



RF EXPOSURE REPORT

Applicant	Savant Technologies LLC, dba GE Lighting, a Savant Company
Address	1975 Noble Road, Cleveland, Ohio 44112, United States

Manufacturer or Supplier	Savant Technologies LLC, dba GE Lighting, a Savant Company
Address	1975 Noble Road, Cleveland, Ohio 44112, United States
Product	ON/OFF Smart Switch
Brand Name	GE
Model	CSWONBLPWF1
Additional Model & Model Difference	CSWONBLTWF1; see items 1
Date of tests	Jun. 14, 2022 ~ Jul. 12, 2022

- ☒ **FCC Part 2 (Section 2.1091)**
- ☒ **KDB 447498 D01**
- ☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
	Date: Jul. 29, 2022

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Test Report No.: FM2206WDG0091

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2206WDG0091	Original release	Jul. 29, 2022

1. CERTIFICATION

PRODUCT:	ON/OFF Smart Switch
BRAND NAME:	GE
MODEL NO.:	CSWONBLPWF1
ADDITIONAL MODEL:	CSWONBLTWF1
FCC ID:	PUU-CSWONBLXWF2
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Savant Technologies LLC, dba GE Lighting, a Savant Company
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

Notes:

1. Additional model CSWONBLTWF1 is identical with the test model CSWONBLPWF1 except the appearance and model number for trading purpose.

RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

2. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

4. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Mode	Peak Gain (dBi)	Antenna Type
BT-LE	1.4	PCB Antenna
WIFI	1.4	PCB Antenna

5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-LE (GFSK)	2402-2480MHz	5	+ -1	4	6
802.11b	2412-2462MHz	18	+ -1	17	19
802.11g	2412-2462MHz	16	+ -1	15	17
802.11n HT20	2412-2462MHz	16	+ -1	15	17

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT-LE (GFSK)	2480	5.38
802.11b	2412	18.21
802.11g	2462	16.42
802.11n HT20	2462	16.36



FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
BT 2402-2480	6	1.4	20	0.001093	1.0
WiFi 2412-2462	19	1.4	20	0.021814	1.0

Note: The BT and WLAN can't transmit simultaneously.

CONCLUSION: PASS

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