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NVLAP Lab code: 200068-0
ISO/IEC 17025:1999, ISO 9002:1994

EMI Test Report

On Model Name: *SELF-BALLASTED LAMP*
Model Number: *SEM-9W / SEM-13W / SCE-20W / SCE-23W / SCE-26W*
Brand Name: *SHENSCO*
FCC ID: T9NSEMSCE01

Prepared for
Shenzhen Shensco Pholighting Tech Co., Ltd

According to FCC Part 18

Industrial,Scientific,And Medical Equipment

Test Report #:	*SHE-0608-5177-FCC*
Prepared by:	*Ivan Wen*
QC Manager:	*Paul Chen*

Test Report Released by: Paul J. Chen — *Paul Chen*; *2006 ,August 8* — *Date*

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List of Attached Files

Exhibit Type	File Description	File Name
731 Form	731 Form	T9NSEMSCE01_731 form.pdf
Test Report	Test Report	T9NSEMSCE01_Test report.pdf
Operational Description	Technical Description	T9NSEMSCE01_operational description.pdf
External Photos	External Photos	T9NSEMSCE01_External Photos.pdf
Internal Photos	Internal Photos	T9NSEMSCE01_Internal Photos.pdf
Block Diagram	Block Diagram	T9NSEMSCE01_Block Diagram.pdf
Schematics	Circuit Diagram	T9NSEMSCE01_Schematics.pdf
ID Label&Location	Label Artwork and Location	T9NSEMSCE01_Label & Location.pdf
User Manual	User Manual	T9NSEMSCE01_User Manual.pdf
Test setup photos	Test setup photos	T9NSEMSCE01_Test Setup Photos.pdf

Test Location

Tests performed at Shenzhen Electronic Products Quality Test Center in a Certified ANSI Semi-Anechoic Chamber and Shielded Room performed testing.

Test Site Location:	*Electronic Testing Building Shahe Road, Xili, Nanshan District Shenzhen 518055, P.R. China.*
Tel:	*86-755-26703698*
Fax:	*86-755-26627238*
Registration Number:	*261032*

Accreditation Bodies

EMC Compliance Management Group is a fully accredited Test Laboratory for ITE, ISM, MIL-STD and Telecommunications Products.

In compliance with the site registration requirements of Section 2.948 of the FCC Rules to perform EMI measurements for the general public. FCC Registration #: 894293.

Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code # 200068-0.

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Opinions and Interpretations

This test report relates to the abovementioned equipment under test (EUT). Without the permission of EMC Compliance Management Group Test Lab this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark on this or similar products. The manufacturer has sole responsibility of continued compliance of the device.

Statement of Measurement Uncertainty

The data and results referenced in the document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

Administrative Data

Test Sample : Self-Ballasted Lamp

Model Numbers : SEM-9W / SEM-13W / SCE-20W / SCE-23W / SCE-26W

Model Tested : SCE-23W

Brand Name : Shensco

FCC ID : T9NSEMSCE01

Date Tested : 2006, March 9th

Applicant : Shenzhen Shensco Pholighting Tech Co., Ltd.

Building L, Jingtie Industry Park, Heao, Henggang, Longgang, Shenzhen, China.

Telephone : 86-755-28626192

Fax : 86-755-28626179

Manufacturer : Shenzhen Shensco Pholighting Tech Co., Ltd.

Building L, Jingtie Industry Park, Heao, Henggang, Longgang, Shenzhen, China.

EUT Description

Shenzhen Shensco Pholighting Tech Co., Ltd.,model tested SCE-23W (referred to as the EUT in this report) is a Self-Ballasted Lamp.

Type of Deriver

The models of SEM-9W, SEM-13W, SCE-20W, SCE-23W are similar products, they have the same function PCB &circuit, except for the power.

The models of SCE-23W, SCE-26W are the same products, they are named differently only for marketing purpose.

Model No.	SEM-9W	SEM-13W	SCE-20W	SCE-23W	SCE-26W
Power	9W	13W	20W	23W	23W

Test Summary

The Electromagnetic Compatibility requirements on model SCE-23W for this test are stated below. All results listed in this report relate exclusively to this above-mentioned model as the Equipment Under Test. This report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.

Emission Tests				
Specifications	***Description***	***Test Results***	***Test Point***	***Remark***
FCC Part 18, FCC MP-5, ANSI C63.4 2003	*Conducted Emission*	*Passed by 4.9dB of QP*	*AC Input Port*	*Attachment 1*
FCC Part 18, FCC MP-5, ANSI C63.4 2003	*Radiated Emission*	*Radiated emissions measurements are not required above 30 MHz for an RF lighting device that operates below 1.705 MHz and there are no limits for radiated emissions below 30 MHz*		

Test Mode Justification

This device complies with Part 18 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference

(2) This device must accept any interference received, including interference that may cause undesired operation.

Equipment Modification

Any modifications installed previous to testing by SHENZHEN SHENSCO PHOLIGHTING TECH CO., LTD will be incorporated in each production model sold or leased in United States.

There were no modifications installed by EMC Compliance Management Group (China) test personnel.

EUT Sample Photos

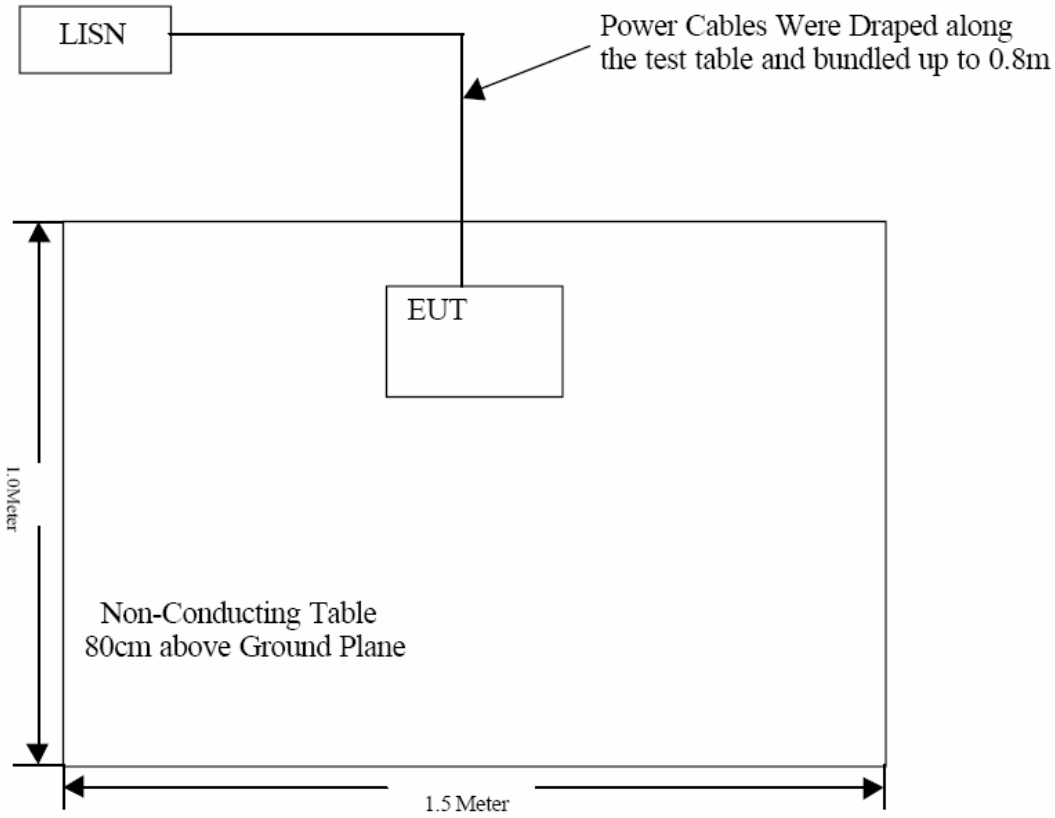
Outside View

Top View

Test System Details

EUT	
Model Number:	SEM-9W / SEM-13W / SCE-20W / SCE-23W / SCE-26W
Brand Name:	Shensco
Description:	Self-Ballasted Lamp
Manufacturer:	Shenzhen Shensco Pholigting Tech Co., Ltd
Support Equipment	
N/A	
Cable Description	
N/A	

Configuration of Tested System

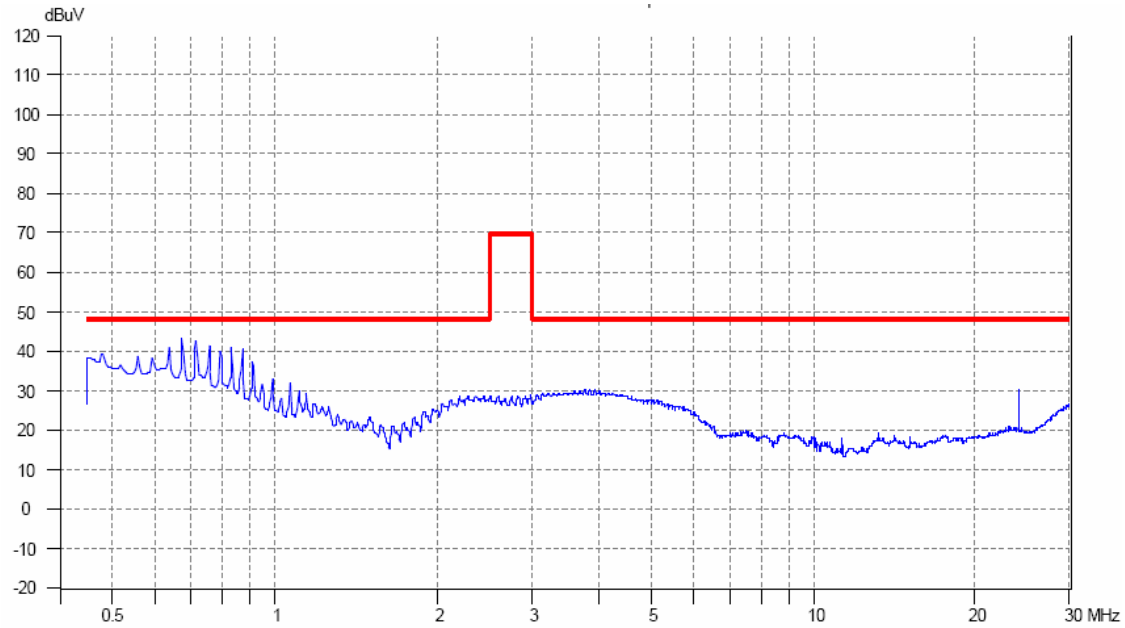


ATTACHMENT 1 - CONDUCTED EMISSION TEST RESULTS

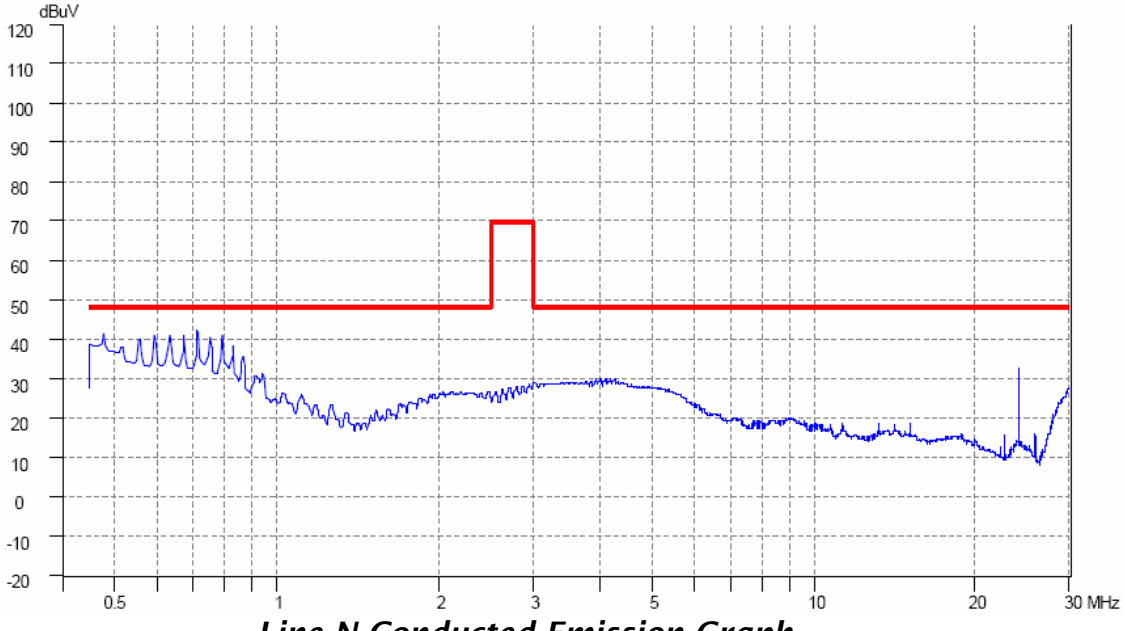
CLIENT:	Shenzhen Shensco Pholighting Tech Co. Ltd	**TEST STANDERD:**	FCC Part 18
MODEL NUMBERS:	SEM-9W / SEM-13W / SCE-20W / SCE-23W / SCE-26W	**PRODUCT:**	Self-Ballasted LAMP
MODEL TESTED:	SCE-23W	**EUT DESIGNATION:**	Home or Office
TEMPERATURE:	21°C	**HUMIDITY:**	56%
ATM PRESSURE:	101kPa	**GROUNDING:**	None
TESTED BY:	Ivan Wen	**DATE OF TEST:**	2006, March 9

TEST REFERENCE:	ANSI C63.4: 2003, FCC MP-5
TEST PROCEDURE:	The EUT was set up according to the guideline of ANSI C63.4: 2003 for conducted emissions. The measurement was using a AMN on each line and an EMI receiver peak scan was made at the frequency measurement range. The six highest significant peaks were then marked, and these signals were then quasi-peaked and averaged. The frequency range investigated was from 450KHz to 30MHz.
TESTED RANGE:	450kHz to 30MHz
TEST VOLTAGE:	120VAC / 60Hz
RESULTS:	The EUT meets the requirements of test reference for Conducted Emissions on line L by 4.9 dB of Quasi-Peak detector. The test results relate only to the equipment under test provided by client.
Changes or Modifications:	There were no modifications installed by EMC Compliance Management Group (China) test personnel.
M. UNCERTAINTY:	Freq. ± 2x10-7 x Center Freq., Amp ± 2.6 dB

The plot(s) of conducted emission test:



Line L Conducted Emission Graph



Line N Conducted Emission Graph

Data of conducted emission test:

Line	Frequency [MHz]	Corrected QP Reading [dBμV]	Delta QP [dB]	Limit [dBμV/m]
L	0.6750	43.10	-4.90	48.00
L	0.7155	42.72	-5.28	48.00
L	0.7580	41.58	-6.42	48.00
N	0.4770	41.20	-8.80	48.00
N	0.7110	42.34	-5.66	48.00
N	0.7920	41.04	-6.96	48.00

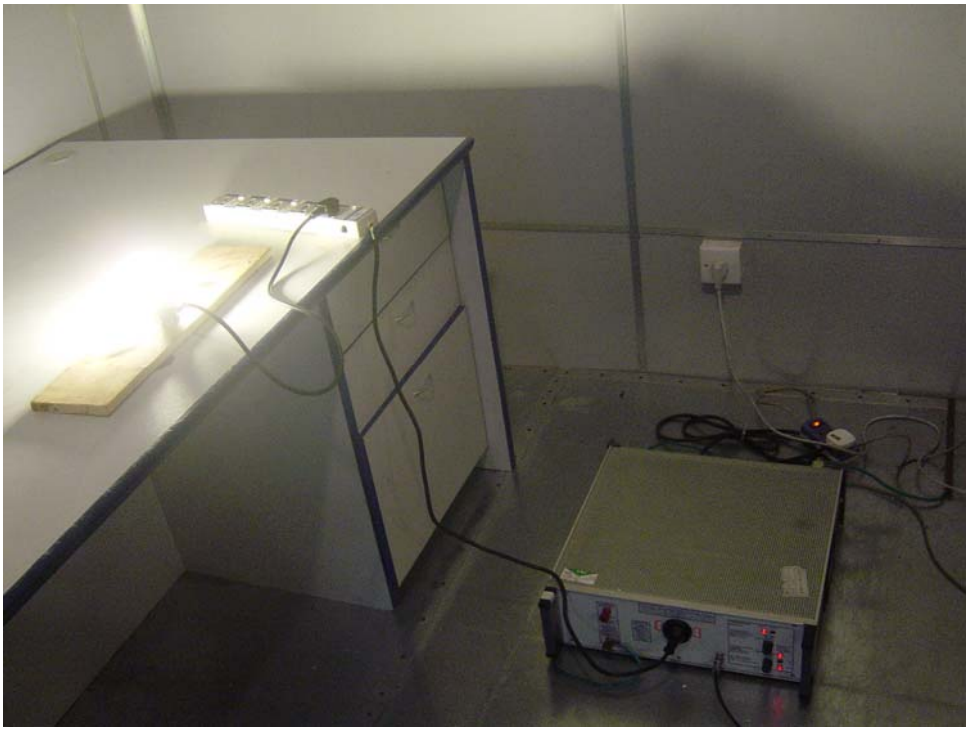
Test Equipment List:

Test Equipment	Manufacturer/ Model	Serial No.	Last Cal.	Cal. Due
EMI Receiver	SCHWARZBECK	FCKL1528	06/10/06	06/09/07
AMN	SCHWARZBECK	NALK8127	06/10/06	06/09/07
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated and traceable to the National Institute of Standards and Technology (NIST).				

SIGNED BY: _____ **REVIEWED BY:** _____

ENGINEER **QC**

Test Set-up Photo of Conducted Emission test:



EUT Model: SCE-23W