

APPLICATION FOR CERTIFICATION

On Behalf of

Philips Lighting(China) Investment Co., Ltd.

LED Lamps

Model No. : 9290011369A

Brand : Philips

FCC ID : 2AGBW9290011369AX

Prepared for

Philips Lighting(China) Investment Co., Ltd.

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

Prepared by

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Report Number : ACWE-F1607003

Date of Test : Feb.27~Mar.05, 2016

Date of Report : Jul.09,2016

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
TEST REPORT CERTIFICATION	4
1. GENERAL INFORMATION.....	4
1.1. Description of Device (EUT).....	4
1.2. Description of Test Facility	5
1.3. Measurement Uncertainty.....	5
2. SUMMARY OF STADARDS AND RESULTS	6
2.1. Specification Limits.....	6
2.2. MPE Calculator Method	6
2.3. Calculated Result	7

TEST REPORT CERTIFICATION

Applicant : Philips Lighting(China) Investment Co., Ltd.
 Manufacturer : Philips Lighting(China) Investment Co., Ltd.
 Factory#1 : Changan Win Channel Electronics Company Limited
 Factory#2 : Arts Electronics Co., Ltd.
 Factory#3 : Honor Tone Ltd
 EUT Description : LED Lamp
 FCC ID : 2AGBW9290011369AX
 (A) Model No. : 9290011369A
 (B) Brand : Philips
 (C) Power Supply : AC 110-130V, 60Hz
 (D) Test Voltage : AC 120V, 60Hz

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 maximum emission levels were compared to the FCC OET Bulletin 65.

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.27~Mar.05, 2016

Date of Report: Jul.09, 2016

Prepared by

:

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(Emma Hu/Assistant Administrator)

Reviewer

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(Danny Sun/ Section Manager)

Approved & Authorized Signer

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Ken Lu

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1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	LED Lamp
Model No.	:	9290011369A
FCC ID	:	2AGBW9290011369AX
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
Factory#1	:	Changan Win Channel Electronics Company Limited No.85, Tong Gu Xia Lu, Shangjiao Community, Changan Town, Dongguan City, Guangdong Province, China
Factory#2	:	Arts Electronics Co., Ltd. Shangxing Lu, Shangjiao Community, Changan Town, Dongguan Guangdong523000 China
Factory#3	:	Honor Tone Ltd Mun Industrial Zone, Danshui, Huiyang, Huizhou Guangdong 516211 CN
Radio Technology	:	IEEE 802.15.4 (ZigBee®)
Antenna Gain	:	1.1dBi
Fundamental Range	:	2405 MHz -2475MHz
Tested Frequency	:	2405MHz (CH11) 2450MHz (CH20) 2475MHz (CH25) 2480MHz (CH26)
Channel Setting Method	:	Channel is changed according to EUT's power on or power off.
Highest Working Frequency	:	2.4GHz
Power Rating	:	9W

Modulation type : O-QPSK
 Date of Receipt of Sample : Jan.20, 2016
 Date of Test : Feb.27~Mar.05, 2016

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, 2016
 (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. SUMMARY OF STADARDS AND RESULTS

2.1. Specification Limits

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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/150	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

*Plane-wave equivalent power density

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The limit value 1.0mW/cm² is available for this EUT.

2.2. MPE Calculator Method

$$S = PG/(4 R^2)$$

$$R = [PG/(4 S)]^{0.5}$$

where: S = power density (in appropriate units, e.g. mW/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see Report: F12124 Section 6.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

2.3. Calculated Result

Radio Frequency Radiation Exposure Evaluation

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(mW/cm ²)
2405	2.94	1.1	1.29	0.000755	1.0
2450	2.83	1.1	1.29	0.000727	1.0
2475	2.69	1.1	1.29	0.000691	1.0
2480	0.44	1.1	1.29	0.000113	1.0

Separation distance R= 20cm.