



# **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, Ohi	io 44112, United States		
Product	ON/OFF Smart Switch			
Brand Name	GE			
Model	CSWONBLBWF1			
Additional Model & Model Difference	N/A			
Date of tests	Jun. 14, 2022 ~ Jul. 12, 2022			
	submitted sample was found to	COMPLY with the test requirement Approved by Glyn He		
	gineer / EMC Department	Assistant Manager / EMC Department		
This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples value to trademark, is permitted only with our prior written permission. This report action for accretize to the test samples was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based on simple acceptance criteria without taking measurement uncertainty is only provided upons request for accredited tests. Statements of conformity are based on simple acceptance or the ning and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report contents.				

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Report Version A



## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2206WDG0090	Original release	Jul. 29, 2022

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### **1. CERTIFICATION**

PRODUCT:	ON/OFF Smart Switch	
BRAND NAME: GE		
MODEL NO.:	CSWONBLBWF1	
ADDITIONAL MODEL:	N/A	
FCC ID:	PUU-CSWONXXBWF2	
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	

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## 2. 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 <sup>2</sup> )	AVERAGE TIME (minutes)	
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE					
300-1500			F/1500	30	
1500-100,000			1.0	30	

F = Frequency in MHz

#### 3. MPE CALCULATION FORMULA

 $Pd = (Pout^{*}G) / (4^{*}pi^{*}r^{2})$ 

where

 $Pd = power density in mW/cm^2$ 

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

#### 4. 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**.

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### 5. ANTENNA GAIN

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

Mode	Peak Gain (dBi)	Antenna Type
BT-LE	3.8	PCB Antenna
WIFI	3.8	PCB Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

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 tuned conducted Average Power (declared by client)

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT-LE (GFSK)	2402	5.46
802.11b	2412	18.18
802.11g	2437	16.18
802.11n HT20	2462	15.88

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FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm²)
BT-LE 2402-2480	6	3.8	20	0.001900	1.0
WiFi 2412-2462	19	3.8	20	0.037908	1.0

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

#### **CONCLUSION: PASS**

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