

# **F C C - TEST REPORT**

REPORT NO.: 38809/4/600F

# **FCC – Test Report**

Date: 2004-07-19

**No.** 38809/4/600F

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FCC listed testlab  
acc. to Section 2.948 of the FCC - Rules

**Product** : Floor Lamp  
**Product Class** : Part 18 Consumer Device  
**Model** : SI448  
**Applicant** : SUN LUEN ELECTRICAL MFG.  
CO. LTD.

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## LABORATORY - REPORT

**APPLICANT:** SUN LUEN ELECTRICAL MFG. CO. LTD.

**ADDRESS:** 22/F., Wang Fai Ind. Bldg.  
29 Luk Hop St.  
San Po Kong, Kowloon  
HONG KONG

**DATE OF SAMPLE RECEIVED:** 2004-07-02

**DATE OF TESTING:** 2004-07-06

### DESCRIPTION OF SAMPLE:

Product: Floor Lamp  
Product class: Part 18 Consumer Device  
Model number: SI448  
Rating: AC 120V 60Hz

### INVESTIGATIONS REQUESTED:

Measurements to the relevant clauses of F.C.C. Rules and Regulations  
Part 18 – Industrial, Scientific, and Medical Equipment

**RESULTS:** See the attached test sheets

**CONCLUSIONS:** From the measurement data obtained, the tested sample was considered to have COMPLIED with the requirements for the relevant clauses of Federal Communications Commission Rules as specified above.

**Note :** The conducted emissions test (if applicable) has considered the limits in Section 18.307 adopted under FCC 02-157 (ETDocket 98-80). The product may be marketed after July 11, 2005, and is not affected by the 18.123 transition provisions.

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Authorized Signature

**Remark:** Purpose of those tests in this report is to provide the applicant with the necessary test data of their device for the submission to FCC with application for Equipment Authorization under the FCC Equipment Authorization Program. The tests themselves are not Approval Tests

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## Summary of Test Results

### Interference Radiation:

Test result: N.A.  
Test data: See attached data sheet

### Interference Voltage:

Test result: O.K.  
Test data: See attached data sheet

### PHOTOGRAPH OF THE SAMPLE



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## TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial No.	Remark
Test Receiver	Rohde & Schwarz	ESH 3	863497/015	150KHz – 30MHz
Test Receiver	Rohde & Schwarz	ESH 3	892580/006	9KHz – 30MHz
Test Receiver	Rohde & Schwarz	ESVP	860688/022	25MHz – 1,000 MHz
Test Receiver	Rohde & Schwarz	ESVP	863512/012	25MHz – 1,000 MHz
Test Receiver	Rohde & Schwarz	ESHS30	839667/002	9KHz – 30MHz
Test Receiver	Rohde & Schwarz	ESVS30	828525/006	25MHz – 1000MHz
Spectrum Analyzer with Q. Peak	Advantest	R3132	140101852	9KHz – 3GHz
Spectrum Analyzer with Q. Peak	Tektronix	2712	B023006	0.15MHz – 1000MHz
Interface for Spectrum 2712	Tektronix	TD3F14A	--	--
Impulse Limiter	Rohde & Schwarz	ESH-3-Z2	--	--
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127	8127312	2 x 10A, 50Ω, 50μH 9KHz-30MHz
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127	8127309	2 x 10A, 50Ω, 50μH 9KHz-30MHz
Antenna System	Schwarzbeck	BBA 9106 / UHALP 9107	--	30MHz – 1000MHz
Antenna Mast System	Schwarzbeck	AM9104	--	Max. 4 meters height
Loop Antenna	Rohde & Schwarz	HFH2-Z2	871336/48	9KHz-30MHz
Turntable with Controller	Drehtisch	DT312	--	φ120 cm

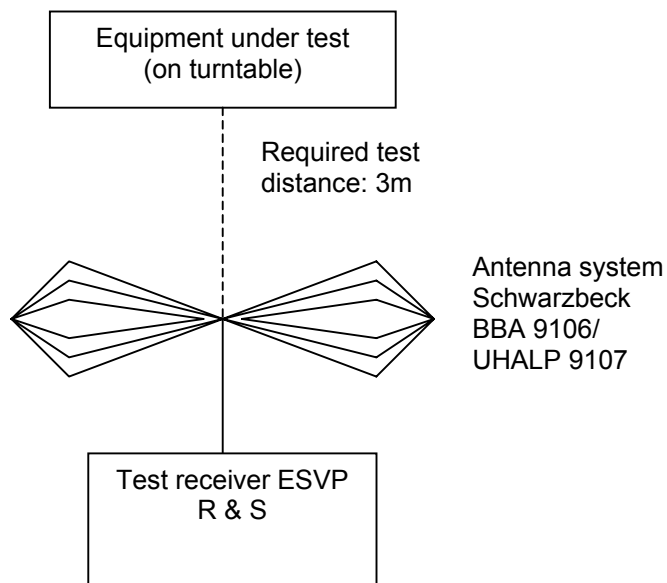
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## Radiated Emission Test Procedure (> 30MHz)



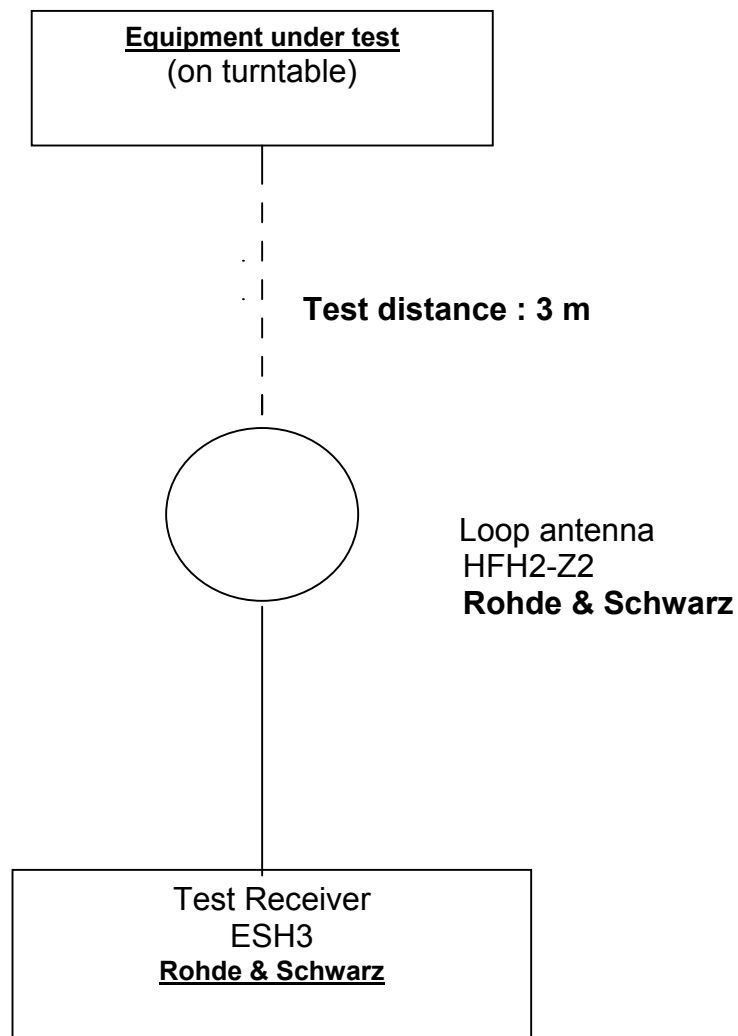
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## Radiated Emission Test Procedure ( 9kHz – 30MHz)





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### **Radiation Measurement Data**

According to Section 18.309, for products with operation frequency below 1.705 MHz, field strength measurements are conducted up to 30MHz. No field strength limits is specified in Section 18.305 for measurements below 30MHz.

In view of the above, no field strength measurement is required.

# ISM 1/2

Interference Voltage Test 450kHz - 30MHz  
Acc: FCC Part 18

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IECC Ref: 38809/4/600F  
Model: SI448  
Applicant: SUN LUEN ELECTRICAL MFG. CO.  
LTD.  
Sample No.: 1  
Set under test: Floor Lamp  
Connected sets: -  
Operating mode: Maximum Intensity  
Measurement: Line

Test Equipment  
Receiver: Rohde & Schwarz ESH 3  
Schwarzbeck NNLA 8119

Frequency (MHz)	Test Result (Quasi-Peak) dB(μV)	Limit (Quasi-Peak) dB(μV)
0.45	36	48
0.62	44.5	48
0.97	42	48
1.32	40.5	48
1.84	36.5	48
3.25	37.5	48
4.13	37	48
9.25	43	48
12.64	43	48
14.13	45	48
15.97	44	48
21.59	33	48
25.54	< 25	48
30	< 25	48

# ISM 1/2

Interference Voltage Test 450kHz - 30MHz  
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IECC Ref: 38809/4/600F  
Model: SI448  
Applicant: SUN LUEN ELECTRICAL MFG. CO.  
LTD.  
Sample No.: 1  
Set under test: Floor Lamp  
Connected sets: -  
Operating mode: Maximum Intensity  
Measurement: Neutral

Test Equipment  
Receiver: Rohde & Schwarz ESH 3  
Schwarzbeck NNLA 8119

Frequency (MHz)	Test Result (Quasi-Peak) dB(μV)	Limit (Quasi-Peak) dB(μV)
0.45	37	48
0.62	41.5	48
0.97	38.5	48
1.32	36.5	48
1.84	33	48
3.77	32	48
5.44	39	48
8.95	42.5	48
12.27	42	48
13.59	45	48
16.61	43	48
23.24	34	48
25.95	< 25	48
30	< 25	48

## Notes for Voltage Measurement

**1. LISN (Line Impedance Stabilization Network) used:**

LISN in accordance with IEEE Standard 213.

**2. Measuring instrumentations:**

Rohde & Schwarz ESH3 Test Receiver ( 9 KHz - 30 MHz ) with a CISPR weighting QP detector, 6 dB bandwidth set at 10 KHz.

**3. Frequency range scanned:**

The frequency range 9 KHz - 30 MHz has been scanned. Readings of the highest emissions relating to the limit were reported as above.

**4. Setup of EUT:**

Connection of equipment and operation conditions are the same as those in the Radiation measurement.

**5. Measuring Procedure:**

In accordance with the relevant sections of FCC Measurement Procedure MP-5, 'Methods of Measurement of Radio Noise Emissions from ISM equipment'.