

MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

Applicant: ETi Solid State Lighting, Inc

Address: 720 Northgate, Parkway Wheeling, IL 60090, Illinois, United States

Product Name: FLUSH MOUNT CEILING LIGHT WITH MOTION SENSOR

FCC ID: XZH-C012632026

Standard(s): 47 CFR §1.1310, 47 CFR §2.1091, 47 CFR §15.249

Report Number: 2602S22967E-RF-00C

Report Date: 2026/4/29

The above device has been tested and found compliant with the requirement of the relevant standards by Bay Area Compliance Laboratories Corp. (Dongguan).

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2602S22967E-RF-00C	Original Report	2026/4/29

1. GENERAL INFORMATION

1.1 General Description Of Equipment under Test

EUT Name:	FLUSH MOUNT CEILING LIGHT WITH MOTION SENSOR
EUT Model:	C01263301A, C01264301A, C01265301A
Multiple Model(s):	C01263@##A, C01264@##A, C01265@##A
Rated Input Voltage:	AC 120V
EUT Received Date:	2026/4/3
EUT Received Status:	Good
Note: Please refer to the declaration letter for more detail, which was provided by manufacturer.	

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

1.3 Antenna Information Detail▲:

Antenna Type	Frequency Range	Antenna Gain
Patch	24.00~24.25GHz	9dBi
The design of compliance with §15.203:		
☒ Unit uses a permanently attached antenna.		
☐ Unit uses a unique coupling to the intentional radiator.		
☐ Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.		

2. RF EXPOSURE EVALUATION (MPE)

2.1 RF Exposure Evaluation

2.1.1 Applicable Standard

According to subpart 15.247(i), 15.407(f) and subpart §1.1310, systems operating under the provisions of this 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.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (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

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

2.1.2 Calculation formula

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

2.1.3 Calculated Data:

Operation Modes	Frequency (GHz)	Conducted output power including Tune-up Tolerance [▲]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBm)	(mW)			
24G Radar	24-24.25	12	15.85	20.00	0.003	1.0

For 24G Radar, Fundamental field strength is 106.34dBμV/m @ 3m = 11.14 dBm EIRP.
 EIRP(dBm)=Field Strength of Fundamental(dBμV/m)-95.2 (dB).
 Conducted power(dBm)= EIRP(dBm)-Antenna Gain(dBi).

Note:

The Tune-up Tolerance provided by manufacturer.

Result: The device meet FCC MPE at 20 cm distance

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2602S22967E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2602S22967E-RF-INP EUT INTERNAL PHOTOGRAPHS.

******* END OF REPORT *******