

Application for FCC Certificate
On Behalf of
Xiamen Longstar Lighting Co., Ltd.

Energy Saving Lamp

Model No.:	FE-R20-9W	FE-R20-11W	FE-R25-11W
	FE-R25-13W	FE-R30-13W	FE-R30-15W
	FE-R38-16W	FE-R38-20W	FE-R40-16W
	FE-R40-20W	FE-G25A-9W	FE-G25A-11W
	FE-G25B-13W	FE-G25B-16W	FE-G30A-15W
	FE-G30A-18W	FE-G30B-20W	FE-G30B-23W
	FE-G40-20W	FE-G40-23W	FE-G40-26W
	FE-G40-32W	FE-AL-20W	FE-AL-24W
	FE-T9-22W	FE-T9-32W	

FCC ID: PKCLS0305

Prepared For : Xiamen Longstar Lighting Co., Ltd.
Chengnan Industrial Zone,
Tongan, Xiamen, China
361100

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F03033
Date of Test : Mar 23-Jun 09, 2003
Date of Report : Jun 20, 2003

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TEST REPORT FOR FCC CERTIFICATE

Applicant : Xiamen Longstar Lighting Co., Ltd.

Manufacturer : Xiamen Longstar Lighting Co., Ltd.

EUT Description : Energy Saving Lamp

(A) Model No.:

FE-R20-9W, FE-R20-11W, FE-R25-11W, FE-R25-13W,
FE-R30-13W, FE-R30-15W, FE-R38-16W, FE-R38-20W,
FE-R40-16W, FE-R40-20W, FE-G25A-9W, FE-G25A-11W,
FE-G25B-13W, FE-G25B-16W, FE-G30A-15W,
FE-G30A-18W, FE-G30B-20W, FE-G30B-23W, FE-G40-20W,
FE-G40-23W, FE-G40-26W, FE-G40-32W, FE-AL-20W,
FE-AL-24W, FE-T9-22W, FE-T9-32W,

(B) Power Supply: 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 18 CONSUMER DEVICES (2002.10)
AND MP-5/1986*

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 Part 18 RF Lighting Device limits both conducted emissions and field strength.

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. Also, this report shows that the EUT to be technically compliant with the FCC official 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 applicant to claim product endorsement by NVLAP or any agency of the U.S. Government.

Date of Test : Mar 23-Jun 09, 2003

Prepared by : Cathrin Yin 2003.7.15 Test Engineer : Solon Gong 2003.7.15
CATHRIN YIN
(Assistant)

AUDIX®
For Engineer on behalf of
Audix Technology (Shanghai) Co., Ltd.

Reviewer : Sammy Chen 2003.7.15 Approved Signatory : Byron Kwo 2003.7.15
SAMMY CHEN
(Engineer)

.....BYRON KWO.....
Authorized Signature(s)
(Assistant Manager)

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description : Energy Saving Lamp

Type of EUT : ☒ Production ☐ Pre-product ☐ Pro-type

Model Number : FE-R20-9W, FE-R20-11W, FE-R25-11W, FE-R25-13W,
FE-R30-13W, FE-R30-15W, FE-R38-16W, FE-R38-20W,
FE-R40-16W, FE-R40-20W, FE-G25A-9W, FE-G25A-11W,
FE-G25B-13W, FE-G25B-16W, FE-G30A-15W, FE-G30A-18W,
FE-G30B-20W, FE-G30B-23W, FE-G40-20W, FE-G40-23W,
FE-G40-26W, FE-G40-32W, FE-AL-20W,
FE-AL-24W, FE-T9-22W, FE-T9-32W
In this report, all test models were tested. About the conducted emission test only FE-R20-11W, FE-R25-13W, FE-R30-15W, FE-R38-20W, FE-R40-20W, FE-G25A-11W, FE-G25B-16W, FE-G30A-18W, FE-G30B-23W, FE-G40-32W, FE-AL-24W, FE-T9-32W'S worse case data is recorded. About the magnetic field emission test only FE-R20-11W, FE-R25-13W, FE-R30-15W, FE-R38-20W, FE-R40-20W, FE-G25A-11W, FE-G25B-16W, FE-G30A-18W, FE-G30B-23W, FE-G40-32W, FE-AL-24W, FE-T9-32W'S data is recorded.

Applicant : Xiamen Longstar Lighting Co., Ltd.
Chengnan Industrial Zone, Tongan,
Xiamen, China 361100

Manufacturer : Xiamen Longstar Lighting Co., Ltd.
Chengnan Industrial Zone, Tongan,
Xiamen, China 361100

Test Model	Apparent Power (V • A)	Real Power (W)	Test Model	Apparent Power (V • A)	Real Power (W)
FE-R20-9W	16.62	8.95	FE-R20-11W	17.37	9.49
FE-R25-11W	14.60	7.52	FE-G25B-13W	19.72	10.73
FE-G25B-16W	25.21	12.85	FE-G30A-15W	24.31	12.24
FE-G30A-18W	27.93	14.29	FE-G30B-20W	30.85	17.26
FE-G30B-23W	32.64	17.87	FE-G40-20W	32.60	18.50
FE-G40-23W	40.10	20.70	FE-G40-26W	40.00	20.50
FE-G40-32W	51.40	20.30	FE-AL-20W	32.60	17.60
FE-AL-24W	31.10	15.40	FE-T9-22W	37.40	20.70
FE-T9-32W	46.40	25.10			

1.2 Description of Test Facility

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

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

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

NVLAP Lab Code : 200371-0

1.3 Measurement Uncertainty

Conducted Emission Uncertainty : $U = \pm 2.66\text{dB}$

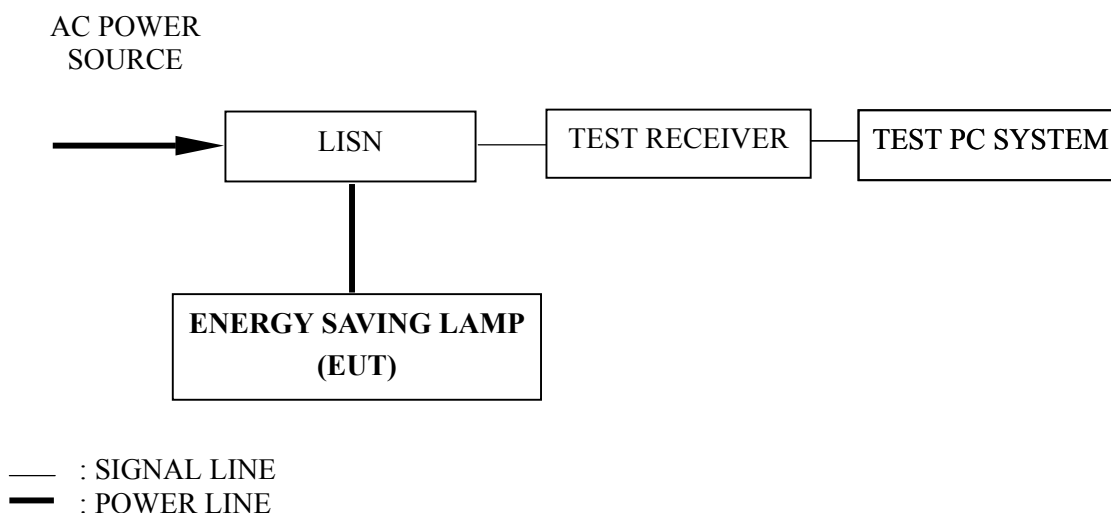
2 AC POWERLINE CONDUCTED EMISSION TEST

2.1 Test Equipment

The following test equipment are used during the powerline conducted emission test in a shielded room:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	844077/020	Apr 21, 2003	1 Year
2.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-5	Apr 24, 2003	1 Year

2.2 Block Diagram of Test Setup



2.3 Conducted Emission Limits

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 30	60	50
NOTE 1 - Decreases with the logarithm of the frequency within the band 0.15 MHz to 5 MHz. NOTE 2 - The lower limit applies at the band edges. NOTE 3 - The average should be read if the quasi-peak's margin is below 10 dB.		

2.4 EUT Configuration on Test

The EUT (listed in Sec. 1.1) was installed as shown on Sec. 2.2 to meet FCC requirement and operating in a manner which tends to maximize its emission level in a normal application.

2.5 Operating Condition of EUT

2.5.1 Setup the EUT as shown in Sec. 2.2.

2.5.2 Turn on the power of all equipment.

2.5.3 The EUT will be operated normally.

2.6 Test Procedures

The EUT was connected to the power mains through a Line Impedance Stabilization Network (LISN). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line were checked for maximum conducted interference. 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 conducted emission test.

The IF bandwidth of Test Receiver ESHS10 was set at 10 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test mode (ON) was done on conducted test and the test results of the highest emissions are listed in Sec. 2.7.

The waveform is attached in APPENDIX I.

2.7 Test Results

< PASS >

The frequency and amplitude of the highest AC powerline conducted emissions relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

NOTE 1 – Probe Factor means insertion loss of LISN

NOTE 2 – Level = Read Level + Factor

NOTE 3 – Factor = Cable Loss + Probe Factor

NOTE 4 – QP means Quasi-Peak Values, AV means Average Values.

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-R20-11W Humidity : 56%

Test Mode : ON Date of Test : Mar 23, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.158	0.22	50.63	50.85	65.56	14.71
	0.175	0.22	51.03	51.25	64.72	13.47
	0.211	0.22	46.19	46.41	63.18	16.77
	0.249	0.20	46.16	46.36	61.78	15.42
	0.322	0.14	41.12	41.26	59.66	18.40
	0.396	0.13	37.31	37.44	57.95	20.51
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.175 MHz with corrected signal level of 51.25 dB (μV) (limit is 64.72 dB (μV)), when the VA of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-R25-13W Humidity : 56%

Test Mode : ON Date of Test : Apr 17, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading DB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.151	0.26	52.30	52.56	65.94	13.38
	0.188	0.21	48.80	49.01	64.12	15.11
	0.252	0.20	44.00	44.20	61.69	17.49
	0.449	0.16	36.00	36.16	56.89	20.73
	0.748	0.16	38.00	38.16	56.00	17.84
	1.033	0.16	36.00	36.16	56.00	19.84
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.151 MHz with corrected signal level of 52.56 dB (μV) (limit is 65.94 dB (μV)), when the VB of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-R30-15W Humidity : 56%

Test Mode : ON Date of Test : Mar 23, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.159	0.25	51.06	51.31	65.53	14.22
	0.170	0.23	49.47	49.70	64.96	15.26
	0.221	0.20	44.90	45.10	62.80	17.70
	0.251	0.20	42.30	42.50	61.71	19.21
	0.270	0.20	40.76	40.96	61.11	20.15
	0.766	0.16	41.41	41.57	56.00	14.43
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.159 MHz with corrected signal level of 51.31 dB (μV) (limit is 65.53 dB (μV)), when the VB of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-R38-20W Humidity : 56%

Test Mode : ON Date of Test : Mar 23, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.156	0.25	54.56	54.81	65.65	10.84
	0.183	0.22	51.91	52.13	64.33	12.20
	0.211	0.20	49.37	49.57	63.18	13.61
	0.238	0.20	46.67	46.87	62.17	15.30
	0.624	0.15	40.97	41.12	56.00	14.88
	0.747	0.16	40.65	40.81	56.00	15.19
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.156 MHz with corrected signal level of 54.81 dB (μV) (limit is 65.65 dB (μV)), when the VB of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-R40-20W Humidity : 56%

Test Mode : ON Date of Test : Mar 23, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.162	0.24	54.85	55.09	65.38	10.29
	0.203	0.20	51.90	52.10	63.49	11.39
	0.253	0.20	47.09	47.29	61.64	14.35
	0.282	0.20	46.53	46.73	60.76	14.03
	0.570	0.15	42.64	42.79	56.00	13.21
	0.763	0.16	43.40	43.56	56.00	12.44
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.162 MHz with corrected signal level of 55.09 dB (μV) (limit is 65.38 dB (μV)), when the VB of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-G25A-11W Humidity : 56%

Test Mode : ON Date of Test : May 20, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.169	0.23	52.11	52.34	64.99	12.65
	0.204	0.20	48.69	48.89	63.45	14.56
	0.247	0.20	44.38	44.58	61.86	17.28
	0.286	0.20	44.10	44.30	60.63	16.33
	0.410	0.17	41.82	41.99	57.64	15.65
	0.576	0.15	39.49	39.64	56.00	16.36
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.169 MHz with corrected signal level of 52.34 dB (μV) (limit is 64.99 dB (μV)), when the VB of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-G25B-16W Humidity : 56%

Test Mode : ON Date of Test : May 20, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.161	0.24	54.04	54.28	65.43	11.15
	0.186	0.22	51.54	51.76	64.20	12.44
	0.228	0.20	50.49	50.69	62.52	11.83
	0.724	0.16	41.74	41.90	56.00	14.10
	0.792	0.16	43.66	43.82	56.00	12.18
	0.909	0.16	39.25	39.41	56.00	16.59
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.161 MHz with corrected signal level of 54.28 dB (μV) (limit is 65.43 dB (μV)), when the VB of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-G30A-18W Humidity : 56%

Test Mode : ON Date of Test : Apr 17, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.162	0.22	50.30	50.52	65.36	14.84
	0.246	0.20	46.50	46.70	61.89	15.19
	0.315	0.14	43.60	43.74	59.84	16.10
	0.458	0.12	38.00	38.12	56.73	18.61
	0.538	0.12	37.60	37.72	56.00	18.28
	0.712	0.11	45.00	45.11	56.00	10.89
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.712 MHz with corrected signal level of 45.11 dB (μV) (limit is 56.00 dB (μV)), when the VA of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-G30B-23W Humidity : 56%

Test Mode : ON Date of Test : May 20, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.158	0.22	49.91	50.13	65.58	15.45
	0.194	0.22	50.67	50.89	63.84	12.95
	0.300	0.14	45.97	46.11	60.24	14.13
	0.369	0.13	42.24	42.37	58.52	16.15
	0.472	0.12	46.25	46.37	56.49	10.12
	0.589	0.11	44.32	44.43	56.00	11.57
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.472 MHz with corrected signal level of 46.37 dB (μV) (limit is 56.49 dB (μV)), when the VA of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-G40-32W Humidity : 56%

Test Mode : ON Date of Test : Apr 17, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.227	0.20	47.87	48.07	62.57	14.50
	0.300	0.20	43.84	44.04	60.24	16.20
	0.419	0.17	42.43	42.60	57.46	14.86
	0.720	0.16	41.18	41.34	56.00	14.66
	0.866	0.16	41.22	41.38	56.00	14.62
	1.191	0.17	38.18	38.35	56.00	17.65
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.227 MHz with corrected signal level of 48.07 dB (μV) (limit is 62.57 dB (μV)), when the VB of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-AL-24W Humidity : 56%

Test Mode : ON Date of Test : Mar 23, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.167	0.23	51.04	51.27	65.11	13.84
	0.196	0.21	48.49	48.70	63.79	15.09
	0.221	0.20	46.05	46.25	62.77	16.52
	0.238	0.20	44.58	44.78	62.15	17.37
	0.520	0.15	40.68	40.83	56.00	15.17
	0.704	0.16	42.43	42.59	56.00	13.41
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.704 MHz with corrected signal level of 42.59 dB (μV) (limit is 56.00 dB (μV)), when the VB of the EUT is connected to LISN.						

EUT : Energy Saving Lamp Temperature : 23°C

Model No. : FE-T9-32W Humidity : 56%

Test Mode : ON Date of Test : May 08, 2003

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading DB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VB	0.200	0.20	52.55	52.75	63.62	10.87
	0.263	0.20	49.74	49.94	61.34	11.40
	0.337	0.19	46.30	46.49	59.27	12.78
	0.471	0.16	45.74	45.90	56.49	10.59
	0.541	0.15	44.83	44.98	56.00	11.02
	0.589	0.15	44.31	44.46	56.00	11.54
NOTE 1 – Emission Level = Meter Reading + Factor NOTE 2 – Factor = Insertion Loss + Cable Loss NOTE 3 – All reading are Quasi-Peak Values. NOTE 4 – The worst emission is detected at 0.197 MHz with corrected signal level of 53.36 dB (μV) (limit is 63.76 dB (μV)), when the VB of the EUT is connected to LISN.						

TEST ENGINEER: Solon Gong
(SOLON GONG)

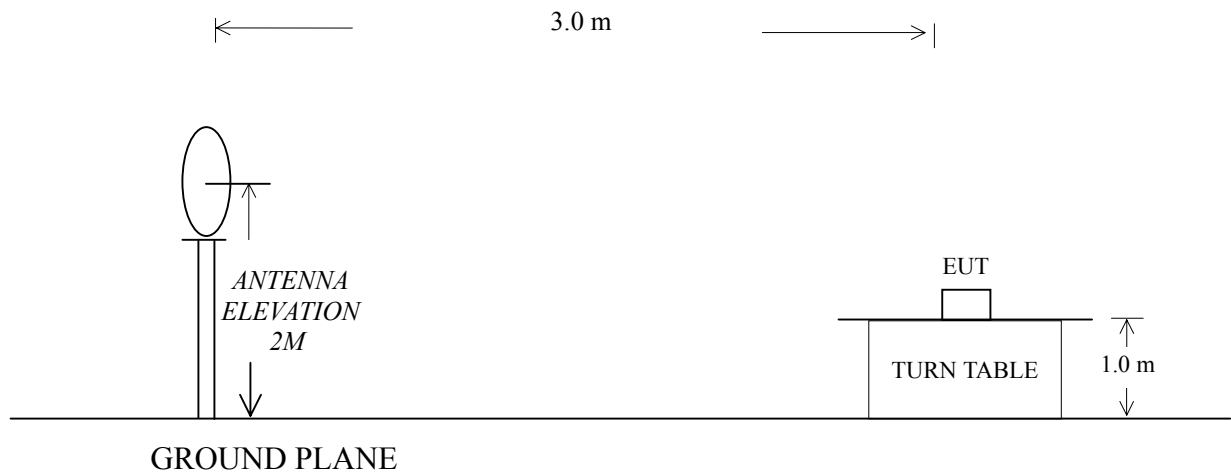
3 MAGNETIC FIELD EMISSION TEST

3.1 Test Equipment

The following test equipment are used during the field strength test in a shielded room:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Loop Antenna	CHASE	HLA6120	1062	Jun 02, 03	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS10	844594/001	Apr 22, 03	1 Year

3.2 Block Diagram of Test Setup



3.3 Magnetic Field Emission Limit

All emanations from Non-ISM frequency devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Frequency (MHz)	Quasi-peak Electric Field Test Distance 3m dB(μ V/m)
0.009~30	63.5
NOTE 1– Distance refers to the distance in meters between the test antenna and the closed point of any part of the EUT.	

3.4 EUT Configuration on Test

The Fcc part 18 regulations test method must be used to find the maximum emission during Radiated Emission test.

The configuration of the EUT is same as used in conducted emission test. Please Refer to Section 2.4.

3.5 Operating Condition of EUT

3.5.1 Setup the EUT as shown on Section 3.2.

3.5.2 Turn on the power of all equipments.

3.5.3 Let the EUT work in test mode (ON) and test it.

3.6 Test Procedures

The EUT is placed on a table, which is 1.0 meter above ground. Measurements are performed at 3.0m distance with a 0.6m loop antenna as described in 2.2.4 of MP-5 . The antenna shall be with the lower edge of the loop at 2m height above the floor.

The bandwidth setting on the test receiver (R&S Test Receiver ESHS10) is 200Hz from 9kHz to 150kHz and 10kHz from 150kHz to 30MHz. The EUT is tested in a semi-anechoic chamber.

All the scanning waveforms are attached within Sec. 3.7.

3.7 Test Results

<PASS>

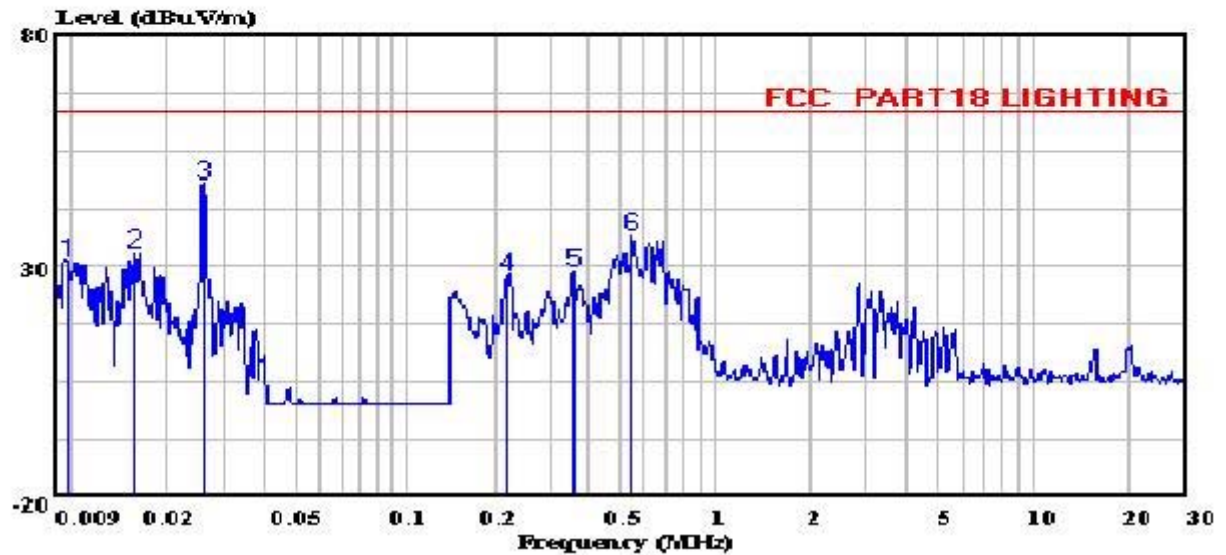
Refer to the following pages.



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Data#: 179 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:55:26



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-R20-11W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

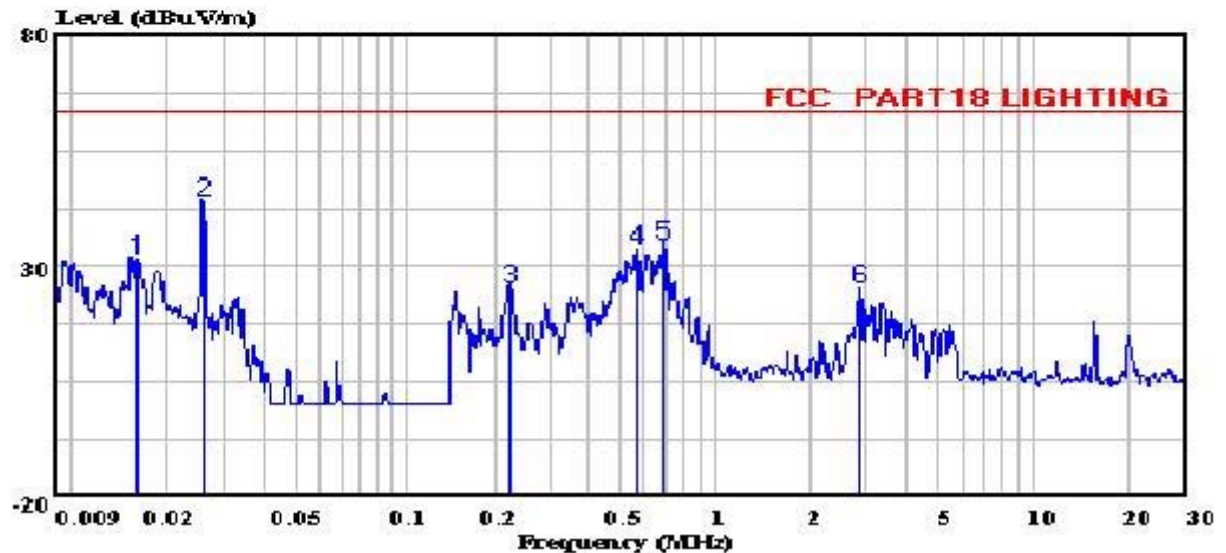
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.010	31.14	31.14	63.50	-32.36
2	0.016	32.90	32.90	63.50	-30.60
3	0.026	47.78	47.78	63.50	-15.72
4	0.229	28.10	28.10	63.50	-35.40
5	0.367	28.71	28.71	63.50	-34.79
6	0.564	36.32	36.32	63.50	-27.18



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Data#: 181 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 17:04:09



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-R25-13W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

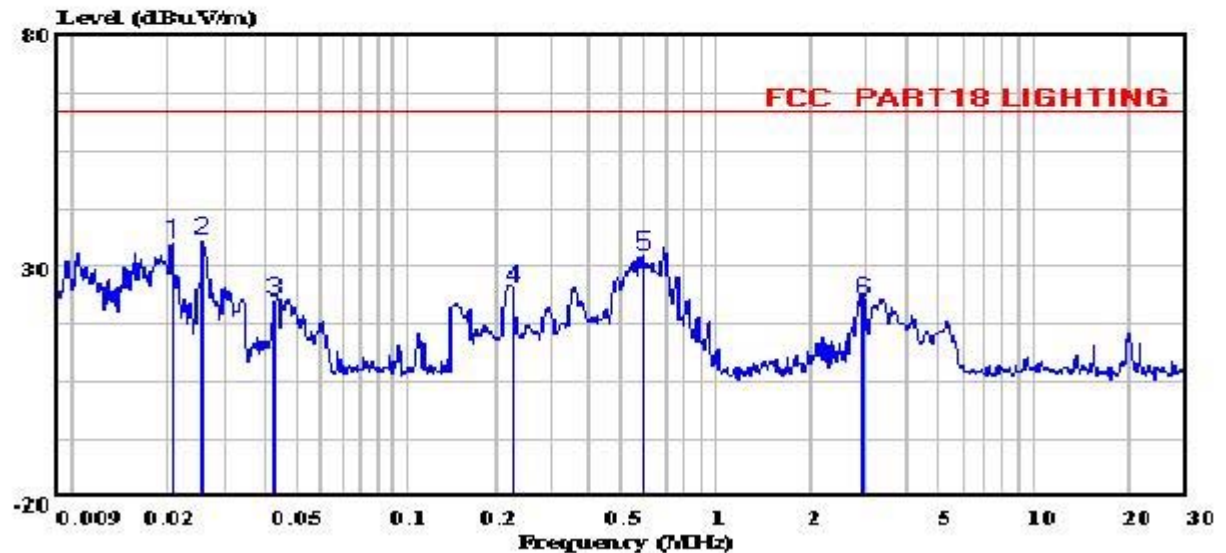
		Read	Limit	Over
Freq	Level	Level	Line	Limit
MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.016	31.56	31.56	63.50 -31.94
2	0.026	44.11	44.11	63.50 -19.39
3	0.235	25.42	25.42	63.50 -38.08
4	0.587	33.98	33.98	63.50 -29.52
5	0.702	34.56	34.56	63.50 -28.94
6	2.901	25.28	25.28	63.50 -38.22



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Data#: 183 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:00:24



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-R30-15W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

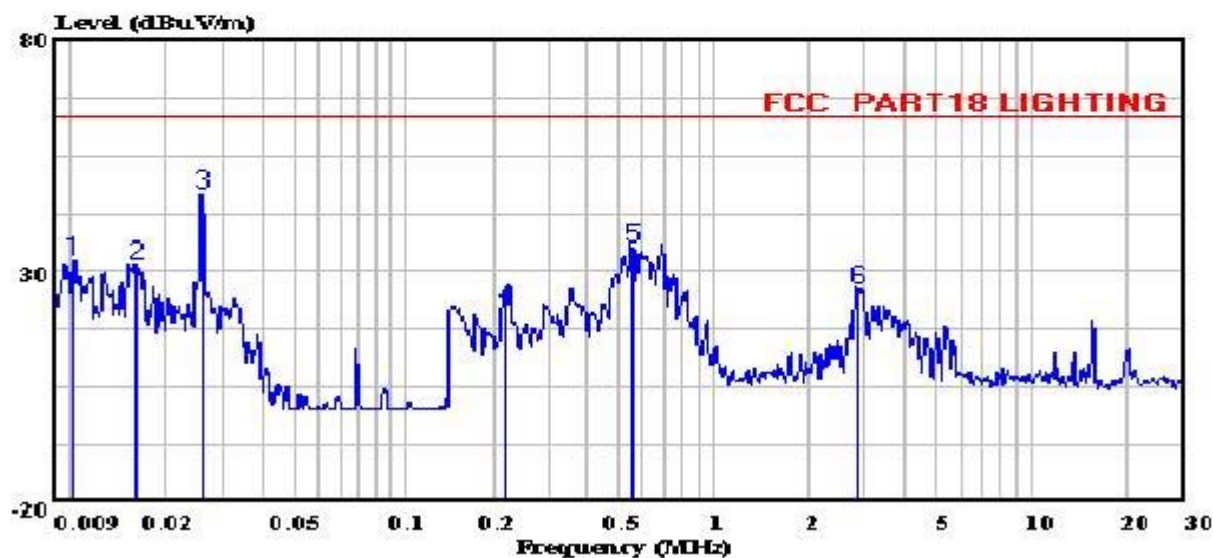
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.021	35.21	35.21	63.50	-28.29
2	0.026	35.65	35.65	63.50	-27.85
3	0.043	22.61	22.61	63.50	-40.89
4	0.237	25.25	25.25	63.50	-38.25
5	0.601	32.35	32.35	63.50	-31.15
6	2.948	22.78	22.78	63.50	-40.72



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Data#: 150 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 17:31:07



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-R38-20W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

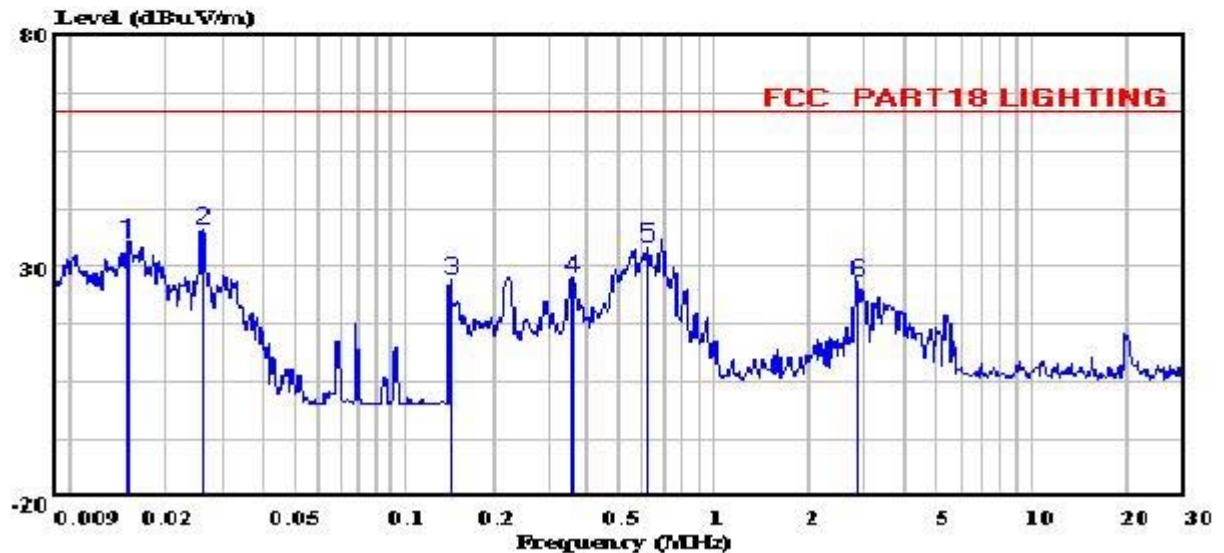
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.010	32.34	32.34	63.50	-31.16
2	0.016	31.59	31.59	63.50	-31.91
3	0.026	46.82	46.82	63.50	-16.68
4	0.231	22.33	22.33	63.50	-41.17
5	0.568	34.93	34.93	63.50	-28.57
6	2.854	26.29	26.29	63.50	-37.21



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Data#: 185 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 15:45:36



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-R40-20W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

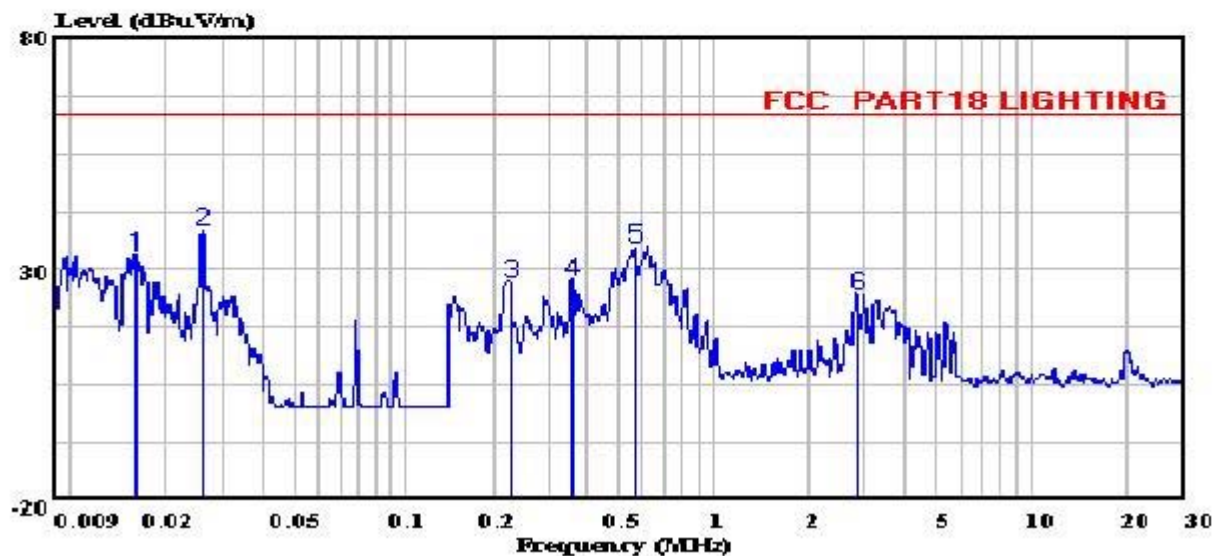
		Read	Limit	Over
Freq	Level	Level	Line	Limit
MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.015	34.94	34.94	63.50 -28.56
2	0.026	37.86	37.86	63.50 -25.64
3	0.154	27.06	27.06	63.50 -36.44
4	0.367	27.56	27.56	63.50 -35.94
5	0.636	34.17	34.17	63.50 -29.33
6	2.854	26.75	26.75	63.50 -36.75



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Data#: 202 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:06:37



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-G25A-11W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

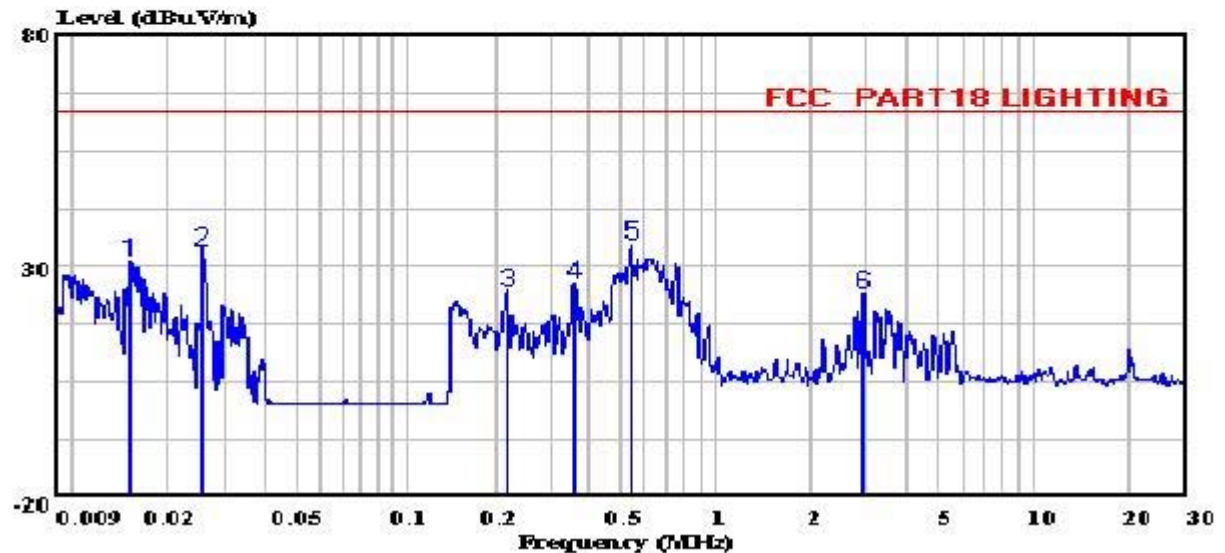
		Read	Limit	Over	
Freq	Level	Level	Line	Limit	
MHz	dBuV	dBuV/m	dBuV/m	dB	
1	0.016	32.74	32.74	63.50	-30.76
2	0.026	38.48	38.48	63.50	-25.02
3	0.237	27.03	27.03	63.50	-36.47
4	0.373	27.74	27.74	63.50	-35.76
5	0.577	34.58	34.58	63.50	-28.92
6	2.854	24.36	24.36	63.50	-39.14



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Data#: 204 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:31:08



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-G25B-16W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

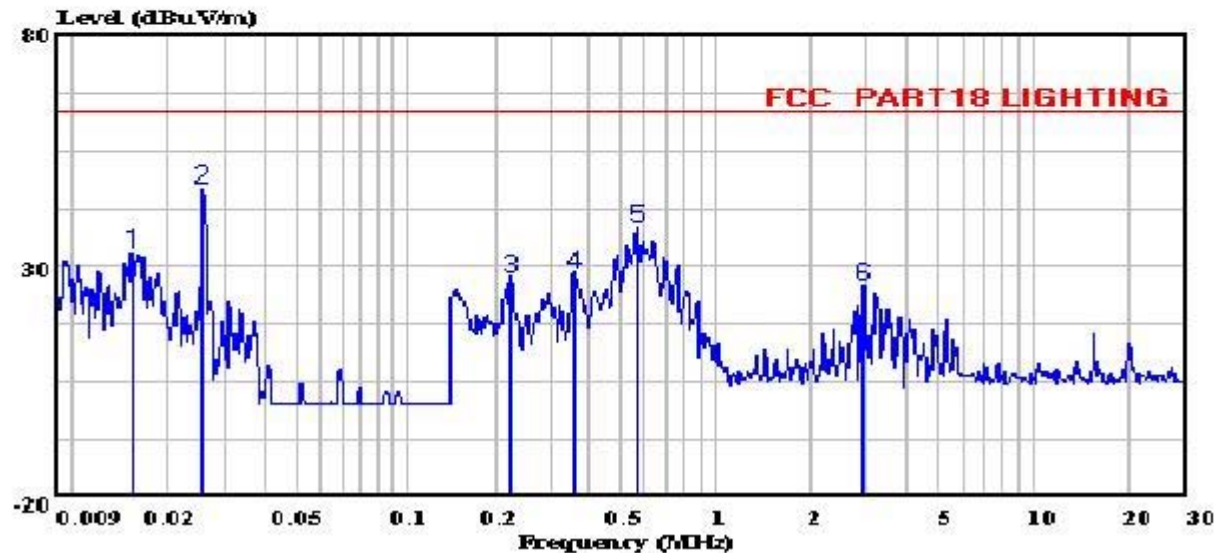
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.015	31.14	31.14	63.50	-32.36
2	0.026	33.24	33.24	63.50	-30.26
3	0.227	24.28	24.28	63.50	-39.22
4	0.373	26.12	26.12	63.50	-37.38
5	0.554	34.86	34.86	63.50	-28.64
6	2.948	24.06	24.06	63.50	-39.44



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Data#: 206 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:43:17



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-G30A-18W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

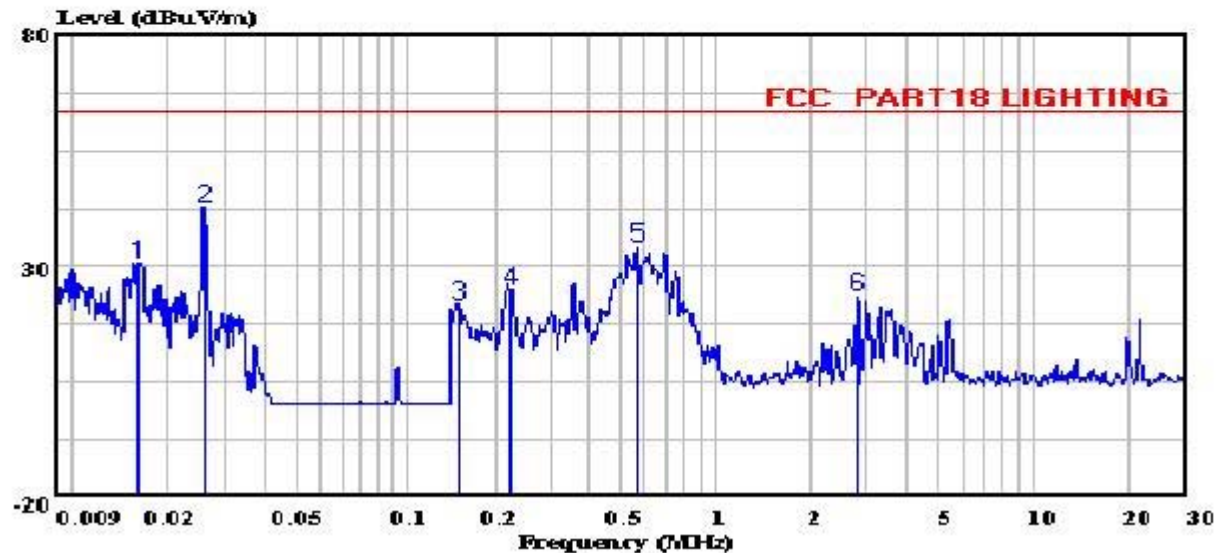
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.015	32.78	32.78	63.50	-30.72
2	0.026	46.68	46.68	63.50	-16.82
3	0.235	27.34	27.34	63.50	-36.16
4	0.373	28.39	28.39	63.50	-35.11
5	0.577	38.12	38.12	63.50	-25.38
6	2.948	25.52	25.52	63.50	-37.98



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Data#: 208 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 16:38:17



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-G30B-23W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

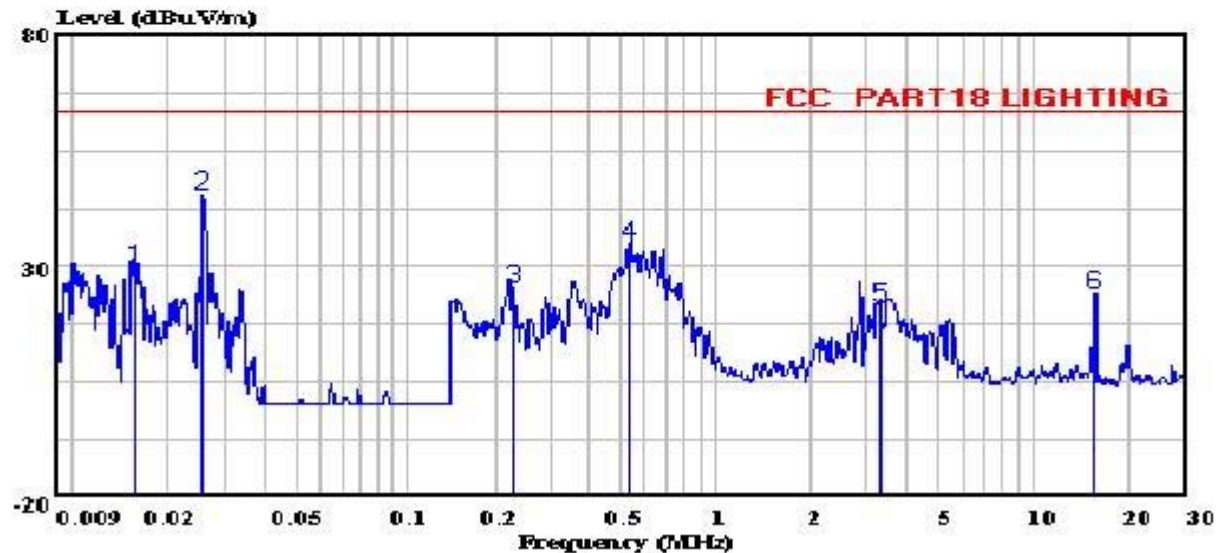
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.016	30.48	30.48	63.50	-33.02
2	0.026	42.71	42.71	63.50	-20.79
3	0.162	21.69	21.69	63.50	-41.81
4	0.233	24.85	24.85	63.50	-38.65
5	0.577	34.32	34.32	63.50	-29.18
6	2.831	23.28	23.28	63.50	-40.22



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Data#: 167 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 17:32:50



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-G40-32W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

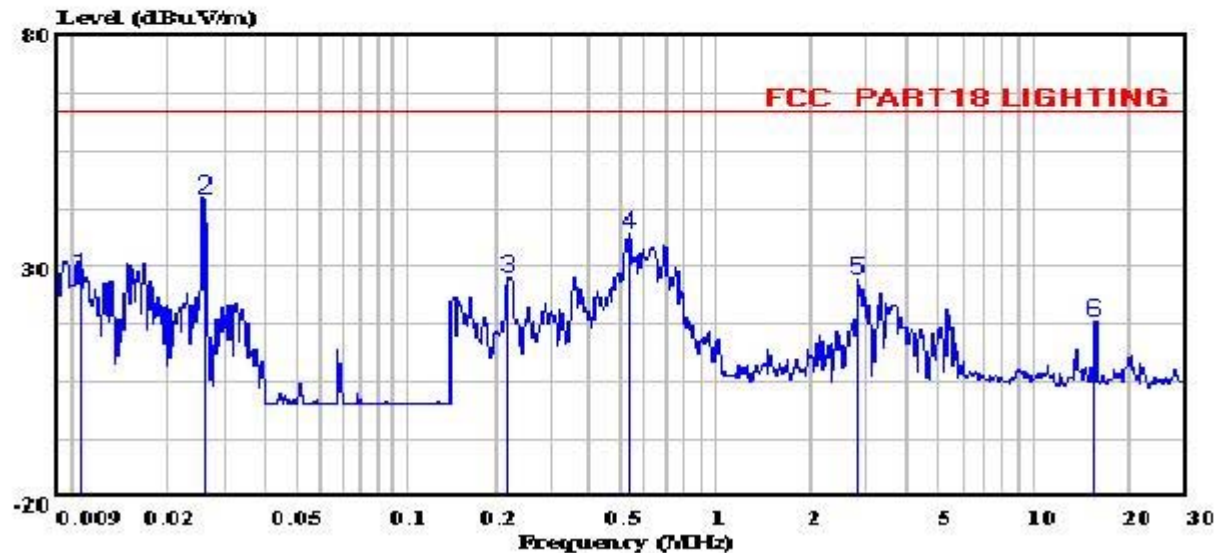
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.016	29.87	29.87	63.50	-33.63
2	0.026	45.40	45.40	63.50	-18.10
3	0.238	25.07	25.07	63.50	-38.43
4	0.546	34.88	34.88	63.50	-28.62
5	3.330	21.13	21.13	63.50	-42.37
6	15.426	24.10	24.10	63.50	-39.40



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Data#: 162 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 17:28:40



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-AL-24W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

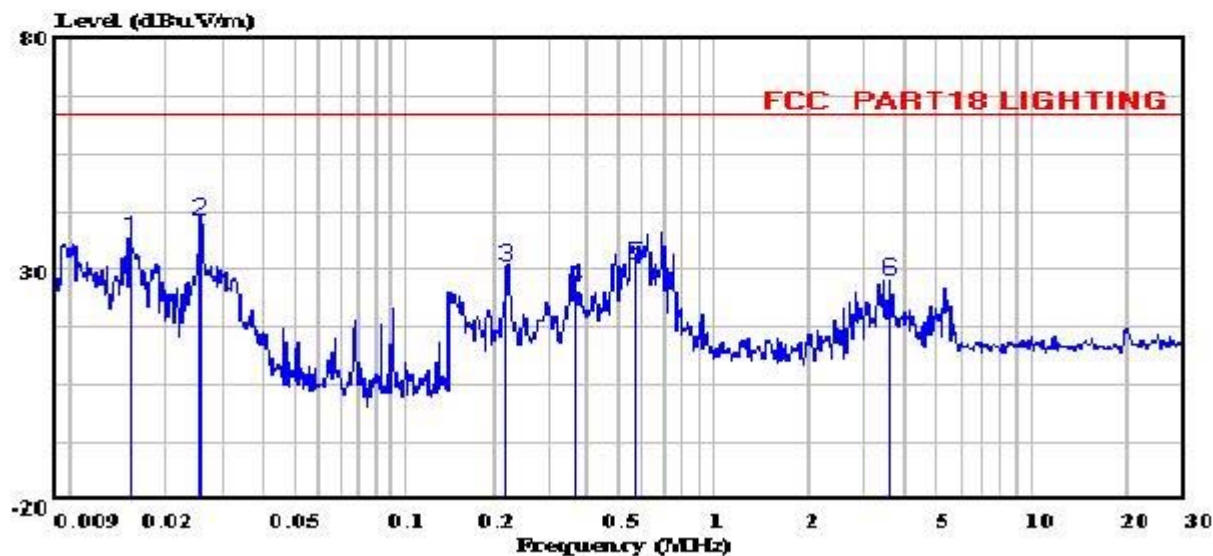
		Read		Limit	Over
	Freq	Level	Level	Line	Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.011	27.88	27.88	63.50	-35.62
2	0.026	44.74	44.74	63.50	-18.76
3	0.229	27.47	27.47	63.50	-36.03
4	0.546	36.74	36.74	63.50	-26.76
5	2.831	26.92	26.92	63.50	-36.58
6	15.426	18.06	18.06	63.50	-45.44



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Data#: 43 File#: E:\EMI_TEST\Data\L\longstar.EMI

Date: 2003-05-11 Time: 15:20:02



Site : audix-aci NO.3 CHAMBER
Condition : FCC PART18 LIGHTING 3m
Project No. : AOE-000367
Applicant : XIAMEN LONGSTAR LIGHTING CO.,LTD
EUT : Energy Saving Lamp
M/N : FE-T9-32W
Power Supply : 120V/60Hz
Ambient : 20.7C, 53%
Test Mode : on
S/N :
Test Engineer:

Solon Gong

Page: 1

	Freq	Read Level	Level	Limit Line	Over Limit
	MHz	dBuV	dBuV/m	dBuV/m	dB
1	0.015	36.49	36.49	63.50	-27.01
2	0.026	40.72	40.72	63.50	-22.78
3	0.231	30.59	30.59	63.50	-32.91
4	0.376	26.15	26.15	63.50	-37.35
5	0.582	31.21	31.21	63.50	-32.29
6	3.582	27.42	27.42	63.50	-36.08