



# MAXIMUM PERMISSIBLE EXPOSURE **EVALUATION REPORT**

**Applicant: Lepro Innovation INC** 

3651 Lindell Road Suite D1048, Las Vegas, Nevada 89103, United Address:

Product Name: Smart LED Bulb

FCC ID: 2A3MAB2

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

47 CFR §15.247(i)

Report Number: 2402W49478E-RF-00D

**Report Date: 2024/9/18** 

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

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from Cas

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## DOCUMENT REVISION HISTORY

Revision Number Report Number		Description of Revision	Date of Revision	
1.0	2402W49478E-RF-00D	Original Report	2024/9/18	

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## 1. GENERAL INFORMATION

### 1.1 General Description Of Equipment under Test

EUT Name:	Smart LED Bulb
EUT Model:	B2
Rated Input Voltage:	AC 120V
EUT Received Date:	2024/8/19
EUT Received Status:	Good

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### 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.

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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/cm²)	Averaging Time (minutes)	
0.3-1.34	614	1.63	*(100)	30	
1.34–30	824/f	2.19/f	*(180/f²)	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/cm<sup>2</sup>);

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);

#### 2.1.3 Calculated Data:

Operation Modes	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm²)	MPE Limit (mW/cm²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	3.1	2.04	15.5	35.48	20.00	0.014	1.0
2.4G Wifi	2412-2462	3.1	2.04	24.5	281.84	20.00	0.115	1.0

#### Note:

The Conducted output power including Tune-up Tolerance provided by manufacturer.

2.4G Wifi and BLE can't transmit simultaneously.

Result: Compliant. The device compliant Simultaneous transmission at 20cm distances.

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### **EXHIBIT A - EUT PHOTOGRAPHS**

Please refer to the attachment 2402W49478E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2402W49478E-RF-INP EUT INTERNAL PHOTOGRAPHS.

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

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