

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 50LN5750-UH
Order No. : DEMC1302-00475
Date of receipt : 2013-02-04
Test duration : 2013-02-13 ~ 2013-02-15
Use of report : FCC CoC Marking
Date of Issue : 2013-02-18

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 °C,
Humidity : (33 ~ 37) % 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:



Engineer
JunHo Park

Reviewed by:



General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

CONTENTS

1. General Remarks	3
2. Test Laboratory	3
3. General Information of EUT	4
4. Test Summary	5
4.1 Applied standards and test results	5
4.2 Test environment and conditions	5
4.3 Test result Summary	5
5. Test Set-up and operation mode	6
5.1 Principle of Configuration Selection	6
5.2 Test Operation Mode	6
5.3 Support Equipment Used	6
6. Test Results : Emission	7
6.1 Conducted Disturbance	7
6.2 Radiated Disturbance	12
Appendix 1	26
List of Test and Measurement Instruments	26
Appendix 2	28
Report Revision History	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.digitalemcc.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.	50LN5750-UH
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ50LN5750UH
Type of Sample Tested	Pre-Production
High Frequency	790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.1 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 350	31.468	70.09
720 x 400	31.469	70.08
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	60.053
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 (°C)	Humidity (% R.H.)
Conducted Disturbance	02-13	24	37
Radiated Disturbance	02-14	24	33
	02-15	24	33

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.41826	N	43.1	Average	47.5	4.4

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
2970.038	V	49.3	Average	54.0	4.7

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 : 1920x1080 Resolution (Worst case)
- USB MODE : USB record 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	DCSCMF	G3RZKBX	DELL INC.	POWER	1.8	Not use	Non-shield	Plastic	DOC
				USB	1.7	Not use	Non-shield		
				USB	1.6	Not use	Non-shield		
				USB	1.8	Not use	Shield		
				HDMI	1.9	Not use	Shield		
KEYBOARD	SKG-3000UB	TAKB601239K	MONITEREY INTERNATIONAL CORP	USB	1.7	Not use	Non-shield	Plastic	DOC
MOUSE	1094	X817158-002	MICROSOFT CORPORATION	USB	1.6	Not use	Non-shield	Plastic	DOC
PRINT	EPSON Aculaser M1200	LWTZ181070	EPSON	POWER	1.8	Not use	Non-shield	Plastic	DOC
				USB	1.8	Not use	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 4GB	N/A	SANDISK	USB	-	-	-	Plastic	DOC
REMOTE CONTROL	AN-MR400K	N/A	OHSUNG ELECTRONICS CO., LTD.	-	-	-	-	-	-
HEADSET	COV9	N/A	COSY	STEREO	1.9	Not use	Non-shield	Plastic	VER

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 >



Results of Conducted Emission

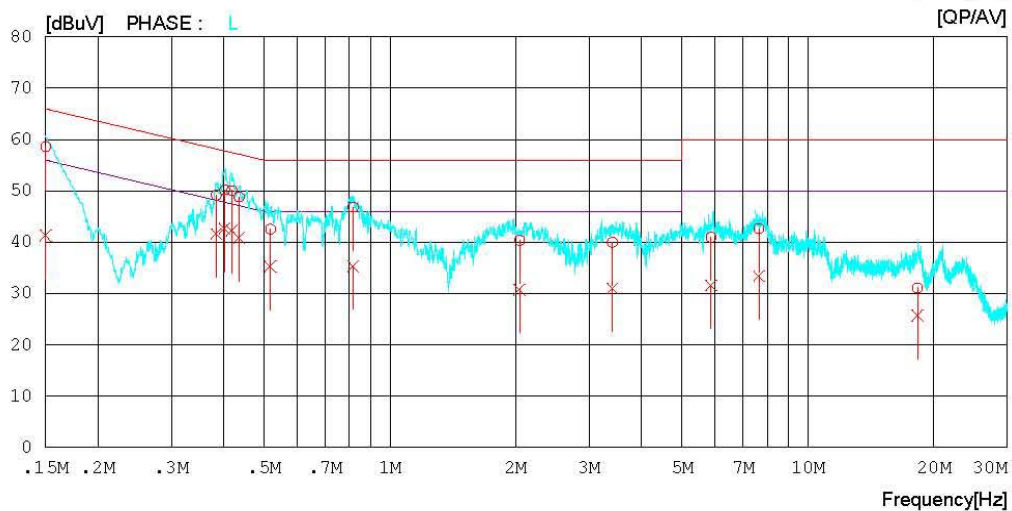
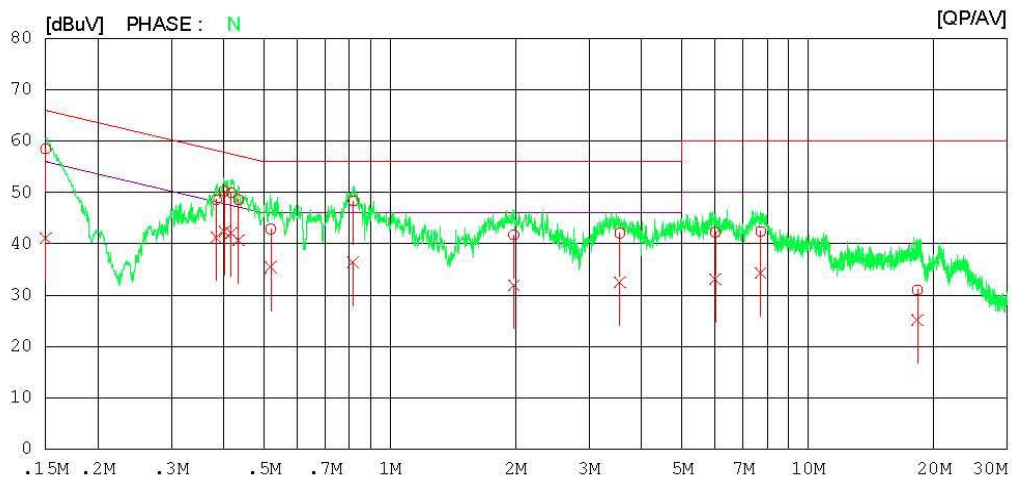
Digital EMC
Date : 2013-02-13

Model No. : 50LN5750-UH
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 24°C 37 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-02-13

Model No. : 50LN5750-UH
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 24°C 37 % 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	0.15012	58.2	40.9	0.2	58.4	41.1	66.0	56.0	7.6	14.9	N
2	0.38470	48.4	41.0	0.2	48.6	41.2	58.2	48.2	9.6	7.0	N
3	0.40168	50.0	42.2	0.2	50.2	42.4	57.8	47.8	7.6	5.4	N
4	0.41736	49.8	41.9	0.2	50.0	42.1	57.5	47.5	7.5	5.4	N
5	0.43436	48.4	40.5	0.2	48.6	40.7	57.2	47.2	8.6	6.5	N
6	0.51904	42.7	35.2	0.2	42.9	35.4	56.0	46.0	13.1	10.6	N
7	0.81784	48.2	36.2	0.2	48.4	36.4	56.0	46.0	7.6	9.6	N
8	1.98000	41.4	31.6	0.3	41.7	31.9	56.0	46.0	14.3	14.1	N
9	3.54850	41.8	32.2	0.3	42.1	32.5	56.0	46.0	13.9	13.5	N
10	6.00350	41.7	32.6	0.5	42.2	33.1	60.0	50.0	17.8	16.9	N
11	7.70600	41.9	33.8	0.5	42.4	34.3	60.0	50.0	17.6	15.7	N
12	18.27800	30.1	24.3	0.9	31.0	25.2	60.0	50.0	29.0	24.8	N
13	0.15018	58.4	41.1	0.2	58.6	41.3	66.0	56.0	7.4	14.7	L
14	0.38441	49.0	41.4	0.2	49.2	41.6	58.2	48.2	9.0	6.6	L
15	0.40254	50.0	42.5	0.2	50.2	42.7	57.8	47.8	7.6	5.1	L
16	0.41888	49.9	42.1	0.2	50.1	42.3	57.5	47.5	7.4	5.2	L
17	0.43593	48.6	40.7	0.2	48.8	40.9	57.1	47.1	8.3	6.2	L
18	0.51818	42.3	35.1	0.2	42.5	35.3	56.0	46.0	13.5	10.7	L
19	0.81726	46.6	35.1	0.2	46.8	35.3	56.0	46.0	9.2	10.7	L
20	2.04300	40.1	30.5	0.3	40.4	30.8	56.0	46.0	15.6	15.2	L
21	3.40750	39.7	30.7	0.3	40.0	31.0	56.0	46.0	16.0	15.0	L
22	5.86650	40.5	31.1	0.5	41.0	31.6	60.0	50.0	19.0	18.4	L
23	7.64000	42.2	32.9	0.5	42.7	33.4	60.0	50.0	17.3	16.6	L
24	18.28750	30.2	24.8	0.9	31.1	25.7	60.0	50.0	28.9	24.3	L

< USB MODE >



Results of Conducted Emission

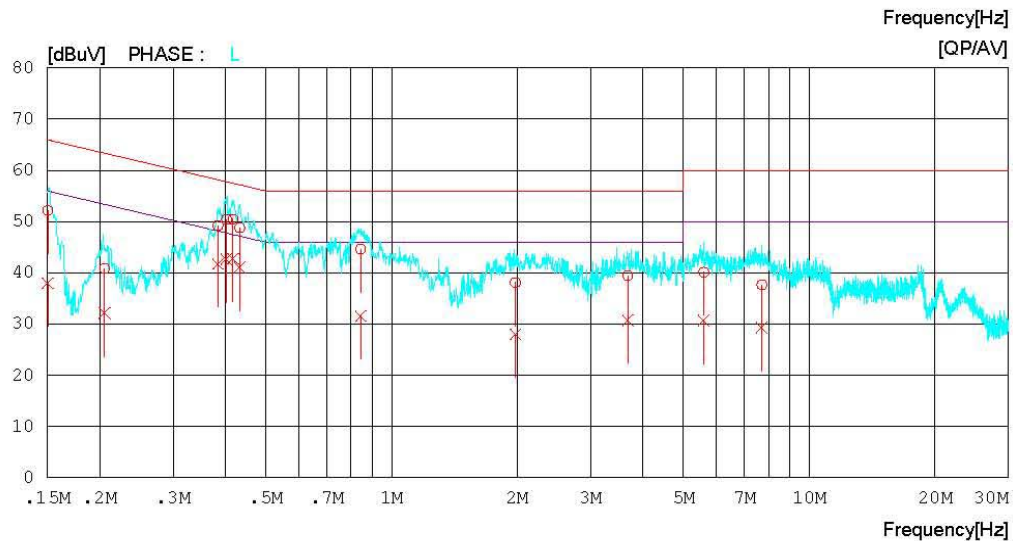
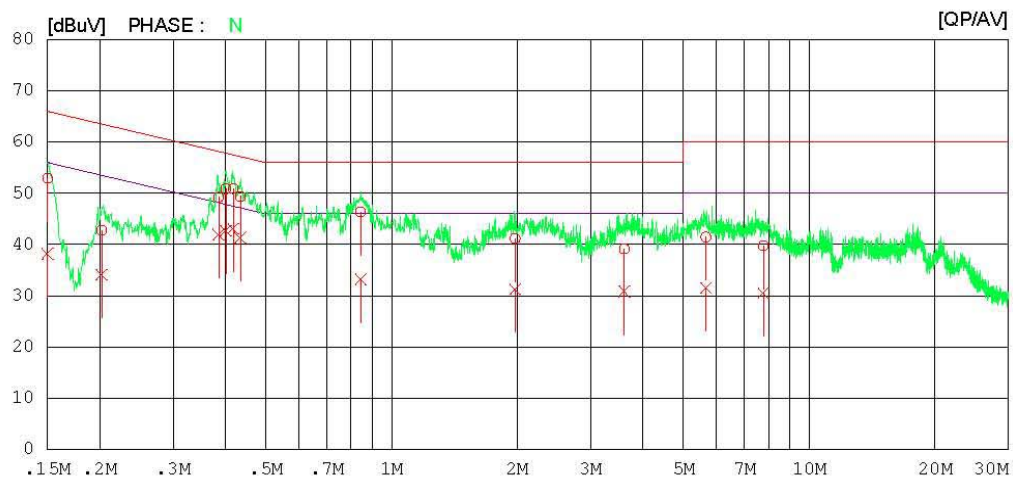
Digital EMC
Date : 2013-02-13

Model No. : 50LN5750-UH
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 24°C 37 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-02-13

Model No. : 50LN5750-UH
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 24°C 37 % 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	0.15022	52.7	38.0	0.2	52.9	38.2	66.0	56.0	13.1	17.8	N
2	0.20243	42.5	33.9	0.2	42.7	34.1	63.5	53.5	20.8	19.4	N
3	0.38539	49.0	41.7	0.2	49.2	41.9	58.2	48.2	9.0	6.3	N
4	0.40126	50.6	42.5	0.2	50.8	42.7	57.8	47.8	7.0	5.1	N
5	0.41826	50.7	42.9	0.2	50.9	43.1	57.5	47.5	6.6	4.4	N
6	0.43476	49.2	41.1	0.2	49.4	41.3	57.2	47.2	7.8	5.9	N
7	0.84368	46.1	33.0	0.2	46.3	33.2	56.0	46.0	9.7	12.8	N
8	1.97700	40.8	31.0	0.3	41.1	31.3	56.0	46.0	14.9	14.7	N
9	3.60850	38.8	30.5	0.3	39.1	30.8	56.0	46.0	16.9	15.2	N
10	5.66000	40.9	31.0	0.5	41.4	31.5	60.0	50.0	18.6	18.5	N
11	7.77500	39.2	30.0	0.5	39.7	30.5	60.0	50.0	20.3	19.5	N
12	0.15048	52.0	37.8	0.2	52.2	38.0	66.0	56.0	13.8	18.0	L
13	0.20551	40.7	31.9	0.2	40.9	32.1	63.4	53.4	22.5	21.3	L
14	0.38459	49.0	41.5	0.2	49.2	41.7	58.2	48.2	9.0	6.5	L
15	0.40248	50.2	42.5	0.2	50.4	42.7	57.8	47.8	7.4	5.1	L
16	0.41728	50.3	42.6	0.2	50.5	42.8	57.5	47.5	7.0	4.7	L
17	0.43326	48.6	40.9	0.2	48.8	41.1	57.2	47.2	8.4	6.1	L
18	0.84460	44.5	31.4	0.2	44.7	31.6	56.0	46.0	11.3	14.4	L
19	1.98000	37.8	27.7	0.3	38.1	28.0	56.0	46.0	17.9	18.0	L
20	3.68050	39.2	30.5	0.3	39.5	30.8	56.0	46.0	16.5	15.2	L
21	5.59100	39.6	30.2	0.5	40.1	30.7	60.0	50.0	19.9	19.3	L
22	7.70350	37.2	28.8	0.5	37.7	29.3	60.0	50.0	22.3	20.7	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	5 th 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

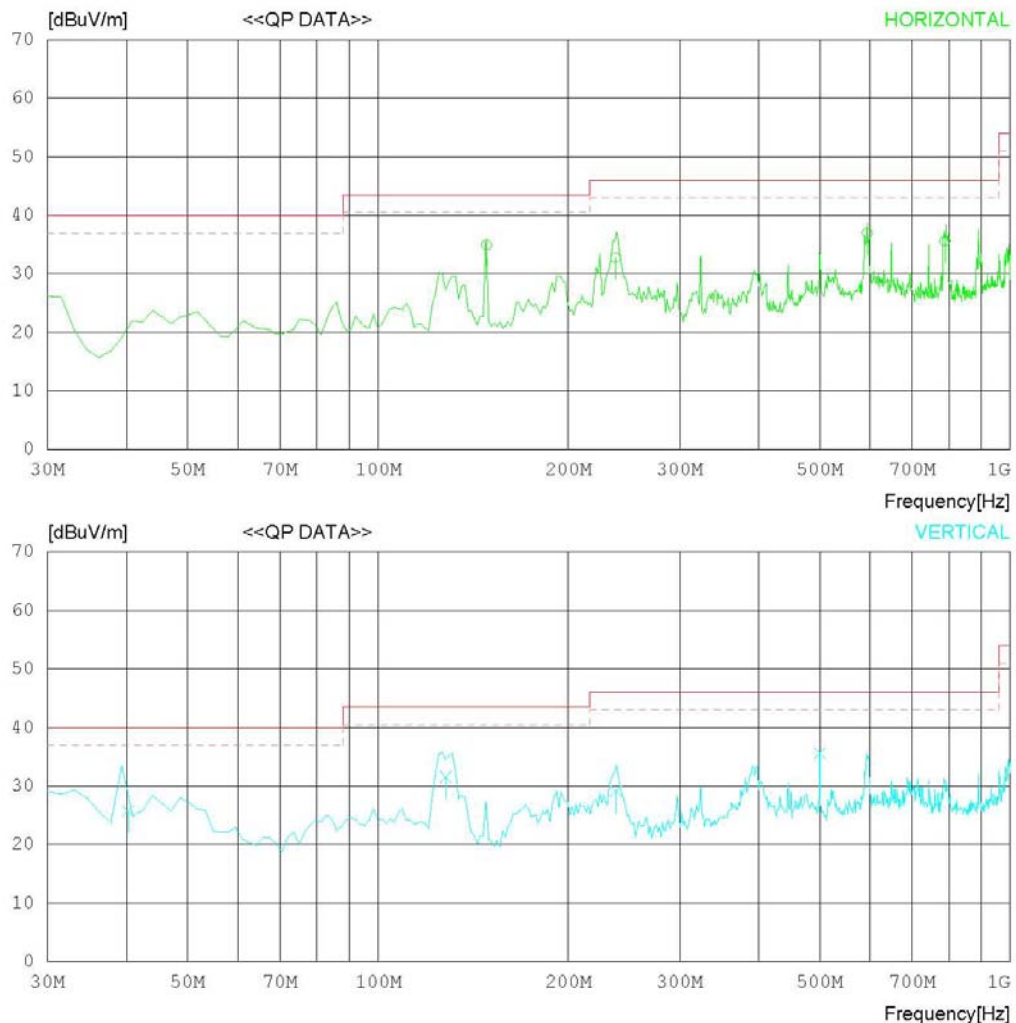
Date : 2013-02-15

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-15

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % 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	148.497	46.9	10.5	1.7	24.2	34.9	43.5	8.6	245	127
2	237.231	42.2	11.9	2.5	23.8	32.8	46.0	13.2	100	225
3	594.000	37.7	18.6	4.1	23.4	37.0	46.0	9.0	100	155
4	788.179	34.5	19.8	4.8	23.5	35.6	46.0	10.4	100	204
----- Vertical -----										
5	40.215	35.9	12.9	1.1	24.1	25.8	40.0	14.2	400	116
6	127.947	42.6	11.7	1.5	24.2	31.6	43.5	11.9	100	72
7	238.000	38.4	12.0	2.5	23.8	29.1	46.0	16.9	219	73
8	499.978	37.4	17.3	3.9	23.0	35.6	46.0	10.4	100	281

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

RADIATED EMISSION

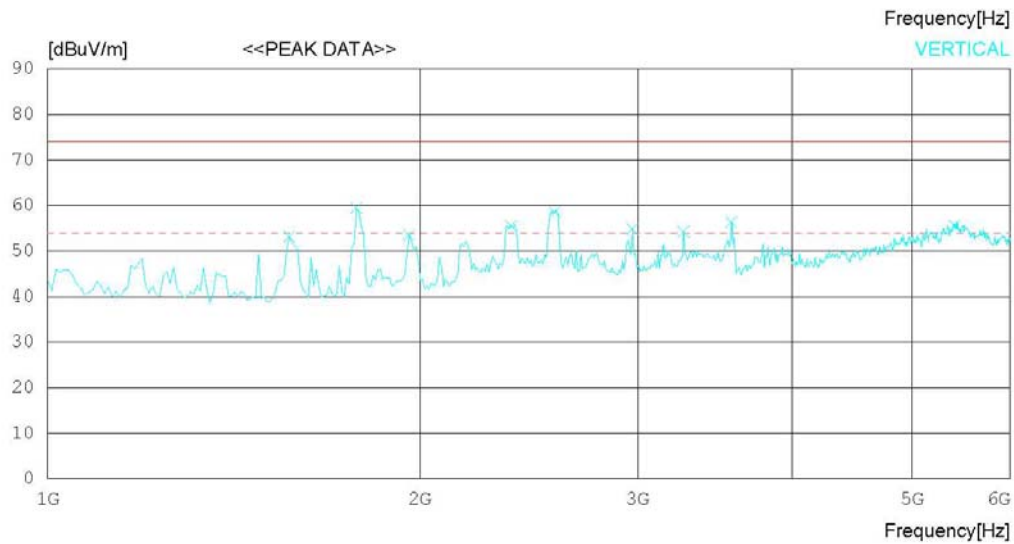
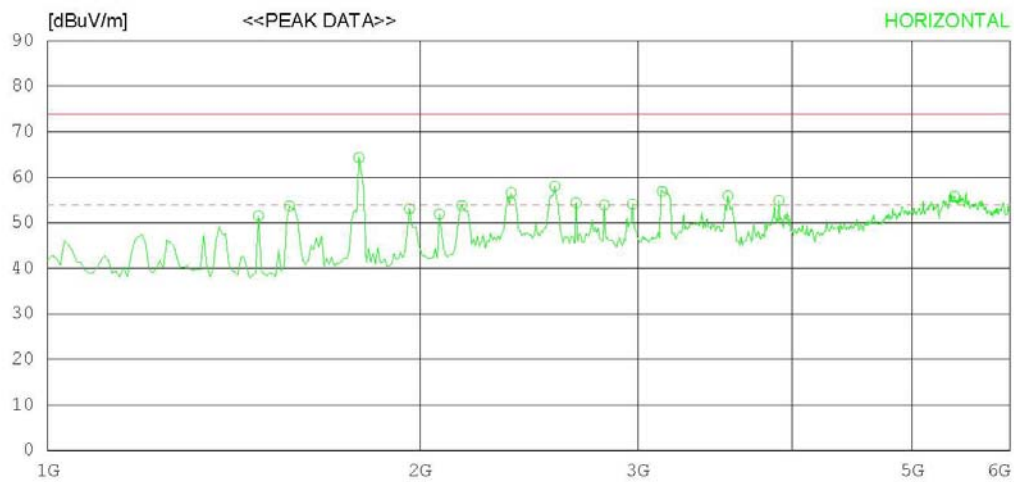
Date : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-14

Model Name : 50LN5750-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 24°C 33 % 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	1480.769	48.0	24.6	7.4	28.5	51.5	74.0	22.5	100	340
2	1568.910	50.0	24.6	7.6	28.5	53.7	74.0	20.3	100	156
3	1785.256	60.2	24.6	8.0	28.5	64.3	74.0	9.7	100	116
4	1961.538	48.6	24.6	8.4	28.5	53.1	74.0	20.9	100	244
5	2073.718	46.8	25.0	8.6	28.5	51.9	74.0	22.1	100	358
6	2161.860	48.0	25.5	8.8	28.5	53.8	74.0	20.2	100	198
7	2370.197	49.1	26.7	9.3	28.5	56.6	74.0	17.4	100	157
8	2570.520	49.0	27.7	9.7	28.4	58.0	74.0	16	100	358
9	2674.688	44.9	28.0	9.9	28.4	54.4	74.0	19.6	100	246
10	2818.921	43.7	28.4	10.2	28.4	53.9	74.0	20.1	100	358
11	2971.167	43.1	28.9	10.5	28.4	54.1	74.0	19.9	100	358
12	3139.439	45.5	29.0	10.8	28.4	56.9	74.0	17.1	100	358
13	3548.099	43.4	29.0	11.8	28.3	55.9	74.0	18.1	100	358
14	3900.668	40.6	29.9	12.7	28.3	54.9	74.0	19.1	100	201
15	5407.061	34.3	34.6	15.0	28.1	55.8	74.0	18.2	100	358
----- Vertical -----										
16	1568.910	49.5	24.6	7.6	28.5	53.2	74.0	20.8	100	188
17	1777.243	55.4	24.6	8.0	28.5	59.5	74.0	14.5	100	1
18	1961.538	49.0	24.6	8.4	28.5	53.5	74.0	20.5	100	1
19	2370.197	48.0	26.7	9.3	28.5	55.5	74.0	18.5	100	179
20	2570.520	49.6	27.7	9.7	28.4	58.6	74.0	15.4	100	1
21	2971.167	43.8	28.9	10.5	28.4	54.8	74.0	19.2	100	1
22	3267.646	42.7	28.9	11.1	28.4	54.3	74.0	19.7	100	1
23	3572.138	43.7	29.1	11.9	28.3	56.4	74.0	17.6	100	208
24	5407.061	34.1	34.6	15.0	28.1	55.6	74.0	18.4	100	231

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

RADIATED EMISSION

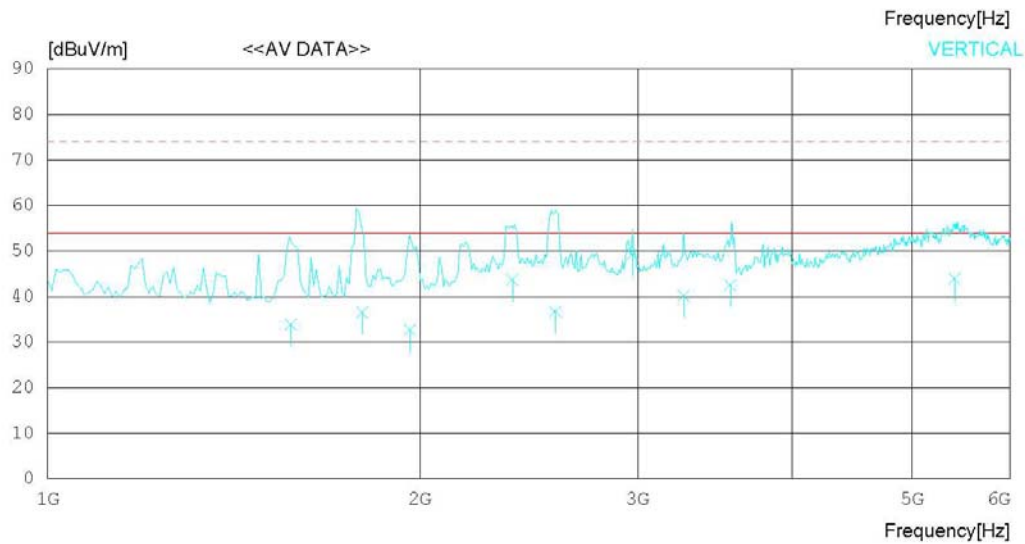
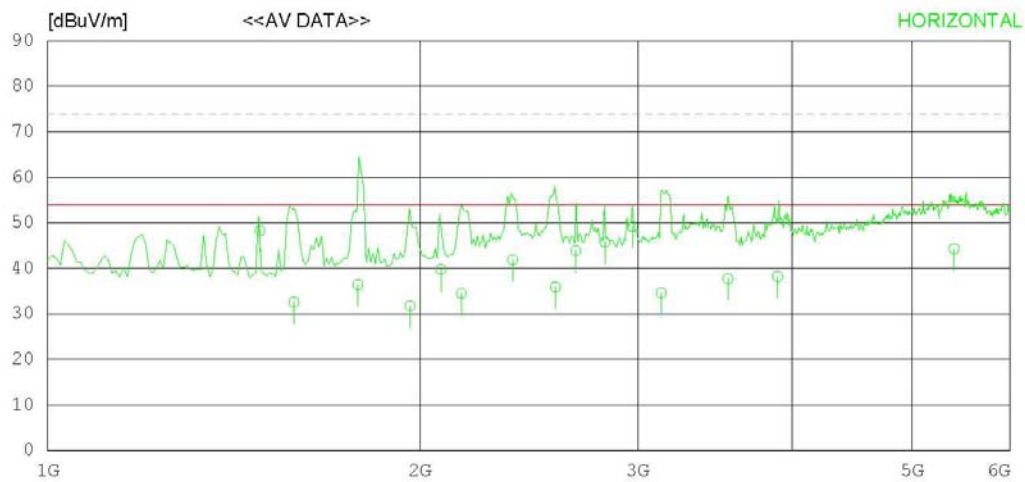
Date : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % 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 : 2013-02-14

Model Name : 50LN5750-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 24°C 33 % 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	1485.021	44.8	24.6	7.4	28.5	48.3	54.0	5.7	100	340
2	1581.865	28.8	24.6	7.7	28.5	32.6	54.0	21.4	115	156
3	1782.025	32.3	24.6	8.0	28.5	36.4	54.0	17.6	100	116
4	1963.564	27.3	24.6	8.4	28.5	31.8	54.0	22.2	100	244
5	2079.026	34.7	25.0	8.6	28.5	39.8	54.0	14.2	121	208
6	2160.006	28.7	25.5	8.8	28.5	34.5	54.0	19.5	100	198
7	2376.027	34.4	26.7	9.3	28.5	41.9	54.0	12.1	100	157
8	2574.006	26.9	27.7	9.7	28.4	35.9	54.0	18.1	100	323
9	2673.038	34.4	28.0	9.9	28.4	43.9	54.0	10.1	133	246
10	2821.532	35.5	28.4	10.2	28.4	45.7	54.0	8.3	100	7
11	2970.035	38.2	28.9	10.5	28.4	49.2	54.0	4.8	100	193
12	3133.712	23.2	29.0	10.8	28.4	34.6	54.0	19.4	100	35
13	3547.615	25.2	29.0	11.8	28.3	37.7	54.0	16.3	100	228
14	3891.154	23.9	29.9	12.7	28.3	38.2	54.0	15.8	100	201
15	5405.619	22.8	34.6	15.0	28.1	44.3	54.0	9.7	100	168
----- Vertical -----										
16	1572.076	30.2	24.6	7.6	28.5	33.9	54.0	20.1	100	188
17	1795.910	32.3	24.6	8.1	28.5	36.5	54.0	17.5	100	326
18	1963.564	28.2	24.6	8.4	28.5	32.7	54.0	21.3	100	72
19	2376.039	36.2	26.7	9.3	28.5	43.7	54.0	10.3	100	179
20	2574.038	27.7	27.7	9.7	28.4	36.7	54.0	17.3	100	3
21	2970.038	38.3	28.9	10.5	28.4	49.3	54.0	4.7	100	271
22	3267.030	28.6	28.9	11.1	28.4	40.2	54.0	13.8	128	18
23	3564.035	29.9	29.0	11.9	28.3	42.5	54.0	11.5	100	208
24	5411.562	22.4	34.6	15.0	28.1	43.9	54.0	10.1	100	231

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

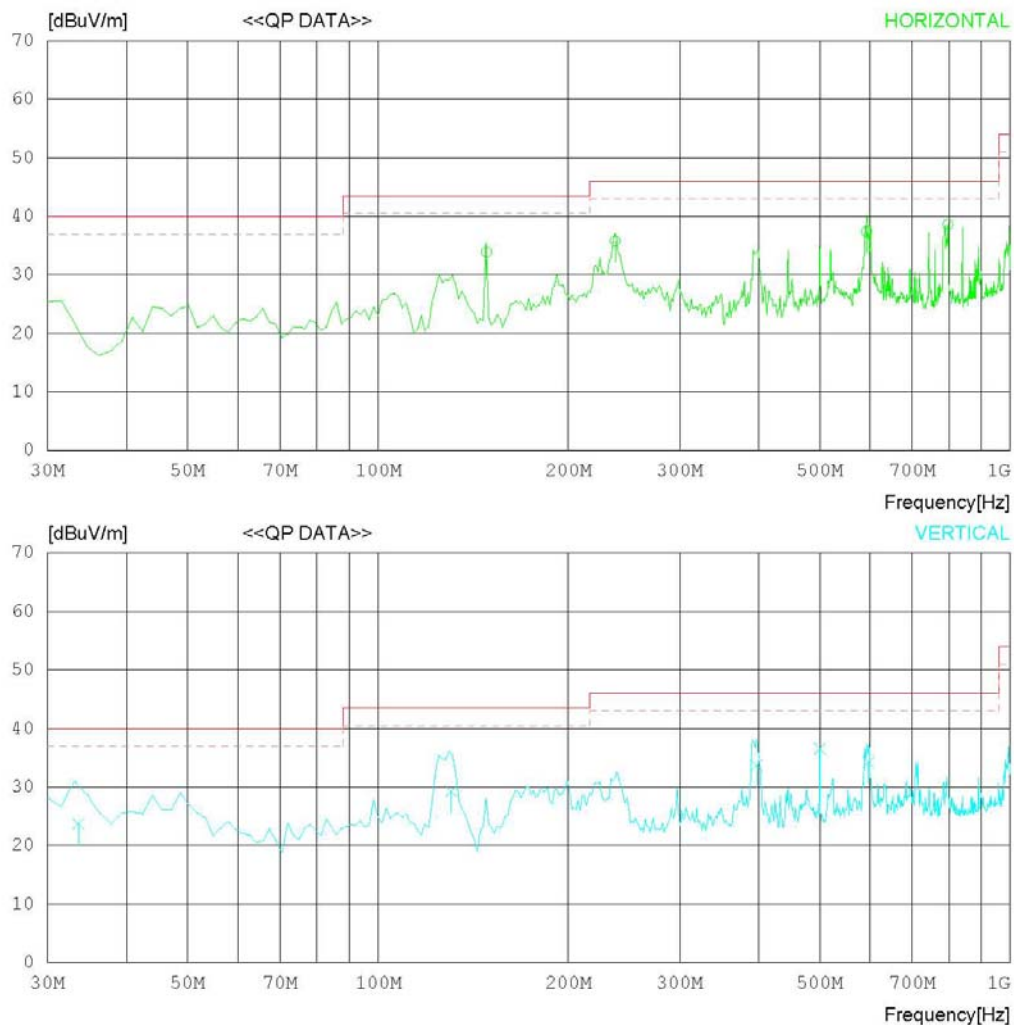
Date : 2013-02-15

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-15

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % 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	148.497	45.9	10.5	1.7	24.2	33.9	43.5	9.6	182	323
2	237.202	45.2	11.9	2.5	23.8	35.8	46.0	10.2	100	355
3	592.565	38.1	18.6	4.1	23.4	37.4	46.0	8.6	100	134
4	796.968	37.4	19.9	4.8	23.5	38.6	46.0	7.4	215	119
----- Vertical -----										
5	33.553	30.6	16.0	1.0	23.9	23.7	40.0	16.3	100	236
6	130.547	40.5	11.5	1.5	24.2	29.3	43.5	14.2	182	300
7	397.055	37.7	16.0	3.5	23.5	33.7	46.0	12.3	100	151
8	499.963	38.4	17.3	3.9	23.0	36.6	46.0	9.4	100	77
9	597.000	34.8	18.7	4.1	23.4	34.2	46.0	11.8	282	184

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

RADIATED EMISSION

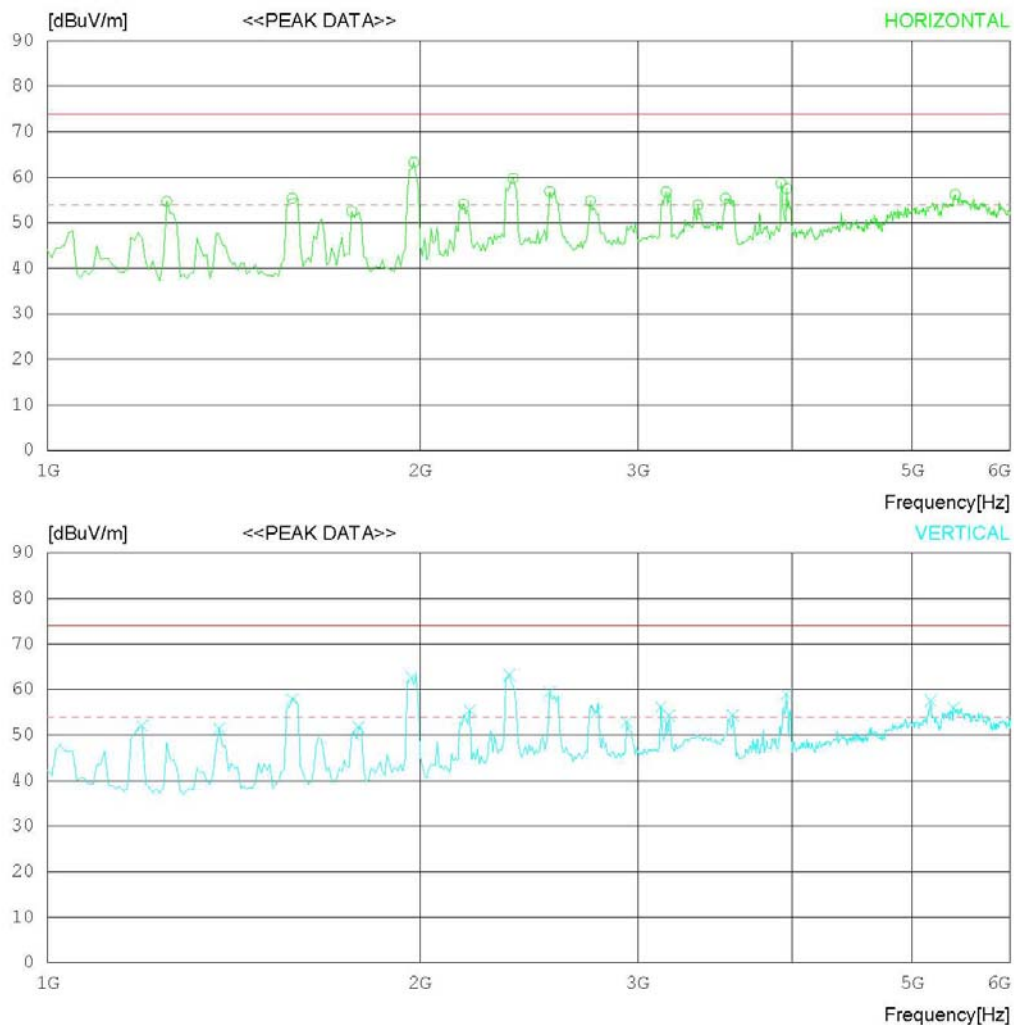
Date : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
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	1248.397	52.3	24.3	6.6	28.5	54.7	74.0	19.3	100	205
2	1576.923	51.7	24.6	7.6	28.5	55.4	74.0	18.6	100	1
3	1761.218	48.4	24.6	8.0	28.5	52.5	74.0	21.5	100	252
4	1977.564	58.8	24.6	8.4	28.5	63.3	74.0	10.7	100	210
5	2169.873	48.3	25.5	8.8	28.5	54.1	74.0	19.9	100	1
6	2378.210	52.3	26.7	9.3	28.5	59.8	74.0	14.2	100	1
7	2546.481	48.1	27.6	9.6	28.4	56.9	74.0	17.1	100	201
8	2746.805	45.0	28.2	10.0	28.4	54.8	74.0	19.2	100	1
9	3163.478	45.4	28.9	10.9	28.4	56.8	74.0	17.2	100	232
10	3355.788	42.0	28.9	11.4	28.4	53.9	74.0	20.1	100	223
11	3532.073	42.9	29.0	11.8	28.3	55.4	74.0	18.6	100	1
12	3916.694	44.4	29.9	12.7	28.3	58.7	74.0	15.3	100	1
13	3956.759	43.0	30.0	12.8	28.3	57.5	74.0	16.5	100	207
14	5415.074	34.8	34.6	14.9	28.1	56.2	74.0	17.8	100	1
----- Vertical -----										
15	1192.308	49.9	24.2	6.4	28.5	52.0	74.0	22	100	1
16	1376.602	48.3	24.5	7.1	28.5	51.4	74.0	22.6	100	212
17	1576.923	54.2	24.6	7.6	28.5	57.9	74.0	16.1	100	172
18	1785.256	47.7	24.6	8.0	28.5	51.8	74.0	22.2	100	1
19	1969.551	58.1	24.6	8.4	28.5	62.6	74.0	11.4	100	1
20	2193.912	49.3	25.7	8.9	28.5	55.4	74.0	18.6	100	186
21	2362.184	55.8	26.7	9.2	28.5	63.2	74.0	10.8	100	1
22	2546.481	50.6	27.6	9.6	28.4	59.4	74.0	14.6	100	1
23	2778.857	45.1	28.3	10.1	28.4	55.1	74.0	18.9	100	225
24	2939.115	42.1	28.8	10.4	28.4	52.9	74.0	21.1	100	194
25	3131.426	44.8	29.0	10.8	28.4	56.2	74.0	17.8	100	225
26	3179.504	42.9	28.9	10.9	28.4	54.3	74.0	19.7	100	232
27	3580.151	41.6	29.1	11.9	28.3	54.3	74.0	19.7	100	206
28	3956.759	44.5	30.0	12.8	28.3	59.0	74.0	15	100	240
29	5174.693	37.0	33.4	15.2	28.1	57.5	74.0	16.5	100	214
30	5399.048	34.5	34.6	15.0	28.1	56.0	74.0	18	100	1

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

RADIATED EMISSION

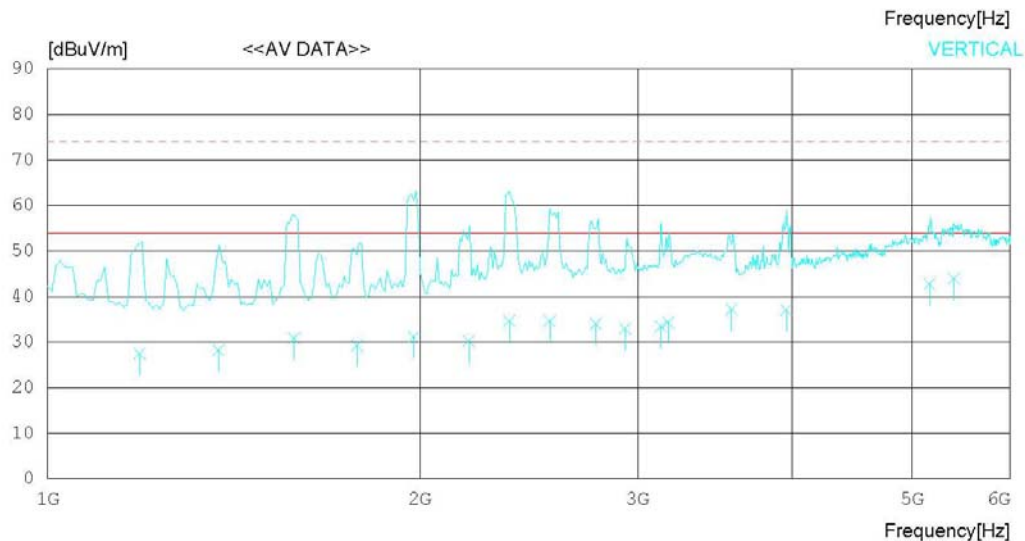
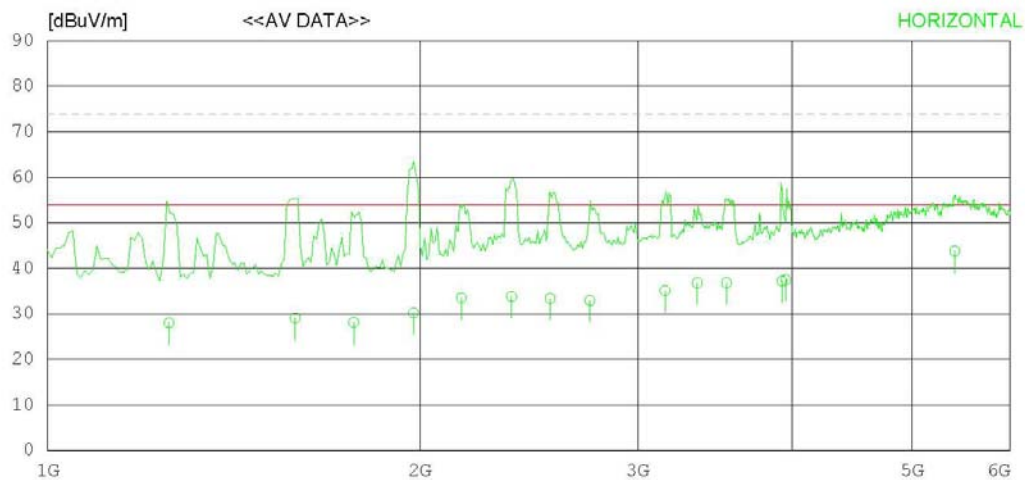
Date : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % 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 : 2013-02-14

Model Name : 50LN5750-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 33 % R. H.
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	1253.572	25.6	24.3	6.6	28.5	28.0	54.0	26.0	100	205
2	1585.167	25.3	24.6	7.7	28.5	29.1	54.0	24.9	100	160
3	1767.635	24.0	24.6	8.0	28.5	28.1	54.0	25.9	100	125
4	1976.552	25.7	24.6	8.4	28.5	30.2	54.0	23.8	100	240
5	2159.994	27.7	25.5	8.8	28.5	33.5	54.0	20.5	100	202
6	2371.269	26.3	26.7	9.3	28.5	33.8	54.0	20.2	100	165
7	2548.821	24.6	27.6	9.6	28.4	33.4	54.0	20.6	100	320
8	2744.526	23.1	28.2	10.0	28.4	32.9	54.0	21.1	100	24
9	3155.788	23.7	28.9	10.9	28.4	35.1	54.0	18.9	100	232
10	3350.673	25.0	28.9	11.3	28.4	36.8	54.0	17.2	100	223
11	3539.532	24.3	29.0	11.8	28.3	36.8	54.0	17.2	100	220
12	3925.262	22.7	30.0	12.8	28.3	37.2	54.0	16.8	100	315
13	3952.089	23.0	30.0	12.8	28.3	37.5	54.0	16.5	100	207
14	5410.855	22.3	34.6	15.0	28.1	43.8	54.0	10.2	100	175
----- Vertical -----										
15	1187.417	25.4	24.2	6.4	28.5	27.5	54.0	26.5	100	326
16	1374.974	25.1	24.5	7.1	28.5	28.2	54.0	25.8	100	212
17	1582.506	27.0	24.6	7.7	28.5	30.8	54.0	23.2	100	172
18	1779.904	25.2	24.6	8.0	28.5	29.3	54.0	24.7	100	332
19	1976.981	26.7	24.6	8.4	28.5	31.2	54.0	22.8	100	80
20	2190.436	24.1	25.7	8.9	28.5	30.2	54.0	23.8	100	186
21	2362.577	27.3	26.7	9.2	28.5	34.7	54.0	19.3	100	188
22	2546.705	25.8	27.6	9.6	28.4	34.6	54.0	19.4	100	7
23	2775.500	24.1	28.3	10.1	28.4	34.1	54.0	19.9	100	225
24	2930.827	22.2	28.8	10.4	28.4	33.0	54.0	21.0	100	194
25	3131.160	22.1	29.0	10.8	28.4	33.5	54.0	20.5	100	225
26	3175.987	23.0	28.9	10.9	28.4	34.4	54.0	19.6	100	232
27	3572.179	24.5	29.1	11.9	28.3	37.2	54.0	16.8	100	206
28	3955.071	22.6	30.0	12.8	28.3	37.1	54.0	16.9	100	240
29	5166.115	22.4	33.3	15.2	28.1	42.8	54.0	11.2	100	214
30	5402.813	22.5	34.6	15.0	28.1	44.0	54.0	10.0	100	230

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	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	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	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	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	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
☐ 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

Appendix 2

Report Revision History

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