



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

Test Report

Product Name: LED T8 Tube

Model No.: SL-A-2012P-011
SL-X-2060P-011, SL-X-1012-031, SL-X-1060-031,
ST-X-1012-031, ST-1060-031, SL-X-2060P-011,
ST-X-2012-011, ST-X-2012P-011, ST-X-2060,
ST-X-2060P, ST-X-2012P-XXX, SL-X-2012-XXX
("X" stand for "0-9" or "A-Z")

FCC ID: XPJSL-A-2012P-011

Applicant:

Shenzhen Sunlight Co., Ltd
6th Floor, B Bldg. Yijiayang Industrial Park, Huaming Road, Dalang
Street, Bao'An District, Shenzhen City, Guangdong Province, China.
Post Code: 518059

Date Received: 09/01/2009

Date Tested: 08/30-31/2009



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

TABLE OF CONTENTS

APPLICANT: Shenzhen Sunlight Co., Ltd

FCC ID: XPJSL-A-2012P-011

TEST REPORT CONTAINING:

PAGE 1.....TEST EQUIPMENT LIST
PAGE 3-5.....POWER LINE CONDUCTED INTERFERENC
PAGE 6.....RADIATION INTERFERENCE

EXHIBIT INCLUDED:

PAGE 1.....BLOCK DIAGRAM
PAGE 2.....SCHEMATIC
PAGE 3.....PART LIST
PAGE 4.....USERS MANUAL
PAGE 5.....LABEL SAMPLE
PAGE 6.....LABEL LOCATION
PAGE 7.....EXTERNAL PHOTOGRAPHS
PAGE 8.....INTERNAL PHOTOGRAPHS
PAGE 9.....OPERATIONAL DESCRIPTION
PAGE 10.....TEST SET UP PHOTOGRAPHS



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost. com Email: szmost@szmost. com

EMC Equipment List

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due
EMI Test Receiver	R&S	ESCS 30	640101048	2009-06-07	2010-06-07
LISN	R&S	ESH2-Z5	640201028-02	2009-06-07	2010-06-07
EMI Test Receiver	R&S	ESMI	640201028	2009-06-07	2010-06-07
BiConiLog antenna	ETS•Lindgren	3142B	00026414	2009-06-07	2010-06-07
Double ridge horn Antenna	EMCO	3115	640201028-08	2009-06-07	2010-06-07
Chamber	ETS•Lindgren	RFSD-F-100	2693	2009-06-07	2010-06-07
Radio communication tester	R&S	CMU200	106389	2009-06-07	2010-06-07

Remark:

Test Firm Name: CHINA CEPREI (HEADQUARTERS) LABORATORY
Test Firm Address: NO 110 DONGGUANZHUANG ROAD, TIANHE DISTRICT, GUANGZHOU 510610, P.R. CHINA
FCC Registered Test Site Number: 258518



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

TEST PROCEDURE

GENERAL: This report shall NOT be reproduced except in full without the written approval of MOST TECHNOLOGY SERVICE CO., LTD. The EUT was transmitting a test signal during the testing.

POWER LINE CONDUCTED INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a 50 uH LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25 with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3 MHz above 1 GHz. The ambient temperature of the EUT was 25 with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer and cable loss. The antenna correction factors and cable loss are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz)	METER READING	+	ACF	+	CABLE	=	FS				
33	20	dBuV	+	10.36	dB	+	0.9	dB	=	31.26	dBuV/m @ 3m

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to 10th harmonic of the fundamental.

Peak readings were taken in three (3) orthogonal planes and the highest readings were converted to average readings based on the duration of "ON" time.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.4-2003 10.1.7 with the EUT 40 cm from the vertical ground wall.



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

APPLICANT: Shenzhen Sunlight Co., Ltd

FCC ID: XPJSL-A-2012P-011

NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE

RULES PART NUMBER: 18.307, 18.311

REQUIREMENTS:

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency

TEST PROCEDURE: ANSI STANDARD C63.4-2003

THE HIGHEST EMISSION READ FOR LINE 1 WAS 57.15dB_{UV} @ 0.202MHz.

THE HIGHEST EMISSION READ FOR LINE 2 WAS 56.32dB_{UV} @ 0.206MHz.

THE PLOTS ON THE NEXT PAGE REPRESENT THE EMISSIONS READ FOR POWER LINE CONDUCTED FOR THIS DEVICE.

Conducted Emission Measurement

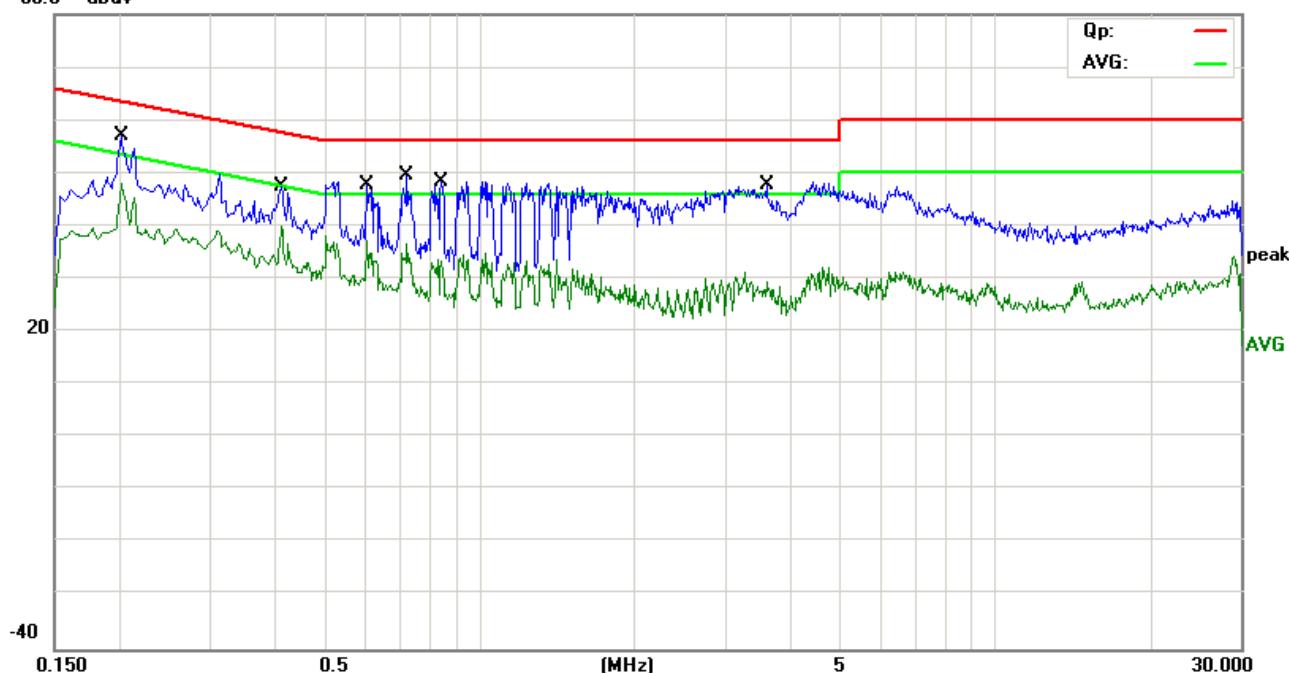
File :Sunlight

Data :#4

Date: 09/08/30/

Time: 8/35/39

80.0 dBuV



Site site #1

Phase: *L1*

Temperature: 26

Limit: FCC Part18 QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: LED T8 Tube

M/N: SL-A-2012P-011

Mode: ON

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.2020	45.16	11.99	57.15	63.53	-6.38	QP	
2 *	0.2020	36.07	11.99	48.06	53.53	-5.47	AVG	
3	0.4140	36.90	10.57	47.47	57.57	-10.10	QP	
4	0.4140	29.31	10.57	39.88	47.57	-7.69	AVG	
5	0.6060	37.73	10.00	47.73	56.00	-8.27	QP	
6	0.6060	27.16	10.00	37.16	46.00	-8.84	AVG	
7	0.7260	39.62	10.00	49.62	56.00	-6.38	QP	
8	0.7260	26.80	10.00	36.80	46.00	-9.20	AVG	
9	0.8340	38.26	10.00	48.26	56.00	-7.74	QP	
10	0.8340	23.72	10.00	33.72	46.00	-12.28	AVG	
11	3.6100	37.22	10.61	47.83	56.00	-8.17	QP	
12	3.6100	18.78	10.61	29.39	46.00	-16.61	AVG	

*:Maximum data x:Over limit !:over margin

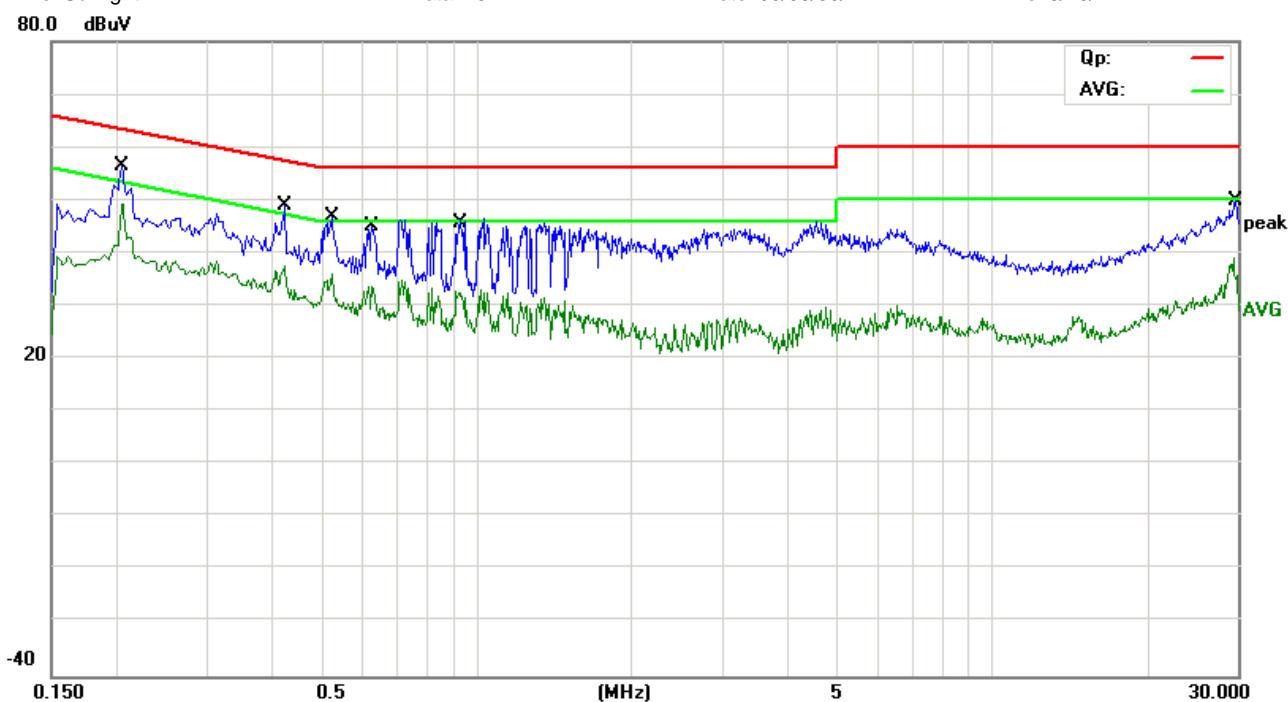
Conducted Emission Measurement

File :Sunlight

Data :#5

Date: 09/08/30/

Time: 8/40/44



Site site #1

Phase: L1

Temperature: 26

Limit: FCC Part18 QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: LED T8 Tube

M/N: SL-A-2012P-011

Mode: ON

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
			MHz	dBuV	dB	dBuV	dB		
1		0.2060	44.36	11.96	56.32	63.37	-7.05	QP	
2	*	0.2060	37.38	11.96	49.34	53.37	-4.03	AVG	
3		0.4260	38.47	10.49	48.96	57.33	-8.37	QP	
4		0.4260	27.03	10.49	37.52	47.33	-9.81	AVG	
5		0.5265	35.23	10.00	45.23	56.00	-10.77	QP	
6		0.5265	25.68	10.00	35.68	46.00	-10.32	AVG	
7		0.6180	23.78	10.00	33.78	46.00	-12.22	AVG	
8		0.6180	35.07	10.00	45.07	56.00	-10.93	QP	
9		0.9140	22.78	10.00	32.78	46.00	-13.22	AVG	
10		0.9140	36.11	10.00	46.11	56.00	-9.89	QP	
11		29.7900	35.60	9.00	44.60	60.00	-15.40	QP	
12		29.7900	23.30	9.00	32.30	50.00	-17.70	AVG	

*:Maximum data x:Over limit !:over margin



SHENZHEN MOST ELECTRONICS CO., LTD.
Tel: (86) 755-26825180 Fax: (86) 755-86170310
Http:// www. szmost.com Email: szmost@szmost.com

APPLICANT: Shenzhen Sunlight Co., Ltd

FCC ID: XPJSL-A-2012P-011

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 18.305, 18.311

REQUIREMENTS:

S18.305
0.009-30 MHz 63.5dBuV/m @3M

Test Data:

REMARK: Emissions attenuated more than 20 dB below the permissible value are not reported.

Frequency (MHz)	Emission Level (dBuV/m)			FCC 18 Limit (dBuV/m)
	Avg	QP	Peak	
0.12	--	--	20.1	63.5
0.37	--	--	19.8	63.5
7.10	--	--	20.3	63.5
19.4	--	--	22.7	63.5