



August 12, 2024

**Subject: Cover Letter for FCC Application**

Applicant: Leviton Manufacturing Co., Inc.  
FCC Certification Number: 2ASLN-C3648  
Product Description: Logic Board C3648

To Whom it May Concern:

This letter is to request certification for our device, **2ASLN-C3648**, to the following certification service:

- New Limited Modular

Please grant FCC certification for this limited modular Logic Board C3648 – being used in total of fourteen (14) end-products as described below, more to be added later. This module utilizes the 2.4GHz Bluetooth low-energy 5.x and ZigBee protocols – only one transmitting at a time. All end-products share same module C3648 as logic board with different assembly variants and different power boards to support functions as required in end-product.

This limited modular certified module integrates all components (Crystals, RF passives and Chip Antenna) required for a system-level implementation of Bluetooth & ZigBee networks except the RF shield. The module PCB will act as a logic board and configured from the firmware for 2.4 GHz ZigBee mesh network and 2.4 GHz BLE 5.x radio for communication with mobile phones.

The assembly variants of the logic board have minor assembly changes to support functions as required in end-product. All variant changes are described in table below also.

- The PCB is same for all variants.
- Radio section is same for all variants with changes in antenna tuning values (Tuning #1 to 4 for combination with different power PCB & plastics variants) to be in radio compliance.
- The SoC used on two set of end-products is different that SBx00-xxx & SKx00-xxx models [serial# 8-14 in table below] have BLE-only protocol compared to that ZBx000-xxx & ZKx00-xxx models [serial# 1-7 in table below] supports both Zigbee & BLE. They are equal from radio SoC & the Bluetooth point of view and are disabled in the firmware only.
- The other assembly changes are based on functions required or not like power supply, dimming, switches & its components, etc., can be in following ways:
  - o Works as switch & 0-10V dimming control or switch or switch & phase control dimmer only depending on the variants.
  - o Powered from 120-277VAC, 120VAC or 347VAC.
  - o Install in wall or ceiling application depending on variants.

Firmware supports remote control via smart phones using Leviton’s own mobile application on Android or iOS.

Preliminary testing on all variations of the module demonstrated that the RF specifications and performance are similar across all models and can be considered for a limited-modular approval under a single FCC ID.

The table below shows the features for each model.



|                              |                          | LIMITED MODULAR CERTIFICATION APPLIED TO RADIO / LOGIC PCB# C3648 ONLY |               |                                                                 |  |                        |            |                |                                                        |                   |                   |                 |                                                        |                       |                      |
|------------------------------|--------------------------|------------------------------------------------------------------------|---------------|-----------------------------------------------------------------|--|------------------------|------------|----------------|--------------------------------------------------------|-------------------|-------------------|-----------------|--------------------------------------------------------|-----------------------|----------------------|
|                              |                          | Product ID                                                             |               |                                                                 |  | Comparison Information |            |                |                                                        |                   |                   |                 |                                                        |                       |                      |
|                              |                          |                                                                        |               |                                                                 |  | Configuration          |            |                |                                                        | Radio / Logic PCB |                   |                 |                                                        | Power PCB & Assembly# | Mobile Application   |
| FCC ID#:                     | ISED ID#:                | Serial#                                                                | Host HVIN     | Product Marketing Name                                          |  | Radio                  | Voltage    | Dimming        | Switch                                                 | PCB#              | Assembly Variant# | Antenna Tuning# | Assembly Difference                                    |                       |                      |
|                              |                          |                                                                        | Model# / Cat# | Description                                                     |  |                        |            |                |                                                        |                   |                   |                 |                                                        |                       |                      |
|                              |                          |                                                                        | Zigbee + BLE  |                                                                 |  |                        |            |                |                                                        |                   |                   |                 |                                                        |                       |                      |
| Contains FCC ID: 2ASLN-C3648 | Contains IC: 25037-C3648 | 1                                                                      | ZB700-D0z     | Lumina RF 0-10V Wall Dimmer, 120-277VAC                         |  | Zigbee & BLE           | 120-277VAC | Yes, 0-10V     | Switch & Dimmer                                        | C3648             | D01               | Tuning #1       | --                                                     | B1674 var 01          | Leviton's mobile app |
|                              |                          | 2                                                                      | ZB700-30z     | Lumina RF 0-10V Wall Dimmer, 347VAC                             |  |                        | 347VAC     |                |                                                        |                   | D01               | Tuning #1       | --                                                     | B1674 var 02          |                      |
|                              |                          | 3                                                                      | ZK700-D0z     | Lumina RF 10A 0-10V Dimming Power Pack, 120-277VAC              |  |                        | 120-277VAC |                |                                                        |                   | D21               | Tuning #3       | D01 with ceiling mount config                          | B7707 var 01          |                      |
|                              |                          | 4                                                                      | ZBS00-D0z     | Lumina RF Decora Wall Switch, 120-277VAC                        |  |                        | 120-277VAC | NO             | Switch                                                 |                   | D02               | Tuning #2       | D01 with NO dimming config                             | B1677 var 01          |                      |
|                              |                          | 5                                                                      | ZKS00-D0z     | Lumina RF 20A ON/OFF Switching Power Pack, 120-277VAC           |  |                        |            |                |                                                        |                   | D22               | Tuning #4       | D01 with ceiling mount config & no dimming             | B1677 var 21          |                      |
|                              |                          | 6                                                                      | ZBM00-10z     | Lumina RF 1000W Traditional Dimmer, 120VAC                      |  |                        |            |                |                                                        |                   | D07               | Tuning #2       | D01 with phase cut control config                      | A9800 var 03          |                      |
|                              |                          | 7                                                                      | ZKM00-10z     | Lumina RF Phase Cut Dimmer, Nipple Mount, 120VAC                |  |                        | D23        | Tuning #5      | D01 with ceiling mount config and phase control config |                   | A9800 var 02      |                 |                                                        |                       |                      |
|                              |                          |                                                                        | BLE Only      |                                                                 |  |                        |            |                |                                                        |                   |                   |                 |                                                        |                       |                      |
| Contains FCC ID: 2ASLN-C3648 | Contains IC: 25037-C3648 | 8                                                                      | SB700-D0z     | Lumina RF 0-10V Wall Dimmer, 120-277VAC, BLE only               |  | BLE                    | 120-277VAC | Yes, 0-10V     | Switch & Dimmer                                        | C3648             | D31               | Tuning #1       | D01 with BLE only config                               | B1674 var 01          | Leviton's mobile app |
|                              |                          | 9                                                                      | SB700-30z     | Lumina RF 0-10V Wall Dimmer, 347VAC, BLE only                   |  |                        | 347VAC     |                |                                                        |                   | D31               | Tuning #1       | D01 with BLE only config                               | B1674 var 02          |                      |
|                              |                          | 10                                                                     | SK700-D0z     | Lumina RF 10A 0-10V Dimming Power Pack, 120-277VAC, BLE only    |  |                        | 120-277VAC |                |                                                        |                   | D51               | Tuning #3       | D31 with ceiling mount config                          | B7707 var 01          |                      |
|                              |                          | 11                                                                     | SBS00-D0z     | Lumina RF Decora Wall Switch, 120-277VAC, BLE only              |  |                        | 120-277VAC | NO             | Switch                                                 |                   | D32               | Tuning #2       | D31 with NO dimming config                             | B1677 var 01          |                      |
|                              |                          | 12                                                                     | SKS00-D0z     | Lumina RF 20A ON/OFF Switching Power Pack, 120-277VAC, BLE only |  |                        |            |                |                                                        |                   | D52               | Tuning #4       | D31 with ceiling mount config & no dimming             | B1677 var 21          |                      |
|                              |                          | 13                                                                     | SBM00-10z     | Lumina RF 1000W Traditional Dimmer, 120VAC, BLE only            |  |                        |            |                |                                                        |                   | D37               | Tuning #2       | D31 with phase cut control config                      | A9800 var 03          |                      |
|                              |                          | 14                                                                     | SKM00-10z     | Lumina RF Phase Cut Dimmer, Nipple Mount, 120VAC, BLE only      |  |                        | 120VAC     | Yes, Phase Cut | Switch & Dimmer                                        |                   | D53               | Tuning #5       | D31 with ceiling mount config and phase control config | A9800 var 02          |                      |

If you have any questions regarding this request for certification, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Dmitriy Moskovkin".

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