

APPLICATION FOR CERTIFICATION

On Behalf of

Philips (China) Investment Co., Ltd.

LED Lamp

Model No. : 9290002579

Brand : Philips

FCC ID : O3M9290002579X

Prepared for

Philips (China) Investment Co., Ltd.

No. 9, Lane 888, Tian Lin Road, 200233, Shanghai, China

Prepared by

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Report Number : ACWE-F1306006A

Date of Test : Aug.15, 2013

Date of Report : Aug.19, 2013

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	4
1. DESCRIPTION OF VERSION.....	4
2. GENERAL INFORMATION.....	5
2.1. Description of Device (EUT).....	5
2.2. Description of Test Facility	6
2.3. Measurement Uncertainty.....	6
3. SUMMARY OF STADARDS AND RESULTS	7
3.1. Applicable Standard.....	7
3.2. Specification Limits	7
3.3. MPE Calculator Method	7
3.4. Calculated Result	8

TEST REPORT CERTIFICATION

Applicant : Philips (China) Investment Co., Ltd.
 Manufacturer : Philips (China) Investment Co., Ltd.
 Factory #1 : Changan Win Channel Electronics Company Limited
 Factory #2 : Arts Electronics Co., Ltd.
 EUT Description : LED Lamp
 FCC ID : O3M9290002579X
 (A) Model No. : 9290002579
 (B) Brand : Philips
 (C) Power Supply : AC 110-130V; 50/60Hz; 8W
 (D) Test Voltage : AC 120V, 60Hz

Applicable Standards:

FCC OET Bulletin 65 August 1997

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 report shows that the EUT to be technically compliant with the FCC limits.

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

Date of Test: Aug.15, 2013

Date of Report: Aug.19, 2013

Prepared by :


 (Tina Zhang/Assistant)

Reviewer :


 (Jingo Lin/Section Manager)

Approved & Authorized Signer :


 (Allen Wang/ Deputy General Manager)

1. DESCRIPTION OF VERSION

Edition No.	Date of Rev.	Summary	Report No.
0	Jun.18, 2013	Original Report.	ACWE-F1306006
Rev. A	Aug.19, 2013	1.Change the inductance L2 from “DR0810-472B 4.7 mH” to “EE10-502 5mH”. 2.Change the capacitor C14 from “2200PF MURATA CAP” to “4.7nF Y-cap”. 3.Add a new capacitor C18 “1206 100PF”. 4.Change the resistor R2,R3,R4,R6,R7,R8 from “0805” to “0603”. 5.Add potting. 6.The distance between the LED pin connection and copper foil is bigger.	ACWE-F1306006A

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description	:	LED Lamp
Model No.	:	9290002579
FCC ID	:	O3M9290002579X
Brand	:	Philips
Applicant	:	Philips (China) Investment Co., Ltd. No. 9, Lane 888, Tian Lin Road, 200233, Shanghai, China
Manufacturer	:	Philips (China) Investment Co., Ltd. No. 9, Lane 888, Tian Lin Road, 200233, 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
Radio Technology	:	IEEE 802.15.4 (ZigBee®)
Antenna Gain	:	-6dBi
Fundamental Range	:	2405 MHz -2480MHz
Tested Frequency	:	2405MHz (CH11) 2450MHz (CH20) 2480MHz (CH26)
Highest Working Frequency	:	2.4GHz
Date of Receipt of Sample	:	Aug.08, 2013
Date of Test	:	Aug.15, 2013

2.2. 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
(NVLAP is a NATA accredited body under Mutual
Recognition Agreement)
Valid until on Sep.30, 2013

2.3. Measurement Uncertainty

Test Item	Uncertainty
Maximum Peak Output Power	$\pm 0.30\text{dB}$

Remark: Uncertainty = $ku_c(y)$

3. SUMMARY OF STADARDS AND RESULTS

3.1. Applicable Standard

FCC OET Bulletin 65:1997

3.2. 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.

3.3. 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)

3.4. 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	1.76	-6	0.25	0.000088	1.
2450	1.69	-6	0.25	0.000084	1.
2480	1.57	-6	0.25	0.000078	1.

Separation distance R = 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(cm)
2405	1.76	-6	0.25	1.0	0.187
2450	1.69	-6	0.25	1.0	0.183
2480	1.57	-6	0.25	1.0	0.177

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.187cm from all persons