

Light & Effects Technology Co., Ltd MPE ASSESSMENT REPORT

Report Type:

FCC Part §2.1091, §2.1093 and §1.1307(b) assessment report

Model:

LE-LP60L12060Q01, LE-LP60L12060D01, LE-LP40L6060Q01, LE-LP40L6060D01, LE-LP40L12030D01

REPORT NUMBER:

180503134SHA-002

ISSUE DATE:

July 18, 2018

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Report no.: 180503134SHA-002

Applicant: Light & Effects Technology Co., Ltd

No. 2 Xinda Road, High-Tech (West) Zone, Chengdu, Sichuan, 611730

Manufacturer: Sunfor Light Co., Ltd

No.2 Xinda Road, High-Tech(West) Zone, Chengdu, Sichuan 611730

FCC ID: 2AG6C-LEP01 IC: 23694-LEP01

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

KDB447498 D01 General RF Exposure Guidance v06 FCC Part2.1091, FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:	REVIEWED BY:	
Gn'A Liu	Dul	
Project Engineer Erick Liu	Reviewer Daniel Zhao	

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Revision History

Report No.	Version	Description	Issued Date
180503134SHA-002	Rev. 01	Initial issue of report	July 18, 2018





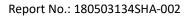
1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Lettin Essential Panel Light	
	LE-LP60L12060Q01, LE-LP60L12060D01,	
	LE-LP40L6060Q01, LE-LP40L6060D01,	
Type/Model:	LE-LP40L12030Q01, LE-LP40L12030D01	
	The EUT is a panel light with 2.4G Zigbee, there are three models,	
	we have tested the samples of all models, the model "LE-	
	LP60L12060Q01" is the worst case and we list the result in the	
Description of EUT:	report.	
	100-277V AC, 60Hz, 60W for model "LE-LP60L12060Q01,	
	LE-LP60L12060D01";	
	100-277V AC, 60Hz, 40W for model "LE-LP40L6060Q01,	
Rating:	LE-LP40L6060D01, LE-LP40L12030Q01, LE-LP40L12030D01"	
Category of EUT:	Class B	
EUT type:	☐ Table top ☐ Floor standing	
Software Version:	/	
Hardware Version:	/	
Sample received date:	June 05, 2018	
Date of test:	June 11, 2018– June 28, 2018	

1.2 Technical Specification

Frequency Range:	2400MHz to 2483.5MHz	
Support Standards:	IEEE 802.15.4	
Type of Modulation:	O-QPSK	
Channel Number:	15 channels	
Channel Separation:	5MHz	
Antenna Information:	2.5dBi, PCB antenna	

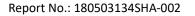




1.3 Description of Test Facility

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	CNAS Accreditation Lab
recognized,	Registration No. CNAS L0139
certified, or accredited by these organizations:	FCC Accredited Lab Designation Number: CN1175
o . Barriago a .	IC Registration Lab
	Registration code No.: 2042B-1
	VCCI Registration Lab Registration No.: R-4243, G-845, C-4723, T-2252
	NVLAP Accreditation Lab NVLAP LAB CODE: 200849-0
	A2LA Accreditation Lab Certificate Number: 3309.02





2 MPE Assessment

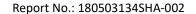
Test result: Pass

2.1 MPE Assessment Limit

Mobile device exposure for standalone operations:

Frequency range	E-field strength	H-field strength	B-field	Equivalent plane wave
	(V/m)	(A/m)	(uT)	power density
				S _{eq} (W/m ²)
0-1 Hz	-	$3,2 \times 10^4$	4×10^{4}	-
1-8 Hz	10 000	$3.2 \times 10^4/f^2$	$4 \times 10^4/f^2$	-
8-25 Hz	10 000	4 000/f	5 000/f	-
0,025-0,8 kHz	250/f	4/f	5/f	-
0,8-3 kHz	250/f	5	6,25	-
3-150 kHz	87	5	6,25	-
0,15-1 MHz	87	0,73/f	0,92/f	-
1-10 MHz	87/f ^{1/2}	0,73/f	0,92/f	-
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	1,375 f ^{1/2}	0,0037 f ^{1/2}	0,0046 f ^{1/2}	f/200
2-300 GHz	61	0,16	0,20	10

Mobile device exposure for simultaneous transmission operations: the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is \leq 1.0





TEST REPORT

2.2 Assessment Results

Power density (S) is calculated according to the formula:

 $S = P / (4\pi R^2)$

Where $S = power density in mW/cm^2$

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 180503134SHA-001: The maximum radiated power = 5.25dBm = 3.35 mW; Here R is chosen to be 20cm,

 $S = P / (4\pi R^2) = 3.35 / (4 * 3.14 * 20 * 20) = 0.0007 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$





Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 25 cm or more should be
maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.
