EMC TEST REPORT

Test item	: LED LCD TV Monitor
Model No.	: 32LQ630H-UA
Order No.	: 1201-00092
Date of receipt	: 2012-01-20
Test duration	: 2012-02-01 ~ 2012-02-04
Use of report	: FCC CoC Marking
Date of Issue	: 2012-02-09

Applicant : LG Electronics Inc.
9-1, 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 ~ 20) °C,
Humidity : (28 ~ 34) % R.H.

Test result : ☒ Comply ☐ Not Comply

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.
This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:

Assistant Manager
D.H.EUN

Reviewed by:

Manager
M.J.SONG

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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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	ROK1028C	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.	32LQ630H-UA
EUT Type	LED LCD TV Monitor
Serial No	NONE
FCC ID	BEJ32LQ630HUA
Type of Sample Tested	Pre-Production
High Frequency	667 MHz
Rating	AC100-240 V~, 50/60 Hz, 0.7 A
Supplied Power for Test	AC120V, 60Hz
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	31.468	70.09
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.712	60.015

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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	02-01	18	34	-
Radiated Disturbance	02-03 02-03 02-04	20 19 19	31 28 28	

4.3 Test result Summary

(1) Conducted Emission(DSUB MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
1.21900	**N**	**45.5**	Quasi-Peak	**56.0**	**10.5**

(2) Radiated Emission(HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
598.507	**H**	**42.0**	Quasi-Peak	**46.0**	**4.0**

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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 : 1360 x 768 Resolution (Worst Case)
- HDMI MODE – Resolution : 1360 x 768 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 AV STEREO PS/2 PS/2	1.8 1.8 1.8 1.6 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
PILLOW SPEAKER	DPS	J00321894-0002	CURBELL ELECTRONICS, INC	SPEAKER	2.0	Not use	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Not use	Non-shield	Plastic	DOC
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 MODE >

Digital EMC

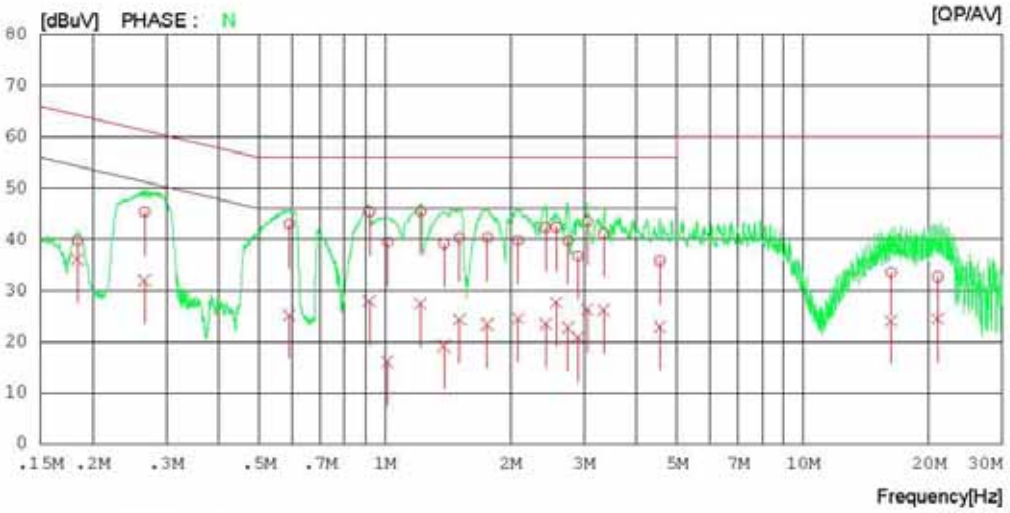
Results of Conducted Emission

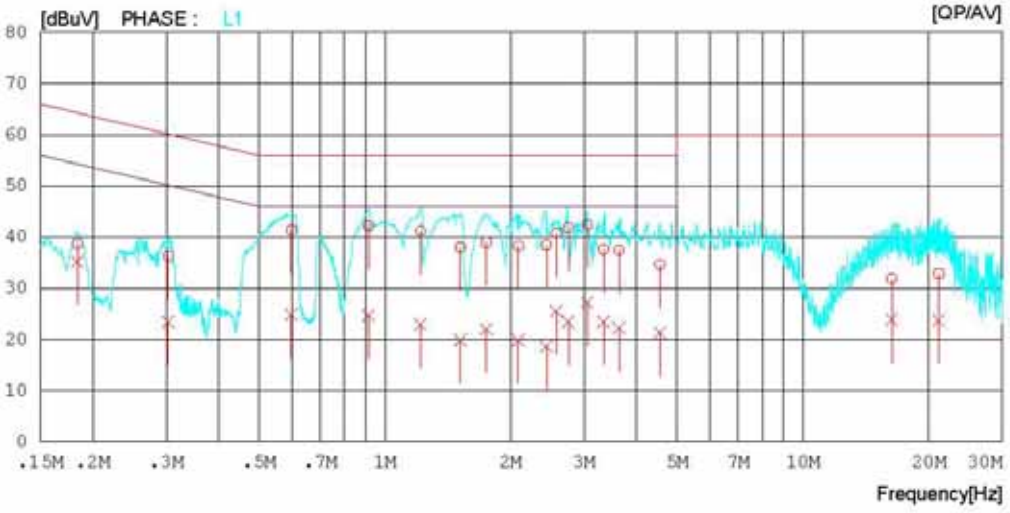
Digital EMC
Date : 2012-02-01

Model No.	:	32LQ630H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % 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 : 2012-02-01

Model No.	:	32LQ630H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % R.H.
Test Condition	:	DSUB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.18400	39.5	35.9	0.2	39.7	36.1	64.3	54.3	24.6	18.2	N
2	0.26600	45.2	31.7	0.2	45.4	31.9	61.2	51.2	15.8	19.3	N
3	0.59090	42.7	24.9	0.2	42.9	25.1	56.0	46.0	13.1	20.9	N
4	0.91850	45.0	27.6	0.3	45.3	27.9	56.0	46.0	10.7	18.1	N
5	1.01500	39.1	15.8	0.3	39.4	16.1	56.0	46.0	16.6	29.9	N
6	1.21900	45.2	27.1	0.3	45.5	27.4	56.0	46.0	10.5	18.6	N
7	1.38500	38.8	18.8	0.3	39.1	19.1	56.0	46.0	16.9	26.9	N
8	1.50710	40.0	24.0	0.3	40.3	24.3	56.0	46.0	15.7	21.7	N
9	1.75960	40.1	23.1	0.3	40.4	23.4	56.0	46.0	15.6	22.6	N
10	2.08320	39.5	24.2	0.3	39.8	24.5	56.0	46.0	16.2	21.5	N
11	2.42870	42.0	23.2	0.3	42.3	23.5	56.0	46.0	13.7	22.5	N
12	2.57200	42.1	27.3	0.3	42.4	27.6	56.0	46.0	13.6	18.4	N
13	2.74250	39.4	22.4	0.3	39.7	22.7	56.0	46.0	16.3	23.3	N
14	2.89660	36.4	20.5	0.3	36.7	20.8	56.0	46.0	19.3	25.2	N
15	3.05400	43.1	25.9	0.4	43.5	26.3	56.0	46.0	12.5	19.7	N
16	3.34000	40.7	25.7	0.4	41.1	26.1	56.0	46.0	14.9	19.9	N
17	4.55100	35.4	22.5	0.4	35.8	22.9	56.0	46.0	20.2	23.1	N
18	16.25000	32.5	23.1	1.0	33.5	24.1	60.0	50.0	26.5	25.9	N
19	21.02150	31.6	23.4	1.1	32.7	24.5	60.0	50.0	27.3	25.5	N
20	0.18400	38.5	35.0	0.2	38.7	35.2	64.3	54.3	25.6	19.1	L1
21	0.30300	36.1	23.2	0.2	36.3	23.4	60.2	50.2	23.9	26.8	L1
22	0.59800	41.2	24.7	0.2	41.4	24.9	56.0	46.0	14.6	21.1	L1
23	0.91409	42.0	24.4	0.3	42.3	24.7	56.0	46.0	13.7	21.3	L1
24	1.21900	40.9	22.6	0.3	41.2	22.9	56.0	46.0	14.8	23.1	L1
25	1.51600	37.7	19.6	0.3	38.0	19.9	56.0	46.0	18.0	26.1	L1
26	1.74900	38.7	21.7	0.3	39.0	22.0	56.0	46.0	17.0	24.0	L1
27	2.08698	38.0	19.6	0.3	38.3	19.9	56.0	46.0	17.7	26.1	L1
28	2.43663	38.1	18.4	0.3	38.4	18.7	56.0	46.0	17.6	27.3	L1
29	2.57186	40.5	25.3	0.3	40.8	25.6	56.0	46.0	15.2	20.4	L1
30	2.74690	41.6	23.2	0.3	41.9	23.5	56.0	46.0	14.1	22.5	L1
31	3.04772	42.0	26.8	0.4	42.4	27.2	56.0	46.0	13.6	18.8	L1
32	3.33535	37.2	23.0	0.4	37.6	23.4	56.0	46.0	18.4	22.6	L1
33	3.63745	37.1	21.9	0.4	37.5	22.3	56.0	46.0	18.5	23.7	L1
34	4.55100	34.2	20.9	0.4	34.6	21.3	56.0	46.0	21.4	24.7	L1
35	16.32460	30.9	22.9	1.0	31.9	23.9	60.0	50.0	28.1	26.1	L1
36	21.14000	31.8	22.7	1.1	32.9	23.8	60.0	50.0	27.1	26.2	L1

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< HDMI MODE >

Digital EMC

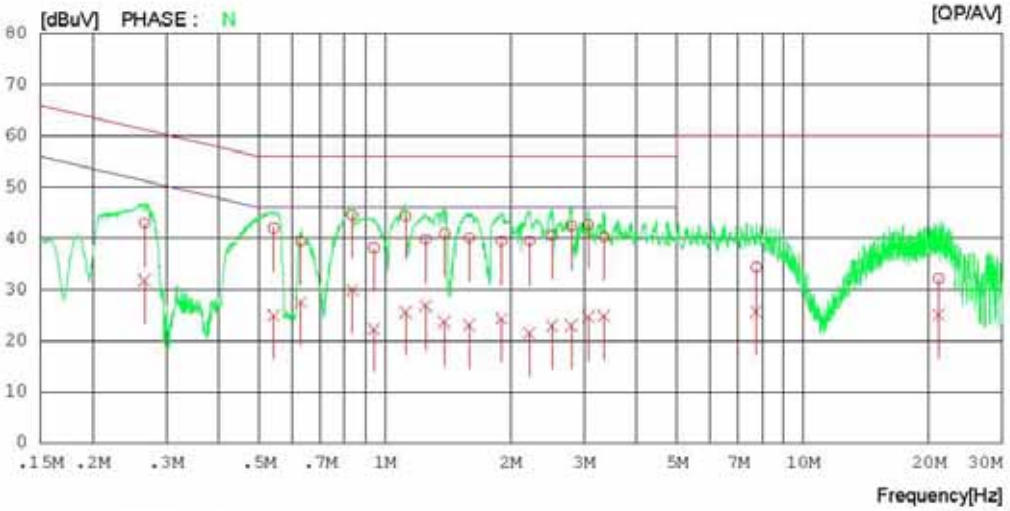
Results of Conducted Emission

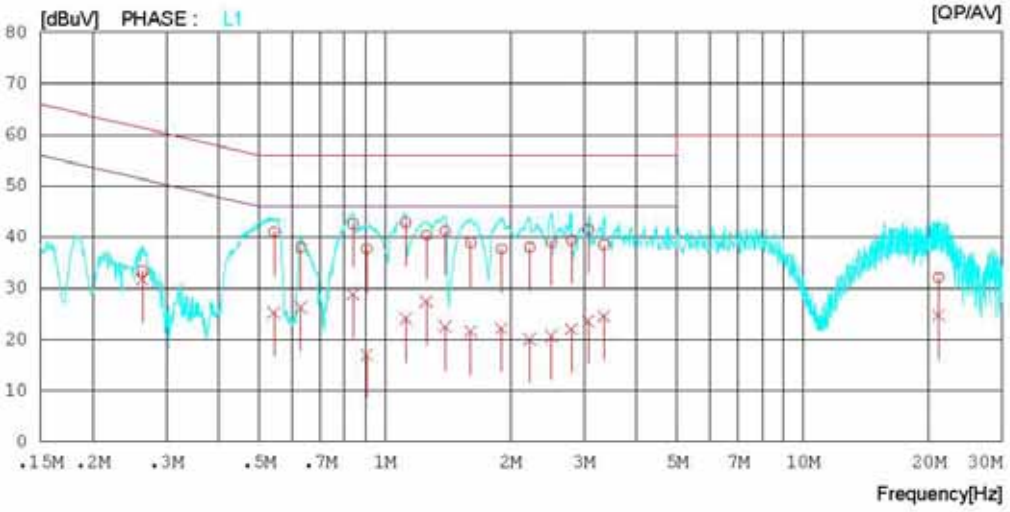
Digital EMC
Date : 2012-02-01

Model No.	: 32LQ630H-UA		Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % 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 : 2012-02-01

Model No.	:	32LQ630H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.26600	42.7	31.6	0.2	42.9	31.8	61.2	51.2	18.3	19.4	N
2	0.54200	41.8	24.7	0.2	42.0	24.9	56.0	46.0	14.0	21.1	N
3	0.62885	39.2	27.3	0.2	39.4	27.5	56.0	46.0	16.6	18.5	N
4	0.83600	44.2	29.6	0.3	44.5	29.9	56.0	46.0	11.5	16.1	N
5	0.94175	37.8	22.0	0.3	38.1	22.3	56.0	46.0	17.9	23.7	N
6	1.12120	44.0	25.3	0.3	44.3	25.6	56.0	46.0	11.7	20.4	N
7	1.25350	39.5	26.5	0.3	39.8	26.8	56.0	46.0	16.2	19.2	N
8	1.38960	40.6	23.3	0.3	40.9	23.6	56.0	46.0	15.1	22.4	N
9	1.59300	39.8	22.7	0.3	40.1	23.0	56.0	46.0	15.9	23.0	N
10	1.90100	39.1	24.0	0.3	39.4	24.3	56.0	46.0	16.6	21.7	N
11	2.21925	39.1	21.2	0.3	39.4	21.5	56.0	46.0	16.6	24.5	N
12	2.51350	40.2	22.6	0.3	40.5	22.9	56.0	46.0	15.5	23.1	N
13	2.79500	42.1	22.7	0.3	42.4	23.0	56.0	46.0	13.6	23.0	N
14	3.06675	42.3	24.2	0.4	42.7	24.6	56.0	46.0	13.3	21.4	N
15	3.34888	39.9	24.4	0.4	40.3	24.8	56.0	46.0	15.7	21.2	N
16	7.74025	33.8	25.1	0.5	34.3	25.6	60.0	50.0	25.7	24.4	N
17	21.12500	31.0	23.9	1.1	32.1	25.0	60.0	50.0	27.9	25.0	N
18	0.26300	33.2	31.6	0.2	33.4	31.8	61.3	51.3	27.9	19.5	L1
19	0.54300	40.9	25.1	0.2	41.1	25.3	56.0	46.0	14.9	20.7	L1
20	0.62975	37.8	26.1	0.2	38.0	26.3	56.0	46.0	18.0	19.7	L1
21	0.83863	42.3	28.6	0.3	42.6	28.9	56.0	46.0	13.4	17.1	L1
22	0.90500	37.4	16.7	0.3	37.7	17.0	56.0	46.0	18.3	29.0	L1
23	1.12320	42.6	23.8	0.3	42.9	24.1	56.0	46.0	13.1	21.9	L1
24	1.25768	40.1	27.1	0.3	40.4	27.4	56.0	46.0	15.6	18.6	L1
25	1.39488	40.9	22.2	0.3	41.2	22.5	56.0	46.0	14.8	23.5	L1
26	1.60463	38.6	21.3	0.3	38.9	21.6	56.0	46.0	17.1	24.4	L1
27	1.90100	37.4	21.9	0.3	37.7	22.2	56.0	46.0	18.3	23.8	L1
28	2.22163	37.7	19.8	0.3	38.0	20.1	56.0	46.0	18.0	25.9	L1
29	2.50500	38.8	20.4	0.3	39.1	20.7	56.0	46.0	16.9	25.3	L1
30	2.79500	39.1	21.7	0.3	39.4	22.0	56.0	46.0	16.6	24.0	L1
31	3.06873	41.1	23.2	0.4	41.5	23.6	56.0	46.0	14.5	22.4	L1
32	3.34438	38.1	24.2	0.4	38.5	24.6	56.0	46.0	17.5	21.4	L1
33	21.12500	31.0	23.6	1.1	32.1	24.7	60.0	50.0	27.9	25.3	L1

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< USB MODE >

Digital EMC

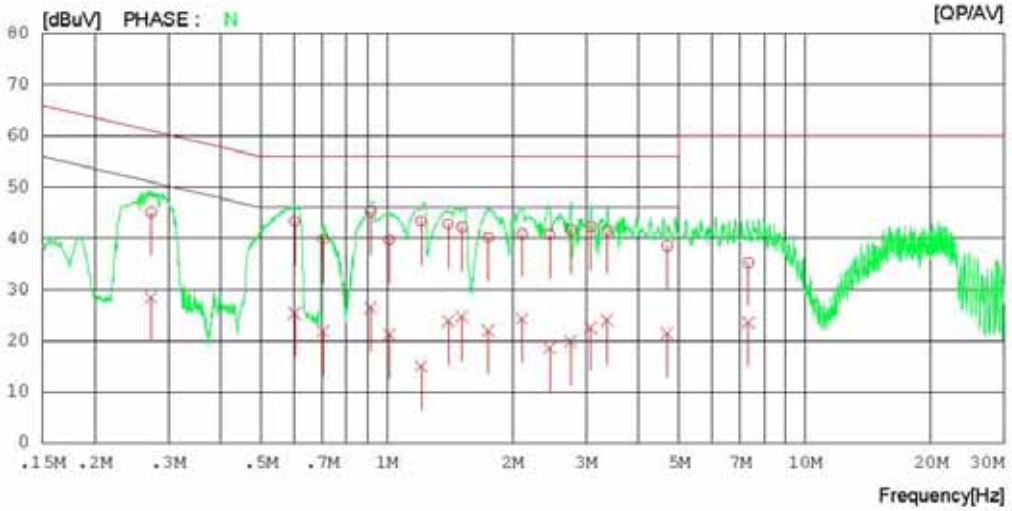
Results of Conducted Emission

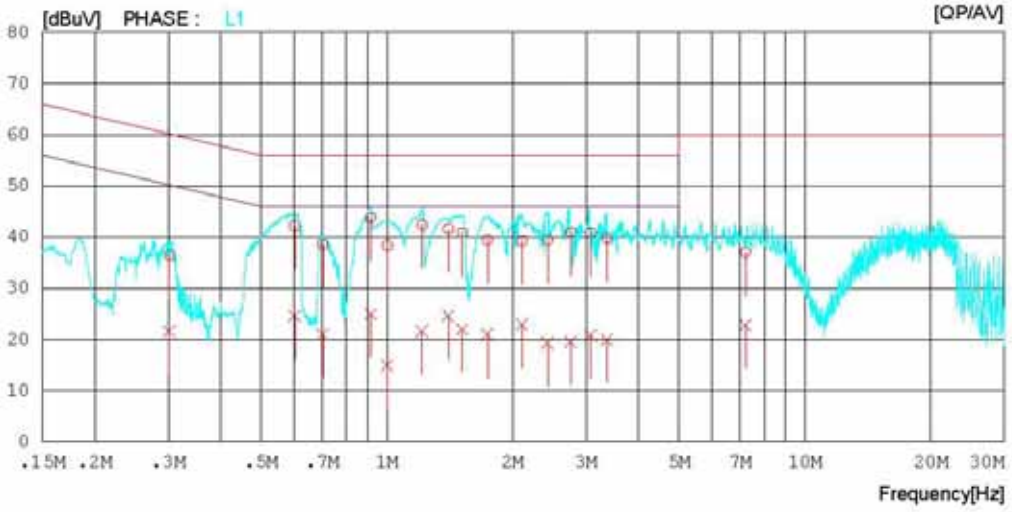
Digital EMC
Date : 2012-02-01

Model No.	: 32LQ630H-UA		Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % 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 : 2012-02-01

Model No.	:	32LQ630H-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	18 'C 34 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.27303	44.9	28.2	0.2	45.1	28.4	61.0	51.0	15.9	22.6	N
2	0.60181	43.2	25.1	0.2	43.4	25.3	56.0	46.0	12.6	20.7	N
3	0.70416	39.6	21.6	0.2	39.8	21.8	56.0	46.0	16.2	24.2	N
4	0.91633	45.0	26.1	0.3	45.3	26.4	56.0	46.0	10.7	19.6	N
5	1.01250	39.4	20.9	0.3	39.7	21.2	56.0	46.0	16.3	24.8	N
6	1.20900	43.1	14.7	0.3	43.4	15.0	56.0	46.0	12.6	31.0	N
7	1.40300	42.5	23.5	0.3	42.8	23.8	56.0	46.0	13.2	22.2	N
8	1.51350	41.9	24.3	0.3	42.2	24.6	56.0	46.0	13.8	21.4	N
9	1.74900	39.9	21.7	0.3	40.2	22.0	56.0	46.0	15.8	24.0	N
10	2.10750	40.5	23.9	0.3	40.8	24.2	56.0	46.0	15.2	21.8	N
11	2.45250	40.5	18.3	0.3	40.8	18.6	56.0	46.0	15.2	27.4	N
12	2.75600	41.3	19.5	0.3	41.6	19.8	56.0	46.0	14.4	26.2	N
13	3.07650	41.9	22.1	0.4	42.3	22.5	56.0	46.0	13.7	23.5	N
14	3.36900	41.1	23.6	0.4	41.5	24.0	56.0	46.0	14.5	22.0	N
15	4.68400	38.1	21.0	0.4	38.5	21.4	56.0	46.0	17.5	24.6	N
16	7.32450	34.8	23.1	0.4	35.2	23.5	60.0	50.0	24.8	26.5	N
17	0.30160	36.3	21.4	0.2	36.5	21.6	60.2	50.2	23.7	28.6	L1
18	0.60228	42.0	24.4	0.2	42.2	24.6	56.0	46.0	13.8	21.4	L1
19	0.70219	38.4	20.8	0.2	38.6	21.0	56.0	46.0	17.4	25.0	L1
20	0.91556	43.6	24.7	0.3	43.9	25.0	56.0	46.0	12.1	21.0	L1
21	1.00300	38.1	14.7	0.3	38.4	15.0	56.0	46.0	17.6	31.0	L1
22	1.21300	42.1	21.4	0.3	42.4	21.7	56.0	46.0	13.6	24.3	L1
23	1.40350	41.3	24.4	0.3	41.6	24.7	56.0	46.0	14.4	21.3	L1
24	1.51450	40.6	21.7	0.3	40.9	22.0	56.0	46.0	15.1	24.0	L1
25	1.73950	39.2	20.7	0.3	39.5	21.0	56.0	46.0	16.5	25.0	L1
26	2.10650	39.0	22.6	0.3	39.3	22.9	56.0	46.0	16.7	23.1	L1
27	2.42550	39.2	19.0	0.3	39.5	19.3	56.0	46.0	16.5	26.7	L1
28	2.75340	40.7	19.3	0.3	41.0	19.6	56.0	46.0	15.0	26.4	L1
29	3.07550	40.5	20.4	0.4	40.9	20.8	56.0	46.0	15.1	25.2	L1
30	3.36100	39.4	19.6	0.4	39.8	20.0	56.0	46.0	16.2	26.0	L1
31	7.21350	36.6	22.4	0.4	37.0	22.8	60.0	50.0	23.0	27.2	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 MODE_30 MHz ~ 1 GHz >

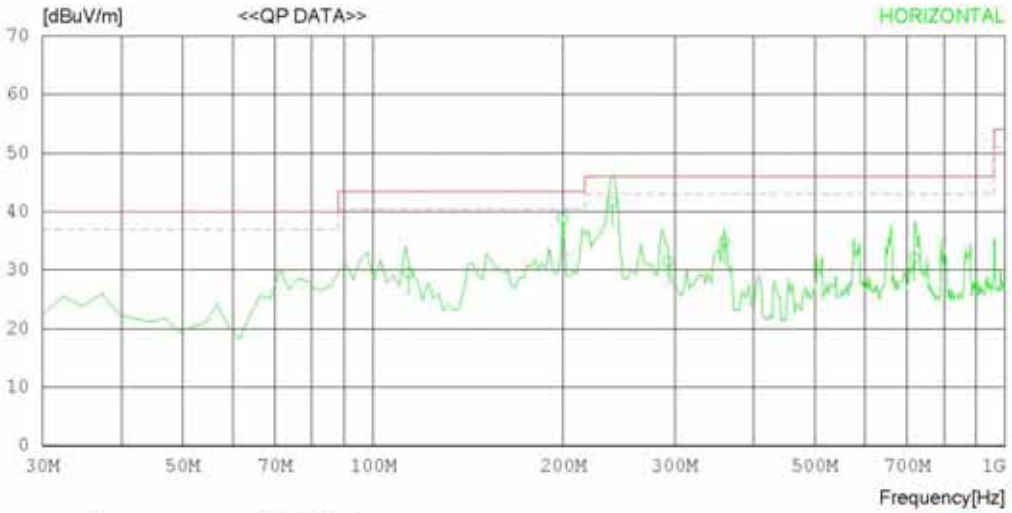
RADIATED EMISSION

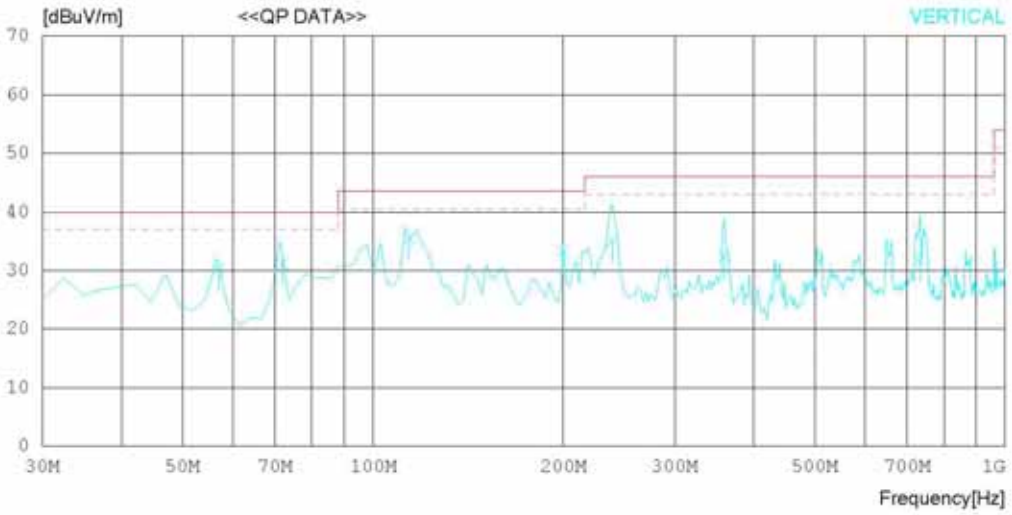
Date : 2012-02-03

Model Name	: 32LQ630H-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 20 'C 31 % 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 : 2012-02-03

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	20 'C 31 % 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	114.025	39.5	11.3	1.5	22.8	29.5	43.5	14.0	201	199
2	199.500	50.5	9.7	2.0	23.3	38.9	43.5	4.6	100	154
3	238.625	50.4	12.3	2.3	23.5	41.5	46.0	4.5	100	209
4	293.160	39.0	13.7	2.6	23.9	31.4	46.0	14.6	100	1
5	359.800	41.1	15.1	2.8	24.2	34.8	46.0	11.2	100	195
6	718.700	32.6	19.2	4.3	24.1	32.0	46.0	14.0	100	341
----- Vertical ------										
7	57.007	45.2	6.7	1.1	22.7	30.3	40.0	9.7	100	216
8	71.900	46.2	6.5	1.2	22.7	31.2	40.0	8.8	100	232
9	113.977	45.4	11.3	1.5	22.8	35.4	43.5	8.1	100	358
10	199.500	44.9	9.7	2.0	23.3	33.3	43.5	10.2	100	358
11	238.975	44.2	12.3	2.3	23.6	35.2	46.0	10.8	197	170
12	359.400	38.8	15.1	2.8	24.2	32.5	46.0	13.5	152	166
13	733.248	32.2	19.4	4.3	24.1	31.8	46.0	14.2	100	358

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< DSUB MODE_1 GHz ~ 6 GHz_Peak >

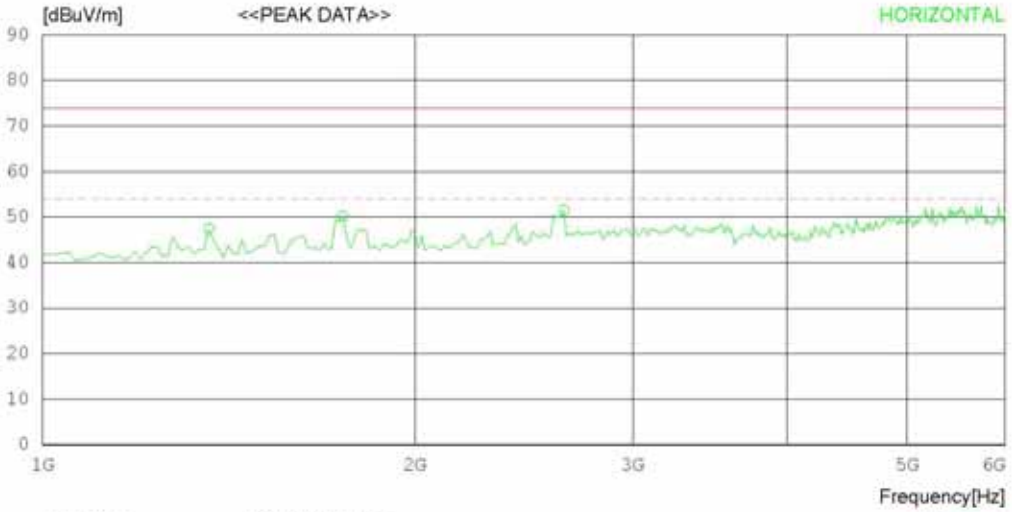
RADIATED EMISSION

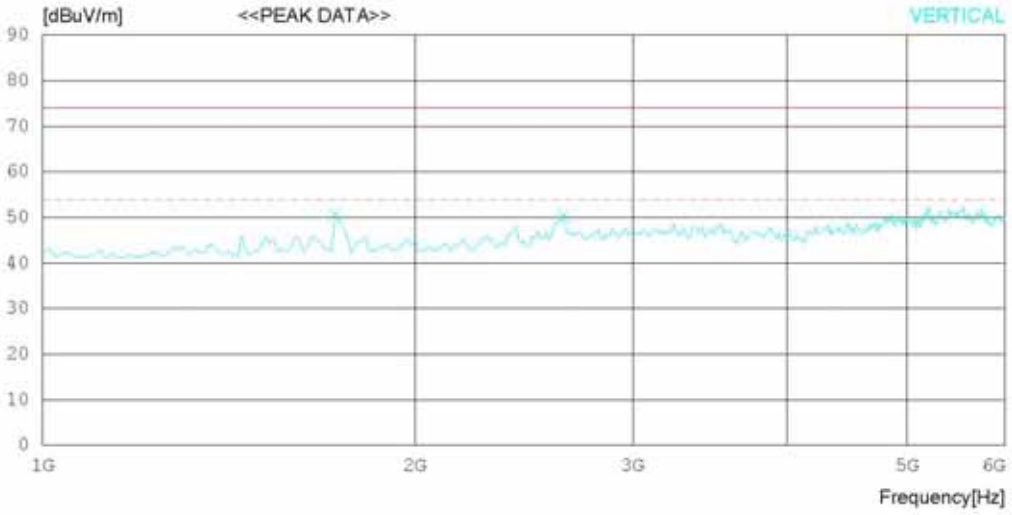
Date : 2012-02-04

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-04

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1362.500	58.8	24.7	5.6	41.7	47.4	74.0	26.6	100	211
2	1750.000	60.2	25.2	6.5	41.7	50.2	74.0	23.8	100	197
3	2637.500	57.6	27.7	8.0	41.8	51.5	74.0	22.5	100	358
----- Vertical ------										
4	1725.000	60.8	25.2	6.4	41.7	50.7	74.0	23.3	100	1
5	2637.500	56.6	27.7	8.0	41.8	50.5	74.0	23.5	100	154

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< DSUB MODE_1 GHz ~ 6 GHz_Average >

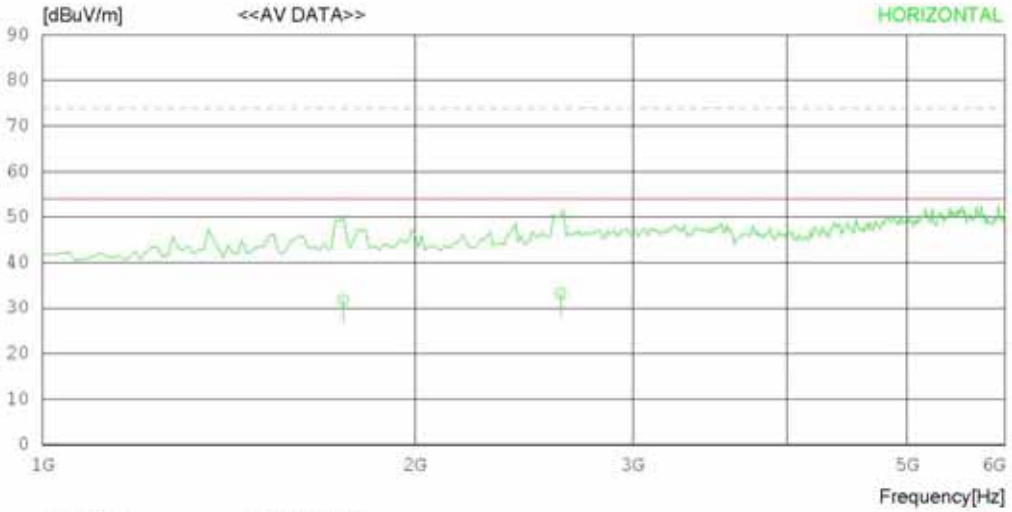
RADIATED EMISSION

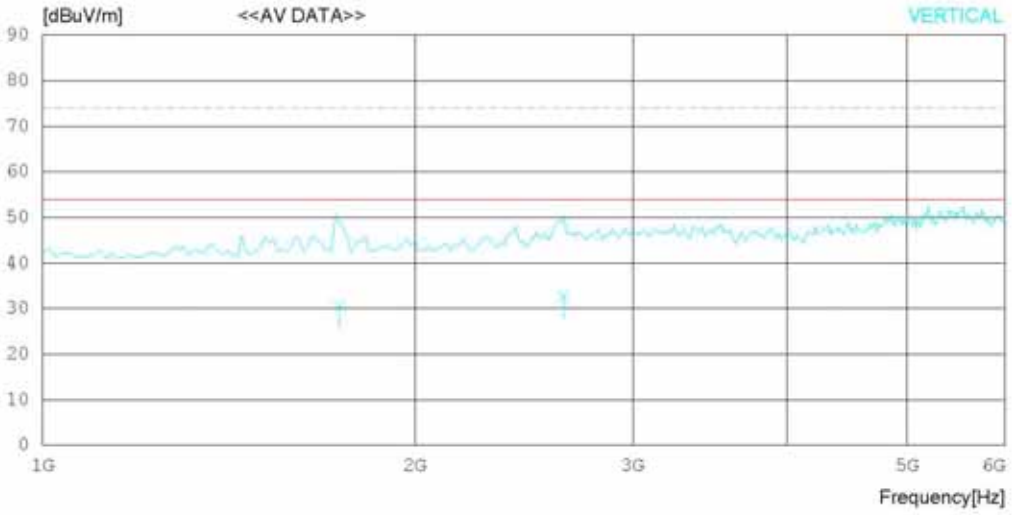
Date : 2012-02-04

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-04

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1750.000	41.9	25.2	6.5	41.7	31.9	54.0	22.1	100	197
2	2622.500	39.3	27.7	8.0	41.8	33.2	54.0	20.8	100	358
----- Vertical ------										
3	1739.000	40.5	25.2	6.5	41.7	30.5	54.0	23.5	100	1
4	2637.500	38.9	27.7	8.0	41.8	32.8	54.0	21.2	100	154

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< HDMI MODE_30 MHz ~ 1 GHz >

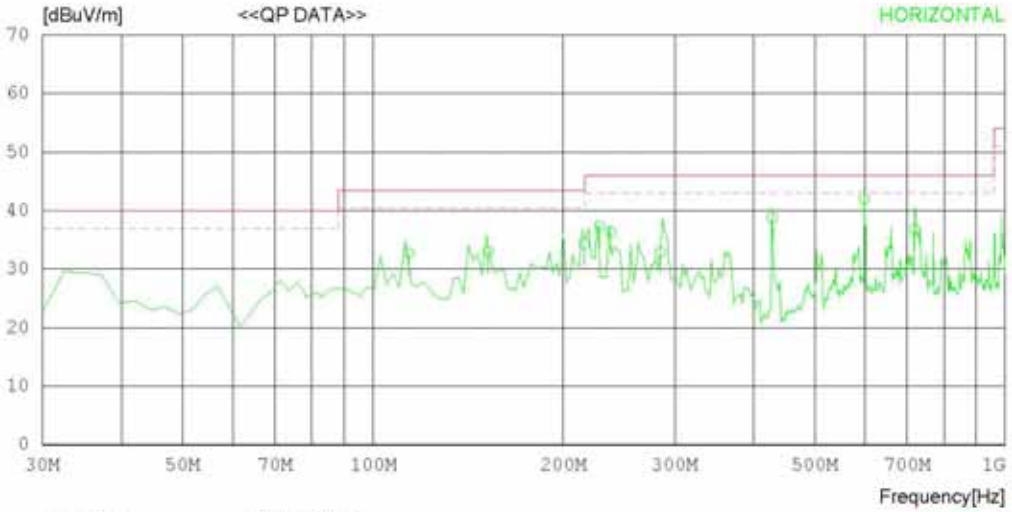
RADIATED EMISSION

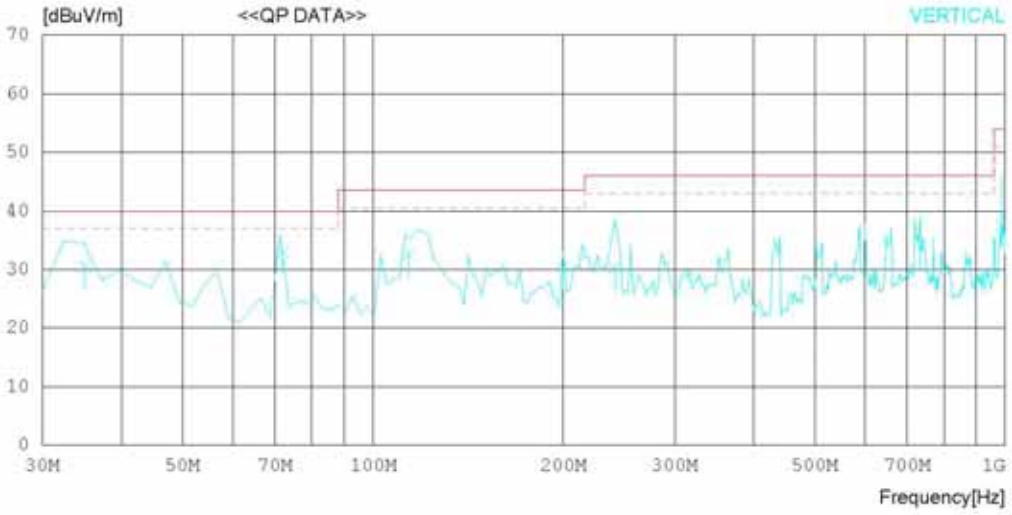
Date : 2012-02-03

Model Name	: 32LQ630H-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 20 'C 31 % 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 : 2012-02-03

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	20 'C 31 % 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	113.995	42.7	11.3	1.5	22.8	32.7	43.5	10.8	149	194
2	152.004	43.9	10.4	1.7	23.1	32.9	43.5	10.6	100	337
3	215.689	44.9	10.7	2.1	23.4	34.3	43.5	9.2	100	27
4	228.025	47.0	11.6	2.2	23.5	37.3	46.0	8.7	100	182
5	237.500	45.3	12.2	2.3	23.5	36.3	46.0	9.7	100	1
6	284.975	40.6	13.6	2.5	23.8	32.9	46.0	13.1	100	186
7	427.699	43.8	16.5	3.1	24.6	38.8	46.0	7.2	100	136
8	598.507	44.1	18.7	3.9	24.7	42.0	46.0	4.0	169	47
9	718.675	37.4	19.2	4.3	24.1	36.8	46.0	9.2	165	45
----- Vertical ------										
10	35.044	35.9	16.7	0.9	23.1	30.4	40.0	9.6	100	358
11	71.950	48.0	6.5	1.2	22.7	33.0	40.0	7.0	100	358
12	114.025	42.6	11.3	1.5	22.8	32.6	43.5	10.9	100	358
13	199.525	41.9	9.7	2.0	23.3	30.3	43.5	13.2	200	189
14	241.550	39.0	12.5	2.3	23.6	30.2	46.0	15.8	100	352
15	733.248	34.5	19.4	4.3	24.1	34.1	46.0	11.9	100	0
16	987.250	34.3	21.2	4.9	23.0	37.4	54.0	16.6	100	0

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< HDMI MODE_1 GHz ~ 6 GHz_Peak >

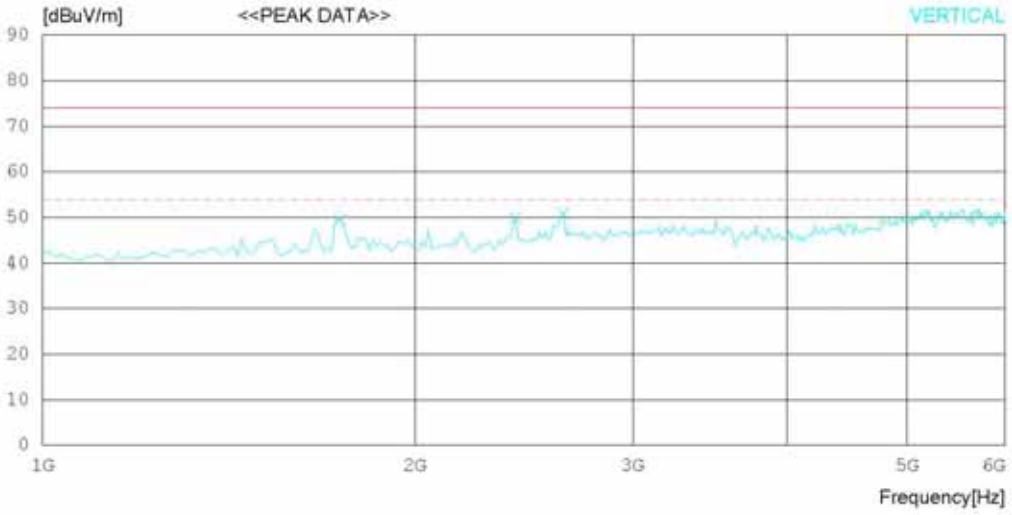
RADIATED EMISSION

Date : 2012-02-04

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-04

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1750.000	59.1	25.2	6.5	41.7	49.1	74.0	24.9	100	202
2	2412.500	55.2	26.9	7.6	41.9	47.8	74.0	26.2	100	195
3	2587.500	57.9	27.6	7.9	41.9	51.5	74.0	22.5	100	358
----- Vertical ------										
4	1737.500	59.5	25.2	6.5	41.7	49.5	74.0	24.5	100	159
5	2412.500	57.3	26.9	7.6	41.9	49.9	74.0	24.1	100	157
6	2637.500	57.0	27.7	8.0	41.8	50.9	74.0	23.1	100	156

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< HDMI MODE_1 GHz ~ 6 GHz_Average>

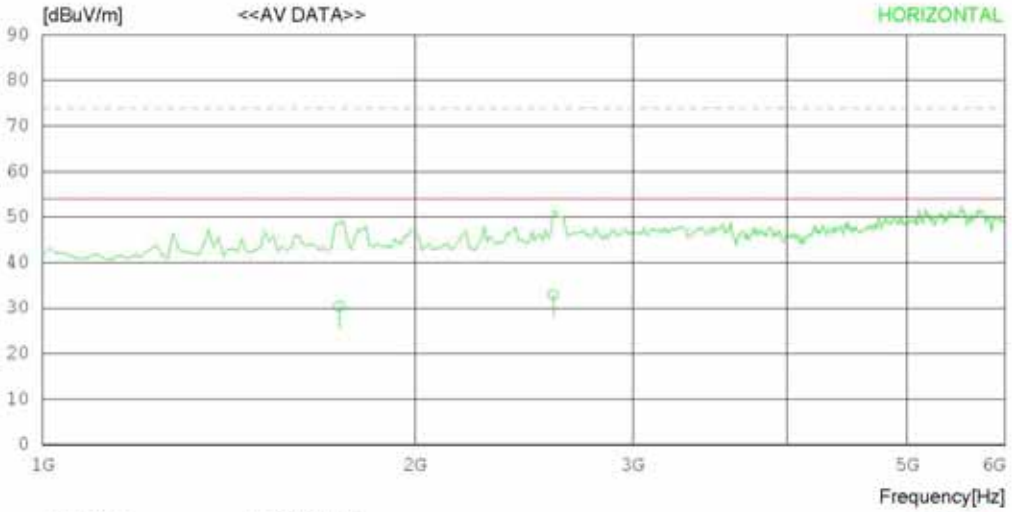
RADIATED EMISSION

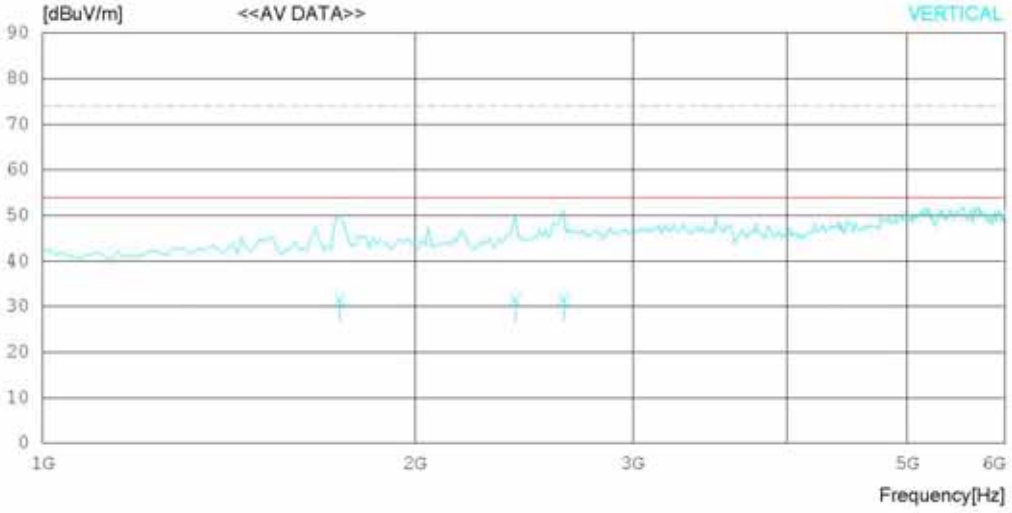
Date : 2012-02-04

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-04

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1737.000	40.4	25.2	6.5	41.7	30.4	54.0	23.6	100	202
2	2587.500	39.3	27.6	7.9	41.9	32.9	54.0	21.1	100	358
----- Vertical ------										
3	1737.500	41.5	25.2	6.5	41.7	31.5	54.0	22.5	100	159
4	2412.500	38.7	26.9	7.6	41.9	31.3	54.0	22.7	100	157
5	2637.500	37.6	27.7	8.0	41.8	31.5	54.0	22.5	100	156

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< USB MODE_30 MHz ~ 1 GHz >

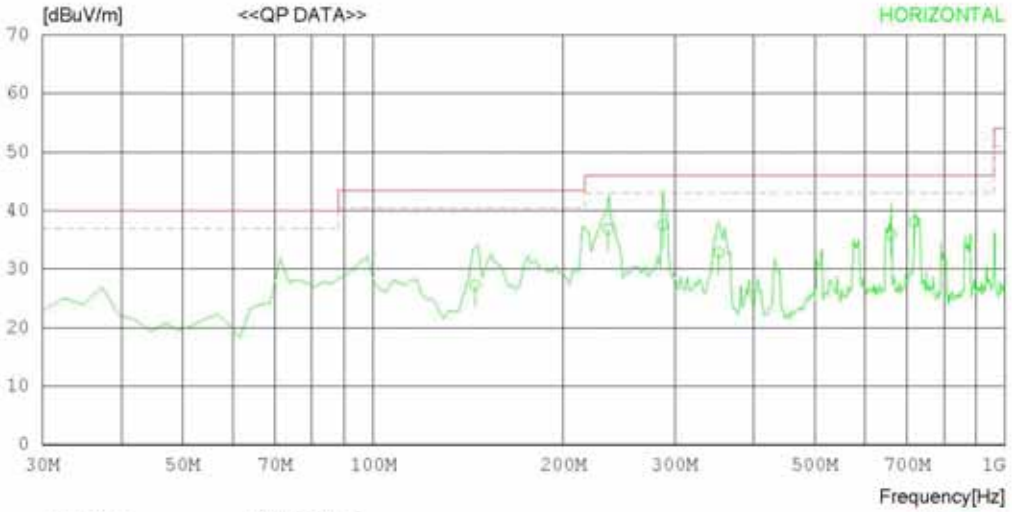
RADIATED EMISSION

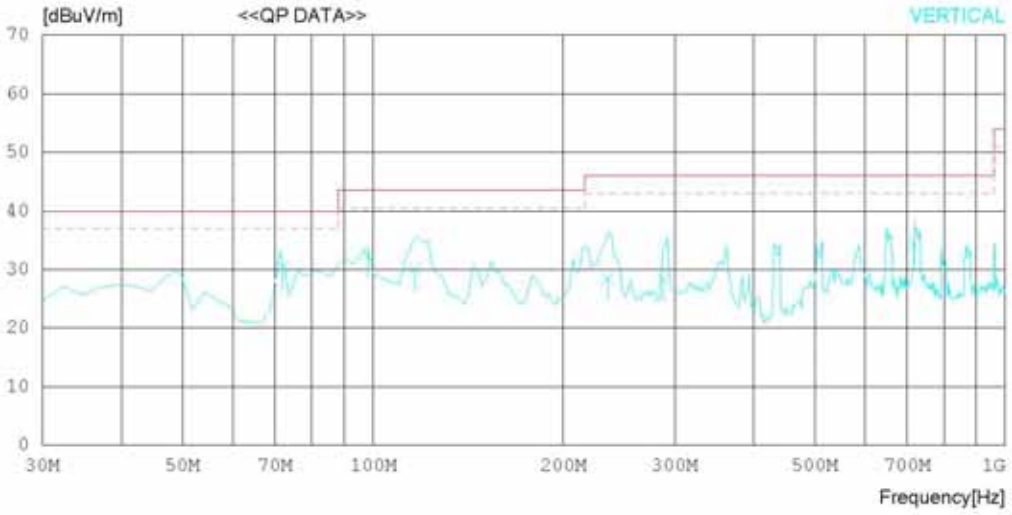
Date : 2012-02-03

Model Name	: 32LQ630H-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 20 'C 31 % 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 : 2012-02-03

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	20 'C 31 % 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	145.050	37.9	10.7	1.7	23.0	27.3	43.5	16.2	156	185
2	235.375	45.9	12.1	2.3	23.5	36.8	46.0	9.2	100	84
3	287.400	45.2	13.7	2.5	23.8	37.6	46.0	8.4	100	194
4	352.525	39.2	15.0	2.8	24.2	32.8	46.0	13.2	100	358
5	659.570	37.5	18.8	4.0	24.4	35.9	46.0	10.1	201	359
6	718.486	38.7	19.2	4.3	24.1	38.1	46.0	7.9	100	196
----- Vertical ------										
7	71.900	45.4	6.5	1.2	22.7	30.4	40.0	9.6	100	1
8	98.300	43.2	10.5	1.5	22.8	32.4	43.5	11.1	100	1
9	116.500	40.0	11.4	1.5	22.9	30.0	43.5	13.5	100	180
10	235.175	37.6	12.1	2.3	23.5	28.5	46.0	17.5	199	358
11	287.452	36.0	13.7	2.5	23.8	28.4	46.0	17.6	146	64
12	718.475	35.0	19.2	4.3	24.1	34.4	46.0	11.6	100	1

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< USB MODE_1 GHz ~ 6 GHz_Peak >

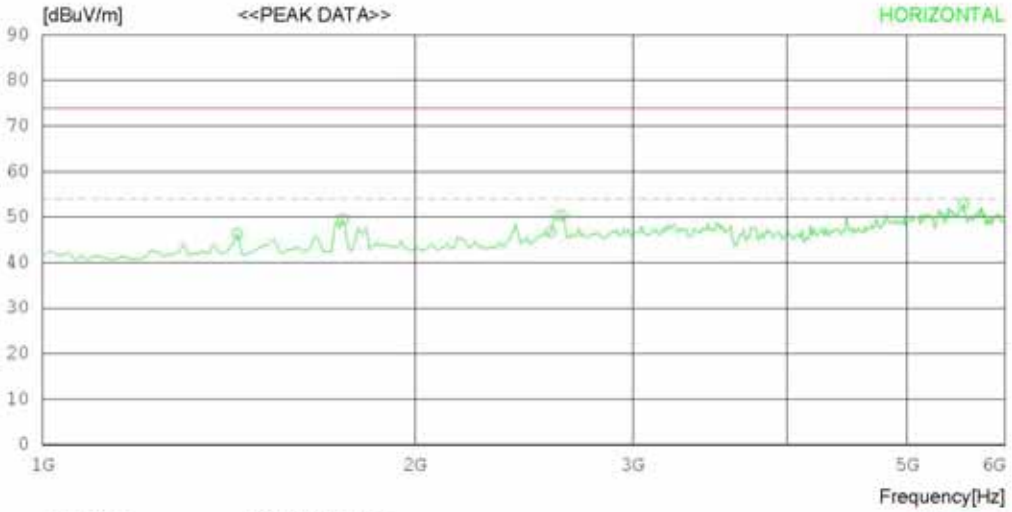
RADIATED EMISSION

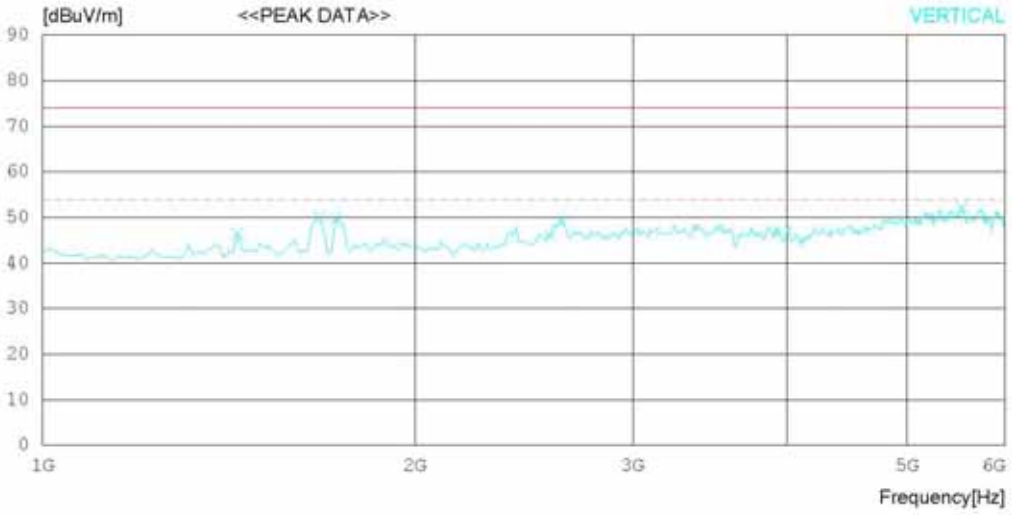
Date : 2012-02-03

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-03

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1437.500	57.1	25.0	5.8	41.6	46.3	74.0	27.7	100	149
2	1750.000	59.5	25.2	6.5	41.7	49.5	74.0	24.5	100	1
3	2575.000	53.2	27.5	7.9	41.9	46.7	74.0	27.3	100	1
4	2625.000	56.5	27.7	8.0	41.8	50.4	74.0	23.6	100	1
5	5550.000	48.8	34.8	11.9	42.6	52.9	74.0	21.1	100	151
----- Vertical ------										
6	1437.500	57.2	25.0	5.8	41.6	46.4	74.0	27.6	100	358
7	1675.000	60.3	25.2	6.3	41.7	50.1	74.0	23.9	100	168
8	1725.000	59.7	25.2	6.4	41.7	49.6	74.0	24.4	100	177
9	2575.000	52.5	27.5	7.9	41.9	46.0	74.0	28	100	358
10	2625.000	55.3	27.7	8.0	41.8	49.2	74.0	24.8	100	188
11	5537.500	48.1	34.9	11.9	42.7	52.2	74.0	21.8	100	0

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< USB MODE_1 GHz ~ 6 GHz_Average >

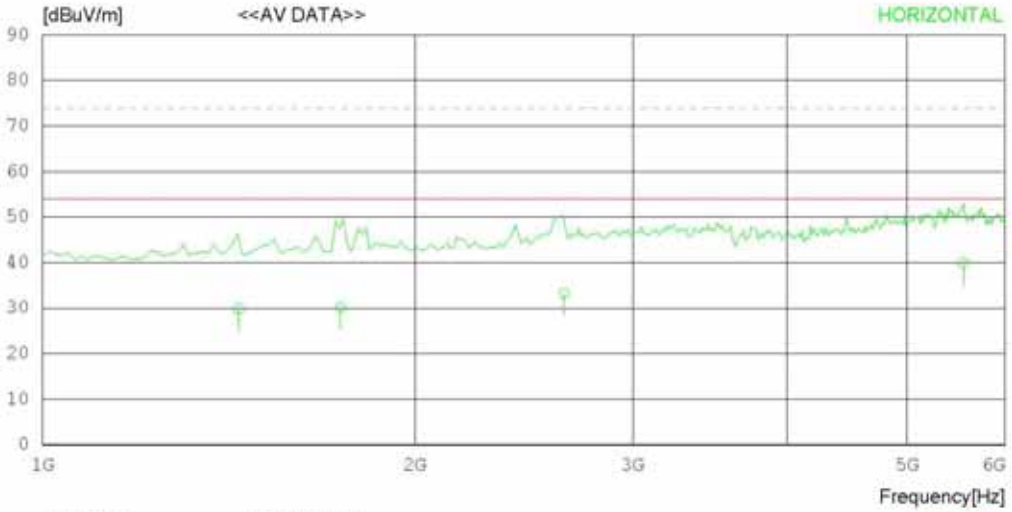
RADIATED EMISSION

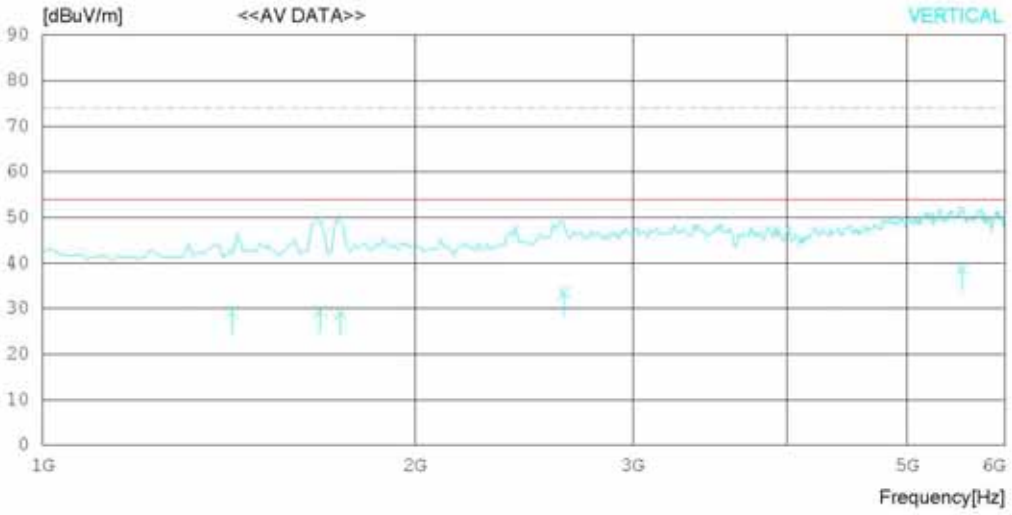
Date : 2012-02-03

Model Name	: 32LQ630H-UA	Reference No.	:		
Model No.	:	Power Supply	:	120V	60Hz
Serial No.	:	Temp/Humi	:	19 'C	28 % 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 : 2012-02-03

Model Name	:	32LQ630H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	19 'C 28 % 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	1439.839	40.7	25.0	5.8	41.6	29.9	54.0	24.1	100	149
2	1741.000	40.1	25.2	6.5	41.7	30.1	54.0	23.9	100	32
3	2639.135	39.4	27.7	8.0	41.8	33.3	54.0	20.7	100	1
4	5550.000	35.8	34.8	11.9	42.6	39.9	54.0	14.1	100	151
----- Vertical ------										
5	1424.000	40.3	24.9	5.8	41.7	29.3	54.0	24.7	100	178
6	1675.750	39.8	25.2	6.3	41.7	29.6	54.0	24.4	100	168
7	1741.000	39.0	25.2	6.5	41.7	29.0	54.0	25.0	100	177
8	2639.134	39.6	27.7	8.0	41.8	33.5	54.0	20.5	100	192
9	5537.500	34.6	34.9	11.9	42.7	38.7	54.0	15.3	100	0

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Appendix 1

List of Test and Measurement Instruments

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1. Conducted Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐	SPECTRUM ANALYZER	8591E	H/P	3649A05889	2011.03.07	2012.03.07
☐	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	2011.07.01	2012.07.01
☐	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2011.03.08	2012.03.08
☒	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	CBL6112B	SCHAFFNER	2737	2010.07.14	2012.07.14
☒	HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2010.04.13	2012.04.13
☒	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	2011.07.01	2012.07.01
☐	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	2011.03.08	2012.03.08
☐	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	2011.03.07	2012.03.07

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