

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 47LA6205-UA
Order No. : DEMC1301-00414
Date of receipt : 2013-01-25
Test duration : 2013-02-12
Use of report : FCC CoC Marking
Date of Issue : 2013-02-18

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 : (18 ~ 19) °C,
Humidity : (34 ~ 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:

Reviewed by:



Assistant Manager
DaeHwa Eun



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.	47LA6205-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ47LA6205UA
Type of Sample Tested	Pre-Production
High Frequency	Max 790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.3 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	54.348	60.053
1360 x 768	47.712	60.015
1280 x 1024	63.981	60.02
1920 x 1080	67.50	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	02-12	18	37
Radiated Disturbance	02-12	19	34

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
3.44300	N	36.8	Average	46.0	9.2

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
587.494	H	41.6	Quasi-Peak	46.0	4.4

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, 1920 x 1080 Resolution (Worst case)
- USB MODE : USB record 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	1.6	Not use	Non-shield	Plastic	DOC
				PS/2	1.8	Not use	Non-shield		
				PS/2	1.6	Not use	Non-shield		
				USB	1.8	Not use	Non-shield		
				HDMI	1.8	Not use	Shield		
KEYBOARD	SKG-210P	TAKSC122 56D	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Not use	Non-shield	Plastic	DOC
MOUSE	SML-510PB	M5PBTAKS 603018D	MICROSOFT CORPORATION	PS/2	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	1.8	Not use	Non-shield		
USB MEMORY	SDCZ37-004G	N/A	SANDISK	USB	-	-	-	Plastic	DOC
PRINTER	EPSON AcuLaser	LWTZ 181070	EPSON	POWER	1.8	Not use	Non-shield	Plastic	DOC
				USB	2.0	Not use	Non-shield		
Remote control	AKB73715608	N/A	OHSUNG ELECTRONIC	-	-	-	-	-	-
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 >



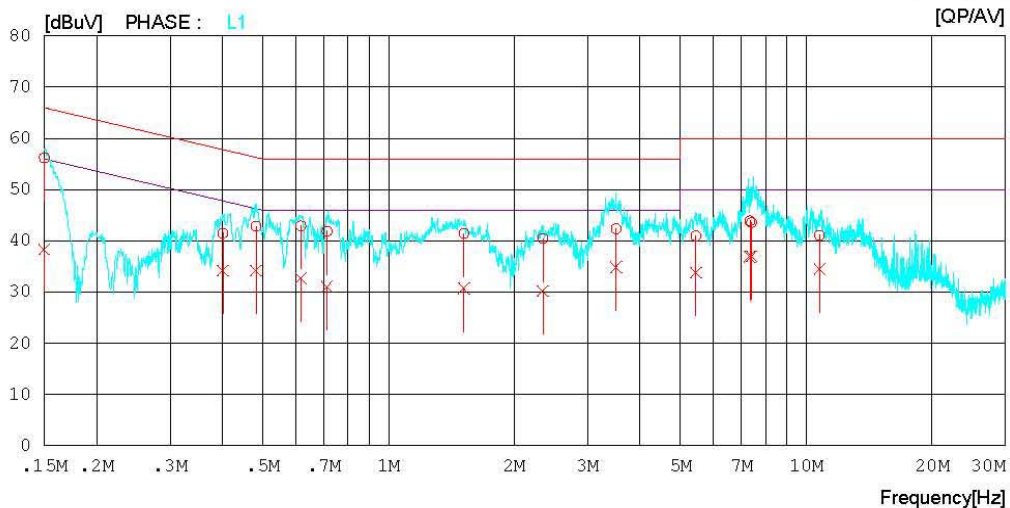
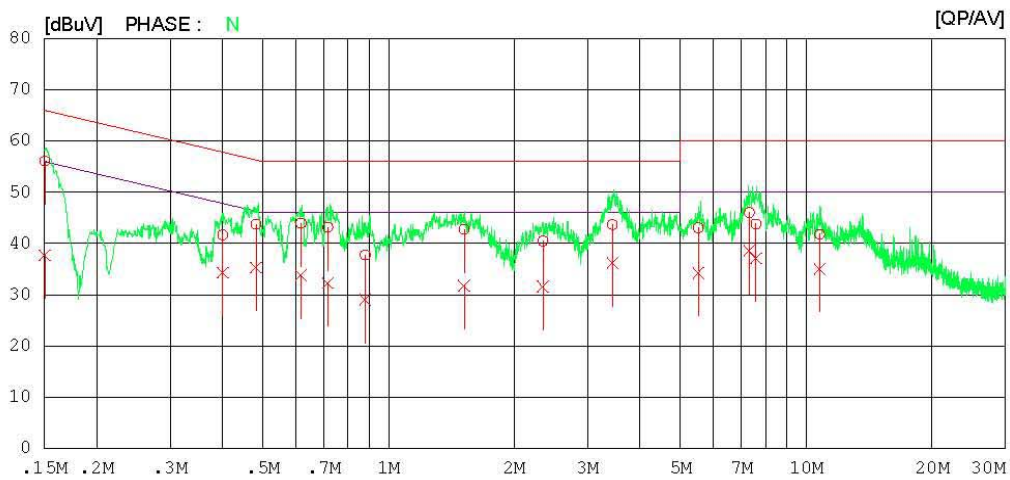
Results of Conducted Emission

Digital EMC
Date : 2013-02-12

Model No.	: 47LA6205-UA	Reference No.	:
Type	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi.	: 18 °C 37 % R.H.
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-02-12

Model No. : 47LA6205-UA	Reference No. :	
Type :	Power Supply :	120V 60Hz
Serial No. :	Temp/Humi. :	18 °C 37 % 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	0.15043	55.9	37.5	0.2	56.1	37.7	66.0	56.0	9.9	18.3	N
2	0.40065	41.5	34.1	0.2	41.7	34.3	57.8	47.8	16.1	13.5	N
3	0.48175	43.5	35.0	0.2	43.7	35.2	56.3	46.3	12.6	11.1	N
4	0.61750	43.8	33.6	0.2	44.0	33.8	56.0	46.0	12.0	12.2	N
5	0.71599	42.9	32.1	0.2	43.1	32.3	56.0	46.0	12.9	13.7	N
6	0.87975	37.6	28.8	0.2	37.8	29.0	56.0	46.0	18.2	17.0	N
7	1.51750	42.5	31.5	0.3	42.8	31.8	56.0	46.0	13.2	14.2	N
8	2.34250	40.2	31.3	0.3	40.5	31.6	56.0	46.0	15.5	14.4	N
9	3.43750	43.4	35.9	0.3	43.7	36.2	56.0	46.0	12.3	9.8	N
10	5.51850	42.6	33.8	0.5	43.1	34.3	60.0	50.0	16.9	15.7	N
11	7.31300	45.5	38.1	0.5	46.0	38.6	60.0	50.0	14.0	11.4	N
12	7.58000	43.3	36.6	0.5	43.8	37.1	60.0	50.0	16.2	12.9	N
13	10.77550	41.1	34.3	0.7	41.8	35.0	60.0	50.0	18.2	15.0	N
14	0.15000	56.0	38.1	0.2	56.2	38.3	66.0	56.0	9.8	17.7	L1
15	0.40134	41.3	34.0	0.2	41.5	34.2	57.8	47.8	16.3	13.6	L1
16	0.48180	42.6	34.0	0.2	42.8	34.2	56.3	46.3	13.5	12.1	L1
17	0.61704	42.7	32.5	0.2	42.9	32.7	56.0	46.0	13.1	13.3	L1
18	0.71331	41.7	30.9	0.2	41.9	31.1	56.0	46.0	14.1	14.9	L1
19	1.51600	41.1	30.4	0.3	41.4	30.7	56.0	46.0	14.6	15.3	L1
20	2.34450	40.1	29.9	0.3	40.4	30.2	56.0	46.0	15.6	15.8	L1
21	3.50700	42.0	34.6	0.3	42.3	34.9	56.0	46.0	13.7	11.1	L1
22	5.44500	40.5	33.3	0.5	41.0	33.8	60.0	50.0	19.0	16.2	L1
23	7.33250	43.4	36.4	0.5	43.9	36.9	60.0	50.0	16.1	13.1	L1
24	7.40050	43.1	36.5	0.5	43.6	37.0	60.0	50.0	16.4	13.0	L1
25	10.76500	40.4	33.8	0.7	41.1	34.5	60.0	50.0	18.9	15.5	L1

< USB MODE >



Results of Conducted Emission

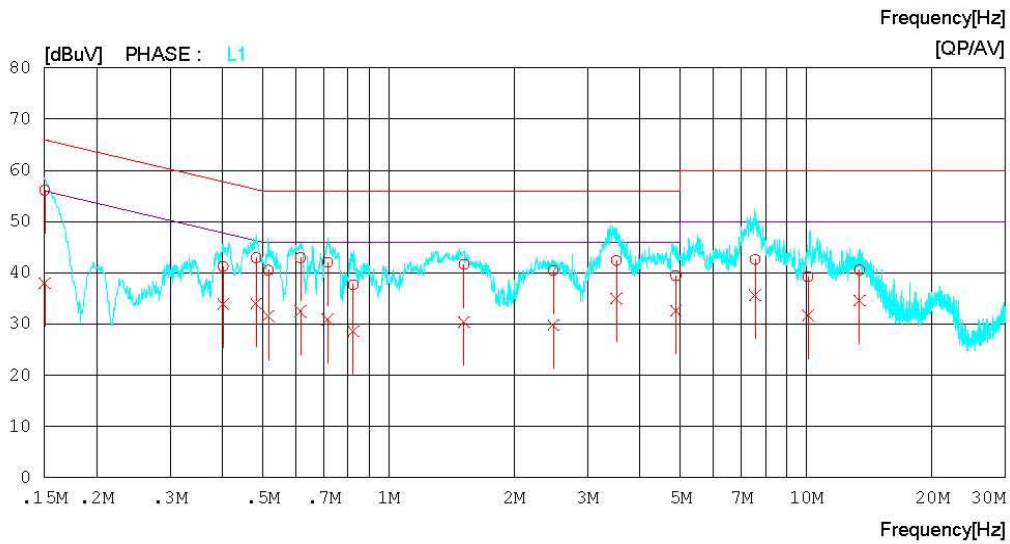
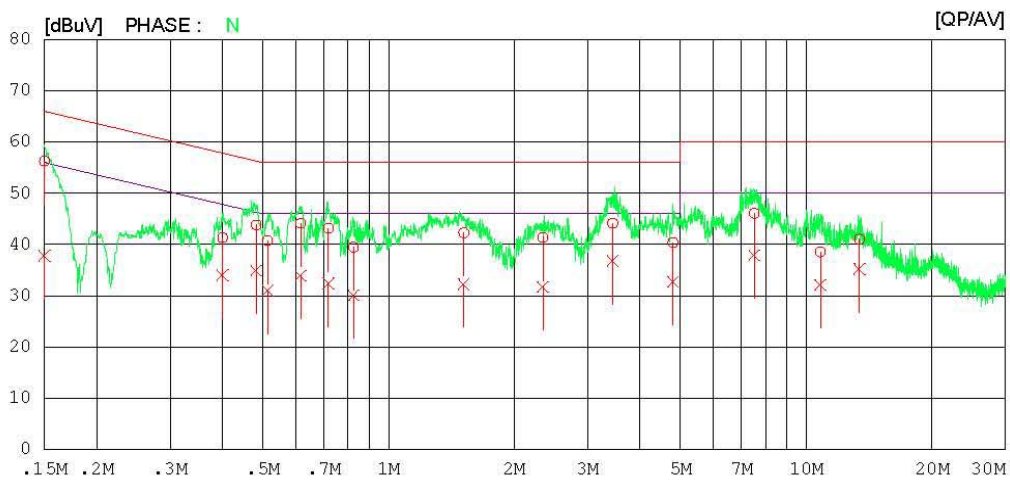
Digital EMC
Date : 2013-02-12

Model No. : 47LA6205-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 18 °C 37 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2013-02-12

Model No. :	47LA6205-UA	Reference No. :	:
Type :	:	Power Supply :	120V 60Hz
Serial No. :	:	Temp/Humi. :	18 °C 37 % R.H.
Test Condition :	USB	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	56.1	37.6	0.2	56.3	37.8	66.0	56.0	9.7	18.2	N
2	0.40059	41.1	33.8	0.2	41.3	34.0	57.8	47.8	16.5	13.8	N
3	0.48235	43.6	34.7	0.2	43.8	34.9	56.3	46.3	12.5	11.4	N
4	0.51350	40.5	30.8	0.2	40.7	31.0	56.0	46.0	15.3	15.0	N
5	0.61633	43.9	33.7	0.2	44.1	33.9	56.0	46.0	11.9	12.1	N
6	0.71810	43.0	32.2	0.2	43.2	32.4	56.0	46.0	12.8	13.6	N
7	0.82550	39.3	29.9	0.2	39.5	30.1	56.0	46.0	16.5	15.9	N
8	1.51400	42.0	31.9	0.3	42.3	32.2	56.0	46.0	13.7	13.8	N
9	2.34300	41.1	31.4	0.3	41.4	31.7	56.0	46.0	14.6	14.3	N
10	3.44300	43.8	36.5	0.3	44.1	36.8	56.0	46.0	11.9	9.2	N
11	4.79900	40.0	32.3	0.4	40.4	32.7	56.0	46.0	15.6	13.3	N
12	7.51350	45.6	37.4	0.5	46.1	37.9	60.0	50.0	13.9	12.1	N
13	10.81350	37.8	31.4	0.7	38.5	32.1	60.0	50.0	21.5	17.9	N
14	13.41950	40.3	34.5	0.7	41.0	35.2	60.0	50.0	19.0	14.8	N
15	0.15025	55.9	37.8	0.2	56.1	38.0	66.0	56.0	9.9	18.0	L1
16	0.40205	41.1	33.7	0.2	41.3	33.9	57.8	47.8	16.5	13.9	L1
17	0.48229	42.8	33.8	0.2	43.0	34.0	56.3	46.3	13.3	12.3	L1
18	0.51583	40.3	31.3	0.2	40.5	31.5	56.0	46.0	15.5	14.5	L1
19	0.61551	42.7	32.3	0.2	42.9	32.5	56.0	46.0	13.1	13.5	L1
20	0.71461	41.8	30.7	0.2	42.0	30.9	56.0	46.0	14.0	15.1	L1
21	0.82346	37.5	28.4	0.2	37.7	28.6	56.0	46.0	18.3	17.4	L1
22	1.51650	41.4	30.1	0.3	41.7	30.4	56.0	46.0	14.3	15.6	L1
23	2.48200	40.2	29.5	0.3	40.5	29.8	56.0	46.0	15.5	16.2	L1
24	3.51150	42.1	34.7	0.3	42.4	35.0	56.0	46.0	13.6	11.0	L1
25	4.87650	39.1	32.2	0.4	39.5	32.6	56.0	46.0	16.5	13.4	L1
26	7.54200	42.1	35.2	0.5	42.6	35.7	60.0	50.0	17.4	14.3	L1
27	10.11100	38.5	31.0	0.7	39.2	31.7	60.0	50.0	20.8	18.3	L1
28	13.41950	39.9	33.9	0.7	40.6	34.6	60.0	50.0	19.4	15.4	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 >

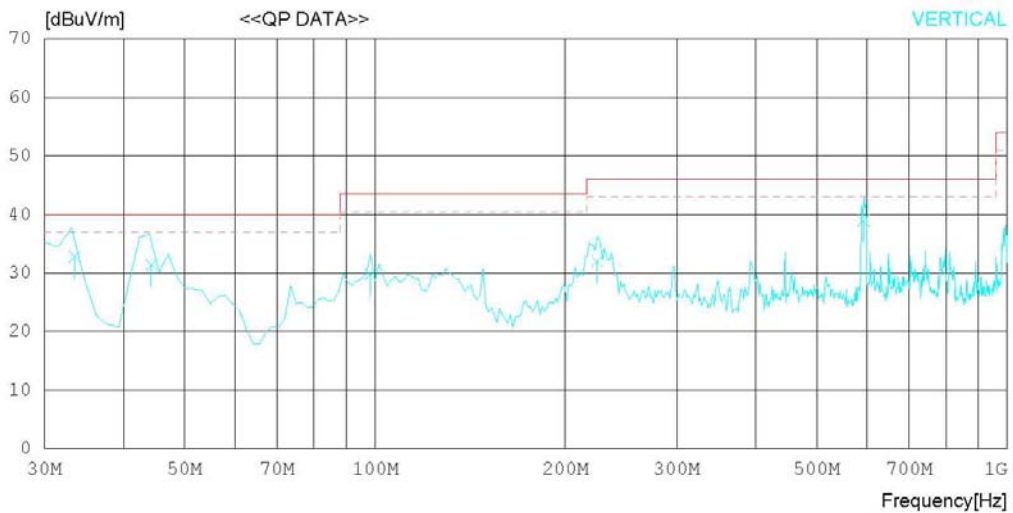
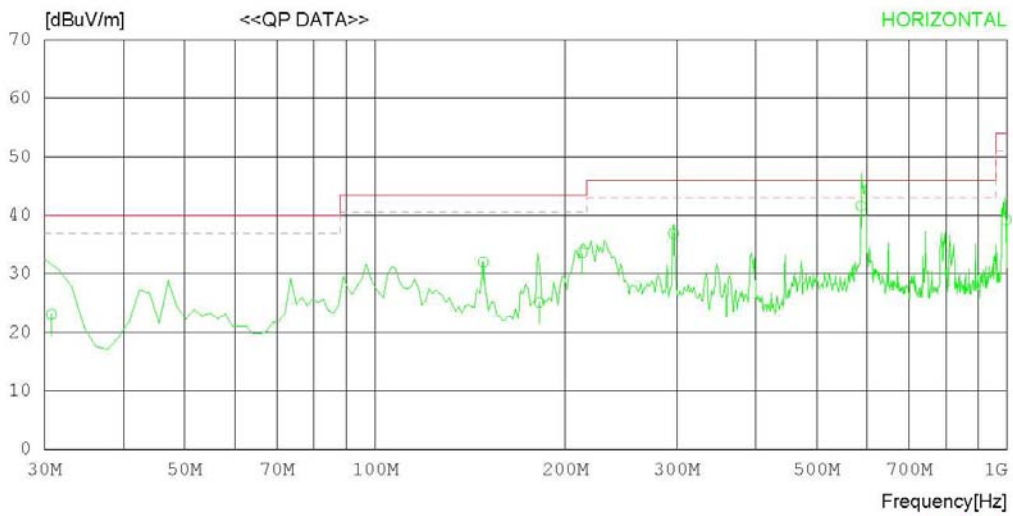
RADIATED EMISSION

Date : 2013-02-12

Model Name	: 47LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19 °C 34 % R.H.
Test Condition	: HDMI	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	30.753	28.5	17.5	0.9	23.8	23.1	40.0	16.9	156	121
2	148.349	44.0	10.5	1.7	24.2	32.0	43.5	11.5	169	143
3	181.913	37.2	9.7	2.2	24.0	25.1	43.5	18.4	100	263
4	212.577	44.7	10.4	2.4	23.9	33.6	43.5	9.9	100	309
5	296.711	44.0	13.7	2.8	23.6	36.9	46.0	9.1	100	228
6	587.494	42.4	18.5	4.1	23.4	41.6	46.0	4.4	100	189
7	996.166	34.2	22.2	5.5	22.7	39.2	54.0	14.8	100	156
----- Vertical -----										
8	33.528	39.7	16.0	1.0	23.9	32.8	40.0	7.2	156	211
9	44.272	40.8	13.7	1.1	24.2	31.4	40.0	8.6	100	146
10	98.307	42.1	10.4	1.4	24.1	29.8	43.5	13.7	100	358
11	224.548	42.3	11.2	2.4	23.9	32.0	46.0	14.0	151	223
12	592.557	39.7	18.6	4.1	23.4	39.0	46.0	7.0	123	190

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

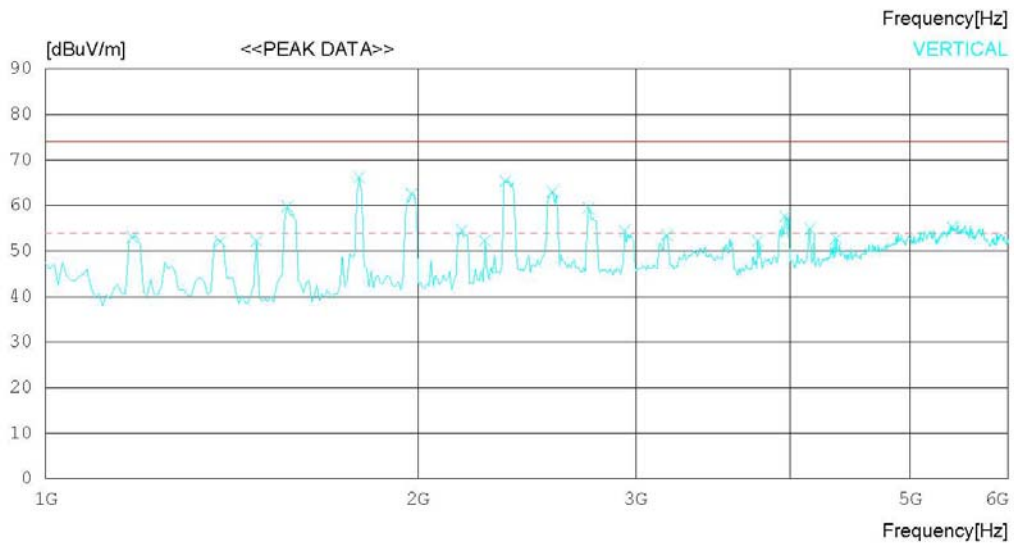
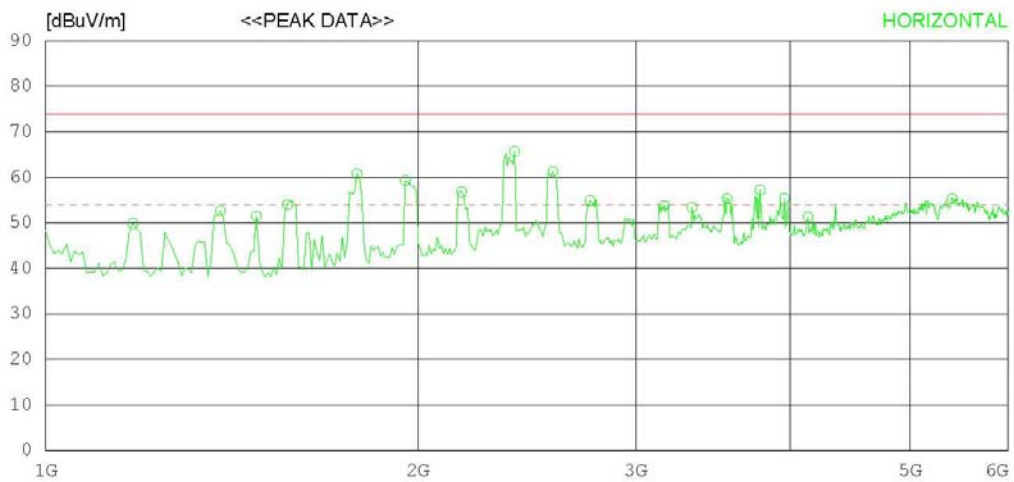
RADIATED EMISSION

Date : 2013-02-12

Model Name	: 47LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19 °C 34 % 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 : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1176.282	47.8	24.1	6.4	28.5	49.8	74.0	24.2	100	1
2	1384.615	49.5	24.5	7.1	28.5	52.6	74.0	21.4	100	219
3	1480.769	47.9	24.6	7.4	28.5	51.4	74.0	22.6	100	205
4	1568.910	50.3	24.6	7.6	28.5	54.0	74.0	20	100	148
5	1785.256	56.7	24.6	8.0	28.5	60.8	74.0	13.2	100	196
6	1953.525	54.8	24.6	8.4	28.5	59.3	74.0	14.7	100	196
7	2169.873	51.0	25.5	8.8	28.5	56.8	74.0	17.2	100	1
8	2394.236	58.1	26.8	9.3	28.5	65.7	74.0	8.3	100	1
9	2570.520	52.3	27.7	9.7	28.4	61.3	74.0	12.7	100	201
10	2754.818	45.1	28.2	10.0	28.4	54.9	74.0	19.1	100	210
11	3163.478	42.4	28.9	10.9	28.4	53.8	74.0	20.2	100	1
12	3331.750	41.6	28.9	11.3	28.4	53.4	74.0	20.6	100	1
13	3556.112	42.8	29.0	11.8	28.3	55.3	74.0	18.7	100	216
14	3780.474	43.5	29.6	12.4	28.3	57.2	74.0	16.8	100	192
15	3956.759	40.9	30.0	12.8	28.3	55.4	74.0	18.6	100	152
16	4133.042	36.1	30.4	13.1	28.3	51.3	74.0	22.7	100	240
17	5407.061	33.8	34.6	15.0	28.1	55.3	74.0	18.7	100	1
----- Vertical -----										
18	1176.282	51.0	24.1	6.4	28.5	53.0	74.0	21	100	358
19	1384.615	49.0	24.5	7.1	28.5	52.1	74.0	21.9	100	205
20	1480.769	48.7	24.6	7.4	28.5	52.2	74.0	21.8	100	236
21	1568.910	56.1	24.6	7.6	28.5	59.8	74.0	14.2	100	358
22	1793.269	62.0	24.6	8.1	28.5	66.2	74.0	7.8	100	358
23	1977.564	58.0	24.6	8.4	28.5	62.5	74.0	11.5	100	171
24	2169.873	48.8	25.5	8.8	28.5	54.6	74.0	19.4	100	358
25	2266.029	45.7	26.1	9.0	28.5	52.3	74.0	21.7	100	188
26	2354.171	58.0	26.6	9.2	28.5	65.3	74.0	8.7	100	358
27	2570.520	54.1	27.7	9.7	28.4	63.1	74.0	10.9	100	358
28	2746.805	49.6	28.2	10.0	28.4	59.4	74.0	14.6	100	358
29	2939.115	43.6	28.8	10.4	28.4	54.4	74.0	19.6	100	182
30	3179.504	42.1	28.9	10.9	28.4	53.5	74.0	20.5	100	207
31	3764.448	38.6	29.6	12.4	28.3	52.3	74.0	21.7	100	358
32	3964.772	42.9	30.1	12.9	28.3	57.6	74.0	16.4	100	358
33	4149.068	39.7	30.4	13.1	28.3	54.9	74.0	19.1	100	358
34	4357.398	36.9	30.7	13.3	28.2	52.7	74.0	21.3	100	225
35	5407.061	33.7	34.6	15.0	28.1	55.2	74.0	18.8	100	358

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

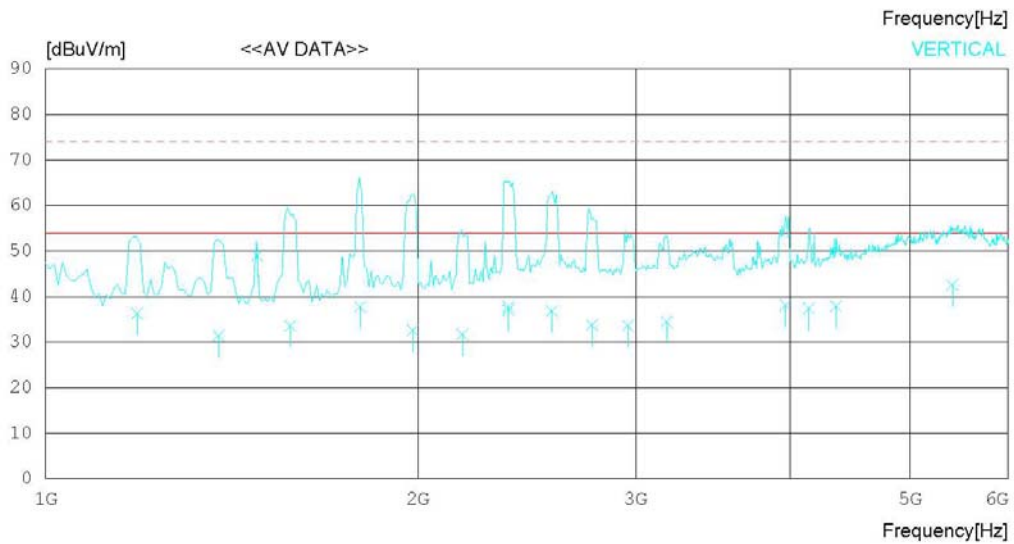
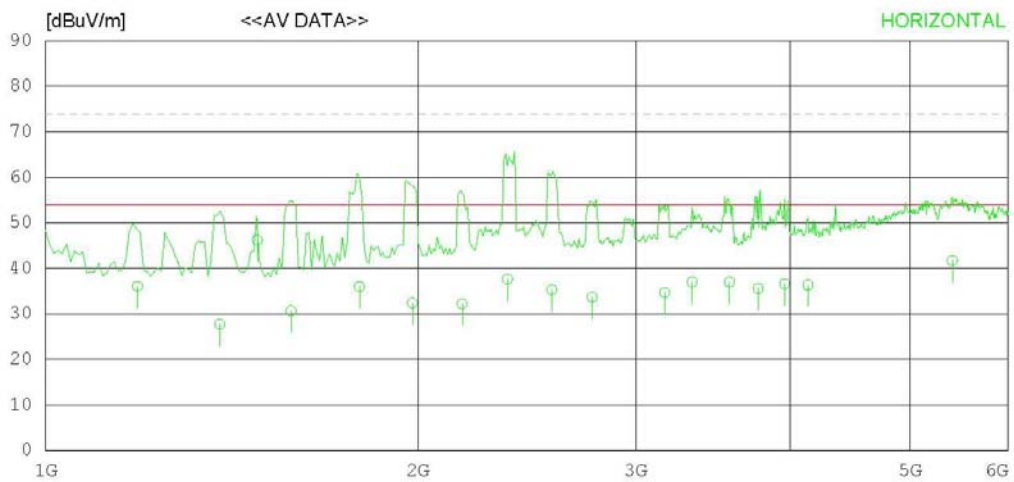
RADIATED EMISSION

Date : 2013-02-12

Model Name	: 47LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19 °C 34 % 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 : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1186.897	34.0	24.2	6.4	28.5	36.1	54.0	17.9	100	177
2	1383.122	24.6	24.5	7.1	28.5	27.7	54.0	26.3	100	213
3	1483.561	42.7	24.6	7.4	28.5	46.2	54.0	7.8	100	188
4	1578.967	26.9	24.6	7.7	28.5	30.7	54.0	23.3	100	148
5	1793.589	31.8	24.6	8.1	28.5	36.0	54.0	18.0	100	196
6	1978.878	27.9	24.6	8.4	28.5	32.4	54.0	21.6	100	196
7	2171.353	26.4	25.5	8.8	28.5	32.2	54.0	21.8	100	188
8	2362.429	30.2	26.7	9.2	28.5	37.6	54.0	16.4	100	223
9	2565.679	26.3	27.7	9.7	28.4	35.3	54.0	18.7	100	244
10	2765.917	23.7	28.3	10.1	28.4	33.7	54.0	20.3	100	217
11	3165.173	23.3	28.9	10.9	28.4	34.7	54.0	19.3	100	191
12	3331.750	25.2	28.9	11.3	28.4	37.0	54.0	17.0	100	224
13	3571.436	24.3	29.1	11.9	28.3	37.0	54.0	17.0	100	216
14	3767.635	21.9	29.6	12.4	28.3	35.6	54.0	18.4	100	192
15	3956.759	22.1	30.0	12.8	28.3	36.6	54.0	17.4	100	199
16	4133.042	21.1	30.4	13.1	28.3	36.3	54.0	17.7	100	231
17	5407.061	20.2	34.6	15.0	28.1	41.7	54.0	12.3	100	1
----- Vertical -----										
18	1185.958	34.2	24.2	6.4	28.5	36.3	54.0	17.7	100	221
19	1379.997	28.3	24.5	7.1	28.5	31.4	54.0	22.6	100	164
20	1483.561	45.5	24.6	7.4	28.5	49.0	54.0	5.0	100	236
21	1577.846	29.9	24.6	7.6	28.5	33.6	54.0	20.4	100	266
22	1796.154	33.6	24.6	8.1	28.5	37.8	54.0	16.2	100	47
23	1980.801	28.1	24.6	8.4	28.5	32.6	54.0	21.4	100	171
24	2171.353	25.9	25.5	8.8	28.5	31.7	54.0	22.3	100	224
25	2368.179	29.5	26.7	9.3	28.5	37.0	54.0	17.0	100	188
26	2368.179	30.2	26.7	9.3	28.5	37.7	54.0	16.3	100	358
27	2565.679	27.8	27.7	9.7	28.4	36.8	54.0	17.2	100	188
28	2765.756	23.8	28.3	10.1	28.4	33.8	54.0	20.2	100	241
29	2956.564	22.8	28.8	10.4	28.4	33.6	54.0	20.4	100	182
30	3179.504	23.1	28.9	10.9	28.4	34.5	54.0	19.5	100	207
31	3964.772	23.4	30.1	12.9	28.3	38.1	54.0	15.9	100	26
32	4139.711	22.2	30.4	13.1	28.3	37.4	54.0	16.6	100	187
33	4357.398	22.1	30.7	13.3	28.2	37.9	54.0	16.1	100	179
34	5407.061	21.0	34.6	15.0	28.1	42.5	54.0	11.5	100	358

< USB MODE_30 MHz ~ 1 GHz >

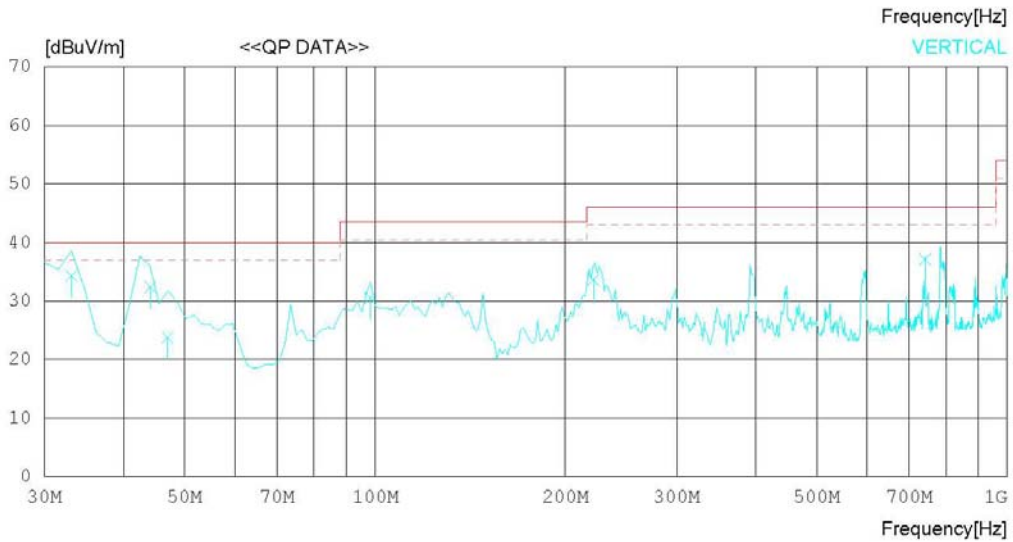
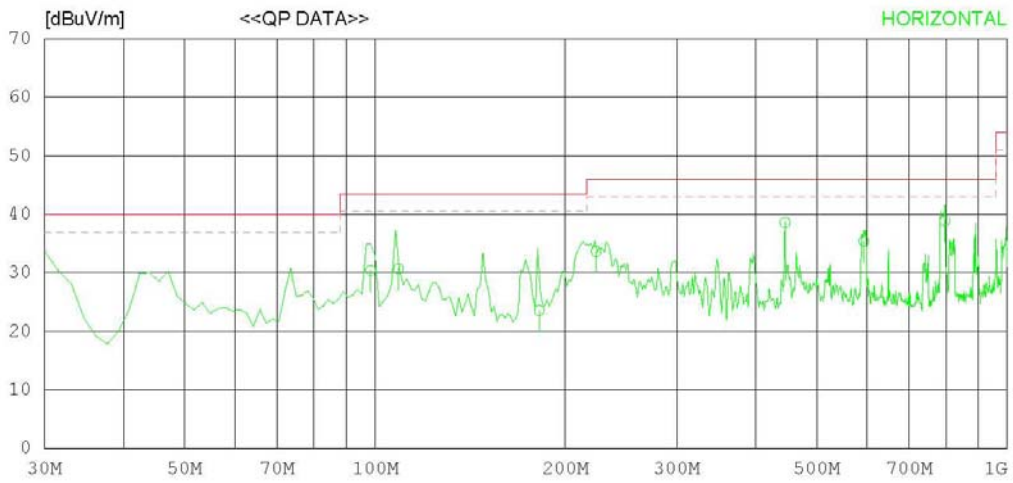
RADIATED EMISSION

Date : 2013-02-12

Model Name	: 47LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19 °C 34 % R.H.
Test Condition	: USB	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	98.344	42.7	10.4	1.4	24.1	30.4	43.5	13.1	250	332
2	108.841	42.2	11.1	1.5	24.1	30.7	43.5	12.8	248	71
3	181.835	35.7	9.7	2.2	24.0	23.6	43.5	19.9	400	294
4	223.705	44.1	11.1	2.4	23.9	33.7	46.0	12.3	100	247
5	445.070	41.8	16.6	3.5	23.3	38.6	46.0	7.4	100	313
6	593.407	36.1	18.6	4.1	23.4	35.4	46.0	10.6	201	44
7	796.945	37.7	19.9	4.8	23.5	38.9	46.0	7.1	100	134
----- Vertical -----										
8	33.109	40.9	16.3	1.0	23.9	34.3	40.0	5.7	199	1
9	44.112	41.8	13.7	1.1	24.2	32.4	40.0	7.6	100	187
10	46.967	35.2	11.7	1.2	24.3	23.8	40.0	16.2	100	44
11	98.320	42.9	10.4	1.4	24.1	30.6	43.5	12.9	100	204
12	221.686	44.1	11.0	2.4	23.9	33.6	46.0	12.4	100	189
13	741.766	37.1	19.1	4.6	23.7	37.1	46.0	8.9	100	206

RADIATED EMISSION

Date : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1376.602	52.3	24.5	7.1	28.5	55.4	74.0	18.6	100	1
2	1568.910	50.7	24.6	7.6	28.5	54.4	74.0	19.6	100	147
3	1761.218	49.4	24.6	8.0	28.5	53.5	74.0	20.5	100	1
4	1985.577	56.1	24.6	8.4	28.5	60.6	74.0	13.4	100	187
5	2161.860	48.6	25.5	8.8	28.5	54.4	74.0	19.6	100	187
6	2362.184	58.7	26.7	9.2	28.5	66.1	74.0	7.9	100	194
7	2578.533	48.4	27.7	9.7	28.4	57.4	74.0	16.6	100	242
8	2762.831	49.7	28.3	10.0	28.4	59.6	74.0	14.4	100	1
9	2939.115	43.1	28.8	10.4	28.4	53.9	74.0	20.1	100	199
10	3171.491	42.5	28.9	10.9	28.4	53.9	74.0	20.1	100	1
11	3564.125	46.3	29.0	11.9	28.3	58.9	74.0	15.1	100	198
12	3780.474	41.5	29.6	12.4	28.3	55.2	74.0	18.8	100	1
13	3924.707	50.8	30.0	12.8	28.3	65.3	74.0	8.7	100	1
14	4349.385	36.2	30.7	13.3	28.2	52.0	74.0	22	100	141
15	5190.718	34.7	33.5	15.2	28.1	55.3	74.0	18.7	100	36
16	5415.074	34.6	34.6	14.9	28.1	56.0	74.0	18	100	1
----- Vertical -----										
17	1392.628	51.1	24.5	7.1	28.5	54.2	74.0	19.8	100	358
18	1592.948	55.6	24.6	7.7	28.5	59.4	74.0	14.6	100	163
19	1777.243	52.3	24.6	8.0	28.5	56.4	74.0	17.6	100	358
20	1985.577	58.9	24.6	8.4	28.5	63.4	74.0	10.6	100	358
21	2169.873	47.6	25.5	8.8	28.5	53.4	74.0	20.6	100	358
22	2362.184	53.9	26.7	9.2	28.5	61.3	74.0	12.7	100	213
23	2570.520	53.4	27.7	9.7	28.4	62.4	74.0	11.6	100	189
24	2778.857	51.1	28.3	10.1	28.4	61.1	74.0	12.9	100	189
25	2955.141	45.3	28.8	10.4	28.4	56.1	74.0	17.9	100	358
26	3179.504	41.2	28.9	10.9	28.4	52.6	74.0	21.4	100	198
27	3564.125	45.8	29.0	11.9	28.3	58.4	74.0	15.6	100	358
28	3788.487	40.5	29.6	12.4	28.3	54.2	74.0	19.8	100	200
29	3916.694	47.6	29.9	12.7	28.3	61.9	74.0	12.1	100	200
30	4373.423	41.1	30.7	13.3	28.2	56.9	74.0	17.1	100	192
31	5166.680	36.4	33.3	15.2	28.1	56.8	74.0	17.2	100	358
32	5318.921	34.9	34.1	15.1	28.1	56.0	74.0	18	100	40

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

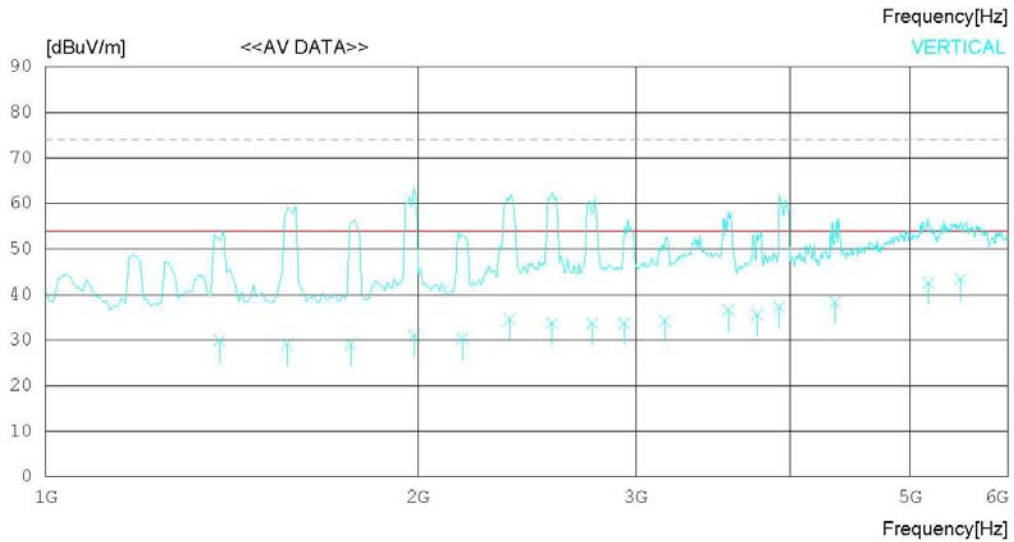
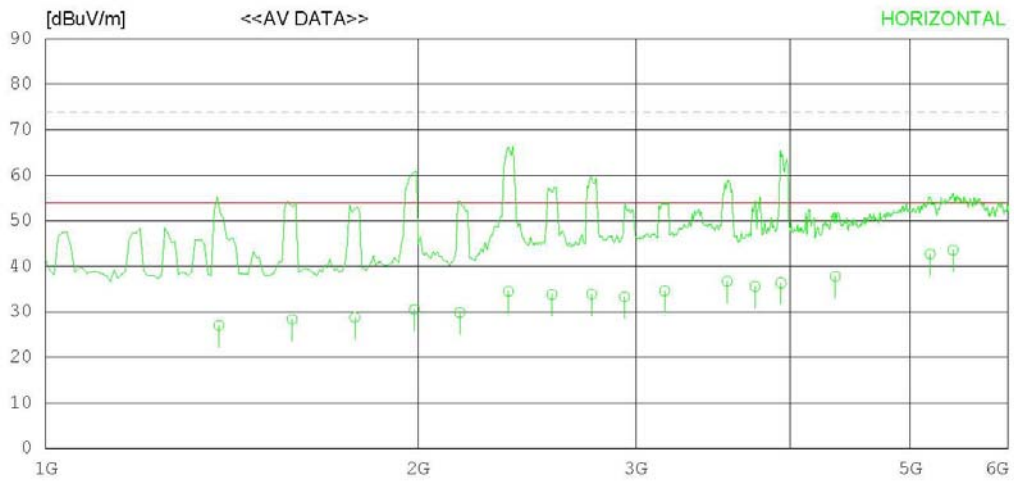
RADIATED EMISSION

Date : 2013-02-12

Model Name	: 47LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 19°C 34% 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 : 2013-02-12

Model Name : 47LA6205-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 34 % 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	1381.048	23.9	24.5	7.1	28.5	27.0	54.0	27.0	100	193
2	1582.859	24.6	24.6	7.7	28.5	28.4	54.0	25.6	100	147
3	1777.858	24.7	24.6	8.0	28.5	28.8	54.0	25.2	100	167
4	2161.860	24.1	25.5	8.8	28.5	29.9	54.0	24.1	100	248
5	2367.237	27.0	26.7	9.3	28.5	34.5	54.0	19.5	100	215
6	2566.654	24.8	27.7	9.7	28.4	33.8	54.0	20.2	100	140
7	2762.831	24.0	28.3	10.0	28.4	33.9	54.0	20.1	100	1
8	2937.045	22.5	28.8	10.4	28.4	33.3	54.0	20.7	100	199
9	3165.333	23.2	28.9	10.9	28.4	34.6	54.0	19.4	100	18
10	3556.442	24.2	29.0	11.8	28.3	36.7	54.0	17.3	100	198
11	3744.750	22.1	29.5	12.3	28.3	35.6	54.0	18.4	100	1
12	3931.112	21.8	30.0	12.8	28.3	36.3	54.0	17.7	100	1
13	4349.385	22.0	30.7	13.3	28.2	37.8	54.0	16.2	100	141
14	5190.718	22.1	33.5	15.2	28.1	42.7	54.0	11.3	100	36
15	5415.074	22.2	34.6	14.9	28.1	43.6	54.0	10.4	100	1
16	1986.859	26.0	24.6	8.4	28.5	30.5	54.0	23.5	100	215
----- Vertical -----										
17	1382.410	26.9	24.5	7.1	28.5	30.0	54.0	24.0	100	178
18	1567.714	25.3	24.6	7.6	28.5	29.0	54.0	25.0	100	178
19	1765.215	24.9	24.6	8.0	28.5	29.0	54.0	25.0	100	221
20	2171.932	24.5	25.5	8.8	28.5	30.3	54.0	23.7	100	210
21	2372.737	27.1	26.7	9.3	28.5	34.6	54.0	19.4	100	213
22	2567.500	24.7	27.7	9.7	28.4	33.7	54.0	20.3	100	189
23	2767.166	23.8	28.3	10.1	28.4	33.8	54.0	20.2	100	189
24	2937.044	22.9	28.8	10.4	28.4	33.7	54.0	20.3	100	112
25	3165.333	22.8	28.9	10.9	28.4	34.2	54.0	19.8	100	198
26	3564.125	24.0	29.0	11.9	28.3	36.6	54.0	17.4	100	358
27	3762.836	22.0	29.5	12.4	28.3	35.6	54.0	18.4	100	200
28	3916.694	23.0	29.9	12.7	28.3	37.3	54.0	16.7	100	200
29	4348.038	22.5	30.7	13.3	28.2	38.3	54.0	15.7	100	192
30	5171.952	22.1	33.4	15.2	28.1	42.6	54.0	11.4	100	204
31	5490.115	21.6	35.0	14.9	28.1	43.4	54.0	10.6	100	40
32	1985.577	26.5	24.6	8.4	28.5	31.0	54.0	23.0	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	2013.01.08	2014.01.08
<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	2013.01.08	2014.01.08
<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	2013.01.08	2014.01.08

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	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
<input checked="" type="checkbox"/> HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2013.01.08	2014.01.08
<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 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