

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 55LA6900-UD
Order No. : 1212-03072
Date of receipt : 2012-12-28
Test duration : 2013-01-07 ~ 2013-01-08
Use of report : FCC CoC Marking
Date of Issue : 2013-01-11

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 : (21 ~ 22) °C,
Humidity : (41 ~ 49) % R.H.

Test result : Comply Not Comply

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

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

Tested by:

Reviewed by:



Manager
MyungJin Song



General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

CONTENTS

1. General Remarks	3
2. Test Laboratory	3
3. General Information of EUT	4
4. Test Summary	5
4.1 Applied standards and test results	5
4.2 Test environment and conditions	5
4.3 Test result Summary	5
5. Test Set-up and operation mode	6
5.1 Principle of Configuration Selection	6
5.2 Test Operation Mode	6
5.3 Support Equipment Used	6
6. Test Results : Emission	7
6.1 Conducted Disturbance	7
6.2 Radiated Disturbance	12
Appendix 1	26
List of Test and Measurement Instruments	26
Appendix 2	28
Report Revision History	28

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.	55LA6900-UD
Add Model No.	55LA6950-UD
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ55LA6900UD
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

Component supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480i	15.73	59.94
	15.73	60.00
720 x 480p	31.47	59.94
	31.50	60.00
1280 x 720p	44.96	59.94
	45.00	60.00
1920 x 1080i	33.72	59.94
	33.75	60.00
1920 x 1080p	26.97	23.976
	27.00	24.00
	33.71	29.97
	33.75	30.00
	67.432	59.94
	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	01-07	22	41
Radiated Disturbance	01-08	21	49

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.15006	L1	49.1	Quasi-Peak	66.0	16.9

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
795.898	H	39.2	Quasi-Peak	46.0	6.8

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 – Resolution : 1920x1080 Resolution (Worst Case)
- USB MODE

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	VOSTRO430	9K77SBX	DELL	POWER	1.8	Not use	Non-shield	Plastic	DOC
				HDMI	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
KEYBOARD	SKG-2000UB	TAKB401425B	MONITEREY INTERNATIONAL CORP	USB	1.8	Not use	Shield	Plastic	DOC
MOUSE	M-UAE96	LZ751AP01L3	LOGITECH Inc.	USB	1.8	Not use	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	Cruzer Z37	N/A	Sandisk	USB	-	-	-	-	DOC
PRINTER	SRP-770	SRP77008060035	BICOLON	POWER USB	1.8 1.8	Not use	Non-shield	Plastic	DOC
Remote control	AN-MR400G	N/A	OHSUNG ELECTRONICS CO., LTD	-	-	-	-	-	-

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

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

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

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

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

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

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

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

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

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

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

6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50

Note 1 The lower limit shall apply at the transition frequencies.
 Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

- Note) 1. Emission Level = Reading Value + Correction Factor.
 2. Correction Factor = Cable Loss + Insertion Loss of LISN
 3. Margin = Limit - Emission level

Test Result

< HDMI MODE >



Results of Conducted Emission

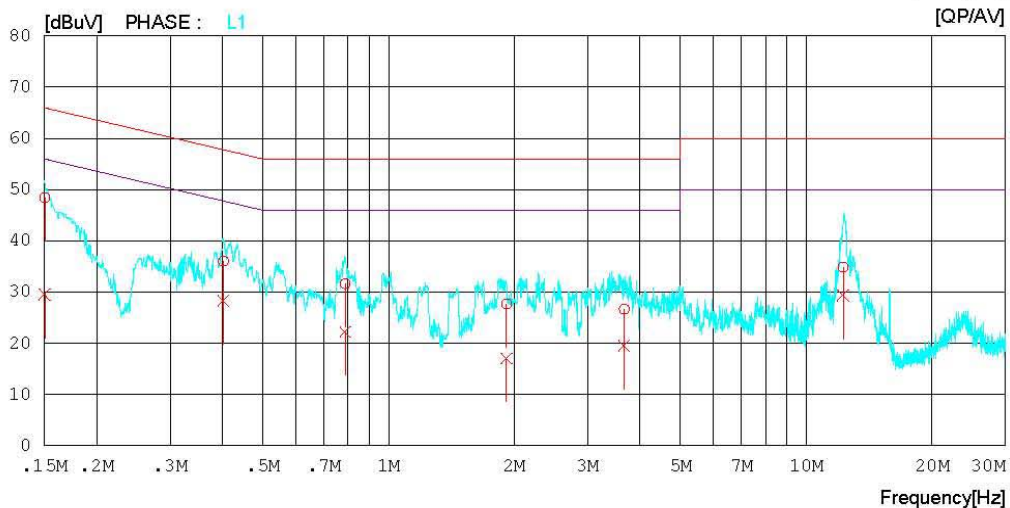
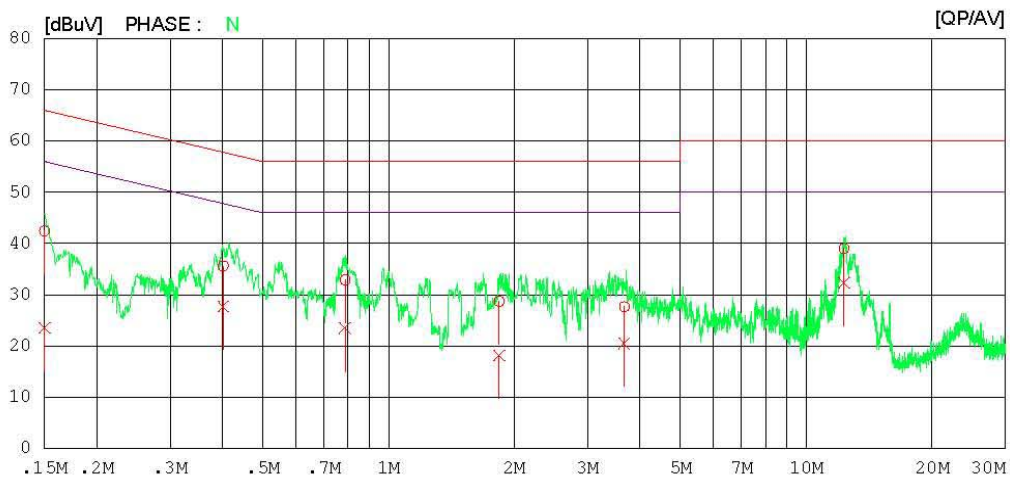
Digital EMC
Date : 2013-01-07

Model No. : 55LA6900-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 22°C 41 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-01-07

Model No.	: 55LA6900-UA	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 22 °C 41 % R.H.
Test Condition	: HDMI	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	0.15012	42.2	23.3	0.2	42.4	23.5	66.0	56.0	23.6	32.5	N
2	0.40223	35.4	27.5	0.2	35.6	27.7	57.8	47.8	22.2	20.1	N
3	0.78751	32.7	23.3	0.2	32.9	23.5	56.0	46.0	23.1	22.5	N
4	1.84150	28.4	17.9	0.3	28.7	18.2	56.0	46.0	27.3	27.8	N
5	3.66900	27.4	20.2	0.3	27.7	20.5	56.0	46.0	28.3	25.5	N
6	12.32750	38.3	31.6	0.7	39.0	32.3	60.0	50.0	21.0	17.7	N
7	0.15031	48.2	29.3	0.2	48.4	29.5	66.0	56.0	17.6	26.5	L1
8	0.40286	35.8	28.1	0.2	36.0	28.3	57.8	47.8	21.8	19.5	L1
9	0.78821	31.4	22.0	0.2	31.6	22.2	56.0	46.0	24.4	23.8	L1
10	1.91600	27.4	16.7	0.3	27.7	17.0	56.0	46.0	28.3	29.0	L1
11	3.66700	26.4	19.2	0.3	26.7	19.5	56.0	46.0	29.3	26.5	L1
12	12.26100	34.2	28.7	0.7	34.9	29.4	60.0	50.0	25.1	20.6	L1

< USB MODE >



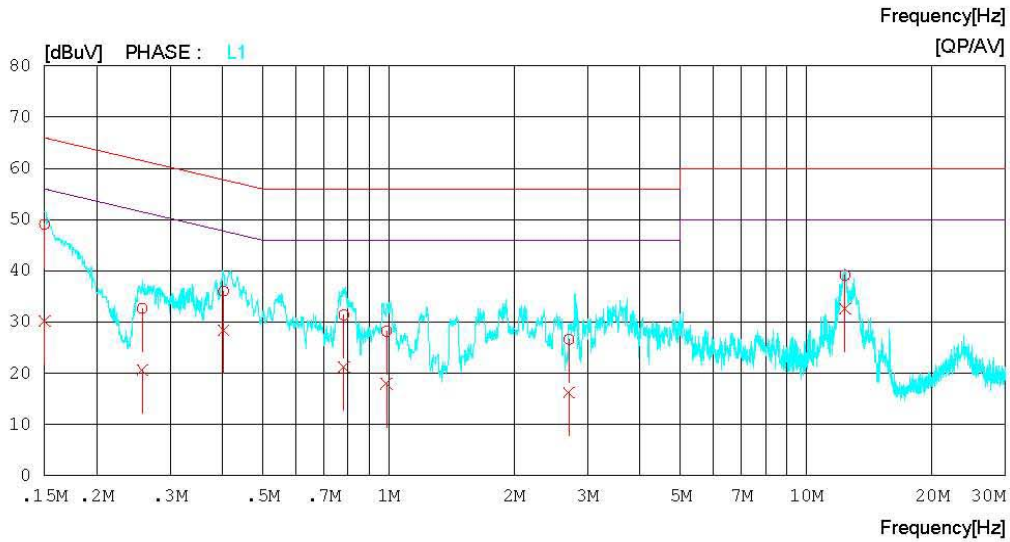
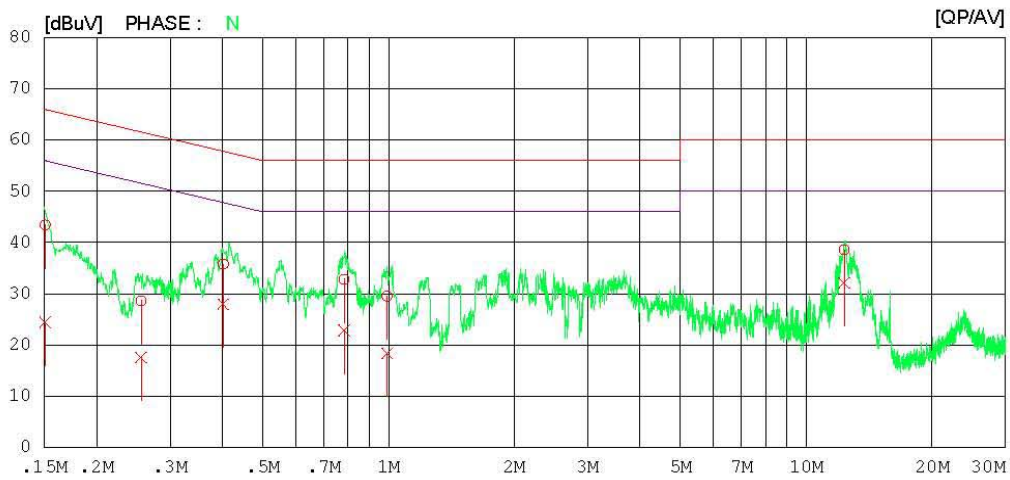
Results of Conducted Emission

Digital EMC
Date : 2013-01-07

Model No.	: 55LA6900-UA	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 22°C 41 % R.H.
Test Condition	: USB	Operator	:

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-01-07

Model No. : 55LA6900-UA
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120 V 60 Hz
 Temp/Humi. : 22 °C 41 % 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	0.15067	43.2	24.3	0.2	43.4	24.5	66.0	56.0	22.6	31.5	N
2	0.25563	28.4	17.3	0.2	28.6	17.5	61.6	51.6	33.0	34.1	N
3	0.40239	35.6	27.7	0.2	35.8	27.9	57.8	47.8	22.0	19.9	N
4	0.78354	32.6	22.7	0.2	32.8	22.9	56.0	46.0	23.2	23.1	N
5	0.99205	29.3	18.1	0.2	29.5	18.3	56.0	46.0	26.5	27.7	N
6	12.33750	37.9	31.4	0.7	38.6	32.1	60.0	50.0	21.4	17.9	N
7	0.15006	48.9	30.0	0.2	49.1	30.2	66.0	56.0	16.9	25.8	L1
8	0.25748	32.5	20.5	0.2	32.7	20.7	61.5	51.5	28.8	30.8	L1
9	0.40269	35.9	28.2	0.2	36.1	28.4	57.8	47.8	21.7	19.4	L1
10	0.78209	31.2	21.0	0.2	31.4	21.2	56.0	46.0	24.6	24.8	L1
11	0.98863	28.0	17.8	0.2	28.2	18.0	56.0	46.0	27.8	28.0	L1
12	2.70350	26.3	15.9	0.3	26.6	16.2	56.0	46.0	29.4	29.8	L1
13	12.38000	38.4	31.9	0.7	39.1	32.6	60.0	50.0	20.9	17.4	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 >

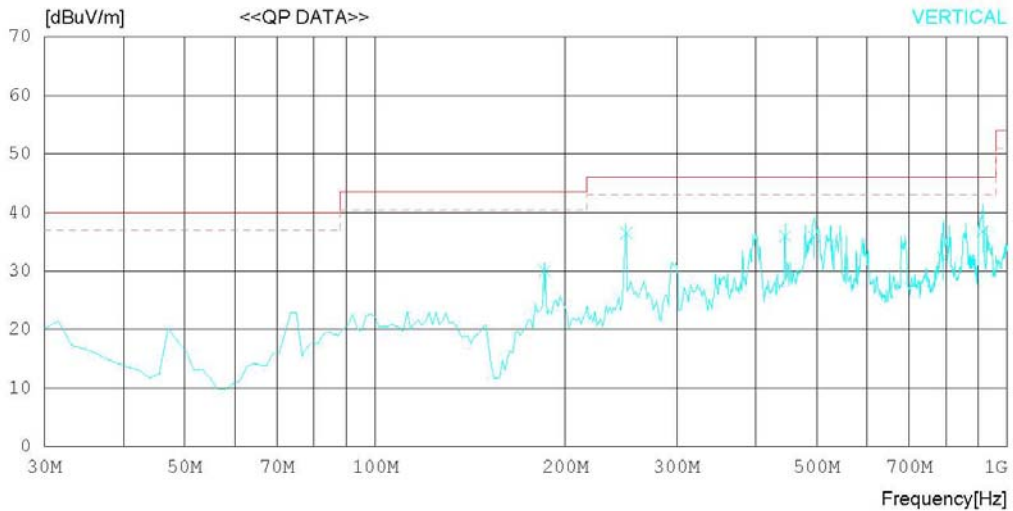
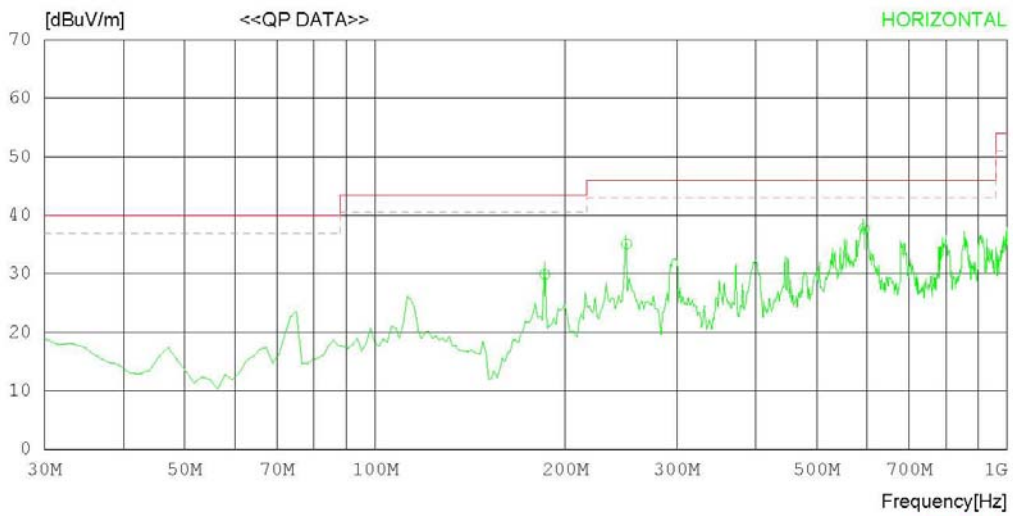
RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % R.H.
Test Condition	: HDMI	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2013-01-08

Model Name : 55LA6900-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °C 49 % 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	185.637	41.7	9.3	2.2	23.3	29.9	43.5	13.6	100	103
2	250.000	43.8	12.3	2.6	23.6	35.1	46.0	10.9	100	180
3	594.010	39.9	18.5	4.1	24.7	37.8	46.0	8.2	100	202
----- Vertical -----										
4	185.637	41.8	9.3	2.2	23.3	30.0	43.5	13.5	100	180
5	250.000	45.2	12.3	2.6	23.6	36.5	46.0	9.5	100	181
6	445.500	40.6	16.5	3.5	24.6	36.0	46.0	10.0	100	209
7	495.000	39.3	17.4	3.9	24.7	35.9	46.0	10.1	100	169
8	791.980	31.4	19.9	4.8	23.8	32.3	46.0	13.7	100	359
9	914.353	33.6	21.0	5.3	23.1	36.8	46.0	9.2	100	158

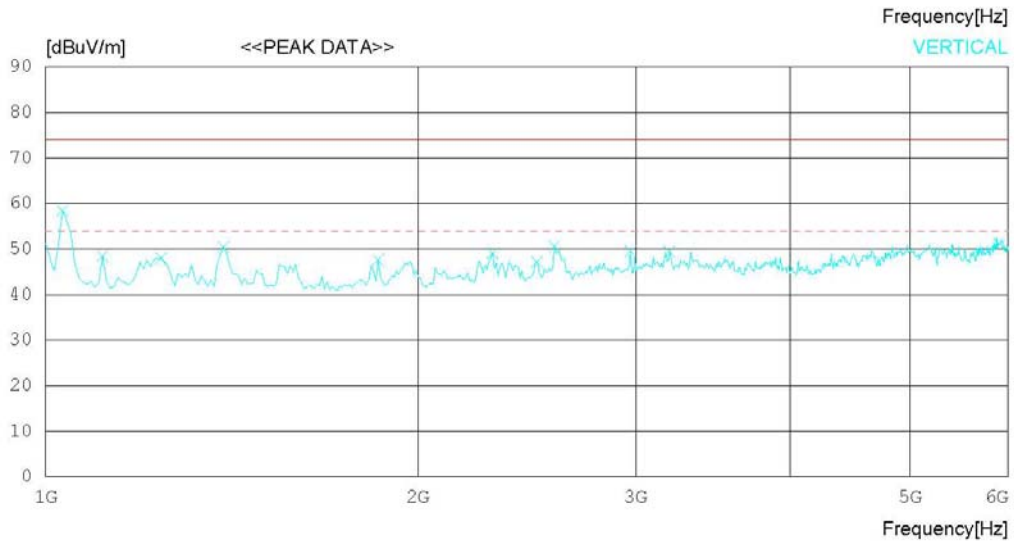
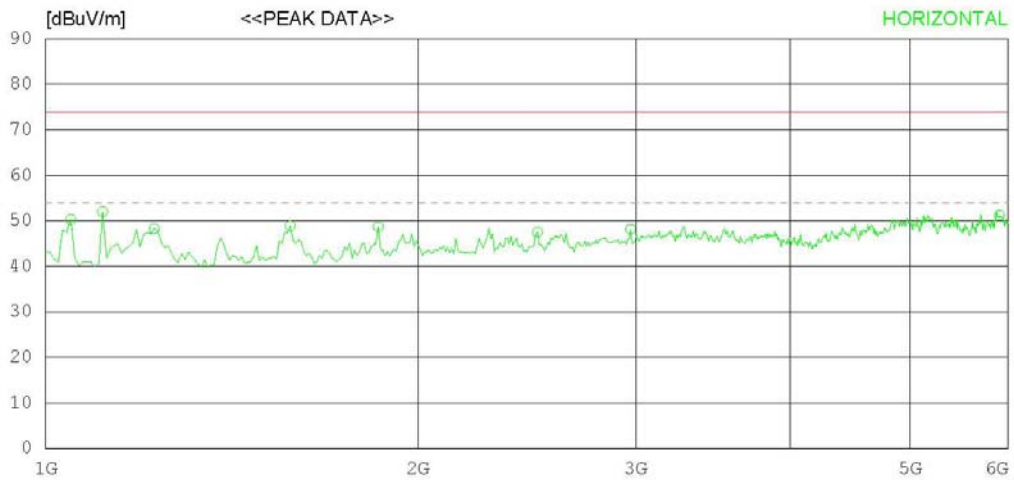
< HDMI MODE _ (1 ~ 6) GHz _ Peak >

RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 'C 49 % 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)



RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % 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	1048.077	61.5	24.7	5.9	41.8	50.3	74.0	23.7	100	1
2	1112.179	62.9	24.8	6.1	41.8	52.0	74.0	22	100	1
3	1224.359	58.7	24.9	6.5	41.8	48.3	74.0	25.7	100	165
4	1576.923	57.5	25.4	7.6	41.6	48.9	74.0	25.1	100	220
5	1857.371	56.5	25.7	8.2	41.7	48.7	74.0	25.3	100	1
6	2498.404	52.7	27.3	9.5	42.0	47.5	74.0	26.5	100	1
7	2971.167	50.9	28.7	10.5	41.9	48.2	74.0	25.8	100	1
8	5903.848	45.5	32.1	15.6	42.0	51.2	74.0	22.8	100	303
----- Vertical -----										
9	1032.051	69.6	24.7	5.9	41.8	58.4	74.0	15.6	100	358
10	1112.179	59.3	24.8	6.1	41.8	48.4	74.0	25.6	100	153
11	1240.385	58.2	25.0	6.6	41.8	48.0	74.0	26	100	194
12	1392.628	59.9	25.1	7.1	41.7	50.4	74.0	23.6	100	219
13	1857.371	55.4	25.7	8.2	41.7	47.6	74.0	26.4	100	203
14	2298.080	55.0	26.8	9.1	41.8	49.1	74.0	24.9	100	204
15	2498.404	52.4	27.3	9.5	42.0	47.2	74.0	26.8	100	358
16	2578.533	55.3	27.6	9.7	41.9	50.7	74.0	23.3	100	358
17	2971.167	52.2	28.7	10.5	41.9	49.5	74.0	24.5	100	358
18	3195.530	51.2	29.0	11.0	41.8	49.4	74.0	24.6	100	222
19	5903.848	45.3	32.1	15.6	42.0	51.0	74.0	23	100	358

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

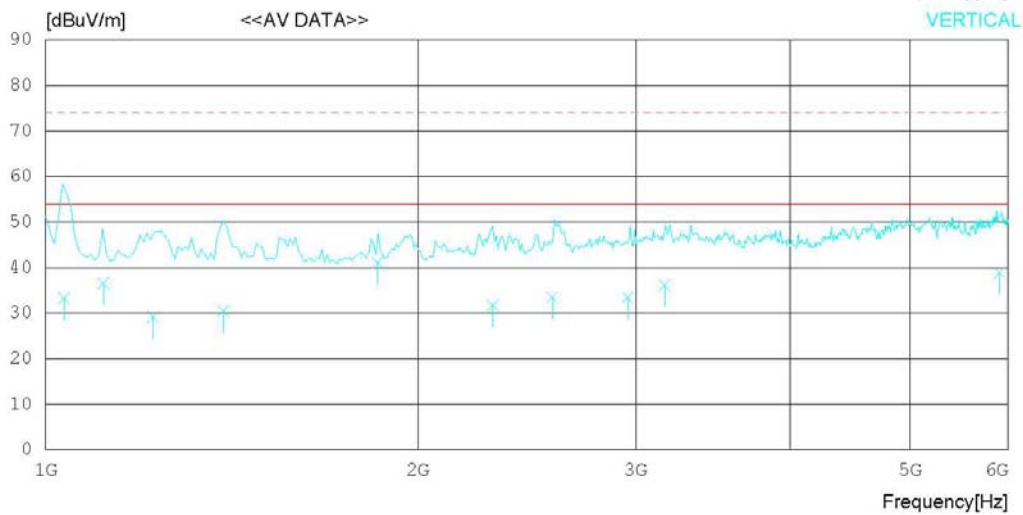
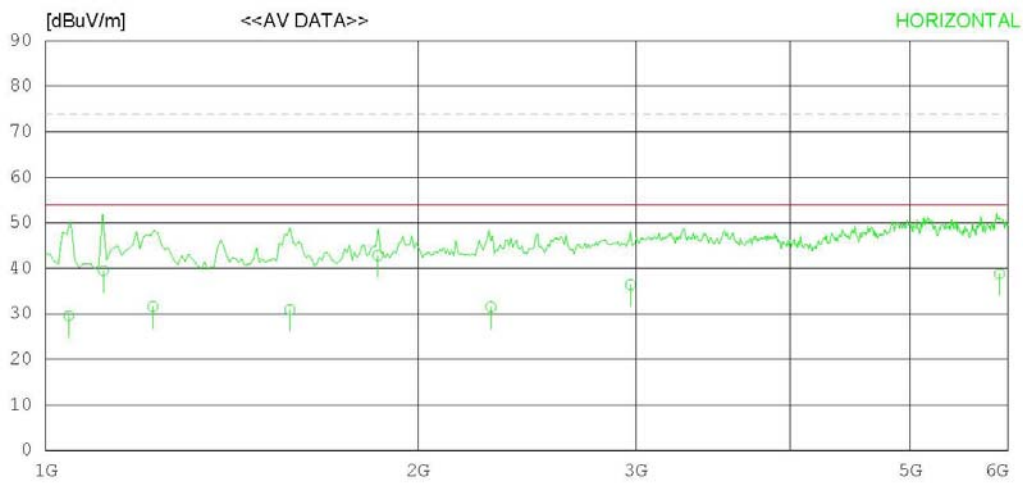
RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 'C 49 % 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)



RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % 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	1043.865	41.6	23.9	5.9	41.8	29.6	54.0	24.4	100	1
2	1113.762	51.2	24.0	6.1	41.8	39.5	54.0	14.5	100	351
3	1220.868	42.7	24.2	6.5	41.8	31.6	54.0	22.4	100	235
4	1575.192	39.5	25.4	7.6	41.6	30.9	54.0	23.1	100	220
5	1856.391	50.7	25.7	8.2	41.8	42.8	54.0	11.2	100	202
6	2291.125	37.5	26.7	9.1	41.8	31.5	54.0	22.5	100	235
7	2971.167	39.1	28.7	10.5	41.9	36.4	54.0	17.6	100	211
8	5903.848	33.1	32.1	15.6	42.0	38.8	54.0	15.2	100	244
----- Vertical -----										
9	1035.365	45.3	23.9	5.9	41.8	33.3	54.0	20.7	100	178
10	1113.763	48.3	24.0	6.1	41.8	36.6	54.0	17.4	100	139
11	1220.868	40.3	24.2	6.5	41.8	29.2	54.0	24.8	100	194
12	1392.628	40.5	24.5	7.1	41.7	30.4	54.0	23.6	100	221
13	1856.391	49.0	25.7	8.2	41.8	41.1	54.0	12.9	100	188
14	2298.561	37.6	26.8	9.1	41.8	31.7	54.0	22.3	100	204
15	2568.654	38.2	27.5	9.7	41.9	33.5	54.0	20.5	100	194
16	2955.362	36.1	28.7	10.4	41.8	33.4	54.0	20.6	100	358
17	3167.878	38.1	28.9	10.9	41.8	36.1	54.0	17.9	100	222
18	5903.848	33.2	32.1	15.6	42.0	38.9	54.0	15.1	100	358

< USB MODE_30 MHz ~ 1 GHz >

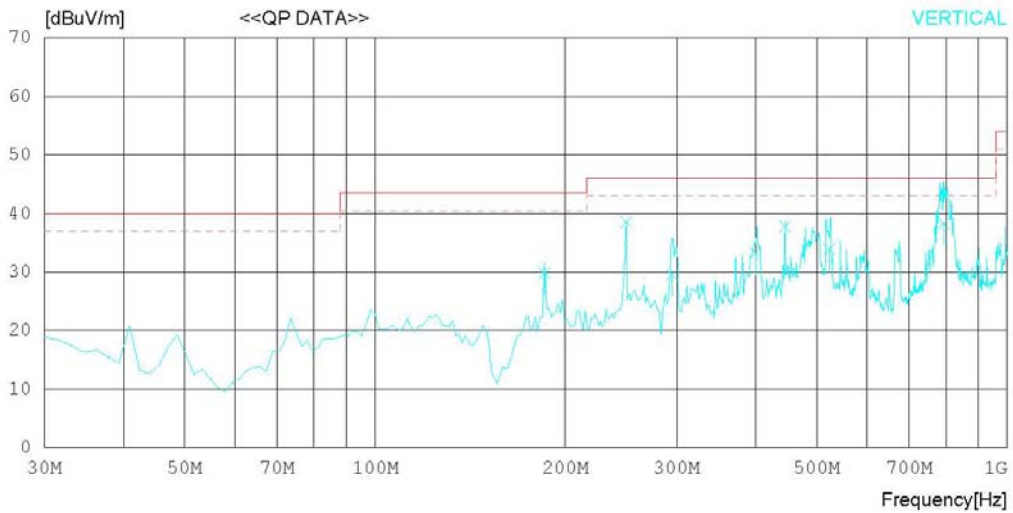
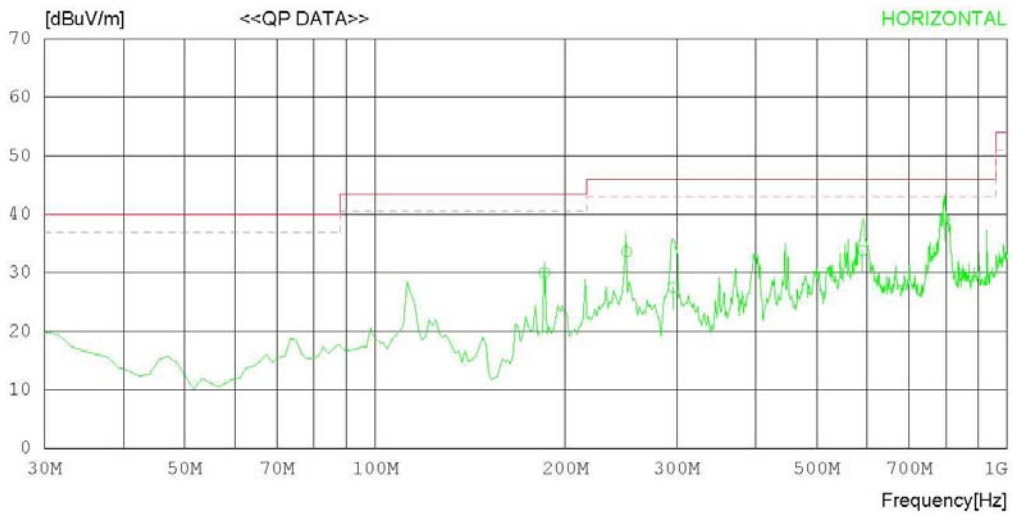
RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % R.H.
Test Condition	: USB	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2013-01-08

Model Name : 55LA6900-UD	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °C 49 % 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	185.365	41.8	9.3	2.2	23.3	30.0	43.5	13.5	125	116
2	250.033	42.3	12.3	2.6	23.6	33.6	46.0	12.4	132	196
3	296.404	35.5	13.1	2.8	23.9	27.5	46.0	18.5	126	263
4	590.222	35.9	18.5	4.1	24.7	33.8	46.0	12.2	156	248
5	795.898	38.3	19.9	4.8	23.8	39.2	46.0	6.8	220	156
----- Vertical -----										
6	185.366	41.6	9.3	2.2	23.3	29.8	43.5	13.7	111	254
7	249.990	47.3	12.3	2.6	23.6	38.6	46.0	7.4	125	184
8	295.058	37.7	13.0	2.8	23.9	29.6	46.0	16.4	171	304
9	400.169	38.5	15.7	3.5	24.5	33.2	46.0	12.8	122	170
10	445.485	42.4	16.5	3.5	24.6	37.8	46.0	8.2	129	167
11	523.858	37.0	17.8	3.9	24.8	33.9	46.0	12.1	146	199
12	794.808	37.4	19.9	4.8	23.8	38.3	46.0	7.7	195	167

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

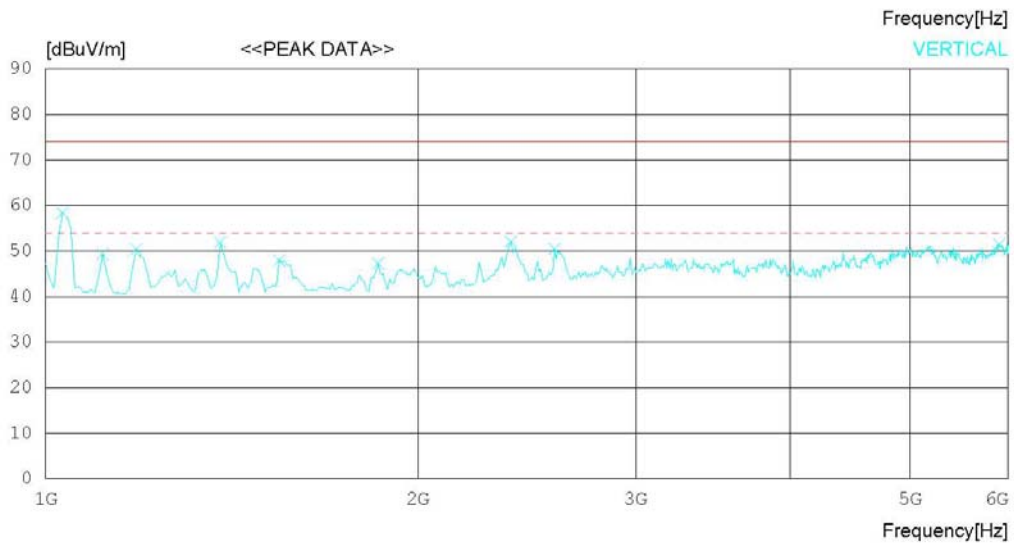
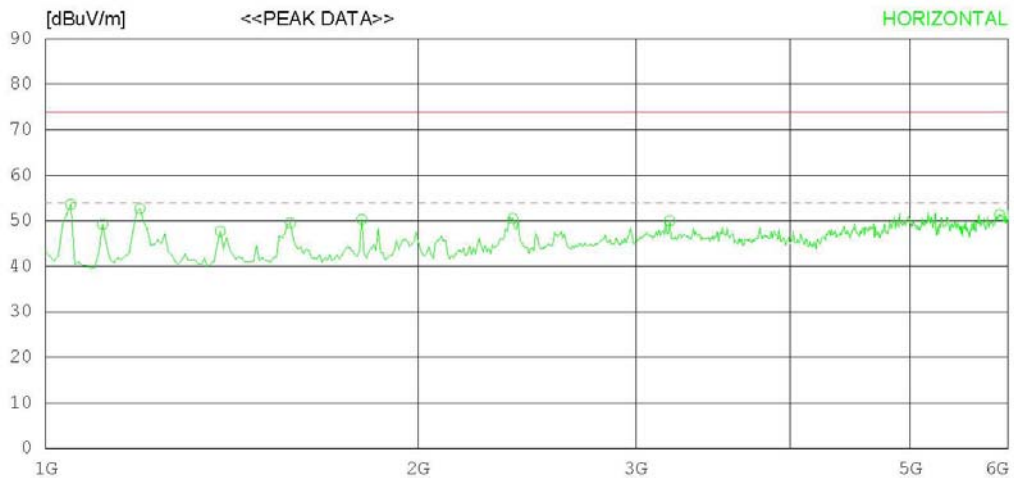
RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 'C 49 % 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)



RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % 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	1048.077	64.8	24.7	5.9	41.8	53.6	74.0	20.4	100	358
2	1112.179	60.1	24.8	6.1	41.8	49.2	74.0	24.8	100	358
3	1192.308	63.3	24.9	6.4	41.9	52.7	74.0	21.3	100	358
4	1384.615	57.2	25.1	7.1	41.7	47.7	74.0	26.3	100	162
5	1576.923	58.1	25.4	7.6	41.6	49.5	74.0	24.5	100	218
6	1801.282	58.4	25.6	8.1	41.8	50.3	74.0	23.7	100	187
7	2386.223	56.1	27.0	9.3	41.9	50.5	74.0	23.5	100	358
8	3195.530	51.8	29.0	11.0	41.8	50.0	74.0	24	100	358
9	5903.848	45.6	32.1	15.6	42.0	51.3	74.0	22.7	100	31
----- Vertical -----										
10	1032.051	69.6	24.7	5.9	41.8	58.4	74.0	15.6	100	166
11	1112.179	60.2	24.8	6.1	41.8	49.3	74.0	24.7	100	150
12	1184.295	61.1	24.9	6.4	41.9	50.5	74.0	23.5	100	350
13	1384.615	61.4	25.1	7.1	41.7	51.9	74.0	22.1	100	1
14	1544.872	56.7	25.3	7.6	41.6	48.0	74.0	26	100	164
15	1857.371	55.1	25.7	8.2	41.7	47.3	74.0	26.7	100	1
16	2378.210	57.6	27.0	9.3	41.9	52.0	74.0	22	100	1
17	2578.533	55.1	27.6	9.7	41.9	50.5	74.0	23.5	100	1
18	5903.848	45.8	32.1	15.6	42.0	51.5	74.0	22.5	100	1

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

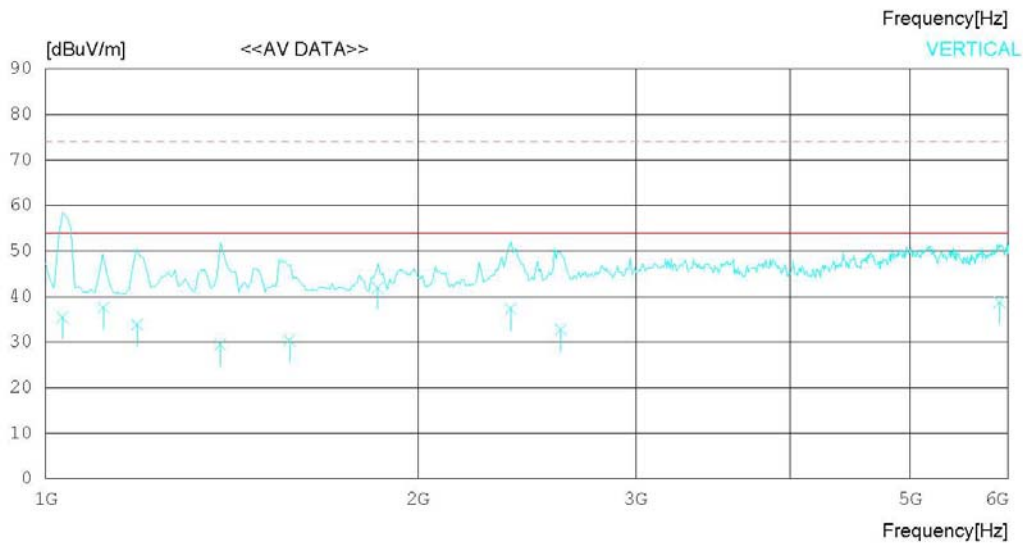
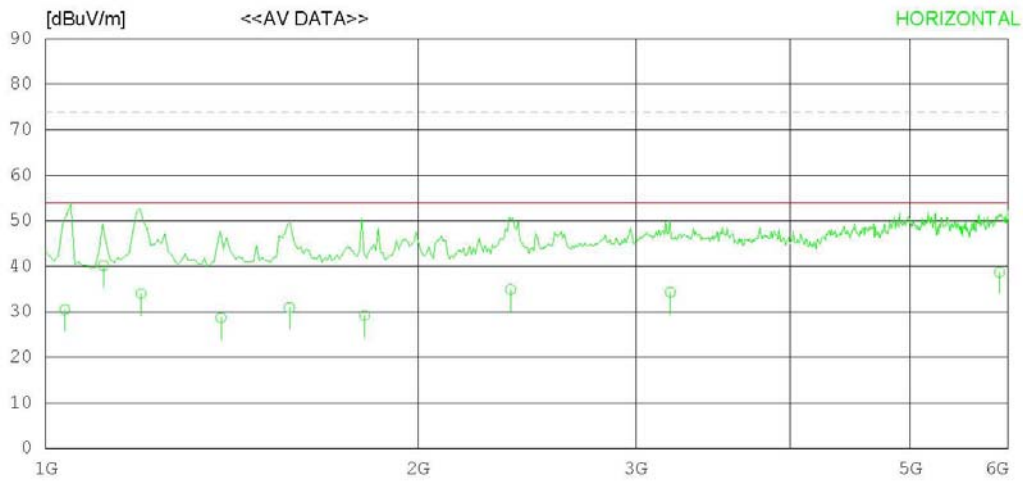
RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 'C 49 % 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)



RADIATED EMISSION

Date : 2013-01-08

Model Name	: 55LA6900-UD	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 21 °C 49 % 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	1036.248	41.7	24.7	5.9	41.8	30.5	54.0	23.5	100	281
2	1113.762	51.1	24.8	6.1	41.8	40.2	54.0	13.8	100	154
3	1194.600	44.6	24.9	6.4	41.9	34.0	54.0	20.0	100	223
4	1385.878	38.2	25.1	7.1	41.7	28.7	54.0	25.3	100	162
5	1574.401	39.5	25.4	7.6	41.6	30.9	54.0	23.1	100	223
6	1810.609	37.2	25.7	8.1	41.8	29.2	54.0	24.8	100	187
7	2375.965	40.5	27.0	9.3	41.9	34.9	54.0	19.1	100	181
8	3199.295	36.1	29.0	11.0	41.8	34.3	54.0	19.7	100	358
9	5903.848	33.0	32.1	15.6	42.0	38.7	54.0	15.3	100	31
----- Vertical -----										
10	1032.448	46.6	24.7	5.9	41.8	35.4	54.0	18.6	100	166
11	1113.698	48.5	24.8	6.1	41.8	37.6	54.0	16.4	100	150
12	1185.571	44.5	24.9	6.4	41.9	33.9	54.0	20.1	100	350
13	1384.615	39.0	25.1	7.1	41.7	29.5	54.0	24.5	100	179
14	1574.401	39.0	25.4	7.6	41.6	30.4	54.0	23.6	100	164
15	1856.275	49.8	25.7	8.2	41.8	41.9	54.0	12.1	100	221
16	2375.965	42.9	27.0	9.3	41.9	37.3	54.0	16.7	100	199
17	2608.583	37.1	27.7	9.8	41.8	32.8	54.0	21.2	100	204
18	5903.848	33.1	32.1	15.6	42.0	38.8	54.0	15.2	100	199

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