#### APPLICATION FOR CERTIFICATION

On Behalf of Philips (China) Investment Co., Ltd. LED Lamp

Model No. : 9290002619

Brand : Philips

FCC ID : O3M9290002619X

#### Prepared for

# Philips (China) Investment Co., Ltd.

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

#### Prepared by

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

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Report Number : ACWE-F1308007

Date of Test : Mar.13, 2014

Date of Report : Mar.14, 2014

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#### TEST REPORT CERTIFICATION

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

Manufacturer #1 : Changan Win Channel Electronics Company Limited

Manufacturer #2 : Arts Electronics Co., Ltd.

EUT Description : LED Lamp

FCC ID : O3M9290002619X

(A) Model No. : 9290002619

(B) Brand : Philips

(C) Power Supply : AC 110-130V; 50/60Hz; 6.5W

(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: Mar.13, 2014 Date of Report: Mar.14, 2014

Prepared by : /mma / U

(Emma Hu/Assistant Administrator)

Reviewer : U (Jingo Lin/Section Manager)

Approved & Authorized Signer : Len 14 3/17 14

(Ken Lu/Assistant General Manager)

# 1. GENERAL INFORMATION

#### 1.1. Description of Device (EUT)

Description : LED Lamp

Model No. : 9290002619

FCC ID : O3M9290002619X

Brand : Philips

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

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

Manufacturer #1 : Changan Win Channel Electronics Company Limited

No.85, Tong Gu Xia Lu, Shangjiao Community, Changan Town, Dongguan City, Guangdong Province, China

Manufacturer #2 : Arts Electronics Co., Ltd.

Shangxing Lu, Shangjiao Community, Changan Town,

Dongguan Guangdong523000 China

Radio Technology : IEEE 802.15.4 (ZigBee®)

Antenna Gain : -10dBi

Fundamental Range : 2405 MHz -2480MHz

Tested Frequency : 2405MHz (CH11)

2450MHz (CH20) 2480MHz (CH26)

Highest Working : 2.4GHz

Frequency

Modulation type : PMW

Date of Receipt of Sample : Mar.12, 2014

Date of Test : Mar.13, 2014

#### 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

(NVLAP is a NATA accredited body under Mutual

Recognition Agreement) Valid until on Sep.30, 2013

## 1.3. Measurement Uncertainty

Test Item	Uncertainty		
Maximum Peak Output Power	± 0.88dB		

Remark: Uncertainty =  $ku_c(y)$ 

# 2. SUMMARY OF STADARDS AND RESULTS

# 2.1. Applicable Standard

FCC OET Bulletin 65:1997

## 2.2. Specification Limits

Limits for General Population/Uncontrolled Exposure

Frequency	Electric Field	Magnetic Field	Power	Averaging Time
Range	Strength (E)	Strength (H)	Density (S)	$ E ^2$ , $ H ^2$ or S
(MHz)	(V/m)	(A/m)	$(mW/cm^2)$	(minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f2)*	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

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/cm<sup>2</sup> is available for this EUT.

#### 2.3. MPE Calculator Method

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

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

where: S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

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)

<sup>\*</sup>Plane-wave equivalent power density

#### 2.4. 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	3.08	-10	0.1	0.000061	1.0
2450	3.60	-10	0.1	0.000072	1.0
2480	3.89	-10	0.1	0.000077	1.0

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm <sup>2</sup> )	(cm)
2405	3.08	-10	0.1	1.0	0.157
2450	3.60	-10	0.1	1.0	0.169
2480	3.89	-10	0.1	1.0	0.176

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.176cm from all persons