

EMC TEST REPORT

Test item : LED TV Monitor
Model No. : 42GA6400-UD
Order No. : 1212-02943
Date of receipt : 2012-12-17
Test duration : 2012-12-20 ~ 2012-12-21
Use of report : FCC CoC Marking
Date of Issue : 2013-01-04

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 ~ 22) °C,
Humidity : (30 ~ 37) % R.H.

Test result : ☒ Comply ☐ Not Comply

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

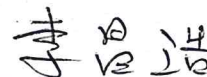
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Tested by:



Assistant Manager
DaeHwa Eun

Reviewed by:



General Manager
ChangHo Lee

PRESIDENT OF DIGITAL EMC CO., LTD.

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1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

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

<http://www.digitalemccom>

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	ROK1124C	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.	42GA6400-UD
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ42GA6400UD
Type of Sample Tested	Pre-Production
High Frequency	Max 800 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

Component supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720 x 480i	15.73	59.94
	15.73	60.00
720 x 480p	31.47	59.94
	31.50	60.00
1280 x 720p	44.96	59.94
	45.00	60.00
1920 x 1080i	33.72	59.94
	33.75	60.00
1920 x 1080p	26.97	23.976
	27.00	24.00
	33.71	29.97
	33.75	30.00
	67.432	59.94
	67.500	60.00

4. Test Summary

4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2003	C
Radiated Disturbance	ANSI C63.4:2003	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (°C)	Humidity (% R.H.)
Conducted Disturbance	12-20	22	30
Radiated Disturbance	12-21	17	37

4.3 Test result Summary

(1) Conducted Emission (USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.79430	N	43.0	Average	46.0	3.0

(2) Radiated Emission (USB MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
928.162	H	42.7	Quasi-Peak	46.0	3.3

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
- 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	1.6	Not use	Non-shield	Plastic	DOC
				HDMI	1.8	Not use	Shield		
				USB	1.8	Not use	Non-shield		
				USB	1.6	Not use	Non-shield		
				USB	2.0	Not use	Non-shield		
KEYBOARD	SKG-3000UB	TAKB601241E	MONITEREY INTERNATIONAL CORP	USB	1.8	Not use	Non-shield	Plastic	DOC
MOUSE	1094	N/A	MICROSOFT CORPORATION	USB	1.6	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	SRP77008060035	BIXOLON	USB Power	1.8 2.0	Not use Not use	Non-shield Non-shield	Plastic	DOC
Headset	COV903	N/A	COSY	STEREO	2.0	Not use	Non-shield	Plastic	DOC
Remote Control	AN-MR300Q	N/A	LG	-	-	-	-	-	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

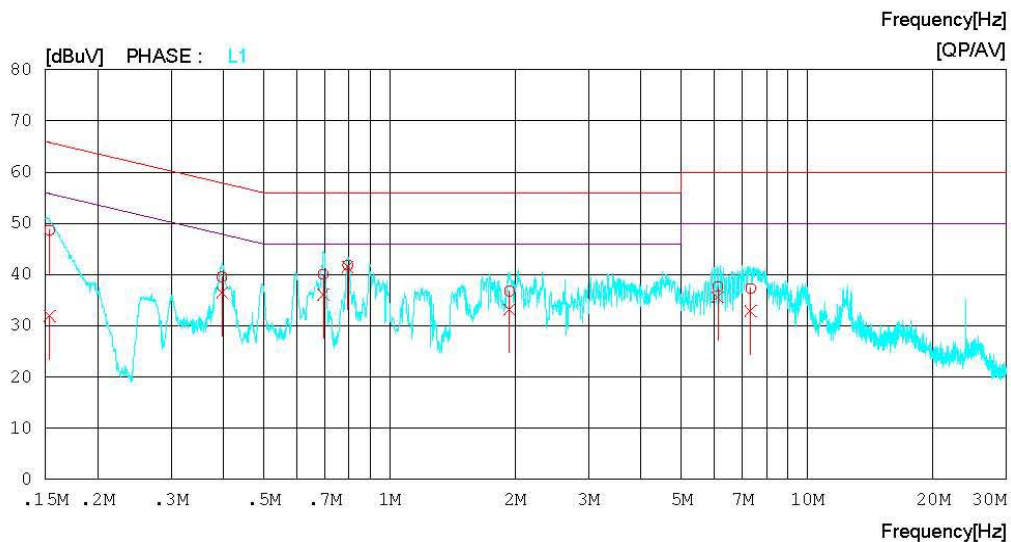
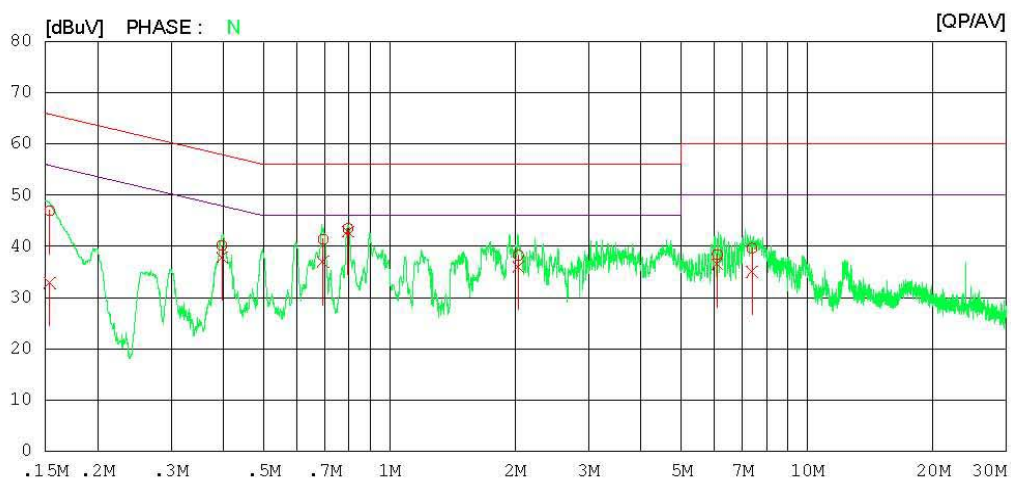
Digital EMC
Date : 2012-12-20

Model No. : 42GA6400-UD
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 22°C 30 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-12-20

Model No. : 42GA6400-UD
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 22 °C 30 % 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	0.15363	46.7	32.7	0.2	46.9	32.9	65.8	55.8	18.9	22.9	N
2	0.39743	40.0	37.7	0.2	40.2	37.9	57.9	47.9	17.7	10.0	N
3	0.69384	41.2	36.8	0.2	41.4	37.0	56.0	46.0	14.6	9.0	N
4	0.79511	43.3	42.7	0.2	43.5	42.9	56.0	46.0	12.5	3.1	N
5	2.03500	38.0	35.7	0.3	38.3	36.0	56.0	46.0	17.7	10.0	N
6	6.09150	37.9	36.0	0.5	38.4	36.5	60.0	50.0	21.6	13.5	N
7	7.38050	39.1	34.5	0.5	39.6	35.0	60.0	50.0	20.4	15.0	N
8	0.15370	48.5	31.7	0.2	48.7	31.9	65.8	55.8	17.1	23.9	L1
9	0.39736	39.4	36.3	0.2	39.6	36.5	57.9	47.9	18.3	11.4	L1
10	0.69483	39.9	35.9	0.2	40.1	36.1	56.0	46.0	15.9	9.9	L1
11	0.79465	41.7	41.3	0.2	41.9	41.5	56.0	46.0	14.1	4.5	L1
12	1.93650	36.5	32.9	0.3	36.8	33.2	56.0	46.0	19.2	12.8	L1
13	6.10800	37.1	35.1	0.5	37.6	35.6	60.0	50.0	22.4	14.4	L1
14	7.32350	36.8	32.4	0.5	37.3	32.9	60.0	50.0	22.7	17.1	L1

< USB MODE >



Results of Conducted Emission

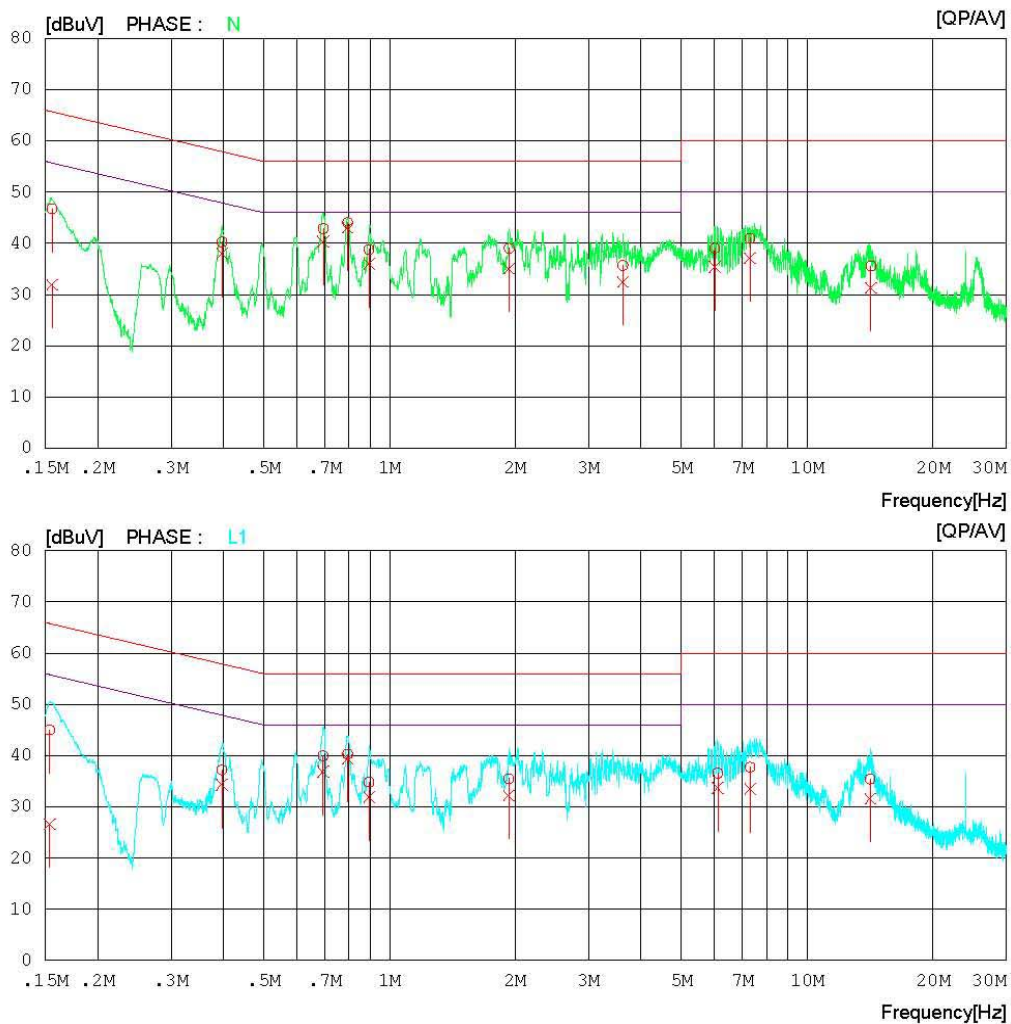
Digital EMC
Date : 2012-12-20

Model No. : 42GA6400-UD
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 22°C 30 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-12-20

Model No. : 42GA6400-UD
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi. : 22 °C 30 % 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	0.15569	46.5	31.7	0.2	46.7	31.9	65.7	55.7	19.0	23.8	N
2	0.39730	40.0	37.8	0.2	40.2	38.0	57.9	47.9	17.7	9.9	N
3	0.69418	42.7	40.1	0.2	42.9	40.3	56.0	46.0	13.1	5.7	N
4	0.79430	43.8	42.8	0.2	44.0	43.0	56.0	46.0	12.0	3.0	N
5	0.89431	38.6	35.8	0.2	38.8	36.0	56.0	46.0	17.2	10.0	N
6	1.93450	38.7	34.8	0.3	39.0	35.1	56.0	46.0	17.0	10.9	N
7	3.62100	35.4	32.2	0.3	35.7	32.5	56.0	46.0	20.3	13.5	N
8	6.01000	38.5	34.9	0.5	39.0	35.4	60.0	50.0	21.0	14.6	N
9	7.29800	40.5	36.6	0.5	41.0	37.1	60.0	50.0	19.0	12.9	N
10	14.21650	34.9	30.6	0.7	35.6	31.3	60.0	50.0	24.4	18.7	N
11	0.15365	44.8	26.4	0.2	45.0	26.6	65.8	55.8	20.8	29.2	L1
12	0.39695	37.0	34.1	0.2	37.2	34.3	57.9	47.9	20.7	13.6	L1
13	0.69383	39.7	36.7	0.2	39.9	36.9	56.0	46.0	16.1	9.1	L1
14	0.79401	40.1	39.2	0.2	40.3	39.4	56.0	46.0	15.7	6.6	L1
15	0.89420	34.7	31.7	0.2	34.9	31.9	56.0	46.0	21.1	14.1	L1
16	1.93150	35.2	31.9	0.3	35.5	32.2	56.0	46.0	20.5	13.8	L1
17	6.10600	36.1	33.2	0.5	36.6	33.7	60.0	50.0	23.4	16.3	L1
18	7.29900	37.2	33.0	0.5	37.7	33.5	60.0	50.0	22.3	16.5	L1
19	14.15350	34.7	30.9	0.7	35.4	31.6	60.0	50.0	24.6	18.4	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 (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

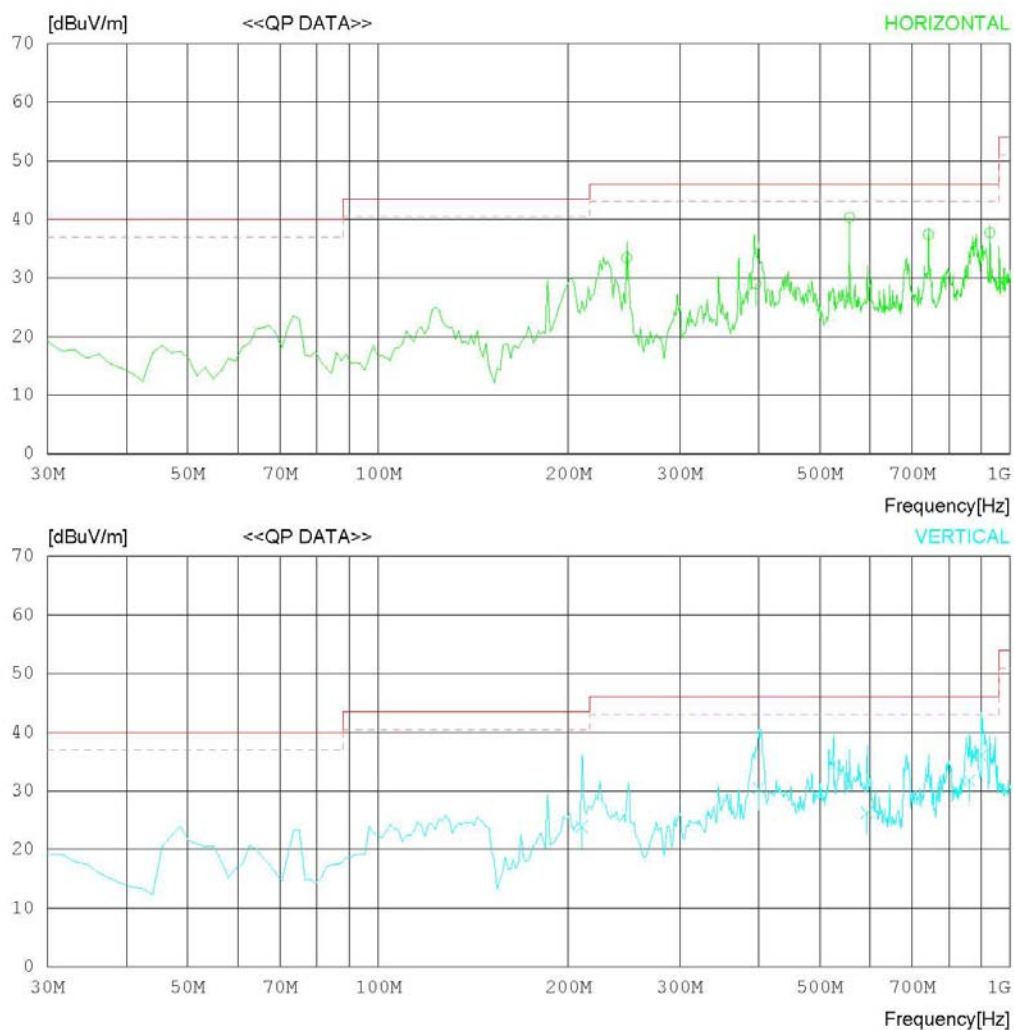
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : HDMI

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	247.466	42.3	12.1	2.6	23.6	33.4	46.0	12.6	119	249
2	396.009	34.4	15.6	3.5	24.5	29.0	46.0	17.0	344	134
3	556.896	43.2	18.1	3.8	24.8	40.3	46.0	5.7	207	44
4	742.503	37.4	19.4	4.6	24.0	37.4	46.0	8.6	158	240
5	928.160	34.1	21.3	5.3	23.0	37.7	46.0	8.3	163	125
----- Vertical -----										
6	210.020	35.1	9.8	2.4	23.4	23.9	43.5	19.6	128	325
7	400.045	35.8	15.7	3.5	24.5	30.5	46.0	15.5	124	158
8	526.169	37.5	17.8	3.9	24.8	34.4	46.0	11.6	101	163
9	593.662	28.4	18.5	4.1	24.7	26.3	46.0	19.7	155	155
10	861.266	29.9	20.4	4.9	23.4	31.8	46.0	14.2	109	133
11	900.454	33.1	20.7	5.3	23.1	36.0	46.0	10.0	139	175

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

RADIATED EMISSION

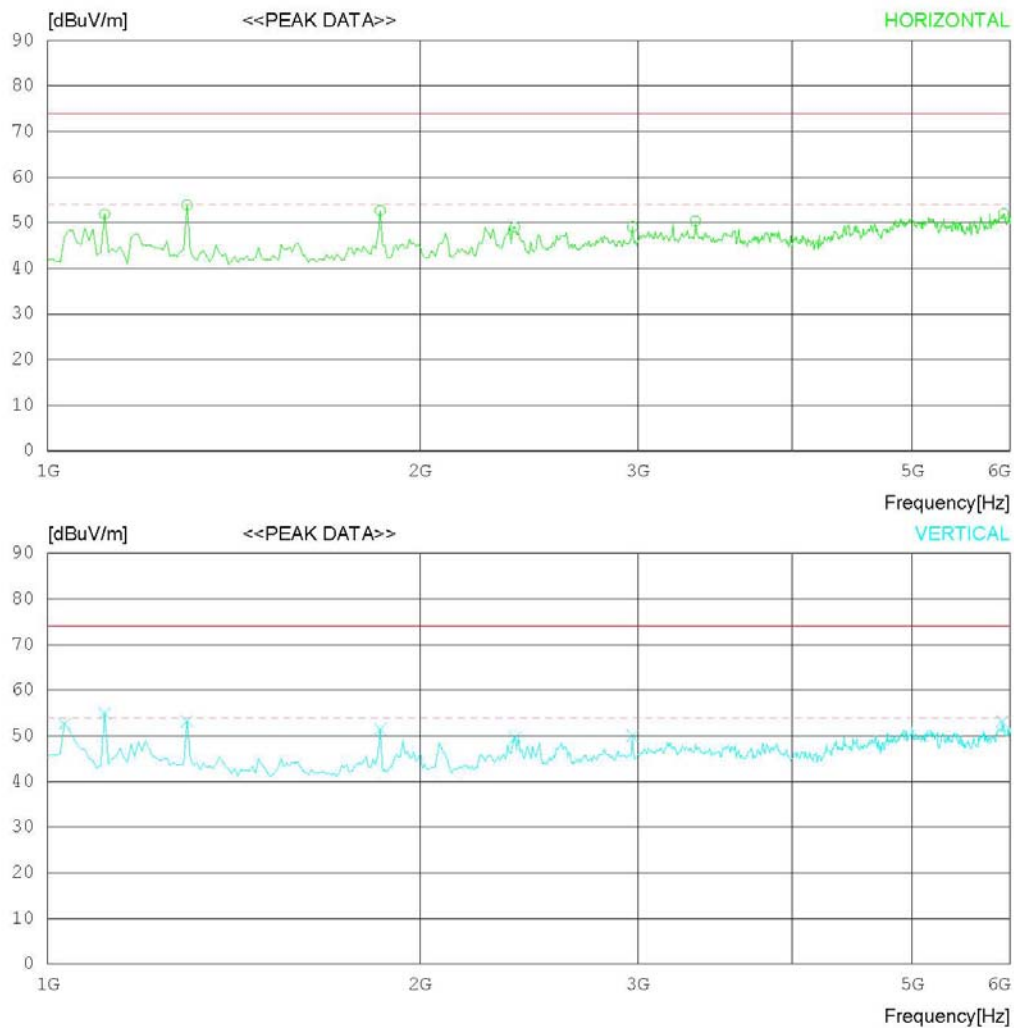
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : HDMI

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	1112.179	62.8	24.8	6.1	41.8	51.9	74.0	22.1	100	358
2	1296.474	63.9	25.0	6.8	41.8	53.9	74.0	20.1	100	358
3	1857.371	60.5	25.7	8.2	41.7	52.7	74.0	21.3	100	212
4	2386.223	54.6	27.0	9.3	41.9	49.0	74.0	25	100	214
5	2971.167	51.8	28.7	10.5	41.9	49.1	74.0	24.9	100	358
6	3339.762	51.9	29.1	11.3	41.9	50.4	74.0	23.6	100	358
7	5927.886	46.2	32.1	15.7	42.0	52.0	74.0	22	100	0
----- Vertical -----										
8	1032.051	63.9	24.7	5.9	41.8	52.7	74.0	21.3	100	174
9	1112.179	65.8	24.8	6.1	41.8	54.9	74.0	19.1	100	119
10	1296.474	63.3	25.0	6.8	41.8	53.3	74.0	20.7	100	1
11	1857.371	59.3	25.7	8.2	41.7	51.5	74.0	22.5	100	1
12	2386.223	55.2	27.0	9.3	41.9	49.6	74.0	24.4	100	172
13	2971.167	52.7	28.7	10.5	41.9	50.0	74.0	24	100	1
14	5911.861	47.3	32.1	15.7	42.0	53.1	74.0	20.9	100	343

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

RADIATED EMISSION

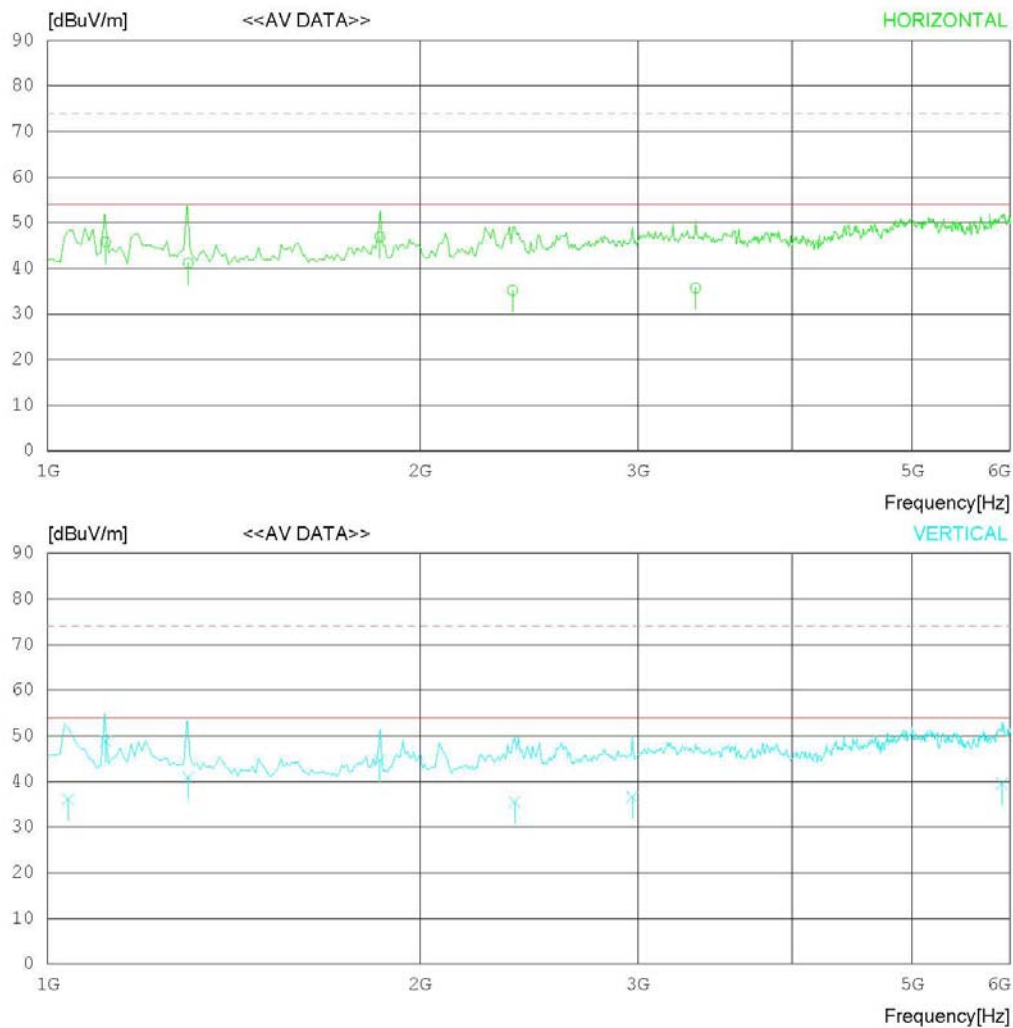
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : HDMI

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	1113.821	56.7	24.8	6.1	41.8	45.8	54.0	8.2	100	231
2	1299.557	51.2	25.0	6.8	41.8	41.2	54.0	12.8	100	188
3	1856.256	54.8	25.7	8.2	41.8	46.9	54.0	7.1	100	212
4	2376.000	40.8	27.0	9.3	41.9	35.2	54.0	18.8	100	198
5	3341.333	37.2	29.1	11.3	41.9	35.7	54.0	18.3	100	133
----- Vertical -----										
6	1039.756	47.3	24.7	5.9	41.8	36.1	54.0	17.9	100	174
7	1113.820	59.8	24.8	6.1	41.8	48.9	54.0	5.1	100	141
8	1299.557	50.9	25.0	6.8	41.8	40.9	54.0	13.1	100	244
9	1856.256	52.6	25.7	8.2	41.8	44.7	54.0	9.3	100	199
10	2386.223	41.1	27.0	9.3	41.9	35.5	54.0	18.5	100	172
11	2970.112	39.3	28.7	10.5	41.9	36.6	54.0	17.4	100	241
12	5911.861	33.7	32.1	15.7	42.0	39.5	54.0	14.5	100	343

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

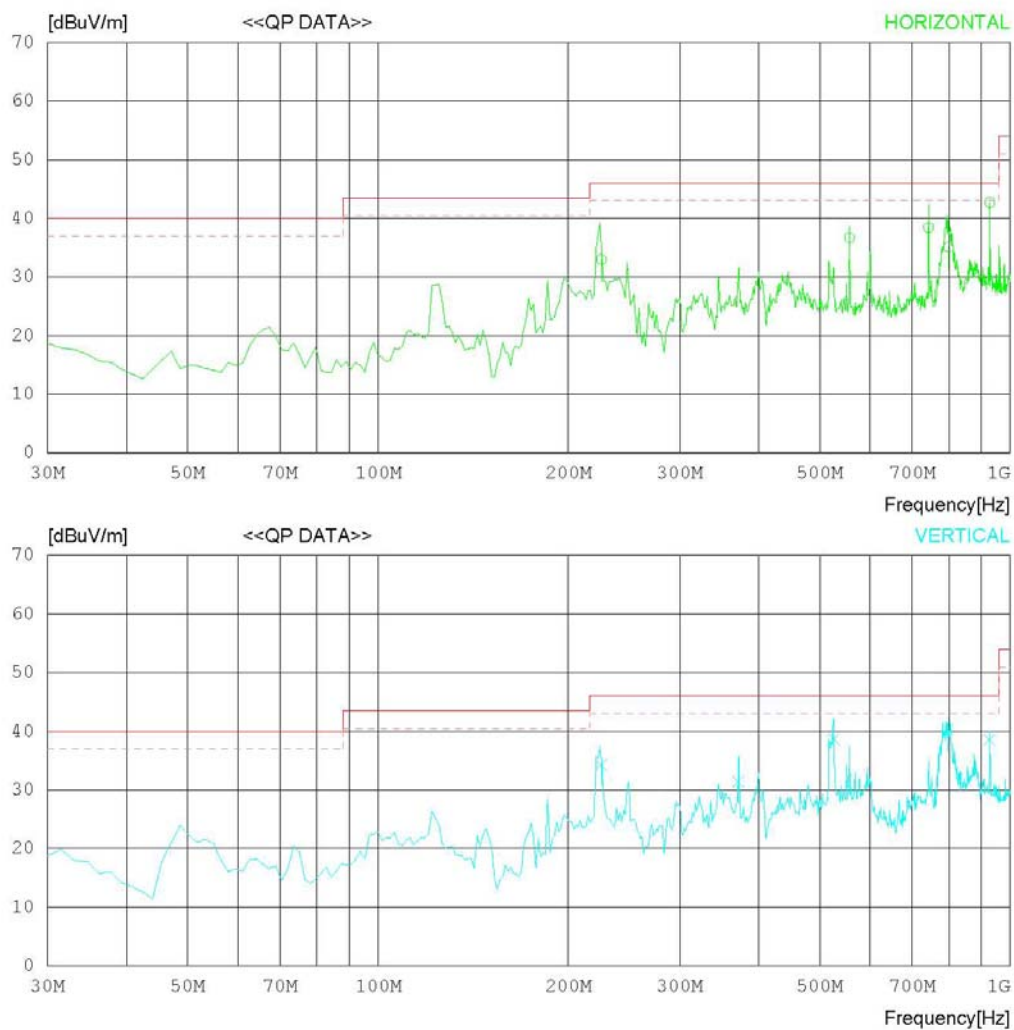
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : USB

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	225.490	43.3	10.8	2.4	23.5	33.0	46.0	13.0	100	251
2	556.886	39.6	18.1	3.8	24.8	36.7	46.0	9.3	100	178
3	742.516	38.4	19.4	4.6	24.0	38.4	46.0	7.6	100	358
4	799.078	34.2	19.9	4.8	23.8	35.1	46.0	10.9	144	132
5	928.162	39.1	21.3	5.3	23.0	42.7	46.0	3.3	100	70
----- Vertical -----										
6	225.256	44.7	10.7	2.4	23.5	34.3	46.0	11.7	147	268
7	371.253	37.4	14.9	3.4	24.3	31.4	46.0	14.6	282	1
8	525.985	41.8	17.8	3.9	24.8	38.7	46.0	7.3	100	1
9	797.115	39.4	19.9	4.8	23.8	40.3	46.0	5.7	100	163
10	928.162	35.0	21.3	5.3	23.0	38.6	46.0	7.4	100	158

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

RADIATED EMISSION

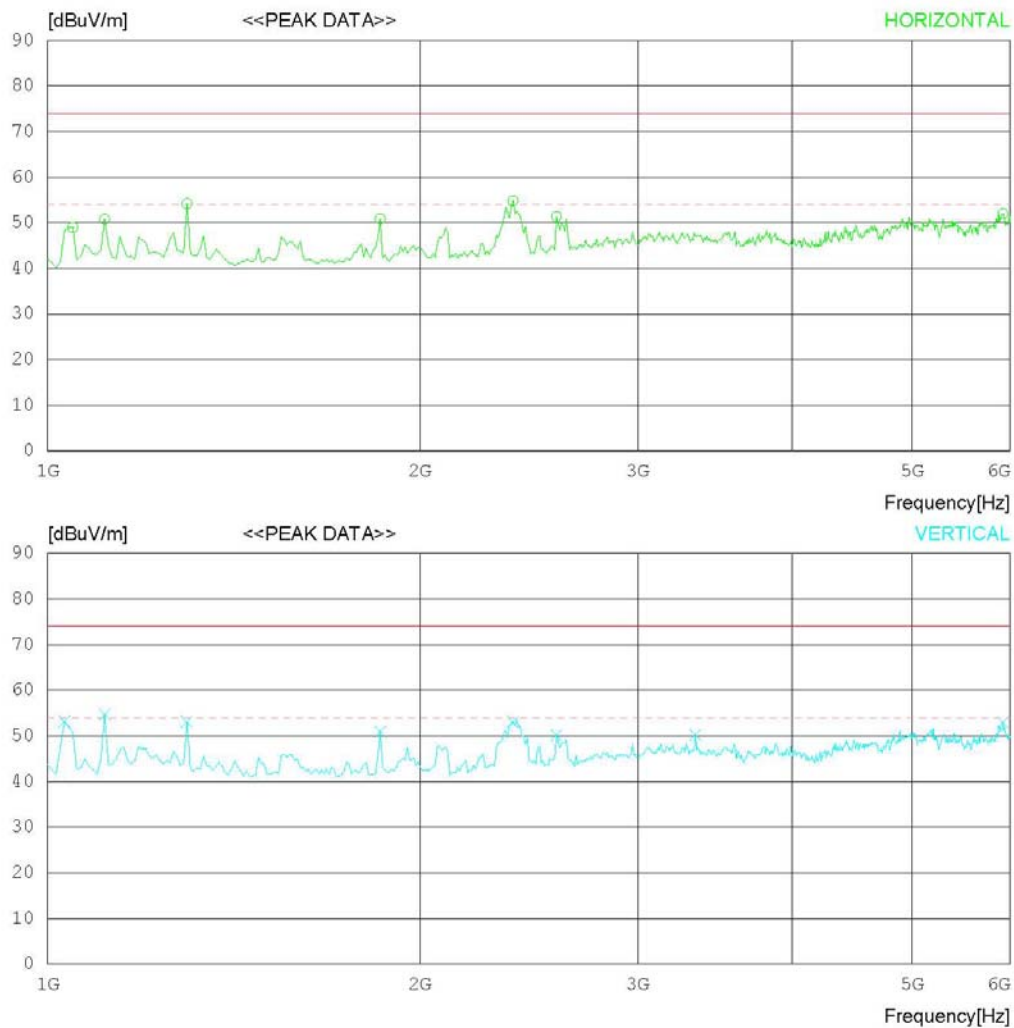
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : USB

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	1048.077	60.2	24.7	5.9	41.8	49.0	74.0	25	100	1
2	1112.179	61.7	24.8	6.1	41.8	50.8	74.0	23.2	100	1
3	1296.474	64.2	25.0	6.8	41.8	54.2	74.0	19.8	100	1
4	1857.371	58.7	25.7	8.2	41.7	50.9	74.0	23.1	100	213
5	2378.210	60.4	27.0	9.3	41.9	54.8	74.0	19.2	100	219
6	2578.533	56.0	27.6	9.7	41.9	51.4	74.0	22.6	100	1
7	5919.874	46.2	32.1	15.7	42.0	52.0	74.0	22	100	1
----- Vertical -----										
8	1032.051	64.3	24.7	5.9	41.8	53.1	74.0	20.9	100	169
9	1112.179	65.6	24.8	6.1	41.8	54.7	74.0	19.3	100	122
10	1296.474	63.0	25.0	6.8	41.8	53.0	74.0	21	100	242
11	1857.371	58.7	25.7	8.2	41.7	50.9	74.0	23.1	100	203
12	2378.210	58.6	27.0	9.3	41.9	53.0	74.0	21	100	173
13	2578.533	54.8	27.6	9.7	41.9	50.2	74.0	23.8	100	229
14	3339.762	51.7	29.1	11.3	41.9	50.2	74.0	23.8	100	222
15	5919.874	47.2	32.1	15.7	42.0	53.0	74.0	21	100	256

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

RADIATED EMISSION

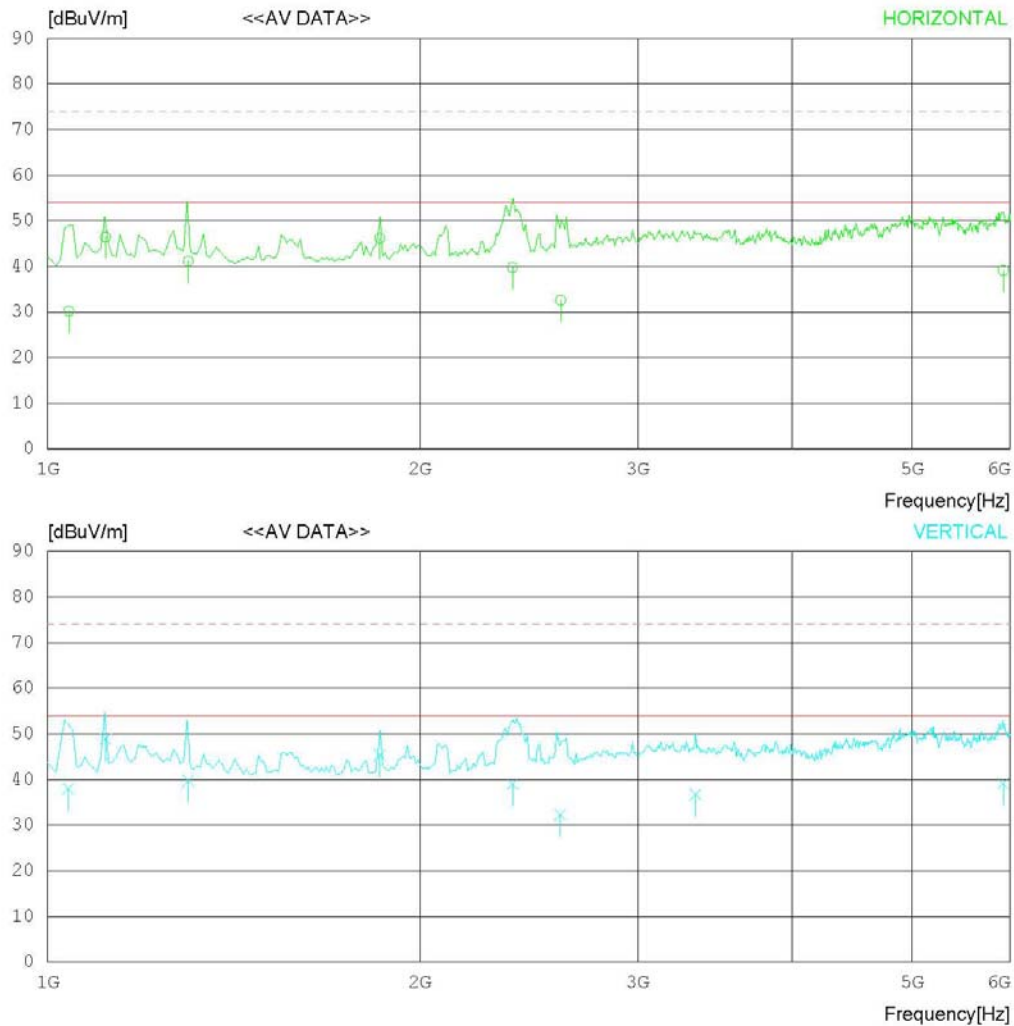
Date : 2012-12-21

Model Name : 42GA6400-UD
Model No. :
Serial No. :
Test Condition : USB

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

Memo :

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



RADIATED EMISSION

Date : 2012-12-21

Model Name : 42GA6400-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	1040.494	41.4	24.7	5.9	41.8	30.2	54.0	23.8	100	294
2	1113.776	57.3	24.8	6.1	41.8	46.4	54.0	7.6	100	188
3	1299.522	51.2	25.0	6.8	41.8	41.2	54.0	12.8	100	238
4	1856.404	54.1	25.7	8.2	41.8	46.2	54.0	7.8	100	202
5	2375.948	45.4	27.0	9.3	41.9	39.8	54.0	14.2	100	294
6	2599.000	37.2	27.6	9.7	41.9	32.6	54.0	21.4	100	1
7	5925.800	33.3	32.1	15.7	42.0	39.1	54.0	14.9	100	1
----- Vertical -----										
8	1039.612	49.2	24.7	5.9	41.8	38.0	54.0	16.0	100	163
9	1113.776	59.8	24.8	6.1	41.8	48.9	54.0	5.1	100	143
10	1299.522	49.8	25.0	6.8	41.8	39.8	54.0	14.2	100	228
11	1856.404	53.3	25.7	8.2	41.8	45.4	54.0	8.6	100	224
12	2375.949	44.6	27.0	9.3	41.9	39.0	54.0	15.0	100	164
13	2597.000	36.9	27.6	9.7	41.9	32.3	54.0	21.7	100	229
14	3341.442	38.2	29.1	11.3	41.9	36.7	54.0	17.3	100	176
15	5925.800	33.3	32.1	15.7	42.0	39.1	54.0	14.9	100	256

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	BBHA9120D	SCHWARZBECK	9120D-1014	2012.07.20	2013.07.20
☒ 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