

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 55LA7400-UD
Order No. : 1212-03074
Date of receipt : 2012-12-28
Test duration : 2013-01-04 ~ 2013-01-09
Use of report : FCC CoC Marking
Date of Issue : 2013-01-14

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 : (17 ~ 19) °C,
Humidity : (27 ~ 37) % R.H.

Test result : Comply Not Comply

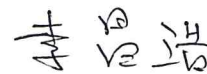
The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.
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Tested by:



Assistant Manager
DaeHwa Eun

Reviewed by:



General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

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1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

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

<http://www.digitalemc.com>

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

2. Test Laboratory

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

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	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.	55LA7400-UD
Add Model No.	None
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ55LA7400UD
Type of Sample Tested	Pre-Production
High Frequency	Max 800 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.4 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

HDMI (PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.363	60.053
1360 x 768	54.348	60.015
1280 x 1024	47.712	60.020
1920 x 1080	67.500	60.00

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	01-04	19	27
Radiated Disturbance	01-09	17	37

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.41818	L1	33.1	Average	47.5	14.4

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
803.654	H	42.4	Quasi-Peak	46.0	3.6

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

- HDMI MODE : 'H' Pattern mode, 1920x1080 Resolution
- USB MODE : USB recorded 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	VOSTRO220	G3RZK BX	DELL INC	Power	1.6	Not use	Non-shield	Plastic	DOC
				USB	1.8	Not use	Non-shield		
				USB	1.6	Not use	Non-shield		
				USB	2.0	Not use	Non-shield		
KEYBOARD	SKG-3000UB	TAKB601241E	MONTEREY INTERNATIONAL CORP	USB	1.8	Not use	Non-shield	Plastic	DOC
MOUSE	M-UAE96	N/A	LOGITECH Inc.	USB	1.6	Not use	Non-shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2001499	SONY EMCS	POWER	1.7	Not use	Non-shield	Plastic	VER
				AV	1.6	Not use	Non-shield		
USB MEMORY	SDCZ37-004G	N/A	Sandisk	USB	-	-	-	Plastic	DOC
PRINTER	SRP-770	N/A	BICSOLON	POWER USB	1.8 2.0	Not use	Non-shield	Plastic	DOC
Remote control	AN-MR400G	N/A	OHSUNG ELECTRONICS CO., LTD	-	-	-	-	-	-
HEADSET	COV903	N/A	COSY	STEREO	2.0	Not use	Non-shield	Plastic	DOC

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

< HDMI MODE >



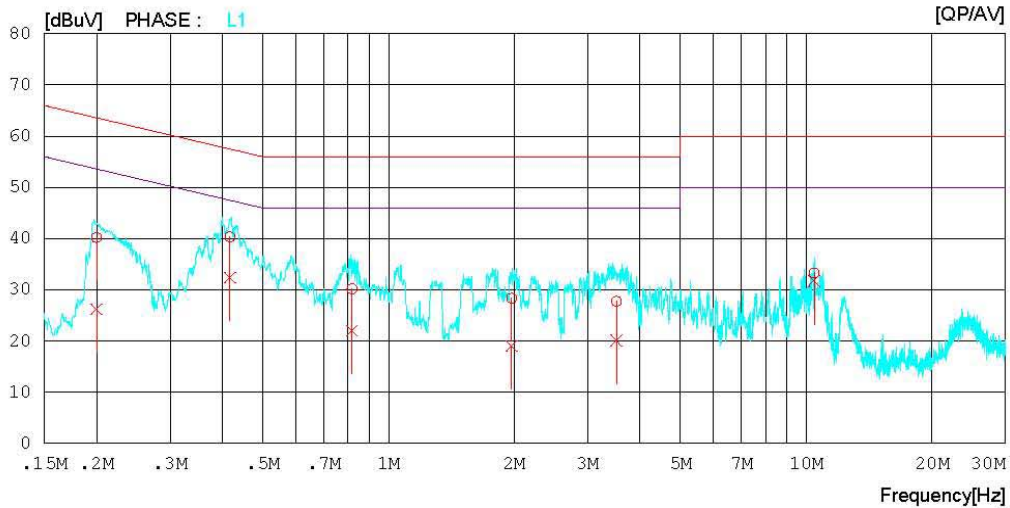
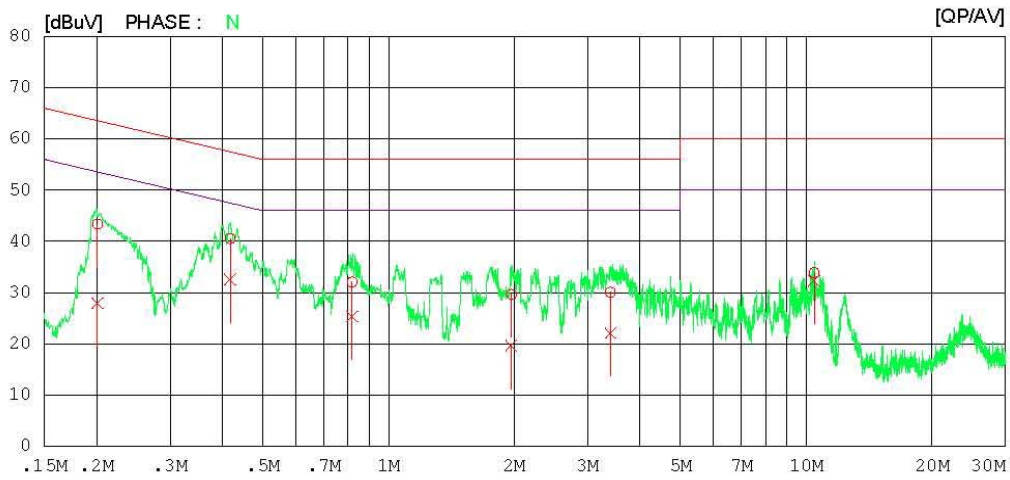
Results of Conducted Emission

Digital EMC
Date : 2013-01-04

Model No. : 55LA7400-UD
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 19°C 27% R.H.
Operator :

Memo :
LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-01-04

Model No. : 55LA7400-UD
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 19 °C 27 % 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	0.20105	43.1	27.7	0.2	43.3	27.9	63.6	53.6	20.3	25.7	N
2	0.41783	40.3	32.4	0.2	40.5	32.6	57.5	47.5	17.0	14.9	N
3	0.81883	31.9	25.2	0.2	32.1	25.4	56.0	46.0	23.9	20.6	N
4	1.96900	29.4	19.4	0.3	29.7	19.7	56.0	46.0	26.3	26.3	N
5	3.39750	29.8	21.8	0.3	30.1	22.1	56.0	46.0	25.9	23.9	N
6	10.44800	33.2	31.6	0.7	33.9	32.3	60.0	50.0	26.1	17.7	N
7	0.19994	40.0	26.0	0.2	40.2	26.2	63.6	53.6	23.4	27.4	L1
8	0.41706	40.2	32.2	0.2	40.4	32.4	57.5	47.5	17.1	15.1	L1
9	0.81796	30.0	21.8	0.2	30.2	22.0	56.0	46.0	25.8	24.0	L1
10	1.97150	28.1	18.8	0.3	28.4	19.1	56.0	46.0	27.6	26.9	L1
11	3.51300	27.5	19.8	0.3	27.8	20.1	56.0	46.0	28.2	25.9	L1
12	10.44750	32.6	31.0	0.7	33.3	31.7	60.0	50.0	26.7	18.3	L1

< USB MODE >



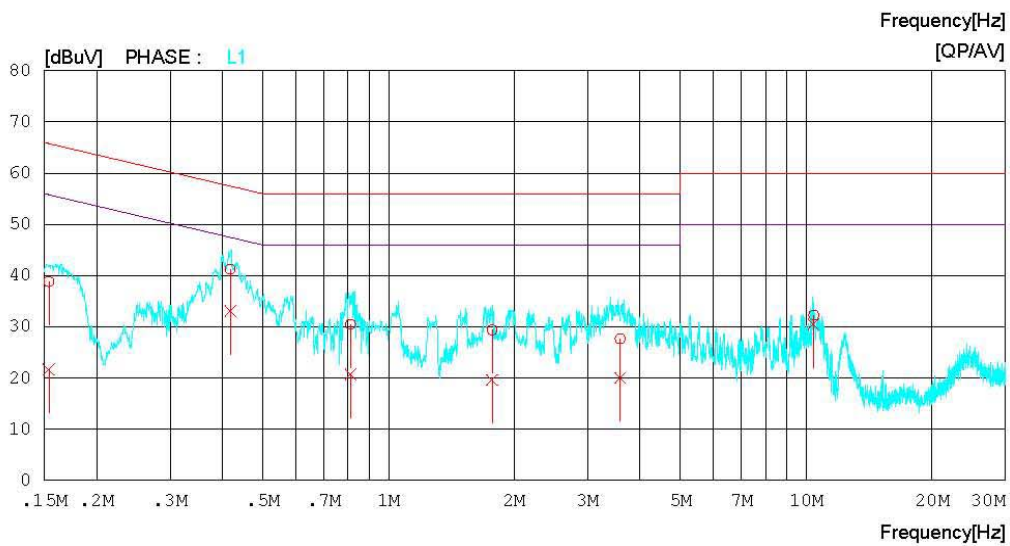
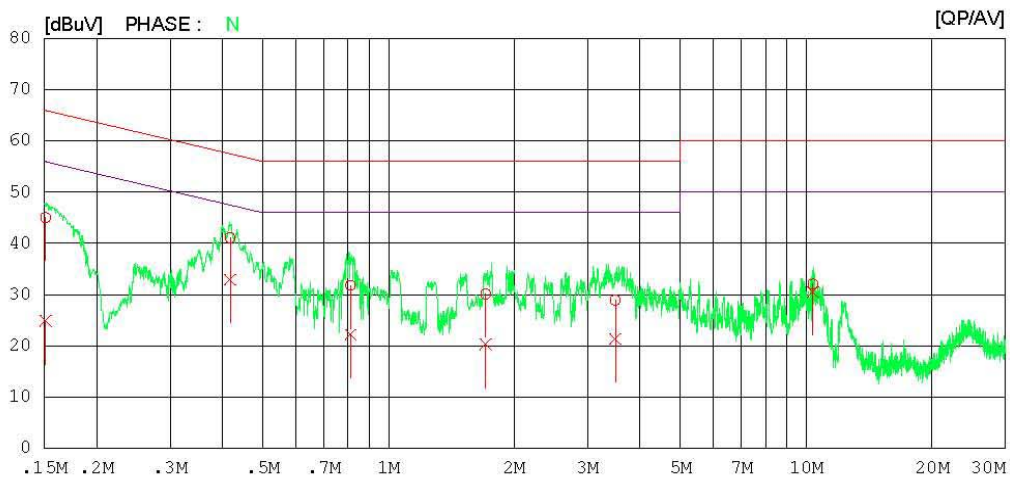
Results of Conducted Emission

Digital EMC
Date : 2013-01-04

Model No. : 55LA7400-UD
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 19°C 27% R.H.
Operator :

Memo :
LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-01-04

Model No. : 55LA7400-UD
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 19 °C 27 % 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	0.15109	44.8	24.7	0.2	45.0	24.9	65.9	55.9	20.9	31.0	N
2	0.41771	40.9	32.7	0.2	41.1	32.9	57.5	47.5	16.4	14.6	N
3	0.81163	31.6	22.0	0.2	31.8	22.2	56.0	46.0	24.2	23.8	N
4	1.71050	29.8	20.0	0.3	30.1	20.3	56.0	46.0	25.9	25.7	N
5	3.49000	28.6	21.0	0.3	28.9	21.3	56.0	46.0	27.1	24.7	N
6	10.37800	31.3	29.8	0.7	32.0	30.5	60.0	50.0	28.0	19.5	N
7	0.15381	38.6	21.5	0.2	38.8	21.7	65.8	55.8	27.0	34.1	L1
8	0.41818	41.1	32.9	0.2	41.3	33.1	57.5	47.5	16.2	14.4	L1
9	0.81209	30.3	20.5	0.2	30.5	20.7	56.0	46.0	25.5	25.3	L1
10	1.77050	29.1	19.4	0.3	29.4	19.7	56.0	46.0	26.6	26.3	L1
11	3.58450	27.4	19.7	0.3	27.7	20.0	56.0	46.0	28.3	26.0	L1
12	10.42800	31.6	29.8	0.7	32.3	30.5	60.0	50.0	27.7	19.5	L1

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 (dB μ V/m)	Quasi-peak (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 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 (dB μ V/m)	Quasi-peak (dB μ V/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 (dB μ V/m)	Average (dB μ V/m)	Peak (dB μ V/m)	Average (dB μ V/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

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

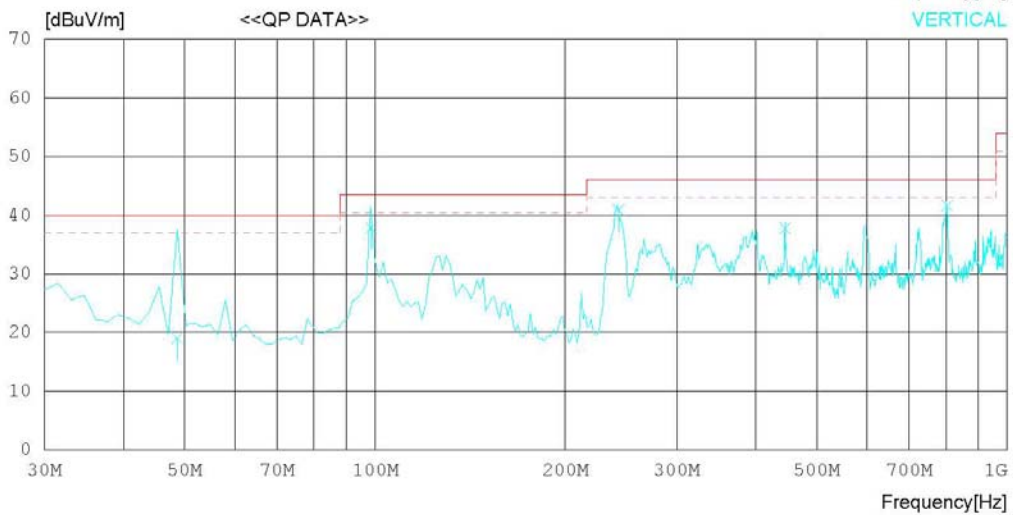
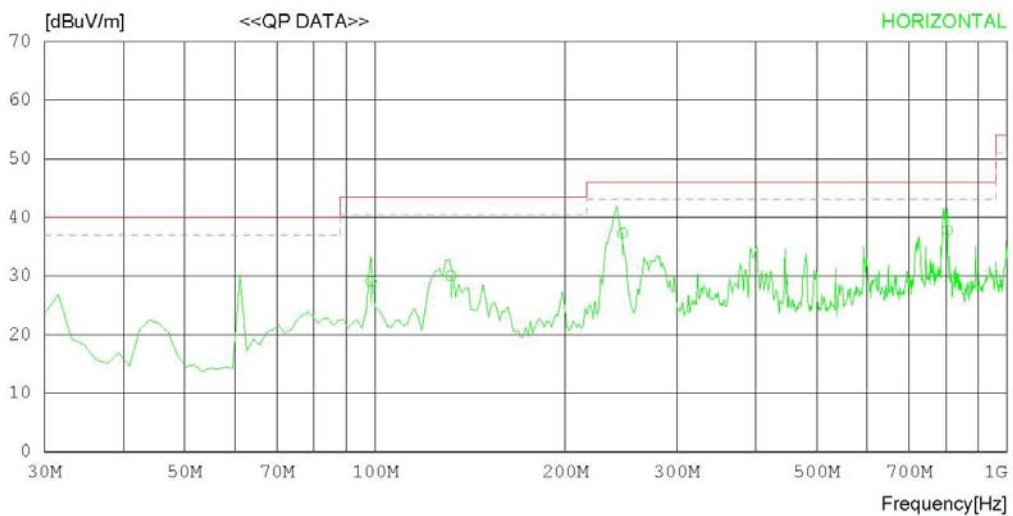
Date : 2013-01-09

Model Name : 55LA7400-UD
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 17 °C 37 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17 °C 37 % 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	98.510	40.1	10.4	1.4	22.8	29.1	43.5	14.4	205	84
2	131.863	40.1	11.4	1.5	23.0	30.0	43.5	13.5	106	104
3	246.280	45.8	12.5	2.6	23.6	37.3	46.0	8.7	164	74
4	803.646	36.7	20.0	4.8	23.7	37.8	46.0	8.2	100	130
----- Vertical -----										
5	48.654	30.8	9.8	1.3	22.8	19.1	40.0	20.9	100	78
6	98.529	48.9	10.4	1.4	22.8	37.9	43.5	5.6	100	43
7	242.798	49.7	12.3	2.5	23.6	40.9	46.0	5.1	100	1
8	445.519	42.3	16.6	3.5	24.6	37.8	46.0	8.2	100	1
9	803.646	40.6	20.0	4.8	23.7	41.7	46.0	4.3	100	1

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

RADIATED EMISSION

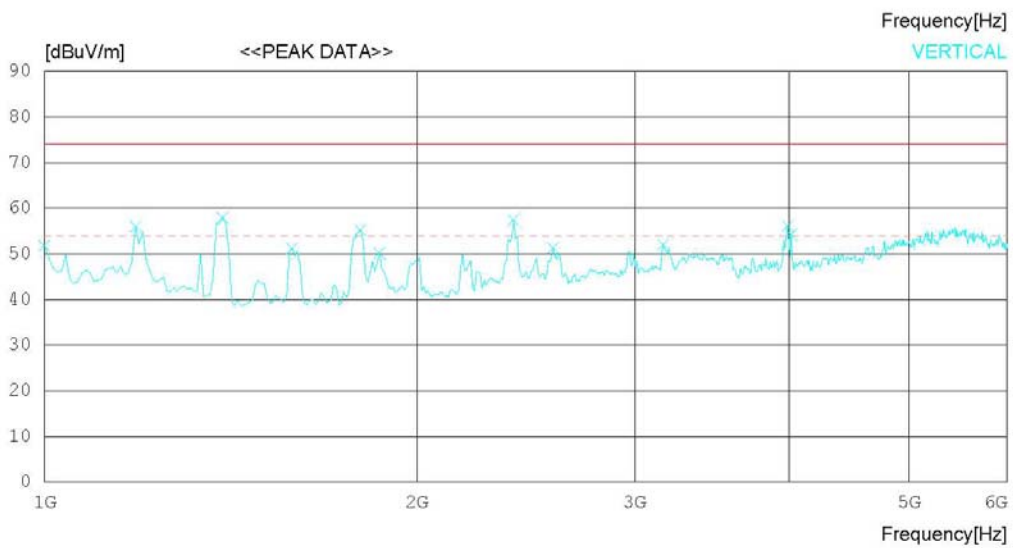
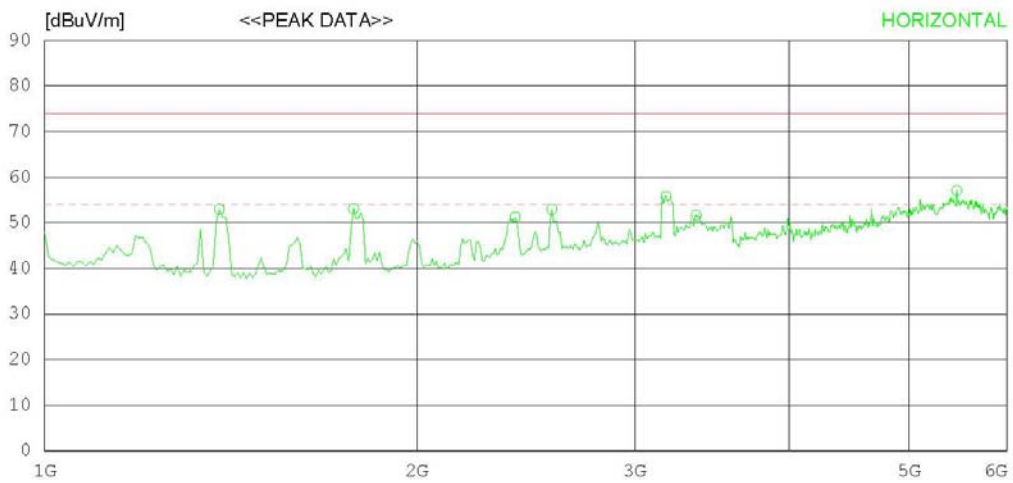
Date : 2013-01-09

Model Name : 55LA7400-UD
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 17 °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)



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17°C 37% R.H.
Test Condition : HDMI	Operator :

Memo :

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1384.615	49.9	24.5	7.1	28.5	53.0	74.0	21	100	179
2	1777.243	49.0	24.6	8.0	28.5	53.1	74.0	20.9	100	212
3	2402.249	43.6	26.9	9.3	28.5	51.3	74.0	22.7	100	92
4	2570.520	43.9	27.7	9.7	28.4	52.9	74.0	21.1	100	240
5	3179.504	44.4	28.9	10.9	28.4	55.8	74.0	18.2	100	232
6	3363.801	39.8	28.9	11.4	28.4	51.7	74.0	22.3	100	358
7	5463.150	35.4	34.9	14.9	28.1	57.1	74.0	16.9	100	80
----- Vertical -----										
8	1000.000	50.7	23.9	5.7	28.5	51.8	74.0	22.2	100	196
9	1184.295	53.9	24.2	6.4	28.5	56.0	74.0	18	100	1
10	1392.628	54.8	24.5	7.1	28.5	57.9	74.0	16.1	100	1
11	1584.936	47.4	24.6	7.7	28.5	51.2	74.0	22.8	100	163
12	1801.282	51.0	24.6	8.1	28.5	55.2	74.0	18.8	100	1
13	1865.384	45.9	24.6	8.2	28.5	50.2	74.0	23.8	100	187
14	2394.236	49.8	26.8	9.3	28.5	57.4	74.0	16.6	100	1
15	2578.533	42.3	27.7	9.7	28.4	51.3	74.0	22.7	100	1
16	3163.478	40.6	28.9	10.9	28.4	52.0	74.0	22	100	216
17	3988.811	41.4	30.1	12.9	28.3	56.1	74.0	17.9	100	207
18	4012.849	39.4	30.2	13.0	28.3	54.3	74.0	19.7	100	1

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

RADIATED EMISSION

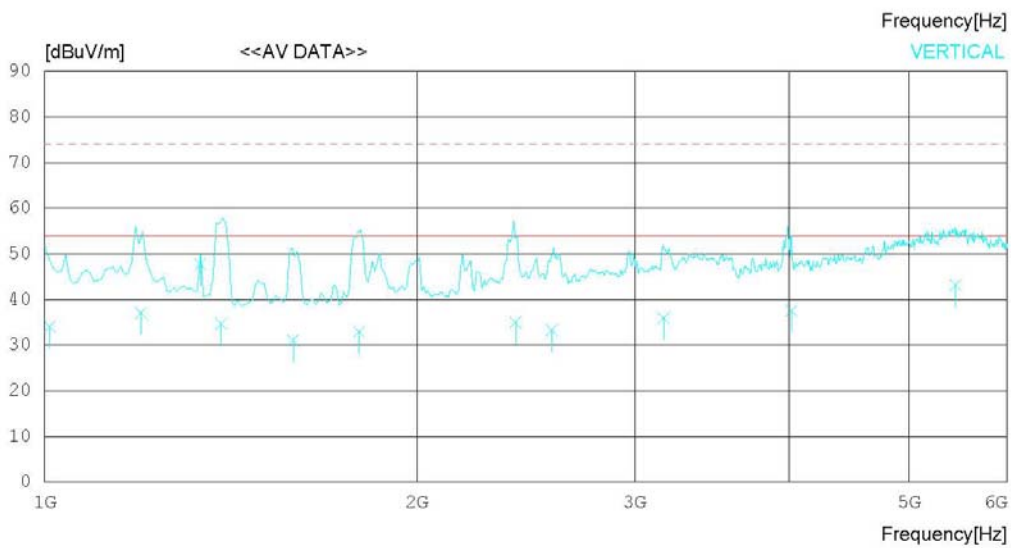
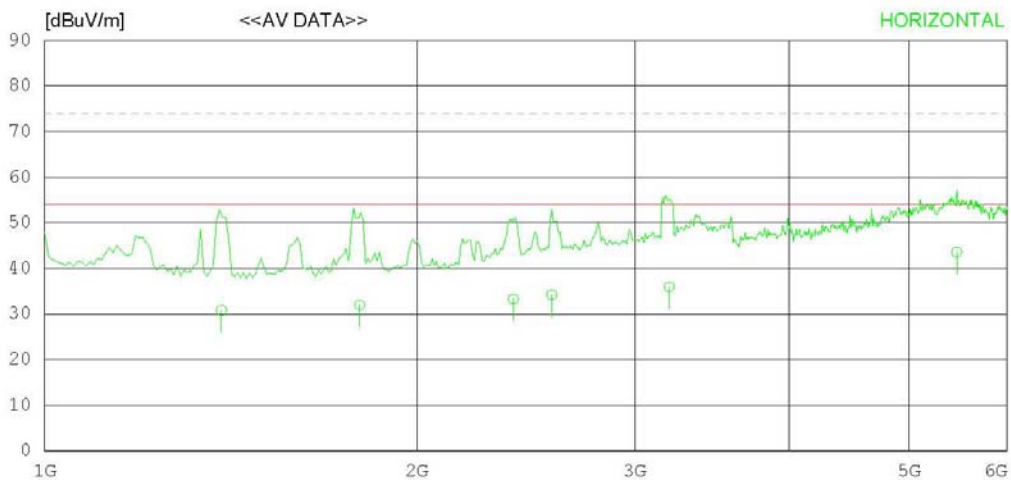
Date : 2013-01-09

Model Name : 55LA7400-UD
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 17 °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)



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17 °C 37 % R.H.
Test Condition : HDMI	Operator :

Memo :

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

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1389.522	27.7	24.5	7.1	28.5	30.8	54.0	23.2	100	179
2	1798.304	27.8	24.6	8.1	28.5	32.0	54.0	22.0	100	212
3	2392.635	25.7	26.8	9.3	28.5	33.3	54.0	20.7	100	178
4	2570.520	25.2	27.7	9.7	28.4	34.2	54.0	19.8	100	223
5	3199.450	24.4	28.9	11.0	28.4	35.9	54.0	18.1	100	245
6	5462.195	21.9	34.9	14.9	28.1	43.6	54.0	10.4	100	80
----- Vertical -----										
7	1010.096	32.9	23.9	5.8	28.5	34.1	54.0	19.9	100	196
8	1197.179	35.0	24.2	6.4	28.5	37.1	54.0	16.9	100	177
9	1336.532	45.0	24.4	6.9	28.5	47.8	54.0	6.2	100	321
10	1389.522	31.6	24.5	7.1	28.5	34.7	54.0	19.3	100	163
11	1587.872	27.3	24.6	7.7	28.5	31.1	54.0	22.9	100	189
12	1795.804	28.7	24.6	8.1	28.5	32.9	54.0	21.1	100	1
13	2402.965	27.3	26.9	9.3	28.5	35.0	54.0	19.0	100	44
14	2570.705	24.3	27.7	9.7	28.4	33.3	54.0	20.7	100	180
15	3164.744	24.5	28.9	10.9	28.4	35.9	54.0	18.1	100	215
16	4016.980	22.7	30.2	13.0	28.3	37.6	54.0	16.4	100	191
17	5451.679	21.6	34.8	14.9	28.1	43.2	54.0	10.8	100	178

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

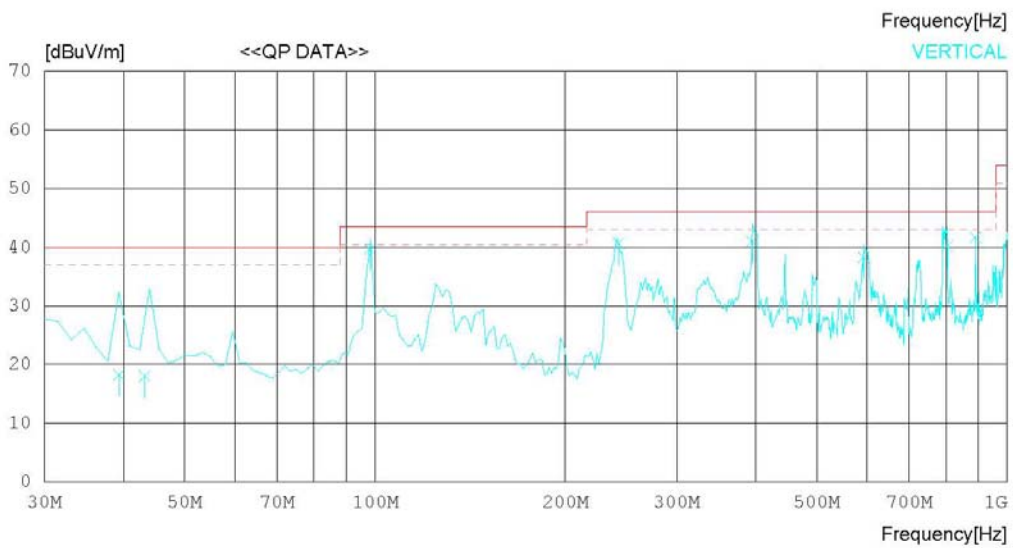
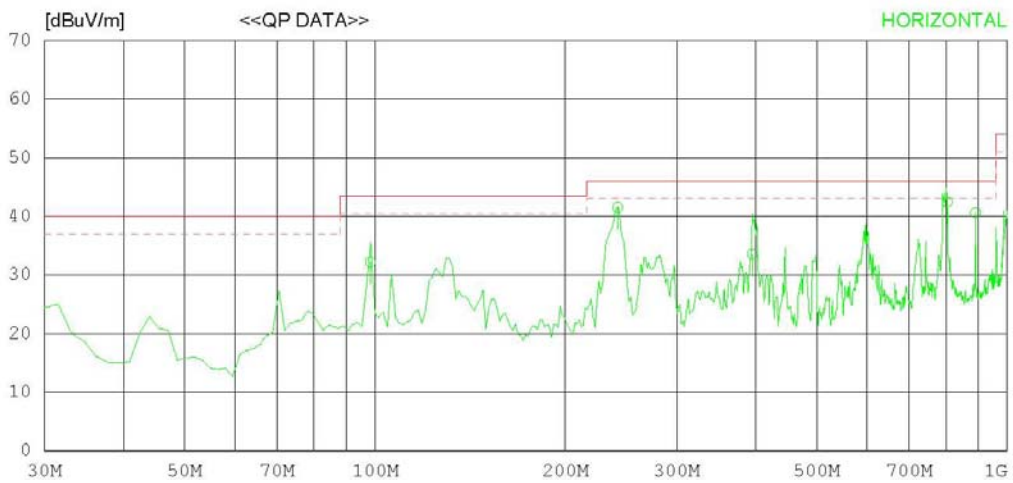
Date : 2013-01-09

Model Name : 55LA7400-UD
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 17 °C 37 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17 °C 37 % 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	98.294	43.2	10.4	1.4	22.8	32.2	43.5	11.3	195	98
2	242.094	50.4	12.2	2.5	23.6	41.5	46.0	4.5	100	105
3	395.304	38.6	15.9	3.5	24.5	33.5	46.0	12.5	100	149
4	803.654	41.3	20.0	4.8	23.7	42.4	46.0	3.6	100	154
5	891.029	37.9	20.7	5.2	23.2	40.6	46.0	5.4	100	204
----- Vertical -----										
6	39.327	27.0	13.2	1.1	23.0	18.3	40.0	21.7	100	128
7	43.263	26.4	13.5	1.1	22.9	18.1	40.0	21.9	100	132
8	98.304	50.7	10.4	1.4	22.8	39.7	43.5	3.8	100	14
9	242.792	49.5	12.3	2.5	23.6	40.7	46.0	5.3	100	1
10	394.899	46.0	15.9	3.5	24.4	41.0	46.0	5.0	119	161
11	592.259	40.3	18.6	4.1	24.7	38.3	46.0	7.7	100	316
12	803.685	39.1	20.0	4.8	23.7	40.2	46.0	5.8	100	177
13	891.029	39.0	20.7	5.2	23.2	41.7	46.0	4.3	100	1

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

RADIATED EMISSION

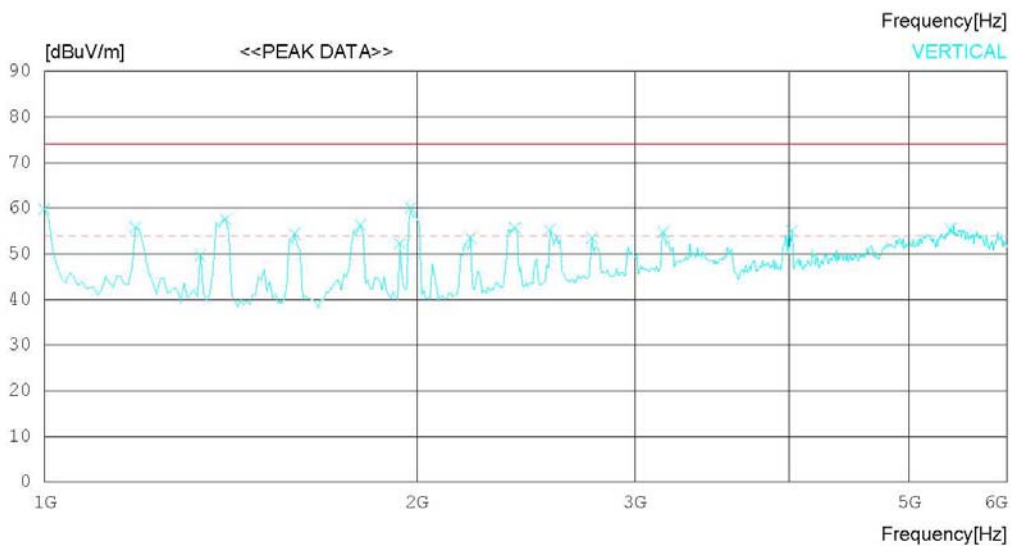
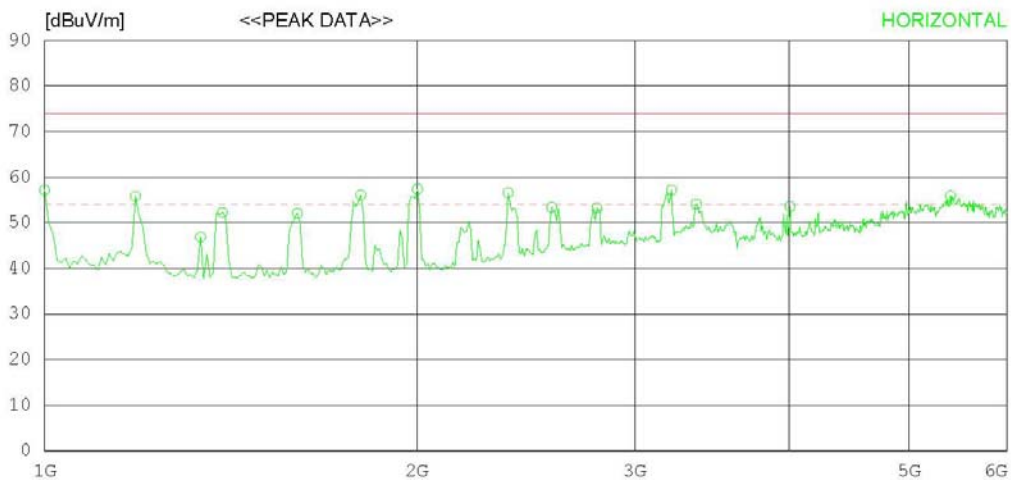
Date : 2013-01-09

Model Name : 55LA7400-UD
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 17 °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)



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17 °C 37 % R.H.
Test Condition : USB	Operator :

Memo :

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1000.000	56.1	23.9	5.7	28.5	57.2	74.0	16.8	100	1
2	1184.295	53.7	24.2	6.4	28.5	55.8	74.0	18.2	100	1
3	1336.538	44.1	24.4	6.9	28.5	46.9	74.0	27.1	100	139
4	1392.628	49.2	24.5	7.1	28.5	52.3	74.0	21.7	100	1
5	1600.961	48.3	24.6	7.7	28.5	52.1	74.0	21.9	100	1
6	1801.282	51.9	24.6	8.1	28.5	56.1	74.0	17.9	100	1
7	2001.602	52.8	24.6	8.5	28.5	57.4	74.0	16.6	100	1
8	2370.197	49.1	26.7	9.3	28.5	56.6	74.0	17.4	100	202
9	2570.520	44.4	27.7	9.7	28.4	53.4	74.0	20.6	100	1
10	2794.883	43.2	28.4	10.1	28.4	53.3	74.0	20.7	100	233
11	3211.555	45.7	28.9	11.0	28.4	57.2	74.0	16.8	100	231
12	3363.801	42.2	28.9	11.4	28.4	54.1	74.0	19.9	100	246
13	4004.836	38.8	30.2	12.9	28.3	53.6	74.0	20.4	100	1
14	5399.048	34.4	34.6	15.0	28.1	55.9	74.0	18.1	100	197
----- Vertical -----										
15	1000.000	58.7	23.9	5.7	28.5	59.8	74.0	14.2	100	358
16	1184.295	53.7	24.2	6.4	28.5	55.8	74.0	18.2	100	358
17	1336.538	46.9	24.4	6.9	28.5	49.7	74.0	24.3	100	358
18	1400.641	54.4	24.5	7.2	28.5	57.6	74.0	16.4	100	358
19	1592.948	50.6	24.6	7.7	28.5	54.4	74.0	19.6	100	358
20	1801.282	52.2	24.6	8.1	28.5	56.4	74.0	17.6	100	204
21	1937.500	47.9	24.6	8.3	28.5	52.3	74.0	21.7	100	346
22	1977.564	55.6	24.6	8.4	28.5	60.1	74.0	13.9	100	358
23	2209.938	47.3	25.8	8.9	28.5	53.5	74.0	20.5	100	358
24	2402.249	48.0	26.9	9.3	28.5	55.7	74.0	18.3	100	358
25	2562.507	46.4	27.6	9.7	28.4	55.3	74.0	18.7	100	358
26	2770.844	43.5	28.3	10.1	28.4	53.5	74.0	20.5	100	358
27	3163.478	43.3	28.9	10.9	28.4	54.7	74.0	19.3	100	158
28	4020.862	40.1	30.2	13.0	28.3	55.0	74.0	19	100	200
29	5399.048	33.9	34.6	15.0	28.1	55.4	74.0	18.6	100	358

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

RADIATED EMISSION

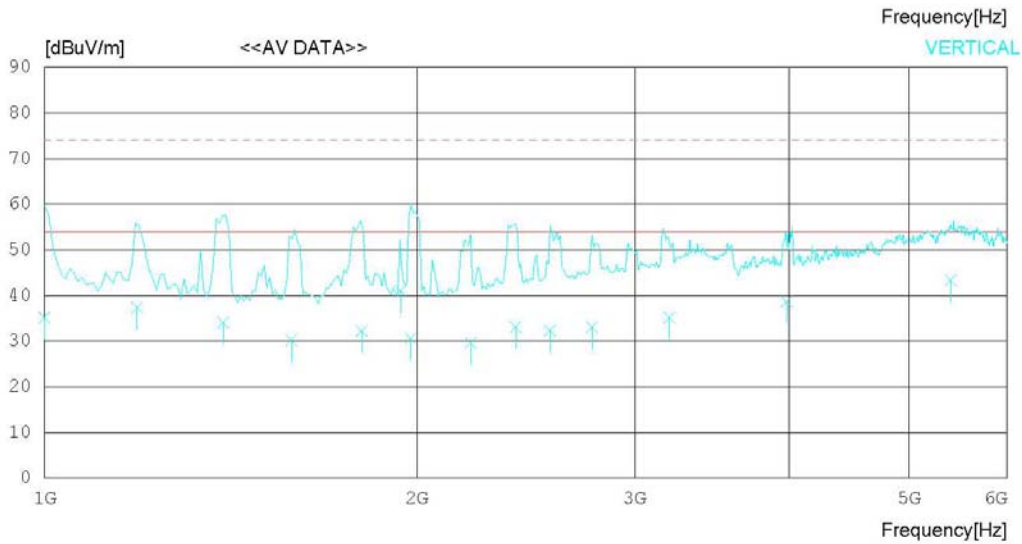
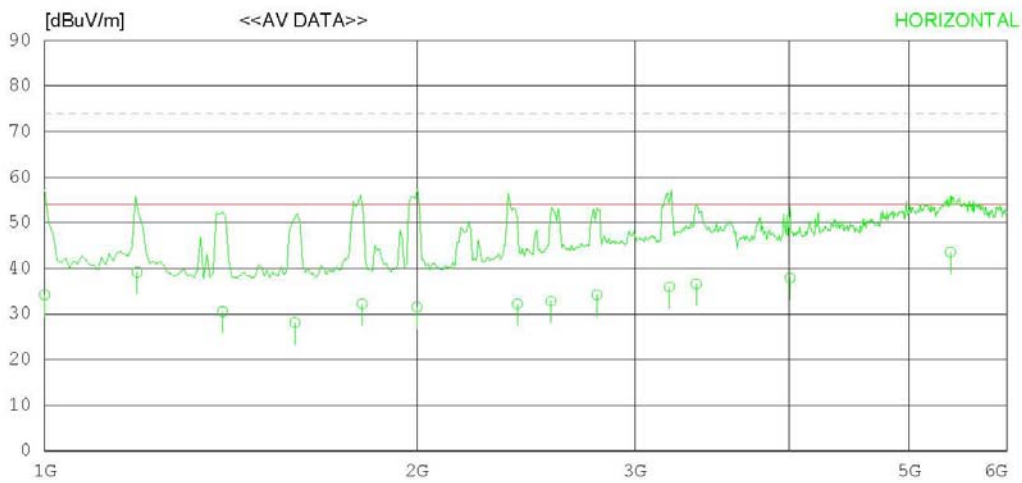
Date : 2013-01-09

Model Name : 55LA7400-UD
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 17 °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)



RADIATED EMISSION

Date : 2013-01-09

Model Name : 55LA7400-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 17 °C 37 % R.H.
Test Condition : USB	Operator :

Memo :

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

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1000.120	33.1	23.9	5.7	28.5	34.2	54.0	19.8	100	257
2	1188.198	37.1	24.2	6.4	28.5	39.2	54.0	14.8	100	178
3	1393.375	27.4	24.5	7.1	28.5	30.5	54.0	23.5	100	231
4	1593.429	24.3	24.6	7.7	28.5	28.1	54.0	25.9	100	44
5	1805.801	28.0	24.6	8.1	28.5	32.2	54.0	21.8	100	1
6	1999.589	27.0	24.6	8.4	28.5	31.5	54.0	22.5	100	46
7	2410.814	24.5	26.9	9.3	28.5	32.2	54.0	21.8	100	202
8	2567.234	23.8	27.7	9.7	28.4	32.8	54.0	21.2	100	1
9	2794.883	24.1	28.4	10.1	28.4	34.2	54.0	19.8	100	233
10	3199.571	24.4	28.9	11.0	28.4	35.9	54.0	18.1	100	231
11	3363.801	24.7	28.9	11.4	28.4	36.6	54.0	17.4	100	246
12	4004.836	23.1	30.2	12.9	28.3	37.9	54.0	16.1	100	1
13	5399.048	22.1	34.6	15.0	28.1	43.6	54.0	10.4	100	197
----- Vertical -----										
14	1000.108	34.1	23.9	5.7	28.5	35.2	54.0	18.8	100	136
15	1188.198	35.3	24.2	6.4	28.5	37.4	54.0	16.6	100	132
16	1394.875	31.0	24.5	7.1	28.5	34.1	54.0	19.9	100	264
17	1583.253	26.4	24.6	7.7	28.5	30.2	54.0	23.8	100	178
18	1805.801	28.0	24.6	8.1	28.5	32.2	54.0	21.8	100	204
19	1941.265	36.6	24.6	8.3	28.5	41.0	54.0	13.0	100	177
20	1976.353	26.1	24.6	8.4	28.5	30.6	54.0	23.4	100	213
21	2209.938	23.4	25.8	8.9	28.5	29.6	54.0	24.4	100	358
22	2404.247	25.4	26.9	9.3	28.5	33.1	54.0	20.9	100	181
23	2562.507	23.4	27.6	9.7	28.4	32.3	54.0	21.7	100	177
24	2770.844	23.0	28.3	10.1	28.4	33.0	54.0	21.0	100	179
25	3199.571	23.7	28.9	11.0	28.4	35.2	54.0	18.8	100	242
26	3978.205	24.0	30.1	12.9	28.3	38.7	54.0	15.3	100	203
27	5399.048	21.9	34.6	15.0	28.1	43.4	54.0	10.6	100	358

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
<input type="checkbox"/> SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
<input type="checkbox"/> RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
<input type="checkbox"/> LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
<input type="checkbox"/> LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
<input type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input checked="" type="checkbox"/> LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
<input checked="" type="checkbox"/> LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
<input checked="" type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09

2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
<input type="checkbox"/> BILOG ANTENNA	CBL6112D	SCHAFFNER	22609	2011.12.21	2012.12.21
<input checked="" type="checkbox"/> HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> AMPLIFIER	MLA-100M18-B01-25	TSJ	1719458	2012.06.04	2013.06.04
<input type="checkbox"/> SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
<input type="checkbox"/> AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
<input checked="" type="checkbox"/> BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.03.22	2014.03.22
<input type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
<input type="checkbox"/> AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2012.03.05	2013.03.05

Appendix 2

Report Revision History

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