDL/SR/LHSLH/BV-02-C MMDL/SR/LHSLH/BV-03-C MMDL/SR/LHSLH/BV-04-C
MMDL 19/8	Light HSL Saturation Server Model	MMDL/SR/LHSLSA/BV-01-C MMDL/SR/LHSLSA/BV-02-C MMDL/SR/LHSLSA/BV-03-C MMDL/SR/LHSLSA/BV-04-C
MMDL 19/9	Light HSL Setup Server Model	MMDL/SR/LHSLSE/BV-01-C MMDL/SR/LHSLSE/BV-02-C MMDL/SR/LHSLSE/BI-01-C
MMDL 19/10	Light xyL Server Model	MMDL/SR/LXYL/BV-01-C MMDL/SR/LXYL/BV-02-C MMDL/SR/LXYL/BV-03-C MMDL/SR/LXYL/BV-04-C MMDL/SR/LXYL/BV-06-C MMDL/SR/LXYL/BV-07-C
MMDL 19/10 AND MMDL 19/6	Light xyL Server Model - Light HSL Server Model	MMDL/SR/LXYL/BV-05-C
MMDL 19/10 AND MMDL 2/5	Light xyL Server Model - Generic Power OnOff Setup Server Model	MMDL/SR/LXYL/BV-08-C
MMDL 19/10 AND MMDL 14/4	Light xyL Server Model - Scene Setup Server Model	MMDL/SR/LXYL/BV-09-C
MMDL 19/11	Light xyL Setup Server Model	MMDL/SR/LXYS/BV-01-C MMDL/SR/LXYS/BV-02-C MMDL/SR/LXYS/BI-01-C
MMDL 20/1	Light LC Server Model	MMDL/SR/LLC/BV-01-C MMDL/SR/LLC/BV-02-C MMDL/SR/LLC/BV-03-C MMDL/SR/LLC/BV-04-C MMDL/SR/LLC/BV-06-C MMDL/SR/LLC/BV-07-C MMDL/SR/LLC/BV-08-C
MMDL 20/1 AND MMDL 0d/1	Light LC Server Model in Version 1.1 or later	MMDL/SR/LLC/BV-12-C MMDL/SR/LLC/BV-13-C

Item	Feature	Test Case(s)
MMDL 20/1 AND MMDL 14/4	Light LC Server Model - Scene Setup Server Model	MMDL/SR/LLC/BV-05-C MMDL/SR/LLC/BV-09-C MMDL/SR/LLC/BV-10-C
MMDL 20/1 AND MMDL 2/5	Light LC Server Model – Generic Power OnOff Setup Server Model	MMDL/SR/LLC/BV-11-C
MMDL 20/2	Light LC Setup Server Model	MMDL/SR/LLCS/BV-01-C MMDL/SR/LLCS/BI-01-C
MMDL 20/2 AND MMDL 14/4	Light LC Setup Server Model - Scene Setup Server Model	MMDL/SR/LLCS/BV-02-C
MMDL 21/1 AND MMDL 22/1	Light Lightness Client Model – Light Lightness Get/Status Procedure	MMDL/CL/LLN/BV-01-C
MMDL 21/1 AND MMDL 22/2	Light Lightness Client Model - Light Lightness Set/Status Procedure	MMDL/CL/LLN/BV-02-C MMDL/CL/LLN/BV-03-C MMDL/CL/LLN/BV-04-C
MMDL 21/1 AND MMDL 22/3	Light Lightness Client Model - Light Lightness Set Unacknowledged Procedure	MMDL/CL/LLN/BV-05-C MMDL/CL/LLN/BV-06-C MMDL/CL/LLN/BV-07-C
MMDL 21/1 AND MMDL 22/4	Light Lightness Client Model - Light Lightness Linear Get/Status Procedure	MMDL/CL/LLN/BV-08-C
MMDL 21/1 AND MMDL 22/5	Light Lightness Client Model - Light Lightness Linear Set/Status Procedure	MMDL/CL/LLN/BV-09-C MMDL/CL/LLN/BV-10-C MMDL/CL/LLN/BV-11-C
MMDL 21/1 AND MMDL 22/6	Light Lightness Linear Set Unacknowledged Procedure	MMDL/CL/LLN/BV-12-C MMDL/CL/LLN/BV-13-C MMDL/CL/LLN/BV-14-C
MMDL 21/1 AND MMDL 22/7	Light Lightness Client Model - Light Lightness Last Get/Status Procedure	MMDL/CL/LLN/BV-15-C
MMDL 21/1 AND MMDL 22/8	Light Lightness Client Model - Light Lightness Default Get/Status Procedure	MMDL/CL/LLN/BV-16-C
MMDL 21/1 AND MMDL 22/9	Light Lightness Client Model - Light Lightness Default Set/Status Procedure	MMDL/CL/LLN/BV-17-C
MMDL 21/1 AND MMDL 22/10	Light Lightness Client Model - Light Lightness Default Set Unacknowledged Procedure	MMDL/CL/LLN/BV-18-C
MMDL 21/1 AND MMDL 22/11	Light Lightness Client Model - Light Lightness Range Get/Status Procedure	MMDL/CL/LLN/BV-19-C
MMDL 21/1 AND MMDL 22/12	Light Lightness Client Model - Light Lightness Range Set/Status Procedure	MMDL/CL/LLN/BV-20-C
MMDL 21/1 AND MMDL 22/13	Light Lightness Client Model - Light Lightness Range Set Unacknowledged Procedure	MMDL/CL/LLN/BV-21-C
MMDL 21/2 AND MMDL 23/1	Light CTL Client Model - Light CTL Get/Status Procedure	MMDL/CL/LCTL/BV-01-C

Item	Feature	Test Case(s)
MMDL 21/2 AND MMDL 23/2	Light CTL Client Model - Light CTL Set/Status Procedure	MMDL/CL/LCTL/BV-02-C MMDL/CL/LCTL/BV-03-C MMDL/CL/LCTL/BV-04-C
MMDL 21/2 AND MMDL 23/3	Light CTL Client Model - Light CTL Set Unacknowledged Procedure	MMDL/CL/LCTL/BV-05-C MMDL/CL/LCTL/BV-06-C MMDL/CL/LCTL/BV-07-C
MMDL 21/2 AND MMDL 23/4	Light CTL Client Model - Light CTL Temperature Get/Status Procedure	MMDL/CL/LCTL/BV-08-C
MMDL 21/2 AND MMDL 23/5	Light CTL Client Model - Light CTL Temperature Set/Status Procedure	MMDL/CL/LCTL/BV-09-C MMDL/CL/LCTL/BV-10-C MMDL/CL/LCTL/BV-11-C
MMDL 21/2 AND MMDL 23/6	Light CTL Client Model - Light CTL Temperature Set Unacknowledged Procedure	MMDL/CL/LCTL/BV-12-C MMDL/CL/LCTL/BV-13-C MMDL/CL/LCTL/BV-14-C
MMDL 21/2 AND MMDL 23/7	Light CTL Client Model - Light CTL Default Get/Status Procedure	MMDL/CL/LCTL/BV-15-C
MMDL 21/2 AND MMDL 23/8	Light CTL Client Model - Light CTL Default Set/Status Procedure	MMDL/CL/LCTL/BV-16-C
MMDL 21/2 AND MMDL 23/9	Light CTL Client Model - Light CTL Default Set Unacknowledged Procedure	MMDL/CL/LCTL/BV-17-C
MMDL 21/2 AND MMDL 23/10	Light CTL Client Model - Light CTL Temperature Range Get/Status Procedure	MMDL/CL/LCTL/BV-18-C
MMDL 21/2 AND MMDL 23/11	Light CTL Client Model - Light CTL Temperature Range Set/Status Procedure	MMDL/CL/LCTL/BV-19-C
MMDL 21/2 AND MMDL 23/12	Light CTL Client Model - Light CTL Temperature Range Set Unacknowledged Procedure	MMDL/CL/LCTL/BV-20-C
MMDL 21/3 AND MMDL 24/1	Light HSL Client Model - Light HSL Get/Status Procedure	MMDL/CL/LHSL/BV-01-C
MMDL 21/3 AND MMDL 24/2	Light HSL Client Model - Light HSL Set/Status Procedure	MMDL/CL/LHSL/BV-02-C MMDL/CL/LHSL/BV-03-C MMDL/CL/LHSL/BV-04-C
MMDL 21/3 AND MMDL 24/3	Light HSL Client Model - Light HSL Set Unacknowledged Procedure	MMDL/CL/LHSL/BV-05-C MMDL/CL/LHSL/BV-06-C MMDL/CL/LHSL/BV-07-C
MMDL 21/3 AND MMDL 24/4	Light HSL Client Model - Light HSL Target Get/Status Procedure	MMDL/CL/LHSL/BV-08-C
MMDL 21/3 AND MMDL 24/5	Light HSL Client Model - Light HSL Default Get/Status Procedure	MMDL/CL/LHSL/BV-09-C
MMDL 21/3 AND MMDL 24/6	Light HSL Client Model - Light HSL Default Set/Status Procedure	MMDL/CL/LHSL/BV-10-C
MMDL 21/3 AND MMDL 24/7	Light HSL Client Model - Light HSL Default Set Unacknowledged Procedure	MMDL/CL/LHSL/BV-11-C

Item	Feature	Test Case(s)
MMDL 21/3 AND MMDL 24/8	Light HSL Client Model - Light HSL Range Get/Status Procedure	MMDL/CL/LHSL/BV-12-C
MMDL 21/3 AND MMDL 24/9	Light HSL Client Model - Light HSL Range Set/Status Procedure	MMDL/CL/LHSL/BV-13-C
MMDL 21/3 AND MMDL 24/10	Light HSL Client Model - Light HSL Range Set Unacknowledged Procedure	MMDL/CL/LHSL/BV-14-C
MMDL 21/3 AND MMDL 24/11	Light HSL Client Model - Light HSL Hue Get/Status Procedure	MMDL/CL/LHSL/BV-15-C
MMDL 21/3 AND MMDL 24/12	Light HSL Client Model - Light HSL Hue Set/Status Procedure	MMDL/CL/LHSL/BV-16-C MMDL/CL/LHSL/BV-17-C MMDL/CL/LHSL/BV-18-C
MMDL 21/3 AND MMDL 24/13	Light HSL Client Model - Light HSL Hue Set Unacknowledged Procedure	MMDL/CL/LHSL/BV-19-C MMDL/CL/LHSL/BV-20-C MMDL/CL/LHSL/BV-21-C
MMDL 21/3 AND MMDL 24/14	Light HSL Client Model - Light HSL Saturation Get/Status Procedure	MMDL/CL/LHSL/BV-22-C
MMDL 21/3 AND MMDL 24/15	Light HSL Client Model - Light HSL Saturation Set/Status Procedure	MMDL/CL/LHSL/BV-23-C MMDL/CL/LHSL/BV-24-C MMDL/CL/LHSL/BV-25-C
MMDL 21/3 AND MMDL 24/16	Light HSL Client Model - Light HSL Saturation Set Unacknowledged Procedure	MMDL/CL/LHSL/BV-26-C MMDL/CL/LHSL/BV-27-C MMDL/CL/LHSL/BV-28-C
MMDL 21/4 AND MMDL 25/1	Light xyL Client Model - Light xyL Get/Status Procedure	MMDL/CL/LXYL/BV-01-C
MMDL 21/4 AND MMDL 25/2	Light xyL Client Model - Light xyL Set/Status Procedure	MMDL/CL/LXYL/BV-02-C MMDL/CL/LXYL/BV-03-C MMDL/CL/LXYL/BV-04-C
MMDL 21/4 AND MMDL 25/3	Light xyL Client Model - Light xyL Set Unacknowledged Procedure	MMDL/CL/LXYL/BV-05-C MMDL/CL/LXYL/BV-06-C MMDL/CL/LXYL/BV-07-C
MMDL 21/4 AND MMDL 25/4	Light xyL Client Model - Light xyL Target Get/Status Procedure	MMDL/CL/LXYL/BV-08-C
MMDL 21/4 AND MMDL 25/5	Light xyL Client Model - Light xyL Default Get/Status Procedure	MMDL/CL/LXYL/BV-09-C
MMDL 21/4 AND MMDL 25/6	Light xyL Client Model - Light xyL Default Set/Status Procedure	MMDL/CL/LXYL/BV-10-C
MMDL 21/4 AND MMDL 25/7	Light xyL Client Model - Light xyL Default Set Unacknowledged Procedure	MMDL/CL/LXYL/BV-11-C
MMDL 21/4 AND MMDL 25/8	Light xyL Client Model - Light xyL Range Get/Status Procedure	MMDL/CL/LXYL/BV-12-C
MMDL 21/4 AND MMDL 25/9	Light xyL Client Model - Light xyL Range Set/Status Procedure	MMDL/CL/LXYL/BV-13-C
MMDL 21/4 AND MMDL 25/10	Light xyL Client Model - Light xyL Range Set Unacknowledged Procedure	MMDL/CL/LXYL/BV-14-C

Item	Feature	Test Case(s)
MMDL 21/5 AND MMDL 26/1	Light LC Client Model - Light LC Mode Get/Status Procedure	MMDL/CL/LLC/BV-01-C
MMDL 21/5 AND MMDL 26/2	Light LC Client Model - Light LC Mode Set/Status Procedure	MMDL/CL/LLC/BV-02-C
MMDL 21/5 AND MMDL 26/3	Light LC Client Model - Light LC Mode Set Unacknowledged Procedure	MMDL/CL/LLC/BV-03-C
MMDL 21/5 AND MMDL 26/4	Light LC Client Model - Light LC OM Get/Status Procedure	MMDL/CL/LLC/BV-04-C
MMDL 21/5 AND MMDL 26/5	Light LC Client Model - Light LC OM Set/Status Procedure	MMDL/CL/LLC/BV-05-C
MMDL 21/5 AND MMDL 26/6	Light LC Client Model - Light LC OM Set Unacknowledged Procedure	MMDL/CL/LLC/BV-06-C
MMDL 21/5 AND MMDL 26/7	Light LC Client Model - Light LC Light OnOff Get/Status Procedure	MMDL/CL/LLC/BV-07-C
MMDL 21/5 AND MMDL 26/8	Light LC Client Model - Light LC Light OnOff Set/Status Procedure	MMDL/CL/LLC/BV-08-C MMDL/CL/LLC/BV-09-C MMDL/CL/LLC/BV-10-C
MMDL 21/5 AND MMDL 26/9	Light LC Client Model - Light LC Light OnOff Set Unacknowledged Procedure	MMDL/CL/LLC/BV-11-C MMDL/CL/LLC/BV-12-C MMDL/CL/LLC/BV-13-C
MMDL 21/5 AND MMDL 26/10	Light LC Client Model - Light LC Property Get/Status Procedure	MMDL/CL/LLC/BV-14-C
MMDL 21/5 AND MMDL 26/11	Light LC Client Model - Light LC Property Set/Status Procedure	MMDL/CL/LLC/BV-15-C
MMDL 21/5 AND MMDL 26/12	Light LC Client Model - Light LC Property Set Unacknowledged	MMDL/CL/LLC/BV-16-C
MMDL 27/1	Generic OnOff State on Secondary Elements	MMDL/SR/MLTEL/BV-01-C
MMDL 27/2	Generic Level State on Secondary Elements	MMDL/SR/MLTEL/BV-02-C

Table 5.1: Test case mapping

6 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
1	1.0.1	2017-11-22	Approved by BTI. Prepared for TCRL 2017-2 publication.
	1.0.2r00-r03	2018-02-26 – 2018-05-09	TSE 10213 (rating: 2): Changed 11/2 to 14/4 in items for MMDL/SR/GOO/BV-03-C, MMDL/SR/GLV/BV-07-C, MMDL/SR/GPL/BV-15-C, MMDL/SR/LLN/BV-18-C – 19-C, MMDL/SR/LCTL/BV-07-C, MMDL/SR/LHSL/BV-07-C, MMDL/SR/LXYL/BV-09-C, MMDL/SR/LLC/BV-05-C, and MMDL/SR/LLCS/BV-02-C in the TCMT. TSE 9976 (rating: 2): Moved MMDL/SR/LHSL/BV-07-C from row with item 19/6, feature Light HSL Server Model, to new row with item 19/6 AND 11/2, feature Light HSL Server Model and Scene Setup Server Model in the TCMT. TSE 10324 (rating: 2): Changed value of state/message/parameter _PARAM_STATUS_from Marshalled Sensor Data = N/A to Marshalled Sensor Data = [MPID (Length = 0, Property ID = Unknown Property ID), Raw Value = N/A] in Table 4.157. TSE 9961 (rating: 4): Added an extra verification step to pass verdict for MMDL/SR-CL/COMP/BV-01-C. TSE 10043 (rating: 4): Updated initial condition; test procedure steps 5, 8, 10, and 13; expected outcome pass verdict; and MSC in Section 4.4.1 (Common State Get/Set/Status Behavior). Updated test purpose; initial condition; test procedure steps 6 and 10; expected outcome pass verdict; and MSC in Section 4.4.2.1 (Common State Two-Way Binding Behavior). Updated initial condition; test procedure steps 7, 8, 11, 12, 16, 21, and 22; expected outcome pass verdict; and MSC in Section 4.4.2.3 (Common State OnPowerUp Binding Behavior). Updated initial condition; test procedure step 7; expected outcome pass verdict; and MSC in Section 4.4.3 (Common State Transition Behavior). Updated initial condition; test procedure steps 2, 6, and 8; expected outcome pass verdict; and MSC in Section 4.4.6 (Common Scene Store/Recall Behavior). TSE 10161 (rating: 4): Added new test cases MMDL/SR/SNRS/BV-08-C and 09-C and their corresponding TCMT entries. TSE 10102 (rating 4): Added new sections: Common Secondary Element Behavior; Generic OnOff State on Secondary Elements; Generic Level State on Secondary Elements; Multiple Elements. Added new test cases MMDL/SR/MLTEL/BV-01-C and 02-C. Added two new items to TCMT for test cases MMDL/SR/MLTEL/BV-01-C and 02-C.

Publication Number	Revision Number	Date	Comments
			TSE 10524 (rating: 1): Editorial revisions including moving the MSCs from notes sections to test procedure sections of test cases. TSE 10277 (rating 1): Revised instances of “Light Lightness Linear” messages to “Light Lightness” messages” in MMDL/SR/LLC/BV-06-C and MMDL/SR/LLC/BV-07-C in test procedure, MSC, and pass verdict.
2	1.0.2	2018-06-27	Approved by BTI. Prepared for TCRL 2018-1 publication.
	1.0.3r00-r01	2018-10-02 – 2018-10-03	TSE 10720 (rating 3): Clarified Sensor Series Status and Sensor Settings Status in sections "Sensor Setting State Settings Get/Status", "Sensor Series Column State Series Get/Status"; and for test cases MMDL/SR/SNR/BV-09-C, MMDL/SR/SNR/BI-04-C, MMDL/SR/SNRS/BV-05-C to 06-C, and MMDL/SR/SNRS/BI-03-C. TSE 10735 (rating 3): Changed _PARAM_STATUS_1_ definiton to 0x0000 in section "Light HSL and Generic OnPowerUp State Binding". TSE 10902 (rating 2): Clarified initial condition and test procedure step 13 that the publishing expectation does not always apply in the Get/Status tests.
	1.0.1.0	2018-11-09	Updated version number from 1.0.3 to 1.0.1.0 to align with adoption of the specification 1.0.1
3	1.0.1.0	2018-11-21	Approved by BTI. Prepared for TCRL 2018-2 publication.
	1.0.1.1 r00–r07	2019-04-03– 2019-06-27	TSE 11469 (rating 2): Updated text in step 5 of test procedure MMDL/SR/SNRS/BV-08-C. TSE 11287 (rating 3): Updated text in Tables 4.81, 4.85, and 4.89 addressing issue for test cases MMDL/SR/GPL/BV-07-C and -13-C and MMDL/SR/LLN/BV-09-C. TSE 11282/11285 (rating 3): Updated text for test cases MMDL/SR/SNRS/BV-01-C and MMDL/SR/SNRS/BI-01-C. TSE 10476 (rating 4): Added test cases MMDL/SR/LLC/BV-09-C – -11-C and related section Light LC Occupancy Mode State Scene Store/Recall with parameter table. TSE 11908 (rating 1): Updated MSC for test case MMDL/SR/GLV/BV-06-C to remove Present Level value from Generic Level Status. TSE 10991 (rating 1): Updated all instances of "unreliable" to "unacknowledged" and "reliable" to "acknowledged" (without regard to uppercase or lowercase). (Note: Test cases within TS doc were changed under a different release but the TCRL spreadsheet was not updated; it is updated with this TSE.)
4	1.0.1.1	2019-07-25	Approved by BTI. Prepared for TCRL 2019-1 publication.

Publication Number	Revision Number	Date	Comments
	p5r00–r08	2020-01-16 – 2020-11-18	TSE 12742 (rating 2): Updated “Time State Get/Set/Status” section so that MMDL/SR/TIMS/BV-01-C Time State Get/Set/Status test case no longer expects time to be frozen. TSE 12969 (rating 4): Updated initial condition, MSC, test steps, and expected outcome for “Common State Get/Set/Status Behavior” section to add model subscription testing. TSE 13315 (rating 3): Added an initial condition to test case MMDL/SR/LLC/BV-06-C. TSE 13311 (rating 4): Updated initial condition, test procedure, and rounds table for test case MMDL/SR/LLC/BV-11-C to strengthen the level of detail to avoid PTS errors when running the test. TSE 13345 (rating 3): Added MESH/NODE/CFG/COMP/BV-01-C to the TCMT. TSE 13508 (rating 2): To address an issue with the range state testing needing to take into account implementation-specific ranges, updated values in the “Generic Power Range State Get/Set/Status” table, “Light Lightness Range State Get/Set/Status” table, “Light CTL Temperature Range State Get/Set/Status” table, “Light HSL Range State Get/Set/Status” table, and “Light xyL Range State Get/Set/Status” table and updated the initial condition of sections “Common State Get/Set/Status Behavior”, “Common State Two-Way Binding Behavior”, “Common State OnPowerUp Binding Behavior”, and “Common Scene Store/Recall Behavior”. TSE 14656 (rating 3): Updated the test steps in the “Common State Transition Behavior” section (associated with test case MMDL/SR/GOO/BV-02-C) to address an issue with a missing expectation for Generic OnOff transitions. TSE 15730 (rating 2): Updated value in section “Time State Get/Set/Status” to address an issue with test case expecting Uncertainty not to change. TSE 15768 (rating 3): Updated many “Common Server Model Behaviors” sections (initial conditions and table values) to add explicit instructions on which messages are published. Consistency Checker fixes and template-related editorials, including revising the document number and assigning last published v1.0.1.1 as p4, replacing Conformance and Pass/Fail Verdict text, updating TCID headings.
5	p5	2020-12-22	Approved by BTI on 2020-12-02. Prepared for TCRL 2020-1 publication.
	p6r00–r03	2021-05-04 – 2021-06-07	TSE 15951 (rating 1): Added a Note before the Expected Outcome section for “Common Scene Store/Recall Behavior” (currently Section 4.4.6); TSE is noted as associated with TCs MMDL/SR/LHSL/BV-

Publication Number	Revision Number	Date	Comments
			07-C, MMDL/SR/LXYL/BV-09-C, MMDL/SR/LCTL/BV-07-C. TSE 15952 (rating 3): Replaced MSC for the “Common Scene Store/Recall Behavior” section to align with the current test case. TSE 16156 (rating 1): Removed duplicated sections. TSE 16157 (rating 2): Updated common test procedure (“Scheduler Register State Action Get/Status”) related to TC MMDL/SR/SCH/BV-02-C to align with changes made under Erratum 10290. TSE 16469 (rating 3): Updated test steps in all Section 4.4.3 “Common State Transition Behavior” subsections to clarify the execution delay requirements. Affects TCs MMDL/SR/GOO/BV-02-C, MMDL/SR/LLN/BV-15-C, MMDL/SR/GPL/BV-11-C, MMDL/SR/SCE/BV-03-C, MMDL/SR/GLV/BV-02-C, MMDL/SR/LHSL/BV-06-C, MMDL/SR/LHSLH/BV-04-C, MMDL/SR/LHSLSA/BV-04-C, MMDL/SR/LXYL/BV-07-C, MMDL/SR/LLC/BV-04-C, MMDL/SR/LLN/BV-16-C, MMDL/SR/GLV/BV-05-C, MMDL/SR/LCTL/BV-05-C. TSE 16470 (rating 1): Corrected the reference for TC MMDL/SR/GPL/BV-11-C. TSE 16682 (rating 2): Updated an initial condition in Section 4.4.4.5 “Generic User Property State Get/Set/Status Invalid Parameters” and corrected a cross-reference to it in TC MMDL/SR/GUP/BI-01-C.
6	p6	2021-07-13	Approved by BTI on 2021-06-03. Prepared for TCRL 2021-1 publication.
	p6ed2 r00–r01	2021-07-16 – 2021-08-03	TSE 17080 (rating 1): Updated the procedure for TC MMDL/SR/LCTLT/BV-02-C to align with the formulas in the spec. TSE 17314 (rating 1): Corrected typo in TCMT entry for MMDL/CL/GLOC/BV-06-C. Template-related editorials and fixed a broken x-ref.
	p6 edition 2	2021-09-29	Approved by BTI on 2021-09-27. Prepared for edition 2 publication.
	p6ed3r00	2021-11-23	TSE 17939 (rating 1): De-integrated changes made for TSE 17080 until the associated specification changes are published.
	p6 edition 3	2021-11-29	Approved by BTI on 2021-11-29. Prepared for edition 3 publication.
	p7r00–r01	2022-03-15 – 2022-04-05	TSE 18193 (rating 2): Updated the _INITIAL_CONDITION value in the Common Get/Set/Status Behavior Values for the Sensor Cadence State table related to test case MMDL/SR/SNRS/BV-01-C. Updated the _INITIAL_CONDITION value in the Common Get/Set/Status Invalid Parameter Behavior Values for the Sensor Cadence State table related to test case MMDL/SR/SNRS/BI-01-C.

Publication Number	Revision Number	Date	Comments
			TSE 18405 (rating 2): Updated the Light LC Lightness Standby state value in a test step and pass verdict for MMDL/SR/LLC/BV-06-C and -07-C to address often-failing tests. TSE 18560 (rating 1): Fixed a copy/paste typo in MMDL/SR/GLV/BV-06-C.
7	p7	2022-06-28	Approved by BTI on 2022-05-22. Prepared for TCRL 2022-1 publication.
	p8r00	2022-08-31	TSE 18822 (rating 2): Per Erratum 17677, updated the 15 Remaining Time values for _PARAM_STATUS_1_ throughout Section 4.4.3, Common State Transition Behavior.
8	p8	2023-02-07	Approved by BTI on 2022-12-19. Prepared for TCRL 2022-2 publication.
	p9r00–r10	2023-06-19 – 2023-08-11	Incorporated test issue ES-23065 with updates for MMDL v1.1: Added an annex defining generic test procedures for Mesh Protocol and Mesh Model tests. In Section 2, added a note regarding gray provisional text. Added one new test case MMDL/SR/SNRS/BV-10-C per test issue ES-18334. Updated the TCMT accordingly. Added one new test case MMDL/SR/LLN/BV-20-C per test issue ES-23036. Updated the TCMT accordingly. Added one new test case MMDL/SR/LLC/BV-12-C per test issue ES-22498. Updated the TCMT accordingly. TSE 16923 (rating 2): Per Erratum 16349, updated Scheduler tests as follows: Updated values in Table 4.46, Common Action Get/Status Behavior Values for the Scheduler State, and Table 4.47, Common Action Get/Set/Status Behavior Values for the Scheduler State, and added test procedure info preceding Table 4.47. TSE 17601 (rating 2): Deleted a phrase from step 4 of the test procedure for MMDL/SR/LLC/BV-11-C for consistency with the state transition tests from Section 4.2.3.13, Light LC Light OnOff State Transition. Added one new test case MMDL/SR/LLC/BV-13-C per test issue ES-22935 and Erratum 22829. Updated the TCMT accordingly. TSE 18022 (rating 1): Updated values in Table 4.95, Binding Behavior Values for the Light CTL Temperature and Generic Level States. TSE 22912 (rating 3): Updated values in Table 4.32, Common Series Get/Status Behavior Values for the Sensor Series Column State; Table 4.33, Common Column Get/Status Behavior Values for the Sensor Series Column State; Table 4.139, Common Series Get/Status Invalid Parameter Behavior Values for the Sensor Series Column State; Table 4.140, Common

Publication Number	Revision Number	Date	Comments
			Column Get/Status Invalid Parameter Behavior Values for the Sensor Series Column State; Table 4.200, Common Column Get/Status Procedure Values for the Sensor Column State; and Table 4.201, Common Series Get/Status Procedure Values for the Sensor Series Column State.
9	p9	2023-09-19	Approved by BTI on 2023-08-27. Mesh Model v1.1 adopted by the BoD on 2023-09-12. Prepared for publication.
	p10r00–r02	2024-02-07 – 2024-03-05	TSE 24122 (rating 3): Added an initial condition to MMDL/SR/LLN/BV-20-C. TSE 24188 (rating 2): Added initial conditions for MMDL/SR/LLC/BV-12-C. TSE 24254 (rating 4): Deleted two tables from the Common Scene Store/Recall Behavior section. Added full test case text for MMDL/SR/LCTL/BV-07-C and MMDL/SR/LHSL/BV-07-C. TSE 24283 (rating 2): In the TCMT, updated Item column for MMDL 0b/1 to MMDL 1a/2 for MMDL/SR-CL/COMP/BV-01-C and MESH/NODE/CFG/COMP/BV-01-C. TSE 24288 (rating 1): Updated the TC descriptions to remove “/Delete” for MMDL/SR/GOO/BV-03-C, MMDL/SR/GLV/BV-07-C, MMDL/SR/GPL/BV-15-C, MMDL/SR/LLN/BV-18-C and -19-C, MMDL/SR/LCTL/BV-07-C, MMDL/SR/LHSL/BV-07-C, MMDL/SR/LXYL/BV-09-C, MMDL/SR/LLC/BV-05-C, and MMDL/SR/LLCS/BV-02-C. TSE 24292 (rating 2): Updated the common test case procedure in Section 4.2.3, Common State Transition Behavior. Updated the values in Section 4.2.3.13, Light LC Light OnOff State Transition.
10	p10	2024-07-01	Approved by BTI on 2024-04-18. Prepared for TCRL 2024-1 publication.
	p11r00–r03	2024-08-08 – 2024-08-19	TSE 25158 (rating 2): Per E25030, E25063, E25064, E25065, E25066, and E25067, updated the initial condition, test procedure, and expected outcome for GMIT/PERF section of the GMIT annex.
11	p11	2024-10-08	Approved by BTI on 2024-08-28. NLC Profiles v1.0.1 adopted by the BoD on 2024-10-01. Prepared for TCRL 2024-2-addition publication.

Acknowledgments

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7 Annex: Generic Mesh Integrated Tests (GMIT)

This annex defines generic test procedures that integrate various Mesh Protocol and Mesh Model tests. These procedures can be referenced by Test Suites developed for Mesh profiles.

A generic test procedure typically defines parameters in a test case parameter table. A Test Suite that uses these procedures must define the values for each parameter in the same table format, as well as a specification reference.

7.1 Identification conventions

In addition to the conventions defined in Section 4.1.1, Test case identification conventions, the following identifiers are introduced in this annex.

Identifier Abbreviation	**Group Identifier <class>**
GMIT	Generic Mesh Integrated Tests
Identifier Abbreviation	**Features and Behaviors Identifier <feat>**
PBGT	Provisioning over PB-GATT
FEAT	Features and models
PERF	Performance
PDES	Device properties in Sensor Descriptor
PSET	Device properties in Sensor Settings
WSET	Writing sensor settings

Table 7.1: GMIT feature naming conventions

7.2 GMIT input table

The GMIT procedures are executed with an input consisting of a table in the following format:

TCID 1 [Description]	
Reference	[N] X.Y
PARAM 1	Value 1
PARAM 2	Value 2
…	…
TCID 2 [Description]	
…	…
…	

Table 7.2: GMIT input table format

Each row that defines a TCID uses the identification conventions defined in Section 7.1. The <feat> particle of the TCID identifies the generic test procedure, defined in one of the sections below.

The next row after the TCID contains a specification reference for the test case.

All next rows after the reference and until another TCID row (or until the end of the table) define parameter values for the test case. Each generic test procedure defines its own parameters, and all parameters must have a defined value in this table. A value of "N/A" is used to indicate that the parameter is not defined for the test case.

The same test procedure may be instantiated multiple times in the input table, with different TCIDs.

7.3 Generic test procedures

This section defines all generic test procedures. The title of each procedure contains the <feat> particle that uniquely identifies it.

7.3.1 GMIT/PBGT [Provisioning over PB-GATT]

- Test Purpose

  Verify that the IUT advertises the Mesh Provisioning Service with a scan response that includes the device name, and that the IUT can be provisioned over PB-GATT.

- Initial Condition

  - The IUT is unprovisioned.

- Test Case Parameters

Parameter	Value
_SCAN_NAME_	Yes / No

Table 7.3: Provisioning over PB-GATT test case parameters

- Test Procedure

  1. Trigger the IUT to send unprovisioned device advertisements.
  2. The IUT starts sending undirected connectable advertising that includes the «Mesh Provisioning Service» in the list of Service UUIDs.
  3. If _SCAN_NAME_ is “Yes”, then the Lower Tester sends a scan request and the IUT's scan response contains either the «Complete Local Name» AD type or the «Shortened Local Name» AD type.
  4. The Lower Tester creates an LE connection with the IUT and provisions the IUT over the PB-GATT provisioning bearer.

- Expected Outcome

  Pass verdict

  If applicable, the IUT sends its name in the scan response.

  The advertising is accompanied by some visual attention indication on the IUT (e.g., an LED blinking).

  The IUT can be provisioned over PB-GATT.

7.3.2 GMIT/FEAT [Features and models]

- Test Purpose

  Verify that the IUT indicates support for mandatory features and models.

- Initial Condition

  - The IUT has been provisioned by Lower Tester 1.

- Test Case Parameters

Parameter	Value
CRPL	Integer
_MESH_PROFILE_UUID_	16-bit UUID

Table 7.4: Features and models test case parameters

- Test Procedure

  1. Lower Tester 1 reads all composition data pages on the IUT and checks the supported features and models.
  2. If the Relay feature is supported by the IUT:
     a. Lower Tester 1 enables the Relay feature on the IUT.
     b. Lower Tester 1 sends a message to the IUT over the advertising bearer, with the DST field set to an address different than the IUT's, and the IUT relays the message.
  3. If the Proxy feature is supported by the IUT:
     a. Lower Tester 1 enables the Proxy feature on the IUT.
     b. Trigger the IUT to start advertising the Mesh Proxy Service.
     c. Lower Tester 1 establishes a proxy connection with the IUT, configures the necessary filters, and sends a message over the GATT bearer, with the DST field set to an address different that the IUT's, and the IUT relays the message over the advertising bearer.
     d. Lower Tester 2 sends a message over the advertising bearer addressed to Lower Tester 1, and the IUT relays the message over the proxy connection.

- Expected Outcome

  Pass verdict

  The Composition Data Page 0 of the IUT correctly indicates all supported features and model IDs, as declared in the profile ICS.

  The CRPL field of the Composition Data Page 0 has a value greater than or equal to _CRPL_.

  Composition Data Page 2 is present, and the _MESH_PROFILE_UUID_ is present in the list of profile identifiers.

7.3.3 GMIT/PERF [Device performance]

- Test Purpose

  Verify that the IUT supports the profile's performance requirements.

- Initial Condition

  - The IUT has been provisioned by the Lower Tester and the Relay feature has been enabled on the IUT.
  - The value of the CRPL field of the Composition Data Page 0 on the IUT has been saved, and it is used and denoted as *CRPL* in step 4 of the test procedure.
  - A list of all model instances (excluding vendor model instance) per the MMDL Specification [4] on the IUT that can be bound to application keys (by definition) has been saved after reading the Composition Data pages.

- Test Case Parameters

Parameter	Value
_NET_KEYS_	Integer
_APP_KEYS_	Integer
_SUB_LIST_	[<model name>: <integer>] pairs

Parameter	Value
_PROXY_FILTER_SIZE_	Integer
_NET_CACHE_SIZE_	Integer

Table 7.5: Device performance test case parameters

- Test Procedure

  1. The Lower Tester adds up to a total of _NET_KEYS_ network keys on the IUT.
  2. The Lower Tester adds up to a total of _APP_KEYS_ application keys on the IUT.
  3. If _SUB_LIST_ is defined, then for each [model: count] pair in _SUB_LIST_, the Lower Tester adds [count] distinct group addresses to the subscription list of the [model] on the IUT.
  4. If _PROXY_FILTER_SIZE_ is defined, then the Lower Tester establishes a proxy connection with the IUT and adds _PROXY_FILTER_SIZE_ addresses to the proxy filter list.
  5. On the advertising bearer, the Lower Tester sends *CRPL* acknowledged messages to the IUT, using a different SRC address every time. The IUT responds to all messages.
  6. On the advertising bearer, the Lower Tester sends _NET_CACHE_SIZE_ messages, using a different SRC address every time (and different than the ones used in step 5), a DST field different than the address of the IUT, and the same TTL value, which is greater than 0x02. The IUT relays all messages.
  7. Resend all messages from step 5 with the same Network PDU fields except that the TTL is decremented by one. The IUT does not relay any of these messages.
  8. For each model instance (excluding vendor model instance) per the MMDL Specification [4] on the IUT that can be bound to application keys, the Lower Tester binds the model instance to a total of _APP_KEYS_ distinct application keys.

- Expected Outcome

  Pass verdict

  The IUT accepts all requests and demonstrates proper implementation of the replay protection list and network message cache.

  The IUT accepts the required number of application keys to be bound to each model instance (excluding vendor model instance) per the MMDL Specification [4] that uses application keys.

7.3.4 GMIT/PDES [Device properties in Sensor Descriptor]

- Test Purpose

  Verify that the IUT returns the correct device property IDs in the Sensor Descriptor state.

- Initial Condition

  - The IUT has been provisioned by the Lower Tester. The Sensor Server model has been bound to an application key on the IUT.
  - If necessary, the IUT has been triggered into the state where the expected device properties are exposed by the sensor descriptor.

- Test Case Parameters

Parameter	Value
_DESCRIPTOR_PROPERTIES_	Device property names (and possibly other restrictions)

Table 7.6: Device properties in Sensor Descriptor test case parameters

- Test Procedure

  1. The Lower Tester sends a Sensor Descriptor Get message to the IUT with the Property ID field omitted.
  2. The IUT responds with a Sensor Descriptor Status message with the Descriptor field value containing descriptors for the properties specified in _DESCRIPTOR_PROPERTIES_.

- Expected Outcome

  Pass verdict

  The IUT responds with the expected Descriptor value.

7.3.5 GMIT/PSET [Device properties in Sensor Settings]

- Test Purpose

  Verify that the IUT returns the correct device property IDs in the Sensor Settings state.

- Initial Condition

  - The IUT has been provisioned by the Lower Tester. The Sensor Server model has been bound to an application key on the IUT.

- Test Case Parameters

Parameter	Value
PROPERTY	Device property name
_SETTINGS_PROPERTIES_	[<property>: <access>] pairs

Table 7.7: Device properties in Sensor Settings test case parameters

- Test Procedure

  1. The Lower Tester sends a Sensor Settings Get message to the IUT with the Property ID field set to the ID of _PROPERTY_.
  2. The IUT responds with a Sensor Settings Status message with the Sensor Setting Property IDs field value containing the IDs of all properties from _SETTINGS_PROPERTIES_.
  3. For each [property: access] pair in _SETTINGS_PROPERTIES_:

     a. The Lower Tester sends a Sensor Setting Get message to the IUT with the Sensor Property ID field set to the ID of _PROPERTY__ and the Sensor Setting Property ID set to the ID of [property].

     b. The IUT responds with a Sensor Setting Status message with the Sensor Property ID field set to the ID of _PROPERTY_, the Sensor Setting Property ID field set to the ID of [property], and the Sensor Setting Access field set to [access].

- Expected Outcome

  Pass verdict

  The IUT responds with the expected sensor setting values.

7.3.6 GMIT/WSET [Writing Sensor Settings]

- Test Purpose

  Verify that the IUT accepts changes to the Sensor Settings state for the properties with write access.

- Initial Condition

  - The IUT has been provisioned by the Lower Tester. The Sensor Setup Server model has been bound to an application key on the IUT.

- Test Case Parameters

Parameter	Value
PROPERTY	Device property name
_SETTINGS_PROPERTY_	Device property name

Table 7.8: Writing Sensor Settings test case parameters

- Test Procedure

  1. The Lower Tester sends a Sensor Setting Set message to the IUT, with the Sensor Property ID field set to the ID of _PROPERTY_, the Sensor Setting Property ID field set to the ID of _SETTINGS_PROPERTY_, and the Sensor Setting Raw field set to a random valid value.
  2. The IUT responds with a Sensor Setting Status message reflecting the requested values.

- Expected Outcome

  Pass verdict

  The IUT responds with the expected status values.