

EMC TEST REPORT

Test item : LED LCD TV monitor
Model No. : 55LM6400-UA
Order No. : 1203-00182
Date of receipt : 2012-03-27
Test duration : 2012-03-28 ~ 2012-03-29
Use of report : FCC CoC Marking
Date of Issue : 2012-04-04

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 : (21 ~ 22) °C,
Humidity : (35 ~ 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.

This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:



Engineer
H.J.KIM

Reviewed by:



General Manager
C.H.LEE

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.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.	55LM6400-UA
EUT Type	LED LCD TV monitor
Serial No	NONE
FCC ID	BEJ55LM6400UA
Type of Sample Tested	Pre-Production
High Frequency	756 MHz
Rating	AC 100 ~ 240 V, ~ 50/60 Hz
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

Related Submittal(s) / Grant(s)

Original submittal only.

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720X480	31.469 31.5	59.94 60
1280X720	44.96 45	59.94 60
1920X1080	33.72 33.75 26.97 27 33.716 33.75 67.43 67.5	59.94 60 23.97 24 29.976 30.00 59.94 60

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	03-28	21	36	-
Radiated Disturbance	03-29	21	35	
	03-29	22	36	

4.3 Test result Summary

(1) Conducted Emission(USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
3.70000	N	44.8	Quasi-Peak	46.0	1.2

(2) Radiated Emission(HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
38.947	V	36.8	Quasi-Peak	40.0	3.2

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)
- DSUB 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	DCSCMF	G3RZKBX	DELL	POWER	1.8	Non-shield	Plastic	DOC
				HDMI	1.8	Shield		
				DSUB	1.8	Shield		
				USB	1.8	Shield		
				PS/2	1.8	Shield		
KEYBOARD	SKG-3000UB	TAKSB24503Y	MONITEREY INTERNATIONAL CORP	USB	1.8	Shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Non-shield Non-shield	Plastic	VER
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

< DSUB MODE >



Results of Conducted Emission

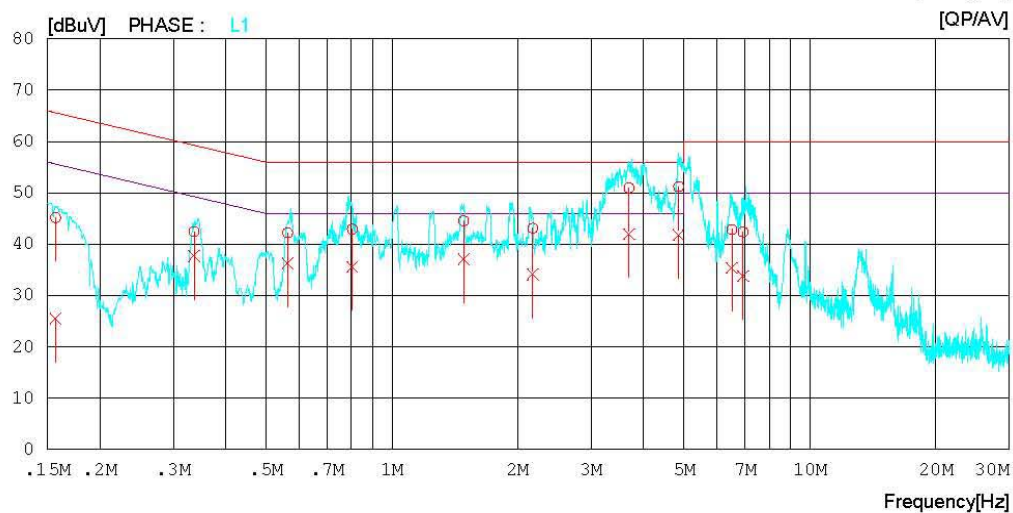
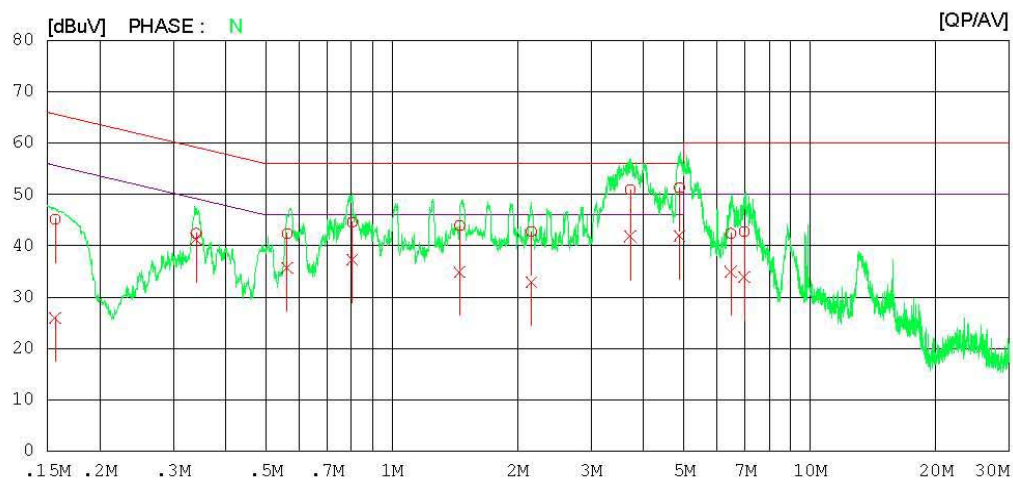
Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 36 % R.H
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °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	0.15656	44.9	25.6	0.3	45.2	25.9	65.6	55.6	20.4	29.7	N
2	0.34021	42.1	41.1	0.3	42.4	41.4	59.2	49.2	16.8	7.8	N
3	0.56185	42.2	35.5	0.2	42.4	35.7	56.0	46.0	13.6	10.3	N
4	0.80409	44.3	37.0	0.3	44.6	37.3	56.0	46.0	11.4	8.7	N
5	1.45300	43.6	34.6	0.3	43.9	34.9	56.0	46.0	12.1	11.1	N
6	2.15750	42.5	32.6	0.3	42.8	32.9	56.0	46.0	13.2	13.1	N
7	3.71800	50.5	41.4	0.4	50.9	41.8	56.0	46.0	5.1	4.2	N
8	4.87700	50.9	41.5	0.4	51.3	41.9	56.0	46.0	4.7	4.1	N
9	6.46800	42.0	34.5	0.4	42.4	34.9	60.0	50.0	17.6	15.1	N
10	6.96900	42.4	33.5	0.4	42.8	33.9	60.0	50.0	17.2	16.1	N
11	0.15685	44.9	25.2	0.3	45.2	25.5	65.6	55.6	20.4	30.1	L1
12	0.33656	42.1	37.4	0.3	42.4	37.7	59.3	49.3	16.9	11.6	L1
13	0.56313	42.0	36.1	0.2	42.2	36.3	56.0	46.0	13.8	9.7	L1
14	0.80356	42.6	35.3	0.3	42.9	35.6	56.0	46.0	13.1	10.4	L1
15	1.48500	44.3	36.8	0.3	44.6	37.1	56.0	46.0	11.4	8.9	L1
16	2.17350	42.8	33.8	0.3	43.1	34.1	56.0	46.0	12.9	11.9	L1
17	3.69250	50.6	41.6	0.4	51.0	42.0	56.0	46.0	5.0	4.0	L1
18	4.85450	50.8	41.4	0.4	51.2	41.8	56.0	46.0	4.8	4.2	L1
19	6.50800	42.5	35.0	0.4	42.9	35.4	60.0	50.0	17.1	14.6	L1
20	6.91950	42.0	33.4	0.4	42.4	33.8	60.0	50.0	17.6	16.2	L1

< HDMI MODE >



Results of Conducted Emission

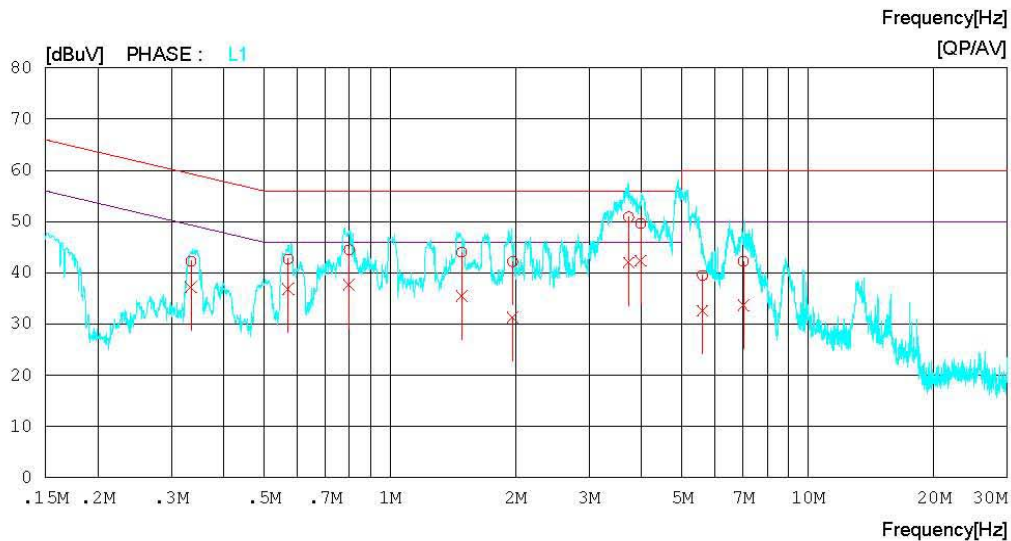
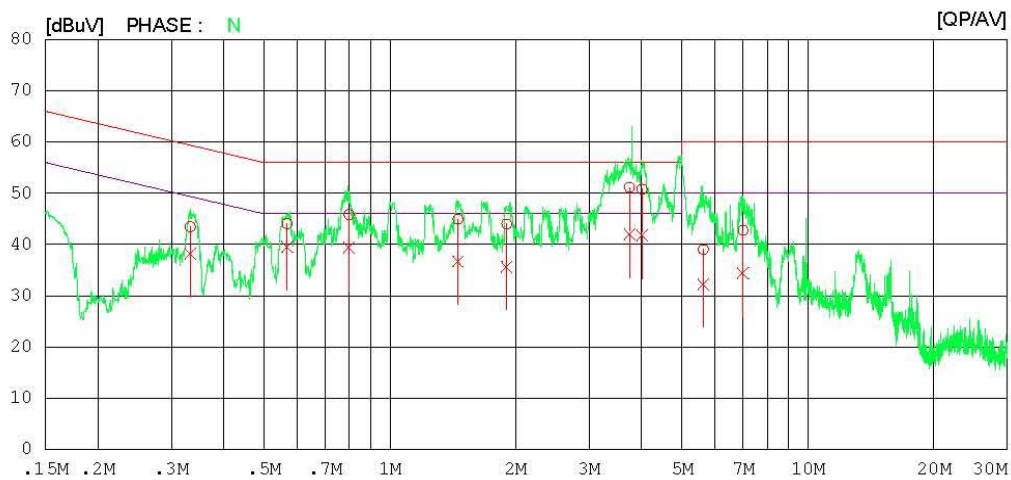
Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 36 % R.H
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °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	0.33340	43.2	37.9	0.3	43.5	38.2	59.4	49.4	15.9	11.2	N
2	0.56814	43.8	39.3	0.2	44.0	39.5	56.0	46.0	12.0	6.5	N
3	0.79830	45.6	39.1	0.2	45.8	39.3	56.0	46.0	10.2	6.7	N
4	1.45500	44.6	36.4	0.3	44.9	36.7	56.0	46.0	11.1	9.3	N
5	1.90250	43.7	35.3	0.3	44.0	35.6	56.0	46.0	12.0	10.4	N
6	3.74350	50.7	41.6	0.4	51.1	42.0	56.0	46.0	4.9	4.0	N
7	4.01300	50.4	41.4	0.4	50.8	41.8	56.0	46.0	5.2	4.2	N
8	5.62100	38.6	31.9	0.4	39.0	32.3	60.0	50.0	21.0	17.7	N
9	6.99400	42.3	34.0	0.4	42.7	34.4	60.0	50.0	17.3	15.6	N
10	0.33433	42.0	36.9	0.3	42.3	37.2	59.3	49.3	17.0	12.1	L1
11	0.57110	42.5	36.7	0.2	42.7	36.9	56.0	46.0	13.3	9.1	L1
12	0.79953	44.3	37.5	0.2	44.5	37.7	56.0	46.0	11.5	8.3	L1
13	1.48500	43.7	35.2	0.3	44.0	35.5	56.0	46.0	12.0	10.5	L1
14	1.96700	41.9	31.0	0.3	42.2	31.3	56.0	46.0	13.8	14.7	L1
15	3.72650	50.5	41.6	0.4	50.9	42.0	56.0	46.0	5.1	4.0	L1
16	3.98250	49.2	42.0	0.4	49.6	42.4	56.0	46.0	6.4	3.6	L1
17	5.59700	39.1	32.2	0.4	39.5	32.6	60.0	50.0	20.5	17.4	L1
18	7.01050	41.8	33.3	0.4	42.2	33.7	60.0	50.0	17.8	16.3	L1

< USB MODE >



Results of Conducted Emission

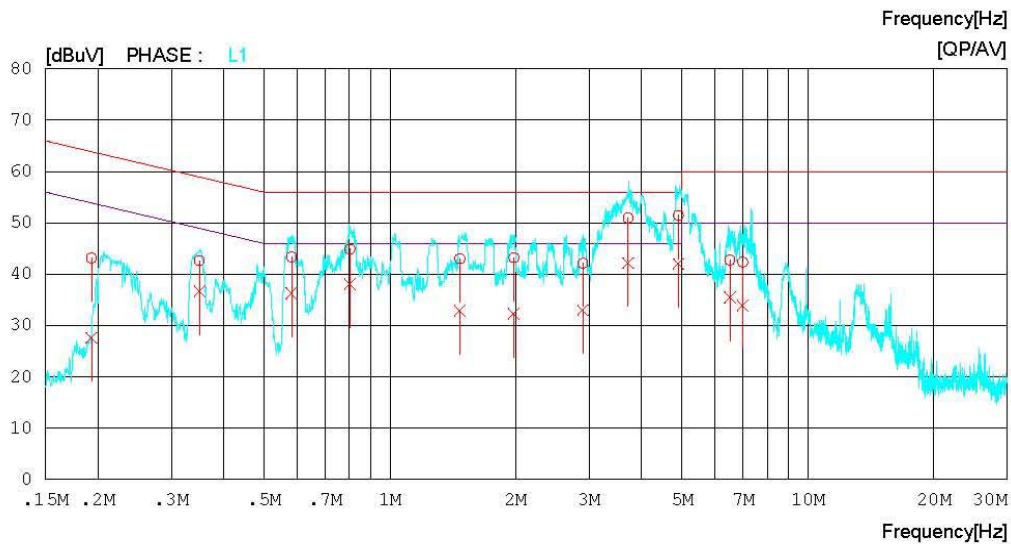
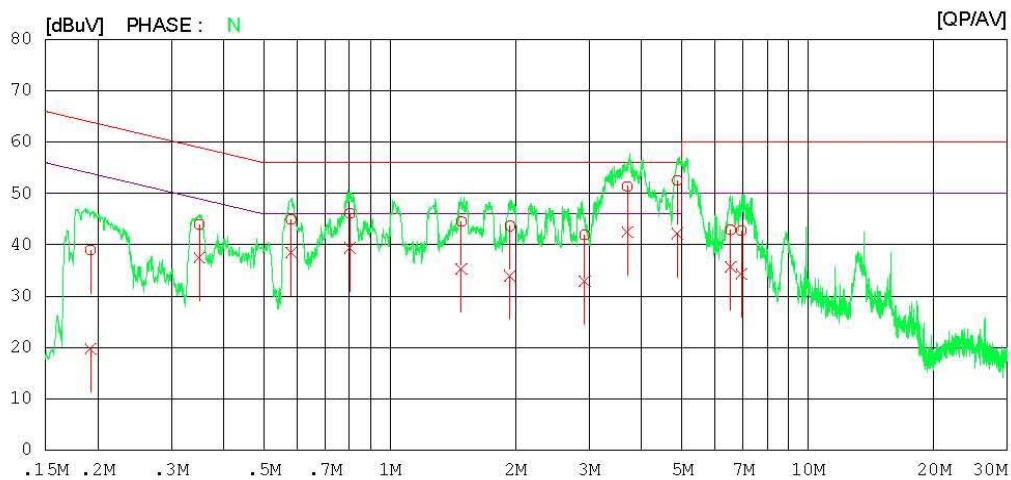
Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 36 % R.H
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-03-28

Model No. : 55LM6400-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °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	0.19234	38.8	19.5	0.2	39.0	19.7	63.9	53.9	24.9	34.2	N
2	0.35034	43.6	37.2	0.3	43.9	37.5	59.0	49.0	15.1	11.5	N
3	0.58030	44.7	38.3	0.2	44.9	38.5	56.0	46.0	11.1	7.5	N
4	0.80248	45.8	39.1	0.3	46.1	39.4	56.0	46.0	9.9	6.6	N
5	1.48300	44.2	35.0	0.3	44.5	35.3	56.0	46.0	11.5	10.7	N
6	1.93850	43.4	33.7	0.3	43.7	34.0	56.0	46.0	12.3	12.0	N
7	2.92250	41.6	32.6	0.3	41.9	32.9	56.0	46.0	14.1	13.1	N
8	3.70000	51.0	42.1	0.4	51.4	42.5	56.0	46.0	4.6	3.5	N
9	4.87250	52.1	41.8	0.4	52.5	42.2	56.0	46.0	3.5	3.8	N
10	6.53350	42.5	35.3	0.4	42.9	35.7	60.0	50.0	17.1	14.3	N
11	6.93800	42.4	33.9	0.4	42.8	34.3	60.0	50.0	17.2	15.7	N
12	0.19333	43.0	27.4	0.2	43.2	27.6	63.9	53.9	20.7	26.3	L1
13	0.35045	42.4	36.4	0.3	42.7	36.7	59.0	49.0	16.3	12.3	L1
14	0.58164	43.2	36.1	0.2	43.4	36.3	56.0	46.0	12.6	9.7	L1
15	0.80265	44.6	37.7	0.3	44.9	38.0	56.0	46.0	11.1	8.0	L1
16	1.47000	42.7	32.6	0.3	43.0	32.9	56.0	46.0	13.0	13.1	L1
17	1.98100	42.9	32.0	0.3	43.2	32.3	56.0	46.0	12.8	13.7	L1
18	2.89550	41.8	32.7	0.3	42.1	33.0	56.0	46.0	13.9	13.0	L1
19	3.71400	50.6	41.8	0.4	51.0	42.2	56.0	46.0	5.0	3.8	L1
20	4.89950	51.1	41.6	0.4	51.5	42.0	56.0	46.0	4.5	4.0	L1
21	6.50750	42.4	35.1	0.4	42.8	35.5	60.0	50.0	17.2	14.5	L1
22	6.98700	42.0	33.6	0.4	42.4	34.0	60.0	50.0	17.6	16.0	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

< DSUB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

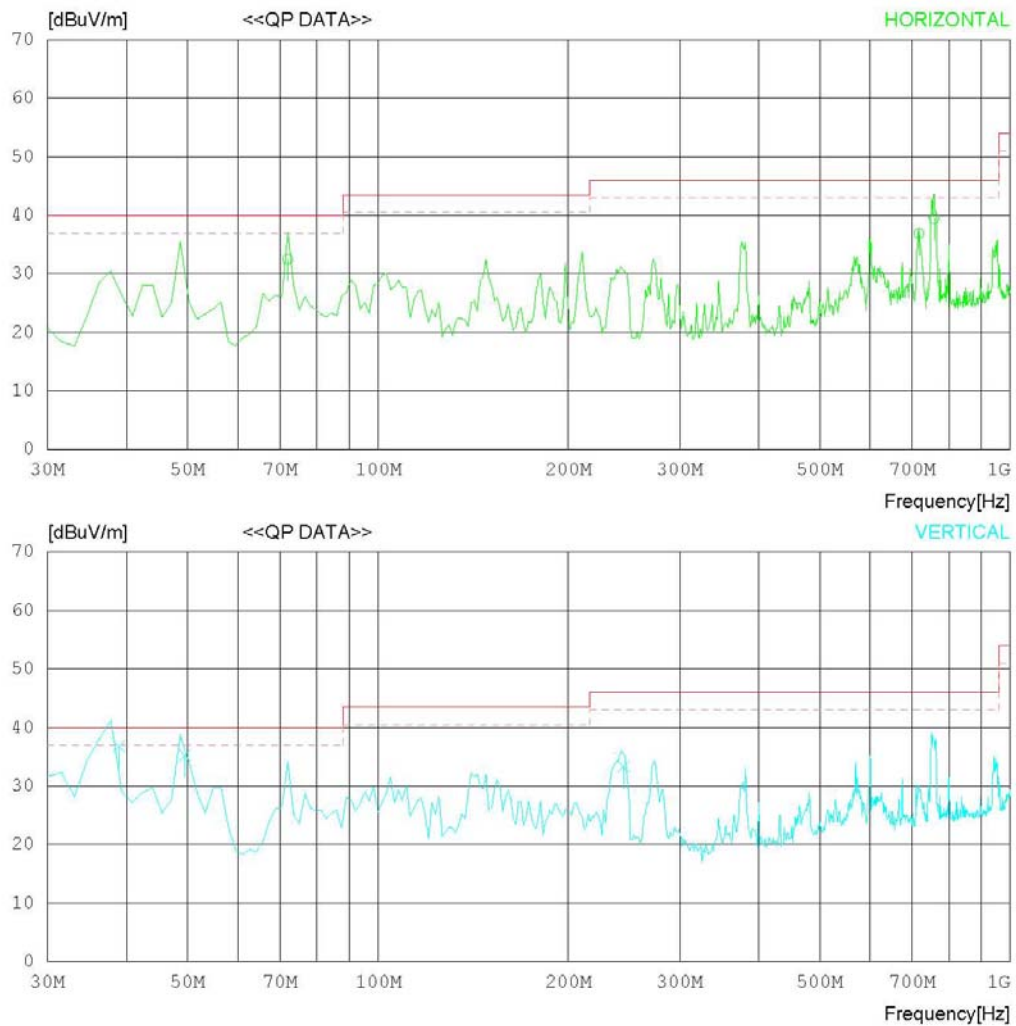
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 'C 35 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 °C 35 % 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	71.985	47.5	6.5	1.2	22.7	32.5	40.0	7.5	400	274
2	717.084	37.6	19.1	4.3	24.1	36.9	46.0	9.1	100	212
3	757.501	39.4	19.7	4.4	24.0	39.5	46.0	6.5	100	0
----- Vertical -----										
4	38.947	44.4	14.5	0.9	23.0	36.8	40.0	3.2	100	284
5	49.514	47.3	9.8	1.0	22.8	35.3	40.0	4.7	100	1
6	244.520	41.9	12.7	2.3	23.6	33.3	46.0	12.7	200	186

< DSUB MODE_1 GHz ~ 6 GHz_Peak >

RADIATED EMISSION

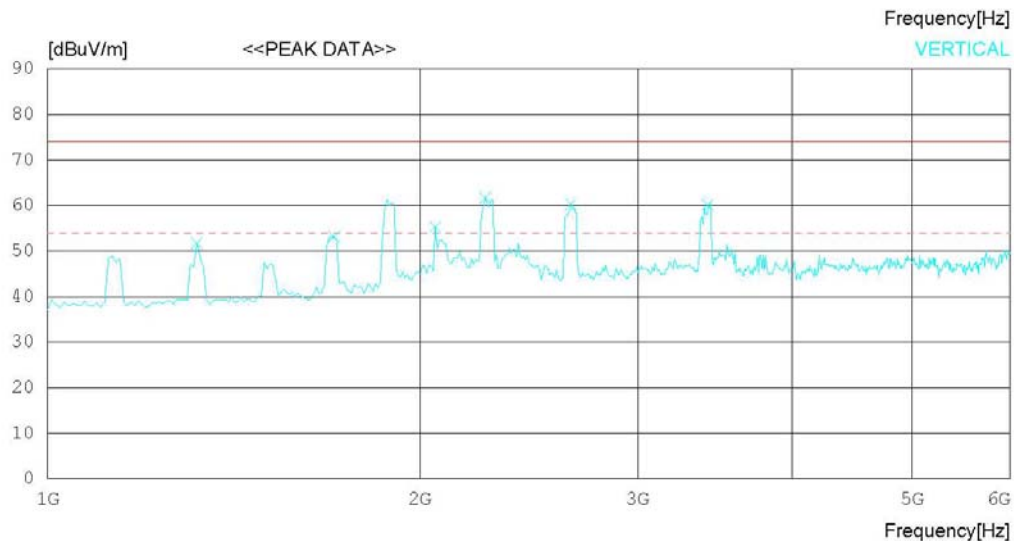
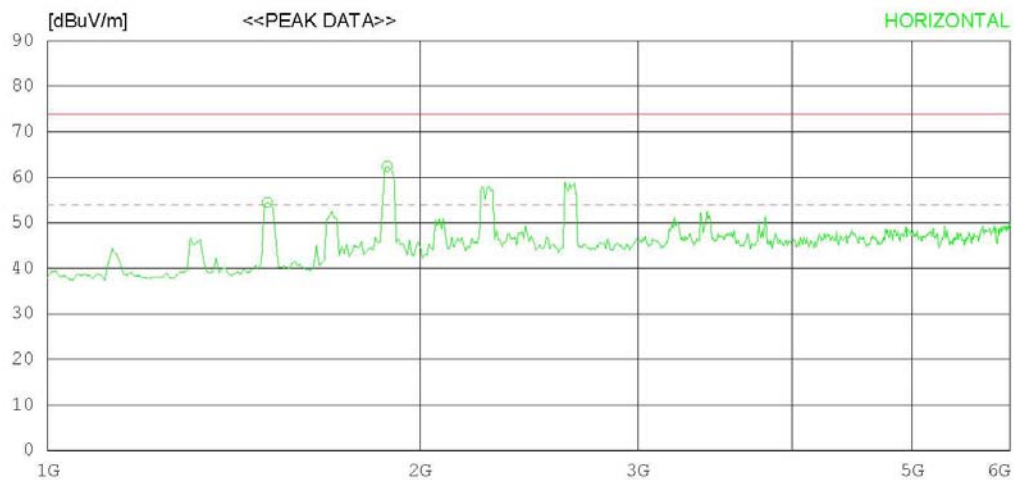
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 'C 36 % R.H
Test Condition : DSUB	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	1504.807	64.0	26.1	6.0	41.6	54.5	74.0	19.5	100	1
2	1881.410	69.8	27.5	6.8	41.7	62.4	74.0	11.6	100	1
----- Vertical -----										
3	1320.513	62.6	25.4	5.5	41.8	51.7	74.0	22.3	100	172
4	1705.128	61.6	26.9	6.4	41.7	53.2	74.0	20.8	100	358
5	2057.692	61.7	28.1	7.1	41.7	55.2	74.0	18.8	100	188
6	2258.016	67.5	28.5	7.4	41.7	61.7	74.0	12.3	100	213
7	2650.650	64.7	29.3	8.1	41.8	60.3	74.0	13.7	100	358
8	3419.892	61.9	31.0	9.3	42.0	60.2	74.0	13.8	100	217

< DSUB MODE_1 GHz ~ 6 GHz_Average >

RADIATED EMISSION

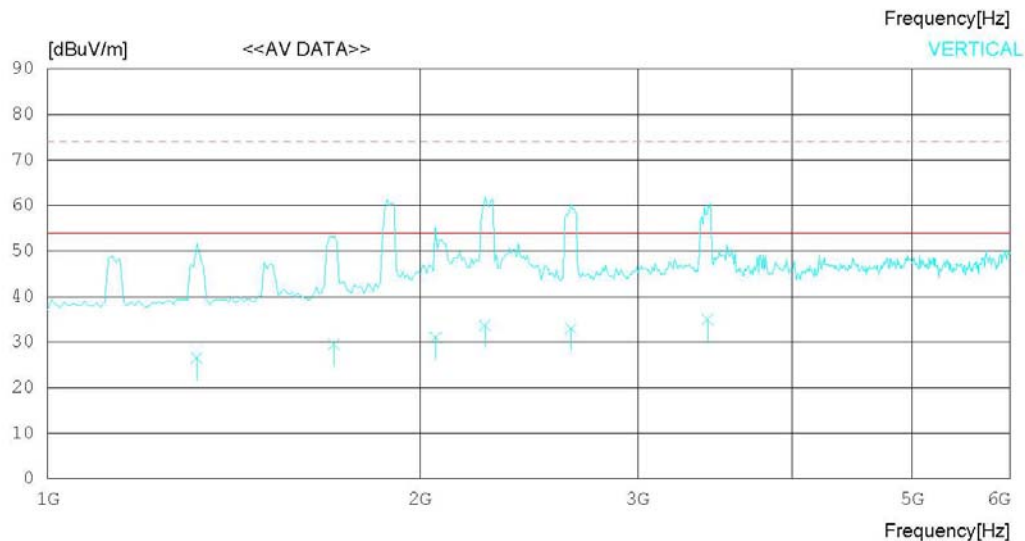
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 'C 36 % R.H
Test Condition : DSUB	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	1504.394	40.0	26.1	6.0	41.6	30.5	54.0	23.5	100	1
2	1881.000	40.3	27.5	6.8	41.7	32.9	54.0	21.1	100	1
----- Vertical -----										
3	1319.725	37.4	25.4	5.5	41.8	26.5	54.0	27.5	100	172
4	1704.495	37.9	26.9	6.4	41.7	29.5	54.0	24.5	100	358
5	2059.365	37.5	28.1	7.1	41.7	31.0	54.0	23.0	100	188
6	2257.951	39.5	28.5	7.4	41.7	33.7	54.0	20.3	100	213
7	2649.961	37.4	29.3	8.1	41.8	33.0	54.0	21.0	100	358
8	3418.423	36.7	31.0	9.3	42.0	35.0	54.0	19.0	100	217

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

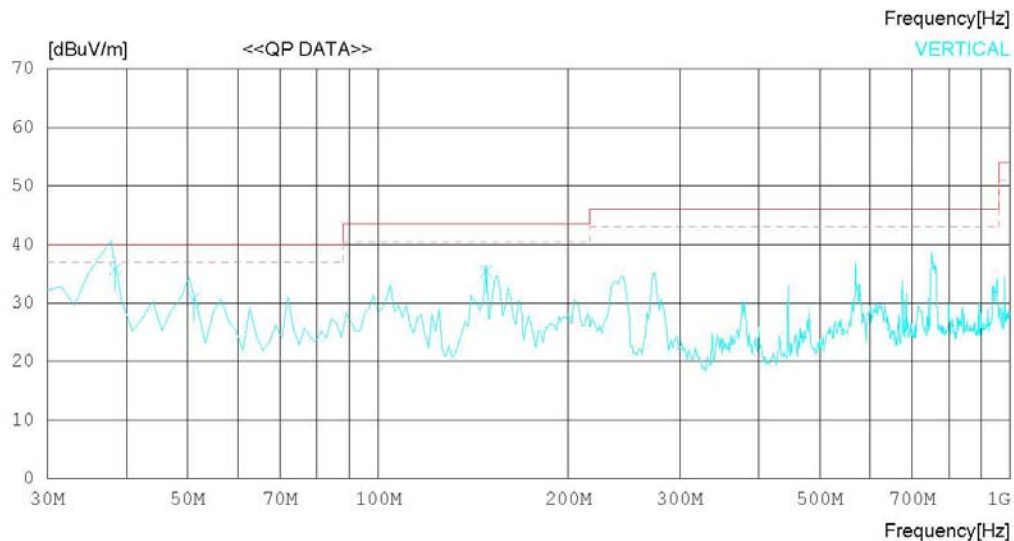
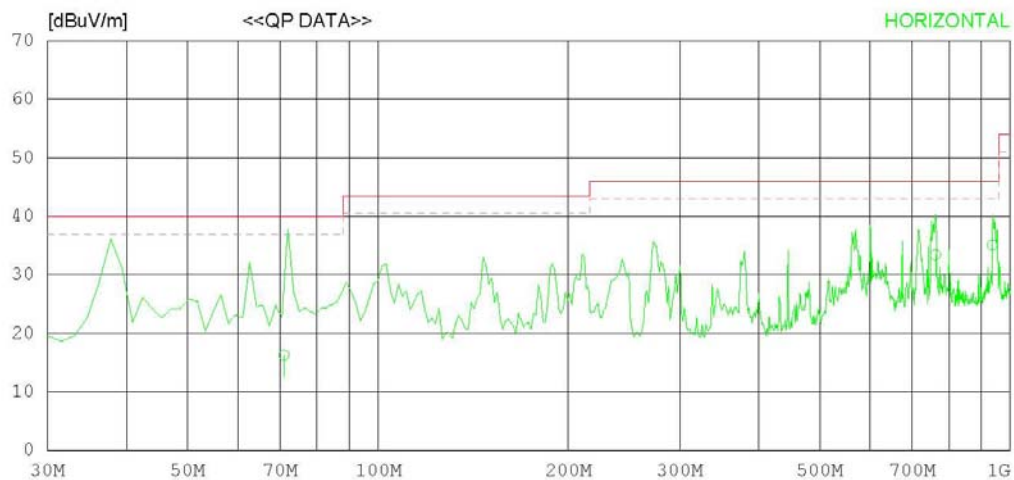
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 'C 35 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 °C 35 % 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	71.000	31.4	6.4	1.2	22.7	16.3	40.0	23.7	200	358
2	762.164	33.3	19.7	4.4	24.0	33.4	46.0	12.6	100	148
3	936.783	32.2	20.9	4.9	22.9	35.1	46.0	10.9	100	0
----- Vertical -----										
4	38.370	43.1	14.8	0.9	23.0	35.8	40.0	4.2	100	358
5	51.033	43.5	9.0	1.0	22.8	30.7	40.0	9.3	100	329
6	148.360	46.3	10.5	1.7	23.1	35.4	43.5	8.1	100	32

< HDMI MODE_1 GHz ~ 6 GHz_Peak >

RADIATED EMISSION

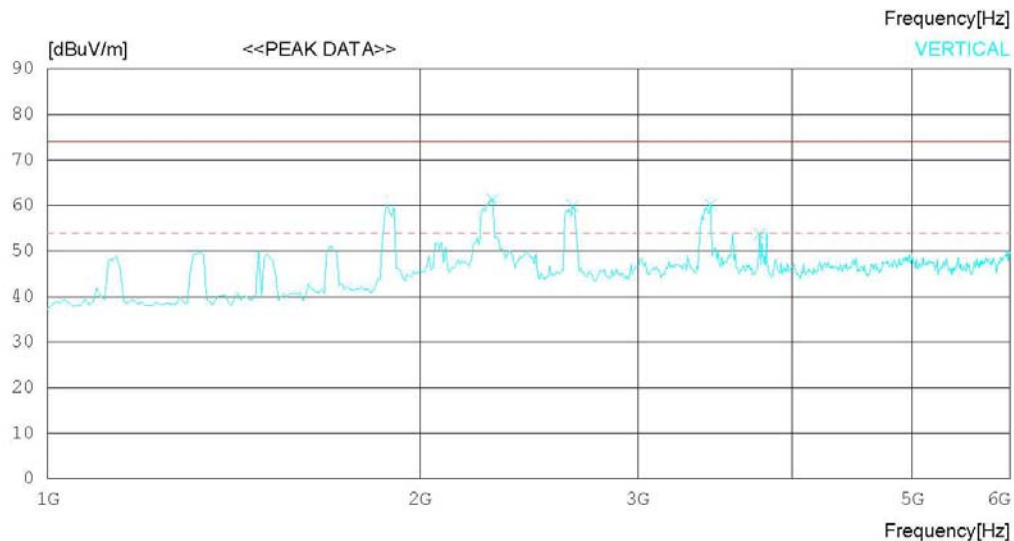
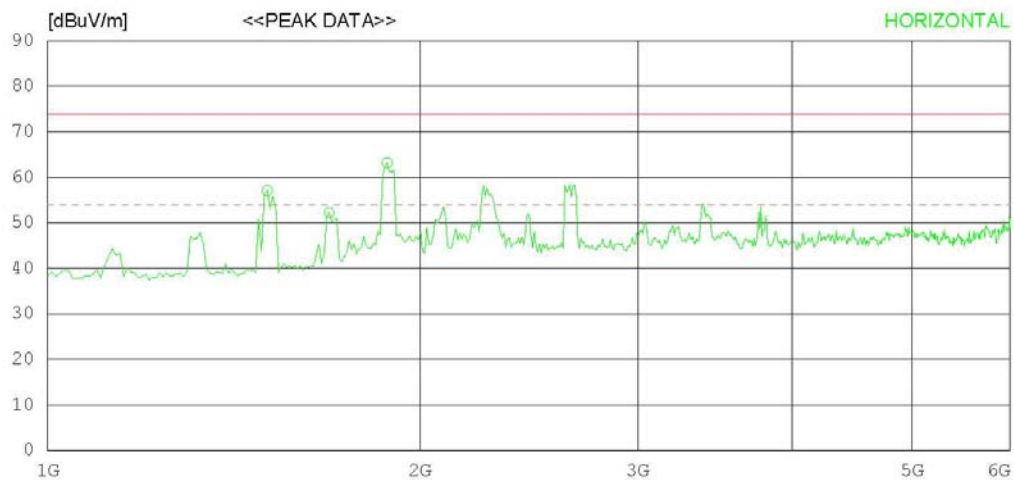
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 'C 36 % 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	1504.807	66.6	26.1	6.0	41.6	57.1	74.0	16.9	100	358
2	1689.102	60.7	26.8	6.4	41.7	52.2	74.0	21.8	100	358
3	1881.410	70.6	27.5	6.8	41.7	63.2	74.0	10.8	100	178
----- Vertical -----										
4	2290.067	67.1	28.5	7.4	41.8	61.2	74.0	12.8	100	210
5	2658.663	64.2	29.3	8.1	41.7	59.9	74.0	14.1	100	1
6	3435.918	61.8	31.0	9.4	42.0	60.2	74.0	13.8	100	199
7	3764.448	54.1	31.8	9.7	41.8	53.8	74.0	20.2	100	111

< HDMI MODE_1 GHz ~ 6 GHz_Average >

RADIATED EMISSION

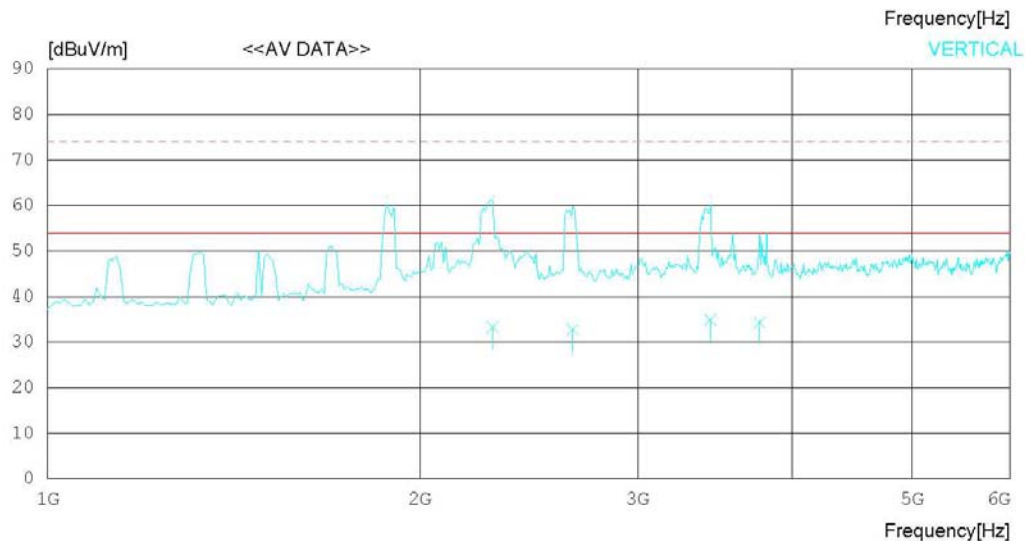
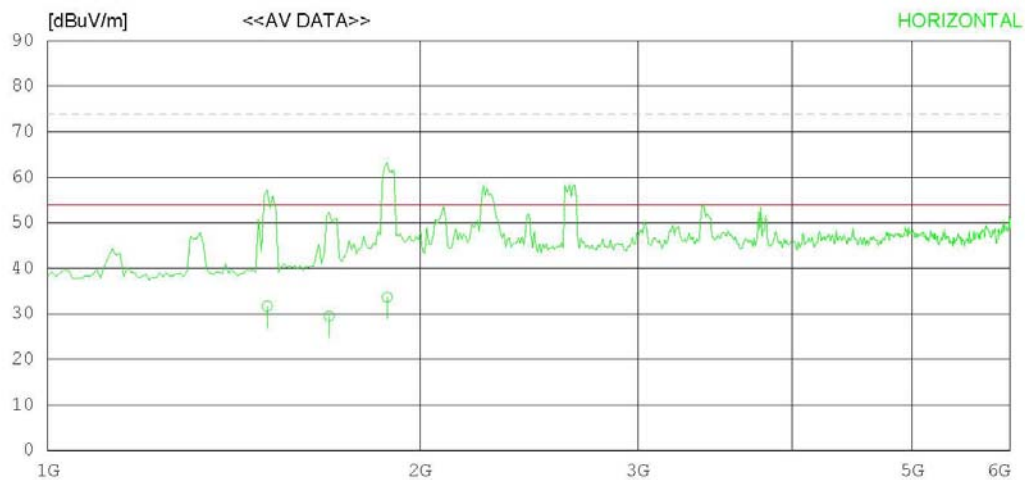
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 'C 36 % 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	1504.807	41.2	26.1	6.0	41.6	31.7	54.0	22.3	100	358
2	1689.102	38.0	26.8	6.4	41.7	29.5	54.0	24.5	100	358
3	1881.410	41.0	27.5	6.8	41.7	33.6	54.0	20.4	100	178
----- Vertical -----										
4	2289.831	39.2	28.5	7.4	41.8	33.3	54.0	20.7	100	210
5	2658.634	37.1	29.3	8.1	41.7	32.8	54.0	21.2	100	1
6	3434.347	36.5	31.0	9.4	42.0	34.9	54.0	19.1	100	199
7	3764.000	34.6	31.8	9.7	41.8	34.3	54.0	19.7	100	111

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

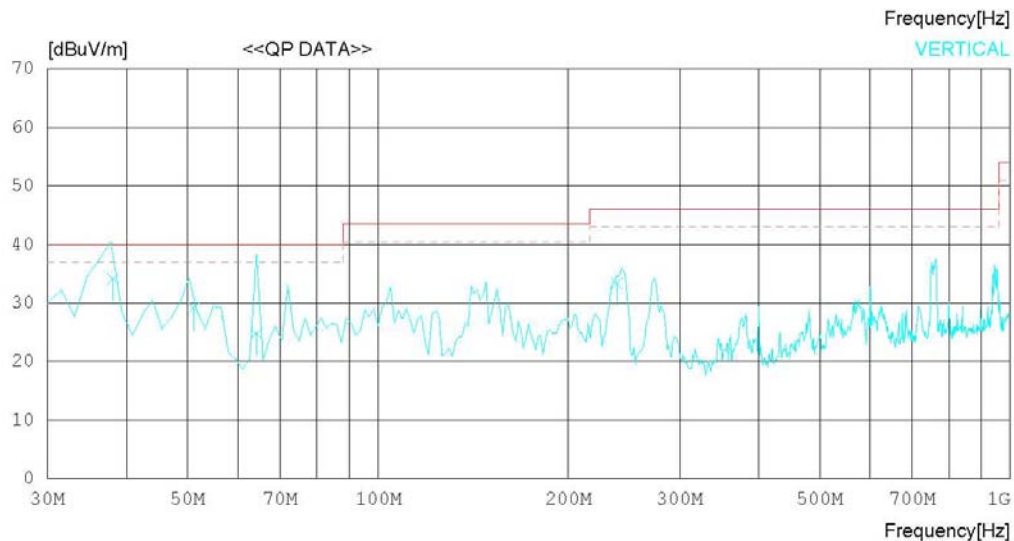
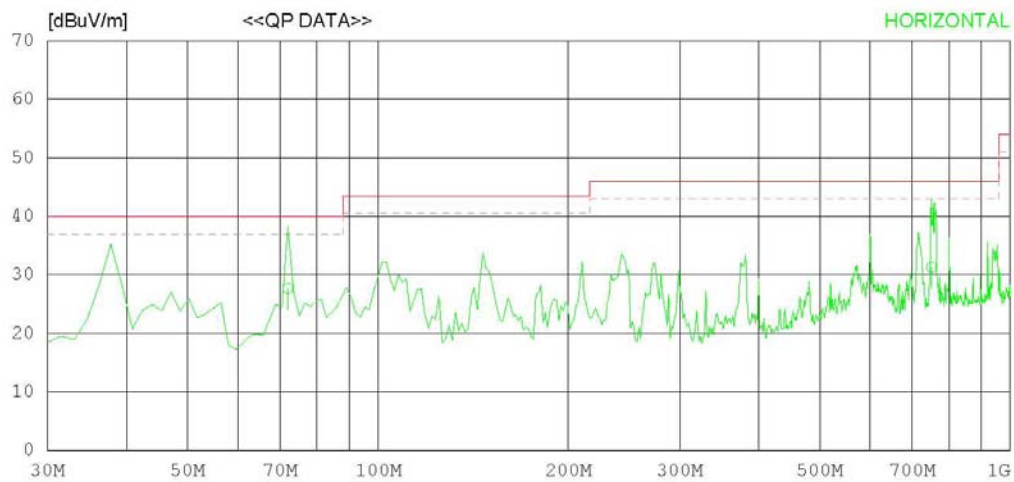
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 'C 35 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 °C 35 % 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	72.009	42.7	6.5	1.2	22.7	27.7	40.0	12.3	200	151
2	750.408	31.3	19.6	4.4	24.0	31.3	46.0	14.7	100	0
----- Vertical -----										
3	38.081	41.2	15.0	0.9	23.0	34.1	40.0	5.9	100	1
4	51.081	41.9	9.0	1.0	22.8	29.1	40.0	10.9	100	255
5	64.199	40.4	5.9	1.2	22.7	24.8	40.0	15.2	100	358
6	238.466	42.3	12.3	2.3	23.5	33.4	46.0	12.6	200	203

< USB MODE_1 GHz ~ 6 GHz_Peak >

RADIATED EMISSION

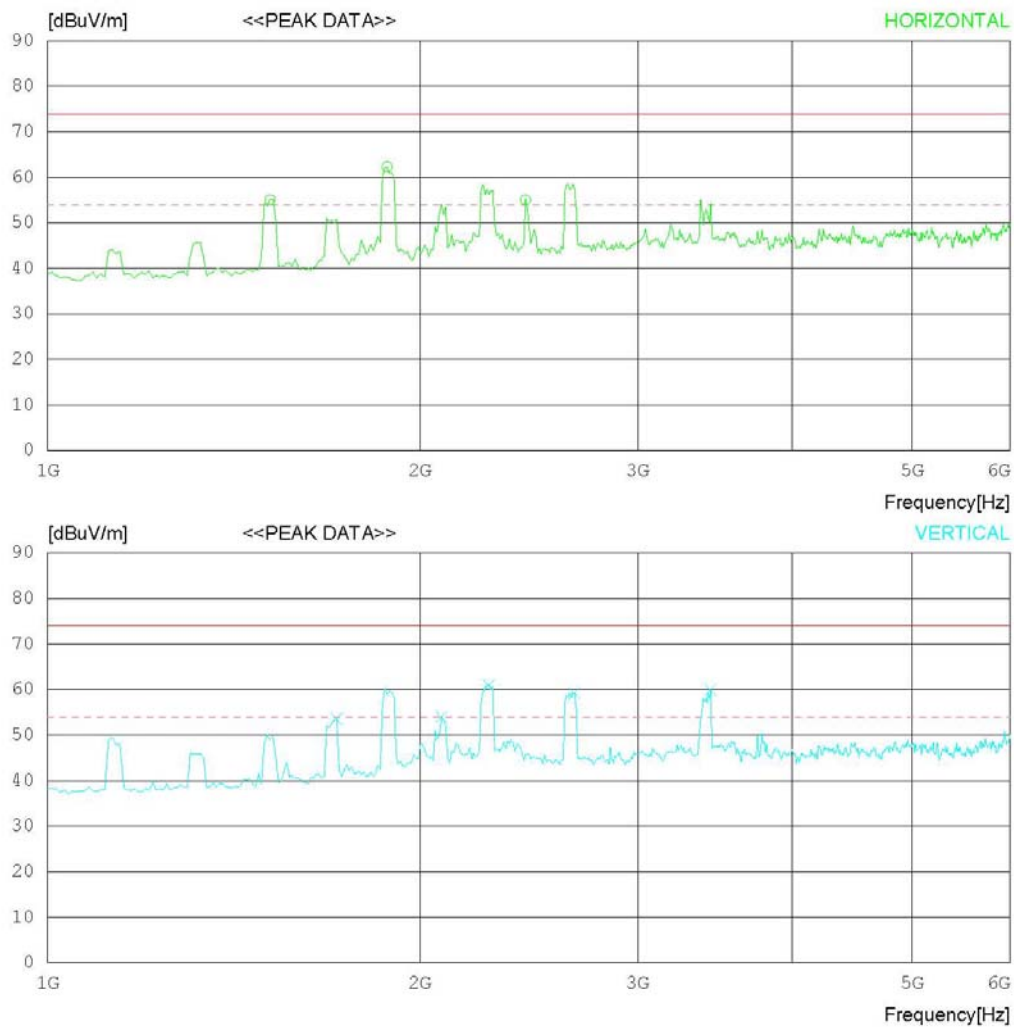
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 'C 36 % 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	1512.820	64.5	26.2	6.0	41.6	55.1	74.0	18.9	100	358
2	1881.410	69.7	27.5	6.8	41.7	62.3	74.0	11.7	100	191
3	2434.300	60.6	28.8	7.7	42.0	55.1	74.0	18.9	100	358
----- Vertical -----										
4	1713.141	62.0	26.9	6.4	41.7	53.6	74.0	20.4	100	1
5	2081.731	60.5	28.1	7.1	41.7	54.0	74.0	20	100	195
6	2274.042	66.8	28.5	7.4	41.8	60.9	74.0	13.1	100	226
7	2666.676	63.5	29.3	8.1	41.7	59.2	74.0	14.8	100	1
8	3435.918	61.5	31.0	9.4	42.0	59.9	74.0	14.1	100	1

< USB MODE_1 GHz ~ 6 GHz_Average >

RADIATED EMISSION

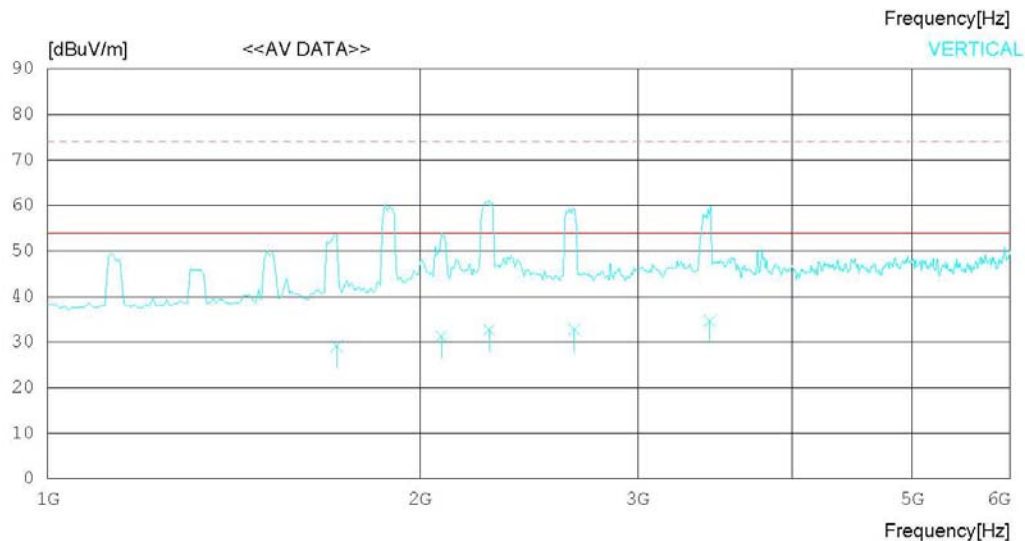
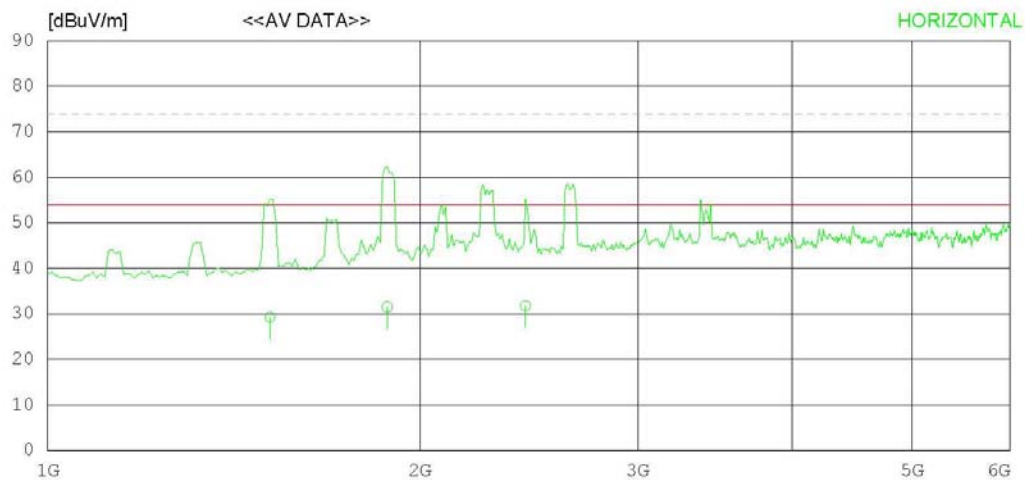
Date : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % 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 : 2012-03-29

Model Name : 55LM6400-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 22 'C 36 % R.H
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	1512.820	38.7	26.2	6.0	41.6	29.3	54.0	24.7	100	358
2	1881.410	38.9	27.5	6.8	41.7	31.5	54.0	22.5	100	191
3	2434.300	37.3	28.8	7.7	42.0	31.8	54.0	22.2	100	358
----- Vertical -----										
4	1713.141	37.5	26.9	6.4	41.7	29.1	54.0	24.9	100	1
5	2081.731	37.7	28.1	7.1	41.7	31.2	54.0	22.8	100	195
6	2274.042	38.6	28.5	7.4	41.8	32.7	54.0	21.3	100	226
7	2666.676	37.1	29.3	8.1	41.7	32.8	54.0	21.2	100	1
8	3429.971	36.4	31.0	9.3	42.0	34.7	54.0	19.3	100	1

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	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	2011.09.19	2012.09.19
☐ 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	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	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
☒ 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	2011.07.11	2012.07.11
☐ 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	2012.03.06	2013.03.06
☐ 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	2012.03.05	2013.03.05