

683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080 Tel: +82-31-321-2664 Fax: +82-31-321-1664

http://www.digitalemc.com

FCC Test Report

for

LCD TV

Applicant: LG Electronics Inc.

Model Number : 37LD660H-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 : January 31 ~ February 09, 2011

Date of Issue : February 14, 2011

Tested by : M.J.SONG/Manager Reviewed by : Y.K.SHIN/Manager

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.

fri

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	١ 6
5.2 Test Operation Mode	6
5.3 Support Equipment Used	7
6. Test Results : Emission	ε
6.1 Conducted Emission	8
6.2 Radiated Emission	

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	Korea KOLAS		ISO/IEC 17025
	USA	FCC 101842		Test Facility list & NSA Data
Site Filing	Japan	VCCI	C-1427 R-1364, R-3385 T-1442	Test Facility list & NSA Data
Cortification	Korea	KCC	KR0034	Test Facility list & NSA Data
Certification	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 competents of calibration and testing laboratory".

DIGITAL EMC CO., LTD.

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

http://www.digitalemc.com

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

3. General Information of EUT

3.1 Product Information

r	
Equipment under Test	LCD TV
Model No.	37LD660H-UA
Serial No	NONE
Type of Sample Tested	Pre-Production
Rating Power Supply	AC110V
High Frequency	513MHz
Supplied Power for Test	AC120V, 60Hz
	LG Electronics Inc.
Applicant	19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si,
	Gyeonggi-do, Korea
	LG Electronics Inc.
Manufacturer	19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si,
	Gyeonggi-do, Korea
	LG Electronics Reynosa, Inc.
Factory	LG Electronics USA, Inc_Reynosa 9801 South Cage Blvd.
	Suite 3F Pharr, TX. 78577
Date of Receipt of Sample	2011-01-31

< Product Specifications >

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

HDMI-PC

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x400	31.469	70.08
800x600	35.156 37.879	56.25 60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.712	60.015
1280x 1024	63.981	60.02
1920x1080	67.500	60.000

For 37/42/47/55LD650H, 37/42LD655H, 37LD660H

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	С
Radiated Emission	FCC Part 15 Subpart B	С
Note 1: C=Conform NC=Not Co	onform 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
 HDMI mode: Resolution 1920*1080 MAX, "H" character scroll

- USB mode : USB file 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 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 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 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.

5.3 Support Equipment Used

	1				CABLE			
Unit	Model No.	Serial No.	Manufacturer	Connect type	Length (m)	shield	Backshell	FCC ID
				USB	1	-	Plastic	
PC AT489AV CNG0117				Audio	1.6	Non-shield	Plastic	
	Λ Τ 49ΩΛ\/	CNC01178	HP	LAN	1.7	Non-shield	Plastic	DOC
	CNGUTI75	ПЕ	Power	1.8	Non-shield	Plastic	DOC	
				DSUB	1.6	Shield	Plastic	
				DVI to HDMI	1.8	Shield	Plastic	
Keyboard	SKG-210PB	TAKSB24503Y	MONITEREY INTERNATIONAL CORP	PS/2	1.4	Non-shield	Plastic	DOC
Mouse	SML-510PB	M5PBTAKS60 3018D	MONITEREY INTERNATIONAL CORP	PS/2	1.4	Non-shield	Plastic	DOC
Deinton	Printer SRP-770 N/A BIXOLON		DIVOLON	USB	1.8	Non-shield	Plastic	DOC
Printer			Power	1.8	Non-shield	Plastic	DOC	
USB Memory	SUBA-2G1	N/A	HANAMICRON CO., LTD.	USB	-	-	Plastic	DOC

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 TSJ 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
EMI TEST RECEIVER	ESCI	100364	R&S	2010.05.12	2011.05.12
DC BLOCK	KFL-007	7-1581-5	Hyuplip	-	-
LISN	LISN1600	197204	TTI	2010.07.02	2011.07.02
LISN(EUT)	ESH2-Z5	828739/006	R&S	2010.10.01	2011.10.01
50 ohm Terminator	CT-01	N/A	TME	2011.01.11	2012.01.11

6.1.3 Limit for Conducted Emission

(1) Conducted Emission at mains ports of class A

Frequency range	Limits dB(μV)						
(MHz)	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	Limits dB(μV)				
(MHz)	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	January 31, 2011
Ambient Temperature	21
Relative Humidity	36 % R.H.

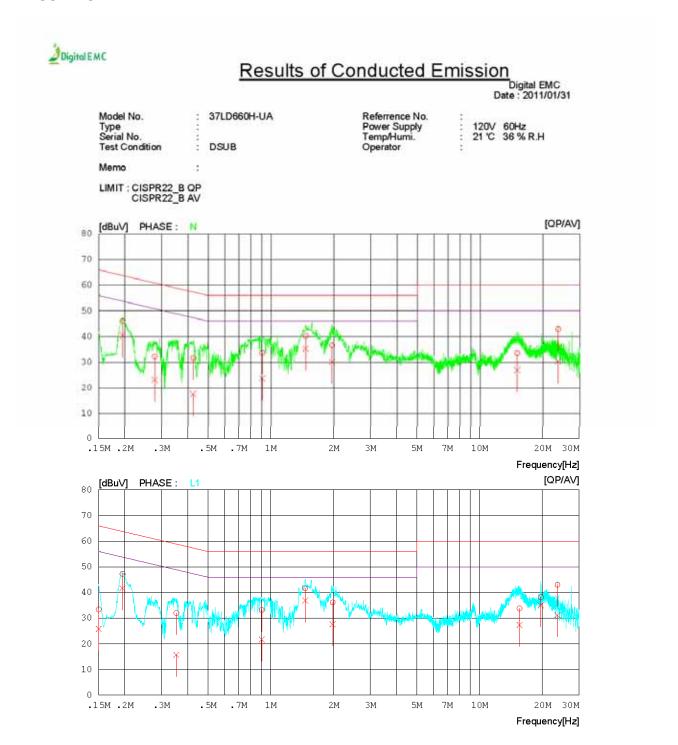
Result: For the measurement data, see next page.

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 >



Results of Conducted Emission

Digital EMC Date : 2011/01/31

Model No. Type Serial No. Test Condition

: 37LD660H-UA

: DSUB

Referrence No. Power Supply Temp/Humi. Operator

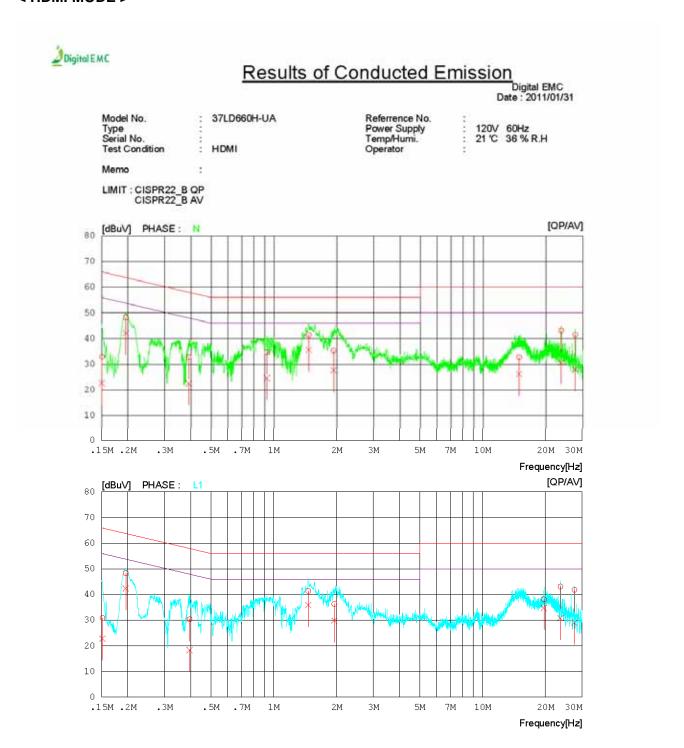
120V 60Hz 21 'C 36 % R.H

Memo

LIMIT : CISPR22_B QP CISPR22_B AV

NC	FREQ	READ QP [dBuV]	AV	C.FACTOR	QP	ULT AV [dBuV]	LIM QP [dBuV]	IIT AV [dBuV]	QP	AV	PHASE	
1	0.19516	46.0	40.2	0.1	46.1	40.3	63.8	53.8	17.7	13.5	N	
2	0.27780	32.1	23.0	0.1	32.2	23.1	60.9	50.9	28.7	27.8	N	
3	0.42463	31.4	17.4	0.2	31.6	17.6	57.4	47.4	25.8	29.8	N	
4	0.90556	33.3	23.4	0.3	33.6	23.7	56.0	46.0	22.4	22.3	N	
5	1.46300	39.9	35.0	0.3	40.2	35.3	56.0	46.0	15.8	10.7	N	
6	1.95550	36.3	29.8	0.3	36.6	30.1	56.0	46.0	19.4	15.9	N	
7	15.01950	32.7	26.1	0.8	33.5	26.9	60.0	50.0	26.5	23.1	N	
8	23.57800	41.9	29.4	1.0	42.9	30.4	60.0	50.0	17.1	19.6	N	
9	0.15006	33.3	25.8	0.1	33.4	25.9	66.0	56.0	32.6	30.1	L1	
10	0.19513	47.2	41.6	0.1	47.3	41.7	63.8	53.8	16.5	12.1	L1	
11	0.35333	31.8	15.5	0.2	32.0	15.7	58.9	48.9	26.9	33.2	L1	
12	0.90550	32.9	21.4	0.3	33.2	21.7	56.0	46.0	22.8	24.3	L1	
13	1.46350	41.3	36.6	0.3	41.6	36.9	56.0	46.0	14.4	9.1	L1	
14	1.98000	35.8	27.3	0.3	36.1	27.6	56.0	46.0	19.9	18.4	L1	
15	15.52450	33.0	26.6	0.8	33.8	27.4	60.0	50.0	26.2	22.6	L1	
16	19.65550	37.3	34.2	0.9	38.2	35.1	60.0	50.0	21.8	14.9	L1	
17	23.58050	42.0	30.2	1.0	43.0	31.2	60.0	50.0	17.0	18.8	L1	

< HDMI MODE >



Results of Conducted Emission

Digital EMC Date : 2011/01/31

Model No. Type Serial No. Test Condition : 37LD660H-UA

: : HDMI Referrence No. Power Supply Temp/Humi. Operator

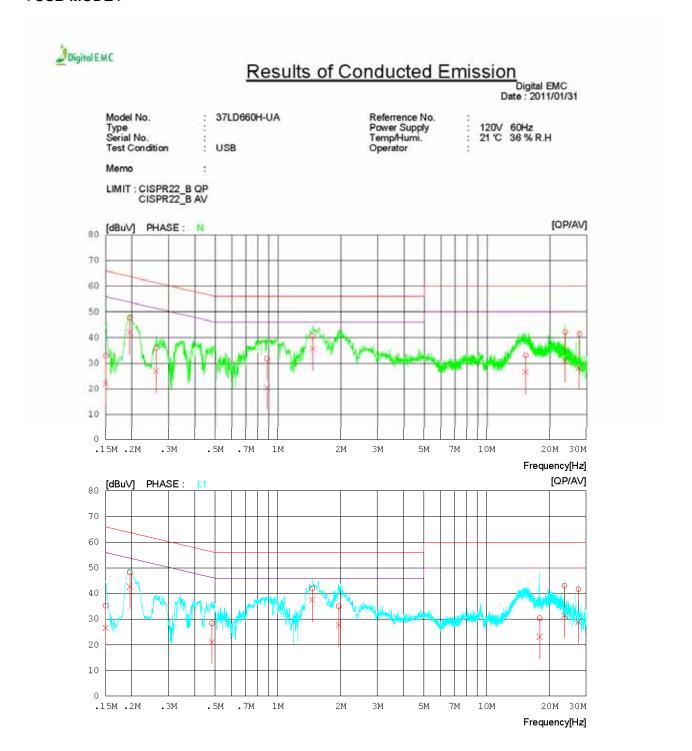
120V 60Hz 21 'C 36 % R.H

Memo :

LIMIT : CISPR22_B QP CISPR22_B AV

NC	FREQ	READ QP [dBuV]	AV	C.FACTOR	QP	ULT AV [dBuV]	LIM QP [dBuV]	IIT AV [dBuV]	MAR QP [dBuV]	AV	PHASE	
1	0.15031	32.8	22.5	0.1	32.9	22.6	66.0	56.0	33.1	33.4	N	
2	0.19536	48.1	41.9	0.1	48.2	42.0	63.8	53.8	15.6	11.8	N	
3	0.39063	32.5	22.3	0.2	32.7	22.5	58.1	48.1	25.4	25.6	N	
4	0.92375	34.4	24.3	0.3	34.7	24.6	56.0	46.0	21.3	21.4	N	
5	1.46500	41.1	35.3	0.3	41.4	35.6	56.0	46.0	14.6	10.4	N	
6	1.92650	35.0	27.2	0.3	35.3	27.5	56.0	46.0	20.7	18.5	N	
7	14.83950	31.9	25.5	0.8	32.7	26.3	60.0	50.0	27.3	23.7	N	
8	23.58800	42.1	29.7	1.0	43.1	30.7	60.0	50.0	16.9	19.3	N	
9	27.51700	40.4	26.9	1.1	41.5	28.0	60.0	50.0	18.5	22.0	N	
10	0.15104	30.8	22.8	0.1	30.9	22.9	65.9	55.9	35.0	33.0	L1	
11	0.19559	48.3	42.3	0.1	48.4	42.4	63.8	53.8	15.4	11.4	L1	
12	0.39518	30.2	18.1	0.2	30.4	18.3	58.0	48.0	27.6	29.7	L1	
13	1.46350	41.0	35.6	0.3	41.3	35.9	56.0	46.0	14.7	10.1	L1	
14	1.94900	36.0	29.5	0.3	36.3	29.8	56.0	46.0	19.7	16.2	L1	
15	19.66650	37.2	33.8	0.9	38.1	34.7	60.0	50.0	21.9	15.3	L1	
16	23.58750		29.8	1.0	43.1	30.8	60.0	50.0	16.9	19.2	L1	
17	27.52100	40.8	27.9	1.1	41.9	29.0	60.0	50.0	18.1	21.0	L1	

< USB MODE >



Results of Conducted Emission

Digital EMC Date : 2011/01/31

 Model No.
 : 37LD660H-UA

 Type
 :

 Serial No.
 :

 Test Condition
 : USB

Referrence No. Power Supply Temp/Humi. Operator

120V 60Hz 21 'C 36 % R.H

Memo :

LIMIT : CISPR22_B QP CISPR22_B AV

	NO	FREQ	READ	ING	C.FACTOR	RESU	JLT	LIM	IIT	MAR	GIN	PHASE	
			OP	AV		OP	AV	OP	AV	OP	AV		
		[MHz]			[dB]	~		~	[dBuV]	~			
-													
	1	0.15018			0.1	33.0	22.1	66.0	56.0	33.0	33.9	N	
	2	0.19535	47.7	41.9	0.1	47.8	42.0	63.8	53.8	16.0	11.8	N	
	3	0.26119	35.8	26.8	0.1	35.9	26.9	61.4	51.4	25.5	24.5	N	
	4	0.88401	31.4	20.2	0.3	31.7	20.5	56.0	46.0	24.3	25.5	N	
	5	1.46600	40.3	35.3	0.3	40.6	35.6	56.0	46.0	15.4	10.4	N	
	6	15.27450	32.3	25.8	0.8	33.1	26.6	60.0	50.0	26.9	23.4	N	
	7	23.58350	41.2	30.0	1.0	42.2	31.0	60.0	50.0	17.8	19.0	N	
	8	27.51500	40.2	27.1	1.1	41.3	28.2	60.0	50.0	18.7	21.8	N	
	9	0.15000	35.2	26.5	0.1	35.3	26.6	66.0	56.0	30.7	29.4	L1	
	10	0.19569	48.2	42.6	0.1	48.3	42.7	63.8	53.8	15.5	11.1	L1	
	11	0.48510	28.2	20.8	0.2	28.4	21.0	56.3	46.3	27.9	25.3	L1	
	12	1.46400	41.7	37.1	0.3	42.0	37.4	56.0	46.0	14.0	8.6	L1	
	13	1.96000	34.7	27.4	0.3	35.0	27.7	56.0	46.0	21.0	18.3	L1	
	14	17.95500	29.5	22.2	0.9	30.4	23.1	60.0	50.0	29.6	26.9	L1	
	15	23.58550	42.0	30.3	1.0	43.0	31.3	60.0	50.0	17.0	18.7	L1	
	16	27 51700	40.6	27 9	1 1	Д1 7	29 N	60.0	50.0	18 3	21 0	T.1	

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	2011.01.20	2012.01.20						
Bilog Antenna	CBL6112B	2737	SCHAFFNER	2010.07.14	2011.07.14						
Horn Antenna	BBHA9120A	322	SCHWARZBECK	2010.04.13	2011.04.13						
Amplifier(22dB)	8447E	2945A02865	H/P	2011.01.11	2012.01.11						
Low Noise Preamplifier	MLA-00108-B02-36	1518831	TSJ	2011.01.11	2012.01.11						
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) Quasi-peak limits (dB (dB	Class B Equipment (3m distance) Quasi-peak limits (dB <i>µ</i> 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	Class A E	quipment	Class B Equipment			
(GHz)	peak (dBμV/m)	peak (dBμV/m)	peak (dBμV/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	Class A E	Equipment	Class B Equipment			
(GHz)	peak (dB <i>μ</i> V/m)	peak (dB <i>µ</i> V/m)	peak (dB <i>µ</i> V/m)	Average (dB _µ V/m)		
1 to 40	80	60	74	54		

6.2.4 Test Result

Test date	February 09, 2011				
Ambient Temperature	20				
Relative Humidity	37 % R.H.				

Result: For the measurement data, see next page

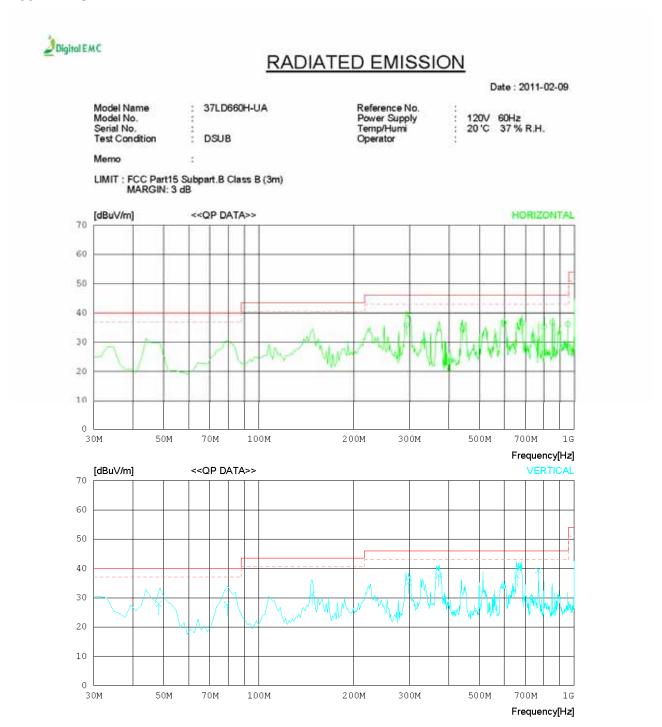
Note) 1. Emission Level = Reading Value + Correction Factor.

- 2. Correction Factor = Cable loss Amp gain + Antenna Factor
- 3. Margin = Limit Emission level

Test Result

< DSUB MODE >

- 30MHz-1GHz



Date: 2011-02-09

 Model Name
 :
 37LD660H-UA
 Reference No.
 :
 Power Supply
 :
 120V
 60Hz

 Serial No.
 :
 Temp/Humi
 :
 20 °C
 37 % R.H.

 Test Condition
 :
 DSUB
 Operator
 :

Memo

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

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]] [dB]	[cm]	[DEG]
	Horizont	al	-							
2 3 4 5	293.645 441.525 680.325 800.026 849.996 950.364	44.0 39.7 38.6 35.4 36.2 34.5	13.7 16.7 18.9 20.2 20.6 21.0	2.0 2.5 3.1 3.4 3.5 3.7	23.8 24.5 24.3 23.6 23.6	34.4 1 36.5 35.4 36.8	46.0 46.0 46.0 46.0 46.0	10.1 11.6 9.5 10.6 9.2 9.8	121 301 303 226 200 110	155 358 315 199 218 181
	Vertical	L								
7 8 9 10 11 12 13	48.336 79.351 147.833 298.727 371.525 659.326 769.480	38.6 42.1 42.2 43.2 44.1 39.9 39.8	11.0 7.1 10.6 13.8 15.4 18.8 19.8	0.9 1.1 1.4 2.0 2.3 3.1 3.4	22.6 22.6 23.3 23.9 24.2 24.2 23.8	5 27.7 1 31.1 9 35.1 2 37.6 2 37.6	40.0 40.0 43.5 46.0 46.0 46.0	12.1 12.3 12.4 10.9 8.4 8.4 6.8	100 100 100 134 121 149	226 298 342 176 184 190

- 1GHz-3GHz Peak



Date: 2011-02-09

Model Name Model No. Serial No.

37LD660H-UA

Reference No. Power Supply Temp/Humi

120V 60Hz 20 'C 37 % R.H.

DSUB Test Condition

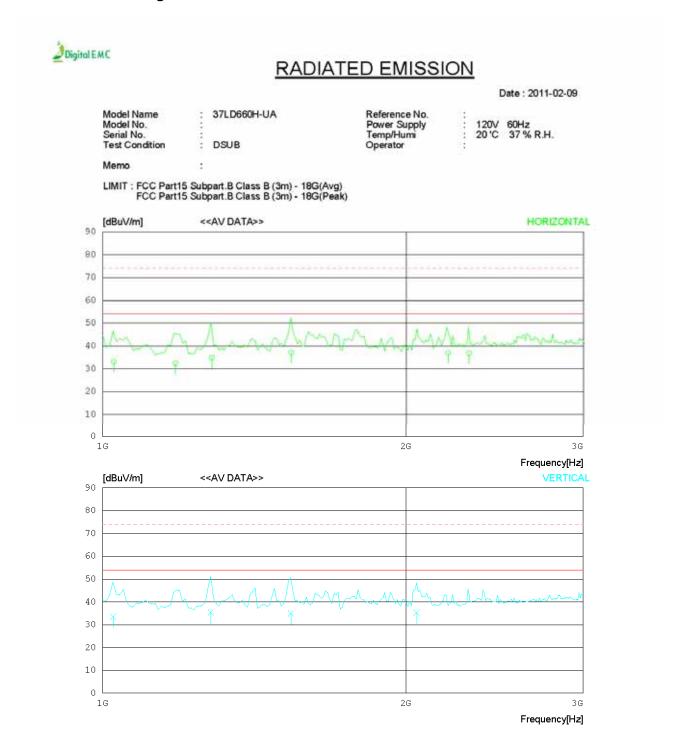
Operator

Memo

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

No.	FREQ	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS	GAIN [dB]	RESULT	LIMIT [dBuV/m	MARGIN	ANTENNA	TABLE
	Horizont	al								
1 2 3 4 5 6 7 8	1024.03 1176.28 1280.44 1536.85 1600.96 1785.25 2193.91 2306.09	2 58.0 9 62.2 9 63.1 1 56.8 6 57.4 2 57.0	23.7 24.2 24.5 25.1 25.2 25.2 26.0 26.5	4.9 5.2 5.5 6.0 6.2 6.6 7.3 7.5	41.8 41.9 41.9 41.9 42.0 42.0	46.5 45.6 50.3 52.3 46.3 47.2 48.3 48.4	74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0	27.5 28.4 23.7 21.7 27.7 26.8 25.7 25.6	100 201 100 100 100 201 100	358 201 358 222 238 333 358 231
	Vertical									
9 10 11 12 13 14 15 16 17	1016.02 1024.03 1184.29 1280.44 1416.66 1536.85 1665.06 2049.67 2306.09 2386.22	8 62.0 5 57.7 9 63.2 7 57.3 9 61.5 4 55.4 9 57.8 3 53.9	23.7 23.7 24.2 24.5 24.9 25.1 25.2 25.4 26.5 26.8	4.9 4.9 5.2 5.5 6.3 7.1 7.5 7.6	41.8 41.8 41.9 41.9 41.9 41.9 42.0 42.0	43.3 48.8 45.3 51.3 46.1 50.7 45.0 48.3 45.9 45.5	74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0	30.7 25.2 28.7 22.7 27.9 23.3 29 25.7 28.1 28.5	201 201 100 100 100 100 100 100 100 201	1 1 358 223 358 358 207 358 185 15

- 1GHz-3GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi

Operator

120V 60Hz 20 'C 37 % R.H.

Memo

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

DSUB

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
1 2 3 4 5	1025.674 1180.377 1283.184 1537.915 2201.520 2309.552	45.6 44.8	23.7 24.2 24.5 25.1 26.1 26.5	4.9 5.2 5.5 6.0 7.3 7.5	41.8 41.8 41.9 42.0 42.0	32.4 9 34.9 9 37.2 0 37.0	54.0 54.0 54.0 54.0 54.0 54.0	20.9 21.6 19.1 16.8 17.0 17.2	100 201 100 100 100	358 201 358 222 358 231
	Vertical									
7 8 9 10	1024.480 1280.257 1537.622 2049.703	47.3	23.7 24.5 25.1 25.4	4.9 5.5 6.0 7.1	41.8 41.9 41.9	35.4 35.0	54.0 54.0 54.0 54.0	20.4 18.6 19.0 18.6	201 100 100 100	1 358 358 185

- 3GHz-6GHz Peak



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi Operator

120V 60Hz 20 'C 37 % R.H.

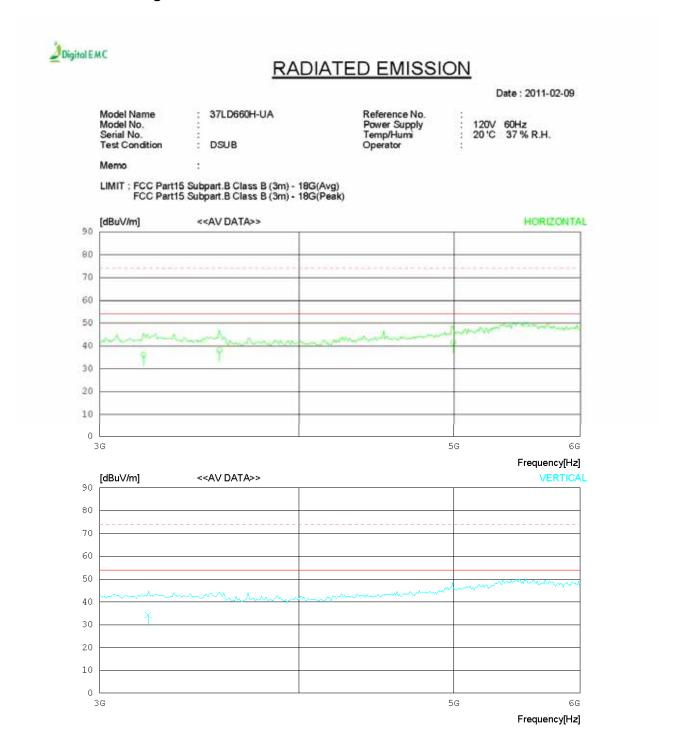
Memo

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

DSUB

1	No.	FREQ	READING		LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
		[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	I	Horizont	al								
	3 4	3075.33 3195.53 3564.12 3724.38 4517.65 4982.38	0 49.9 5 50.1 4 46.0 2 46.5	28.9 29.3 29.6 30.8	8.9 9.0 9.5 9.7 10.7	42.1 42.0 41.9 41.9 41.4 41.1	45.0 45.8 47.0 43.4 46.6 49.0	74.0 74.0 74.0 74.0 74.0 74.0	29 28.2 27 30.6 27.4 25	100 100 100 201 201 201	177 224 195 359 359 359
	7	Vertical	L								
	7 8 9	3219.56 3716.37	1 46.9	29.0 29.6	9.1 9.7	42.0 41.9	44.7 44.3	74.0 74.0	29.3 29.7	201 100	164 358 358

- 3GHz-6GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi Operator

120V 60Hz 20 'C 37 % R.H.

Memo

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

DSUB

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
2 3	3196.302 3565.771 1995.515	41.2	28.9 29.3 32.8	9.0 9.5 11.1	42.0 41.9 41.1	38.1	54.0 54.0 54.0	17.8 15.9 12.5	100 100 201	224 195 359
	Vertical									
4 3	3217.053	38.2	29.0	9.1	42.0	34.3	54.0	19.7	201	164

< HDMI MODE >

- 30MHz-1GHz



Date: 2011-02-09

 Model Name
 :
 37LD660H-UA
 Reference No.
 :
 Power Supply
 :
 120V
 60Hz

 Model No.
 :
 Temp/Humi
 :
 20 °C
 37 % R.H.

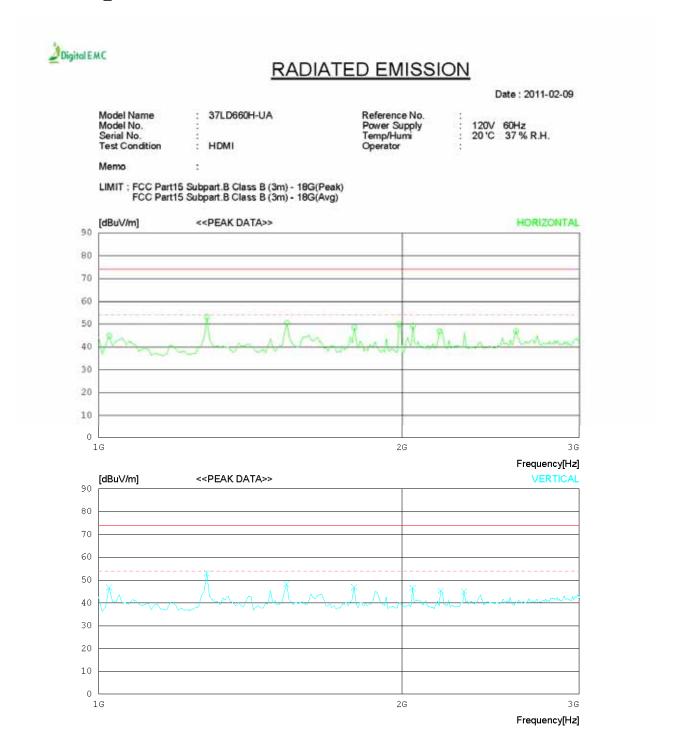
 Test Condition
 :
 HDMI
 Operator
 :

Memo

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

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]] [dB]	[cm]	[DEG]
	Horizont	al								
1 2 3 4 5	79.527 248.626 292.118 769.506 800.000 949.985	41.0 42.2 41.7 39.2 39.1 39.0	7.1 13.0 13.7 19.8 20.2 21.0	1.1 1.8 2.0 3.4 3.4 3.7	22.6 23.5 23.8 23.8 23.7	33.5 33.6 33.6 38.6 7 39.0	40.0 46.0 46.0 46.0 46.0	13.4 12.5 12.4 7.4 7.0 5.4	201 100 100 201 100 100	168 1 218 351 203 189
	Vertica:	l								
7 8 9 10 11	31.554 43.956 79.626 151.252 769.480	32.4 35.6 42.2 39.4 41.0	17.2 14.1 7.1 10.4 19.8	0.7 0.8 1.1 1.4 3.4	22.6 22.6 22.6 23.2 23.8	27.9 27.8 28.1	40.0 40.0 40.0 43.5 46.0	12.3 12.1 12.2 15.4 5.6	212 108 100 100 100	124 260 358 216 358
1.2	801 202	35.6	20 2	3 /	23 6	3 5 6	46.0	10 /	199	199

- 1GHz-3GHz Peak



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi Operator

120V 60Hz 20 'C 37 % R.H.

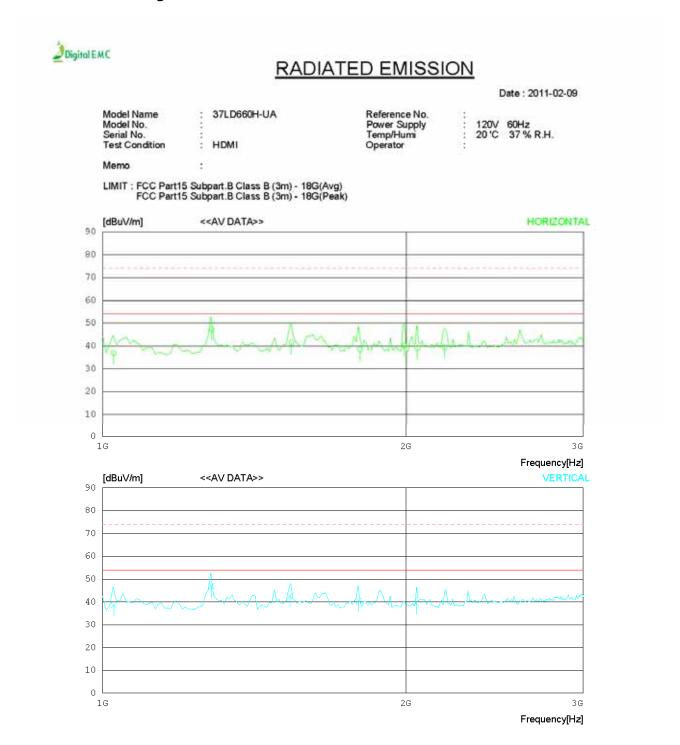
Memo

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

HDMI

No.	FREQ	READING		LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	ı] [dB]	[cm]	[DEG]
	Horizont	al								
1 2 3 4 5 6 7 8	1024.03 1280.44 1536.85 1793.26 1985.57 2049.67 2177.88 2594.55	9 65.1 9 61.4 9 58.7 7 59.8 9 58.6 6 55.6	23.7 24.5 25.1 25.2 25.2 25.4 26.0 27.6	4.9 5.5 6.0 6.6 7.0 7.1 7.3 7.9	41.8 41.9 41.9 42.0 42.0 42.0 42.0	44.8 53.2 50.6 48.5 50.0 49.1 46.9 47.0	74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0	29.2 20.8 23.4 25.5 24 24.9 27.1	100 100 100 100 100 100 100	181 358 183 358 350 358 358
	Vertical									
9 10 11 12 13 14 15	1024.03 1280.44 1536.85 1793.26 2049.67 2185.89 2306.09	9 64.9 9 59.0 9 57.1 9 56.0 9 54.0	23.7 24.5 25.1 25.2 25.4 26.0 26.5	4.9 5.5 6.0 6.6 7.1 7.3 7.5	41.8 41.9 41.9 42.0 42.0 42.0	46.8 53.0 48.2 46.9 46.5 45.3	74.0 74.0 74.0 74.0 74.0 74.0 74.0	27.2 21 25.8 27.1 27.5 28.7 29	200 200 100 100 100 100	186 167 191 358 144 33 176

- 1GHz-3GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi

Operator

120V 60Hz 20 'C 37 % R.H.

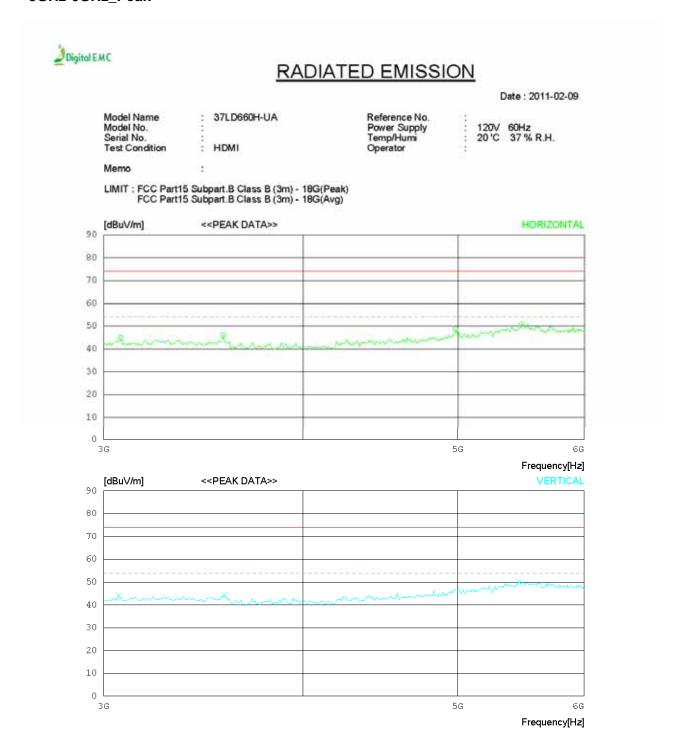
Memo

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

HDMI

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m] [dB]	[cm]	[DEG]
	Horizont	al								
1 2 3 4 5 6 7	1025.220 1282.474 1539.048 1799.515 1992.252 2052.020 2183.363	50.1 59.1 52.2 48.6 50.0 48.5 48.2	23.7 24.5 25.1 25.2 25.2 25.4 26.0	4.9 5.5 6.0 6.6 7.0 7.1 7.3	41.8 41.9 42.0 42.0 42.0	9 47.2 9 41.4 0 38.4 0 40.2 0 39.0	54.0 54.0 54.0 54.0 54.0 54.0	6.8	100 100 100 100 100 100	181 358 183 358 350 358 358
	Vertical									
8 9 10 11 12	1026.025 1282.516 1534.626 1794.600 2048.441	51.8 58.8 53.3 50.7 48.9	23.7 24.5 25.1 25.2 25.4	4.9 5.5 6.0 6.6 7.1	41.8 41.9 41.9 42.0	9 46.9 9 42.5 0 40.5	54.0 54.0 54.0 54.0 54.0	15.4 7.1 11.5 13.5 14.6	200 200 100 100 100	186 167 191 358 144

- 3GHz-6GHz Peak



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi

Operator

120V 60Hz 20 'C 37 % R.H.

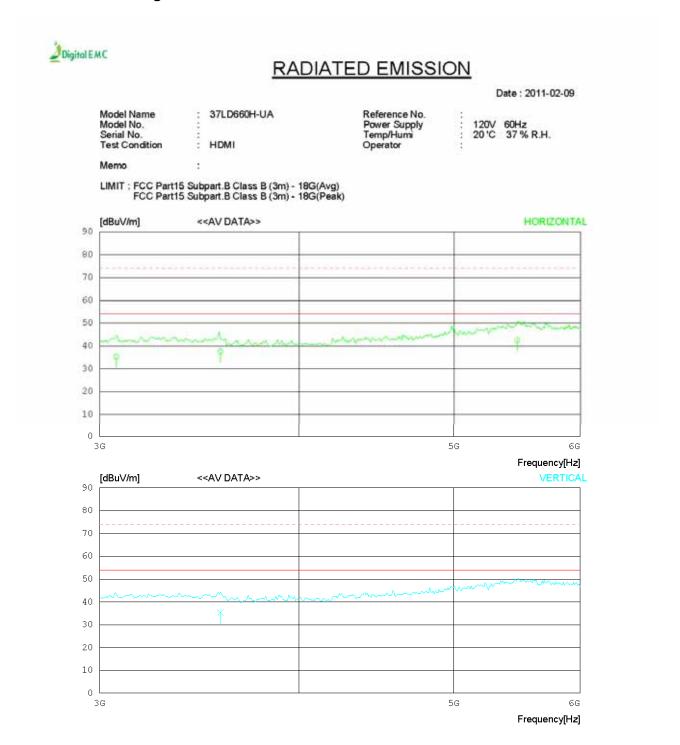
Memo

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

HDMI

No.	FREQ	READING PEAK	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m] [dB]	[cm]	[DEG]
	Horizont	al								
1	3075.33	5 49.1	28.9	8.9	42.1	44.8	74.0	29.2	100	358
2	3564.12	5 49.1	29.3	9.5	41.9	46.0	74.0	28	100	195
3	4982.38	8 45.8	32.8	11.1	41.1	48.6	74.0	25.4	100	358
4	5479.17	5 44.5	35.0	11.8	40.4	50.9	74.0	23.1	100	358
	Vertical	L								
5	3067.32	3 48.3	28.9	8.9	42.1	44.0	74.0	30	200	359
6	3572.13	8 47.4	29.3	9.5	41.9	44.3	74.0	29.7	200	359
7	5463.15	0 44.0	34.9	11.8	40.5	50.2	74.0	23.8	200	1

- 3GHz-6GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi

Operator

120V 60Hz 20 'C 37 % R.H.

Memo

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

HDMI

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
2 3	3072.625 3570.499 5475.626	40.7	28.9 29.3 35.0	8.9 9.5 11.8	42.1 41.9 40.4	37.6	54.0 54.0 54.0	18.7 16.4 11.4	100 100 100	358 195 358
	Vertical									
4 3	3571.119	38.5	29.3	9.5	41.9	35.4	54.0	18.6	200	359

< USB MODE >

- 30MHz-1GHz



Date: 2011-02-09

 Model Name
 :
 37LD660H-UA
 Reference No.
 :
 Power Supply
 :
 120V
 60Hz

 Model No.
 :
 Temp/Humi
 :
 20 °C
 37 % R.H.

 Test Condition
 :
 USB
 Operator
 :

Memo

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	[dB]	[cm]	[DEG]
	Horizont	al	-							
3 4 5 6 7 8 9	45.525 148.955 250.006 299.818 699.983 799.993 849.938 864.151 950.525 999.977	40.6 42.2 43.9 42.0 41.4 39.4 35.9 37.0 34.8 41.7	13.7 10.5 13.1 13.8 18.9 20.2 20.6 20.6 21.0 21.2	0.8 1.4 1.8 2.0 3.2 3.4 3.5 3.5 3.7	22.0 23.5 23.5 24.2 23.5 23.5 23.4 23.0 22.9	1 31.0 5 35.3 9 33.9 1 39.4 7 39.3 5 36.5 4 37.7 0 36.5	40.0 43.5 46.0 46.0 46.0 46.0 46.0 46.0 46.0	7.5 12.5 10.7 12.1 6.6 6.7 9.5 8.3 9.5	100 200 115 144 114 100 262 100 100 189	176 358 216 188 230 212 113 192 182 145
	Vertical	L	-							
	32.604 44.567 48.526 83.648 800.445 863.985	37.1 41.0 41.2 45.2 36.3 36.1	17.1 14.2 10.8 7.8 20.2 20.6	0.7 0.8 0.9 1.1 3.4 3.5	22.6 22.6 22.6 22.6 23.6 23.6	33.4 30.3 31.5 36.3	40.0 40.0 40.0 40.0 46.0	7.7 6.6 9.7 8.5 9.7 9.2	100 100 100 121 141 115	319 176 358 358 315 358

- 1GHz-3GHz Peak



Date: 2011-02-09

 Model Name
 : 37LD660H-UA

 Model No.
 :

 Serial No.
 :

 Test Condition
 : USB

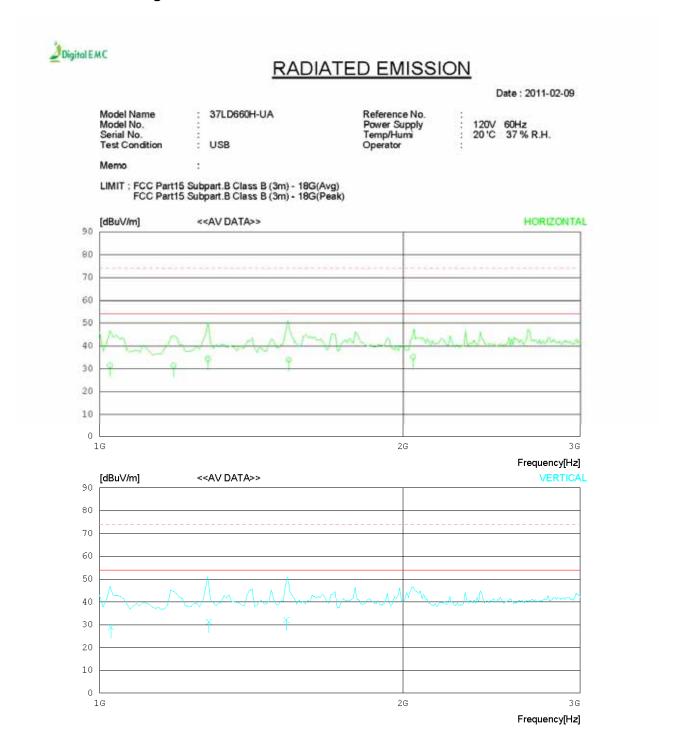
Reference No.
Power Supply : 120V 60Hz
Temp/Humi : 20 'C 37 % R.H.
Operator :

Memo

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

M.o.	EDEO	READING	7. NTTT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
No.	. FREQ	PEAK	ANT FACTOR	LOSS	GAIN	KESULI	PIMII	MAKGIN	ANIENNA	IABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	.] [dB]	[cm]	[DEG]
	Horizont	al								
1	1024.03	8 59.7	23.7	4.9	41.8	46.5	74.0	27.5	100	183
2	1184.29		24.2	5.2	41.8	44.6	74.0	29.4	100	358
3	1280.44	9 62.2	24.5	5.5	41.9	50.3	74.0	23.7	100	177
4	1536.85	9 61.9	25.1	6.0	41.9	51.1	74.0	22.9	100	177
5	1600.96	1 55.7	25.2	6.2	41.9	45.2	74.0	28.8	100	233
6	1793.26	9 56.4	25.2	6.6	42.0	46.2	74.0	27.8	100	225
7	2049.67	9 56.8	25.4	7.1	42.0	47.3	74.0	26.7	100	185
8	2306.09	3 54.9	26.5	7.5	42.0	46.9	74.0	27.1	100	358
9	2666.67	6 53.4	27.8	8.1	42.1	47.2	74.0	26.8	100	358
	77									
	Vertical									
10	1024.03	8 60.0	23.7	4.9	41.8	46.8	74.0	27.2	201	192
11	1176.28	2 57.6	24.2	5.2	41.8	45.2	74.0	28.8	201	1
12	1280.44	9 62.9	24.5	5.5	41.9	51.0	74.0	23	201	169
13	1536.85	9 61.7	25.1	6.0	41.9	50.9	74.0	23.1	100	207
14	1793.26	9 56.4	25.2	6.6	42.0	46.2	74.0	27.8	100	358
15	2041.66	6 56.0	25.4	7.1	42.0	46.5	74.0	27.5	201	190
16	2386.22	3 52.5	26.8	7.6	42.0	44.9	74.0	29.1	201	359

- 1GHz-3GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No. Test Condition

37LD660H-UA

Reference No. Power Supply Temp/Humi

120V 60Hz 20 'C 37 % R.H.

Operator

Memo

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

USB

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
2 3 4	1023.645 1183.955 1279.825 1539.622 2045.829	44.6 43.8 46.2 44.8 44.7	23.7 24.2 24.5 25.1 25.4	4.9 5.2 5.5 6.0 7.1	41.8 41.8 41.9 41.9	31.4 34.3 34.0	54.0 54.0 54.0 54.0 54.0	22.6 22.6 19.7 20.0 18.8	100 100 100 100 100	183 358 177 177 358
	Vertical									
6 7 8	1026.309 1283.755 1532.344	42.1 43.2 43.0	23.7 24.5 25.1	4.9 5.5 6.0	41.8 41.9 41.9	31.3	54.0 54.0 54.0	25.1 22.7 21.8	201 201 100	192 169 207

- 3GHz-6GHz Peak



Date: 2011-02-09

 Model Name
 :
 37LD660H-UA
 Reference No.
 :
 Power Supply
 :
 120V
 60Hz

 Serial No.
 :
 Temp/Humi
 :
 20 °C
 37 % R.H.

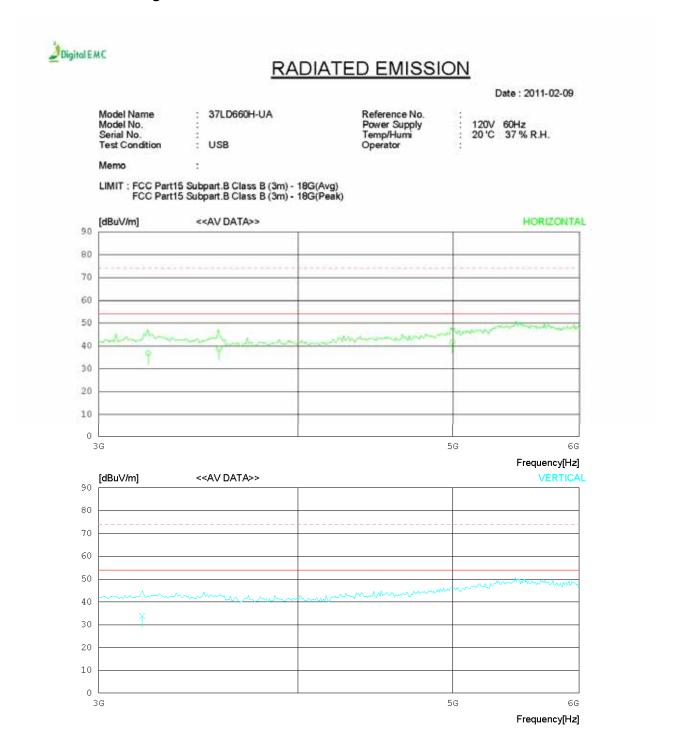
 Test Condition
 :
 USB
 Operator
 :

Memo

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	[dB]	[cm]	[DEG]
 	Horizont	al								
1 2 3 4	3075.33 3219.56 3564.12 4998.41 5471.16	8 51.1 5 50.4 4 45.6	28.9 29.0 29.3 32.8 35.0	8.9 9.1 9.5 11.1	42.1 42.0 41.9 41.1	45.3 47.2 47.3 48.4 50.8	74.0 74.0 74.0 74.0 74.0	28.7 26.8 26.7 25.6 23.2	100 100 100 100	179 358 197 358 270
 	Vertical									
6 7	3195.53 5471.16		28.9 35.0	9.0 11.8	42.0	44.9 50.7	74.0 74.0	29.1 23.3	100 201	358 99

- 3GHz-6GHz_Average



Date: 2011-02-09

Model Name Model No. Serial No.

Memo

: 37LD660H-UA : Reference No. Power Supply Temp/Humi

: : 120V 60Hz : 20 'C 37 % R.H. :

Test Condition : USB Operator

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

No	. FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
2	3222.199 3567.836 4995.508	40.8 41.9 38.8	29.0 29.3 32.8	9.1 9.5 11.1	42.0 41.9 41.3	38.8	54.0 54.0 54.0	17.1 15.2 12.4	100 100 100	358 197 358
	Vertical									
4	3194.626	37.9	28.9	9.0	42.0	33.8	54.0	20.2	100	358