EMC TEST REPORT

Test item	: LED LCD TV monitor
Model No.	: 47LT770H-UA
Order No.	: 1207-01188
Date of receipt	: 2012-07-16
Test duration	: 2012-07-23 ~ 2012-07-24
Use of report	: FCC CoC Marking
Date of Issue	: 2012-07-24

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 : (25 ~ 26) °C,
Humidity : (47 ~ 50) % 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
H.J.KIM

Reviewed by:

General Manager
C.H.LEE

PRESIDENT OF DIGITAL EMC CO., LTD.

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1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address : 683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

http://www.digitalemc.com

Tel: +82-31-321-2664 Fax: +82-31-321-1664

2. Test Laboratory

Digital EMC Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1124C	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

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3. General Information of EUT

Model No.	47LT770H-UA
EUT Type	LED LCD TV monitor
Serial No	N/A
FCC ID	BEJ47LT770HUA
Type of Sample Tested	Pre-Production
High Frequency	650 MHz
Rating	AC 100-240 V, ~ 50/60 Hz
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

RGB(PC), HDMI(PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640x350	31.46	70.09
720x400	31.46	70.08
640x480	31.46	59.94
800x600	37.87	60.31
1024x768	48.36	60.00
1280x768	47.77	59.87
1360x768	47.71	60.01
1280x1024	63.98	60.02
1600x1200	75.00	60.00
1920x1080 (RGB-PC)	66.58	59.93
1920x1080 (HDMI-PC)	67.50	60.00

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4. Test Summary

4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2003	C
Radiated Disturbance	ANSI C63.4:2003	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (℃)	Humidity (% R.H.)
Conducted Disturbance	07-23	25	47
Radiated Disturbance	07-24 07-24	26 25	50 47

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.15018	**L1**	**62.6**	Quasi-Peak	**66.0**	**3.4**

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
48.654	**V**	**36.4**	Quasi-Peak	**40.0**	**3.6**

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5. Test Set-up and operation mode

5.1 Principle of Configuration Selection

Emission : The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

5.2 Test Operation Mode

- DSUB MODE – Resolution : 1920 X 1080 Resolution (Worst Case)
- HDMI MODE – Resolution : 1920 X 1080 Resolution (Worst Case)
- USB MODE

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	shield		
PC	DCSCMF	G3RZKBX	DELL	POWER HDMI DSUB USB PS/2	1.8 1.8 1.8 1.8 1.8	Non-shield Shield Shield Shield Shield	Plastic	DOC
KEYBOARD	SKG-3000UB	TAKB601231H	MONITEREY INTERNATIONAL CORP	USB	1.8	Shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Non-shield Non-shield	Plastic	VER
USB MEMORY	Cruzer Slice	N/A	SANDISK	USB	-	-	-	DOC
PRINTER	SRP-770	SRP77008060035	BIXOLON	USB	1.8	Shield	Plastic	DOC

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6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15 MHz to 30 MHz, the conducted disturbance was measured and set-up was made accordance with **ANSI C63.4.**

If the EUT is table top equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 0.4 m from the conducting wall of the shielded room.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Connect the EUT's power source lines to the appropriate power mains / peripherals through the LISN. All the other peripherals are connected to the 2nd LISN, if any.

Unused measuring port of the LISN was resistively terminated by 50 ohm terminator.

The measuring port of the LISN for EUT was connected to spectrum analyzer.

Using conducted emission test software, the emissions were scanned with peak detector mode.

After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and Average detector.

By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.

For further description of the configuration refer to the picture of the test set-up.

6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50

Note 1 The lower limit shall apply at the transition frequencies.
Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Note) 1. Emission Level = Reading Value + Correction Factor.
2. Correction Factor = Cable Loss + Insertion Loss of LISN
3. Margin = Limit - Emission level

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Test Result

< DSUB MODE >

Digital EMC

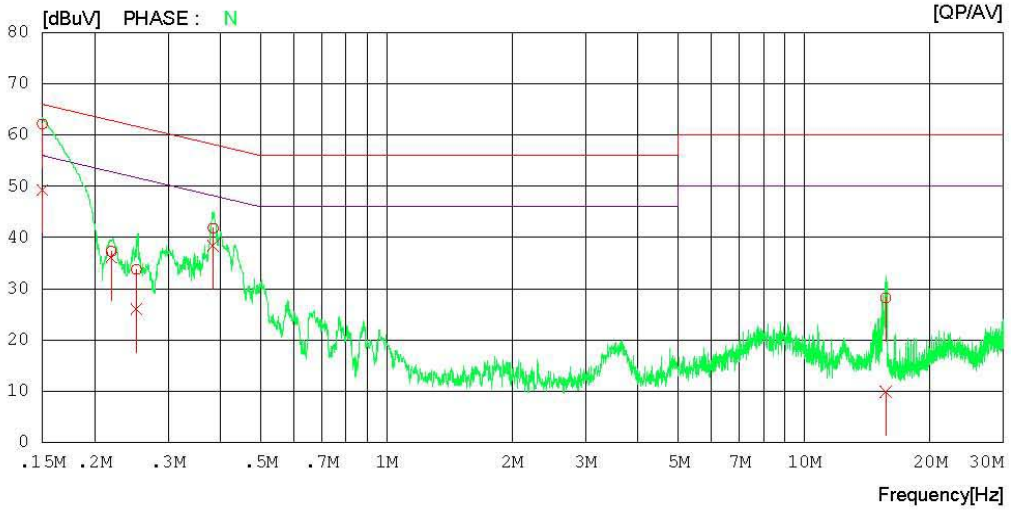
Results of Conducted Emission

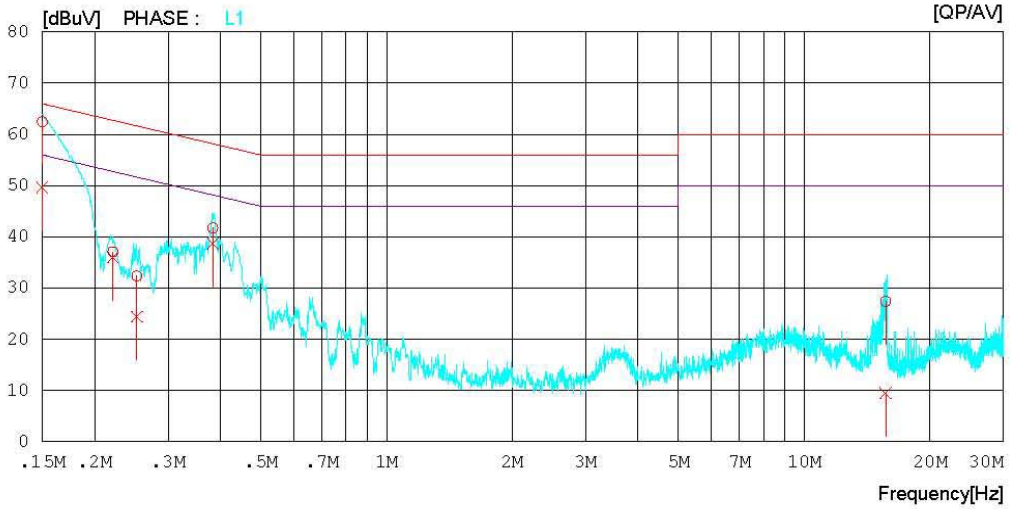
Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	DSUB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





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Results of Conducted Emission

Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	DSUB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.15000	61.8	49.0	0.3	62.1	49.3	66.0	56.0	3.9	6.7	N
2	0.21950	37.1	35.9	0.2	37.3	36.1	62.8	52.8	25.5	16.7	N
3	0.25185	33.5	25.8	0.2	33.7	26.0	61.7	51.7	28.0	25.7	N
4	0.38473	41.5	38.1	0.3	41.8	38.4	58.2	48.2	16.4	9.8	N
5	15.67750	27.2	8.9	1.0	28.2	9.9	60.0	50.0	31.8	40.1	N
6	0.15000	62.2	49.3	0.3	62.5	49.6	66.0	56.0	3.5	6.4	L1
7	0.22125	36.9	35.8	0.2	37.1	36.0	62.8	52.8	25.7	16.8	L1
8	0.25261	32.2	24.3	0.2	32.4	24.5	61.7	51.7	29.3	27.2	L1
9	0.38396	41.4	38.4	0.3	41.7	38.7	58.2	48.2	16.5	9.5	L1
10	15.67300	26.4	8.5	1.0	27.4	9.5	60.0	50.0	32.6	40.5	L1

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< HDMI MODE >

Digital EMC

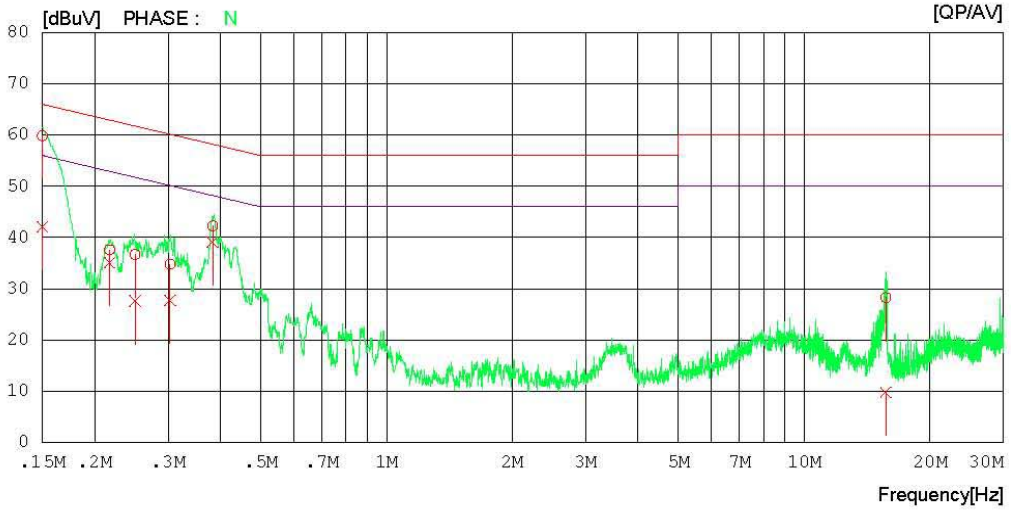
Results of Conducted Emission

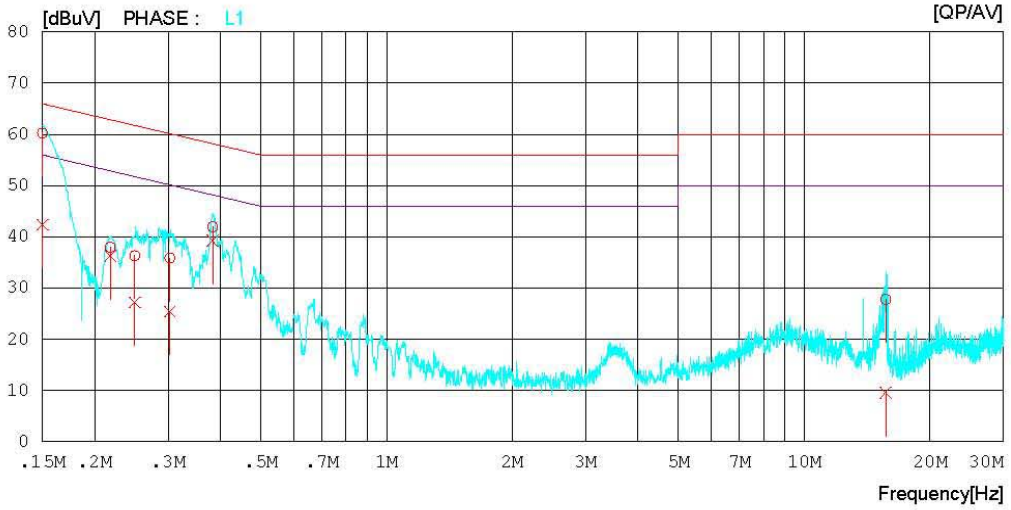
Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





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Results of Conducted Emission

Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.15000	59.5	41.8	0.3	59.8	42.1	66.0	56.0	6.2	13.9	N
2	0.21733	37.4	34.9	0.2	37.6	35.1	62.9	52.9	25.3	17.8	N
3	0.25001	36.5	27.4	0.2	36.7	27.6	61.8	51.8	25.1	24.2	N
4	0.30330	34.6	27.5	0.2	34.8	27.7	60.2	50.2	25.4	22.5	N
5	0.38374	41.9	38.8	0.3	42.2	39.1	58.2	48.2	16.0	9.1	N
6	15.67900	27.3	8.7	1.0	28.3	9.7	60.0	50.0	31.7	40.3	N
7	0.15006	59.9	42.0	0.3	60.2	42.3	66.0	56.0	5.8	13.7	L1
8	0.21813	37.8	36.1	0.2	38.0	36.3	62.9	52.9	24.9	16.6	L1
9	0.24978	36.1	27.0	0.2	36.3	27.2	61.8	51.8	25.5	24.6	L1
10	0.30289	35.7	25.2	0.2	35.9	25.4	60.2	50.2	24.3	24.8	L1
11	0.38361	41.6	39.0	0.3	41.9	39.3	58.2	48.2	16.3	8.9	L1
12	15.67100	26.8	8.6	1.0	27.8	9.6	60.0	50.0	32.2	40.4	L1

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< USB MODE >

Digital EMC

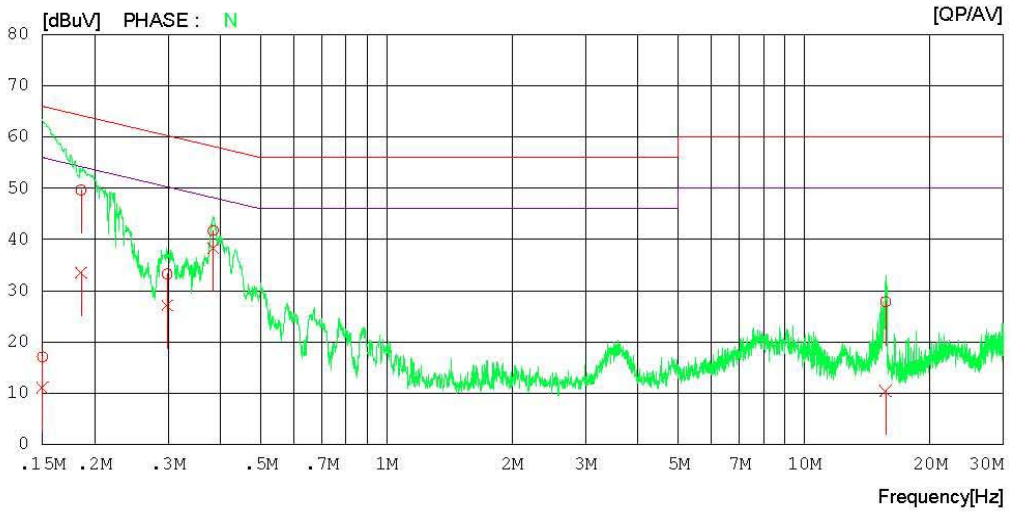
Results of Conducted Emission

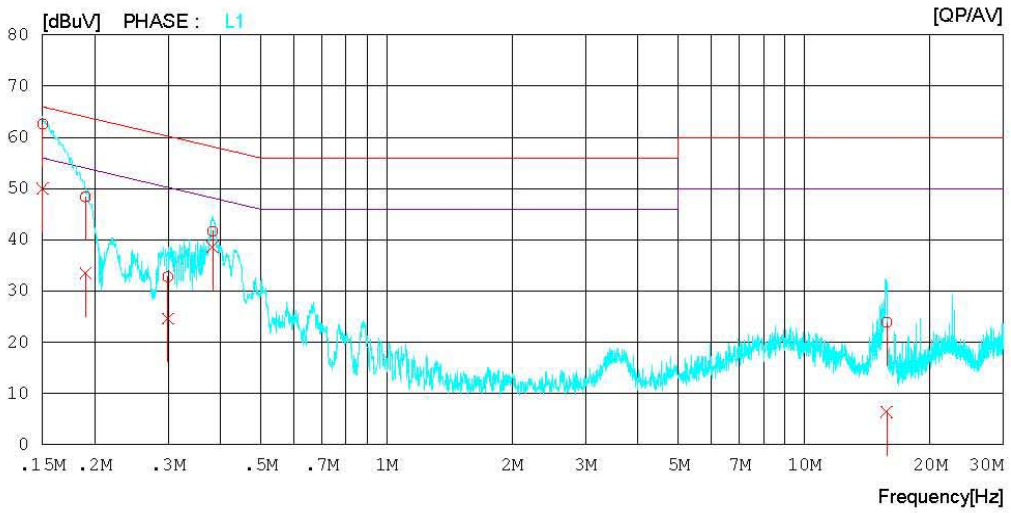
Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	USB	Operator.	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





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Results of Conducted Emission

Digital EMC
Date : 2012-07-23

Model No.	:	47LT770H-UA	Referrence No.	:	
Type	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi.	:	25 'C 47 % R.H
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.15012	16.8	10.8	0.3	17.1	11.1	66.0	56.0	48.9	44.9	N
2	0.18568	49.4	33.3	0.2	49.6	33.5	64.2	54.2	14.6	20.7	N
3	0.29865	33.0	26.9	0.2	33.2	27.1	60.3	50.3	27.1	23.2	N
4	0.38464	41.4	38.0	0.3	41.7	38.3	58.2	48.2	16.5	9.9	N
5	15.66200	26.8	9.5	1.0	27.8	10.5	60.0	50.0	32.2	39.5	N
6	0.15018	62.3	49.7	0.3	62.6	50.0	66.0	56.0	3.4	6.0	L1
7	0.19026	48.2	33.3	0.2	48.4	33.5	64.0	54.0	15.6	20.5	L1
8	0.29975	32.6	24.4	0.2	32.8	24.6	60.2	50.2	27.4	25.6	L1
9	0.38370	41.4	38.3	0.3	41.7	38.6	58.2	48.2	16.5	9.6	L1
10	15.74550	22.9	5.4	1.0	23.9	6.4	60.0	50.0	36.1	43.6	L1

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6.2 Radiated Disturbance

6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4.**
If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 3 m or 10m away from the interference receiving antenna in the **10m semi-anechoic chamber.**
Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.
Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m above the reference ground plane continuously to determine associated with higher emission levels and record them.
The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.
For below 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.
Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz frequency range.
For further description of the configuration refer to the picture of the test set-up.

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6.2.2 Limit for Radiated Disturbance

- The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1 000
108 – 500	2 000
500 – 1 000	5 000
Above 1 000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.
Note 2 Additional provisions may be required for cases where interference occurs.
Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (10 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 230	40	30
230 to 1 000	47	37

(2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + Correction Factor.
2. Correction Factor = Cable loss - Amp gain + Antenna Factor
3. Margin = Limit - Emission level

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Test Result

< DSUB MODE_30 MHz ~ 1 GHz >

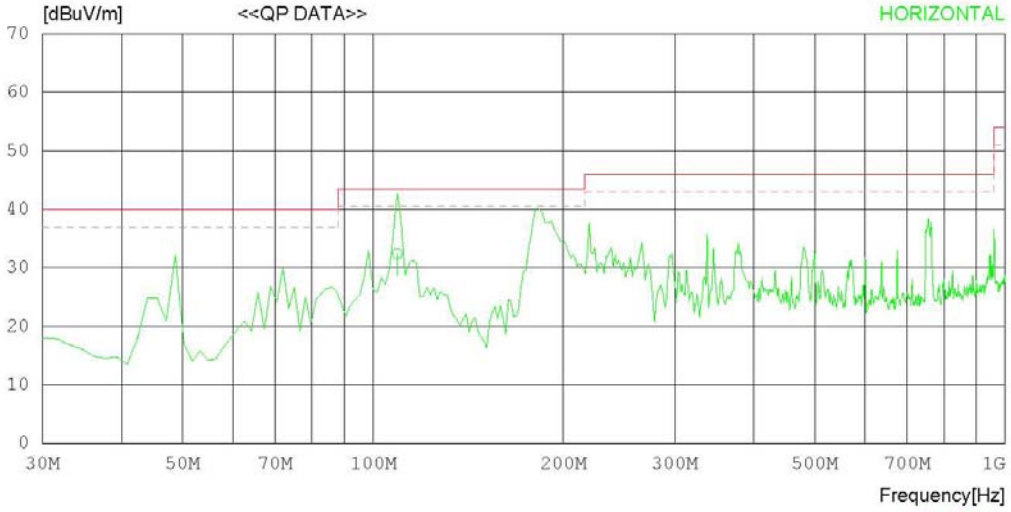
RADIATED EMISSION

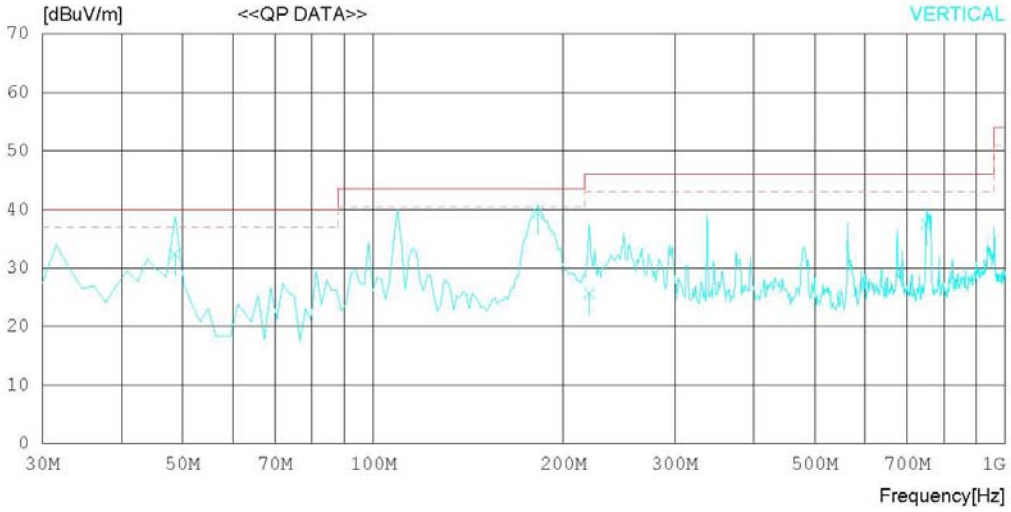
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % R.H
Test Condition	:	DSUB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % R.H
Test Condition	:	DSUB	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	109.279	42.1	11.6	1.5	22.8	32.4	43.5	11.1	268	17
----- Vertical ------										
2	48.654	45.2	8.7	1.3	22.8	32.4	40.0	7.6	100	1
3	182.340	51.2	9.3	2.2	23.3	39.4	43.5	4.1	100	1
4	219.648	36.3	10.4	2.4	23.4	25.7	46.0	20.3	100	256
5	749.728	37.4	19.5	4.6	24.0	37.5	46.0	8.5	100	181

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< DSUB MODE _ (1 ~ 6) GHz_Peak >

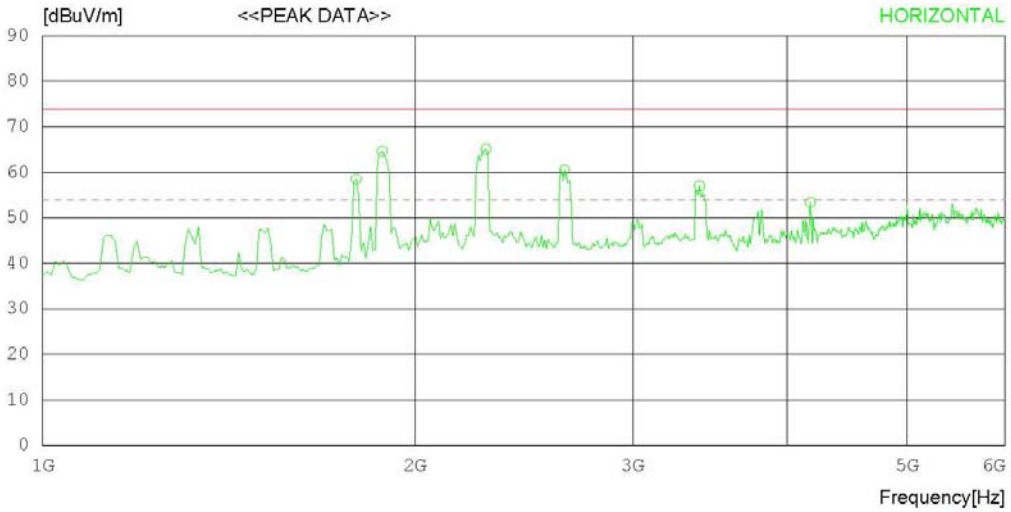
RADIATED EMISSION

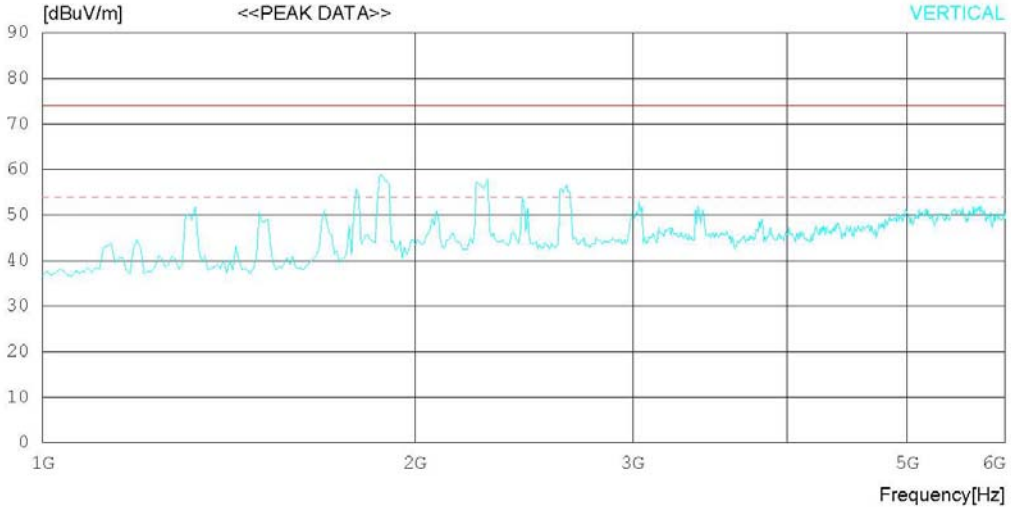
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	DSUB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	DSUB	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	67.6	24.6	8.1	41.8	58.5	74.0	15.5	100	358
2	1881.410	73.5	24.6	8.2	41.7	64.6	74.0	9.4	100	358
3	2282.054	71.6	26.2	9.1	41.8	65.1	74.0	8.9	100	229
4	2642.637	64.6	27.9	9.8	41.8	60.5	74.0	13.5	100	207
5	3395.853	58.5	28.9	11.5	41.9	57.0	74.0	17	100	358
6	4173.106	52.1	30.4	13.1	42.2	53.4	74.0	20.6	100	358

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< DSUB MODE _ (1 ~ 6) GHz_Average >

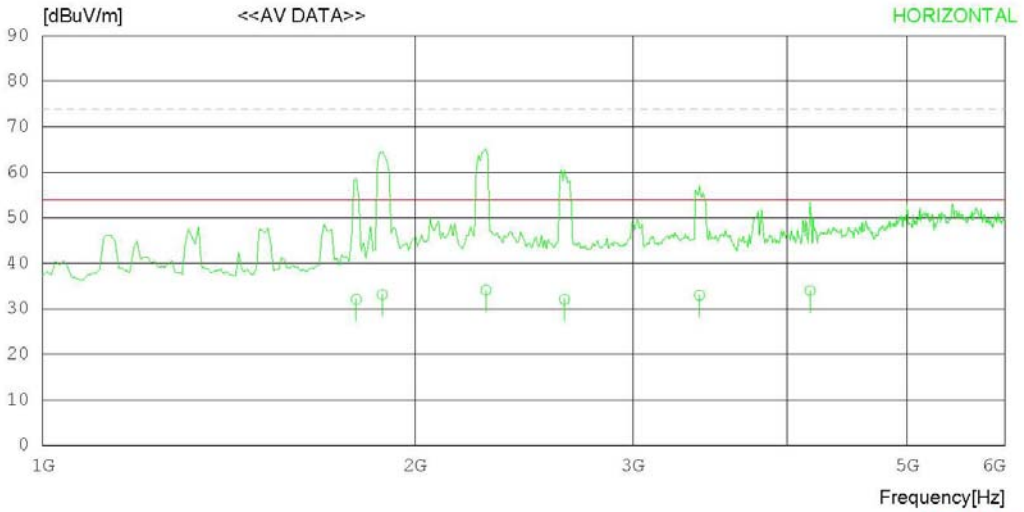
RADIATED EMISSION

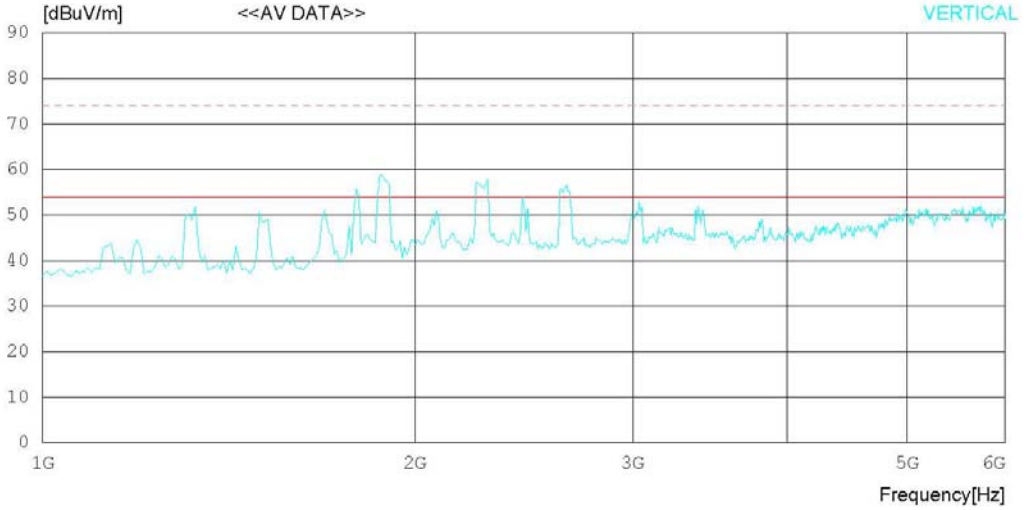
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	DSUB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	DSUB	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	1793.269	41.2	24.6	8.1	41.8	32.1	54.0	21.9	100	358
2	1881.410	42.0	24.6	8.2	41.7	33.1	54.0	20.9	100	358
3	2282.054	40.6	26.2	9.1	41.8	34.1	54.0	19.9	100	229
4	2642.637	36.2	27.9	9.8	41.8	32.1	54.0	21.9	100	207
5	3395.853	34.5	28.9	11.5	41.9	33.0	54.0	21.0	100	358
6	4173.106	32.7	30.4	13.1	42.2	34.0	54.0	20.0	100	358

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< HDMI MODE_30 MHz ~ 1 GHz >

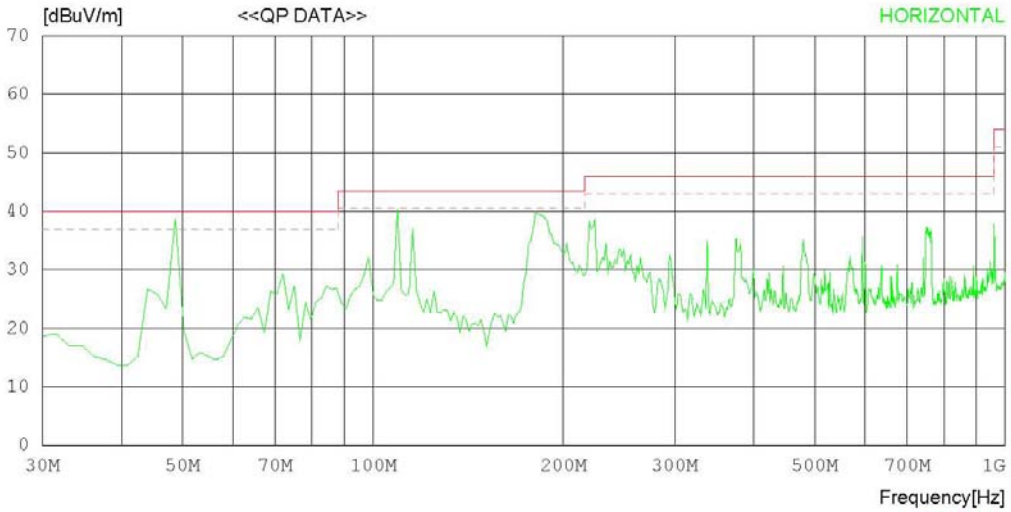
RADIATED EMISSION

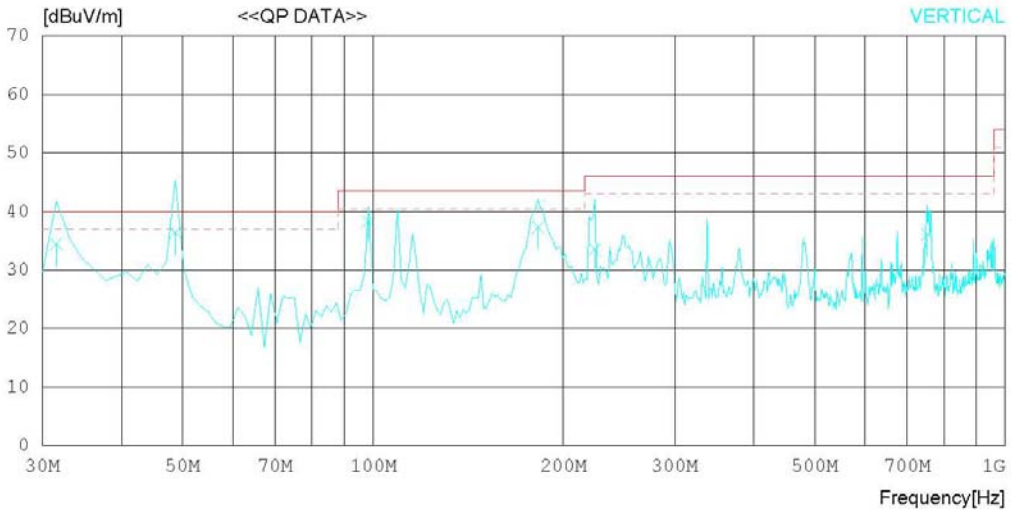
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % R.H
Test Condition	:	HDMI	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % 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]
----- Vertical ------										
1	31.554	39.1	17.6	0.9	23.2	34.4	40.0	5.6	100	257
2	48.654	49.2	8.7	1.3	22.8	36.4	40.0	3.6	100	164
3	98.398	49.1	10.6	1.4	22.8	38.3	43.5	5.2	100	358
4	182.340	49.1	9.3	2.2	23.3	37.3	43.5	6.2	100	358
5	224.311	43.9	10.7	2.4	23.5	33.5	46.0	12.5	201	56
6	752.837	36.0	19.5	4.6	24.0	36.1	46.0	9.9	201	359

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

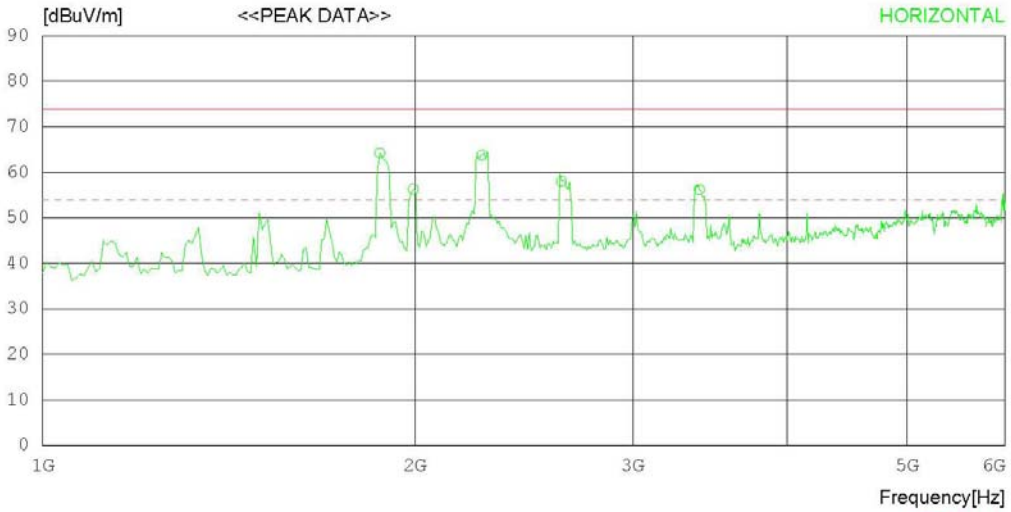
RADIATED EMISSION

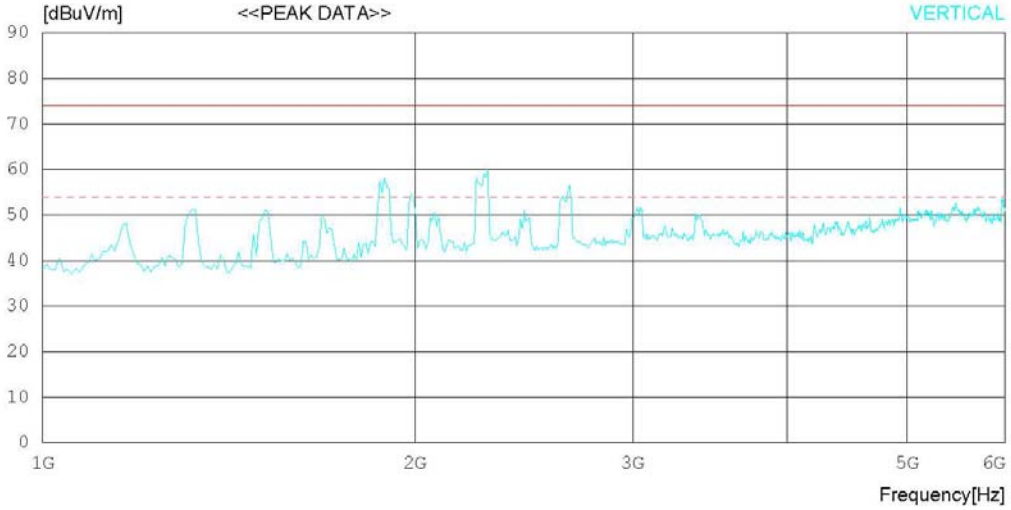
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	HDMI	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % 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	1873.397	73.1	24.6	8.2	41.7	64.2	74.0	9.8	100	358
2	1993.589	65.0	24.6	8.4	41.7	56.3	74.0	17.7	100	167
3	2266.029	70.5	26.1	9.0	41.8	63.8	74.0	10.2	100	358
4	2626.611	62.2	27.8	9.8	41.8	58.0	74.0	16	100	224
5	3395.853	57.7	28.9	11.5	41.9	56.2	74.0	17.8	100	202

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

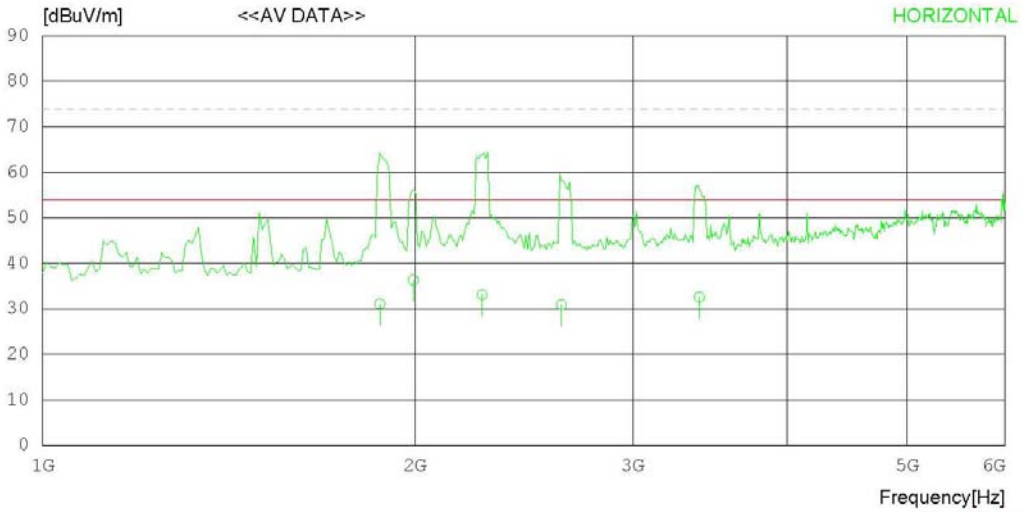
RADIATED EMISSION

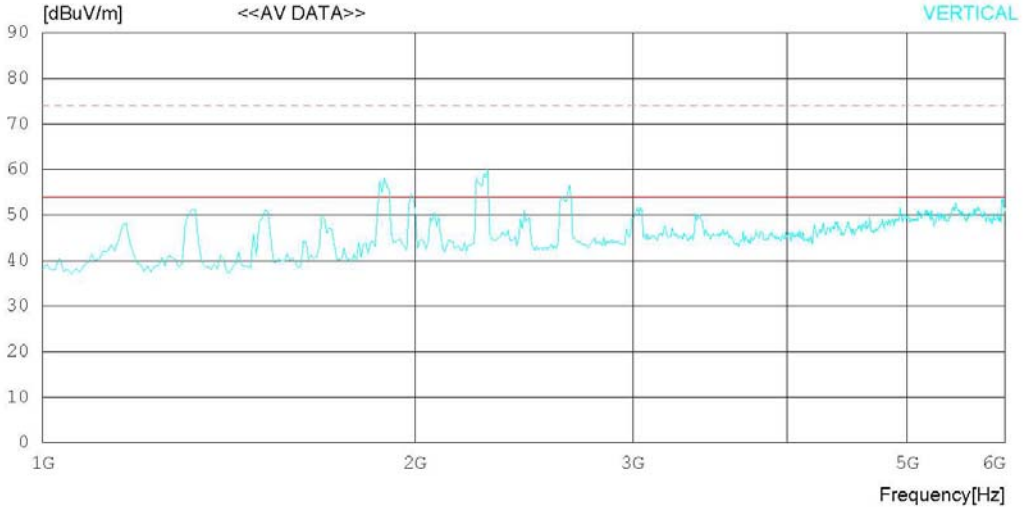
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	HDMI	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % 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	1873.397	40.0	24.6	8.2	41.7	31.1	54.0	22.9	100	358
2	1993.589	45.0	24.6	8.4	41.7	36.3	54.0	17.7	100	167
3	2266.029	39.8	26.1	9.0	41.8	33.1	54.0	20.9	100	358
4	2626.611	35.1	27.8	9.8	41.8	30.9	54.0	23.1	100	224
5	3395.853	34.1	28.9	11.5	41.9	32.6	54.0	21.4	100	202

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< USB MODE_30 MHz ~ 1 GHz >

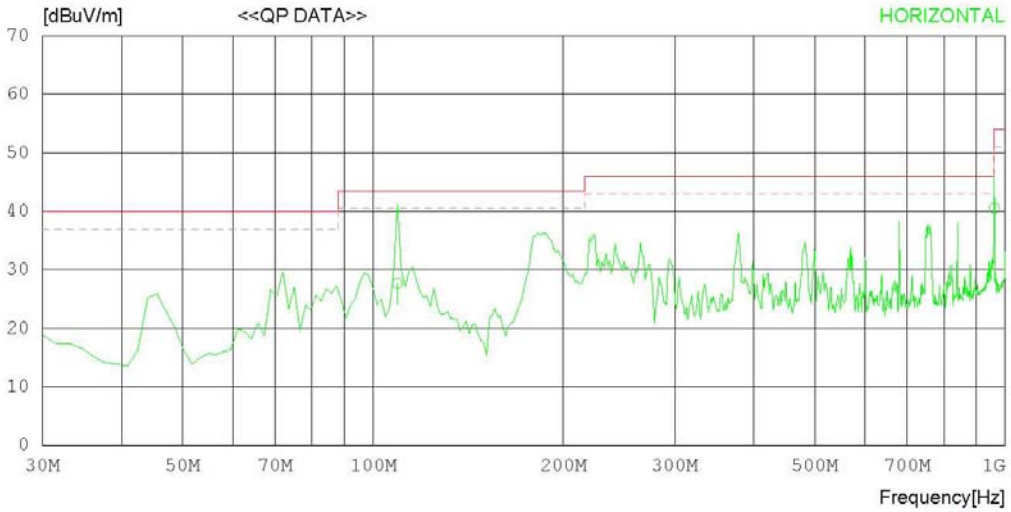
RADIATED EMISSION

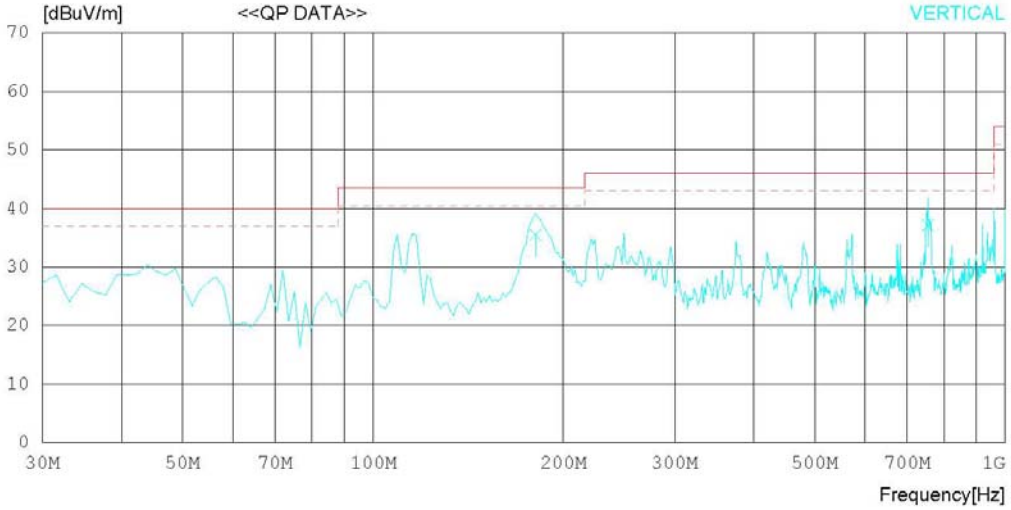
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % R.H
Test Condition	:	USB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	26 'C 50 % 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	109.279	37.4	11.6	1.5	22.8	27.7	43.5	15.8	202	73
2	961.141	36.2	21.9	5.4	23.0	40.5	54.0	13.5	100	130
----- Vertical ------										
3	180.785	47.2	9.3	2.2	23.2	35.5	43.5	8.0	100	1
4	754.392	37.0	19.5	4.6	24.0	37.1	46.0	8.9	100	359

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

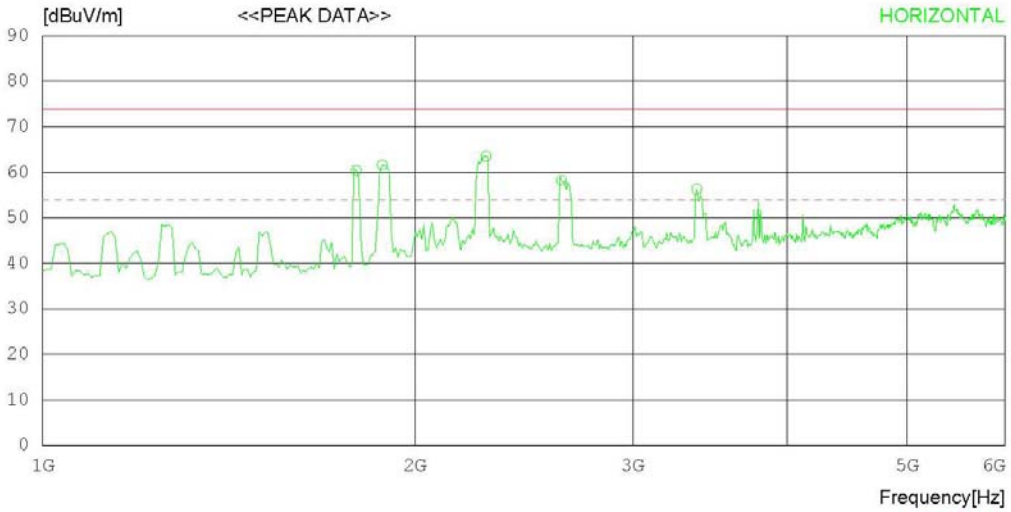
RADIATED EMISSION

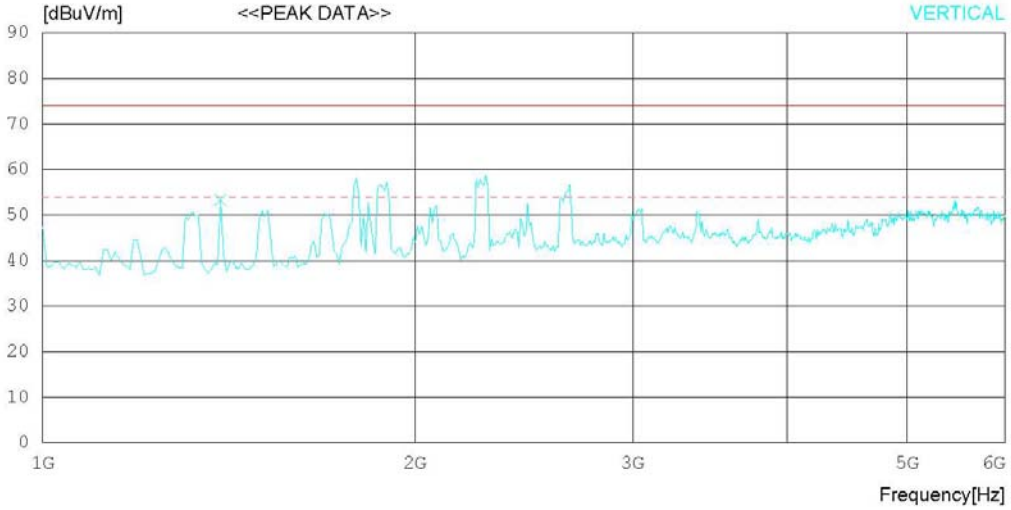
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	USB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % 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	1793.269	69.5	24.6	8.1	41.8	60.4	74.0	13.6	100	1
2	1881.410	70.5	24.6	8.2	41.7	61.6	74.0	12.4	100	1
3	2282.054	70.0	26.2	9.1	41.8	63.5	74.0	10.5	100	1
4	2626.611	62.4	27.8	9.8	41.8	58.2	74.0	15.8	100	1
5	3379.827	57.9	28.9	11.4	41.9	56.3	74.0	17.7	100	1
----- Vertical ------										
6	1392.628	63.4	24.5	7.1	41.7	53.3	74.0	20.7	100	358

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

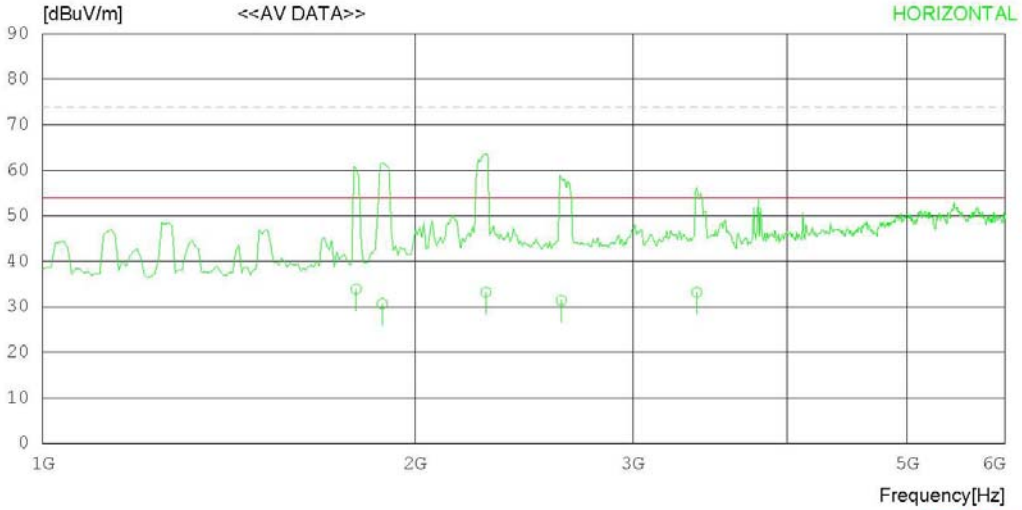
RADIATED EMISSION

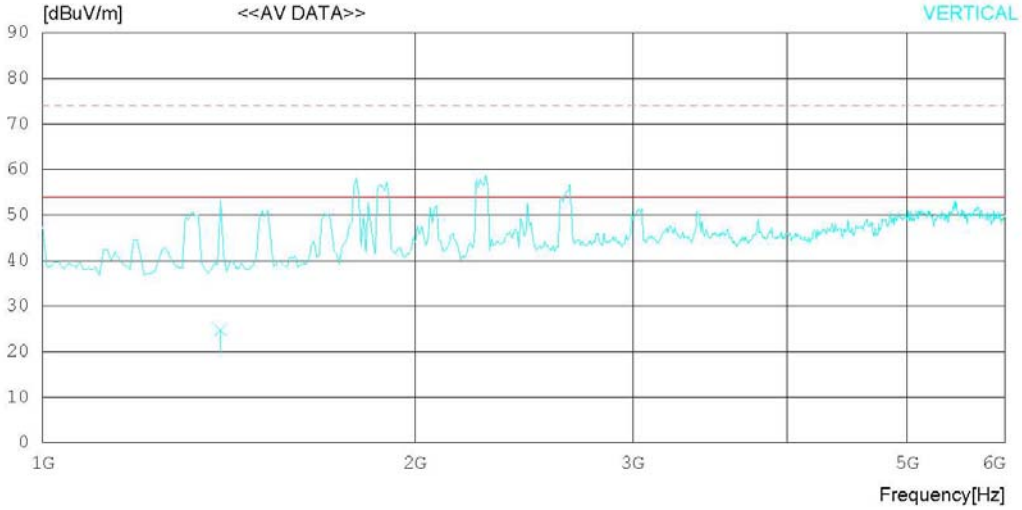
Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % R.H
Test Condition	:	USB	Operator	:	

Memo :

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





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RADIATED EMISSION

Date : 2012-07-24

Model Name	:	47LT770H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120 V 60 Hz
Serial No.	:		Temp/Humi	:	25 'C 47 % 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	1793.269	43.0	24.6	8.1	41.8	33.9	54.0	20.1	100	1
2	1881.410	39.6	24.6	8.2	41.7	30.7	54.0	23.3	100	1
3	2282.054	39.7	26.2	9.1	41.8	33.2	54.0	20.8	100	1
4	2626.611	35.6	27.8	9.8	41.8	31.4	54.0	22.6	100	1
5	3379.827	34.8	28.9	11.4	41.9	33.2	54.0	20.8	100	1
----- Vertical ------										
6	1392.628	34.8	24.5	7.1	41.7	24.7	54.0	29.3	100	358

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Appendix 1

List of Test and Measurement Instruments

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To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment is identified by the Test Laboratory.

1. Conducted Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐	SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
☐	RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐	LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐	LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2011.09.19	2012.09.19
☐	ATTENUATOR	CFA-10BPJ-10	TAMAGAWA ELECTRONICS	1760307E	N/A	N/A
☐	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☒	LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2011.09.30	2012.09.30
☒	LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
☒	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09

2. Radiated Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
☒	BILOG ANTENNA	CBL6112D	SCHAFFNER	22609	2010.12.21	2012.12.21
☒	HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
☒	AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
☒	AMPLIFIER	MLA-00108-B02-36	TSJ	1518831	2012.01.09	2013.01.09
☐	SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
☐	AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
☐	BILOG ANTENNA	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
☐	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☐	BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2010.11.29	2012.11.29
☐	LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2011.07.07	2013.07.07
☐	BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2010.12.21	2012.12.21
☐	LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2010.11.29	2012.11.29
☐	AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2012.03.05	2013.03.05

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