



中国认可
国际互认
检测
TESTING
CNAS L5313



RF Exposure Evaluation Declaration

Product Name : LED Lamp

Model No. : 9290011369B

FCC ID : 2AGBW9290011369BX

Applicant : Philips Lighting(China) Investment Co.,Ltd.

Address : Building 9,Lane 888,Tian Lin Road,Minhang
district,Shanghai,China

Date of Receipt : Apr. 19th, 2017

Test Date : Apr. 19th, 2017~ Apr. 28th, 2017

Issued Date : May. 05th, 2017

Report No. : 1742090R-RF-US-P20V01

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing & Certification (Suzhou) Co., Ltd.

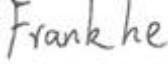
Test Report Certification

Issued Date : May. 05th, 2017
Report No. : 1742090R-RF-US-P20V01

Product Name : LED Lamp
Applicant : Philips Lighting(China) Investment Co.,Ltd.
Address : Building 9,Lane 888,Tian Lin Road,Minhang district,Shanghai,China
Manufacturer : Philips Lighting(China) Investment Co.,Ltd.
Address : Building 9,Lane 888,Tian Lin Road,Minhang district,Shanghai,China
Model No. : 9290011369B
FCC ID : 2AGBW9290011369BX
EUT Voltage : AC 110-130V/50/60Hz
Test Voltage : AC 120V/60Hz
Applicable Standard : KDB 447498D01V06
FCC Part1.1310
Test Result : Complied
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392

Documented By : 

(Adm. Specialist: Kathy Feng)

Reviewed By : 

(Senior Engineer: Frank He)

Approved By : 

(Engineering Manager: Harry Zhao)

1. RF Exposure Evaluation

1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of 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) | Average Time (Minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| (A) Limits for Occupational/ Control Exposures | | | | |
| 300-1500 | -- | -- | F/300 | 6 |
| 1500-100,000 | -- | -- | 5 | 6 |
| (B) Limits for General Population/ Uncontrolled Exposures | | | | |
| 300-1500 | -- | -- | F/1500 | 6 |
| 1500-100,000 | -- | -- | 1 | 30 |

F= Frequency in MHz

Friis Formula

Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

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 center of the radiator in cm

P_d is the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

1.3. Test Result of RF Exposure Evaluation

| | | |
|-----------|---|------------------------|
| Product | : | LED Lamp |
| Test Item | : | RF Exposure Evaluation |
| Test Site | : | AC-6 |

● Antenna Information

| | | | | | | |
|----------------------|-------------------------------------|-----------|-------------------------------------|--------------------------|--------------------------|-----------|
| Antenna manufacturer | N/A | | | | | |
| Antenna Delivery | <input checked="" type="checkbox"/> | 1*TX+1*RX | <input type="checkbox"/> | 2*TX+2*RX | <input type="checkbox"/> | 3*TX+3*RX |
| Antenna technology | <input checked="" type="checkbox"/> | SISO | | | | |
| | <input type="checkbox"/> | MIMO | <input type="checkbox"/> | Basic | | |
| | <input type="checkbox"/> | | <input type="checkbox"/> | CDD | | |
| | <input type="checkbox"/> | | <input type="checkbox"/> | Beam-forming | | |
| Antenna Type | <input type="checkbox"/> | External | <input type="checkbox"/> | Dipole | | |
| | <input checked="" type="checkbox"/> | Internal | <input type="checkbox"/> | PIFA | | |
| | | | <input checked="" type="checkbox"/> | PCB | | |
| | | | <input type="checkbox"/> | Ceramic Chip Antenna | | |
| | | | <input type="checkbox"/> | Microstrip Patch Antenna | | |
| Antenna Gain | 5dBi | | | | | |

● Power Density

Standalone modes:

| Test Mode | Frequency Band (MHz) | EIRP (dBm) | Power Density at R = 20 cm (mW/cm ²) | Limit of Power Density S(mW/cm ²) |
|-----------|----------------------|------------|--|---|
| Zigbee | 2405 ~ 2480 | 6.367 | 0.00086 | 1 |

Note: The standalone transmission power density is 0.00086 mW/cm² for LED Lamp without any other radio equipment.

The End