

Most Technology Service Co., Ltd.
Tel:(86) 755-86170306 Fax:(86) 755-86170310
Http://www.szmost.com Email: szmost@szmost.com

## Test Report

Product Name: USB Driver

FCC ID: WB9-USBMIRRORXG

MODEL NO. : Mirror-4G; Mirror-8G; Mirror-16G

# Applicant:

LG Electronics (Hangzhou) Recording Media Co., Ltd. 9,No.23 Street, HEDA, Hangzhou 310018,Zhejiang, China

Test by: (candy zhang )

Reviewed by: \_\_\_\_\_ (key wang)

Approved by: (Yvette zhou)

Date Received: 31/07/2011

Date Tested: 29/07/2011

APPLICANT: LG Electronics (Hangzhou) Recording Media Co., Ltd..



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# EMC Equipment List

Equipment	Manufacturer		Serial No.		Cal. Interval
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	100492	Mar. 06, 2010	1 Year
LISN	ROHDE&SCHWARZ	ENV216	100093	Mar. 06, 2010	1Year
EMI Test Receiver		ESCI	101202	Mar. 06, 2010	1 Year
Spectrum Analyzer		MS2651B	6200238316	2010	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Mar. 06, 2010	1 Year
Bilog Antenna	Sunol	ЈВ3	A121206	Mar. 06, 2010	1 Year
Horn Antenna	EMCO	3115	640201028- 06	2010	1 Year
50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Mar. 06, 2010	1 Year
Cable	Resenberger	N/A	NO.1	Mar. 06, 2010	1 Year
Cable	SCHWARZBECK	N/A	NO.2	Mar. 06, 2010	1 Year
Cable	SCHWARZBECK	N/A	NO.3	Mar. 06, 2010	1 Year
Dual Directional Coupler	A&R	DC6080	301508	Mar. 06, 2010	1 Year
Power Head	A&R	PH2000	301193	Mar. 06, 2010	1 Year
Power Meter	A&R	PM2002	302799	Mar. 06, 2010	1 Year
Field Monitor	A&R	FM5004	300329	Mar. 06, 2010	1 Year
Field Probe	A&R	FP5000	300221	Mar. 06, 2010	1 Year
Lenovo	PC	Т3900	SS05750640	Mar. 06, 2010	1 Year
Dell	Monitor	E178FPc	78682	Mar. 06, 2010	1 Year

#### Remark:

Test Firm Name: Most Technology Service Co., Ltd.

Test Firm Address:

No. 5, 2nd Langshan Road, North District, Hi-tech Industrial

Park, Nanshan, Shenzhen, Guangdong, China FCC Registered Test Site Number: 490827

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#### 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  $50\,\text{U}\,\text{H}$  LISN. Both Lines were observed. The bandwidth of the receiver was  $10\,\text{kHz}$  with an appropriate sweep speed. The ambient temperature of the EUT was  $25\,\text{with}$  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 edge 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.

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NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE

RULES PART NUMBER: 15.107

**REQUIREMENTS:** 

\* Decreases with the logarithm of the frequency.

TEST PROCEDURE: ANSI STANDARD C63.4-2003

The highest emission read for line 1 was 44.00dBuV@0.394 MHz

The highest emission read for line 2 was 48.14dBuV@0.278 MHz

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

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# Conducted Emission Measurement Data:#1 Date: 2010/07/29 Time: 14:51:11 File:Mirror-4GB 80.0 dBuV Qp: AVG: 20 halaman AVG -40 0.150 (MHz) 30.000 0.5 5

Site site #1

Limit: FCC Part15 B Class B QP

EUT: USB DRIVE M/N: Mirror-4GB

Mode: Data Transmitting

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment	
1	0.2300	36.13	11.80	47.93	62.45	-14.52	QP		
2 *	0.3940	33.29	10.71	44.00	57.98	-13.98	QP		
3	0.7180	28.74	10.00	38.74	56.00	-17.26	QP		
4	2.4060	28.99	9.41	38.40	56.00	-17.60	QP		
5	3.2460	13.34	10.25	23.59	56.00	-32.41	QP		
6	10.1420	10.11	9.00	19.11	60.00	-40.89	QP		

Phase:

L1

Power: DC 5V BY USB Port

Engineer Signature: Kobe

Temperature: 26

Humidity: 60 %

<sup>\*:</sup>Maximum data x:Over limit !:over margin



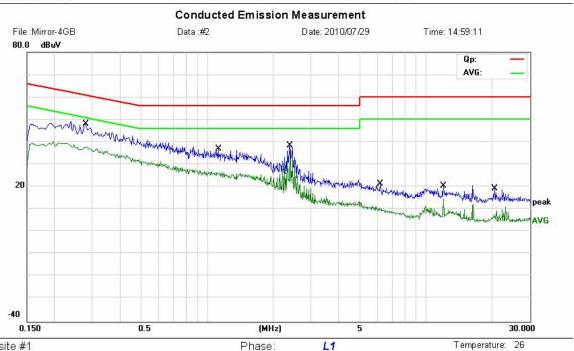
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L1

Humidity: 60 %

Power: DC 5V BY USB Port

Site site #1 Limit: FCC Part15 B Class B QP

EUT: USB DRIVE M/N: Mirror-4GB

Mode: DataTransmitting

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∨	dB	dBu∀	dBu∀	dB	Detector	Comment
1 *	0.2780	36.66	11.48	48.14	60.88	-12.74	QР	
2	1.1260	27.18	9.87	37.05	56.00	-18.95	QP	
3	2.4060	29.17	9.41	38.58	56.00	-17.42	QP	
4	6.2140	9.95	11.27	21.22	60.00	-38.78	QP	
5	12.0020	11.60	9.00	20.60	60.00	-39.40	QР	
6 :	20.7180	10.38	9.00	19.38	60.00	-40.62	QР	

Engineer Signature: Kobe

<sup>\*:</sup>Maximum data x:Over limit !:over margin



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NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 15.109

## **REQUIREMENTS:**

S15.109 30 -88 MHz 40 dBuV/m @3M 88 - 216 MHz 43.5 216 - 960 MHz 46 ABOVE 960 MHz 54dBuV/m

## Test Data:

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

Test Mode: Data Transmitting

Test flode: bata framewreting									
Frequency (MHz)	Antenna Polarization	Emissi	FCC 15						
		Avg	QP	Peak	Subpart B Limit (dBuV/m)				
112.45	Vertical			23.01	43.5				
358.83	Vertical			35.35	46.0				
718.70	Vertical			36.00	46.0				
114.39	Horizontal			22.59	43.5				
457.77	Horizontal			35.67	46.0				
716.76	Horizontal			34.45	46.0				

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