EMC TEST REPORT

Test item	: LED TV Monitor
Model No.	: 60LN5750-UA
Order No.	: DEMC1303-01011
Date of receipt	: 2013-03-15
Test duration	: 2013-03-19 ~ 2013-03-20
Use of report	: FCC CoC Marking
Date of Issue	: 2013-03-26

Applicant : LG Electronics Inc.
19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Test laboratory : Digital EMC Co., Ltd.
683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

Test specification : ANSI C 63.4:2003
FCC Part 15 Subpart B
(Type of Device : Class B Personal Computers and Peripherals (JBP))

Test environment : Temperature : (20 ~ 23) °C,
Humidity : 45 % R.H.

Test result : ☒ Comply ☐ Not Comply

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.
This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:

Assistant Manager
SangWon Lee

Reviewed by:

Technical Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

CONTENTS

1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address : 683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

http://www.digitalemc.com

Tel: +82-31-321-2664 Fax: +82-31-321-1664

2. Test Laboratory

Digital EMC Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1221C	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the “General requirements for the competent of calibration and testing laboratory”.

3. General Information of EUT

Model No.	60LN5750-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ60LN5750UA
Type of Sample Tested	Pre-Production
High Frequency	790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 2.0 A
Supplied Power for Test	AC 120 V, 60 Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

HDMI (PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1152x864	54.348	60.053
1360x768	47.712	60.015
1280x1024	63.981	60.020
1920x1080	67.50	60.00

4. Test Summary

4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2003	**C**
Radiated Disturbance	ANSI C63.4:2003	**C**
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (℃)	Humidity (% R.H.)
Conducted Disturbance	03-20	20	45
Radiated Disturbance	03-19	23	45

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.61178	**N**	**34.9**	Average	**46.0**	**11.1**

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
222.757	**H**	**43.4**	Quasi-Peak	**46.0**	**2.6**

5. Test Set-up and operation mode

5.1 Principle of Configuration Selection

Emission : The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

5.2 Test Operation Mode

- HDMI MODE : 'H' Pattern mode, 1920x1080 Resolution (Worst Case)
- USB MODE : USB video file play

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	VOSTRO430	9K77SBX	DELL	Power USB USB USB HDMI	1.8 1.8 1.7 1.9 2.0	Not use Not use Not use Not use Not use	Non-shield Shield Shield Shield Shield	Plastic	DOC
Keyboard	SKG-3000UB	TAKB601236L	MONITEREY INTERNATIONAL CORP	USB	1.7	Not use	Shield	Plastic	DOC
MOUSE	MS111-T	CN-0KW2YH-71616-245-1S1T	DELL INC.	USB	1.8	Not use	Shield	Plastic	DOC
PRINT	EPSON AcuLaser M1200	LWTZ181308	EPSON	Power USB	1.8 1.9	Not use Not use	Shield Non-shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS.	POWER AV	1.8 1.7	Not use Not use	Non-shield Non-shield	Plastic	VER
HEADSET	COV9	N/A	COSY	STEREO	2.0	Not use	Non-shield	Plastic	DOC
USB MEMORY	CRUZER Slice	N/A	SANDISK	USB	-	-	-	Plastic	DOC
REMOTE CONTROL	AN-MR400K	N/A	OHSUNG ELECTRONICS CO., LTD.	-	-	-	-	-	-

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15 MHz to 30 MHz, the conducted disturbance was measured and set-up was made accordance with **ANSI C63.4.**

If the EUT is table top equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 0.4 m from the conducting wall of the shielded room.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Connect the EUT's power source lines to the appropriate power mains / peripherals through the LISN. All the other peripherals are connected to the 2nd LISN, if any.

Unused measuring port of the LISN was resistively terminated by 50 ohm terminator.

The measuring port of the LISN for EUT was connected to spectrum analyzer.

Using conducted emission test software, the emissions were scanned with peak detector mode.

After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and Average detector.

By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.

For further description of the configuration refer to the picture of the test set-up.

6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50
Note 1 The lower limit shall apply at the transition frequencies. Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note) 1. Emission Level = Reading Value + Correction Factor.
2. Correction Factor = Cable Loss + Insertion Loss of LISN
3. Margin = Limit - Emission level

Test Result

< HDMI MODE >

Digital EMC

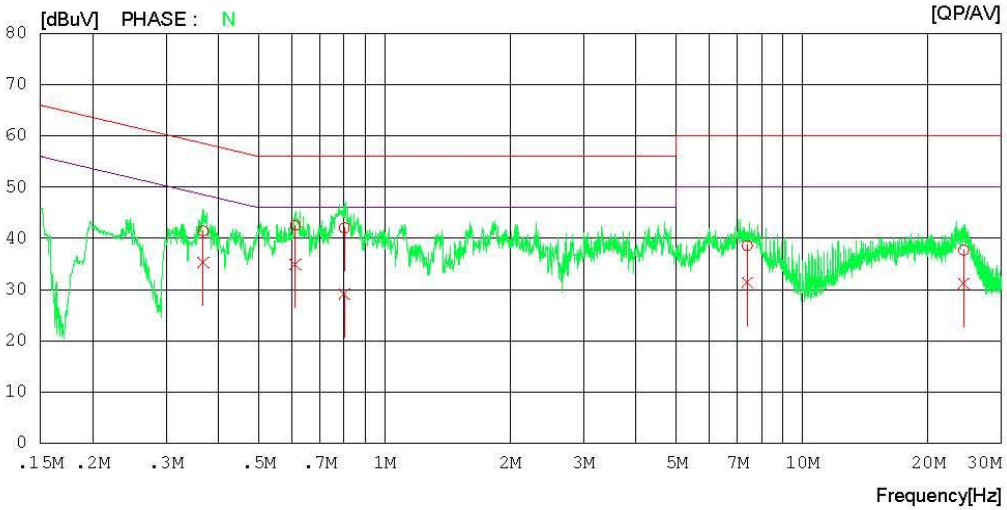
Results of Conducted Emission

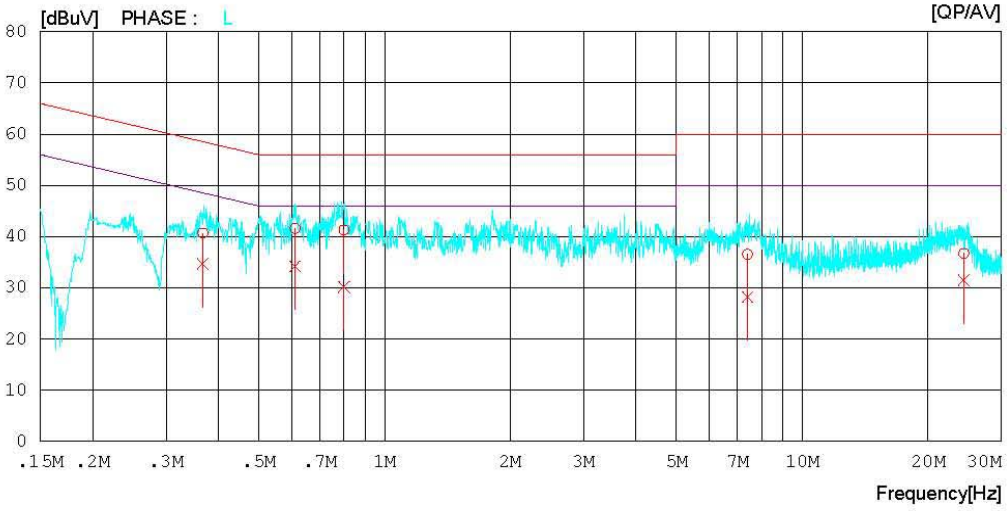
Digital EMC
Date : 2013-03-20

Model No.	:	60LN5750_UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	20 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-03-20

Model No.	:	60LN5750_UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	20 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.36836	41.2	35.0	0.2	41.4	35.2	58.5	48.5	17.1	13.3	N
2	0.61178	42.3	34.7	0.2	42.5	34.9	56.0	46.0	13.5	11.1	N
3	0.80228	41.8	28.9	0.2	42.0	29.1	56.0	46.0	14.0	16.9	N
4	7.39300	38.1	30.8	0.5	38.6	31.3	60.0	50.0	21.4	18.7	N
5	24.37850	36.7	30.1	1.0	37.7	31.1	60.0	50.0	22.3	18.9	N
6	0.36744	40.5	34.5	0.2	40.7	34.7	58.6	48.6	17.9	13.9	L
7	0.61103	41.4	34.0	0.2	41.6	34.2	56.0	46.0	14.4	11.8	L
8	0.79984	41.1	30.0	0.2	41.3	30.2	56.0	46.0	14.7	15.8	L
9	7.39750	36.1	27.7	0.5	36.6	28.2	60.0	50.0	23.4	21.8	L
10	24.39050	35.7	30.5	1.0	36.7	31.5	60.0	50.0	23.3	18.5	L

< USB MODE >

Digital EMC

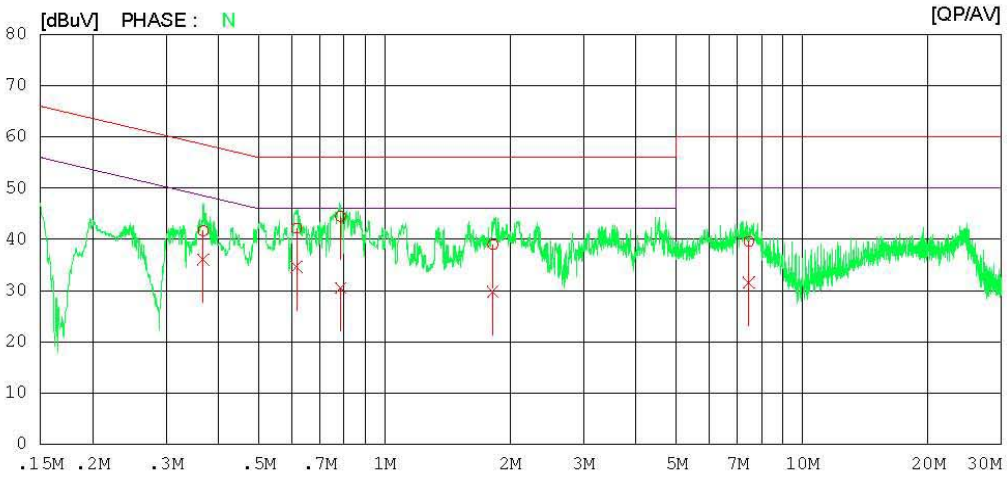
Results of Conducted Emission

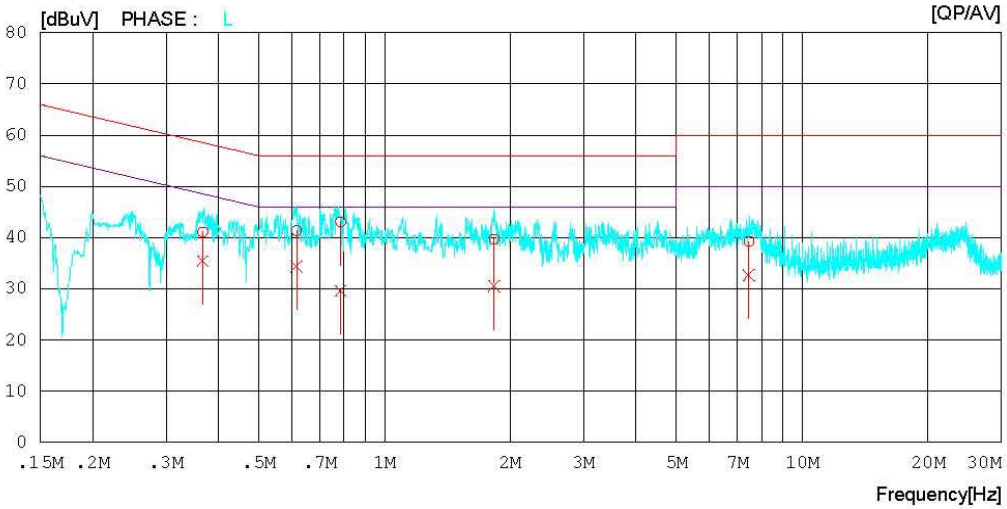
Digital EMC
Date : 2013-03-20

Model No.	:	60LN5750_UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	20 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : USB PLAY

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-03-20

Model No.	:	60LN5750_UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	20 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : USB PLAY

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.36846	41.5	35.8	0.2	41.7	36.0	58.5	48.5	16.8	12.5	N
2	0.61591	42.0	34.4	0.2	42.2	34.6	56.0	46.0	13.8	11.4	N
3	0.78539	44.3	30.3	0.2	44.5	30.5	56.0	46.0	11.5	15.5	N
4	1.81850	38.7	29.5	0.3	39.0	29.8	56.0	46.0	17.0	16.2	N
5	7.45200	39.1	31.1	0.5	39.6	31.6	60.0	50.0	20.4	18.4	N
6	0.36736	40.9	35.2	0.2	41.1	35.4	58.6	48.6	17.5	13.2	L
7	0.61561	41.2	34.2	0.2	41.4	34.4	56.0	46.0	14.6	11.6	L
8	0.78550	42.9	29.4	0.2	43.1	29.6	56.0	46.0	12.9	16.4	L
9	1.83000	39.4	30.2	0.3	39.7	30.5	56.0	46.0	16.3	15.5	L
10	7.45350	38.8	32.2	0.5	39.3	32.7	60.0	50.0	20.7	17.3	L

6.2 Radiated Disturbance

6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4.**
If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 3 m or 10 m away from the interference receiving antenna in the **10m semi-anechoic chamber.**
Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.
Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m above the reference ground plane continuously to determine associated with higher emission levels and record them.
The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.
For below 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.
Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz frequency range.
For further description of the configuration refer to the picture of the test set-up.

6.2.2 Limit for Radiated Disturbance

- The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1 000
108 – 500	2 000
500 – 1 000	5 000
Above 1 000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.
Note 2 Additional provisions may be required for cases where interference occurs.
Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (10 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 230	40	30
230 to 1 000	47	37

(2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + Correction Factor.
2. Correction Factor = Cable loss - Amp gain + Antenna Factor
3. Margin = Limit - Emission level

Test Result

< HDMI MODE_30 MHz ~ 1 GHz >

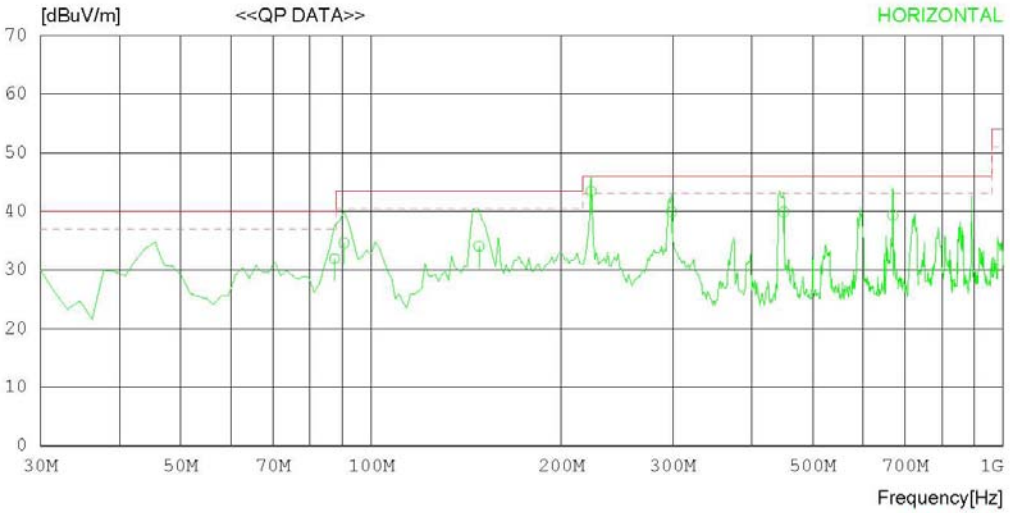
RADIATED EMISSION

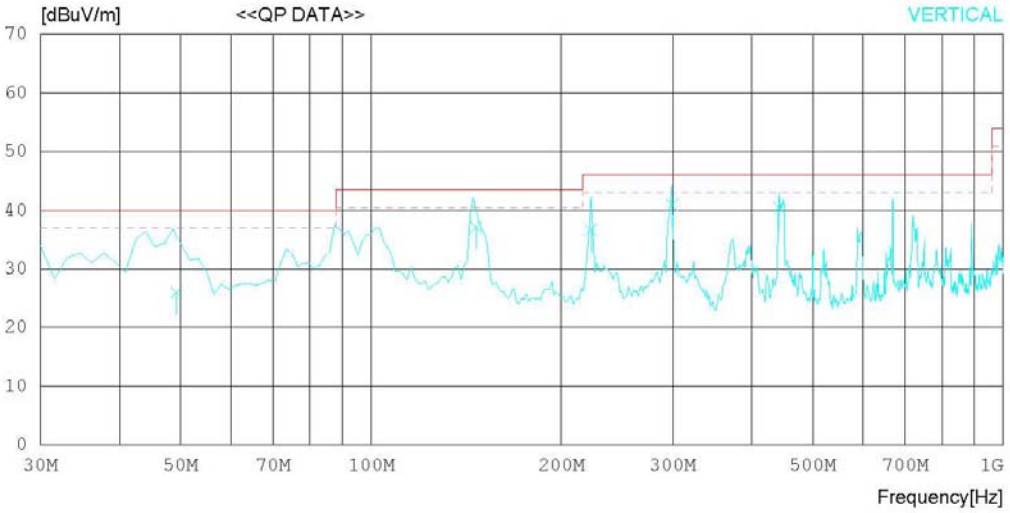
Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB





RADIATED EMISSION

Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	87.516	46.0	8.6	1.5	24.2	31.9	40.0	8.1	301	317
2	90.625	48.2	9.1	1.5	24.2	34.6	43.5	8.9	301	79
3	148.141	46.0	10.5	1.7	24.2	34.0	43.5	9.5	201	223
4	222.757	53.8	11.1	2.4	23.9	43.4	46.0	2.6	100	1
5	298.926	47.0	13.7	2.8	23.6	39.9	46.0	6.1	100	1
6	449.710	43.0	16.7	3.5	23.3	39.9	46.0	6.1	301	1
7	668.894	40.0	18.6	4.4	23.7	39.3	46.0	6.7	201	0
----- Vertical ------										
8	49.258	40.0	9.1	1.3	24.4	26.0	40.0	14.0	100	358
9	146.775	49.0	10.6	1.7	24.2	37.1	43.5	6.4	100	358
10	222.798	47.0	11.1	2.4	23.9	36.6	46.0	9.4	100	358
11	299.445	48.0	13.7	2.8	23.6	40.9	46.0	5.1	100	166
12	441.938	43.7	16.6	3.5	23.3	40.5	46.0	5.5	100	358

< HDMI MODE _ (1 ~ 6) GHz _ Peak >

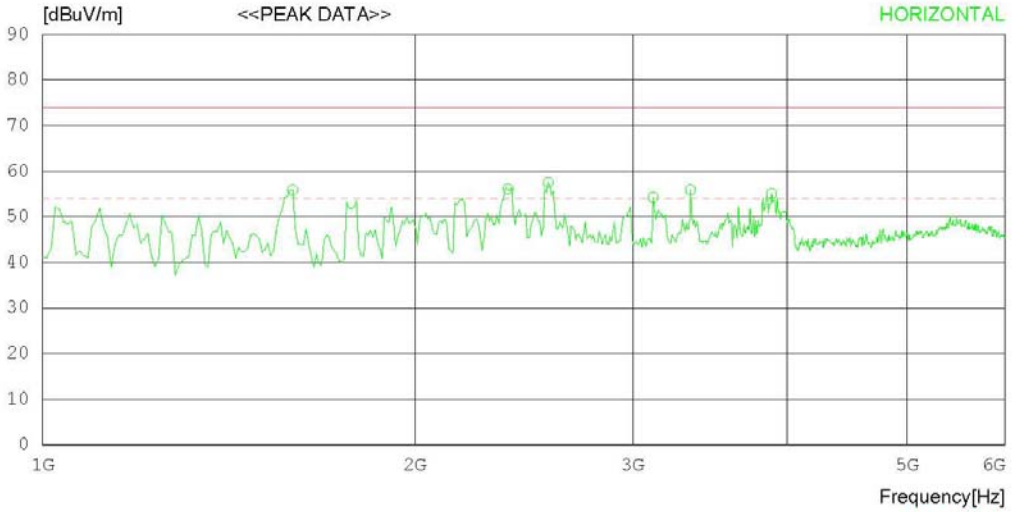
RADIATED EMISSION

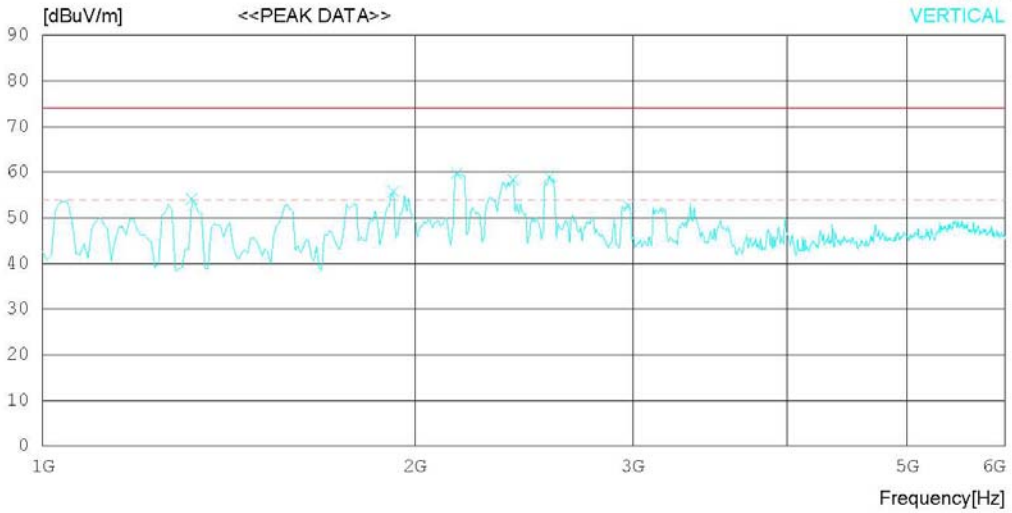
Date : 2013-03-19

Model Name	: 60LN5750-UA	Reference No.	:		
Model No.	:	Power Supply	:	120 V	60 Hz
Serial No.	:	Temp/Humi	:	23 'C	45 % R.H.
Test Condition	:	Operator	:		

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)





RADIATED EMISSION

Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	1592.948	67.1	24.6	4.2	40.0	55.9	74.0	18.1	100	358
2	2378.210	63.6	26.7	5.1	39.3	56.1	74.0	17.9	100	358
3	2562.507	63.9	27.6	5.3	39.3	57.5	74.0	16.5	100	358
4	3115.400	58.8	29.0	5.8	39.3	54.3	74.0	19.7	100	358
5	3339.762	60.1	28.9	6.0	39.1	55.9	74.0	18.1	100	259
6	3884.642	57.1	29.9	6.6	38.5	55.1	74.0	18.9	100	201
----- Vertical ------										
7	1320.513	66.5	24.4	3.8	40.5	54.2	74.0	19.8	100	163
8	1921.474	66.2	24.6	4.6	39.6	55.8	74.0	18.2	100	1
9	2161.860	68.7	25.5	4.9	39.4	59.7	74.0	14.3	100	1
10	2402.249	65.6	26.9	5.1	39.3	58.3	74.0	15.7	100	1
11	2570.520	65.3	27.7	5.3	39.3	59.0	74.0	15	100	1
12	2979.180	57.4	28.9	5.7	39.3	52.7	74.0	21.3	100	1

< HDMI MODE _ (1 ~ 6) GHz _ Average >

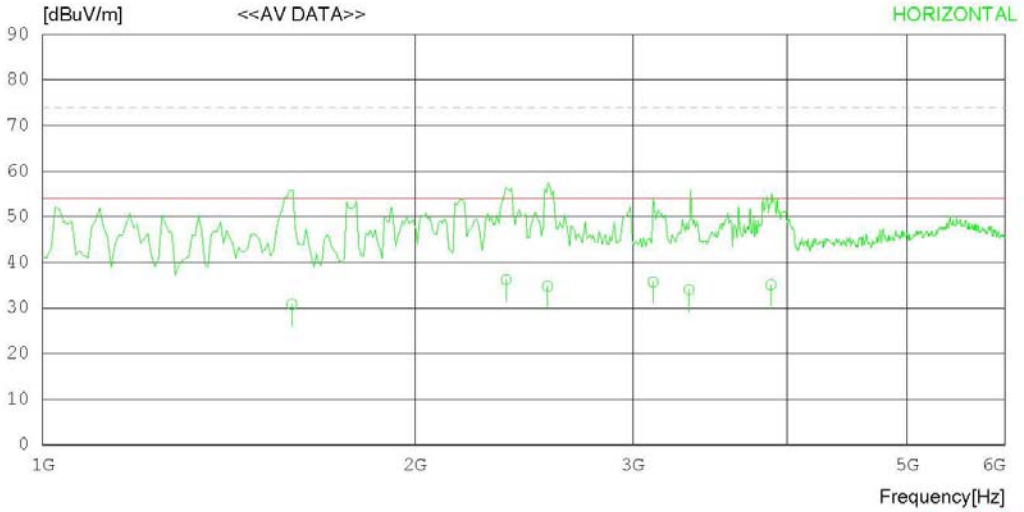
RADIATED EMISSION

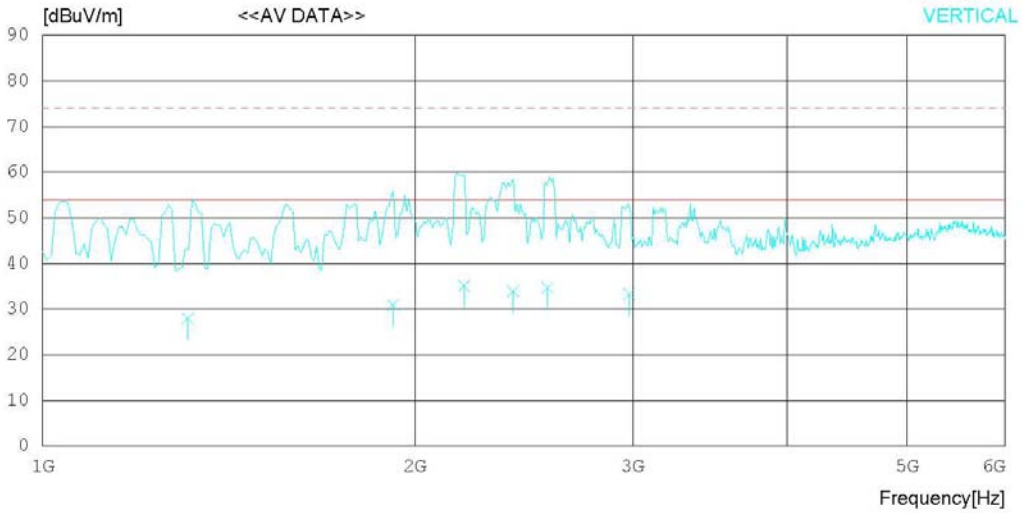
Date : 2013-03-19

Model Name	: 60LN5750-UA	Reference No.	:		
Model No.	:	Power Supply	:	120 V	60 Hz
Serial No.	:	Temp/Humi	:	23 'C	45 % R.H.
Test Condition	:	Operator	:		

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)





RADIATED EMISSION

Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : HDMI

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	1590.248	42.0	24.6	4.2	40.0	30.8	54.0	23.2	100	358
2	2370.145	43.7	26.7	5.1	39.3	36.2	54.0	17.8	100	358
3	2560.421	41.2	27.6	5.3	39.3	34.8	54.0	19.2	100	358
4	3115.400	40.2	29.0	5.8	39.3	35.7	54.0	18.3	100	358
5	3330.447	38.2	28.9	6.0	39.1	34.0	54.0	20.0	100	259
6	3880.477	37.2	29.8	6.6	38.5	35.1	54.0	18.9	100	201
----- Vertical ------										
7	1310.250	40.2	24.4	3.8	40.5	27.9	54.0	26.1	100	163
8	1920.417	41.2	24.6	4.6	39.6	30.8	54.0	23.2	100	1
9	2190.745	43.9	25.7	4.9	39.4	35.1	54.0	18.9	100	1
10	2400.574	41.3	26.9	5.1	39.3	34.0	54.0	20.1	100	1
11	2560.472	41.0	27.6	5.3	39.3	34.6	54.0	19.4	100	1
12	2980.244	38.0	28.9	5.7	39.3	33.3	54.0	20.7	100	1

< USB MODE_30 MHz ~ 1 GHz >

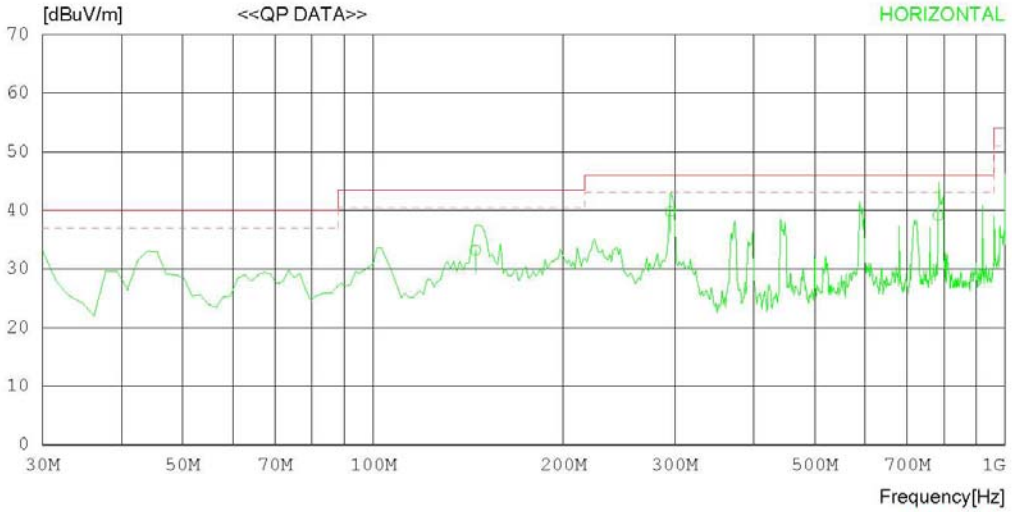
RADIATED EMISSION

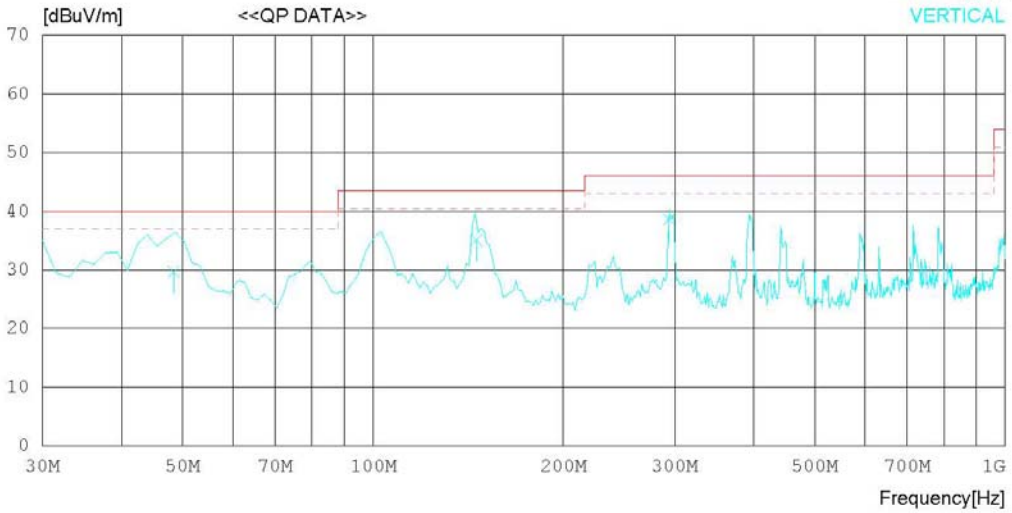
Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB





RADIATED EMISSION

Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	145.256	45.0	10.7	1.7	24.2	33.2	43.5	10.3	201	105
2	295.475	47.0	13.6	2.8	23.6	39.8	46.0	6.2	100	189
3	783.397	38.1	19.7	4.8	23.5	39.1	46.0	6.9	201	132
----- Vertical ------										
4	48.378	42.6	10.1	1.3	24.3	29.7	40.0	10.3	100	36
5	145.770	47.0	10.6	1.7	24.2	35.1	43.5	8.4	100	358
6	293.989	45.8	13.6	2.8	23.6	38.6	46.0	7.4	100	358

< USB MODE _ (1 ~ 6) GHz _ Peak >

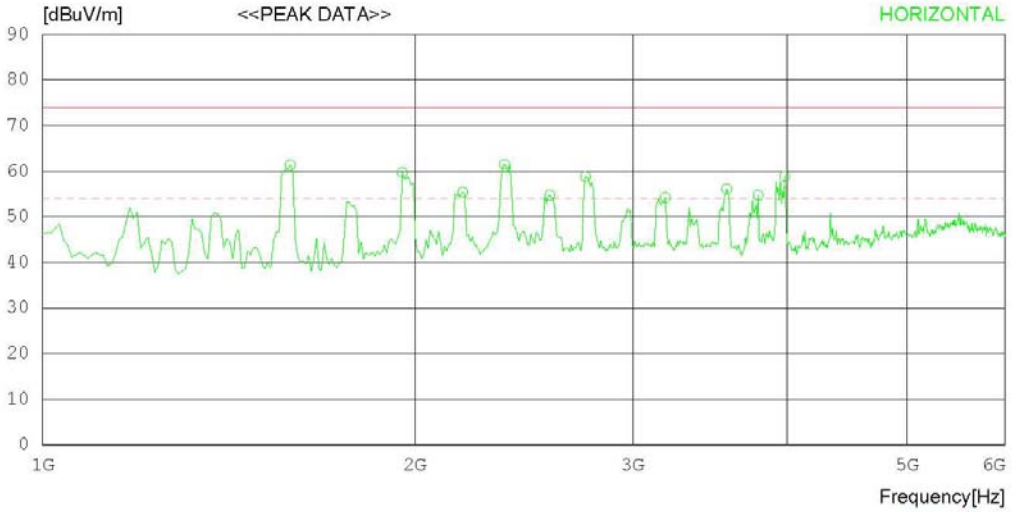
RADIATED EMISSION

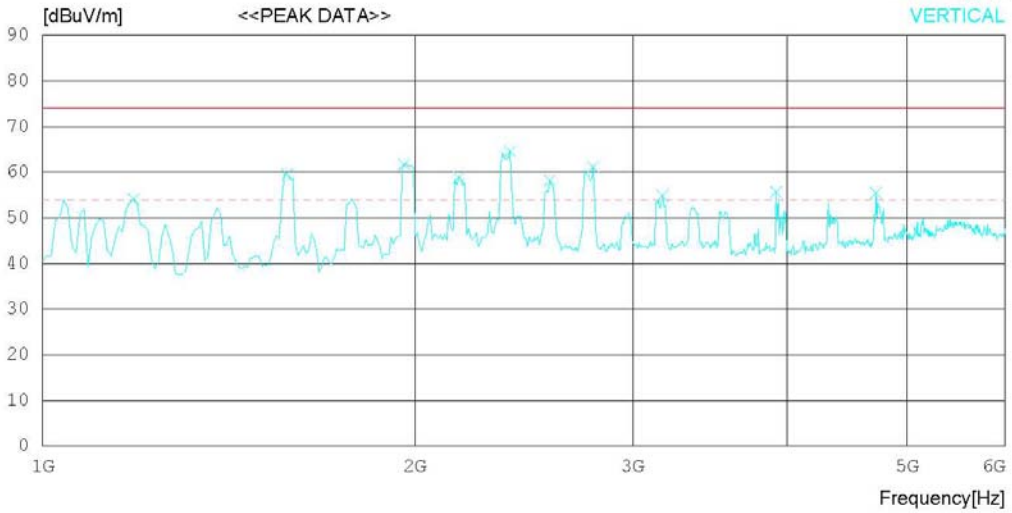
Date : 2013-03-19

Model Name	: 60LN5750-UA	Reference No.	:		
Model No.	:	Power Supply	:	120 V	60 Hz
Serial No.	:	Temp/Humi	:	23 'C	45 % R.H.
Test Condition	:	Operator	:		

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)





RADIATED EMISSION

Date : 2013-03-19

Model Name	: 60LN5750-UA	Reference No.	:		
Model No.	:	Power Supply	:	120 V	60 Hz
Serial No.	:	Temp/Humi	:	23 'C	45 % R.H.
Test Condition	:	Operator	:		

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	1584.936	72.6	24.6	4.2	40.0	61.4	74.0	12.6	100	358
2	1953.525	69.9	24.6	4.7	39.5	59.7	74.0	14.3	100	154
3	2185.899	64.3	25.6	4.9	39.4	55.4	74.0	18.6	100	358
4	2362.184	69.0	26.7	5.1	39.3	61.5	74.0	12.5	100	358
5	2570.520	61.0	27.7	5.3	39.3	54.7	74.0	19.3	100	214
6	2746.805	64.4	28.2	5.5	39.3	58.8	74.0	15.2	100	207
7	3187.517	58.6	28.9	5.9	39.2	54.2	74.0	19.8	100	358
8	3572.138	59.6	29.1	6.3	38.9	56.1	74.0	17.9	100	232
9	3788.487	57.2	29.6	6.5	38.6	54.7	74.0	19.3	100	358
10	3980.798	60.5	30.1	6.7	38.4	58.9	74.0	15.1	100	358
----- Vertical ------										
11	1184.295	67.1	24.2	3.6	40.8	54.1	74.0	19.9	100	180
12	1576.923	70.8	24.6	4.2	40.0	59.6	74.0	14.4	100	180
13	1961.538	71.9	24.6	4.7	39.5	61.7	74.0	12.3	100	235
14	2169.873	67.9	25.5	4.9	39.4	58.9	74.0	15.1	100	185
15	2386.223	72.0	26.8	5.1	39.3	64.6	74.0	9.4	100	1
16	2570.520	64.5	27.7	5.3	39.3	58.2	74.0	15.8	100	210
17	2786.870	66.7	28.3	5.5	39.3	61.2	74.0	12.8	100	218
18	3171.491	59.3	28.9	5.9	39.2	54.9	74.0	19.1	100	176
19	3916.694	57.7	29.9	6.6	38.5	55.7	74.0	18.3	100	222
20	4717.969	55.1	31.6	7.5	38.7	55.5	74.0	18.5	100	1

< USB MODE _ (1 ~ 6) GHz _ Average >

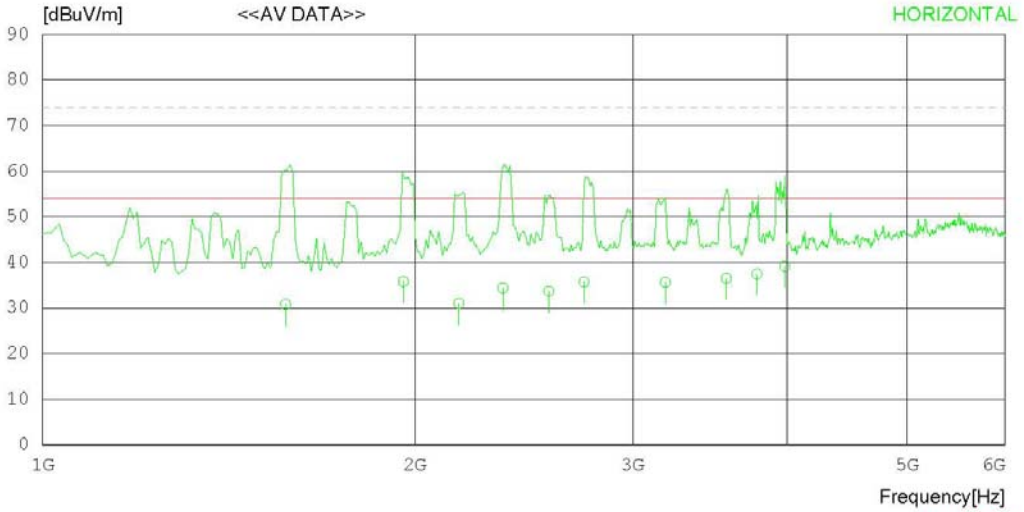
RADIATED EMISSION

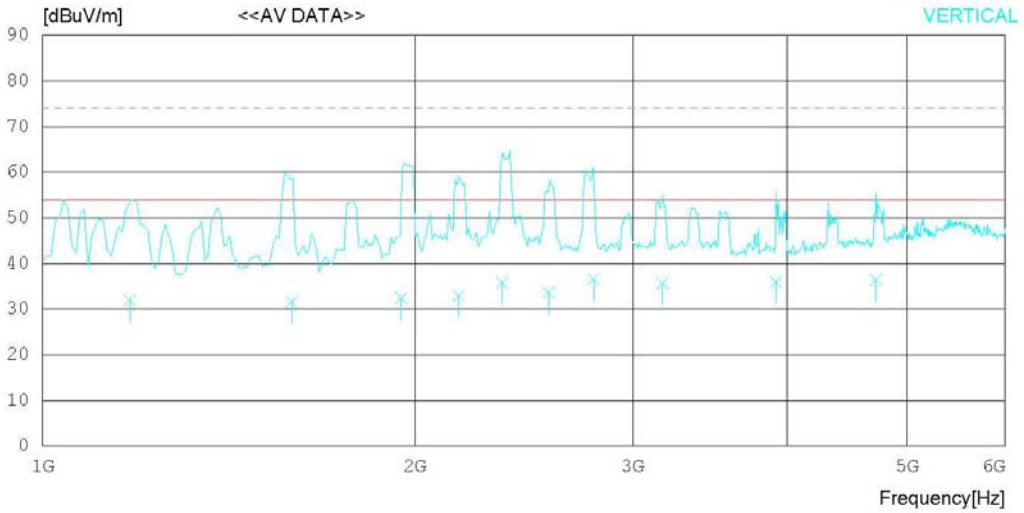
Date : 2013-03-19

Model Name	: 60LN5750-UA	Reference No.	:		
Model No.	:	Power Supply	:	120 V	60 Hz
Serial No.	:	Temp/Humi	:	23 'C	45 % R.H.
Test Condition	:	Operator	:		

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)





RADIATED EMISSION

Date : 2013-03-19

Model Name	:	60LN5750-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	23 'C 45 % R.H.
Test Condition	:		Operator	:	

Memo : USB PLAY

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	1572.240	42.0	24.6	4.2	40.0	30.8	54.0	23.2	100	358
2	1957.200	46.0	24.6	4.7	39.5	35.8	54.0	18.2	100	154
3	2170.258	40.0	25.5	4.9	39.4	31.0	54.0	23.0	100	358
4	2355.254	42.0	26.6	5.1	39.3	34.4	54.0	19.6	100	358
5	2565.570	40.0	27.7	5.3	39.3	33.7	54.0	20.3	100	214
6	2740.584	41.4	28.2	5.4	39.3	35.7	54.0	18.3	100	207
7	3187.517	40.0	28.9	5.9	39.2	35.6	54.0	18.4	100	358
8	3570.144	40.0	29.1	6.3	38.9	36.5	54.0	17.5	100	232
9	3780.410	40.0	29.6	6.5	38.6	37.5	54.0	16.5	100	358
10	3980.798	40.8	30.1	6.7	38.4	39.2	54.0	14.8	100	358
----- Vertical ------										
11	1176.948	45.0	24.1	3.6	40.8	31.9	54.0	22.1	100	180
12	1590.826	42.8	24.6	4.2	40.0	31.6	54.0	22.4	100	180
13	1950.200	42.6	24.6	4.7	39.5	32.4	54.0	21.6	100	235
14	2170.587	42.0	25.5	4.9	39.4	33.0	54.0	21.0	100	185
15	2352.974	43.4	26.6	5.1	39.3	35.8	54.0	18.2	100	1
16	2565.240	40.0	27.6	5.3	39.3	33.6	54.0	20.4	100	210
17	2788.740	42.0	28.3	5.5	39.3	36.5	54.0	17.5	100	218
18	3171.491	40.0	28.9	5.9	39.2	35.6	54.0	18.4	100	176
19	3916.694	38.0	29.9	6.6	38.5	36.0	54.0	18.0	100	222
20	4717.969	36.0	31.6	7.5	38.7	36.4	54.0	17.6	100	1

Appendix 1

List of Test and Measurement Instruments

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment is identified by the Test Laboratory.

1. Conducted Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐	SPECTRUM ANALYZER	8591E	H/P	3649A05889	2013.02.28	2014.02.28
☐	RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐	LISN	KNW-407	KYORITSU	8-317-8	2013.01.08	2014.01.08
☐	LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
☐	50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
☒	LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
☒	LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
☒	50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08

2. Radiated Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2013.01.08	2014.01.08
☒	BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
☒	HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
☒	AMPLIFIER	8447E	H/P	2945A02865	2013.01.08	2014.01.08
☒	PREAMPLIFIER	8449B	AGILENT	3008A01590	2013.02.27	2014.02.27
☐	SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
☐	AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
☐	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
☐	BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
☐	LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
☐	BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
☐	LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
☐	AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2013.02.28	2014.02.28

Appendix 2

Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
None	Original	N/A	N/A