

Application for FCC Certificate
On Behalf of
Fujian Joinluck Electronic Enterprise Co., Ltd.

Energy Saving Lamp

Model No.:	Par38 T4S 18W	Par38 T4S 20W	Par38 T4S 23W
	R40 T4S 20W	R40 T4S 23W	Globe T4S 20W
	Globe T4S 23W	A-Type T4S 20W	A-Type T4S 23W
Serial No.:	F04090601	F04090602	F04090603
	F04090604	F04090605	F04090606
	F04090607	F04090608	F04090609

FCC ID: N6AFJEE0405

Prepared For : Fujian Joinluck Electronic Enterprise Co., Ltd.
Cangshan Industrial Area, Cangshan District,
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Report No. : ACI-F04076
Date of Test : Oct 09-10, 2004
Date of Report : Oct 11, 2004

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TEST REPORT FOR FCC CERTIFICATE

Applicant : Fujian Joinluck Electronic Enterprise Co., Ltd.
Manufacturer : Fujian Joinluck Electronic Enterprise Co., Ltd.
EUT Description : Energy Saving Lamp
(A) Model No.:
Par38 T4S 18W, Par38 T4S 20W, Par38 T4S 23W,
R40 T4S 20W, R40 T4S 23W, Globe T4S 20W,
Globe T4S 23W, A-Type T4S 20W, A-Type T4S 23W
(B) Serial No.:
F04090601, F04090602, F04090603,
F04090604, F04090605, F04090606,
F04090607, F04090608, F04090609
(C) Power Supply: 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 18 CONSUMER DEVICES (2003.10)
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 (Please see the EUT Description above), which was tested in 3m anechoic chamber on Oct 09-10, 2004, 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 contains data that are not covered by the NVLAP accreditation.

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 : Oct 09-10, 2004

Prepared by : Candy Xi 2004.10.13 Test Engineer : Harry Zhao 2004.10.13
CANDY XI
(Assistant) HARRY ZHAO
(Engineer on behalf of
Audix Technology (Shanghai) Co., Ltd.)
Reviewer : Sammy Chen 2004.10.14 Approved Signatory : Byron Kwo 14 Oct / 04
SAMMY CHEN
(Supervisor) BYRON KWO
(Deputy 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	:	Par38 T4S 18W, Par38 T4S 20W, Par38 T4S 23W, R40 T4S 20W, R40 T4S 23W, Globe T4S 20W, Globe T4S 23W, A-Type T4S 20W, A-Type T4S 23W
Serial Number	:	F04090601, F04090602, F04090603, F04090604, F04090605, F04090606, F04090607, F04090608, F04090609
Note	:	Except the lamp shades, model numbers and serial numbers, they are the same product. The circuit card copper traces are in agreement with the schematic.
Applicant	:	Fujian Joinluck Electronic Enterprise Co., Ltd. Cangshan Industrial Area, Cangshan District, Fuzhou, Fujian, China.
Manufacturer	:	Fujian Joinluck Electronic Enterprise Co., Ltd. Cangshan Industrial Area, Cangshan District, Fuzhou, Fujian, China.

Test Model	Apparent Power (V • A)	Real Power (W)
Par38 T4S 18W	30.26	16.71
Par38 T4S 20W	37.4	19.6
Par38 T4S 23W	39.0	20.8
R40 T4S 20W	36.6	19.3
R40 T4S 23W	39.2	20.8
Globe T4S 20W	37.5	19.7
Globe T4S 23W	38.2	20.4
A-Type T4S 20W	37.2	19.5
A-Type T4S 23W	38.8	20.6

1.2 Description of Test Facility

Site Description (Semi-Anechoic Chamber)	:	Sept. 17, 1998 file on 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.
FCC registration Number	:	91789
Accredited by NVLAP, Lab Code	:	200371-0

1.3 Measurement Uncertainty

Conducted Emission Uncertainty	:	$U = \pm 2.66\text{dB}$
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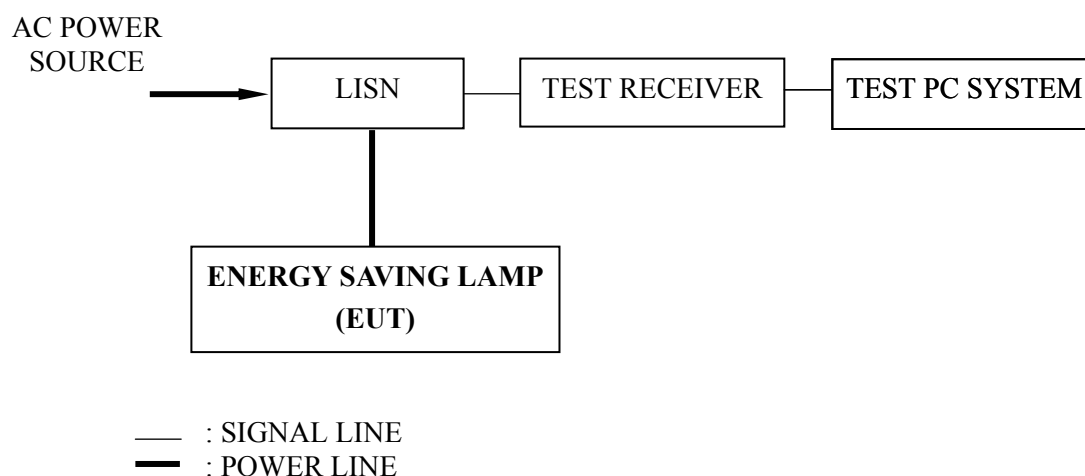
2 AC POWERLINE CONDUCTED EMISSION TEST

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 20, 2004	1 Year
2.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-5	Apr 27, 2004	1 Year
	Attenuator	Yalian	TTS-1	#1	Sep 18, 2004	1/2 Year
3.	Software	Audix	E3	SET00200 9804M592	-	-

2.2 Block Diagram of Test Setup



2.3 Conducted Emission Limits

Frequency (MHz)	Maximum RF Line Voltage	
	(μ V)	dB(μ V)
0.45 ~ 2.51	250	48
2.51 ~ 3	3000	70
3 ~ 30	250	48
NOTE 1 – RF Line Voltage dB (μ V) = 20 log RF Line Voltage (μ V) NOTE 2 – The tighter limits shall apply at the boundary between two frequency ranges.		

2.4 Test Configuration

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 450 kHz to 30 MHz was checked.

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

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.

The worse case is for Par38 T4S 23W. The worst emission is detected at 0.452 MHz with corrected signal level of 42.56 dB(μ V) (limit is 48.00 dB(μ V)), when the VB of the EUT is connected to LISN.

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : Par38 T4S 18W Humidity : 56%

Serial No. : F04090601 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.452	25.5	10.28	35.78	48.00	12.22
	0.526	23.6	10.28	33.88	48.00	14.12
	0.803	22.94	10.29	33.23	48.00	14.77
	1.087	25.35	10.30	35.65	48.00	12.35
	3.768	18.44	10.40	28.84	48.00	19.16
	17.673	9.08	11.03	20.11	48.00	27.89
VB	0.452	21.11	10.32	31.43	48.00	16.57
	0.526	24.32	10.31	34.63	48.00	13.37
	0.627	22.32	10.33	32.65	48.00	15.35
	0.990	23.40	10.36	33.76	48.00	14.24
	3.900	17.36	10.47	27.83	48.00	20.17
	16.587	5.94	10.85	16.79	48.00	31.21
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

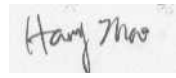
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : Par38 T4S 20W Humidity : 56%

Serial No. : F04090602 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.450	19.15	10.28	29.43	48.00	18.57
	0.524	26.18	10.28	36.46	48.00	11.54
	0.679	26.67	10.28	36.95	48.00	11.05
	1.378	18.14	10.32	28.46	48.00	19.54
	3.670	15.83	10.40	26.23	48.00	21.77
	17.534	5.42	11.01	16.43	48.00	31.57
VB	0.450	18.78	10.32	29.10	48.00	18.90
	0.530	27.33	10.31	37.64	48.00	10.36
	0.777	24.99	10.34	35.33	48.00	12.67
	1.375	22.62	10.38	33.00	48.00	15.00
	3.800	16.47	10.47	26.94	48.00	21.06
	17.452	9.55	10.88	20.43	48.00	27.57
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

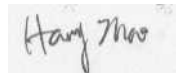
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : Par38 T4S 23W Humidity : 56%

Serial No. : F04090603 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.450	31.71	10.28	41.99	48.00	6.01
	0.544	30.44	10.28	40.72	48.00	7.28
	0.661	27.56	10.28	37.84	48.00	10.16
	0.745	23.94	10.29	34.23	48.00	13.77
	1.238	22.46	10.31	32.77	48.00	15.23
	3.350	14.20	10.39	24.59	48.00	23.41
VB	0.452	32.24	10.32	42.56	48.00	5.44
	0.541	30.79	10.31	41.10	48.00	6.90
	0.657	29.42	10.33	39.75	48.00	8.25
	0.897	24.63	10.36	34.99	48.00	13.01
	1.580	22.37	10.39	32.76	48.00	15.24
	2.761	19.91	10.43	30.34	70.00	39.66
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

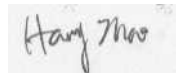
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : R40 T4S 20W Humidity : 56%

Serial No. : F04090604 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.519	29.24	10.28	39.52	48.00	8.48
	0.691	25.62	10.28	35.90	48.00	12.10
	0.934	23.75	10.29	34.04	48.00	13.96
	1.207	21.19	10.31	31.50	48.00	16.50
	3.016	18.82	10.38	29.20	48.00	18.80
	17.525	7.16	11.01	18.17	48.00	29.83
VB	0.518	28.09	10.31	38.40	48.00	9.60
	0.627	27.65	10.33	37.98	48.00	10.02
	0.797	25.27	10.34	35.61	48.00	12.39
	1.078	22.67	10.37	33.04	48.00	14.96
	2.832	17.37	10.44	27.81	70.00	42.19
	28.050	15.85	11.23	27.08	48.00	20.92
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

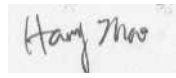
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : R40 T4S 23W Humidity : 56%

Serial No. : F04090605 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.460	29.24	10.28	39.52	48.00	8.48
	0.519	29.22	10.28	39.50	48.00	8.50
	0.614	29.11	10.28	39.39	48.00	8.61
	0.831	27.62	10.29	37.91	48.00	10.09
	2.832	23.08	10.38	33.46	70.00	36.54
	17.525	12.60	11.01	23.61	48.00	24.39
VB	0.463	28.44	10.32	38.76	48.00	9.24
	0.515	28.66	10.31	38.97	48.00	9.03
	0.720	29.75	10.34	40.09	48.00	7.91
	0.911	26.89	10.36	37.25	48.00	10.75
	3.042	23.03	10.44	33.47	48.00	14.53
	22.265	11.31	11.08	22.39	48.00	25.61
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

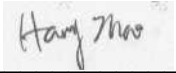
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : Globe T4S 20W Humidity : 56%

Serial No. : F04090606 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.502	28.43	10.28	38.71	48.00	9.29
	0.599	27.81	10.28	38.09	48.00	9.91
	0.907	24.84	10.29	35.13	48.00	12.87
	1.814	21.16	10.33	31.49	48.00	16.51
	4.951	17.92	10.43	28.35	48.00	19.65
	17.525	11.56	11.01	22.57	48.00	25.43
VB	0.506	26.53	10.31	36.84	48.00	11.16
	0.708	26.26	10.34	36.60	48.00	11.40
	1.148	22.69	10.37	33.06	48.00	14.94
	2.916	21.03	10.44	31.47	70.00	38.53
	5.711	17.72	10.51	28.23	48.00	19.77
	18.124	12.12	10.91	23.03	48.00	24.97
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : Globe T4S 23W Humidity : 56%

Serial No. : F04090607 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.460	28.11	10.28	38.39	48.00	9.61
	0.562	29.79	10.29	40.08	48.00	7.92
	0.668	28.52	10.28	38.80	48.00	9.20
	0.983	26.49	10.29	36.78	48.00	11.22
	2.832	23.73	10.38	34.11	70.00	35.89
	10.455	14.94	10.58	25.52	48.00	22.48
VB	0.463	29.78	10.32	40.10	48.00	7.90
	0.665	28.93	10.33	39.26	48.00	8.74
	0.777	29.76	10.34	40.10	48.00	7.90
	1.697	25.33	10.39	35.72	48.00	12.28
	2.374	25.75	10.42	36.17	48.00	11.83
	17.525	8.53	10.89	19.42	48.00	28.58
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

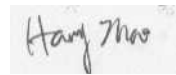
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : A-Type T4S 20W Humidity : 56%

Serial No. : F04090608 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.450	27.50	10.28	37.78	48.00	10.22
	0.632	26.77	10.28	37.05	48.00	10.95
	0.748	25.23	10.29	35.52	48.00	12.48
	1.038	23.60	10.29	33.89	48.00	14.11
	2.761	19.73	10.37	30.10	70.00	39.90
	9.492	8.99	10.54	19.53	48.00	28.47
VB	0.450	29.22	10.32	39.54	48.00	8.46
	0.599	27.84	10.33	38.17	48.00	9.83
	0.754	27.23	10.34	37.57	48.00	10.43
	1.330	21.70	10.37	32.07	48.00	15.93
	2.991	20.56	10.44	31.00	70.00	39.00
	17.452	8.11	10.88	18.99	48.00	29.01
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

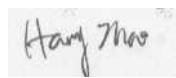
(HARRY ZHAO)

EUT : Energy Saving Lamp Temperature : 22.8°C

Model No. : A-Type T4S 23W Humidity : 56%

Serial No. : F04090609 Date of Test : Oct 09, 2004

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.460	28.17	10.28	38.45	48.00	9.55
	0.510	28.51	10.28	38.79	48.00	9.21
	0.919	27.08	10.29	37.37	48.00	10.63
	1.547	26.89	10.32	37.21	48.00	10.79
	7.194	22.24	10.47	32.71	48.00	15.29
	10.455	20.10	10.58	30.68	48.00	17.32
VB	0.519	27.47	10.31	37.78	48.00	10.22
	0.715	27.20	10.34	37.54	48.00	10.46
	1.134	27.14	10.37	37.51	48.00	10.49
	1.330	27.13	10.37	37.50	48.00	10.50
	7.409	22.00	10.53	32.53	48.00	15.47
	18.431	15.25	10.92	26.17	48.00	21.83
NOTE 1 - Probe Factor means insertion loss of LISN. NOTE 2 - Factor = Cable Loss (including 10dB attenuator) + Probe Factor. NOTE 3 - Emission Level = Meter Reading + Factor. NOTE 4 - All reading are Quasi-Peak Values.						

TEST ENGINEER: 

(HARRY ZHAO)

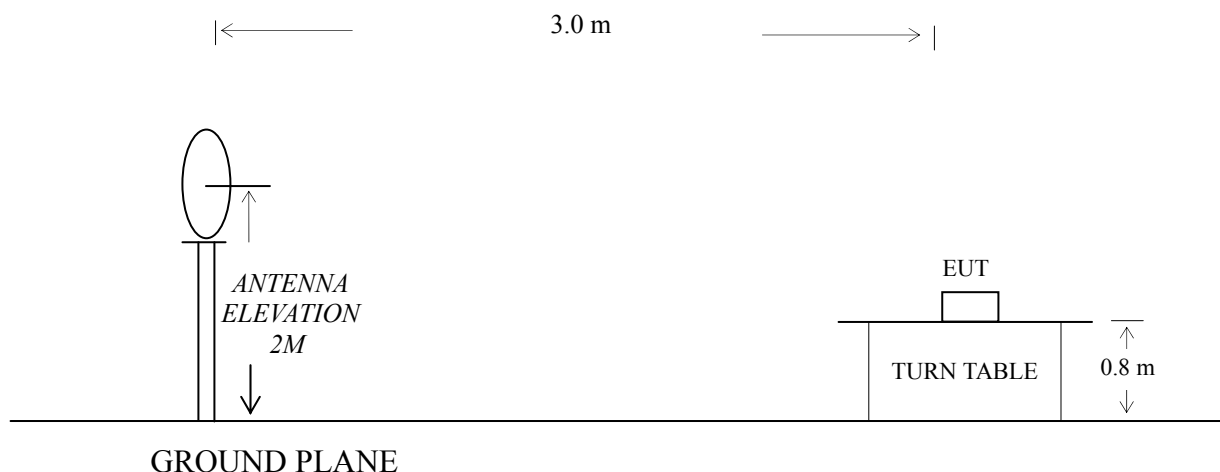
3 MAGNETIC FIELD EMISSION TEST

3.1 Test Equipment

The following test equipment are used during the field strength test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Loop Antenna	Schaffner	HLA6120	1193	Aug 06, 2003	2 Year
2.	Test Receiver	Rohde & Schwarz	ESHS10	830223/007	Apr 20, 2004	1 Year
3.	50Ω Coaxial Switch	ANRITSU	MP59B	M74689	Sep 20, 2004	1/2 Year
4.	Software	Audix	E3	SET00200 9912M295-2	-	-

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(μV/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 (Lighting) and test it.

3.6 Test Procedures

The EUT is placed on a table, which is 0.8 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 center of the loop at 2m height above the floor.

The bandwidth setting on the test receiver (R&S Test Receiver ESHS10) is 200Hz from 9 kHz to 150 kHz and 10 kHz from 150 kHz 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

NOTE 1 - Probe Factor means antenna factor of the 0.6m Loop Antenna.

NOTE 2 - Factor = Probe Factor + Cable Loss

NOTE 3 - Level = Read Level+ Factor

NOTE 4 - All reading are Quasi-Peak values.

<PASS>

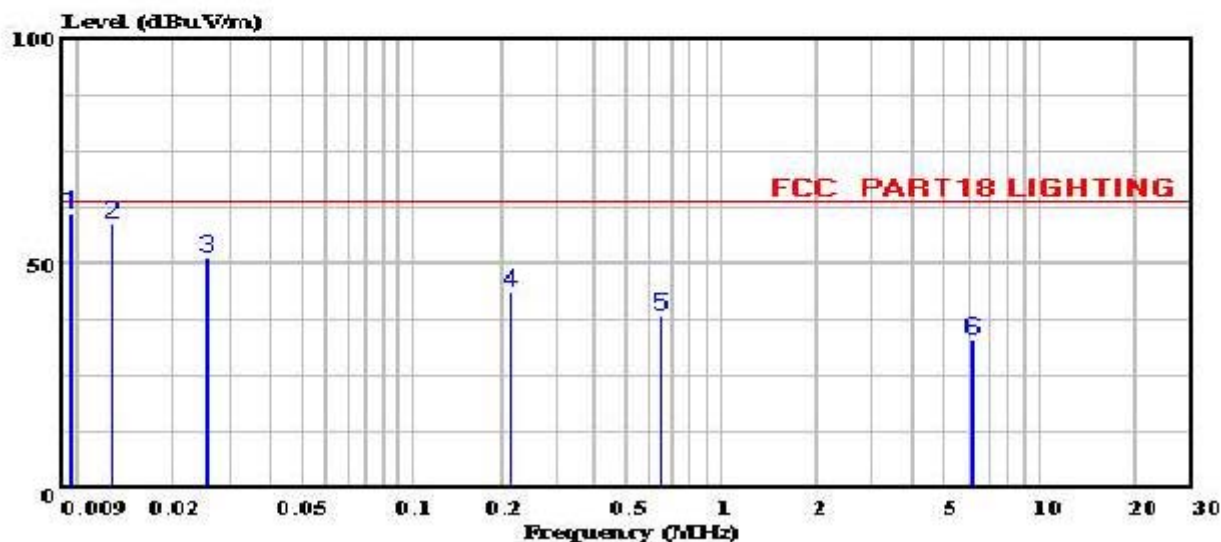
Refer to the following pages.



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 audixaci@8848.net

Data#: 163 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:03:25



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : Par38 T4S 18W
 S/N : F04090601
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Miao*

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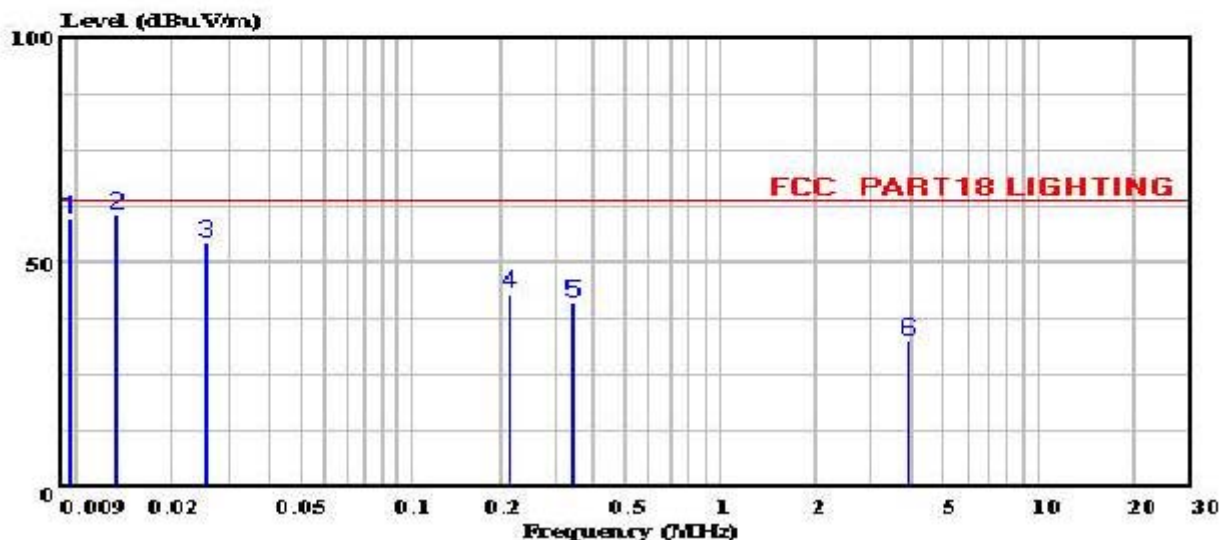
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	61.08	63.50	-2.42	40.24	20.84	0.14
2	0.013	58.96	63.50	-4.54	38.10	20.86	0.16
3	0.026	51.07	63.50	-12.43	30.26	20.81	0.22
4	0.224	43.82	63.50	-19.68	23.32	20.50	0.40
5	0.657	38.65	63.50	-24.85	18.17	20.48	0.48
6	6.218	33.17	63.50	-30.33	12.50	20.67	0.67



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Data#: 164 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:06:53



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : Par38 T48 20W
 S/N : F04090602
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Hang Zhuo*

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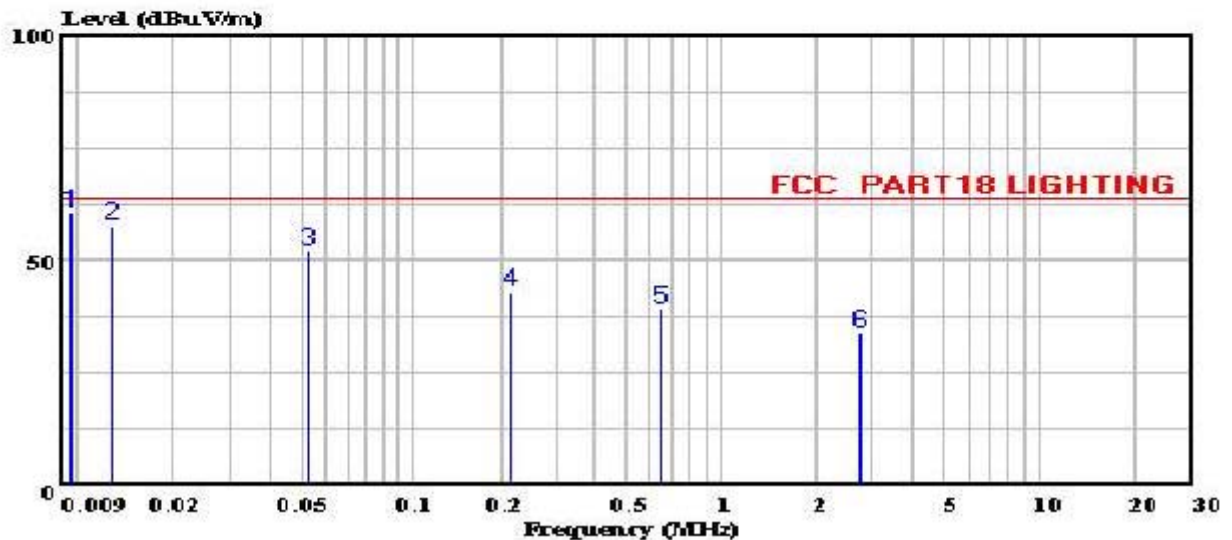
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
			dBuV/m	dB	dBuV	dB	dB
1	0.010	59.59	63.50	-3.91	38.75	20.84	0.14
2	0.013	60.43	63.50	-3.07	39.57	20.86	0.16
3	0.025	54.12	63.50	-9.38	33.30	20.82	0.22
4	0.224	43.40	63.50	-20.10	22.90	20.50	0.40
5	0.352	41.33	63.50	-22.17	20.90	20.43	0.43
6	3.916	32.72	63.50	-30.78	12.09	20.63	0.63



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Data#: 165 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:11:27



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : Par38 T48 23W
 S/N : F04090603
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Mao*

Page: 1

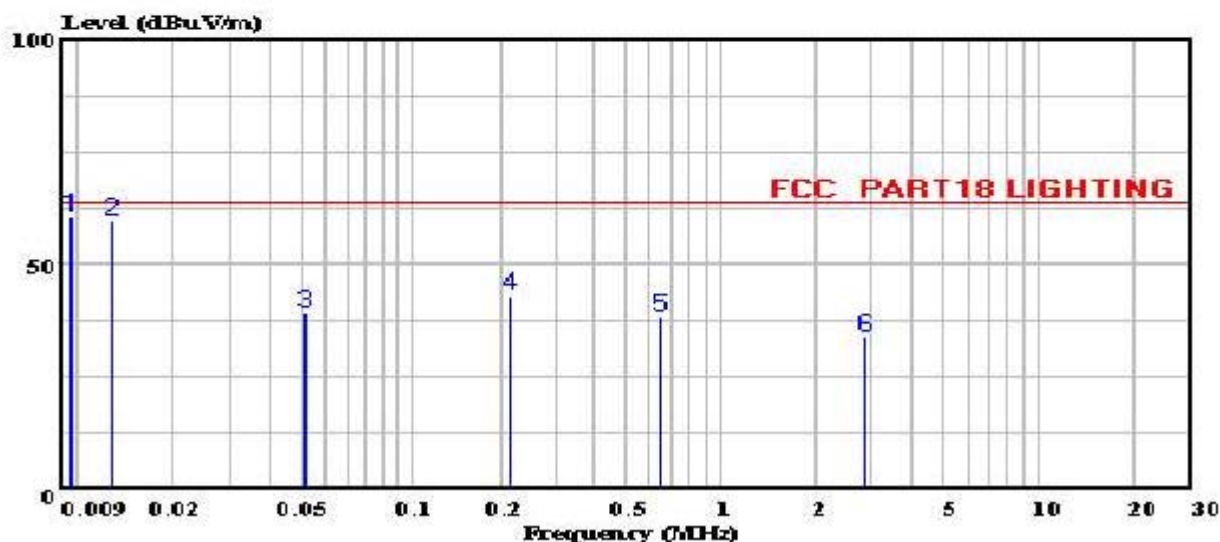
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	60.70	63.50	-2.80	39.86	20.84	0.14
2	0.013	57.91	63.50	-5.59	37.05	20.86	0.16
3	0.053	52.00	63.50	-11.50	31.24	20.76	0.28
4	0.224	43.62	63.50	-19.88	23.12	20.50	0.40
5	0.657	39.27	63.50	-24.23	18.79	20.48	0.48
6	2.763	34.04	63.50	-29.46	13.44	20.60	0.60



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Data#: 166 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:16:06



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : R40 T4S 20W
 S/N : F04090604
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Zhao*

Page: 1

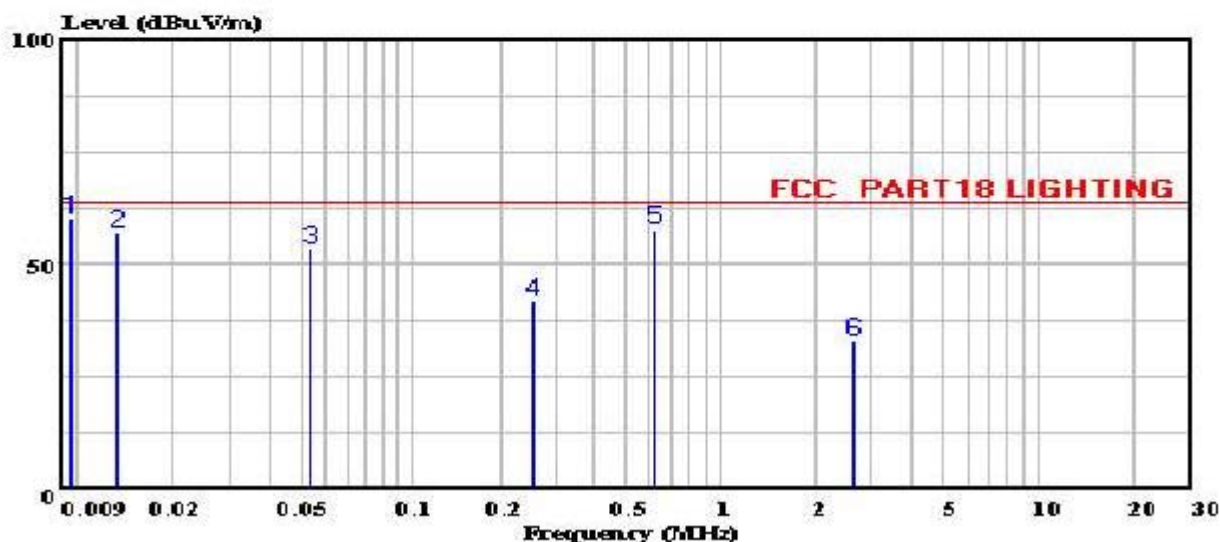
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	60.62	63.50	-2.88	39.78	20.84	0.14
2	0.013	59.83	63.50	-3.67	38.97	20.86	0.16
3	0.051	39.53	63.50	-23.97	18.77	20.76	0.27
4	0.224	43.34	63.50	-20.16	22.84	20.50	0.40
5	0.657	38.53	63.50	-24.97	18.05	20.48	0.48
6	2.854	34.13	63.50	-29.37	13.52	20.61	0.61



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Data#: 167 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:19:47



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : R40 T4S 23W
 S/N : F04090605
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Mao*

Page: 1

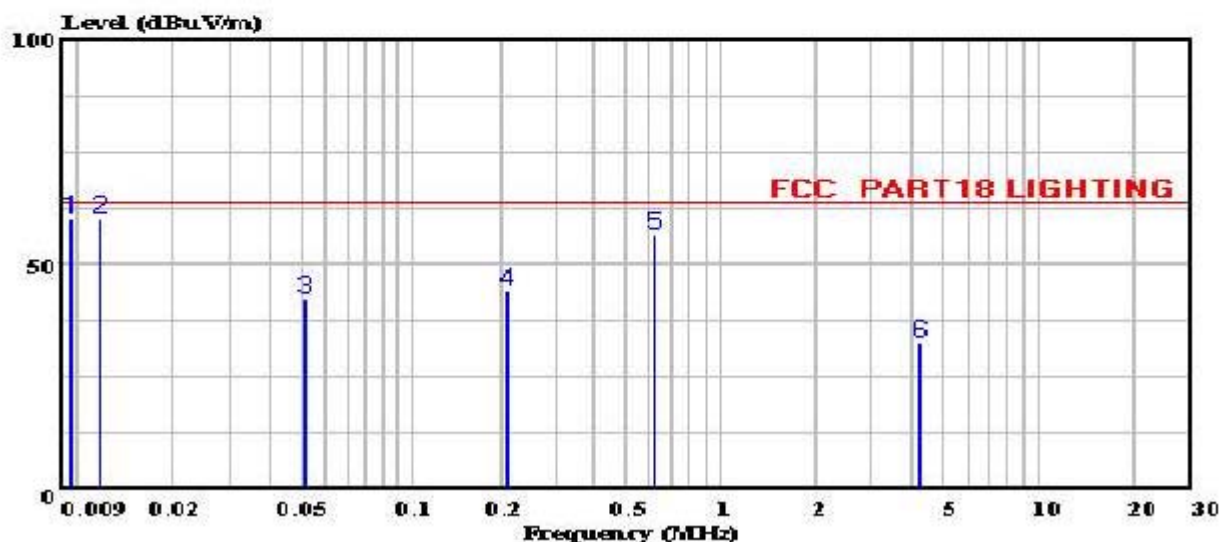
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	59.91	63.50	-3.59	39.07	20.84	0.14
2	0.013	56.73	63.50	-6.77	35.87	20.86	0.16
3	0.053	53.40	63.50	-10.10	32.64	20.76	0.28
4	0.267	42.22	63.50	-21.28	21.75	20.47	0.41
5	0.636	57.82	63.50	-5.68	37.34	20.48	0.48
6	2.632	33.22	63.50	-30.28	12.62	20.60	0.60



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Data#: 168 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:22:44



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : Globe T48 20W
 S/N : F04090606
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Zhao*

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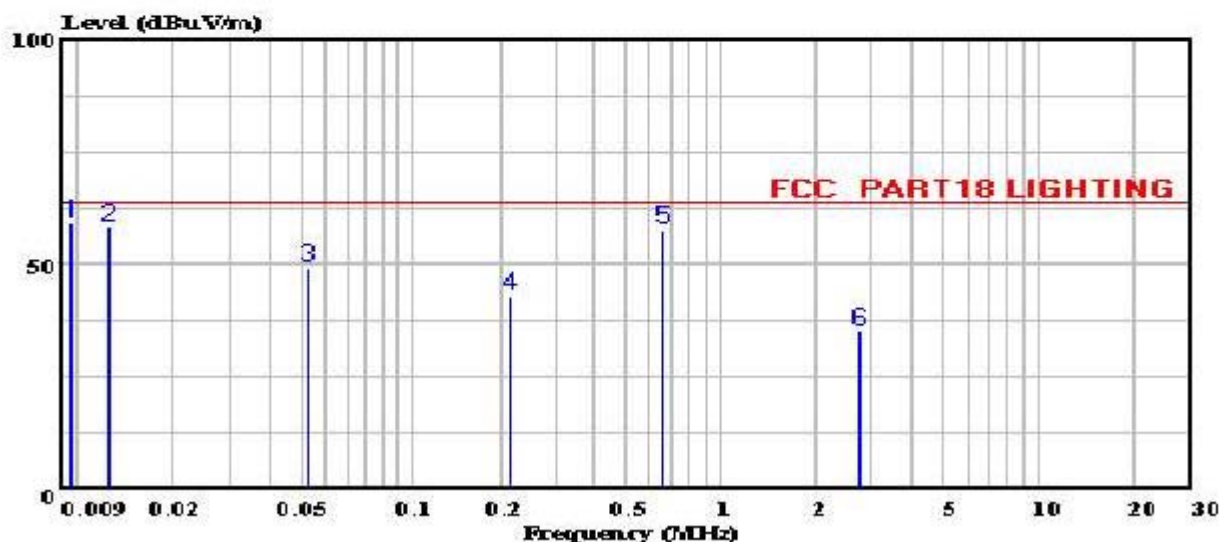
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
			dBuV/m	dB	dBuV	dB	dB
1	0.010	59.88	63.50	-3.62	39.05	20.83	0.13
2	0.012	60.28	63.50	-3.22	39.43	20.85	0.15
3	0.051	42.59	63.50	-20.91	21.83	20.76	0.27
4	0.220	44.17	63.50	-19.33	23.68	20.49	0.39
5	0.636	56.62	63.50	-6.88	36.14	20.48	0.48
6	4.247	32.53	63.50	-30.97	11.89	20.64	0.64



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Data#: 169 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:25:38



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : Globe T4S 23W
 S/N : F04090607
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Zhao*

Page: 1

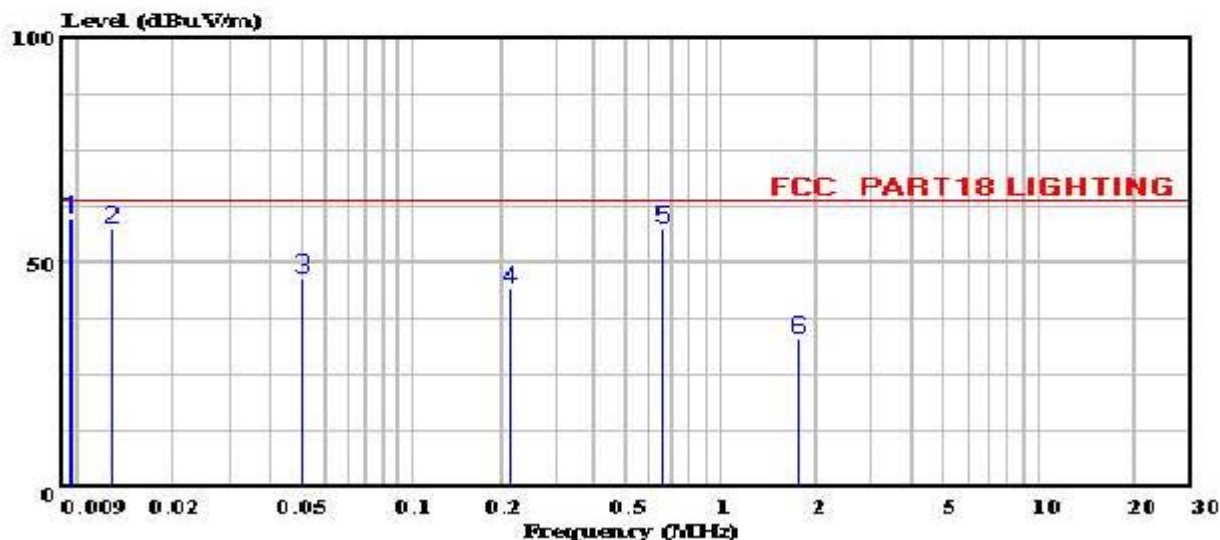
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
			dBuV/m	dB	dBuV	dB	dB
1	0.010	59.41	63.50	-4.09	38.57	20.84	0.14
2	0.013	58.43	63.50	-5.07	37.57	20.86	0.16
3	0.052	49.45	63.50	-14.05	28.68	20.77	0.28
4	0.224	43.52	63.50	-19.98	23.02	20.50	0.40
5	0.668	57.71	63.50	-5.79	37.22	20.49	0.49
6	2.763	35.22	63.50	-28.28	14.62	20.60	0.60



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Data#: 170 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:28:41



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : A-Type T4S 20W
 S/N : F04090608
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Mao*

Page: 1

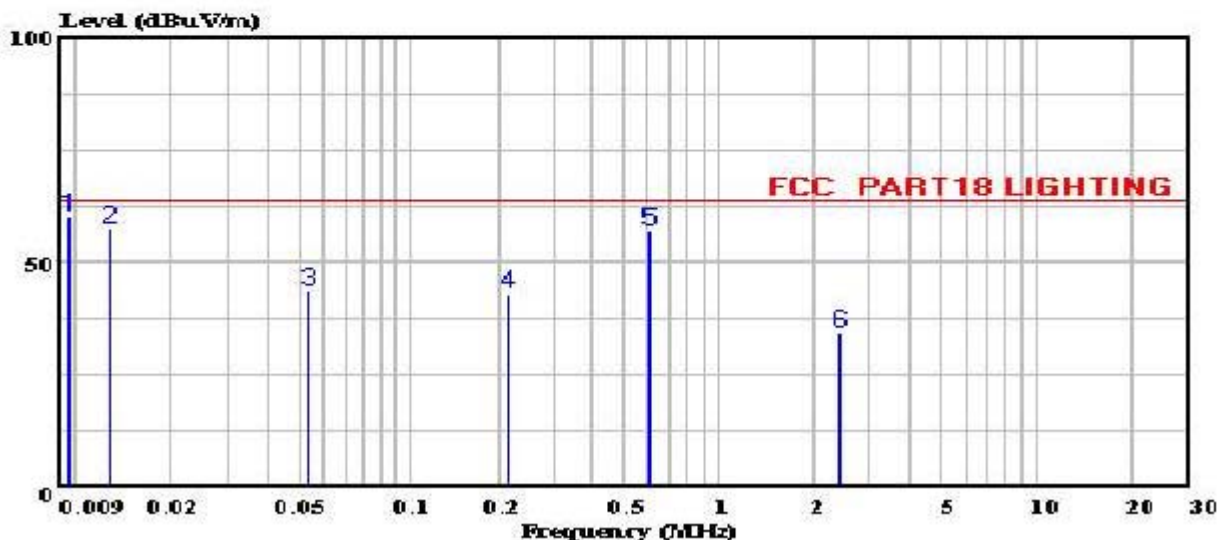
	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	59.69	63.50	-3.81	38.85	20.84	0.14
2	0.013	57.24	63.50	-6.26	36.38	20.86	0.16
3	0.050	46.54	63.50	-16.96	25.77	20.77	0.27
4	0.224	44.32	63.50	-19.18	23.82	20.50	0.40
5	0.668	57.45	63.50	-6.05	36.96	20.49	0.49
6	1.783	33.11	63.50	-30.39	12.60	20.51	0.57



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Data#: 171 File#: D:\Test-Data\J\joinluck.emi

Date: 2004-10-10 Time: 15:32:24



Site : Chamber 3
 Condition : FCC PART18 LIGHTING 3m HLA6120
 Project No : AOE-000750
 Applicant : FUJIAN JOINLUCK ELECTRONIC ENTERPRISE
 : CO., LTD.
 EUT : Energy Saving Lamp
 M/N : A-Type T4S 23W
 S/N : F04090609
 Power Supply : 120V/60Hz
 Ambient : 23°C 55%
 Test Mode : Lighting
 Test Engineer: *Harry Mao*

Page: 1

	Freq	Level	Limit	Over	Read	Probe	Cable
	MHz	dBuV/m	Line	Limit	Level	Factor	Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	0.010	60.01	63.50	-3.49	39.17	20.84	0.14
2	0.013	57.30	63.50	-6.20	36.44	20.86	0.16
3	0.053	44.06	63.50	-19.44	23.30	20.76	0.28
4	0.224	43.60	63.50	-19.90	23.10	20.50	0.40
5	0.616	56.74	63.50	-6.76	36.26	20.48	0.48
6	2.427	34.39	63.50	-29.11	13.81	20.58	0.59