

EMC TEST REPORT

Test item : LCD TV Monitor
Model No. : 37CS560-UE
Order No. : 1112-01773
Date of receipt : 2011-12-19
Test duration : 2011-12-23 ~ 2011-12-29
Use of report : FCC CoC Marking
Date of Issue : 2012-01-04

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 : (18 ~ 21) °C,
Humidity : (31 ~ 34) % 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:

Reviewed by:



Assistant Manager
D.H.EUN



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.	37CS560-UE
EUT Type	LCD TV Monitor
Serial No	NONE
FCC ID	BEJ37CS560UE
Type of Sample Tested	Pre-Production
High Frequency	800 MHz
Rating	AC100-240 V~, 50/60 Hz, 1.6 A
Supplied Power for Test	AC120 V, 60 Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1360x768	47.712	60.015
1280x1024	63.981	60.02
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 ()	Humidity (% R.H.)	Pressure (hPa)
Conducted Disturbance	12-23	18	34	-
Radiated Disturbance	12-29	19	31	
	12-29	21	34	

4.3 Test result Summary

(1) Conducted Emission(USB MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.97123	N	37.8	Average	46.0	8.2

(2) Radiated Emission(HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
741.774	H	40.8	Quasi-Peak	46.0	5.2

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)
- 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		
				USB	1.8	Non-shield		
				PS/2	1.6	Non-shield		
				PS/2	1.8	Non-shield		
KEYBOARD	SKG-210P	TAKSC12255P	MONITOEREY INTERNATIONAL CORP	PS/2	1.6	Non-shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITOEREY INTERNATIONAL CORP	PS/2	1.8	Non-shield	Plastic	DOC
PRINTER	SRP-770	SRP77008060035	BICSOLON	POWER	1.8	Non-shield	Plastic	DOC
				USB	1.8			
USB MEMORY	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

< HDMI MODE >



Results of Conducted Emission

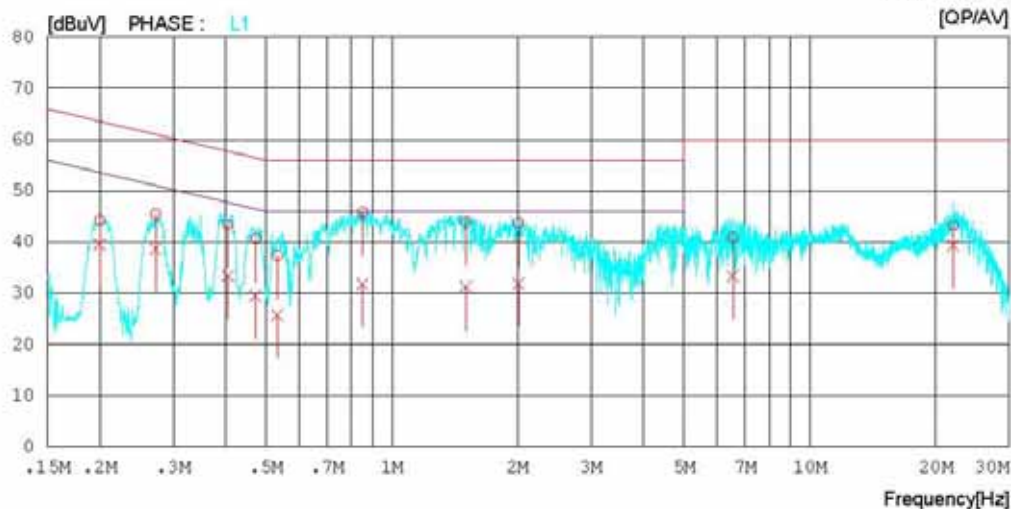
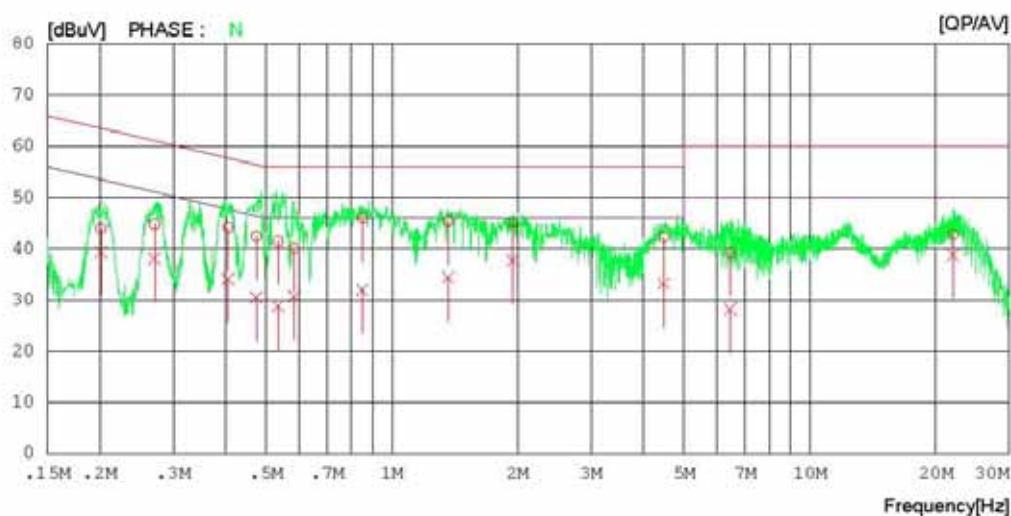
Digital EMC
 Date : 2011-12-23

Model No. : 37CS560-UE
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 18 °C 34 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-23

Model No. : 37CS560-UE
 Type :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 18 °C 34 % 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	0.20135	43.9	39.3	0.1	44.0	39.4	63.6	53.6	19.6	14.2	N
2	0.27079	44.7	38.0	0.1	44.8	38.1	61.1	51.1	16.3	13.0	N
3	0.40546	43.9	33.9	0.2	44.1	34.1	57.7	47.7	13.6	13.6	N
4	0.47383	42.4	30.4	0.1	42.5	30.5	56.4	46.4	13.9	15.9	N
5	0.53454	41.4	28.7	0.1	41.5	28.8	56.0	46.0	14.5	17.2	N
6	0.58453	40.0	30.6	0.1	40.1	30.7	56.0	46.0	15.9	15.3	N
7	0.85111	45.9	31.8	0.2	46.1	32.0	56.0	46.0	9.9	14.0	N
8	1.36500	45.3	34.2	0.2	45.5	34.4	56.0	46.0	10.5	11.6	N
9	1.94850	45.0	37.5	0.2	45.2	37.7	56.0	46.0	10.8	8.3	N
10	4.48000	41.9	32.8	0.4	42.3	33.2	56.0	46.0	13.7	12.8	N
11	6.46350	38.8	27.8	0.4	39.2	28.2	60.0	50.0	20.8	21.8	N
12	22.02000	41.7	37.7	1.1	42.8	38.8	60.0	50.0	17.2	11.2	N
13	0.20001	44.1	39.5	0.1	44.2	39.6	63.6	53.6	19.4	14.0	L1
14	0.27265	45.3	38.5	0.1	45.4	38.6	61.0	51.0	15.6	12.4	L1
15	0.40564	43.3	33.2	0.2	43.5	33.4	57.7	47.7	14.2	14.3	L1
16	0.47284	40.6	29.4	0.1	40.7	29.5	56.5	46.5	15.8	17.0	L1
17	0.53291	37.3	25.7	0.1	37.4	25.8	56.0	46.0	18.6	20.2	L1
18	0.85075	45.6	31.6	0.2	45.8	31.8	56.0	46.0	10.2	14.2	L1
19	1.50500	43.7	31.1	0.2	43.9	31.3	56.0	46.0	12.1	14.7	L1
20	2.01100	43.4	31.7	0.3	43.7	32.0	56.0	46.0	12.3	14.0	L1
21	6.54900	40.5	32.9	0.4	40.9	33.3	60.0	50.0	19.1	16.7	L1
22	22.03250	42.1	38.3	1.1	43.2	39.4	60.0	50.0	16.8	10.6	L1

< USB MODE >



Results of Conducted Emission

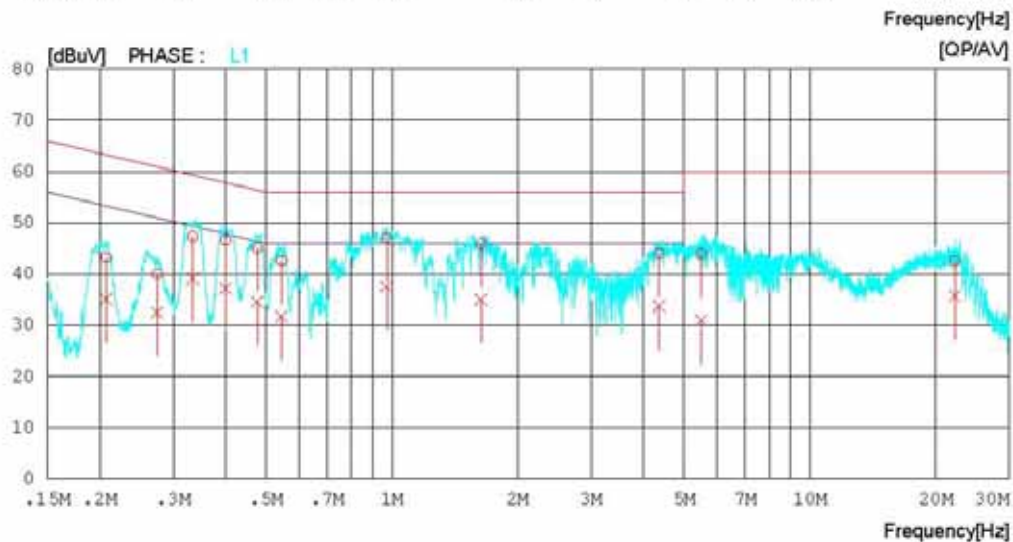
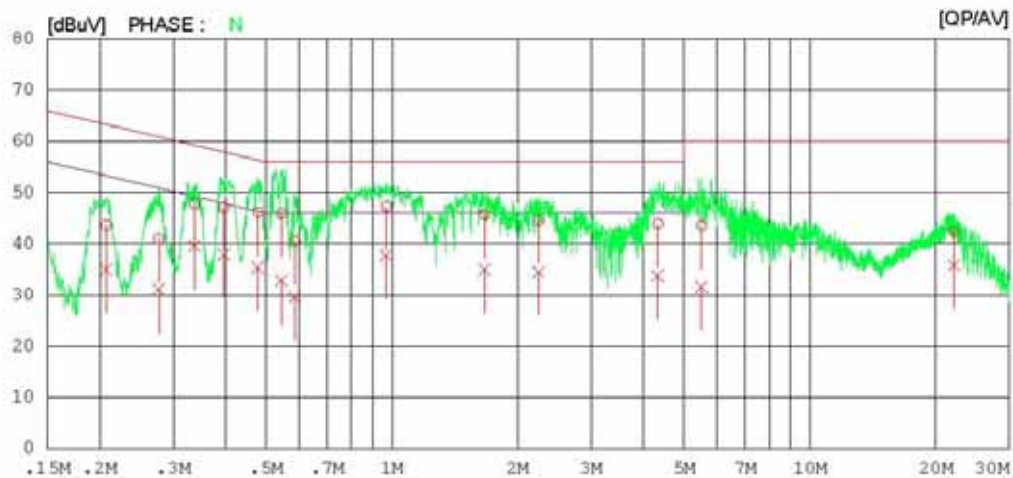
Digital EMC
 Date : 2011-12-23

Model No. : 37CS560-UE
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 18 °C 34 % R.H.
 Operator :

Memo :

LIMIT : CISPR22_B OP
 CISPR22_B AV



Results of Conducted Emission

Digital EMC
 Date : 2011-12-23

Model No. : 37CS560-UE
 Type :
 Serial No. :
 Test Condition : USB

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi. : 18 °C 34 % 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	0.20749	43.5	34.9	0.1	43.6	35.0	63.3	53.3	19.7	18.3	N
2	0.27711	40.9	30.9	0.1	41.0	31.0	60.9	50.9	19.9	19.9	N
3	0.33734	47.7	39.4	0.2	47.9	39.6	59.3	49.3	11.4	9.7	N
4	0.39636	46.9	37.7	0.2	47.1	37.9	57.9	47.9	10.8	10.0	N
5	0.47834	46.1	35.3	0.1	46.2	35.4	56.4	46.4	10.2	11.0	N
6	0.54504	45.8	32.7	0.1	45.9	32.8	56.0	46.0	10.1	13.2	N
7	0.58670	40.4	29.6	0.1	40.5	29.7	56.0	46.0	15.5	16.3	N
8	0.97123	47.1	37.6	0.2	47.3	37.8	56.0	46.0	8.7	8.2	N
9	1.66650	45.5	34.8	0.2	45.7	35.0	56.0	46.0	10.3	11.0	N
10	2.24650	44.3	34.2	0.3	44.6	34.5	56.0	46.0	11.4	11.5	N
11	4.33250	43.5	33.4	0.4	43.9	33.8	56.0	46.0	12.1	12.2	N
12	5.50500	43.2	31.2	0.4	43.6	31.6	60.0	50.0	16.4	18.4	N
13	22.12850	41.3	34.7	1.1	42.4	35.8	60.0	50.0	17.6	14.2	N
14	0.20720	43.2	35.0	0.1	43.3	35.1	63.3	53.3	20.0	18.2	L1
15	0.27456	39.9	32.3	0.1	40.0	32.4	61.0	51.0	21.0	18.6	L1
16	0.33385	47.1	38.9	0.2	47.3	39.1	59.4	49.4	12.1	10.3	L1
17	0.40035	46.4	37.0	0.2	46.6	37.2	57.8	47.8	11.2	10.6	L1
18	0.47700	45.1	34.5	0.1	45.2	34.6	56.4	46.4	11.2	11.8	L1
19	0.54464	42.6	31.6	0.1	42.7	31.7	56.0	46.0	13.3	14.3	L1
20	0.97199	46.8	37.4	0.2	47.0	37.6	56.0	46.0	9.0	8.4	L1
21	1.63550	45.7	34.8	0.2	45.9	35.0	56.0	46.0	10.1	11.0	L1
22	4.36100	43.6	33.3	0.4	44.0	33.7	56.0	46.0	12.0	12.3	L1
23	5.50200	43.6	30.6	0.4	44.0	31.0	60.0	50.0	16.0	19.0	L1
24	22.22550	41.5	34.6	1.1	42.6	35.7	60.0	50.0	17.4	14.3	L1

6.2 Radiated Disturbance

6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8m above the reference ground plane and 3m away from the interference receiving antenna in the **10m semi-anechoic chamber**.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15m above the reference ground plane.

Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4m above the reference ground plane continuously to determine associated with higher emission levels and record them.

The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

For below 1GHz frequency range, Quasi-Peak detector with 120kHz RBW was used.

Also Peak and Average detector with 1MHz RBW were used for above 1GHz frequency range.

For further description of the configuration refer to the picture of the test set-up.

6.2.2 Limit for Radiated Disturbance

- The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

(1) Limit for Radiated Emission below 1000MHz

Frequency range (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m distance)
	Quasi-peak (dB μ V/m)	Quasi-peak (dB μ V/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.

Note 2 Additional provisions may be required for cases where interference occurs.

Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

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

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

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dB μ V/m)	Average (dB μ V/m)	Peak (dB μ V/m)	Average (dB μ V/m)
1 to 40	80	60	74	54

Test Result

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

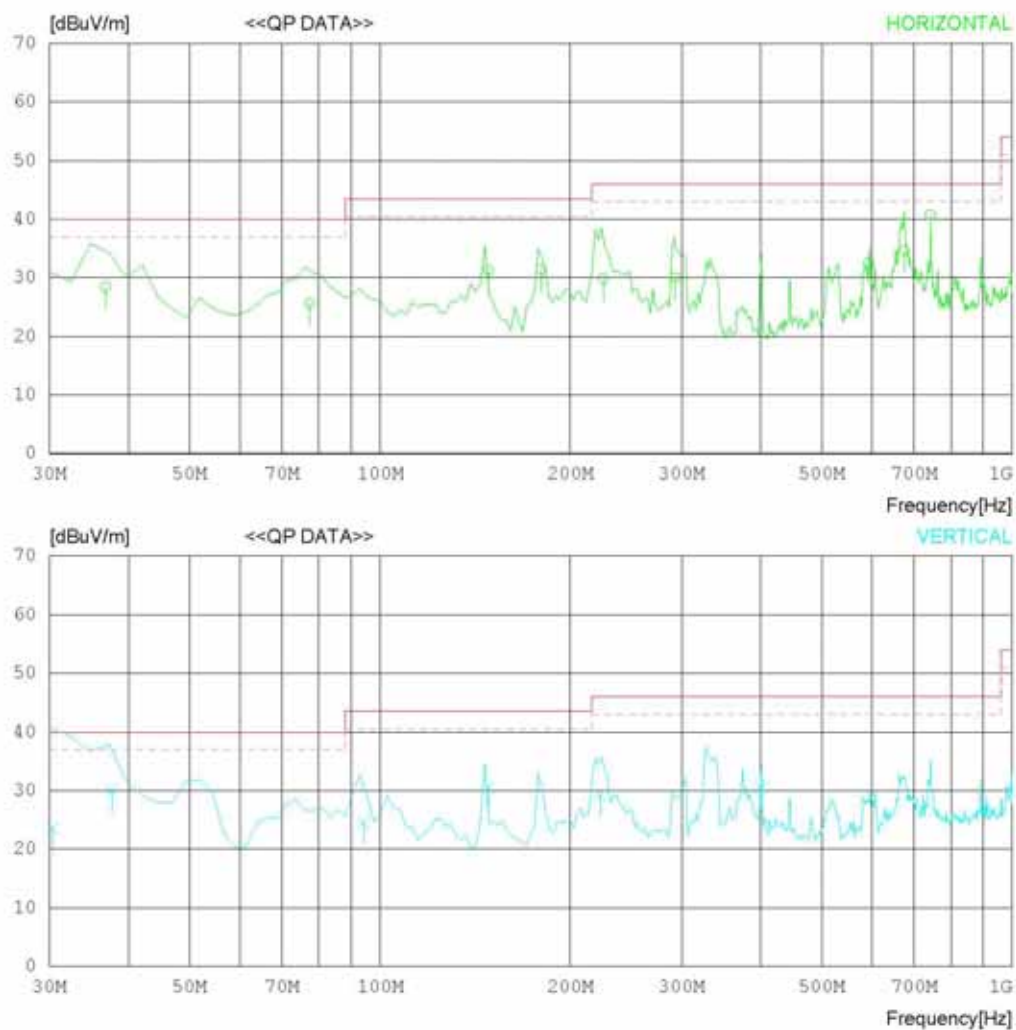
Date : 2011-12-29

Model Name : 37CS560-UE
 Model No. :
 Serial No. :
 Test Condition : HDMI

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 21 °C 34 % R.H.
 Operator :

Memo :

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



RADIATED EMISSION

Date : 2011-12-29

Model Name : 37CS560-UE	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °C 34 % R.H.
Test Condition : HDMI	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
 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	36.819	34.5	15.7	0.9	22.6	28.5	40.0	11.5	299	337
2	77.289	40.0	6.9	1.3	22.6	25.6	40.0	14.4	217	340
3	148.385	42.2	10.5	1.7	23.1	31.3	43.5	12.2	152	346
4	179.923	42.6	9.9	2.0	23.2	31.3	43.5	12.2	107	350
5	225.290	39.6	11.4	2.2	23.4	29.8	46.0	16.2	157	90
6	293.021	37.5	13.7	2.6	23.8	30.0	46.0	16.0	111	115
7	593.429	34.3	18.7	3.9	24.4	32.5	46.0	13.5	268	288
8	675.619	35.7	18.9	4.1	24.1	34.6	46.0	11.4	176	46
9	741.775	40.8	19.5	4.4	23.9	40.8	46.0	5.2	132	343
----- Vertical -----										
10	30.300	27.9	17.4	0.8	22.6	23.5	40.0	16.5	100	320
11	37.600	36.5	15.2	0.9	22.6	30.0	40.0	10.0	100	358
12	94.350	36.0	9.8	1.4	22.7	24.5	43.5	19.0	202	358
13	148.348	41.5	10.5	1.7	23.1	30.6	43.5	12.9	199	1
14	223.150	39.3	11.2	2.2	23.4	29.3	46.0	16.7	100	357
15	400.000	36.0	16.0	3.0	24.4	30.6	46.0	15.4	199	148

< HDMI MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

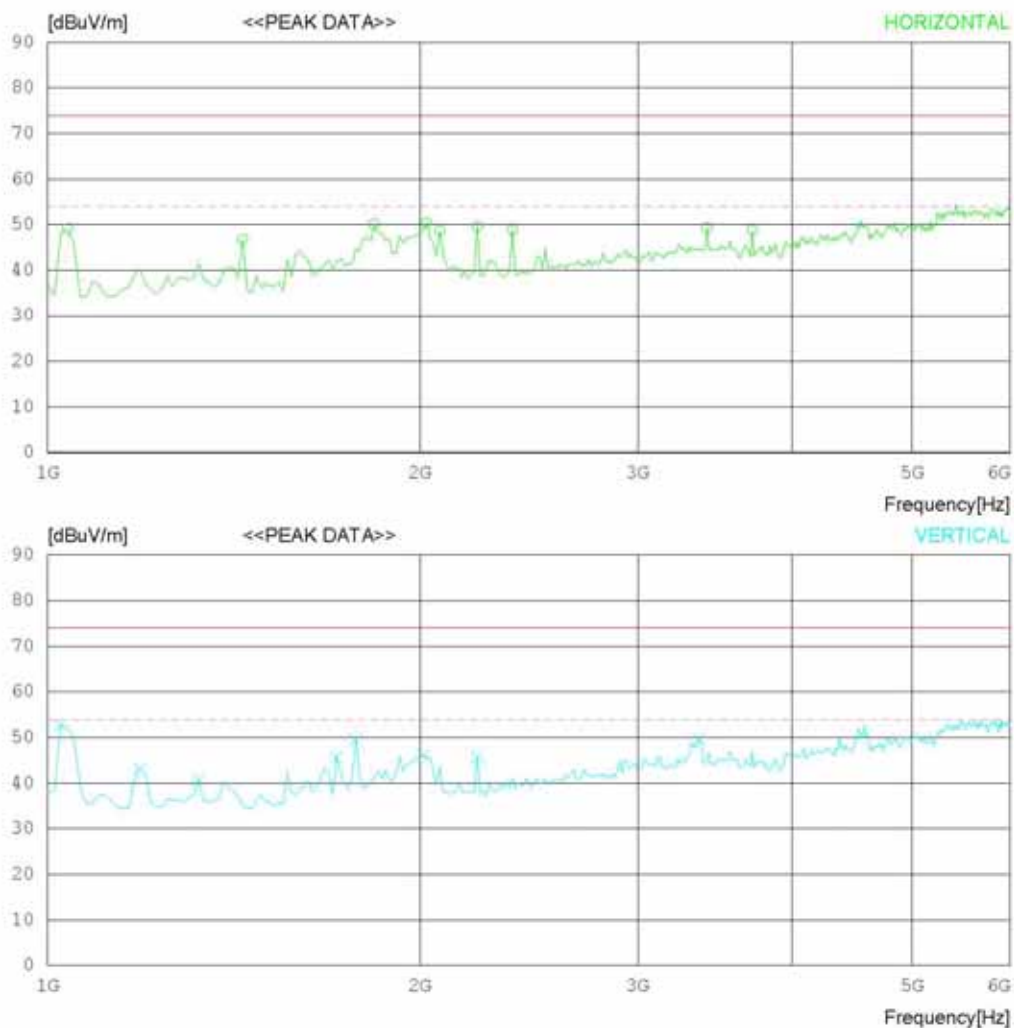
Date : 2011-12-29

Model Name : 37CS560-UE
 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 : 2011-12-29

Model Name : 37CS560-UE	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	61.9	23.7	5.3	41.8	49.1	74.0	24.9	100	358
2	1437.500	57.4	25.0	6.2	41.9	46.7	74.0	27.3	100	346
3	1837.500	59.7	25.2	7.2	42.0	50.1	74.0	23.9	100	358
4	2025.000	59.4	25.3	7.7	42.0	50.4	74.0	23.6	100	65
5	2075.000	57.4	25.5	7.8	42.0	48.7	74.0	25.3	100	358
6	2225.000	57.5	26.2	7.9	42.0	49.6	74.0	24.4	100	312
7	2375.000	55.9	26.8	8.1	42.0	48.8	74.0	25.2	100	321
8	3412.500	52.2	29.1	10.0	42.0	49.3	74.0	24.7	100	358
9	3712.500	50.7	29.6	10.4	41.9	48.8	74.0	25.2	100	358
----- Vertical -----										
10	1025.000	65.5	23.7	5.3	41.8	52.7	74.0	21.3	100	1
11	1187.500	55.0	24.2	5.7	41.8	43.1	74.0	30.9	100	16
12	1325.000	52.0	24.6	5.9	41.9	40.6	74.0	33.4	100	1
13	1712.500	55.5	25.2	6.9	41.9	45.7	74.0	28.3	100	349
14	1775.000	59.3	25.2	7.1	42.0	49.6	74.0	24.4	100	332
15	2012.500	55.1	25.3	7.7	42.0	46.1	74.0	27.9	100	1
16	2225.000	53.5	26.2	7.9	42.0	45.6	74.0	28.4	100	1
17	3362.500	52.7	29.0	9.9	42.0	49.6	74.0	24.4	100	19

< HDMI MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

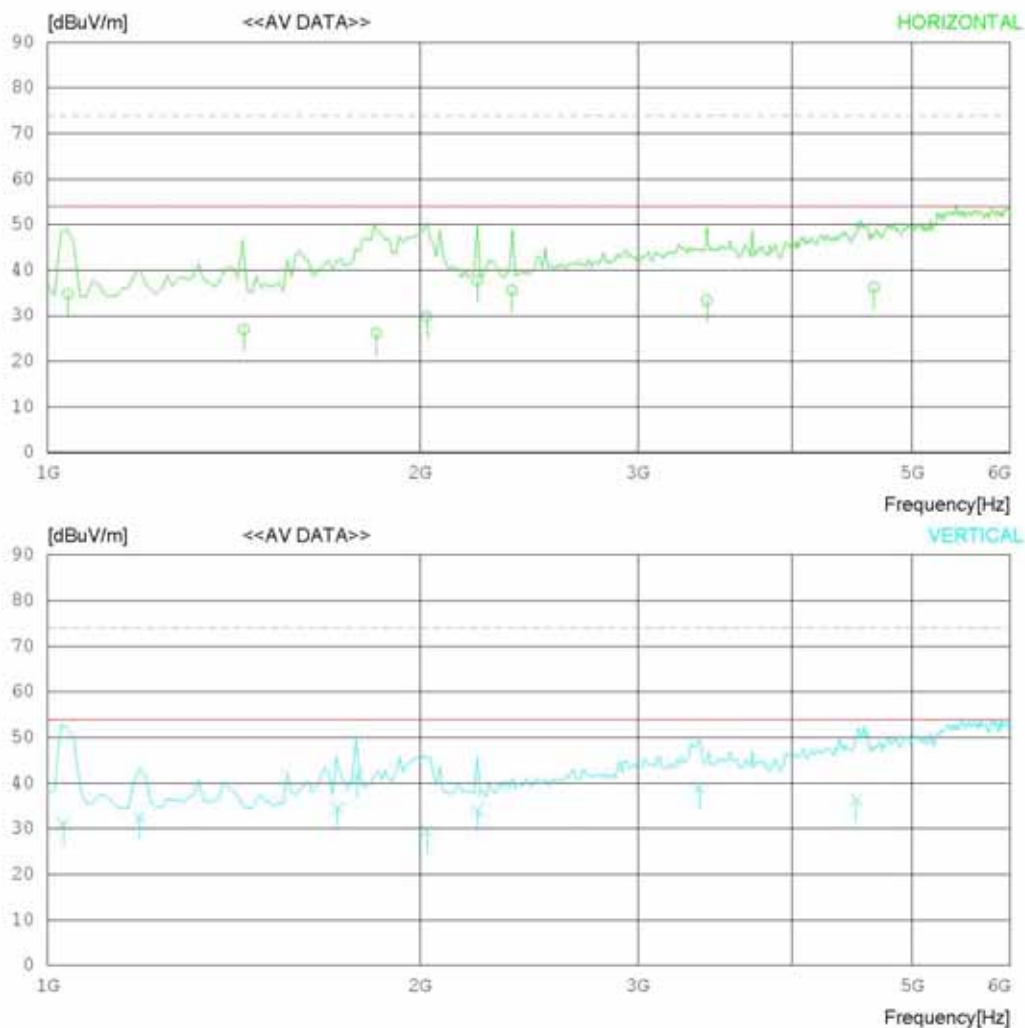
Date : 2011-12-29

Model Name : 37CS560-UE
 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 : 2011-12-29

Model Name : 37CS560-UE	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 [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	1038.500	47.6	23.7	5.3	41.8	34.8	54.0	19.2	100	358
2	1440.750	37.7	25.0	6.2	41.9	27.0	54.0	27.0	100	346
3	1844.400	35.8	25.2	7.2	42.0	26.2	54.0	27.8	100	358
4	2026.100	38.9	25.3	7.7	42.0	29.9	54.0	24.1	100	358
5	2225.289	45.6	26.2	7.9	42.0	37.7	54.0	16.3	100	312
6	2373.800	42.7	26.8	8.1	42.0	35.6	54.0	18.4	100	321
7	3412.500	36.3	29.1	10.0	42.0	33.4	54.0	20.6	100	358
8	4653.000	33.9	31.4	12.2	41.3	36.2	54.0	17.8	100	358
----- Vertical -----										
9	1030.000	43.8	23.7	5.3	41.8	31.0	54.0	23.0	100	1
10	1186.829	44.3	24.2	5.7	41.8	32.4	54.0	21.6	100	16
11	1716.648	44.3	25.2	6.9	41.9	34.5	54.0	19.5	100	349
12	1780.250	51.3	25.2	7.1	42.0	41.6	54.0	12.4	100	332
13	2027.500	38.5	25.3	7.7	42.0	29.5	54.0	24.5	100	1
14	2225.628	41.9	26.2	7.9	42.0	34.0	54.0	20.0	100	1
15	3362.500	42.0	29.0	9.9	42.0	38.9	54.0	15.1	100	19
16	4505.000	35.1	30.7	12.0	41.4	36.4	54.0	17.6	100	1

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

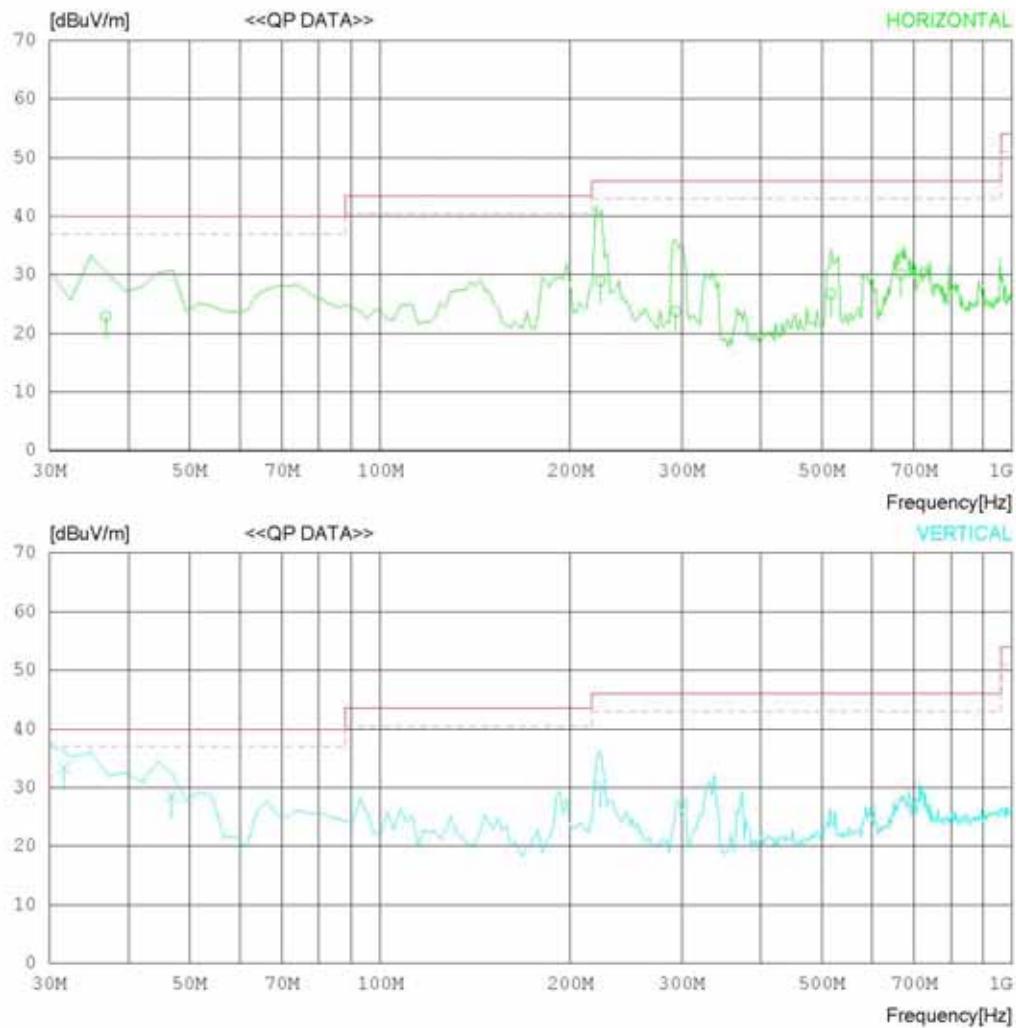
Date : 2011-12-29

Model Name : 37CS560-UE
 Model No.
 Serial No.
 Test Condition : USB

Reference No.
 Power Supply : 120V 60Hz
 Temp/Humi : 21 °C 34 % R.H.
 Operator

Memo :

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



RADIATED EMISSION

Date : 2011-12-29

Model Name : 37CS560-UE	Reference No. :
Model No. :	Power Supply : 120V 60Hz
Serial No. :	Temp/Humi : 21 °C 34 % R.H.
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
 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	36.870	29.0	15.6	0.9	22.6	22.9	40.0	17.1	201	1
2	223.075	39.0	11.2	2.2	23.4	29.0	46.0	17.0	100	0
3	293.600	31.2	13.7	2.6	23.8	23.7	46.0	22.3	100	358
4	517.424	30.0	17.9	3.4	24.6	26.7	46.0	19.3	100	358
5	666.950	31.2	18.9	4.1	24.1	30.1	46.0	15.9	100	36
----- Vertical -----										
6	31.625	37.9	17.2	0.9	22.6	33.4	40.0	6.6	100	1
7	46.838	37.7	12.4	1.0	22.6	28.5	40.0	11.5	100	1
8	223.075	40.2	11.2	2.2	23.4	30.2	46.0	15.8	185	358

< USB MODE_1 GHz ~ 6 GHz_PEAK >

RADIATED EMISSION

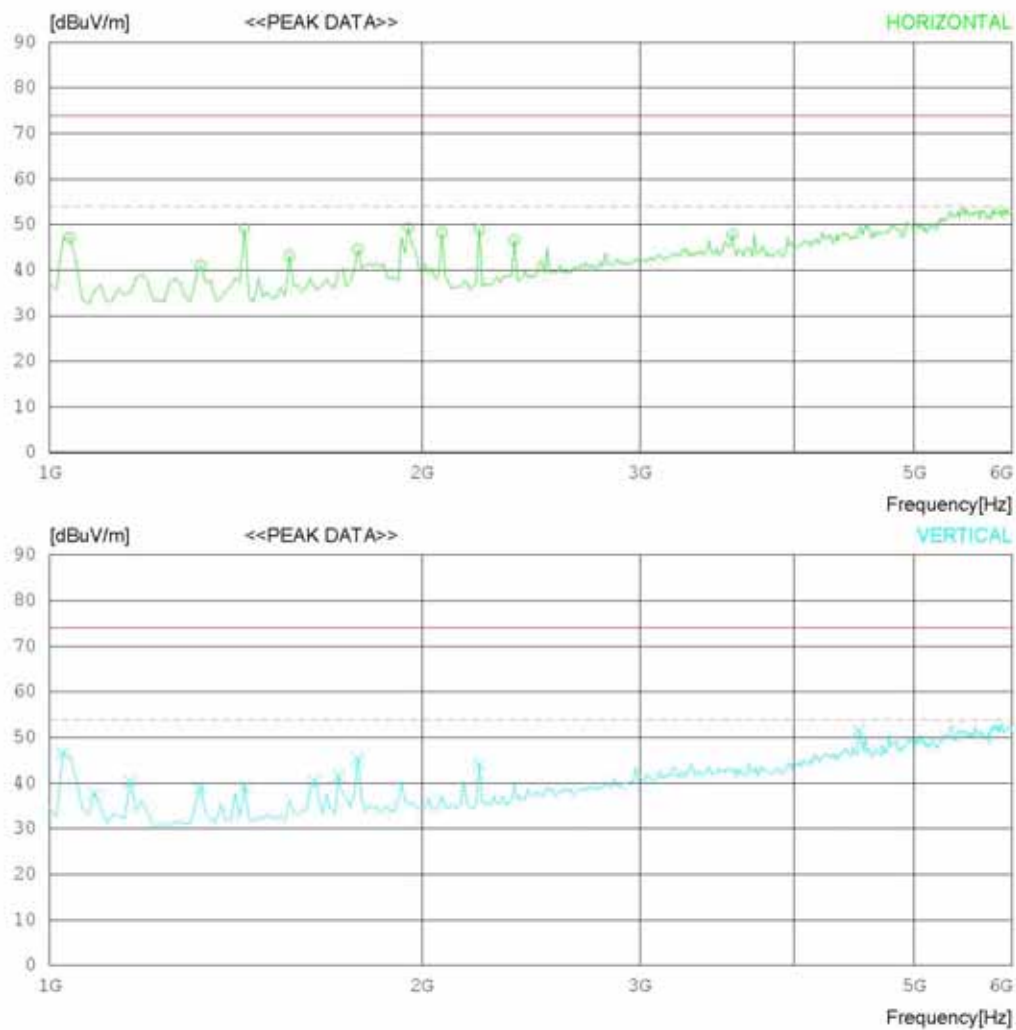
Date : 2011-12-29

Model Name : 37CS560-UE
 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 : 2011-12-29

Model Name : 37CS560-UE	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	59.9	23.7	5.3	41.8	47.1	74.0	26.9	100	1
2	1325.000	52.4	24.6	5.9	41.9	41.0	74.0	33	100	1
3	1437.500	59.8	25.0	6.2	41.9	49.1	74.0	24.9	100	1
4	1562.500	53.5	25.1	6.5	41.9	43.2	74.0	30.8	100	1
5	1775.000	54.3	25.2	7.1	42.0	44.6	74.0	29.4	100	1
6	1950.000	58.6	25.2	7.5	42.0	49.3	74.0	24.7	100	348
7	2075.000	57.0	25.5	7.8	42.0	48.3	74.0	25.7	100	1
8	2225.000	56.9	26.2	7.9	42.0	49.0	74.0	25	100	3
9	2375.000	53.7	26.8	8.1	42.0	46.6	74.0	27.4	100	1
10	3562.500	50.2	29.3	10.2	41.9	47.8	74.0	26.2	100	359
----- Vertical -----										
11	1025.000	59.3	23.7	5.3	41.8	46.5	74.0	27.5	100	0
12	1087.500	50.1	23.9	5.4	41.8	37.6	74.0	36.4	100	35
13	1162.500	52.4	24.1	5.6	41.8	40.3	74.0	33.7	100	35
14	1325.000	50.3	24.6	5.9	41.9	38.9	74.0	35.1	100	0
15	1437.500	50.0	25.0	6.2	41.9	39.3	74.0	34.7	100	358
16	1637.500	50.4	25.2	6.7	41.9	40.4	74.0	33.6	100	81
17	1712.500	51.2	25.2	6.9	41.9	41.4	74.0	32.6	100	0
18	1775.000	55.1	25.2	7.1	42.0	45.4	74.0	28.6	100	358
19	2225.000	52.0	26.2	7.9	42.0	44.1	74.0	29.9	100	358
20	4512.500	50.1	30.8	12.0	41.4	51.5	74.0	22.5	100	0

< USB MODE_1 GHz ~ 6 GHz_AV >

RADIATED EMISSION

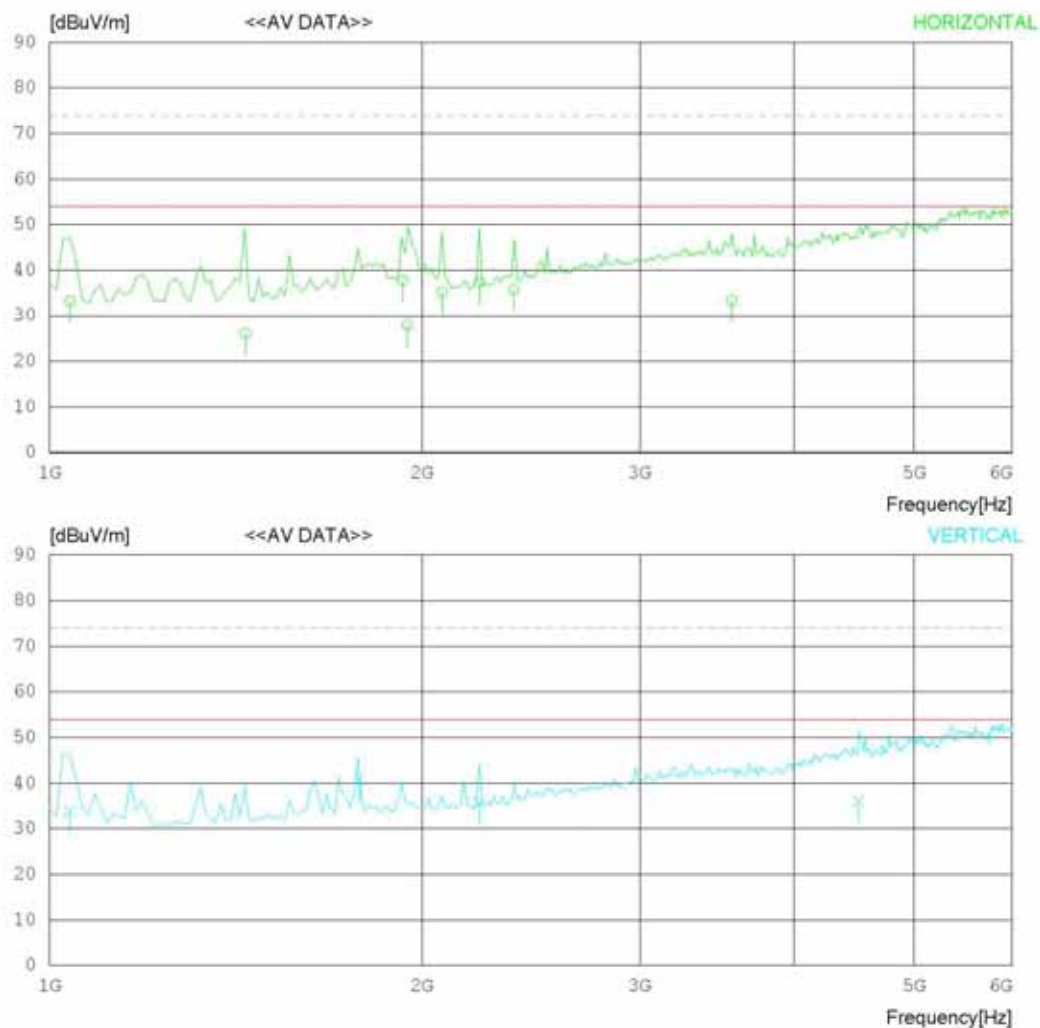
Date : 2011-12-29

Model Name : 37CS560-UE
 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 : 2011-12-29

Model Name : 37CS560-UE	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	1038.485	46.1	23.7	5.3	41.8	33.3	54.0	20.7	100	1
2	1440.050	36.8	25.0	6.2	41.9	26.1	54.0	27.9	100	1
3	1928.575	47.0	25.2	7.5	42.0	37.7	54.0	16.3	100	348
4	1946.175	37.3	25.2	7.5	42.0	28.0	54.0	26.0	100	348
5	2076.950	43.9	25.5	7.8	42.0	35.2	54.0	18.8	100	1
6	2225.305	45.2	26.2	7.9	42.0	37.3	54.0	16.7	100	1
7	2373.625	42.9	26.8	8.1	42.0	35.8	54.0	18.2	100	1
8	3560.500	35.8	29.3	10.2	41.9	33.4	54.0	20.6	100	359
----- Vertical -----										
9	1038.475	46.6	23.7	5.3	41.8	33.8	54.0	20.2	100	0
10	1780.250	50.7	25.2	7.1	42.0	41.0	54.0	13.0	100	358
11	2225.337	43.5	26.2	7.9	42.0	35.6	54.0	18.4	100	358
12	4506.250	34.8	30.7	12.0	41.4	36.1	54.0	17.9	100	0

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