Application for FCC Identifier

On Behalf of

Suzhou Chengguang Electronics Co., Ltd.

(FCC ID QWJSSEDESSER15)

Summary

The equipment comply with the requirements according to the following standard(s):

47CFR Part 18: Industrial, Scientific, and Medical Equipment

FCC/OET MP-5 (1986): FCC Methods of Measurements of Radio Noise Emissions From Industrial, Scientific, and Medical Equipment

ANSI C63.4 (2000): Interim Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz.

Description

The appliances were tested by *QuieTek Corporation.*and found compliance with relevant requirements described in FCC Part 18 RF Lighting Device.

Test results are contained in this test report and Intertek Testing Services ETL SEMKO Shanghai Limited is assumed full responsibility for the accuracy and completeness of these measurements.

The test report applies to tested samples only and shall not be reproduced in part without written approval of Intertek Testing Services ETL SEMKO Shanghai Limited.

Date of Test: March 27, 2003

Date of Issue: November 24, 2003

Prepared by: Report Approved by:

Tino Pan *(Engineer)* Ole Stiling *(Chief Engineer)*

Description of Test Facility

Name of Firm	:	QuieTek Corporation.
Site Location	:	716 Yi Shan Road Shanghai City, China
Name of contact	:	Mr. Hall (first name) Wang (last name)
Phone	:	86-21-64700066EXT201
Fax	:	86-21-64514252
E-mail address	:	hall_wang@hotmail.com
Registeration Code	:	142171

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1.Applicant Information

Applicant :	Suzhou Chengguang Electronics Co., Ltd. No.40 Shi Hu East Rd.Wuzhong District. Suzhou, Jiangsu
Manufacturer:	Suzhou Chengguang Electronics Co., Ltd. No.40 Shi Hu East Rd.Wuzhong District. Suzhou, Jiangsu
Country of origin:	P.R. China
Name of contact:	Mr. JianXin(first name) Gu (last name)
Telephone:	86-512-65658615
Telefax:	86-512-65616584

2.Information of Equipment Under Test (EUT)

2.1 Identification of the EUT

Equipment:	Compact Fluorescent Lamp
Type of EUT:	☑ Production ☐ Pre-product ☐ Pro-type
Type/model:	BMS-15
Serial number:	02*0955-001
Date of sample receipt	2003-03-9
Date of test	2003-03-27
Rating:	120V~, 60Hz, 15W

2.2 Additional information about the EUT

There is just one model mentioned in the report, which was described above.
Internal clock frequencies or other used frequencies: None

The tests have been performed on the EUT provided with the following modification: None

2.3 Peripheral equipment

None

3. Conducted Powerline Measurement

3.1 Conduction Limit

For Consumer Equipment

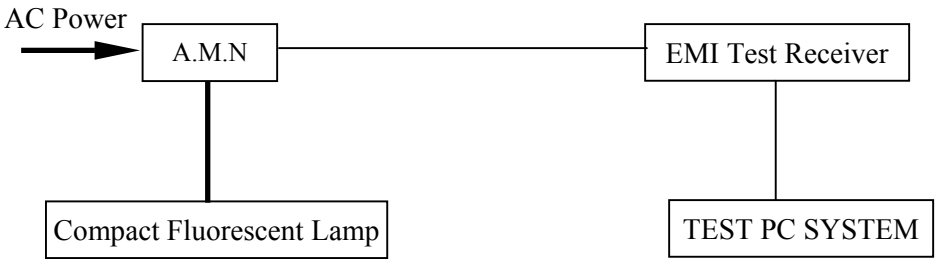
Frequency (MHz)	Maximum RF line voltage measured with a 50uH/50 ohm LISN	
	(μV)	dB(μV)
0.45 – 2.51	250	48
2.51 – 3.0	3000	69.5
3.0 – 30	250	48
RF Line Voltage dB(μV) = 20 lg RF Line Voltage (μV)		

3.2 Instruments List

The following instruments were used during the measurement of RF voltage conducted back into the power lines.

Item	Equipment	Manu.	Type	Serials no.	Last Cal.	Cal. Interval
1	EMI Test Receiver	Rohde & Schwarz	ESCS10	100070	May 24, 02	1 Year
2	A.M.N	Rohde & Schwarz	ESH3-Z5	100211	June 08, 02	1 Year

3.3 Test Setup



Note: ——— means "power line"
——— means "signal line"

3.4 Test Configuration

The Conducted Powerline Measurement was proceeded in a shielded room.

The EUT was connected to AC power source through an Linear Impedance Stability Network (L.I.S.N.). which provides a 50 ohm, standardized RF impedance for the measuring equipment.

The EUT was placed 40 centimeters from the wall of the earthed shielded room, which was considered as Ground Reference Plane(GRP), and kept at least 80 centimeters from any other earthed conducting surface.

The EUT was placed at a distance of 80 centimeters from the L.I.S.N.'s, and connected thereto by a unshielded lead of 1 meter in length.

In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to MP-5/1986 during measurement.

The frequency range from 450 kHz to 30 MHz was checked.

The bandwidth of Test Receiver ESCS 30 was set at 10 kHz.

During measurement, EUT was set at "LIGHTING ON" mode.

Test Results were listed in sec. 3.6.

3.5 Test Procedure

3.5.1 Establish the test setup as sec. 3.3.
3.5.2 Lighting on the EUT to its stable operation.
3.5.3 Proceed the measurement.

3.6 Test Results

■ Pass ☐ Fail

3.6.1 Measurement environment

Temperature : 23.5 °C Relative Humidity : 48 %

3.6.2 Test Personnel

Name: Hall Wang Title: Supervisor
Tel: 86-21-64700066EXT201
Fax: 86-21-64514252
E-mail address: hall_wang@hotmail.com

3.6.3 Data table

All emissions not listed below are too low against the prescribed limits.

Emission level = Reading level + Factor

Since the test software will automatically add factor to the reading level, only the emission level was listed in the test report. The highest six points were chose automatically through software by its compare the pre-scanned graph to the limit.

Model : BMS--15

Test Line	Frequency (MHz)	Reading Level dB(μV)	Factor dB	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.465000	25.50	10.1	35.60	48	12.4
	0.850000	***26.70***	***10.2***	***36.90***	***48***	***11.1***
	1.195000	22.70	10.3	33.00	48	15.0
	1.850000	15.50	10.3	25.80	48	22.2
	3.140000	11.00	10.5	21.50	48	26.5
	4.185000	5.90	10.5	16.40	48	31.6
VB	0.625000	27.60	10.1	37.70	48	10.3
	0.910000	***27.70***	***10.2***	***37.90***	***48***	***10.1***
	2.175000	16.00	10.4	26.40	48	21.6
	3.480000	11.40	10.5	21.90	48	26.1
	3.675000	8.60	10.5	19.10	48	28.9
	16.180000	2.50	11.0	13.50	48	34.5

Note:
1. All data listed are Quasi-Peak value.
2. The worst emission was founded at 0.524 MHz with emission level 43.31 dBμV, at line VB.
3. Emission Level = Reading Level + Factor

Test Engineer: Jikai Xu Date of test: 2003-03-27
JiKai Xu

3.7 Measurement Uncertainty

Measurement uncertainty of conducted power line test is 3.34dB
The measurement uncertainty is given with a confidence of 95%

4. Conducted Powerline Calculation

The emission level of the conducted power line is calculated by adding Factor to Reading Level. The basic equation with a sample calculation is as follows:

EL= RL+ F
Where EL= Emission Level
RL= Reading Level
F= Factor

dB (μV) = 20log(μV)

Example 1: @ 0.910000 MHz

The limit of Part 18 RF lighting devices = 250 μV = 48 dB (μV)
Reading Level = 27.70dB (μV)
Factor = 10.3 dB

So EL (Emission Level) = 27.70+10.3 = 37.90 dB (μV)
Margin = 48- 37.90 = 10.1 dB

The Emission Level at this frequency is 10.1 dB below the limit.