

Application for FCC Certification
On behalf of

PHILIPS LIGHTING CO, DIV OF PHILIPS ELECTRONICS
NORTH AMERICA CORP

Product Name: LED LAMPS

Model No.: 9290002265

Serial No.: E1206790-06/06

FCC ID: O3M9290002265X

(MPE Calculation)

Prepared For : PHILIPS LIGHTING CO, DIV OF PHILIPS
ELECTRONICS NORTH AMERICA CORP
200 Franklin Square Drive Somerset, NJ 08873, USA

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F12125

Date of Test : Jul. 05, 2012

Date of Report : Jul. 19, 2012

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TEST REPORT FOR FCC CERTIFICATE

Applicant : PHILIPS LIGHTING CO, DIV OF PHILIPS ELECTRONICS
NORTH AMERICA CORP

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

Factory #1 : CHANGAN WIN CHANNEL ELECTRONICS
COMPANY LIMITED

Factory #2 : Arts Electronics Co., Ltd.

EUT Description : LED LAMPS

(A) Model No. : 9290002265

(B) Serial No. : E1206790-06/06

(C) Test Voltage : AC 120V/60Hz

Test Procedure Used:

FCC OET Bulletin 65 August 1997

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC OET Bulletin 65.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report also shows that the EUT (M/N: 9290002266, S/N: E1206790-06/06), which was tested on Jan. 13, 2012 is technically compliance 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 (Shanghai) Co., Ltd.

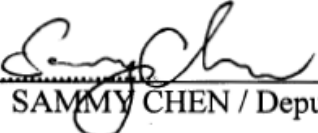
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jul. 05, 2012 Date of Report : Jul. 19, 2012

Producer : 
KATHY WANG / Assistant

Review : 
DIO YANG / Assistant Manager

 For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : 
Authorized Signature EMC SAMMY CHEN / Deputy Manager

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description : LED LAMPS

Type of EUT Production Pre-product Pro-type

Model Number : 9290002265

Serial Number : E1206790-06/06

Radio Tech : IEEE 802.15.4 (ZigBee®)

Freq. Band : 2405 MHz - 2480 MHz
Total 5 Channels:
(2405 MHz, 2425 MHz, 2450 MHz, 2475 MHz,
2480 MHz)

Tested Freq. : 2405 MHz (Channel 01)
2450 MHz (Channel 03)
2480 MHz (Channel 05)

Antenna Gain : -10.0 dBi

Applicant : PHILIPS LIGHTING CO, DIV OF PHILIPS
ELECTRONICS NORTH AMERICA CORP
200 Franklin Square Drive Somerset, NJ 08873, USA

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.
No.1 Shang Xing Lu, Shang Jiao Community,
Chang An Town, Dongguan City,
Guangdong Province 523000, China.

1.2 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on
Apr 29, 2009 Renewed
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3 F 34 Bldg 680 Guiping Rd.,
Caohejing Hi-Tech Park,
Shanghai 200233, China

FCC registration Number : 91789

Accredited by NVLAP, Lab Code : 200371-0

1.3 Measurement Uncertainty

Output Power Expanded Uncertainty : $U = 0.30$ dB

2 SUMMARY OF STANDARDS AND RESULTS

2.1 Applicable Standard

FCC OET Bulletin 65:1997

2.2 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.

2.3 MPE Calculation Method

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

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

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)

2.4 Calculated Result

2.4.1 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	1.40	-10.0	0.1	0.0000279	1.0
2450	0.87	-10.0	0.1	0.0000173	1.0
2480	0.72	-10.0	0.1	0.0000143	1.0

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(cm)
2405	1.40	-10.0	0.1	1.0	0.11
2450	0.87	-10.0	0.1	1.0	0.08
2480	0.72	-10.0	0.1	1.0	0.08

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.11 cm from all persons.