



683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

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

<http://www.digitalemcc.com>

FCC Test Report

for

LCD TV Monitor

Applicant : LG Electronics Inc.

Model Number : 32LD650H-UA

Manufacturer : LG Electronics Inc.

ANSI C 63.4:2003

Test Standard : FCC Part 15 Subpart B

(Type of Device : Class B Computing Device Peripheral (JBP))

Date of Tests : July 13 ~ 14, 2010

Date of Issue : July 23, 2010

Tested by : M.K.KIM/Engineer

Reviewed by : Y.K.SHIN/Manager

A handwritten signature in black ink, appearing to read "mkkim", written over a horizontal line.

A handwritten signature in black ink, appearing to read "shin", written over a horizontal line.

This test result only responds to the tested sample.

It is not allowed to copy this report even partly without the allowance of the test laboratory.

CONTENTS

1. General Remarks	3
2. Test Laboratory	3
3. General Information of EUT	4
3.1 Product Information	4
4. Test Summary	5
4.1 Summary of tests	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 Emission	7
6.2 Radiated Emission	15

1. General Remarks

This Report describes the emission characteristics of the tested product.

If the product will be used with additional equipment other than those mentioned in this report or if the tested product will be used against the manufacture's specifications, the compliance with the relevant standards for the system has to be ensured.

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	Test Facility list & NSA Data
	Japan	VCCI	C-1427, C-2807 R-1364, R-2556 T-1442	Test Facility list & NSA Data
Certification	Korea	KCC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK0826C	ISO/IEC 17025

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

DIGITAL EMC CO., LTD.

Address: 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

<http://www.digitalemcc.com>

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

3. General Information of EUT

3.1 Product Information

Equipment under Test	LCD TV Monitor
Model No.	32LD650H-UA
Add Model No.	32LD655H-UA
Serial No	NONE
Type of Sample Tested	Pre-Production
Rating Power Supply	AC120V, 60Hz
High Frequency	513MHz,1360*768(HDMI,D sub max resolution)
Supplied Power for Test	AC120V, 60Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea
Factory	LG Electronics Reynosa, Inc. LG Electronics USA, Inc_Reynosa 9801 South Cage Blvd. Suite 3F Pharr, TX. 78577
Date of Receipt of Sample	2010-06-30

< Resolution >

RGB-PC

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x400	31.469	70.08
640x480	31.469 37.861	59.94 72.80
800x600	37.879 48.077	60.31 72.18
1024x768	48.363 56.476	60.00 70.06
1280x768	47.776 60.289	59.870 74.893
1360x768	47.712	60.015
1280x1024	63.981 79.976	60.020 75.025
1920x1080	66.587	59.934

Depending on models

HDMI-PC

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x400	31.469	70.08
640x480	31.469	59.94
800x600	35.156 37.879	56.25 60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.712	60.015
1280x1024	63.981	60.02
1920x1080	67.50	60.00

Depending on models

4. Test Summary

4.1 Summary of tests

The applied standards to evaluate the compliance of requirements is 47CFR Part 15, Subpart B and the measurement procedures specified in ANSI C63.4 are performed.

Test Items	Applied Standards	Status
Emission		
Conducted Emission	FCC Part 15 Subpart B	C
Radiated Emission	FCC Part 15 Subpart B	C
Note 1: C=Conform NC=Not Conform NT=Not Tested NA=Not Applicable		

5. Test Set-up and operation mode

5.1 Principle of Configuration Selection

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

5.2 Test Operation Mode

- DSUB mode : Resolution 1920*1080 MAX, "H" character scroll
- DVI to HDMI mode : Resolution 1920*1080 MAX, "H" character scroll
- USB MP3 mode : MP3 play

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 than maximum 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 characters per screen is displayed.
- f) For a monitor that has no graphics capabilities, regardless of the video card used, a pattern consisting of 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 scrolling H's should be displayed. For a monitor that has no text capabilities, use a typical display. That pattern should be used for the remainder of the tests.

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	shield		
PC	S30MS	004SHVM019295	LG	Power	1.8	Non-shield	Plastic	DOC
				LAN	1.6	Non-shield	Plastic	
				USB	1.8	Shield	Plastic	
				DSUB	1.6	Shield	Plastic	
				DVI	1.9	Shield	Plastic	
				PS/2	1.6	Shield	Plastic	
				PS/2	1.8	Shield	Plastic	
				USB	-	-	-	
Keyboard	SKG-210P	TAKSC12254A	MONITEREY INTERNATIONAL CORP	PS/2	1.6	Non-shield	Plastic	DOC
Mouse	SML-510P	TAKS700467Y	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Non-shield	Plastic	DOC
Printer	SRP-770	N/A	BIXOLON	Power	1.8	Non-shield	Plastic	DOC
				USB	1.8	Shield	Plastic	

NOTE

- See "APPENDIX 1 Photographs" for actual system test setup

6. Test Results : Emission

6.1 Conducted Emission

RESULT : COMPLY

6.1.1 Measurement Procedure

In the range of 0.15MHz to 30MHz, the conducted emission was measured and set-up was made accordance with **ANSI C63.4:2003**.

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 TOYO conducted emission test software, the emissions were scanned from 150KHz to 30MHz 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 List of Test and Measurement Instruments

Name of Instrument	Model No.	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
Spectrum Analyzer	8591E	3649A05889	H.P	2010.03.12	2011.03.12
RFI/Field intensity Meter	KNM-2402	4N-170-3	KYORITSU	2010.07.02	2011.07.02
LISN	KNW-407	8-317-8	KYORITSU	2010.01.29	2011.01.29
LISN	KNW-242	8-654-15	KYORITSU	2010.01.29	2011.01.29
50 ohm Terminator	CT-01	N/A	TME	2010.01.12	2011.01.12

6.1.3 Limit for Conducted Emission

(1) Conducted Emission at mains ports of class A

Frequency range (MHz)	Limits dB(μ V)	
	Quasi-peak	Average
0.15 to 0.50	79	66
0.50 to 30	73	60
Note The lower limit shall apply at the transition frequencies.		

(2) Conducted Emission at mains ports of class B

Frequency range (MHz)	Limits dB(μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	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.		

6.1.4 Test Result

Test date	July 13, 2010
Ambient Temperature	26
Relative Humidity	39 % R.H.

Result : For the measurement data, see next page.

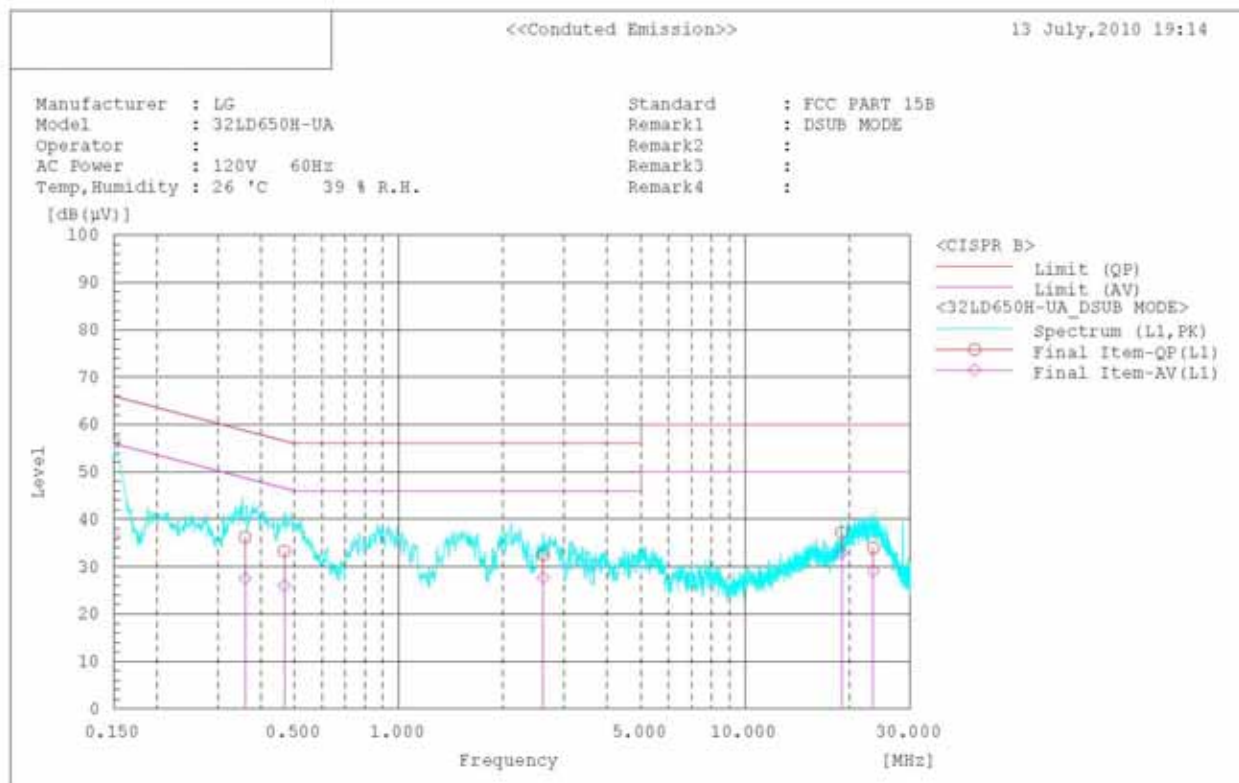
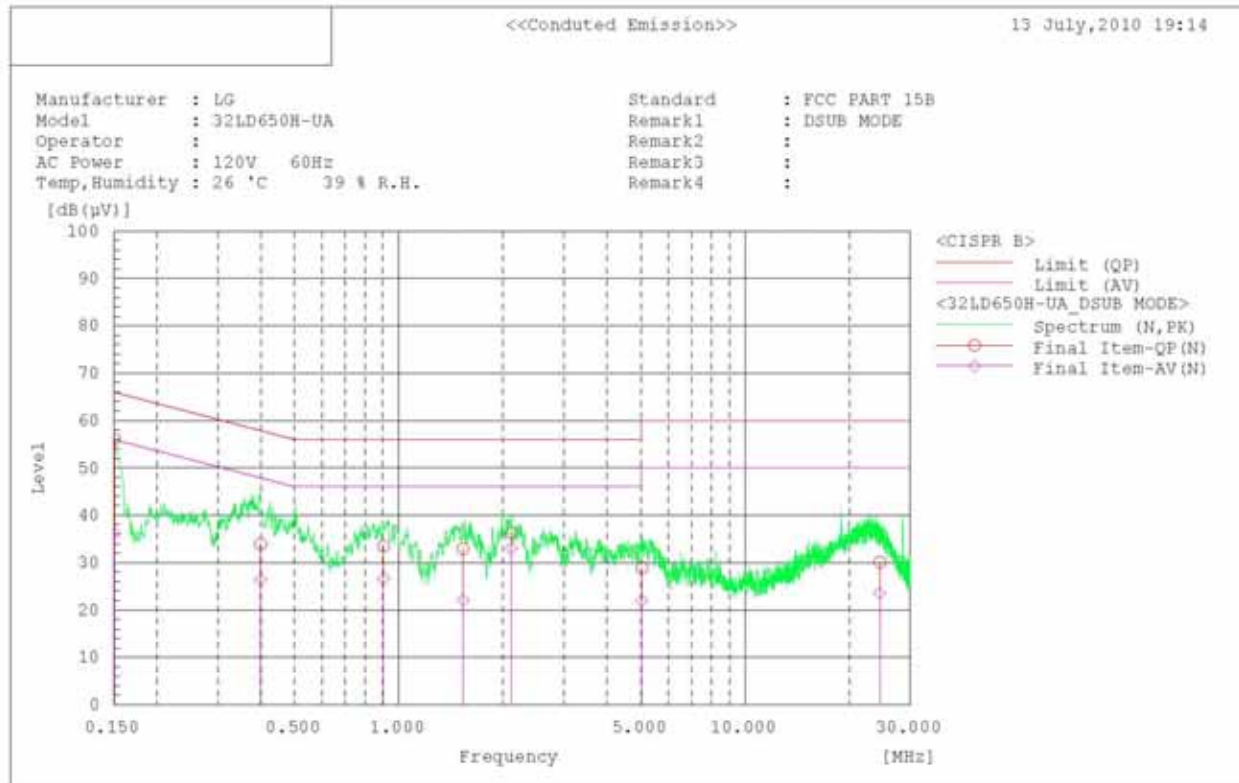
Note) 1. Emission Level = Reading Value + Correction Factor.

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

3. Margin = Limit - Emission level

Test Result

< DSUB MODE >



<<Conducted Emission>>

13 July,2010 19:14

Standard : FCC PART 15B
 Manufacturer : LG
 Model : 32LD650H-UA
 Operator :
 AC Power : 120V 60Hz
 Temp, Humidity : 26 °C 39 % R.H.
 Remark1 : DSUB MODE
 Remark2 :
 Remark3 :
 Remark4 :

Final Result

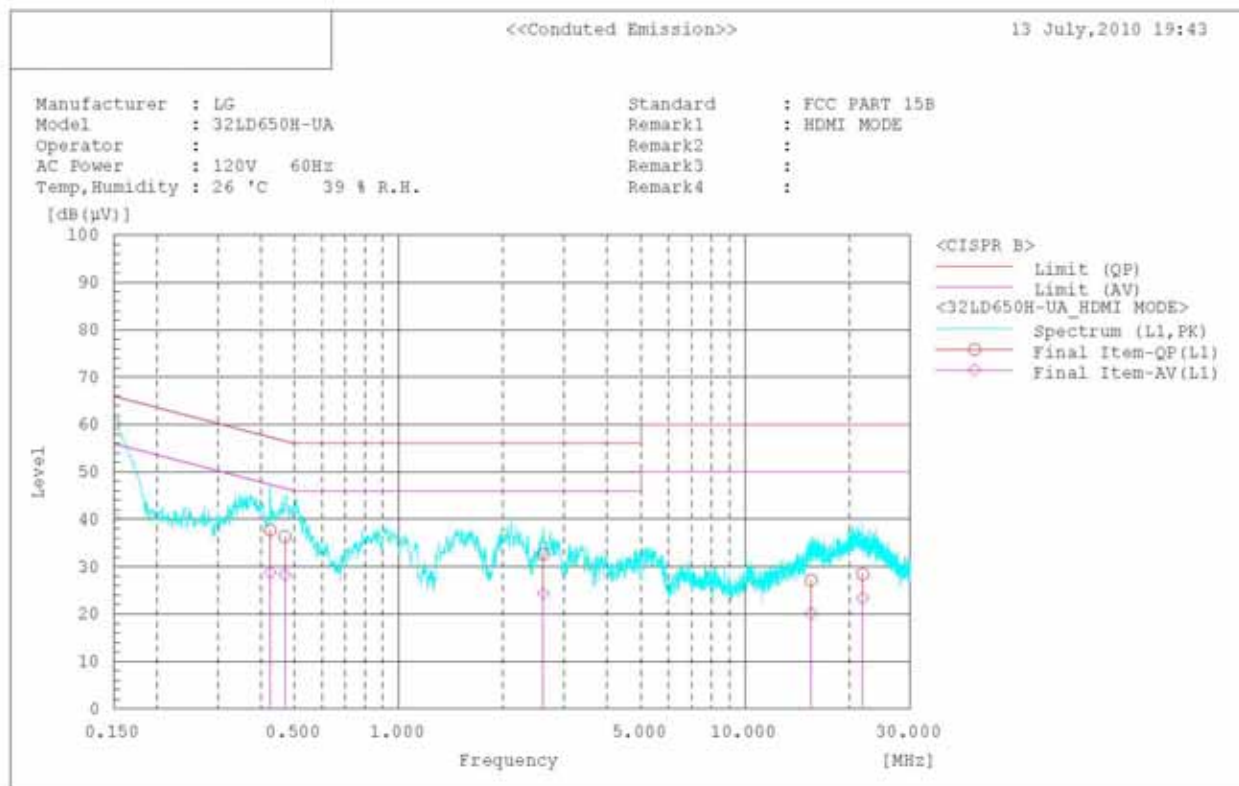
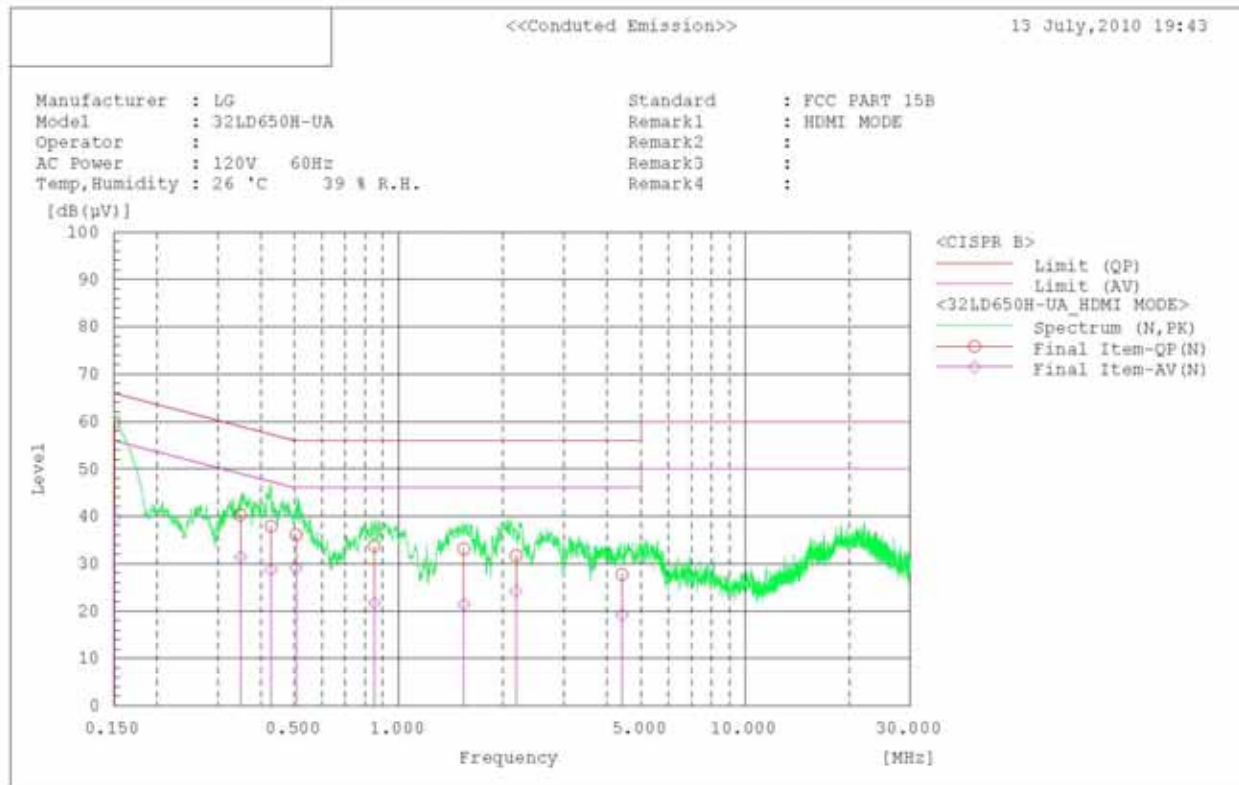
--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB (μV)]	[dB (μV)]	[dB]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB]	[dB]	
1	0.151	56.0	36.1	0.1	56.1	36.2	65.9	55.9	9.8	19.7	
2	0.399	33.8	26.3	0.1	33.9	26.4	57.9	47.9	24.0	21.5	
3	0.904	33.4	26.6	0.1	33.5	26.7	56.0	46.0	22.5	19.3	
4	1.532	32.7	21.9	0.2	32.9	22.1	56.0	46.0	23.1	23.9	
5	2.115	36.1	32.8	0.2	36.3	33.0	56.0	46.0	19.7	13.0	
6	5.040	28.5	21.6	0.4	28.9	22.0	60.0	50.0	31.1	28.0	
7	24.519	28.6	22.1	1.5	30.1	23.6	60.0	50.0	29.9	26.4	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB (μV)]	[dB (μV)]	[dB]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB]	[dB]	
1	0.150	55.9	36.0	0.3	56.2	36.3	66.0	56.0	9.8	19.7	
2	0.360	35.9	27.2	0.3	36.2	27.5	58.7	48.7	22.5	21.2	
3	0.467	33.0	25.7	0.3	33.3	26.0	56.6	46.6	23.3	20.6	
4	2.613	32.2	27.4	0.3	32.5	27.7	56.0	46.0	23.5	18.3	
5	19.011	36.1	31.8	1.1	37.2	32.9	60.0	50.0	22.8	17.1	
6	23.465	32.6	27.7	1.4	34.0	29.1	60.0	50.0	26.0	20.9	

< DVI TO HDMI MODE >



<<Conducted Emission>>

13 July, 2010 19:43

Standard : FCC PART 15B
 Manufacturer : LG
 Model : 32LD650H-UA
 Operator :
 AC Power : 120V 60Hz
 Temp, Humidity : 26 °C 39 % R.H.
 Remark1 : HDMI MODE
 Remark2 :
 Remark3 :
 Remark4 :

Final Result

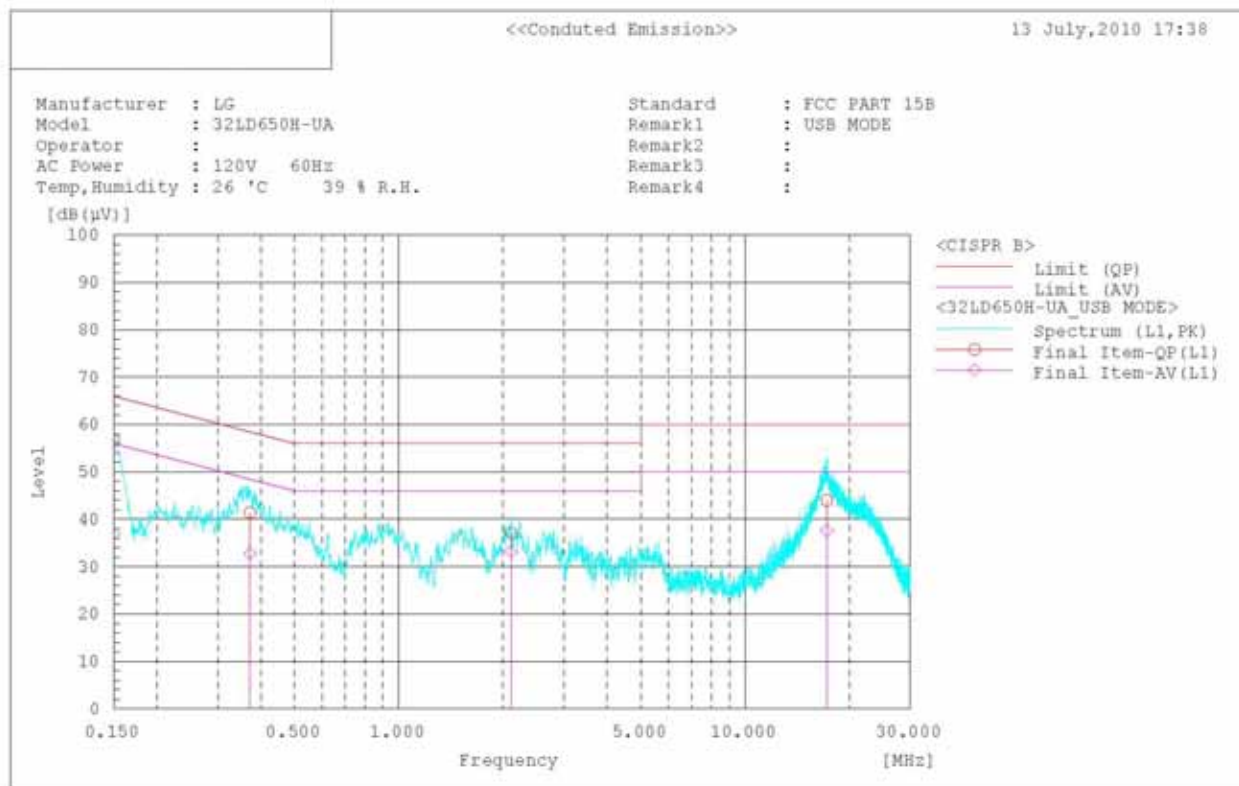
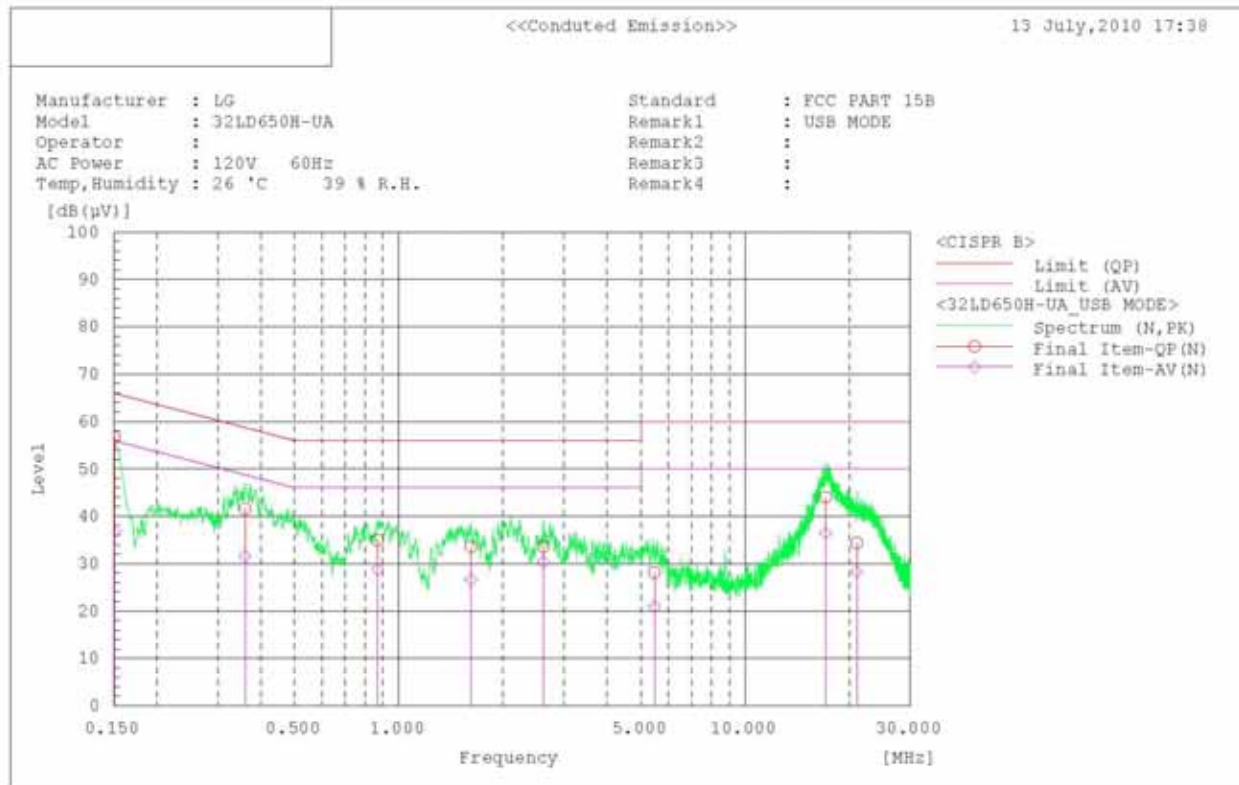
--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]		[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.151	59.8	39.7	0.1	59.9	39.8	65.9	55.9	6.0	16.1	
2	0.349	40.2	31.3	0.1	40.3	31.4	59.0	49.0	18.7	17.6	
3	0.428	37.8	28.6	0.1	37.9	28.7	57.3	47.3	19.4	18.6	
4	0.506	36.0	29.0	0.1	36.1	29.1	56.0	46.0	19.9	16.9	
5	0.850	33.6	21.6	0.1	33.7	21.7	56.0	46.0	22.3	24.3	
6	1.542	32.9	21.2	0.2	33.1	21.4	56.0	46.0	22.9	24.6	
7	2.185	31.5	24.0	0.2	31.7	24.2	56.0	46.0	24.3	21.8	
8	4.420	27.4	18.9	0.3	27.7	19.2	56.0	46.0	28.3	26.8	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]		[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.150	59.9	40.0	0.3	60.2	40.3	66.0	56.0	5.8	15.7	
2	0.426	37.4	28.5	0.3	37.7	28.8	57.3	47.3	19.6	18.5	
3	0.469	36.1	28.0	0.3	36.4	28.3	56.5	46.5	20.1	18.2	
4	2.613	32.4	24.1	0.3	32.7	24.4	56.0	46.0	23.3	21.6	
5	15.528	26.2	19.2	0.9	27.1	20.1	60.0	50.0	32.9	29.9	
6	21.849	27.1	22.1	1.3	28.4	23.4	60.0	50.0	31.6	26.6	

< USB MODE >



<<Conducted Emission>>

13 July, 2010 17:38

Standard : FCC PART 15B
 Manufacturer : LG
 Model : 32LD650H-UA
 Operator :
 AC Power : 120V 60Hz
 Temp, Humidity : 26 °C 39 % R.H.
 Remark1 : USB MODE
 Remark2 :
 Remark3 :
 Remark4 :

Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]		[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.151	56.6	36.6	0.1	56.7	36.7	65.9	55.9	9.2	19.2	
2	0.360	41.5	31.5	0.1	41.6	31.6	58.7	48.7	17.1	17.1	
3	0.869	34.9	28.7	0.1	35.0	28.8	56.0	46.0	21.0	17.2	
4	1.617	33.4	26.4	0.2	33.6	26.6	56.0	46.0	22.4	19.4	
5	2.615	33.4	30.1	0.2	33.6	30.3	56.0	46.0	22.4	15.7	
6	5.477	27.7	20.5	0.4	28.1	20.9	60.0	50.0	31.9	29.1	
7	17.116	43.0	35.4	1.0	44.0	36.4	60.0	50.0	16.0	13.6	
8	21.050	33.1	27.0	1.3	34.4	28.3	60.0	50.0	25.6	21.7	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]		[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.150	56.4	36.6	0.3	56.7	36.9	66.0	56.0	9.3	19.1	
2	0.372	41.1	32.5	0.3	41.4	32.8	58.5	48.5	17.1	15.7	
3	2.115	36.8	32.9	0.3	37.1	33.2	56.0	46.0	18.9	12.8	
4	17.242	43.0	36.6	1.0	44.0	37.6	60.0	50.0	16.0	12.4	

6.2 Radiated Emission

RESULT : COMPLY

6.2.1 Measurement Procedure

The radiated emission was measured and set-up was made accordance with **ANSI C63.4:2003**.

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 **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.

6.2.2 List of Test and Measurement Instruments

Radiated Emission (10m Chamber)					
Name of Instrument	Model No.	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
EMI Test Receiver	ESU	100014	R&S	2010.01.29	2011.01.29
Bilog Antenna	CBL6112D	22609	SCHAFFNER	2010.10.28	2011.10.28
Horn Antenna	3115	21097	ETS	2009.09.23	2010.09.23
Amplifier(22dB)	8447E	2945A02865	H/P	2010.01.29	2011.01.29
Amplifier(30dB)	8449B	3008A01590	Agilent	2009.10.10	2010.10.10
Low Noise Preamplifier	MLA-00108-B02-36	1518831	TSJ	2010.02.08	2011.02.08
Controller	5905A	N/A	TOKIN	-	-
ANT.master	N/A	N/A	TOKIN	-	-

6.2.3 Limit of Radiated Emission

- The test frequency range of Radiated Emission 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	5 th 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 limits (dB μ V/m)	Quasi-peak limits (dB μ V/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 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.		
30 to 230	40	30
230 to 1000	47	37

(2) Limits for Radiated Emission in the frequency range 1000 - 2000MHz at a measuring distance of 10m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	peak (dB μ V/m)	peak (dB μ V/m)	peak (dB μ V/m)	Average (dB μ V/m)
1 to 2	69.5	49.5	63.5	43.5

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

Frequency (GHz)	Class A Equipment		Class B Equipment	
	peak (dB μ V/m)	peak (dB μ V/m)	peak (dB μ V/m)	Average (dB μ V/m)
1 to 40	80	60	74	54

6.2.4 Test Result

Test date	July 14, 2010
Ambient Temperature	24
Relative Humidity	56 % R.H.

Result : For the measurement data, see next page

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

2. Correction Factor = Cable loss - Amp gain + Antenna Factor

3. Margin = Limit - Emission level

* No emission were found greater than 10dB below limit above 3GHz.

Test Result

< DSUB MODE >

- 30MHz-1GHz

**RADIATED EMISSION**

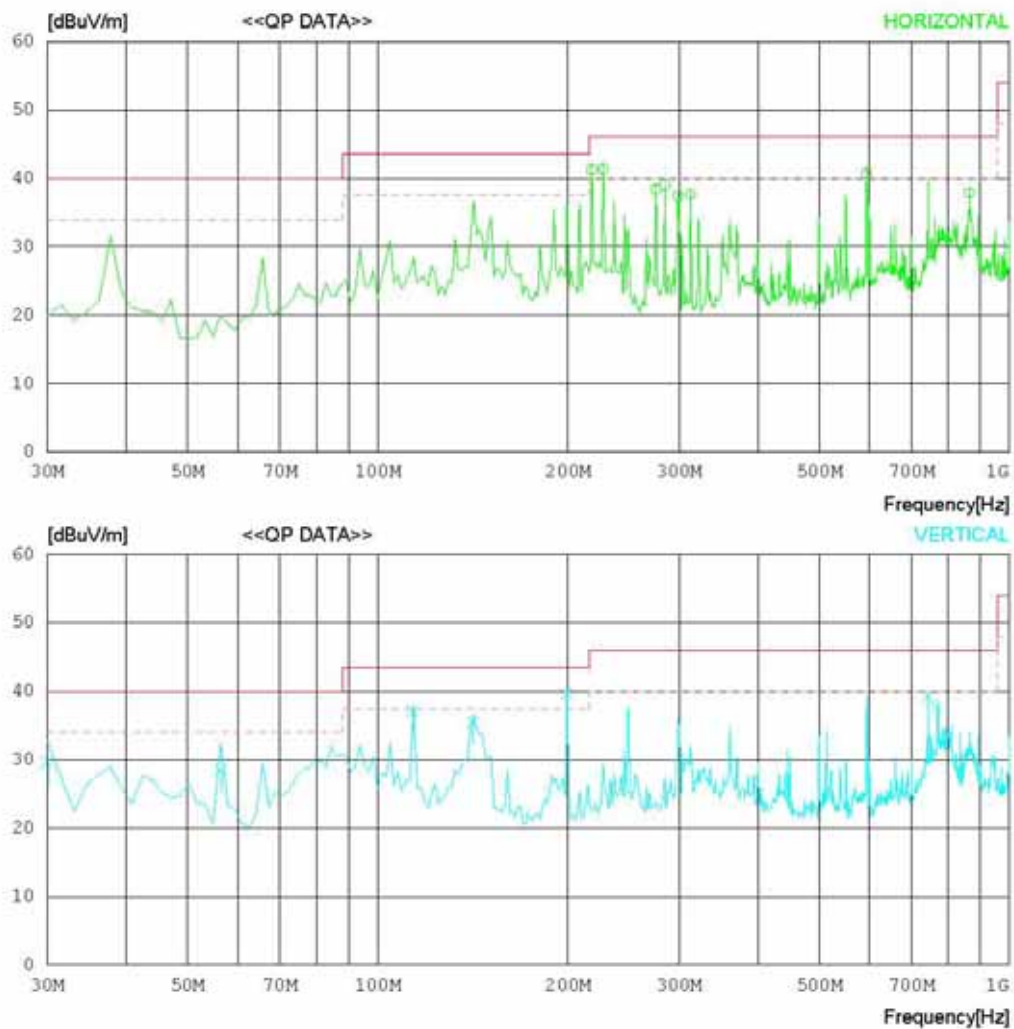
Date : 2010-07-14

Model Name : 32LD650H-UA
Model No. :
Serial No. :
Test Condition : DSUB MODE

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 56% R.H.
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 6 dB



RADIATED EMISSION

Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : DSUB MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24°C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
 MARGIN: 6 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	218.063	51.3	11.7	1.7	23.4	41.3	46.0	4.7	100	166
2	227.346	50.9	12.1	1.8	23.4	41.4	46.0	4.6	100	248
3	275.599	46.5	13.6	1.9	23.6	38.4	46.0	7.6	100	300
4	284.845	47.0	13.7	2.0	23.7	39.0	46.0	7.0	100	314
5	298.941	45.2	13.9	2.0	23.7	37.4	46.0	8.6	100	351
6	312.900	45.2	14.2	2.1	23.8	37.7	46.0	8.3	100	329
7	594.313	43.5	18.7	2.9	24.4	40.7	46.0	5.3	100	341
8	864.757	37.6	20.2	3.5	23.4	37.9	46.0	8.1	100	163
----- Vertical -----										
9	30.064	33.1	18.5	0.7	22.6	29.7	40.0	10.3	100	316
10	56.513	43.6	6.7	0.9	22.7	28.5	40.0	11.5	152	49
11	113.864	47.5	11.1	1.3	22.8	37.1	43.5	6.4	100	38
12	141.796	46.2	10.7	1.4	22.9	35.4	43.5	8.1	100	347
13	199.501	50.6	10.7	1.7	23.3	39.7	43.5	3.8	100	225
14	743.506	40.6	19.2	3.4	24.0	39.2	46.0	6.8	163	267
15	769.934	38.5	19.4	3.4	23.8	37.5	46.0	8.5	100	142

- 1GHz-2GHz



RADIATED EMISSION

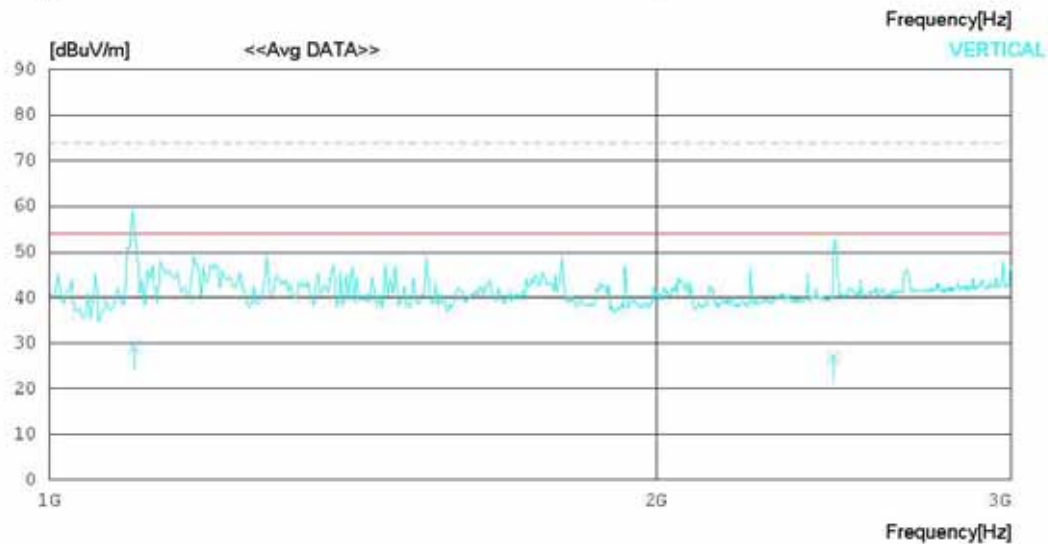
Date : 2010-07-14

Model Name : 32LD650H-UA
Model No. :
Serial No. :
Test Condition : DSUB MODE

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 56% R.H.
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Avg)
FCC Part15 Subpart.B Class B (3m) - 8G(Peak)



RADIATED EMISSION

Date : 2010-07-14

Model Name	:	32LD650H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	24°C 56% R.H.
Test Condition	:	DSUB MODE	Operator	:	

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Avg)
 FCC Part15 Subpart B Class B (3m) - 8G(Peak)

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	Avg [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1102.094	43.9	23.9	5.1	41.9	31.0	54.0	23.0	100	98
2	1193.665	37.9	24.2	5.3	41.9	25.5	54.0	28.5	100	46
3	1210.934	37.3	24.3	5.3	41.9	25.0	54.0	29.0	100	158
4	1310.872	45.0	24.6	5.5	41.9	33.2	54.0	20.8	128	328
5	1539.269	56.5	25.1	6.0	41.9	45.7	54.0	8.3	117	267
----- Vertical -----										
6	1101.482	42.0	23.9	5.0	41.9	29.0	54.0	25.0	100	263
7	2448.805	33.7	27.1	7.7	41.6	26.9	54.0	27.1	100	341



RADIATED EMISSION

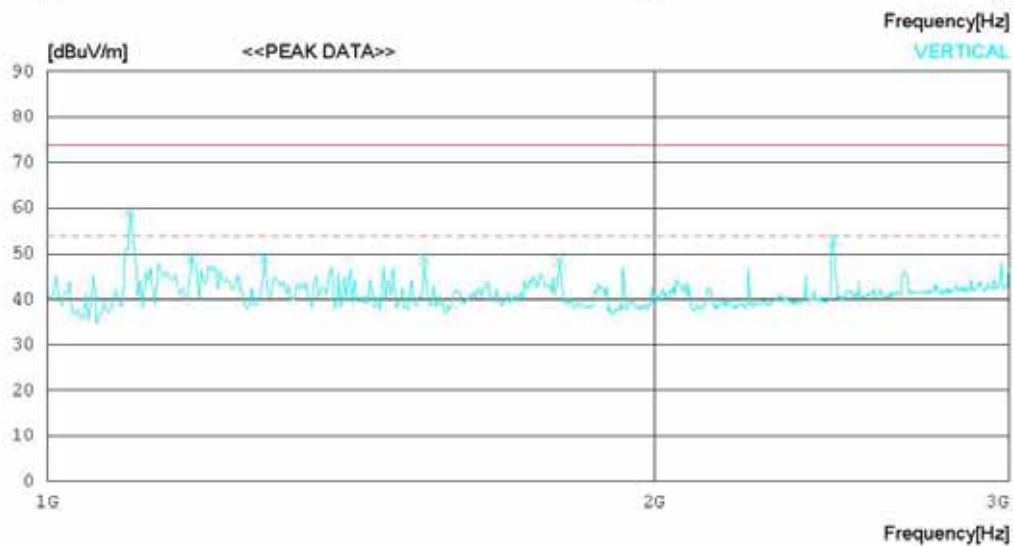
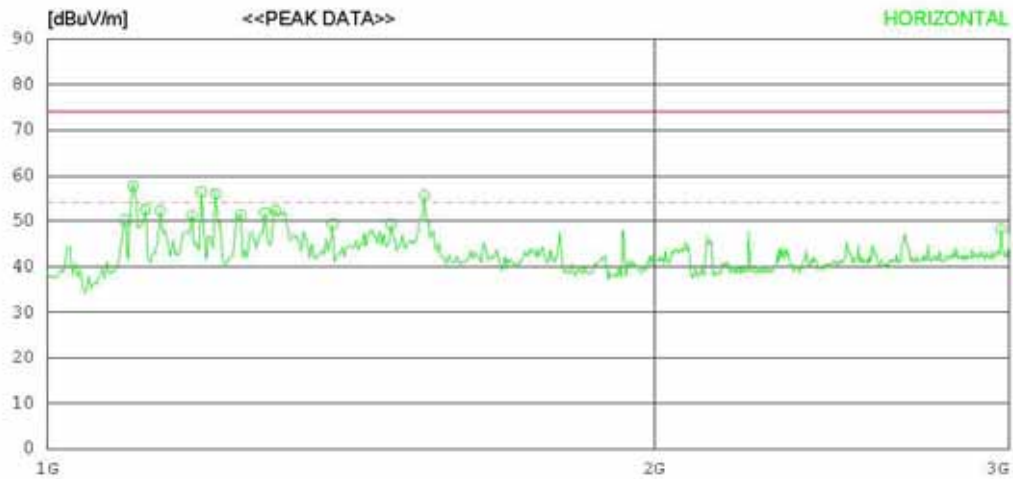
Date : 2010-07-14

Model Name : 32LD650H-UA
Model No. :
Serial No. :
Test Condition : DSUB MODE

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24'C 56% R.H.
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Peak)
FCC Part15 Subpart.B Class B (3m) - 8G(Avg)



RADIATED EMISSION

Date : 2010-07-14

Model Name	:	32LD650H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	24°C 56% R.H.
Test Condition	:	DSUB MODE	Operator	:	

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Peak)
FCC Part15 Subpart B Class B (3m) - 8G(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	1092.948	63.3	23.9	5.0	41.9	50.3	74.0	23.7	100	358
2	1102.563	70.7	23.9	5.1	41.9	57.8	74.0	16.2	100	358
3	1118.588	65.3	24.0	5.1	41.9	52.5	74.0	21.5	100	358
4	1137.819	65.1	24.0	5.1	41.9	52.3	74.0	21.7	100	358
5	1179.485	63.7	24.2	5.2	41.9	51.2	74.0	22.8	100	358
6	1192.305	68.8	24.2	5.3	41.9	56.4	74.0	17.6	100	321
7	1211.536	68.3	24.3	5.3	41.9	56.0	74.0	18	100	135
8	1246.792	63.6	24.4	5.4	41.9	51.5	74.0	22.5	100	358
9	1282.047	63.8	24.5	5.5	41.9	51.9	74.0	22.1	100	358
10	1298.073	64.3	24.5	5.5	41.9	52.4	74.0	21.6	100	196
11	1384.610	60.8	24.8	5.7	41.9	49.4	74.0	24.6	100	358
12	1480.762	60.2	25.1	5.9	41.9	49.3	74.0	24.7	100	358
13	1538.454	66.4	25.1	6.0	41.9	55.6	74.0	18.4	100	358
14	2971.124	52.2	28.7	8.7	41.3	48.3	74.0	25.7	100	153
----- Vertical -----										
15	1099.358	72.0	23.9	5.0	41.9	59.0	74.0	15	100	226
16	1179.485	61.5	24.2	5.2	41.9	49.0	74.0	25	100	1
17	1282.047	61.1	24.5	5.5	41.9	49.2	74.0	24.8	199	358
18	1538.454	59.6	25.1	6.0	41.9	48.8	74.0	25.2	100	184
19	1794.860	58.6	25.2	6.6	41.9	48.5	74.0	25.5	100	204
20	2455.106	59.8	27.1	7.7	41.6	53.0	74.0	21	100	1

< USB MODE >

- 30MHz-1GHz



RADIATED EMISSION

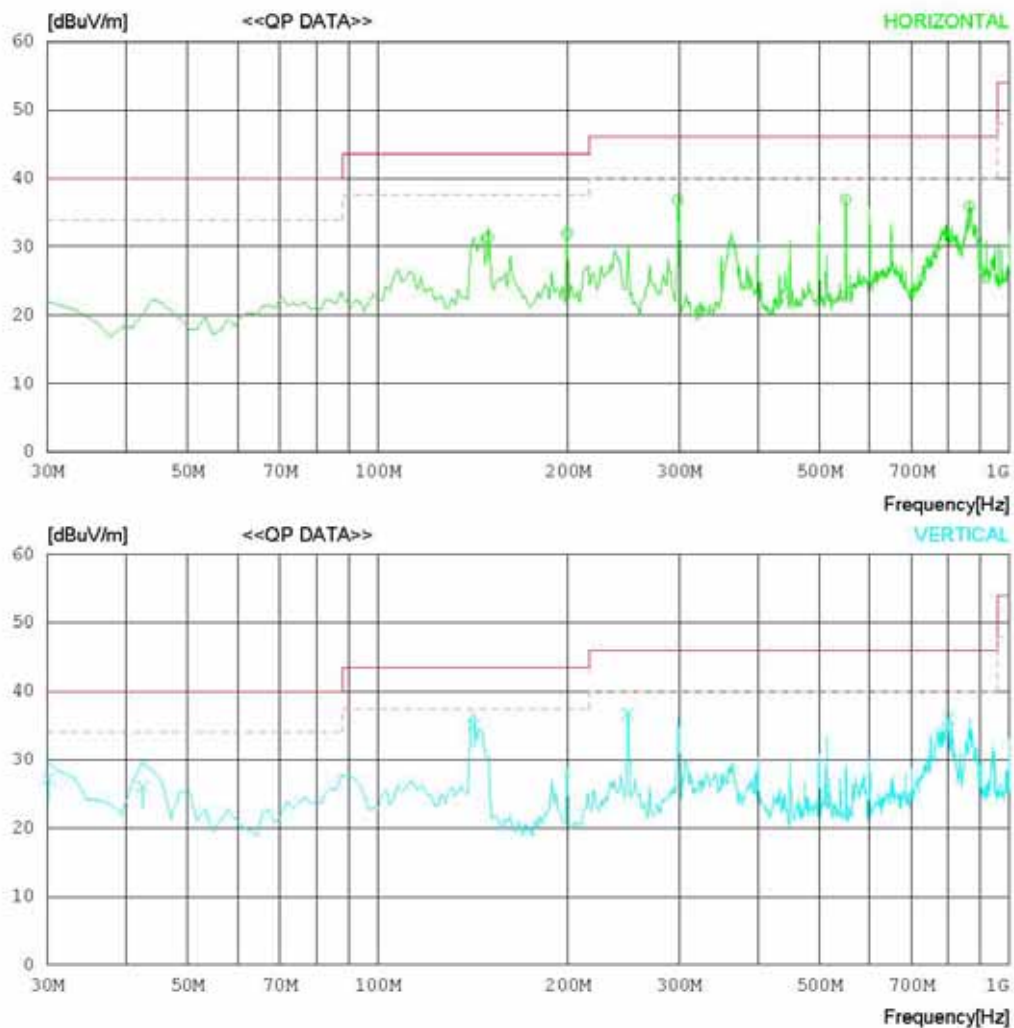
Date : 2010-07-14

Model Name : 32LD650H-UA
Model No. :
Serial No. :
Test Condition : USB MODE

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 56% R.H.
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 6 dB



RADIATED EMISSION

Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : USB MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24°C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
 MARGIN: 6 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	149.688	42.6	10.3	1.4	23.0	31.3	43.5	12.2	263	317
2	199.426	42.8	10.7	1.7	23.3	31.9	43.5	11.6	100	155
3	298.926	44.6	13.9	2.0	23.7	36.8	46.0	9.2	100	124
4	550.764	40.4	18.2	2.8	24.5	36.9	46.0	9.1	100	294
5	864.759	35.6	20.2	3.5	23.4	35.9	46.0	10.1	100	26
----- Vertical -----										
6	30.105	30.6	18.5	0.7	22.6	27.2	40.0	12.8	100	158
7	42.461	35.8	12.1	0.8	22.6	26.1	40.0	13.9	100	194
8	141.951	45.9	10.7	1.4	22.9	35.1	43.5	8.4	100	336
9	249.183	45.1	13.3	1.8	23.5	36.7	46.0	9.3	184	39
10	801.037	36.7	19.6	3.4	23.7	36.0	46.0	10.0	131	167

- 1GHz-2GHz



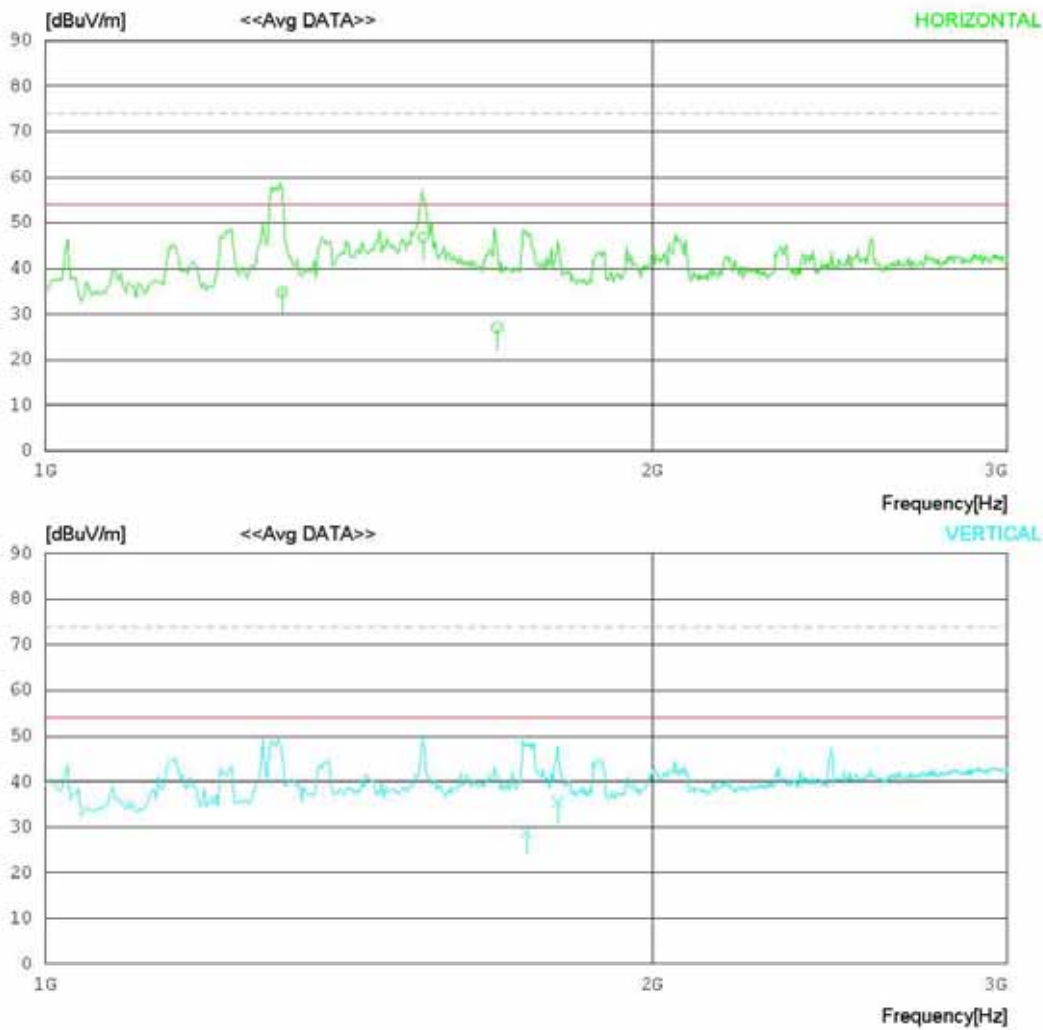
RADIATED EMISSION

Date : 2010-07-14

Model Name	: 32LD650H-UA	Reference No.	:	
Model No.	:	Power Supply	:	120V 60Hz
Serial No.	:	Temp/Humi	:	24'C 56% R.H.
Test Condition	: USB MODE	Operator	:	

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Avg)
FCC Part15 Subpart.B Class B (3m) - 8G(Peak)



RADIATED EMISSION

Date : 2010-07-14

Model Name	:	32LD650H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	24°C 56% R.H.
Test Condition	:	USB MODE	Operator	:	

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Avg)
 FCC Part15 Subpart B Class B (3m) - 8G(Peak)

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	Avg [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1310.774	46.7	24.6	5.5	41.9	34.9	54.0	19.1	141	55
2	1539.315	57.5	25.1	6.0	41.9	46.7	54.0	7.3	100	313
3	1675.285	37.4	25.2	6.3	41.9	27.0	54.0	27.0	126	263
----- Vertical -----										
4	1732.613	39.2	25.2	6.4	41.9	28.9	54.0	25.1	179	341
5	1795.349	45.6	25.2	6.6	41.9	35.5	54.0	18.5	100	274



RADIATED EMISSION

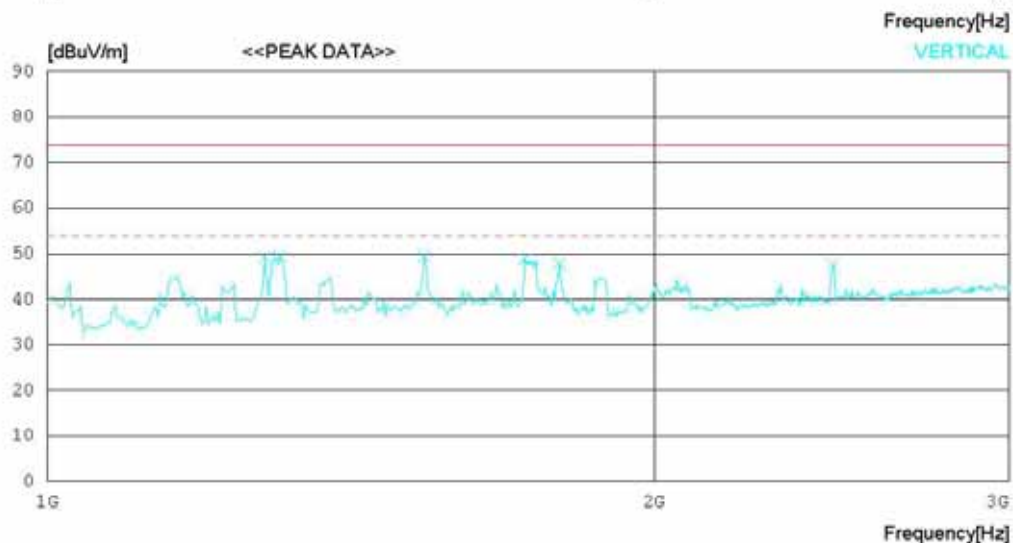
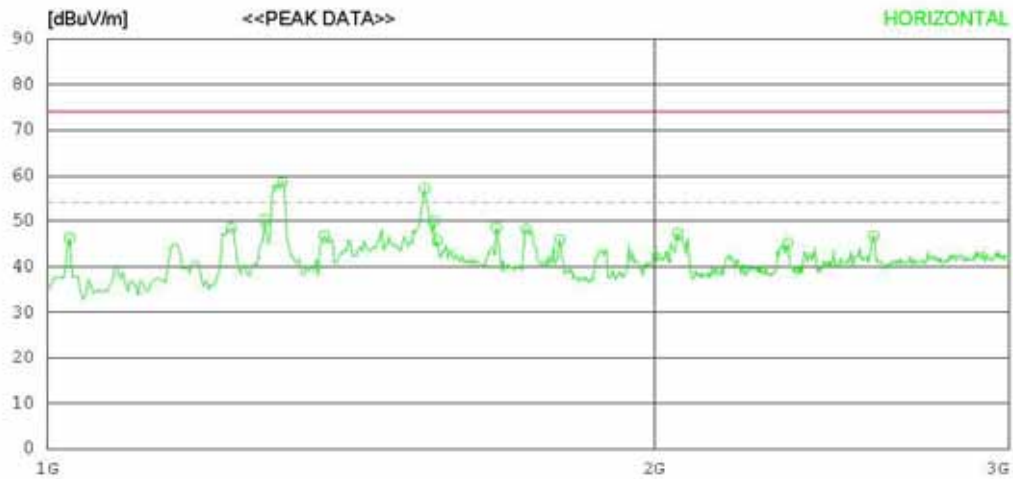
Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : USB MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24'C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 8G(Avg)



RADIATED EMISSION

Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : USB MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24°C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Peak)
 FCC Part15 Subpart B Class B (3m) - 8G(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	1025.641	59.5	23.7	4.9	41.9	46.2	74.0	27.8	103	358
2	1233.971	60.8	24.3	5.3	41.9	48.5	74.0	25.5	103	358
3	1282.047	62.2	24.5	5.5	41.9	50.3	74.0	23.7	103	358
4	1307.688	70.5	24.6	5.5	41.9	58.7	74.0	15.3	100	193
5	1371.790	58.2	24.8	5.7	41.9	46.8	74.0	27.2	103	358
6	1538.454	68.0	25.1	6.0	41.9	57.2	74.0	16.8	100	195
7	1554.479	60.7	25.1	6.1	41.9	50.0	74.0	24	103	358
8	1560.889	56.4	25.1	6.1	41.9	45.7	74.0	28.3	103	358
9	1669.862	59.0	25.2	6.3	41.9	48.6	74.0	25.4	100	215
10	1727.553	58.6	25.2	6.4	41.9	48.3	74.0	25.7	100	249
11	1794.860	56.0	25.2	6.6	41.9	45.9	74.0	28.1	103	358
12	2054.471	56.7	25.4	7.1	41.9	47.3	74.0	26.7	103	358
13	2330.108	52.7	26.6	7.5	41.7	45.1	74.0	28.9	100	215
14	2570.489	52.9	27.5	7.9	41.6	46.7	74.0	27.3	100	191
----- Vertical -----										
15	1282.047	61.2	24.5	5.5	41.9	49.3	74.0	24.7	215	358
16	1304.483	61.3	24.5	5.5	41.9	49.4	74.0	24.6	100	201
17	1538.454	60.4	25.1	6.0	41.9	49.6	74.0	24.4	100	1
18	1724.348	59.1	25.2	6.4	41.9	48.8	74.0	25.2	100	185
19	1794.860	58.0	25.2	6.6	41.9	47.9	74.0	26.1	100	1
20	2455.106	54.1	27.1	7.7	41.6	47.3	74.0	26.7	100	1

< DVI TO HDMI MODE >

- 30MHz-1GHz

RADIATED EMISSION

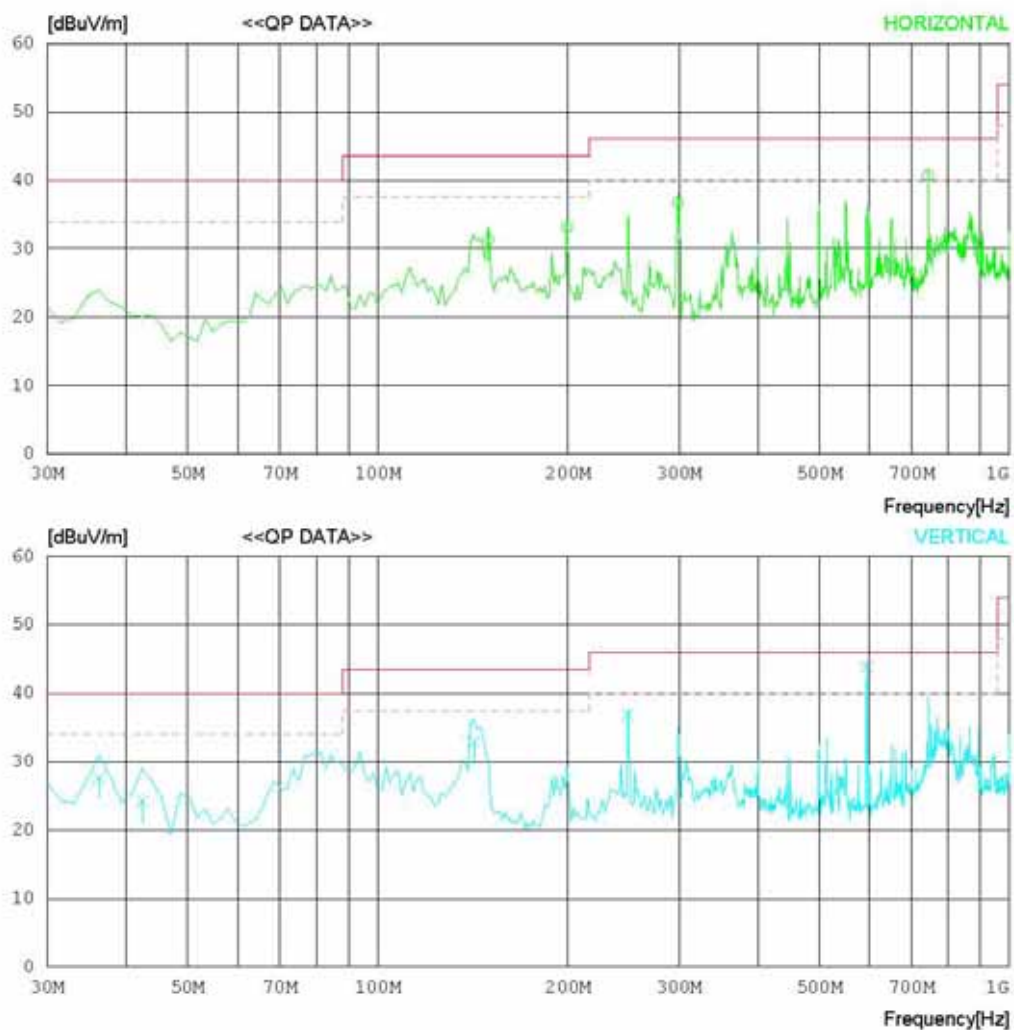
Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : DVI TO HDMI MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24°C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 6 dB



RADIATED EMISSION

Date : 2010-07-14

Model Name	: 32LD650H-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 24°C 56% R.H.
Test Condition	: DVI TO HDMI MODE	Operator	:

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
MARGIN: 6 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	149.706	42.6	10.3	1.4	23.0	31.3	43.5	12.2	100	96
2	199.453	44.0	10.7	1.7	23.3	33.1	43.5	10.4	100	57
3	298.930	44.5	13.9	2.0	23.7	36.7	46.0	9.3	100	175
4	743.512	42.1	19.2	3.4	24.0	40.7	46.0	5.3	153	104
----- Vertical -----										
5	36.220	34.2	15.3	0.8	22.6	27.7	40.0	12.3	100	311
6	42.429	33.9	12.1	0.8	22.6	24.2	40.0	15.8	100	309
7	141.974	43.7	10.7	1.4	22.9	32.9	43.5	10.6	100	324
8	249.174	45.2	13.3	1.8	23.5	36.8	46.0	9.2	216	169
9	594.285	46.7	18.7	2.9	24.4	43.9	46.0	2.1	100	263

- 1GHz-3GHz



RADIATED EMISSION

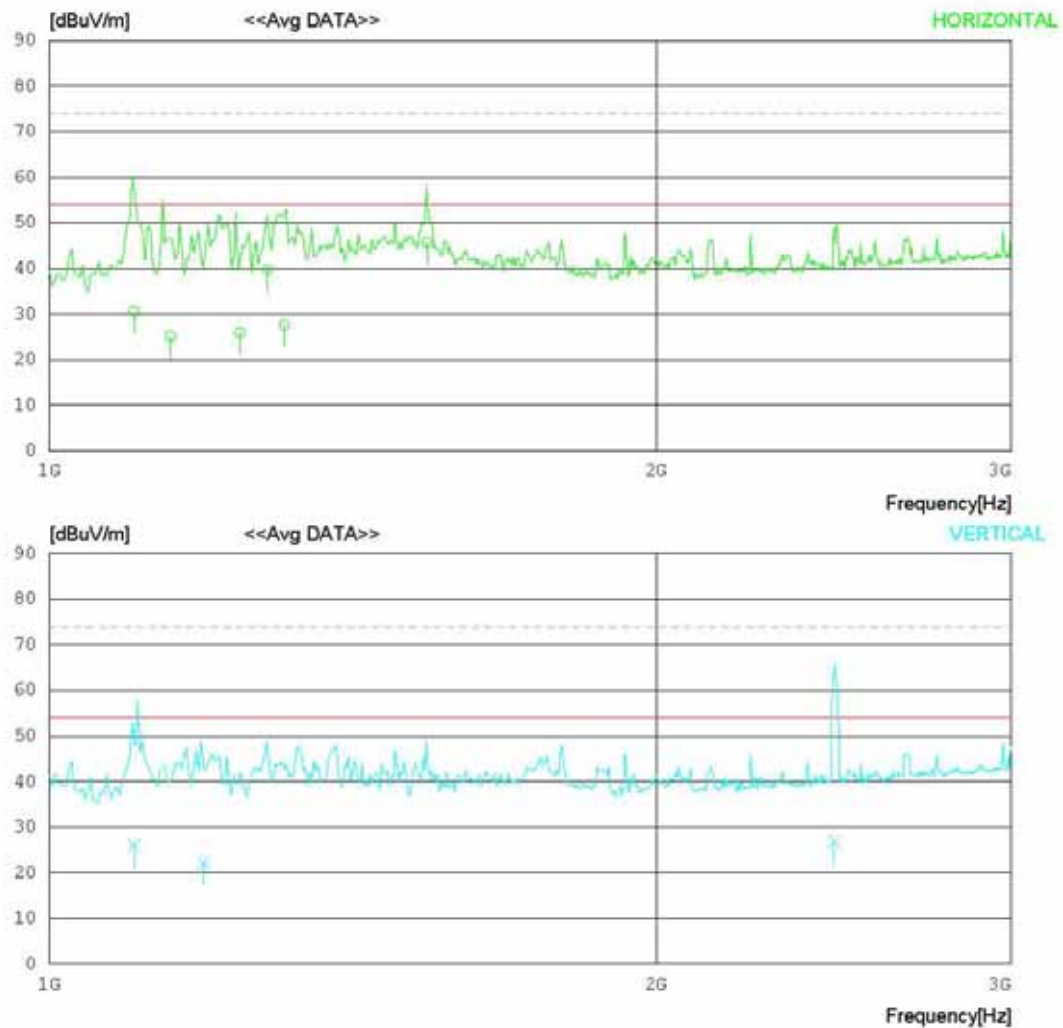
Date : 2010-07-14

Model Name : 32LD650H-UA
Model No. :
Serial No. :
Test Condition : DVI TO HDMI MODE

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 56% R.H.
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Avg)
FCC Part15 Subpart.B Class B (3m) - 8G(Peak)



RADIATED EMISSION

Date : 2010-07-14

Model Name	:	32LD650H-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	24°C 56% R.H.
Test Condition	:	DVI TO HDMI MODE	Operator	:	

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Avg)
 FCC Part15 Subpart B Class B (3m) - 8G(Peak)

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	Avg [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1101.554	43.5	23.9	5.0	41.9	30.5	54.0	23.5	100	181
2	1148.288	37.8	24.1	5.2	41.9	25.2	54.0	28.8	100	324
3	1242.975	38.0	24.4	5.4	41.9	25.9	54.0	28.1	100	2
4	1282.440	51.7	24.5	5.5	41.9	39.8	54.0	14.2	100	57
5	1307.439	39.4	24.6	5.5	41.9	27.6	54.0	26.4	211	173
6	1539.066	56.5	25.1	6.0	41.9	45.7	54.0	8.3	100	47
----- Vertical -----										
7	1102.176	38.9	23.9	5.1	41.9	26.0	54.0	28.0	100	341
8	1193.163	34.6	24.2	5.3	41.9	22.2	54.0	31.8	247	85
9	2450.834	33.7	27.1	7.7	41.6	26.9	54.0	27.1	100	354



RADIATED EMISSION

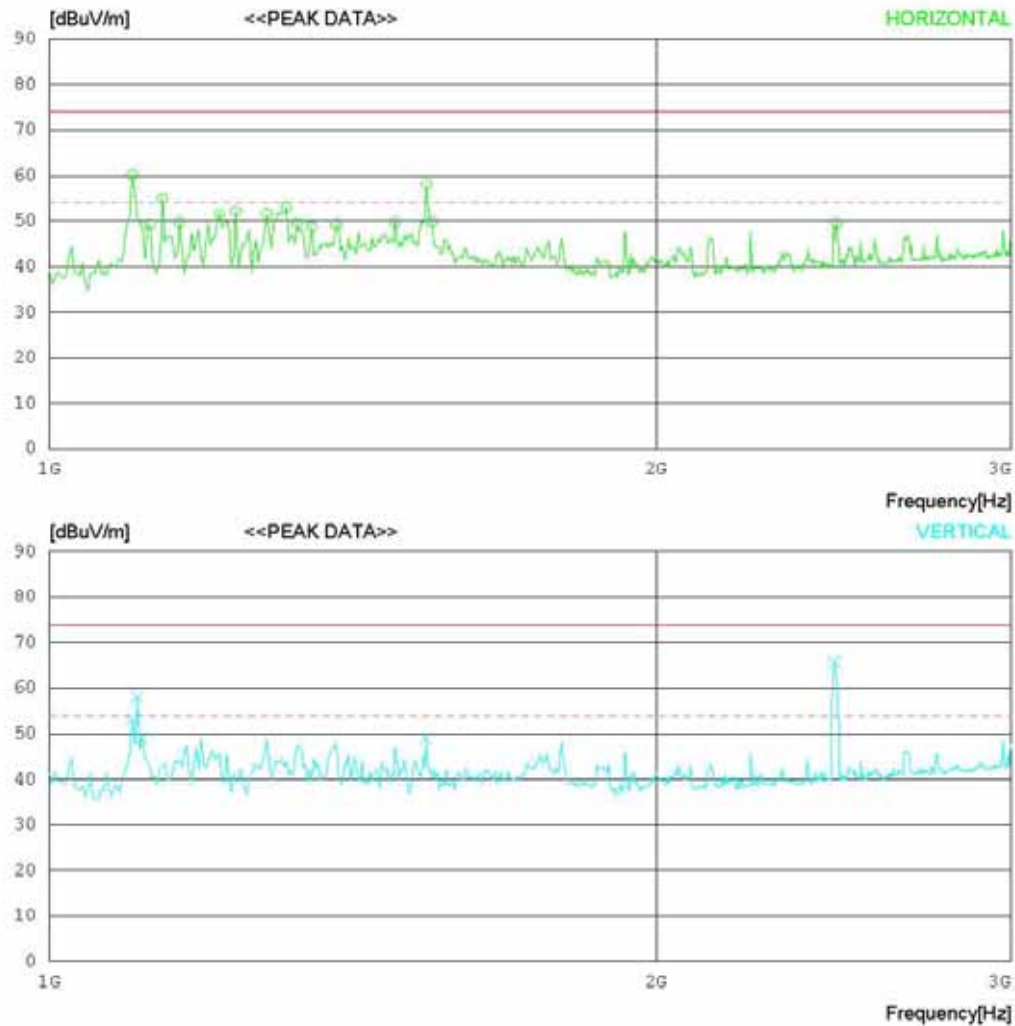
Date : 2010-07-14

Model Name : 32LD650H-UA
 Model No. :
 Serial No. :
 Test Condition : DVI TO HDMI MODE

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24'C 56% R.H.
 Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 8G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 8G(Avg)



RADIATED EMISSION

Date : 2010-07-14

Model Name	: 32LD650H-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 24°C 56% R.H.
Test Condition	: DVI TO HDMI MODE	Operator	:

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 8G(Peak)
FCC Part15 Subpart B Class B (3m) - 8G(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	1099.358	73.1	23.9	5.0	41.9	60.1	74.0	13.9	100	1
2	1121.793	62.0	24.0	5.1	41.9	49.2	74.0	24.8	100	160
3	1137.819	67.8	24.0	5.1	41.9	55.0	74.0	19	100	329
4	1160.254	62.4	24.1	5.2	41.9	49.8	74.0	24.2	100	1
5	1214.741	63.8	24.3	5.3	41.9	51.5	74.0	22.5	100	1
6	1237.176	64.4	24.3	5.4	41.9	52.2	74.0	21.8	100	1
7	1282.047	63.5	24.5	5.5	41.9	51.6	74.0	22.4	100	191
8	1310.893	64.8	24.6	5.5	41.9	53.0	74.0	21	100	195
9	1326.918	61.2	24.6	5.6	41.9	49.5	74.0	24.5	100	221
10	1349.354	60.4	24.7	5.6	41.9	48.8	74.0	25.2	100	231
11	1387.815	60.6	24.8	5.7	41.9	49.2	74.0	24.8	100	231
12	1483.967	60.8	25.1	5.9	41.9	49.9	74.0	24.1	100	199
13	1538.454	68.9	25.1	6.0	41.9	58.1	74.0	15.9	100	151
14	1548.069	60.5	25.1	6.1	41.9	49.8	74.0	24.2	100	1
15	2458.311	56.4	27.1	7.7	41.6	49.6	74.0	24.4	200	358
----- Vertical -----										
16	1099.358	66.1	23.9	5.0	41.9	53.1	74.0	20.9	301	358
17	1105.768	70.8	23.9	5.1	41.9	57.9	74.0	16.1	100	358
18	1112.178	61.9	24.0	5.1	41.9	49.1	74.0	24.9	100	144
19	1538.454	59.7	25.1	6.0	41.9	48.9	74.0	25.1	100	190
20	2451.901	72.6	27.1	7.7	41.6	65.8	74.0	8.2	100	358