

# EMC TEST REPORT

Test item : LED TV Monitor  
Model No. : 60LA6205-UA  
Order No. : DEMC1302-00493  
Date of receipt : 2013-02-05  
Test duration : 2013-02-14 ~ 2013-02-15  
Use of report : FCC CoC Marking  
Date of Issue : 2013-02-19

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 : 19 °C,  
Humidity : (38 ~ 40) % 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  
HyunSuk Ko



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.	60LA6205-UA
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ60LA6205UA
Type of Sample Tested	Pre-Production
High Frequency	790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.1 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	02-14	19	38
Radiated Disturbance	02-15	19	40

### 4.3 Test result Summary

#### (1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
0.58540	LI	33.2	Average	46.0	12.8

#### (2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB( $\mu$ V/m)]	Detector	Limit [dB( $\mu$ V/m)]	Margin [dB]
720.004	H	42.5	Quasi-Peak	46.0	3.5

## 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 : 1920x1080 Resolution (Worst case)
- USB MODE : Play MP3 file

### 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	1.8	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	1.5	Not use	Shield		
				LAN	1.6	Not use	Non-shield		
				STEREO	1.5	Not use	Non-shield		
KEYBOARD	SKG-3300UB	TAKZ200031M	MONITEREY INTERNATIONAL CORP	USB	1.8	Not use	Shield	Plastic	DOC
MOUSE	1484	352700021372	MICROSOFT CORPORATION	USB	1.8	Not use	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2001499	SONY EMCS.	POWER Component	1.8 1.6	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	Sandisk Cruzer Z37 4G	N/A	SANDISK	USB	-	-	-	-	DOC
PRINTER	SRP-770	SRP77008060035	BIXOLON	POWER USB	1.5 1.6	Not use Not use	Non-shield Shield	Plastic	DOC
HEADSET	COV903	N/A	COSY	STEREO	2.1	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 2<sup>nd</sup> 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

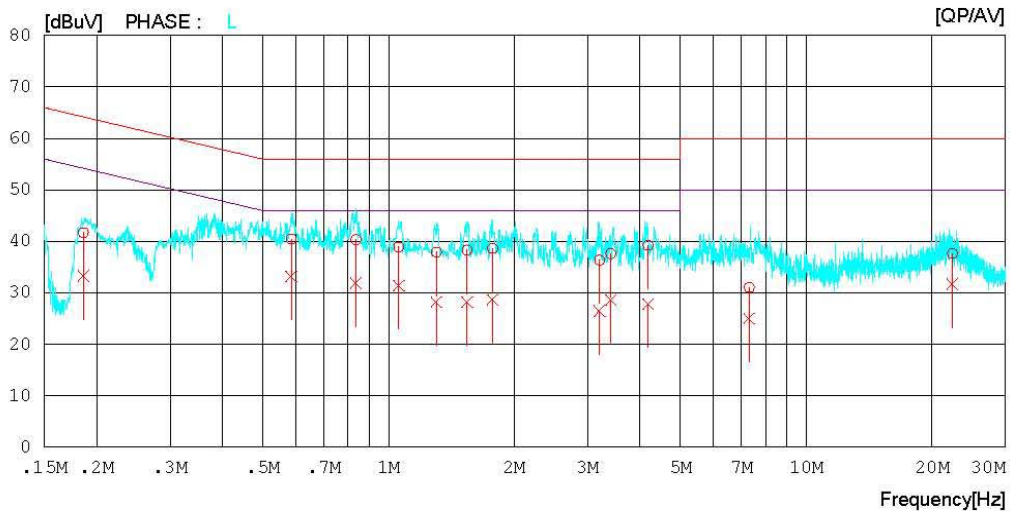
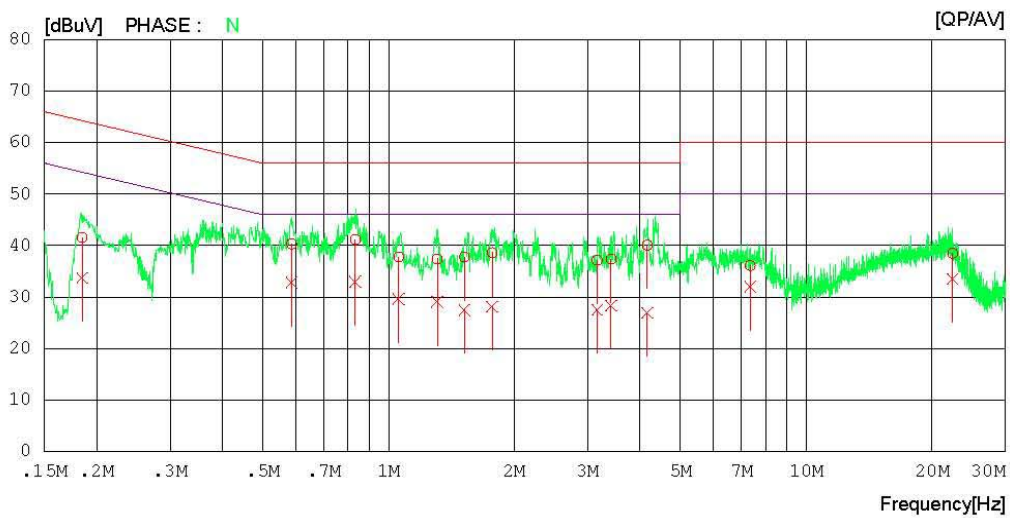
Digital EMC  
Date : 2013-02-14

Model No. : 60LA6205-UA  
Type :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi. : 19 °C 38 % R.H.  
Operator :

Memo :

LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2013-02-14

Model No. : 60LA6205-UA	Reference No. :	
Type :	Power Supply :	120 V 60 Hz
Serial No. :	Temp/Humi. :	19 °C 38 % 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	0.18499	41.4	33.5	0.2	41.6	33.7	64.3	54.3	22.7	20.6	N
2	0.58633	40.1	32.6	0.2	40.3	32.8	56.0	46.0	15.7	13.2	N
3	0.83308	41.0	32.8	0.2	41.2	33.0	56.0	46.0	14.8	13.0	N
4	1.05750	37.5	29.3	0.3	37.8	29.6	56.0	46.0	18.2	16.4	N
5	1.30750	37.1	28.7	0.3	37.4	29.0	56.0	46.0	18.6	17.0	N
6	1.51950	37.5	27.2	0.3	37.8	27.5	56.0	46.0	18.2	18.5	N
7	1.77150	38.3	27.8	0.3	38.6	28.1	56.0	46.0	17.4	17.9	N
8	3.16100	36.8	27.2	0.3	37.1	27.5	56.0	46.0	18.9	18.5	N
9	3.41050	37.1	28.0	0.3	37.4	28.3	56.0	46.0	18.6	17.7	N
10	4.16650	39.8	26.6	0.3	40.1	26.9	56.0	46.0	15.9	19.1	N
11	7.34650	35.6	31.5	0.5	36.1	32.0	60.0	50.0	23.9	18.0	N
12	22.40650	37.6	32.6	0.9	38.5	33.5	60.0	50.0	21.5	16.5	N
13	0.18610	41.5	33.1	0.2	41.7	33.3	64.2	54.2	22.5	20.9	L
14	0.58540	40.3	33.0	0.2	40.5	33.2	56.0	46.0	15.5	12.8	L
15	0.83615	40.1	31.7	0.2	40.3	31.9	56.0	46.0	15.7	14.1	L
16	1.05750	38.6	31.1	0.3	38.9	31.4	56.0	46.0	17.1	14.6	L
17	1.30300	37.6	27.9	0.3	37.9	28.2	56.0	46.0	18.1	17.8	L
18	1.54250	38.0	27.9	0.3	38.3	28.2	56.0	46.0	17.7	17.8	L
19	1.77550	38.3	28.4	0.3	38.6	28.7	56.0	46.0	17.4	17.3	L
20	3.20150	36.1	26.2	0.3	36.4	26.5	56.0	46.0	19.6	19.5	L
21	3.40700	37.3	28.3	0.3	37.6	28.6	56.0	46.0	18.4	17.4	L
22	4.18300	38.9	27.6	0.3	39.2	27.9	56.0	46.0	16.8	18.1	L
23	7.30600	30.5	24.5	0.5	31.0	25.0	60.0	50.0	29.0	25.0	L
24	22.40400	36.7	30.9	0.9	37.6	31.8	60.0	50.0	22.4	18.2	L

< USB MODE >



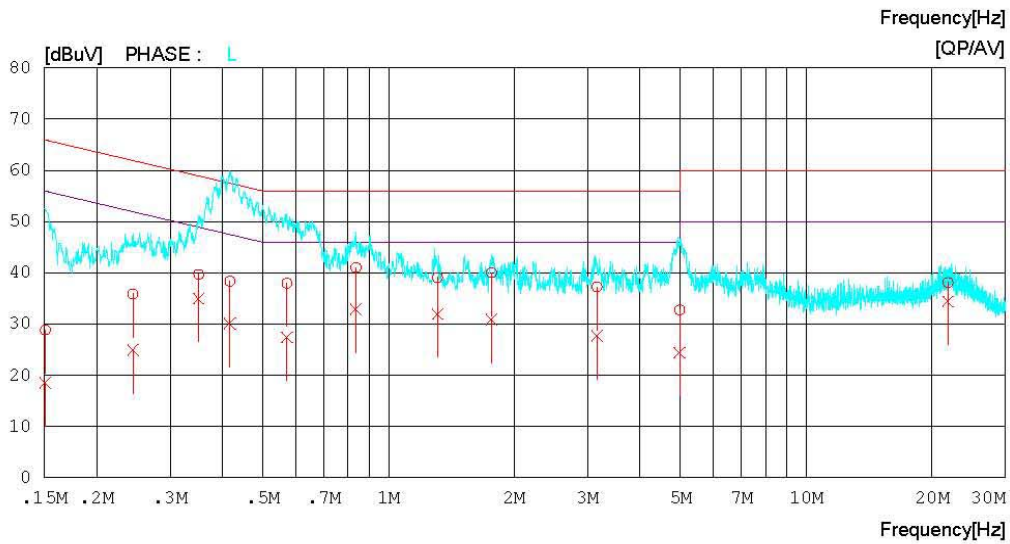
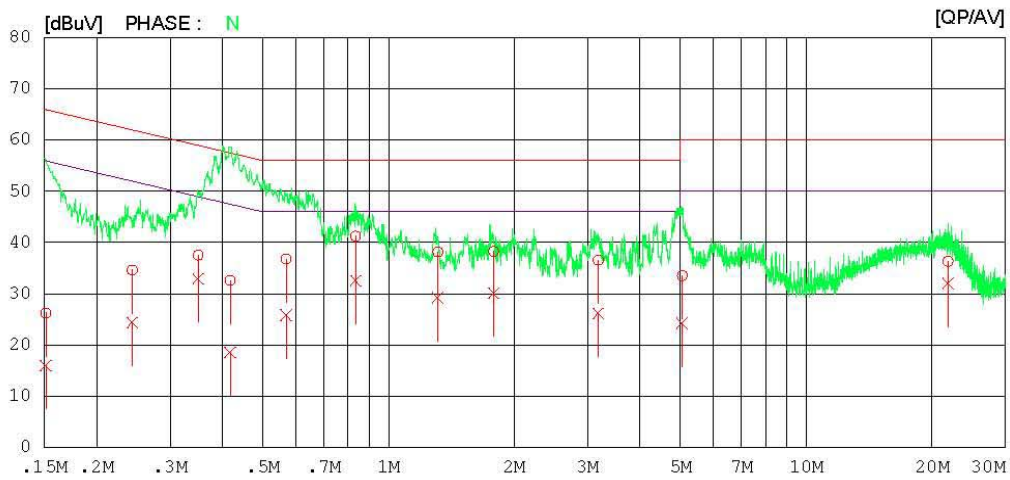
### Results of Conducted Emission

Digital EMC  
 Date : 2013-02-14

Model No.	: 60LA6205-UA	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 19 °C 38 % R.H.
Test Condition	: USB	Operator	:

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2013-02-14

Model No. : 60LA6205-UA  
 Type :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi. : 19 °C 38 % 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	0.15114	26.1	15.7	0.2	26.3	15.9	65.9	55.9	39.6	40.0	N
2	0.24365	34.4	24.2	0.2	34.6	24.4	62.0	52.0	27.4	27.6	N
3	0.35048	37.3	32.7	0.2	37.5	32.9	59.0	49.0	21.5	16.1	N
4	0.41783	32.3	18.3	0.2	32.5	18.5	57.5	47.5	25.0	29.0	N
5	0.56884	36.5	25.6	0.2	36.7	25.8	56.0	46.0	19.3	20.2	N
6	0.83471	41.0	32.3	0.2	41.2	32.5	56.0	46.0	14.8	13.5	N
7	1.31250	37.8	29.0	0.3	38.1	29.3	56.0	46.0	17.9	16.7	N
8	1.78600	37.9	29.8	0.3	38.2	30.1	56.0	46.0	17.8	15.9	N
9	3.17750	36.2	25.8	0.3	36.5	26.1	56.0	46.0	19.5	19.9	N
10	5.05150	33.1	23.8	0.4	33.5	24.2	60.0	50.0	26.5	25.8	N
11	21.85300	35.4	31.1	0.9	36.3	32.0	60.0	50.0	23.7	18.0	N
12	0.15090	28.7	18.3	0.2	28.9	18.5	66.0	56.0	37.1	37.5	L
13	0.24446	35.7	24.8	0.2	35.9	25.0	61.9	51.9	26.0	26.9	L
14	0.35135	39.5	34.8	0.2	39.7	35.0	58.9	48.9	19.2	13.9	L
15	0.41730	38.2	29.9	0.2	38.4	30.1	57.5	47.5	19.1	17.4	L
16	0.57134	37.8	27.2	0.2	38.0	27.4	56.0	46.0	18.0	18.6	L
17	0.83594	40.8	32.7	0.2	41.0	32.9	56.0	46.0	15.0	13.1	L
18	1.31050	38.8	31.7	0.3	39.1	32.0	56.0	46.0	16.9	14.0	L
19	1.76650	39.7	30.6	0.3	40.0	30.9	56.0	46.0	16.0	15.1	L
20	3.15700	37.0	27.4	0.3	37.3	27.7	56.0	46.0	18.7	18.3	L
21	4.97900	32.4	24.1	0.4	32.8	24.5	56.0	46.0	23.2	21.5	L
22	21.85400	37.2	33.5	0.9	38.1	34.4	60.0	50.0	21.9	15.6	L

## 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 <sup>th</sup> 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 $\mu$ V/m)	Quasi-peak (dB $\mu$ 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 $\mu$ V/m)	Quasi-peak (dB $\mu$ 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 $\mu$ V/m)	Average (dB $\mu$ V/m)	Peak (dB $\mu$ V/m)	Average (dB $\mu$ 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 >

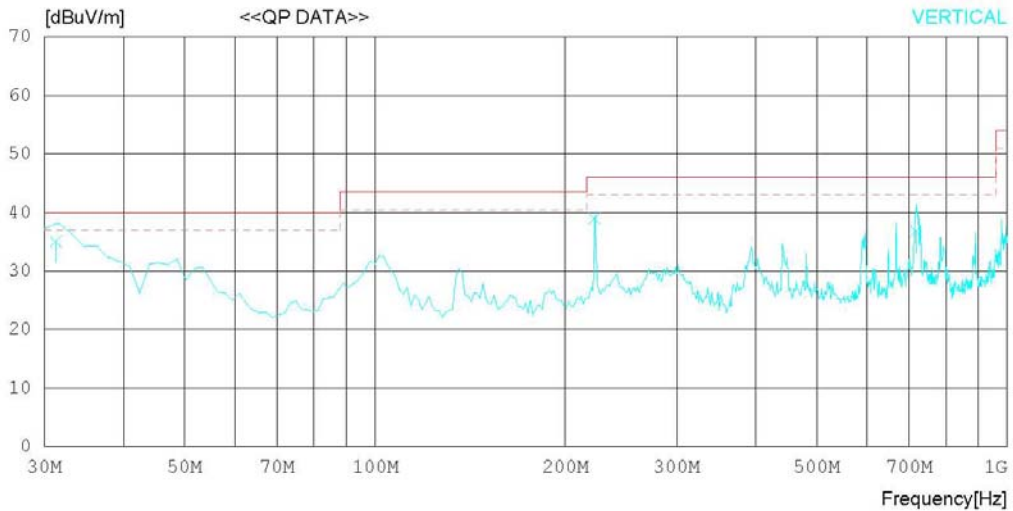
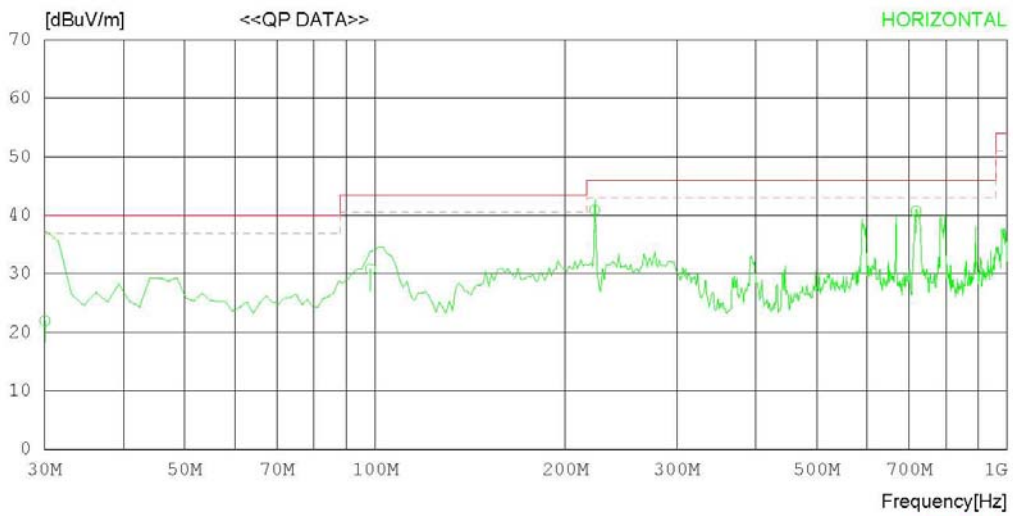
**RADIATED EMISSION**

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % R.H.
Test Condition	: HDMI	Operator	:

Memo :

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



## RADIATED EMISSION

Date : 2013-02-15

Model Name : 60LA6205-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 19 °C 40 % 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	30.048	27.2	17.8	0.8	23.8	22.0	40.0	18.0	231	10
2	98.298	43.1	10.4	1.4	24.1	30.8	43.5	12.7	335	114
3	222.552	51.4	11.0	2.4	23.9	40.9	46.0	5.1	100	264
4	717.208	41.1	18.8	4.6	23.8	40.7	46.0	5.3	175	114
----- Vertical -----										
5	31.246	40.8	17.2	0.9	23.8	35.1	40.0	4.9	152	51
6	222.532	49.5	11.0	2.4	23.9	39.0	46.0	7.0	108	209
7	716.512	37.2	18.8	4.6	23.8	36.8	46.0	9.2	172	298

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

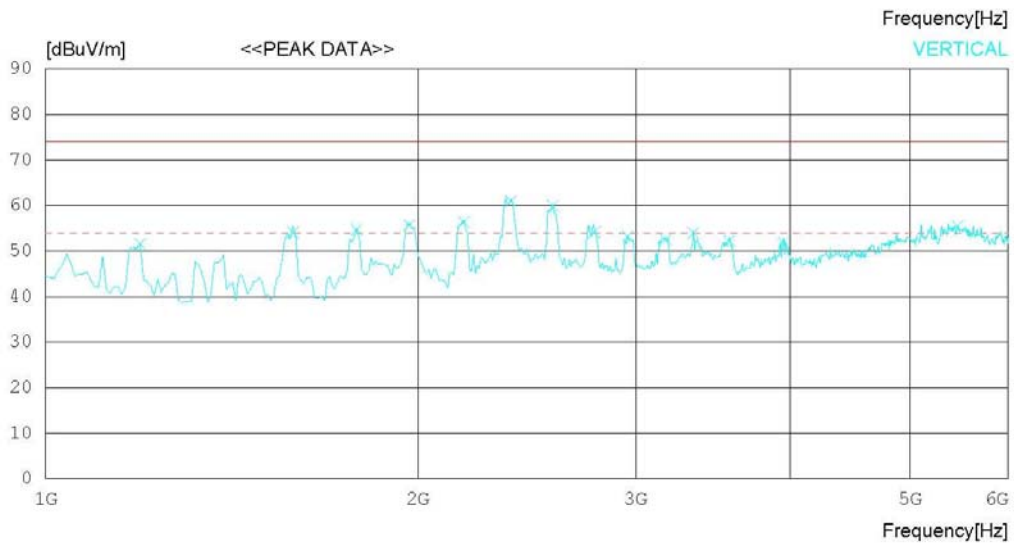
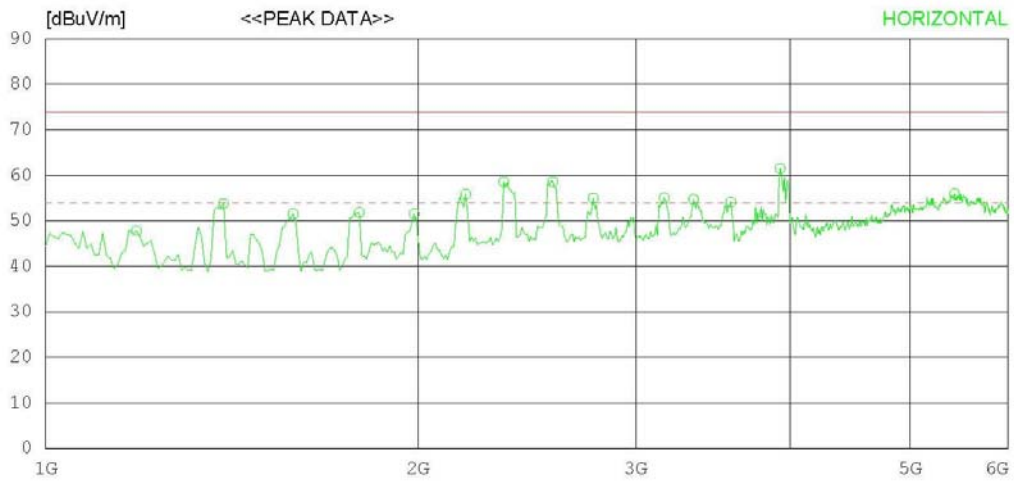
**RADIATED EMISSION**

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % 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 : 2013-02-15

Model Name : 60LA6205-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 19 °C 40 % 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	1184.295	45.7	24.2	6.4	28.5	47.8	74.0	26.2	100	178
2	1392.628	50.7	24.5	7.1	28.5	53.8	74.0	20.2	100	115
3	1584.936	47.7	24.6	7.7	28.5	51.5	74.0	22.5	100	358
4	1793.269	47.6	24.6	8.1	28.5	51.8	74.0	22.2	100	117
5	1985.577	47.0	24.6	8.4	28.5	51.5	74.0	22.5	100	358
6	2185.899	49.8	25.6	8.9	28.5	55.8	74.0	18.2	100	358
7	2346.158	51.3	26.6	9.2	28.5	58.6	74.0	15.4	100	133
8	2570.520	49.6	27.7	9.7	28.4	58.6	74.0	15.4	100	358
9	2770.844	45.0	28.3	10.1	28.4	55.0	74.0	19	100	159
10	3163.478	43.7	28.9	10.9	28.4	55.1	74.0	18.9	100	143
11	3339.762	42.9	28.9	11.3	28.4	54.7	74.0	19.3	100	358
12	3580.151	41.4	29.1	11.9	28.3	54.1	74.0	19.9	100	358
13	3924.707	47.0	30.0	12.8	28.3	61.5	74.0	12.5	100	358
14	5431.099	34.4	34.7	14.9	28.1	55.9	74.0	18.1	100	106
----- Vertical -----										
15	1192.308	49.5	24.2	6.4	28.5	51.6	74.0	22.4	100	166
16	1584.936	51.6	24.6	6.4	28.5	54.1	74.0	19.9	100	1
17	1785.256	50.9	24.6	7.7	28.5	54.7	74.0	19.3	100	1
18	1969.551	51.6	24.6	8.0	28.5	55.7	74.0	18.3	100	156
19	2177.886	50.9	25.6	8.4	28.5	56.4	74.0	17.6	100	1
20	2378.210	53.9	26.7	8.8	28.5	60.9	74.0	13.1	100	162
21	2570.520	51.4	27.7	9.3	28.5	59.9	74.0	14.1	100	169
22	2778.857	44.5	28.3	9.7	28.4	54.1	74.0	19.9	100	186
23	2955.141	42.7	28.8	10.1	28.4	53.2	74.0	20.8	100	178
24	3171.491	41.7	28.9	10.4	28.4	52.6	74.0	21.4	100	193
25	3339.762	42.6	28.9	10.9	28.4	54.0	74.0	20	100	1
26	3572.138	40.3	29.1	11.3	28.4	52.3	74.0	21.7	100	160
27	3948.746	38.3	30.0	11.9	28.3	51.9	74.0	22.1	100	1
28	5463.150	33.8	34.9	14.9	28.1	55.5	74.0	18.5	100	1

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

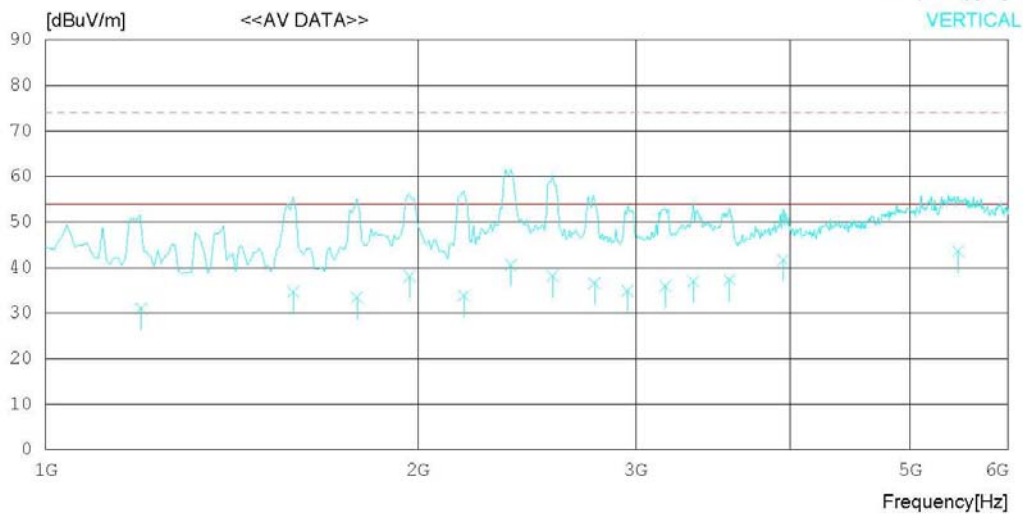
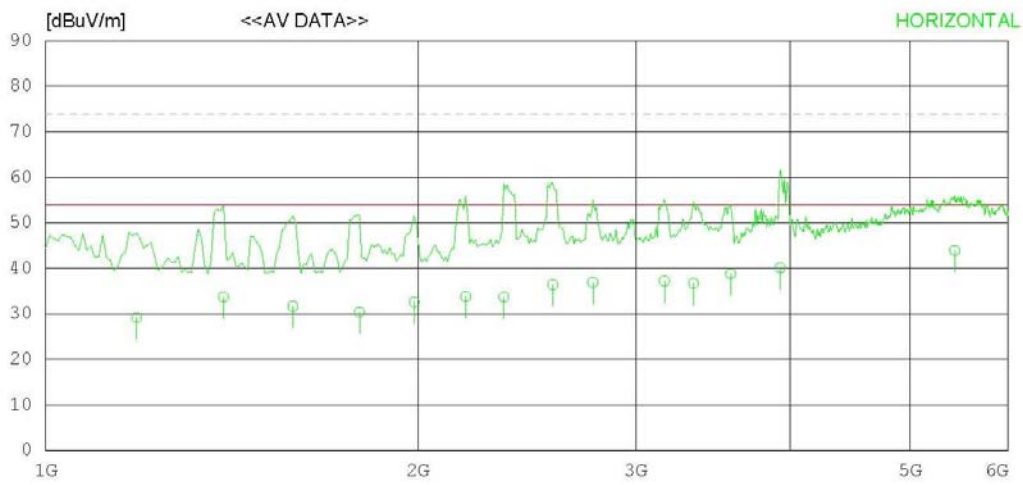
**RADIATED EMISSION**

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % 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 : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % 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	1184.297	27.1	24.2	6.4	28.5	29.2	54.0	24.8	100	172
2	1392.467	30.6	24.5	7.1	28.5	33.7	54.0	20.3	100	114
3	1584.378	27.9	24.6	7.7	28.5	31.7	54.0	22.3	100	311
4	1793.689	26.2	24.6	8.1	28.5	30.4	54.0	23.6	100	104
5	1985.753	28.1	24.6	8.4	28.5	32.6	54.0	21.4	100	127
6	2185.956	27.8	25.6	8.9	28.5	33.8	54.0	20.2	100	192
7	2346.670	26.4	26.6	9.2	28.5	33.7	54.0	20.3	100	168
8	2570.267	27.4	27.7	9.7	28.4	36.4	54.0	17.6	100	10
9	2769.560	26.9	28.3	10.1	28.4	36.9	54.0	17.1	100	81
10	3163.987	25.8	28.9	10.9	28.4	37.2	54.0	16.8	100	132
11	3340.017	24.9	28.9	11.3	28.4	36.7	54.0	17.3	100	75
12	3579.640	26.1	29.1	11.9	28.3	38.8	54.0	15.2	100	89
13	3925.001	25.6	30.0	12.8	28.3	40.1	54.0	13.9	100	71
14	5431.187	22.4	34.7	14.9	28.1	43.9	54.0	10.1	100	102
----- Vertical -----										
15	1195.004	28.9	24.2	6.4	28.5	31.0	54.0	23.0	100	172
16	1585.570	30.8	24.6	7.7	28.5	34.6	54.0	19.4	100	110
17	1785.456	29.3	24.6	8.0	28.5	33.4	54.0	20.6	100	278
18	1969.793	33.6	24.6	8.4	28.5	38.1	54.0	15.9	100	130
19	2177.272	28.0	25.6	8.8	28.5	33.9	54.0	20.1	100	224
20	2378.528	33.2	26.7	9.3	28.5	40.7	54.0	13.3	100	162
21	2570.536	29.2	27.7	9.7	28.4	38.2	54.0	15.8	100	172
22	2778.015	26.6	28.3	10.1	28.4	36.6	54.0	17.4	100	56
23	2955.081	24.1	28.8	10.4	28.4	34.9	54.0	19.1	100	180
24	3171.008	24.6	28.9	10.9	28.4	36.0	54.0	18.0	100	172
25	3339.783	25.2	28.9	11.3	28.4	37.0	54.0	17.0	100	108
26	3572.998	24.6	29.1	11.9	28.3	37.3	54.0	16.7	100	215
27	3948.234	27.2	30.0	12.8	28.3	41.7	54.0	12.3	100	137
28	5463.571	21.9	34.9	14.9	28.1	43.6	54.0	10.4	100	134

< USB MODE\_30 MHz ~ 1 GHz >

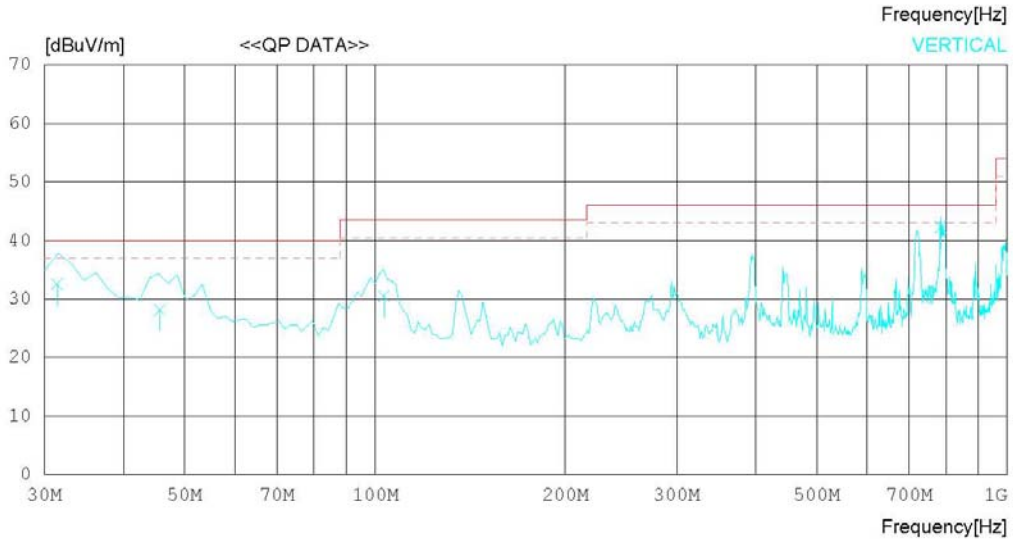
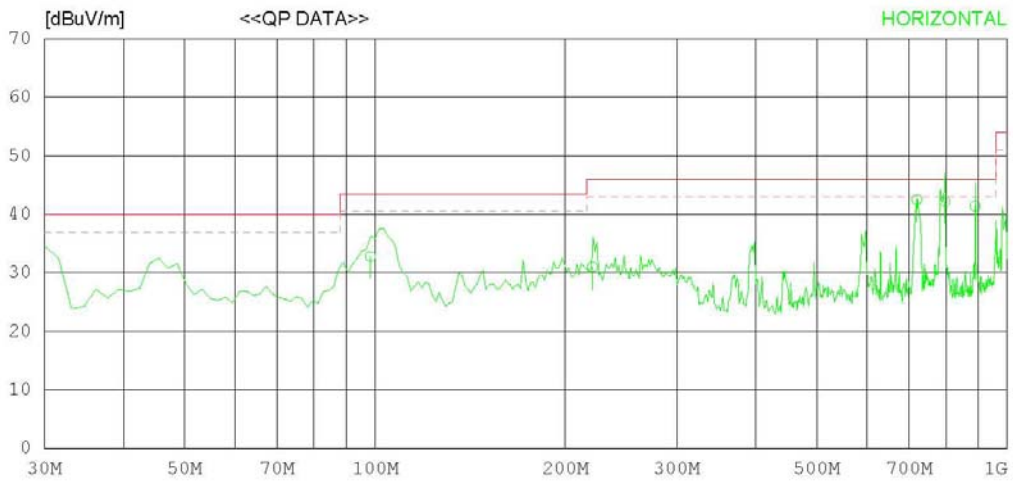
## RADIATED EMISSION

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % R.H.
Test Condition	: USB	Operator	:

Memo :

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



## RADIATED EMISSION

Date : 2013-02-15

Model Name : 60LA6205-UA  
 Model No. :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi : 19 °C 40 % R.H.  
 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	98.288	45.1	10.4	1.4	24.1	32.8	43.5	10.7	198	136
2	220.783	41.6	10.9	2.4	23.9	31.0	46.0	15.0	217	17
3	720.004	42.9	18.8	4.6	23.8	42.5	46.0	3.5	117	129
4	797.105	41.0	19.9	4.8	23.5	42.2	46.0	3.8	349	109
5	890.012	38.6	20.7	5.2	23.1	41.4	46.0	4.6	132	190
----- Vertical -----										
6	31.432	38.3	17.1	0.9	23.8	32.5	40.0	7.5	117	269
7	45.649	38.2	13.2	1.1	24.3	28.2	40.0	11.8	274	138
8	103.298	42.4	10.8	1.4	24.1	30.5	43.5	13.0	129	148
9	785.846	41.2	19.8	4.8	23.5	42.3	46.0	3.7	124	74

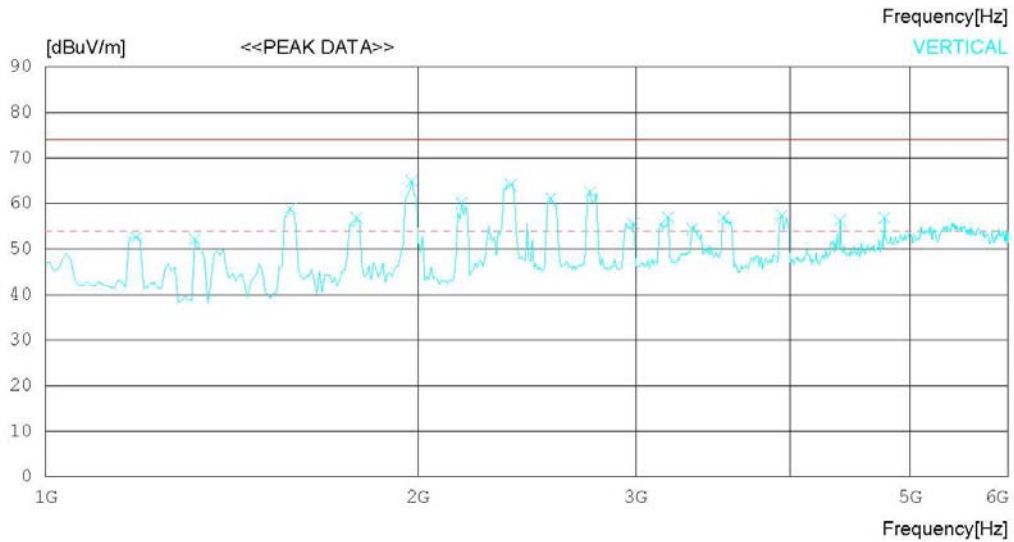
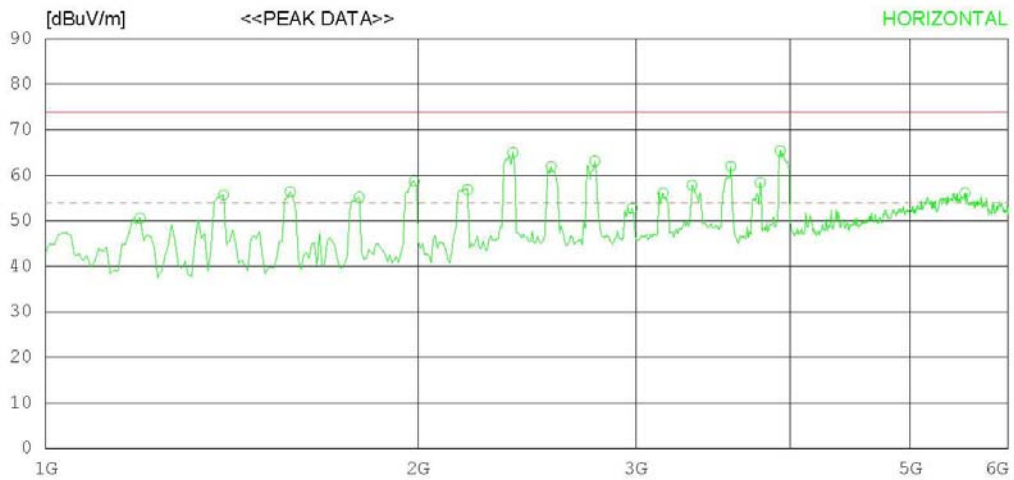
< USB MODE \_ (1 ~ 6) GHz \_ Peak >

## RADIATED EMISSION

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % 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 : 2013-02-15

Model Name : 60LA6205-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 19 °C 40 % 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	1192.308	48.5	24.2	6.4	28.5	50.6	74.0	23.4	100	206
2	1392.628	52.6	24.5	7.1	28.5	55.7	74.0	18.3	100	1
3	1576.923	52.7	24.6	7.6	28.5	56.4	74.0	17.6	100	1
4	1793.269	51.0	24.6	8.1	28.5	55.2	74.0	18.8	100	1
5	1985.577	54.2	24.6	8.4	28.5	58.7	74.0	15.3	100	163
6	2193.912	50.7	25.7	8.9	28.5	56.8	74.0	17.2	100	163
7	2386.223	57.4	26.8	9.3	28.5	65.0	74.0	9	100	1
8	2562.507	53.0	27.6	9.7	28.4	61.9	74.0	12.1	100	1
9	2778.857	53.1	28.3	10.1	28.4	63.1	74.0	10.9	100	98
10	2979.180	41.8	28.9	10.5	28.4	52.8	74.0	21.2	100	177
11	3155.465	44.7	28.9	10.9	28.4	56.1	74.0	17.9	100	1
12	3331.750	46.0	28.9	11.3	28.4	57.8	74.0	16.2	100	1
13	3580.151	49.3	29.1	11.9	28.3	62.0	74.0	12	100	191
14	3780.474	44.7	29.6	12.4	28.3	58.4	74.0	15.6	100	167
15	3924.707	50.9	30.0	12.8	28.3	65.4	74.0	8.6	100	1
16	5535.264	34.5	34.9	14.9	28.2	56.1	74.0	17.9	100	1
----- Vertical -----										
17	1184.295	50.5	24.2	6.4	28.5	52.6	74.0	21.4	100	358
18	1320.513	49.4	24.4	6.9	28.5	52.2	74.0	21.8	100	358
19	1576.923	55.2	24.6	7.6	28.5	58.9	74.0	15.1	100	165
20	1785.256	52.7	24.6	8.0	28.5	56.8	74.0	17.2	100	358
21	1977.564	60.5	24.6	8.4	28.5	65.0	74.0	9	100	358
22	2169.873	54.3	25.5	8.8	28.5	60.1	74.0	13.9	100	182
23	2378.210	56.6	26.7	9.3	28.5	64.1	74.0	9.9	100	358
24	2562.507	52.2	27.6	9.7	28.4	61.1	74.0	12.9	100	358
25	2754.818	52.8	28.2	10.0	28.4	62.6	74.0	11.4	100	191
26	2987.193	44.6	28.9	10.5	28.4	55.6	74.0	18.4	100	167
27	3187.517	45.5	28.9	11.0	28.4	57.0	74.0	17	100	191
28	3331.750	42.6	28.9	11.3	28.4	54.4	74.0	19.6	100	176
29	3532.073	44.5	29.0	11.8	28.3	57.0	74.0	17	100	193
30	3940.733	42.9	30.0	12.8	28.3	57.4	74.0	16.6	100	193
31	4389.449	40.5	30.7	13.3	28.2	56.3	74.0	17.7	100	128
32	4766.045	38.8	31.7	14.5	28.1	56.9	74.0	17.1	100	137

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

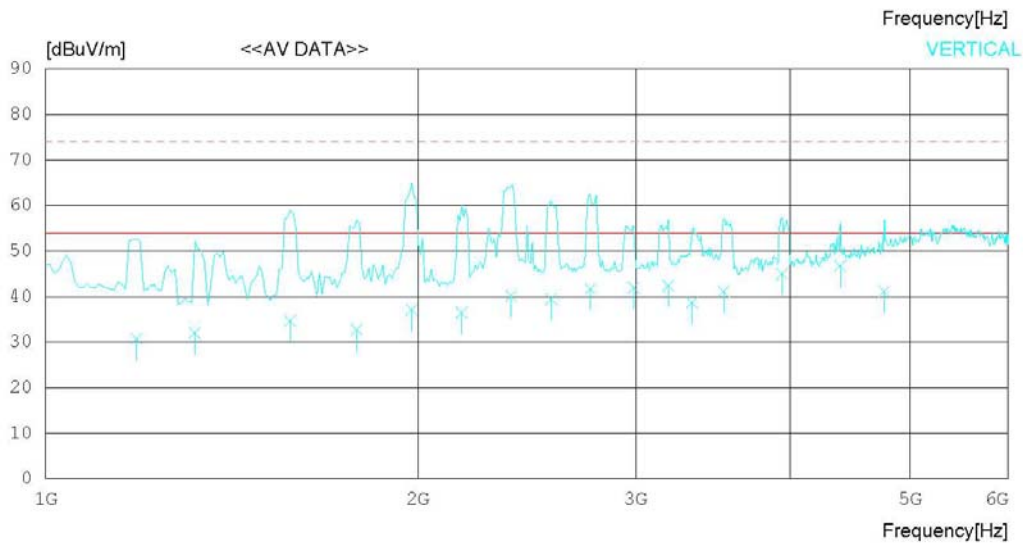
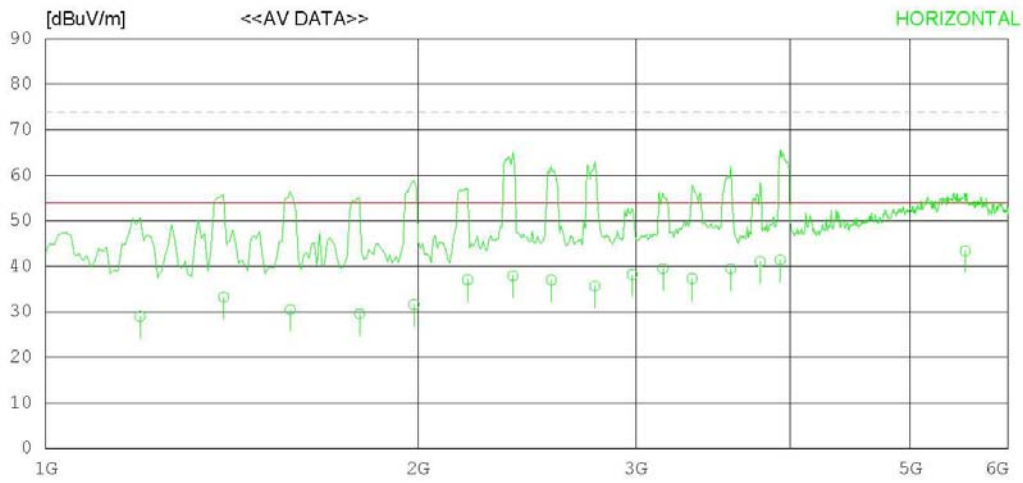
**RADIATED EMISSION**

Date : 2013-02-15

Model Name	: 60LA6205-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 19 °C 40 % 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 : 2013-02-15

Model Name : 60LA6205-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 19 °C 40 % 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	1191.976	26.9	24.2	6.4	28.5	29.0	54.0	25.0	100	127
2	1392.824	30.1	24.5	7.1	28.5	33.2	54.0	20.8	100	134
3	1576.329	26.8	24.6	7.6	28.5	30.5	54.0	23.5	100	140
4	1793.968	25.4	24.6	8.1	28.5	29.6	54.0	24.4	100	218
5	1985.127	27.1	24.6	8.4	28.5	31.6	54.0	22.4	100	116
6	2193.291	31.0	25.7	8.9	28.5	37.1	54.0	16.9	100	137
7	2386.426	30.3	26.8	9.3	28.5	37.9	54.0	16.1	100	172
8	2564.176	28.1	27.6	9.7	28.4	37.0	54.0	17.0	100	87
9	2779.167	25.7	28.3	10.1	28.4	35.7	54.0	18.3	100	100
10	2979.397	27.2	28.9	10.5	28.4	38.2	54.0	15.8	100	162
11	3155.440	28.1	28.9	10.9	28.4	39.5	54.0	14.5	100	310
12	3331.659	25.5	28.9	11.3	28.4	37.3	54.0	16.7	100	311
13	3579.267	26.8	29.1	11.9	28.3	39.5	54.0	14.5	100	334
14	3780.673	27.3	29.6	12.4	28.3	41.0	54.0	13.0	100	168
15	3924.972	26.9	30.0	12.8	28.3	41.4	54.0	12.6	100	37
16	5536.781	21.9	34.8	14.9	28.2	43.4	54.0	10.6	100	101
----- Vertical -----										
17	1185.042	28.6	24.2	6.4	28.5	30.7	54.0	23.3	100	358
18	1320.470	29.2	24.4	6.9	28.5	32.0	54.0	22.0	100	358
19	1576.785	31.0	24.6	7.6	28.5	34.7	54.0	19.3	100	165
20	1785.386	28.7	24.6	8.0	28.5	32.8	54.0	21.2	100	358
21	1977.631	32.6	24.6	8.4	28.5	37.1	54.0	16.9	100	358
22	2169.372	30.7	25.5	8.8	28.5	36.5	54.0	17.5	100	182
23	2378.628	32.7	26.7	9.3	28.5	40.2	54.0	13.8	100	358
24	2563.975	30.6	27.6	9.7	28.4	39.5	54.0	14.5	100	358
25	2756.710	31.9	28.2	10.0	28.4	41.7	54.0	12.3	100	191
26	2987.995	31.0	28.9	10.5	28.4	42.0	54.0	12.0	100	167
27	3189.693	30.9	28.9	11.0	28.4	42.4	54.0	11.6	100	191
28	3331.987	26.9	28.9	11.3	28.4	38.7	54.0	15.3	100	176
29	3532.423	28.6	29.0	11.8	28.3	41.1	54.0	12.9	100	193
30	3939.677	30.4	30.0	12.8	28.3	44.9	54.0	9.1	100	193
31	4389.267	31.0	30.7	13.3	28.2	46.8	54.0	7.2	100	128
32	4766.175	23.0	31.7	14.5	28.1	41.1	54.0	12.9	100	137

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## Appendix 1

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### 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

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**Appendix 2**

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**Report Revision History**

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