EMC TEST REPORT

Test item	: LED LCD TV Monitor
Model No.	: 42LT670H-UA
Order No.	: 1203-00034
Date of receipt	: 2012-03-12
Test duration	: 2012-03-14 ~ 2012-03-21
Use of report	: FCC CoC Marking
Date of Issue	: 2012-03-22

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 : (18 ~ 19) °C,
Humidity : (34 ~ 40) % 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
D.H.EUN

Reviewed by:

General Manager
C.H.LEE

The above test report is the accredited test results by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

PRESIDENT OF DIGITAL EMC CO., LTD.

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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 7

6. Test Results : Emission 8

6.1 Conducted Disturbance 8

6.2 Radiated Disturbance 15

Appendix 1 35

List of Test and Measurement Instruments 35

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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.	42LT670H-UA
EUT Type	LED LCD TV Monitor
Serial No	NONE
FCC ID	BEJ42LT670HUA
Type of Sample Tested	Pre-Production
High Frequency	667 MHz
Rating	AC100-240 V~, 50/60 Hz
Supplied Power for Test	AC120 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

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.)	Pressure (hPa)
Conducted Disturbance	03-21	18	40	-
Radiated Disturbance	03-14 03-20	18 19	34 37	

4.3 Test result Summary

(1) Conducted Emission(HDMI + LAN MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.15008	**L1**	**51.3**	Quasi-Peak	**66.0**	**14.7**

(2) Radiated Emission(USB MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
594.278	**H**	**40.5**	Quasi-Peak	**46.0**	**5.5**

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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 + LAN MODE – Resolution : 1920 x 1080 Resolution (Worst Case)
- HDMI + LAN MODE – Resolution : 1920 x 1080 Resolution (Worst Case)
- USB MODE

EUT is the following operational conditions apply:

a) Set the contrast control to maximum.

b) Set the brightness control to maximum or at raster extinction if raster extinction occurs at less thanmaximum brightness.

c) For color monitors, use white letters on a black background to represent all colors.

d) Select the worse case of positive or negative video if both alternatives are available.

e) Set character size and number of characters per line so that the typical maximum number of charac-ters per screen is displayed.

f) For a monitor that has no graphics capabilities, regardless of the video card used, a pattern consistingof random text shall be displayed. For a monitor with graphics capability, even though another videocard may be needed to accomplish a graphic display, a screen pattern consisting of lines of scrollingH's should be displayed. For a monitor that has no text capabilities, use a typical display. That pat-tern should be used for the remainder of the tests.

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5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	VOSTRO 430	9K77SBX	DELL	POWER HDMI DSUB LAN STEREO PS/2 PS/2	1.8 1.8 1.6 1.8 1.6 1.6 1.8	Not use Not use Use Not use Not use Not use Not use	Non-shield Shield Shield Non-shield Non-shield Non-shield Non-shield	Plastic	DOC
KEYBOARD	SKG-210PB	TAKSB24503Y	MONITEREY INTERNATIONAL CORP	PS/2	1.6	Not use	Non-shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Not use	Non-shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Not use	Non-shield	Plastic	VER
USB MEMORY	JEWERLY	N/A	AXXEN	USB	-	-	-	-	DOC

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6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15MHz to 30MHz, 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 0.8m above the reference ground plane and 0.4m 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 0.15m 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 0.15MHz to 0.5MHz.

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Test Result

< DSUB + LAN MODE >

Digital EMC

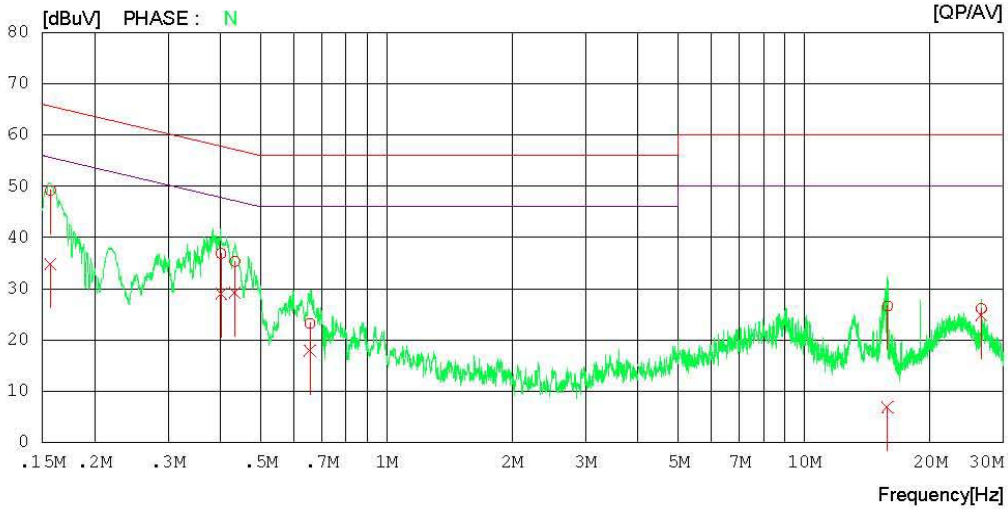
Results of Conducted Emission

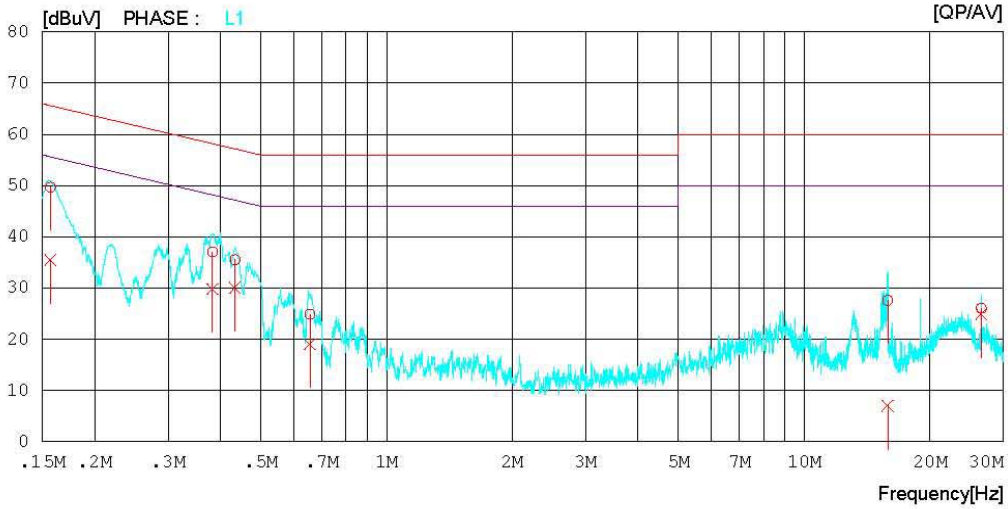
Digital EMC
Date : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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 : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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	0.15693	48.8	34.5	0.3	49.1	34.8	65.6	55.6	16.5	20.8	N
2	0.40151	36.5	28.7	0.3	36.8	29.0	57.8	47.8	21.0	18.8	N
3	0.43365	35.1	29.1	0.2	35.3	29.3	57.2	47.2	21.9	17.9	N
4	0.65591	23.0	17.7	0.2	23.2	17.9	56.0	46.0	32.8	28.1	N
5	15.83750	25.6	5.9	1.0	26.6	6.9	60.0	50.0	33.4	43.1	N
6	26.55000	24.8	23.5	1.3	26.1	24.8	60.0	50.0	33.9	25.2	N
7	0.15686	49.4	35.1	0.3	49.7	35.4	65.6	55.6	15.9	20.2	L1
8	0.38289	36.8	29.5	0.3	37.1	29.8	58.2	48.2	21.1	18.4	L1
9	0.43400	35.3	29.9	0.2	35.5	30.1	57.2	47.2	21.7	17.1	L1
10	0.65573	24.7	18.8	0.2	24.9	19.0	56.0	46.0	31.1	27.0	L1
11	15.83850	26.6	6.0	1.0	27.6	7.0	60.0	50.0	32.4	43.0	L1
12	26.55150	24.8	23.5	1.3	26.1	24.8	60.0	50.0	33.9	25.2	L1

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< HDMI + LAN MODE >

Digital EMC

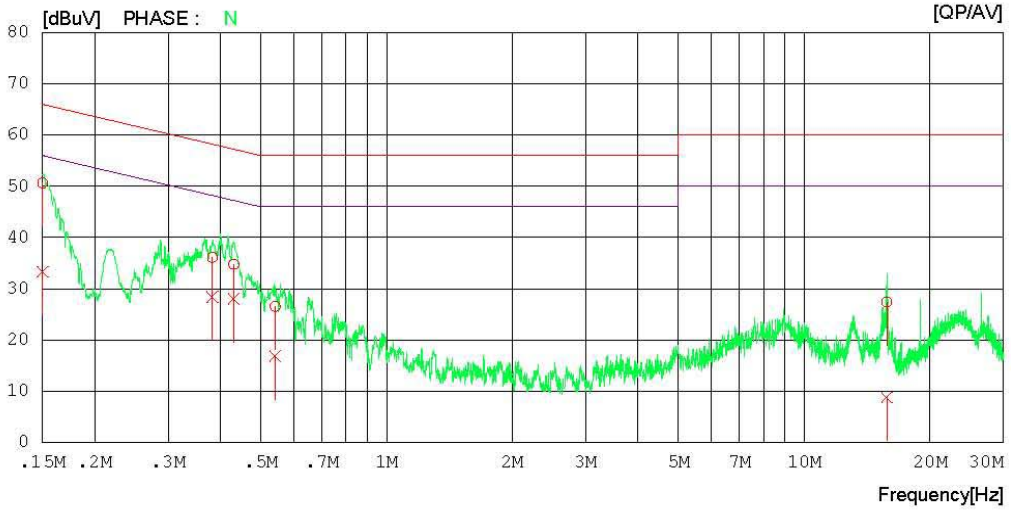
Results of Conducted Emission

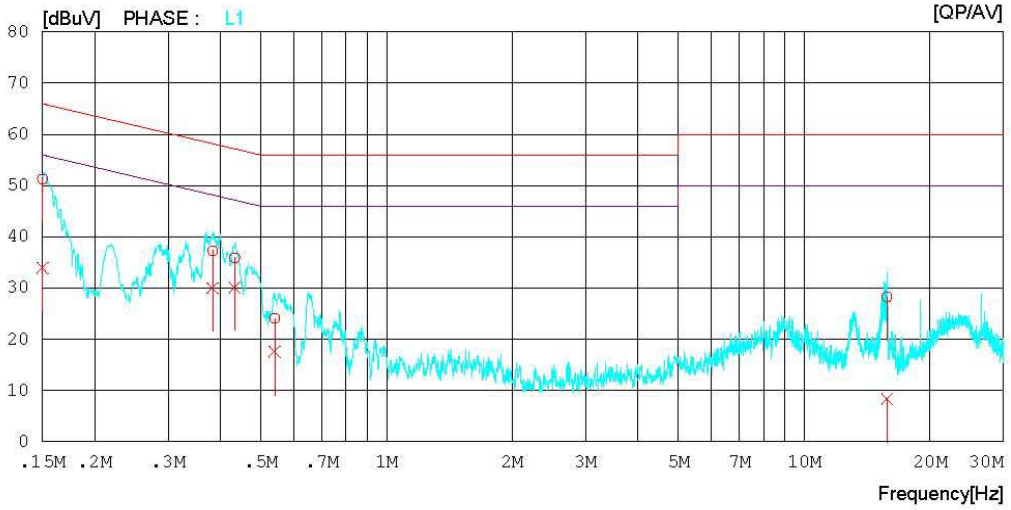
Digital EMC
Date : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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 : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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	0.15016	50.3	33.0	0.3	50.6	33.3	66.0	56.0	15.4	22.7	N
2	0.38325	35.8	28.1	0.3	36.1	28.4	58.2	48.2	22.1	19.8	N
3	0.43096	34.5	27.7	0.3	34.8	28.0	57.2	47.2	22.4	19.2	N
4	0.54140	26.3	16.7	0.2	26.5	16.9	56.0	46.0	29.5	29.1	N
5	15.77150	26.4	7.8	1.0	27.4	8.8	60.0	50.0	32.6	41.2	N
6	0.15008	51.0	33.7	0.3	51.3	34.0	66.0	56.0	14.7	22.0	L1
7	0.38389	37.0	29.7	0.3	37.3	30.0	58.2	48.2	20.9	18.2	L1
8	0.43346	35.7	30.0	0.2	35.9	30.2	57.2	47.2	21.3	17.0	L1
9	0.54018	23.9	17.4	0.2	24.1	17.6	56.0	46.0	31.9	28.4	L1
10	15.77450	27.3	7.3	1.0	28.3	8.3	60.0	50.0	31.7	41.7	L1

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< USB MODE >

Digital EMC

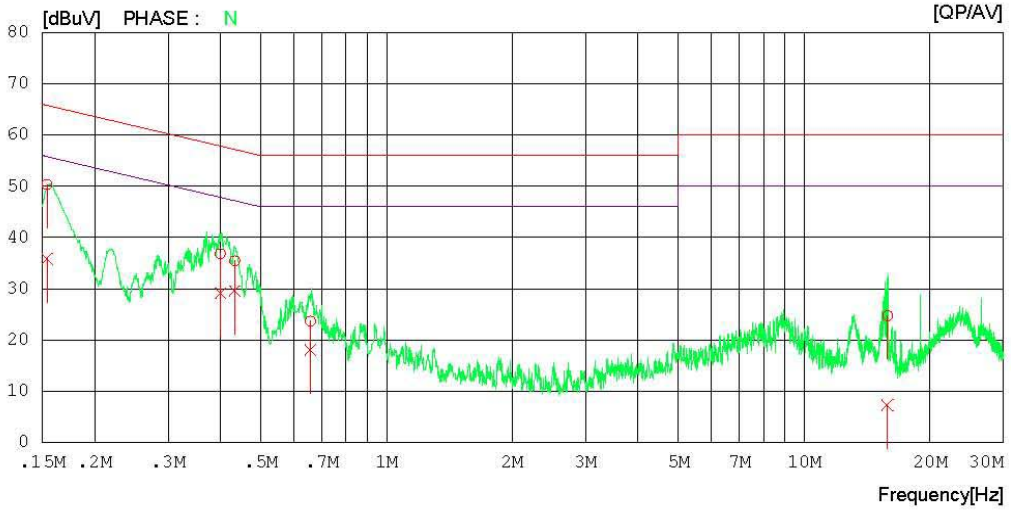
Results of Conducted Emission

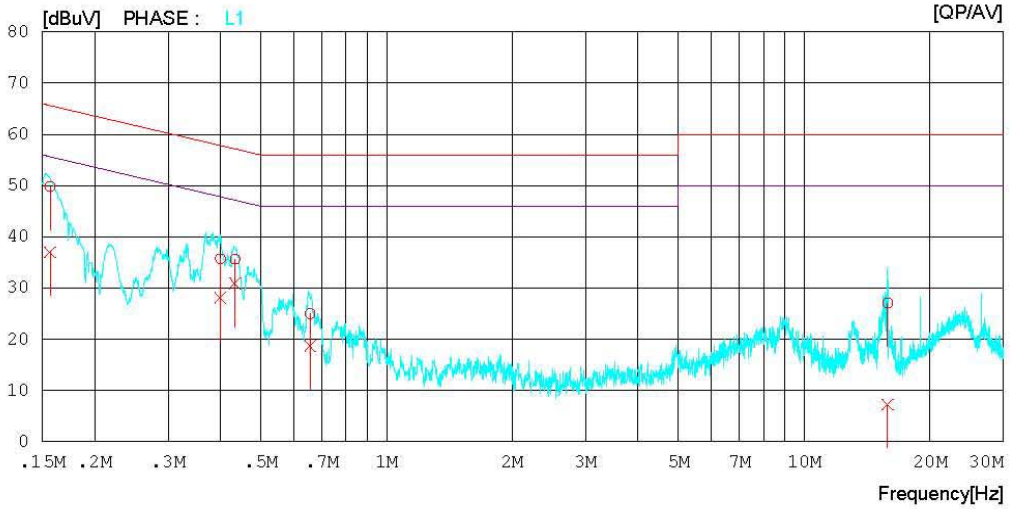
Digital EMC
Date : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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 : 2012-03-21

Model No.	:	42LT670H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 40 % 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	0.15400	50.0	35.5	0.3	50.3	35.8	65.8	55.8	15.5	20.0	N
2	0.40009	36.5	28.8	0.3	36.8	29.1	57.9	47.9	21.1	18.8	N
3	0.43346	35.2	29.3	0.2	35.4	29.5	57.2	47.2	21.8	17.7	N
4	0.65775	23.5	17.8	0.2	23.7	18.0	56.0	46.0	32.3	28.0	N
5	15.83550	23.7	6.3	1.0	24.7	7.3	60.0	50.0	35.3	42.7	N
6	0.15645	49.5	36.7	0.3	49.8	37.0	65.7	55.7	15.9	18.7	L1
7	0.40033	35.4	27.8	0.3	35.7	28.1	57.8	47.8	22.1	19.7	L1
8	0.43416	35.4	30.7	0.2	35.6	30.9	57.2	47.2	21.6	16.3	L1
9	0.65641	24.8	18.5	0.2	25.0	18.7	56.0	46.0	31.0	27.3	L1
10	15.83750	26.1	6.3	1.0	27.1	7.3	60.0	50.0	32.9	42.7	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 0.8m above the reference ground plane and 3m 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 0.15m above the reference ground plane.

Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4m 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 1GHz frequency range, Quasi-Peak detector with 120kHz RBW was used.

Also Peak and Average detector with 1MHz RBW were used for above 1GHz 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	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower

(1) Limit for Radiated Emission below 1000MHz

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 1000	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 (10m distance)	Class B Equipment (10m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 230	40	30
230 to 1000	47	37

(2) Limits for Radiated Emission above 1000MHz at a measuring distance of 3m

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

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Test Result

< DSUB + LAN MODE_30 MHz ~ 1 GHz >

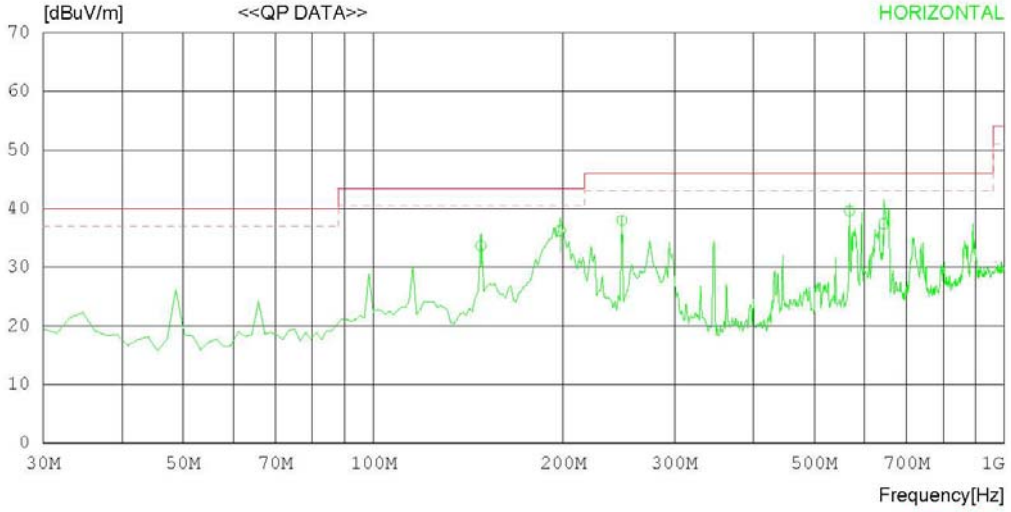
RADIATED EMISSION

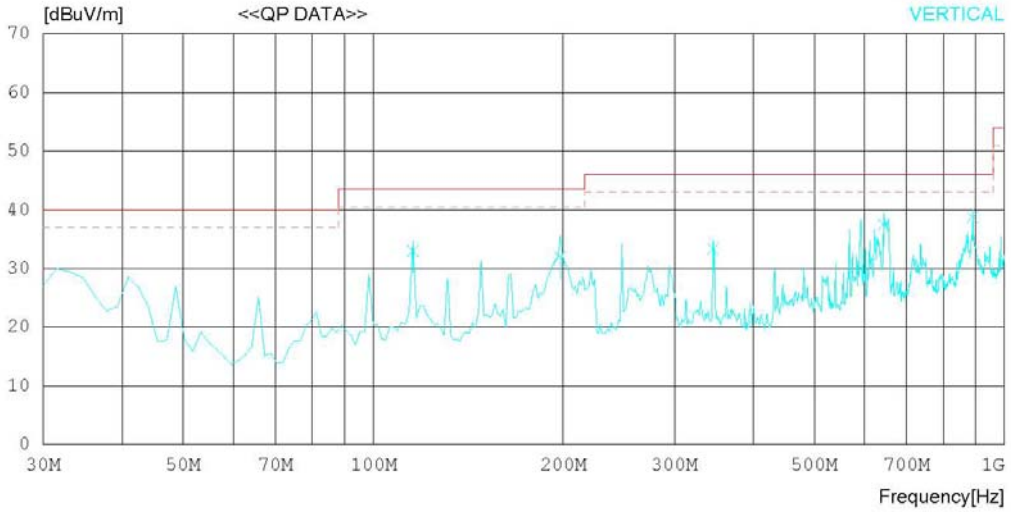
Date : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % 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 : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % 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	148.141	44.0	11.1	1.7	23.1	33.7	43.5	9.8	198	46
2	197.885	48.7	8.8	2.0	23.3	36.2	43.5	7.3	100	278
3	247.629	47.1	12.2	2.3	23.6	38.0	46.0	8.0	100	190
4	567.851	41.5	19.2	3.7	24.8	39.6	46.0	6.4	246	359
5	644.022	37.8	20.1	4.0	24.5	37.4	46.0	8.6	100	119
----- Vertical ------										
6	115.497	43.1	11.3	1.5	22.9	33.0	43.5	10.5	100	189
7	197.885	44.5	8.8	2.0	23.3	32.0	43.5	11.5	169	358
8	345.560	40.2	14.5	2.7	24.1	33.3	46.0	12.7	100	46
9	644.022	37.9	20.1	4.0	24.5	37.5	46.0	8.5	100	197
10	891.188	34.0	23.2	4.8	23.2	38.8	46.0	7.2	100	1

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< DSUB + LAN MODE_1 GHz ~ 6 GHz_Peak >

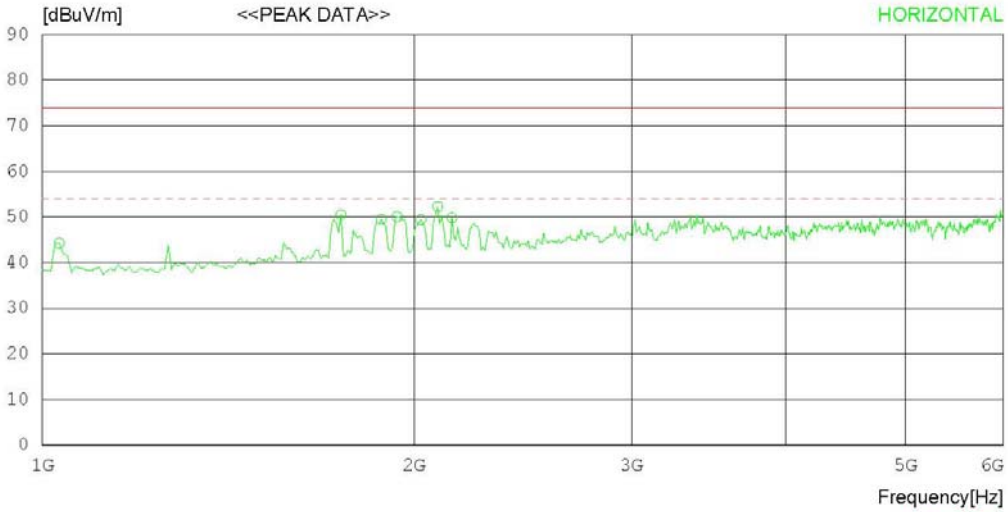
RADIATED EMISSION

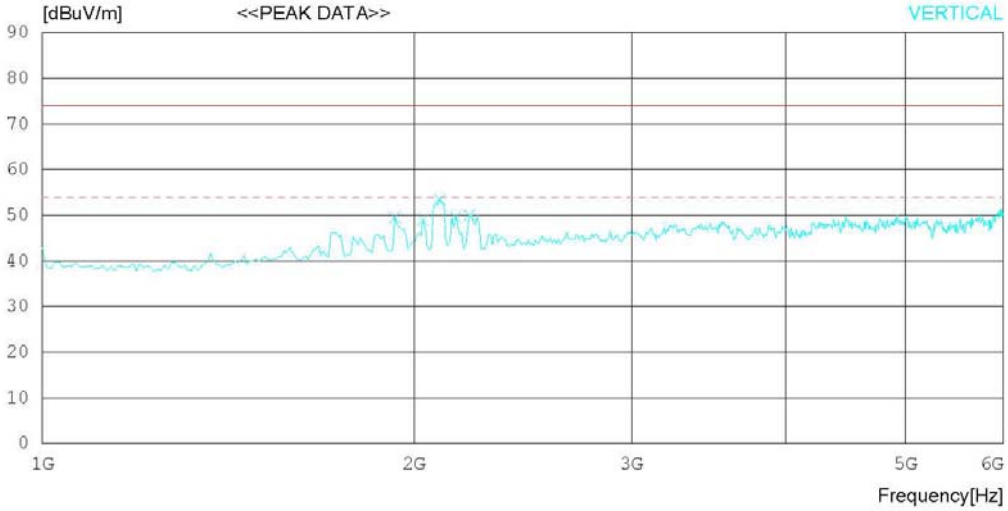
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1032.051	56.8	24.4	4.9	41.8	44.3	74.0	29.7	100	229
2	1745.192	58.7	27.0	6.5	41.7	50.5	74.0	23.5	100	1
3	1881.410	56.9	27.5	6.8	41.7	49.5	74.0	24.5	100	1
4	1937.500	57.2	27.7	6.9	41.7	50.1	74.0	23.9	100	1
5	2025.641	56.1	28.0	7.0	41.7	49.4	74.0	24.6	100	227
6	2089.744	58.8	28.1	7.1	41.7	52.3	74.0	21.7	100	1
7	2145.834	56.0	28.3	7.2	41.7	49.8	74.0	24.2	100	202
----- Vertical ------										
8	1929.487	56.7	27.7	6.9	41.7	49.6	74.0	24.4	100	180
9	2033.653	55.6	28.0	7.1	41.7	49.0	74.0	25	100	187
10	2097.757	59.8	28.2	7.2	41.7	53.5	74.0	20.5	100	180
11	2161.860	55.9	28.3	7.2	41.7	49.7	74.0	24.3	100	196
12	2217.951	56.1	28.4	7.3	41.7	50.1	74.0	23.9	100	187

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< DSUB + LAN MODE_1 GHz ~ 6 GHz_Average >

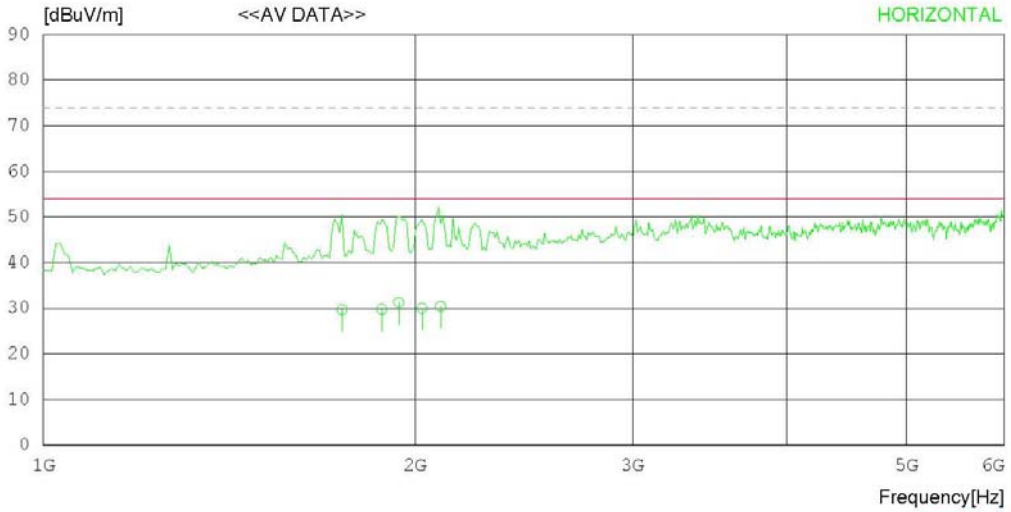
RADIATED EMISSION

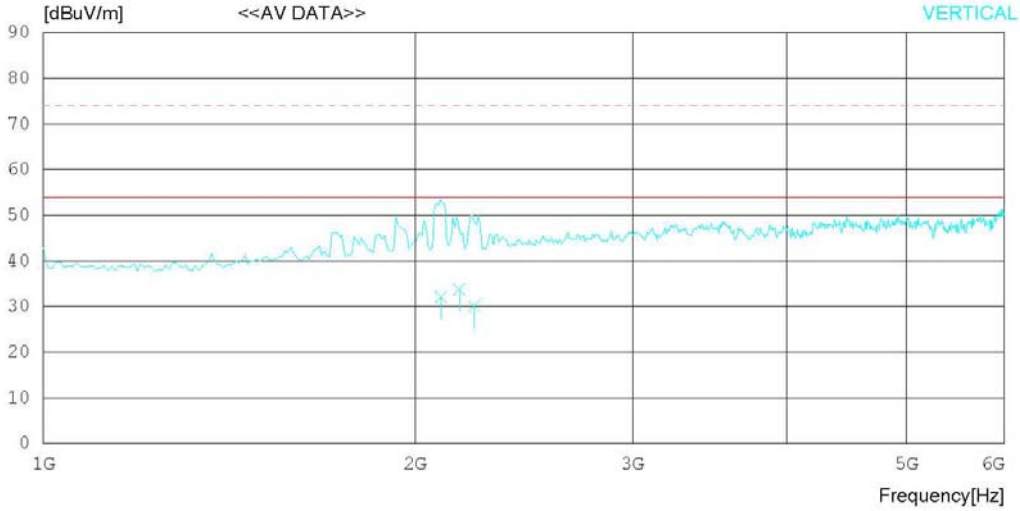
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1745.192	37.9	27.0	6.5	41.7	29.7	54.0	24.3	100	1
2	1879.000	37.2	27.5	6.8	41.7	29.8	54.0	24.2	100	1
3	1938.987	38.4	27.7	6.9	41.7	31.3	54.0	22.7	100	1
4	2025.641	36.7	28.0	7.0	41.7	30.0	54.0	24.0	100	227
5	2097.000	36.7	28.2	7.2	41.7	30.4	54.0	23.6	100	1
----- Vertical ------										
6	2099.000	38.4	28.2	7.2	41.7	32.1	54.0	21.9	100	180
7	2172.000	39.9	28.3	7.3	41.7	33.8	54.0	20.2	100	196
8	2233.000	36.0	28.4	7.4	41.7	30.1	54.0	23.9	100	187

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< HDMI + LAN MODE_30 MHz ~ 1 GHz >

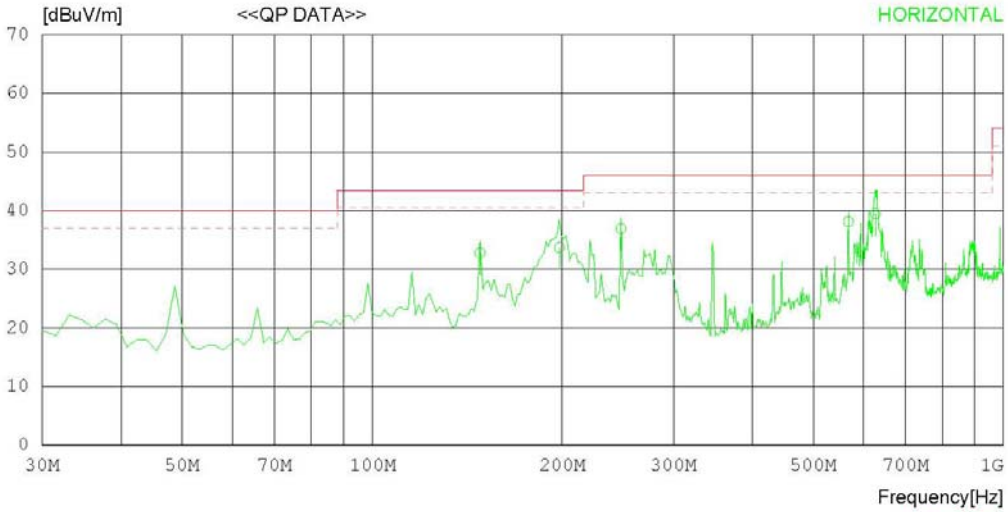
RADIATED EMISSION

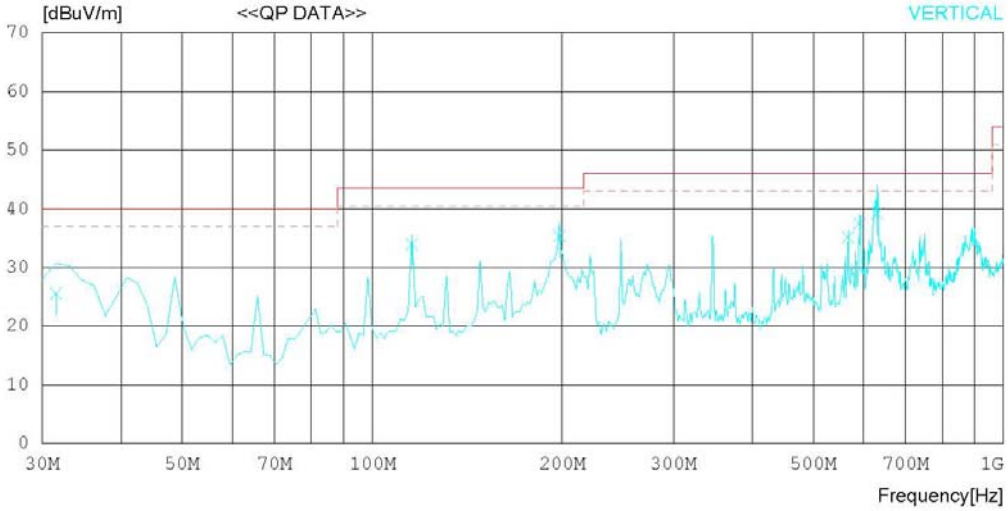
Date : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % 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 : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	148.141	43.1	11.1	1.7	23.1	32.8	43.5	10.7	201	1
2	197.885	46.2	8.8	2.0	23.3	33.7	43.5	9.8	100	358
3	247.629	46.0	12.2	2.3	23.6	36.9	46.0	9.1	100	186
4	567.851	40.0	19.2	3.7	24.8	38.1	46.0	7.9	100	220
5	626.922	40.1	20.0	4.0	24.6	39.5	46.0	6.5	100	358
----- Vertical ------										
6	31.554	29.9	18.0	0.9	23.2	25.6	40.0	14.4	199	358
7	115.497	44.0	11.3	1.5	22.9	33.9	43.5	9.6	100	10
8	197.885	47.9	8.8	2.0	23.3	35.4	43.5	8.1	100	1
9	567.851	37.1	19.2	3.7	24.8	35.2	46.0	10.8	199	358
10	591.169	38.7	19.6	3.9	24.7	37.5	46.0	8.5	100	267
11	631.586	39.8	20.0	4.0	24.6	39.2	46.0	6.8	100	159

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< HDMI + LAN MODE_1 GHz ~ 6 GHz_Peak >

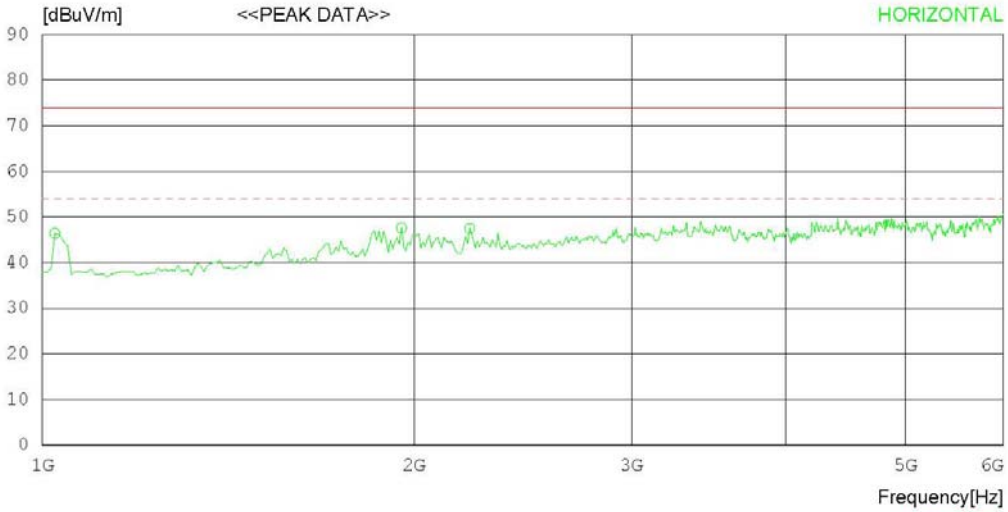
RADIATED EMISSION

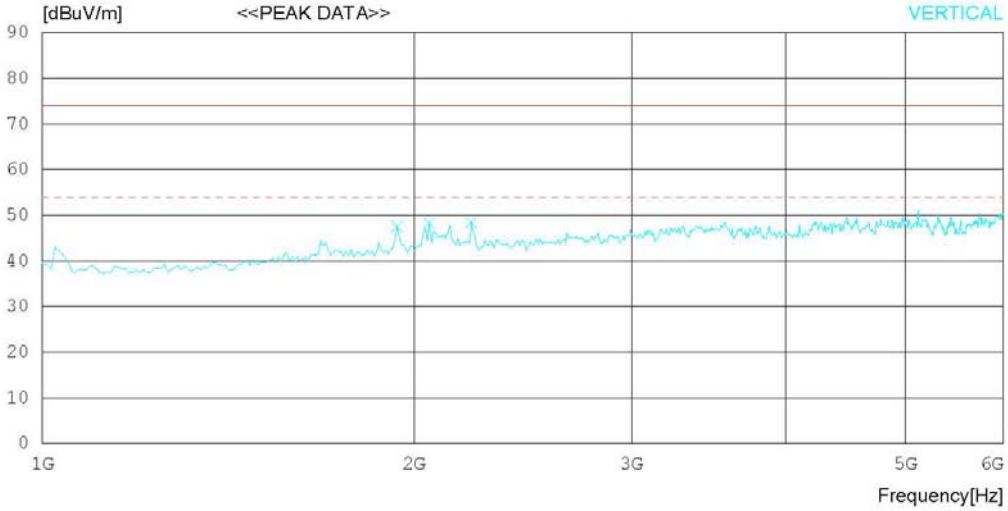
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1024.038	59.0	24.3	4.9	41.8	46.4	74.0	27.6	100	229
2	1953.525	54.6	27.8	6.9	41.7	47.6	74.0	26.4	100	1
3	2217.951	53.5	28.4	7.3	41.7	47.5	74.0	26.5	100	202
----- Vertical ------										
4	1937.500	54.7	27.7	6.9	41.7	47.6	74.0	26.4	100	43
5	2057.692	54.8	28.1	7.1	41.7	48.3	74.0	25.7	100	172
6	2225.964	54.5	28.4	7.3	41.7	48.5	74.0	25.5	100	178

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< HDMI + LAN MODE_1 GHz ~ 6 GHz_Average>

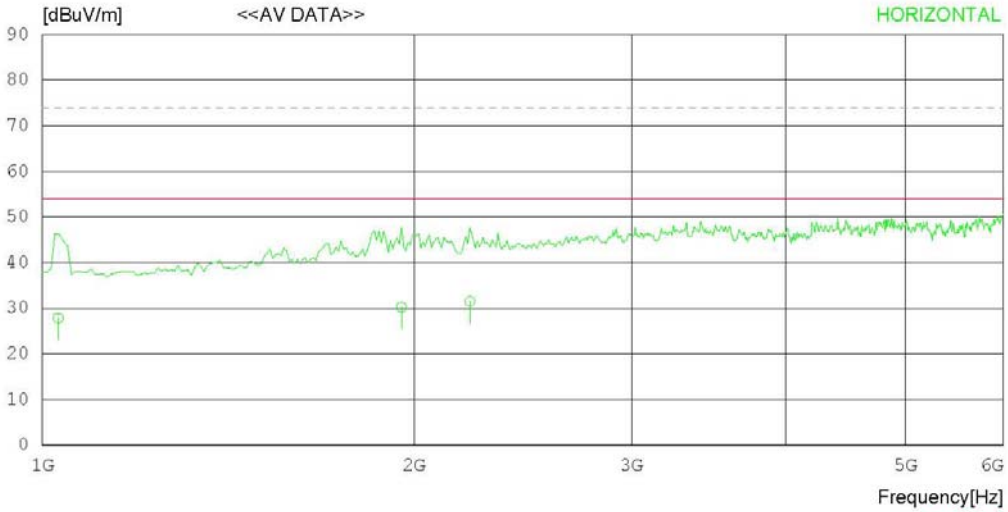
RADIATED EMISSION

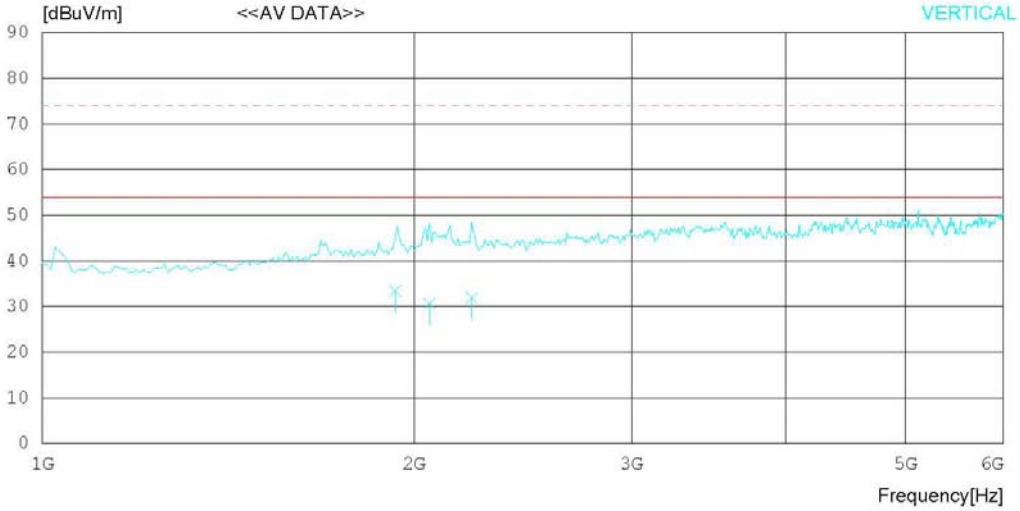
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1030.250	40.4	24.4	4.9	41.8	27.9	54.0	26.1	100	229
2	1953.500	37.2	27.8	6.9	41.7	30.2	54.0	23.8	100	1
3	2219.000	37.5	28.4	7.3	41.7	31.5	54.0	22.5	100	202
----- Vertical ------										
4	1930.830	40.6	27.7	6.9	41.7	33.5	54.0	20.5	100	43
5	2058.554	37.2	28.1	7.1	41.7	30.7	54.0	23.3	100	172
6	2228.038	38.0	28.4	7.3	41.7	32.0	54.0	22.0	100	178

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< USB MODE_30 MHz ~ 1 GHz >

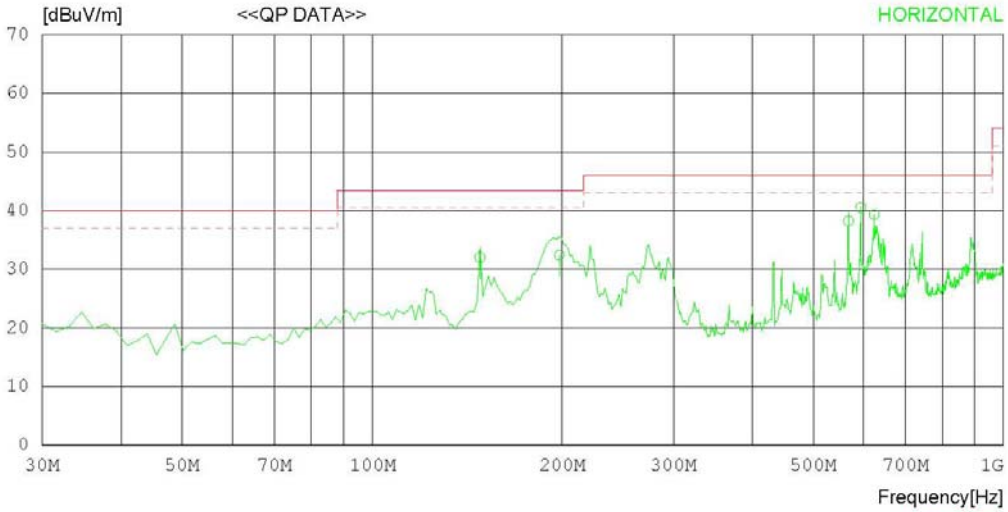
RADIATED EMISSION

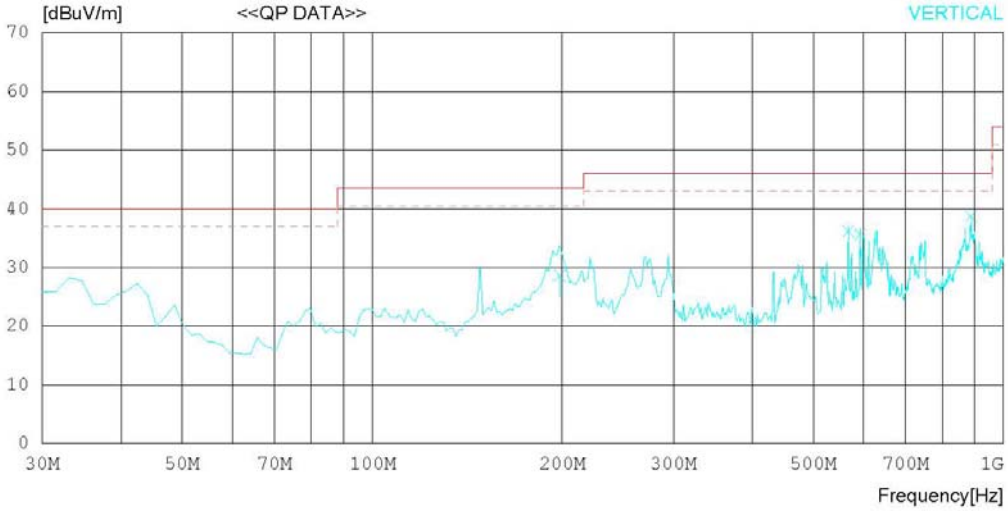
Date : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % 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 : 2012-03-14

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 34 % 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	148.141	42.3	11.1	1.7	23.1	32.0	43.5	11.5	200	1
2	197.885	44.9	8.8	2.0	23.3	32.4	43.5	11.1	100	358
3	567.851	40.1	19.2	3.7	24.8	38.2	46.0	7.8	100	211
4	594.278	41.6	19.7	3.9	24.7	40.5	46.0	5.5	100	358
5	623.813	40.0	19.9	4.0	24.6	39.3	46.0	6.7	100	123
----- Vertical ------										
6	197.885	41.1	8.8	2.0	23.3	28.6	43.5	14.9	100	359
7	567.851	38.1	19.2	3.7	24.8	36.2	46.0	9.8	199	358
8	592.723	36.8	19.6	3.9	24.7	35.6	46.0	10.4	100	1
9	888.079	34.1	23.2	4.7	23.2	38.8	46.0	7.2	100	206

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< USB MODE_1 GHz ~ 6 GHz_Peak >

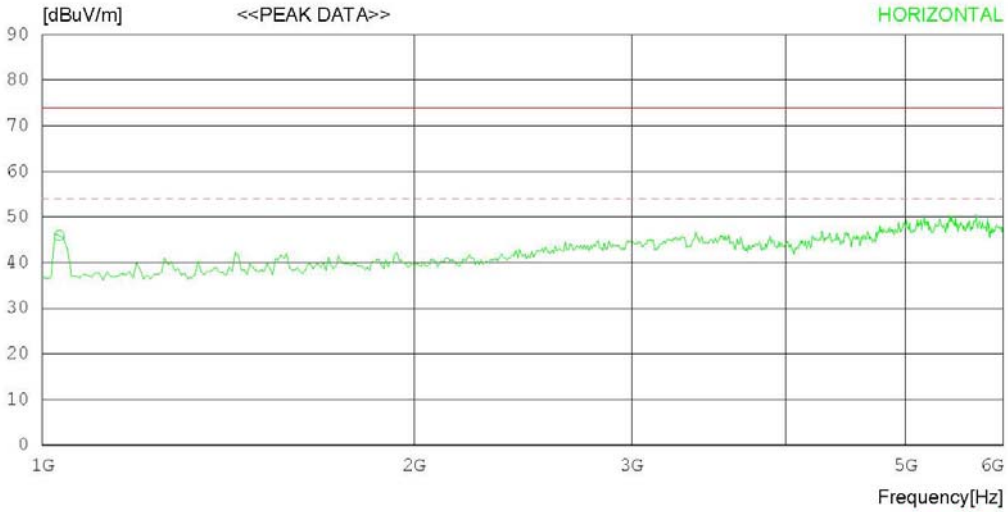
RADIATED EMISSION

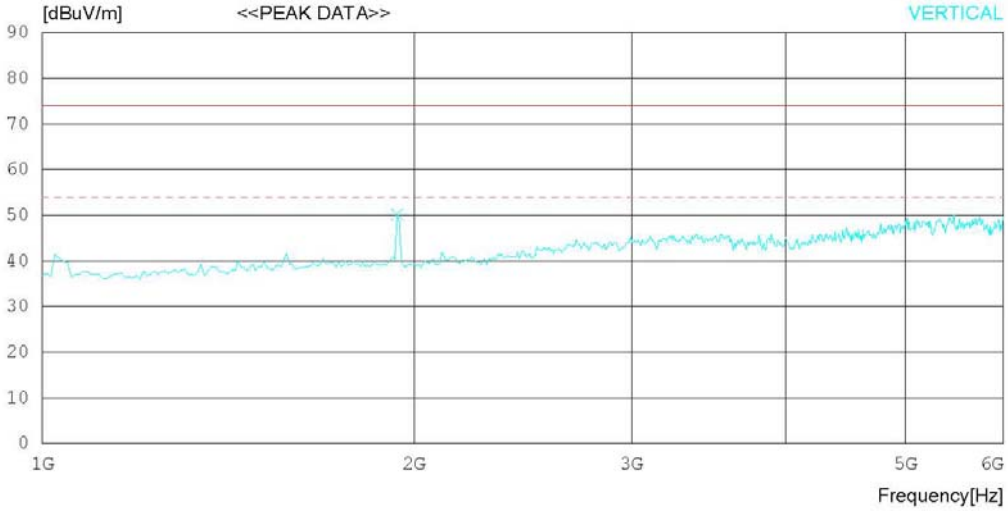
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1032.051	59.2	23.7	4.9	41.8	46.0	74.0	28	100	358
----- Vertical ------										
2	1937.500	59.8	25.2	6.9	41.7	50.2	74.0	23.8	100	276

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< USB MODE_1 GHz ~ 6 GHz_Average >

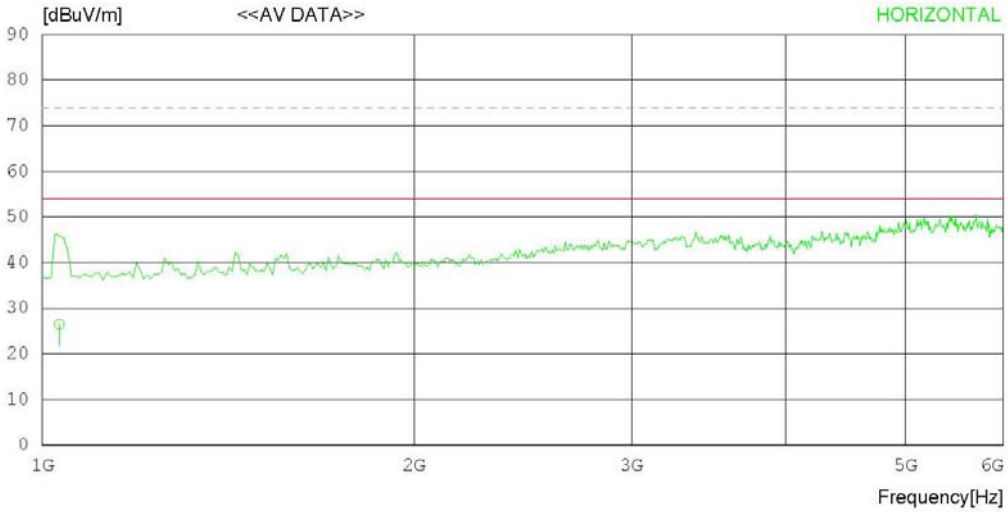
RADIATED EMISSION

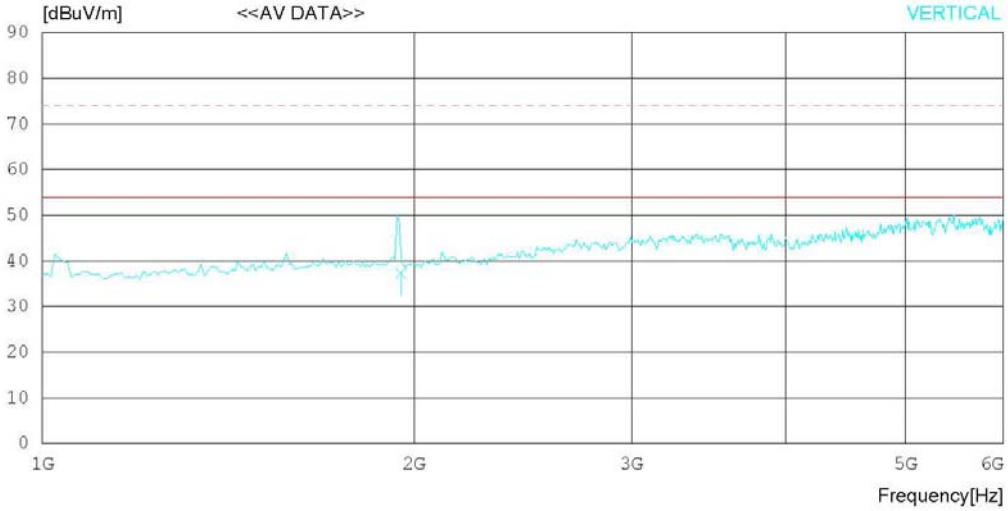
Date : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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 : 2012-03-20

Model Name	:	42LT670H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 37 % 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	1032.051	39.7	23.7	4.9	41.8	26.5	54.0	27.5	100	358
----- Vertical ------										
2	1951.538	46.9	25.2	6.9	41.7	37.3	54.0	16.7	100	276

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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	2011.07.02	2012.07.02
☐	LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐	LISN	KNW-242	KYORITSU	8-654-15	2011.09.19	2012.09.19
☐	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	2011.07.02	2012.07.02
☒	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	CBL6111D	SCHAFFNER	24885	2010.09.14	2012.09.14
☒	HORN ANTENNA	ETS3115	ETS	6419	2012.02.20	2013.02.20
☒	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	2011.07.11	2012.07.11
☐	AMPLIFIER	8447D	AGILENT	2443A03690	2011.07.01	2012.07.01
☐	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	2010.07.07	2012.07.07
☐	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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