

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 42LN5700-UA
Order No. : 1211-02696
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".

3. General Information of EUT

Model No.	42LN5700-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ42LN5700UA
Type of Sample Tested	Pre-Production
High Frequency	Max 800 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

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

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.15331	N	60.2	Quasi-Peak	65.8	5.6

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
2410.261	H	70.0	Peak	74.0	4.0

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 – 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	1.8	Not use	Non-shield	Plastic	DOC
				HDMI	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.5	Not use	Shield		
				LAN	1.6	Not use	Non-shield		
				STEREO	1.5	Not use	Non-shield		
KEYBOARD	SKG-3000UB	TAKSB601236L	MONITERY 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

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 >



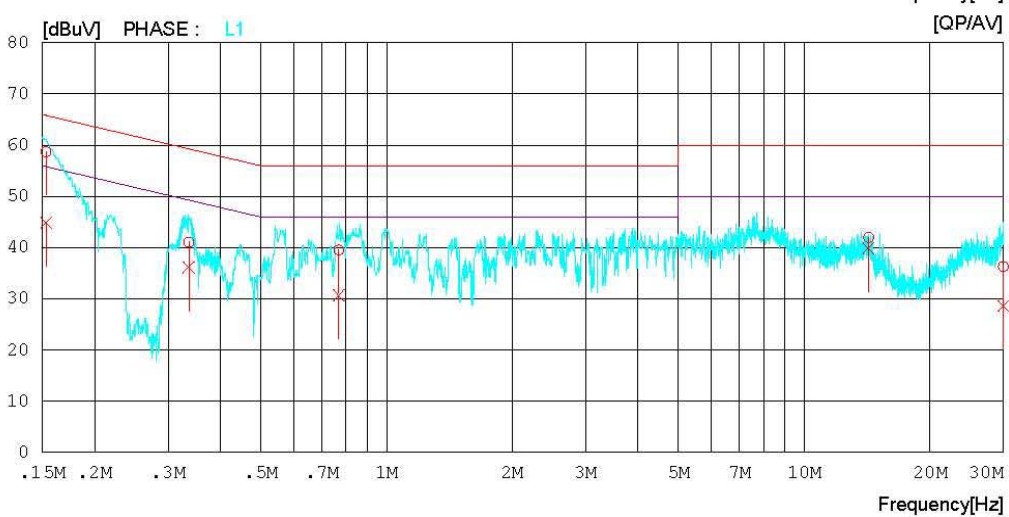
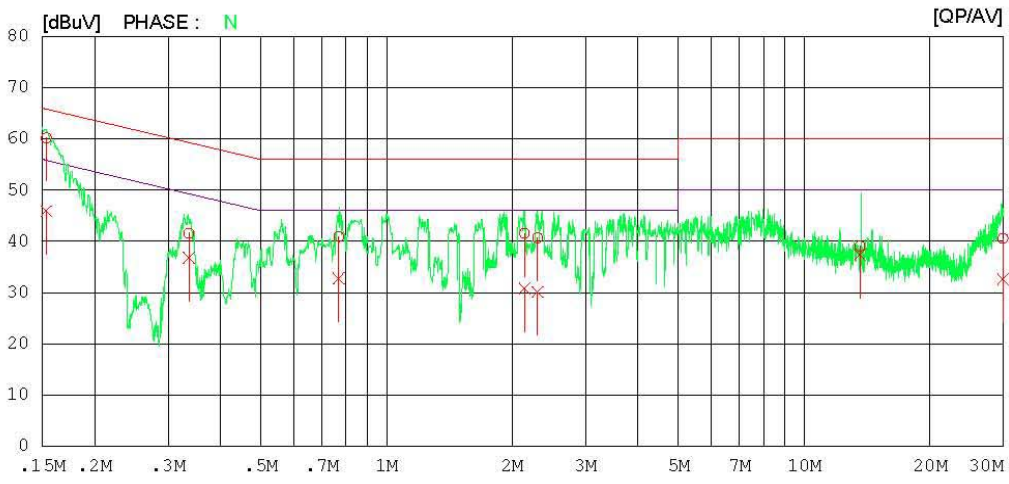
Results of Conducted Emission

Digital EMC
Date : 2012-12-06

Model No. : 42LN5700-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 16 °C 47 % R.H.
Operator :

Memo :
LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2012-12-06

Model No. : 42LN5700-UA
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120 V 60 Hz
 Temp/Humi. : 16 °C 47 % 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	0.15331	60.0	45.7	0.2	60.2	45.9	65.8	55.8	5.6	9.9	N
2	0.33639	41.4	36.6	0.2	41.6	36.8	59.3	49.3	17.7	12.5	N
3	0.76863	40.7	32.6	0.2	40.9	32.8	56.0	46.0	15.1	13.2	N
4	2.14050	41.3	30.5	0.3	41.6	30.8	56.0	46.0	14.4	15.2	N
5	2.29950	40.4	29.8	0.3	40.7	30.1	56.0	46.0	15.3	15.9	N
6	13.60350	38.4	36.6	0.7	39.1	37.3	60.0	50.0	20.9	12.7	N
7	29.93650	39.6	31.6	1.0	40.6	32.6	60.0	50.0	19.4	17.4	N
8	0.15316	58.5	44.7	0.2	58.7	44.9	65.8	55.8	7.1	10.9	L1
9	0.33644	40.9	36.0	0.2	41.1	36.2	59.3	49.3	18.2	13.1	L1
10	0.76920	39.3	30.5	0.2	39.5	30.7	56.0	46.0	16.5	15.3	L1
11	14.27150	41.3	39.2	0.7	42.0	39.9	60.0	50.0	18.0	10.1	L1
12	29.97552	35.3	27.6	1.0	36.3	28.6	60.0	50.0	23.7	21.4	L1

< USB MODE >



Results of Conducted Emission

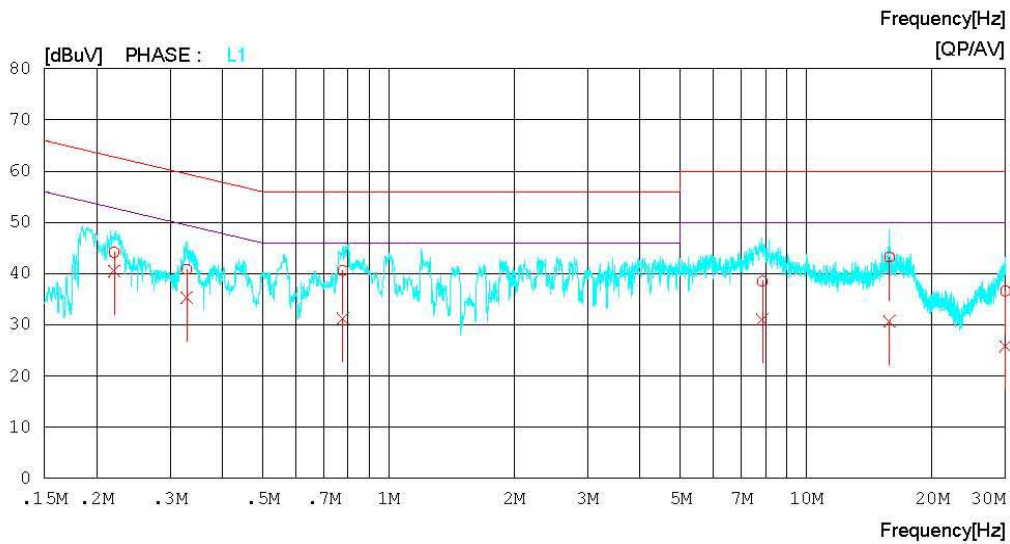
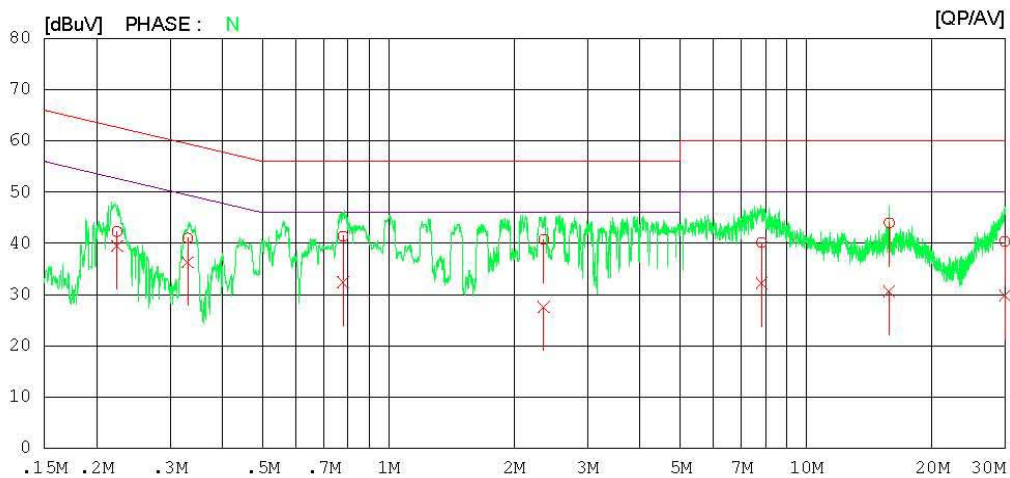
Digital EMC
Date : 2012-12-06

Model No. : 42LN5700-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 16 °C 47 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2012-12-06

Model No. : 42LN5700-UA
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120 V 60 Hz
 Temp/Humi. : 16 °C 47 % 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	0.22381	42.1	39.3	0.2	42.3	39.5	62.7	52.7	20.4	13.2	N
2	0.33061	40.8	36.1	0.2	41.0	36.3	59.4	49.4	18.4	13.1	N
3	0.77819	41.2	32.2	0.2	41.4	32.4	56.0	46.0	14.6	13.6	N
4	2.35400	40.5	27.3	0.3	40.8	27.6	56.0	46.0	15.2	18.4	N
5	7.82250	39.6	31.7	0.5	40.1	32.2	60.0	50.0	19.9	17.8	N
6	15.81800	43.2	29.8	0.8	44.0	30.6	60.0	50.0	16.0	19.4	N
7	29.90208	39.4	28.8	1.0	40.4	29.8	60.0	50.0	19.6	20.2	N
8	0.22049	44.0	40.3	0.2	44.2	40.5	62.8	52.8	18.6	12.3	L1
9	0.32886	40.7	35.1	0.2	40.9	35.3	59.5	49.5	18.6	14.2	L1
10	0.77784	40.4	31.1	0.2	40.6	31.3	56.0	46.0	15.4	14.7	L1
11	7.85200	38.0	30.6	0.5	38.5	31.1	60.0	50.0	21.5	18.9	L1
12	15.82600	42.4	29.9	0.8	43.2	30.7	60.0	50.0	16.8	19.3	L1
13	29.99464	35.6	24.8	1.0	36.6	25.8	60.0	50.0	23.4	24.2	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

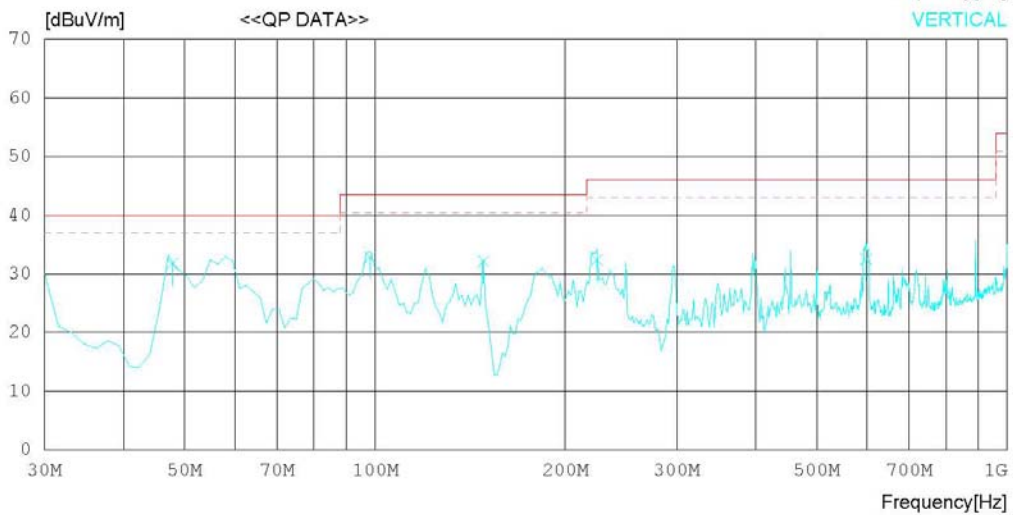
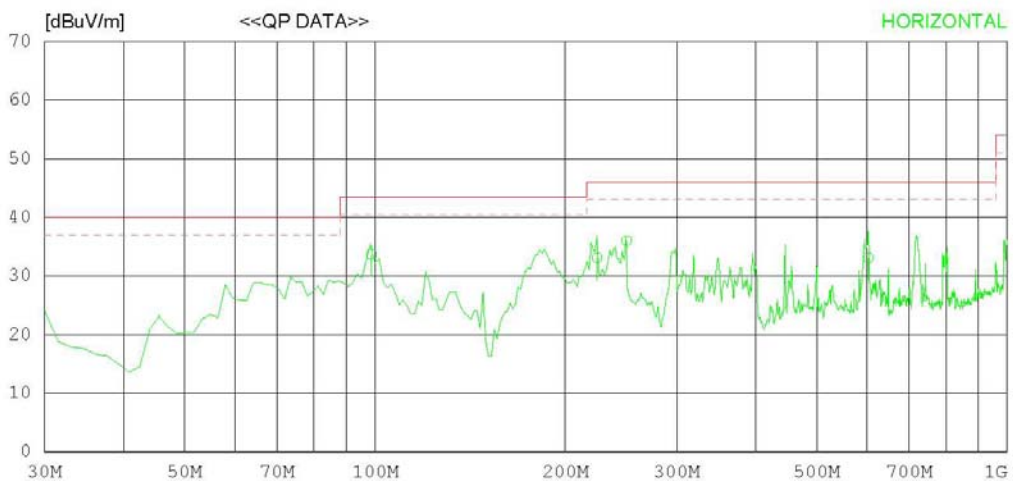
Date : 2012-12-06

Model Name : 42LN5700-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 18 °C 42 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-12-06

Model Name : 42LN5700-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	98.674	44.5	10.6	1.4	22.8	33.7	43.5	9.8	199	176
2	224.550	43.5	10.7	2.4	23.5	33.1	46.0	12.9	100	125
3	250.032	44.7	12.3	2.6	23.6	36.0	46.0	10.0	100	125
4	602.314	35.0	18.6	4.2	24.7	33.1	46.0	12.9	100	142
----- Vertical -----										
5	47.808	44.2	9.1	1.2	22.8	31.7	40.0	8.3	100	220
6	98.306	43.7	10.6	1.4	22.8	32.9	43.5	10.6	100	154
7	148.354	42.8	10.7	1.7	23.1	32.1	43.5	11.4	100	302
8	224.560	42.8	10.7	2.4	23.5	32.4	46.0	13.6	100	8
9	598.941	34.5	18.6	4.1	24.7	32.5	46.0	13.5	100	183

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

RADIATED EMISSION

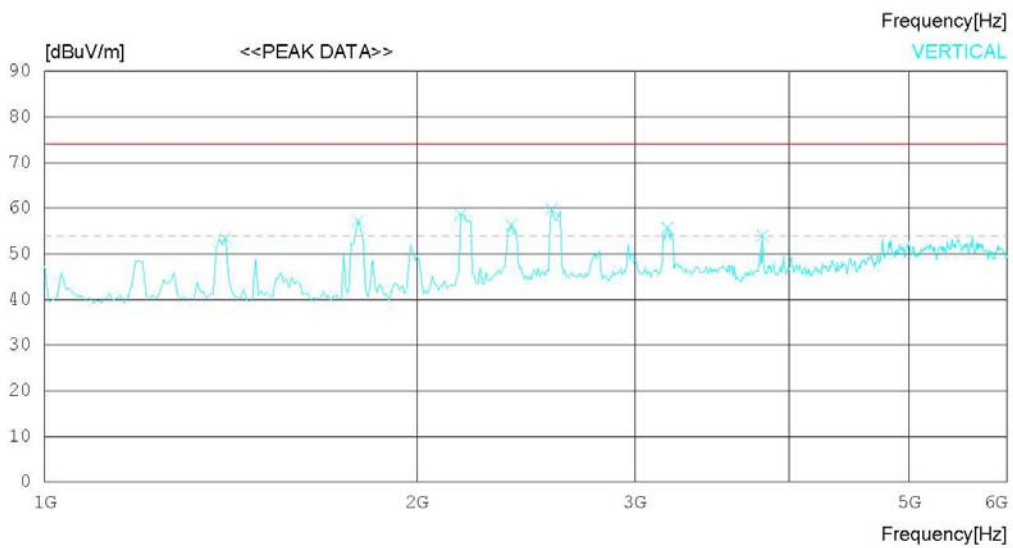
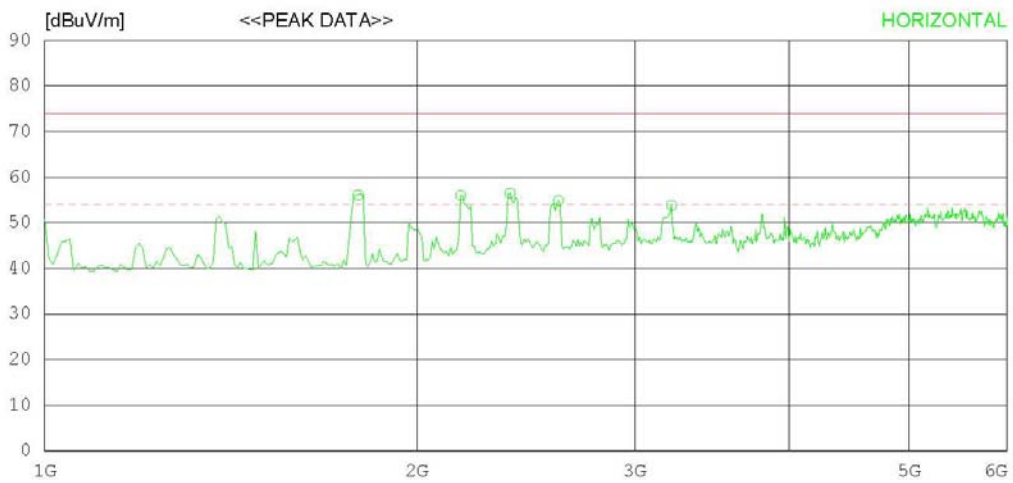
Date : 2012-12-06

Model Name : 42LN5700-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 18 °C 42 % 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 : 2012-12-06

Model Name : 42LN5700-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	1793.269	65.2	24.6	8.1	41.8	56.1	74.0	17.9	100	358
2	2169.873	63.4	25.5	8.8	41.7	56.0	74.0	18	100	358
3	2378.210	62.4	26.7	9.3	41.9	56.5	74.0	17.5	100	220
4	2602.572	59.3	27.8	9.7	41.9	54.9	74.0	19.1	100	246
5	3211.555	55.7	28.9	11.0	41.8	53.8	74.0	20.2	100	358
----- Vertical -----										
6	1400.641	63.4	24.5	7.2	41.7	53.4	74.0	20.6	100	196
7	1793.269	66.3	24.6	8.1	41.8	57.2	74.0	16.8	100	2
8	2169.873	66.0	25.5	8.8	41.7	58.6	74.0	15.4	100	211
9	2386.223	62.1	26.8	9.3	41.9	56.3	74.0	17.7	100	1
10	2570.520	64.3	27.7	9.7	41.9	59.8	74.0	14.2	100	1
11	3187.517	57.6	28.9	11.0	41.8	55.7	74.0	18.3	100	1
12	3804.513	53.6	29.7	12.5	41.8	54.0	74.0	20	100	1

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

RADIATED EMISSION

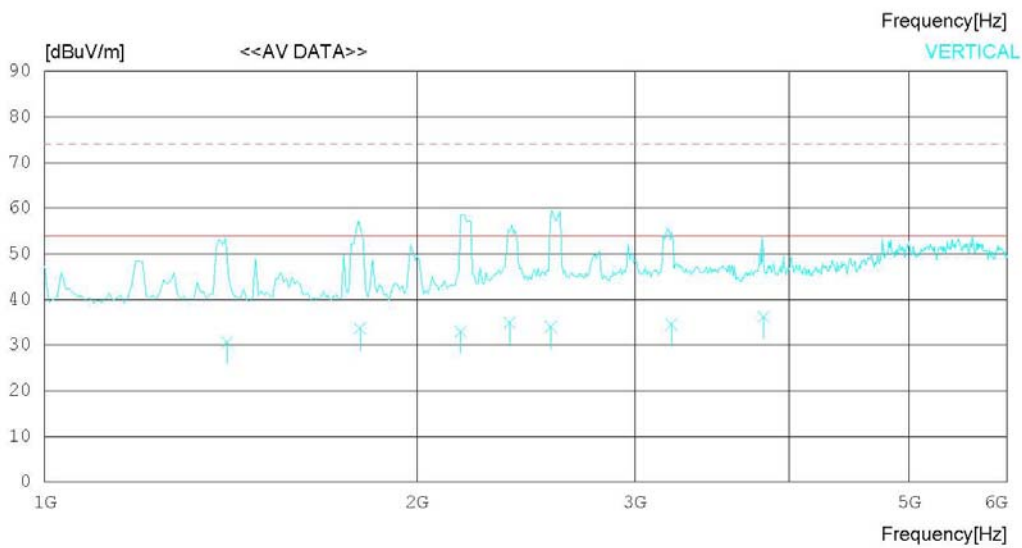
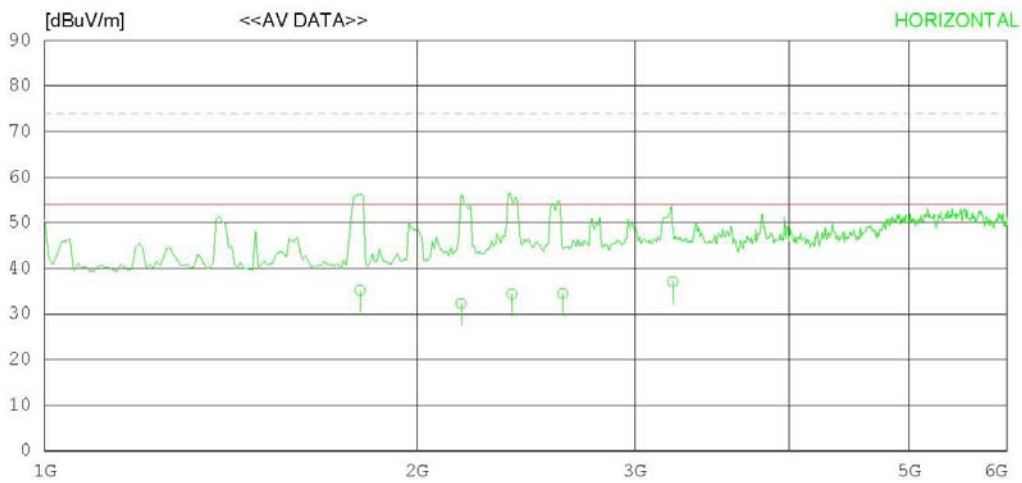
Date : 2012-12-06

Model Name : 42LN5700-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 18 °C 42 % 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 : 2012-12-06

Model Name : 42LN5700-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	1798.929	44.3	24.6	8.1	41.8	35.2	54.0	18.8	100	84
2	2171.256	39.7	25.5	8.8	41.7	32.3	54.0	21.7	100	116
3	2386.117	40.2	26.8	9.3	41.9	34.4	54.0	19.6	100	220
4	2622.854	38.7	27.8	9.8	41.8	34.5	54.0	19.5	100	246
5	3220.416	39.0	28.9	11.0	41.8	37.1	54.0	16.9	100	165
----- Vertical -----										
6	1404.730	40.7	24.5	7.2	41.7	30.7	54.0	23.3	100	196
7	1798.846	42.7	24.6	8.1	41.8	33.6	54.0	20.4	100	84
8	2171.025	40.4	25.5	8.8	41.7	33.0	54.0	21.0	100	211
9	2375.564	40.8	26.7	9.3	41.9	34.9	54.0	19.1	100	220
10	2566.512	38.5	27.7	9.7	41.9	34.0	54.0	20.0	100	308
11	3212.442	36.4	28.9	11.0	41.8	34.5	54.0	19.5	100	165
12	3811.341	35.8	29.7	12.5	41.8	36.2	54.0	17.8	100	79

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

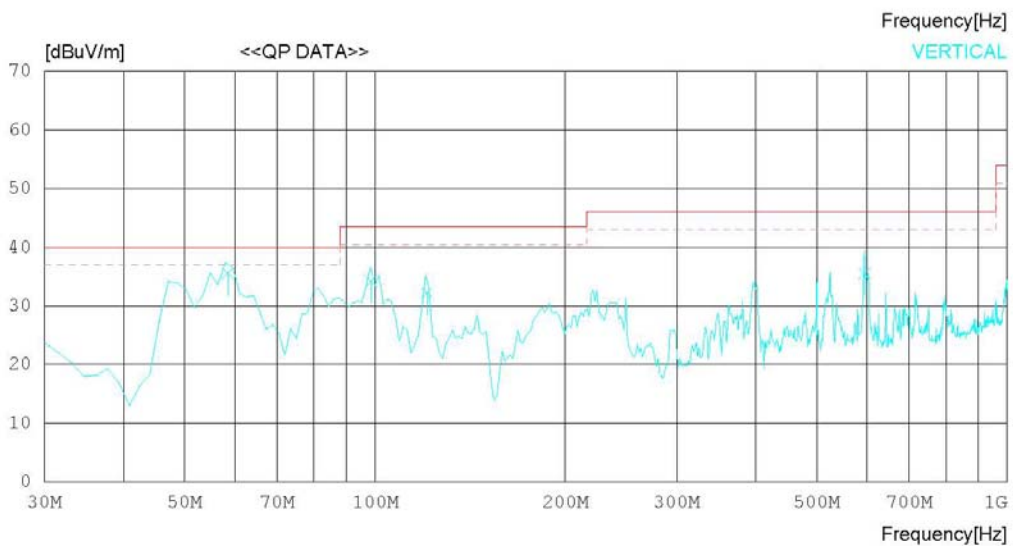
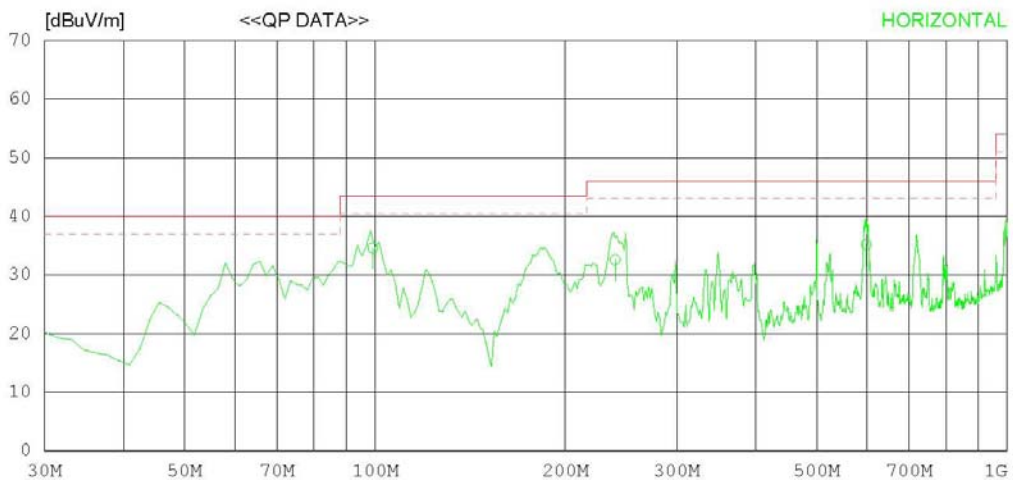
Date : 2012-12-06

Model Name : 42LN5700-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 18 °C 42 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-12-06

Model Name : 42LN5700-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	99.114	45.3	10.7	1.4	22.8	34.6	43.5	8.9	300	152
2	239.748	42.1	11.6	2.5	23.6	32.6	46.0	13.4	100	336
3	598.674	37.2	18.6	4.1	24.7	35.2	46.0	10.8	100	212
----- Vertical -----										
4	58.514	50.3	6.6	1.4	22.7	35.6	40.0	4.4	100	6
5	98.671	45.0	10.6	1.4	22.8	34.2	43.5	9.3	100	242
6	120.774	41.0	12.5	1.6	22.9	32.2	43.5	11.3	100	87
7	594.664	37.5	18.6	4.1	24.7	35.5	46.0	10.5	100	141

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

RADIATED EMISSION

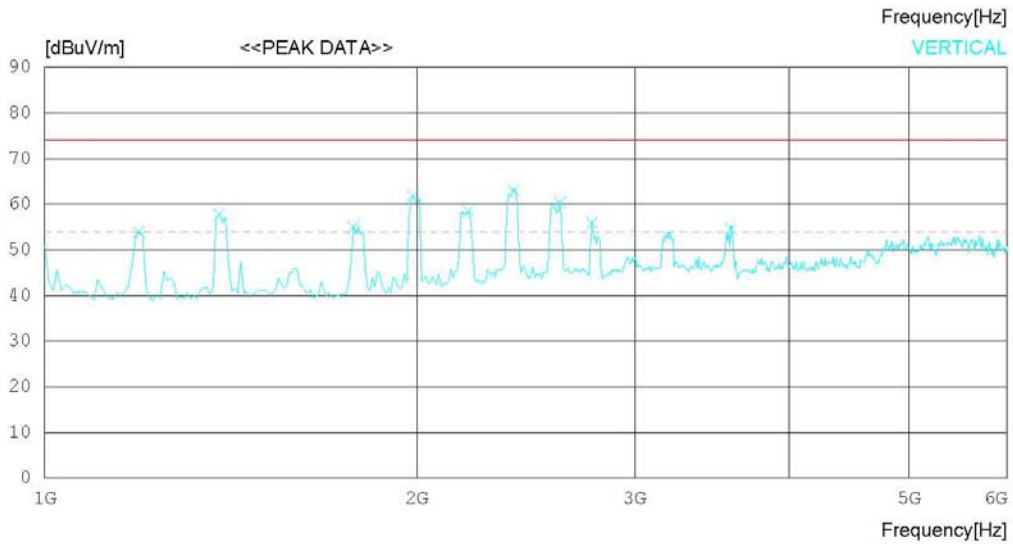
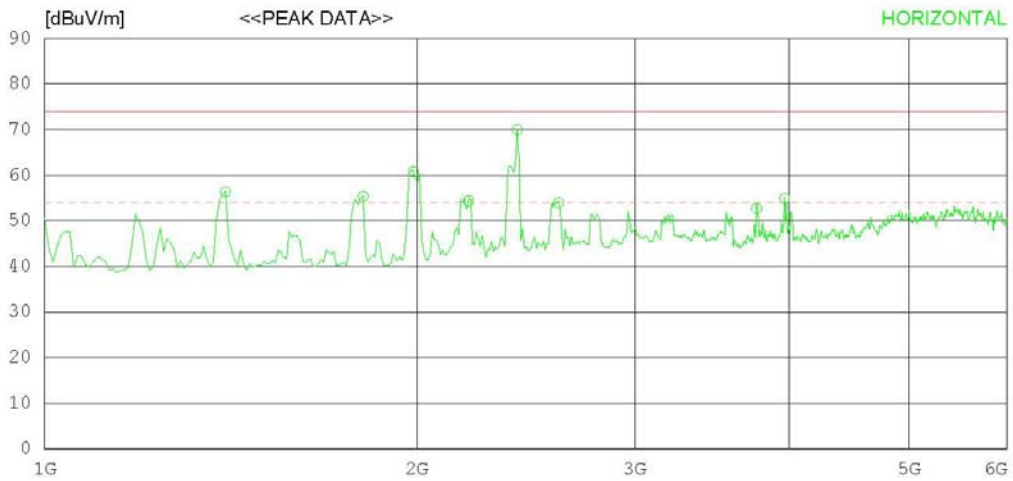
Date : 2012-12-06

Model Name : 42LN5700-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 18 °C 42 % 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 : 2012-12-06

Model Name : 42LN5700-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	1400.641	66.4	24.5	7.2	41.7	56.4	74.0	17.6	100	358
2	1809.295	64.5	24.6	8.0	41.8	55.3	74.0	18.7	100	358
3	1985.577	69.9	24.6	8.1	41.8	60.8	74.0	13.2	100	358
4	2201.925	62.0	25.7	8.4	41.7	54.4	74.0	19.6	100	358
5	2410.261	75.7	26.9	9.3	41.9	70.0	74.0	4	100	4
6	2602.572	58.7	27.8	9.3	41.9	53.9	74.0	20.1	100	208
7	3764.448	53.2	29.6	11.9	42.0	52.7	74.0	21.3	100	203
8	3964.772	54.2	30.1	12.4	41.8	54.9	74.0	19.1	100	177
----- Vertical -----										
9	1192.308	65.2	24.2	6.4	41.9	53.9	74.0	20.1	100	166
10	1384.615	67.8	24.5	7.1	41.7	57.7	74.0	16.3	100	1
11	1777.243	64.4	24.6	7.6	41.6	55.0	74.0	19	100	205
12	1985.577	70.6	24.6	8.4	41.7	61.9	74.0	12.1	100	205
13	2201.925	65.6	25.7	8.9	41.7	58.5	74.0	15.5	100	219
14	2394.236	69.1	26.8	8.9	41.7	63.1	74.0	10.9	100	1
15	2610.585	64.8	27.8	9.7	41.9	60.4	74.0	13.6	100	1
16	2770.844	59.6	28.3	9.8	41.8	55.9	74.0	18.1	100	1
17	3195.530	55.7	28.9	10.1	41.7	53.0	74.0	21	100	1
18	3588.164	56.3	29.1	11.0	41.8	54.6	74.0	19.4	100	1

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

RADIATED EMISSION

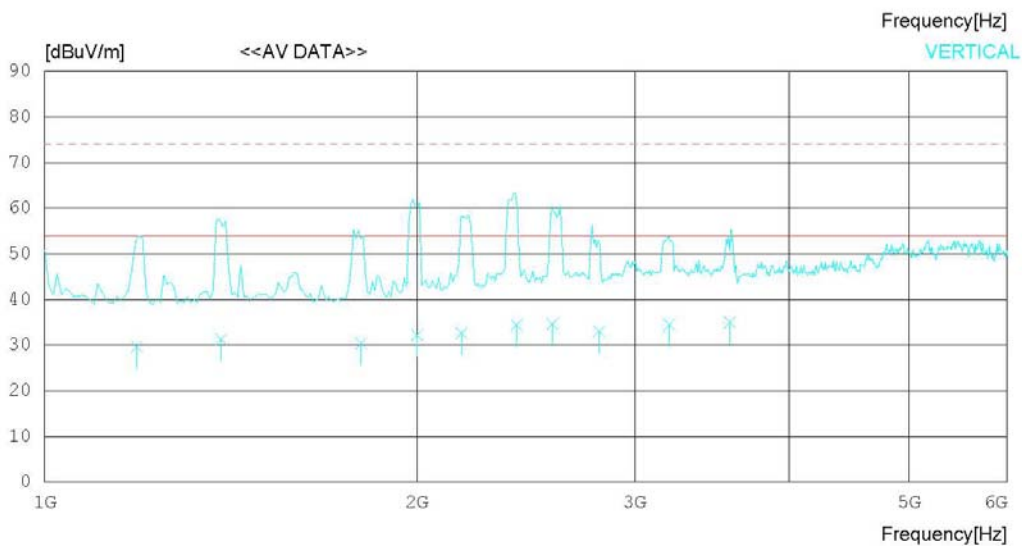
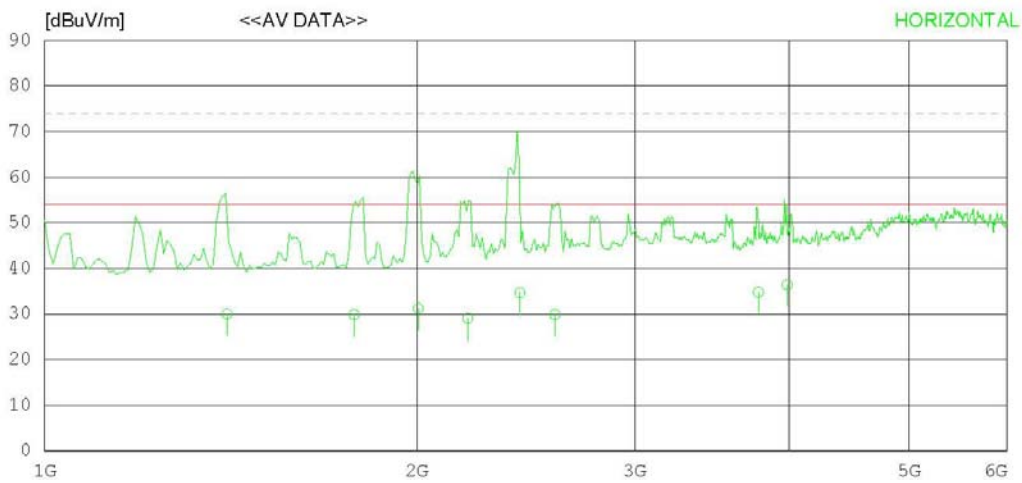
Date : 2012-12-06

Model Name : 42LN5700-UA
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120 V 60 Hz
 Temp/Humi : 18 °C 42 % 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 : 2012-12-06

Model Name : 42LN5700-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	1404.326	40.0	24.5	7.2	41.7	30.0	54.0	24.0	100	358
2	1778.685	39.1	24.6	8.0	41.8	29.9	54.0	24.1	100	358
3	2005.160	39.8	24.6	8.5	41.7	31.2	54.0	22.8	100	358
4	2198.514	36.2	25.7	8.9	41.7	29.1	54.0	24.9	100	358
5	2422.521	40.2	27.0	9.4	41.9	34.7	54.0	19.3	100	4
6	2584.664	34.4	27.7	9.7	41.9	29.9	54.0	24.1	100	208
7	3775.114	34.6	29.6	12.4	41.8	34.8	54.0	19.2	100	203
8	3984.171	35.4	30.1	12.9	42.0	36.4	54.0	17.6	100	177
----- Vertical -----										
9	1187.833	40.9	24.2	6.4	41.9	29.6	54.0	24.4	100	166
10	1389.570	41.3	24.5	7.1	41.7	31.2	54.0	22.8	100	1
11	1803.330	39.5	24.6	8.1	41.8	30.4	54.0	23.6	100	205
12	2000.448	40.8	24.6	8.5	41.7	32.2	54.0	21.8	100	205
13	2173.730	39.9	25.6	8.8	41.7	32.6	54.0	21.4	100	219
14	2408.980	40.1	26.9	9.3	41.9	34.4	54.0	19.6	100	1
15	2572.852	39.1	27.7	9.7	41.9	34.6	54.0	19.4	100	1
16	2807.935	36.2	28.4	10.1	41.7	33.0	54.0	21.0	100	1
17	3198.980	36.4	28.9	11.0	41.8	34.5	54.0	19.5	100	1
18	3583.335	36.0	29.1	11.9	42.0	35.0	54.0	19.0	100	1

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
<input type="checkbox"/> SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
<input type="checkbox"/> RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
<input type="checkbox"/> LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
<input type="checkbox"/> LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
<input type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<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	2012.07.02	2013.07.02
<input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> BILOG ANTENNA	CBL6112D	SCHAFFNER	22609	2011.12.21	2012.12.21
<input checked="" type="checkbox"/> HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> AMPLIFIER	MLA-100M18-B01-25	TSJ	1719458	2012.06.04	2013.06.04
<input type="checkbox"/> SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
<input type="checkbox"/> AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
<input type="checkbox"/> BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.03.22	2014.03.22
<input type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<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	TSJ	1252741	2012.03.05	2013.03.05