



MPE Report

Report No.:STS2512340H01

Issued for

LEPRO INNOVATION INC.

3651 Lindell Road Suite D1048, Las Vegas, NV 89103, USA

Product Name: Smart LED Spotlights

Brand Name: **Lepro**

Model Name: PG1-4

Series Model(s): PG1-2

FCC ID: 2A3MAPG1

Test Standard: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen STS Test Services Co., Ltd.

**TEST REPORT****Applicant's Name**.....: LEPRO INNOVATION INC.

Address: 3651 Lindell Road Suite D1048, Las Vegas, NV 89103, USA

Manufacturer's Name.....: LEPRO INNOVATION INC.

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447498 D01 Interim General RF Exposure Guidance v06

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Date of Test.....:

Date of receipt of test item: 09 Dec. 2025

Date (s) of performance of tests.....: 09 Dec. 2025 to 15 Dec. 2025

Date of Issue.....: 15 Dec. 2025

Test Result: **Pass**

Testing Engineer : _____

Aaron Bu

(Aaron Bu)

Technical Manager : _____

Skylar Li

(Skylar Li)

Authorized Signatory : _____

Bovey Yang

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	15 Dec. 2025	STS2512340H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Smart LED Spotlights	
Brand Name	Lepre	
Model Name	PG1-4	
Series Model(s)	PG1-2	
Model Difference	All the model are the same circuit and RF module, except model names and the number of lamps, PG1-4 has four lights and PG1-2 has two lights.	
Product Description	The EUT is AI LED permanent lights	
	Operation Frequency:	802.11b/g/n 20: 2412~2462 MHz BLE:2402~2480 MHz
	Modulation Type:	BLE:GFSK 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM
	Antenna gain:	3.96 dBi
	Antenna Designation:	PCB antenna
Power Rating	24V $\overline{=}$	
Adapter 1 Information (PG1-4):	Manufacture: XING YUAN ELECTRONICS CO., LTD Model No.: XY36SC-240150VQ-UT Input: 100-240V~ 50/60Hz 0.9A Max Output: 24V $\overline{=}$ 1.5A	
Adapter 2 Information (PG1-2):	Manufacture: XING YUAN ELECTRONICS CO., LTD Model No.: XY24SR-240075VQ-UT Input: 100-240V~ 50/60Hz 0.6A Max Output: 24V $\overline{=}$ 0.75A	
Hardware Version	N/A	
Software Version	N/A	

1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	F/300
3.0-30	1842/f	4.89/f	*(900/f ²)
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	F/1500
1.34-30	824/f	2.19/f	*(180f ²)
1500 – 100000	--	--	1.0

F= Frequency in MHz

Friss Formula

Friss Transmission Formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 TEST RESULT

Tune up

Mode	Detector	Tune up
BLE 1M	AV	0±1dBm
WIFI 2.4G	AV	19±1dBm

	Tune up Produce power	Maximum peak output power (dBm)	Output power to antenna (mW)	Antenna Gain (numeric)	Power Density (S) (mW/ cm2)	Limit (mW/ cm2)	Result
WIFI 2.4G	19±1	20	100	2.489 (3.96dBi)	0.49508	1	Pass
BLE	0±1	1	1.26	2.489 (3.96dBi)	0.00623	1	Pass

Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.
2. The Bluetooth and WLAN can't simultaneous transmission at the same time.

※※※※※END OF THE REPORT※※※※※