

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

LCD Monitor

Model No.	W1943SV	W1943CV
Serial No.	E11101248-01/01	--

FCC ID : BEJW1943SV

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.
3F and 4F 34Bldg 680 Guiping Rd,
Caohejing Hi-Tech Park,
Shanghai 200233, China

Tel: +86-21-64955500
Fax: +86-21-64955491

Report No. : ACI-F09002A2
Date of Test : Oct 10, 2011
Date of Report : Oct 22, 2011

TABLE OF CONTENTS

	Page
1 SUMMARY OF STANDARDS AND RESULTS.....	4
1.1 Description of Standards and Results.....	4
2 GENERAL INFORMATION.....	5
2.1 Description of Equipment Under Test.....	5
2.2 Peripherals.....	6
2.3 Description of Test Facility	7
2.4 Measurement Uncertainty	8
3 CONDUCTED EMISSION TEST	9
3.1 Test Equipment.....	9
3.2 Block Diagram of Test Setup	9
3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)].....	10
3.4 Test Configuration.....	10
3.5 Operating Condition of EUT	11
3.6 Test Procedures	11
3.7 Test Results	12
4 RADIATED EMISSION TEST	17
4.1 Test Equipment.....	17
4.2 Block Diagram of Test Setup	17
4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)].....	18
4.4 Test Configuration.....	18
4.5 Operating Condition of EUT	19
4.6 Test Procedures	19
4.7 Test Results	20
5 DEVIATION TO TEST SPECIFICATIONS	25

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	W1943SV	W1943CV
(B) Serial No	E11101248-01/01	--
(C) Power Supply	120V/60Hz	

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2010
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 on Oct 10, 2011 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 : Oct 10, 2011 Date of Report : Oct 22, 2011

Producer : Yenny Yu
YENNY YU / Assistant

Review : Dio Yang
DIO YANG / Assistant Manager

AUDIX[®] For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Sammy Chen
Authorized Signature EMC SAMMY CHEN / Deputy 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 2010 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2010 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. :

W1943SV	W1943CV
---------	---------

Serial No. :

E11101248-01/01	--
-----------------	----

Note #1 : The different list for all the models are as follows:

Report No.	Model No.	Rev. Summary	Edition No.	Data of Rev.
ACI-F09002	W1943SV W1943CV	Original Report.	0	Jan 12, 2009
ACI-F09002A1	W1943SV W1943CV	To add two new switching adapters.	Rev. A1	Jun 30, 2011
ACI-F09002A2	W1943SV W1943CV	To add two new switching adapters.	Rev. A2	Oct 22, 2011

Note #2 : W1943SV and W1943CV are all the same except for different panel with different brightness of screen (The brightness of W1943SV is 300 and the brightness of W1943CV is 200).

Note #3 : The W1943SV model (worst emission model in original report) was selected to be tested and recorded in this report.

Real Power	:	Model Number	Real Power
		W1943SV	22.40W (Adapter #1)
			22.10W (Adapter #2)

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: AU Optronics
(for W1943SV) M/N : M185XW01

Adapter #1	:	Manufacturer: Genmao Electronic(Suzhou) Co., Ltd. M/N : LCAP21 Input : 100-240V ~ 50-60Hz, 1.1A Output : 19V $\overline{\text{---}}$ 1.3A Output Cable : Unshielded, Undetachable, 1.80m, with one core
Adapter #2	:	Manufacturer: Genmao Electronic(Suzhou) Co., Ltd. M/N : LCAP16-Y (Y can be A, B, C, E, I direct plug-in type) represents different plug types, LCAP16-A was selected as the test model. Input : 100-240V ~ 50-60Hz, 1.1A Output : 19V $\overline{\text{---}}$ 1.3A Output Cable : Unshielded, Undetachable, 1.80m, with one core
Max Resolution	:	1360*768@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
Note #4	:	The D-Sub cable #2 was selected to be used in the test.

Remark:

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

- (1) One D-Sub Port : Connected with PC
- (2) One DC In Port : Connected with Adapter

2.2 Peripherals

2.2.1 PC

Manufacturer	:	HP
Model Number	:	dx7200MT
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, 1.8m.
Certificate : CE/EMC, FCC DoC, VCCI, MIC, C-Tick, BSMI

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 : Sept. 17, 1998 file on
(Semi-Anechoic Chamber) 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 = 3.38 dB

Radiated Emission Expanded Uncertainty (30-200MHz):

U = 4.58 dB (horizontal)

U = 4.70 dB (vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):

U = 4.84 dB (horizontal)

U = 4.70 dB (vertical)

3 CONDUCTED EMISSION TEST

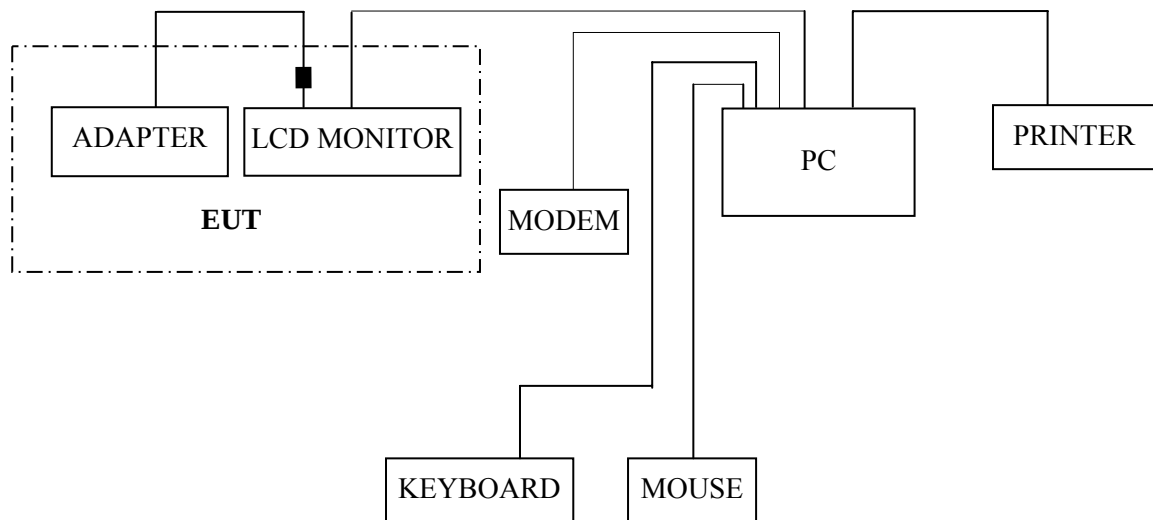
3.1 Test Equipment

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	Mar 22, 2011	Mar 22, 2012
2.	Artificial Mains Network (AMN #1)	R&S	ESH2-Z5	843890/011	Mar 22, 2011	Mar 22, 2012
3.	Artificial Mains Network (AMN #2)	R&S	ENV4200	100125	Mar 22, 2011	Mar 22, 2012
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 18, 2011	Mar 18, 2012
5.	50 Ω Terminator	Anritsu	BNC	001	Mar 22, 2011	Mar 22, 2012
6.	Software	Audix	E3	SET00200 9804M592	--	--

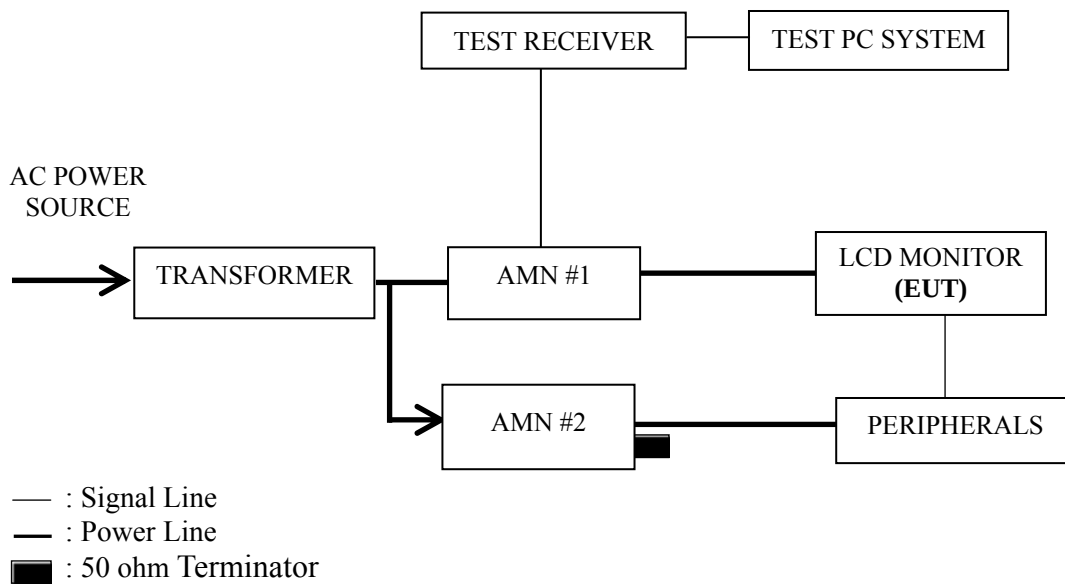
3.2 Block Diagram of Test Setup

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:

Test Mode
D-Sub 640*480@60Hz
D-Sub 1024*768@60Hz
D-Sub 1360*768@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.

Model Number	Adapter	Test Mode	Page
W1943SV	Adapter #1: LCAP21	D-Sub 640*480@60Hz	P13
		D-Sub 1024*768@60Hz	P14
		D-Sub 1360*768@60Hz	P15
	Adapter #2: LCAP16-A	D-Sub 640*480@60Hz	P16

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 – We select the worst test mode to test the EUT with Adapter #2 (LCAP16-A).

NOTE 6 – The worst case is for D-Sub 640*480@60Hz (Adapter #2) test mode. The worst emission is detected at 0.168 MHz (Average Value) with corrected signal level of 52.69 dB (μV) (limit is 55.07 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 48%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 640*480@60Hz Adapter : Adapter #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.164	57.31	0.22	57.53	65.25	7.72	QP
	0.215	49.24	0.22	49.46	63.01	13.55	
	0.352	42.65	0.28	42.93	58.91	15.98	
	0.481	40.90	0.31	41.21	56.32	15.11	
	4.772	42.04	0.55	42.59	56.00	13.41	
	13.841	38.80	0.85	39.65	60.00	20.35	
	0.164	48.40	0.22	48.62	55.25	6.63	AV
	0.215	39.31	0.22	39.53	53.01	13.48	
	0.352	31.90	0.28	32.18	48.91	16.73	
	0.481	30.60	0.31	30.91	46.32	15.41	
	4.772	31.80	0.55	32.35	46.00	13.65	
	13.841	28.60	0.85	29.45	50.00	20.55	
Neutral	0.162	55.62	0.19	55.81	65.34	9.53	QP
	0.215	47.24	0.18	47.42	63.01	15.59	
	0.343	39.34	0.21	39.55	59.13	19.58	
	0.476	38.17	0.24	38.41	56.41	18.00	
	4.454	39.38	0.76	40.14	56.00	15.86	
	14.828	37.46	1.16	38.62	60.00	21.38	
	0.162	45.40	0.19	45.59	55.34	9.75	AV
	0.215	36.61	0.18	36.79	53.01	16.22	
	0.343	28.70	0.21	28.91	49.13	20.22	
	0.476	28.20	0.24	28.44	46.41	17.97	
	4.454	30.49	0.76	31.25	46.00	14.75	
	14.828	27.30	1.16	28.46	50.00	21.54	

TEST ENGINEER: L V Y L V

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 48%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 1024*768@60Hz Adapter : Adapter #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.162	55.68	0.22	55.90	65.34	9.44	QP
	0.216	47.82	0.22	48.04	62.96	14.92	
	0.356	42.45	0.28	42.73	58.83	16.10	
	0.471	41.60	0.31	41.91	56.49	14.58	
	4.454	41.03	0.55	41.58	56.00	14.42	
	14.986	38.24	0.86	39.10	60.00	20.90	
	0.162	44.40	0.22	44.62	55.34	10.72	AV
	0.216	37.41	0.22	37.63	52.96	15.33	
	0.356	32.20	0.28	32.48	48.83	16.35	
	0.471	31.60	0.31	31.91	46.49	14.58	
	4.454	30.69	0.55	31.24	46.00	14.76	
	14.986	28.40	0.86	29.26	50.00	20.74	
Neutral	0.161	55.67	0.19	55.86	65.43	9.57	QP
	0.216	46.86	0.18	47.04	62.96	15.92	
	0.336	39.28	0.21	39.49	59.31	19.82	
	0.476	38.22	0.24	38.46	56.41	17.95	
	4.772	39.86	0.76	40.62	56.00	15.38	
	13.127	35.75	1.14	36.89	60.00	23.11	
	0.161	44.90	0.19	45.09	55.43	10.34	AV
	0.216	36.21	0.18	36.39	52.96	16.57	
	0.336	29.30	0.21	29.51	49.31	19.80	
	0.476	28.30	0.24	28.54	46.41	17.87	
	4.772	29.70	0.76	30.46	46.00	15.54	
	13.127	25.78	1.14	26.92	50.00	23.08	

TEST ENGINEER: LVY LV

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 48%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 1360*768@60Hz Adapter : Adapter #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.162	55.50	0.22	55.72	65.34	9.62	QP
	0.219	47.72	0.22	47.94	62.88	14.94	
	0.348	42.34	0.28	42.62	59.00	16.38	
	0.466	41.32	0.31	41.63	56.58	14.95	
	4.721	40.95	0.55	41.50	56.00	14.50	
	14.828	38.42	0.86	39.28	60.00	20.72	
	0.162	44.70	0.22	44.92	55.34	10.42	AV
	0.219	37.81	0.22	38.03	52.88	14.85	
	0.348	32.20	0.28	32.48	49.00	16.52	
	0.466	31.80	0.31	32.11	46.58	14.47	
	4.721	30.40	0.55	30.95	46.00	15.05	
	14.828	28.70	0.86	29.56	50.00	20.44	
Neutral	0.162	54.88	0.19	55.07	65.34	10.27	QP
	0.216	46.44	0.18	46.62	62.96	16.34	
	0.348	39.11	0.21	39.32	59.00	19.68	
	0.471	38.46	0.24	38.70	56.49	17.79	
	4.721	40.20	0.76	40.96	56.00	15.04	
	13.127	37.82	1.14	38.96	60.00	21.04	
	0.162	44.50	0.19	44.69	55.34	10.65	AV
	0.216	36.21	0.18	36.39	52.96	16.57	
	0.348	29.10	0.21	29.31	49.00	19.69	
	0.471	28.10	0.24	28.34	46.49	18.15	
	4.721	30.70	0.76	31.46	46.00	14.54	
	13.127	27.10	1.14	28.24	50.00	21.76	

TEST ENGINEER: L V Y L V

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 48%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 640*480@60Hz Adapter : Adapter #2

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.168	60.20	0.22	60.42	65.08	4.66	QP
	0.213	55.91	0.22	56.13	63.10	6.97	
	0.356	46.38	0.28	46.66	58.83	12.17	
	0.431	42.61	0.31	42.92	57.24	14.32	
	4.926	34.17	0.55	34.72	56.00	21.28	
	14.986	32.85	0.86	33.71	60.00	26.29	
	0.168	51.10	0.22	51.32	55.08	3.76	AV
	0.213	44.51	0.22	44.73	53.10	8.37	
	0.356	36.30	0.28	36.58	48.83	12.25	
	0.431	32.69	0.31	33.00	47.24	14.24	
	4.926	26.90	0.55	27.45	46.00	18.55	
	14.986	24.80	0.86	25.66	50.00	24.34	
Neutral	0.168	60.51	0.19	60.70	65.07	4.37	QP
	0.213	55.26	0.18	55.44	63.10	7.66	
	0.300	45.73	0.19	45.92	60.24	14.32	
	0.431	42.01	0.24	42.25	57.24	14.99	
	4.874	34.69	0.76	35.45	56.00	20.55	
	15.552	31.67	1.16	32.83	60.00	27.17	
	0.168	52.50	0.19	52.69	55.07	2.38	AV
	0.213	46.11	0.18	46.29	53.10	6.81	
	0.300	35.20	0.19	35.39	50.24	14.85	
	0.431	32.10	0.24	32.34	47.24	14.90	
	4.874	24.70	0.76	25.46	46.00	20.54	
	15.552	21.90	1.16	23.06	50.00	26.94	

TEST ENGINEER: L V Y L V

4 RADIATED EMISSION TEST

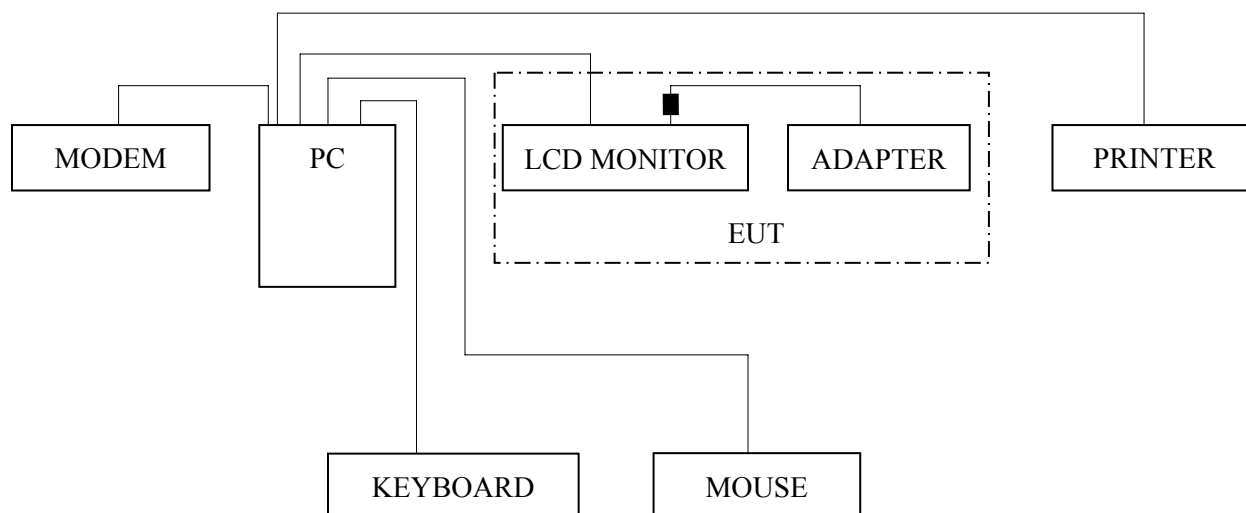
4.1 Test Equipment

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 22, 2011	Mar 22, 2012
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 18, 2011	Mar 18, 2012
3.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2010	Dec 01, 2011
4.	Spectrum	Agilent	E7405A	MY45106600	Mar 22, 2011	Mar 22, 2012
5.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2011	Mar 18, 2012
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

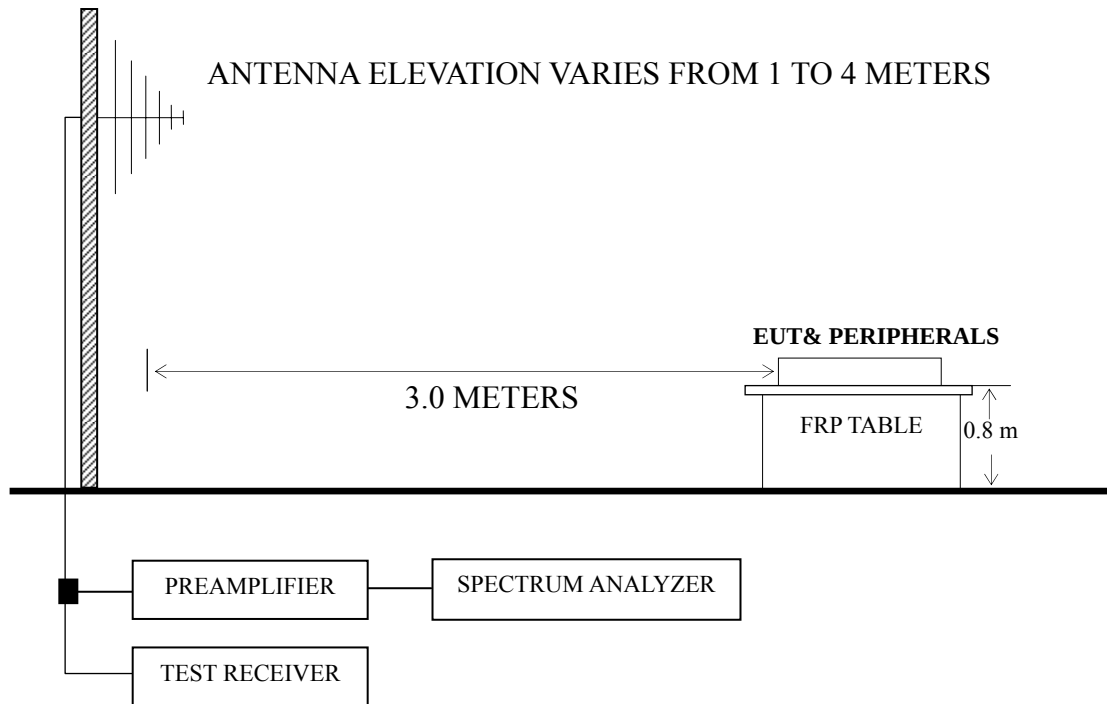
4.2 Block Diagram of Test Setup

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.

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 I.F. 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 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.

Model Number	Adapter	Test Mode	Data Page
W1943SV	Adapter #1: LCAP21	D-Sub 640*480@60Hz	P21
		D-Sub 1024*768@60Hz	P22
		D-Sub 1360*768@60Hz	P23
	Adapter #2: LCAP16-A	D-Sub 1024*768@60Hz	P24

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.

NOTE 2 – The **bold test mode** listed above means the worst test mode.

NOTE 3 – The emission levels that are 20dB below the official limit are not reported.

NOTE 4 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 5 – All reading are Quasi-Peak values.

NOTE 6 – We select the worst test mode to test the EUT with Adapter #2 (LCAP16-A).

NOTE 7 – The worst case is for D-Sub 1024*768@60Hz (Adapter #1) test mode. The worst emission at horizontal polarization was detected at 230.790MHz with corrected signal level of 42.81 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 150°. The worst emission at vertical polarization was detected at 58.130 MHz with corrected signal level of 37.06 dB (μV/m) (limit is 40.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 80°.

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 60%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 640*480@60Hz Adapter : Adapter #1

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	58.130	16.50	9.02	0.83	26.35	40.00	13.65
	116.330	14.37	11.07	1.12	26.56	43.50	16.94
	230.790	28.54	11.10	1.55	41.19	46.00	4.81
	322.940	22.98	14.34	1.84	39.16	46.00	6.84
	701.240	8.19	19.50	2.67	30.36	46.00	15.64
	771.080	7.51	20.30	2.85	30.66	46.00	15.34
Vertical	58.130	26.62	9.02	0.83	36.47	40.00	3.53
	106.630	15.80	11.24	1.07	28.11	43.50	15.39
	143.490	23.71	10.54	1.22	35.47	43.50	8.03
	221.090	24.48	10.68	1.52	36.68	46.00	9.32
	230.790	23.07	11.10	1.55	35.72	46.00	10.28
	322.940	12.48	14.34	1.84	28.66	46.00	17.34

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 60%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 1024*768@60Hz Adapter : Adapter #1

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	58.130	16.89	9.02	0.83	26.74	40.00	13.26
	116.330	13.54	11.07	1.12	25.73	43.50	17.77
	201.690	25.07	9.87	1.45	36.39	43.50	7.11
	230.790	30.16	11.10	1.55	42.81	46.00	3.19
	322.940	24.93	14.34	1.84	41.11	46.00	4.89
	371.440	10.80	15.68	1.99	28.47	46.00	17.53
Vertical	58.130	27.21	9.02	0.83	37.06	40.00	2.94
	77.530	16.85	10.39	0.94	28.18	40.00	11.82
	116.330	20.22	11.07	1.12	32.41	43.50	11.09
	221.090	19.22	10.68	1.52	31.42	46.00	14.58
	286.080	16.99	13.32	1.73	32.04	46.00	13.96
	371.440	9.49	15.68	1.99	27.16	46.00	18.84

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 60%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 1360*768@60Hz Adapter : Adapter #1

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	58.130	15.47	9.02	0.83	25.32	40.00	14.68
	143.490	17.02	10.54	1.22	28.78	43.50	14.72
	201.690	27.94	9.87	1.45	39.26	43.50	4.24
	230.790	25.81	11.10	1.55	38.46	46.00	7.54
	322.940	22.12	14.34	1.84	38.30	46.00	7.70
	484.930	9.98	17.44	2.24	29.66	46.00	16.34
Vertical	58.130	25.36	9.02	0.83	35.21	40.00	4.79
	116.330	21.46	11.07	1.12	33.65	43.50	9.85
	221.090	24.13	10.68	1.52	36.33	46.00	9.67
	286.080	17.68	13.32	1.73	32.73	46.00	13.27
	400.540	11.14	16.30	2.06	29.50	46.00	16.50
	572.230	8.11	18.05	2.39	28.55	46.00	17.45

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W1943SV Humidity : 60%RH

Serial No. : E11101248-01/01 Date of Test : Oct 10, 2011

Test Mode : D-Sub 1024*768@60Hz Adapter : Adapter #2

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	58.130	16.32	9.02	0.83	26.17	40.00	13.83
	116.330	13.36	11.07	1.12	25.55	43.50	17.95
	143.490	16.56	10.54	1.22	28.32	43.50	15.18
	230.790	29.19	11.10	1.55	41.84	46.00	4.16
	322.940	25.37	14.34	1.84	41.55	46.00	4.45
	352.040	14.21	15.17	1.93	31.31	46.00	14.69
Vertical	58.130	25.68	9.02	0.83	35.53	40.00	4.47
	116.330	22.53	11.07	1.12	34.72	43.50	8.78
	144.460	17.57	10.52	1.22	29.31	43.50	14.19
	221.090	28.72	10.68	1.52	40.92	46.00	5.08
	286.080	22.70	13.32	1.73	37.75	46.00	8.25
	371.440	13.67	15.68	1.99	31.34	46.00	14.66

TEST ENGINEER: RAVEN JIN

5 DEVIATION TO TEST SPECIFICATIONS

None.