

APPLICATION FOR CERTIFICATION

On Behalf of

Philips Lighting(China) Investment Co., Ltd.

LED Lamps

Model No. : 9290011998B

Brand : Philips

FCC ID : 2AGBW9290011998BX

Prepared for

**Philips Lighting(China) Investment Co., Ltd.**

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

Prepared by

**Audix Technology (Wujiang) Co., Ltd. EMC Dept.**

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Report Number : ACWE-F1703007

Date of Test : Feb.25~Mar.30, 2017

Date of Report : Apr.01, 2017

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**TEST REPORT CERTIFICATION**

Applicant : Philips Lighting(China) Investment Co., Ltd.  
 Manufacturer : Philips Lighting(China) Investment Co., Ltd.  
 EUT Description : LED Lamp  
 FCC ID : 2AGBW9290011998BX  
 (A) Model No. : 9290011998B  
 (B) Brand : Philips  
 (C) Power Supply : AC 110-130V, 50/60Hz  
 (D) Test Voltage : AC 120V, 60Hz

## Applicable Standards:

447498 D01 General RF Exposure Guidance v06

The device described above was tested by Audix Technology (Wujiang) Co., Ltd. EMC Dept. to determine the maximum emission levels emanating from the device.

The measurement results are contained in this test report and Audix Technology (Wujiang) Co., Ltd. EMC Dept. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this test report shows that the EUT to be technically compliant with the FCC limits.

This test report applies to above tested sample only. This test report shall not be reproduced in part without written approval of Audix Technology (Wujiang) Co., Ltd. EMC Dept.

Date of Test: Feb.25~Mar.30, 2017

Date of Report: Apr.01, 2017

Prepared by


:



(Emma Hu/Assistant Administrator)

Reviewer

:



(Danny Sun/ Deputy Manager)

Approved &amp; Authorized Signer

:



(Ken Lu/Assistant General Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

Description	:	LED Lamp
Model No.	:	9290011998B
FCC ID	:	2AGBW9290011998BX
Brand	:	Philips
Applicant	:	Philips Lighting(China) Investment Co., Ltd. Building 9, Lane 888, Tian Lin Road, Minhang district, Shanghai, China
Manufacturer	:	Philips Lighting(China) Investment Co., Ltd. Building 9, Lane 888, Tian Lin Road, Minhang district, Shanghai, China
Radio Technology	:	IEEE 802.15.4 (ZigBee®)
Antenna Gain	:	2.21dBi
Fundamental Range	:	2405 MHz -2480MHz
Tested Frequency	:	2405MHz (CH11) 2450MHz (CH20) 2475MHz (CH25) 2480MHz (CH26)
Channel Setting Method	:	Channel is changed via atmel production test application.
Highest Working Frequency	:	2.4GHz
Modulation type	:	O-QPSK
Date of Receipt of Sample	:	Jan.16, 2017
Date of Test	:	Feb.25~Mar.30, 2017

1.2. Description of Test Facility

Name of Firm : **Audix Technology (Wujiang) Co., Ltd. EMC Dept.**

Site Location : No. 1289 Jiangxing East Road, the Eastern Part of Wujiang Economic Development Zone  
Jiangsu China 215200

Test Facilities : **RF Fully Chamber**

NVLAP Lab Code : 200786-0  
Valid until on Sep.30, 2017  
(NVLAP is a signatory member of ILAC MRA)  
Remark: This report shall not be imply endorsement, certification or approval by NVLAP, NIST, or any agency of the U.S. Federal Government.

1.3. Measurement Uncertainty

Test Item	Uncertainty
Maximum Peak Output Power	± 0.12dB

Remark: Uncertainty =  $ku_c(y)$

## 2. RADIO FRREQUENCY EXPOSURE COMPLIANCE RESULT

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

- $f_{(\text{GHz})}$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step b below

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

According to the actual measurement,

max. power of channel, including tune-up tolerance =2.70mW

min. test separation distance=5mm

$\sqrt{f_{(\text{GHz})}}=1.57$

The test result is  $0.85 \leq 3.0$  for 1-g SAR  $\leq 7.5$  for 10-g SAR, hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01:General RF Exposure Guidance V06.