

# EMC TEST REPORT

Test item : LED TV Monitor  
Model No. : 55LN5700-UA  
Order No. : DEMC1308-02537  
Date of receipt : 2013-08-16  
Test duration : 2013-08-19 ~ 2013-08-22  
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

<b>1. General Remarks</b> .....	3
<b>2. Test Laboratory</b> .....	3
<b>3. General Information of EUT</b> .....	4
<b>4. Test Summary</b> .....	5
4.1 Applied standards and test results .....	5
4.2 Test environment and conditions .....	5
4.3 Test result Summary .....	5
<b>5. Test Set-up and operation mode</b> .....	6
5.1 Principle of Configuration Selection .....	6
5.2 Test Operation Mode .....	6
5.3 Support Equipment Used .....	6
<b>6. Test Results : Emission</b> .....	7
6.1 Conducted Disturbance .....	7
6.2 Radiated Disturbance .....	12
<b>Appendix 1</b> .....	26
<b>List of Test and Measurement Instruments</b> .....	26
<b>Appendix 2</b> .....	28
<b>Report Revision History</b> .....	28

## 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.	55LN5700-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ55LN5700UA
Type of Sample Tested	Pre-Production
High Frequency	795 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 supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480	31.469	59.94
	31.5	60
1280 x 720	44.96	59.94
	45	60
1920 x 1080	33.72	59.94
	33.75	60
	26.97	23.97
	27	24
	33.716	29.976
	33.75	30.00
	67.43	59.94
	67.5	60

## 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 (°C)	Humidity (% R.H.)
Conducted Disturbance	08-19	24	56
Radiated Disturbance	08-21	25	56
	08-22	25	56

### 4.3 Test result Summary

#### (1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
0.15006	L1	58.8	Quasi-Peak	66.0	7.2

#### (2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB( $\mu$ V/m)]	Detector	Limit [dB( $\mu$ V/m)]	Margin [dB]
148.506	H	40.5	Quasi-Peak	43.5	3.0

## 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	1.8	Not use	Non-shield	Plastic	DOC
				USB	1.7	Not use	Non-shield		
				USB	1.6	Not use	Non-shield		
				USB	2.0	Not use	Non-shield		
				HDMI	1.9	Not use	Shield		
KEYBOARD	SKG-3000UB	TAKB601241E	MONITERY 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	1.8	Not use	Non-shield	Plastic	DOC
				USB	2.0	Not use	Non-shield		
Adaptor (PRINTER)	N60-24025011	N/A	JIANGSU LEADER ELECTRONICS CO., LTD.	POWER	1.8	Not use	Non-shield	Plastic	DOC
				POWER	1.8	Not use	Non-shield		
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

## 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 2<sup>nd</sup> 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 >



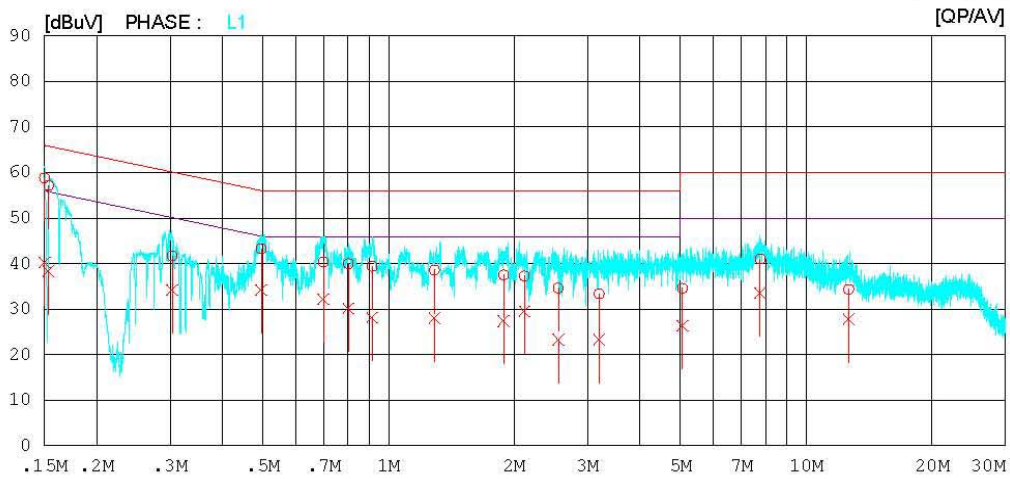
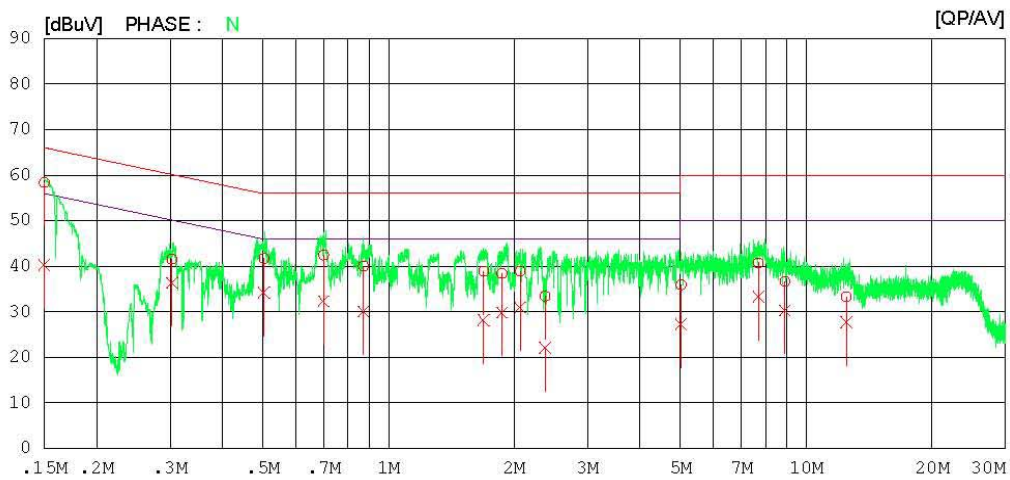
Results of Conducted Emission

Digital EMC  
Date : 2013-08-19

Model No. : 55LN5700-UA  
Type :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi. : 24 °C 56 % R.H.  
Operator :

Memo :  
LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2013-08-19

Model No. : 55LN5700-UA	Reference 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 [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15000	58.3	40.1	0.1	58.4	40.2	66.0	56.0	7.6	15.8	N
2	0.30314	41.4	36.3	0.1	41.5	36.4	60.2	50.2	18.7	13.8	N
3	0.50337	41.6	34.1	0.1	41.7	34.2	56.0	46.0	14.3	11.8	N
4	0.69967	42.3	32.2	0.1	42.4	32.3	56.0	46.0	13.6	13.7	N
5	0.87023	39.9	29.9	0.2	40.1	30.1	56.0	46.0	15.9	15.9	N
6	1.69000	38.6	27.9	0.3	38.9	28.2	56.0	46.0	17.1	17.8	N
7	1.86840	38.1	29.5	0.3	38.4	29.8	56.0	46.0	17.6	16.2	N
8	2.06840	38.6	30.6	0.3	38.9	30.9	56.0	46.0	17.1	15.1	N
9	2.37040	33.1	21.8	0.3	33.4	22.1	56.0	46.0	22.6	23.9	N
10	5.01920	35.4	26.7	0.5	35.9	27.2	60.0	50.0	24.1	22.8	N
11	7.68680	40.2	32.8	0.5	40.7	33.3	60.0	50.0	19.3	16.7	N
12	8.89180	36.1	29.7	0.6	36.7	30.3	60.0	50.0	23.3	19.7	N
13	12.47840	32.6	27.0	0.7	33.3	27.7	60.0	50.0	26.7	22.3	N
14	0.15006	58.7	40.1	0.1	58.8	40.2	66.0	56.0	7.2	15.8	L1
15	0.15350	57.1	38.3	0.1	57.2	38.4	65.8	55.8	8.6	17.4	L1
16	0.30344	41.6	34.1	0.1	41.7	34.2	60.1	50.1	18.4	15.9	L1
17	0.49562	43.1	34.2	0.1	43.2	34.3	56.1	46.1	12.9	11.8	L1
18	0.69871	40.3	32.1	0.1	40.4	32.2	56.0	46.0	15.6	13.8	L1
19	0.80193	39.8	29.9	0.2	40.0	30.1	56.0	46.0	16.0	15.9	L1
20	0.91462	39.2	28.0	0.2	39.4	28.2	56.0	46.0	16.6	17.8	L1
21	1.28860	38.3	27.8	0.3	38.6	28.1	56.0	46.0	17.4	17.9	L1
22	1.88720	37.2	27.1	0.3	37.5	27.4	56.0	46.0	18.5	18.6	L1
23	2.11600	37.0	29.2	0.3	37.3	29.5	56.0	46.0	18.7	16.5	L1
24	2.55040	34.3	23.0	0.3	34.6	23.3	56.0	46.0	21.4	22.7	L1
25	3.19440	33.1	23.1	0.3	33.4	23.4	56.0	46.0	22.6	22.6	L1
26	5.05440	34.1	25.9	0.5	34.6	26.4	60.0	50.0	25.4	23.6	L1
27	7.75520	40.6	33.1	0.5	41.1	33.6	60.0	50.0	18.9	16.4	L1
28	12.64720	33.7	27.2	0.7	34.4	27.9	60.0	50.0	25.6	22.1	L1

< USB MODE >

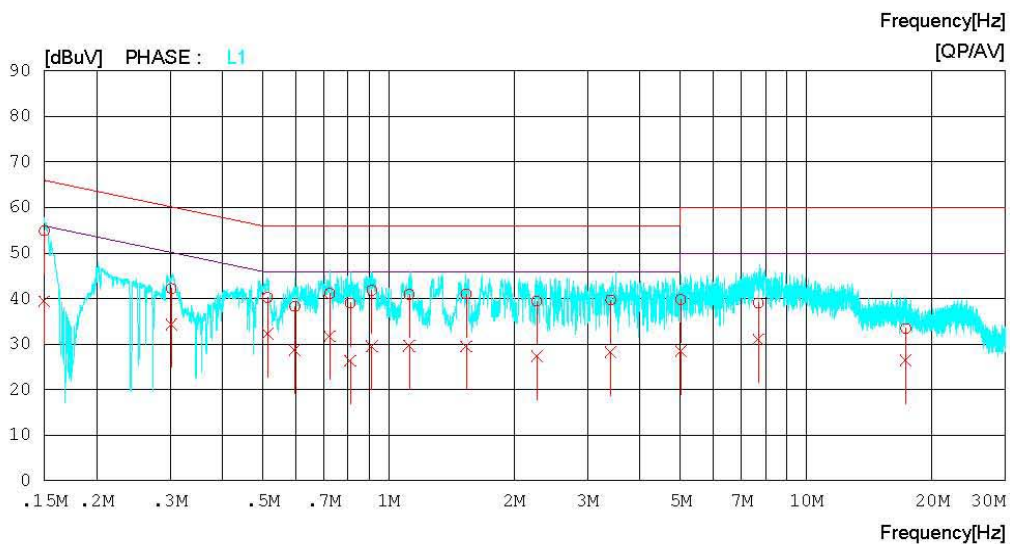
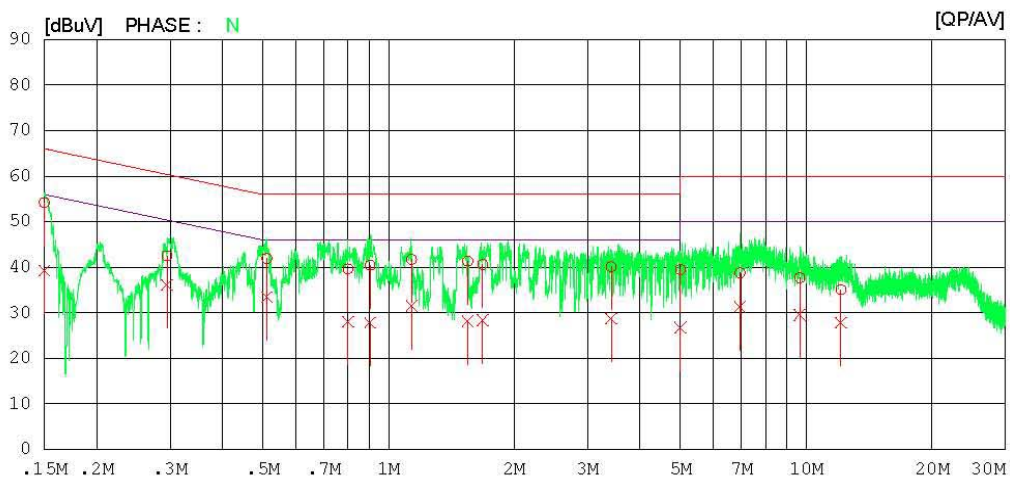


Results of Conducted Emission

Digital EMC  
Date : 2013-08-19

Model No.	: 55LN5700-UA	Reference 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. : 55LN5700-UA  
 Type :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi. : 24 °C 56 % R.H.  
 Operator :

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15000	54.1	39.1	0.1	54.2	39.2	66.0	56.0	11.8	16.8	N
2	0.29513	42.3	36.1	0.1	42.4	36.2	60.4	50.4	18.0	14.2	N
3	0.51151	41.8	33.3	0.1	41.9	33.4	56.0	46.0	14.1	12.6	N
4	0.79969	39.4	27.8	0.2	39.6	28.0	56.0	46.0	16.4	18.0	N
5	0.90402	40.2	27.6	0.2	40.4	27.8	56.0	46.0	15.6	18.2	N
6	1.13640	41.4	31.2	0.3	41.7	31.5	56.0	46.0	14.3	14.5	N
7	1.54800	41.0	27.8	0.3	41.3	28.1	56.0	46.0	14.7	17.9	N
8	1.68120	40.3	28.1	0.3	40.6	28.4	56.0	46.0	15.4	17.6	N
9	3.41200	39.8	28.4	0.3	40.1	28.7	56.0	46.0	15.9	17.3	N
10	4.99920	39.0	26.2	0.5	39.5	26.7	56.0	46.0	16.5	19.3	N
11	6.94460	38.2	30.8	0.5	38.7	31.3	60.0	50.0	21.3	18.7	N
12	9.65180	37.0	28.8	0.7	37.7	29.5	60.0	50.0	22.3	20.5	N
13	12.11140	34.3	27.1	0.7	35.0	27.8	60.0	50.0	25.0	22.2	N
14	0.15000	54.8	39.3	0.1	54.9	39.4	66.0	56.0	11.1	16.6	L1
15	0.30224	42.1	34.3	0.1	42.2	34.4	60.2	50.2	18.0	15.8	L1
16	0.51350	40.2	32.2	0.1	40.3	32.3	56.0	46.0	15.7	13.7	L1
17	0.59687	38.2	28.6	0.1	38.3	28.7	56.0	46.0	17.7	17.3	L1
18	0.72329	41.0	31.6	0.2	41.2	31.8	56.0	46.0	14.8	14.2	L1
19	0.81014	38.9	26.1	0.2	39.1	26.3	56.0	46.0	16.9	19.7	L1
20	0.91264	41.6	29.4	0.2	41.8	29.6	56.0	46.0	14.2	16.4	L1
21	1.12060	40.6	29.3	0.3	40.9	29.6	56.0	46.0	15.1	16.4	L1
22	1.53560	40.7	29.2	0.3	41.0	29.5	56.0	46.0	15.0	16.5	L1
23	2.26640	39.2	27.1	0.3	39.5	27.4	56.0	46.0	16.5	18.6	L1
24	3.40400	39.4	28.0	0.3	39.7	28.3	56.0	46.0	16.3	17.7	L1
25	5.01060	39.3	28.0	0.5	39.8	28.5	60.0	50.0	20.2	21.5	L1
26	7.68320	38.6	30.5	0.5	39.1	31.0	60.0	50.0	20.9	19.0	L1
27	17.32000	32.7	25.6	0.8	33.5	26.4	60.0	50.0	26.5	23.6	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	5 <sup>th</sup> 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 (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/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 (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/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 (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/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**

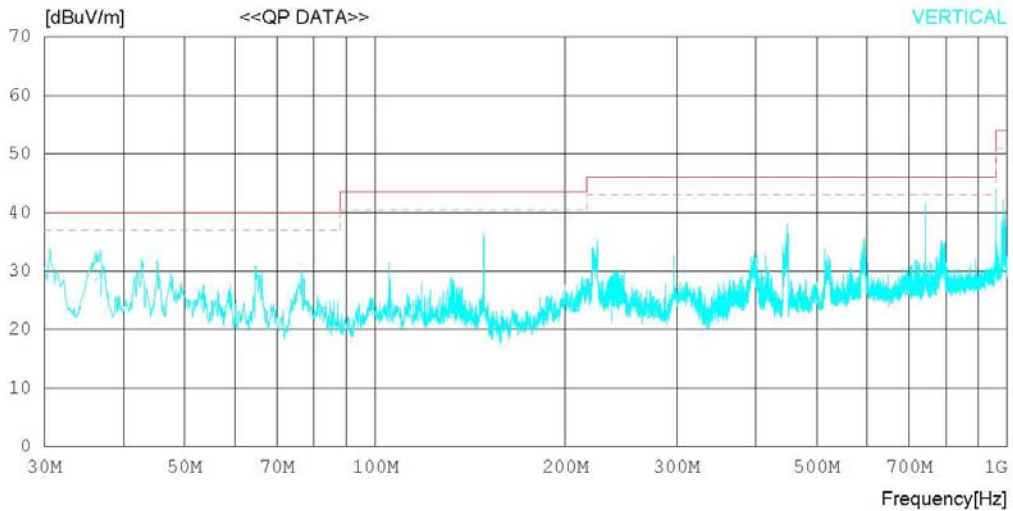
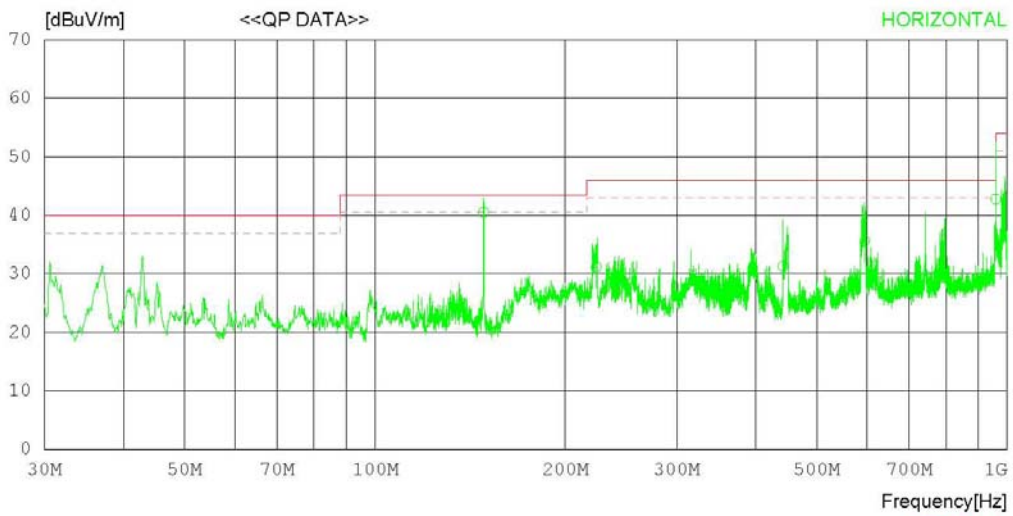
Date : 2013-08-21

Model Name : 55LN5700-UA  
Model No. :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 25 °C 56 % R.H.  
Operator :

Memo :

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



## RADIATED EMISSION

Date : 2013-08-21

Model Name : 55LN5700-UA	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	148.506	51.1	10.5	3.1	24.2	40.5	43.5	3.0	300	180
2	223.900	40.4	11.1	3.6	23.9	31.2	46.0	14.8	100	230
3	441.811	32.5	16.6	5.5	23.3	31.3	46.0	14.7	200	180
4	594.958	33.2	18.6	6.7	22.9	35.6	46.0	10.4	100	230
5	959.941	35.4	21.7	8.4	22.7	42.8	46.0	3.2	100	250
----- Vertical -----										
6	36.835	37.1	14.4	1.9	24.0	29.4	40.0	10.6	100	120

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

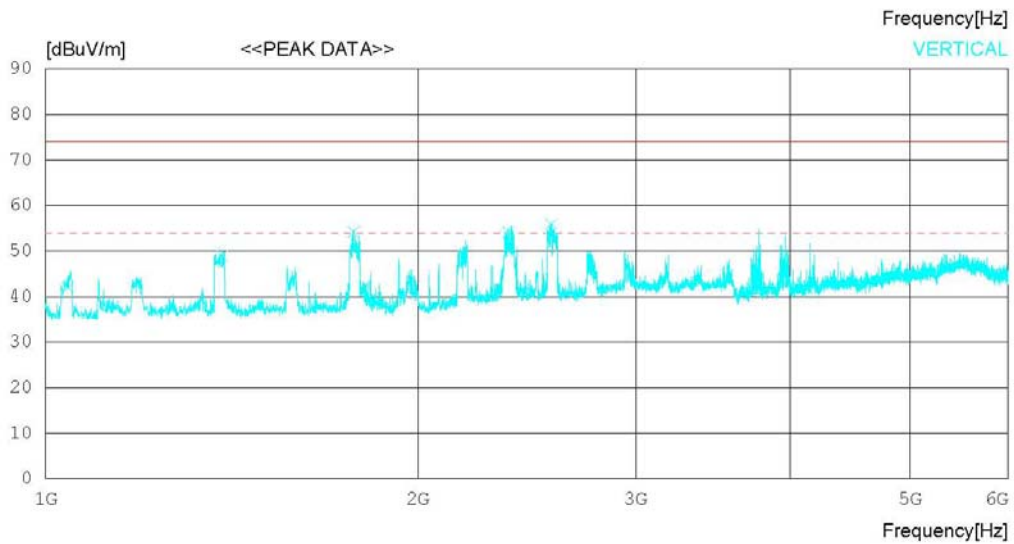
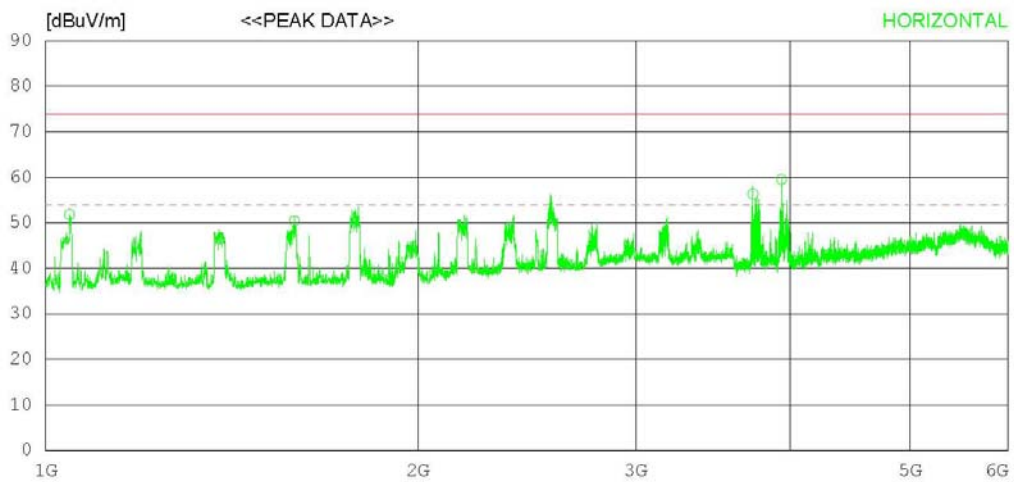
RADIATED EMISSION

Date : 2013-08-22

Model Name	: 55LN5700-UA	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 : 2013-08-22

Model Name : 55LN5700-UA	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	1045.625	65.6	23.9	3.4	41.1	51.8	74.0	22.2	100	121
2	1588.750	62.2	24.6	3.9	40.3	50.4	74.0	23.6	100	216
3	3731.250	60.8	29.5	5.3	39.3	56.3	74.0	17.7	100	358
4	3933.750	61.8	30.0	6.4	38.7	59.5	74.0	14.5	100	358
----- Vertical -----										
5	1043.125	55.8	23.9	3.4	41.1	42.0	74.0	32	100	194
6	1388.125	62.1	24.5	3.4	41.1	48.9	74.0	25.1	100	179
7	1773.125	65.4	24.6	4.2	40.0	54.2	74.0	19.8	100	184
8	2368.125	62.7	26.7	4.4	39.7	54.1	74.0	19.9	100	174
9	2564.375	62.5	27.6	5.1	39.3	55.9	74.0	18.1	100	209

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

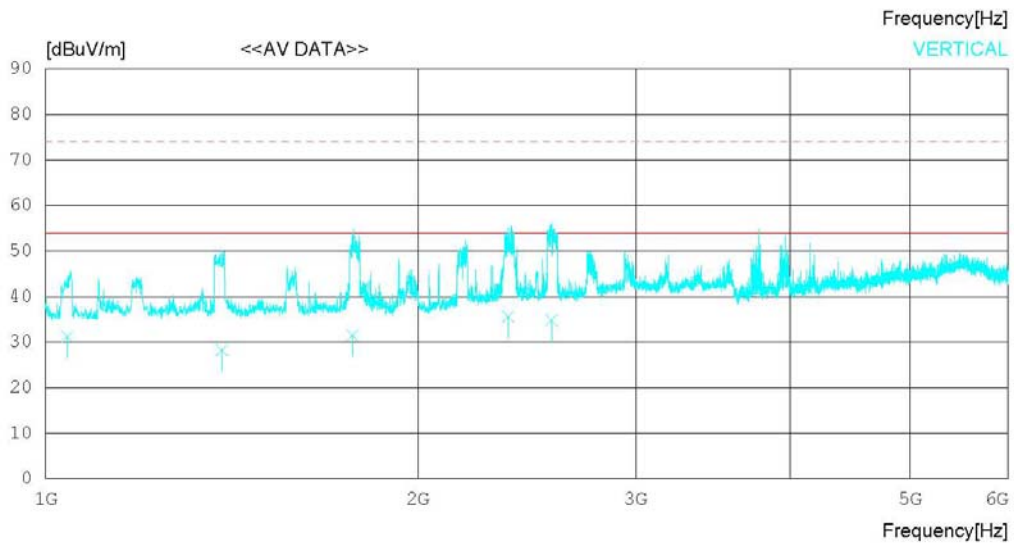
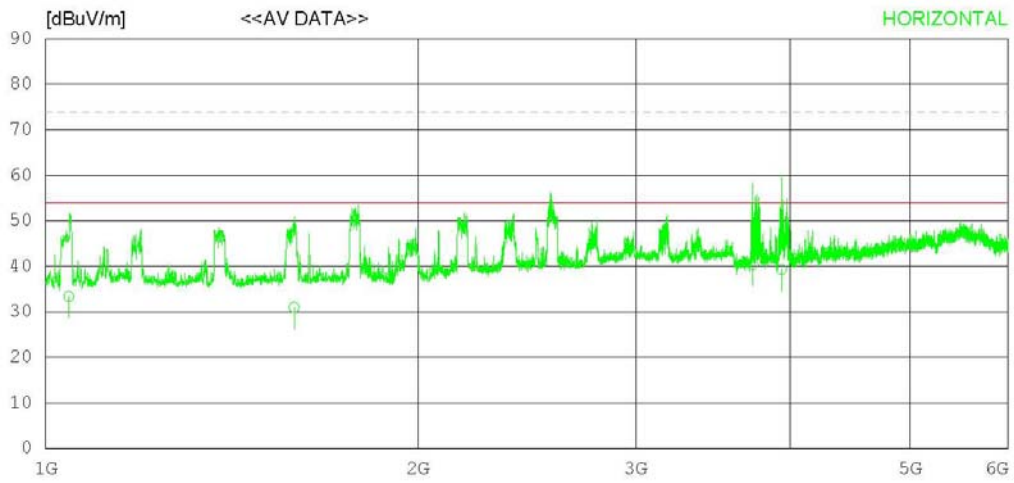
RADIATED EMISSION

Date : 2013-08-22

Model Name	: 55LN5700-UA	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 : 2013-08-22

Model Name : 55LN5700-UA	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	1043.956	47.2	23.9	3.4	41.1	33.4	54.0	20.6	100	120
2	1588.005	42.2	24.6	4.2	40.0	31.0	54.0	23.0	100	220
3	3731.249	43.2	29.5	6.4	38.7	40.4	54.0	13.6	100	360
4	3933.592	41.1	30.0	6.6	38.4	39.3	54.0	14.7	100	360
----- Vertical -----										
5	1041.465	45.0	23.9	3.4	41.1	31.2	54.0	22.8	100	190
6	1389.235	40.2	24.5	3.9	40.3	28.3	54.0	25.7	100	180
7	1772.188	42.2	24.6	4.4	39.7	31.5	54.0	22.5	100	190
8	2367.680	43.1	26.7	5.1	39.3	35.6	54.0	18.4	100	180
9	2564.770	41.2	27.6	5.3	39.3	34.8	54.0	19.2	100	210

< USB MODE\_30 MHz ~ 1 GHz >

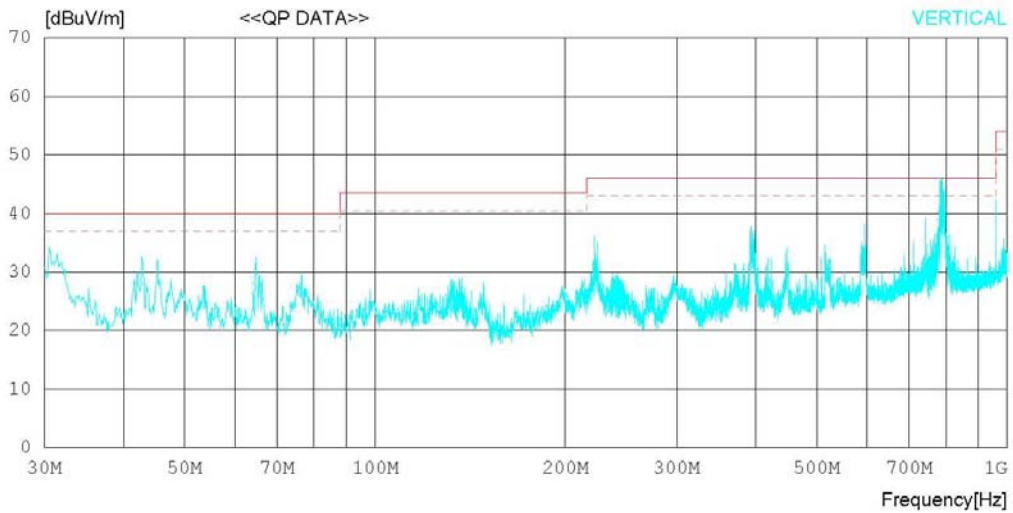
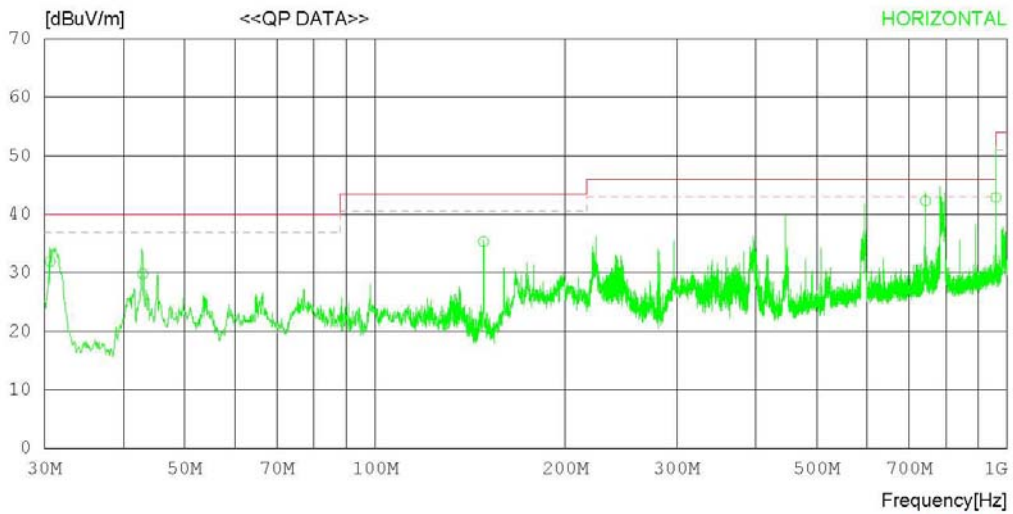
**RADIATED EMISSION**

Date : 2013-08-21

Model Name	: 55LN5700-UA	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 : 55LN5700-UA  
 Model No. :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi : 25 °C 56 % R.H.  
 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	30.617	36.2	17.5	2.0	23.8	31.9	40.0	8.1	200	360
2	42.902	38.5	13.5	2.0	24.2	29.8	40.0	10.2	200	360
3	148.496	45.9	10.5	3.1	24.2	35.3	43.5	8.2	200	100
4	742.487	38.5	19.2	7.4	22.8	42.3	46.0	3.7	100	330
5	959.960	35.5	21.7	8.4	22.7	42.9	46.0	3.1	200	100
----- Vertical -----										
6	65.108	43.7	5.9	2.2	24.4	27.4	40.0	12.6	100	360
7	788.402	35.2	19.8	7.5	22.8	39.7	46.0	6.3	100	360

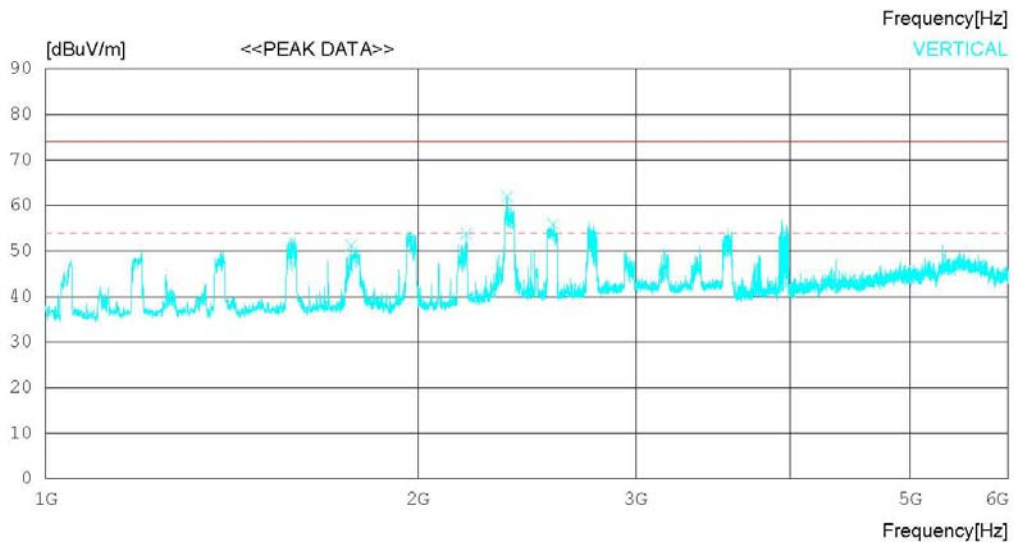
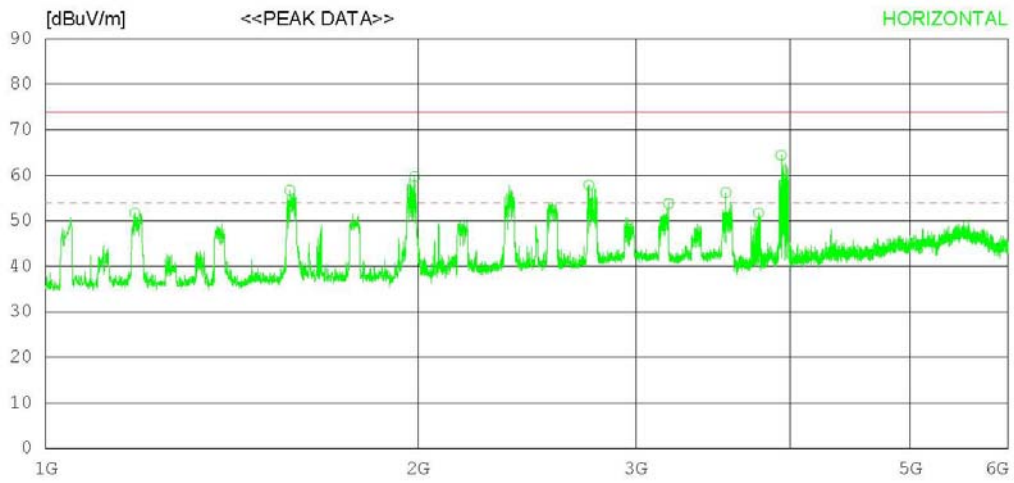
< USB MODE \_ (1 ~ 6) GHz \_ Peak >

RADIATED EMISSION

Date : 2013-08-22

Model Name	: 55LN5700-UA	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 : 2013-08-22

Model Name : 55LN5700-UA	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	1181.250	64.7	24.2	3.6	40.8	51.7	74.0	22.3	100	233
2	1575.625	67.9	24.6	4.2	40.0	56.7	74.0	17.3	100	358
3	1987.500	69.9	24.6	4.7	39.5	59.7	74.0	14.3	100	233
4	2748.750	63.4	28.2	5.5	39.3	57.8	74.0	16.2	100	169
5	3188.750	58.2	28.9	5.9	39.2	53.8	74.0	20.2	100	159
6	3546.875	59.9	29.0	6.2	38.9	56.2	74.0	17.8	100	358
7	3770.000	54.3	29.6	6.5	38.7	51.7	74.0	22.3	100	204
8	3931.875	66.2	30.0	6.6	38.4	64.4	74.0	9.6	100	189
----- Vertical -----										
9	1766.875	62.0	24.6	4.4	39.8	51.2	74.0	22.8	100	0
10	2189.375	62.7	25.6	4.9	39.4	53.8	74.0	20.2	100	0
11	2362.500	69.4	26.7	5.1	39.3	61.9	74.0	12.1	100	0
12	2572.500	62.2	27.7	5.3	39.3	55.9	74.0	18.1	100	200

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

**RADIATED EMISSION**

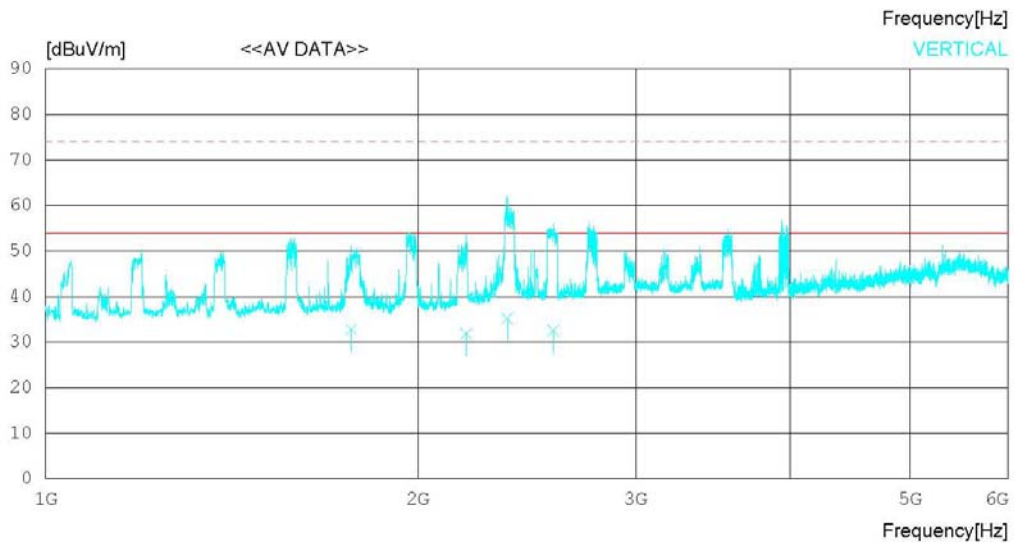
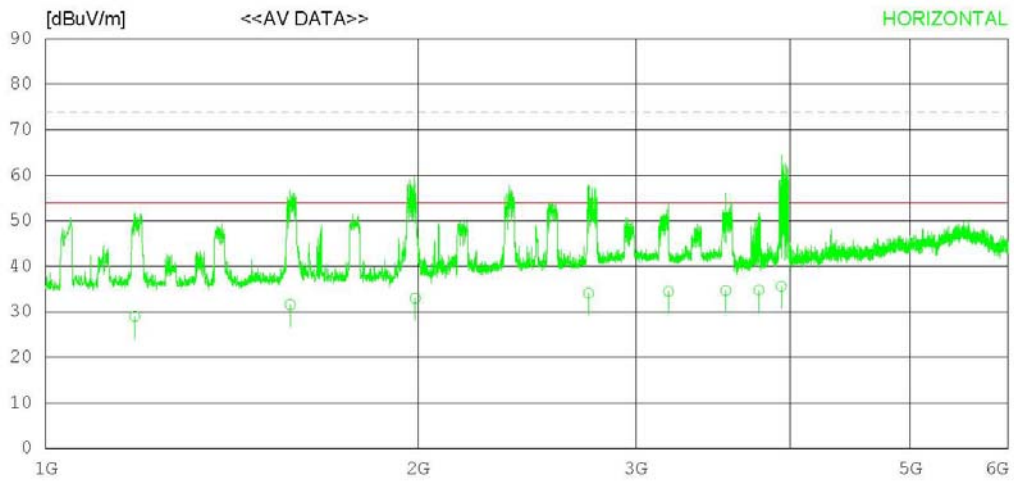
Date : 2013-08-22

Model Name : 55LN5700-UA  
Model No. :  
Serial No. :  
Test Condition : USB

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 25 °C 56 % R.H.  
Operator :

Memo :

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



## RADIATED EMISSION

Date : 2013-08-22

Model Name : 55LN5700-UA	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	1180.385	42.0	24.2	3.6	40.8	29.0	54.0	25.0	100	240
2	1576.755	42.8	24.6	4.2	40.0	31.6	54.0	22.4	100	360
3	1990.141	43.2	24.6	4.7	39.5	33.0	54.0	21.0	100	240
4	2746.608	39.7	28.2	5.5	39.3	34.1	54.0	19.9	100	170
5	3189.008	38.9	28.9	5.9	39.2	34.5	54.0	19.5	100	160
6	3546.184	38.4	29.0	6.2	38.9	34.7	54.0	19.3	100	360
7	3771.490	37.4	29.6	6.5	38.7	34.8	54.0	19.2	100	210
8	3931.892	37.4	30.0	6.6	38.4	35.6	54.0	18.4	100	190
----- Vertical -----										
9	1767.328	43.6	24.6	4.4	39.8	32.8	54.0	21.2	100	180
10	2188.226	40.7	25.6	4.9	39.4	31.8	54.0	22.2	100	180
11	2361.852	42.8	26.6	5.1	39.3	35.2	54.0	18.8	100	100
12	2573.513	38.8	27.7	5.3	39.3	32.5	54.0	21.5	100	200

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## Appendix 1

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### 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
<input type="checkbox"/> SPECTRUM ANALYZER	8591E	H/P	3649A05889	2013.02.28	2014.02.28
<input type="checkbox"/> RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2013.06.28	2014.06.28
<input type="checkbox"/> LISN	KNW-407	KYORITSU	8-317-8	2013.01.08	2014.01.08
<input type="checkbox"/> LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2013.06.27	2014.06.27
<input type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
<input checked="" type="checkbox"/> LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
<input checked="" type="checkbox"/> LISN	LISN1600	TTI	197204	2013.06.28	2014.06.28
<input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
<input checked="" type="checkbox"/> HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> AMPLIFIER	8449B	AGILENT	3008A01590	2013.02.27	2014.02.27
<input type="checkbox"/> SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2013.06.27	2014.06.27
<input type="checkbox"/> AMPLIFIER	8447D	AGILENT	2443A03690	2013.06.28	2014.06.28
<input type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
<input type="checkbox"/> AMPLIFIER	MLA-100K01-B01-26	T SJ	1252741	2013.02.28	2014.02.28

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**Appendix 2**

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**Report Revision History**

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