

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 32LP620H-UH
Order No. : DEMC1303-00963
Date of receipt : 2013-03-12
Test duration : 2013-03-19 ~ 2013-03-26
Use of report : FCC CoC Marking
Date of Issue : 2013-03-26

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 : 23 °C,
Humidity : (32 ~ 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.

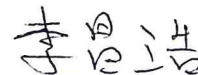
This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:



Engineer
JunHo Park

Reviewed by:



Technical Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

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	6
6. Test Results : Emission	7
6.1 Conducted Disturbance	7
6.2 Radiated Disturbance	14
Appendix 1	34
List of Test and Measurement Instruments	34
Appendix 2	36
Report Revision History	36

1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

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

<http://www.digitalemcc.com>

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

2. Test Laboratory

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

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1221C	ISO/IEC 17025

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

3. General Information of EUT

Model No.	32LP620H-UH
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ32LP620HUH
Type of Sample Tested	Pre-Production
High Frequency	800 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.3 A
Supplied Power for Test	AC 120 V, 60 Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

RGB (PC), HDMI (PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720x400	31.46	70.08
640x480	31.46	59.94
800x600	37.87	60.31
1024x768	48.36	60.00
1360x768	47.71	60.01

4. Test Summary

4.1 Applied standards and test results

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

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

4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (°C)	Humidity (% R.H.)
Conducted Disturbance	03-19	23	32
Radiated Disturbance	03-25 03-26	23	34

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.15521	N	55.0	Quasi-Peak	65.7	10.7

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
236.770	H	42.5	Quasi-Peak	46.0	3.5

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 : 'H' Pattern mode, 1360x768 Resolution
- HDMI MODE : 'H' Pattern mode, 1360x768 Resolution
- USB MODE : USB video file play

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	DCSCMF	G3RZKBX	DELL	Power	1.8	Not use	Non-shield	Plastic	DOC
				USB	1.7	Not use	Non-shield		
				USB	1.6	Not use	Non-shield		
				USB	1.8	Not use	Shield		
				HDMI	1.9	Not use	Shield		
				DSUB	1.6	Not use	Shield		
Keyboard	SKG-3000UB	TAKB601238B	MONITEREY INTERNATIONAL CORP.	USB	1.7	Not use	Shield	Plastic	DOC
MOUSE	1484	352700021378	MICROSOFT CORPORATION	USB	1.6	Not use	Shield	Plastic	DOC
PRINT	EPSON Aculaser M1200	LWTZ181070	EPSON	Power	1.8	Not use	Shield	Plastic	DOC
				USB	1.8	Not use	Non-shield		
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS.	POWER AV	1.8 1.5	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	CRUZER 4GB	N/A	SANDISK	USB	-	-	-	Plastic	DOC
HEADSET	COV9	N/A	COSY	STEREO	1.9	Not use	Non-shield	Plastic	DOC
REMOTE CONTROL	AKB73755414	N/A	HANSUNG ELECTRONICS CO., LTD.	-	-	-	-	-	-

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

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

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

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

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

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

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

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

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

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

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

6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50
Note 1 The lower limit shall apply at the transition frequencies.				
Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note) 1. Emission Level = Reading Value + Correction Factor.

2. Correction Factor = Cable Loss + Insertion Loss of LISN

3. Margin = Limit - Emission level

Test Result

< DSUB MODE >



Results of Conducted Emission

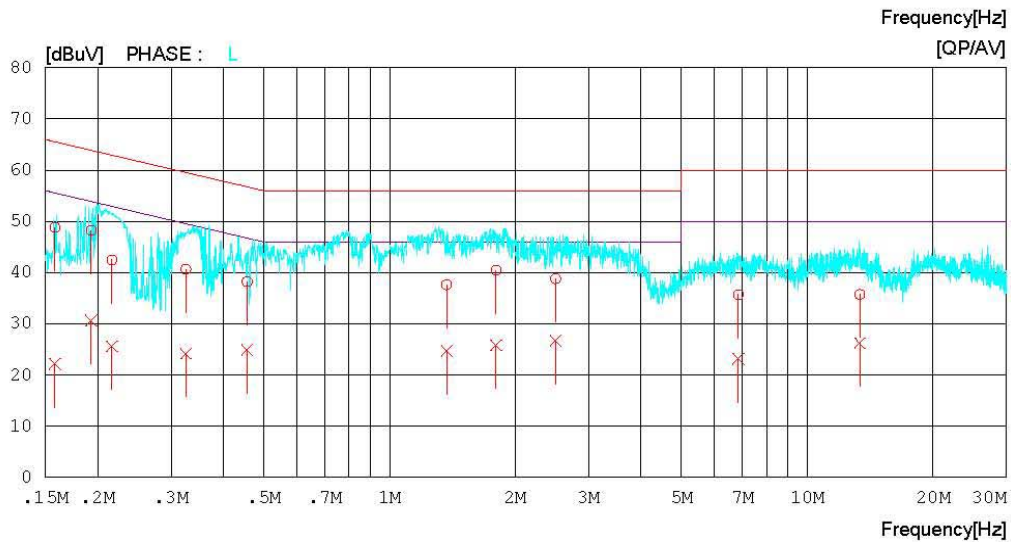
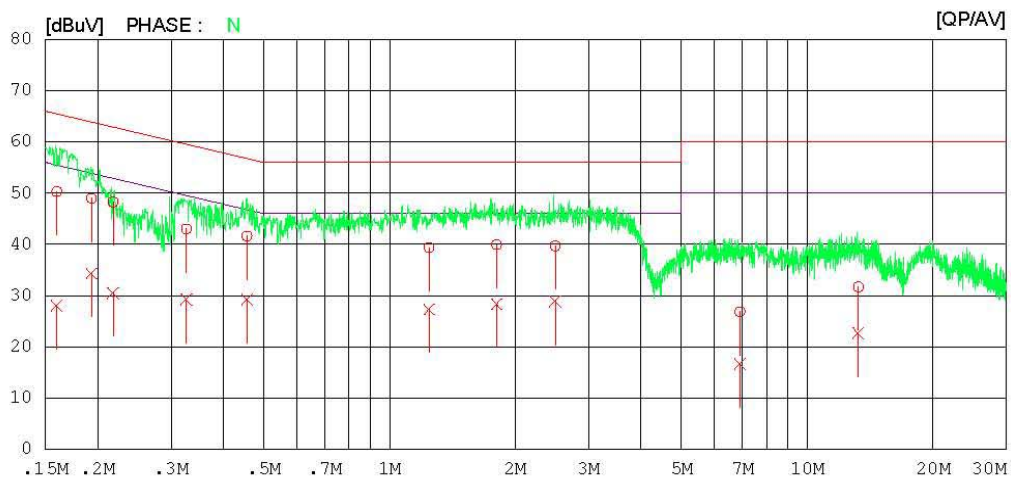
Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23 C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23°C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15970	50.1	27.8	0.2	50.3	28.0	65.5	55.5	15.2	27.5	N
2	0.19350	48.8	34.1	0.2	49.0	34.3	63.9	53.9	14.9	19.6	N
3	0.21801	48.1	30.3	0.2	48.3	30.5	62.9	52.9	14.6	22.4	N
4	0.32650	42.8	29.0	0.2	43.0	29.2	59.5	49.5	16.5	20.3	N
5	0.45585	41.4	29.0	0.2	41.6	29.2	56.8	46.8	15.2	17.6	N
6	1.24500	39.1	27.0	0.3	39.4	27.3	56.0	46.0	16.6	18.7	N
7	1.80550	39.6	28.0	0.3	39.9	28.3	56.0	46.0	16.1	17.7	N
8	2.49350	39.4	28.6	0.3	39.7	28.9	56.0	46.0	16.3	17.1	N
9	6.90450	26.3	16.2	0.5	26.8	16.7	60.0	50.0	33.2	33.3	N
10	13.26400	31.0	21.9	0.7	31.7	22.6	60.0	50.0	28.3	27.4	N
11	0.15813	48.6	22.0	0.2	48.8	22.2	65.6	55.6	16.8	33.4	L
12	0.19315	48.1	30.5	0.2	48.3	30.7	63.9	53.9	15.6	23.2	L
13	0.21656	42.3	25.4	0.2	42.5	25.6	62.9	52.9	20.4	27.3	L
14	0.32569	40.5	24.0	0.2	40.7	24.2	59.6	49.6	18.9	25.4	L
15	0.45638	38.0	24.7	0.2	38.2	24.9	56.8	46.8	18.6	21.9	L
16	1.37100	37.3	24.4	0.3	37.6	24.7	56.0	46.0	18.4	21.3	L
17	1.79850	40.2	25.5	0.3	40.5	25.8	56.0	46.0	15.5	20.2	L
18	2.49950	38.5	26.4	0.3	38.8	26.7	56.0	46.0	17.2	19.3	L
19	6.84150	35.2	22.7	0.5	35.7	23.2	60.0	50.0	24.3	26.8	L
20	13.36950	35.1	25.6	0.7	35.8	26.3	60.0	50.0	24.2	23.7	L

< HDMI MODE >



Results of Conducted Emission

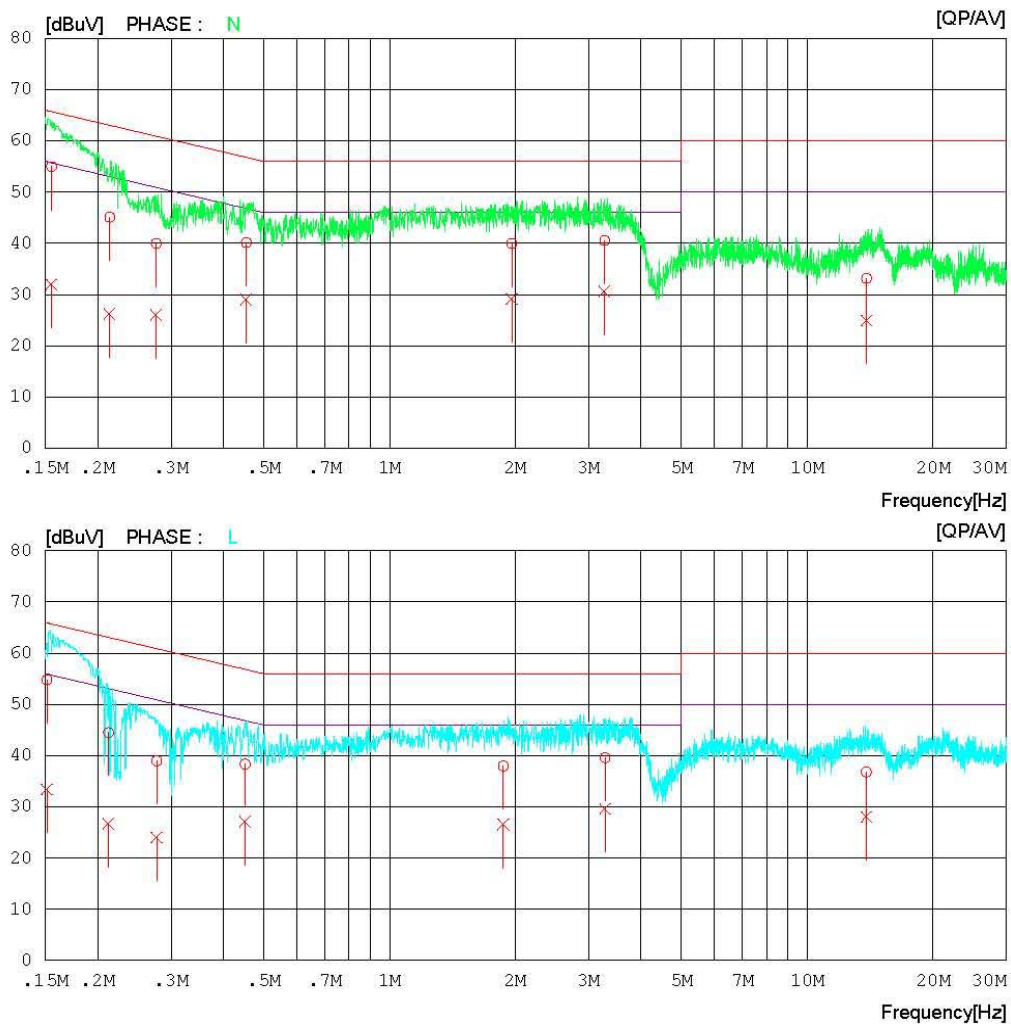
Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23 C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23 °C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15521	54.8	31.7	0.2	55.0	31.9	65.7	55.7	10.7	23.8	N
2	0.21389	44.9	26.0	0.2	45.1	26.2	63.1	53.1	18.0	26.9	N
3	0.27636	39.7	25.8	0.2	39.9	26.0	60.9	50.9	21.0	24.9	N
4	0.45405	40.0	28.8	0.2	40.2	29.0	56.8	46.8	16.6	17.8	N
5	1.96200	39.7	28.8	0.3	40.0	29.1	56.0	46.0	16.0	16.9	N
6	3.27400	40.2	30.3	0.3	40.5	30.6	56.0	46.0	15.5	15.4	N
7	13.87400	32.4	24.2	0.7	33.1	24.9	60.0	50.0	26.9	25.1	N
8	0.15131	54.6	33.2	0.2	54.8	33.4	65.9	55.9	11.1	22.5	L
9	0.21250	44.3	26.5	0.2	44.5	26.7	63.1	53.1	18.6	26.4	L
10	0.27713	38.8	23.9	0.2	39.0	24.1	60.9	50.9	21.9	26.8	L
11	0.45149	38.2	26.9	0.2	38.4	27.1	56.8	46.8	18.4	19.7	L
12	1.87350	37.7	26.3	0.3	38.0	26.6	56.0	46.0	18.0	19.4	L
13	3.28400	39.3	29.3	0.3	39.6	29.6	56.0	46.0	16.4	16.4	L
14	13.85900	36.1	27.3	0.7	36.8	28.0	60.0	50.0	23.2	22.0	L

< USB MODE >



Results of Conducted Emission

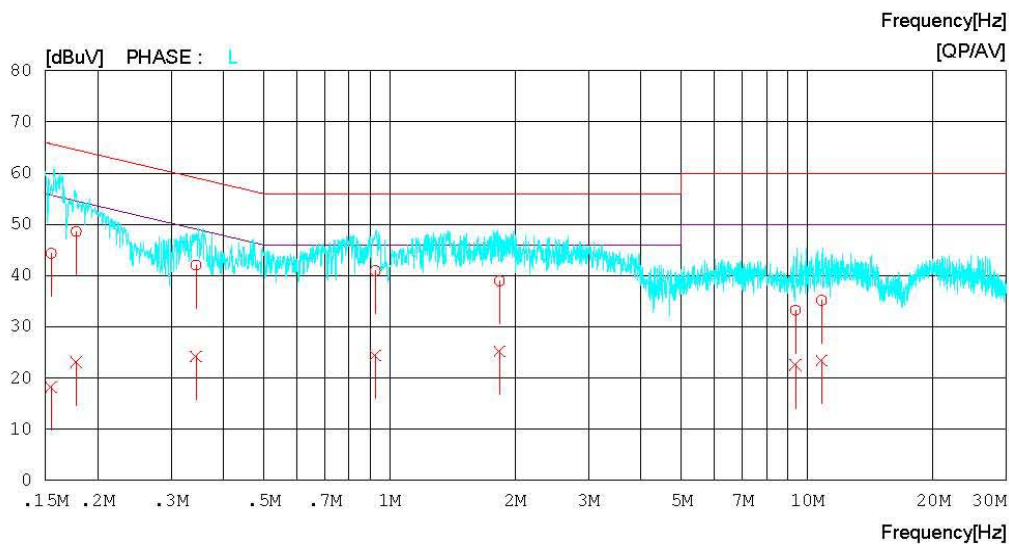
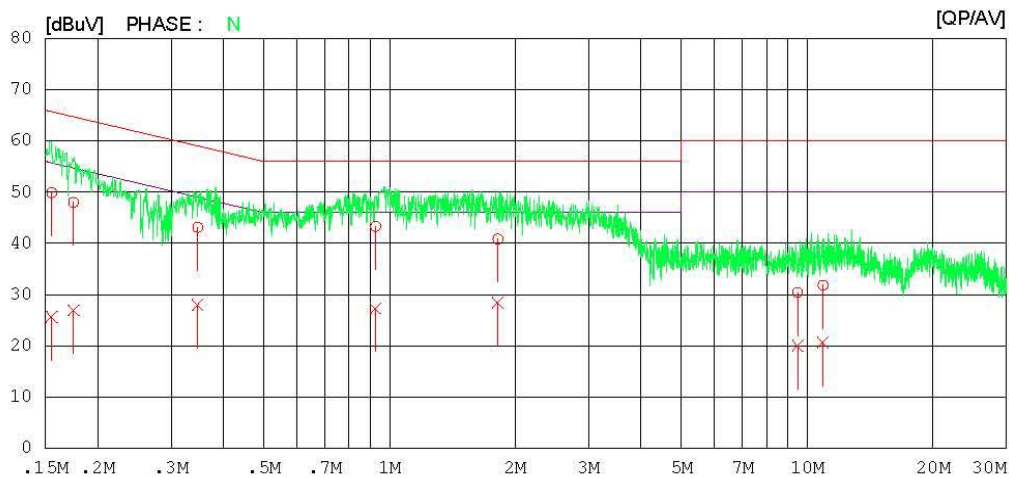
Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23 C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2013-03-19

Model No. : 32LP620H-UH
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 23°C 32 % R. H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15538	49.7	25.4	0.2	49.9	25.6	65.7	55.7	15.8	30.1	N
2	0.17530	47.8	26.8	0.2	48.0	27.0	64.7	54.7	16.7	27.7	N
3	0.34744	42.9	27.8	0.2	43.1	28.0	59.0	49.0	15.9	21.0	N
4	0.92665	43.1	27.1	0.2	43.3	27.3	56.0	46.0	12.7	18.7	N
5	1.81850	40.5	28.1	0.3	40.8	28.4	56.0	46.0	15.2	17.6	N
6	9.48900	29.7	19.3	0.7	30.4	20.0	60.0	50.0	29.6	30.0	N
7	10.91900	31.1	20.0	0.7	31.8	20.7	60.0	50.0	28.2	29.3	N
8	0.15503	44.1	18.0	0.2	44.3	18.2	65.7	55.7	21.4	37.5	L
9	0.17774	48.4	23.0	0.2	48.6	23.2	64.6	54.6	16.0	31.4	L
10	0.34419	41.9	24.1	0.2	42.1	24.3	59.1	49.1	17.0	24.8	L
11	0.92515	40.7	24.2	0.2	40.9	24.4	56.0	46.0	15.1	21.6	L
12	1.83450	38.7	24.9	0.3	39.0	25.2	56.0	46.0	17.0	20.8	L
13	9.37450	32.5	21.8	0.7	33.2	22.5	60.0	50.0	26.8	27.5	L
14	10.83300	34.5	22.7	0.7	35.2	23.4	60.0	50.0	24.8	26.6	L

6.2 Radiated Disturbance

6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 3 m or 10 m away from the interference receiving antenna in the **10m semi-anechoic chamber**.

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

Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m above the reference ground plane continuously to determine associated with higher emission levels and record them.

The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

For below 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.

Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz frequency range.

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

6.2.2 Limit for Radiated Disturbance

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

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

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (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

Test Result

< DSUB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

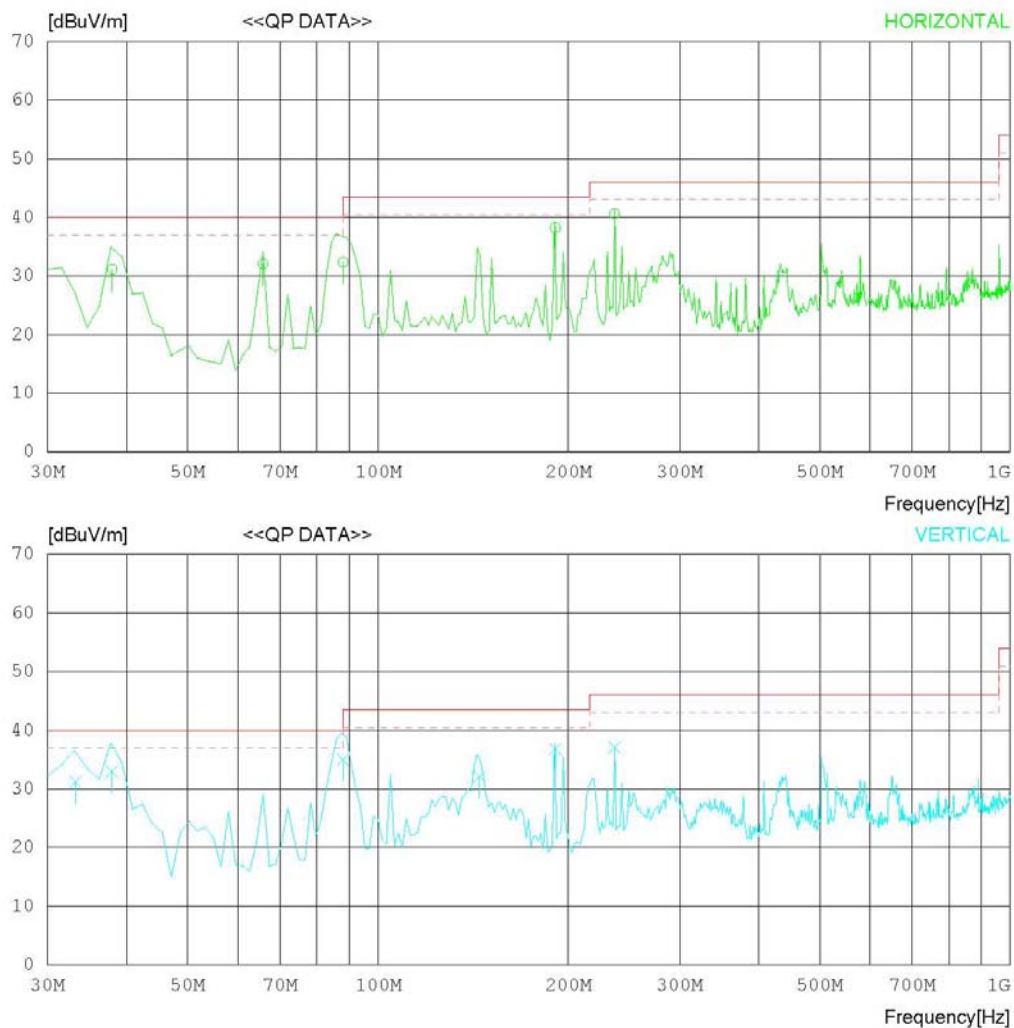
Date : 2013-03-25

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-25

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°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	37.967	40.3	13.8	1.1	24.1	31.1	40.0	8.9	100	118
2	65.769	48.9	5.9	1.6	24.4	32.0	40.0	8.0	300	286
3	88.000	46.3	8.7	1.5	24.2	32.3	40.0	7.7	205	3
4	190.737	50.3	9.7	2.2	24.0	38.2	43.5	5.3	100	274
5	236.769	50.0	11.9	2.5	23.8	40.6	46.0	5.4	100	348
----- Vertical -----										
6	33.227	37.9	16.2	1.0	23.9	31.2	40.0	8.8	100	202
7	37.943	42.1	13.9	1.1	24.1	33.0	40.0	7.0	100	250
8	88.045	49.0	8.7	1.5	24.2	35.0	43.5	8.5	244	118
9	144.667	43.9	10.7	1.7	24.2	32.1	43.5	11.4	100	336
10	190.737	48.9	9.7	2.2	24.0	36.8	43.5	6.7	100	263
11	236.769	46.5	11.9	2.5	23.8	37.1	46.0	8.9	100	96

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

RADIATED EMISSION

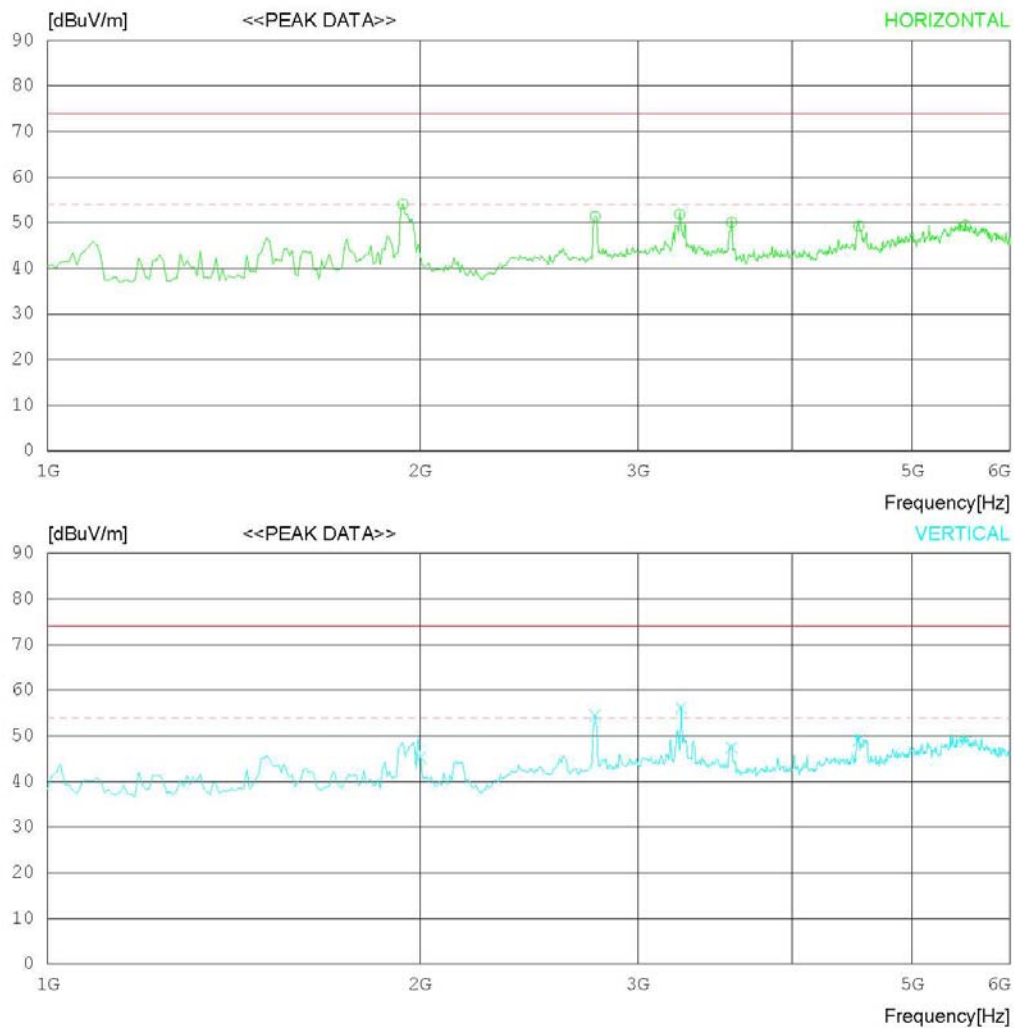
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % 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	1937.500	64.5	24.6	4.6	39.6	54.1	74.0	19.9	100	240
2	2770.844	56.9	28.3	5.5	39.3	51.4	74.0	22.6	100	358
3	3243.607	56.8	28.9	5.5	39.3	51.9	74.0	22.1	100	193
4	3572.138	54.3	29.1	5.9	39.2	50.1	74.0	23.9	100	358
5	4525.665	50.9	31.0	6.3	38.9	49.3	74.0	24.7	100	358
6	5519.239	45.8	35.0	7.2	38.6	49.4	74.0	24.6	100	358
----- Vertical -----										
7	2001.602	55.4	24.6	4.7	39.5	45.2	74.0	28.8	100	1
8	2770.844	60.1	28.3	5.5	39.3	54.6	74.0	19.4	100	210
9	3251.620	61.0	28.9	5.5	39.3	56.1	74.0	17.9	100	1
10	3572.138	51.6	29.1	5.9	39.2	47.4	74.0	26.6	100	168
11	4525.665	50.6	31.0	6.3	38.9	49.0	74.0	25	100	207
12	5519.239	45.1	35.0	7.2	38.6	48.7	74.0	25.3	100	1

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

RADIATED EMISSION

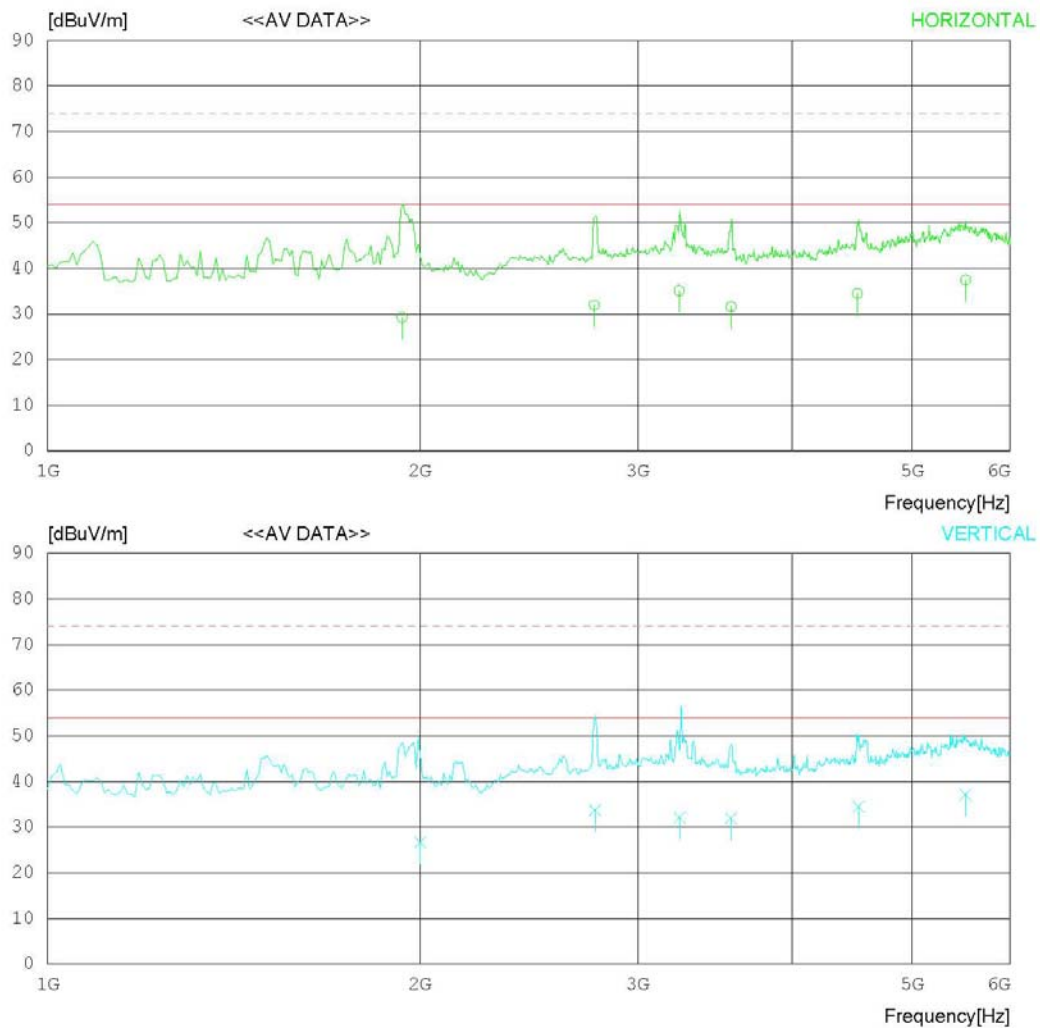
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34% R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % 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	1934.083	39.7	24.6	4.6	39.6	29.3	54.0	24.7	100	240
2	2765.801	37.5	28.3	5.5	39.3	32.0	54.0	22.0	100	358
3	3240.308	39.5	28.9	5.9	39.2	35.1	54.0	18.9	100	193
4	3569.276	35.1	29.1	6.3	38.9	31.6	54.0	22.4	100	358
5	4517.179	35.0	31.0	7.1	38.6	34.5	54.0	19.5	100	358
6	5522.252	33.0	34.9	7.9	38.3	37.5	54.0	16.5	100	358
----- Vertical -----										
7	2771.891	39.2	28.3	5.5	39.3	33.7	54.0	20.3	100	210
8	3243.981	36.5	28.9	5.9	39.2	32.1	54.0	21.9	100	21
9	3568.859	35.4	29.1	6.3	38.9	31.9	54.0	22.1	100	168
10	4525.665	34.9	31.0	7.2	38.6	34.5	54.0	19.5	100	207
11	5522.228	32.6	34.9	7.9	38.3	37.1	54.0	16.9	100	7
12	2001.795	36.8	24.6	4.7	39.5	26.6	54.0	27.4	100	153

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

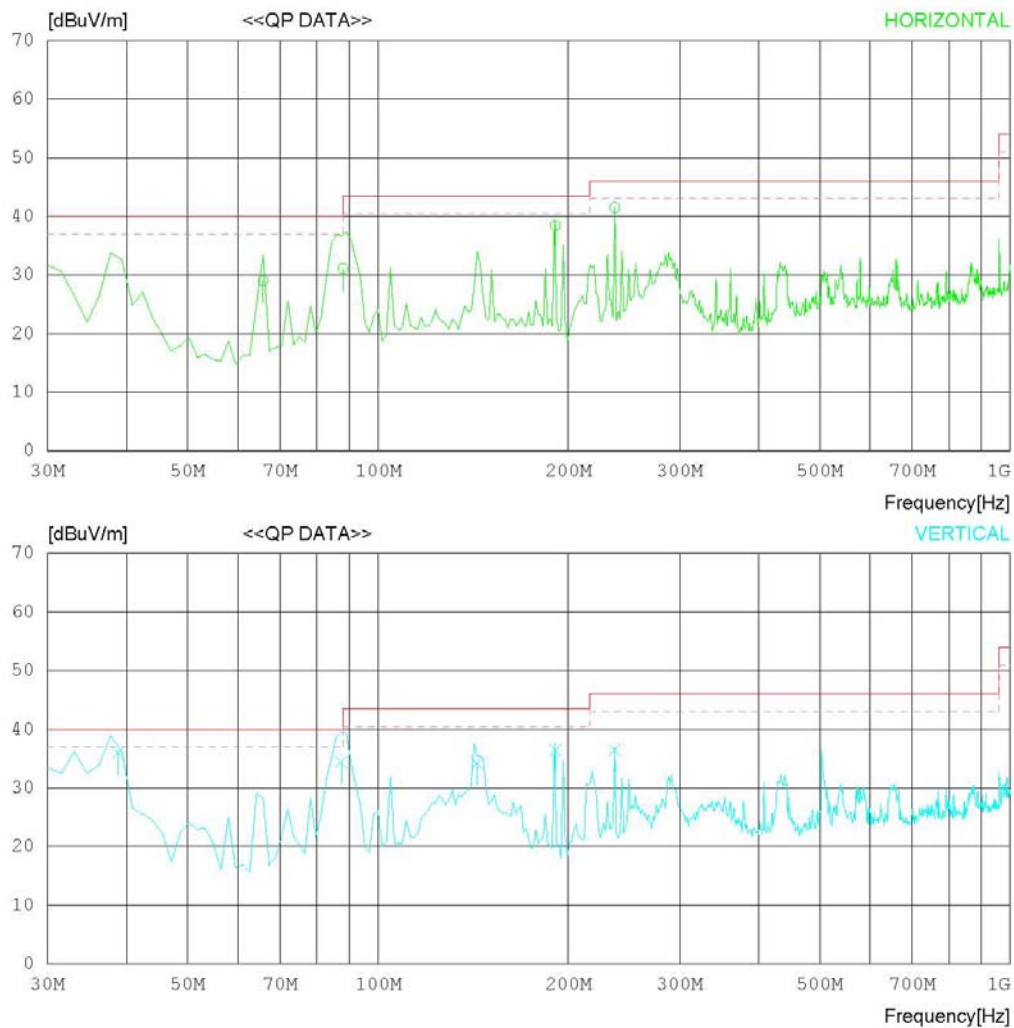
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34% R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°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	65.801	45.9	5.9	1.6	24.4	29.0	40.0	11.0	300	276
2	88.000	45.1	8.7	1.5	24.2	31.1	40.0	8.9	188	347
3	190.737	50.5	9.7	2.2	24.0	38.4	43.5	5.1	100	22
4	236.802	50.9	11.9	2.5	23.8	41.5	46.0	4.5	218	114
----- Vertical -----										
5	38.782	45.5	13.5	1.1	24.1	36.0	40.0	4.0	100	212
6	87.449	48.6	8.5	1.5	24.2	34.4	40.0	5.6	208	227
7	143.179	45.9	10.8	1.7	24.2	34.2	43.5	9.3	100	307
8	190.737	48.6	9.7	2.2	24.0	36.5	43.5	7.0	100	86
9	236.804	45.9	11.9	2.5	23.8	36.5	46.0	9.5	100	313

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

RADIATED EMISSION

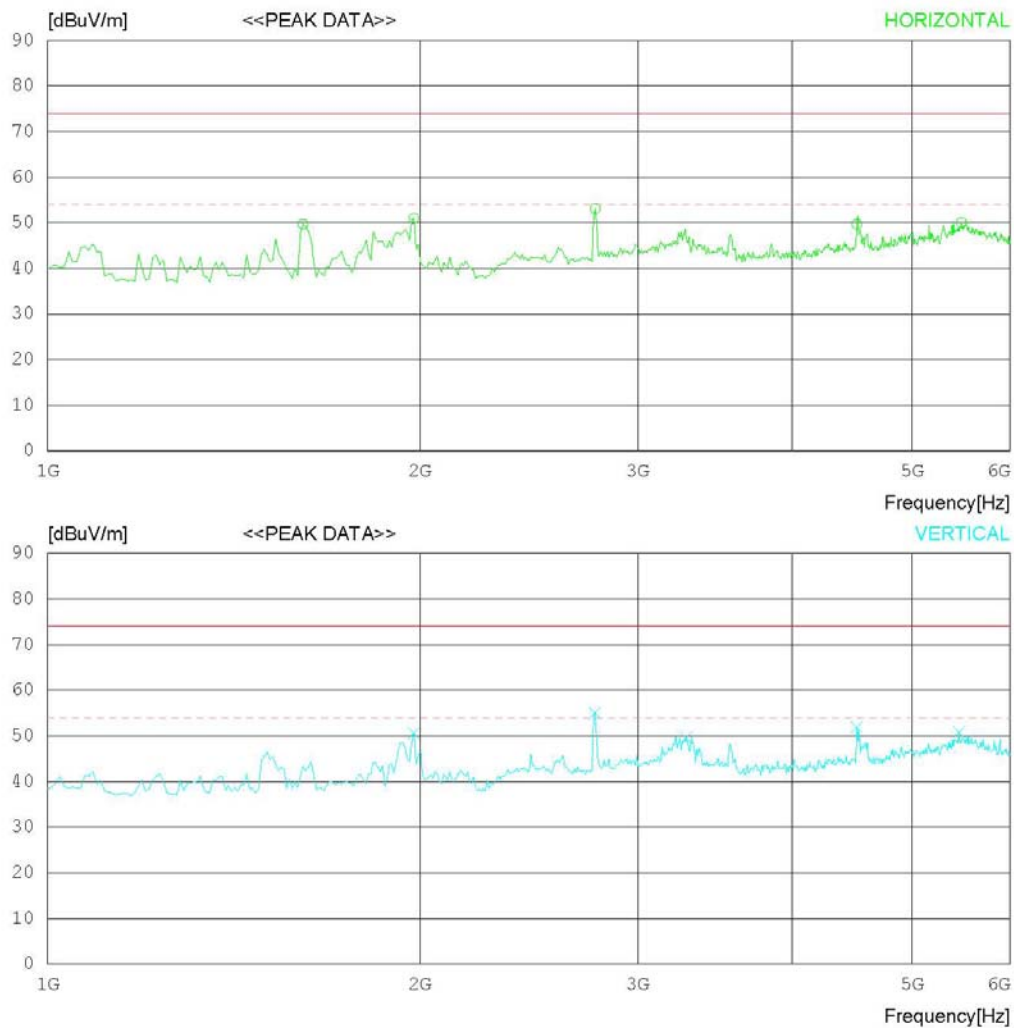
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % R. H.
Test Condition : HDMI	Operator :

Memo :

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1608.974	60.8	24.6	4.2	39.9	49.7	74.0	24.3	100	358
2	1977.564	61.2	24.6	4.7	39.5	51.0	74.0	23	100	358
3	2770.844	58.6	28.3	5.5	39.3	53.1	74.0	20.9	100	358
4	4509.639	50.3	30.9	7.1	38.6	49.7	74.0	24.3	100	205
5	5479.175	45.4	35.0	7.9	38.3	50.0	74.0	24	100	221
----- Vertical -----										
6	1977.564	60.8	24.6	4.7	39.5	50.6	74.0	23.4	100	318
7	2770.844	60.5	28.3	5.5	39.3	55.0	74.0	19	100	227
8	3283.672	53.8	28.9	6.0	39.1	49.6	74.0	24.4	100	1
9	4509.639	52.5	30.9	7.1	38.6	51.9	74.0	22.1	100	1
10	5455.137	46.4	34.8	7.9	38.3	50.8	74.0	23.2	100	1

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

RADIATED EMISSION

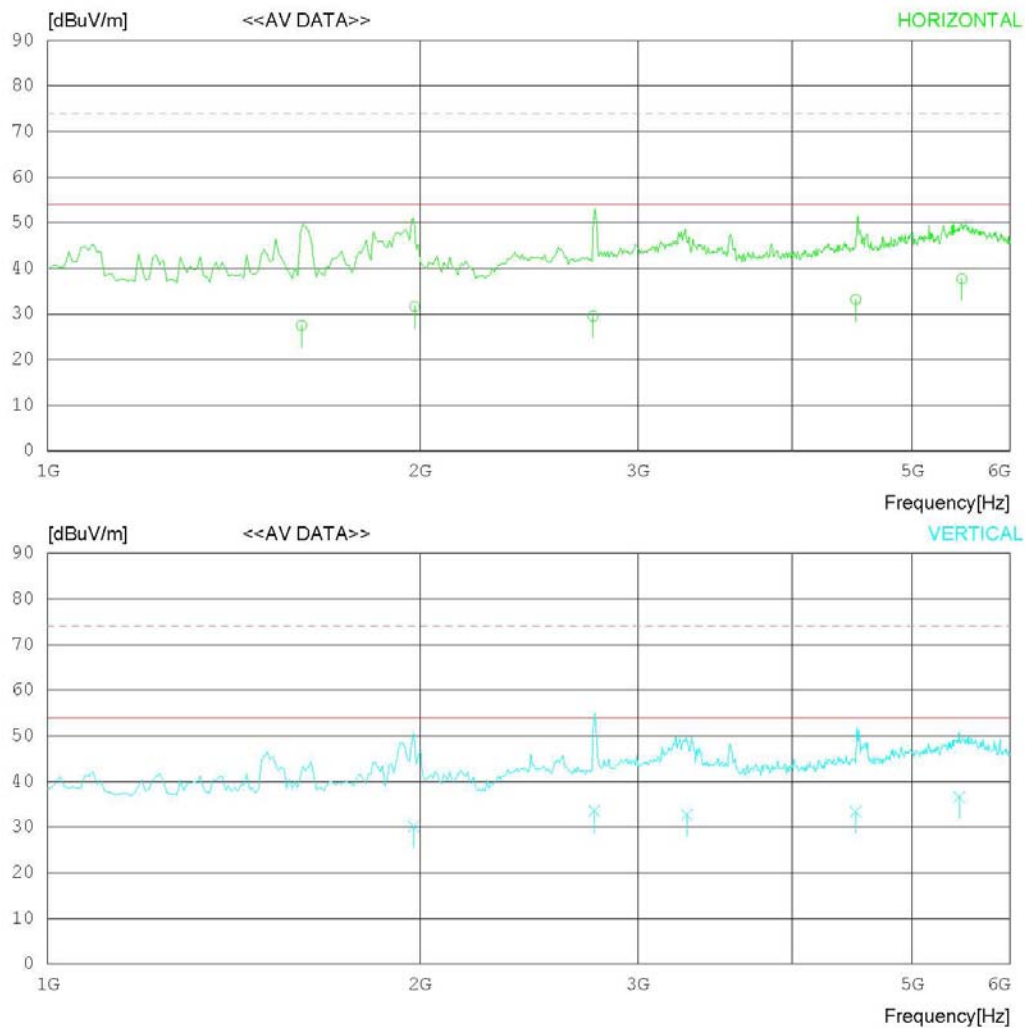
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34% R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % R. H.
Test Condition : HDMI	Operator :

Memo :

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

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1604.731	38.6	24.6	4.2	39.9	27.5	54.0	26.5	100	108
2	1980.526	41.8	24.6	4.7	39.5	31.6	54.0	22.4	100	228
3	2760.256	35.1	28.2	5.5	39.3	29.5	54.0	24.5	100	3
4	4500.474	33.8	30.9	7.1	38.6	33.2	54.0	20.8	100	205
5	5484.218	33.1	35.0	7.9	38.3	37.7	54.0	16.3	100	221
----- Vertical -----										
6	1977.353	40.4	24.6	4.7	39.5	30.2	54.0	23.8	100	318
7	2767.083	39.0	28.3	5.5	39.3	33.5	54.0	20.5	100	227
8	3287.776	36.9	28.9	6.0	39.1	32.7	54.0	21.3	100	212
9	4500.442	34.0	30.9	7.1	38.6	33.4	54.0	20.6	100	273
10	5458.933	32.1	34.9	7.9	38.3	36.6	54.0	17.4	100	3

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

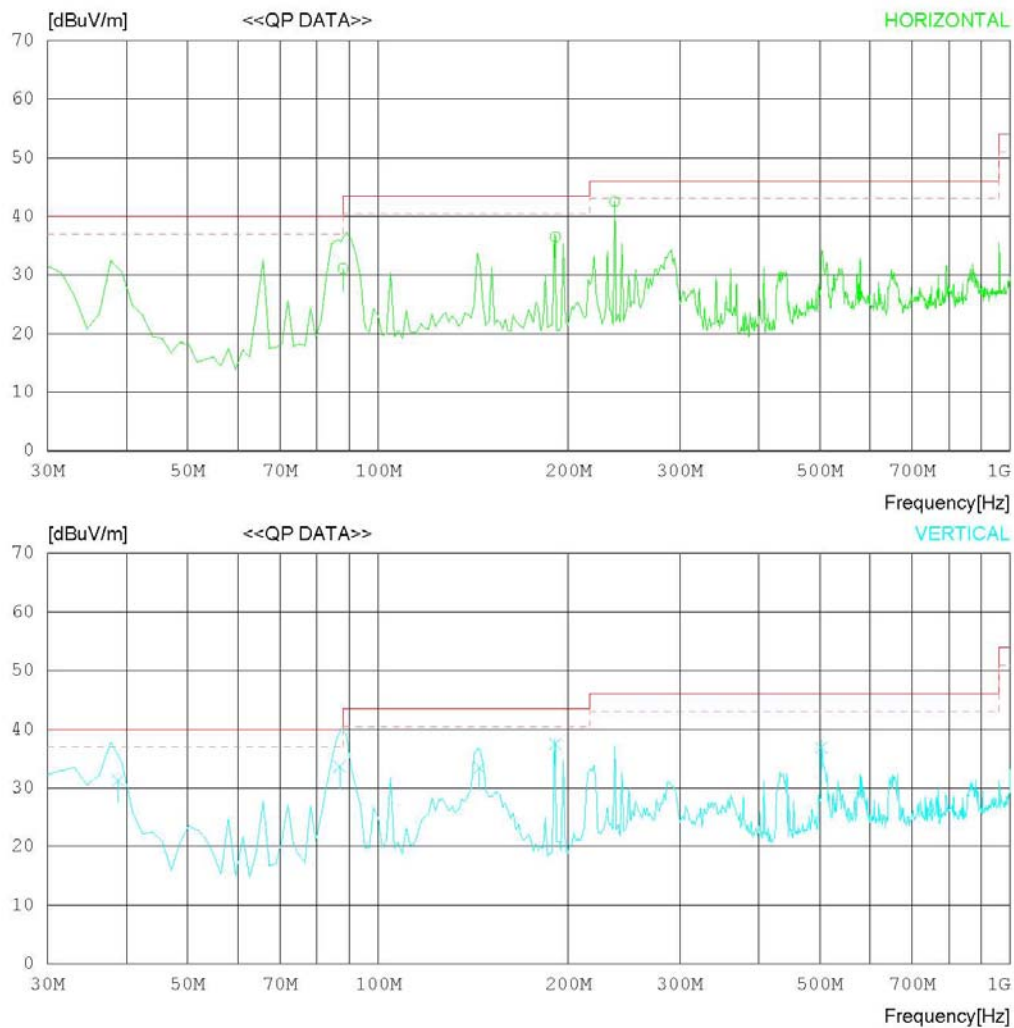
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°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	88.000	45.1	8.7	1.5	24.2	31.1	40.0	8.9	311	347
2	190.721	48.6	9.7	2.2	24.0	36.5	43.5	7.0	100	55
3	236.770	51.9	11.9	2.5	23.8	42.5	46.0	3.5	285	180
----- Vertical -----										
4	38.810	40.9	13.4	1.1	24.1	31.3	40.0	8.7	100	266
5	87.032	47.9	8.5	1.5	24.2	33.7	40.0	6.3	200	121
6	144.683	45.3	10.7	1.7	24.2	33.5	43.5	10.0	100	341
7	190.737	49.6	9.7	2.2	24.0	37.5	43.5	6.0	100	267
8	502.849	38.6	17.4	3.9	23.0	36.9	46.0	9.1	100	38

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

RADIATED EMISSION

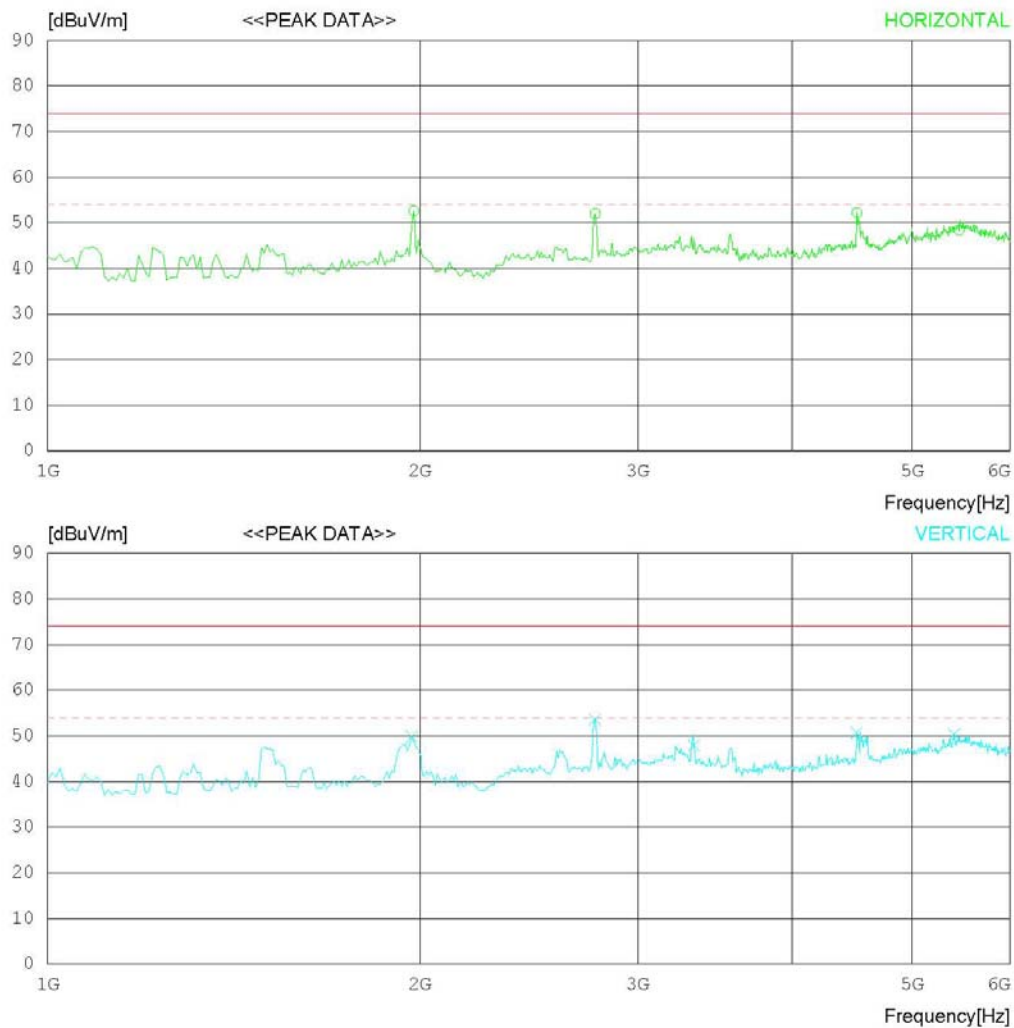
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34 % R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % R. H.
Test Condition : USB	Operator :

Memo :

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1977.564	62.8	24.6	4.7	39.5	52.6	74.0	21.4	100	205
2	2770.844	57.5	28.3	5.5	39.3	52.0	74.0	22	100	159
3	4509.639	52.8	30.9	7.1	38.6	52.2	74.0	21.8	100	210
4	5455.137	44.0	34.8	7.9	38.3	48.4	74.0	25.6	100	217
----- Vertical -----										
5	1969.551	60.0	24.6	4.7	39.5	49.8	74.0	24.2	100	1
6	2770.844	59.1	28.3	5.5	39.3	53.6	74.0	20.4	100	233
7	3331.750	52.1	28.9	6.0	39.1	47.9	74.0	26.1	100	321
8	4509.639	51.3	30.9	7.1	38.6	50.7	74.0	23.3	100	1
9	5407.061	46.3	34.6	7.9	38.4	50.4	74.0	23.6	100	8

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

RADIATED EMISSION

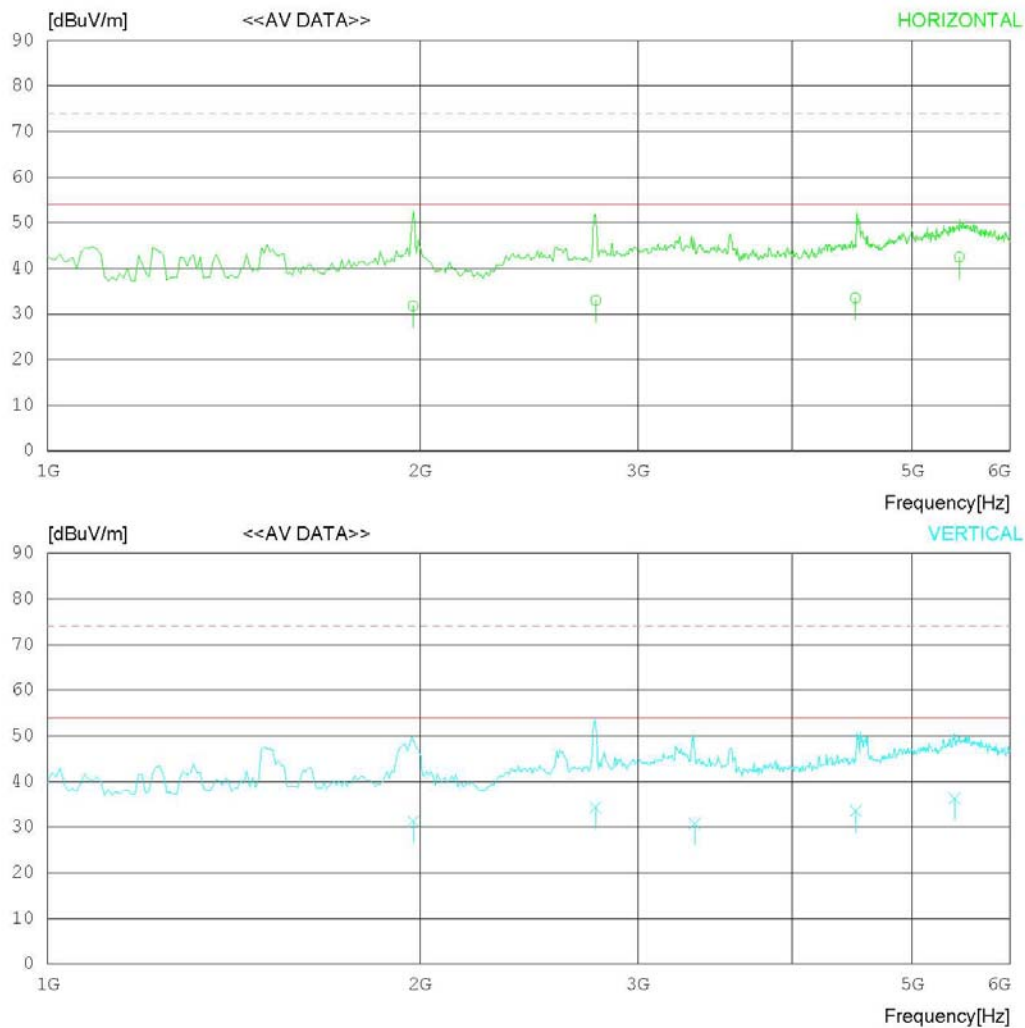
Date : 2013-03-26

Model Name : 32LP620H-UH
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 23°C 34% R. H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-03-26

Model Name : 32LP620H-UH	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 23°C 34 % R. H.
Test Condition : USB	Operator :

Memo :

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

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1974.052	42.0	24.6	4.7	39.5	31.8	54.0	22.2	100	205
2	2774.429	38.5	28.3	5.5	39.3	33.0	54.0	21.0	100	159
3	4497.397	34.1	30.9	7.1	38.6	33.5	54.0	20.5	100	210
4	5457.558	38.0	34.9	7.9	38.3	42.5	54.0	11.5	100	217
----- Vertical -----										
5	1975.987	41.5	24.6	4.7	39.5	31.3	54.0	22.7	100	244
6	2773.462	39.8	28.3	5.5	39.3	34.3	54.0	19.7	100	233
7	3337.218	35.0	28.9	6.0	39.1	30.8	54.0	23.2	100	321
8	4500.442	34.2	30.9	7.1	38.6	33.6	54.0	20.4	100	118
9	5411.220	32.2	34.6	7.9	38.4	36.3	54.0	17.7	100	8

Appendix 1

List of Test and Measurement Instruments

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

1. Conducted Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐ SPECTRUM ANALYZER	8591E	H/P	3649A05889	2013.02.28	2014.02.28
☐ RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐ LISN	KNW-407	KYORITSU	8-317-8	2013.01.08	2014.01.08
☐ LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
☐ 50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08
☒ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
☒ LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
☒ LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
☒ 50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08

2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒ EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2013.01.08	2014.01.08
☒ BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
☒ HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
☒ AMPLIFIER	8447E	H/P	2945A02865	2013.01.08	2014.01.08
☒ PREAMPLIFIER	8449B	AGILENT	3008A01590	2013.02.27	2014.02.27
☐ SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
☐ AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
☐ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2013.02.27	2014.02.27
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
☐ LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
☐ LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
☐ AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2013.02.28	2014.02.28

Appendix 2

Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
None	Original	N/A	N/A