# ZigBee Light Link Profile: PICS Proforma Version 1.0

ZigBee Document 11-0038-05

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| | |
|---|---|
| Accepted by | This document has not yet been accepted for release by the ZigBee Alliance Board of Directors |
| Abstract | As a part of formal conformance testing, manufacturers will be asked to submit a statement of protocol conformance with respect to the appropriate ZigBee devices required by the application profile under test. This document is intended to provide the form of that statement of conformance for the Light Link profile. |
| Keywords | ZLL, consumer, residential, lighting, Light Link, profile. |


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# 1 Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given standard. Such a statement is called a protocol implementation conformance statement (PICS).

## 1.1 Scope

This document provides the protocol implementation conformance statement (PICS) proforma for the ZigBee Light Link profile [R3] in compliance with the relevant requirements, and in accordance with the relevant guidance, given in ISO/IEC 9646-7.

## 1.2 Purpose

The supplier of a protocol implementation claiming to conform to the ZigBee Light Link profile shall complete the following PICS proforma and accompany it with the information necessary to identify fully both the supplier and the implementation.

The PICS is in the form of answers to a set of questions in the PICS proforma. The questions in a proforma consist of a systematic list of protocol capabilities and options as well as their implementation requirements. The implementation requirement indicates whether implementation of a capability is mandatory, optional, or conditional depending on options selected. When a protocol implementer answers questions in a PICS proforma, they would indicate whether an item is implemented or not, and provide explanations if an item is not implemented.

## 1.3 Abbreviations and special symbols

Notations for requirement status:

| | |
|---|---|
| M | Mandatory |
| O | Optional |
| O.n | Optional, but support of at least one of the group of options labeled O.n is required. |
| N/A | Not applicable |
| X | Prohibited |
| *Item Number*:*Status* | Status is conditional on support of item number |

"*Item Number*": Conditional, status dependent upon the support marked for the "*Item Number*".

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For example, FD1: O.1 indicates that the status is optional but at least one of the features described in FD1 is required to be implemented, if this implementation is to follow the standard of which this PICS Proforma is a part.

## 1.4 Instructions for completing the PICS proforma

If a given implementation is claimed to conform to this standard, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma in this annex, and shall preserve the numbering and naming and the ordering of the PICS proforma.

A PICS which conforms to this document shall be a conforming PICS proforma completed in accordance with the instructions for completion given in this annex.

The main part of the PICS is a fixed-format questionnaire, divided into five tables. Answers to the questionnaire are to be provided in the rightmost column, either by simply marking an answer to indicate a restricted choice (such as Yes or No), or by entering a value, set, or range of values.

## 1.5 PICS proforma tables

The tables in clauses 4 onwards are composed of the detailed questions to be answered, which make up the PICS proforma.


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# 2 References

The following standards contain provisions, which, through reference in this document, constitute provisions of this standard. All the standards listed are normative references. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

## 2.1 ZigBee Alliance documents

[R1] ZigBee document 053474: ZigBee Specification

[R2] ZigBee document 08006: ZigBee-2007 Layer PICS and Stack Profiles

[R3] ZigBee document 11-0037: ZigBee Light Link Profile Specification

[R4] ZigBee document 075123: ZigBee Cluster Library

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# 3 Implementation declaration

## 3.1 Identification of the implementation

**Implementation under test (IUT) identification**

| | |
|---|---|
| **IUT name** | **ZLL Non-color scene controller: RWL020** |
| **IUT software version** | **5.45.1.15767** |
| **IUT hardware version** | **MP1.0** |
| **Operating system (optional)** | **n.a.** |

**Product supplier**

| | |
|---|---|
| **Name** | **Philips Lighting B.V.** |
| **Address** | **P.O. Box 80020**<br>**5600 JM Eindhoven**<br>**The Netherlands** |
| **Telephone number** | |
| **Fax number** | |
| **Email address** | |
| **Additional information** | |


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**Client**

| | |
|---|---|
| **Name** | **Henk Veldhuis** |
| **Address** | **(See above)** |
| **Telephone number** | **+31-(0)62280-1614** |
| **Fax number** | |
| **Email address** | **henk.veldhuis@philips.com** |
| **Additional information** | |

**PICS contact person**

| | |
|---|---|
| **Name** | **Rob Houtepen** |
| **Address** | **(See above)** |
| **Telephone number** | |
| **Fax number** | |
| **Email address** | **rob.houtepen@philips.com** |
| **Additional information** | |

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## 3.2 Identification of the protocol

This PICS proforma applies to ZigBee Light Link profile [R3].

## 3.3 Global statement of conformance

The implementation described in this PICS proforma meets all of the mandatory requirements of the referenced standards:

Application Profile: ZigBee Light Link [R3]

(•) Yes

( ) No

Note -- Answering 'No' indicates non-conformance to the specified protocol standard. Non-supported mandatory capabilities are to be identified in the following tables, with an explanation by the implementer explaining why the implementation is non-conforming.

The supplier will have fully complied with the requirements for a statement of conformance by completing the statement contained in this sub-clause. That means, by clicking the above, the statement of conformance is complete.


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# 4 General

## 4.1 [FDT] ZigBee device types

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| FDT1 | Is this device capable of acting as a ZigBee coordinator? | [R1]/2.5.5.5.1 | X | No |
| FDT2 | Is this device capable of acting as a ZigBee router? | [R1]/2.5.5.5.2 | O.1 | No |
| FDT3 | Is this a ZigBee end device? | [R1]/2.5.5.5.3 | O.1 | Yes |

## 4.2 [CDD] Commissioning device descriptions

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CDD1 | Is the product programmed as a commissioning server? | [R3]/5 | O.2 | No |
| CDD2 | Is the product programmed as a commissioning server/client? | [R3]/5 | O.2 | Yes |
| CDD3 | Is the product programmed as a commissioning client? | [R3]/5 | O.2 | No |

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# 5 [DD] Device descriptions

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| DD1 | Is the product programmed as an On/Off Light?<br>Note: If this is supported, fill out section 5.2.1. | [R3]/5 | O.3 | No |
| DD2 | Is the product programmed as an On/Off plug-in unit?<br>Note: If this is supported, fill out section 5.2.2. | [R3]/5 | O.3 | No |
| DD3 | Is the product programmed as a dimmable light?<br>Note: If this is supported, fill out section 5.2.3. | [R3]/5 | O.3 | No |
| DD4 | Is the product programmed as a dimmable plug-in unit?<br>Note: If this is supported, fill out section 5.2.4. | [R3]/5 | O.3 | No |
| DD5 | Is the product programmed as a color light?<br>Note: If this is supported, fill out section 5.2.5. | [R3]/5 | O.3 | No |
| DD51 | Is the product programmed as an extended color light?<br>Note: If this is supported, fill out section 5.2.6. | [R3]/5 | O.3 | No |
| DD52 | Is the product programmed as a color temperature light?<br>Note: If this is supported, fill out section 5.2.7. | [R3]/5 | O.3 | No |
| DD6 | Is the product programmed as a color controller?<br>Note: If this is supported, fill out section 5.3.1. | [R3]/5 | O.3 | No |
| DD7 | Is the product programmed as a color scene controller?<br>Note: If this is supported, fill out section 5.3.2. | [R3]/5 | O.3 | No |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| DD8 | Is the product programmed as a non-color controller?<br>Note: If this is supported, fill out section 5.3.3. | [R3]/5 | O.3 | Yes |
| DD9 | Is the product programmed as a non-color scene controller?<br>Note: If this is supported, fill out section 5.3.4. | [R3]/5 | O.3 | No |
| DD10 | Is the product programmed as a control bridge?<br>Note: If this is supported, fill out section 5.3.5. | [R3]/5 | O.3 | No |
| DD11 | Is the product programmed as an on/off sensor?<br>Note: If this is supported, fill out section 5.3.6. | [R3]/5 | O.3 | No |

## 5.1 [CC] Common clusters

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CC1 | Does the device support the basic cluster as a server? | [R3]/5.1 | M | Yes |

## 5.2 Lighting devices

### 5.2.1 [ADOOL] On/off light

Note: Only fill out this section if DD1 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADOOL0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD1:<br>(CDD1: O4<br>CDD2: O4<br>CDD3: X) | |
| ADOOL1 | Does the device support the identify cluster as a server? | [R3]/5.2.1 | DD1:M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADOOL2 | Does the device support the groups cluster as a server? | [R3]/5.2.1 | DD1:M | |
| ADOOL3 | Does the device support the scenes cluster as a server? | [R3]/5.2.1 | DD1:M | |
| ADOOL4 | Does the device support the on/off cluster as a server? | [R3]/5.2.1 | DD1:M | |

### 5.2.2 [ADOOPIU] On/Off plug-in unit

Note: Only fill out this section if DD2 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADOOPIU0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD2: (CDD1: O5 CDD2: O5 CDD3: X) | |
| ADOOPIU1 | Does the device support the identify cluster as a server? | [R3]/5.2.2 | DD2:M | |
| ADOOPIU2 | Does the device support the groups cluster as a server? | [R3]/5.2.2 | DD2:M | |
| ADOOPIU3 | Does the device support the scenes cluster as a server? | [R3]/5.2.2 | DD2:M | |
| ADOOPIU4 | Does the device support the on/off cluster as a server? | [R3]/5.2.2 | DD2:M | |


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### 5.2.3 [ADDL] Dimmable light

Note: Only fill out this section if DD3 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADDL0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD3: (CDD1: O6 CDD2: O6 CDD3: X) | |
| ADDL1 | Does the device support the identify cluster as a server? | [R3]/5.2.3 | DD3:M | |
| ADDL2 | Does the device support the groups cluster as a server? | [R3]/5.2.3 | DD3:M | |
| ADDL3 | Does the device support the scenes cluster as a server? | [R3]/5.2.3 | DD3:M | |
| ADDL4 | Does the device support the on/off cluster as a server? | [R3]/5.2.3 | DD3:M | |
| ADDL5 | Does the device support the level control cluster as a server? | [R3]/5.2.3 | DD3:M | |

### 5.2.4 [ADDPIU] Dimmable plug-in unit

Note: Only fill out this section if DD4 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADDPIU0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD4: (CDD1: O7 CDD2: O7 CDD3: X) | |
| ADDPIU1 | Does the device support the identify cluster as a server? | [R3]/5.2.4 | DD4:M | |
| ADDPIU2 | Does the device support the groups cluster as a server? | [R3]/5.2.4 | DD4:M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADDPIU3 | Does the device support the scenes cluster as a server? | [R3]/5.2.4 | DD4:M | |
| ADDPIU4 | Does the device support the on/off cluster as a server? | [R3]/5.2.4 | DD4:M | |
| ADDPIU5 | Does the device support the level control cluster as a server? | [R3]/5.2.4 | DD4:M | |

### 5.2.5 [ADCL] Color light

Note: Only fill out this section if DD5 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCL0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD5: (CDD1: O8 CDD2: O8 CDD3: X) | |
| ADCL1 | Does the device support the identify cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL2 | Does the device support the groups cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL3 | Does the device support the scenes cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL4 | Does the device support the on/off cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL5 | Does the device support the level control cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL6 | Does the device support the color control cluster as a server? | [R3]/5.2.5 | DD5:M | |
| ADCL7 | Does the device set the *ColorCapabilities* attribute to 0x000f? | [R3]/5.2.5 | DD5:M | |


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### 5.2.6 [ADECL] Extended color light

Note: Only fill out this section if DD51 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADECL0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD51: (CDD1: O9 CDD2: O9 CDD3: X) | |
| ADECL1 | Does the device support the identify cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL2 | Does the device support the groups cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL3 | Does the device support the scenes cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL4 | Does the device support the on/off cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL5 | Does the device support the level control cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL6 | Does the device support the color control cluster as a server? | [R3]/5.2.6 | DD51:M | |
| ADECL7 | Does the device set the *ColorCapabilities* attribute to 0x001f? | [R3]/5.2.6 | DD51:M | |

### 5.2.7 [ADCTL] Color temperature light

Note: Only fill out this section if DD52 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCTL0 | Is the device programmed as a commissioning server or a commissioning server/client? | [R3]/5 | DD52: (CDD1: O10 CDD2: O10 CDD3: X) | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCTL1 | Does the device support the identify cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL2 | Does the device support the groups cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL3 | Does the device support the scenes cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL4 | Does the device support the on/off cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL5 | Does the device support the level control cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL6 | Does the device support the color control cluster as a server? | [R3]/5.2.7 | DD52:M | |
| ADCTL7 | Does the device set the *ColorCapabilities* attribute to 0x0010? | [R3]/5.2.7 | DD52:M | |

## 5.3 Controller devices

### 5.3.1 [ADCC] Color controller

Note: Only fill out this section if DD6 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCC0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD6: (CDD1: O11 CDD2: O11 CDD3: O11) | |
| ADCC1 | Does the device support the identify cluster as a client? | [R3]/5.3.1 | DD6:M | |
| ADCC2 | Does the device support the groups cluster as a client? | [R3]/5.3.1 | DD6:M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCC3 | Does the device support the on/off cluster as a client? | [R3]/5.3.1 | DD6:M | |
| ADCC4 | Does the device support the level control cluster as a client? | [R3]/5.3.1 | DD6:M | |
| ADCC5 | Does the device support the color control cluster as a client? | [R3]/5.3.1 | DD6:M | |
| ADCC6 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.1 | DD6:M | |

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### 5.3.2 [ADCSC] Color scene controller

Note: Only fill out this section if DD7 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCSC0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD7: (CDD1: O12 CDD2: O12 CDD3: O12) | |
| ADCSC1 | Does the device support the identify cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC2 | Does the device support the groups cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC3 | Does the device support the scenes cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC4 | Does the device support the on/off cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC5 | Does the device support the level control cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC6 | Does the device support the color control cluster as a client? | [R3]/5.3.2 | DD7:M | |
| ADCSC7 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.2 | DD7:M | |

### 5.3.3 [ADNCC] Non-color controller

Note: Only fill out this section if DD8 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADNCC0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD8: (CDD1: O13 CDD2: O13 CDD3: O13) | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADNCC1 | Does the device support the identify cluster as a client? | [R3]/5.3.3 | DD8:M | Yes |
| ADNCC2 | Does the device support the groups cluster as a client? | [R3]/5.3.3 | DD8:M | Yes |
| ADNCC3 | Does the device support the on/off cluster as a client? | [R3]/5.3.3 | DD8:M | Yes |
| ADNCC4 | Does the device support the level control cluster as a client? | [R3]/5.3.3 | DD8:M | Yes |
| ADNCC5 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.3 | DD8:M | Yes |

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### 5.3.4 [ADNCSC] Non-color scene controller

Note: Only fill out this section if DD9 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADNCSC0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD9: (CDD1: O14 CDD2: O14 CDD3: O14) | |
| ADNCSC1 | Does the device support the identify cluster as a client? | [R3]/5.3.4 | DD9:M | |
| ADNCSC2 | Does the device support the groups cluster as a client? | [R3]/5.3.4 | DD9:M | |
| ADNCSC3 | Does the device support the scenes cluster as a client? | [R3]/5.3.4 | DD9:M | |
| ADNCSC4 | Does the device support the on/off cluster as a client? | [R3]/5.3.4 | DD9:M | |
| ADNCSC5 | Does the device support the level control cluster as a client? | [R3]/5.3.4 | DD9:M | |
| ADNCSC6 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.4 | DD9:M | |


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### 5.3.5 [ADCB] Control bridge

Note: Only fill out this section if DD10 is supported.

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADCB0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD10: (CDD1: O15 CDD2: O15 CDD3: O15) | |
| ADCB9 | Does the device support the identify cluster as a client? | [R3]/5.3.5 | DD10:M | |
| ADCB10 | Does the device support the groups cluster as a client? | [R3]/5.3.5 | DD10:M | |
| ADCB11 | Does the device support the scenes cluster as a client? | [R3]/5.3.5 | DD10:M | |
| ADCB12 | Does the device support the on/off cluster as a client? | [R3]/5.3.5 | DD10:M | |
| ADCB13 | Does the device support the level control cluster as a client? | [R3]/5.3.5 | DD10:M | |
| ADCB14 | Does the device support the color control cluster as a client? | [R3]/5.3.5 | DD10: M | |
| ADCB15 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.5 | DD10:M | |

### 5.3.6 [ADOOS] On/off sensor

Note: Only fill out this section if DD11 is supported.


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADOOS0 | Is the device programmed as a commissioning server, a commissioning server/client or a commissioning client? | [R3]/5 | DD11: (CDD1: O16 CDD2: O16 CDD3: O16) | |
| ADOOS3 | Does the device support the identify cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS4 | Does the device support the groups cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS5 | Does the device support the scenes cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS6 | Does the device support the on/off cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS7 | Does the device support the level control cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS8 | Does the device support the color control cluster as a client? | [R3]/5.3.6 | DD11:M | |
| ADOOS9 | Does the device support the ZLL commissioning cluster: utility as both a server and a client? | [R3]/5.3.6 | DD11:M | |


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# 6 ZCL usage and enhancements

## 6.1 [GCF] General command frames

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCF1 | Does the device support the transmission of the **read attributes** command? | [R4]/2.4.1 | O | No |
| GCF1a | Does the device support the reception of the **read attributes** command? | [R4]/2.4.1 | M | Yes |
| GCF2 | Does the device support the transmission of the **read attributes response** command? | [R4]/2.4.2 | M | Yes |
| GCF2a | Does the device support the reception of the **read attributes response** command? | [R4]/2.4.2 | GCF1: M | No |
| GCF3 | Does the device support the transmission of the **write attributes** command? | [R4]/2.4.3 | O | No |
| GCF3a | Does the device support the reception of the **write attributes** command? | [R4]/2.4.3 | M | Yes |
| GCF4 | Does the device support the transmission of the **write attributes undivided** command? | [R4]/2.4.4 | O | No |
| GCF4a | Does the device support the reception of the **write attributes undivided** command? | [R4]/2.4.4 | M | Yes |
| GCF5 | Does the device support the transmission of the **write attributes response** command? | [R4]/2.4.5 | M | Yes |
| GCF5a | Does the device support the reception of the **write attributes response** command? | [R4]/2.4.5 | GCF3: M<br>GCF4: M | No |
| GCF6 | Does the device support the transmission of the **write attributes no response** command? | [R4]/2.4.6 | O | No |
| GCF6a | Does the device support the reception of the **write attributes no response** command? | [R4]/2.4.6 | M | Yes |
| GCF7 | Does the device support the transmission and reception of the **default response** command? | [R4]/2.4.12 | M | Yes |

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## 6.2 Basic cluster

### 6.2.1 [BCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| BCS1 | Does the device support the **basic** cluster as a server? | [R4]/3.2.2 | M | Yes |

#### 6.2.1.1 [BCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| BCSA1 | Does the device support the **ZCLVersion** attribute? | [R4]/3.2.2.2.2 | M | Yes |
| BCSA2 | Does the device support the **ApplicationVersion** attribute? | [R4]/3.2.2.2.3 | M | Yes |
| BCSA3 | Does the device support the **StackVersion** attribute? | [R4]/3.2.2.2.4 | M | Yes |
| BCSA4 | Does the device support the **HWVersion** attribute? | [R4]/3.2.2.2.5 | M | Yes |
| BCSA5 | Does the device support the **ManufacturerName** attribute? | [R4]/3.2.2.2.6 | M | Yes |
| BCSA6 | Does the device support the **ModelIdentifier** attribute? | [R4]/3.2.2.2.7 | M | Yes |
| BCSA7 | Does the device support the **DateCode** attribute? | [R4]/3.2.2.2.8 | M | Yes |
| BCSA8 | Does the device support the **PowerSource** attribute? | [R4]/3.2.2.2.9 | M | Yes |
| BCSA9 | Does the device support the **SWBuildID** attribute? | [R3]/6.2.1.1.1 | M | Yes |


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### 6.2.2 [BCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| BCC1 | Does the device support the **basic** cluster as a client? | [R4]/3.2.3 | O | No |

## 6.3 Identify cluster

### 6.3.1 [ICS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICS1 | Does the device support the **identify** cluster as a server? | [R4]/3.5.2 | DD1: M<br>DD2: M<br>DD3: M<br>DD4: M<br>DD5: M<br>DD51: M<br>DD52: M | No |

#### 6.3.1.1 [ICSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICSA1 | Does the device support the **IdentifyTime** attribute? | [R4]/3.5.2.2.1 | ICS1: M | |

#### 6.3.1.2 [ICSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICSCR1 | Does the device support the reception of the **identify** command? | [R4]/3.5.2.3.1 | ICS1: M | |
| ICSCR2 | Does the device support the reception of the **identify query** command? | [R4]/3.5.2.3.2 | ICS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICSCR3 | Does the device support the reception of the **trigger effect** command? | [R3]/6.3.1.2.1 | ICS1: M | |

#### 6.3.1.3 [ICSCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICSCG1 | Does the device support the generation and transmission of the **identify query response** command? | [R4]/3.5.2.4.1 | ICS1: M | |

### 6.3.2 [ICC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICC1 | Does the device support the **identify** cluster as a client? | [R4]/3.5.3 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 6.3.2.1 Attributes

There are no PICS requirements for this section.

#### 6.3.2.2 [ICCCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICCCR1 | Does the device support the reception of the **identify query response** command? | [R4]/3.5.2.4.1 | ICCCG2: M | No |


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#### 6.3.2.3 [ICCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ICCCG1 | Does the device support the generation and transmission of the **identify** command? | [R4]/3.5.2.3.1 | ICC1: O | No |
| ICCCG2 | Does the device support the generation and transmission of the **identify query** command? | [R4]/3.5.2.3.2 | ICC1: O | No |
| ICCCG3 | Does the device support the generation and transmission of the **trigger effect** command? | [R3]/6.3.1.2.1 | ICC1: O | Yes |

## 6.4 Groups cluster

### 6.4.1 [GCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCS1 | Does the device support the **groups** cluster as a server? | [R4]/3.6.2 | DD1: M<br>DD2: M<br>DD3: M<br>DD4: M<br>DD5: M<br>DD51: M<br>DD52: M | No |

#### 6.4.1.1 [GCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCSA1 | Does the device support the **NameSupport** attribute? | [R4]/3.6.2.2 | GCS1: M | |

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### 6.4.1.2 [GCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCSCR1 | Does the device support the reception of the **add group** command? | [R4]/3.6.2.2.3 | GCS1:M | |
| GCSCR2 | Does the device support the reception of the **view group** command? | [R4]/3.6.2.2.4 | GCS1:M | |
| GCSCR3 | Does the device support the reception of the **get group membership** command? | [R4]/3.6.2.2.5 | GCS1:M | |
| GCSCR4 | Does the device support the reception of the **remove group** command? | [R4]/3.6.2.2.6 | GCS1:M | |
| GCSCR5 | Does the device support the reception of the **remove all groups** command? | [R4]/3.6.2.2.7 | GCS1:M | |
| GCSCR6 | Does the device support the reception of the **add group if identifying** command? | [R4]/3.6.2.2.8 | GCS1:M | |

### 6.4.1.3 [GCSCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCSCG1 | Does the device support the generation and transmission of the **add group response** command in the case that an **add group** command was received as a unicast? | [R4]/3.6.2.3.1 | GCS1:M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCSCG1a | Does the device not support the generation and transmission of the **add group response** command in the case that an **add group** command was received as a groupcast or broadcast? | [R3]/6.4.1.2.1 | GCS1:M | |
| GCSCG2 | Does the device support the generation and transmission of the **view group response** command in the case that an **view group** command was received as a unicast? | [R4]/3.6.2.3.2 | GCS1:M | |
| GCSCG2a | Does the device not support the generation and transmission of the **view group response** command in the case that an **view group** command was received as a groupcast or broadcast? | [R3]/6.4.1.2.1 | GCS1:M | |
| GCSCG3 | Does the device support the generation and transmission of the **get group membership response** command in the case that a **get group membership** command was received as a unicast? | [R4]/3.6.2.3.3 | GCS1: M | |
| GCSCG3a | Does the device not support the generation and transmission of the **get group membership response** command in the case that a **get group membership** command was received as a groupcast or broadcast? | [R3]/6.4.1.2.1 | GCS1:M | |
| GCSCG4 | Does the device support the generation and transmission of the **remove group response** command in the case that a **remove group** command was received as a unicast? | [R4]/3.6.2.3.4 | GCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCSCG4a | Does the device not support the generation and transmission of the **remove group response** command in the case that a **remove group** command was received as a groupcast or broadcast? | [R3]/6.4.1.2.1 | GCS1:M | |

### 6.4.2 [GCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCC1 | Does the device support the **groups** cluster as a client? | [R4]/3.6.3 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 6.4.2.1 Attributes

There are no PICS requirements for this section.

#### 6.4.2.2 [GCCCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCCCR1 | Does the device support the reception of the **add group response** command? | [R4]/3.6.2.3.1 | GCCCG1: M | Yes |
| GCCCR2 | Does the device support the reception of the **view group response** command? | [R4]/3.6.2.3.2 | GCCCG2: M | No |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCCCR3 | Does the device support the reception of the **get group membership response** command? | [R4]/3.6.2.3.3 | GCCCG3: M | No |
| GCCCR4 | Does the device support the reception of the **remove group response** command? | [R4]/3.6.2.3.4 | GCCCG4: M | Yes |

### 6.4.2.3 [GCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| GCCCG1 | Does the device support the generation and transmission of the **add group** command? | [R4]/3.6.2.2.3 | GCC1: O | Yes |
| GCCCG2 | Does the device support the generation and transmission of the **view group** command? | [R4]/3.6.2.2.4 | GCC1: O | No |
| GCCCG3 | Does the device support the generation and transmission of the **get group membership** command? | [R4]/3.6.2.2.5 | GCC1: O | No |
| GCCCG4 | Does the device support the generation and transmission of the **remove group** command? | [R4]/3.6.2.2.6 | GCC1: O | Yes |
| GCCCG5 | Does the device support the generation and transmission of the **remove all groups** command? | [R4]/3.6.2.2.7 | GCC1: O | No |
| GCCCG6 | Does the device support the generation and transmission of the **add group if identifying** command? | [R4]/3.6.2.2.8 | GCC1: O | No |

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## 6.5 Scenes cluster

### 6.5.1 [SCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCS1 | Does the device support the **scenes** cluster as a server? | [R4]/3.7.2 | DD1: M<br>DD2: M<br>DD3: M<br>DD4: M<br>DD5: M<br>DD51: M<br>DD52: M | No |

#### 6.5.1.1 [SCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSA1 | Does the device support the **SceneCount** attribute? | [R4]/3.7.2.2.1.1 | SCS1: M | |
| SCSA2 | Does the device support the **CurrentScene** attribute? | [R4]/3.7.2.2.1.2 | SCS1: M | |
| SCSA3 | Does the device support the **CurrentGroup** attribute? | [R4]/3.7.2.2.1.3 | SCS1: M | |
| SCSA4 | Does the device support the **SceneValid** attribute? | [R4]/3.7.2.2.1.4 | SCS1: M | |
| SCSA5 | Does the device support the **NameSupport** attribute, fixed to 0, indicating no name support? | [R4]/3.7.2.2.1.5 | SCS1: M | |


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### 6.5.1.2 [SCSSTE] Scene table enhancements

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSSTE1 | Does the device support the scene table item **TransitionTime100ms**? | [R3]/6.5.1.2 | SCS1: M | |

### 6.5.1.3 [SCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCR1 | Does the device support the reception of the **add scene** command? | [R4]/3.7.2.4.1 | SCS1: M | |
| SCSCR2 | Does the device support the reception of the **view scene** command? | [R4]/3.7.2.4.2 | SCS1: M | |
| SCSCR3 | Does the device support the reception of the **remove scene** command? | [R4]/3.7.2.4.3 | SCS1: M | |
| SCSCR4 | Does the device support the reception of the **remove all scenes** command? | [R4]/3.7.2.4.4 | SCS1: M | |
| SCSCR5 | Does the device support the reception of the **store scene** command? | [R4]/3.7.2.4.5 | SCS1: M | |
| SCSCR6 | Does the device support the reception of the **recall scene** command? | [R4]/3.7.2.4.6 | SCS1: M | |
| SCSCR7 | Does the device support the reception of the **get scene membership** command? | [R4]/3.7.2.4.7 | SCS1: M | |
| SCSCR8 | Does the device support the reception of the **enhanced add scene** command? | [R3]/6.5.1.3.1 | SCS1: M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCR9 | Does the device support the reception of the **enhanced view scene** command? | [R3]/6.5.1.3.2 | SCS1: M | |
| SCSCR10 | Does the device support the reception of the **copy scene** command? | [R3]/6.5.1.3.3 | SCS1: M | |

### 6.5.1.4 [SCSCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCG1 | Does the device support the generation and transmission of the **add scene response** command in the case that an **add scene** command was received as a unicast? | [R4]/3.7.2.5.1 | SCS1: M | |
| SCSCG1a | Does the device not support the generation and transmission of the **add scene response** command in the case that an **add scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG2 | Does the device support the generation and transmission of the **view scene response** command in the case that a **view scene** command was received as a unicast? | [R4]/3.7.2.5.2 | SCS1: M | |
| SCSCG2a | Does the device not support the generation and transmission of the **view scene response** command in the case that a **view scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCG3 | Does the device support the generation and transmission of the **remove scene response** command in the case that a **remove scene** command was received as a unicast? | [R4]/3.7.2.5.3 | SCS1: M | |
| SCSCG3a | Does the device not support the generation and transmission of the **remove scene response** command in the case that a **remove scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG4 | Does the device support the generation and transmission of the **remove all scenes response** command in the case that a **remove all scenes** command was received as a unicast? | [R4]/3.7.2.5.4 | SCS1: M | |
| SCSCG4a | Does the device not support the generation and transmission of the **remove all scenes response** command in the case that a **remove all scenes** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG5 | Does the device support the generation and transmission of the **store scene response** command in the case that a **store scene** command was received as a unicast? | [R4]/3.7.2.5.5 | SCS1: M | |
| SCSCG5a | Does the device not support the generation and transmission of the **store scene response** command in the case that a **store scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCG6 | Does the device support the generation and transmission of the **get scene membership response** command in the case that a **get scene membership** command was received as a unicast? | [R4]/3.7.2.5.6 | SCS1: M | |
| SCSCG6a | Does the device not support the generation and transmission of the **get scene membership response** command in the case that a **get scene membership** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG7 | Does the device support the generation and transmission of the **enhanced add scene response** command in the case that an **enhanced add scene** command was received as a unicast? | [R3]/6.5.1.4.1 | SCS1: M | |
| SCSCG7a | Does the device not support the generation and transmission of the **enhanced add scene response** command in the case that an **enhanced add scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG8 | Does the device support the generation and transmission of the **enhanced view scene response** command in the case that an **enhanced view scene** command was received as a unicast? | [R3]/6.5.1.4.2 | SCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCSCG8a | Does the device not support the generation and transmission of the **enhanced view scene response** command in the case that an **enhanced view scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |
| SCSCG9 | Does the device support the generation and transmission of the **copy scene response** command in the case that a **copy scene** command was received as a unicast? | [R3]/6.5.1.4.3 | SCS1: M | |
| SCSCG9a | Does the device not support the generation and transmission of the **copy scene response** command in the case that a **copy scene** command was received as a groupcast or broadcast? | [R3]/6.5.1.3.1 | SCS1: M | |

### 6.5.2 [SCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCC1 | Does the device support the **scenes** cluster as a client? | [R4]/3.7.3 | DD7: M<br>DD9: M<br>DD10: M<br>DD11: M | No |

#### 6.5.2.1 Attributes

There are no PICS requirements for this section.


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### 6.5.2.2 [SCCCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCCCR1 | Does the device support the reception of the **add scene response** command? | [R3]/6.5.2.2 | SCCCG1: M | |
| SCCCR2 | Does the device support the reception of the **view scene response** command? | [R3]/6.5.2.2 | SCCCG2: M | |
| SCCCR3 | Does the device support the reception of the **remove scene response** command? | [R3]/6.5.2.2 | SCCCG3: M | |
| SCCCR4 | Does the device support the reception of the **remove all scenes response** command? | [R3]/6.5.2.2 | SCCCG4: M | |
| SCCCR5 | Does the device support the reception of the **store scene response** command? | [R3]/6.5.2.2 | SCCCG5: M | |
| SCCCR6 | Does the device support the reception of the **get scene membership response** command? | [R3]/6.5.2.2 | SCCCG7: M | |
| SCCCR7 | Does the device support the reception of the **enhanced add scene response** command? | [R3]/6.5.1.4.1 | SCCCG8: M | |
| SCCCR8 | Does the device support the reception of the **enhanced view scene response** command? | [R3]/6.5.1.4.2 | SCCCG9: M | |
| SCCCR9 | Does the device support the reception of the **copy scene response** command? | [R3]/6.5.1.4.3 | SCCCG10: M | |


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#### 6.5.2.3 [SCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| SCCCG1 | Does the device support the generation and transmission of the **add scene** command? | [R4]/3.7.2.4.1 | SCC1: O | |
| SCCCG2 | Does the device support the generation and transmission of the **view scene** command? | [R4]/3.7.2.4.2 | SCC1: O | |
| SCCCG3 | Does the device support the generation and transmission of the **remove scene** command? | [R4]/3.7.2.4.3 | SCC1: O | |
| SCCCG4 | Does the device support the generation and transmission of the **remove all scenes** command? | [R4]/3.7.2.4.4 | SCC1: O | |
| SCCCG5 | Does the device support the generation and transmission of the **store scene** command? | [R4]/3.7.2.4.5 | SCC1: O | |
| SCCCG6 | Does the device support the generation and transmission of the **recall scene** command? | [R4]/3.7.2.4.6 | SCC1: O | |
| SCCCG7 | Does the device support the generation and transmission of the **get scene membership** command? | [R4]/3.7.2.4.7 | SCC1: O | |
| SCCCG8 | Does the device support the generation and transmission of the **enhanced add scene** command? | [R3]/6.5.1.3.1 | SCC1: O | |
| SCCCG9 | Does the device support the generation of the **enhanced view scene** command? | [R3]/6.5.1.3.2 | SCC1: O | |
| SCCCG10 | Does the device support the generation of the **copy scene** command? | [R3]/6.5.1.3.3 | SCC1: O | |

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## 6.6 On/off cluster

### 6.6.1 [OOCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCS1 | Does the device support the **on/off** cluster as a server? | [R4]/3.8.2 | DD1: M<br>DD2: M<br>DD3: M<br>DD4: M<br>DD5: M<br>DD51: M<br>DD52: M | No |

#### 6.6.1.1 [OOCSD] Dependencies

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSD1 | Does the device set the **OnTime** attribute to 0x0000 on receipt of a **level control** cluster command that causes the **OnOff** attribute to be set to 0x00? | 6.6.1.1.1 | OOCS1: M | |
| OOCSD2 | Does the device set the **OffWaitTime** attribute to 0x0000 on receipt of a **level control** cluster command that causes the **OnOff** attribute to be set to 0x01 if the **OnTime** attribute is equal to 0x0000? | 6.6.1.1.1 | OOCS1: M | |

#### 6.6.1.2 [OOCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSA1 | Does the device support the **OnOff** attribute? | [R4]/3.8.2.2 | OOCS1:M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSA2 | Does the device support the **GlobalSceneControl** attribute? | [R3]/6.6.1.2.1 | OOCS1:M | |
| OOCSA3 | Does the device support the **OnTime** attribute? | [R3]/6.6.1.2.2 | OOCS1:M | |
| OOCSA4 | Does the device support the **OffWaitTime** attribute? | [R3]/6.6.1.2.3 | OOCS1:M | |

### 6.6.1.3 [OOCSSTE] Scene table enhancement

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSSTE1 | Does the device support the scene table item **OnOff**? | [R3]/6.6.1.3 | OOCS1: M | |

### 6.6.1.4 [OOCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSCR1 | Does the device support the reception of the **off** command? | [R3]/6.6.1.4.1<br>[R4]/3.8.2.3.1 | OOCS1: M | |
| OOCSCR2 | Does the device support the reception of the **on** command? | [R3]/6.6.1.4.2<br>[R4]/3.8.2.3.2 | OOCS1: M | |
| OOCSCR3 | Does the device support the reception of the **toggle** command? | [R3]/6.6.1.4.3<br>[R4]/3.8.2.3.3 | OOCS1: M | |
| OOCSCR4 | Does the device support the reception of the **off with effect** command? | [R3]/6.6.1.4.4 | OOCS1: M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCSCR5 | Does the device support the reception of the **on with recall global scene** command? | [R3]/6.6.1.4.5 | OOCS1: M | |
| OOCSCR6 | Does the device support the reception of the **on with timed off** command? | [R3]/6.6.1.4.6 | OOCS1: M | |

### 6.6.2 [OOCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCC1 | Does the device support the **on/off** cluster as a client? | [R4]/3.8.3 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 6.6.2.1 Attributes

There are no PICS requirements for this section.

#### 6.6.2.2 Commands received

There are no PICS requirements for this section.


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#### 6.6.2.3 [OOCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| OOCCCG1 | Does the device support the generation and transmission of the **off** command? | [R4]/3.8.2.3.1 | OOCC1: O | No |
| OOCCCG2 | Does the device support the generation and transmission of the **on** command? | [R4]/3.8.2.3.2 | OOCC1: O | Yes |
| OOCCCG3 | Does the device support the generation and transmission of the **toggle** command? | [R4]/3.8.2.3.3 | OOCC1: O | No |
| OOCCCG4 | Does the device support the generation and transmission of the **off with effect** command? | [R3]/6.6.1.4.4 | OOCC1: O | Yes |
| OOCCCG5 | Does the device support the generation and transmission of the **on with recall global scene** command? | [R3]/6.6.1.4.5 | OOCC1: O | No |
| OOCCCG6 | Does the device support the generation and transmission of the **on with timed off** command? | [R3]/6.6.1.4.6 | OOCC1: O | No |

## 6.7 Level control cluster

### 6.7.1 [LCCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCS1 | Does the device support the **level control** cluster as a server? | [R4]/3.10.2 | DD3: M<br>DD4: M<br>DD5: M<br>DD51: M<br>DD52: M | No |


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### 6.7.1.1 [LCCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCSA1 | Does the device support the **CurrentLevel** attribute? | [R4]/3.10.2.2.1 | LCCS1: M | |
| LCCSA2 | Does the device support the **RemainingTime** attribute? | [R4]/3.10.2.2.2 | LCCS1: M | |

### 6.7.1.2 [LCCSSTE] Scene table enhancements

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCSSTE1 | Does the device support the scene table item **CurrentLevel**? | [R3]/6.7.1.2 | LCCS1: M | |

### 6.7.1.3 [LCCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCSCR1 | Does the device support the reception of the **move to level** command? | [R4]/3.10.2.3.1 | LCCS1: M | |
| LCCSCR2 | Does the device support the reception of the **move** command? | [R4]/3.10.2.3.2 | LCCS1: M | |
| LCCSCR3 | Does the device support the reception of the **step** command? | [R4]/3.10.2.3.3 | LCCS1: M | |
| LCCSCR4 | Does the device support the reception of the **stop** command? | [R4]/3.10.2.3.4 | LCCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCSCR5 | Does the device support the reception of the **move to level (with on/off)** command? | [R4]/3.10.2.3.5 | LCCS1: M | |
| LCCSCR6 | Does the device support the reception of the **move (with on/off)** command? | [R4]/3.10.2.3.5 | LCCS1: M | |
| LCCSCR7 | Does the device support the reception of the **step (with on/off)** command? | [R4]/3.10.2.3.5 | LCCS1: M | |
| LCCSCR8 | Does the device support the reception of the **stop (with on/off)** command? | [R4]/3.10.2.3.4 | LCCS1: M | |

### 6.7.2 [LCCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCC1 | Does the device support the **level control** cluster as a client? | [R4]/3.10.3 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 6.7.2.1 Attributes

There are no PICS requirements for this section.

#### 6.7.2.2 Commands received

There are no PICS requirements for this section.


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### 6.7.2.3 [LCCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LCCCCG1 | Does the device support the generation and transmission of the **move to level** command? | [R4]/3.10.2.3.1 | LCCC1: O | No |
| LCCCCG2 | Does the device support the generation and transmission of the **move** command? | [R4]/3.10.2.3.2 | LCCC1: O | No |
| LCCCCG3 | Does the device support the generation and transmission of the **step** command? | [R4]/3.10.2.3.3 | LCCC1: O | Yes |
| LCCCCG4 | Does the device support the generation and transmission of the **stop** command? | [R4]/3.10.2.3.4 | LCCC1: O | Yes |
| LCCCCG5 | Does the device support the generation and transmission of the **move to level (with on/Off)** command? | [R4]/3.10.2.3.5 | LCCC1: O | No |
| LCCCCG6 | Does the device support the generation and transmission of the **move (with on/off)** command? | [R4]/3.10.2.3.5 | LCCC1: O | No |
| LCCCCG7 | Does the device support the generation and transmission of the **step (with on/off)** command? | [R4]/3.10.2.3.5 | LCCC1: O | No |
| LCCCCG8 | Does the device support the generation and transmission of the **stop (with on/off)** command? | [R4]/3.10.2.3.4 | LCCC1: O | No |


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## 6.8 Color control cluster

### 6.8.1 [CCCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCS1 | Does the device support the **color control** cluster as a server? | [R4]/5.2.2 | DD5: M<br>DD51: M<br>DD52: M | No |

#### 6.8.1.1 [CCCSA] Attributes

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSA1 | Does the device support the **CurrentHue** attribute? | [R4]/5.2.2.2.1.1 | CCCS1: M | |
| CCCSA2 | Does the device support the **CurrentSaturation** attribute? | [R4]/5.2.2.2.1.2 | CCCS1: M | |
| CCCSA3 | Does the device support the **RemainingTime** attribute? | [R4]/5.2.2.2.1.3 | CCCS1: M | |
| CCCSA4 | Does the device support the **CurrentX** attribute? | [R4]/5.2.2.2.1.4 | CCCS1: M | |
| CCCSA5 | Does the device support the **CurrentY** attribute? | [R4]/5.2.2.2.1.5 | CCCS1: M | |
| CCCSA51 | Does the device support the **ColorTemperature** attribute? | [R4]/5.2.2.2.1.8 | CCCS1: M | |
| CCCSA6 | Does the device support the **ColorMode** attribute? | [R4]/5.2.2.2.1.9 | CCCS1: M | |
| CCCSA7 | Does the device support the **NumberOfPrimaries** attribute? | [R4]/5.2.2.2.2.1 | CCCS1: M | |
| CCCSA8 | Does the device support the **Primary1X** attribute? | [R4]/5.2.2.2.2.2 | CCCS1: M | |
| CCCSA9 | Does the device support the **Primary1Y** attribute? | [R4]/5.2.2.2.2.3 | CCCS1: M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSA10 | Does the device support the **Primary1Intensity** attribute? | [R4]/5.2.2.2.2.4 | CCCS1: M | |
| CCCSA11 | Does the device support the **Primary2X** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA12 | Does the device support the **Primary2Y** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA13 | Does the device support the **Primary2Intensity** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA14 | Does the device support the **Primary3X** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA15 | Does the device support the **Primary3Y** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA16 | Does the device support the **Primary3Intensity** attribute? | [R4]/5.2.2.2.2.5 | CCCS1: M | |
| CCCSA17 | Does the device support the **Primary4X** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA18 | Does the device support the **Primary4Y** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA19 | Does the device support the **Primary4Intensity** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA20 | Does the device support the **Primary5X** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA21 | Does the device support the **Primary5Y** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA22 | Does the device support the **Primary5Intensity** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA23 | Does the device support the **Primary6X** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSA24 | Does the device support the **Primary6Y** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA25 | Does the device support the **Primary6Intensity** attribute? | [R4]/5.2.2.2.3.1 | CCCS1: M | |
| CCCSA26 | Does the device support the **EnhancedCurrentHue** attribute? | [R3]/6.8.1.1.1 | CCCS1: M | |
| CCCSA27 | Does the device support the **EnhancedColorMode** attribute? | [R3]/6.8.1.1.2 | CCCS1: M | |
| CCCSA28 | Does the device support the **ColorLoopActive** attribute? | [R3]/6.8.1.1.3 | CCCS1: M | |
| CCCSA29 | Does the device support the **ColorLoopDirection** attribute? | [R3]/6.8.1.1.4 | CCCS1: M | |
| CCCSA30 | Does the device support the **ColorLoopTime** attribute? | [R3]/6.8.1.1.5 | CCCS1: M | |
| CCCSA31 | Does the device support the **ColorLoopStartEnhancedHue** attribute? | [R3]/6.8.1.1.6 | CCCS1: M | |
| CCCSA32 | Does the device support the **ColorLoopStoredEnhancedHue** attribute? | [R3]/6.8.1.1.7 | CCCS1: M | |
| CCCSA33 | Does the device support the **ColorCapabilities** attribute? | [R3]/6.8.1.1.8 | CCCS1: M | |
| CCCSA34 | Does the device support the **ColorTempPhysicalMin** attribute? | [R3]/6.8.1.1.9 | CCCSACC4: M | |
| CCCSA35 | Does the device support the **ColorTempPhysicalMax** attribute? | [R3]/6.8.1.1.10 | CCCSACC4: M | |


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#### 6.8.1.1.8 [CCCSACC] ColorCapabilities attribute

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSACC0 | Is bit 0 of the ***ColorCapabilities*** attribute set to 1? | [R3]/6.8.1.1.8 | CCCSACC1: M<br>CCCSACC2: M<br>ADCL7: M<br>ADECL7: M | |
| CCCSACC1 | Is bit 1 of the ***ColorCapabilities*** attribute set to 1? | [R3]/6.8.1.1.8 | CCCSA33: O<br>ADCL7: M<br>ADECL7: M | |
| CCCSACC2 | Is bit 2 of the ***ColorCapabilities*** attribute set to 1? | [R3]/6.8.1.1.8 | CCCSA33: O<br>ADCL7: M<br>ADECL7: M | |
| CCCSACC3 | Is bit 3 of the ***ColorCapabilities*** attribute set to 1? | [R3]/6.8.1.1.8 | CCCSA33: O<br>ADCL7: M<br>ADECL7: M | |
| CCCSACC4 | Is bit 4 of the ***ColorCapabilities*** attribute set to 1? | [R3]/6.8.1.1.8 | CCCSA33: O<br>ADECL7: M<br>ADCTL7: M | |

### 6.8.1.2 [CCCSSTE] Scene table enhancements

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSSTE1 | Does the device support the scene table item **CurrentX**? | [R3]/6.8.1.2 | CCCS1: M | |
| CCCSSTE2 | Does the device support the scene table item **CurrentY**? | [R3]/6.8.1.2 | CCCS1: M | |
| CCCSSTE3 | Does the device support the scene table item **EnhancedCurrentHue**? | [R3]/6.8.1.2 | CCCS1: M | |
| CCCSSTE4 | Does the device support the scene table item **CurrentSaturation**? | [R3]/6.8.1.2 | CCCS1: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSSTE5 | Does the device support the scene table item **ColorLoopActive**? | [R3]/6.8.1.2 | CCCS1: M | |
| CCCSSTE6 | Does the device support the scene table item **ColorLoopDirection**? | [R3]/6.8.1.2 | CCCS1: M | |
| CCCSSTE7 | Does the device support the scene table item **ColorLoopTime**? | [R3]/6.8.1.2 | CCCS1: M | |

### 6.8.1.3 [CCCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSCR1 | Does the device support the reception of the **move to hue** command? | [R4]/5.2.2.3.2 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR2 | Does the device support the reception of the **move hue** command? | [R4]/5.2.2.3.3 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR3 | Does the device support the reception of the **step hue** command? | [R4]/5.2.2.3.4 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR4 | Does the device support the reception of the **move to saturation** command? | [R4]/5.2.2.3.5 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR5 | Does the device support the reception of the **move saturation** command? | [R4]/5.2.2.3.6 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR6 | Does the device support the reception of the **step saturation** command? | [R4]/5.2.2.3.7 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSCR7 | Does the device support the reception of the **move to hue and saturation** command? | [R4]/5.2.2.3.8 | CCCSACC0: M<br>CCCSACC1: M<br>CCCSACC2: M | |
| CCCSCR8 | Does the device support the reception of the **move to color** command? | [R4]/5.2.2.3.9 | CCCSACC3: M | |
| CCCSCR9 | Does the device support the reception of the **move color** command? | [R4]/5.2.2.3.10 | CCCSACC3: M | |
| CCCSCR10 | Does the device support the reception of the **step color** command? | [R4]/5.2.2.3.11 | CCCSACC3: M | |
| CCCSCR101 | Does the device support the reception of the **move to color temperature** command? | [R4]/5.2.2.3.12 | CCCSACC4: M | |
| CCCSCR11 | Does the device support the reception of the **enhanced move to hue** command? | [R3]/6.8.1.3.2 | CCCSACC1: M | |
| CCCSCR12 | Does the device support the reception of the **enhanced move hue** command? | [R3]/6.8.1.3.3 | CCCSACC1: M | |
| CCCSCR13 | Does the device support the reception of the **enhanced step hue** command? | [R3]/6.8.1.3.4 | CCCSACC1: M | |
| CCCSCR14 | Does the device support the reception of the **enhanced move to hue and saturation** command? | [R3]/6.8.1.3.5 | CCCSACC1: M | |
| CCCSCR15 | Does the device support the reception of the **color loop set** command? | [R3]/6.8.1.3.6 | CCCSACC2: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCSCR16 | Does the device support the reception of the **stop move step** command? | [R3]/6.8.1.3.7 | CCCS1: M | |
| CCCSCR17 | Does the device support the reception of the **move color temperature** command? | [R3]/6.8.1.3.8 | CCCSACC4: M | |
| CCCSCR18 | Does the device support the reception of the **step color temperature** command? | [R3]/6.8.1.3.9 | CCCSACC4: M | |

### 6.8.2 [CCCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCC1 | Does the device support the **color control** cluster as a client? | [R4]/5.2.3 | DD6: M<br>DD7: M<br>DD10: M<br>DD11: M | No |

#### 6.8.2.1 Attributes

There are no PICS requirements for this section.

#### 6.8.2.2 Commands received

There are no PICS requirements for this section.

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### 6.8.2.3 [CCCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCCCG1 | Does the device support the generation and transmission of the **move to hue** command? | [R4]/5.2.2.3.2 | CCCC1: O | |
| CCCCCG2 | Does the device support the generation and transmission of the **move hue** command? | [R4]/5.2.2.3.3 | CCCC1: O | |
| CCCCCG3 | Does the device support the generation and transmission of the **step hue** command? | [R4]/5.2.2.3.4 | CCCC1: O | |
| CCCCCG4 | Does the device support the generation and transmission of the **move to saturation** command? | [R4]/5.2.2.3.5 | CCCC1: O | |
| CCCCCG5 | Does the device support the generation and transmission of the **move saturation** command? | [R4]/5.2.2.3.6 | CCCC1: O | |
| CCCCCG6 | Does the device support the generation and transmission of the **step saturation** command? | [R4]/5.2.2.3.7 | CCCC1: O | |
| CCCCCG7 | Does the device support the generation and transmission of the **move to hue and saturation** command? | [R4]/5.2.2.3.8 | CCCC1: O | |
| CCCCCG8 | Does the device support the generation and transmission of the **move to color** command? | [R4]/5.2.2.3.9 | CCCC1: O | |
| CCCCCG9 | Does the device support the generation and transmission of the **move color** command? | [R4]/5.2.2.3.10 | CCCC1: O | |
| CCCCCG10 | Does the device support the generation and transmission of the **step color** command? | [R4]/5.2.2.3.11 | CCCC1: O | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CCCCCG101 | Does the device support the generation and transmission of the **move to color temperature** command? | [R4]/5.2.2.3.12 | CCCC1: O | |
| CCCCCG11 | Does the device support the generation and transmission of the **enhanced move to hue** command? | [R3]/6.8.1.3.2 | CCCC1: O | |
| CCCCCG12 | Does the device support the generation and transmission of the **enhanced move hue** command? | [R3]/6.8.1.3.3 | CCCC1: O | |
| CCCCCG13 | Does the device support the generation and transmission of the **enhanced step hue** command? | [R3]/6.8.1.3.4 | CCCC1: O | |
| CCCCCG14 | Does the device support the generation and transmission of the **enhanced move to hue and saturation** command? | [R3]/6.8.1.3.5 | CCCC1: O | |
| CCCCCG15 | Does the device support the generation and transmission of the **color loop set** command? | [R3]/6.8.1.3.6 | CCCC1: O | |
| CCCCCG16 | Does the device support the generation and transmission of the **stop move step** command? | [R3]/6.8.1.3.7 | CCCC1: O | |
| CCCCCR17 | Does the device support the generation of the **move color temperature** command? | [R3]/6.8.1.3.8 | CCCC1: O | |
| CCCCCR18 | Does the device support the generation of the **step color temperature** command? | [R3]/6.8.1.3.9 | CCCC1: O | |

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# 7 New clusters

Tables in the following sub-clauses detail PICS items for new clusters defined within the ZigBee Light link profile.

## 7.1 ZLL commissioning cluster

### 7.1.1 Overview

There are no PICS requirements for this section.

### 7.1.2 [ZCCS] Server

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCS1 | Does the device support the **ZLL commissioning: touchlink** cluster as a server? | [R3]/7.1.2 | CDD1: M<br>CDD2: M | Yes |
| ZCCUS1 | Does the device support the **ZLL commissioning: utility** cluster as a server? | [R3]/7.1.2 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 7.1.2.1 Attributes

There are no PICS requirements for this section.

#### 7.1.2.2 [ZCCSCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCSCR1 | Does the device support the reception of the **scan request** inter-PAN command? | [R3]/7.1.2.2.1 | ZCCS1: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCSCR2 | Does the device support the reception of the **device information request** inter-PAN command? | [R3]/7.1.2.2.2 | ZCCS1: M | Yes |
| ZCCSCR3 | Does the device support the reception of the **identify request** inter-PAN command? | [R3]/7.1.2.2.3 | ZCCS1: M | Yes |
| ZCCSCR4 | Does the device support the reception of the **reset to factory new request** inter-PAN command? | [R3]/7.1.2.2.4 | ZCCS1: M | Yes |
| ZCCSCR5 | Does the device support the reception of the **network start request** inter-PAN command? | [R3]/7.1.2.2.5 | ZCCS1: M | Yes |
| ZCCSCR6 | Does the device support the reception of the **network join router request** inter-PAN command? | [R3]/7.1.2.2.6 | ZCCS1: M | Yes |
| ZCCSCR7 | Does the device support the reception of the **network join end device request** inter-PAN command? | [R3]/7.1.2.2.7 | ZCCS1: M | Yes |
| ZCCSCR8 | Does the device support the reception of the **network update request** inter-PAN command? | [R3]/7.1.2.2.8 | ZCCS1: M | Yes |
| ZCCSCR9 | Does the device support the reception of the **get group identifiers** request command? | [R3]/7.1.2.2.9 | ZCCUS1: M | Yes |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCSCR10 | Does the device support the reception of the **get endpoint list request** command? | [R3]/7.1.2.2.10 | ZCCUS1: M | Yes |

### 7.1.2.3 [ZCCSCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCSCG1 | Does the device support the generation and transmission of the **scan response** inter-PAN command? | [R3]/7.1.2.3.1 | ZCCS1: M | Yes |
| ZCCSCG2 | Does the device support the generation and transmission of the **device information response** inter-PAN command? | [R3]/7.1.2.3.2 | ZCCS1: M | Yes |
| ZCCSCG3 | Does the device support the generation and transmission of the **network start response** inter-PAN command? | [R3]/7.1.2.3.3 | ZCCS1: M | Yes |
| ZCCSCG4 | Does the device support the generation and transmission of the **network join router response** inter-PAN command? | [R3]/7.1.2.3.4 | ZCCS1: M | Yes |
| ZCCSCG5 | Does the device support the generation and transmission of the **network join end device response** inter-PAN command? | [R3]/7.1.2.3.5 | ZCCS1: M | Yes |
| ZCCSCG6 | Does the device support the generation and transmission of the **endpoint information** command? | [R3]/7.1.2.3.6 | ZCCUS1: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCSCG7 | Does the device support the generation and transmission of the **get group identifiers response** command? | [R3]/7.1.2.3.7 | ZCCUS1: M | Yes |
| ZCCSCG8 | Does the device support the generation and transmission of the **get endpoint list response** command? | [R3]/7.1.2.3.8 | ZCCUS1: M | Yes |

### 7.1.3 [ZCCC] Client

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCC1 | Does the device support the **ZLL commissioning: touchlink** cluster component as a client? | [R3]/7.1.3 | CDD2: M<br>CDD3: M | Yes |
| ZCCUC1 | Does the device support the **ZLL commissioning: utility** cluster component as a client? | [R3]/7.1.3 | DD6: M<br>DD7: M<br>DD8: M<br>DD9: M<br>DD10: M<br>DD11: M | Yes |

#### 7.1.3.1 Attributes

There are no PICS requirements for this section.

#### 7.1.3.2 [ZCCCCR] Commands received

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCCCR1 | Does the device support the reception of the **scan response** inter-PAN command? | [R3]/7.1.2.3.1 | ZCCC1: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCCCR2 | Does the device support the reception of the **device information response** inter-PAN command? | [R3]/7.1.2.3.2 | ZCCC1: M | Yes |
| ZCCCCR3 | Does the device support the reception of the **network start response** inter-PAN command? | [R3]/7.1.2.3.3 | ZCCC1: M | Yes |
| ZCCCCR4 | Does the device support the reception of the **network join router response** inter-PAN command? | [R3]/7.1.2.3.4 | ZCCC1: M | Yes |
| ZCCCCR5 | Does the device support the reception of the **network join end device response** inter-PAN command? | [R3]/7.1.2.3.5 | ZCCC1: M | Yes |
| ZCCCCR6 | Does the device support the reception of the **endpoint information** command? | [R3]/7.1.2.3.6 | ZCCUC1: O | Yes |
| ZCCCCR7 | Does the device support the reception of the **get group identifiers response** command? | [R3]/7.1.2.3.7 | ZCCCCG9: M | Yes |
| ZCCCCR8 | Does the device support the reception of the **get endpoint list response** command? | [R3]/7.1.2.3.8 | ZCCCCG10: M | Yes |


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### 7.1.3.3 [ZCCCCG] Commands generated

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCCCG1 | Does the device support the generation and transmission of the **scan request** inter-PAN command? | [R3]/7.1.2.2.1 | ZCCC1: M | Yes |
| ZCCCCG2 | Does the device support the generation and transmission of the **device information request** inter-PAN command? | [R3]/7.1.2.2.2 | ZCCC1: M | Yes |
| ZCCCCG3 | Does the device support the generation and transmission of the **identify request** inter-PAN command? | [R3]/7.1.2.2.3 | ZCCC1: M | Yes |
| ZCCCCG4 | Does the device support the generation and transmission of the **reset to factory new request** inter-PAN command? | [R3]/7.1.2.2.4 | ZCCC1: M | Yes |
| ZCCCCG5 | Does the device support the generation and transmission of the **network start request** inter-PAN command? | [R3]/7.1.2.2.5 | ZCCC1: M | Yes |
| ZCCCCG6 | Does the device support the generation and transmission of the **network join router request** inter-PAN command? | [R3]/7.1.2.2.6 | ZCCC1: M | Yes |
| ZCCCCG7 | Does the device support the generation and transmission of the **network join end device request** inter-PAN command? | [R3]/7.1.2.2.7 | ZCCC1: M | Yes |
| ZCCCCG8 | Does the device support the generation and transmission of the **network update request** inter-PAN command? | [R3]/7.1.2.2.8 | ZCCC1: M | Yes |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZCCCCG9 | Does the device support the generation and transmission of the **get group identifiers request** command? | [R3]/7.1.2.2.9 | ZCCUC1: O | No |
| ZCCCCG10 | Does the device support the generation and transmission of the **get endpoint list request** command? | [R3]/7.1.2.2.10 | ZCCUC1: O | No |


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# 8 Functional description

## 8.1 General

### 8.1.1 [ZSP] ZigBee Stack Profile

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZSP1 | Is the device built on a ZigBee Compliant Platform certified for the ZigBee PRO stack profile? | 8.1.1 | M | Yes |

### 8.1.2 [C] Channels

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| C1 | Is the device able to operate on any of the 16 channels available at 2.4GHz? | 8.1.2 | M | Yes |

### 8.1.3 [ADV] Application device version

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ADV1 | Is the **application device version** field of all simple descriptors supported by the device, and hence the **version** field used in the *scan response*, *device information response*, *endpoint information* and *get endpoint list response* inter-PAN command frames, equal to 0x2? | 8.1.3 | M | Yes |

### 8.1.4 [PI] Profile identifier

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| PI1 | Does the device indicate the **profile identifier** field of the corresponding ZLL simple descriptor as 0xc05e or 0x0104? | 8.1.4 | M | Yes |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| PI2 | When the device transmits a ZLL commissioning cluster command is the profile identifier indicated as being 0xc05e? | 8.1.4 | M | Yes |
| PI3 | When the device transmits a ZLL specified ZCL cluster command is the profile identifier indicated as being 0x0104? | 8.1.4 | M | Yes |

### 8.1.5 ZDO requirements

There are no PICS requirements for this section.

### 8.1.6 Startup attribute set

There are no PICS requirements for this section.

### 8.1.7 [DIT] Device information table

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| DIT1 | Does the device maintain a device information table with an entry for each sub-device in accordance with the device information table record format? | [R3]/8.1.7 | M | Yes |

### 8.1.8 Constants

There are no PICS requirements for this section.

### 8.1.9 ZLL profile attributes

There are no PICS requirements for this section.


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### 8.1.10 [IPFF] Inter-PAN frame format

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| IPFF1 | Does the device support generation of inter-PAN command frames according to the general inter-PAN command frame format? | [R3]/8.1.10 | M | Yes |
| IPFF2 | Does the device support reception of inter-PAN command frames according to the general inter-PAN command frame format? | [R3]/8.1.10 | M | Yes |

### 8.1.11 [IPTI] Inter-PAN transaction identifier

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| IPTI1 | Does the device transmitting a scan request inter-PAN command frame preserve the same transaction identifier within the same inter-PAN transaction? | [R3]/8.1.11 | TC1: M | Yes |
| IPTI2 | Does the device receiving a scan request inter-PAN command frame reuse the same transaction identifier in all responses within the same inter-PAN transaction? | [R3]/8.1.11 | M | Yes |

### 8.1.12 Commissioning scenarios

There are no PICS requirements for this section.

## 8.2 ZigBee-pro stack requirements

### 8.2.1 [INS] Initialization NIB settings

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| INS1 | Does the device set *nwkUseMulticast* to FALSE? | [R3]/8.2.1 | M | Yes |


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### 8.2.2 [EDRJ] End-device rejoining

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| EDRJ1 | If an end device has lost communication with its parent does it attempt to poll at most *aplcMaxLostParentRetryAttempts* times? | [R3]/8.2.2 | FDT3: M | Yes |
| EDRJ2 | If the poll is unsuccessful, does the end device perform a network scan on the primary channels and, if *apsTrustCenterAddress* is not equal to 0xffffffffffffffff, also on the secondary channels for a new parent. | [R3]/8.2.2 | FDT3: M | Yes |
| EDRJ3 | After a successful rejoin to a new parent, does the device transmit a **Device_annce** command frame? | [R3]/8.2.2 | FDT3: M | Yes |

### 8.2.3 [LSM] Link status messages

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| LSM1 | When a router device is non factory new does it set ***nwkLinkStatusPeriod*** to 0x0f? | [R3]/8.1.14 | FDT2: M | No |

### 8.2.4 [ZDA] ZigBee device announcement

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| ZDA1 | Is the device capable of broadcasting a Device_annce command frame after joining or rejoining a network? | [R3]/8.1.14 | FDT3: M | Yes |


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### 8.2.5 [EDP] End device polling

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| EDP1 | Does the end device poll its parent? | [R3]/8.2.5 | FDT3: O | Yes |
| EDP2 | If the end device polls at a rate greater than *aplcMaxPollInterval* or does not poll at all, does it transmit a NWK rejoin command frame to its assumed parent before transmitting any application data? | [R3]/8.2.5 | FDT3: M | Yes |
| EDP3 | If the NWK rejoin was successful, does the end device NOT transmit a device_annce command frame? | [R3]/8.2.5 | EDP2: M | Yes |
| EDP4 | If the NWK rejoin was not successful, does the end device continue to scan for suitable parents? | [R3]/8.2.5 | EDP2: M | Yes |
| EDP5 | If the end device has been in contact with its parent for a time greater than *aplcMaxPollInterval*, does it attempt a rejoin before transmitting any application data? | [R3]/8.2.5 | EDT3: M | Yes |

### 8.2.6 [CTM] Child table maintenance

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CTM1 | Are the contents of the child table preserved through a power cycle? | [R3]/8.2.6 | FDT2: M | |
| CTM2 | If a parent device does not receive a message from one of its child devices within *aplcMinChildPersistenceTime*, does it remove that device from its child table? | [R3]/8.2.6 | FDT2: O | |
| CTM3 | On receipt of a message from a device which is listed in its child table, does the parent device verify that this device is indeed one of its children, removing it from the child table if not? | [R3]/8.2.6 | FDT2: M | |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| CTM4 | On receipt of a message from a device which is not listed in its child table, does the parent device transmit a NWK leave request to the device using its short network address? | [R3]/8.2.6 | FDT2: O | |

## 8.3 Device startup

### 8.3.1 [EDSU] End-device

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| EDSU2 | If the device is an end device and is not factory new, does it resume ZigBee functionality on start up based on information stored in NVRAM? | [R3]/8.3.1 | FDT3: M | Yes |
| EDSU3 | If the device is an end device and is not factory new, does it transmit a **device_annce** command after a successful network rejoin to a new parent? | [R3]/8.3.1 | FDT3: M | Yes |

### 8.3.2 [RSU] Router

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| RSU2 | If the device is a router and is not factory new, does it resume ZigBee functionality on start up based on information stored in NVRAM? | [R3]/8.3.2 | FDT2: M | |
| RSU5 | If the device is a router and is not factory new, does it transmit a **device_annce** command after a successful startup? | [R3]/8.3.2 | FDT2: M | |


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## 8.4 [TC] Touchlink commissioning

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TC1 | Is the device capable of initiating a touchlink operation? | [R3]/8.4.1.1 | AA1: M | Yes |

### 8.4.1 [TDD] Device discovery

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TDD1 | Is the device capable of carrying out a series of scan operations, first 5 times on a single channel, then once each on the remaining channels? | [R3]/8.4.1.1 | TC1: M | Yes |
| TDD2 | Is the device capable of being discovered by a scan operation? | [R3]/8.4.1.2 | M | Yes |
| TDD3 | Is the device capable of generating a broadcast **scan request** inter-PAN command frame at 0dBm, and waiting for a response? | [R3]/8.4.1.1 | TC1: M | Yes |
| TDD4 | Is the device capable of receiving a broadcast **scan request** inter-PAN command frame? | [R3]/8.4.1.2 | M | Yes |
| TDD5 | Is the device capable of generating a **scan response** inter-PAN command frame containing the RSSI correction factor, the device information table if it has only one sub-device, and the value of its nwkUpdateId attribute? | [R3]/8.4.1.2<br>[R3]/8.4.1.1<br>[R3]/8.6 | M | Yes |
| TDD6 | Does the device include in its **scan response** inter-PAN command frame the logical channel on which it is currently operating, and if not factory new, also its other network settings? | [R3]/8.4.1.2 | M | Yes |
| TDD8 | Is the device capable of receiving a **scan response** inter-PAN command frame, and discarding it if the RSSI is too low? | [R3]/8.4.1.2 | TC1: M | Yes |
| TDD9 | Is the device capable of gathering detailed device information by use of the **device information request** and **device information response** inter-PAN command frames? | [R3]/8.4.1.1 | TC1: O | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TDD10 | Is the device capable of providing detailed device information by use of the **device information request** and **device information response** inter-PAN command frames? | [R3]/8.4.1.2 | M | Yes |

### 8.4.2 [TI] Identify

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TI1 | Following the touch-link operation, does the device select one or more devices for further processing? | [R3]/8.4.2 | TC1: M | Yes |
| TI2 | Is the device capable of requesting another device to identify itself using the **identify request** inter-PAN command frame? | [R3]/8.4.2.1 | O | Yes |

### 8.4.3 [TSNN] Starting a new network

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TSNN1 | Is the device capable of requesting another device to start a network using the **network start request** inter-PAN command frame? | [R3]/8.4.3.1 | TC1: M | Yes |
| TSNN2 | Is the device capable of receiving a **network start request** inter-PAN command frame and carrying out the steps required to start a network, taking account of whether or not it is factory new? | [R3]/8.4.3.2 | FDT2: M | No |
| TSNN3 | Is the device capable of generating a **network start response** inter-PAN command frame? | [R3]/8.4.3.2 | FDT2: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TSNN4 | Is the device capable of receiving a **network start response** inter-PAN command frame and carrying out the steps required to join the new network? | [R3]/8.4.3.1 | TC1: M | Yes |

### 8.4.4 [TJR] Joining routers to the network

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TJR1 | Is the device capable of requesting another device to join a network using the **network join router request** inter-PAN command frame? | [R3]/8.4.4.1 | TC1: M | Yes |
| TJR2 | Is the device capable of receiving a **network join router request** inter-PAN command frame and carrying out the steps required to join a network? | [R3]/8.4.4.2 | FDT2: M | No |
| TJR3 | Is the device capable of generating a **network join router response** inter-PAN command frame? | [R3]/8.4.4.2 | FDT2: M | Yes |
| TJR4 | Is the device capable of receiving a **network join router response** inter-PAN command? | [R3]/8.4.4.1 | TC1: M | Yes |

### 8.4.5 [TJED] Joining end devices

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TJED1 | Is the device capable of requesting a factory new end device to join a network using the **network join end device request** inter-PAN command frame? | [R3]/8.4.5.1 | TC1: M | Yes |
| TJED2 | Is the device capable of receiving a **network join end device request** inter-PAN command and carrying out the steps required to join a network? | [R3]/8.4.5.2 | FDT3: M | Yes |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TJED3 | Is the device capable of generating a **network join end device response** inter-PAN command frame? | [R3]/8.4.5.2 | FDT3: M | Yes |
| TJED4 | Is the device capable of receiving a **network join end device response** inter-PAN command? | [R3]/8.4.5.1 | TC1: M | Yes |

### 8.4.6 [TNU] Network update

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TNU1 | If an initiator receives a **scan response** inter-PAN command frame from a device on its network with a lower network update identifier than its own, does it transmit a **network update request** inter-PAN command frame to the target? | [R3]/8.4.6.1 | TC1: O | Yes |
| TNU2 | If an initiator receives a **scan response** inter-PAN command frame from a device on its network with a higher network update identifier than its own, does it update its own value and its logical channel with those values received in the **scan response** inter-PAN command frame. | [R3]/8.4.6.1 | TC1: M | Yes |
| TNU3 | If after updating its network update identifier and logical channel, does an end device initiator attempt a network rejoin? | [R3]/8.4.6.1 | TC1: (FDT3: M) | Yes |
| TNU4 | If a target receives a **network update request** inter-PAN command frame with a valid transaction identifier and a higher network update identifier than its own, does it update its own value and its logical channel with those values received in the **network update request** inter-PAN command frame. | [R3]/8.4.6.2 | M | Yes |


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### 8.4.7 [TRFN] Reset to factory new

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| TRFN1 | Is the device capable of requesting another device to reset to its factory new state using the **reset to factory new request** inter-PAN command frame? | [R3]/8.4.7.1 | O | Yes |
| TRFN2 | Is the device capable of resetting to its factory new state when requested to do so by reception of the **reset to factory new request** inter-PAN command frame with a valid transaction identifier? | [R3]/8.4.7.2 | M | Yes |

### 8.4.8 [AA] Address assignment

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| AA1 | Is the device network address and group address assignment capable? | [R3]/8.4.8.1<br>[R3]/8.4.8.2 | O | Yes |
| AA2 | Does the device keep track of its current free network address range? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA3 | When starting a network from factory new state, does the device assign itself network address 0x0001, and free network address range 0x0002-0xfff7? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA4 | When it requests a device to join a network, is the device assigned the first free network address, and the network address range updated accordingly? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA5 | If there are no free network addresses does the device not permit further devices to join the network? | [R3]/8.4.8.1 | AA1: M | Yes |

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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| AA6 | When a device requests a network assignment capable device to join the network, does it split its own network address range in two and assign the higher numbered range to the joining device, and update its own address range accordingly? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA7 | When joining a network, does the device support being assigned a network address range? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA8 | If splitting the range of free network addresses would result in there being less than an implementation specific threshold, then does the device not permit further address assignment capable devices to join the network? | [R3]/8.4.8.1 | AA1: M | Yes |
| AA9 | Is the device network address assignment capable but not group address assignment capable? | [R3]/8.4.8.2 | X | No |
| AA10 | Does the device keep track of its current free group address range? | [R3]/8.4.8.2 | AA1: M | Yes |
| AA11 | When starting a network from factory new state, does the device assign itself group addresses starting from 0x0001, and free group address range up to 0xfeff? | [R3]/8.4.8.2 | AA1: M | Yes |
| AA12 | When it requests a device to join a network, is the device assigned a range of free group address, and the group address range updated accordingly? | [R3]/8.4.8.2 | AA1: M | Yes |
| AA13 | When a device requests an address assignment capable device to join the network, does it, if possible, split its own group address range in two and assign the higher numbered range to the joining device, and update its own group address range accordingly? | [R3]/8.4.8.2 | AA1: M | Yes |
| AA14 | When joining a network, does the device support being assigned a group address range? | [R3]/8.4.8.2 | AA1: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| AA15 | If splitting the range of free group addresses would result in there being less than an implementation specific threshold, then does the device not permit further address assignment capable devices to join the network? | [R3]/8.4.8.2 | AA1: M | Yes |

## 8.5 Classical ZigBee commissioning

### 8.5.1 [NTLC] Classical ZigBee commissioning of ZLL devices

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| NTLC1 | If requested under application control, does the device perform a network discovery over the primary channel set? | [R3]/8.5.1 | FDT2: M<br>FDT3: M | Yes |
| NTLC2 | If requested under application control, is the device able to join a suitable network on one of the primary channels? | [R3]/8.5.1 | FDT2: M<br>FDT3: M | Yes |
| NTLC3 | If requested under application control and its primary network discovery failed, does the device perform a network discovery over the secondary channel set? | [R3]/8.5.1 | FDT2: M<br>FDT3: M | Yes |
| NTLC4 | If requested under application control, is the device able to join a suitable network on one of the secondary channels? | [R3]/8.5.1 | FDT2: M<br>FDT3: M | Yes |

### 8.5.2 [NTNZD2ZR] Classical ZigBee commissioning of a non-ZLL device to a ZLL router in case there is no trust center

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| NTNZD2ZR1 | If the device is a router, when requested under application control, does the device enable its permit joining flag and receiver for a predetermined period, allowing non-ZLL devices to join? | [R3]/8.5.2 | FDT2: M | |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| NTNZD2ZR2 | If a non-ZLL device requests to join the ZLL router (as above), does the ZLL router assign an address to the new device using classical ZigBee stochastic addressing. | [R3]/8.5.2 | FDT2: M | |

### 8.5.3 [NTT2NZN] Touchlinking devices on non-ZLL networks

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| NTT2NZN1 | Can a factory new device initiate a touchlink operation to a ZLL device on a non-ZLL network? | [R3]/8.5.3 | TC1: M | Yes |
| NTT2NZN2 | Can a device on a non-ZLL network touchlink to another device on the same network? | [R3]/8.5.3 | TC1: M | Yes |
| NTT2NZN3 | Does a device on a non-ZLL network not send network start, network join router or network join end device request command frames (following a scan) to factory new devices or devices connected to a different network? | [R3]/8.5.3 | TC1: M | Yes |

## 8.6 [FA] Frequency agility

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| FA1 | Does the device support instigation of the channel change mechanism? | [R3]/8.6 | O | Yes |
| FA2 | Does the device support transmission of an Mgmt_NWK_Update_req command frame broadcast to all RxOnWhenIdle devices? | [R3]/8.6 | FA1: M | Yes |
| FA3 | On receipt of an Mgmt_NWK_Update_req command frame, does the device update its NIB and execute the channel change procedure? | [R3]/8.6 | FDT2: M | No |
| FA4 | Following a channel change, does the device rejoin? | [R3]/8.6 | FDT3: M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| FA5 | In that case that a router misses a channel change, does the device support use of the touch-link procedure for bringing a router back into the network? | [R3]/8.6 | O | Yes |
| FA6 | Does the device support transmission of an inter-PAN network update request command frame unicast to a router it wishes to bring back into the network? | [R3]/8.6 | FA5: M | Yes |
| FA7 | If a device detects a router reporting a nwkUpdateId attribute value newer than its own, does it update its network settings according to the values in the scan response command frame, and execute a rejoin procedure? | [R3]/8.6 | TC1: M | Yes |

## 8.7 [S] Security

| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| S1 | Does the device use ZigBee network layer security? | [R3]/8.7 | M | Yes |
| S2 | Does the device randomly generate the network key for use by the network when initiating starting of a new network? | [R3]/8.7 | TC1: M | Yes |
| S3 | Does the device transmit the network key encrypted as part of the start and join commands? | [R3]/8.7.1 | TC1: M | Yes |
| S4 | Is the nwkSecurityLevel NIB attribute set to 0x05? (use data encryption and frame integrity) | [R3]/8.7.2 | M | Yes |
| S5 | Is the nwkAllFresh NIB attribute set to False (do not check frame counter)? | [R3]/8.7.2 | M | Yes |
| S6 | Is the nwkSecureAllFrames NIB attribute set to True? (only accept secured frames) | [R3]/8.7.2 | M | Yes |
| S7 | Does the device use the ZLL Certification key for certification testing? | [R3]/8.7.4.1.2 | M | Yes |


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| Item number | Item description | Reference | Status | Support |
|---|---|---|---|---|
| S8 | Does the device use the ZLL Master key in commercial products, and not use the ZLL Certification key in commercial products? | [R3]/8.7.4.1.1 | M | Yes |


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