FCC PART 18

EMI MEASUREMENT AND TEST REPORT

For

LINK ELECTRONIC SHANGHAI CO., LTD.

Zhu Jia Long Village, Gu Cun Town, Bao Shan District, Shanghai, China

Brand Name: LINK

Model No: LKE65

FCC ID: USDK50362

This Report Concerns: ☒ Original Report	**Equipment Type:** Self Ballast Lamp

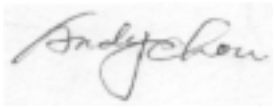
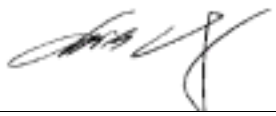
Test Engineer:	Andy Chou 
Report No.:	BTR06110601-1
Report Date:	2006-11-08
Reviewed By:	Chris Zeng 
Prepared By:	Best Test Service (Shenzhen) Co., Ltd. Flat 11E, Xinhaofang Building, 11018, Shennan Road,Nanshan District, Shenzhen, China Tel: +86-755-86182350 Fax: +86-755-86182353

TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The LINK ELECTRONIC SHANGHAI CO., LTD.'s model LKE65or the "EUT" as referred to in this report is Self Ballast Lamp, which measures approximately is 8.0cmL x 8.0cmW x 27.4cmH, rated input voltage: AC 120V/60Hz.

The test data was only good for the test sample. It may have deviation for other test sample.

Objective

The following test report is prepared on behalf of LINK ELECTRONIC SHANGHAI CO., LTD.. in accordance with Part 2, Subpart J, and Part 18, Subparts A, B, and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to demonstrate compliance with FCC Part 18 limit requirements for Industrial, Scientific, and Medical Equipment.

Related Submittal(s)/Grant(s)

No Related Submittals.

Test Methodology

All measurements contained in this report were conducted with MP-5 1986, FCC Method of measurements of radio noise emission from Industrial, Scientific and Medical equipments.

Test Facility

All measurement facilities used to collect the data are located at Huatongwei Building , Keji Rd, 12 S, high-Tech Park, Nanshan District, Shenzhen, China.
The sites are constructed in conformance with the requirements of ANSI C63.7/634 and CISPR 22, The site was accredited by FCC (662850), A2LA(2243.01) and CNAL (L1225)

SYSTEM TEST CONFIGURATION

Justification

The EUT was tested under normal mode as used by a common (typical) user.

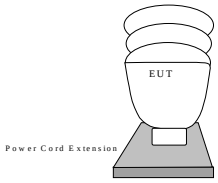
Schematics / Block Diagram

N/A.

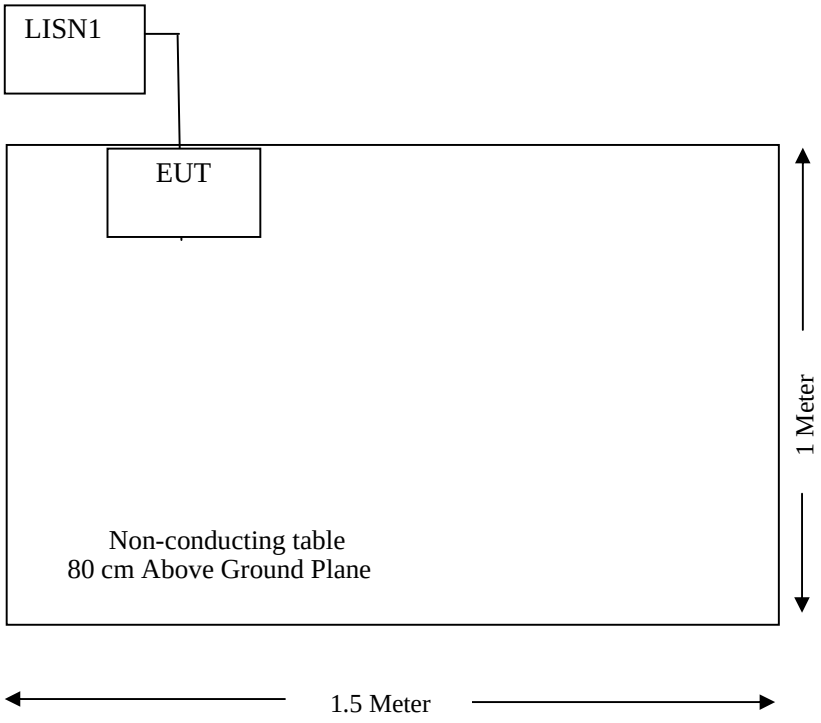
Equipment Modifications

No modifications were made by BEST TEST SERVICE (SHENZHEN) CO., LTD. to ensure the EUT to comply with the application limits and requirements.

Configuration of Test System



Test Setup Block Diagram



CONDUCTED EMISSIONS TEST DATA

Applicable Standard

For the following equipment, when designed to be connected to the public utility (AC) power line the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies shall not exceed the limits in the following tables. Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal using a 50 µH/50 ohms line impedance stabilization network (LISN).

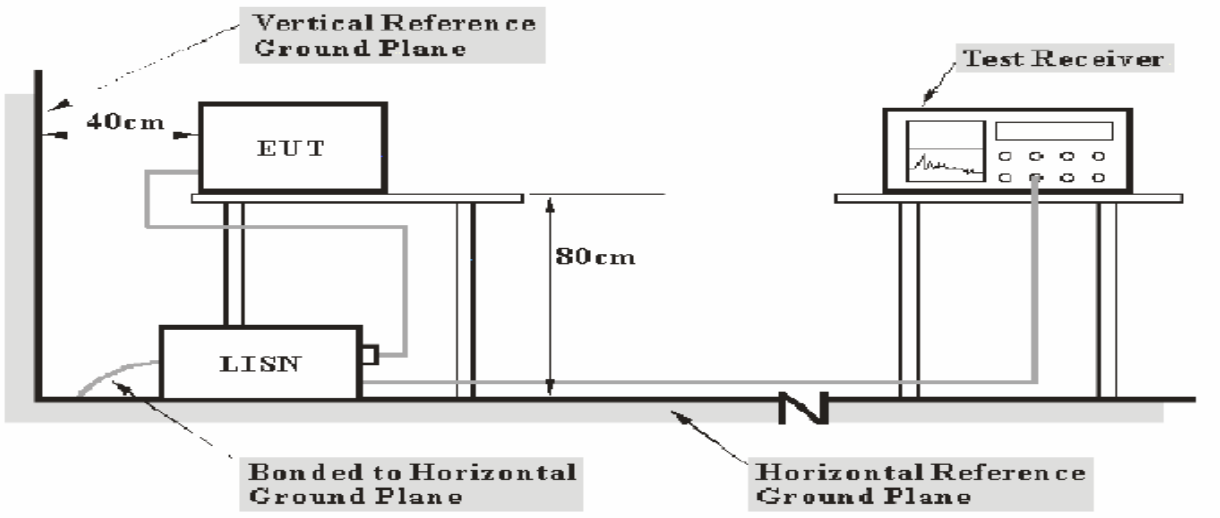
Frequency Range (MHz)	Max RF Voltage (uV)	Max RF Voltage (dBuV)
Non-consumer equipment		
0.45 to 1.6	1,000	60.0
1.6 to 30	3,000	69.0
Consumer equipment		
0.45 to 2.51	250	48.0
2.51 to 3.0	3000	69.0
3.0 to 30	250	48.0

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMI. The factors contributing to uncertainties are EMI Test Receiver, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMI Measurements, the best estimate of the uncertainty of any conducted emissions measurement at BEST TEST SERVICE (SHENZHEN) CO., LTD. is ±2.0 dB.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with MP-5 measurement procedure. The specification used was the FCC Part 18 limits.

The EUT was connected to the power cord extension and placed on the left of the back edge on the test table.

The power cord extension was connected with 120 VAC/60 Hz power source.

Test Equipments

Manufacturer	Description	Model	Serial Number	Cal. Date	Cal. Due.Date
ROHDE & SCHWARZ	EMI TEST RECEIVER	ESCS30	100038	2005-11-16	2006-11-15
ROHDE & SCHWARZ	L.I.S.N	ESH2-Z5	100028	2005-11-16	2006-11-15
ROHDE & SCHWARZ	Pulse Limiter	ESHSZ2	100044	2005-11-16	2006-11-15

Statement of traceability: BEST attests that all calibrations have been performed per the CNAL /A2LA requirements, traceable to NIM China

Test Procedure

During the conducted emission test, the power cord of the power cord extension was connected to the auxiliary outlet of the first LISN.

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT is compliant with all installation combination.

All data was recorded in the peak detection mode. Quasi-peak readings were only performed when an emission was found to be marginal (within 4 dBμV of specification limits). Quasi-peak readings are distinguished with a "**Qp**".

The EUT was tested under the normal modes during the final qualification test to represent the worst-case results.

Summary of Test Results

Pass

The EUT complied with the FCC 18 Conducted margin for industry, scientific and medical device, and with the worst margin reading of:

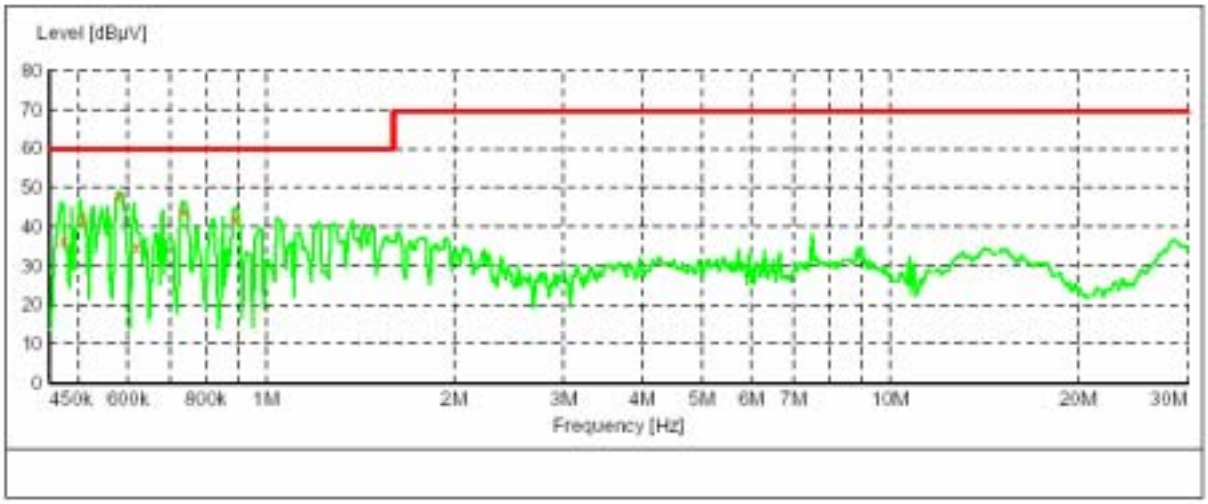
12.5 dBμV at **0.518 MHz** in the **live** mode **for LKE65**

Conducted Emissions Test Data and Plots

Disturbance Voltage at AC Mains FCC 18

EUT:	Energy Saving Lamp M/N:LKE65
Manufacturer:	LINK
Operating Condition:	On
Test Site:	SHIELDED ROOM
Operator:	SHUAI
Test Specification:	AC 120V/60Hz
Comment:	
Start of Test:	11/7/2006

SCAN TABLE: "Voltage (9K-30M) FIN"
Short Description: 150K-30M Voltage



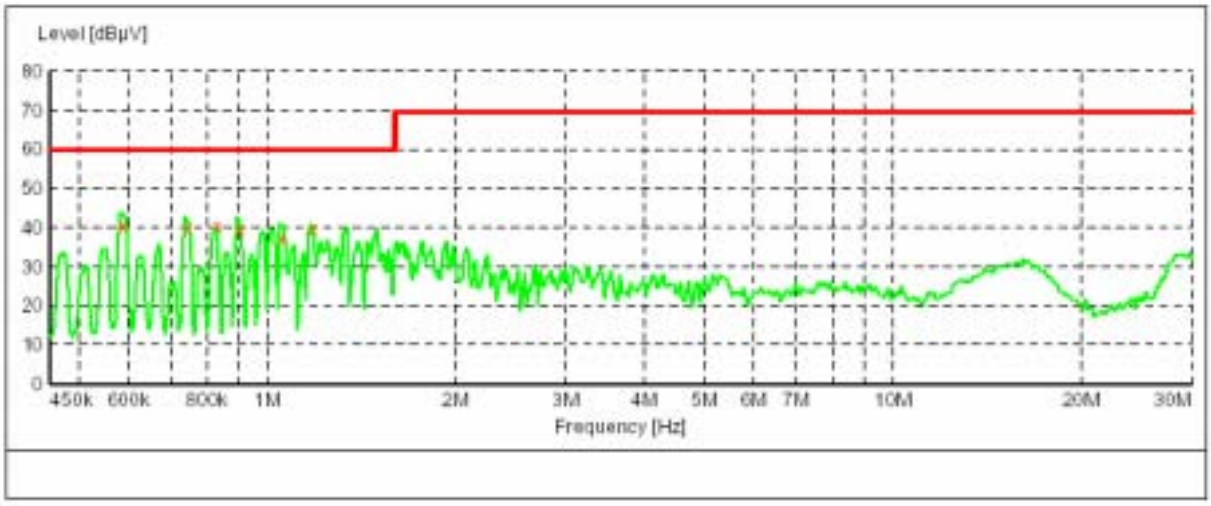
MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.472500	36.40	10.1	60	23.6	QP	L1	GND
0.507630	42.00	10.1	60	18.0	QP	L1	GND
0.581270	47.50	10.1	60	12.5	QP	L1	GND
0.619530	34.80	10.1	60	25.2	QP	L1	GND
0.738231	44.00	10.1	60	16.0	QP	L1	GND
0.893820	41.80	10.1	60	18.2	QP	L1	GND

Disturbance Voltage at AC Mains FCC 18

EUT:	Energy Saving Lamp M/N:LKE65
Manufacturer:	LINK
Operating Condition:	On
Test Site:	SHIELDED ROOM
Operator:	SHUAI
Test Specification:	AC 120V/60Hz
Comment:	
Start of Test:	11/7/2006

SCAN TABLE: "Voltage (9K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.585920	40.40	10.1	60	19.6	QP	N	GND
0.744140	39.90	10.1	60	20.1	QP	N	GND
0.831963	40.40	10.1	60	19.6	QP	N	GND
0.900964	39.40	10.1	60	20.6	QP	N	GND
1.056620	37.30	10.2	60	22.7	QP	N	GND
1.181320	39.60	10.2	60	20.4	QP	N	GND