

# **EXHIBIT 5**

## **Test Report**

## APPLICATION FOR CERTIFICATION

On Behalf of

**Zhongshan ZEDA Lighting Co., Ltd.**

**Energy Saving Lamp**

Model Number : ZD06a-7/9/11/13W;  
ZD02a-7/9/11/13W;  
ZD17a-5/7/9/11/13/15W;  
ZD16a-5/7/9/11/13/15W;  
ZD04a-15/18/20/23/25W;  
ZD04Aa-15/18/20/23/25W;  
ZD07a-15/18/20/23/25W;  
ZD09S4a-3/5/7W;  
ZDJGa-11/15/19/23W;  
ZDFGa-11/13/23W。

Prepared for : Zhongshan ZEDA Lighting Co., Ltd.  
GuangZhu Road, DaLin Village, Torch Hi-Tech  
Development Zone, ZhongShan, GuangDong,  
China

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Report No. : SUTF030502

Date of Test : May 5 - May 15, 2003

Date of Report : May 15, 2002

**TABLE OF CONTENTS**

Description

Page

Test Report Declaration

- 1. GENERAL INFORMATION ..... 5**
  - 1.1. Description of Device (ETU)..... 5
  - 1.2. Test Facility ..... 34
  - 1.3. Test Uncertainty ..... 34
- 2. POWER LINE CONDUCTED EMISSION TEST ..... 7**
  - 2.1. Test Equipment ..... 35
  - 2.2. Block Diagram of Test Setup..... 35
  - 2.3. Power Line Conducted Emission Test Limits ..... 35
  - 2.4. Configuration of ETU on Test..... 35
  - 2.5. Operating Condition of ETU ..... 36
  - 2.6. Test Procedure ..... 36
  - 2.7. Power Line Conducted Emission Test Results..... 8
- 3. MODIFICATION TO TEST SPECIFICATIONS ..... 37**
- 4. PHOTOGRAPH..... 32**
  - 4.1. Photo of Power Line Conducted Emission Test ..... **Error! Bookmark not defined.**

**Appendix I: Power Line Conduction Emission Test Data**



# 1. GENERAL INFORMATION

## 1.1 Description of Device (EUT)

Description : Energy Saving Lamp

Model Number : ZD06a-7/9/11/13W;  
ZD02a-7/9/11/13W;  
ZD17a-5/7/9/11/13/15W;  
ZD16a-5/7/9/11/13/15W;  
ZD04a-15/18/20/23/25W;  
ZD04Aa-15/18/20/23/25W;  
ZD07a-15/18/20/23/25W;  
ZD09S4a-3/5/7W;  
ZDJGa-11/15/19/23W;  
ZDFGa-11/13/23W.

Applicant : Zhongshan ZEDA Lighting Co., Ltd.  
GuangZhu Road, DaLin Village, Torch Hi-Tech  
Development Zone, ZhongShan, GuangDong, China

Manufacturer : Zhongshan ZEDA Lighting Co., Ltd.  
GuangZhu Road, DaLin Village, Torch Hi-Tech  
Development Zone, ZhongShan, GuangDong, China

Date of Receipt : May 1, 2003

Date of Test : May 5 - 15, 2003

## 1.2 Test Facility

### Site Description

3m Anechoic Chamber : Certificated by FCC, USA  
Aug. 24, 2000

EMC Laboratory : Certificated by TUV Rheinland (Guangdong)  
Limited, which is member of TUV Rheinland /  
Berlin-Brandenburg Group.  
March 26, 2001

Name of Firm : Shenzhen Emtex Co., Ltd.

Site Location : Bldg 69, Taipinyang Industrial Zone, Majialong,  
Nanshan, Shenzhen, Guangdong, China

## 1.3 Test Uncertainty

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

Radiated Emission Uncertainty =  $\pm 4.26\text{dB}$

## 2. POWER LINE CONDUCTED EMISSION TEST

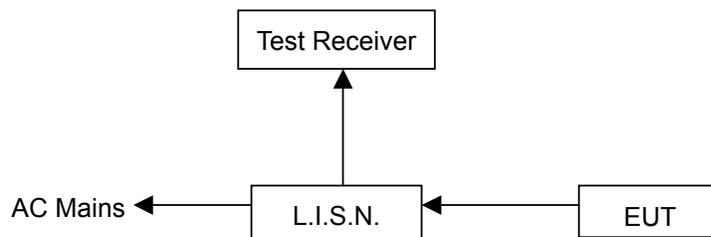
### 2.1 Test Equipment

The following test equipments are used during the power line conducted emission test:

Item	Equipment	Manufacturer	Model No	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	Jun. 04, 02	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	Jun. 04, 02	1 Year
3.	L.I.S.N.#2	Rohde & Schwarz	ESH3-Z6	Jun. 04, 02	1 Year
4.	L.I.S.N.#3	Kyoritsu	KNW-407	Jun. 04, 02	1 Year
5.	Terminator	EMCO	50Ω	Jun. 04, 02	1 Year
6.	Terminator	EMCO	50Ω	Jun. 04, 02	1 Year
7.	RF Cable	FUJIKURA	RG-55/U	Sep. 04, 02	1/2 Year
8.	Passive Probe	Rohde & Schwarz	ESH-Z3	Jun. 04, 02	1 Year
9.	Coaxial Switch	Anritsu	MP59B	Jun. 04, 02	1/2 Year

### 2.2 Block Diagram of Test Setup

Block diagram of connection between the EUT and simulators



(EUT: Energy Saving Lamp)

### 2.3 Power Line Conducted Emission Test Limits

Frequency MHz	Test Limits
	dBμV
0.45 ~ 2.51	48
2.51-3.0	70
3.0-30	48

### 2.4 Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

**2.4.1 Energy Saving Lamp (EUT)**

Model No.	:	ZD06a-7/9/11/13W ZD02a-7/9/11/13W ZD17a-5/7/9/11/13/15W ZD16a-5/7/9/11/13/15W ZD04a-15/18/20/23/25W ZD04Aa-15/18/20/23/25W ZD07a-15/18/20/23/25W ZD09S4a-3/5/7W ZDJGa-11/15/19/23W ZDFGa-11/13/23W
Serial No.	:	F2003051501
Manufacturer	:	Zhongshan ZEDA Lighting Co., Ltd.

**2.5 Operating Condition of EUT**

- 2.5.1 Setup the EUT and simulator as shown as Section 2.2.
- 2.5.2 Turn on the power of all equipment.
- 2.5.3 Let the EUT work in test mode (ON) and test it.

**2.6 Test Procedure**

- 2.6.1 The EUT is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohms coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission levels. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4-2000 on Conducted Emission Test.
- 2.6.2 The bandwidth of test receiver(R & S ESCS30) is set at 10KHz.
- 2.6.3 The frequency range from 450KHz to 30MHz is checked.
- 2.6.4 The test results are reported on Section 2.7, all the scanning waveforms for Conducted Emission Test are attached in Appendix I.

**2.7 Power Line Conducted Emission Test Results****PASS.**

The frequency range from 450KHz to 30 MHz is investigated.  
All emissions not reported below are too low against the prescribed limits.

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD06a-7W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.528	40.125	48.000	0.535	39.870	48.000
0.643	32.730	48.000	0.692	33.520	48.000
<b>0.775</b>	<b>40.980</b>	<b>48.000</b>	<b>0.775</b>	<b>41.330</b>	<b>48.000</b>
1.085	38.760	48.000	0.924	34.090	48.000
1.475	30.750	48.000	1.085	37.450	48.000
3.750	29.580	48.000	1.350	29.870	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD06a-9W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.483	23.340	48.000	0.452	28.750	48.000
0.528	25.470	48.000	0.475	21.250	48.000
<b>0.995</b>	<b>30.020</b>	<b>48.000</b>	0.565	23.550	48.000
1.504	25.650	48.000	0.591	26.720	48.000
1.530	25.740	48.000	<b>0.990</b>	<b>29.300</b>	<b>48.000</b>
1.625	25.820	48.000	1.145	22.450	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD06a-11W                      Test Engineer: Andy

■ Va    □ Neutral    □ Other			■ Vb    □ Live    □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.453	20.980	48.000	<b>0.450</b>	<b>29.830</b>	<b>48.000</b>
0.670	21.200	48.000	0.550	22.680	48.000
0.975	23.150	48.000	0.975	23.440	48.000
1.080	21.850	48.000	1.350	20.970	48.000
<b>1.380</b>	<b>29.470</b>	<b>48.000</b>	1.430	20.190	48.000
1.470	27.550	48.000	1.540	20.480	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD06a-13W                      Test Engineer: Andy

■ Va    □ Neutral    □ Other			■ Vb    □ Live    □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.845	20.350	48.000	0.468	23.150	48.000
0.875	21.920	48.000	0.482	23.430	48.000
<b>0.920</b>	<b>29.130</b>	<b>48.000</b>	0.597	23.560	48.000
0.973	24.500	48.000	0.895	24.370	48.000
1.520	20.870	48.000	0.945	24.410	48.000
1.570	20.740	48.000	<b>0.975</b>	<b>25.040</b>	<b>48.000</b>

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD02a-7W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
1.015	24.150	48.000	0.452	21.750	48.000
<b>1.035</b>	<b>29.320</b>	<b>48.000</b>	0.524	21.980	48.000
1.147	21.050	48.000	0.550	20.460	48.000
1.504	21.370	48.000	0.623	20.510	48.000
1.590	19.430	48.000	1.015	23.450	48.000
1.780	19.500	48.000	<b>1.060</b>	<b>25.550</b>	<b>48.000</b>

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD02a-9W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.535	20.150	48.000	0.472	21.350	48.000
0.542	20.750	48.000	0.530	21.490	48.000
0.975	20.830	48.000	0.549	20.830	48.000
1.021	20.490	48.000	1.385	21.560	48.000
<b>1.395</b>	<b>21.350</b>	<b>48.000</b>	1.419	21.550	48.000
1.480	20.830	48.000	<b>1.460</b>	<b>23.490</b>	<b>48.000</b>

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD02a-11W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.465	25.030	48.000	1.184	23.750	48.000
0.957	25.400	48.000	1.279	20.550	48.000
1.330	25.870	48.000	<b>1.310</b>	<b>30.150</b>	<b>48.000</b>
1.385	25.942	48.000	1.350	24.020	48.000
<b>1.420</b>	<b>28.750</b>	<b>48.000</b>	1.415	23.840	48.000
1.497	25.350	48.000	1.635	24.390	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD02a-13W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.472	23.050	48.000	0.469	24.970	48.000
0.627	23.150	48.000	0.673	22.060	48.000
<b>0.940</b>	<b>34.830</b>	<b>48.000</b>	0.900	25.330	48.000
0.975	24.390	48.000	<b>0.940</b>	<b>29.640</b>	<b>48.000</b>
1.035	25.050	48.000	0.982	26.380	48.000
1.680	25.140	48.000	1.025	25.050	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-5W Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.458	22.930	48.000	0.450	22.860	48.000
0.739	22.945	48.000	0.934	21.750	48.000
0.982	23.035	48.000	1.019	21.830	48.000
1.125	22.960	48.000	1.083	20.430	48.000
1.385	25.270	48.000	<b>1.140</b>	<b>25.350</b>	<b>48.000</b>
<b>1.417</b>	<b>25.370</b>	<b>48.000</b>	1.230	21.970	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-7W Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.497	25.650	48.000	0.450	25.970	48.000
1.315	23.750	48.000	0.525	25.830	48.000
1.357	24.290	48.000	0.700	25.790	48.000
1.414	25.980	48.000	0.892	24.650	48.000
<b>1.460</b>	<b>30.750</b>	<b>48.000</b>	<b>1.610</b>	<b>26.050</b>	<b>48.000</b>
1.485	28.060	48.000	1.625	24.780	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-9W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	24.250	48.000	0.463	23.750	48.000
1.027	24.430	48.000	0.850	23.430	48.000
1.380	24.470	48.000	<b>1.015</b>	<b>26.860</b>	<b>48.000</b>
1.469	25.050	48.000	1.089	23.540	48.000
<b>1.538</b>	<b>25.750</b>	<b>48.000</b>	1.395	23.750	48.000
1.614	24.890	48.000	1.477	23.620	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-11W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.450</b>	<b>26.370</b>	<b>48.000</b>	<b>0.450</b>	<b>28.650</b>	<b>48.000</b>
0.525	23.450	48.000	0.695	25.470	48.000
1.000	22.780	48.000	0.642	24.980	48.000
1.462	22.610	48.000	0.738	21.550	48.000
1.529	23.070	48.000	0.800	22.330	48.000
1.589	22.590	48.000	1.015	20.760	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-13W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.465	23.506	48.000	0.471	26.320	48.000
0.902	23.650	48.000	0.692	26.580	48.000
0.938	23.580	48.000	0.775	27.050	48.000
<b>0.975</b>	<b>27.090</b>	<b>48.000</b>	<b>0.960</b>	<b>30.860</b>	<b>48.000</b>
1.365	24.450	48.000	1.000	23.540	48.000
1.455	29.980	48.000	1.087	26.700	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD17a-15W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.885	27.390	48.000	0.735	26.250	48.000
0.992	26.520	48.000	<b>0.900</b>	<b>32.390</b>	<b>48.000</b>
1.381	27.415	48.000	0.954	27.250	48.000
<b>1.405</b>	<b>28.650</b>	<b>48.000</b>	1.000	26.730	48.000
1.410	27.540	48.000	1.325	26.580	48.000
1.432	28.060	48.000	1.425	27.560	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD16a-5W                      Test Engineer: Andy

■ Va    □ Neutral    □ Other			■ Vb    □ Live    □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	23.370	48.000	0.462	24.350	48.000
0.624	20.710	48.000	0.525	24.550	48.000
0.938	24.125	48.000	0.625	22.410	48.000
0.992	25.270	48.000	<b>1.073</b>	<b>25.330</b>	<b>48.000</b>
1.085	24.870	48.000	1.225	24.760	48.000
<b>1.525</b>	<b>29.750</b>	<b>48.000</b>	1.382	25.080	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD16a-7W                      Test Engineer: Andy

■ Va    □ Neutral    □ Other			■ Vb    □ Live    □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	23.750	48.000	0.458	25.540	48.000
0.632	22.030	48.000	0.585	22.170	48.000
0.992	28.340	48.000	0.970	26.030	48.000
1.073	26.960	48.000	<b>1.056</b>	<b>30.250</b>	<b>48.000</b>
1.153	24.530	48.000	1.138	25.820	48.000
<b>1.525</b>	<b>31.590</b>	<b>48.000</b>	1.257	23.740	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD16a-9W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.468	21.750	48.000	0.658	23.450	48.000
0.515	22.080	48.000	0.697	22.370	48.000
0.638	21.890	48.000	0.815	22.840	48.000
0.984	25.250	48.000	0.937	24.060	48.000
<b>1.005</b>	<b>28.340</b>	<b>48.000</b>	<b>0.970</b>	<b>28.022</b>	<b>48.000</b>
1.045	22.150	48.000	1.075	25.270	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD16a-11W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	26.230	48.000	<b>0.458</b>	<b>27.550</b>	<b>48.000</b>
0.487	26.750	48.000	0.512	25.905	48.000
1.414	27.040	48.000	0.995	24.320	48.000
1.435	27.560	48.000	1.305	26.210	48.000
<b>1.515</b>	<b>30.180</b>	<b>48.000</b>	1.402	25.970	48.000
1.528	29.350	48.000	1.615	26.470	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD16a-13W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	25.750	48.000	<b>0.450</b>	<b>28.030</b>	<b>48.000</b>
0.492	25.840	48.000	0.503	26.290	48.000
0.525	26.150	48.000	0.558	26.040	48.000
0.947	26.430	48.000	0.705	24.440	48.000
<b>1.495</b>	<b>27.380</b>	<b>48.000</b>	0.825	22.570	48.000
1.529	25.470	48.000	1.040	22.890	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD16a-15W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.492	29.270	48.000	<b>0.450</b>	<b>32.500</b>	<b>48.000</b>
0.778	27.350	48.000	0.525	29.730	48.000
0.895	30.680	48.000	0.758	28.840	48.000
0.948	29.590	48.000	0.802	28.900	48.000
<b>1.430</b>	<b>33.140</b>	<b>48.000</b>	1.000	28.870	48.000
1.516	30.750	48.000	1.146	29.920	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD04Aa-15W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.465	23.450	48.000	0.455	27.340	48.000
0.500	22.970	48.000	0.473	24.520	48.000
0.564	23.870	48.000	0.497	22.750	48.000
0.715	24.040	48.000	1.150	22.880	48.000
1.214	26.350	48.000	1.228	23.150	48.000
<b>1.350</b>	<b>28.370</b>	<b>48.000</b>	<b>1.345</b>	<b>28.370</b>	<b>48.000</b>

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD04Aa-18W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	25.370	48.000	0.500	26.350	48.000
0.437	25.850	48.000	0.575	25.790	48.000
0.852	24.560	48.000	<b>0.680</b>	<b>27.480</b>	<b>48.000</b>
<b>0.880</b>	<b>27.340</b>	<b>48.000</b>	0.721	24.650	48.000
1.065	25.790	48.000	0.763	24.870	48.000
1.258	24.890	48.000	0.807	25.250	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD04Aa-20W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.462	22.250	48.000	0.525	26.870	48.000
0.521	22.740	48.000	<b>0.545</b>	<b>29.650</b>	<b>48.000</b>
0.567	25.420	48.000	0.642	25.820	48.000
0.635	20.650	48.000	0.800	25.450	48.000
0.875	24.820	48.000	1.070	25.290	48.000
<b>1.080</b>	<b>25.850</b>	<b>48.000</b>	1.350	26.320	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD04Aa-23W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.935	29.360	48.000	<b>0.480</b>	<b>33.650</b>	<b>48.000</b>
<b>0.990</b>	<b>32.870</b>	<b>48.000</b>	0.595	31.170	48.000
1.224	30.480	48.000	0.750	29.430	48.000
1.337	30.480	48.000	1.105	30.520	48.000
1.480	31.690	48.000	1.336	30.670	48.000
1.520	30.480	48.000	1.487	28.890	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD04Aa-25W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.503	30.530	48.000	0.487	28.590	48.000
0.695	30.270	48.000	0.500	30.670	48.000
0.816	30.790	48.000	0.750	29.140	48.000
<b>0.875</b>	<b>34.750</b>	<b>48.000</b>	0.931	30.060	48.000
1.000	31.920	48.000	<b>0.980</b>	<b>31.780</b>	<b>48.000</b>
1.195	32.240	48.000	1.175	28.550	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD04a-15W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.465	21.470	48.000	<b>0.455</b>	<b>28.580</b>	<b>48.000</b>
0.500	21.250	48.000	0.570	23.290	48.000
0.562	22.530	48.000	0.498	22.470	48.000
0.727	22.820	48.000	1.184	20.350	48.000
1.285	26.340	48.000	1.229	22.250	48.000
<b>1.365</b>	<b>28.870</b>	<b>48.000</b>	1.313	27.230	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD04a-18W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	25.430	48.000	<b>0.500</b>	<b>28.350</b>	<b>48.000</b>
0.468	25.870	48.000	0.583	26.750	48.000
0.475	25.060	48.000	0.685	27.280	48.000
0.875	25.530	48.000	0.725	25.210	48.000
1.025	25.790	48.000	0.766	25.590	48.000
<b>1.275</b>	<b>26.350</b>	<b>48.000</b>	0.800	26.340	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD04a-20W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.462	22.370	48.000	0.465	23.750	48.000
0.516	23.750	48.000	0.504	24.980	48.000
<b>0.560</b>	<b>26.290</b>	<b>48.000</b>	<b>0.549</b>	<b>28.350</b>	<b>48.000</b>
0.642	20.550	48.000	0.647	25.090	48.000
0.889	23.580	48.000	0.800	25.450	48.000
1.089	23.830	48.000	1.345	27.640	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD04a-23W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.489	28.750	48.000	0.482	31.350	48.000
0.632	29.070	48.000	0.585	31.890	48.000
0.938	30.280	48.000	<b>0.742</b>	<b>39.520</b>	<b>48.000</b>
0.998	30.430	48.000	1.105	30.640	48.000
1.280	30.590	48.000	1.217	29.870	48.000
<b>1.340</b>	<b>31.750</b>	<b>48.000</b>	1.315	30.720	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD04a-25W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.512	30.680	48.000	0.485	28.740	48.000
0.697	30.270	48.000	0.598	31.290	48.000
0.816	30.490	48.000	0.757	28.890	48.000
<b>0.875</b>	<b>34.180</b>	<b>48.000</b>	0.800	28.630	48.000
1.000	31.540	48.000	0.931	29.250	48.000
1.185	31.850	48.000	<b>0.980</b>	<b>32.580</b>	<b>48.000</b>

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD07a-15W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.455</b>	<b>30.120</b>	<b>48.000</b>	<b>0.525</b>	<b>30.210</b>	<b>48.000</b>
0.548	27.940	48.000	0.598	27.490	48.000
0.652	25.370	48.000	0.695	24.750	48.000
0.698	27.450	48.000	0.825	24.630	48.000
0.881	27.870	48.000	0.932	25.870	48.000
1.257	23.650	48.000	0.997	25.950	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZD07a-18W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.532	26.870	48.000	0.582	30.270	48.000
0.608	29.030	48.000	0.678	30.540	48.000
0.753	26.770	48.000	<b>0.725</b>	<b>32.350</b>	<b>48.000</b>
0.865	30.020	48.000	0.852	29.870	48.000
<b>0.885</b>	<b>30.850</b>	<b>48.000</b>	0.927	30.680	48.000
1.055	29.850	48.000	0.963	29.910	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD07a-20W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.470</b>	<b>28.850</b>	<b>48.000</b>	<b>0.460</b>	<b>29.710</b>	<b>48.000</b>
0.518	24.320	48.000	0.534	26.570	48.000
0.584	24.070	48.000	0.717	25.890	48.000
0.875	24.850	48.000	0.800	26.240	48.000
0.925	26.340	48.000	0.851	26.860	48.000
1.120	25.150	48.000	1.125	25.790	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD07a-23W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.571	30.780	48.000	0.583	31.090	48.000
0.782	31.250	48.000	0.725	30.160	48.000
0.824	31.550	48.000	0.848	32.750	48.000
0.917	32.050	48.000	1.217	32.540	48.000
1.185	32.560	48.000	<b>1.295</b>	<b>33.690</b>	<b>48.000</b>
<b>1.284</b>	<b>33.570</b>	<b>48.000</b>	1.328	32.330	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD07a-25W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.450	30.250	48.000	0.450	31.470	48.000
0.817	32.540	48.000	0.879	30.890	48.000
0.858	31.790	48.000	0.950	31.750	48.000
0.945	30.780	48.000	<b>0.998</b>	<b>33.640</b>	<b>48.000</b>
0.998	33.160	48.000	1.052	32.080	48.000
<b>1.058</b>	<b>33.240</b>	<b>48.000</b>	1.130	32.860	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZD09S4a-3W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.461	20.780	48.000	0.460	21.270	48.000
0.587	19.560	48.000	0.475	20.980	48.000
0.652	20.450	48.000	<b>0.515</b>	<b>21.760</b>	<b>48.000</b>
0.883	20.550	48.000	0.667	20.250	48.000
<b>0.947</b>	<b>23.770</b>	<b>48.000</b>	0.950	20.310	48.000
1.002	21.940	48.000	1.067	21.650	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD09S4a-5W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.460	24.620	48.000	0.450	24.380	48.000
0.522	24.850	48.000	0.563	23.790	48.000
0.625	24.879	48.000	0.932	24.570	48.000
0.726	25.240	48.000	1.020	25.150	48.000
<b>0.973</b>	<b>27.150</b>	<b>48.000</b>	<b>1.140</b>	<b>26.830</b>	<b>48.000</b>
1.385	26.450	48.000	1.215	25.370	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZD09S4a-7W      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.504	24.830	48.000	0.450	24.850	48.000
0.575	23.490	48.000	0.815	23.490	48.000
0.668	25.060	48.000	0.933	24.670	48.000
0.774	25.250	48.000	1.015	25.280	48.000
0.993	26.420	48.000	<b>1.140</b>	<b>26.850</b>	<b>48.000</b>
<b>1.390</b>	<b>27.570</b>	<b>48.000</b>	1.185	25.320	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZDJGa-11W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.505</b>	<b>30.830</b>	<b>48.000</b>	<b>0.483</b>	<b>29.250</b>	<b>48.000</b>
0.645	26.560	48.000	0.585	28.780	48.000
0.927	27.380	48.000	0.626	26.850	48.000
0.998	30.240	48.000	0.905	27.640	48.000
1.530	26.950	48.000	0.981	26.470	48.000
1.605	27.540	48.000	1.350	26.280	48.000

Date of Test: May 12, 2003 Temperature: 22°C  
 EUT: Energy Saving Lamp Humidity: 50%  
 M/N: ZDJGa-15W Test Engineer: Andy

■ Va □ Neutral □ Other			■ Vb □ Live □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.516	25.480	48.000	<b>0.500</b>	<b>29.910</b>	<b>48.000</b>
0.585	26.370	48.000	0.554	26.430	48.000
0.827	25.790	48.000	0.665	26.270	48.000
1.025	27.250	48.000	0.721	25.440	48.000
1.155	27.820	48.000	1.000	25.350	48.000
<b>1.340</b>	<b>29.890</b>	<b>48.000</b>	1.292	27.920	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZDJGa-19W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.465	28.250	48.000	<b>0.455</b>	<b>27.540</b>	<b>48.000</b>
0.742	25.180	48.000	0.542	25.560	48.000
0.934	27.530	48.000	0.725	24.890	48.000
1.055	26.390	48.000	0.883	25.020	48.000
1.182	26.540	48.000	0.956	26.480	48.000
<b>1.325</b>	<b>30.750</b>	<b>48.000</b>	1.252	26.250	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZDJGa-23W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.460</b>	<b>28.780</b>	<b>48.000</b>	0.482	29.240	48.000
0.572	27.430	48.000	0.535	26.750	48.000
0.695	27.250	48.000	0.667	26.850	48.000
0.787	27.090	48.000	0.783	27.320	48.000
1.085	25.510	48.000	1.204	30.870	48.000
1.189	26.850	48.000	<b>1.335</b>	<b>32.560</b>	<b>48.000</b>

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZDFGa-11W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
0.505	29.970	48.000	<b>0.485</b>	<b>30.270</b>	<b>48.000</b>
0.637	28.580	48.000	0.585	28.450	48.000
0.921	29.040	48.000	0.617	27.550	48.000
<b>1.000</b>	<b>30.270</b>	<b>48.000</b>	0.729	27.230	48.000
1.483	28.560	48.000	0.900	27.440	48.000
1.515	30.150	48.000	1.375	26.890	48.000

Date of Test: May 12, 2003                      Temperature: 22°C  
 EUT: Energy Saving Lamp                      Humidity: 50%  
 M/N: ZDFGa-13W                      Test Engineer: Andy

■ Va   □ Neutral   □ Other			■ Vb   □ Live   □ Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.460</b>	<b>30.820</b>	<b>48.000</b>	0.450	31.430	48.000
0.565	29.140	48.000	<b>0.470</b>	<b>33.250</b>	<b>48.000</b>
0.697	26.350	48.000	0.575	29.470	48.000
0.955	28.670	48.000	1.014	29.210	48.000
1.384	26.790	48.000	1.187	28.950	48.000
1.403	26.150	48.000	1.253	26.580	48.000

Date of Test: May 12, 2003      Temperature: 22°C  
 EUT: Energy Saving Lamp      Humidity: 50%  
 M/N: ZDFGa-23W      Test Engineer: Andy

<input checked="" type="checkbox"/> Va <input type="checkbox"/> Neutral <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Vb <input type="checkbox"/> Live <input type="checkbox"/> Other		
Frequency (MHz)	QP (dBuV)	Limit	Frequency (MHz)	QP (dBuV)	Limit
<b>0.460</b>	<b>29.250</b>	<b>48.000</b>	0.485	29.750	48.000
0.564	27.830	48.000	0.535	27.530	48.000
0.621	26.570	48.000	0.655	27.720	48.000
0.689	28.430	48.000	0.782	28.840	48.000
0.781	27.520	48.000	1.287	30.330	48.000
1.185	26.770	48.000	<b>1.335</b>	<b>32.690</b>	<b>48.000</b>

### **3. MODIFICATION TO TEST SPECIFICATIONS**

[ NONE ]