

EMC TEST REPORT

Test item : LCD TV Monitor
Model No. : 42LS3400-UA
Order No. : 1201-00046
Date of receipt : 2012-01-13
Test duration : 2012-01-16 ~ 2012-01-17
Use of report : FCC CoC Marking
Date of Issue : 2012-01-19

Applicant : LG Electronics Inc.

9-1, 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 ~ 22) °C,
Humidity : (31 ~ 36) % 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
D.H.EUN

Reviewed by:


Manager
M.J.SONG

The above test report is the accredited test results by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

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.digitalemcc.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	ROK1028C	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.	42LS3400-UA
EUT Type	LCD TV Monitor
Serial No	NONE
FCC ID	BEJ42LS3400UA
Type of Sample Tested	Pre-Production
High Frequency	800 MHz
Rating	AC100-240 V~, 50/60 Hz, 1.2 A
Supplied Power for Test	AC120 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

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720x480p	31.47 31.50	59.94 60.00
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.94 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.)	Pressure (hPa)
Conducted Disturbance	01-17	22	36	-
Radiated Disturbance	01-16	19	31	
	01-17	21	34	

4.3 Test result Summary

(1) Conducted Emission(HDMI MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
22.11000	L1	38.3	Average	50.0	11.7

(2) Radiated Emission(HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
741.750	H	40.4	Quasi-Peak	46.0	5.6

5. Test Set-up and operation mode

5.1 Principle of Configuration Selection

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

5.2 Test Operation Mode

- HDMI MODE – Resolution : 1920 x 1080 Resolution (Worst Case)
- USB MODE

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	shield		
PC	VOSTRO430	9K77SBX	DELL	POWER	1.8	Non-shield	Plastic	DOC
				HDMI	1.8	Shield		
				STEREO	1.6	Non-shield		
				USB	1.8	Non-shield		
				PS/2	1.6	Non-shield		
				PS/2	1.8	Non-shield		
KEYBOARD	SKG-210P	TAKSC12255P	MONITOEREY INTERNATIONAL CORP	PS/2	1.6	Non-shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITOEREY INTERNATIONAL CORP	PS/2	1.8	Non-shield	Plastic	DOC
PRINTER	SRP-770	SRP77008060035	BICSOLON	POWER	1.8	Non-shield	Plastic	DOC
				USB	1.8			
USB MEMORY	JEWERLY	N/A	AXXEN	USB	-	-	-	DOC

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15MHz to 30MHz, 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 0.8m above the reference ground plane and 0.4m 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 0.15m 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 0.15MHz to 0.5MHz.				

Test Result

< HDMI MODE >



Results of Conducted Emission

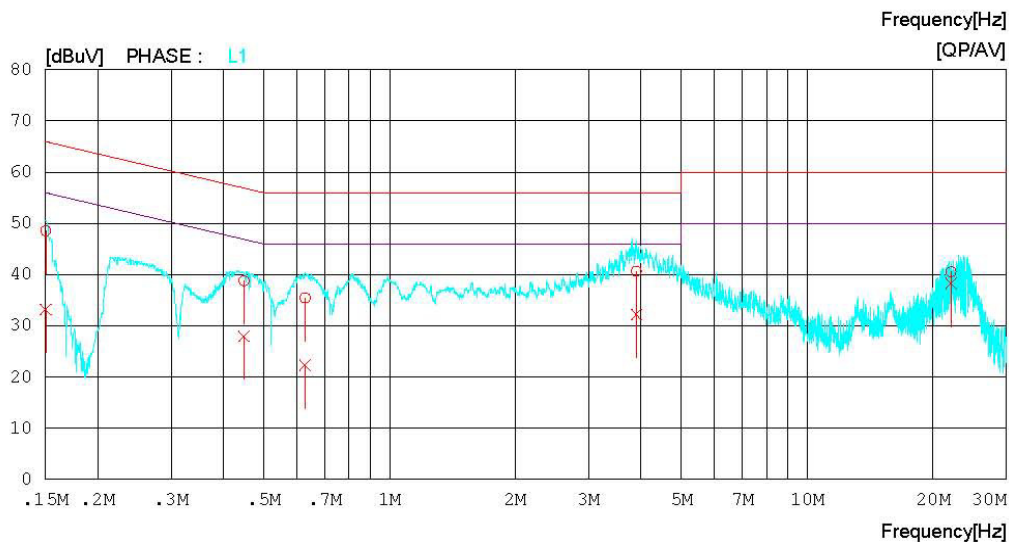
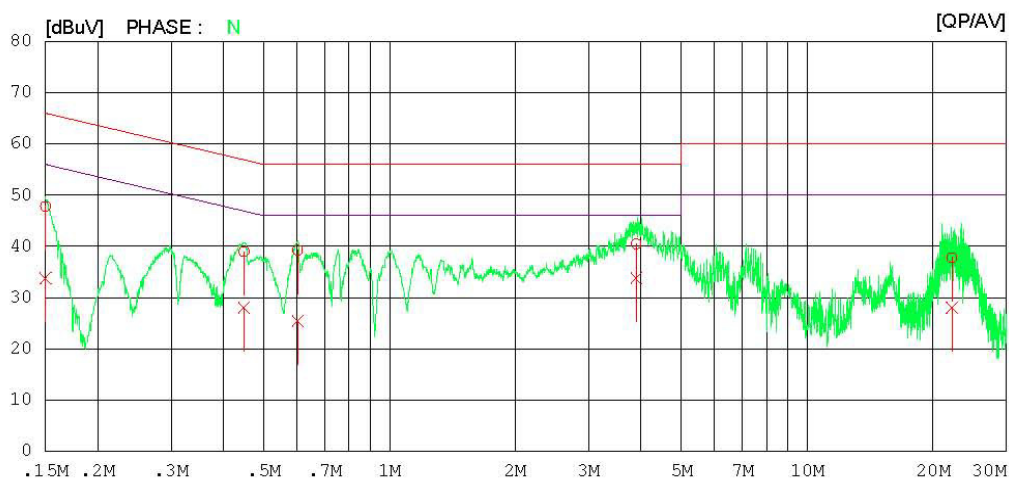
Digital EMC
 Date : 2012-01-17

Model No. : 42LS3400-UA
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22°C 36 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2012-01-17

Model No. : 42LS3400-UA
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22 °C 36 % 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	0.15006	47.6	33.5	0.2	47.8	33.7	66.0	56.0	18.2	22.3	N
2	0.44850	38.9	27.9	0.1	39.0	28.0	56.9	46.9	17.9	18.9	N
3	0.60273	39.1	25.3	0.1	39.2	25.4	56.0	46.0	16.8	20.6	N
4	3.89800	40.1	33.3	0.4	40.5	33.7	56.0	46.0	15.5	12.3	N
5	22.19500	36.7	26.9	1.1	37.8	28.0	60.0	50.0	22.2	22.0	N
6	0.15025	48.4	33.0	0.2	48.6	33.2	66.0	56.0	17.4	22.8	L1
7	0.44850	38.7	27.9	0.1	38.8	28.0	56.9	46.9	18.1	18.9	L1
8	0.62818	35.4	22.2	0.1	35.5	22.3	56.0	46.0	20.5	23.7	L1
9	3.90250	40.3	31.8	0.4	40.7	32.2	56.0	46.0	15.3	13.8	L1
10	22.11000	39.5	37.2	1.1	40.6	38.3	60.0	50.0	19.4	11.7	L1

< USB MODE >



Results of Conducted Emission

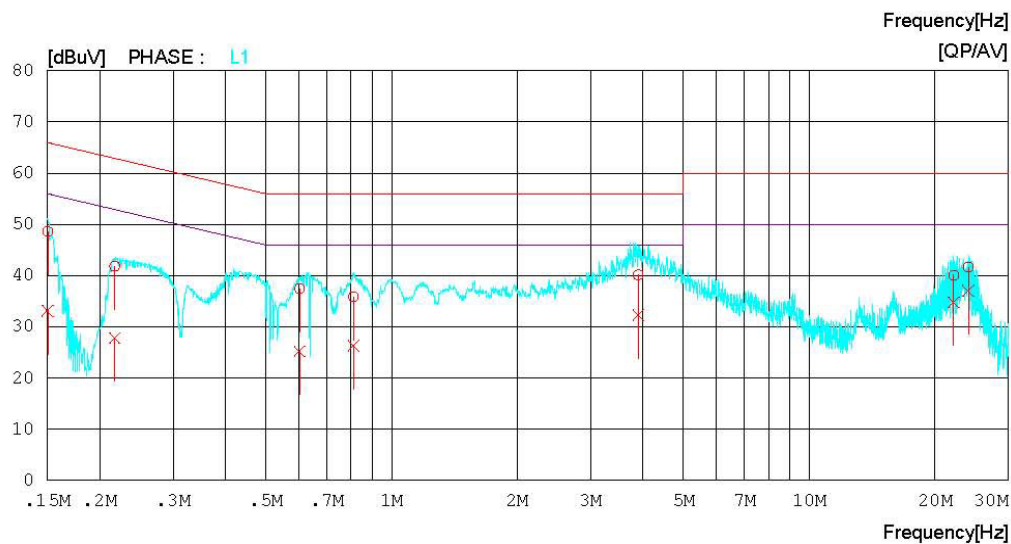
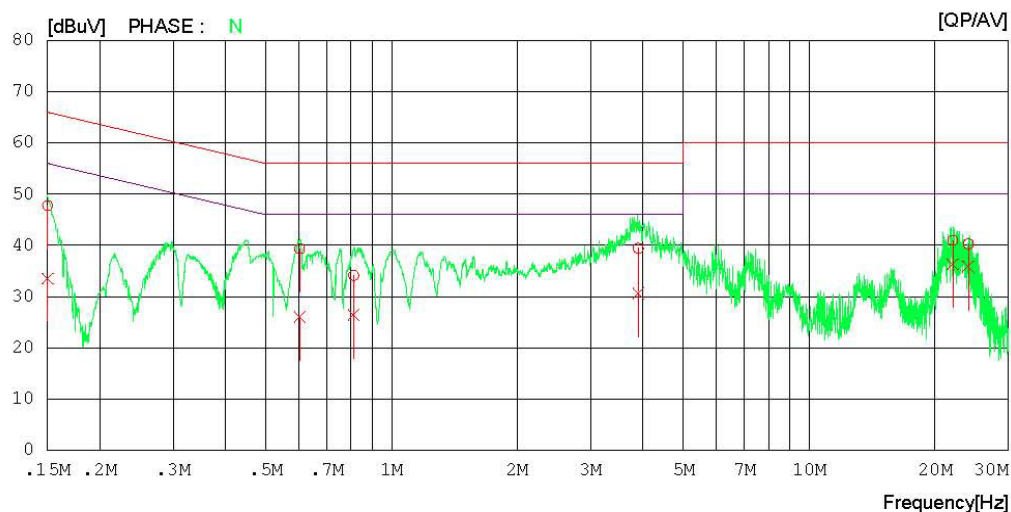
Digital EMC
 Date : 2012-01-17

Model No. : 42LS3400-UA
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22°C 36 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2012-01-17

Model No. : 42LS3400-UA
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22 °C 36 % 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	0.15006	47.5	33.3	0.2	47.7	33.5	66.0	56.0	18.3	22.5	N
2	0.60250	39.2	25.9	0.1	39.3	26.0	56.0	46.0	16.7	20.0	N
3	0.81168	33.9	26.2	0.2	34.1	26.4	56.0	46.0	21.9	19.6	N
4	3.90100	39.0	30.2	0.4	39.4	30.6	56.0	46.0	16.6	15.4	N
5	22.07400	39.8	35.2	1.1	40.9	36.3	60.0	50.0	19.1	13.7	N
6	24.05900	39.2	34.7	1.1	40.3	35.8	60.0	50.0	19.7	14.2	N
7	0.15025	48.4	32.9	0.2	48.6	33.1	66.0	56.0	17.4	22.9	L1
8	0.21748	41.7	27.7	0.1	41.8	27.8	62.9	52.9	21.1	25.1	L1
9	0.60268	37.4	25.1	0.1	37.5	25.2	56.0	46.0	18.5	20.8	L1
10	0.81163	35.7	26.1	0.2	35.9	26.3	56.0	46.0	20.1	19.7	L1
11	3.89600	39.8	31.9	0.4	40.2	32.3	56.0	46.0	15.8	13.7	L1
12	22.17350	39.0	33.6	1.1	40.1	34.7	60.0	50.0	19.9	15.3	L1
13	24.05450	40.6	35.9	1.1	41.7	37.0	60.0	50.0	18.3	13.0	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 0.8m above the reference ground plane and 3m 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 0.15m above the reference ground plane.

Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4m 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 1GHz frequency range, Quasi-Peak detector with 120kHz RBW was used.

Also Peak and Average detector with 1MHz RBW were used for above 1GHz 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	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

(1) Limit for Radiated Emission below 1000MHz

Frequency range (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m 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 1000	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 (10m distance)	Class B Equipment (10m distance)
	Quasi-peak (dB μ V/m)	Quasi-peak (dB μ V/m)
30 to 230	40	30
230 to 1000	47	37

(2) Limits for Radiated Emission above 1000MHz at a measuring distance of 3m

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

Test Result

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

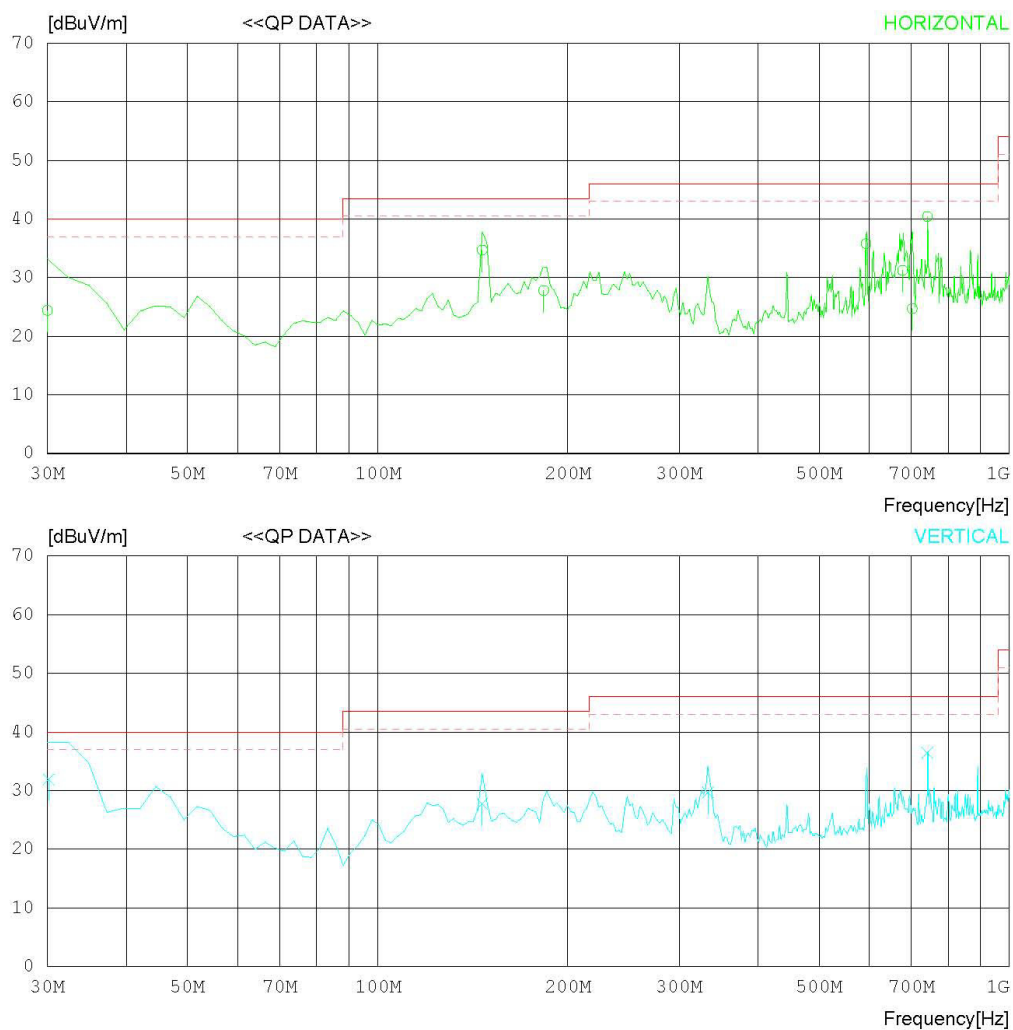
Date : 2012-01-16

Model Name : 42LS3400-UA
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 19 °C 31 % R.H.
 Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-01-16

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19°C 31 % 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	30.000	28.9	17.4	0.8	22.7	24.4	40.0	15.6	200	133
2	146.400	45.5	10.6	1.7	23.1	34.7	43.5	8.8	160	302
3	183.150	39.2	9.8	2.0	23.2	27.8	43.5	15.7	178	165
4	593.433	37.6	18.7	3.9	24.4	35.8	46.0	10.2	140	232
5	677.300	32.3	18.9	4.1	24.1	31.2	46.0	14.8	100	151
6	701.723	25.5	18.9	4.3	24.0	24.7	46.0	21.3	101	220
7	741.750	40.4	19.5	4.4	23.9	40.4	46.0	5.6	101	140
----- Vertical -----										
8	30.150	36.3	17.4	0.8	22.6	31.9	40.0	8.1	100	1
9	146.400	38.5	10.6	1.7	23.1	27.7	43.5	15.8	100	358
10	333.575	36.4	14.6	2.7	24.0	29.7	46.0	16.3	100	143
11	741.750	36.5	19.5	4.4	23.9	36.5	46.0	9.5	100	58

< HDMI MODE_1 GHz ~ 6 GHz_Peak >

RADIATED EMISSION

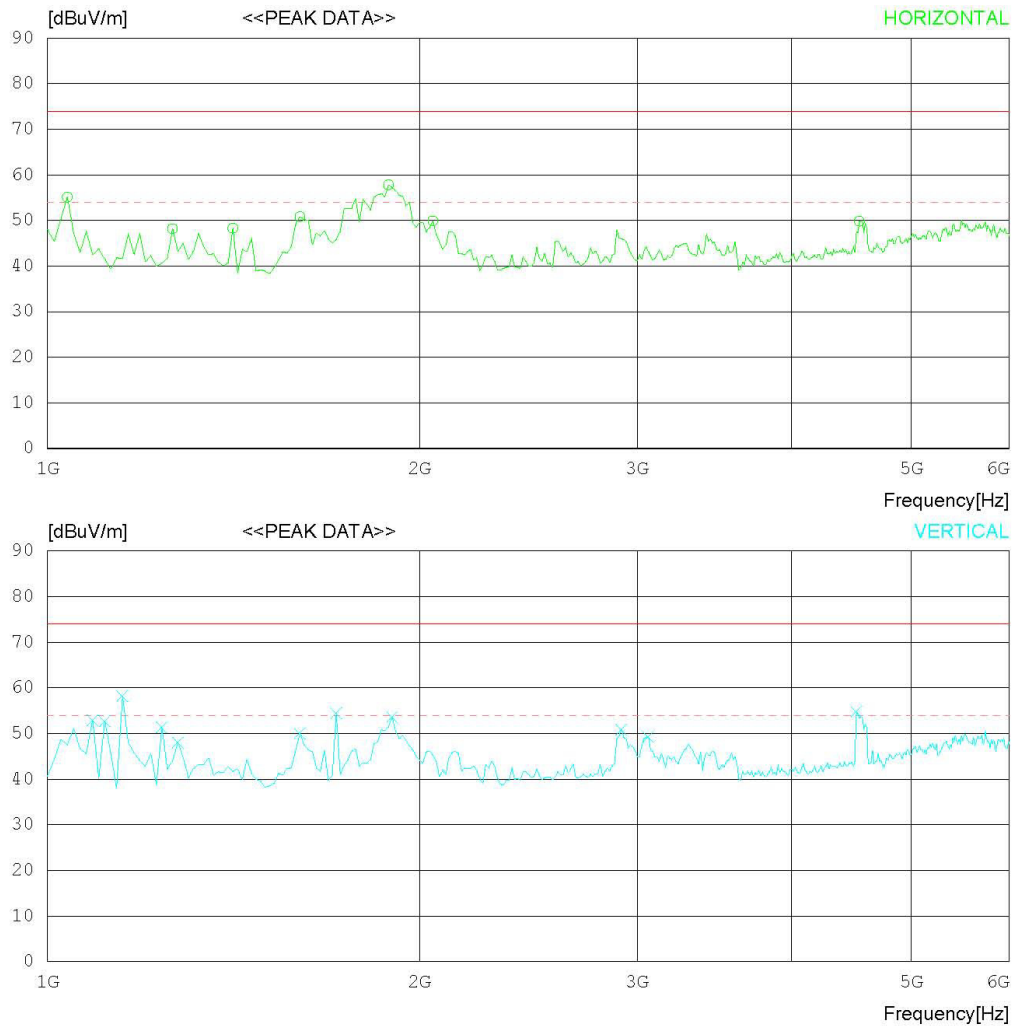
Date : 2012-01-17

Model Name : 42LS3400-UA
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 21 °C 34 % 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 : 2012-01-17

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °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	1037.500	68.3	23.7	4.9	41.8	55.1	74.0	18.9	100	358
2	1262.500	60.3	24.4	5.4	41.9	48.2	74.0	25.8	100	358
3	1412.500	59.5	24.9	5.8	41.9	48.3	74.0	25.7	100	160
4	1600.000	61.3	25.2	6.2	41.9	50.8	74.0	23.2	100	358
5	1887.500	67.8	25.2	6.8	42.0	57.8	74.0	16.2	100	243
6	2050.000	59.4	25.4	7.1	42.0	49.9	74.0	24.1	100	154
7	4537.500	49.6	30.9	10.7	41.4	49.8	74.0	24.2	100	358
----- Vertical -----										
8	1087.500	65.8	23.9	5.0	41.8	52.9	74.0	21.1	100	200
9	1112.500	65.4	24.0	5.1	41.8	52.7	74.0	21.3	100	100
10	1150.000	70.7	24.1	5.2	41.8	58.2	74.0	15.8	100	1
11	1237.500	63.4	24.3	5.4	41.8	51.3	74.0	22.7	100	1
12	1275.000	60.0	24.5	5.4	41.9	48.0	74.0	26	100	1
13	1600.000	60.5	25.2	6.2	41.9	50.0	74.0	24	100	1
14	1712.500	64.7	25.2	6.4	41.9	54.4	74.0	19.6	100	1
15	1900.000	63.6	25.2	6.8	42.0	53.6	74.0	20.4	100	215
16	2912.500	55.8	28.6	8.6	42.1	50.9	74.0	23.1	100	197
17	3062.500	53.7	28.9	8.8	42.1	49.3	74.0	24.7	100	188
18	4512.500	54.7	30.8	10.7	41.4	54.8	74.0	19.2	100	218

< HDMI MODE_1 GHz ~ 6 GHz_Average >

RADIATED EMISSION

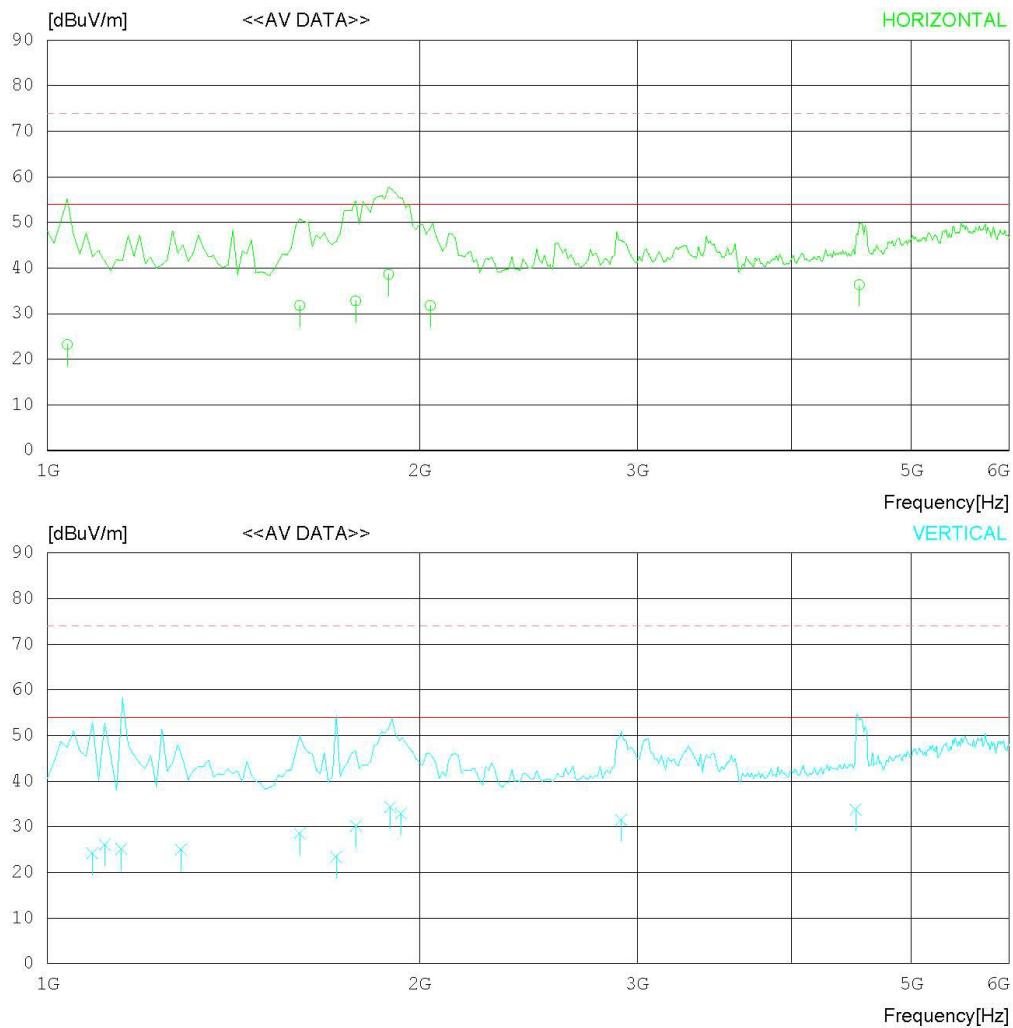
Date : 2012-01-17

Model Name : 42LS3400-UA
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 21 °C 34 % 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 : 2012-01-17

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °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	1037.600	36.4	23.7	4.9	41.8	23.2	54.0	30.8	100	358
2	1599.900	42.3	25.2	6.2	41.9	31.8	54.0	22.2	100	358
3	1775.650	43.1	25.2	6.5	42.0	32.8	54.0	21.2	100	160
4	1887.400	48.6	25.2	6.8	42.0	38.6	54.0	15.4	100	243
5	2040.218	41.3	25.4	7.1	42.0	31.8	54.0	22.2	100	154
6	4537.500	36.1	30.9	10.7	41.4	36.3	54.0	17.7	100	358
----- Vertical -----										
7	1087.500	37.1	23.9	5.0	41.8	24.2	54.0	29.8	100	200
8	1112.500	38.8	24.0	5.1	41.8	26.1	54.0	27.9	100	100
9	1147.600	37.6	24.1	5.2	41.8	25.1	54.0	28.9	100	213
10	1282.500	36.9	24.5	5.5	41.9	25.0	54.0	29.0	100	1
11	1600.000	39.0	25.2	6.2	41.9	28.5	54.0	25.5	100	1
12	1712.650	33.7	25.2	6.4	41.9	23.4	54.0	30.6	100	1
13	1777.000	40.5	25.2	6.5	42.0	30.2	54.0	23.8	100	1
14	1894.076	44.3	25.2	6.8	42.0	34.3	54.0	19.7	100	197
15	1932.076	42.8	25.2	6.9	42.0	32.9	54.0	21.1	100	215
16	2912.500	36.4	28.6	8.6	42.1	31.5	54.0	22.5	100	188
17	4505.600	33.8	30.7	10.7	41.4	33.8	54.0	20.2	100	218

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

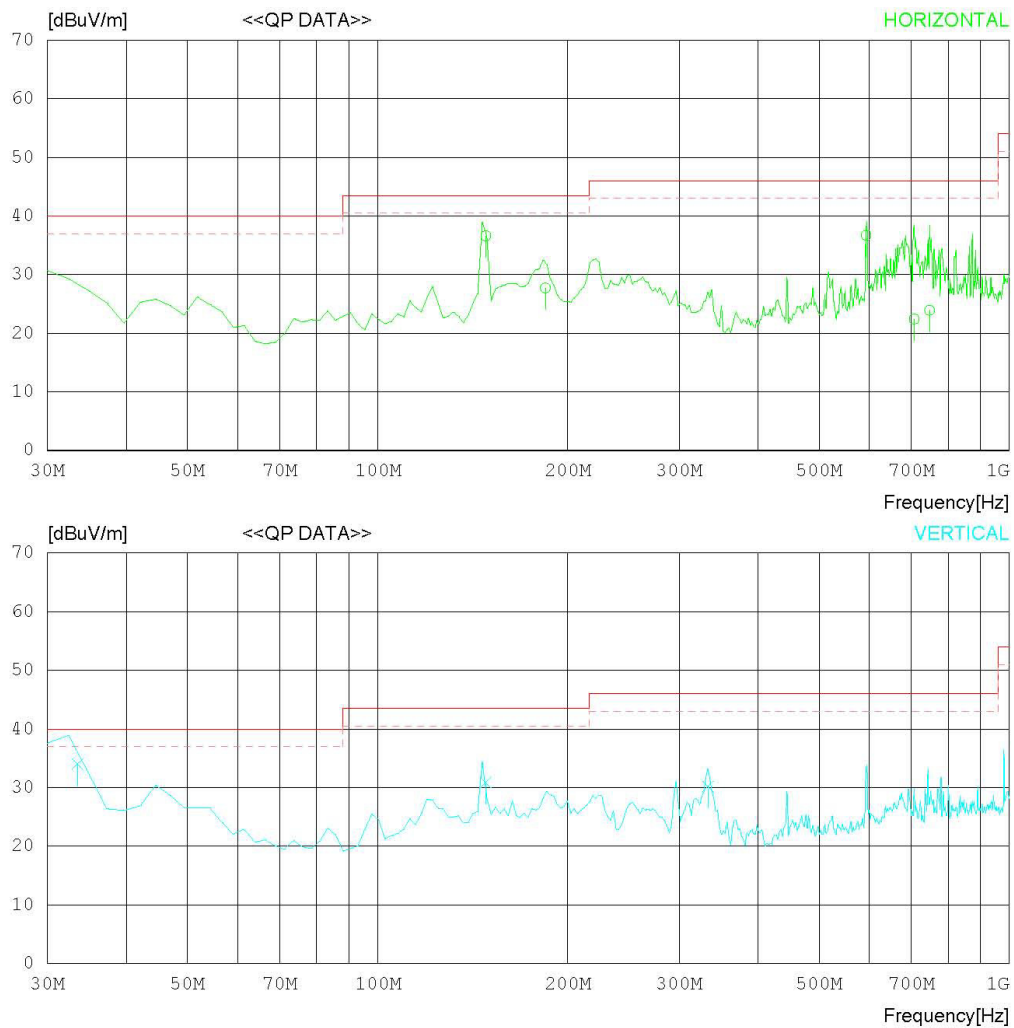
Date : 2012-01-16

Model Name : 42LS3400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 19 °C 31 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-01-16

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 31 % 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	148.325	47.5	10.5	1.7	23.1	36.6	43.5	6.9	166	130
2	184.225	39.1	9.8	2.0	23.2	27.7	43.5	15.8	100	1
3	593.400	38.5	18.7	3.9	24.4	36.7	46.0	9.3	206	203
4	706.919	23.1	19.0	4.3	24.0	22.4	46.0	23.6	100	0
5	747.798	23.9	19.5	4.4	23.9	23.9	46.0	22.1	100	246
----- Vertical -----										
6	33.500	38.8	16.9	0.9	22.6	34.0	40.0	6.0	100	120
7	148.325	41.8	10.5	1.7	23.1	30.9	43.5	12.6	329	174
8	333.469	36.9	14.6	2.7	24.0	30.2	46.0	15.8	100	358

< USB MODE_1 GHz ~ 6 GHz_Peak >

RADIATED EMISSION

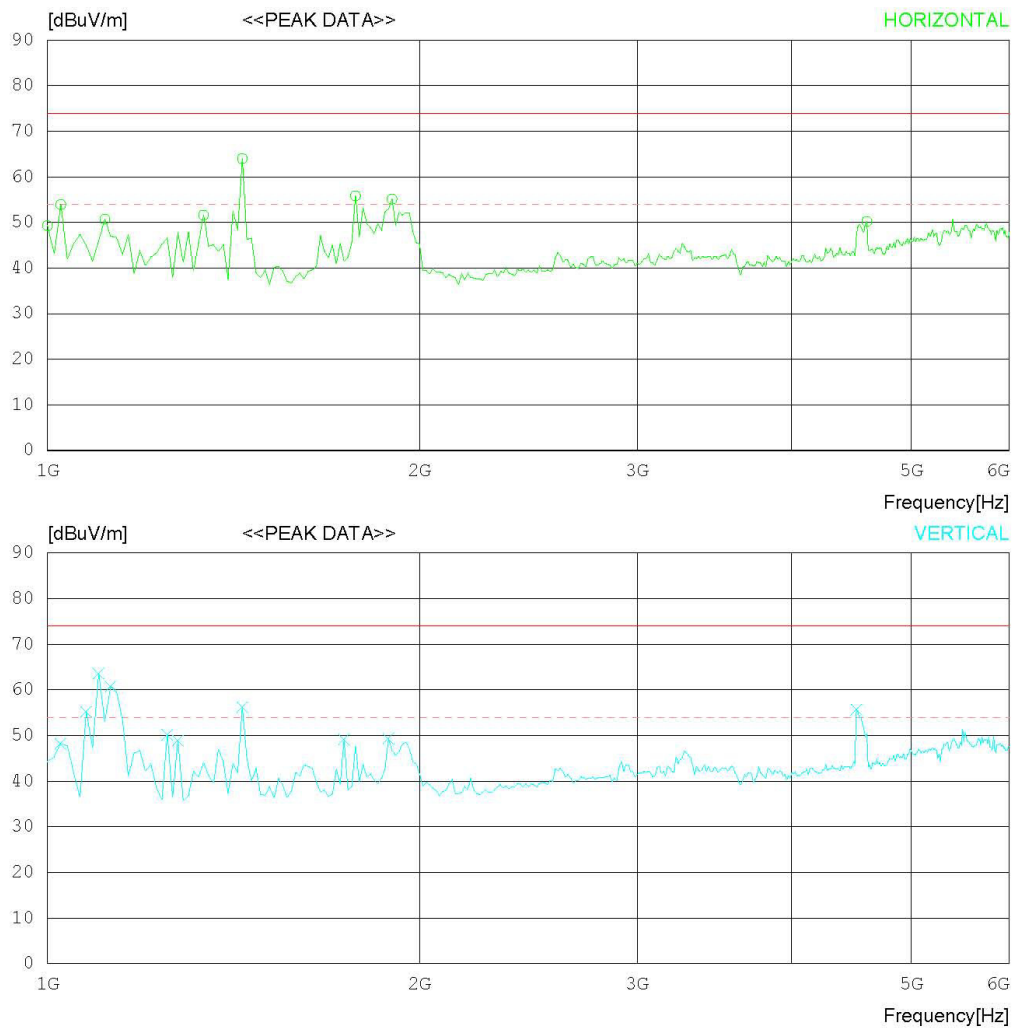
Date : 2012-01-17

Model Name : 42LS3400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 21 °C 34 % 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 : 2012-01-17

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °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	1000.000	62.7	23.6	4.8	41.8	49.3	74.0	24.7	100	1
2	1025.000	67.1	23.7	4.9	41.8	53.9	74.0	20.1	100	1
3	1112.500	63.4	24.0	5.1	41.8	50.7	74.0	23.3	100	1
4	1337.500	63.3	24.6	5.6	41.9	51.6	74.0	22.4	100	158
5	1437.500	75.1	25.0	5.8	41.9	64.0	74.0	10	100	174
6	1775.000	66.1	25.2	6.5	42.0	55.8	74.0	18.2	100	199
7	1900.000	65.1	25.2	6.8	42.0	55.1	74.0	18.9	100	215
8	4600.000	49.7	31.1	10.8	41.4	50.2	74.0	23.8	100	1
----- Vertical -----										
9	1025.000	61.4	23.7	4.9	41.8	48.2	74.0	25.8	100	358
10	1075.000	68.2	23.8	5.0	41.8	55.2	74.0	18.8	100	358
11	1100.000	76.5	23.9	5.0	41.8	63.6	74.0	10.4	100	358
12	1125.000	73.5	24.0	5.1	41.8	60.8	74.0	13.2	100	142
13	1250.000	62.3	24.4	5.4	41.9	50.2	74.0	23.8	100	167
14	1275.000	60.9	24.5	5.4	41.9	48.9	74.0	25.1	100	217
15	1437.500	67.3	25.0	5.8	41.9	56.2	74.0	17.8	100	178
16	1737.500	59.3	25.2	6.5	41.9	49.1	74.0	24.9	100	211
17	1887.500	59.3	25.2	6.8	42.0	49.3	74.0	24.7	100	203
18	4512.500	55.6	30.8	10.7	41.4	55.7	74.0	18.3	100	358

< USB MODE_1 GHz ~ 6 GHz_Average >

RADIATED EMISSION

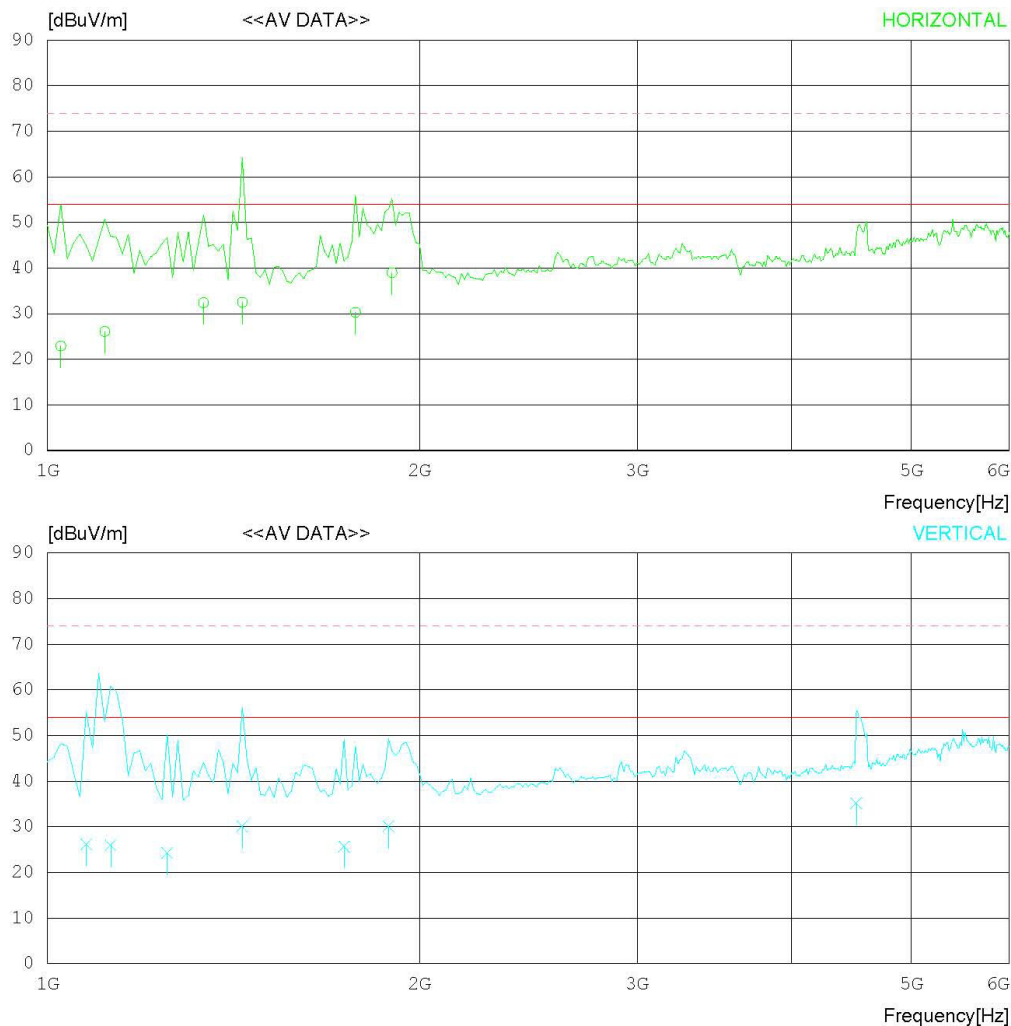
Date : 2012-01-17

Model Name : 42LS3400-UA
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 21 °C 34 % 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 : 2012-01-17

Model Name : 42LS3400-UA	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °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	1025.000	36.1	23.7	4.9	41.8	22.9	54.0	31.1	100	1
2	1112.500	38.8	24.0	5.1	41.8	26.1	54.0	27.9	100	1
3	1337.500	44.1	24.6	5.6	41.9	32.4	54.0	21.6	100	158
4	1437.500	43.6	25.0	5.8	41.9	32.5	54.0	21.5	100	174
5	1775.000	40.6	25.2	6.5	42.0	30.3	54.0	23.7	100	199
6	1900.000	49.0	25.2	6.8	42.0	39.0	54.0	15.0	100	215
----- Vertical -----										
7	1075.000	39.1	23.8	5.0	41.8	26.1	54.0	27.9	100	358
8	1125.000	38.6	24.0	5.1	41.8	25.9	54.0	28.1	100	142
9	1250.000	36.4	24.4	5.4	41.9	24.3	54.0	29.7	100	167
10	1437.500	41.2	25.0	5.8	41.9	30.1	54.0	23.9	100	178
11	1737.500	35.9	25.2	6.5	41.9	25.7	54.0	28.3	100	211
12	1887.500	40.1	25.2	6.8	42.0	30.1	54.0	23.9	100	203
13	4512.500	35.1	30.8	10.7	41.4	35.2	54.0	18.8	100	358

Appendix 1

List of Test and Measurement Instruments

1. Conducted Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☐ SPECTRUM ANALYZER	8591E	H/P	3649A05889	2011.03.07	2012.03.07
☐ RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2011.07.02	2012.07.02
☐ LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐ LISN	KNW-242	KYORITSU	8-654-15	2011.07.01	2012.07.01
☐ 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2011.03.08	2012.03.08
☒ LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2011.09.30	2012.09.30
☒ LISN	LISN1600	TTI	197204	2011.07.02	2012.07.02
☒ 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	CBL6112B	SCHAFFNER	2737	2010.07.14	2012.07.14
☒ HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2010.04.13	2012.04.13
☒ AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
☒ AMPLIFIER	MLA-00108-B02-36	TSJ	1518831	2012.01.09	2013.01.09
☐ SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2011.07.01	2012.07.01
☐ AMPLIFIER	8447D	AGILENT	2443A03690	2011.07.01	2012.07.01
☐ BILOG ANTENNA	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
☐ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2011.03.08	2012.03.08
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2010.11.29	2012.11.29
☐ LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2010.07.07	2012.07.07
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2010.12.21	2012.12.21
☐ LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2010.11.29	2012.11.29
☐ AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2011.03.07	2012.03.07