NVLAP LAB CODE 200707-0

FCC PART 18

MEASUREMENT AND TEST REPORT

For

Jiangxi Elegant Lighting Co., Ltd.

No.731 Xihou street, Guixi City, Jiangxi, China

FCC ID: VGZGYC3-7E12

Report Type:	**Product Type:**
Original Report	CFL

Test Engineer:	Cookies Bu
Report Number:	RSZ0910652
Report Date:	2009-06-10
Reviewed By:	Lisa Zhu EMC Engineer
Prepared By:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Jiangxi Elegant Lighting Co., Ltd.*'s model: *GYC03-E12, GYC05-E12, GYC07-E12*, or the "EUT" as referred to in this report is a *CFL* which measures approximately: 3.7 cm L x 3.7 cm W x 10.0 cm H for *GYC03-E12*, 3.7 cm L x 3.7 cm W x 10.0 H for *GYC05-E12*, 3.7 cm L x 3.7 cm W x 10.0 cm H for *GYC07-E12*, rated input voltage: AC 120V/60Hz.

The series products, model GYC03-E12, GYD03-E12, GYG03-E12, we select GYC03-E12 to test, the series products, model GYC05-E12, GYD05-E12, GYG05-E12, we select GYC05-E12 to test, the series products, model GYC07-E12, GYD07-E12, GYG07-E12, we select GYC07-E12 to test, the all models have same circuit diagram, PCB, only appearance has difference, which was explained in the attached Declaration Letter.

** All measurement and test data in this report was gathered from production sample serial number: 0901502 (Assigned by BACL, Shenzhen). The EUT was received on 2009-01-06.*

Objective

The following test report is prepared on behalf of *Jiangxi Elegant Lighting Co., Ltd.* in accordance with Part 2, Subpart J, and Part 18, Subparts A, B and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to determine compliance with FCC Part 18 limits.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with MP-5, FCC Methods of Measurements of Radio Noise Emissions from ISM Equipment, February 1986. All measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 21, 2007. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

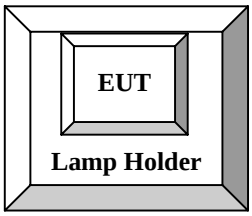
Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

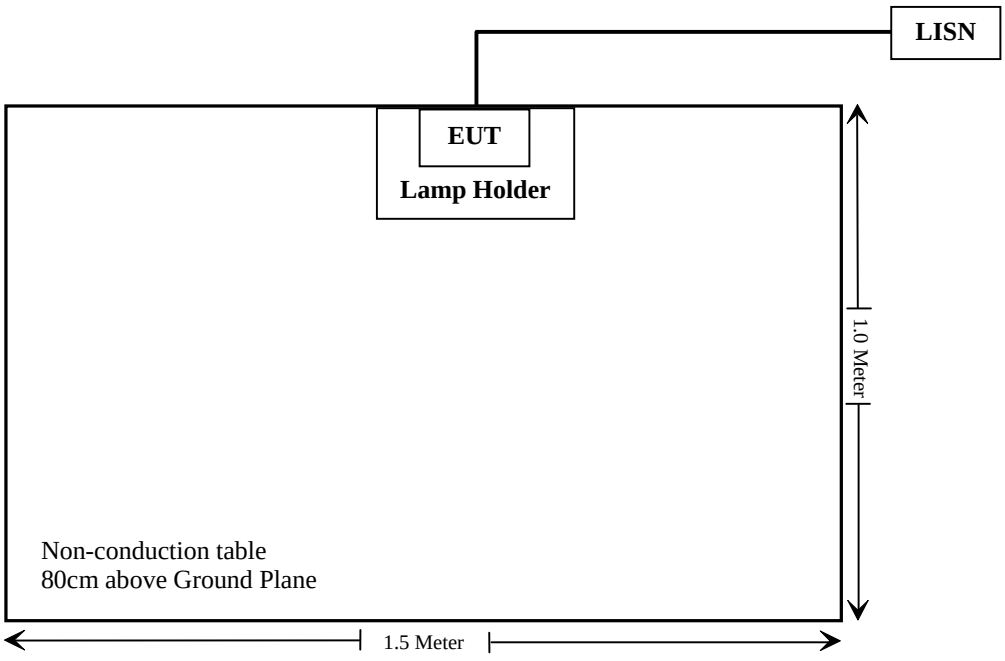
Equipment Modifications

No modifications were made to the unit tested.

Configuration of Test Setup



Block Diagram of Test Setup



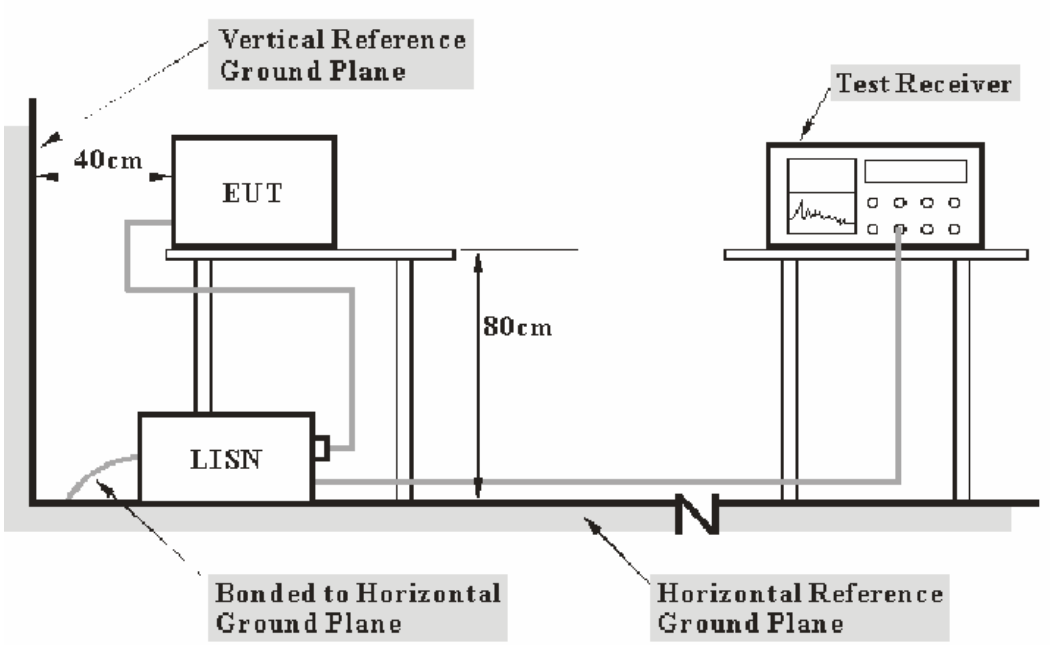
CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ±2.4 dB.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18 limits.

The EUT was connected to a 120 VAC/ 60Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 450 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	***IF B/W***
450 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12208	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCS30	830245/006	2008-03-25	2009-03-25
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2008-03-25	2009-03-25

***** Com-Power's LISN were used as the supporting equipment.
*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the EUT power cord was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 18, with the worst margin reading of:

GYC03-E12: 3.50 dB at **1.735 MHz** in the **Neutral** conductor mode

GYC05-E12: 4.70 dB at **1.610 MHz** in the **Neutral** conductor mode

GYC03-E12: 4.10 dB at **1.555 MHz** in the **Neutral** conductor mode

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

Testing was performed by Cookies Bu on 2009-02-16.

Test Mode: On (GYC03-E12)

Line Conducted Emissions				FCC Part 18.307	
Frequency (MHz)	**Amplitude (dBµV)**	**Detector (Peak)**	**Conductor (Line/Neutral)**	**Limit (dBµV)**	**Margin (dB)**
1.735	44.50	Peak	Neutral	48	3.50
4.935	39.50	Peak	Line	48	8.50
5.500	39.00	Peak	Line	48	9.00
3.845	38.50	Peak	Line	48	9.50
1.705	38.50	Peak	Line	48	9.50
3.720	38.30	Peak	Line	48	9.70
1.595	37.90	Peak	Line	48	10.10
2.970	37.10	Peak	Neutral	48	10.90
2.775	36.10	Peak	Neutral	48	11.90
3.145	34.40	Peak	Neutral	48	13.60
4.395	34.20	Peak	Neutral	48	13.80
1.530	33.80	Peak	Neutral	48	14.20

Test Mode: On (GYC05-E12)

Line Conducted Emissions				FCC Part 18.307	
Frequency (MHz)	**Amplitude (dBμV)**	**Detector (Peak)**	**Conductor (Line/Neutral)**	**Limit (dBμV)**	**Margin (dB)**
1.610	43.30	Peak	Neutral	48	4.70
1.470	40.60	Peak	Neutral	48	7.40
1.620	40.60	Peak	Line	48	7.40
1.545	39.60	Peak	Line	48	8.40
1.355	38.30	Peak	Neutral	48	9.70
1.390	37.60	Peak	Neutral	48	10.40
1.250	35.20	Peak	Neutral	48	12.80
1.440	34.90	Peak	Line	48	13.10
1.150	33.10	Peak	Neutral	48	14.90
5.090	32.50	Peak	Line	48	15.50
0.575	31.50	Peak	Line	48	16.50
1.315	31.20	Peak	Line	48	16.80

Test Mode: On (GYC07-E12)

Line Conducted Emissions				FCC Part 18.307	
Frequency (MHz)	**Amplitude (dBμV)**	**Detector (Peak)**	**Conductor (Line/Neutral)**	**Limit (dBμV)**	**Margin (dB)**
1.555	43.90	Peak	Neutral	48	4.10
1.505	41.80	Peak	Line	48	6.20
1.560	41.70	Peak	Line	48	6.30
25.915	40.60	Peak	Neutral	48	7.40
1.020	36.80	Peak	Neutral	48	11.20
1.230	36.60	Peak	Neutral	48	11.40
7.295	36.50	Peak	Line	48	11.50
0.995	36.10	Peak	Line	48	11.90
1.105	35.50	Peak	Neutral	48	12.50
0.680	35.50	Peak	Neutral	48	12.50
0.710	34.90	Peak	Line	48	13.10
0.665	34.50	Peak	Line	48	13.50

Plot(s) of Test Data

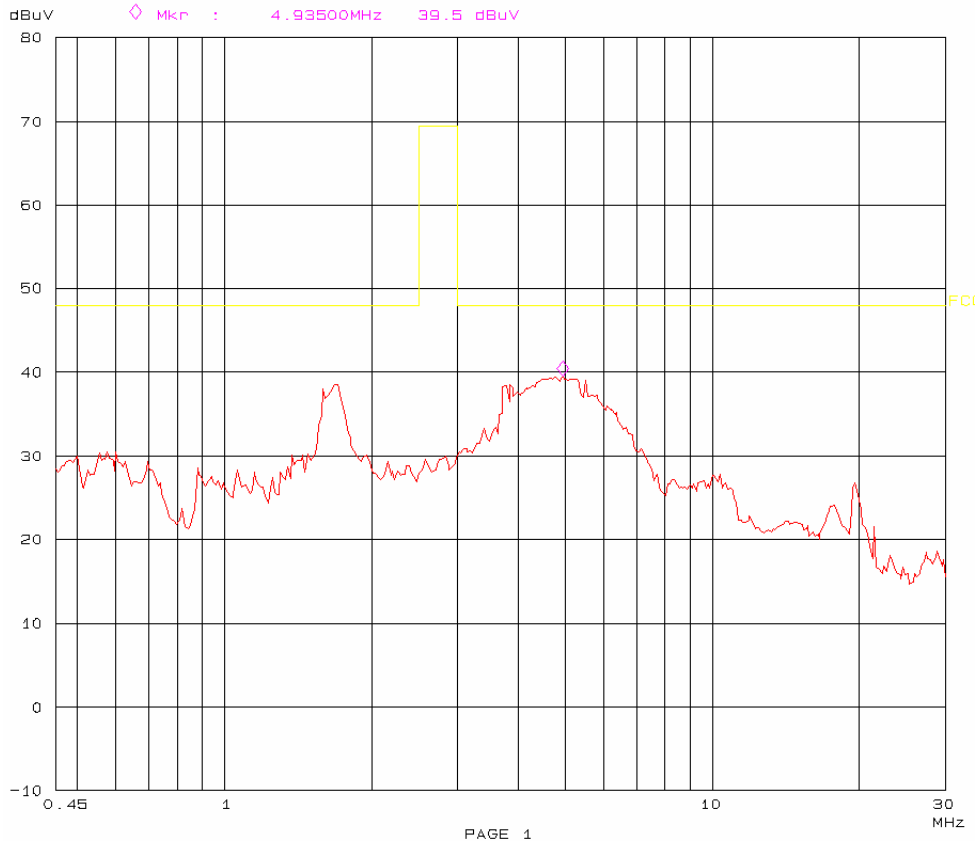
Plot(s) of Test Data is presented hereinafter as reference..

Model: GYC03-E12

Conducted emission
FCC PART18

16. Feb 09 14:47

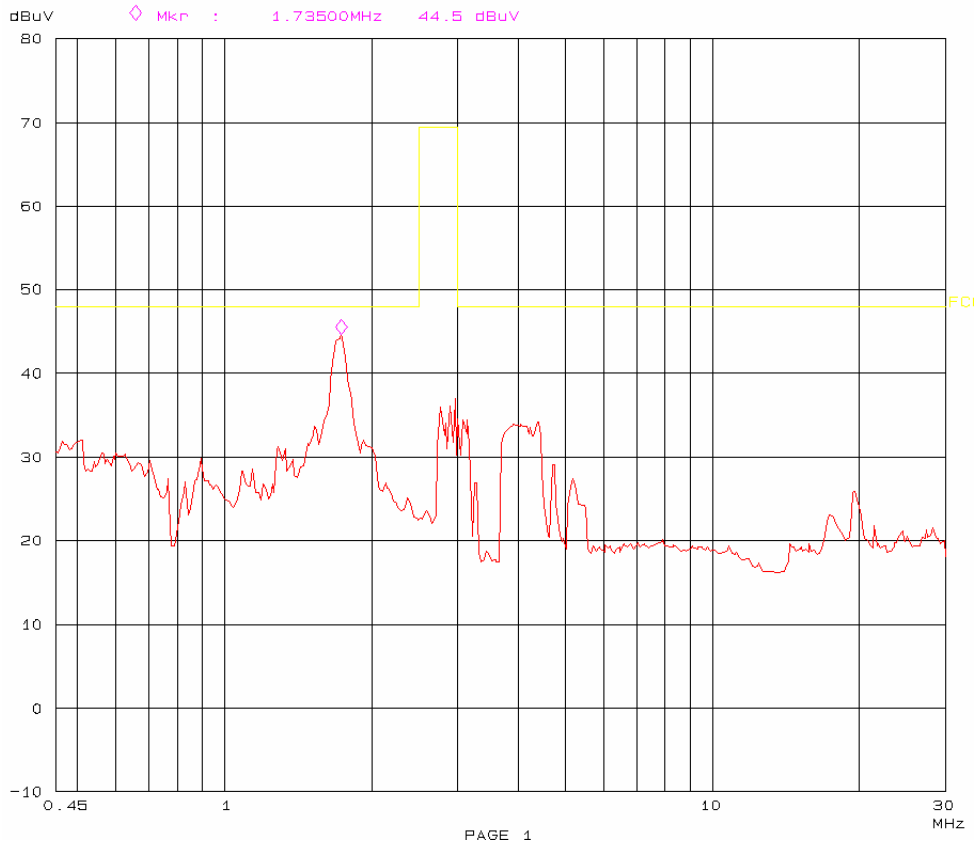
EUT:	CFL M/N: GYC03-E12
Manuf:	JIANGXI ELEGANT LIGHTING CO.,LTD
Op Cond:	On
Operator:	Cookies
Test Spec:	AC 120V/60Hz L
Comment:	Temp: 25 Hum: 56%
	BACL



Conducted emission
FCC PART18

16. Feb 09 13:54

EUT: CFL M/N: GYC03-E12
Manuf: JIANGXI ELEGANT LIGHTING CO.,LTD
Op Cond: On
Operator: Cookies
Test Spec: AC 120V/60Hz N
Comment: Temp: 25 Hum: 56%
BACL

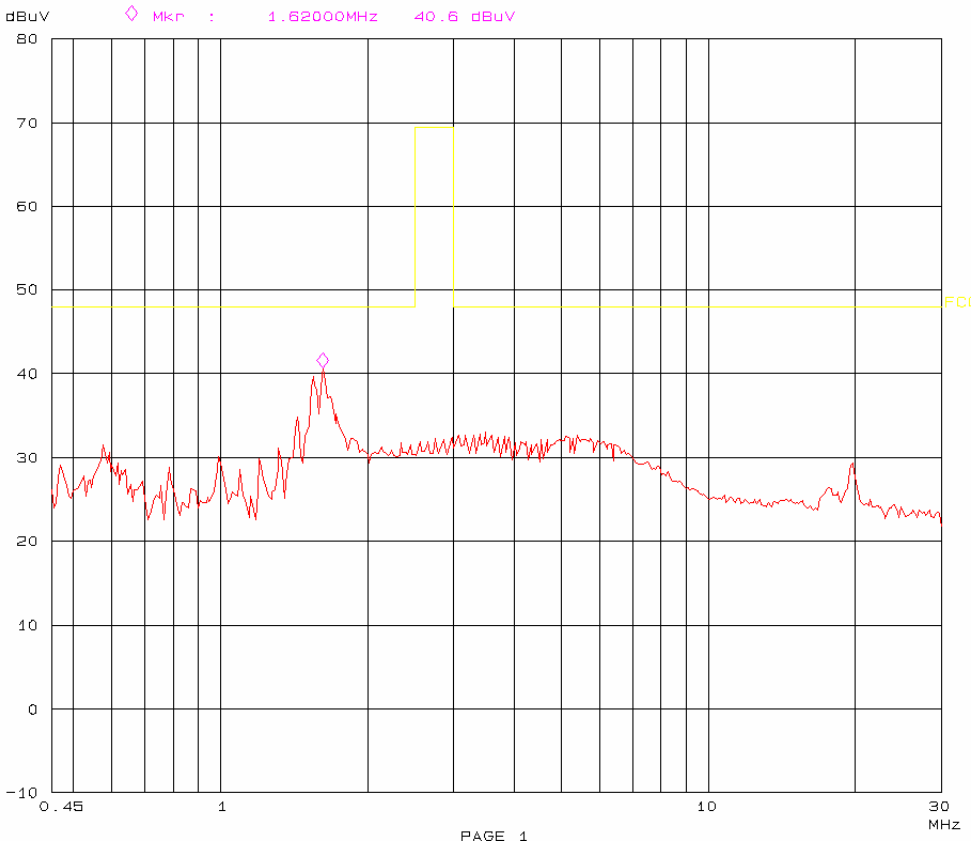


Mode: GYC05-E12

Conducted emission
FCC PART18

16. Feb 09 10:25

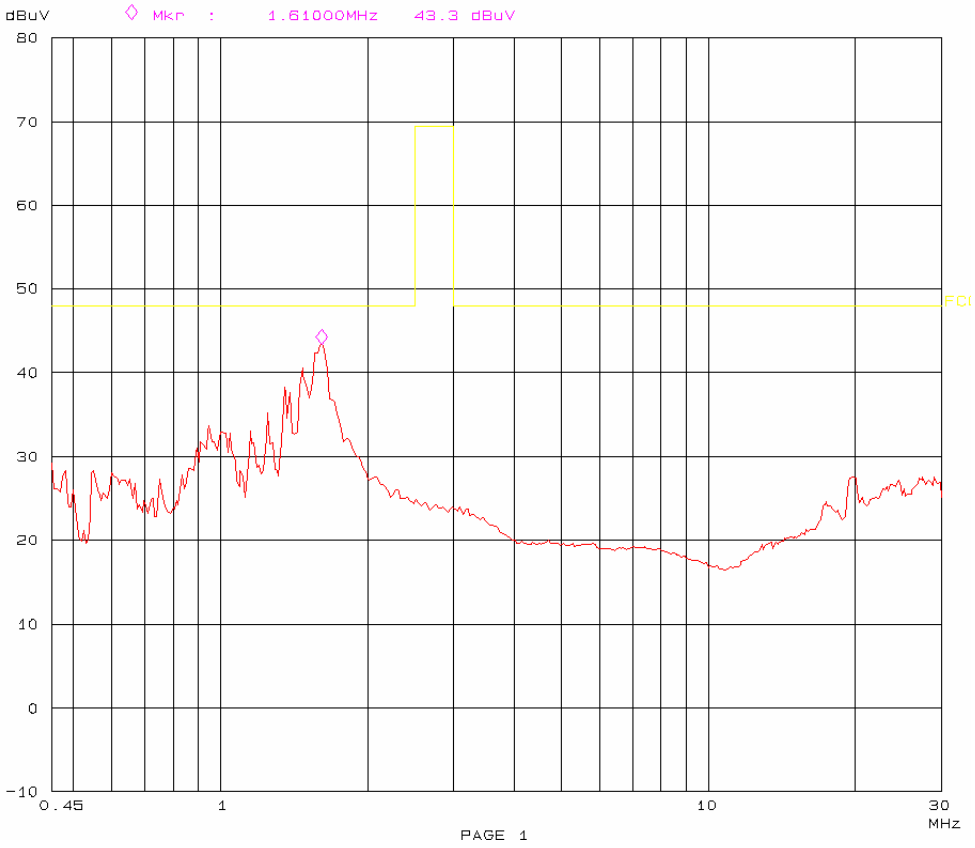
EUT:	CFL M/N: GYC05 E12
Manuf:	JIANGXI ELEGANT LIGHTING CO.,LTD
Op Cond:	On
Operator:	Cookies
Test Spec:	AC 120V/60Hz L
Comment:	Temp: 25 Hum: 56%
	BACL



Conducted emission
FCC PART18

16. Feb 09 09:24

EUT: CFL M/N: GYC05 E12
Manuf: JIANGXI ELEGANT LIGHTING CO.,LTD
Op Cond: On
Operator: Cookies
Test Spec: AC 120V/60Hz N
Comment: Temp: 25 Hum: 56%
BACL

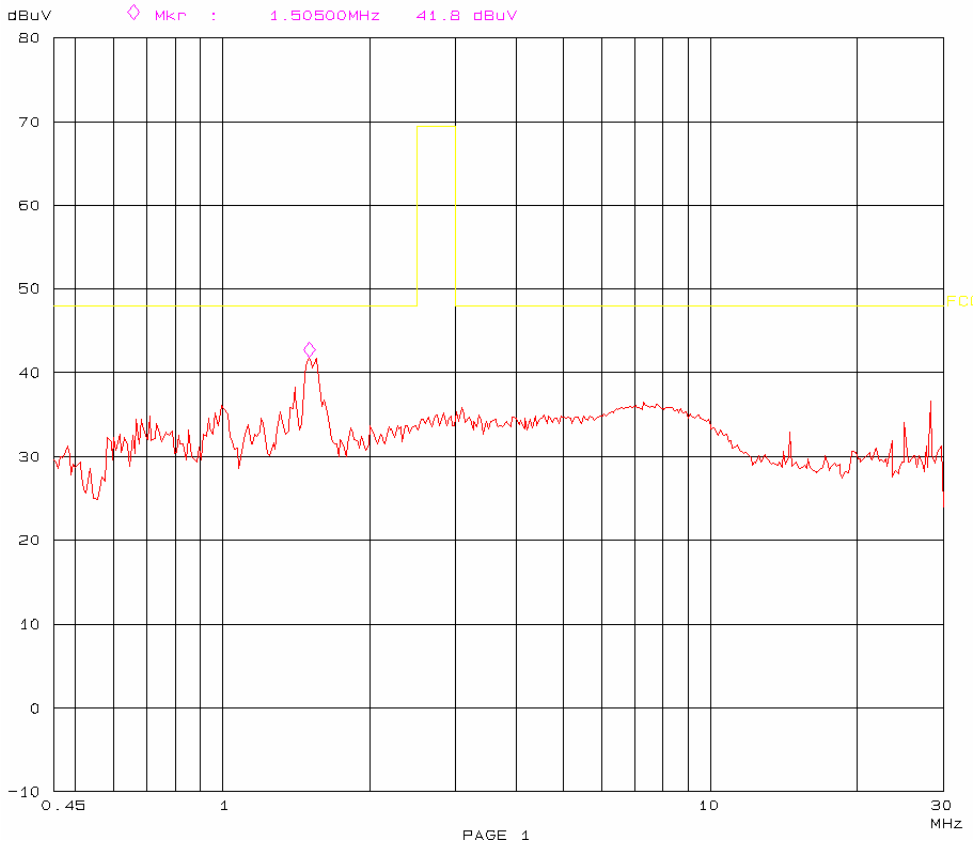


Model: GYC07-E12

Conducted emission
FCC PART18

17. Feb 09 11:28

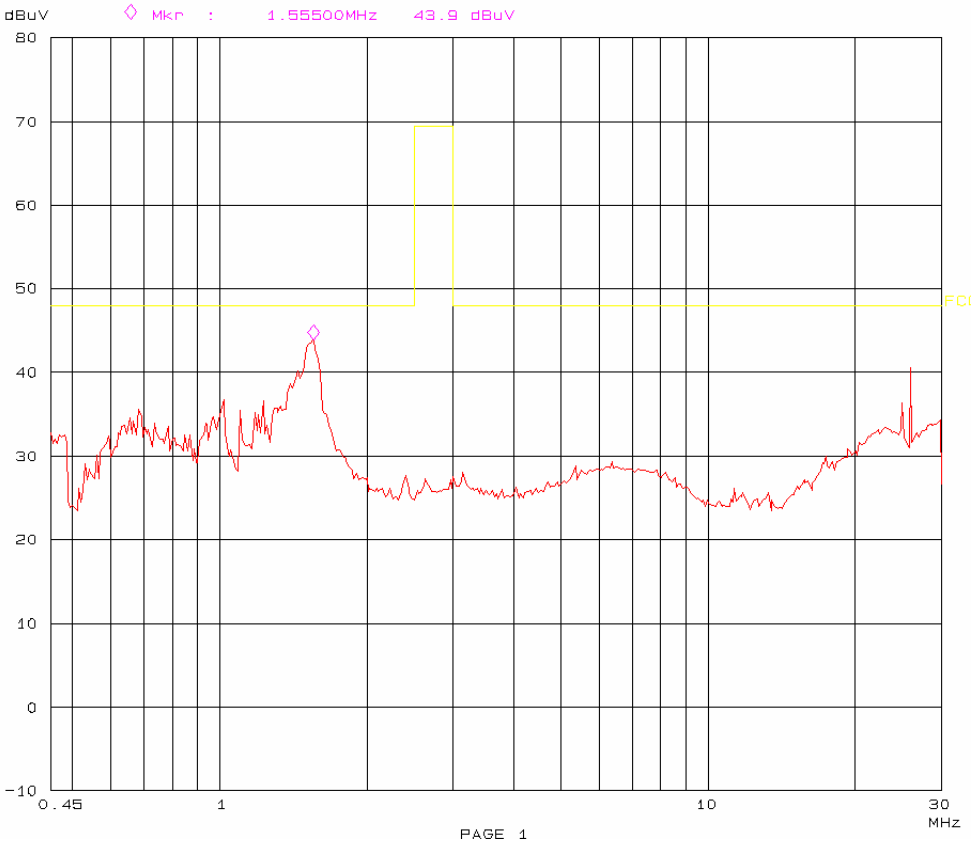
EUT:	CFL M/N: GYC07 E12
Manuf:	JIANGXI ELEGANT LIGHTING CO., LTD
Op Cond:	On
Operator:	Cookies
Test Spec:	AC 120V/60Hz L
Comment:	Temp: 25 Hum: 56%
	BACL



Conducted emission
FCC PART18

17. Feb 09 11:42

EUT: CFL M/N: GYC07 E12
Manuf: JIANGXI ELEGANT LIGHTING CO.,LTD
Op Cond: On
Operator: Cookies
Test Spec: AC 120V/60Hz N
Comment: Temp: 25 Hum: 56%
BACL



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DECLARATION LETTER

贵雅®

Jiangxi Elegant Lighting Co., Ltd.

Different Declaration

We, Jiangxi Elegant Lighting Co., Ltd., declare that the CFL, the GYC3W-E12 (trade name: GUI YA) and GYC05-E12,GYC07-E12,GYD03-E12,GYD05-E12,GYD07-E12,GYG03-E12,GYG05-E12,GYG07-E12 which have the same circuit diagram, PCB layout in side, and only different in output power and appearance.

Thank you!

Date: 2009/10/30

Sincerely Yours,

Signature:

Typed or Printed Name: JIANMING.XU

Title: Founder-inventor/ Manager

Company Name: Jiangxi Elegant Lighting Co., Ltd

******* END OF REPORT *******