



Test Report

Report No.: RKEYS250910321

Date: Oct. 07, 2025

Page 1 of 6

RF EXPOSURE EVALUATION REPORT

for

Product: LED String Lights

Model: MKR-PL-15, MKR-PL-29, MKR-PL-46, MKR-PL-47, MKR-PL-48, MKR-BO-27, MKR-BO-39, MKR-BO-63, BG-QCTB-UB-06, DY-OA08-T, DY-QP-100, StarryEver-USB, DY-OA08-1, DY-OA08-20, DY-OA08-21, DY-OA08-30, DY-OA08-39, DY-OA08-200, DY-OA08-44, DY-OA08-45

FCC ID: 2BDZU-MKRPL15

Report No.: RKEYS250910321

Issued for

ShenZhenShi YunZhiFeng DianZiShangWu Co., Ltd.

**307, 1 Dong, DiaoSuJiaYuan, 8 Hao, ZhongKangLu, MeiTingSheQu, MeiLinJieDao,
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Issued by

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CONTENTS

	PAGE
1. TEST CERTIFICATION	3
2. GENERAL INFORMATION	4
2.1. GENERAL DESCRIPTION OF E.U.T.	4
3. RF EXPOSURE EVALUATION	5
3.1. LIMITS	5
3.2. CALCULATION METHOD	5
3.3. TEST RESULT	6
3.4. CONCLUSION	6

1. TEST CERTIFICATION

Product: LED String Lights

Trade mark: Omika, StarryEver

FCC ID: 2BDZU-MKRPL15

Model: MKR-PL-15

Model List(s): MKR-PL-29, MKR-PL-46, MKR-PL-47, MKR-PL-48, MKR-BO-27, MKR-BO-39, MKR-BO-63, BG-QCTB-UB-06, DY-OA08-T, DY-QP-100, StarryEver-USB, DY-OA08-1, DY-OA08-20, DY-OA08-21, DY-OA08-30, DY-OA08-39, DY-OA08-200, DY-OA08-44, DY-OA08-45

Applicant : ShenZhenShi YunZhiFeng DianZiShangWu Co.,Ltd.

Address: 307, 1 Dong, DiaoSuJiaYuan, 8 Hao, ZhongKangLu, MeiTingSheQu, MeiLinJieDao, FuTianQu, ShenZhen, GuangDong, 518000, China

Manufacturer: Omika Co.,Ltd.

Address: 201, 16th Building, Fourth Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China

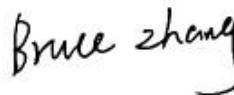
Applicable Standards: CFR 47, FCC Part 2.1091

The above equipment has been tested by Guangdong KEYS Testing Technology Co., Ltd. and found compliance with the requirements in the technical standards mentioned above. The test results presented in this report only relate to the product/system tested. The other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



Prepared by:

Evan Fang / Engineer



Approved by:

Bruce Zhang / Manager

2. GENERAL INFORMATION

2.1. General Description of E.U.T.

Product Name	LED String Lights
Model Name	MKR-PL-15
Specification	Bluetooth BLE
Operating frequency	2402-2480MHz
Number of Channel	40 Channels for BLE
Antenna installation	PCB Antenna
Antenna Gain	-5.41dBi
Type of Modulation	GFSK

3. RF EXPOSURE EVALUATION

3.1. Limits

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
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

3.2. Calculation method

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S: Power density(mW/cm²)

P: power input to antenna (Watt)

G: is the antenna gain relative to an isotropic antenna;

R: is the distance from observation point to the antenna

Note:

1) P (Watts)=(10[^] (dBm /10))/1000

2) G (Antenna gain in numeric) = 10[^] (Antenna gain in dBi /10)

3) π=3.142

4)R=20cm

3.3. Test Result

Test mode	Maximum Conducted Output Power(dBm)	Tune-up Power(dBm)
BLE 2M	3.56	3±1

The maximum power density at a distance of 0.2 m is shown as below:

Mode	Maximum Tune up Power (dBm)	Antenna Gain(dBi)	Maximum E.I.R.P. (mW)	Power density (mW/cm ²)	Power density Limit (mW/cm ²)	Result
BLE 2M	4	-5.41	2.5119	0.0001	1	PASS

3.4. Conclusion

According to 47 CFR 2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

**** End of Report ****