



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											
			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											

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".

Dmitriy Moskovkin
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