

EMC TEST REPORT

Test item : LED LCD TV Monitor
Model No. : 55LM5800-UC
Order No. : 1112-01864
Date of receipt : 2011-12-28
Test duration : 2011-12-29 ~ 2012-01-09
Use of report : FCC CoC Marking
Date of Issue : 2012-01-10

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 ~ 41) % 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:

Witnessed by:

Reviewed by:


Assistant Manager
D.H.EUN


Manager
M.J.SONG


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.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.	55LM5800-UC
EUT Type	LED LCD TV Monitor
Serial No	NONE
FCC ID	BEJ55LM5800UC
Type of Sample Tested	Pre-Production
High Frequency	667 MHz
Rating	AC120V~, 60 Hz, 150 W, 1.5 A
Supplied Power for Test	AC120V, 60Hz
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	12-29	22	41	-
Radiated Disturbance	01-09	19	31	

4.3 Test result Summary

(1) Conducted Emission(DSUB + LAN MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
1.74350	N	46.3	Quasi-Peak	56.0	9.7

(2) Radiated Emission(DSUB + LAN MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
445.525	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

- DSUB+LAN MODE – Resolution : 1920 x 1080 Resolution (Worst Case)
- HDMI+LAN 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		
				DSUB	1.8	Shield		
				STEREO	1.6	Non-shield		
				PS/2	1.6	Non-shield		
				PS/2	1.8	Non-shield		
				LAN	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
USB MEMORY	X1	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 + LAN MODE >



Results of Conducted Emission

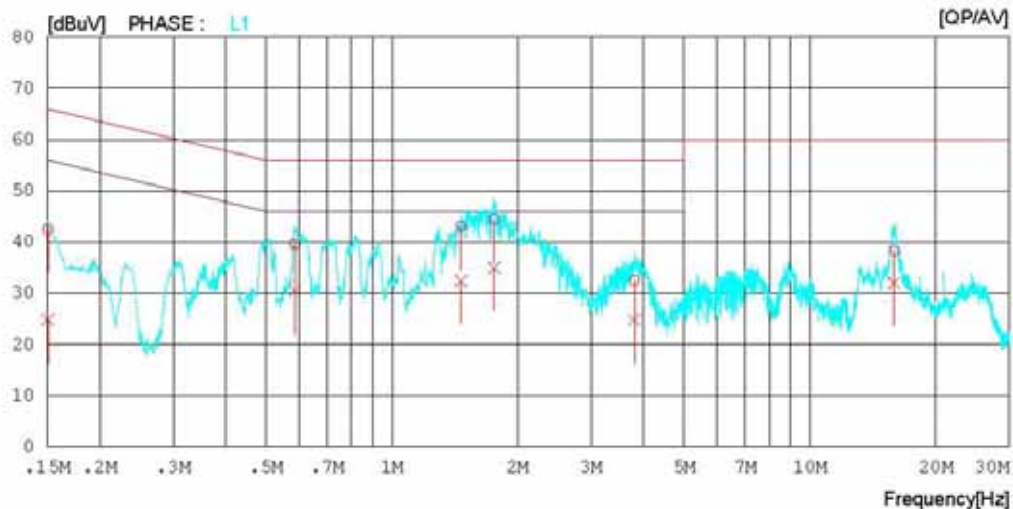
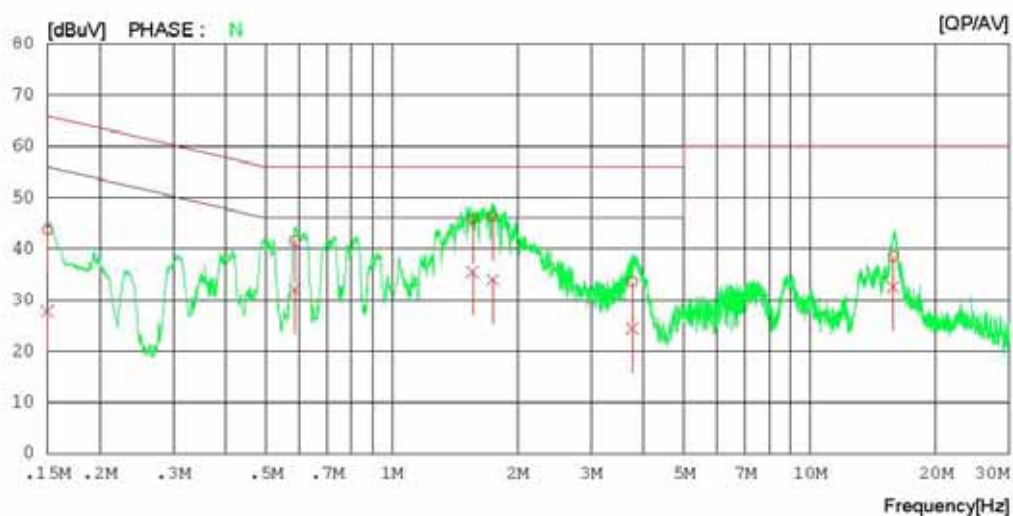
Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22°C 41 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22 °C 41 % 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	43.6	27.6	0.2	43.8	27.8	66.0	56.0	22.2	28.2	N
2	0.58635	41.5	31.9	0.1	41.6	32.0	56.0	46.0	14.4	14.0	N
3	1.56200	45.6	35.2	0.2	45.8	35.4	56.0	46.0	10.2	10.6	N
4	1.74350	46.1	33.7	0.2	46.3	33.9	56.0	46.0	9.7	12.1	N
5	3.75950	33.1	24.0	0.4	33.5	24.4	56.0	46.0	22.5	21.6	N
6	15.82750	37.6	31.5	1.0	38.6	32.5	60.0	50.0	21.4	17.5	N
7	0.15031	42.3	24.7	0.2	42.5	24.9	66.0	56.0	23.5	31.1	L1
8	0.58670	39.6	30.4	0.1	39.7	30.5	56.0	46.0	16.3	15.5	L1
9	1.46400	42.9	32.2	0.2	43.1	32.4	56.0	46.0	12.9	13.6	L1
10	1.75900	44.2	34.8	0.2	44.4	35.0	56.0	46.0	11.6	11.0	L1
11	3.80650	32.1	24.4	0.4	32.5	24.8	56.0	46.0	23.5	21.2	L1
12	15.91000	37.3	31.0	1.0	38.3	32.0	60.0	50.0	21.7	18.0	L1

< HDMI + LAN MODE >



Results of Conducted Emission

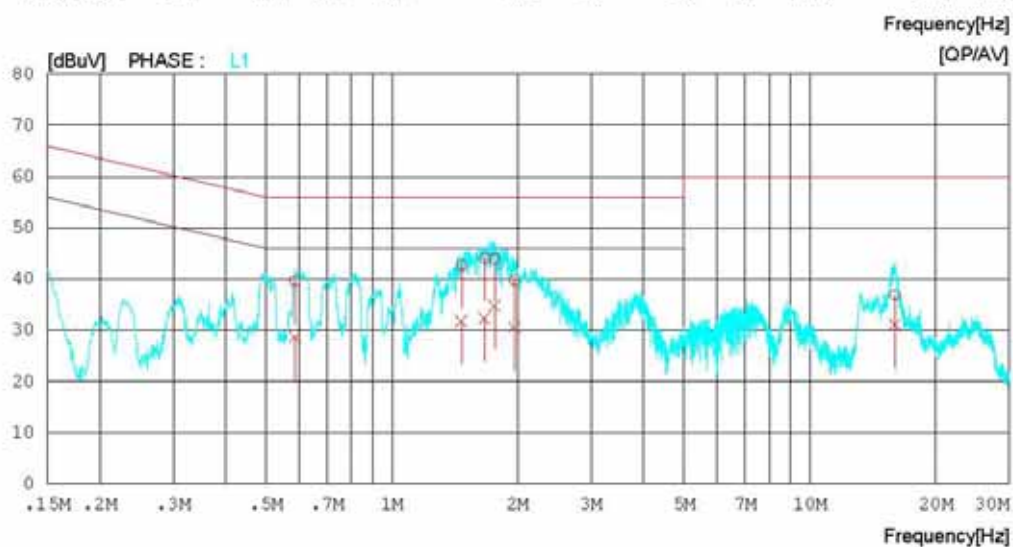
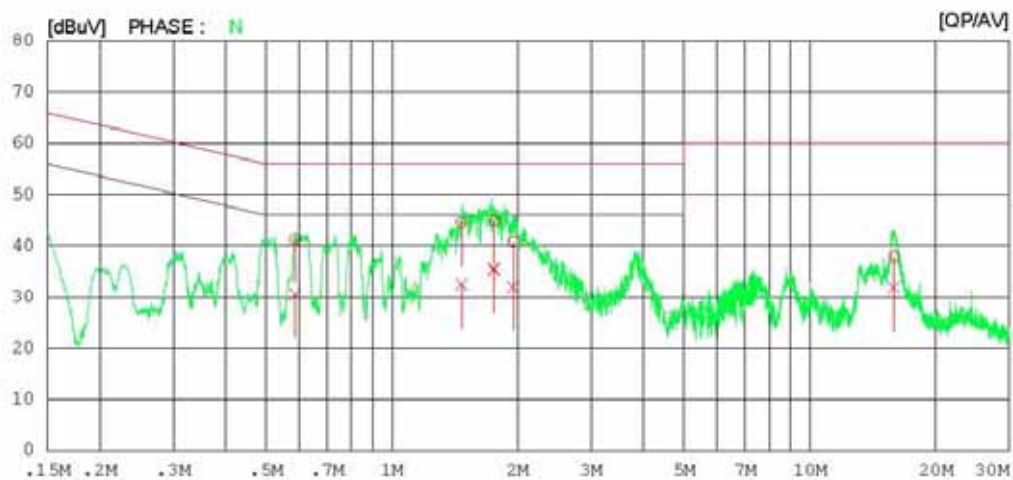
Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22°C 41 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22 °C 41 % 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	0.58681	41.2	30.4	0.1	41.3	30.5	56.0	46.0	14.7	15.5	N
2	1.46800	44.4	32.2	0.2	44.6	32.4	56.0	46.0	11.4	13.6	N
3	1.75750	44.7	35.4	0.2	44.9	35.6	56.0	46.0	11.1	10.4	N
4	1.75750	44.8	35.2	0.2	45.0	35.4	56.0	46.0	11.0	10.6	N
5	1.95250	40.5	31.7	0.2	40.7	31.9	56.0	46.0	15.3	14.1	N
6	15.91100	36.9	30.8	1.0	37.9	31.8	60.0	50.0	22.1	18.2	N
7	0.58578	39.6	28.6	0.1	39.7	28.7	56.0	46.0	16.3	17.3	L1
8	1.46700	42.5	31.6	0.2	42.7	31.8	56.0	46.0	13.3	14.2	L1
9	1.66750	43.9	32.2	0.2	44.1	32.4	56.0	46.0	11.9	13.6	L1
10	1.76150	43.8	34.6	0.2	44.0	34.8	56.0	46.0	12.0	11.2	L1
11	1.96600	39.6	30.4	0.2	39.8	30.6	56.0	46.0	16.2	15.4	L1
12	15.98800	35.9	30.2	1.0	36.9	31.2	60.0	50.0	23.1	18.8	L1

< USB MODE >



Results of Conducted Emission

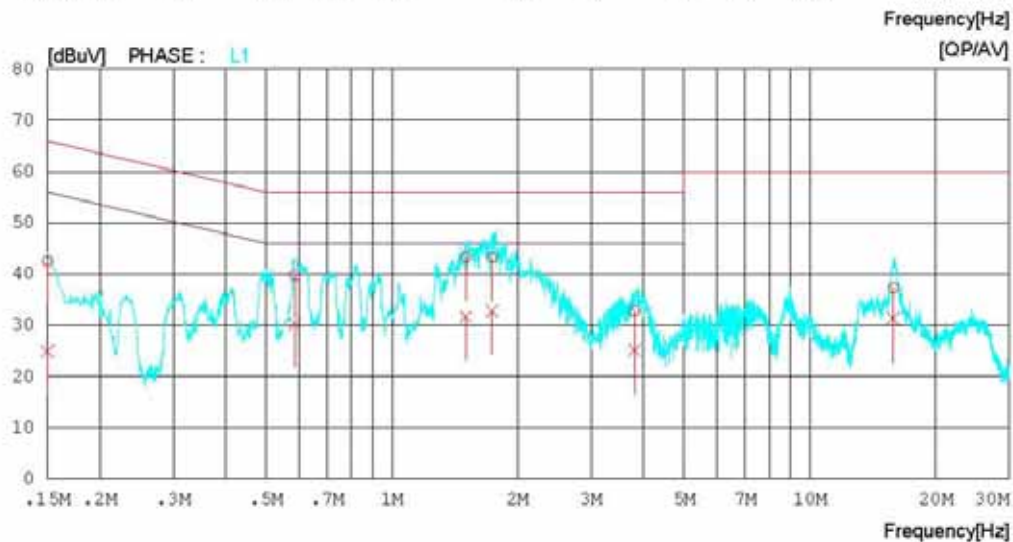
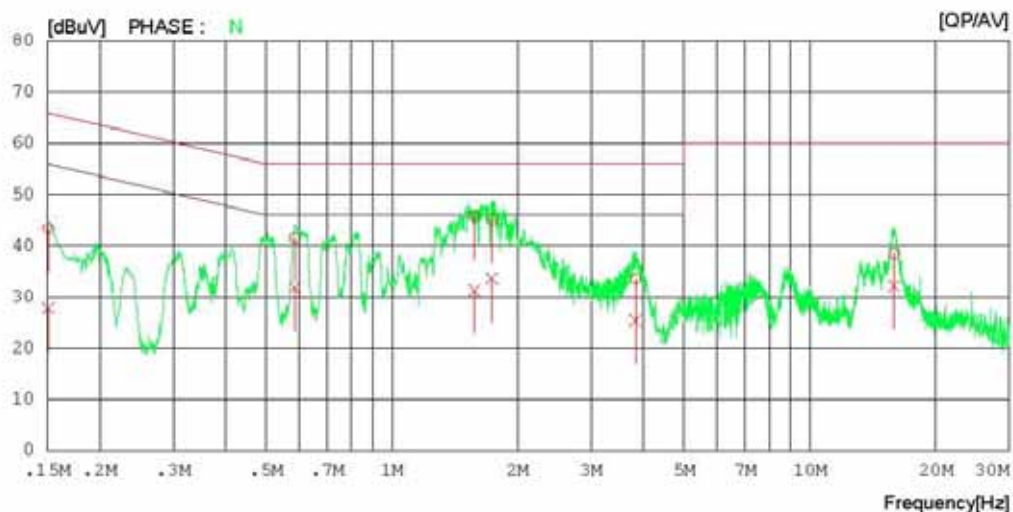
Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22°C 41% R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-29

Model No. : 55LM5800-UC
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 22 °C 41 % 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	0.15067	43.3	27.7	0.2	43.5	27.9	66.0	56.0	22.5	28.1	N
2	0.58560	41.4	31.7	0.1	41.5	31.8	56.0	46.0	14.5	14.2	N
3	1.57500	45.6	31.1	0.2	45.8	31.3	56.0	46.0	10.2	14.7	N
4	1.73900	45.0	33.4	0.2	45.2	33.6	56.0	46.0	10.8	12.4	N
5	3.82500	33.2	25.0	0.4	33.6	25.4	56.0	46.0	22.4	20.6	N
6	15.90850	37.5	31.1	1.0	38.5	32.1	60.0	50.0	21.5	17.9	N
7	0.15012	42.4	24.7	0.2	42.6	24.9	66.0	56.0	23.4	31.1	L1
8	0.58629	39.7	30.2	0.1	39.8	30.3	56.0	46.0	16.2	15.7	L1
9	1.50400	43.1	31.4	0.2	43.3	31.6	56.0	46.0	12.7	14.4	L1
10	1.73850	43.1	32.7	0.2	43.3	32.9	56.0	46.0	12.7	13.1	L1
11	3.80700	32.5	24.8	0.4	32.9	25.2	56.0	46.0	23.1	20.8	L1
12	15.83250	36.3	30.3	1.0	37.3	31.3	60.0	50.0	22.7	18.7	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 (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 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 (dBμV/m)	Quasi-peak (dBμV/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 (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Test Result

< DSUB + LAN MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

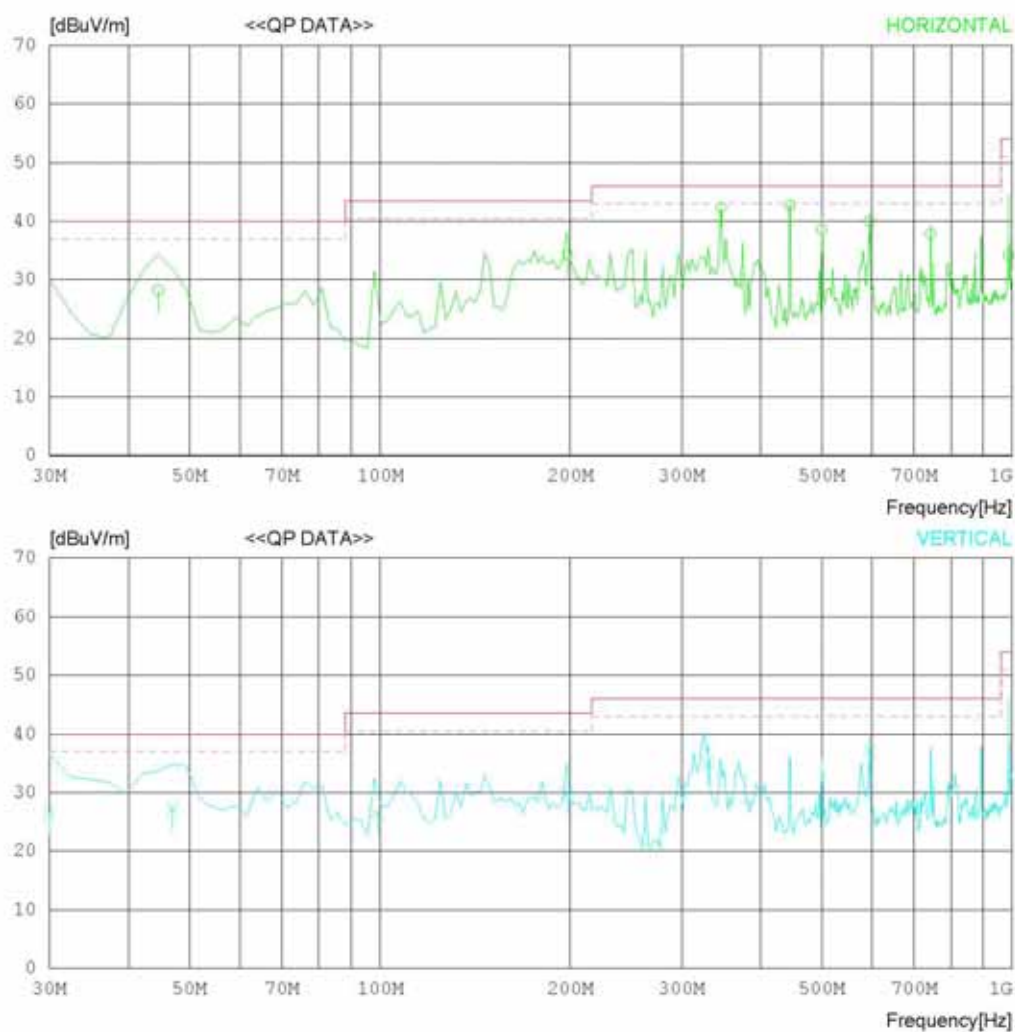
Date : 2012-01-09

Model Name : 55LM5800-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

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 : 2012-01-09

Model Name : 55LM5800-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 31 % R.H.
Test Condition : DSUB	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	44.550	35.6	14.2	1.0	22.6	28.2	40.0	11.8	201	206
2	198.009	45.8	9.7	2.0	23.2	34.3	43.5	9.2	100	1
3	346.520	48.9	14.8	2.7	24.1	42.3	46.0	3.7	100	208
4	445.525	47.2	16.8	3.2	24.5	42.7	46.0	3.3	100	238
5	499.975	42.1	17.7	3.4	24.6	38.6	46.0	7.4	100	164
6	594.015	41.8	18.7	3.9	24.4	40.0	46.0	6.0	201	0
7	742.948	37.8	19.5	4.4	23.9	37.8	46.0	8.2	100	148
8	987.150	31.0	21.2	4.9	22.9	34.2	54.0	19.8	100	129
----- Vertical -----										
9	30.000	31.2	17.4	0.8	22.7	26.7	40.0	13.3	134	1
10	46.975	36.7	12.3	1.0	22.6	27.4	40.0	12.6	100	358
11	99.017	37.2	10.6	1.5	22.7	26.6	43.5	16.9	121	221
12	198.000	41.5	9.7	2.0	23.2	30.0	43.5	13.5	100	36
13	330.000	42.0	14.5	2.7	24.0	35.2	46.0	10.8	100	199
14	594.013	38.9	18.7	3.9	24.4	37.1	46.0	8.9	100	23

< DSUB + LAN MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

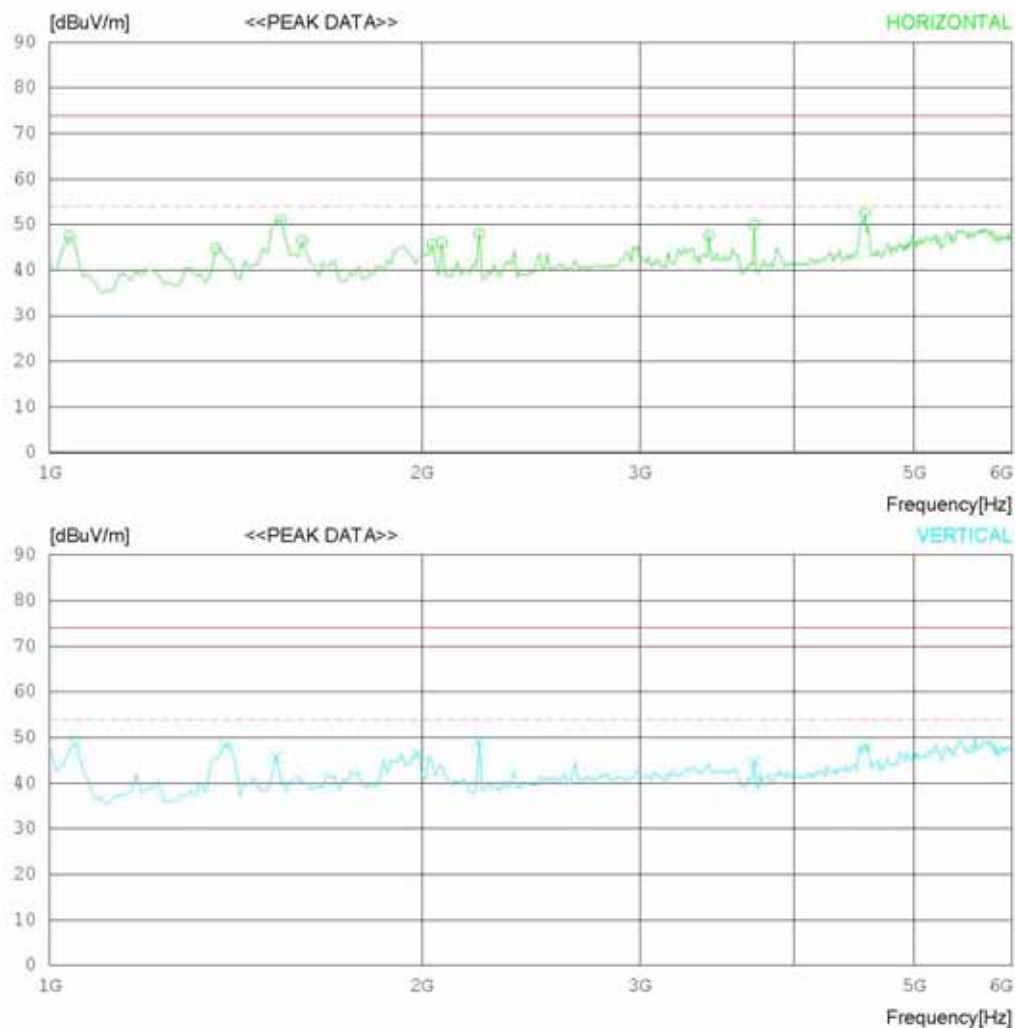
Date : 2012-01-09

Model Name : 55LM5800-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 19 °C 31 % 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 : 2012-01-09

Model Name : 55LM5800-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19°C 31 % 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	1037.500	60.6	23.7	4.9	41.8	47.4	74.0	26.6	100	92
2	1362.500	56.3	24.7	5.6	41.9	44.7	74.0	29.3	100	358
3	1537.500	61.8	25.1	6.0	41.9	51.0	74.0	23	100	358
4	1600.000	56.9	25.2	6.2	41.9	46.4	74.0	27.6	100	358
5	2037.500	55.1	25.4	7.1	42.0	45.6	74.0	28.4	100	358
6	2075.000	55.4	25.5	7.1	42.0	46.0	74.0	28	100	358
7	2225.000	56.5	26.2	7.3	42.0	48.0	74.0	26	100	358
8	3412.500	51.2	29.1	9.3	42.0	47.6	74.0	26.4	100	358
9	3712.500	52.6	29.6	9.7	41.9	50.0	74.0	24	100	358
10	4562.500	52.2	31.0	10.7	41.4	52.5	74.0	21.5	100	358
----- Vertical -----										
11	1050.000	61.6	23.8	4.9	41.8	48.5	74.0	25.5	100	1
12	1387.500	59.7	24.8	5.7	41.9	48.3	74.0	25.7	100	174
13	1525.000	56.6	25.1	6.0	41.9	45.8	74.0	28.2	100	157
14	1987.500	56.3	25.2	7.0	42.0	46.5	74.0	27.5	100	331
15	2225.000	57.5	26.2	7.3	42.0	49.0	74.0	25	100	115
16	3712.500	47.4	29.6	9.7	41.9	44.8	74.0	29.2	100	1

< DSUB + LAN MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

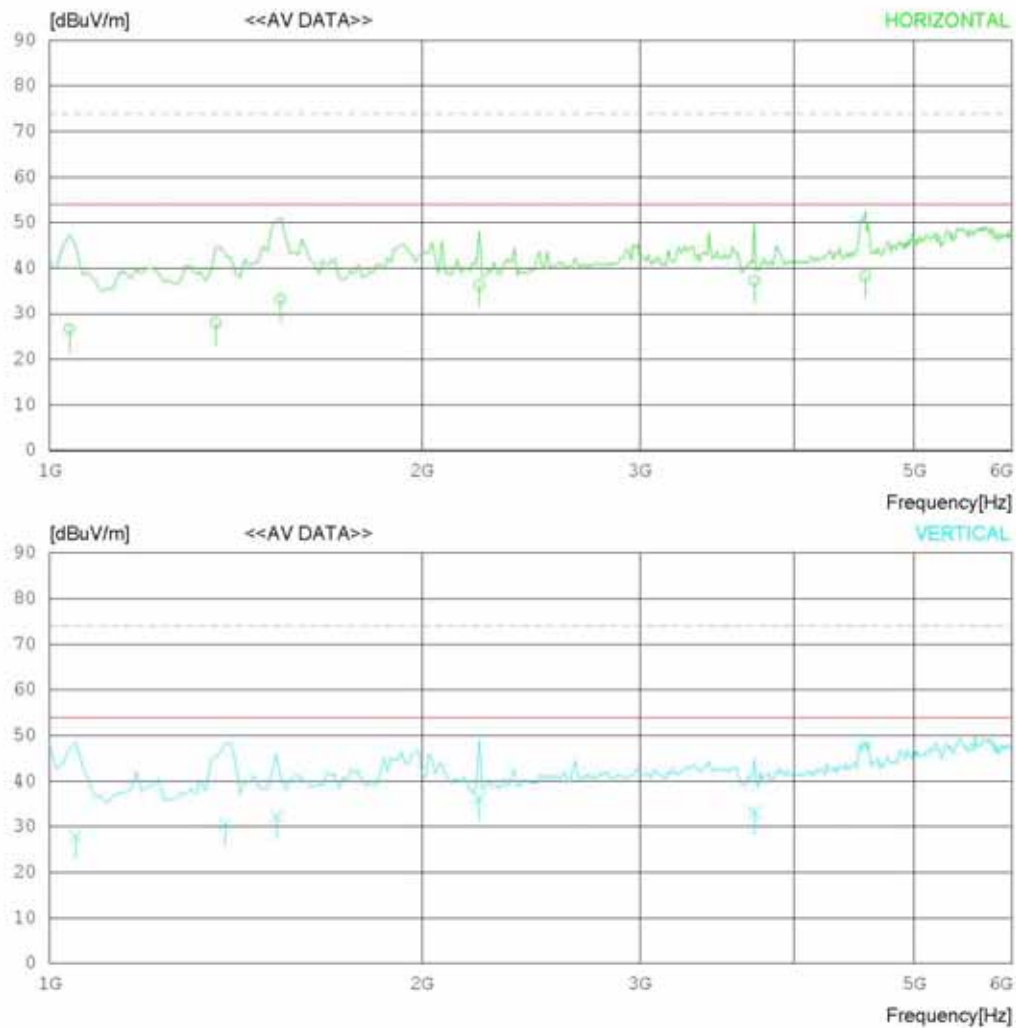
Date : 2012-01-09

Model Name : 55LM5800-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 19 °C 31 % 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 : 2012-01-09

Model Name : 55LM5800-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 19 °C 31 % 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	1037.500	39.9	23.7	4.9	41.8	26.7	54.0	27.3	100	92
2	1362.500	39.7	24.7	5.6	41.9	28.1	54.0	25.9	100	176
3	1537.500	44.1	25.1	6.0	41.9	33.3	54.0	20.7	100	358
4	2225.000	44.8	26.2	7.3	42.0	36.3	54.0	17.7	100	358
5	3712.500	39.9	29.6	9.7	41.9	37.3	54.0	16.7	100	358
6	4562.500	37.9	31.0	10.7	41.4	38.2	54.0	15.8	100	358
----- Vertical -----										
7	1050.000	41.0	23.8	4.9	41.8	27.9	54.0	26.1	100	23
8	1387.500	42.0	24.8	5.7	41.9	30.6	54.0	23.4	100	174
9	1525.000	43.1	25.1	6.0	41.9	32.3	54.0	21.7	100	157
10	2225.000	44.7	26.2	7.3	42.0	36.2	54.0	17.8	100	115
11	3712.500	35.8	29.6	9.7	41.9	33.2	54.0	20.8	100	1

< HDMI + LAN MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

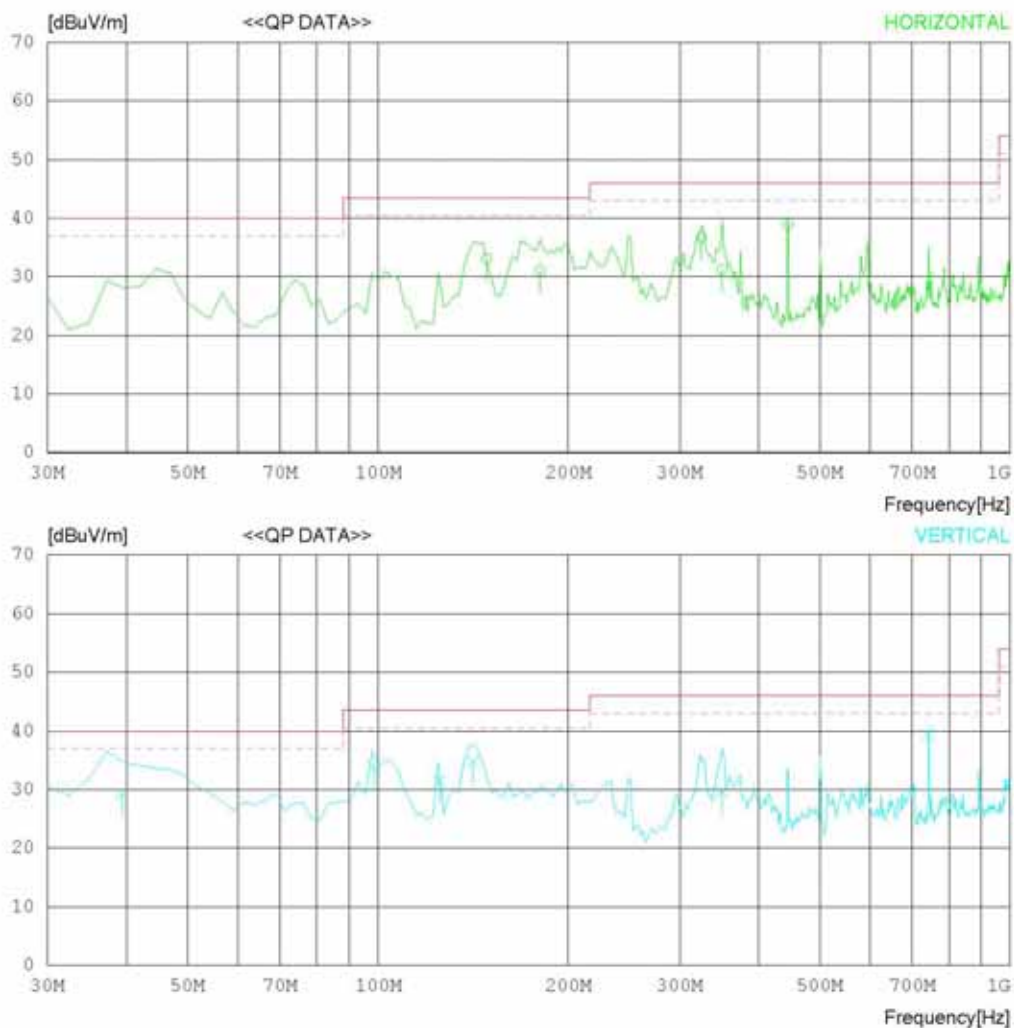
Date : 2012-01-09

Model Name : 55LM5800-UC
 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 : 2012-01-09

Model Name : 55LM5800-UC	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	148.450	44.0	10.5	1.7	23.1	33.1	43.5	10.4	143	179
2	180.350	42.5	9.8	2.0	23.2	31.1	43.5	12.4	200	358
3	324.438	43.6	14.4	2.7	24.0	36.7	46.0	9.3	100	1
4	350.000	37.6	14.9	2.8	24.1	31.2	46.0	14.8	100	223
5	445.053	43.5	16.7	3.2	24.5	38.9	46.0	7.1	100	193
----- Vertical -----										
6	39.325	36.7	14.3	0.9	22.6	29.3	40.0	10.7	100	260
7	98.450	44.5	10.5	1.5	22.7	33.8	43.5	9.7	100	358
8	125.000	41.0	11.8	1.6	22.9	31.5	43.5	12.0	100	51
9	141.200	45.2	10.9	1.6	23.0	34.7	43.5	8.8	100	358
10	350.100	36.1	14.9	2.8	24.1	29.7	46.0	16.3	178	123
11	741.750	39.3	19.5	4.4	23.9	39.3	46.0	6.7	100	161

< HDMI + LAN MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

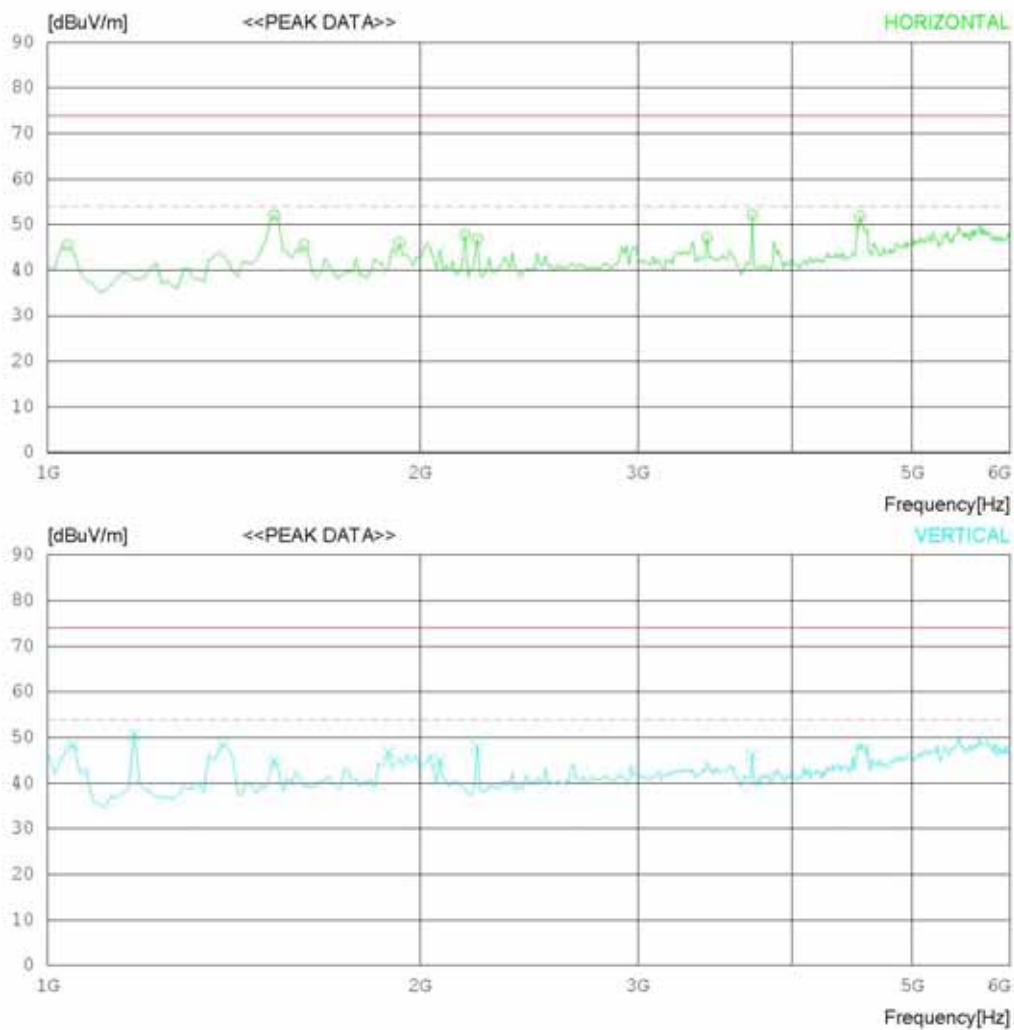
Date : 2012-01-09

Model Name : 55LM5800-UC
 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) - 18G(Peak)
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)



RADIATED EMISSION

Date : 2012-01-09

Model Name : 55LM5800-UC	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) - 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	58.7	23.7	4.9	41.8	45.5	74.0	28.5	100	358
2	1525.000	62.9	25.1	6.0	41.9	52.1	74.0	21.9	100	358
3	1612.500	56.0	25.2	6.2	41.9	45.5	74.0	28.5	100	227
4	1925.000	55.9	25.2	6.9	42.0	46.0	74.0	28	100	129
5	2175.000	56.6	25.9	7.3	42.0	47.8	74.0	26.2	100	95
6	2225.000	55.3	26.2	7.3	42.0	46.8	74.0	27.2	100	358
7	3412.500	50.7	29.1	9.3	42.0	47.1	74.0	26.9	100	358
8	3712.500	54.8	29.6	9.7	41.9	52.2	74.0	21.8	100	125
9	4537.500	51.6	30.9	10.7	41.4	51.8	74.0	22.2	100	242
----- Vertical -----										
10	1050.000	61.3	23.8	4.9	41.8	48.2	74.0	25.8	100	1
11	1175.000	63.1	24.2	5.2	41.8	50.7	74.0	23.3	100	2
12	1387.500	59.9	24.8	5.7	41.9	48.5	74.0	25.5	100	1
13	1525.000	55.6	25.1	6.0	41.9	44.8	74.0	29.2	100	159
14	1887.500	56.7	25.2	6.8	42.0	46.7	74.0	27.3	100	2
15	2075.000	54.3	25.5	7.1	42.0	44.9	74.0	29.1	100	208
16	2225.000	56.5	26.2	7.3	42.0	48.0	74.0	26	100	115
17	3712.500	48.8	29.6	9.7	41.9	46.2	74.0	27.8	100	153

< HDMI + LAN MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

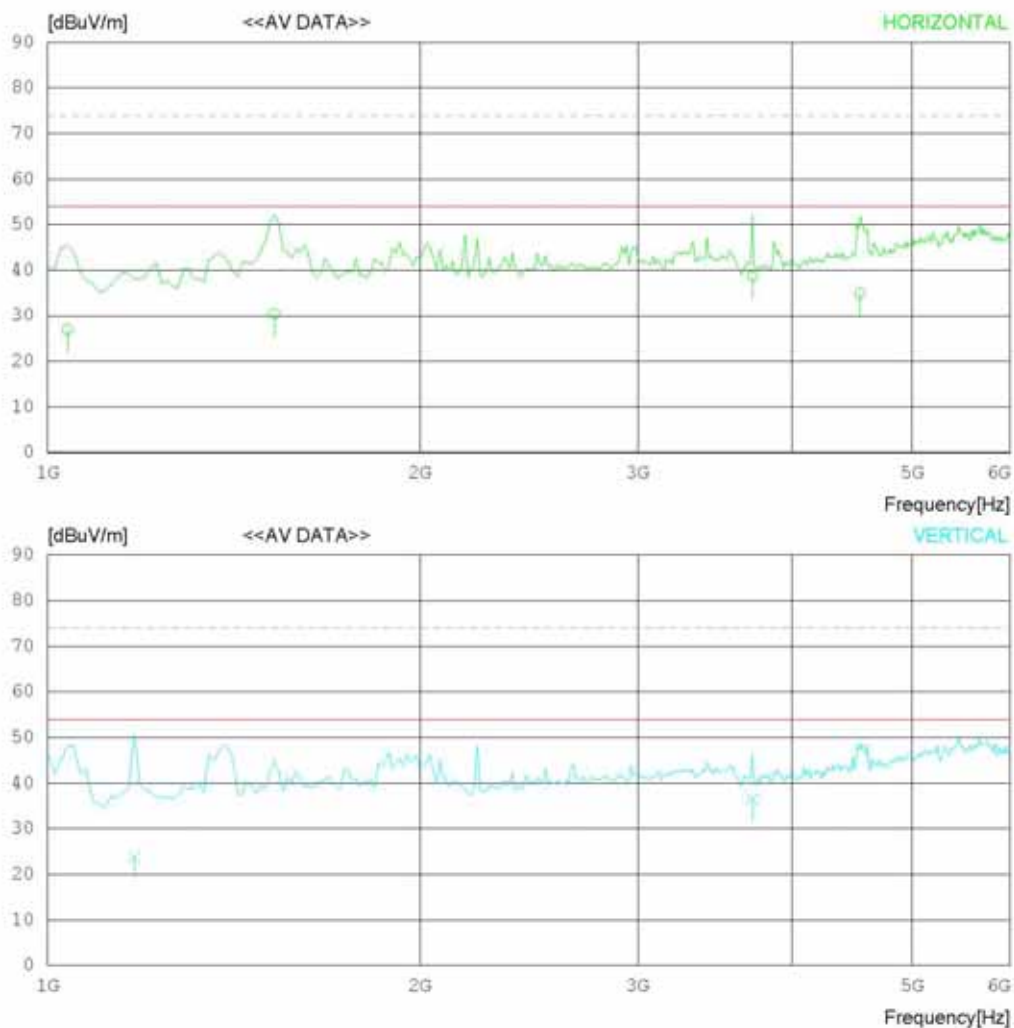
Date : 2012-01-09

Model Name : 55LM5800-UC
 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) - 18G(Avg)
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)



RADIATED EMISSION

Date : 2012-01-09

Model Name : 55LM5800-UC	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) - 18G(Avg)
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	AV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1037.500	40.1	23.7	4.9	41.8	26.9	54.0	27.1	100	358
2	1525.000	41.2	25.1	6.0	41.9	30.4	54.0	23.6	100	358
3	3712.500	41.2	29.6	9.7	41.9	38.6	54.0	15.4	100	125
4	4537.500	34.7	30.9	10.7	41.4	34.9	54.0	19.1	100	242
----- Vertical -----										
5	1175.000	36.2	24.2	5.2	41.8	23.8	54.0	30.2	100	2
6	3712.500	39.1	29.6	9.7	41.9	36.5	54.0	17.5	100	153

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

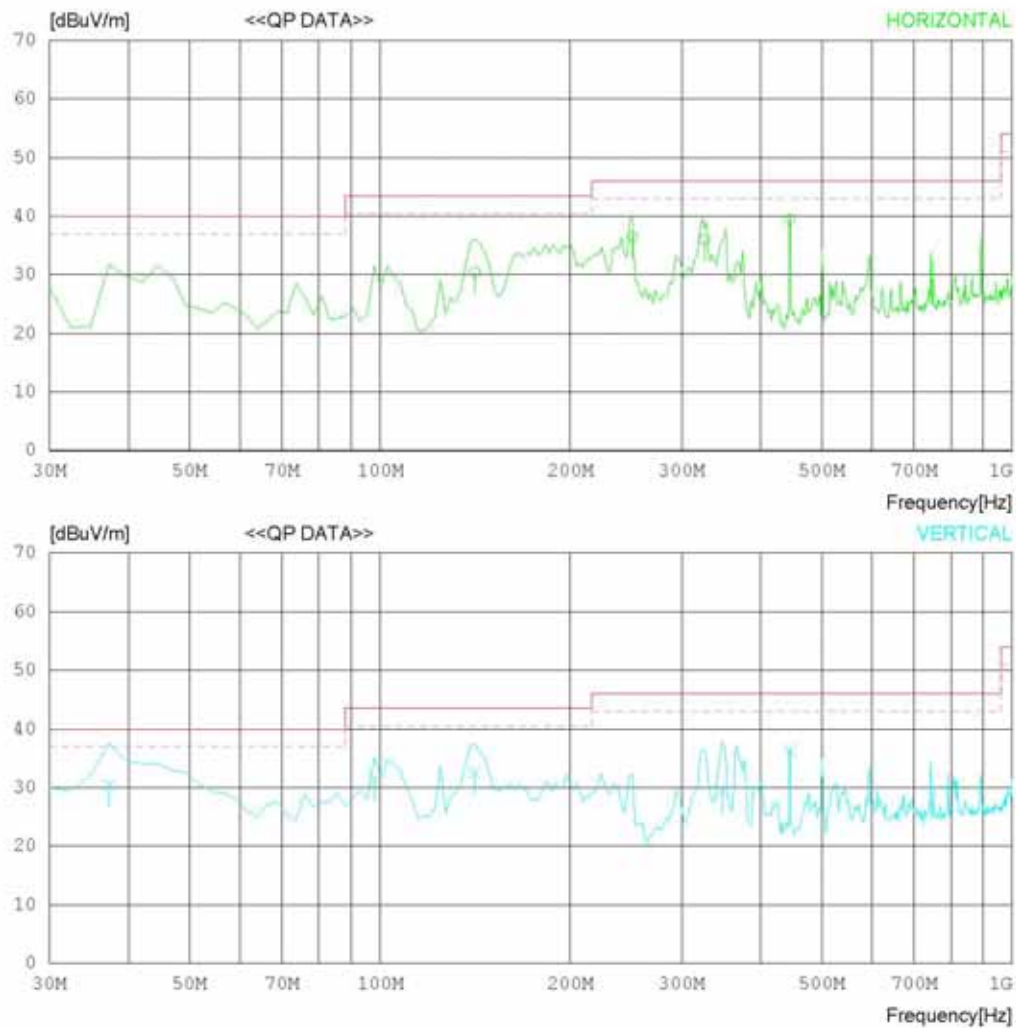
Date : 2012-01-09

Model Name : 55LM5800-UC
 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 : 2012-01-09

Model Name : 55LM5800-UC	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	141.225	41.0	10.9	1.6	23.0	30.5	43.5	13.0	100	181
2	250.675	44.5	13.1	2.4	23.5	36.5	46.0	9.5	163	23
3	325.726	42.9	14.4	2.7	24.0	36.0	46.0	10.0	100	140
4	445.050	44.0	16.7	3.2	24.5	39.4	46.0	6.6	100	206
----- Vertical -----										
5	37.275	36.6	15.4	0.9	22.6	30.3	40.0	9.7	100	358
6	97.900	42.3	10.4	1.5	22.7	31.5	43.5	12.0	100	358
7	141.225	43.0	10.9	1.6	23.0	32.5	43.5	11.0	100	28
8	347.675	35.8	14.9	2.8	24.1	29.4	46.0	16.6	100	358
9	445.050	41.0	16.7	3.2	24.5	36.4	46.0	9.6	199	81

< USB MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

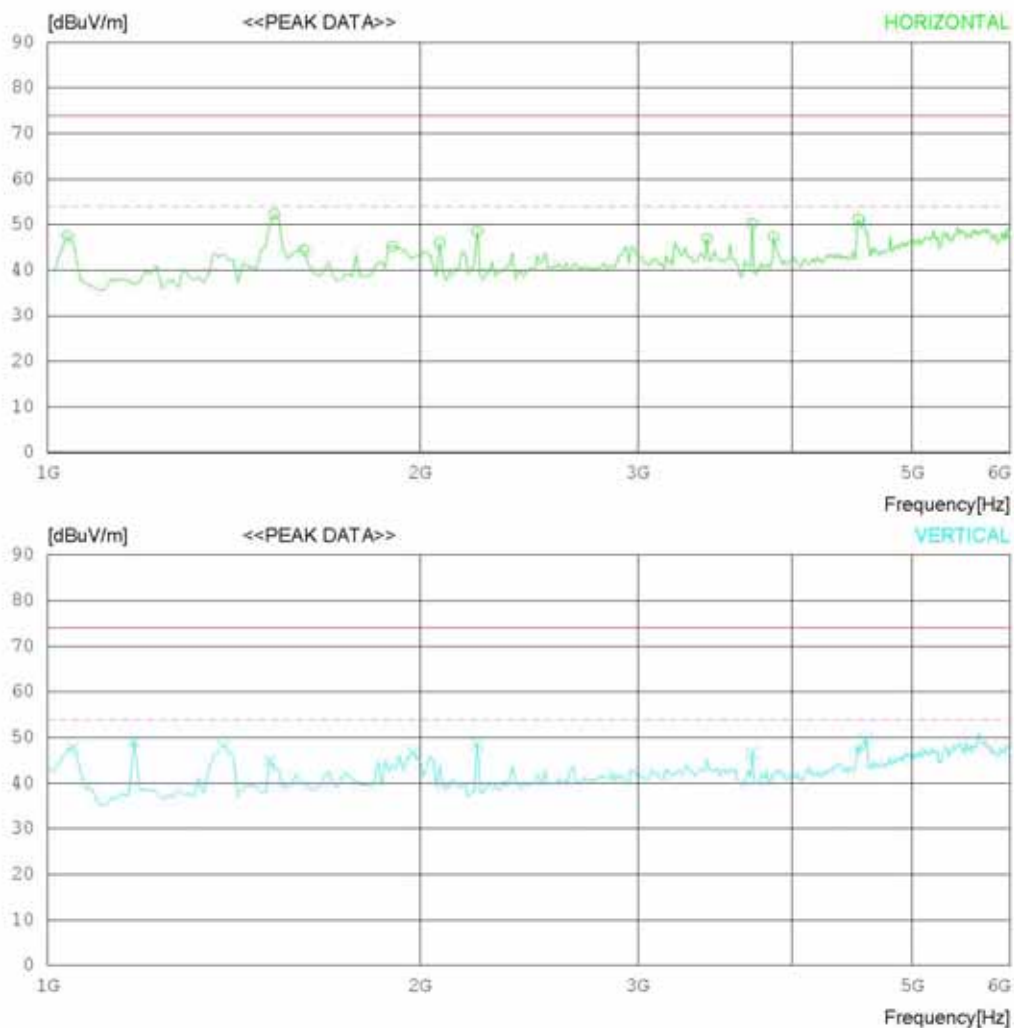
Date : 2012-01-09

Model Name : 55LM5800-UC
 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) - 18G(Peak)
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)



RADIATED EMISSION

Date : 2012-01-09

Model Name : 55LM5800-UC	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) - 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	60.7	23.7	4.9	41.8	47.5	74.0	26.5	100	358
2	1525.000	63.1	25.1	6.0	41.9	52.3	74.0	21.7	100	227
3	1612.500	54.9	25.2	6.2	41.9	44.4	74.0	29.6	100	358
4	1900.000	55.3	25.2	6.8	42.0	45.3	74.0	28.7	100	358
5	2075.000	55.4	25.5	7.1	42.0	46.0	74.0	28	100	358
6	2225.000	57.0	26.2	7.3	42.0	48.5	74.0	25.5	100	179
7	3412.500	50.6	29.1	9.3	42.0	47.0	74.0	27	100	140
8	3712.500	52.8	29.6	9.7	41.9	50.2	74.0	23.8	100	358
9	3862.500	49.4	29.9	9.8	41.8	47.3	74.0	26.7	100	158
10	4525.000	51.1	30.8	10.7	41.4	51.2	74.0	22.8	100	241
----- Vertical -----										
11	1050.000	60.9	23.8	4.9	41.8	47.8	74.0	26.2	100	1
12	1175.000	61.4	24.2	5.2	41.8	49.0	74.0	25	100	93
13	1387.500	59.6	24.8	5.7	41.9	48.2	74.0	25.8	100	176
14	1512.500	55.6	25.1	6.0	41.9	44.8	74.0	29.2	100	184
15	1975.000	56.4	25.2	7.0	42.0	46.6	74.0	27.4	100	1
16	2225.000	57.2	26.2	7.3	42.0	48.7	74.0	25.3	100	116
17	3712.500	49.2	29.6	9.7	41.9	46.6	74.0	27.4	100	154
18	4587.500	49.0	31.1	10.8	41.4	49.5	74.0	24.5	100	194

< USB MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

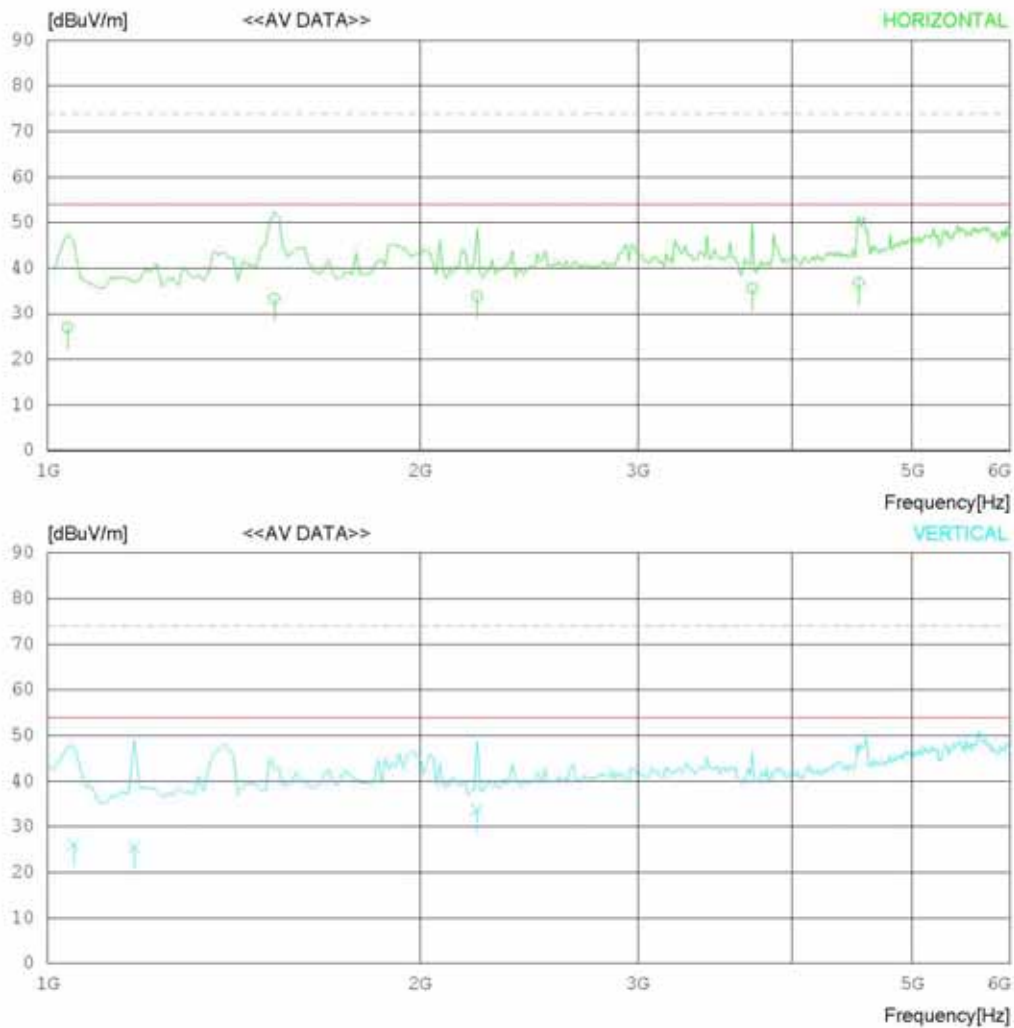
Date : 2012-01-09

Model Name : 55LM5800-UC
 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) - 18G(Avg)
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)



RADIATED EMISSION

Date : 2012-01-09

Model Name : 55LM5800-UC	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) - 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	1037.500	40.2	23.7	4.9	41.8	27.0	54.0	27.0	100	358
2	1525.000	44.2	25.1	6.0	41.9	33.4	54.0	20.6	100	227
3	2225.000	42.3	26.2	7.3	42.0	33.8	54.0	20.2	100	179
4	3712.500	38.2	29.6	9.7	41.9	35.6	54.0	18.4	100	167
5	4525.000	36.7	30.8	10.7	41.4	36.8	54.0	17.2	100	241
----- Vertical -----										
6	1050.000	39.2	23.8	4.9	41.8	26.1	54.0	27.9	100	176
7	1175.000	37.8	24.2	5.2	41.8	25.4	54.0	28.6	100	93
8	2225.000	42.1	26.2	7.3	42.0	33.6	54.0	20.4	100	116

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	2011.01.11	2012.01.11
☐ LISN	KNW-242	KYORITSU	8-654-15	2011.07.01	2012.07.01
☐ 50 OHM TERMINATOR	CT-01	TME	N/A	2011.01.11	2012.01.11
☒ 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	2011.01.11	2012.01.11

2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒ EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2011.01.20	2012.01.20
☒ 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	2011.01.11	2012.01.11
☒ AMPLIFIER	MLA-00108-B02-36	TSJ	1518831	2011.01.11	2012.01.11
☐ 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