EMC TEST REPORT

Test item	: LED TV Monitor
Model No.	: 55LN5700-UA
Order No.	: 1211-02697
Date of receipt	: 2012-11-28
Test duration	: 2012-12-06
Use of report	: FCC CoC Marking
Date of Issue	: 2012-12-10

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 : (16 ~ 18) °C,
Humidity : (42 ~ 47) % 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.
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Tested by:

Engineer
KyungMin Jeong

Reviewed by:

General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

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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	ROK1124C	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".

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3. General Information of EUT

Model No.	55LN5700-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ55LN5700UA
Type of Sample Tested	Pre-Production
High Frequency	Max 800 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

Component supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480i	15.73	59.94
	15.73	60.00
720 x 480p	31.47	59.94
	31.50	60.00
1280 x 720p	44.96	59.94
	45.00	60.00
1920 x 1080i	33.72	59.94
	33.75	60.00
1920 x 1080p	26.97	23.976
	27.00	24.00
	33.71	29.97
	33.75	30.00
	67.432	59.94
	67.500	60.00

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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	12-06	16	47
Radiated Disturbance	12-06	18	42

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.15037	**L1**	**59.8**	Quasi-Peak	**66.0**	**6.2**

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
719.554	**H**	**41.2**	Quasi-Peak	**46.0**	**4.8**

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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 – Resolution : 1920x1080 Resolution (Worst Case)
- USB MODE

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	VOSTRO220	G3RZKBX	DELL INC	Power HDMI USB USB USB LAN STEREO	1.8 1.8 1.8 1.8 1.5 1.6 1.5	Not use Not use Not use Not use Not use Not use Not use	Non-shield Shield Shield Shield Shield Non-shield Non-shield	Plastic	DOC
KEYBOARD	SKG-3000UB	TAKSB601236L	MONITEREY INTERNATIONAL CORP	USB	1.8	Not use	Shield	Plastic	DOC
MOUSE	1484	352700021373	MICROSOFT CORPORATION	USB	1.8	Not use	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2001499	SONY EMCS	POWER COMPONENT	1.8 1.6	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	Sandisk Cruzer Z37 4G	N/A	SANDISK	USB	-	-	-	-	DOC
PRINTER	SRP-770	SRP77008060035	BIXOLON	USB Power	1.6 1.5	Not use Not use	Shield Non-shield	Plastic	DOC
HEADSET	COV903	N/A	COSY	STEREO	1.5	Not use	Non-shield	Plastic	DOC

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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

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Test Result

< HDMI MODE >

Digital EMC

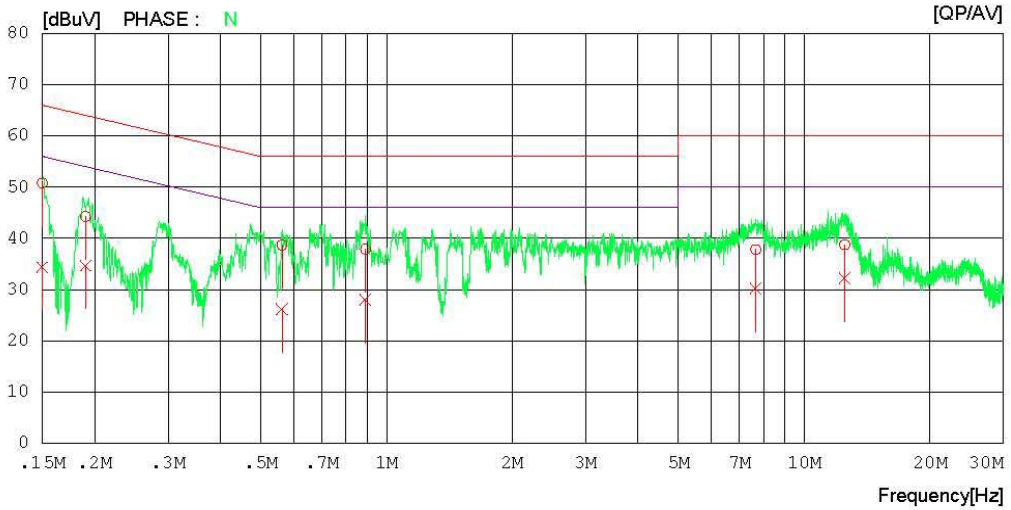
Results of Conducted Emission

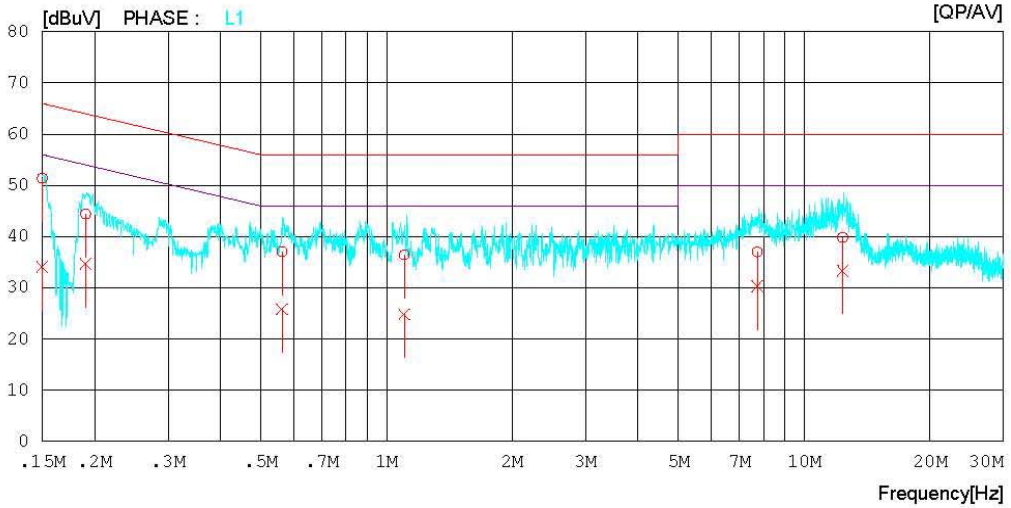
Digital EMC
Date : 2012-12-06

Model No.	:	55LN5700-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	16 'C 47 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





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Results of Conducted Emission

Digital EMC
Date : 2012-12-06

Model No.	:	55LN5700-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	16 'C 47 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.15000	50.6	34.1	0.2	50.8	34.3	66.0	56.0	15.2	21.7	N
2	0.19039	44.1	34.5	0.2	44.3	34.7	64.0	54.0	19.7	19.3	N
3	0.56219	38.5	26.0	0.2	38.7	26.2	56.0	46.0	17.3	19.8	N
4	0.89074	37.7	27.8	0.2	37.9	28.0	56.0	46.0	18.1	18.0	N
5	7.66200	37.3	29.7	0.5	37.8	30.2	60.0	50.0	22.2	19.8	N
6	12.50750	38.0	31.5	0.7	38.7	32.2	60.0	50.0	21.3	17.8	N
7	0.15000	51.2	33.9	0.2	51.4	34.1	66.0	56.0	14.6	21.9	L1
8	0.19045	44.2	34.5	0.2	44.4	34.7	64.0	54.0	19.6	19.3	L1
9	0.56236	36.8	25.6	0.2	37.0	25.8	56.0	46.0	19.0	20.2	L1
10	1.10350	36.1	24.5	0.3	36.4	24.8	56.0	46.0	19.6	21.2	L1
11	7.72150	36.5	29.8	0.5	37.0	30.3	60.0	50.0	23.0	19.7	L1
12	12.36550	39.1	32.7	0.7	39.8	33.4	60.0	50.0	20.2	16.6	L1

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< USB MODE >

Digital EMC

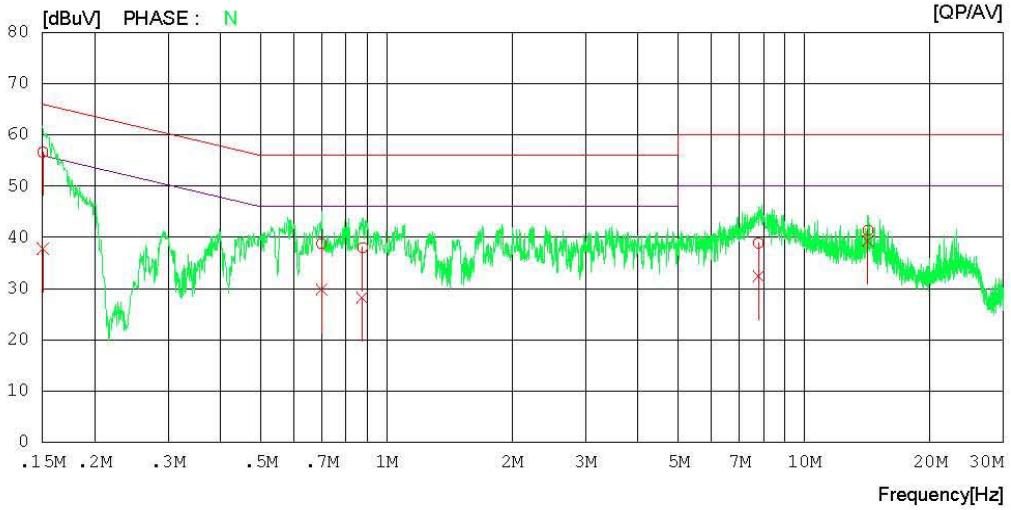
Results of Conducted Emission

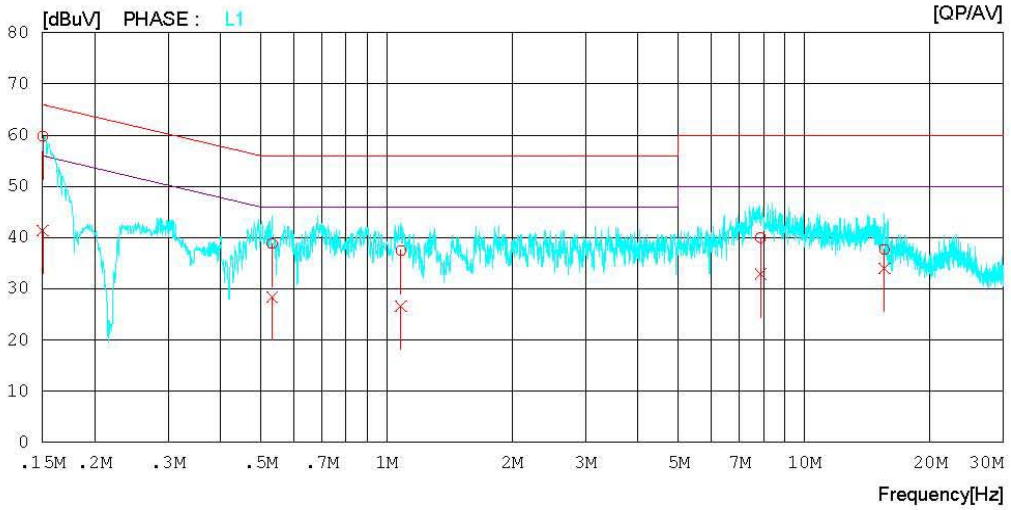
Digital EMC
Date : 2012-12-06

Model No.	:	55LN5700-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	16 'C 47 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





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Results of Conducted Emission

Digital EMC
Date : 2012-12-06

Model No.	:	55LN5700-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	16 'C 47 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.15049	56.4	37.6	0.2	56.6	37.8	66.0	56.0	9.4	18.2	N
2	0.69913	38.5	29.6	0.2	38.7	29.8	56.0	46.0	17.3	16.2	N
3	0.87596	37.8	28.0	0.2	38.0	28.2	56.0	46.0	18.0	17.8	N
4	7.77700	38.4	31.9	0.5	38.9	32.4	60.0	50.0	21.1	17.6	N
5	14.21450	40.7	38.6	0.7	41.4	39.3	60.0	50.0	18.6	10.7	N
6	0.15037	59.6	41.1	0.2	59.8	41.3	66.0	56.0	6.2	14.7	L1
7	0.53246	38.6	28.2	0.2	38.8	28.4	56.0	46.0	17.2	17.6	L1
8	1.08300	37.2	26.3	0.3	37.5	26.6	56.0	46.0	18.5	19.4	L1
9	7.86250	39.5	32.4	0.5	40.0	32.9	60.0	50.0	20.0	17.1	L1
10	15.55550	36.9	33.2	0.8	37.7	34.0	60.0	50.0	22.3	16.0	L1

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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.

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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

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Test Result

< HDMI MODE_30 MHz ~ 1 GHz >

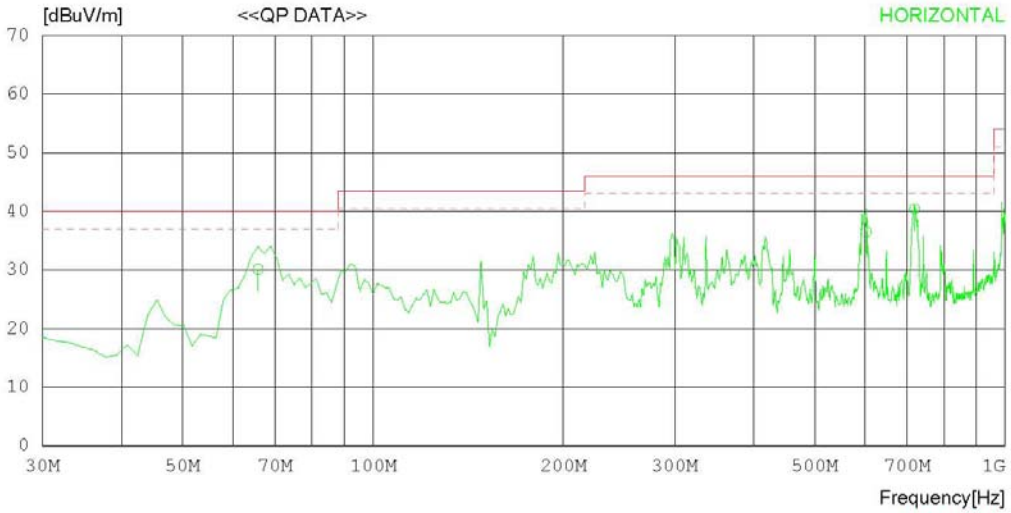
RADIATED EMISSION

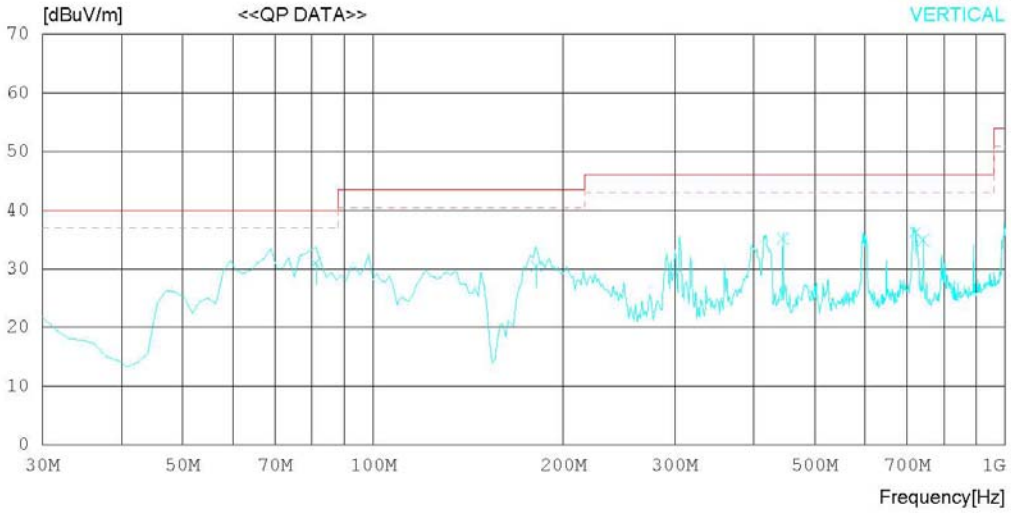
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	65.753	44.7	6.5	1.6	22.7	30.1	40.0	9.9	300	134
2	602.775	38.4	18.6	4.2	24.7	36.5	46.0	9.5	100	236
3	718.599	40.8	19.1	4.6	24.1	40.4	46.0	5.6	200	115
----- Vertical ------										
4	81.204	44.8	7.4	1.6	22.8	31.0	40.0	9.0	100	304
5	181.246	42.3	9.3	2.2	23.3	30.5	43.5	13.0	100	331
6	445.059	39.8	16.5	3.5	24.6	35.2	46.0	10.8	100	358
7	722.109	36.6	19.2	4.6	24.1	36.3	46.0	9.7	100	153
8	741.771	34.9	19.4	4.6	24.0	34.9	46.0	11.1	100	241

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

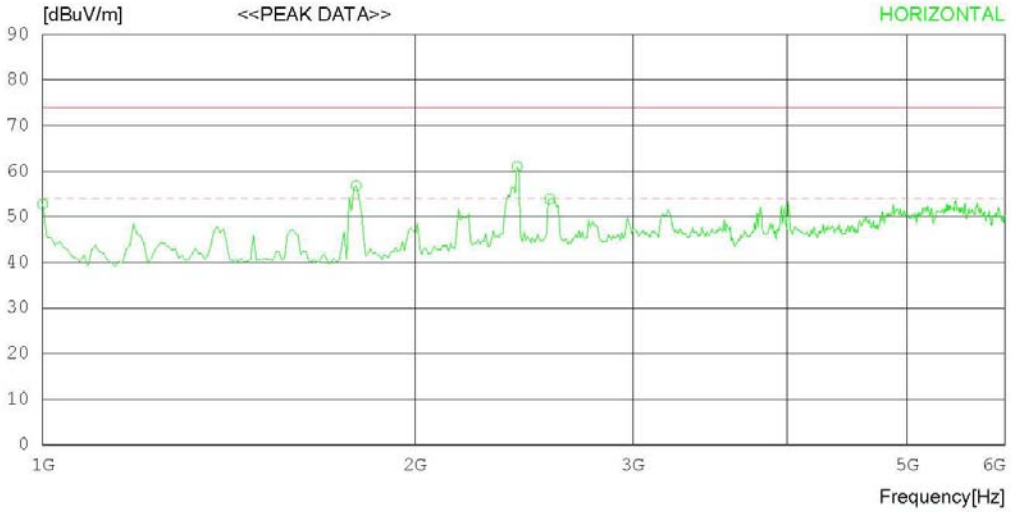
RADIATED EMISSION

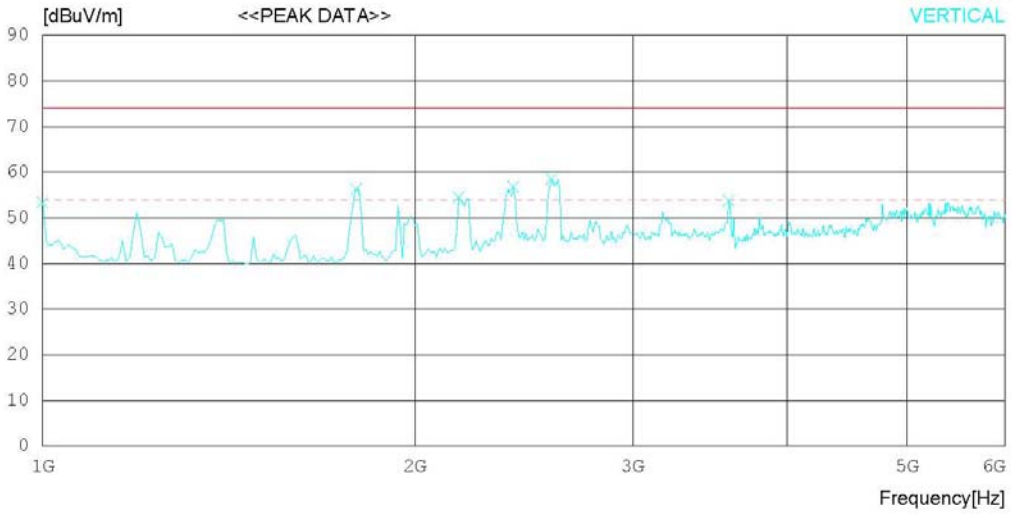
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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)





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	1000.000	65.0	23.9	5.7	41.8	52.8	74.0	21.2	100	192
2	1793.269	65.9	24.6	8.1	41.8	56.8	74.0	17.2	100	315
3	2418.274	66.5	27.0	9.4	41.9	61.0	74.0	13	100	155
4	2570.520	58.4	27.7	9.7	41.9	53.9	74.0	20.1	100	140
----- Vertical ------										
5	1000.000	65.6	23.9	5.7	41.8	53.4	74.0	20.6	100	206
6	1793.269	65.5	24.6	8.1	41.8	56.4	74.0	17.6	100	349
7	2169.873	61.9	25.5	8.8	41.7	54.5	74.0	19.5	100	1
8	2402.249	62.5	26.9	9.3	41.9	56.8	74.0	17.2	100	186
9	2578.533	63.0	27.7	9.7	41.9	58.5	74.0	15.5	100	1
10	3588.164	54.7	29.1	11.9	42.0	53.7	74.0	20.3	100	1

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

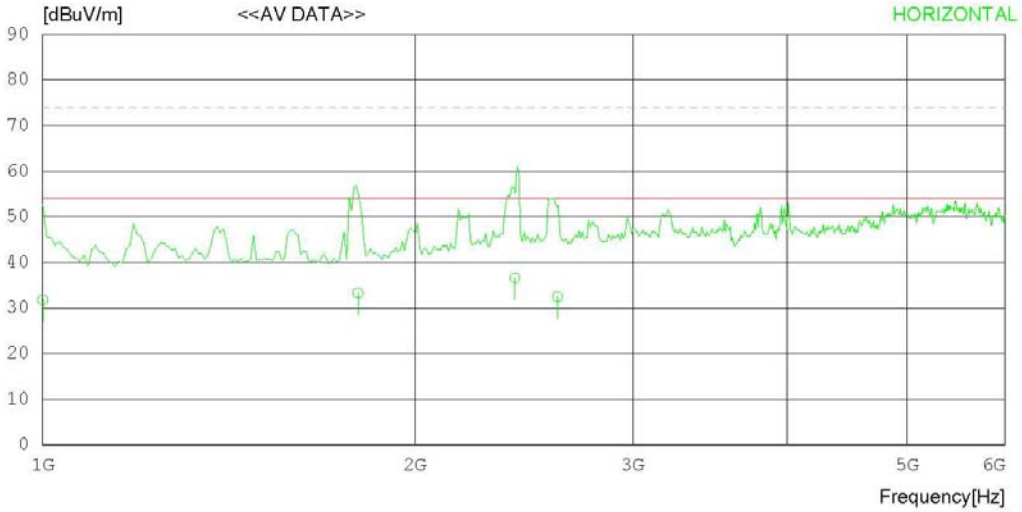
RADIATED EMISSION

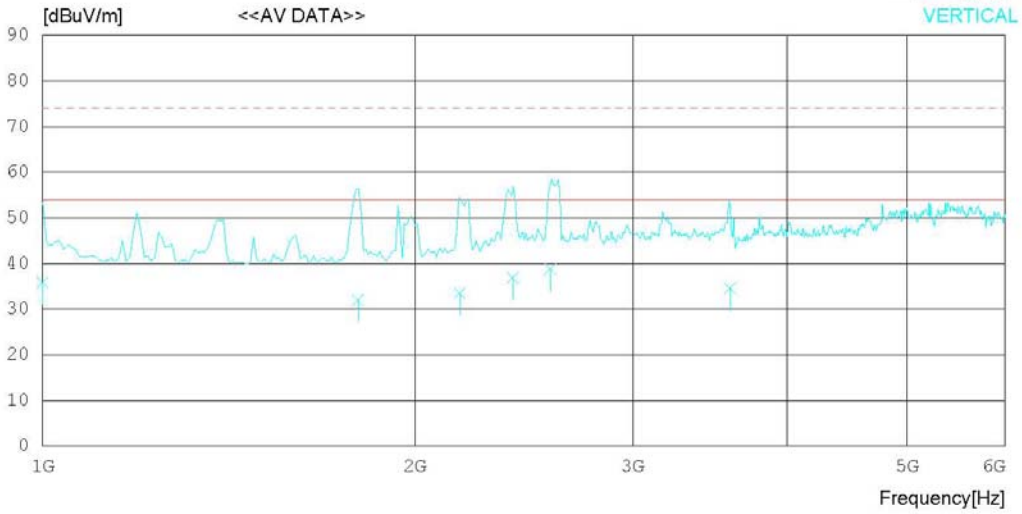
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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)





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	1000.339	44.0	23.9	5.7	41.8	31.8	54.0	22.2	100	192
2	1798.526	42.4	24.6	8.1	41.8	33.3	54.0	20.7	100	315
3	2409.038	42.3	26.9	9.3	41.9	36.6	54.0	17.4	100	155
4	2607.884	36.8	27.8	9.7	41.8	32.5	54.0	21.5	100	140
----- Vertical ------										
5	1000.264	48.0	23.9	5.7	41.8	35.8	54.0	18.2	100	206
6	1798.967	41.1	24.6	8.1	41.8	32.0	54.0	22.0	100	349
7	2174.256	40.8	25.6	8.8	41.7	33.5	54.0	20.5	100	241
8	2399.865	42.6	26.9	9.3	41.9	36.9	54.0	17.1	100	186
9	2574.294	43.3	27.7	9.7	41.9	38.8	54.0	15.2	100	162
10	3595.692	35.5	29.1	11.9	42.0	34.5	54.0	19.5	100	89

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< USB MODE_30 MHz ~ 1 GHz >

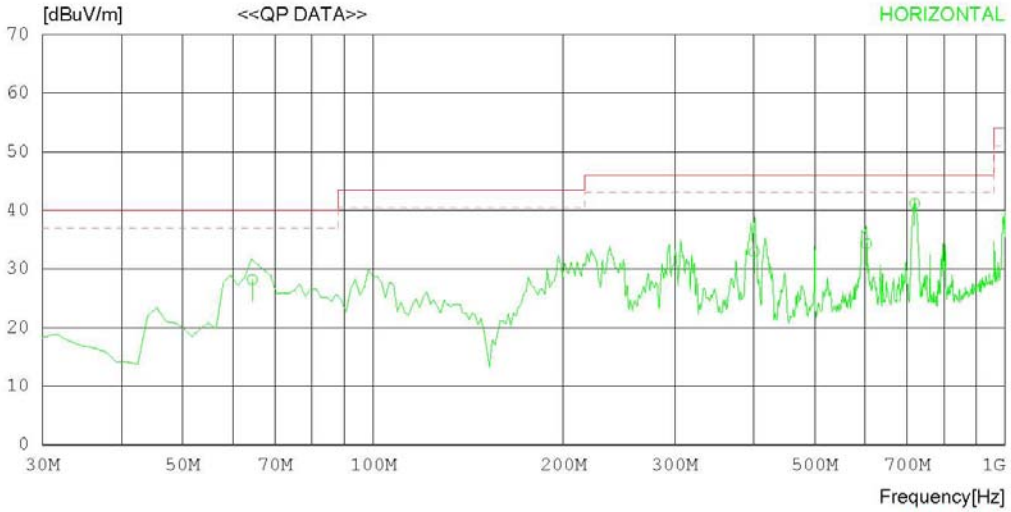
RADIATED EMISSION

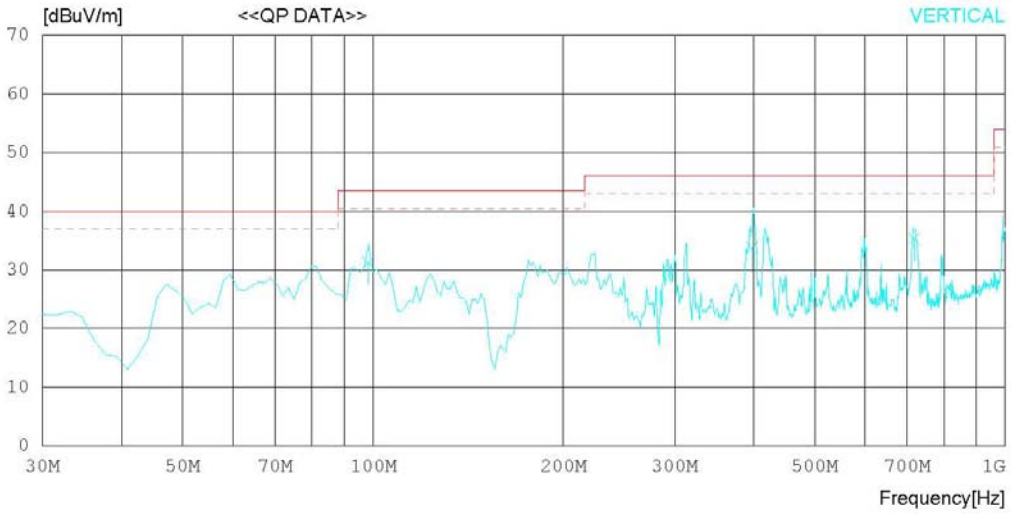
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	64.384	42.9	6.5	1.5	22.7	28.2	40.0	11.8	301	1
2	400.741	38.2	15.7	3.5	24.5	32.9	46.0	13.1	100	140
3	603.605	36.2	18.6	4.2	24.7	34.3	46.0	11.7	201	221
4	719.554	41.5	19.2	4.6	24.1	41.2	46.0	4.8	201	78
----- Vertical ------										
5	98.326	42.1	10.6	1.4	22.8	31.3	43.5	12.2	100	284
6	397.252	39.2	15.6	3.5	24.5	33.8	46.0	12.2	199	224
7	718.224	35.7	19.1	4.6	24.1	35.3	46.0	10.7	100	308

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

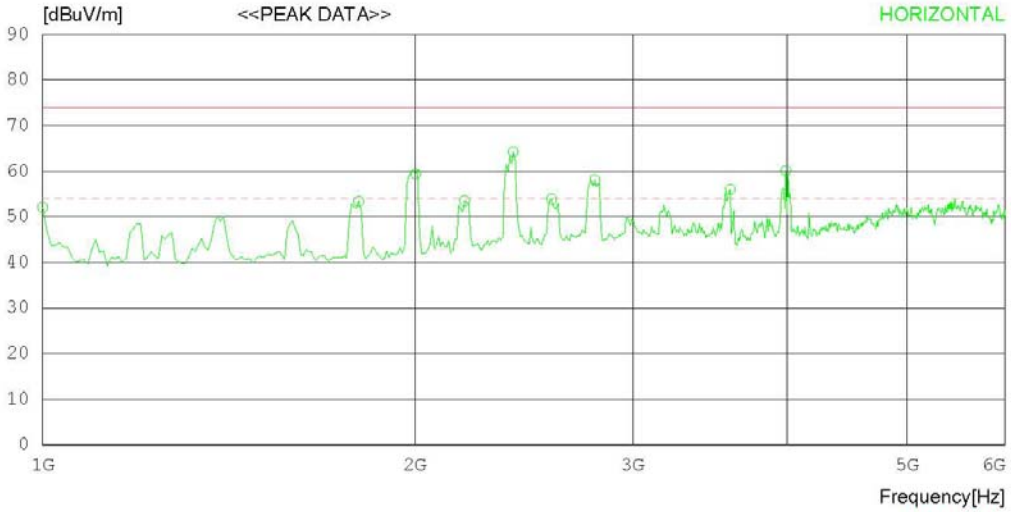
RADIATED EMISSION

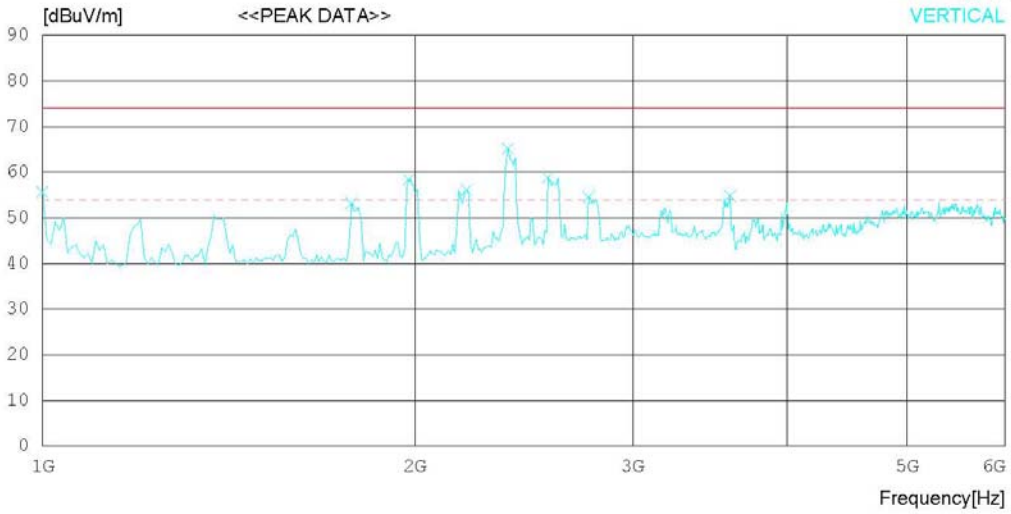
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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)





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	1000.000	64.3	23.9	5.7	41.8	52.1	74.0	21.9	100	164
2	1801.282	62.5	24.6	8.1	41.8	53.4	74.0	20.6	100	358
3	2001.602	68.0	24.6	8.5	41.7	59.4	74.0	14.6	100	358
4	2193.912	60.6	25.7	8.9	41.7	53.5	74.0	20.5	100	358
5	2402.249	69.9	26.9	9.3	41.9	64.2	74.0	9.8	100	199
6	2578.533	58.4	27.7	9.7	41.9	53.9	74.0	20.1	100	216
7	2794.883	61.3	28.4	10.1	41.7	58.1	74.0	15.9	100	216
8	3596.177	57.0	29.1	11.9	42.0	56.0	74.0	18	100	234
9	3988.811	59.1	30.1	12.9	42.0	60.1	74.0	13.9	100	220
----- Vertical ------										
10	1000.000	67.9	23.9	5.7	41.8	55.7	74.0	18.3	100	1
11	1777.243	62.5	24.6	8.0	41.8	53.3	74.0	20.7	100	214
12	1977.564	67.1	24.6	8.4	41.7	58.4	74.0	15.6	100	205
13	2201.925	63.3	25.7	8.9	41.7	56.2	74.0	17.8	100	1
14	2378.210	71.1	26.7	9.3	41.9	65.2	74.0	8.8	100	1
15	2562.507	63.4	27.6	9.7	41.9	58.8	74.0	15.2	100	210
16	2762.831	58.0	28.3	10.0	41.7	54.6	74.0	19.4	100	1
17	3596.177	55.8	29.1	11.9	42.0	54.8	74.0	19.2	100	1

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

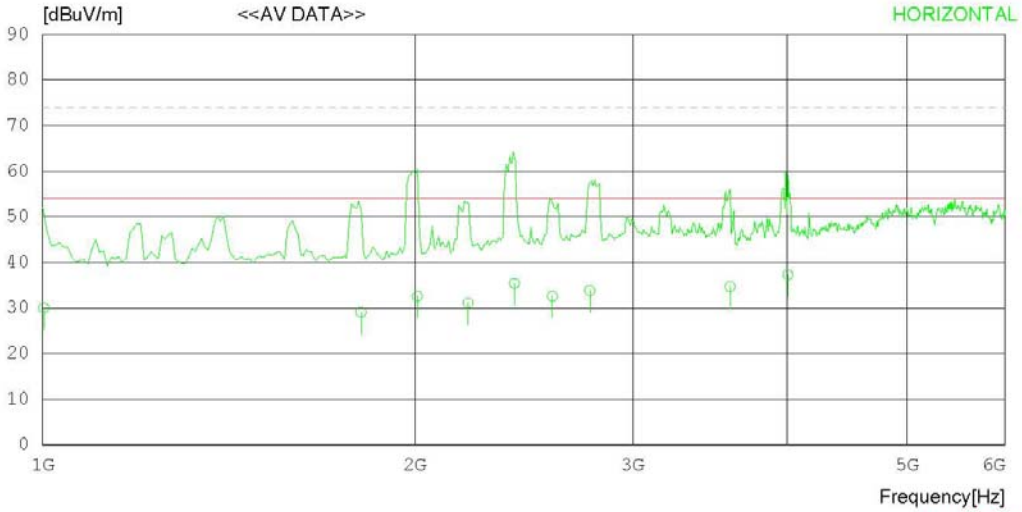
RADIATED EMISSION

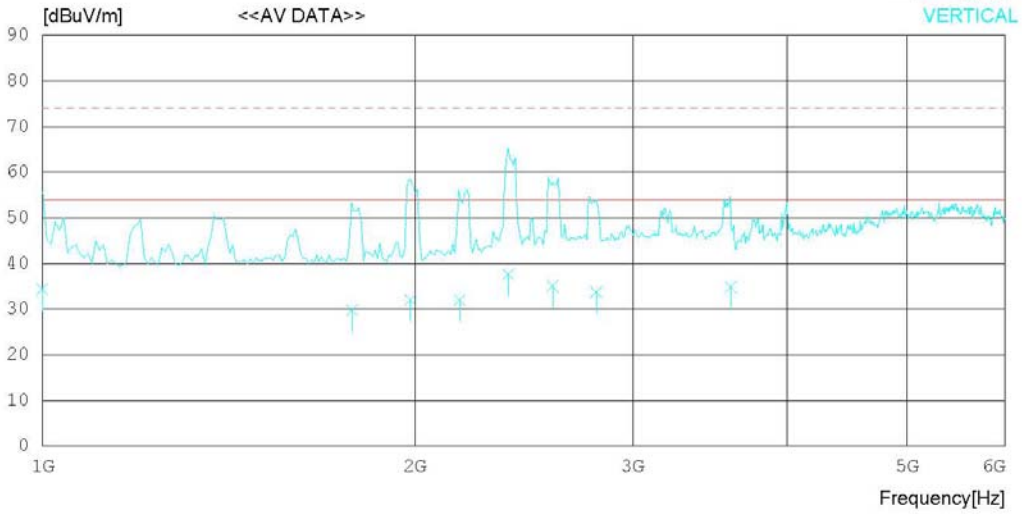
Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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)





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RADIATED EMISSION

Date : 2012-12-06

Model Name	:	55LN5700-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	18 'C 42 % 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	1002.117	42.2	23.9	5.7	41.8	30.0	54.0	24.0	100	164
2	1809.012	38.2	24.6	8.1	41.8	29.1	54.0	24.9	100	305
3	2008.570	41.2	24.6	8.5	41.7	32.6	54.0	21.4	100	165
4	2207.842	38.1	25.8	8.9	41.7	31.1	54.0	22.9	100	87
5	2406.596	41.1	26.9	9.3	41.9	35.4	54.0	18.6	100	199
6	2583.205	37.1	27.7	9.7	41.9	32.6	54.0	21.4	100	216
7	2768.647	37.1	28.3	10.1	41.7	33.8	54.0	20.2	100	216
8	3595.070	35.7	29.1	11.9	42.0	34.7	54.0	19.3	100	234
9	4003.205	36.3	30.2	12.9	42.1	37.3	54.0	16.7	100	220
----- Vertical ------										
10	1000.042	46.6	23.9	5.7	41.8	34.4	54.0	19.6	100	241
11	1778.717	39.0	24.6	8.0	41.8	29.8	54.0	24.2	100	214
12	1982.846	40.7	24.6	8.4	41.7	32.0	54.0	22.0	100	205
13	2174.237	39.3	25.6	8.8	41.7	32.0	54.0	22.0	100	104
14	2380.243	43.4	26.8	9.3	41.9	37.6	54.0	16.4	100	79
15	2584.596	39.5	27.7	9.7	41.9	35.0	54.0	19.0	100	210
16	2802.935	36.9	28.4	10.1	41.7	33.7	54.0	20.3	100	221
17	3599.679	35.8	29.1	11.9	42.0	34.8	54.0	19.2	100	194

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Appendix 1

List of Test and Measurement Instruments

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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	2012.03.05	2013.03.05
☐	RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐	LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐	LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
☐	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☒	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	2012.01.09	2013.01.09

2. Radiated Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
☒	BILOG ANTENNA	CBL6112D	SCHAFFNER	22609	2011.12.21	2012.12.21
☒	HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
☒	AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
☒	AMPLIFIER	MLA-100M18-B01-25	TSJ	1719458	2012.06.04	2013.06.04
☐	SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
☐	AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
☐	BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.03.22	2014.03.22
☐	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☐	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	2012.03.05	2013.03.05

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