EMC TEST REPORT

Test item	: LED TV Monitor
Model No.	: 47LA7400-UD
Order No.	: 1212-03073
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.
This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:

Assistant Manager
DaeHwa Eun

Reviewed by:

General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

CONTENTS

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.	47LA7400-UD
Add Model No.	None
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ47LA7400UD
Type of Sample Tested	Pre-Production
High Frequency	Max 800 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.2 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 (℃)	Humidity (% R.H.)
Conducted Disturbance	01-04	19	27
Radiated Disturbance	01-09	17	37

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
0.56470	**N**	**32.7**	Average	**46.0**	**13.3**

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
1336.545	**V**	**49.5**	Average	**54.0**	**4.5**

5. Test Set-up and operation mode

5.1 Principle of Configuration Selection

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

5.2 Test Operation Mode

- 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	G3RZKBX	DELL INC	Power USB USB USB	1.6 1.8 1.6 2.0	Not use Not use Not use Not use	Non-shield Non-shield Non-shield Non-shield	Plastic	DOC
KEYBOARD	SKG-3000UB	TAKB601241E	MONITEREY 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 AV	1.7 1.6	Not use Not use	Non-shield Non-shield	Plastic	VER
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

< HDMI MODE >

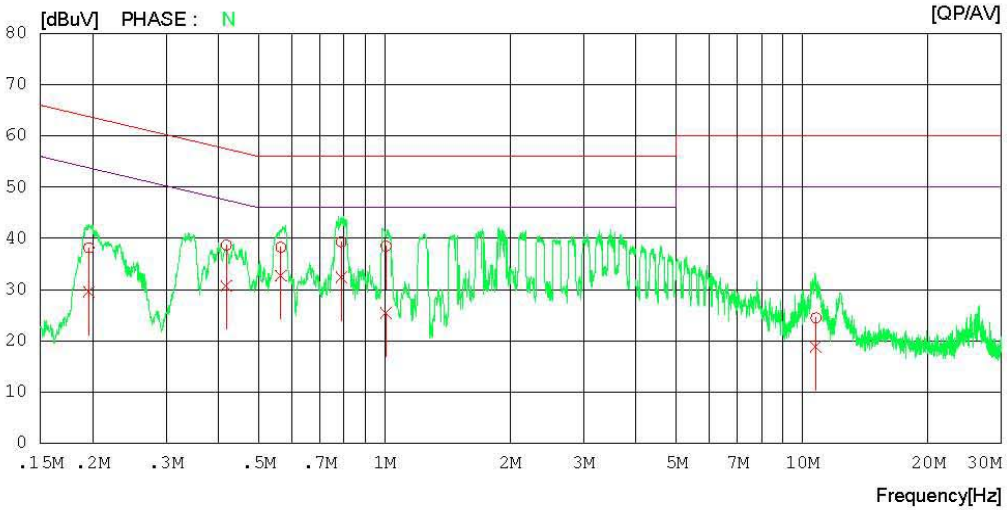
Digital EMC

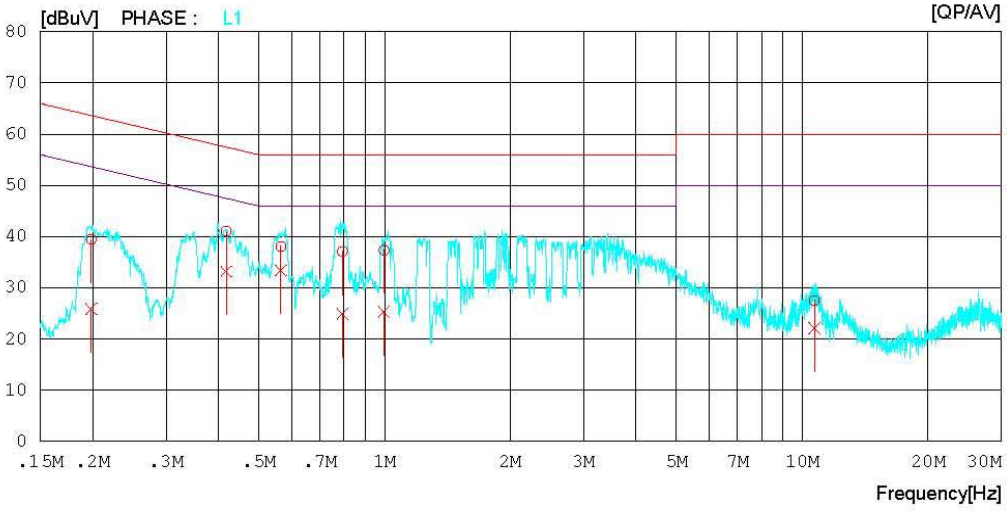
Results of Conducted Emission

Digital EMC
Date : 2013-01-04

Model No.	:	47LA7400-UD	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	19 'C 27 % R.H.
Test Condition	:	HDMI	Operator	:	
Memo	:				

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-01-04

Model No.	:	47LA7400-UD	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	19 'C 27 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.19590	37.9	29.3	0.2	38.1	29.5	63.8	53.8	25.7	24.3	N
2	0.41835	38.5	30.5	0.2	38.7	30.7	57.5	47.5	18.8	16.8	N
3	0.56470	38.1	32.5	0.2	38.3	32.7	56.0	46.0	17.7	13.3	N
4	0.78861	39.1	32.2	0.2	39.3	32.4	56.0	46.0	16.7	13.6	N
5	1.00900	38.2	25.2	0.3	38.5	25.5	56.0	46.0	17.5	20.5	N
6	10.78500	23.8	18.1	0.7	24.5	18.8	60.0	50.0	35.5	31.2	N
7	0.19859	39.3	25.7	0.2	39.5	25.9	63.7	53.7	24.2	27.8	L1
8	0.41818	40.9	33.0	0.2	41.1	33.2	57.5	47.5	16.4	14.3	L1
9	0.56480	37.9	33.2	0.2	38.1	33.4	56.0	46.0	17.9	12.6	L1
10	0.79338	36.9	24.7	0.2	37.1	24.9	56.0	46.0	18.9	21.1	L1
11	0.99800	37.1	25.1	0.2	37.3	25.3	56.0	46.0	18.7	20.7	L1
12	10.68950	26.8	21.4	0.7	27.5	22.1	60.0	50.0	32.5	27.9	L1

< USB MODE >

Digital EMC

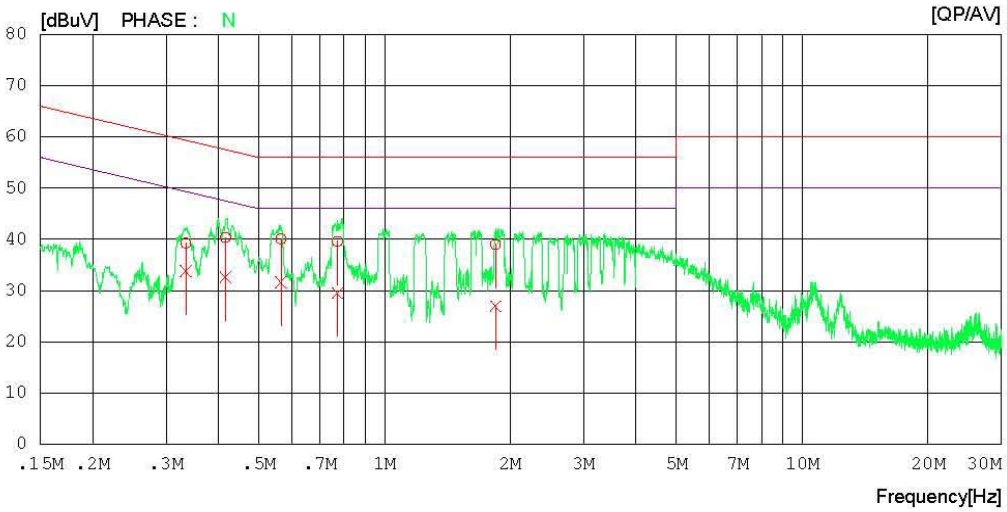
Results of Conducted Emission

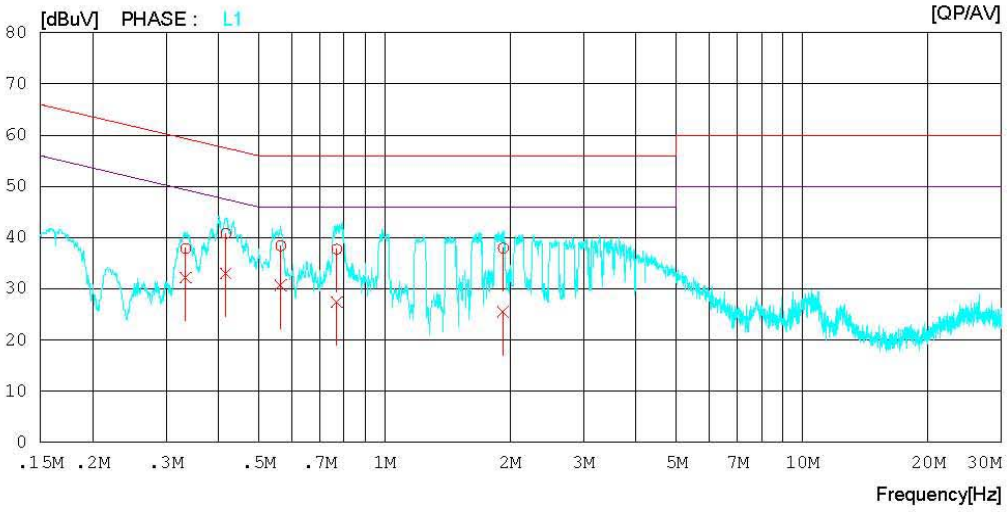
Digital EMC
Date : 2013-01-04

Model No.	:	47LA7400-UD	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	19 'C 27 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2013-01-04

Model No.	:	47LA7400-UD	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	19 'C 27 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.33464	39.1	33.6	0.2	39.3	33.8	59.3	49.3	20.0	15.5	N
2	0.41650	40.2	32.4	0.2	40.4	32.6	57.5	47.5	17.1	14.9	N
3	0.56515	39.9	31.4	0.2	40.1	31.6	56.0	46.0	15.9	14.4	N
4	0.77176	39.4	29.3	0.2	39.6	29.5	56.0	46.0	16.4	16.5	N
5	1.84550	38.7	26.7	0.3	39.0	27.0	56.0	46.0	17.0	19.0	N
6	0.33416	37.7	32.0	0.2	37.9	32.2	59.3	49.3	21.4	17.1	L1
7	0.41696	40.6	32.8	0.2	40.8	33.0	57.5	47.5	16.7	14.5	L1
8	0.56451	38.2	30.5	0.2	38.4	30.7	56.0	46.0	17.6	15.3	L1
9	0.76914	37.6	27.2	0.2	37.8	27.4	56.0	46.0	18.2	18.6	L1
10	1.92500	37.7	25.2	0.3	38.0	25.5	56.0	46.0	18.0	20.5	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	5th harmonic of the highest frequency or 40 GHz, whichever is lower

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.
Note 2 Additional provisions may be required for cases where interference occurs.
Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (10 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 230	40	30
230 to 1 000	47	37

(2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + Correction Factor.
2. Correction Factor = Cable loss - Amp gain + Antenna Factor
3. Margin = Limit - Emission level

Test Result

< HDMI MODE_30 MHz ~ 1 GHz >

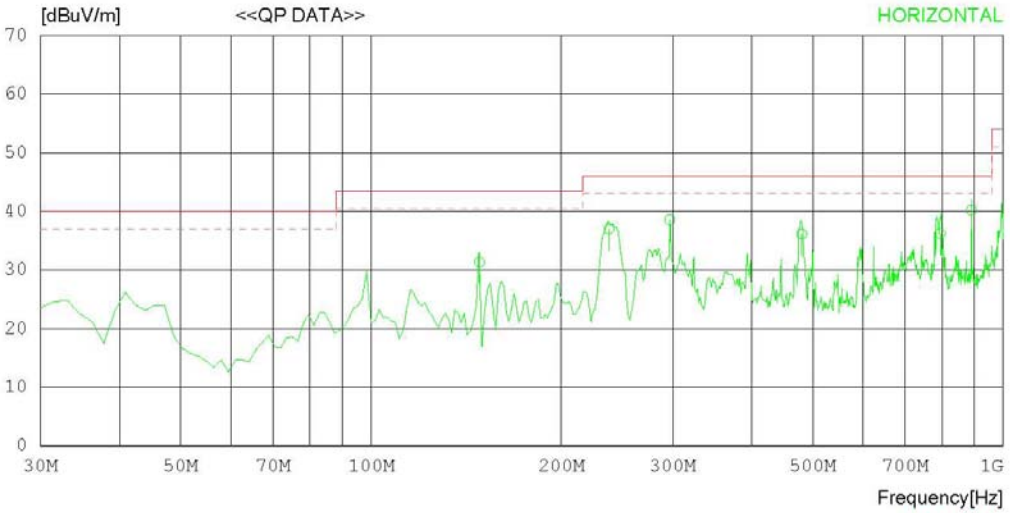
RADIATED EMISSION

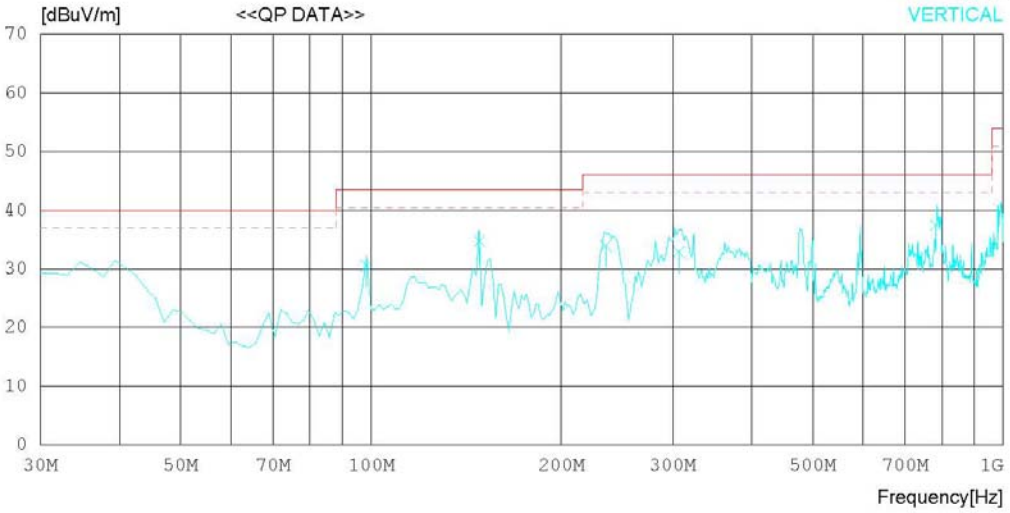
Date : 2013-01-09

Model Name	:	47LA7400-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





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	148.500	42.2	10.5	1.7	23.1	31.3	43.5	12.2	269	211
2	237.910	46.0	12.0	2.5	23.5	37.0	46.0	9.0	100	1
3	297.005	46.0	13.7	2.8	23.9	38.6	46.0	7.4	100	36
4	480.006	39.9	17.1	3.8	24.7	36.1	46.0	9.9	100	228
5	795.200	35.3	19.9	4.8	23.8	36.2	46.0	9.8	100	223
6	891.026	37.5	20.7	5.2	23.2	40.2	46.0	5.8	159	146
----- Vertical ------										
7	98.320	41.6	10.4	1.4	22.8	30.6	43.5	12.9	100	351
8	148.506	45.7	10.5	1.7	23.1	34.8	43.5	8.7	100	248
9	235.125	43.2	11.8	2.5	23.5	34.0	46.0	12.0	100	179
10	307.000	40.0	13.9	2.9	23.9	32.9	46.0	13.1	200	1
11	783.306	36.9	19.7	4.8	23.9	37.5	46.0	8.5	100	197

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

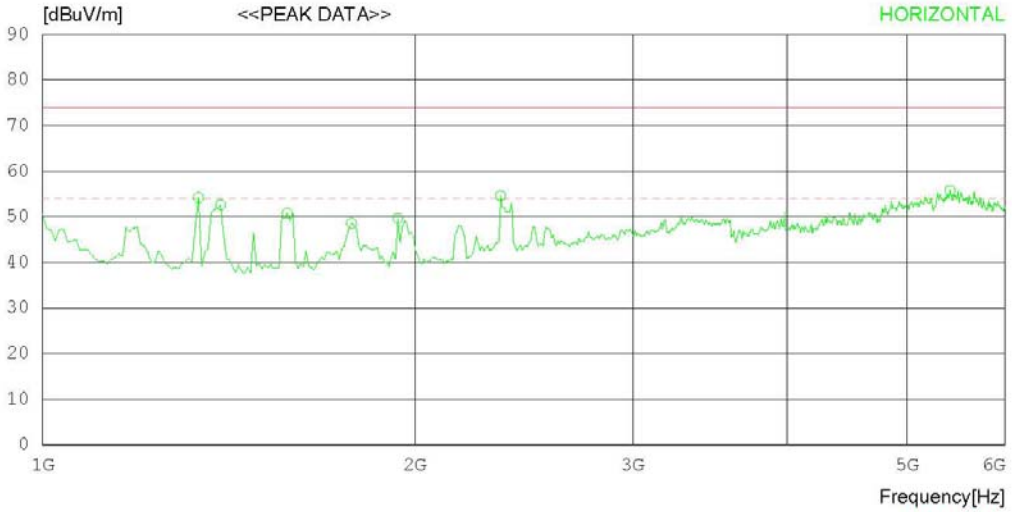
RADIATED EMISSION

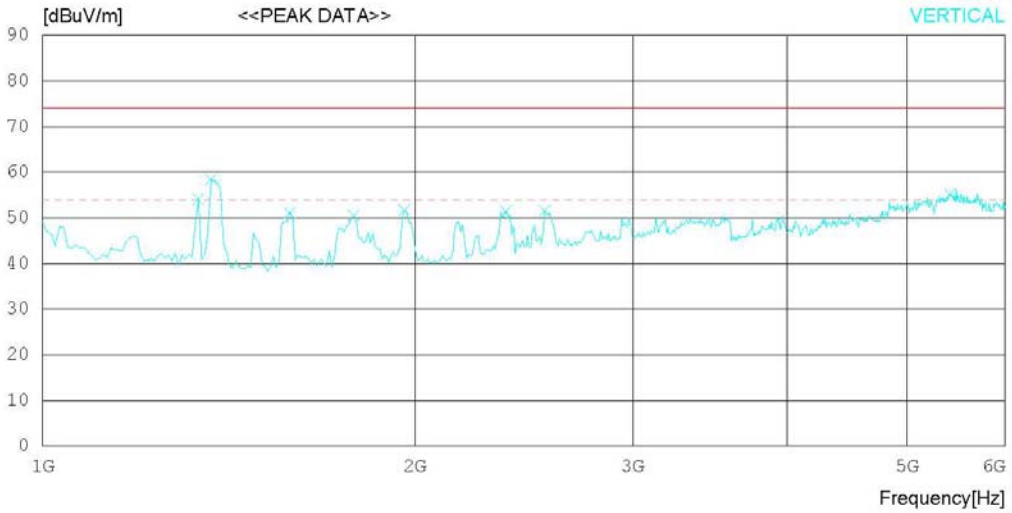
Date : 2013-01-09

Model Name	: 47LA7400-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)





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	1336.538	51.4	24.4	6.9	28.5	54.2	74.0	19.8	100	253
2	1392.628	49.5	24.5	7.1	28.5	52.6	74.0	21.4	100	122
3	1576.923	47.1	24.6	7.6	28.5	50.8	74.0	23.2	100	1
4	1777.243	44.5	24.6	8.0	28.5	48.6	74.0	25.4	100	1
5	1937.500	45.3	24.6	8.3	28.5	49.7	74.0	24.3	100	18
6	2346.158	47.3	26.6	9.2	28.5	54.6	74.0	19.4	100	242
7	5415.074	34.4	34.6	14.9	28.1	55.8	74.0	18.2	100	343
----- Vertical ------										
8	1336.538	51.3	24.4	6.9	28.5	54.1	74.0	19.9	100	358
9	1368.590	55.6	24.4	7.0	28.5	58.5	74.0	15.5	100	358
10	1584.936	47.3	24.6	7.7	28.5	51.1	74.0	22.9	100	234
11	1785.256	46.4	24.6	8.0	28.5	50.5	74.0	23.5	100	170
12	1961.538	47.2	24.6	8.4	28.5	51.7	74.0	22.3	100	218
13	2370.197	44.0	26.7	9.3	28.5	51.5	74.0	22.5	100	132
14	2546.481	42.8	27.6	9.6	28.4	51.6	74.0	22.4	100	358
15	5415.074	33.7	34.6	14.9	28.1	55.1	74.0	18.9	100	264

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

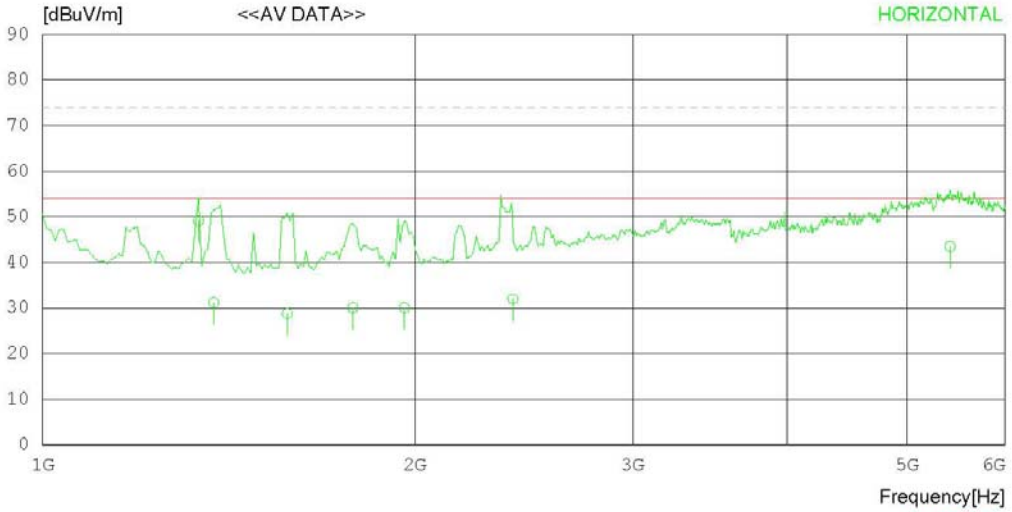
RADIATED EMISSION

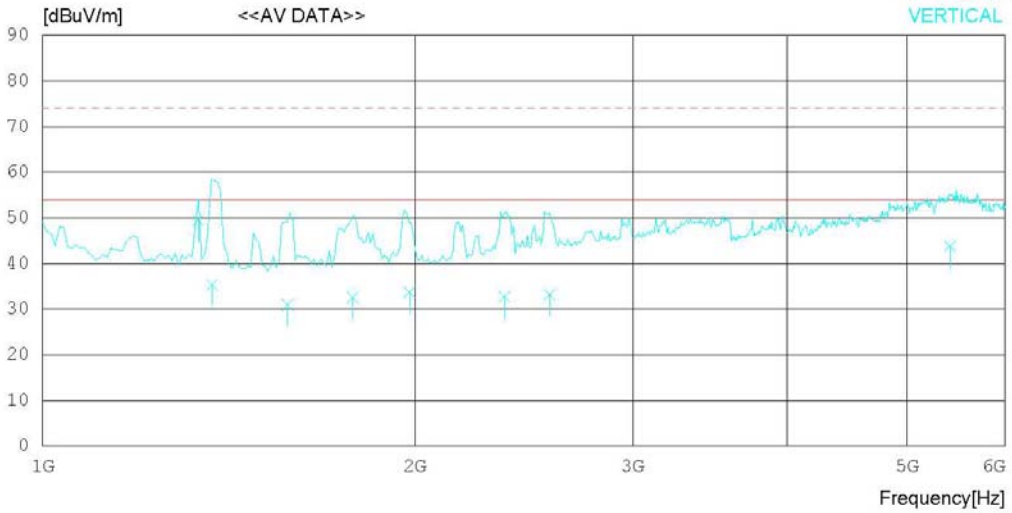
Date : 2013-01-09

Model Name	: 47LA7400-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)





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	1336.545	46.3	24.4	6.9	28.5	49.1	54.0	4.9	100	203
2	1375.272	28.1	24.5	7.1	28.5	31.2	54.0	22.8	100	122
3	1576.923	25.1	24.6	7.6	28.5	28.8	54.0	25.2	100	199
4	1781.732	25.9	24.6	8.0	28.5	30.0	54.0	24.0	100	1
5	1961.326	25.5	24.6	8.4	28.5	30.0	54.0	24.0	100	133
6	2399.647	24.3	26.9	9.3	28.5	32.0	54.0	22.0	100	242
7	5415.074	22.1	34.6	14.9	28.1	43.5	54.0	10.5	100	343
----- Vertical ------										
8	1336.545	46.7	24.4	6.9	28.5	49.5	54.0	4.5	100	210
9	1371.772	32.5	24.4	7.0	28.5	35.4	54.0	18.6	100	358
10	1578.200	27.2	24.6	7.6	28.5	30.9	54.0	23.1	100	180
11	1781.733	28.5	24.6	8.0	28.5	32.6	54.0	21.4	100	170
12	1979.263	29.2	24.6	8.4	28.5	33.7	54.0	20.3	100	213
13	2361.800	25.4	26.6	9.2	28.5	32.7	54.0	21.3	100	188
14	2569.557	24.2	27.7	9.7	28.4	33.2	54.0	20.8	100	131
15	5415.074	22.4	34.6	14.9	28.1	43.8	54.0	10.2	100	264

< USB MODE_30 MHz ~ 1 GHz >

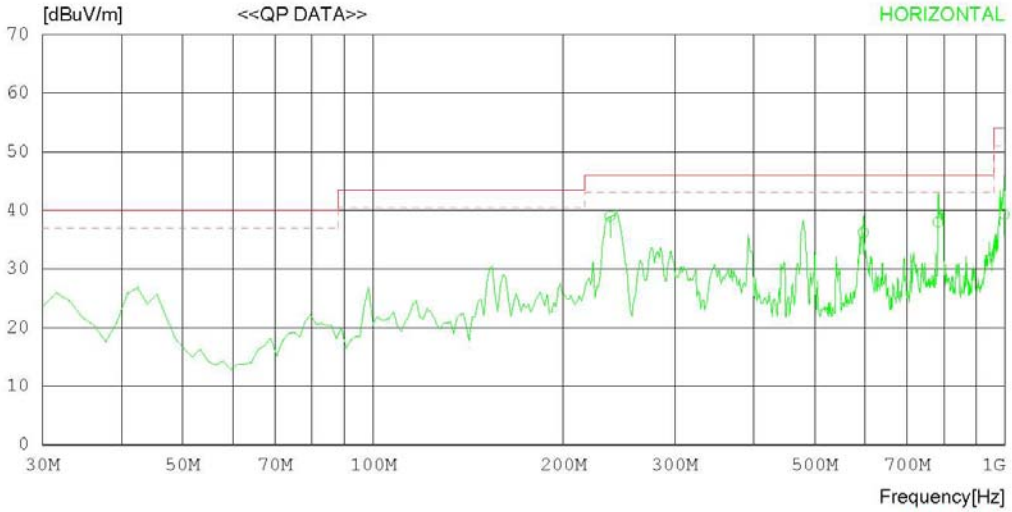
RADIATED EMISSION

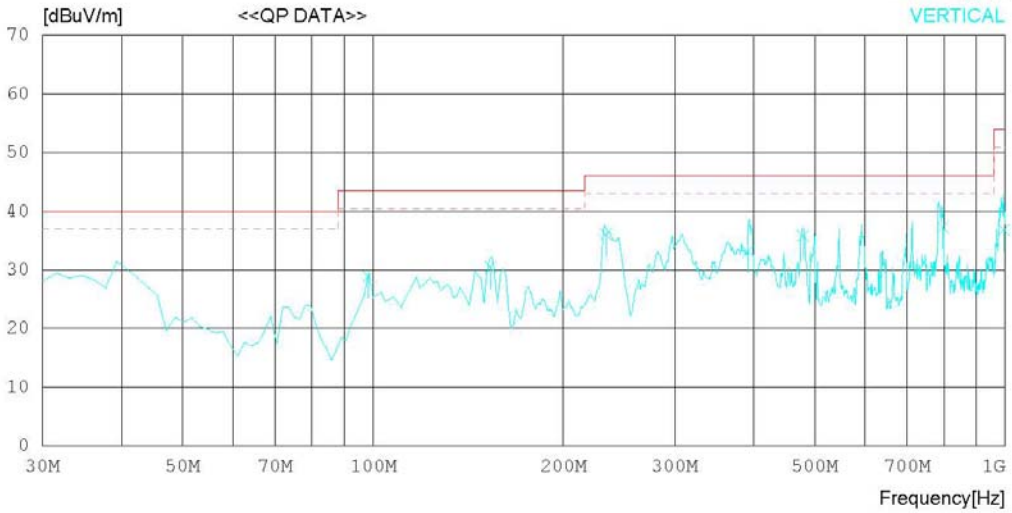
Date : 2013-01-09

Model Name	:	47LA7400-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





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	237.192	48.1	11.9	2.5	23.5	39.0	46.0	7.0	100	141
2	596.588	38.1	18.7	4.1	24.7	36.2	46.0	9.8	100	190
3	783.192	37.4	19.7	4.8	23.9	38.0	46.0	8.0	100	189
4	995.994	34.6	22.2	5.5	23.0	39.3	54.0	14.7	100	192
----- Vertical ------										
5	98.304	39.9	10.4	1.4	22.8	28.9	43.5	14.6	100	204
6	153.497	41.5	10.3	1.8	23.1	30.5	43.5	13.0	100	38
7	233.724	45.4	11.7	2.5	23.5	36.1	46.0	9.9	201	188
8	391.708	38.3	15.8	3.5	24.4	33.2	46.0	12.8	100	154
9	479.282	39.6	17.1	3.8	24.7	35.8	46.0	10.2	201	28
10	797.006	36.4	19.9	4.8	23.8	37.3	46.0	8.7	100	176
11	995.994	32.1	22.2	5.5	23.0	36.8	54.0	17.2	100	359

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

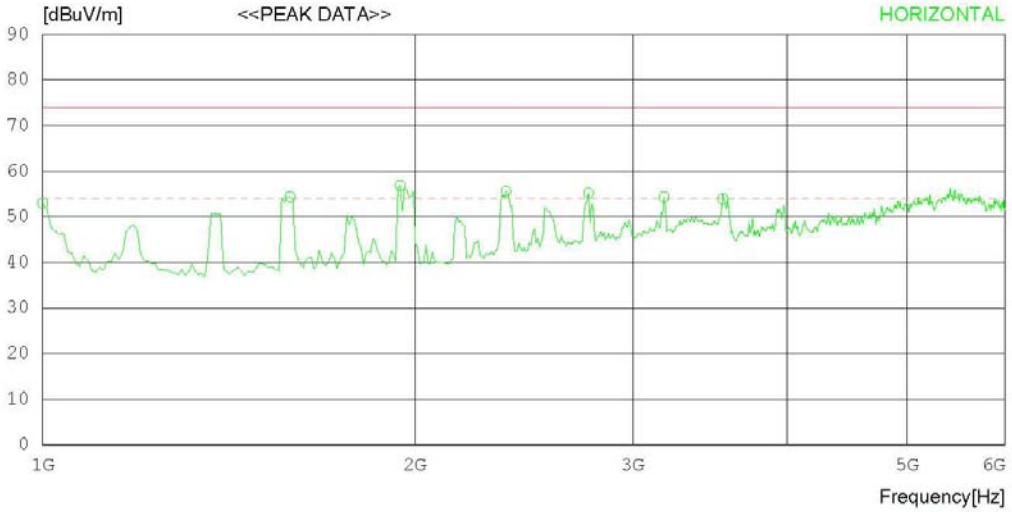
RADIATED EMISSION

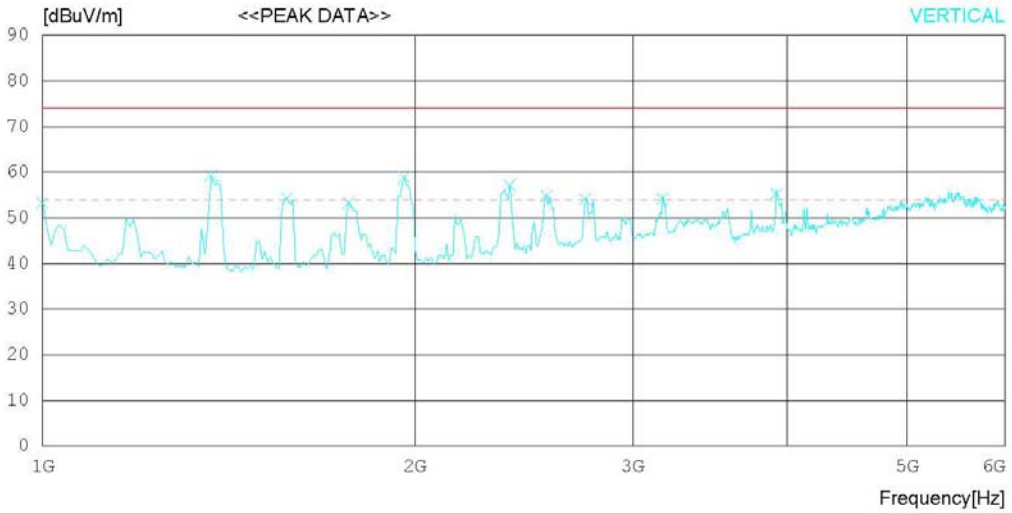
Date : 2013-01-09

Model Name	: 47LA7400-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)





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	51.9	23.9	5.7	28.5	53.0	74.0	21	100	189
2	1584.936	50.6	24.6	7.7	28.5	54.4	74.0	19.6	100	213
3	1945.512	52.5	24.6	8.3	28.5	56.9	74.0	17.1	100	12
4	2370.197	48.1	26.7	9.3	28.5	55.6	74.0	18.4	100	1
5	2762.831	45.3	28.3	10.0	28.4	55.2	74.0	18.8	100	1
6	3179.504	43.0	28.9	10.9	28.4	54.4	74.0	19.6	100	1
7	3548.099	42.4	29.0	10.9	28.4	53.9	74.0	20.1	100	240
----- Vertical ------										
8	1000.000	52.2	23.9	5.7	28.5	53.3	74.0	20.7	100	146
9	1368.590	56.3	24.4	7.0	28.5	59.2	74.0	14.8	100	211
10	1576.923	50.6	24.6	7.6	28.5	54.3	74.0	19.7	100	171
11	1769.230	49.2	24.6	8.0	28.5	53.3	74.0	20.7	100	358
12	1961.538	54.4	24.6	8.4	28.5	58.9	74.0	15.1	100	358
13	2386.223	49.6	26.8	9.3	28.5	57.2	74.0	16.8	100	180
14	2554.494	46.0	27.6	9.6	28.4	54.8	74.0	19.2	100	213
15	2746.805	44.3	28.2	10.0	28.4	54.1	74.0	19.9	100	358
16	3171.491	43.6	28.9	10.1	28.4	54.2	74.0	19.8	100	199
17	3916.694	41.8	29.9	11.8	28.3	55.2	74.0	18.8	100	167

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

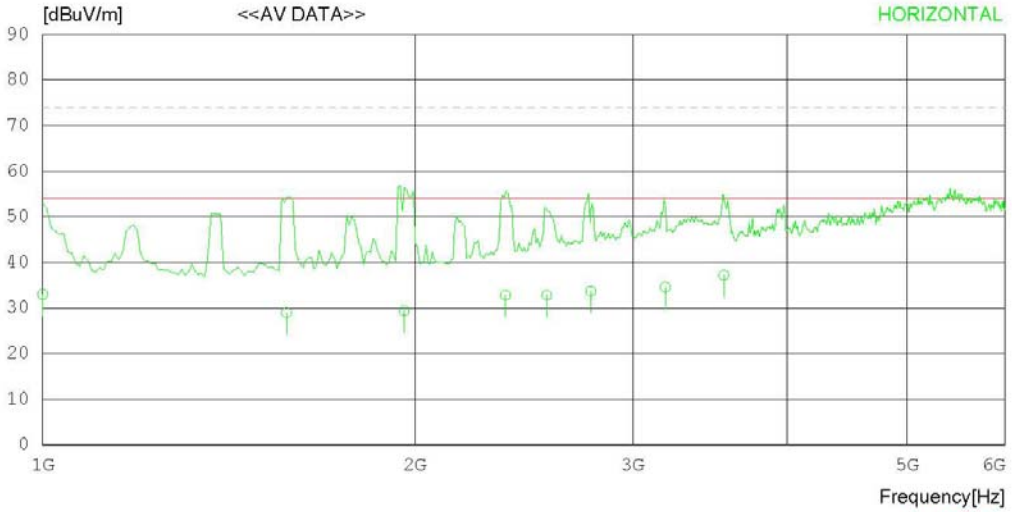
RADIATED EMISSION

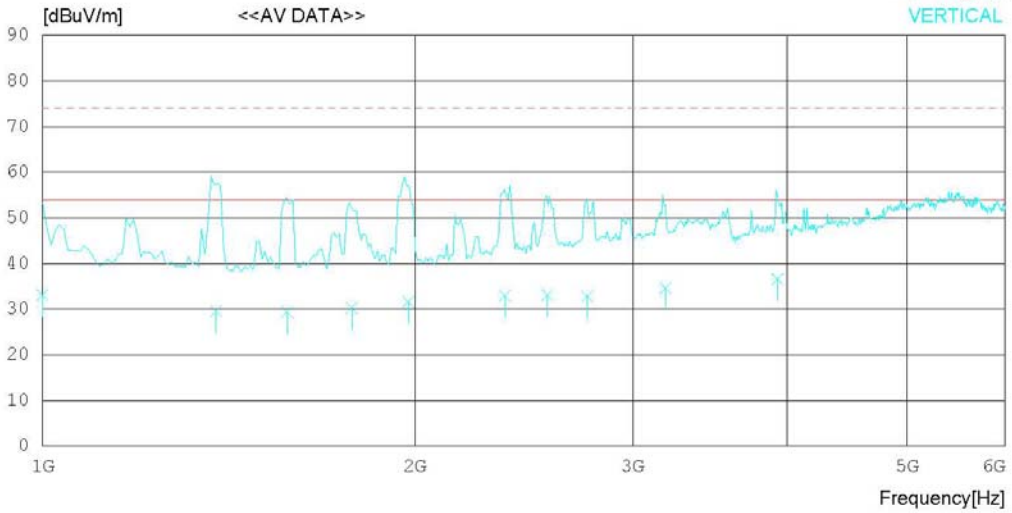
Date : 2013-01-09

Model Name	: 47LA7400-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)





RADIATED EMISSION

Date : 2013-01-09

Model Name	:	47LA7400-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	1000.128	31.9	23.9	5.7	28.5	33.0	54.0	21.0	100	179
2	1574.465	25.3	24.6	7.6	28.5	29.0	54.0	25.0	100	213
3	1960.528	24.9	24.6	8.4	28.5	29.4	54.0	24.6	100	181
4	2367.435	25.3	26.7	9.3	28.5	32.8	54.0	21.2	100	301
5	2556.192	24.0	27.6	9.6	28.4	32.8	54.0	21.2	100	1
6	2774.410	23.7	28.3	10.1	28.4	33.7	54.0	20.3	100	180
7	3187.731	23.1	28.9	11.0	28.4	34.6	54.0	19.4	100	179
8	3553.718	24.7	29.0	11.8	28.3	37.2	54.0	16.8	100	240
----- Vertical ------										
9	1000.128	32.0	23.9	5.7	28.5	33.1	54.0	20.9	100	213
10	1381.737	26.5	24.5	7.1	28.5	29.6	54.0	24.4	100	211
11	1576.923	25.7	24.6	7.6	28.5	29.4	54.0	24.6	100	194
12	1778.000	26.1	24.6	8.0	28.5	30.2	54.0	23.8	100	187
13	1976.000	27.1	24.6	8.4	28.5	31.6	54.0	22.4	100	199
14	2365.436	25.6	26.7	9.2	28.5	33.0	54.0	21.0	100	180
15	2559.198	24.2	27.6	9.7	28.4	33.1	54.0	20.9	100	213
16	2756.417	23.0	28.2	10.0	28.4	32.8	54.0	21.2	100	358
17	3189.133	23.1	28.9	11.0	28.4	34.6	54.0	19.4	100	199
18	3926.400	22.1	30.0	12.8	28.3	36.6	54.0	17.4	100	167

Appendix 1

List of Test and Measurement Instruments

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

1. Conducted Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐	SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
☐	RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐	LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐	LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
☐	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☒	LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
☒	LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
☒	50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09

2. Radiated Disturbance

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