LUX LED LIGHTS

MPE ASSESSMENT REPORT

Report Type:
FCC MPE assessment report

Model:
77120, 77121

REPORT NUMBER:
220201823SHA-002

ISSUE DATE:
June 26, 2022

DOCUMENT CONTROL NUMBER:
TTRFFCCMPE-02_V1 © 2018 Intertek

Intertek Testing Services Shanghai
Building No.86, 1198 Qinzhou Road (North)
Caohejing Development Zone
Shanghai 200233, China

Telephone: 86 21 6127 8200
www.intertek.com

Total Quality. Assured.

TEST REPORT

Report no.: 220201823SHA-002

Applicant	:	LUX LED LIGHTS 5540 Ekwill St Suite 130, SANTA BARBARA CA 93111
Manufacturer	:	Dongguan Checkson Enterprise Co.,Ltd KongYang Ind.Gentre, Zhangmutou Town, Dongguan City, Guangdong Province, China
FCC ID	:	**2ARP2-LUX-AURA01**

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:
FCC PART 1 SECTION 1.1310

PREPARED BY:	**REVIEWED BY:**
Project Engineer Erick Liu	Reviewer Wakeyou Wang

Total Quality. Assured.

TEST REPORT

Revision History

Report No.	Version	Description	Issued Date
220201823SHA-002	Rev. 01	Initial issue of report	June 26, 2022

Measurement result summary

TEST ITEM	FCC REFERANCE	TEST RESULT	NOTE
RF Exposure	1.1310	Pass	-

Notes: 1: NA =Not Applicable
2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.
3: Additions, Deviations and Exclusions from Standards: None.

Total Quality. Assured.

TEST REPORT

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	LUX Brooklyn Aura Desk Light
Type/Model:	77120, 77121
Description of EUT:	EUT is a desk light with wireless charging function, all models are same except the model names. After evaluation, we choose 77120 for all tests.
Rating:	12Vdc (Powered by Adaptor); total Max. 48W; USB Output 1: 5 Vdc; 1 A; USB Output 2: 5 Vdc; 1 A; Wireless Output Max. 15 W
Category of EUT:	Class B
EUT type:	☒ Table top ☐ Floor standing
Software Version:	/
Hardware Version:	/
Sample received date:	May 23, 2022
Date of test:	May 23, 2022 – June 15, 2022

1.2 Technical Specification

Frequency Range:	111-205KHz
Modulation:	FSK
Antenna:	Coil Antenna, 0dBi

1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road (North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0051
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

The tests were subcontracted to the following laboratories:

Name:	Shenzhen NTEK Testing Technology Co., Ltd.
Address:	Add.: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen 518126 P.R. China
Telephone:	0755-2320 0050/2320 0090

The test facility is recognized, certified, or accredited by these organizations:	CNAS-Lab The Certificate Registration Number is L5516
	IC-Registration The Certificate Registration Number is CN0074
	FCC- Accredited Test Firm Registration Number: 463705 Designation Number: CN1184
	A2LA-Lab The Certificate Registration Number is 4298.01

2 TEST SPECIFICATIONS

2.1 Standards or specification

FCC PART 1 SECTION 1.1310
KDB 680106 D01 RF Exposure Wireless Charging App v03

2.2 Mode of operation during the test

Within this test report, EUT was tested under its rating voltage and frequency (120V, 60Hz).
The 0%/50%/100% battery capacity was tested and the 5c0% battery capacity was worst case.

2.3 Test peripherals list

Item No.	Name	Band and Model	Description
1	Wireless Load	FOD	5W,10W,15W
2	iphone 8	Apple	-

2.4 Record of climatic conditions

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (kPa)
RF Exposure	24	53	101

2.5 Instrument list

EMF TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Electric and Magnetic Field Probe-Analyzer	NARDA	ELT-200A	180ZX10220	2022.03.02	2023.03.01	1 year

2.6 Measurement uncertainty

Test Items	Expanded Uncertainty (k=2)
H-field	0.9 dB
E-field	1.1 dB

3 RF Exposure Assessment

Test result: Pass

3.1 Assessment Limit

Reference: 47 CFR §1.1310, KDB 680106

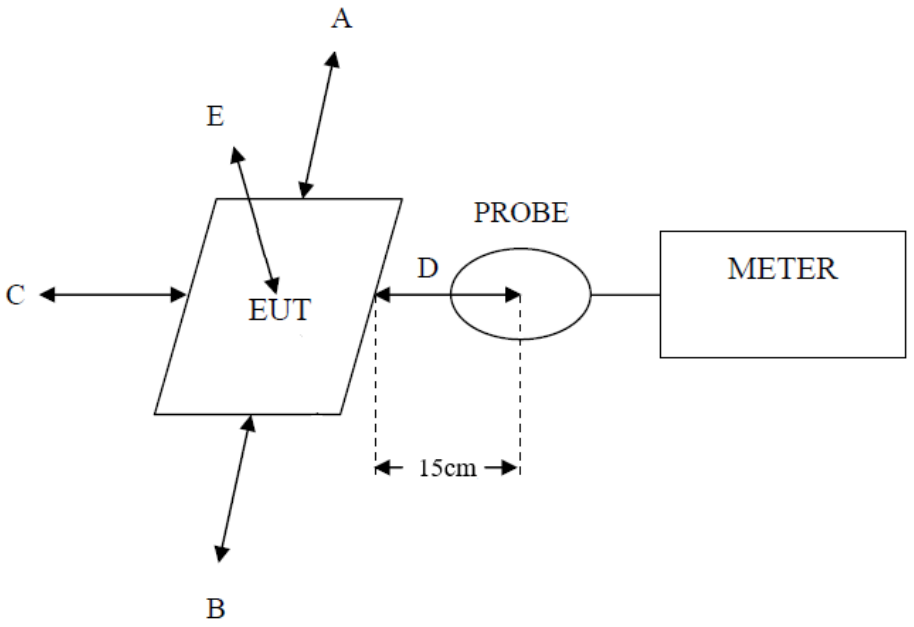
Limits for General Population/Uncontrolled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm^2]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	30
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 – 1 500	-	-	f/1500	30
1 500 – 100 000	-	-	1.0	30

Limits for Occupational/Controlled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm^2]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	6
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 – 1 500	-	-	f/300	6
1 500 – 100 000	-	-	5	6

3.2 Assessment Configuration



3.3 Assessment Results

Test result of Magnetic Field Strength:

Test Position	Test distance (cm)	Test result (A/m)	Limit (A/m)	Result (Pass/Fail)
A: Right	15	0.115	1.63 *0.5	Pass
B: Left	15	0.116	1.63 *0.5	Pass
C: Front	15	0.113	1.63 *0.5	Pass
D: Back	15	0.113	1.63 *0.5	Pass
E: Top	15	0.146	1.63 *0.5	Pass

Test result of Electric Field Strength:

Test Position	Test distance (cm)	Test result (V/m)	Limit (V/m)	Result (Pass/Fail)
A: Right	15	0.440	614 *0.5	Pass
B: Left	15	0.444	614 *0.5	Pass
C: Front	15	0.433	614 *0.5	Pass
D: Back	15	0.439	614 *0.5	Pass
E: Top	15	0.464	614 *0.5	Pass

********** END **********