

Application for FCC Certificate
On Behalf of
LG Electronics U.S.A., Inc.

LCD Monitor

Model No.: E2250SV

Serial No.: E2009121404

FCC ID : BEJE2250SV

Prepared For : LG Electronics U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs,
NJ 07632, United States

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Report No. : ACI-F09134
Date of Test : Dec 25, 2009
Date of Report : Dec 26, 2009

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TEST REPORT FOR FCC CERTIFICATE

Applicant : LG Electronics U.S.A., Inc.
Manufacturer : LG Electronics Nanjing Display Co., Ltd.
EUT Description : LCD Monitor
(A) Model No. : E2250SV
(B) Serial No. : E2009121404
(C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2008
AND ANSI C63.4-2003*

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B (Class B) and ICES-003, Issue 4 February 2004 (CISPR 22:2002) limits both radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: Refer to Sec. 2.1; S/N: Refer to Sec. 2.1) which was tested in 3m anechoic chamber Dec 25, 2009 is technically compliance with the FCC official limits also.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report contains data that are not covered by the NVLAP accreditation.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Dec 25, 2009 Date of Report : Dec 26, 2009

Producer : Zeno Gu
ZENO GU / Assistant

Review : Dio Yang
DIO YANG / Deputy Assistant Manager

 For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Sammy Chen
Authorized Signature EMC SAMMY CHEN / Assistant Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Description of Test Item	Standard	Limits	Results
EMISSION			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2008 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2008 AND ANSI C63.4-2003	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description	:	LCD Monitor
Type of EUT	:	☒ Production ☐ Pre-product ☐ Pro-type
Model No.	:	E2250SV
Serial No.	:	E2009121404
Real Power	:	24.00W
Applicant	:	LG Electronics U.S.A., Inc. 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632, United States
Manufacturer	:	LG Electronics Nanjing Display Co., Ltd. No.346, Yao Xin Road, Economic & Technical Development Zone, Nanjing, China
LCD Panel	:	Manufacturer : LG Display M/N : LM215WF4 (TL) (A1)
Adapter	:	SMPS ADAPTER Manufacturer : LIEN CHANG M/N : LCAP07F Input : 100-240V ~ 50/60Hz, 1.0A Output : 12V 3.0A Output Cable : Unshielded, Undetachable, 1.80m, with one core
Max Resolution	:	1920*1080@60Hz
D-Sub Cable #1	:	Shielded, Detachable, 1.85m, with two cores on cable
D-Sub Cable #2	:	Shielded, Detachable, 1.85m, with two cores in connector
Power Cord	:	Unshielded, Detachable, 1.80m
Note	:	After evaluation, the D-Sub cable#1 was used in the test for they will cause the maximum emission.

Remark:

The EUT is a LCD Monitor which input/output ports as follows:

- | | |
|--------------------|------------------------|
| (1) One D-Sub Port | : Connected with PC |
| (2) One AC In Port | : Connected with Power |

2.2 Peripherals

2.2.1 PC

Manufacturer : HP
Model Number : dx7400MT
Serial Number : CNG8130K89
Power Cord : Unshielded, Detachable, 1.8m
Certificate : FCC DoC; CE/EMC; VCCI; C-Tick; UL
BSMI (R33001) 3C (A000111)
MIC (E-A011-04-2659(B))

2.2.2 Printer

Manufacturer : HP
Model Number : C3990A
Serial Number : JPZX020487
Data Cable : Shielded, Detachable, 1.5m
Certificate : GS, CE/EMC, C-Tick, FCC DoC

2.2.3 Keyboard

Manufacturer : Microsoft
Model Number : RT2300
Serial Number : 7668200662248
Data Cable : Shielded, Undetachable, 1.8m
Certificate : CE/EMC, FCC DoC, VCCI, MIC, C-Tick,
BSMI

2.2.4 Mouse

Manufacturer : Microsoft
Model Number : RT2300
Serial Number : 6965712071551
Data Cable : Shielded, Undetachable, 1.85m.
Certificate : FCC DoC, VCCI, CE/EMC, MIC, GS

2.2.5 Modem

Manufacturer : TP-LINK
Model Number : TM-EC5658V
Serial Number : 07123301053
Data Cable : Shielded, Detachable, 1.8m
Certificate : FCC DoC, CE/EMC, CCC

2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber)	:	Sept. 17, 1998 file on Apr 29, 2009 Renewed Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA
Name of Firm	:	Audix Technology (Shanghai) Co., Ltd.
Site Location	:	3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China
NVLAP Lab Code	:	200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:	U = 1.26 dB
Radiated Emission Expanded Uncertainty :	U = 3.02 dB

3 CONDUCTED EMISSION TEST

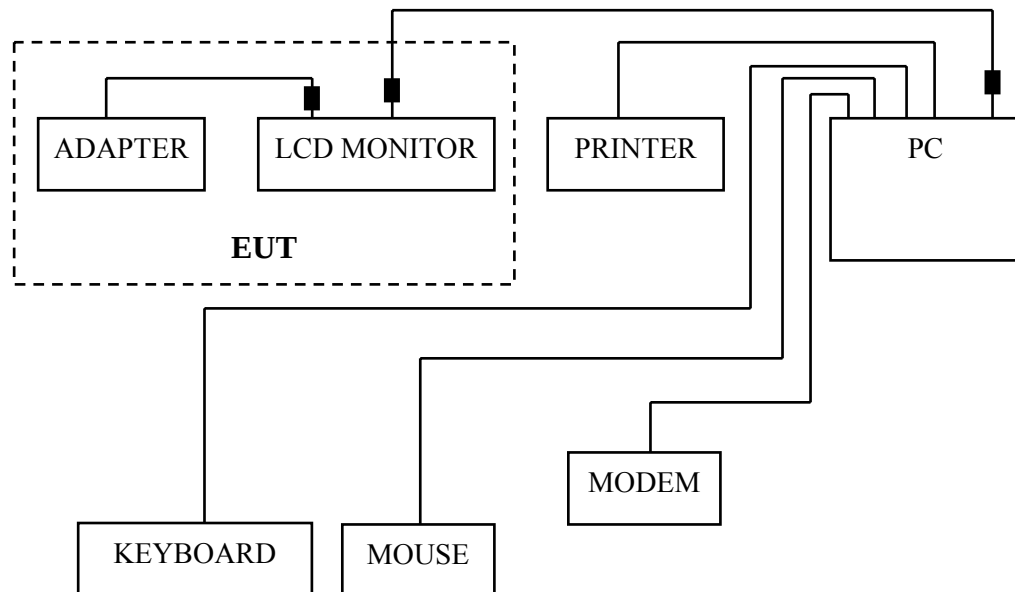
3.1.1 Test Equipment

The following test equipments are used during the conducted emission test in a shielded room:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	100841	Nov 21, 2009	Nov 21, 2010
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2009	Apr 02, 2010
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2009	Apr 02, 2010
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2009	Mar 19, 2010
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 02, 2009	Apr 02, 2010
6.	Software	Audix	E3	SET00200 9804M592	--	--

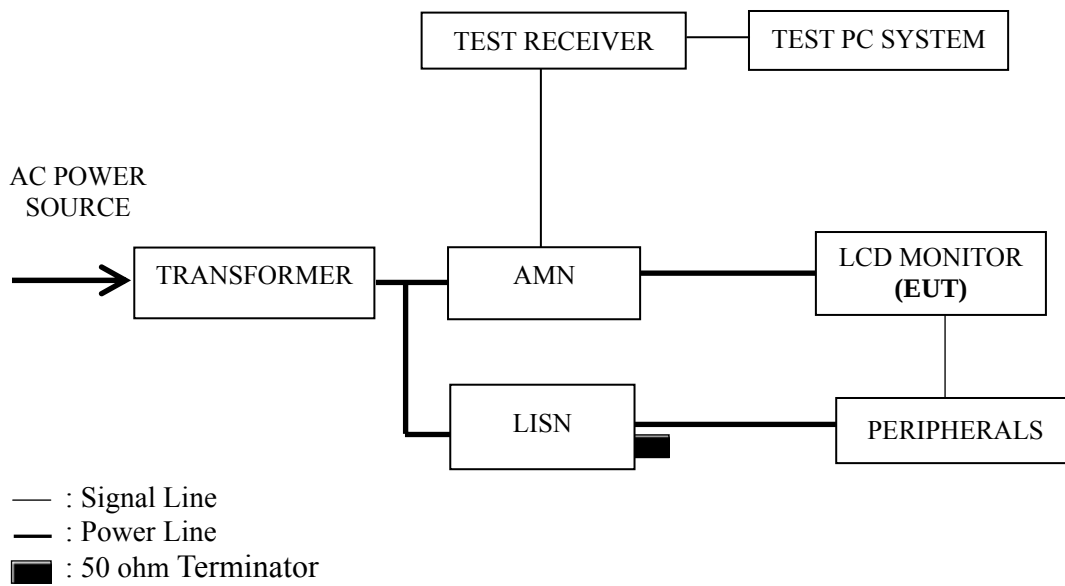
3.2 Block Diagram of Test Setup

3.2.1 EUT & Peripherals



■: Ferrite core

3.2.2 Conducted Disturbance Test Setup



3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)]

Frequency Range (MHz)	Limits dB (μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 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 0.15 MHz~0.50 MHz		

3.4 Test Configuration

The EUT (listed in Sec.2.1) and the peripherals (listed in Sec 2.2) were installed as shown on Sec.3.2 to meet FCC requirement and operating in a manner that tends to maximize its emission level in a normal application.

3.5 Operating Condition of EUT

3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.

3.5.2 Turn on the power of all equipments and the EUT.

3.5.3 Set the contrast & brightness of EUT to maximum.

3.5.4 PC system ran the self-test program “EMC Test” by windows XP and sent “H” characters to EUT through graphic card, the EUT’s screen displayed and filled with “H” pattern by its resolution (Via D-Sub Input).

3.5.5 Repeat above procedure from 3.5.3 to 3.5.4 for difference test mode.

3.5.6 The other peripherals devices were driven and operated during the test.

3.5.7 The test modes are as follows:

M/N	Test Mode
E2250SV	D-Sub 640*480@60Hz
	D-Sub 1024*768@60Hz
	D-Sub 1680*1050@60Hz
	D-Sub 1920*1080@60Hz

3.6 Test Procedures

The EUT and peripherals were connected to the power mains through an Artificial Mains Network (AMN). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line (Line & Neutral) were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to ANSI C63.4:2003 during conducted emission test.

The bandwidth of R&S Test Receiver ESCI was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

3.7 Test Results

< PASS >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

M/N	Test Mode	Data Page
E2250SV	D-Sub 640*480@60Hz	P12
	D-Sub 1024*768@60Hz	P13
	D-Sub 1680*1050@60Hz	P14
	D-Sub 1920*1080@60Hz	P15

NOTE 1 – The **bold test mode** listed above means the worst test mode.

NOTE 2 – Factor = Cable Loss + AMN Factor.

NOTE 3 – Emission Level = Meter Reading + Factor.

NOTE 4 – “QP” means “Quasi-Peak” values, “AV” means “Average” values.

NOTE 5 – The worst case is for D-Sub 640*480@60Hz test mode. The worst emission is detected at 0.177 MHz (Quasi-Peak Value) with corrected signal level of 58.70 dB (μV) (limit is 64.61 dB (μV)), when the Neutral the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 48%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 640*480@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	57.27	0.22	57.49	64.69	7.20	QP
	0.234	41.76	0.24	42.00	62.30	20.30	
	0.489	28.65	0.29	28.94	56.19	27.25	
	2.448	14.63	0.39	15.02	56.00	40.98	
	5.419	28.31	0.44	28.75	60.00	31.25	
	15.146	38.35	0.71	39.06	60.00	20.94	
	0.176	40.05	0.22	40.27	54.69	14.42	AV
	0.234	30.59	0.24	30.83	52.30	21.47	
	0.489	16.17	0.29	16.46	46.19	29.73	
	2.448	5.02	0.39	5.41	46.00	40.59	
	5.419	12.09	0.44	12.53	50.00	37.47	
	15.146	32.40	0.71	33.11	50.00	16.89	
Neutral	0.177	58.50	0.20	58.70	64.61	5.91	QP
	0.234	48.25	0.22	48.47	62.30	13.83	
	0.444	25.92	0.26	26.18	56.98	30.80	
	2.201	10.10	0.37	10.47	56.00	45.53	
	5.333	27.88	0.45	28.33	60.00	31.67	
	16.055	39.02	0.71	39.73	60.00	20.27	
	0.177	40.22	0.20	40.42	54.61	14.19	AV
	0.234	25.10	0.22	25.32	52.30	26.98	
	0.444	10.00	0.26	10.26	46.98	36.72	
	2.201	1.40	0.37	1.77	46.00	44.23	
	5.333	9.84	0.45	10.29	50.00	39.71	
	16.055	31.38	0.71	32.09	50.00	17.91	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 48%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1024*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.178	56.63	0.22	56.85	64.59	7.74	QP
	0.239	47.50	0.24	47.74	62.13	14.39	
	0.471	27.80	0.29	28.09	56.49	28.40	
	2.261	14.35	0.37	14.72	56.00	41.28	
	5.221	33.36	0.44	33.80	60.00	26.20	
	15.226	39.20	0.71	39.91	60.00	20.09	
	0.178	42.23	0.22	42.45	54.59	12.14	AV
	0.239	33.31	0.24	33.55	52.13	18.58	
	0.471	10.38	0.29	10.67	46.49	35.82	
	2.261	6.01	0.37	6.38	46.00	39.62	
	5.221	18.45	0.44	18.89	50.00	31.11	
	15.226	33.18	0.71	33.89	50.00	16.11	
Neutral	0.178	55.85	0.20	56.05	64.59	8.54	QP
	0.239	46.09	0.22	46.31	62.13	15.82	
	0.585	21.19	0.26	21.45	56.00	34.55	
	3.207	14.14	0.41	14.55	56.00	41.45	
	5.476	30.15	0.45	30.60	60.00	29.40	
	15.388	41.96	0.68	42.64	60.00	17.36	
	0.178	42.77	0.20	42.97	54.59	11.62	AV
	0.239	30.02	0.22	30.24	52.13	21.89	
	0.585	2.62	0.26	2.88	46.00	43.12	
	3.207	5.05	0.41	5.46	46.00	40.54	
	5.476	16.66	0.45	17.11	50.00	32.89	
	15.388	35.48	0.68	36.16	50.00	13.84	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 48%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1680*1050@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.174	52.13	0.22	52.35	64.77	12.42	QP
	0.234	43.15	0.24	43.39	62.30	18.91	
	0.297	40.56	0.25	40.81	60.32	19.51	
	5.221	32.23	0.44	32.67	60.00	27.33	
	15.885	40.97	0.74	41.71	60.00	18.29	
	22.655	27.72	0.84	28.56	60.00	31.44	
	0.174	34.77	0.22	34.99	54.77	19.78	AV
	0.234	23.62	0.24	23.86	52.30	28.44	
	0.297	24.45	0.25	24.70	50.32	25.62	
	5.221	19.10	0.44	19.54	50.00	30.46	
	15.885	35.04	0.74	35.78	50.00	14.22	
	22.655	22.06	0.84	22.90	50.00	27.10	
Neutral	0.178	54.88	0.20	55.08	64.59	9.51	QP
	0.237	45.54	0.22	45.76	62.22	16.46	
	0.585	21.40	0.26	21.66	56.00	34.34	
	3.276	16.21	0.41	16.62	56.00	39.38	
	5.333	31.65	0.45	32.10	60.00	27.90	
	15.388	39.96	0.68	40.64	60.00	19.36	
	0.178	40.69	0.20	40.89	54.59	13.70	AV
	0.237	24.57	0.22	24.79	52.22	27.43	
	0.585	12.58	0.26	12.84	46.00	33.16	
	3.276	7.88	0.41	8.29	46.00	37.71	
	5.333	23.85	0.45	24.30	50.00	25.70	
	15.388	34.29	0.68	34.97	50.00	15.03	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 48%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1920*1080@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	54.21	0.22	54.43	64.68	10.25	QP
	0.237	44.13	0.24	44.37	62.22	17.85	
	0.300	39.32	0.25	39.57	60.24	20.67	
	5.112	30.95	0.44	31.39	60.00	28.61	
	15.885	41.78	0.74	42.52	60.00	17.48	
	20.924	26.37	0.87	27.24	60.00	32.76	
	0.176	37.39	0.22	37.61	54.68	17.07	AV
	0.237	28.76	0.24	29.00	52.22	23.22	
	0.300	27.37	0.25	27.62	50.24	22.62	
	5.112	19.39	0.44	19.83	50.00	30.17	
	15.885	36.03	0.74	36.77	50.00	13.23	
	20.924	20.89	0.87	21.76	50.00	28.24	
Neutral	0.178	54.01	0.20	54.21	64.59	10.38	QP
	0.233	42.15	0.22	42.37	62.35	19.98	
	0.292	37.62	0.23	37.85	60.46	22.61	
	5.277	31.66	0.45	32.11	60.00	27.89	
	15.885	41.06	0.71	41.77	60.00	18.23	
	21.373	27.53	0.83	28.36	60.00	31.64	
	0.178	36.32	0.20	36.52	54.59	18.07	AV
	0.233	20.47	0.22	20.69	52.35	31.66	
	0.292	21.14	0.23	21.37	50.46	29.09	
	5.277	19.93	0.45	20.38	50.00	29.62	
	15.885	34.02	0.71	34.73	50.00	15.27	
	21.373	23.46	0.83	24.29	50.00	25.71	

TEST ENGINEER: HUGH HUANG

4 RADIATED EMISSION TEST

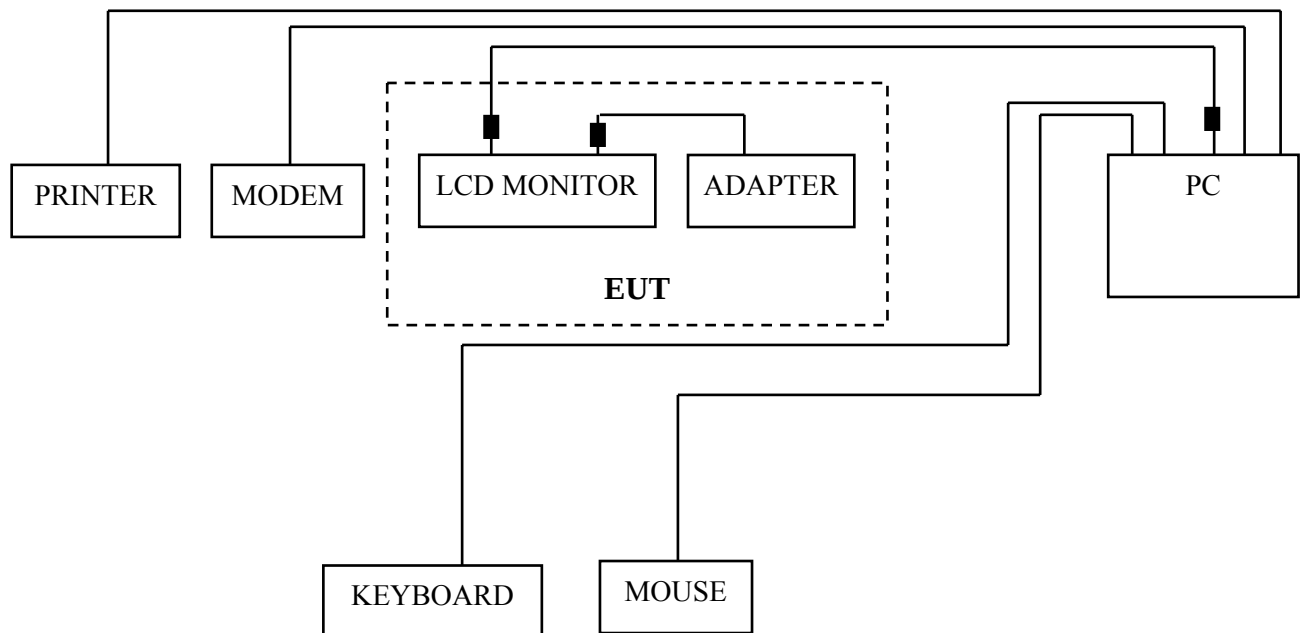
4.1 Test Equipment

The following test equipments are used during the radiated emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESVS10	844594/001	Mar 07, 2009	Mar 07, 2010
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2009	Mar 19, 2010
3.	Preamplifier	HP	8449B	3008A00864	Apr 29, 2009	Apr 29, 2010
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2010
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2009	May 19, 2010
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

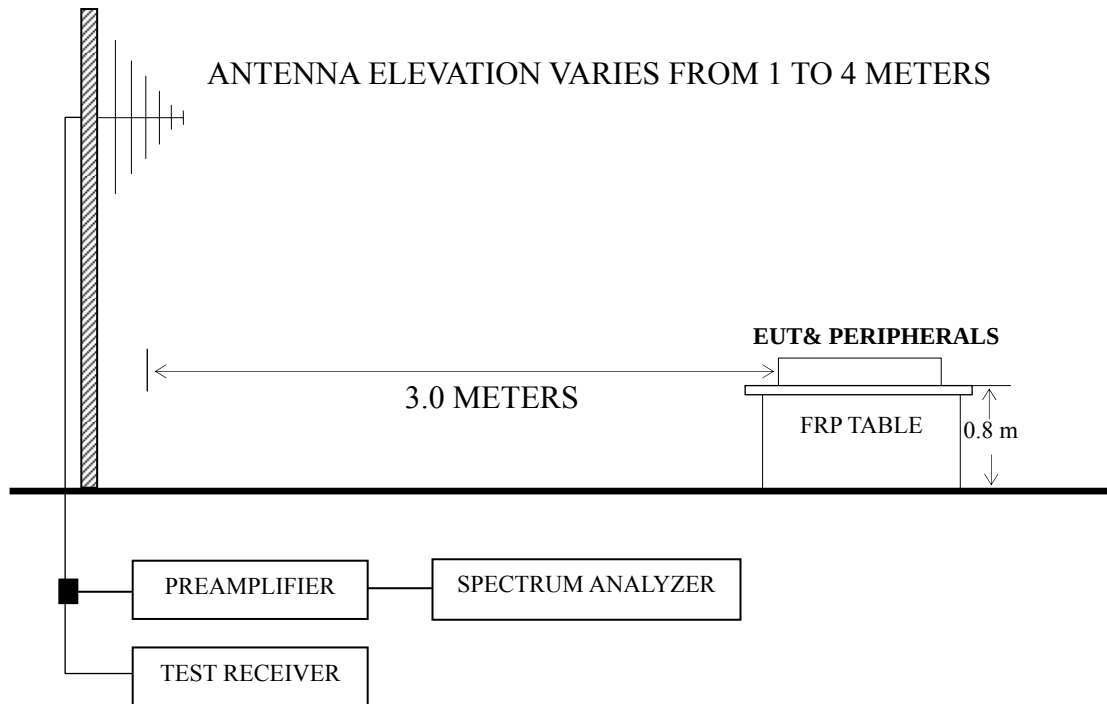
4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals



■ : Ferrite core

4.2.2 Radiated emission test setup



■ : 50 ohm Coaxial Switch

4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)]

Frequency (MHz)	Distance (m)	Field strength limits	
		($\mu\text{V/m}$)	dB ($\mu\text{V/m}$)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0

NOTE 1 - Emission Level dB ($\mu\text{V/m}$) = 20 log Emission Level ($\mu\text{V/m}$)

NOTE 2 - The tighter limit applies at the band edges.

NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz.

NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT.

4.4 Test Configuration

The configuration of the EUT and peripherals are same as those used in conducted emission test.

Please refer to Sec.3.4.

4.5 Operating Condition of EUT

Same as conducted emission test which is listed in Sec.3.5, except for the test setup replaced by Sec.4.2.

4.6 Test Procedures

The EUT and peripherals were placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna) was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4:2003 requirements during radiated emission test.

The bandwidth of Test Receiver R&S ESVS10 was set at 120 kHz

The frequency range from 30 MHz to 1000MHz was checked for all test modes.

The frequency range from 1 GHz to 2 GHz was checked for D-Sub 1680*1050@60Hz and D-Sub 1920*1080@60Hz modes.

The test modes were done on radiated disturbance test and all the test results are listed in Sec.4.7.

4.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

M/N	Test Mode	Data Page
E2250SV	D-Sub 640*480@60Hz	P20
	D-Sub 1024*768@60Hz	P21
	D-Sub 1680*1050@60Hz	P22
	D-Sub 1920*1080@60Hz	P23

NOTE 1 – **The bold test mode** listed above means the worst test mode.

NOTE 2 – Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz)

NOTE 3 – Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading. (> 1GHz)

NOTE 4 – The emission levels that are 20dB below the official limit are not reported.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 6 – The worst case is for D-Sub 1680*1050@60Hz test mode. The worst emission at horizontal polarization was detected at 44.550 MHz with corrected signal level of 36.74 dB (μV/m) (limit is 40.00dB (μV/m)), when the antenna was 1.10 m height and the turntable was at 300°. The worst emission at vertical polarization was detected at 227.880MHz with corrected signal level of 40.03 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 230°.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 60%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 640*480@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	31.940	14.03	18.49	0.64	33.16	40.00	6.84
	43.580	23.52	11.88	0.68	36.08	40.00	3.92
	112.450	21.48	12.51	1.12	35.11	43.50	8.39
	173.560	24.88	10.09	1.38	36.35	43.50	7.15
	298.690	18.58	13.88	1.88	34.34	46.00	11.66
	573.200	16.68	18.88	2.66	38.22	46.00	7.78
Vertical	30.970	1.74	19.03	0.63	21.40	40.00	18.60
	133.790	14.27	12.35	1.18	27.80	43.50	15.70
	214.300	22.52	11.35	1.59	35.46	43.50	8.04
	247.280	22.37	12.79	1.69	36.85	46.00	9.15
	477.170	13.84	17.62	2.38	33.84	46.00	12.16
	816.670	15.41	20.87	3.24	39.52	46.00	6.48

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 60%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1024*768@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	43.580	8.95	11.88	0.68	21.51	40.00	18.49
	87.230	14.23	8.96	1.00	24.19	40.00	15.81
	172.590	25.76	10.11	1.38	37.25	43.50	6.25
	224.000	23.06	11.85	1.62	36.53	46.00	9.47
	475.230	14.82	17.60	2.37	34.79	46.00	11.21
	813.760	12.44	20.84	3.24	36.52	46.00	9.48
Vertical	31.940	15.95	18.49	0.64	35.08	40.00	4.92
	43.580	23.04	11.88	0.68	35.60	40.00	4.40
	113.420	21.55	12.58	1.12	35.25	43.50	8.25
	172.590	26.52	10.11	1.38	38.01	43.50	5.49
	298.690	19.92	13.88	1.88	35.68	46.00	10.32
	486.870	18.07	17.75	2.40	38.22	46.00	7.78

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 60%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1680*1050@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	44.550	24.67	11.38	0.69	--	36.74	40.00	3.26	QP
	113.420	20.55	12.58	1.12	--	34.25	43.50	9.25	
	179.380	28.40	9.92	1.43	--	39.75	43.50	3.75	
	227.880	21.09	12.02	1.63	--	34.74	46.00	11.26	
	482.020	15.06	17.68	2.40	--	35.14	46.00	10.86	
	602.300	15.82	19.21	2.74	--	37.77	46.00	8.23	
	1009.000	53.02	22.46	3.88	34.10	45.26	74.00	28.74	PK
	1215.000	50.89	23.82	4.24	34.12	44.83	74.00	29.17	
	1317.000	50.46	24.66	4.42	34.13	45.41	74.00	28.59	
	1548.000	51.22	26.11	4.81	34.16	47.98	74.00	26.02	
	1696.000	48.91	26.65	5.11	34.17	46.50	74.00	27.50	
	1823.000	47.72	27.03	5.21	34.18	45.78	74.00	28.22	
Vertical	43.580	6.98	11.88	0.68	--	19.54	40.00	20.46	QP
	97.900	14.38	11.11	1.07	--	26.56	43.50	16.94	
	194.900	24.91	10.51	1.51	--	36.93	43.50	6.57	
	227.880	26.38	12.02	1.63	--	40.03	46.00	5.97	
	341.370	18.03	15.07	2.02	--	35.12	46.00	10.88	
	804.060	12.78	20.73	3.21	--	36.72	46.00	9.28	
	1019.000	49.89	22.51	3.88	34.10	42.18	74.00	31.82	PK
	1141.000	48.59	23.36	4.10	34.11	41.94	74.00	32.06	
	1215.000	48.22	23.82	4.24	34.12	42.16	74.00	31.84	
	1391.000	43.90	25.16	4.54	34.14	39.46	74.00	34.54	
	1549.000	47.01	26.11	4.81	34.16	43.77	74.00	30.23	
	1823.000	45.45	27.03	5.21	34.18	43.51	74.00	30.49	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250SV Humidity : 60%RH

Serial No. : E2009121404 Date of Test : Dec 25, 2009

Test Mode : D-Sub 1920*1080@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	50.370	25.50	8.85	0.70	--	35.05	40.00	4.95	QP
	65.890	25.43	6.54	0.84	--	32.81	40.00	7.19	
	123.120	15.06	12.86	1.15	--	29.07	43.50	14.43	
	164.830	24.52	10.35	1.32	--	36.19	43.50	7.31	
	246.310	23.07	12.75	1.69	--	37.51	46.00	8.49	
	942.770	10.31	22.02	3.51	--	35.84	46.00	10.16	
	1009.000	54.02	22.46	3.88	34.10	46.26	74.00	27.74	PK
	1215.000	51.89	23.82	4.24	34.12	45.83	74.00	28.17	
	1317.000	51.46	24.66	4.42	34.13	46.41	74.00	27.59	
	1548.000	51.22	26.11	4.81	34.16	47.98	74.00	26.02	
	1696.000	48.91	26.65	5.11	34.17	46.50	74.00	27.50	
	1823.000	49.72	27.03	5.21	34.18	47.78	74.00	26.22	
Vertical	43.580	22.95	11.88	0.68	--	35.51	40.00	4.49	QP
	50.370	26.32	8.85	0.70	--	35.87	40.00	4.13	
	116.330	22.24	12.78	1.13	--	36.15	43.50	7.35	
	182.290	23.87	9.99	1.44	--	35.30	43.50	8.20	
	299.660	18.71	13.90	1.88	--	34.49	46.00	11.51	
	573.200	15.85	18.88	2.66	--	37.39	46.00	8.61	
	1020.000	54.62	22.54	3.88	34.10	46.94	74.00	27.06	PK
	1152.000	52.91	23.45	4.13	34.11	46.38	74.00	27.62	
	1215.000	52.22	23.82	4.24	34.12	46.16	74.00	27.84	
	1391.000	49.90	25.16	4.54	34.14	45.46	74.00	28.54	
	1549.000	51.01	26.11	4.81	34.16	47.77	74.00	26.23	
	1823.000	48.45	27.03	5.21	34.18	46.51	74.00	27.49	

TEST ENGINEER: RAVEN JIN

5 DEVIATION TO TEST SPECIFICATIONS

None.

6 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	M/N	Specifications (mm)	Manufacturer	Location
Adhesive Tape	T-308	50*60	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 11
Gasket	T-308	100*9mm*1T	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 10
Gasket	T-308	110*9mm*1T	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 10

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:



(RAVEN JIN)