

Application for FCC Certificate
On Behalf of
Twin Growth Electronics (Suzhou) Co., Ltd.

Energy Saving Lamp

Model No.: TME15W
TME20W
TME25W

FCC ID : O9OTGESC20011

Prepared For : Twin Growth Electronics (Suzhou) Co., Ltd.
Mudu Town, Jiangsu, China

Prepared By : Audix Technology (Shanghai) Co., Ltd.
3 F 34 Bldg 680 Guiping Rd,
Caohejing Hi-Tech Park,
Shanghai, China

Tel : (+86-21) 64955500

Report No. : ACI-F01046
Date of Test : Jul 10 ~ Jul 24, 2001
Date of Report : Aug 4, 2001

TABLE OF CONTENTS

	Page
1 GENERAL INFORMATION.....	4
1.1 Description of Equipment Under Test.....	4
1.2 Description of Test Facility	4
1.3 Measurement Uncertainty.....	4
2 AC POWERLINE CONDUCTED EMISSION TEST.....	5
2.1 Test Equipment.....	5
2.2 Block Diagram of Test Setup	5
2.3 Conducted Emission Limits.....	5
2.4 Test Configuration	6
2.5 Operating Condition of EUT	6
2.6 Test Procedures.....	6
2.7 Test Results.....	7
3 RADIATED EMISSION TEST.....	10
3.1 Test Equipment.....	10
3.2 Block Diagram of Test Setup	10
3.3 Radiated Emission Limits.....	11
3.4 Test Configuration	11
3.5 Operating Condition of EUT	11
3.6 Test Procedures.....	11
3.7 Test Results.....	12
4 RADIATED ELECTROMAGNETIC EMISSION TEST.....	15
4.1 Test Equipment.....	15
4.2 Block Diagram of Test Setup	15
4.3 Test Configuration	15
4.4 Operating Condition of EUT	15
4.5 Test Procedure	16
4.6 Test Result	16

TEST REPORT FOR FCC CERTIFICATE

Applicant : Twin Growth Electronics (Suzhou) Co., Ltd.
Manufacturer : Twin Growth Electronics (Suzhou) Co., Ltd.
EUT Description : Energy Saving Lamp
(A) Model No. (B) Serial No.
TME15W E062901 (8)
TME20W E062901 (4)
TME25W E062901 (3)
(C) Power Supply: 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 18 CONSUMER DEVICES (1998)
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 radiated and conducted emissions.

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 : Jul 10 ~ Jul 24, 2001

Prepared by :

Louise Lu
Louise Lu / Assistant

Test Engineer :

Rain Wang
Rain Liang / Engineer
For and on behalf of
AUDIX TECHNOLOGY (SHANGHAI) CO.,LTD.

Reviewer :

Hall Wang
Hall Wang / Supervisor

Approved Signatory :

Alex Chiu
Alex Chiu /
Assistant Manager
Authorized Signatures

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description : Energy Saving Lamp

Type of EUT : Production Pre-product Pro-type

Model Number : TME15W TME20W TME25W

Applicant : Twin Growth Electronics (Suzhou) Co., Ltd.

Mudu Town, Suzhou Jiangsu, China

Manufacturer : Twin Growth Electronics (Suzhou) Co., Ltd.

Mudu Town, Suzhou Jiangsu, China

M/N	INPUT POWER (VA)	OUTPUT POWER (W)
TME15W	25.3	13.1
TME20W	31.5	17.1
TME25W	38.6	22.1

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

NVLAP Lab Code : 200371-0

1.3 Measurement Uncertainty

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

Radiated Emission Uncertainty : $U = 4.26\text{dB}$

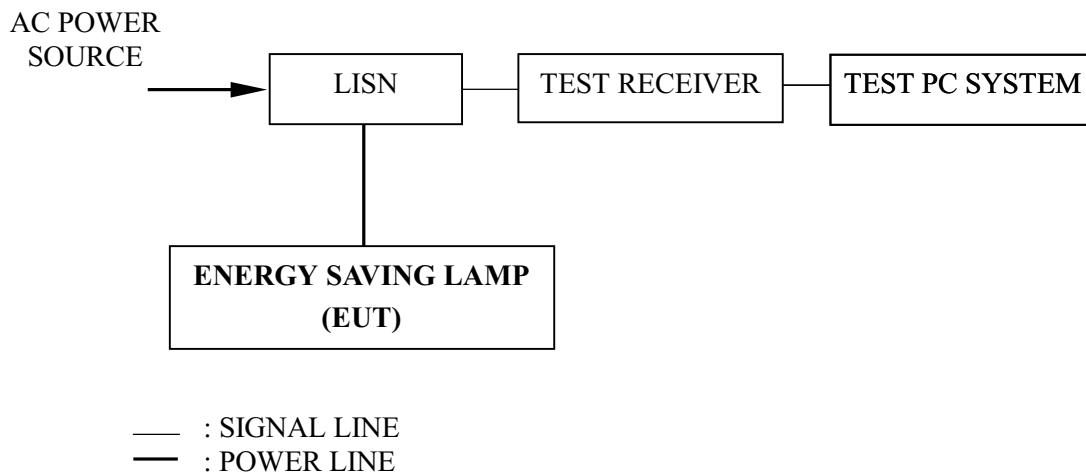
2 AC POWERLINE CONDUCTED EMISSION TEST

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 24, 2001	1 Year
2.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-5	Apr 15, 2001	1 Year

2.2 Block Diagram of Test Setup



2.3 Conducted Emission Limits

Frequency (MHz)	Maximum RF Line Voltage	
	(μV)	dB(μV)
0.45 ~ 2.51	250	48
2.51 ~ 3	3000	70
3 ~ 30	250	48
NOTE 1 – RF Line Voltage dB(μV) = 20 log RF Line Voltage (μV)		

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

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 bandwidth of Test Receiver ESHS10 was set at 10 kHz.

The frequency range from 450 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.

2.6 Test Procedures

- 2.6.1 Setup the EUT as shown in Sec. 2.2.
- 2.6.2 Turn on the power of all equipment.
- 2.6.3 The EUT will be operated normally.

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.

EUT	: <u>Energy Saving Lamp</u>	Temperature :	<u>20.8°C</u>
Model No.	: <u>TME15W</u>	Humidity	<u>53%</u>
Test Mode	: <u>ON</u>	Date of Test :	<u>Jul 11, 2001</u>

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)
VA	0.499	0.31	40.30	40.61	48.00	7.39
	0.540	0.31	44.70	45.01	48.00	2.99
	0.628	0.30	39.40	39.70	48.00	8.30
	0.716	0.29	43.10	43.39	48.00	4.61
	0.870	0.28	44.60	44.88	48.00	3.12
	0.962	0.27	44.90	45.17	48.00	2.83
VB	0.482	0.32	38.90	39.22	48.00	8.78
	0.524	0.31	37.20	37.51	48.00	10.49
	0.730	0.29	39.80	40.09	48.00	7.91
	0.853	0.28	31.20	31.48	48.00	16.52
	0.889	0.28	41.80	42.08	48.00	5.92
	0.974	0.27	41.70	41.97	48.00	6.03

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 0.962 MHz with corrected signal level of 45.17 dB(μV) (limit is 48.00 dB(μV)), when the VA of the EUT is connected to LISN.

TEST ENGINEER: Rain Liang
(RAIN LIANG)

EUT : Energy Saving Lamp Temperature : 20.8°C

Model No. : TME20W Humidity : 53%

Test Mode : ON Date of Test : Jul 11, 2001

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(µV)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)
VA	0.483	0.32	43.22	43.54	48.00	4.46
	0.544	0.31	43.66	43.97	48.00	4.03
	0.654	0.29	43.67	43.96	48.00	4.04
	0.739	0.29	43.58	43.87	48.00	4.13
	0.881	0.28	44.12	44.40	48.00	3.60
	0.970	0.27	41.91	42.18	48.00	5.82
VB	0.512	0.31	42.60	42.91	48.00	5.09
	0.590	0.30	39.40	39.70	48.00	8.30
	0.844	0.28	38.90	39.18	48.00	8.82
	0.923	0.27	39.90	40.17	48.00	7.83
	0.981	0.27	40.30	40.57	48.00	7.43
	1.060	0.27	40.30	40.57	48.00	7.43

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 0.881 MHz with corrected signal level of 44.40 dB(µV) (limit is 48.00 dB(µV)), when the VA of the EUT is connected to LISN.

TEST ENGINEER: Rain Liang
(RAIN LIANG)

EUT : Energy Saving Lamp Temperature : 20.8°C

Model No. : TME25W Humidity : 53%

Test Mode : ON Date of Test : Jul 11, 2001

Test Line	Frequency (MHz)	Factor (dB)	Meter Reading dB(µV)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)
VA	0.534	0.31	36.00	36.31	48.00	11.69
	0.640	0.30	38.60	38.90	48.00	9.10
	0.723	0.29	42.60	42.89	48.00	5.11
	0.811	0.28	41.40	41.68	48.00	6.32
	0.891	0.28	38.40	38.68	48.00	9.32
	1.230	0.27	37.10	37.37	48.00	10.63
VB	0.502	0.31	37.20	37.51	48.00	10.49
	0.575	0.30	36.00	36.30	48.00	11.70
	0.717	0.29	39.80	40.09	48.00	7.91
	0.797	0.28	39.00	39.28	48.00	8.72
	0.868	0.28	37.30	37.58	48.00	10.42
	1.230	0.26	35.10	35.36	48.00	12.64

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 0.723 MHz with corrected signal level of 42.89 dB(µV) (limit is 48.00 dB(µV)), when the VA of the EUT is connected to LISN.

TEST ENGINEER: Rain Liang
(RAIN LIANG)

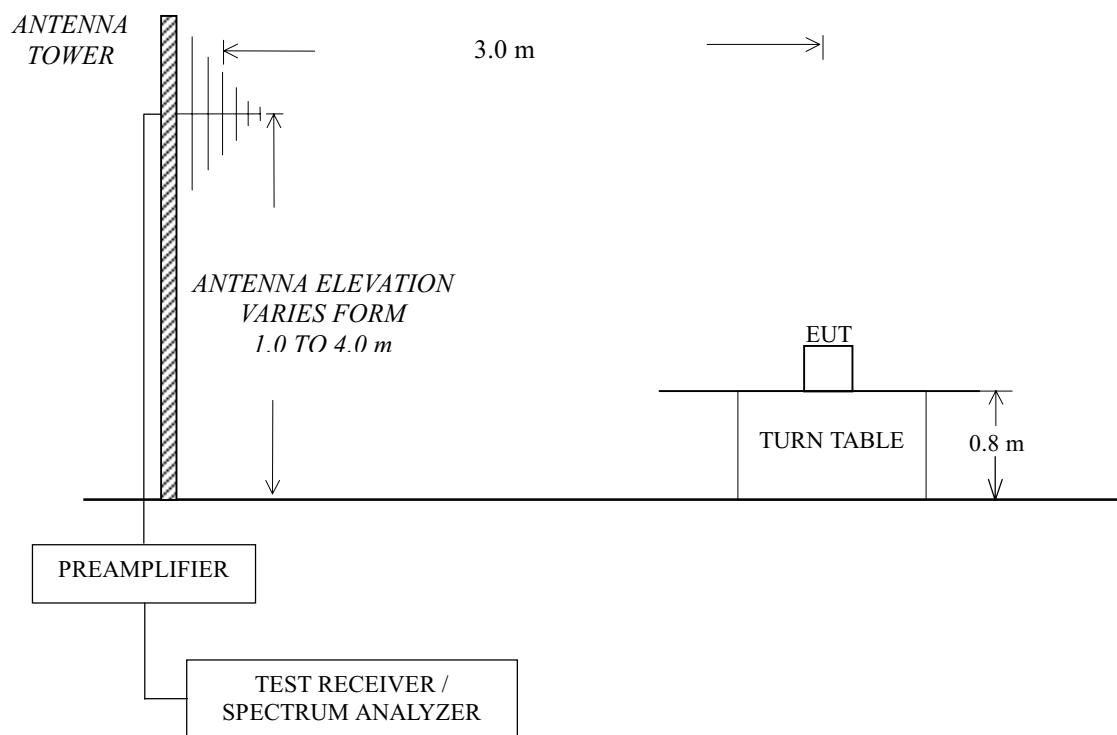
3 RADIATED EMISSION TEST

3.1 Test Equipment

The following test equipment are used during the radiated emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Preamplifier	HP	8447D	2944A06849	May 02, 2001	1/2 Year
2.	Bilog Antenna	Chase	CBL6111	1146	May 02, 2001	1/2 Year
3.	Test Receiver	HP	85422E	3617A00167	Sept 20, 2000	1 Year

3.2 Block Diagram of Test Setup



3.3 Radiated Emission Limits

Frequency (MHz)	Distance (m)	Field strength limits (μ V/m)	Converted Field Strengths Limits By 3 meters Measuring Distance	
			μ V/m	dB(μ V/m)
30 ~ 88	30	10	100	40.0
88 ~ 216	30	15	150	43.5
216 ~ 1000	30	20	200	46.0

NOTE 1 - Emission Level dB(μ V/m) = 20 log Emission Level (μ V/m)
 NOTE 2 - The tighter limit applies at the band edges.
 NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
 NOTE 4 - The measurements are made at 3 meters distance, then the permissible field strength limits be adjusted using 1/d as an attenuation factor.

3.4 Test Configuration

The configuration of the EUT is same as those used in conducted emission test.

Please refer to Sec. 2.4.

3.5 Operating Condition of EUT

The EUT was placed on a turn table which is 0.8 meter above ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (Calibrated Bilog Antenna) or dipole antenna were used as receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to MP-5/1986 requirements during radiated test.

The bandwidth setting on Test Receiver 85422E was 120 kHz.

The frequency range from 30 MHz to 1000 MHz was checked. The test mode (ON) was done on radiated emission test and the test results of the highest emissions are listed in Sec. 3.7.

3.6 Test Procedures

Same as conducted emission test which is listed in Sec. 2.6, except the test set up replaced by Sec. 3.2.

3.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emissions relative the limit is reported. All the emissions not reported below are too low against the FCC Part 18 limit.

EUT	: <u>Energy Saving Lamp</u>	Temperature :	<u>20.8°C</u>
Model No.	: <u>TME15W</u>	Humidity	<u>53%</u>
Test Mode	: <u>ON</u>	Date of Test :	<u>Jul 10, 2001</u>

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Meter Reading dB(μV)	Emission Level dB(μV/m)	Limits dB(μV/m)	Margin (dB)
Horizontal	35.820	16.71	0.75	25.50	26.82	18.78	40.00	21.22
	132.820	13.23	1.52	25.10	26.95	16.60	43.50	26.90
	295.780	13.92	2.47	25.10	27.34	18.63	46.00	27.37
	644.010	21.44	3.99	26.70	27.23	25.96	46.00	20.04
	898.150	23.86	4.63	26.42	27.79	29.86	46.00	16.14
Vertical	30.000	18.90	0.67	25.57	26.34	20.34	40.00	19.66
	127.000	13.21	1.47	25.10	28.84	18.42	43.50	25.08
	151.250	12.54	1.68	25.10	31.19	20.31	43.50	23.19
	160.950	11.96	1.75	25.10	29.50	18.11	43.50	25.39
	187.140	10.04	1.93	25.10	30.71	17.58	43.50	25.92
	242.430	12.59	2.24	25.10	33.79	23.52	46.00	22.48

NOTE 1 – Emission Level = Meter Reading + Antenna Factor + Cable Loss – Preamp Factor

NOTE 2 – All reading are Quasi-Peak values.

NOTE 3 – The worst emission at horizontal polarization was detected at 898.150 MHz with corrected signal level of 29.86 dB(μV/m) (limit is 46.00 dB(μV/m)), when the antenna was 1.00m height and the turn table was at 185°.

NOTE 4 – The worst emission at vertical polarization was detected at 30.000 MHz with corrected signal level of 20.34 dB(μV/m) (limit is 40.00 dB(μV/m)), when the antenna was 1.00 m height and the turn table was at 95°.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

TEST ENGINEER: 
(RAIN LIANG)

EUT : Energy Saving Lamp Temperature : 20.8°C

Model No. : TME20W Humidity : 53%

Test Mode : ON Date of Test : Jul 10, 2001

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Meter Reading dB(µV)	Emission Level dB(µV/m)	Limits dB(µV/m)	Margin (dB)
Horizontal	33.880	17.47	0.72	25.52	26.93	19.60	40.00	20.40
	51.340	8.51	0.90	25.36	30.98	15.03	40.00	24.97
	124.090	13.12	1.44	25.10	27.47	16.93	43.50	26.57
	149.310	12.63	1.66	25.10	29.83	19.02	43.50	24.48
	369.500	16.72	2.90	25.76	26.65	20.51	46.00	25.49
	771.080	22.90	4.34	26.59	26.48	27.13	46.00	18.87
Vertical	31.940	18.16	0.70	25.54	26.39	19.71	40.00	20.29
	36.790	16.33	0.76	25.49	26.85	18.45	40.00	21.55
	126.030	13.20	1.46	25.10	30.44	20.00	43.50	23.50
	149.310	12.63	1.66	25.10	30.31	19.50	43.50	24.00
	160.950	11.96	1.75	25.10	29.50	18.11	43.50	25.39
	427.700	18.05	3.19	26.21	27.34	22.37	46.00	23.63

NOTE 1 – Emission Level = Meter Reading + Antenna Factor + Cable Loss – Preamp Factor

NOTE 2 – All reading are Quasi-Peak values.

NOTE 3 – The worst emission at horizontal polarization was detected at 771.080 MHz with corrected signal level of 27.13dB(µV/m) (limit is 46.00 dB(µV/m)), when the antenna was 1.00m height and the turn table was at 96°.

NOTE 4 – The worst emission at vertical polarization was detected at 31.940 MHz with corrected signal level of 19.71 dB(µV/m) (limit is 40.00 dB(µV/m)), when the antenna was 1.00 m height and the turn table was at 167°.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

TEST ENGINEER: Rain Liang
(RAIN LIANG)

EUT : Energy Saving Lamp Temperature : 20.8°C

Model No. : TME25W Humidity : 53%

Test Mode : ON Date of Test : Jul 10, 2001

Polarization	Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Meter Reading dB(µV)	Emission Level dB(µV/m)	Limits dB(µV/m)	Margin (dB)
Horizontal	31.940	18.16	0.70	25.54	27.29	20.61	40.00	19.39
	51.340	8.51	0.90	25.36	30.98	15.03	40.00	24.97
	150.280	12.57	1.67	25.10	31.08	20.22	43.50	23.28
	159.980	12.10	1.74	25.10	30.54	19.28	43.50	24.22
	281.230	13.63	2.41	25.10	28.37	19.31	46.00	26.69
	679.900	22.00	4.09	26.70	28.37	27.76	46.00	18.24
Vertical	33.880	17.47	0.72	25.52	26.93	19.60	40.00	20.40
	126.030	13.20	1.46	25.10	30.44	20.00	43.50	23.50
	151.250	12.54	1.68	25.10	31.19	20.31	43.50	23.19
	243.400	12.63	2.24	25.10	31.14	20.91	46.00	25.09
	439.340	18.15	3.23	26.29	31.11	26.20	46.00	19.80
	653.710	21.59	4.02	26.70	27.12	26.03	46.00	19.97

NOTE 1 – Emission Level = Meter Reading + Antenna Factor + Cable Loss – Preamp Factor

NOTE 2 – All reading are Quasi-Peak values.

NOTE 3 – The worst emission at horizontal polarization was detected at 679.900 MHz with corrected signal level of 27.76 dB(µV/m) (limit is 46.00 dB(µV/m)), when the antenna was 1.00m height and the turn table was at 168°.

NOTE 4 – The worst emission at vertical polarization was detected at 439.34 MHz with corrected signal level of 26.20 dB(µV/m) (limit is 46.00 dB(µV/m)), when the antenna was 1.10 m height and the turn table was at 110°.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

TEST ENGINEER: Rain Liang
(RAIN LIANG)

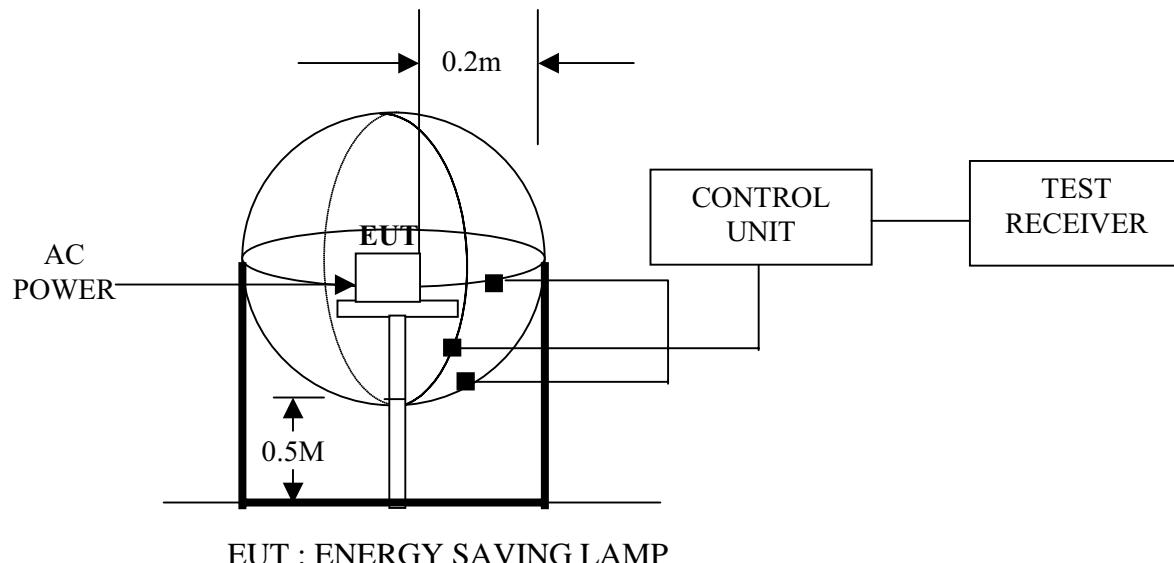
4 RADIATED ELECTROMAGNETIC EMISSION TEST

4.1 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.	Loop Antenna	Laplace	RF300	5001	May 5, 2001	1/2 Year
2.	Test Receiver	Rohde & Schwarz	ESHS10	844077/020	Apr 24, 2001	1 Year

4.2 Block Diagram of Test Setup



4.3 Test Configuration

The configuration of the EUT is same as those used in conducted Emission test.

Refer to Sec. 2.4.

4.4 Operating Condition of EUT

Same as conducted Emission test which is listed in Sec. 2.5, except the test set up replaced by Sec. 4.1.

4.5 Test Procedure

The EUT was placed on a wooden table, which is in the center of the loop antenna. The loop antenna is 0.5 meters above the ground. The sides of the EUT were 0.2 meters away from the loop antenna. Each side had one sensor. The three sensors were through the control unit to connect the Test receiver, which receiving the emission and find out the maximum emission of each side of the loop antenna.

The bandwidth of R&S Test Receiver ESHS10 was set at 200 Hz from 9kHz to 150kHz and 10kHz from 150 kHz to 30 MHz.

The frequency range from 9 kHz to 30 MHz was checked.

The “ON” mode was done on radiated electromagnetic emission test and all the test results are listed in Sec. 4.6.

4.6 Test Result

<PASS>

Refer to the following pages.

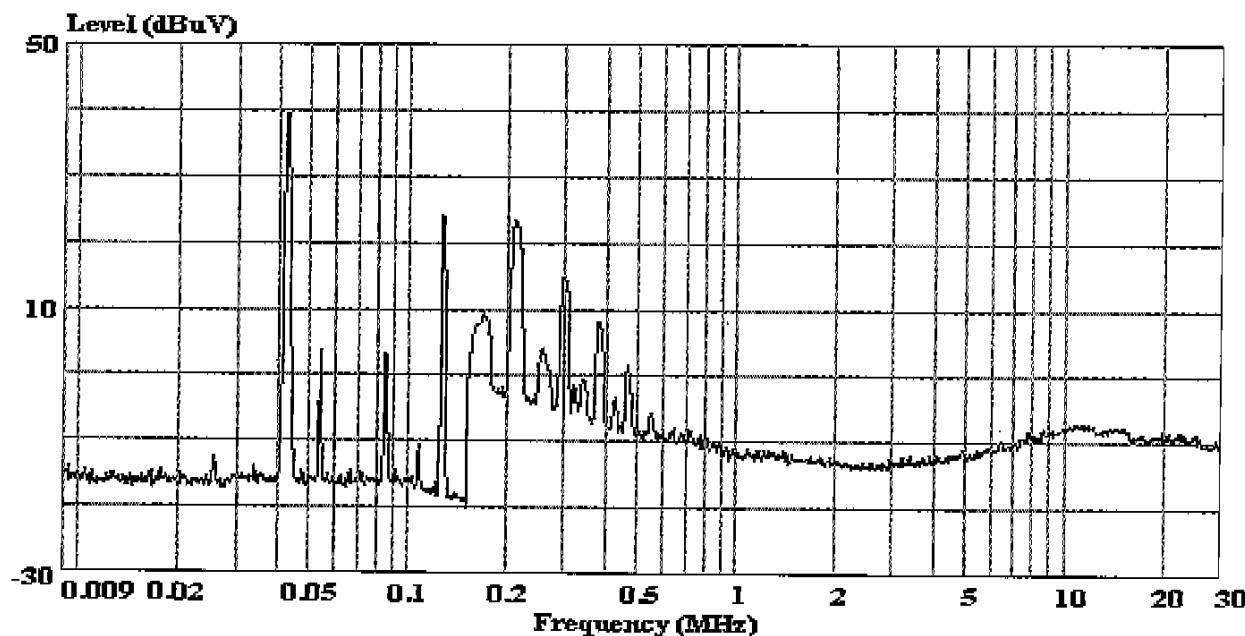
For TME15W:



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel:+86-21-64955500
Fax:+86-21-64955491
audixaci@8848.net

Data#: 124 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:41:52



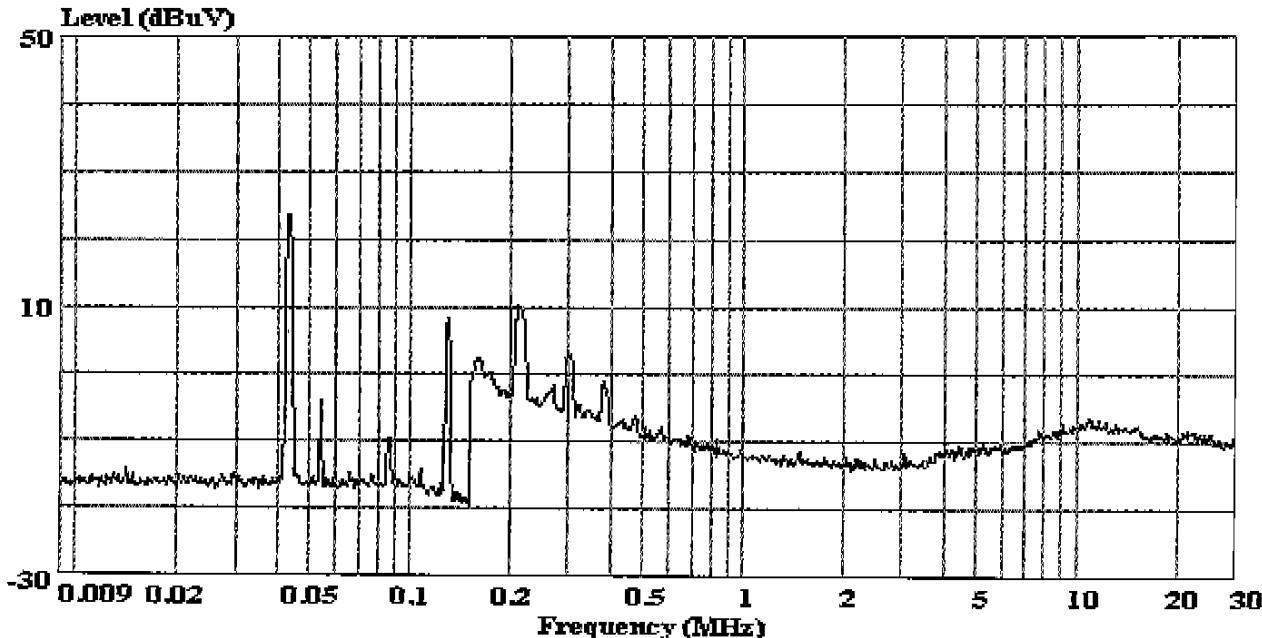
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO.,LTD
EUT : Energy Saving Lamp
M/N : TME 15W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : A
Test Mode : ON
Test Engineer: *Ran*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel: +86-21-64955500
Fax: +86-21-64955491
audixaci@8848.net

Data#: 121 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:37:09



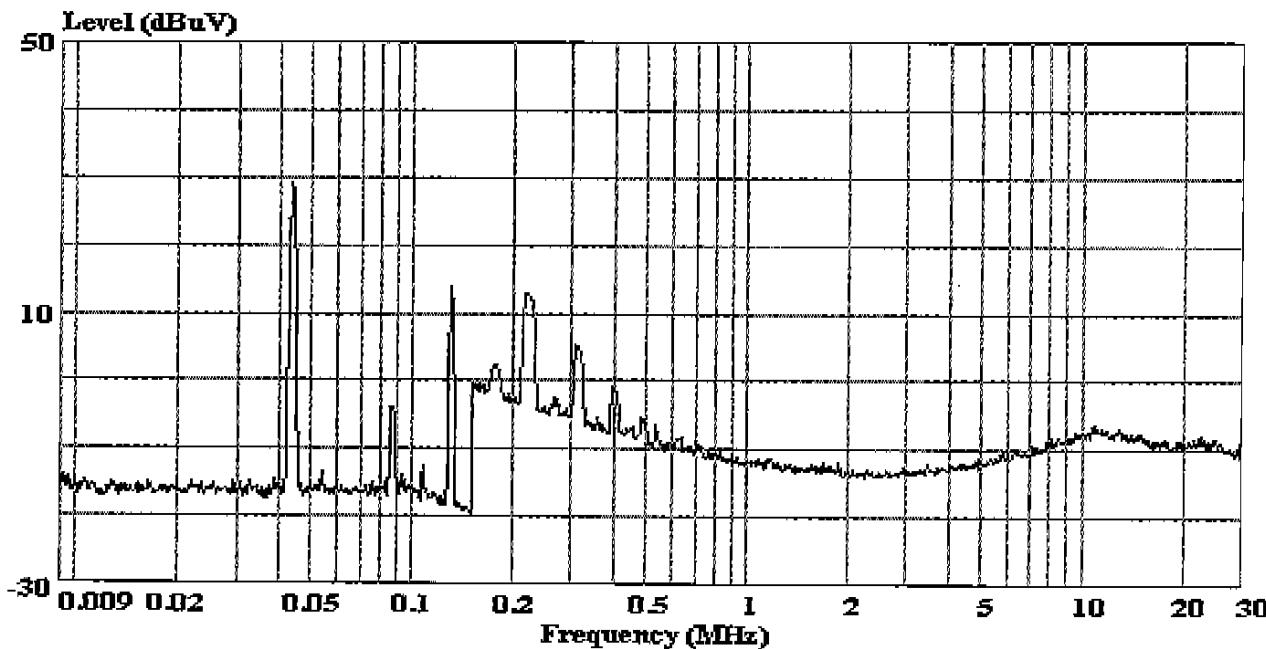
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO., LTD
EUT : Energy Saving Lamp
M/N : TME 15W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : B
Test Mode : ON
Test Engineer: *Ran*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel:+86-21-64955500
Fax:+86-21-64955491
audixaci@8848.net

Data#: 118 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:33:11



Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO.,LTD
EUT : Energy Saving Lamp
M/N : TME 15W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : C
Test Mode : ON
Test Engineer: *Ran*

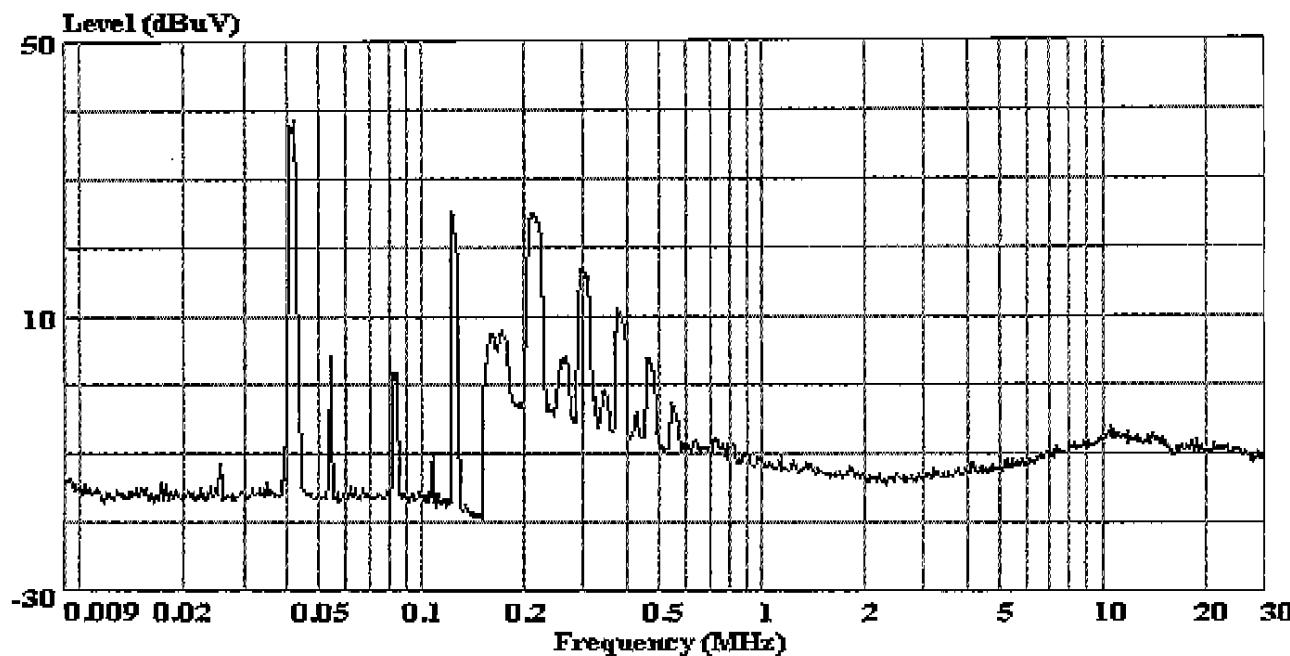
For TME20W



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel:+86-21-64955500
Fax:+86-21-64955491
audixaci@8848.net

Data#: 128 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:49:11



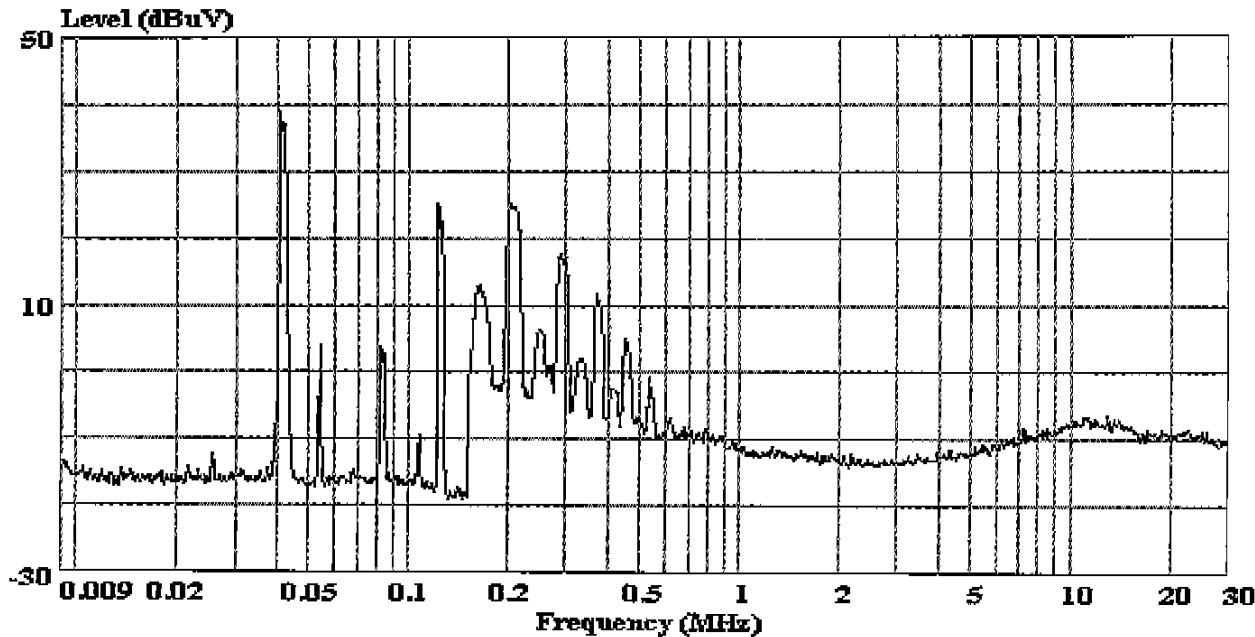
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO.,LTD
EUT : Energy Saving Lamp
M/N : TME 20W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : A
Test Mode : ON
Test Engineer: *Rain*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel:+86-21-64955500
Fax:+86-21-64955491
audixaci@8848.net

Data#: 131 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:55:12



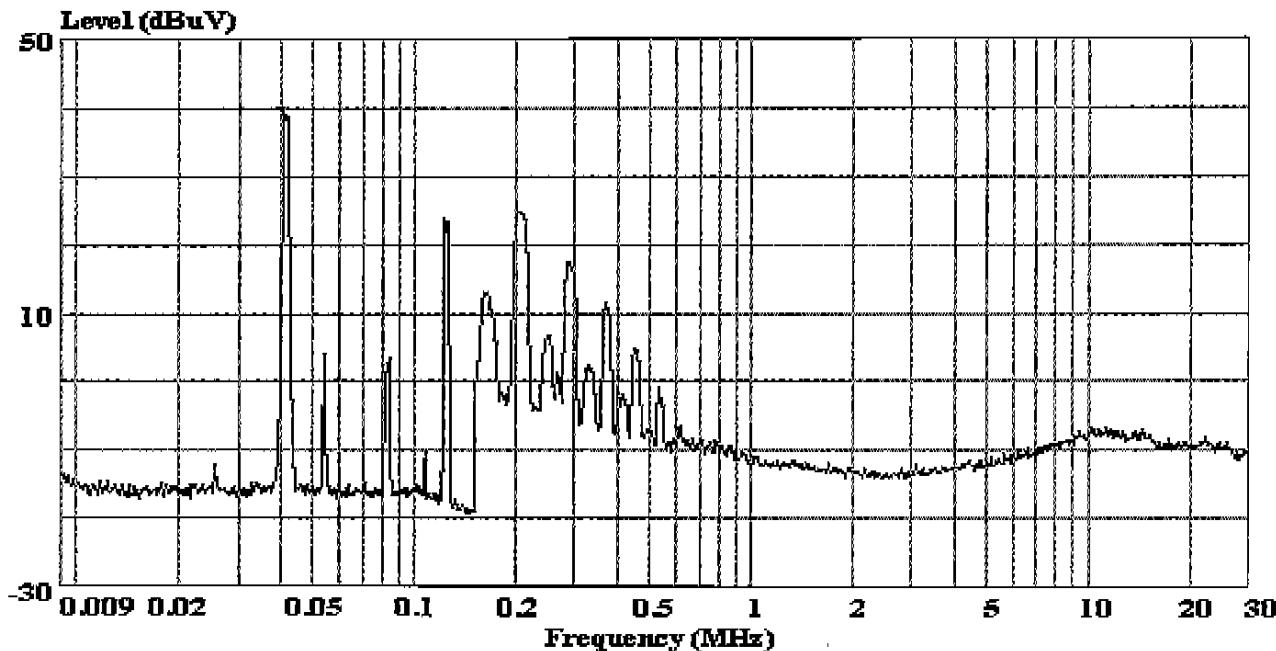
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO., LTD
EUT : Energy Saving Lamp
M/N : TME 20W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : B
Test Mode : ON
Test Engineer: *R-chen*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel: +86-21-64955500
Fax: +86-21-64955491
audixaci@8848.net

Data#: 134 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:57:38



Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO., LTD
EUT : Energy Saving Lamp
M/N : TME 20W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : C
Test Mode : ON
Test Engineer: *R. ...*

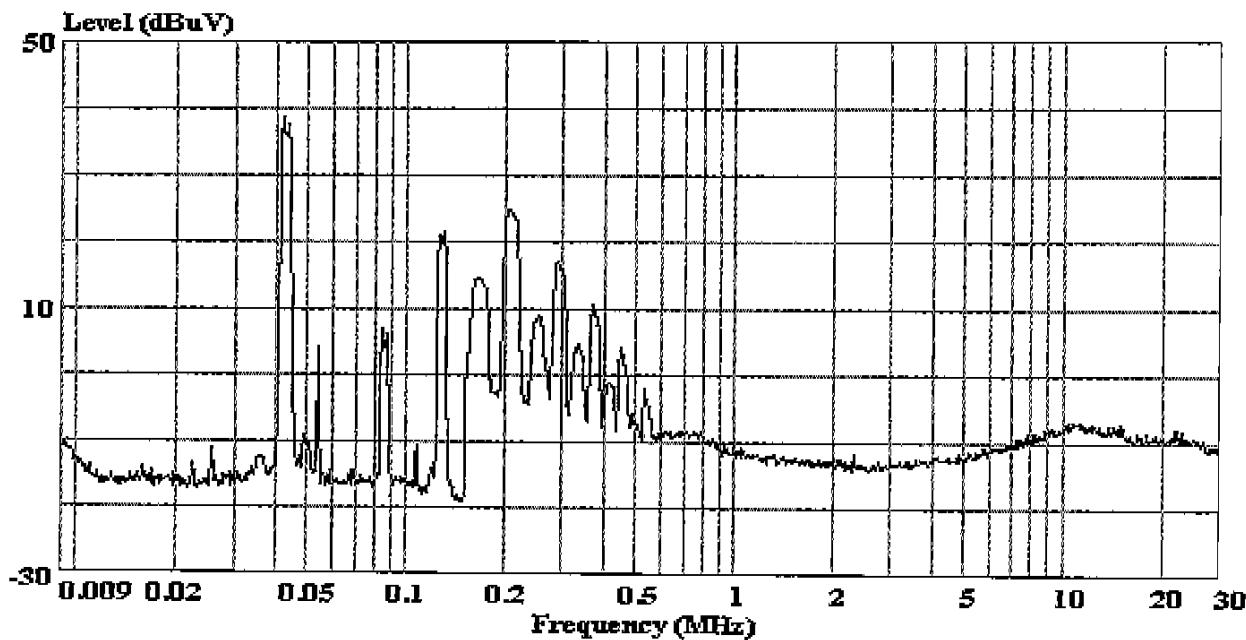
For TME25W



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel: +86-21-64955500
Fax: +86-21-64955491
audixaci@8848.net

Data#: 109 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:12:44



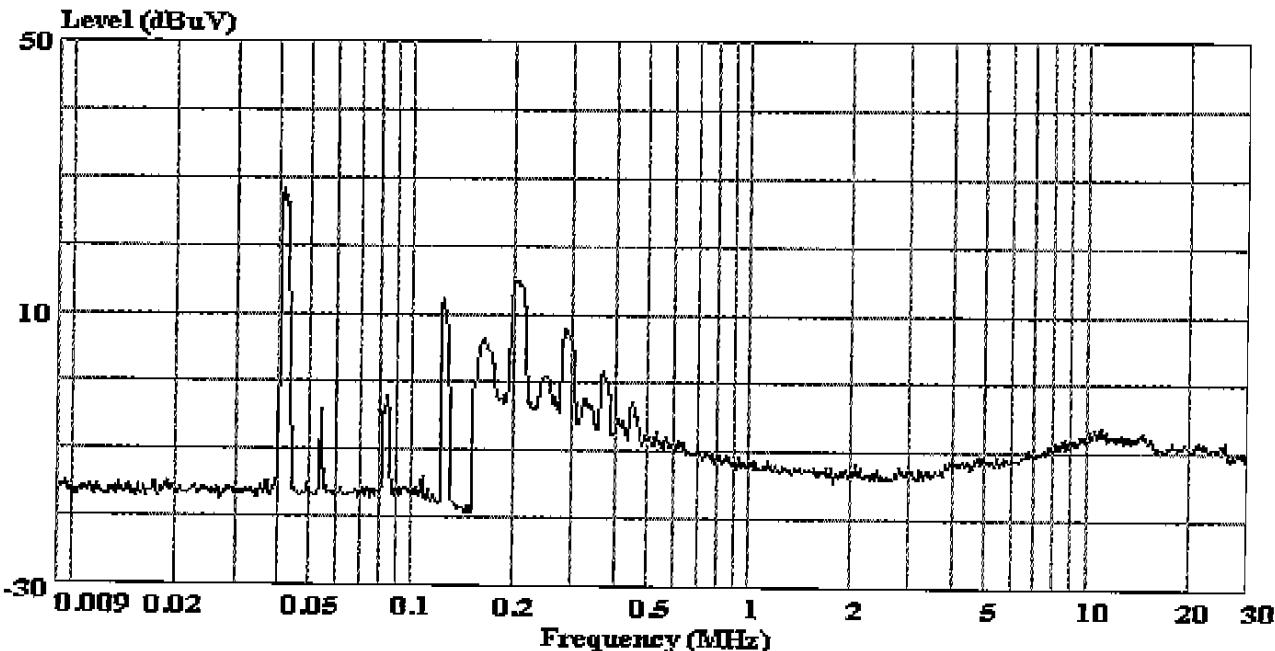
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO., LTD
EUT : Energy Saving Lamp
M/N : TME 25W
Power Supply : 120V/60Hz
Ambient : 20.8°C 53%
Test Line : A
Test Mode : ON
Test Engineer: *Ran*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel: +86-21-64955500
Fax: +86-21-64955491
audixaci@8848.net

Data#: 112 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:21:46



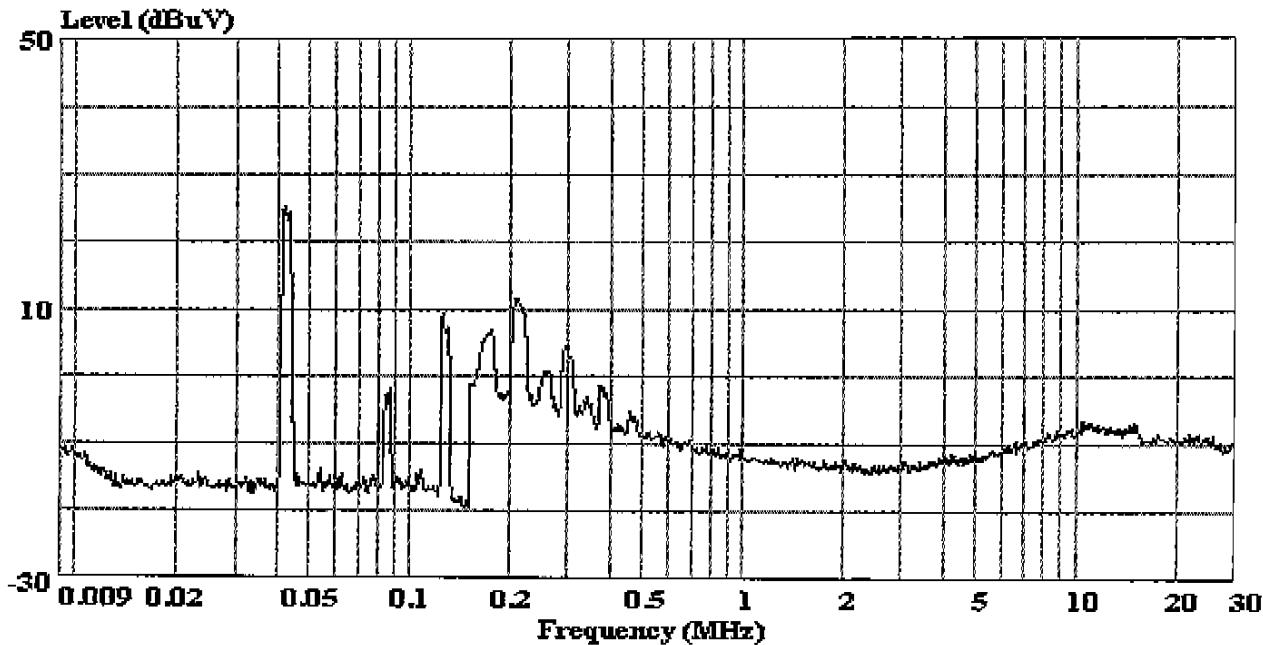
Site : audix-aci
Condition :
Project No. : AQE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO., LTD
EUT : Energy Saving Lamp
M/N : TME 25W
Power Supply : 120V/60Hz
Ambient : 20.8'C 53%
Test Line : B
Test Mode : ON
Test Engineer: *Rex*



3F #34Bldg. No.680 GuiPing Rd.,
CaoHeJing Hi-Tech Park,
Shanghai, China
Tel: +86-21-64955500
Fax: +86-21-64955491
audixaci@8848.net

Data#: 115 File#: D:\EMIVM\TEST\T\TWIN.emi

Date: 2001-07-24 Time: 14:27:54



Site : audix-aci
Condition :
Project No. : AOE-000056
Applicant : TWIN GROWTH ELECTRONICS (SUZHOU) CO.,LTD
EUT : Energy Saving Lamp
M/N : TME 25W
Power Supply : 120V/60Hz
Ambient : 20.8°C 53%
Test Line : C
Test Mode : ON
Test Engineer: *R. M.*