

## **FCC RF EXPOSURE REPORT**

*For*

**Paddle Switch, Toggle Switch**

**MODEL NUMBER: CSWONBLPT2/MSWF, CSWONBLTT2/MSWF**

**REPORT NUMBER: 4791319573-1-RF-3**

**ISSUE DATE: September 12, 2024**

**FCC ID: PUU-CSWONBLXT2  
IC: 10798A-CSWONBLXT2**

*Prepared for*

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*Prepared by*

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## Revision History

Rev.	Issue Date	Revisions	Revised By
V0	September 12, 2024	Initial Issue	

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Savant Technologies LLC, dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland OH 44112 USA

### Manufacturer Information


Company Name: Savant Technologies LLC, dba GE Lighting, a Savant Company  
Address: 1975 Noble Road Cleveland OH 44112 USA

### EUT Information

EUT Name: Paddle Switch  
Model Name: CSWONBLPT2/MSWF  
Series EUT Name: Toggle Switch  
Series Model Name: CSWONBLTT2/MSWF  
Model Difference: Please refer the declaration.  
Sample Received Date: August 22, 2024  
Sample Status: Normal  
Sample ID: 7549702  
Date of Tested: August 22, 2024 to September 12, 2024

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
447498 D04 Interim General RF Exposure Guidance v01	PASS

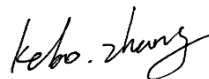
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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 1 Subpart I, section 1.1307 and KDB 447498 D04 Interim General RF Exposure Guidance v01.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202 Shielding Room B, the VCCI registration No. is C-20153 and T-20155</p>
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.

## 4. REQUIREMENT

### LIMIT AND CALCULATION METHOD

According to 447498 D04 Interim General RF Exposure Guidance v01,

#### 2.1.4 MPE-Based Exemption

An alternative to the SAR-based exemption is provided in § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz to 100 GHz, applicable for separation distances greater or equal to  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.<sup>10</sup> For this case, a RF source is an RF exempt device if its ERP (watts) is no more than a frequency-dependent value, as detailed tabular form in Appendix B. These limits have been derived based on the basic specifications on Maximum Permissible Exposure (MPE) considered for the FCC rules in § 1.1310(e)(1).

#### MPE-based Exemption

$$P_{\text{th}} (\text{mW}) = ERP_{20 \text{ cm}} (\text{mW}) = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{\text{th}} (\text{mW}) = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20 \text{ cm}}$  is per Formula (B.1).

**CALCULATED RESULTS****For Single RF Source**

Operating Mode	Max. Tune up Power	Max. Antenna Gain	EIRP	ERP	ERP	Distance	Limit Threshold
	(dBm)	(dBi)	(dBm)	(dBm)	(mW)	(cm)	(mW)
BLE	9.0	3.05	12.05	9.9	9.772	20	3060
WIFI2.4G	17.0	3.05	20.05	17.9	61.660	20	3060

Note:

1. The calculated distance is 20 cm.
2. The power comes from operation description.
3. The EUT does not support simultaneous operation.

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**END OF REPORT**