

March 6, 2020

Cover Letter for FCC Application

Please grant FCC certification for the Lumina RF Wall Switch family with Dimmer as described below. These 3 products utilize the 2.4GHz Zigbee protocol to work with other Zigbee products networked to the wall station. All models share same power PCB B1674 and logic PCB B1676 with different assembly variants to support functions as required.

Each wall station utilizes a 2.4 GHz Zigbee radio that is integrated into the logic board B1676. Assembly differences of B1676 are as below:

- There is no difference in radio MCU or components or antenna tuning values in all variants.
- Variant D21 is same as used for variant D01 except dimming LEDs and switches and only one switch.

The power board B1674 for each wall station differs on the input voltage range that it is compatible. Variant D01 supports 120-277VAC while variant D02 supports 347VAC.

Preliminary testing on all variations of power and logic boards demonstrated that the RF specifications and performance are similar across all models and can be considered for a family approval under a single FCC ID for FCC.

The table below shows the features for each model.

Product ID			Configuration			Logic PCB			Power PCB				
FCC ID#	Model# / Cat#	Description	Radio	0-10 Vdc Dimming	Switch	PCB	Variant	Assembly Difference	Power PCB	Variant	Input Voltage	Loads	Relay Rating
QGH-B167601	ZS057-D0Z	Lumina 0-10VDC RF Wall Dimmer	Zigbee	Yes	Yes	B1676	D01	--	B1674	D01	120-277VAC	5A Electronic 5A Fluorescent 10A Tungsten	5A/ 10A
	LU107-DNW	Lumina RF Wireless Load Control 0-10V Dimmer					D21	D01 with no dimming LEDs and switches					
	ZS057-30Z	Lumina RF Wall Switch w/0-10V Dimmer, 347Vac					D01	--		D02	347VAC	5A Electronic 5A Fluorescent 10A Tungsten	5A/ 10A

Sincerely,

Frank Tse