

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 39LN5300-UB
Order No. : DEMC1301-00494
Date of receipt : 2013-02-05
Test duration : 2013-02-09 ~ 2013-02-12
Use of report : FCC CoC Marking
Date of Issue : 2013-02-19

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 : (19 ~ 20) °C,
Humidity : (34 ~ 35) % 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.

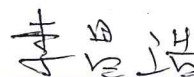
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Tested by:



Assistant Manager
DaeHwa Eun

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.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.	39LN5300-UB
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ39LN5300UB
Type of Sample Tested	Pre-Production
High Frequency	Max 800 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.5 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

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	02-09	20	35
Radiated Disturbance	02-12	19	34

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.41916	L1	34.6	Average	47.5	12.9

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
959.981	H	40.9	Quasi-Peak	46.0	5.1

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 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	VOSTRO220	G3RZKBX	DELL INC.	POWER	1.6	Not use	Non-shield	Plastic	DOC
				PS/2	1.8	Not use	Non-shield		
				PS/2	1.6	Not use	Non-shield		
				USB	1.8	Not use	Non-shield		
				HDMI	1.8	Not use	Shield		
KEYBOARD	SKG-210P	TAKSC122 56D	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Not use	Non-shield	Plastic	DOC
MOUSE	SML-510PB	M5PBTAKS 603018D	MICROSOFT CORPORATION	PS/2	1.6	Not use	Non-shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2001499	SONY EMCS	POWER AV	1.7 1.8	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	SDCZ37-004G	N/A	SANDISK	USB	-	-	-	Plastic	DOC
PRINTER	EPSON AcuLaser	LWTZ 181070	EPSON	POWER USB	1.8 2.0	Not use Not use	Non-shield Non-shield	Plastic	DOC
Remote control	AKB73715608	N/A	OHSUNG ELECTRONIC	-	-	-	-	-	-

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

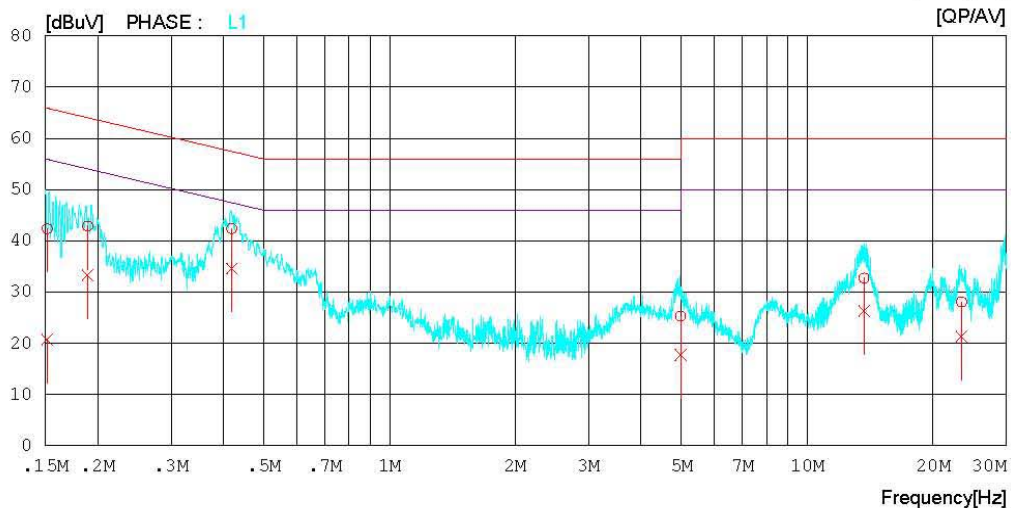
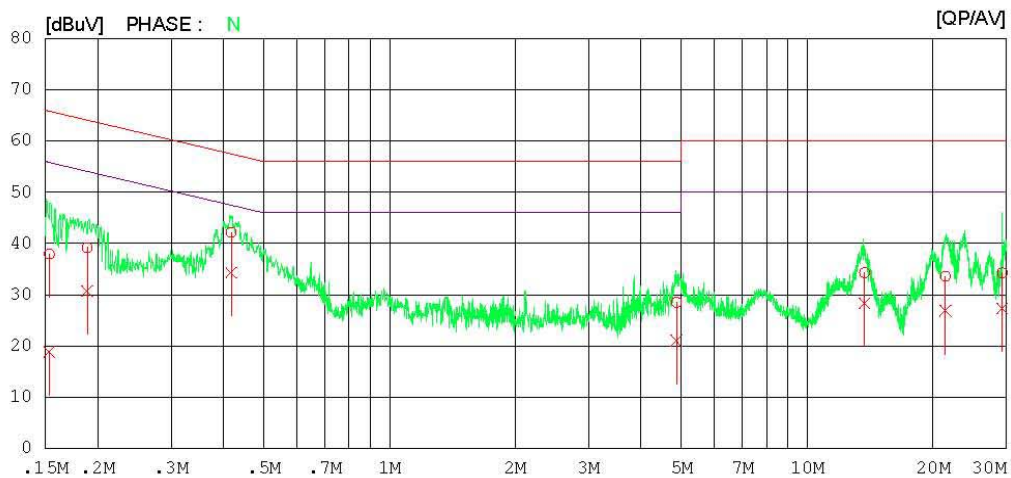
Digital EMC
Date : 2013-02-09

Model No. : 39LN5300-UB
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 20 °C 35 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-02-09

Model No. : 39LN5300-UB
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 20 °C 35 % 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	0.15336	37.7	18.7	0.2	37.9	18.9	65.8	55.8	27.9	36.9	N
2	0.18891	39.0	30.5	0.2	39.2	30.7	64.1	54.1	24.9	23.4	N
3	0.41818	41.9	34.1	0.2	42.1	34.3	57.5	47.5	15.4	13.2	N
4	4.86650	28.1	20.6	0.4	28.5	21.0	56.0	46.0	27.5	25.0	N
5	13.72100	33.6	27.6	0.7	34.3	28.3	60.0	50.0	25.7	21.7	N
6	21.41800	32.7	26.0	0.9	33.6	26.9	60.0	50.0	26.4	23.1	N
7	29.30550	33.2	26.3	1.0	34.2	27.3	60.0	50.0	25.8	22.7	N
8	0.15161	42.2	20.6	0.2	42.4	20.8	65.9	55.9	23.5	35.1	L1
9	0.18943	42.7	33.1	0.2	42.9	33.3	64.1	54.1	21.2	20.8	L1
10	0.41916	42.2	34.4	0.2	42.4	34.6	57.5	47.5	15.1	12.9	L1
11	4.97950	24.9	17.4	0.4	25.3	17.8	56.0	46.0	30.7	28.2	L1
12	13.68150	32.0	25.6	0.7	32.7	26.3	60.0	50.0	27.3	23.7	L1
13	23.43750	27.1	20.4	1.0	28.1	21.4	60.0	50.0	31.9	28.6	L1

< USB MODE >



Results of Conducted Emission

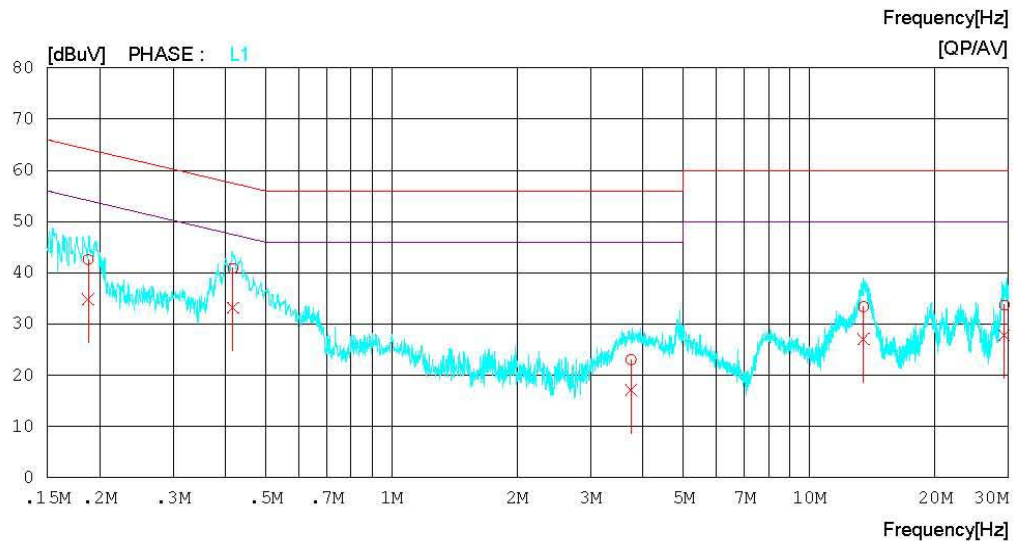
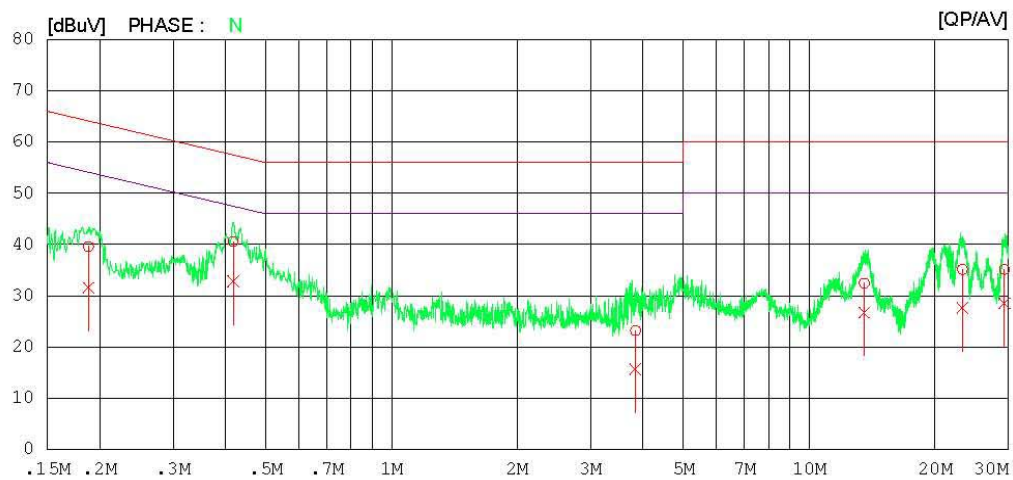
Digital EMC
Date : 2013-02-09

Model No. : 39LN5300-UB
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 20 °C 35 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-02-09

Model No. : 39LN5300-UB
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 20 °C 35 % 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	0.18830	39.4	31.3	0.2	39.6	31.5	64.1	54.1	24.5	22.6	N
2	0.41795	40.4	32.6	0.2	40.6	32.8	57.5	47.5	16.9	14.7	N
3	3.84000	22.9	15.4	0.3	23.2	15.7	56.0	46.0	32.8	30.3	N
4	13.54750	31.7	26.0	0.7	32.4	26.7	60.0	50.0	27.6	23.3	N
5	23.28150	34.1	26.6	1.0	35.1	27.6	60.0	50.0	24.9	22.4	N
6	29.35000	34.1	27.5	1.0	35.1	28.5	60.0	50.0	24.9	21.5	N
7	0.18790	42.4	34.6	0.2	42.6	34.8	64.1	54.1	21.5	19.3	L1
8	0.41730	40.7	33.0	0.2	40.9	33.2	57.5	47.5	16.6	14.3	L1
9	3.74600	22.7	16.9	0.3	23.0	17.2	56.0	46.0	33.0	28.8	L1
10	13.50200	32.7	26.4	0.7	33.4	27.1	60.0	50.0	26.6	22.9	L1
11	29.31350	32.7	26.9	1.0	33.7	27.9	60.0	50.0	26.3	22.1	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 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 (dB μ V/m)	Quasi-peak (dB μ 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 μ V/m)	Quasi-peak (dB μ 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 μ V/m)	Average (dB μ V/m)	Peak (dB μ V/m)	Average (dB μ 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

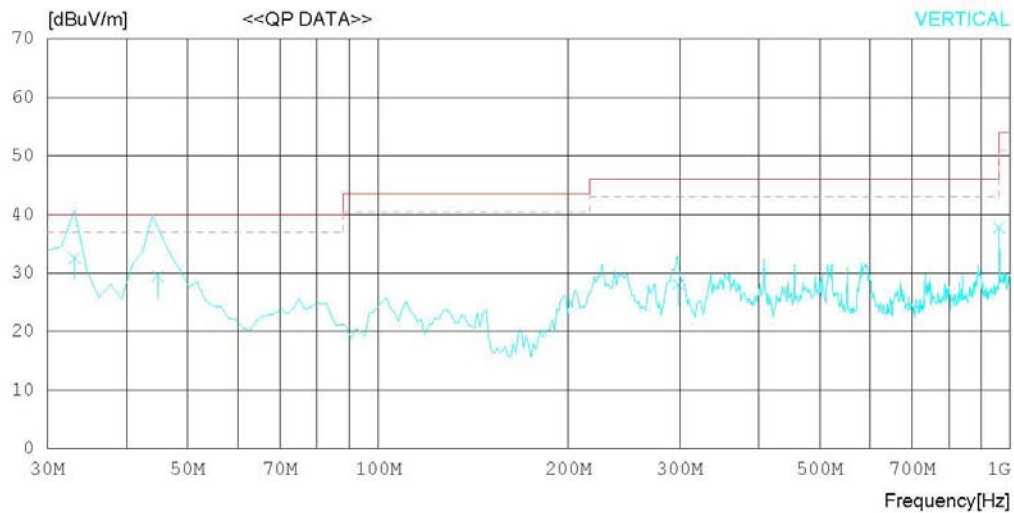
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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	240.000	43.0	12.1	2.5	23.8	33.8	46.0	12.2	100	358
2	293.089	39.8	13.6	2.8	23.6	32.6	46.0	13.4	100	194
3	445.063	34.0	16.6	3.5	23.3	30.8	46.0	15.2	165	146
4	479.984	37.1	17.1	3.8	23.1	34.9	46.0	11.1	184	283
5	890.125	35.0	20.7	5.2	23.1	37.8	46.0	8.2	100	143
6	959.981	36.7	21.7	5.4	22.9	40.9	46.0	5.1	200	198
----- Vertical -----										
7	33.109	39.2	16.3	1.0	23.9	32.6	40.0	7.4	202	236
8	44.817	38.9	13.8	1.1	24.3	29.5	40.0	10.5	100	188
9	298.306	35.2	13.7	2.8	23.6	28.1	46.0	17.9	100	180
10	959.981	33.6	21.7	5.4	22.9	37.8	46.0	8.2	100	199

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

RADIATED EMISSION

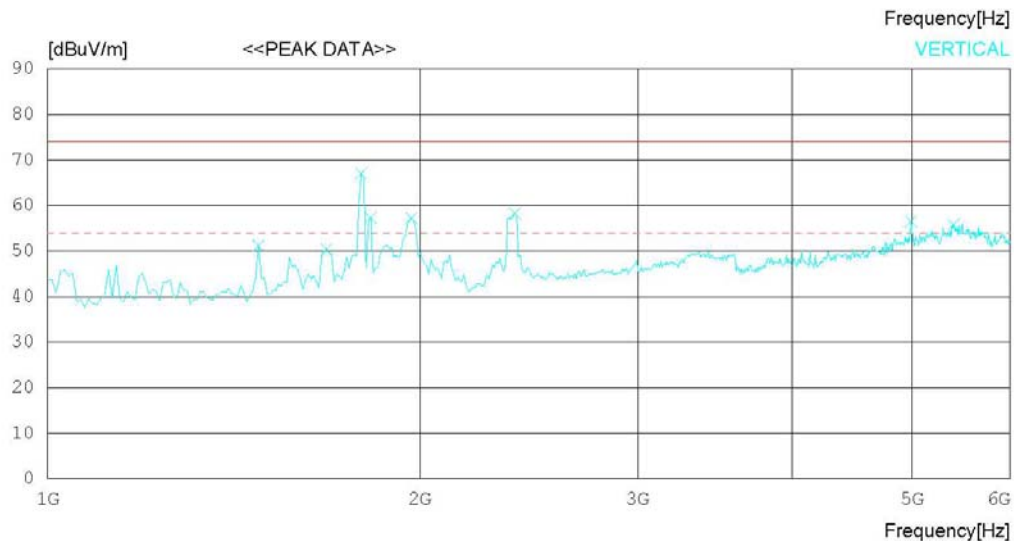
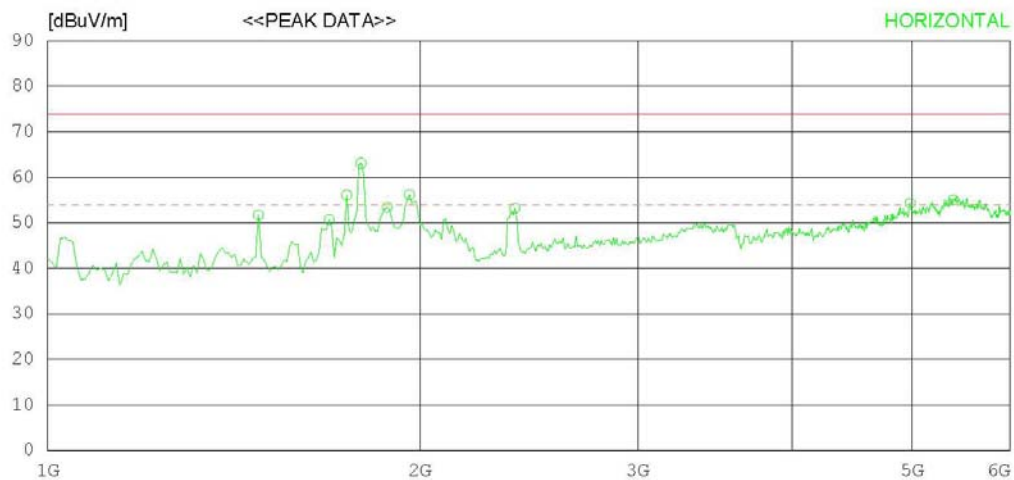
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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 : 2013-02-12

Model Name	: 39LN5300-UB	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19 °C 34 % 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	48.2	24.6	7.4	28.5	51.7	74.0	22.3	100	218
2	1689.102	46.7	24.6	7.9	28.5	50.7	74.0	23.3	100	235
3	1745.192	52.0	24.6	8.0	28.5	56.1	74.0	17.9	100	283
4	1793.269	58.9	24.6	8.1	28.5	63.1	74.0	10.9	100	358
5	1881.410	49.1	24.6	8.2	28.5	53.4	74.0	20.6	100	218
6	1961.538	51.7	24.6	8.4	28.5	56.2	74.0	17.8	100	218
7	2386.223	45.6	26.8	9.3	28.5	53.2	74.0	20.8	100	165
8	4982.388	34.6	32.4	15.4	28.1	54.3	74.0	19.7	100	152
9	5399.048	33.6	34.6	15.0	28.1	55.1	74.0	18.9	100	358
----- Vertical -----										
10	1480.769	47.7	24.6	7.4	28.5	51.2	74.0	22.8	100	1
11	1681.089	46.6	24.6	7.8	28.5	50.5	74.0	23.5	100	1
12	1793.269	62.8	24.6	8.1	28.5	67.0	74.0	7	100	1
13	1825.320	53.1	24.6	8.1	28.5	57.3	74.0	16.7	100	1
14	1969.551	52.7	24.6	8.4	28.5	57.2	74.0	16.8	100	1
15	2386.223	50.7	26.8	9.3	28.5	58.3	74.0	15.7	100	226
16	4990.401	36.8	32.4	15.4	28.1	56.5	74.0	17.5	100	1
17	5399.048	34.3	34.6	15.0	28.1	55.8	74.0	18.2	100	62

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

RADIATED EMISSION

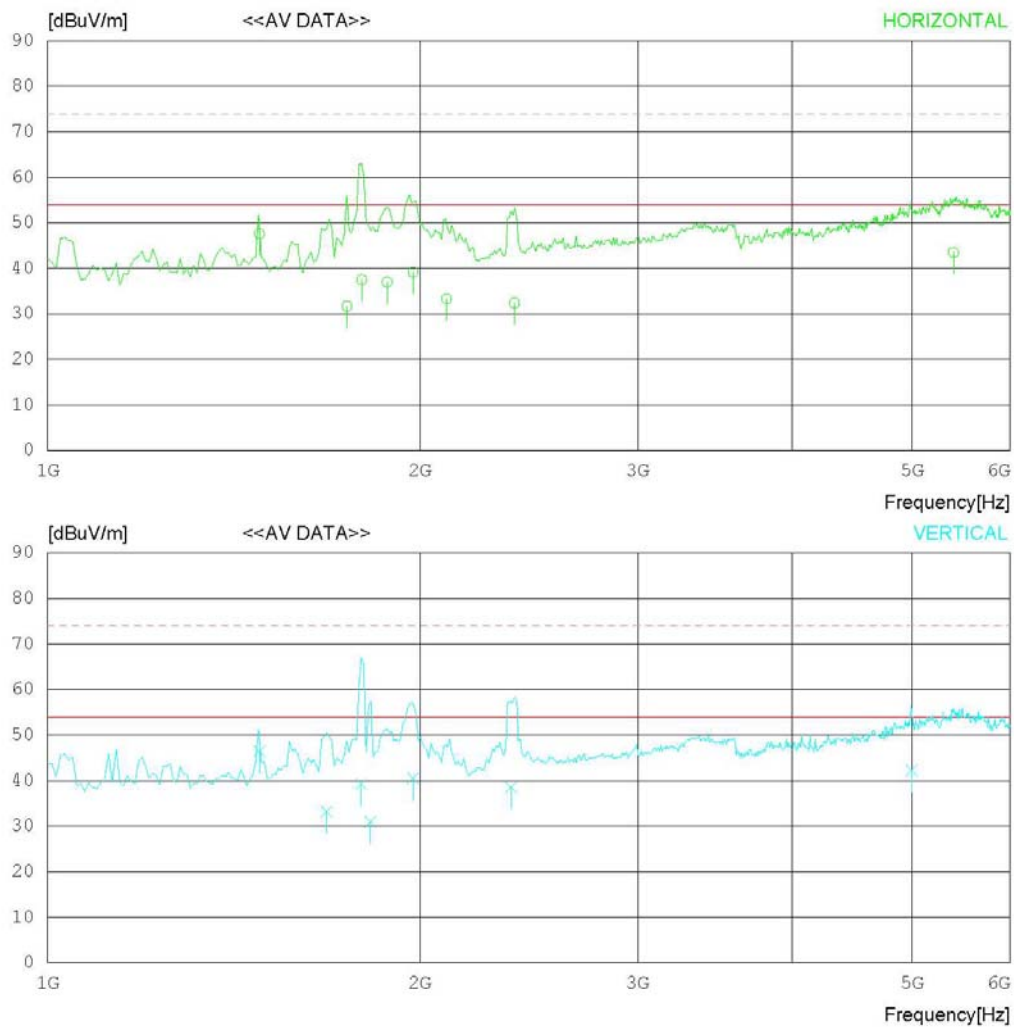
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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 : 2013-02-12

Model Name : 39LN5300-UB	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1483.526	44.1	24.6	7.4	28.5	47.6	54.0	6.4	100	218
2	1746.321	27.6	24.6	8.0	28.5	31.7	54.0	22.3	100	283
3	1794.154	33.3	24.6	8.1	28.5	37.5	54.0	16.5	100	241
4	1881.410	32.7	24.6	8.2	28.5	37.0	54.0	17.0	100	236
5	1974.295	34.6	24.6	8.4	28.5	39.1	54.0	14.9	100	207
6	2102.054	28.0	25.1	8.7	28.5	33.3	54.0	20.7	100	179
7	2384.843	24.8	26.8	9.3	28.5	32.4	54.0	21.6	100	133
8	5399.048	22.0	34.6	15.0	28.1	43.5	54.0	10.5	100	358
----- Vertical -----										
9	1483.525	42.9	24.6	7.4	28.5	46.4	54.0	7.6	100	179
10	1681.089	29.3	24.6	7.8	28.5	33.2	54.0	20.8	100	191
11	1793.269	35.0	24.6	8.1	28.5	39.2	54.0	14.8	100	189
12	1824.199	26.7	24.6	8.1	28.5	30.9	54.0	23.1	100	220
13	1974.609	36.0	24.6	8.4	28.5	40.5	54.0	13.5	100	221
14	2369.378	31.0	26.7	9.3	28.5	38.5	54.0	15.5	100	226
15	4997.356	22.5	32.5	15.4	28.1	42.3	54.0	11.7	100	241

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

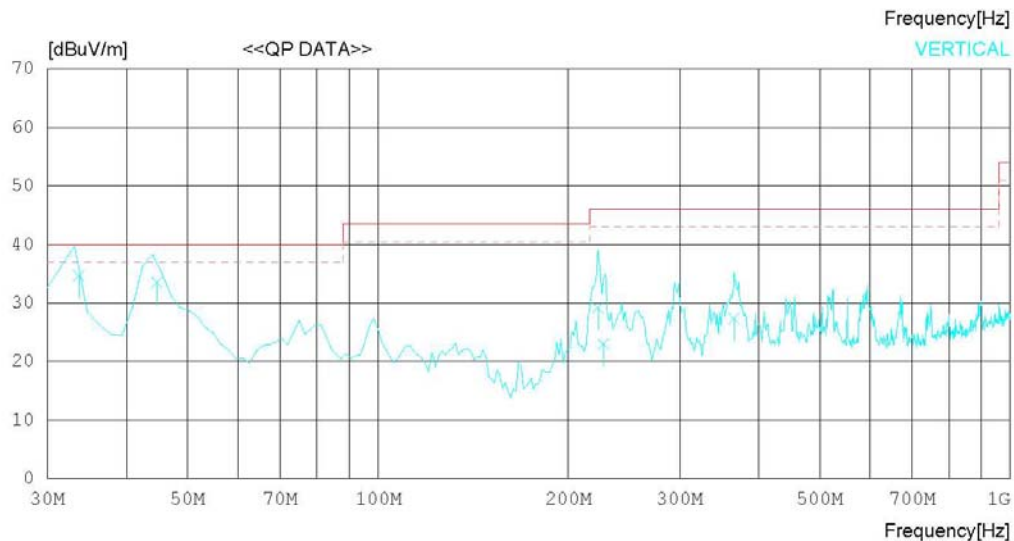
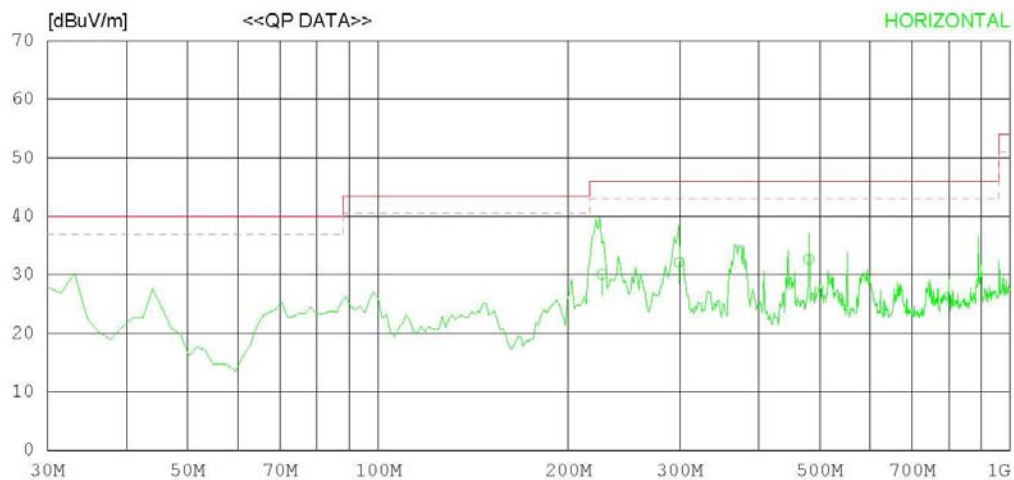
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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	226.083	40.3	11.3	2.4	23.9	30.1	46.0	15.9	100	79
2	299.679	39.2	13.7	2.8	23.6	32.1	46.0	13.9	100	184
3	480.028	34.9	17.1	3.8	23.1	32.7	46.0	13.3	186	165
----- Vertical -----										
4	33.625	41.5	16.0	1.0	23.9	34.6	40.0	5.4	200	178
5	44.682	42.8	13.8	1.1	24.2	33.5	40.0	6.5	100	224
6	222.839	39.6	11.1	2.4	23.9	29.2	46.0	16.8	200	189
7	227.407	33.1	11.3	2.5	23.9	23.0	46.0	23.0	200	358
8	365.769	32.2	15.3	3.4	23.6	27.3	46.0	18.7	100	202

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

RADIATED EMISSION

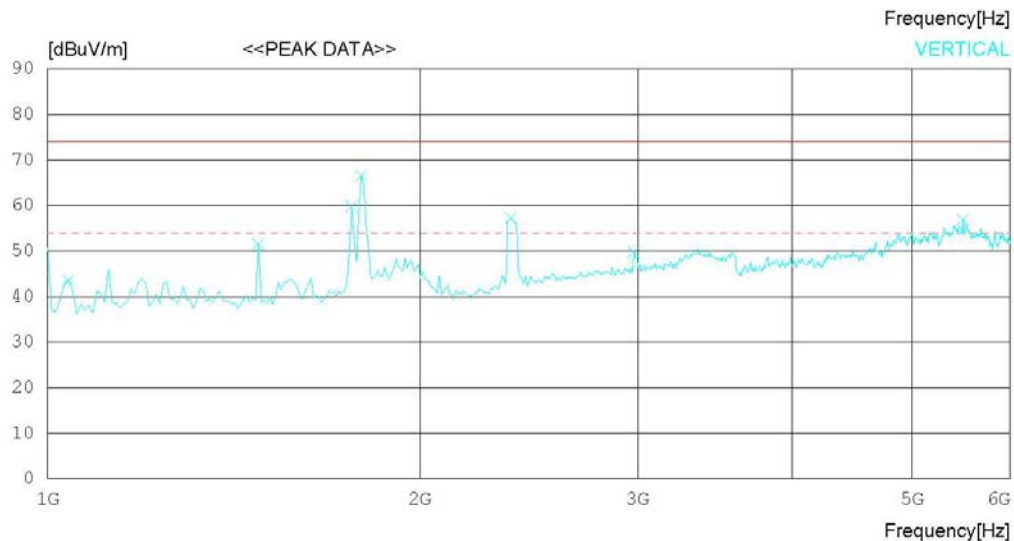
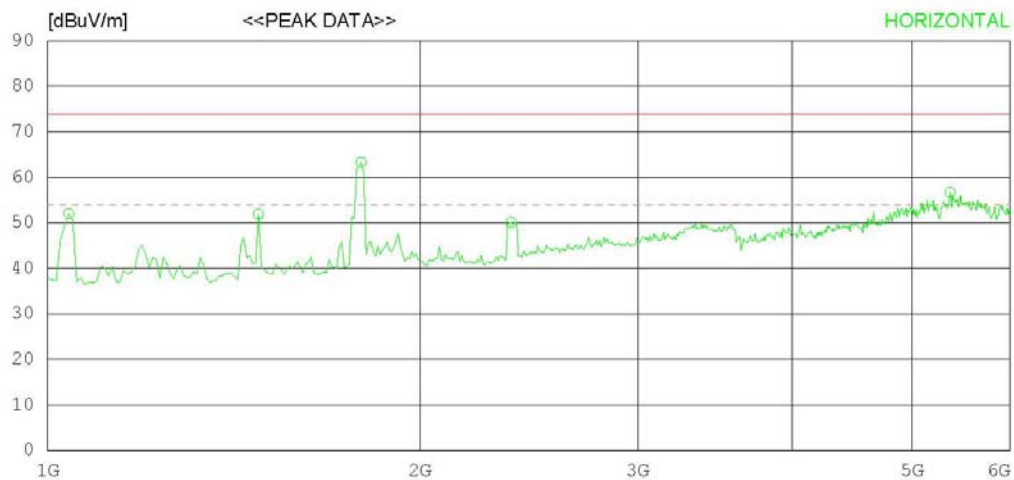
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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 : 2013-02-12

Model Name : 39LN5300-UB	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1040.064	50.7	23.9	5.9	28.5	52.0	74.0	22	100	358
2	1480.769	48.4	24.6	7.4	28.5	51.9	74.0	22.1	100	207
3	1793.269	59.1	24.6	8.1	28.5	63.3	74.0	10.7	100	142
4	2370.197	42.6	26.7	9.3	28.5	50.1	74.0	23.9	100	225
5	5366.998	35.4	34.4	15.0	28.1	56.7	74.0	17.3	100	131
----- Vertical -----										
6	1040.064	42.2	23.9	5.9	28.5	43.5	74.0	30.5	100	206
7	1480.769	48.1	24.6	7.4	28.5	51.6	74.0	22.4	100	1
8	1761.218	55.7	24.6	8.0	28.5	59.8	74.0	14.2	100	1
9	1793.269	62.3	24.6	8.1	28.5	66.5	74.0	7.5	100	171
10	2370.197	49.8	26.7	9.3	28.5	57.3	74.0	16.7	100	1
11	2979.180	38.7	28.9	10.5	28.4	49.7	74.0	24.3	100	186
12	5495.201	35.0	35.1	14.9	28.1	56.9	74.0	17.1	100	127

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

RADIATED EMISSION

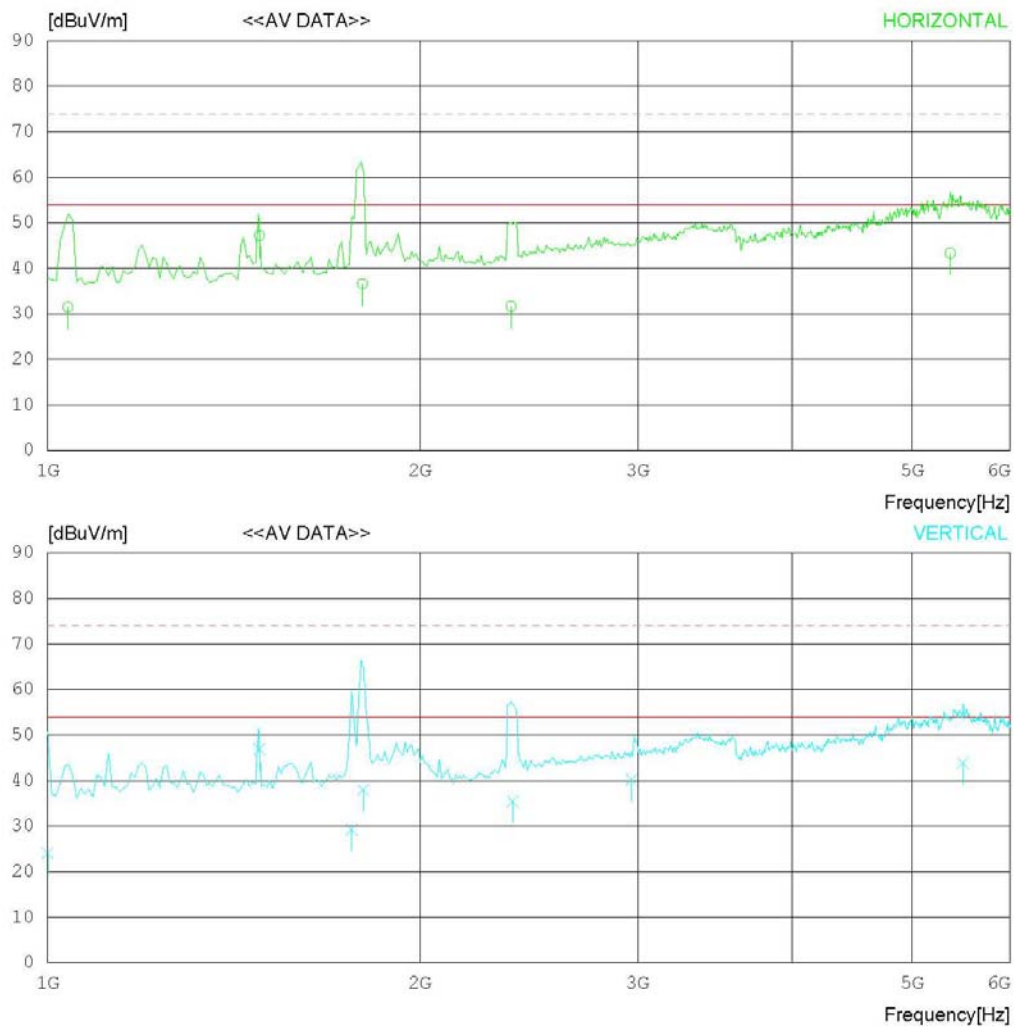
Date : 2013-02-12

Model Name : 39LN5300-UB
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 34 % 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 : 2013-02-12

Model Name : 39LN5300-UB	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1038.276	30.2	23.9	5.9	28.5	31.5	54.0	22.5	100	182
2	1483.477	43.7	24.6	7.4	28.5	47.2	54.0	6.8	100	207
3	1796.731	32.4	24.6	8.1	28.5	36.6	54.0	17.4	100	142
4	2370.197	24.2	26.7	9.3	28.5	31.7	54.0	22.3	100	225
5	5366.998	22.0	34.4	15.0	28.1	43.3	54.0	10.7	100	131
----- Vertical -----										
6	1000.321	23.0	23.9	5.7	28.5	24.1	54.0	29.9	100	206
7	1483.477	43.4	24.6	7.4	28.5	46.9	54.0	7.1	100	184
8	1761.218	25.2	24.6	8.0	28.5	29.3	54.0	24.7	100	181
9	1798.817	33.8	24.6	8.1	28.5	38.0	54.0	16.0	100	171
10	2375.997	27.9	26.7	9.3	28.5	35.4	54.0	18.6	100	222
11	2966.981	29.3	28.9	10.4	28.4	40.2	54.0	13.8	100	186
12	5495.201	22.0	35.1	14.9	28.1	43.9	54.0	10.1	100	127

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