



FCC RF EXPOSURE REPORT

For

Smart Thermostat

MODEL NUMBER: CTHMCAPPEKB1

FCC ID: PUU-CTHMCAPPEKB1

REPORT NUMBER: 4790004027-4

ISSUE DATE: July 08, 2021

Prepared for

Savant Technologies LLC, dba GE Lighting, a Savant Company

1975 Noble Road Cleveland, Ohio 44112 United States

Prepared by

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	07/08/2021	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, Ohio 44112 United States

Manufacturer Information

Company Name: LEEDARSON LIGHTING CO., LTD.
 Address: Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou City, Fujian Province, P.R.China

EUT Information

EUT Name: Smart Thermostat
 Model Name: CTHMCAPPEKB1
 Brand: GE
 Sample Received Date: June 29, 2021
 Sample Status: Normal
 Sample ID: 4030860
 Date of Tested: June 29, 2021~ July 2, 2021

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	PASS

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

3. FACILITIES AND ACCREDITATION

<p>Accreditation Certificate</p>	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) 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>ISED (Company No.: 21320) 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>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) 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-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
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Note: 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.



4. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f ²)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

CALCULATION METHOD

$$S = PG / 4\pi R^2$$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

**CALCULATED RESULTS**

BLE Mode					
Frequency	Output Power	Output Power	Power Density	Power Density Limit	Test Result
MHz	dBm	mW	mW/cm ²	mW/cm ²	--
2402~2480	12	15.85	0.00362	1.0	Complies

2.4G WIFI Mode					
Frequency	Output Power	Output Power	Power Density	Power Density Limit	Test Result
MHz	dBm	mW	mW/cm ²	mW/cm ²	--
2412~2462	16	39.81	0.00909	1.0	Complies

- Note: 1. Antenna Gain=0.6 dBi (Numeric 1.15), $\pi=3.141$.
2. BT and WIFT cannot simultaneously transmitting.
3. The minimum separation distance of the device is greater than 20 cm.
4. Calculate by WORST-CASE mode.

END OF REPORT