

EMC TEST REPORT

Test item : LED LCD TV Monitor
Model No. : 55LM8600-UC
Order No. : 1112-01714
Date of receipt : 2011-12-08
Test duration : 2011-12-13 ~ 2011-12-20
Use of report : FCC CoC Marking
Date of Issue : 2011-12-26

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 : (20 ~ 22) °C,
Humidity : (37 ~ 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:



Assistant Manager
D.H.EUN

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.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.	55LM8600-UC
EUT Type	LED LCD TV Monitor
Serial No	NONE
FCC ID	BEJ55LM8600UC
Type of Sample Tested	Pre-Production
High Frequency	800 MHz
Rating	AC100-240 V~, 50/60 Hz, 1.7 A, 170 W
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

□ Formats Supported

PC Input Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
HDMI-PC / RGB-PC	640x350	31.468	70.09
	720x400	31.469	70.08
	640x480	31.469	59.94
	800x600	37.879	60.31
	1024x768	48.363	60.00
	1152x864	54.348	60.053
	1360x768	47.712	60.015
	1920x1080	67.5	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	12-14	21	37	-
Radiated Disturbance	12-13	20	41	
	12-20	22	41	

4.3 Test result Summary

(1) Conducted Emission(HDMI + LAN MODE)

Frequency [MHz]	Phase	Result [dBμV]	Detector	Limit [dBμV]	Margin [dB]
1.88250	L1	37.9	Average	46.0	8.1

(2) Radiated Emission(HDMI + LAN MODE)

Frequency [MHz]	Pol.	Result [dB(μV/m)]	Detector	Limit [dB(μV/m)]	Margin [dB]
3336.427	V	47.9	Average	54.0	6.1

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
				DSUB	1.5	Shield		
				HDMI	1.8	Shield		
				STEREO	1.6	Non-shield		
				USB	-	-		
				PS/2	1.6	Non-shield		
				PS/2	1.8	Non-shield		
				LAN	2.5	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	POP-S2	N/A	MEMORIVE	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

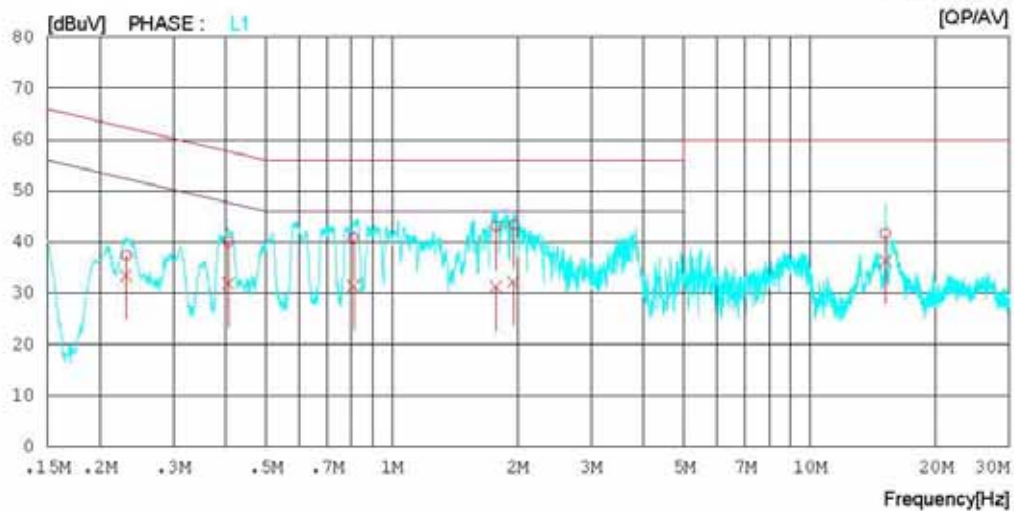
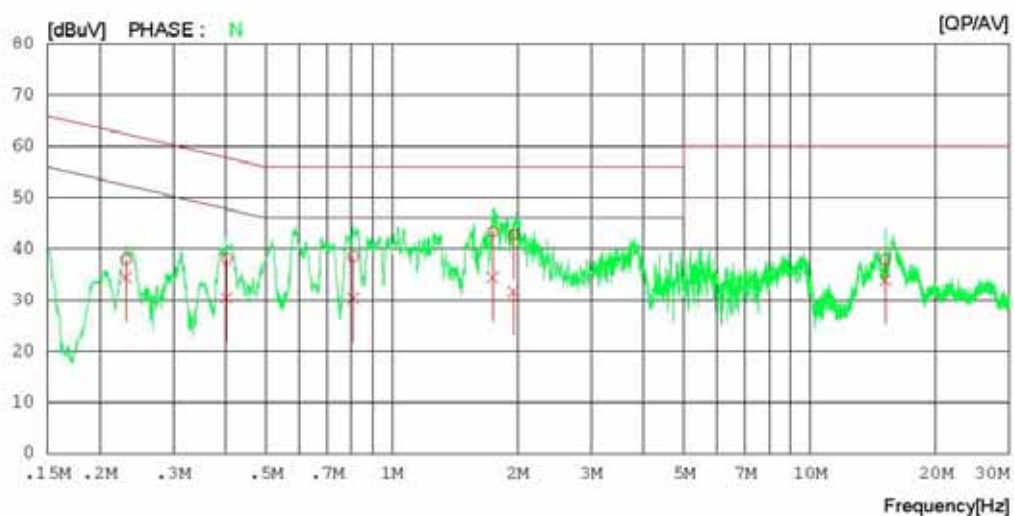
Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % 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	0.23160	37.8	34.3	0.1	37.9	34.4	62.4	52.4	24.5	18.0	N
2	0.40285	37.9	30.2	0.2	38.1	30.4	57.8	47.8	19.7	17.4	N
3	0.80958	38.3	30.0	0.2	38.5	30.2	56.0	46.0	17.5	15.8	N
4	1.74400	43.2	34.3	0.2	43.4	34.5	56.0	46.0	12.6	11.5	N
5	1.95500	42.6	31.5	0.2	42.8	31.7	56.0	46.0	13.2	14.3	N
6	15.16150	37.0	32.9	0.9	37.9	33.8	60.0	50.0	22.1	16.2	N
7	0.23154	37.3	33.4	0.1	37.4	33.5	62.4	52.4	25.0	18.9	L1
8	0.40616	39.9	31.7	0.2	40.1	31.9	57.7	47.7	17.6	15.8	L1
9	0.81026	40.6	31.2	0.2	40.8	31.4	56.0	46.0	15.2	14.6	L1
10	1.77750	42.9	31.1	0.2	43.1	31.3	56.0	46.0	12.9	14.7	L1
11	1.95400	43.2	32.0	0.2	43.4	32.2	56.0	46.0	12.6	13.8	L1
12	15.15900	40.7	35.4	0.9	41.6	36.3	60.0	50.0	18.4	13.7	L1

< HDMI + LAN MODE >



Results of Conducted Emission

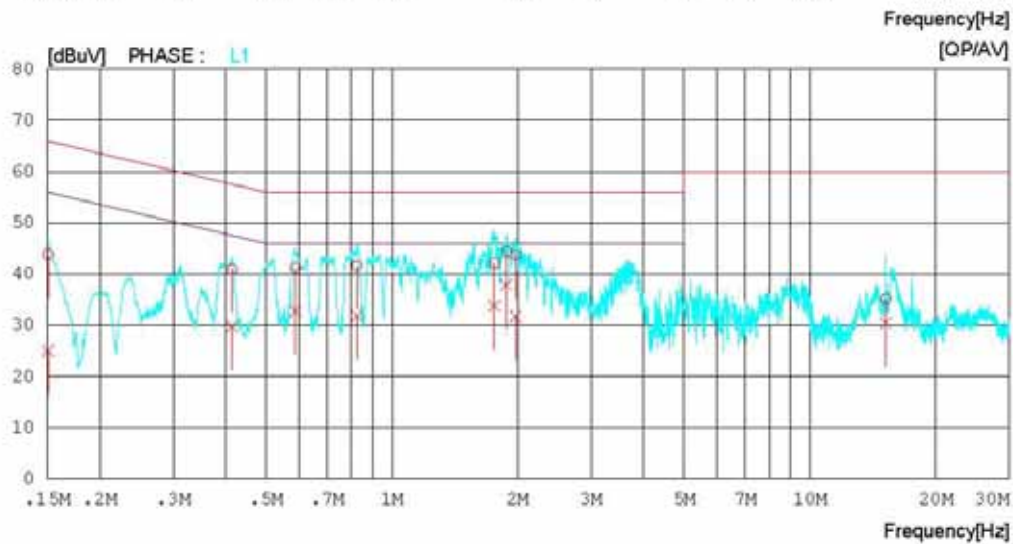
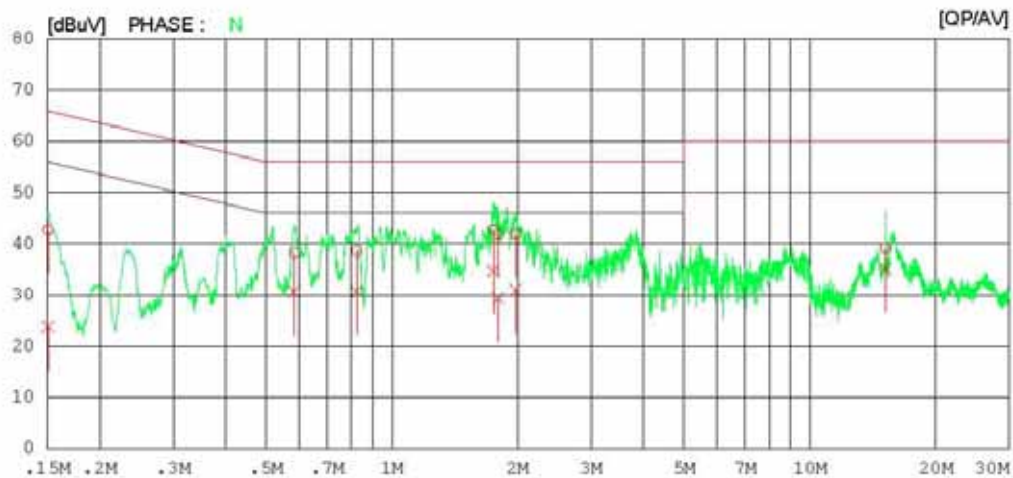
Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B OP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % 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	0.15050	42.5	23.6	0.2	42.7	23.8	66.0	56.0	23.3	32.2	N
2	0.58431	38.2	30.5	0.1	38.3	30.6	56.0	46.0	17.7	15.4	N
3	0.82558	38.5	30.5	0.2	38.7	30.7	56.0	46.0	17.3	15.3	N
4	1.75050	42.5	34.6	0.2	42.7	34.8	56.0	46.0	13.3	11.2	N
5	1.79800	41.7	29.2	0.2	41.9	29.4	56.0	46.0	14.1	16.6	N
6	1.98100	41.7	30.8	0.2	41.9	31.0	56.0	46.0	14.1	15.0	N
7	15.16200	38.3	34.2	0.9	39.2	35.1	60.0	50.0	20.8	14.9	N
8	0.15068	43.6	24.8	0.2	43.8	25.0	66.0	56.0	22.2	31.0	L1
9	0.41500	40.7	29.6	0.2	40.9	29.8	57.5	47.5	16.6	17.7	L1
10	0.58793	41.2	32.7	0.1	41.3	32.8	56.0	46.0	14.7	13.2	L1
11	0.82435	41.4	31.7	0.2	41.6	31.9	56.0	46.0	14.4	14.1	L1
12	1.75900	41.9	33.6	0.2	42.1	33.8	56.0	46.0	13.9	12.2	L1
13	1.88250	44.2	37.7	0.2	44.4	37.9	56.0	46.0	11.6	8.1	L1
14	1.98050	43.5	31.6	0.2	43.7	31.8	56.0	46.0	12.3	14.2	L1
15	15.19350	34.3	29.5	0.9	35.2	30.4	60.0	50.0	24.8	19.6	L1

< USB MODE >



Results of Conducted Emission

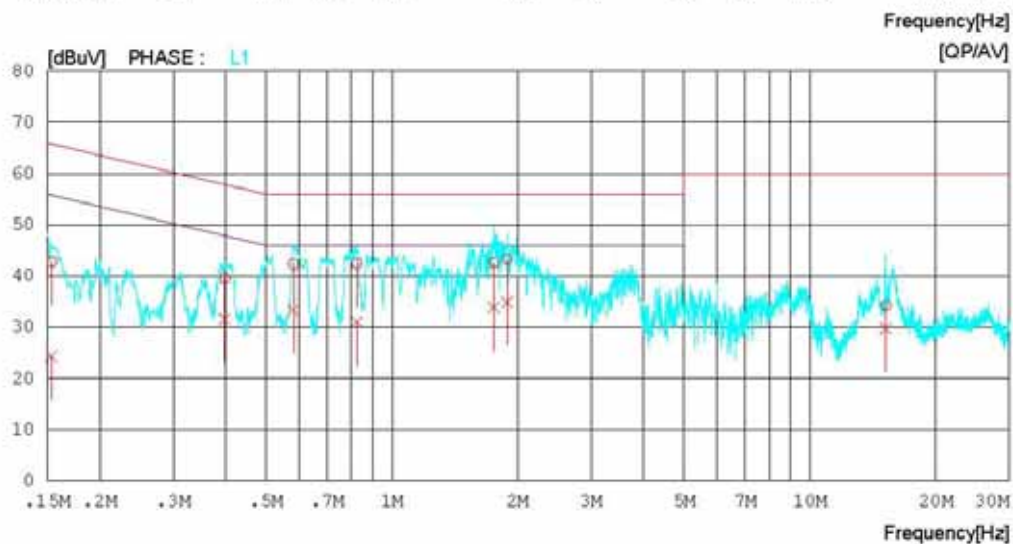
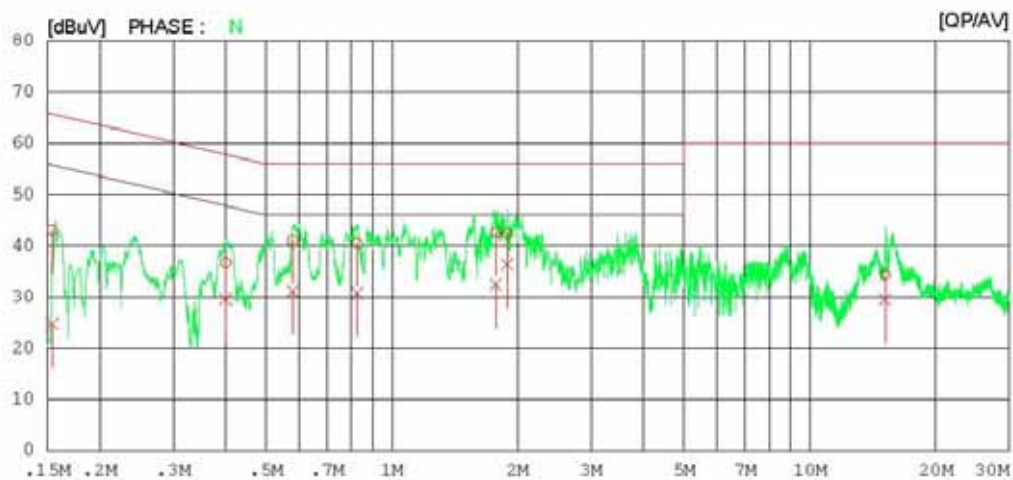
Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B OP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-14

Model No. : 55LM8600-UC
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 21 °C 37 % 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	0.15385	42.9	24.6	0.2	43.1	24.8	65.8	55.8	22.7	31.0	N
2	0.40074	36.5	29.4	0.2	36.7	29.6	57.8	47.8	21.1	18.2	N
3	0.57973	40.9	31.0	0.1	41.0	31.1	56.0	46.0	15.0	14.9	N
4	0.82583	40.3	30.5	0.2	40.5	30.7	56.0	46.0	15.5	15.3	N
5	1.77550	42.4	32.2	0.2	42.6	32.4	56.0	46.0	13.4	13.6	N
6	1.88750	42.2	36.2	0.2	42.4	36.4	56.0	46.0	13.6	9.6	N
7	15.13050	33.4	28.6	0.9	34.3	29.5	60.0	50.0	25.7	20.5	N
8	0.15356	42.6	24.2	0.2	42.8	24.4	65.8	55.8	23.0	31.4	L1
9	0.39830	39.4	31.4	0.2	39.6	31.6	57.9	47.9	18.3	16.3	L1
10	0.58223	42.3	33.3	0.1	42.4	33.4	56.0	46.0	13.6	12.6	L1
11	0.82576	42.3	30.8	0.2	42.5	31.0	56.0	46.0	13.5	15.0	L1
12	1.75450	42.4	33.7	0.2	42.6	33.9	56.0	46.0	13.4	12.1	L1
13	1.88850	43.1	34.7	0.2	43.3	34.9	56.0	46.0	12.7	11.1	L1
14	15.19450	33.4	28.9	0.9	34.3	29.8	60.0	50.0	25.7	20.2	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 + LAN MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

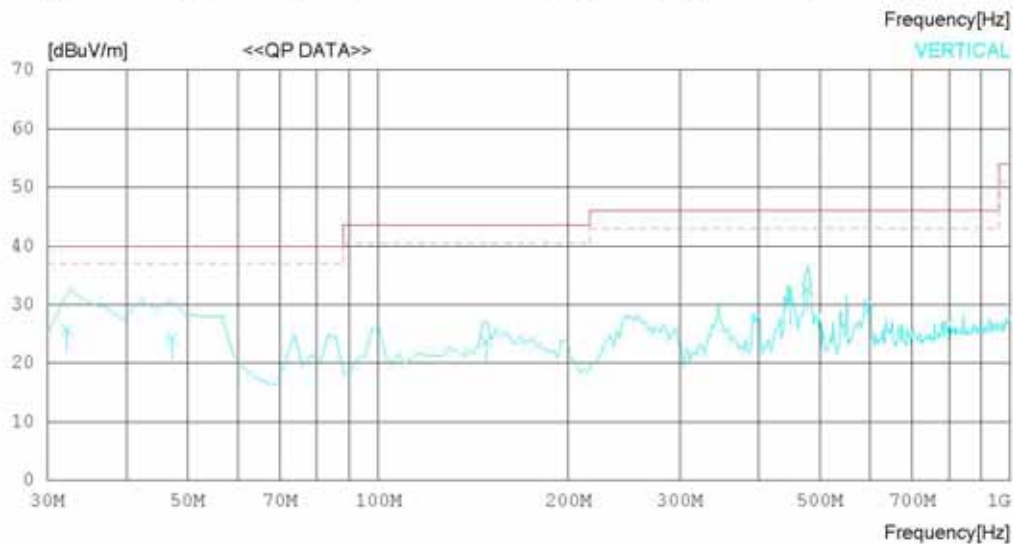
Date : 2011-12-20

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

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

Memo :

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



RADIATED EMISSION

Date : 2011-12-20

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 22°C 41% 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	42.363	30.8	14.0	1.0	22.6	23.2	40.0	16.8	301	221
2	86.117	36.3	8.3	1.4	22.6	23.4	40.0	16.6	400	202
3	194.688	38.6	9.7	2.0	23.2	27.1	43.5	16.4	100	324
4	265.135	34.4	13.3	2.4	23.6	26.5	46.0	19.5	100	137
5	477.719	38.0	17.3	3.3	24.6	34.0	46.0	12.0	201	255
----- Vertical -----										
6	32.135	30.3	17.1	0.9	22.6	25.7	40.0	14.3	100	190
7	47.215	33.6	12.1	1.0	22.6	24.1	40.0	15.9	100	258
8	148.202	34.6	10.5	1.7	23.1	23.7	43.5	19.8	100	251
9	449.811	34.8	16.8	3.2	24.5	30.3	46.0	15.7	100	213
10	476.500	36.6	17.3	3.3	24.6	32.6	46.0	13.4	100	277

< DSUB + LAN MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

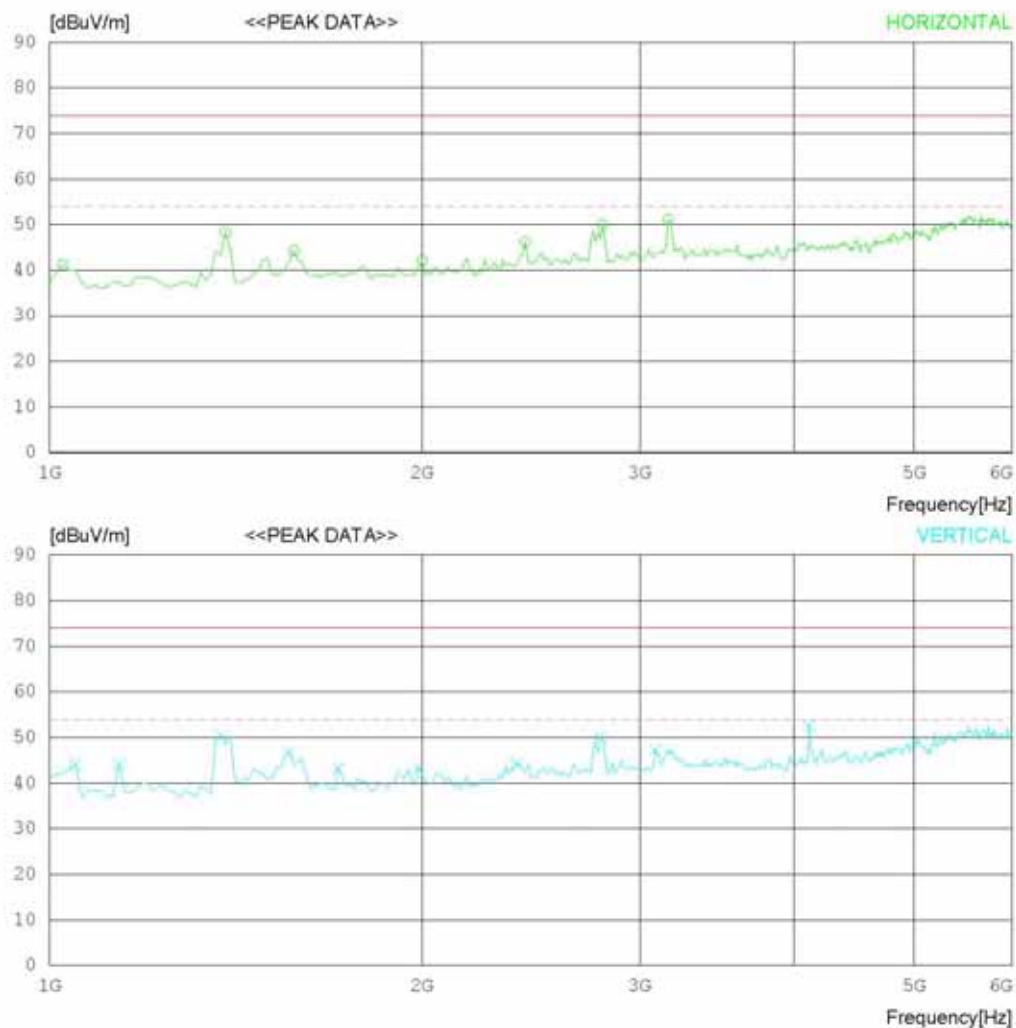
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name	: 55LM8600-UC	Reference No.	:
Model No.	:	Power Supply	: 120V 60Hz
Serial No.	:	Temp/Humi	: 20 °C 41% 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	1025.000	54.4	23.7	4.9	41.8	41.2	74.0	32.8	100	262
2	1387.500	59.7	24.8	5.7	41.9	48.3	74.0	25.7	100	262
3	1575.000	55.0	25.1	6.1	41.9	44.3	74.0	29.7	100	214
4	2000.000	52.0	25.2	7.0	42.0	42.2	74.0	31.8	100	127
5	2425.000	53.6	27.0	7.6	42.0	46.2	74.0	27.8	100	225
6	2800.000	55.5	28.2	8.4	42.1	50.0	74.0	24	100	146
7	3162.500	55.3	28.9	9.0	42.1	51.1	74.0	22.9	100	262
----- Vertical -----										
8	1050.000	57.1	23.8	4.9	41.8	44.0	74.0	30	100	1
9	1137.500	56.8	24.0	5.1	41.8	44.1	74.0	29.9	100	33
10	1375.000	61.9	24.8	5.7	41.9	50.5	74.0	23.5	100	155
11	1562.500	57.5	25.1	6.1	41.9	46.8	74.0	27.2	100	1
12	1712.500	53.5	25.2	6.4	41.9	43.2	74.0	30.8	100	1
13	1987.500	53.2	25.2	7.0	42.0	43.4	74.0	30.6	100	340
14	2387.500	51.9	26.8	7.6	42.0	44.3	74.0	29.7	100	1
15	2787.500	55.7	28.2	8.3	42.1	50.1	74.0	23.9	100	126
16	3087.500	51.6	28.9	8.9	42.1	47.3	74.0	26.7	100	169
17	4112.500	53.7	30.3	10.2	41.7	52.5	74.0	21.5	100	167

< DSUB + LAN MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

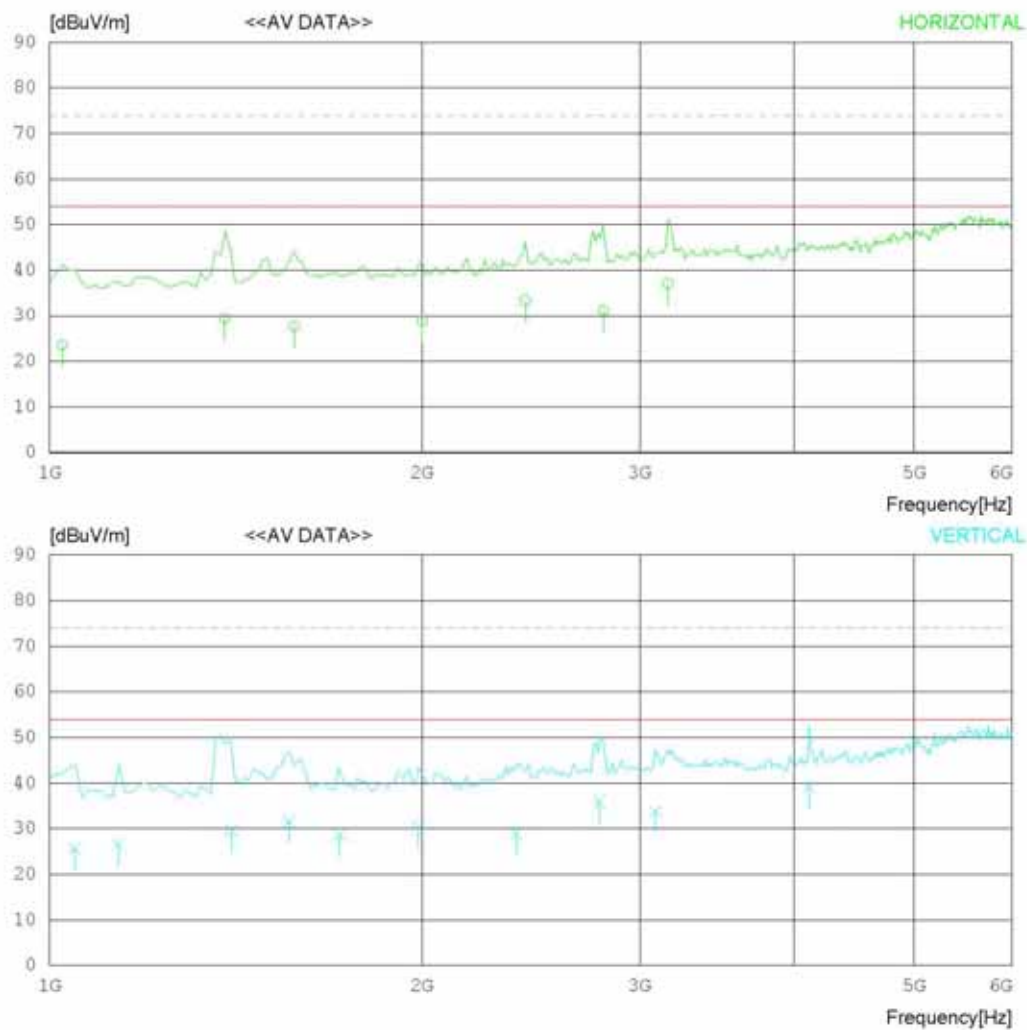
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : DSUB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 20 °C 41% 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	1024.215	36.8	23.7	4.9	41.8	23.6	54.0	30.4	100	262
2	1385.505	40.8	24.8	5.7	41.9	29.4	54.0	24.6	100	262
3	1576.366	38.4	25.1	6.1	41.9	27.7	54.0	26.3	100	214
4	2001.371	38.7	25.2	7.0	42.0	28.9	54.0	25.1	100	127
5	2424.039	40.8	27.0	7.6	42.0	33.4	54.0	20.6	100	225
6	2804.840	36.6	28.2	8.4	42.1	31.1	54.0	22.9	100	146
7	3161.166	41.2	28.9	9.0	42.1	37.0	54.0	17.0	100	262
----- Vertical -----										
8	1048.693	38.8	23.8	4.9	41.8	25.7	54.0	28.3	100	1
9	1136.471	39.4	24.0	5.1	41.8	26.7	54.0	27.3	100	33
10	1402.858	41.1	24.8	5.7	41.9	29.7	54.0	24.3	100	155
11	1561.164	42.2	25.1	6.1	41.9	31.5	54.0	22.5	100	1
12	1714.847	38.9	25.2	6.4	41.9	28.6	54.0	25.4	100	1
13	1985.594	40.1	25.2	7.0	42.0	30.3	54.0	23.7	100	340
14	2384.498	36.6	26.8	7.6	42.0	29.0	54.0	25.0	100	1
15	2782.212	41.4	28.2	8.3	42.1	35.8	54.0	18.2	100	126
16	3089.685	38.0	28.9	8.9	42.1	33.7	54.0	20.3	100	169
17	4114.067	40.3	30.3	10.2	41.7	39.1	54.0	14.9	100	167

< HDMI + LAN MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

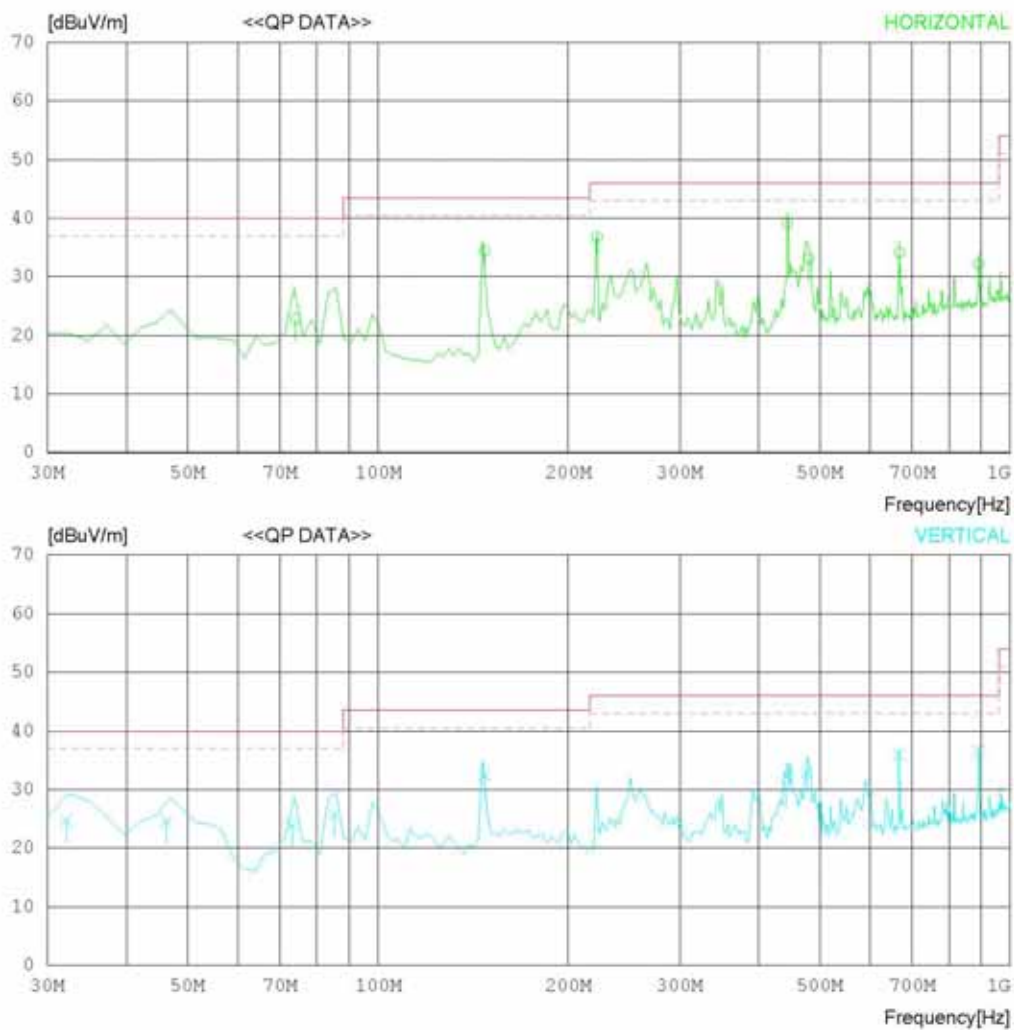
Date : 2011-12-20

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : HDMI

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

Memo :

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



RADIATED EMISSION

Date : 2011-12-20

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 22°C 41% 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	74.025	37.4	6.7	1.3	22.6	22.8	40.0	17.2	400	203
2	147.505	45.2	10.6	1.7	23.1	34.4	43.5	9.1	199	125
3	222.036	46.8	11.2	2.2	23.4	36.8	46.0	9.2	100	194
4	444.249	43.6	16.7	3.2	24.5	39.0	46.0	7.0	199	215
5	479.680	37.1	17.3	3.3	24.6	33.1	46.0	12.9	100	231
6	668.077	35.2	18.9	4.1	24.1	34.1	46.0	11.9	100	275
7	890.814	30.1	20.6	4.8	23.3	32.2	46.0	13.8	100	220
----- Vertical -----										
8	32.152	29.3	17.1	0.9	22.6	24.7	40.0	15.3	100	204
9	46.320	33.3	12.9	1.0	22.6	24.6	40.0	15.4	100	221
10	73.135	38.6	6.6	1.3	22.6	23.9	40.0	16.1	100	264
11	85.415	38.7	8.2	1.4	22.6	25.7	40.0	14.3	100	231
12	147.511	43.3	10.6	1.7	23.1	32.5	43.5	11.0	100	274
13	442.135	35.2	16.7	3.2	24.5	30.6	46.0	15.4	201	141
14	477.125	37.1	17.3	3.3	24.6	33.1	46.0	12.9	100	201
15	667.199	37.1	18.9	4.1	24.1	36.0	46.0	10.0	100	232
16	891.120	34.4	20.6	4.8	23.3	36.5	46.0	9.5	100	271

< HDMI + LAN MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

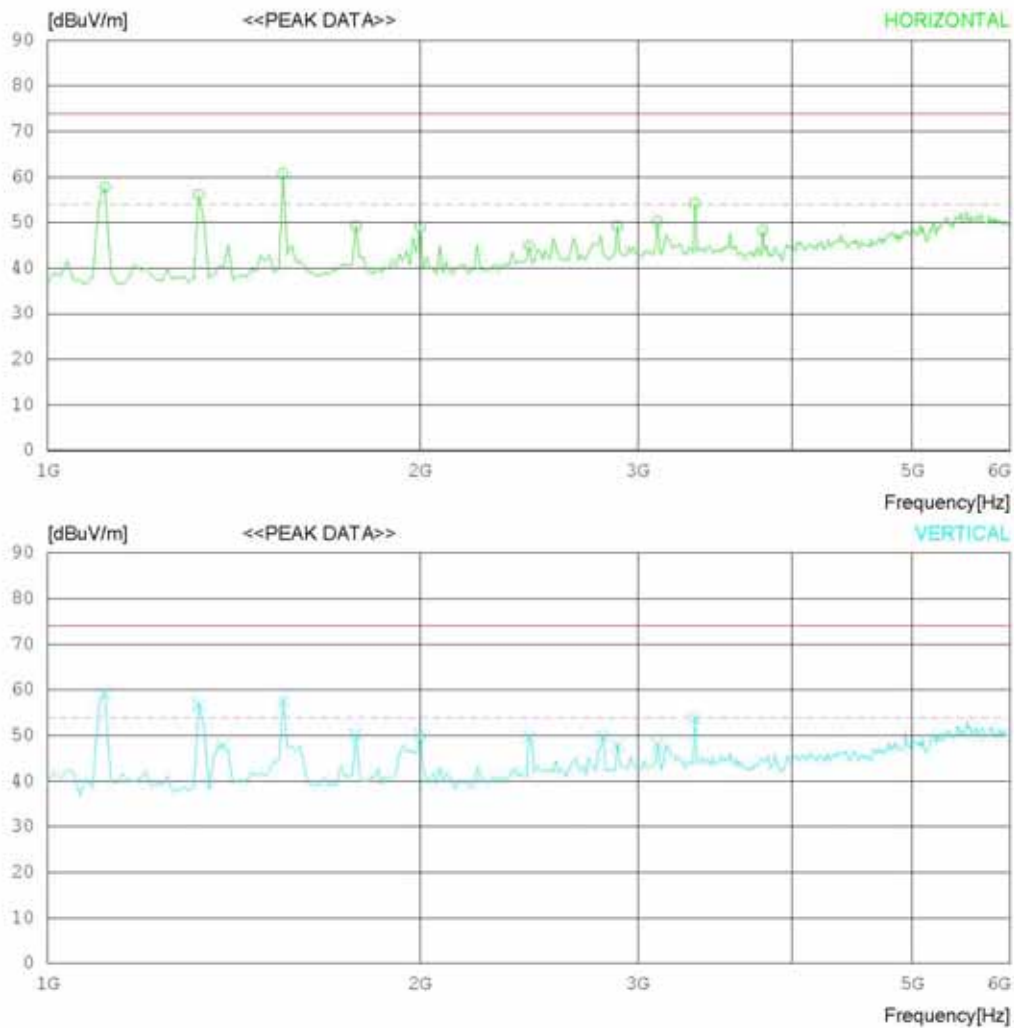
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 20 °C 41% 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	1112.500	70.5	24.0	5.1	41.8	57.8	74.0	16.2	100	150
2	1325.000	67.8	24.6	5.6	41.9	56.1	74.0	17.9	100	143
3	1550.000	71.5	25.1	6.1	41.9	60.8	74.0	13.2	100	246
4	1775.000	59.6	25.2	6.5	42.0	49.3	74.0	24.7	100	246
5	2000.000	58.9	25.2	7.0	42.0	49.1	74.0	24.9	100	246
6	2450.000	52.1	27.1	7.7	42.0	44.9	74.0	29.1	100	154
7	2887.500	54.3	28.5	8.5	42.1	49.2	74.0	24.8	100	246
8	3112.500	54.6	28.9	8.9	42.1	50.3	74.0	23.7	100	217
9	3337.500	58.0	29.0	9.2	42.0	54.2	74.0	19.8	100	146
10	3787.500	50.7	29.7	9.8	41.9	48.3	74.0	25.7	100	157
----- Vertical -----										
11	1112.500	71.9	24.0	5.1	41.8	59.2	74.0	14.8	100	159
12	1325.000	68.6	24.6	5.6	41.9	56.9	74.0	17.1	100	160
13	1387.500	59.1	24.8	5.7	41.9	47.7	74.0	26.3	100	196
14	1550.000	68.3	25.1	6.1	41.9	57.6	74.0	16.4	100	358
15	1775.000	60.5	25.2	6.5	42.0	50.2	74.0	23.8	100	358
16	2000.000	60.1	25.2	7.0	42.0	50.3	74.0	23.7	100	242
17	2450.000	56.8	27.1	7.7	42.0	49.6	74.0	24.4	100	358
18	2812.500	55.1	28.3	8.4	42.1	49.7	74.0	24.3	100	127
19	2887.500	52.9	28.5	8.5	42.1	47.8	74.0	26.2	100	358
20	3112.500	52.3	28.9	8.9	42.1	48.0	74.0	26	100	209
21	3337.500	57.6	29.0	9.2	42.0	53.8	74.0	20.2	100	358

< HDMI + LAN MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

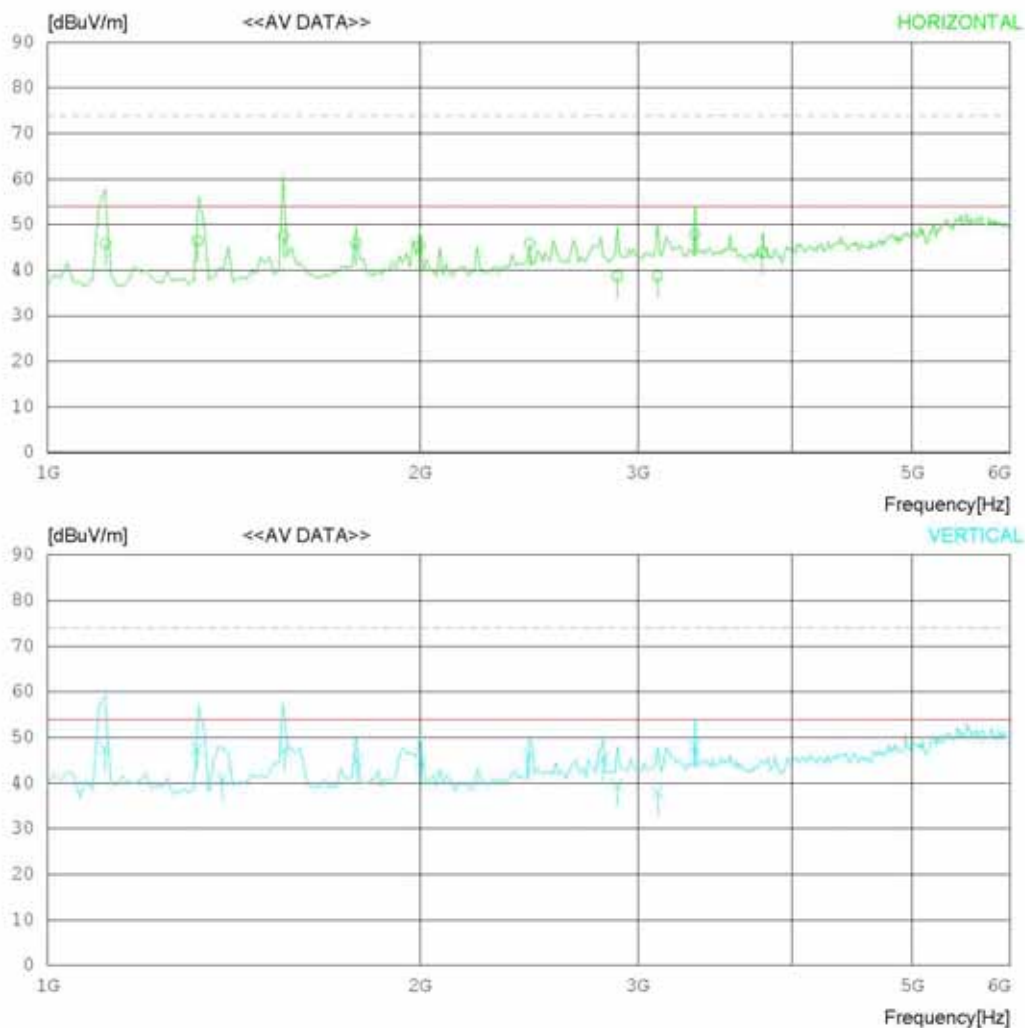
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 20 °C 41% 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	1113.854	58.6	24.0	5.1	41.8	45.9	54.0	8.1	100	150
2	1322.236	58.2	24.6	5.5	41.9	46.4	54.0	7.6	100	143
3	1551.740	58.2	25.1	6.1	41.9	47.5	54.0	6.5	100	246
4	1775.000	56.3	25.2	6.5	42.0	46.0	54.0	8.0	100	246
5	1998.814	55.1	25.2	7.0	42.0	45.3	54.0	8.7	100	246
6	2452.845	53.0	27.1	7.7	42.0	45.8	54.0	8.2	100	154
7	2886.699	43.8	28.5	8.5	42.1	38.7	54.0	15.3	100	246
8	3111.847	43.0	28.9	8.9	42.1	38.7	54.0	15.3	100	217
9	3334.735	51.6	29.0	9.2	42.0	47.8	54.0	6.2	100	146
10	3784.132	46.3	29.7	9.8	41.9	43.9	54.0	10.1	100	157
----- Vertical -----										
11	1112.750	60.3	24.0	5.1	41.8	47.6	54.0	6.4	100	159
12	1322.135	59.4	24.6	5.5	41.9	47.6	54.0	6.4	100	160
13	1385.540	52.3	24.8	5.7	41.9	40.9	54.0	13.1	100	196
14	1554.510	57.9	25.1	6.1	41.9	47.2	54.0	6.8	100	358
15	1778.541	55.2	25.2	6.5	42.0	44.9	54.0	9.1	100	358
16	2002.336	54.4	25.2	7.0	42.0	44.6	54.0	9.4	100	242
17	2451.163	53.3	27.1	7.7	42.0	46.1	54.0	7.9	100	358
18	2811.813	50.8	28.3	8.4	42.1	45.4	54.0	8.6	100	127
19	2885.618	44.8	28.5	8.5	42.1	39.7	54.0	14.3	100	358
20	3114.836	42.2	28.9	8.9	42.1	37.9	54.0	16.1	100	209
21	3336.427	51.7	29.0	9.2	42.0	47.9	54.0	6.1	100	358

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

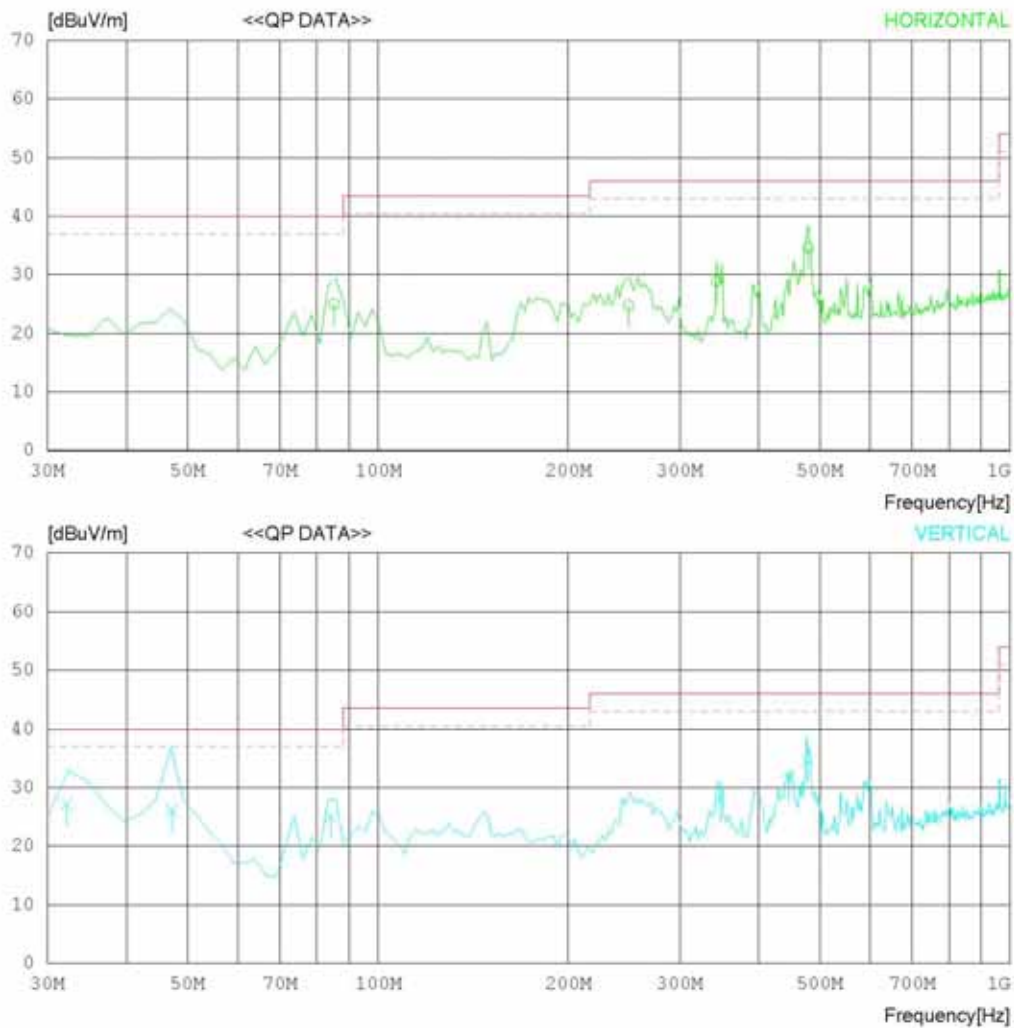
Date : 2011-12-20

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : USB

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

Memo :

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



< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

Date : 2011-12-20

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 22°C 41% 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	85.182	38.1	8.1	1.4	22.6	25.0	40.0	15.0	300	251
2	249.124	33.0	13.0	2.3	23.5	24.8	46.0	21.2	300	235
3	343.265	35.5	14.8	2.7	24.1	28.9	46.0	17.1	100	221
4	479.223	38.6	17.3	3.3	24.6	34.6	46.0	11.4	201	254
----- Vertical -----										
5	32.135	31.8	17.1	0.9	22.6	27.2	40.0	12.8	100	232
6	47.162	35.6	12.1	1.0	22.6	26.1	40.0	13.9	400	222
7	84.135	38.4	7.9	1.4	22.6	25.1	40.0	14.9	100	203
8	348.215	34.2	14.9	2.8	24.1	27.8	46.0	18.2	100	200
9	447.136	36.0	16.8	3.2	24.5	31.5	46.0	14.5	100	204
10	477.870	38.6	17.3	3.3	24.6	34.6	46.0	11.4	100	216

< USB MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

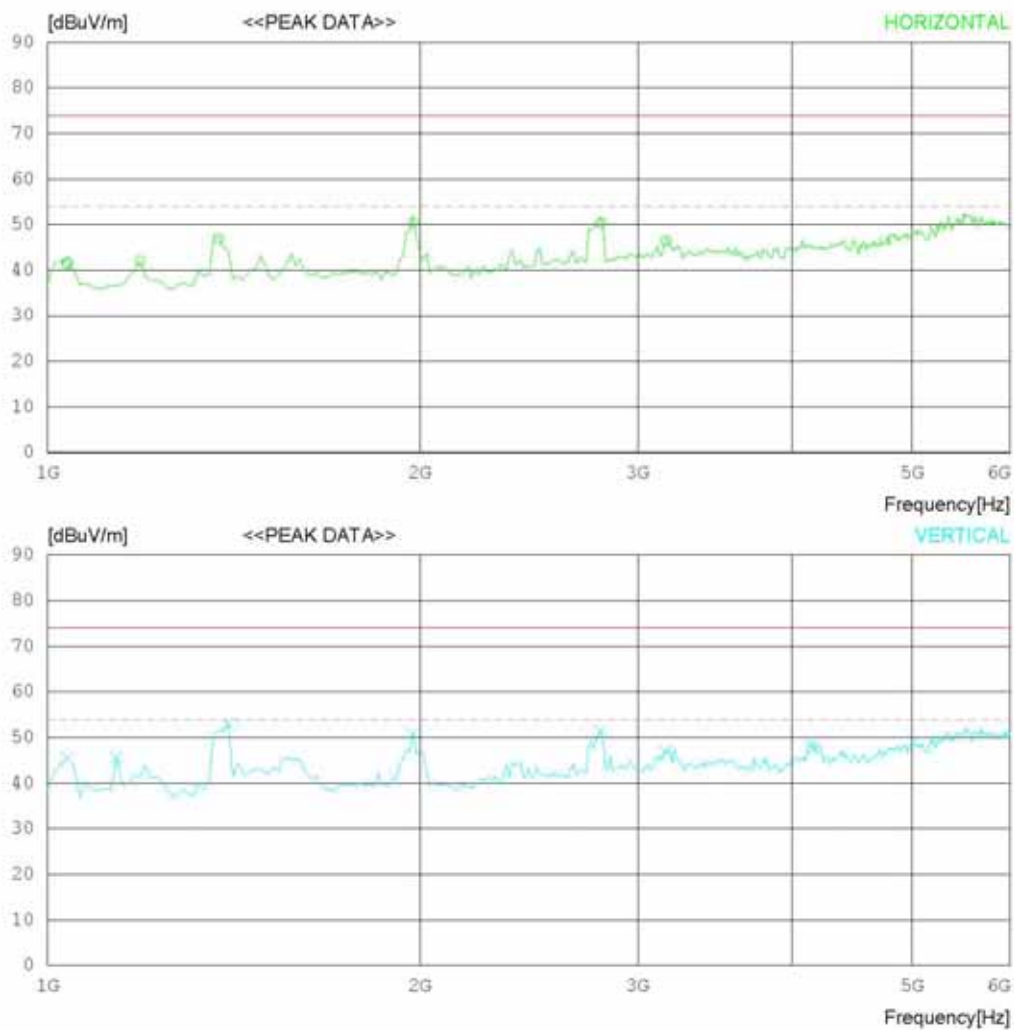
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 20 °C 41% 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	1036.585	54.5	23.7	4.9	41.8	41.3	74.0	32.7	100	273
2	1037.500	54.9	23.7	4.9	41.8	41.7	74.0	32.3	100	222
3	1187.500	54.5	24.2	5.1	41.8	42.0	74.0	32	100	204
4	1375.000	58.8	24.8	5.2	41.8	47.0	74.0	27	100	248
5	1975.000	61.5	25.2	5.7	41.9	50.5	74.0	23.5	100	273
6	2800.000	57.2	28.2	7.0	42.0	50.4	74.0	23.6	100	172
7	3162.500	51.2	28.9	8.4	42.1	46.4	74.0	27.6	100	261
----- Vertical -----										
8	1037.500	58.6	23.7	4.9	41.8	45.4	74.0	28.6	100	176
9	1137.500	58.4	24.0	4.9	41.8	45.5	74.0	28.5	100	358
10	1400.000	64.4	24.8	5.7	41.9	53.0	74.0	21	100	358
11	1975.000	60.6	25.2	7.0	42.0	50.8	74.0	23.2	100	161
12	2800.000	56.9	28.2	8.4	42.1	51.4	74.0	22.6	100	358
13	3162.500	51.2	28.9	9.0	42.1	47.0	74.0	27	100	209
14	4162.500	50.3	30.4	9.0	42.1	47.6	74.0	26.4	100	358

< USB MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

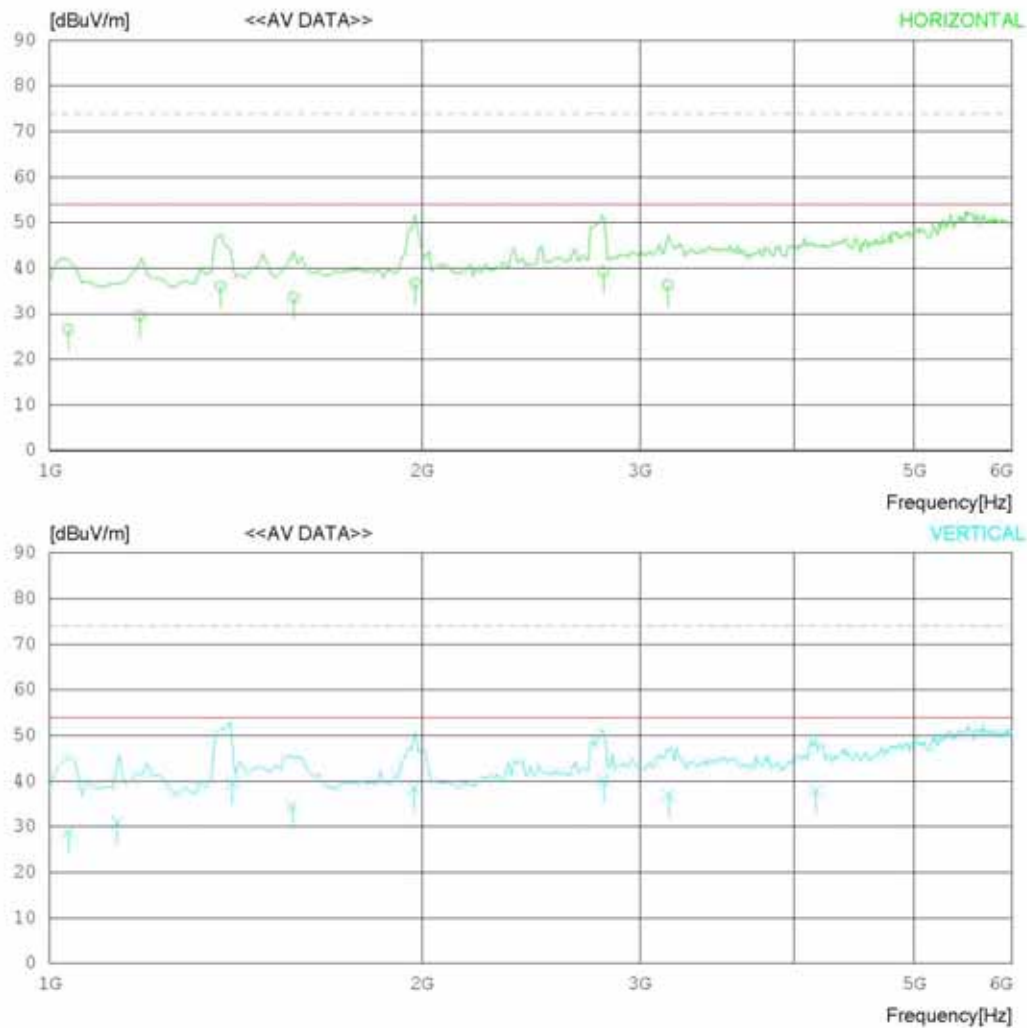
Date : 2011-12-13

Model Name : 55LM8600-UC
 Model No. :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 20 °C 41% 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 : 2011-12-13

Model Name : 55LM8600-UC	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 20 °C 41% 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	1035.135	39.8	23.7	4.9	41.8	26.6	54.0	27.4	100	222
2	1182.202	42.0	24.2	5.2	41.8	29.6	54.0	24.4	100	204
3	1374.184	47.5	24.8	5.7	41.9	36.1	54.0	17.9	100	248
4	1574.658	44.3	25.1	6.1	41.9	33.6	54.0	20.4	100	273
5	1974.167	46.6	25.2	7.0	42.0	36.8	54.0	17.2	100	273
6	2803.274	44.7	28.2	8.4	42.1	39.2	54.0	14.8	100	172
7	3161.136	40.6	28.9	9.0	42.1	36.4	54.0	17.6	100	261
----- Vertical -----										
8	1036.684	42.0	23.7	4.9	41.8	28.8	54.0	25.2	100	176
9	1134.581	43.6	24.0	5.1	41.8	30.9	54.0	23.1	100	358
10	1404.544	51.0	24.8	5.7	41.9	39.6	54.0	14.4	100	358
11	1571.647	45.2	25.1	6.1	41.9	34.5	54.0	19.5	100	358
12	1972.696	48.2	25.2	7.0	42.0	38.4	54.0	15.6	100	161
13	2803.314	45.5	28.2	8.4	42.1	40.0	54.0	14.0	100	358
14	3163.877	41.1	28.9	9.0	42.1	36.9	54.0	17.1	100	209
15	4161.479	39.0	30.4	10.2	41.7	37.9	54.0	16.1	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	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