EMC TEST REPORT

Test item	: LED TV Monitor
Model No.	: 55LN5790-UI
Order No.	: DEMC1308-02539
Date of receipt	: 2013-08-16
Test duration	: 2013-08-19 ~ 2013-08-21
Use of report	: FCC CoC Marking
Date of Issue	: 2013-08-23

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 : (24 ~ 25) °C,
Humidity : 56 % 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:

Manager
DaeHwa Eun

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.	55LN5790-UI
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ55LN5790UI
Type of Sample Tested	Pre-Production
High Frequency	790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.6 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)
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.348	60.05
1360 x 768	47.712	60.015
1280 x 1024	63.981	60.02
1920 x 1080	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	08-19	24	56
Radiated Disturbance	08-21	25	56

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.15000	**L1**	**60.1**	**Quasi-Peak**	**66.0**	**5.9**

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
742.493	**H**	**42.7**	**Quasi-Peak**	**46.0**	**3.3**

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, 1920 x 1080 Resolution (Worst Case)
- USB MODE : USB recorded 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	VOSTRO460	7L7JXBX	DELL	POWER USB USB USB HDMI	1.8 1.7 1.6 2.0 1.9	Not use Not use Not use Not use Not use	Non-shield Non-shield Non-shield Non-shield Shield	Plastic	DOC
KEYBOARD	SKG-3000UB	TAKB601241E	MONITEREY INTERNATIONAL CORP	USB	1.7	Not use	Non-shield	Plastic	DOC
MOUSE	1484	3527000 21372	MICROSOFT CORPORATION	USB	1.6	Not use	Non-shield	Plastic	DOC
PRINTER	SRP-770	N/A	BICSOLON	POWER USB	1.8 2.0	Not use Not use	Non-shield Non-shield	Plastic	DOC
Adaptor (PRINTER)	N60-240250I1	N/A	JIANGSU LEADER ELECREONICS CO., LTD.	POWER POWER	1.8 1.8	Not use Not use	Non-shield Non-shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS.	POWER AV	1.8 1.5	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	Cruzer Blade 2GB	N/A	SANDISK	USB	-	-	-	Plastic	DOC
Headset	COV903	N/A	COSY	STEREO	2.0	Not use	Non-shield	Plastic	DOC
REMOTE	AKB73756542	N/A	HANSUNG ELECTRONICS CO., LTD.	-	-	-	-	-	-
SOUND BAR	NB2338A	N/A	LG Electronics	OPT IN	1.4	-	Non-shield	Plastic	DOC
Adaptor	DA-48A18	AAAB YC693129251 53242500	Yang Ming Industrial	DC IN POWER	1.4 1.8	- -	Non-shield Non-shield	Plastic	DOC

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

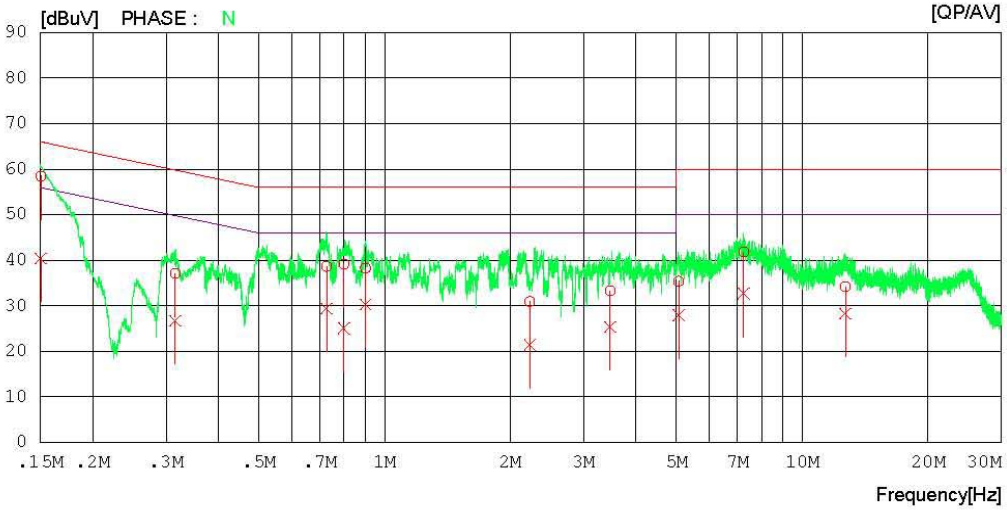
Results of Conducted Emission

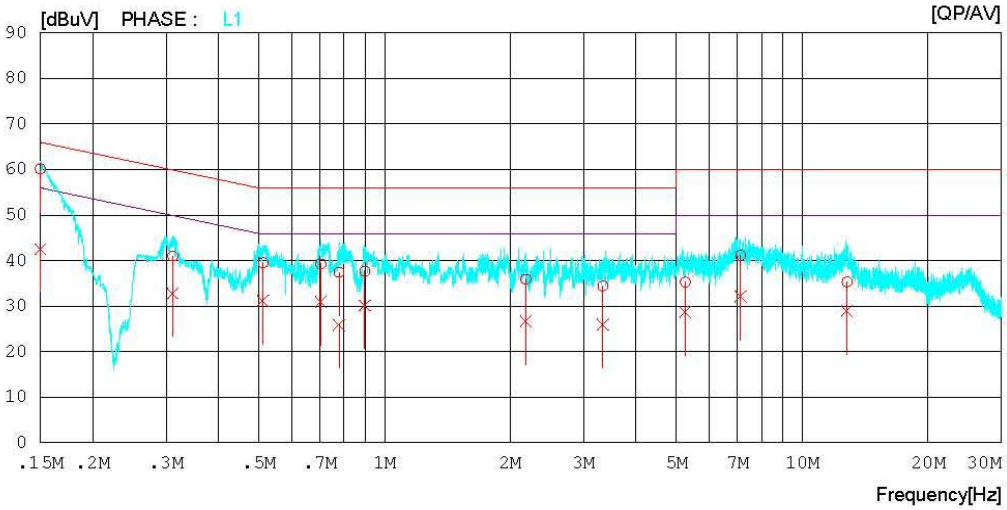
Digital EMC
Date : 2013-08-19

Model No.	:	55LN5790-UI	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	24 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-08-19

Model No.	:	55LN5790-UI	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	24 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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	0.15056	58.3	40.2	0.1	58.4	40.3	66.0	56.0	7.6	15.7	N
2	0.31561	37.0	26.6	0.1	37.1	26.7	59.8	49.8	22.7	23.1	N
3	0.72700	38.4	29.2	0.2	38.6	29.4	56.0	46.0	17.4	16.6	N
4	0.79979	39.0	24.8	0.2	39.2	25.0	56.0	46.0	16.8	21.0	N
5	0.90071	38.1	30.1	0.2	38.3	30.3	56.0	46.0	17.7	15.7	N
6	2.22840	30.6	21.1	0.3	30.9	21.4	56.0	46.0	25.1	24.6	N
7	3.47080	33.0	25.0	0.3	33.3	25.3	56.0	46.0	22.7	20.7	N
8	5.06460	34.9	27.4	0.5	35.4	27.9	60.0	50.0	24.6	22.1	N
9	7.24360	41.3	32.2	0.5	41.8	32.7	60.0	50.0	18.2	17.3	N
10	12.68780	33.5	27.6	0.7	34.2	28.3	60.0	50.0	25.8	21.7	N
11	0.15000	60.0	42.4	0.1	60.1	42.5	66.0	56.0	5.9	13.5	L1
12	0.31125	40.9	32.7	0.1	41.0	32.8	59.9	49.9	18.9	17.1	L1
13	0.51219	39.4	31.1	0.1	39.5	31.2	56.0	46.0	16.5	14.8	L1
14	0.70438	39.1	30.8	0.2	39.3	31.0	56.0	46.0	16.7	15.0	L1
15	0.77820	37.2	25.7	0.2	37.4	25.9	56.0	46.0	18.6	20.1	L1
16	0.89733	37.5	30.0	0.2	37.7	30.2	56.0	46.0	18.3	15.8	L1
17	2.17880	35.6	26.4	0.3	35.9	26.7	56.0	46.0	20.1	19.3	L1
18	3.33400	34.1	25.7	0.3	34.4	26.0	56.0	46.0	21.6	20.0	L1
19	5.25440	34.8	28.1	0.5	35.3	28.6	60.0	50.0	24.7	21.4	L1
20	7.11820	40.7	31.6	0.5	41.2	32.1	60.0	50.0	18.8	17.9	L1
21	12.81000	34.6	28.2	0.7	35.3	28.9	60.0	50.0	24.7	21.1	L1

< USB MODE >

Digital EMC

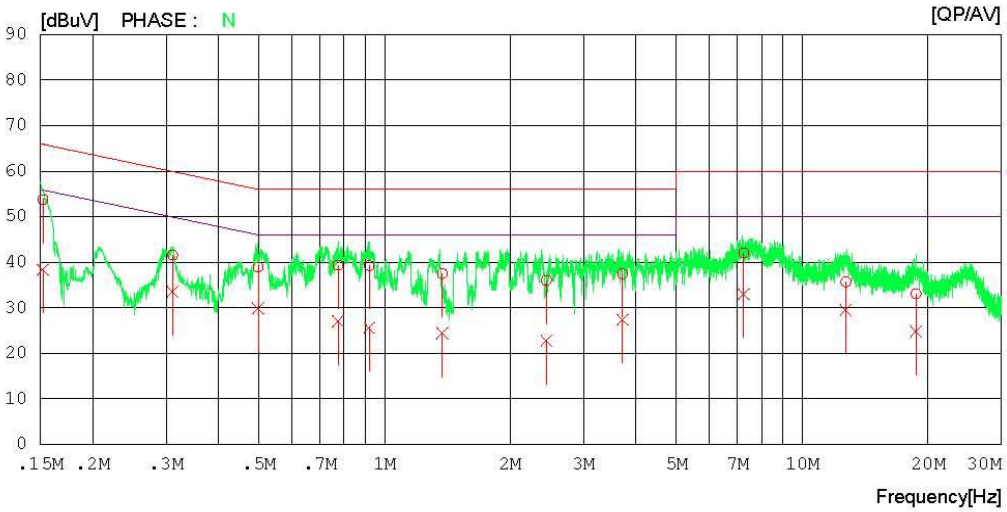
Results of Conducted Emission

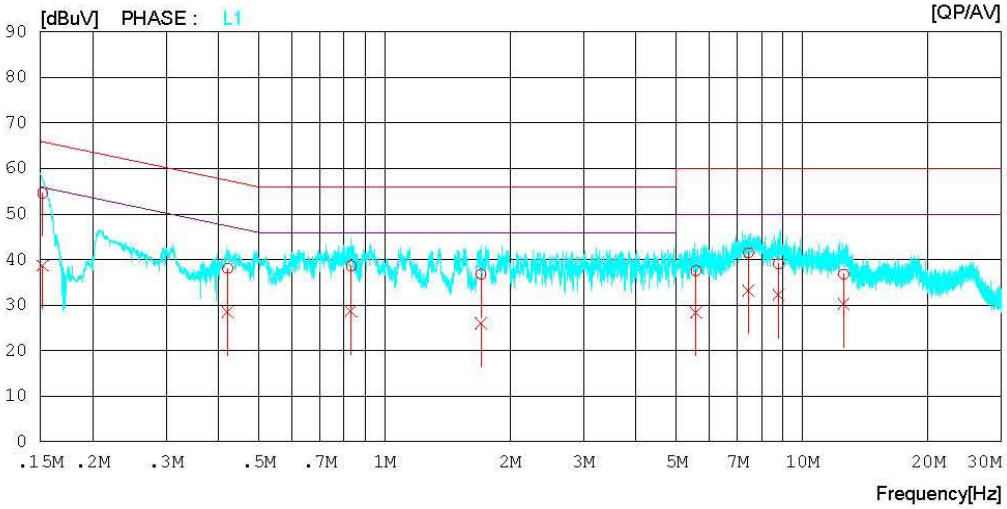
Digital EMC
Date : 2013-08-19

Model No.	:	55LN5790-UI	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	24 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-08-19

Model No.	:	55LN5790-UI	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	24 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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	0.15228	53.7	38.2	0.1	53.8	38.3	65.9	55.9	12.1	17.6	N
2	0.31117	41.5	33.5	0.1	41.6	33.6	59.9	49.9	18.3	16.3	N
3	0.49850	38.9	29.8	0.1	39.0	29.9	56.0	46.0	17.0	16.1	N
4	0.77423	39.1	26.9	0.2	39.3	27.1	56.0	46.0	16.7	18.9	N
5	0.91934	39.1	25.4	0.2	39.3	25.6	56.0	46.0	16.7	20.4	N
6	1.37560	37.2	24.1	0.3	37.5	24.4	56.0	46.0	18.5	21.6	N
7	2.44240	35.7	22.4	0.3	36.0	22.7	56.0	46.0	20.0	23.3	N
8	3.71400	37.1	27.1	0.3	37.4	27.4	56.0	46.0	18.6	18.6	N
9	7.24400	41.5	32.5	0.5	42.0	33.0	60.0	50.0	18.0	17.0	N
10	12.72860	35.0	28.8	0.7	35.7	29.5	60.0	50.0	24.3	20.5	N
11	18.74160	32.1	23.9	0.9	33.0	24.8	60.0	50.0	27.0	25.2	N
12	0.15184	54.5	38.6	0.1	54.6	38.7	65.9	55.9	11.3	17.2	L1
13	0.42132	38.0	28.4	0.1	38.1	28.5	57.4	47.4	19.3	18.9	L1
14	0.83250	38.4	28.5	0.2	38.6	28.7	56.0	46.0	17.4	17.3	L1
15	1.70220	36.5	25.7	0.3	36.8	26.0	56.0	46.0	19.2	20.0	L1
16	5.57380	37.1	27.9	0.5	37.6	28.4	60.0	50.0	22.4	21.6	L1
17	7.43520	41.0	32.8	0.5	41.5	33.3	60.0	50.0	18.5	16.7	L1
18	8.77980	38.5	31.7	0.6	39.1	32.3	60.0	50.0	20.9	17.7	L1
19	12.58300	36.1	29.5	0.7	36.8	30.2	60.0	50.0	23.2	19.8	L1

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 >

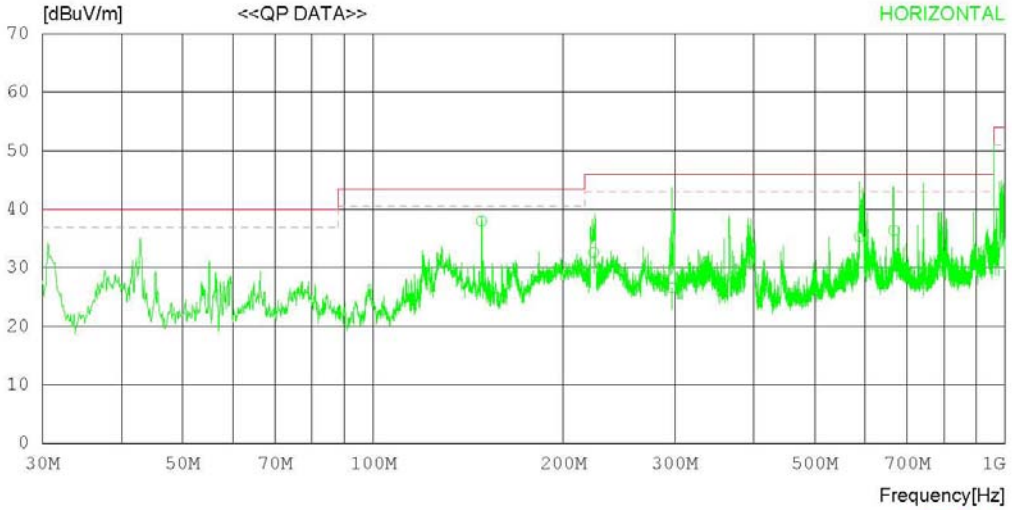
RADIATED EMISSION

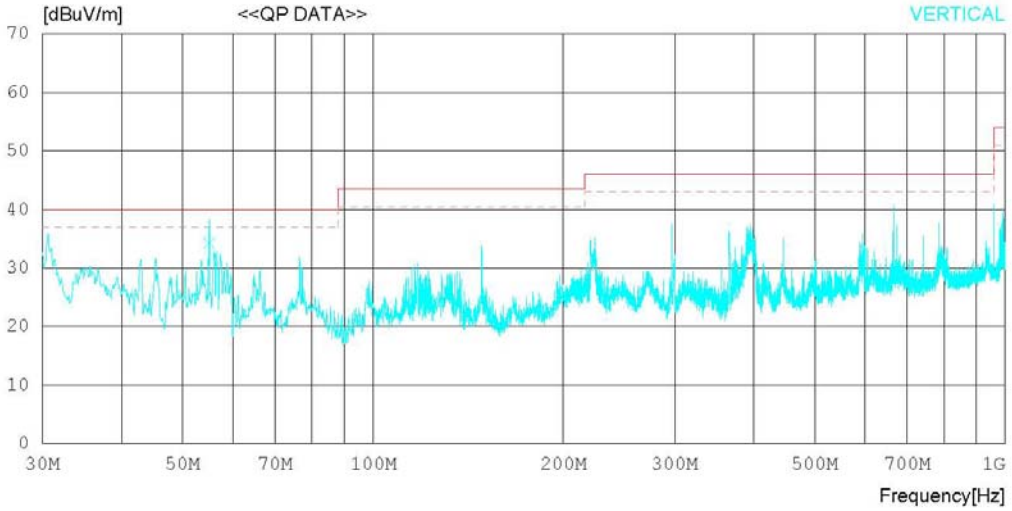
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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	148.474	48.6	10.5	3.1	24.2	38.0	43.5	5.5	300	180
2	223.403	41.8	11.1	3.6	23.9	32.6	46.0	13.4	100	40
3	296.986	32.1	13.7	4.4	23.6	26.6	46.0	19.4	100	360
4	588.017	33.1	18.5	6.6	22.9	35.3	46.0	10.7	100	360
5	666.043	33.6	18.6	7.1	22.9	36.4	46.0	9.6	100	360
6	742.033	25.3	19.1	7.4	22.8	29.0	46.0	17.0	100	360
----- Vertical ------										
7	55.067	49.7	6.8	2.1	24.4	34.2	40.0	5.8	200	180

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

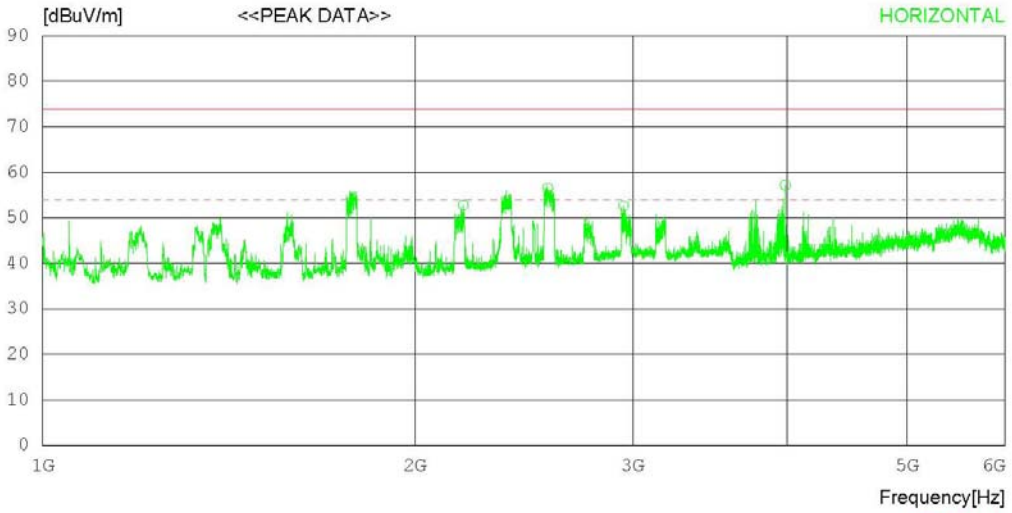
RADIATED EMISSION

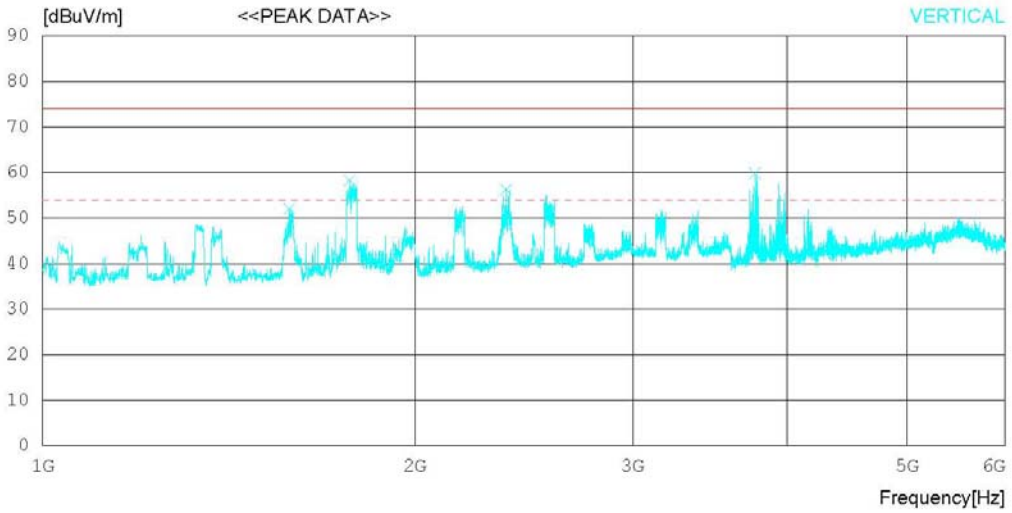
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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	2188.750	61.7	25.6	4.9	39.4	52.8	74.0	21.2	100	358
2	2560.625	62.9	27.6	5.3	39.3	56.5	74.0	17.5	100	175
3	2950.000	57.5	28.8	5.6	39.3	52.6	74.0	21.4	100	175
4	3985.000	58.8	30.1	6.7	38.4	57.2	74.0	16.8	100	195
----- Vertical ------										
5	1583.125	63.2	24.6	4.2	40.0	52.0	74.0	22	100	1
6	1771.250	69.0	24.6	4.4	39.7	58.3	74.0	15.7	100	1
7	2370.625	63.7	26.7	5.1	39.3	56.2	74.0	17.8	100	1
8	3769.375	62.4	29.6	6.5	38.7	59.8	74.0	14.2	100	208

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

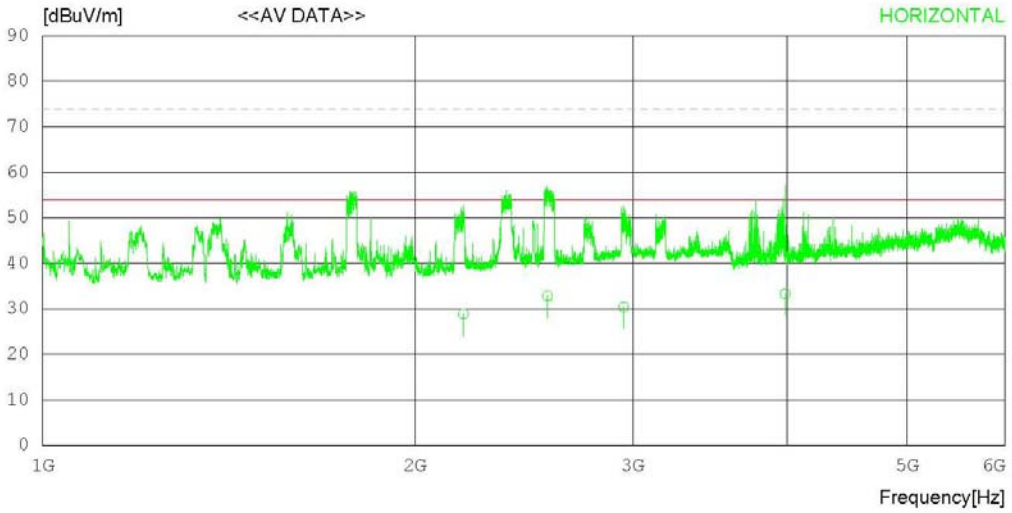
RADIATED EMISSION

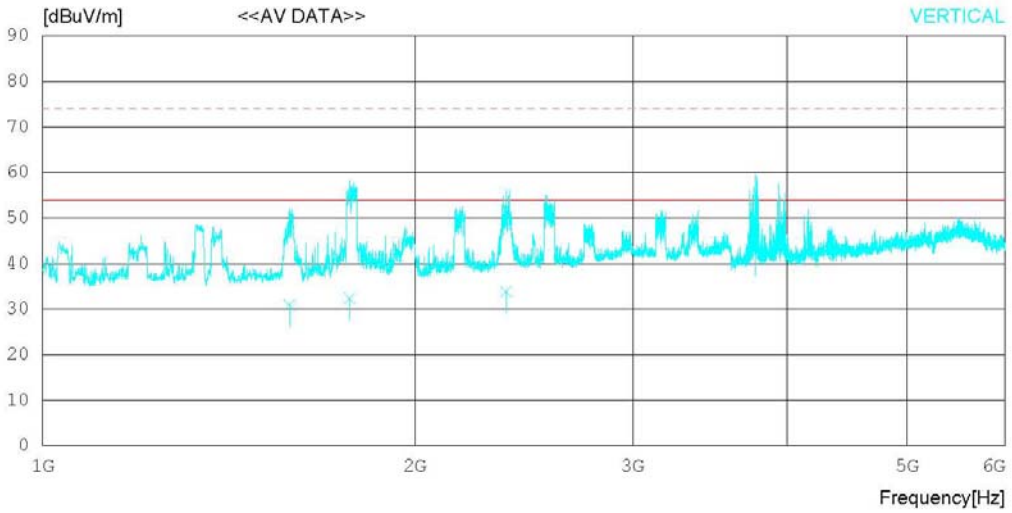
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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	2188.836	37.8	25.6	4.9	39.4	28.9	54.0	25.1	100	360
2	2559.838	39.2	27.6	5.3	39.3	32.8	54.0	21.2	100	180
3	2949.544	35.3	28.8	5.6	39.3	30.4	54.0	23.6	100	180
4	3984.941	34.9	30.1	6.7	38.4	33.3	54.0	20.7	100	200
----- Vertical ------										
5	1583.279	42.1	24.6	4.2	40.0	30.9	54.0	23.1	100	180
6	1771.503	43.1	24.6	4.4	39.7	32.4	54.0	21.6	100	180
7	2370.854	41.4	26.7	5.1	39.3	33.9	54.0	20.1	100	100
8	3769.743	44.5	29.6	6.5	38.7	41.9	54.0	12.1	100	210

< USB MODE_30 MHz ~ 1 GHz >

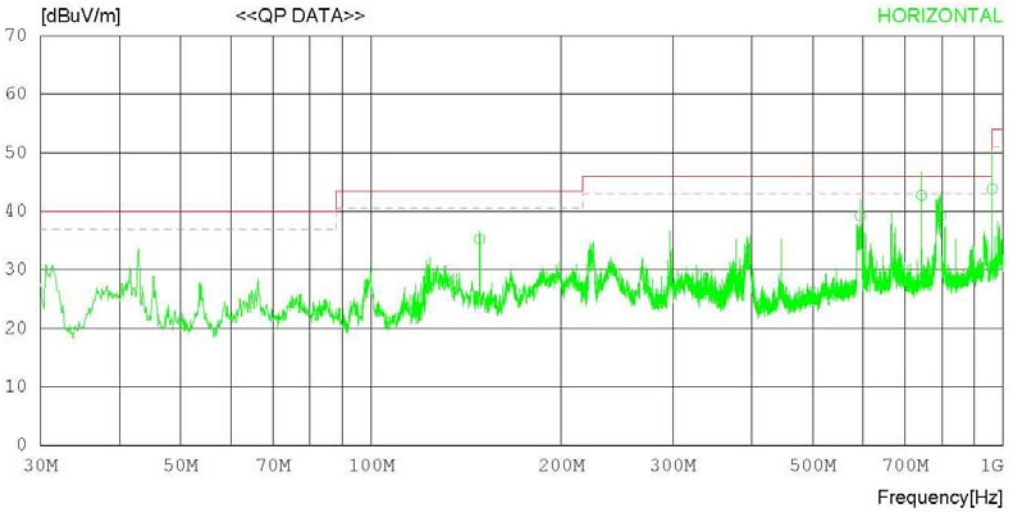
RADIATED EMISSION

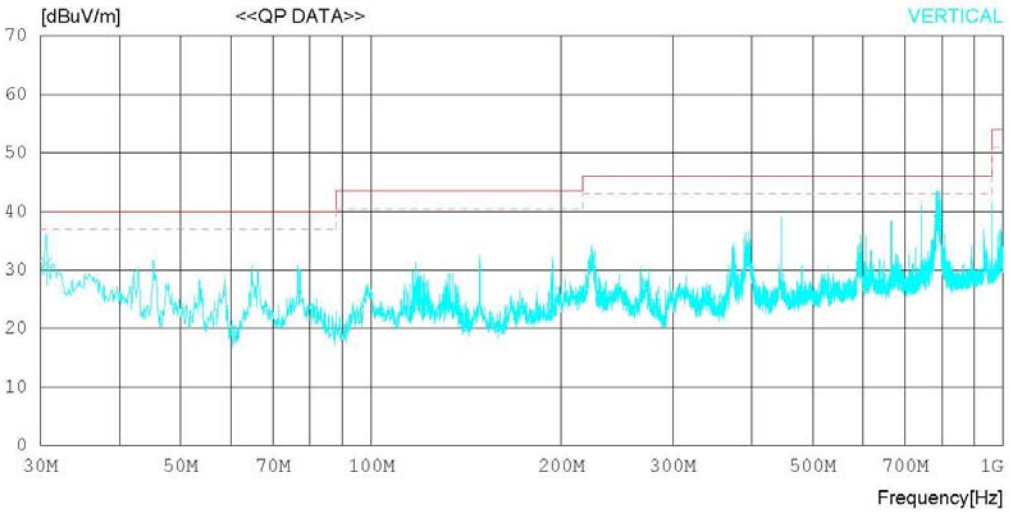
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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	148.521	45.8	10.5	3.1	24.2	35.2	43.5	8.3	200	360
2	593.975	36.8	18.6	6.7	22.9	39.2	46.0	6.8	100	280
3	742.493	38.9	19.2	7.4	22.8	42.7	46.0	3.3	200	180
4	795.958	34.6	19.9	7.5	22.8	39.2	46.0	6.8	200	360
5	960.958	36.4	21.7	8.4	22.7	43.8	54.0	10.2	200	180
----- Vertical ------										
6	30.660	35.5	17.5	2.0	23.8	31.2	40.0	8.8	100	360
7	791.092	33.8	19.9	7.5	22.8	38.4	46.0	7.6	100	360

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

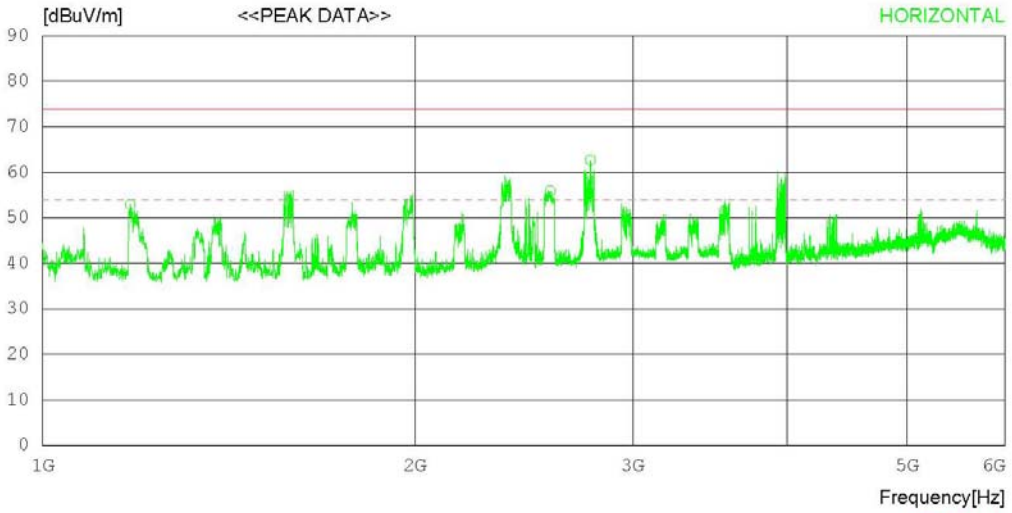
RADIATED EMISSION

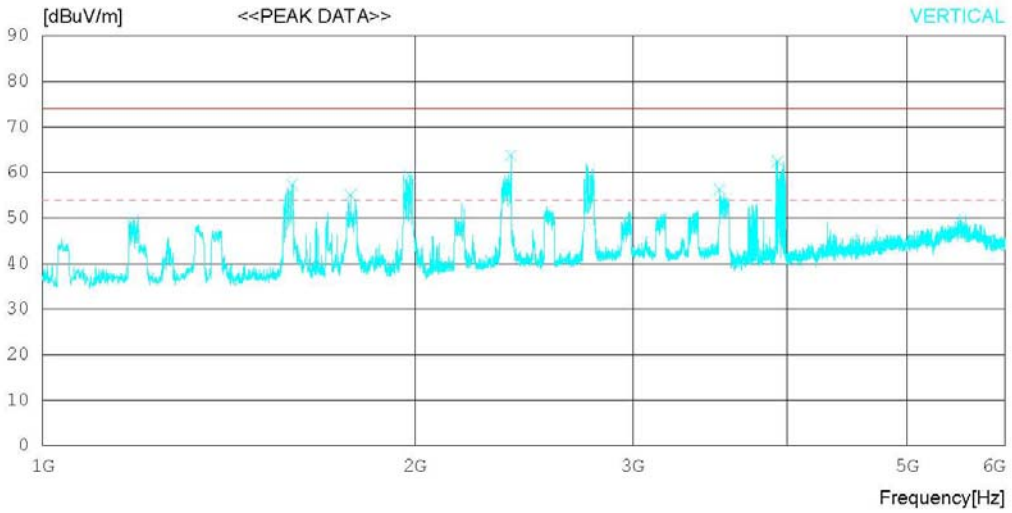
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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	1177.500	66.0	24.1	3.6	40.8	52.9	74.0	21.1	100	0
2	2573.125	62.2	27.7	5.3	39.3	55.9	74.0	18.1	100	199
3	2772.500	68.2	28.3	5.5	39.3	62.7	74.0	11.3	100	0
----- Vertical ------										
4	1592.500	68.6	24.6	4.2	40.0	57.4	74.0	16.6	100	220
5	1774.375	65.7	24.6	4.4	39.7	55.0	74.0	19	100	239
6	1981.250	69.5	24.6	4.7	39.5	59.3	74.0	14.7	100	239
7	2392.500	71.2	26.8	5.1	39.3	63.8	74.0	10.2	100	191
8	3525.625	60.2	28.9	6.2	39.0	56.3	74.0	17.7	100	357
9	3930.625	64.3	30.0	6.6	38.4	62.5	74.0	11.5	100	200

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

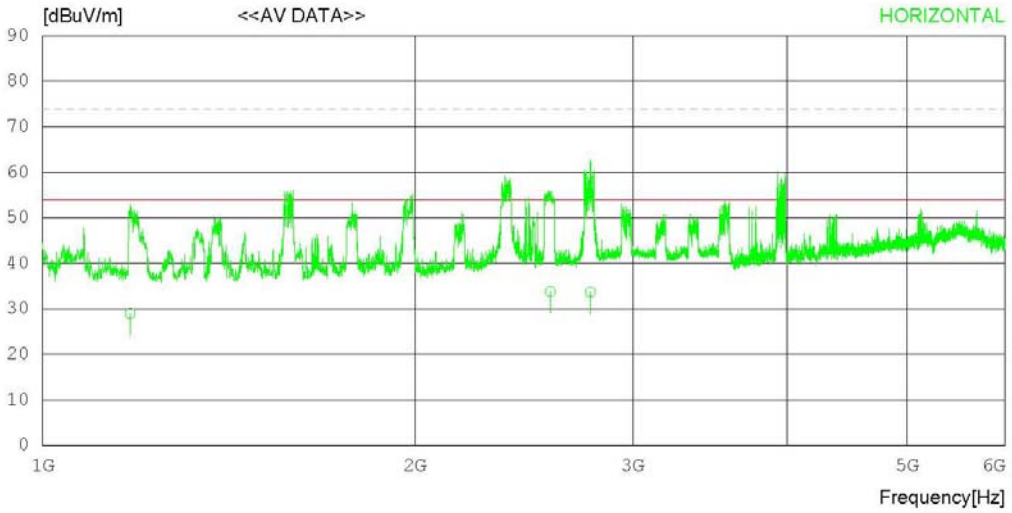
RADIATED EMISSION

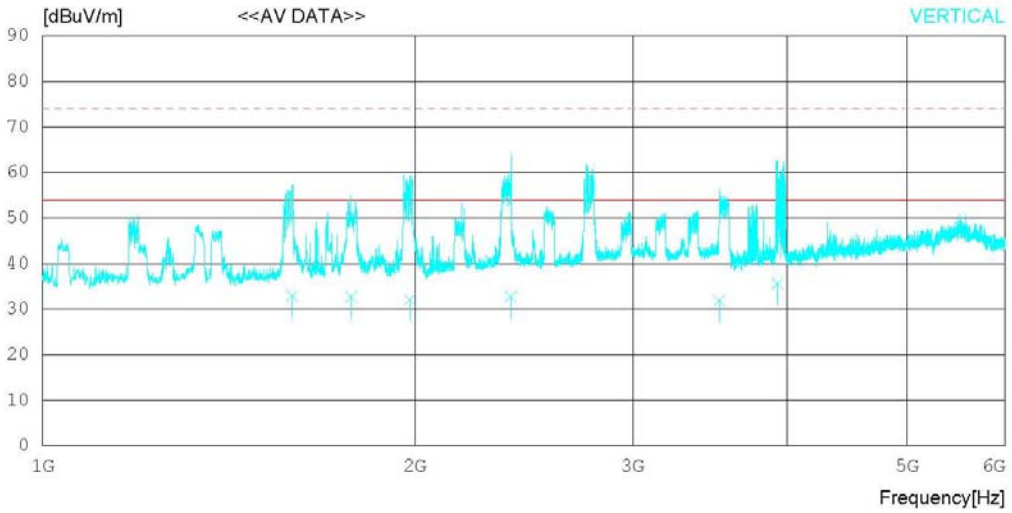
Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2013-08-21

Model Name	:	55LN5790-UI	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 56 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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	1177.333	42.1	24.1	3.6	40.8	29.0	54.0	25.0	100	0
2	2573.375	40.1	27.7	5.3	39.3	33.8	54.0	20.2	100	199
3	2772.082	39.2	28.3	5.5	39.3	33.7	54.0	20.3	100	0
----- Vertical ------										
4	1591.994	44.1	24.6	4.2	40.0	32.9	54.0	21.1	100	220
5	1775.816	43.4	24.6	4.4	39.7	32.7	54.0	21.3	100	240
6	1982.610	42.3	24.6	4.7	39.5	32.1	54.0	21.9	100	240
7	2391.657	40.1	26.8	5.1	39.3	32.7	54.0	21.3	100	190
8	3525.270	35.8	28.9	6.2	39.0	31.9	54.0	22.1	100	360
9	3928.758	37.4	30.0	6.6	38.4	35.6	54.0	18.4	100	200

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	2013.06.28	2014.06.28
☐	LISN	KNW-407	KYORITSU	8-317-8	2013.01.08	2014.01.08
☐	LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2013.06.27	2014.06.27
☐	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	2013.06.28	2014.06.28
☒	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
☒	AMPLIFIER	8449B	AGILENT	3008A01590	2013.02.27	2014.02.27
☐	SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2013.06.27	2014.06.27
☐	AMPLIFIER	8447D	AGILENT	2443A03690	2013.06.28	2014.06.28
☐	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