

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

LCD Monitor

Model No.: W2253SQV

Serial No.: 811NDGL4J279

FCC ID : BEJW2253SV

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

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Report No. : ACI-F08073
Date of Test : Dec 02-08, 2008
Date of Report : Dec 11, 2008

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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. : W2253SQV
(B) Serial No. : 811NDGL4J279
(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: W2253SQV; S/N: 811NDGL4J279) which was tested in 3m anechoic chamber on Dec 02-08, 2008 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 02-08, 2008 Date of Report : Dec 11, 2008

Producer : Alan He
ALAN HE / Assistant

Review : Dio Yang
DIO YANG / Supervisor

 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.	:	W2253SQV
Serial No.	:	811NDGL4J279
Real Power	:	42.00W
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: CHI MEI OPTOELECTRONICS M/N : M216H1 –L01
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
July 26, 2006 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

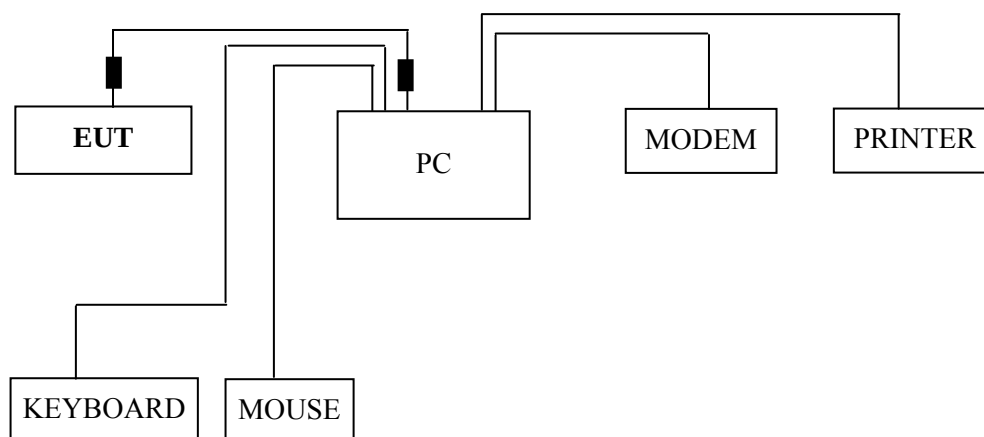
3.1 Test Equipment

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	ESHS10	830223/007	Apr 02, 2008	Apr 02, 2009
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2008	Apr 02, 2009
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2008	Apr 02, 2009
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2008	Mar 19, 2009
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 02, 2008	Apr 02, 2009
6.	Software	Audix	E3	SET00200 9804M592	--	--

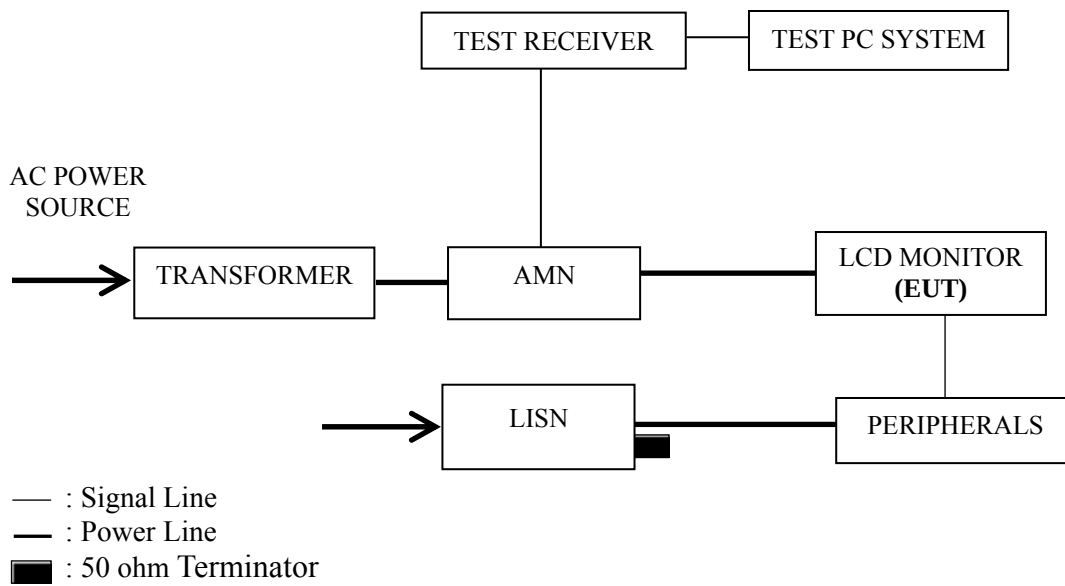
3.2 Block Diagram of Test Setup

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 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 ESHS10 was set at 10 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.

Test Mode	Data Page
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 – Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

NOTE 3 – “QP” means “Quasi-Peak” values, “AV” means “Average” values.

NOTE 4 –The worst case is for D-Sub 640*480@60Hz test mode. The worst emission is detected at 0.150 MHz (Average Value) with corrected signal level of 52.93 dB (μV) (limit is 56.00 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 21°C

Model No. : W2253SQV Humidity : 50%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 02, 2008

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	0.150	61.10	0.23	61.33	66.00	4.67	QP
	0.224	49.53	0.21	49.74	62.66	12.92	
	0.751	33.09	0.24	33.33	56.00	22.67	
	4.049	34.69	0.36	35.05	56.00	20.95	
	10.905	42.13	0.62	42.75	60.00	17.25	
	20.486	46.99	0.74	47.73	60.00	12.27	
	0.150	52.70	0.23	52.93	56.00	3.07	AV
	0.224	42.60	0.21	42.81	52.66	9.85	
	0.751	27.13	0.24	27.37	46.00	18.63	
	4.049	28.46	0.36	28.82	46.00	17.18	
	10.905	35.16	0.62	35.78	50.00	14.22	
	20.486	40.59	0.74	41.33	50.00	8.67	
Neutral	0.150	60.30	0.19	60.49	66.00	5.51	QP
	0.227	49.01	0.21	49.22	62.57	13.35	
	0.644	30.51	0.22	30.73	56.00	25.27	
	4.158	32.93	0.33	33.26	56.00	22.74	
	9.809	33.92	0.59	34.51	60.00	25.49	
	21.600	37.24	0.60	37.84	60.00	22.16	
	0.150	52.00	0.19	52.19	56.00	3.81	AV
	0.227	39.86	0.21	40.07	52.57	12.50	
	0.644	22.51	0.22	22.73	46.00	23.27	
	4.158	24.93	0.33	25.26	46.00	20.74	
	9.809	25.92	0.59	26.51	50.00	23.49	
	21.600	29.24	0.60	29.84	50.00	20.16	

TEST ENGINEER: YONG XU

EUT : LCD Monitor Temperature : 21°C

Model No. : W2253SQV Humidity : 50%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 02, 2008

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	0.151	58.29	0.23	58.52	65.96	7.44	QP
	0.228	48.01	0.21	48.22	62.52	14.30	
	0.532	31.63	0.22	31.85	56.00	24.15	
	4.247	35.97	0.37	36.34	56.00	19.66	
	10.733	42.12	0.61	42.73	60.00	17.27	
	21.486	46.35	0.78	47.13	60.00	12.87	
	0.151	50.29	0.23	50.52	55.96	5.44	AV
	0.228	42.31	0.21	42.52	52.52	10.00	
	0.532	24.35	0.22	24.57	46.00	21.43	
	4.247	28.65	0.37	29.02	46.00	16.98	
	10.733	35.27	0.61	35.88	50.00	14.12	
	21.486	39.38	0.78	40.16	50.00	9.84	
Neutral	0.227	48.29	0.21	48.50	62.57	14.07	QP
	0.302	41.24	0.22	41.46	60.19	18.73	
	1.888	25.33	0.24	25.57	56.00	30.43	
	3.720	33.53	0.32	33.85	56.00	22.15	
	10.452	32.37	0.60	32.97	60.00	27.03	
	21.147	36.88	0.59	37.47	60.00	22.53	
	0.227	41.26	0.21	41.47	52.57	11.10	AV
	0.302	33.26	0.22	33.48	50.19	16.71	
	1.888	18.33	0.24	18.57	46.00	27.43	
	3.720	25.53	0.32	25.85	46.00	20.15	
	10.452	24.37	0.60	24.97	50.00	25.03	
	21.147	28.88	0.59	29.47	50.00	20.53	

TEST ENGINEER: YONG XU

EUT : LCD Monitor Temperature : 21°C

Model No. : W2253SQV Humidity : 50%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 02, 2008

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	0.151	59.91	0.23	60.14	65.96	5.82	QP
	0.228	47.37	0.21	47.58	62.52	14.94	
	0.608	29.34	0.22	29.56	56.00	26.44	
	4.874	37.68	0.38	38.06	56.00	17.94	
	10.905	41.69	0.62	42.31	60.00	17.69	
	20.162	46.83	0.73	47.56	60.00	12.44	
	0.151	49.35	0.23	49.58	55.96	6.38	AV
	0.228	39.59	0.21	39.80	52.52	12.72	
	0.608	20.34	0.22	20.56	46.00	25.44	
	4.874	28.68	0.38	29.06	46.00	16.94	
	10.905	32.69	0.62	33.31	50.00	16.69	
	20.162	38.83	0.73	39.56	50.00	10.44	
Neutral	0.152	59.51	0.19	59.70	65.87	6.17	QP
	0.228	47.43	0.21	47.64	62.52	14.88	
	2.900	25.33	0.29	25.62	56.00	30.38	
	4.114	31.35	0.33	31.68	56.00	24.32	
	10.288	31.80	0.60	32.40	60.00	27.60	
	20.814	37.09	0.58	37.67	60.00	22.33	
	0.152	48.26	0.19	48.45	55.87	7.42	AV
	0.228	35.35	0.21	35.56	52.52	16.96	
	2.900	15.33	0.29	15.62	46.00	30.38	
	4.114	22.35	0.33	22.68	46.00	23.32	
	10.288	23.80	0.60	24.40	50.00	25.60	
	20.814	29.09	0.58	29.67	50.00	20.33	

TEST ENGINEER: YONG XU

EUT : LCD Monitor Temperature : 21°C

Model No. : W2253SQV Humidity : 50%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 02, 2008

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	0.151	57.29	0.23	57.52	65.96	8.44	QP
	0.228	47.01	0.21	47.22	62.52	15.30	
	0.532	30.63	0.22	30.85	56.00	25.15	
	4.247	34.97	0.37	35.34	56.00	20.66	
	10.733	41.12	0.61	41.73	60.00	18.27	
	21.486	45.35	0.78	46.13	60.00	13.87	
	0.151	47.28	0.23	47.51	55.96	8.45	AV
	0.228	40.30	0.21	40.51	52.52	12.01	
	0.532	24.50	0.22	24.72	46.00	21.28	
	4.247	28.90	0.37	29.27	46.00	16.73	
	10.733	35.61	0.61	36.22	50.00	13.78	
	21.486	39.45	0.78	40.23	50.00	9.77	
Neutral	0.227	46.29	0.21	46.50	62.57	16.07	QP
	0.302	40.24	0.22	40.46	60.19	19.73	
	1.888	24.33	0.24	24.57	56.00	31.43	
	3.720	32.53	0.32	32.85	56.00	23.15	
	10.452	31.37	0.60	31.97	60.00	28.03	
	21.147	35.88	0.59	36.47	60.00	23.53	
	0.227	36.00	0.21	36.21	52.57	16.36	AV
	0.302	30.25	0.22	30.47	50.19	19.72	
	1.888	14.59	0.24	14.83	46.00	31.17	
	3.720	22.49	0.32	22.81	46.00	23.19	
	10.452	21.45	0.60	22.05	50.00	27.95	
	21.147	25.48	0.59	26.07	50.00	23.93	

TEST ENGINEER: YONG XU

4 RADIATED EMISSION TEST

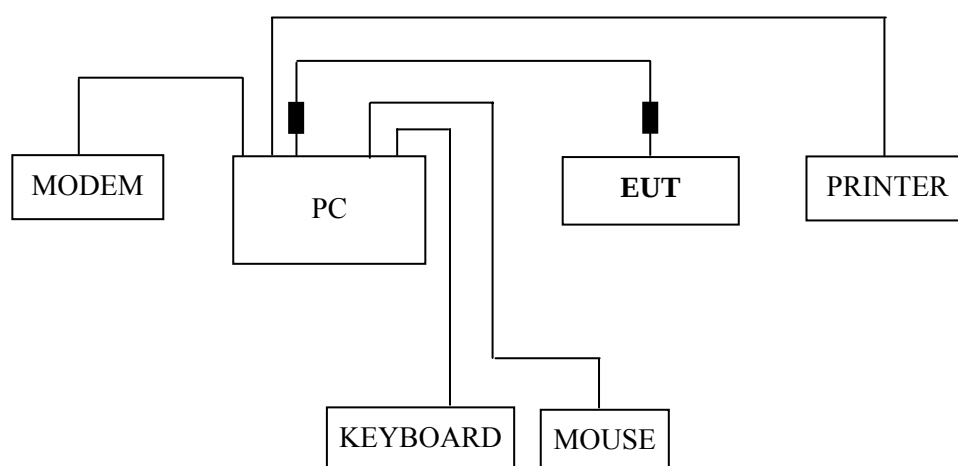
4.1 Test Equipment

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, 2008	Mar 07, 2009
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2008	Mar 19, 2009
3.	Preamplifier	HP	8449B	3008A00864	May 19, 2008	May 19, 2009
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2009
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2008	May 19, 2009
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

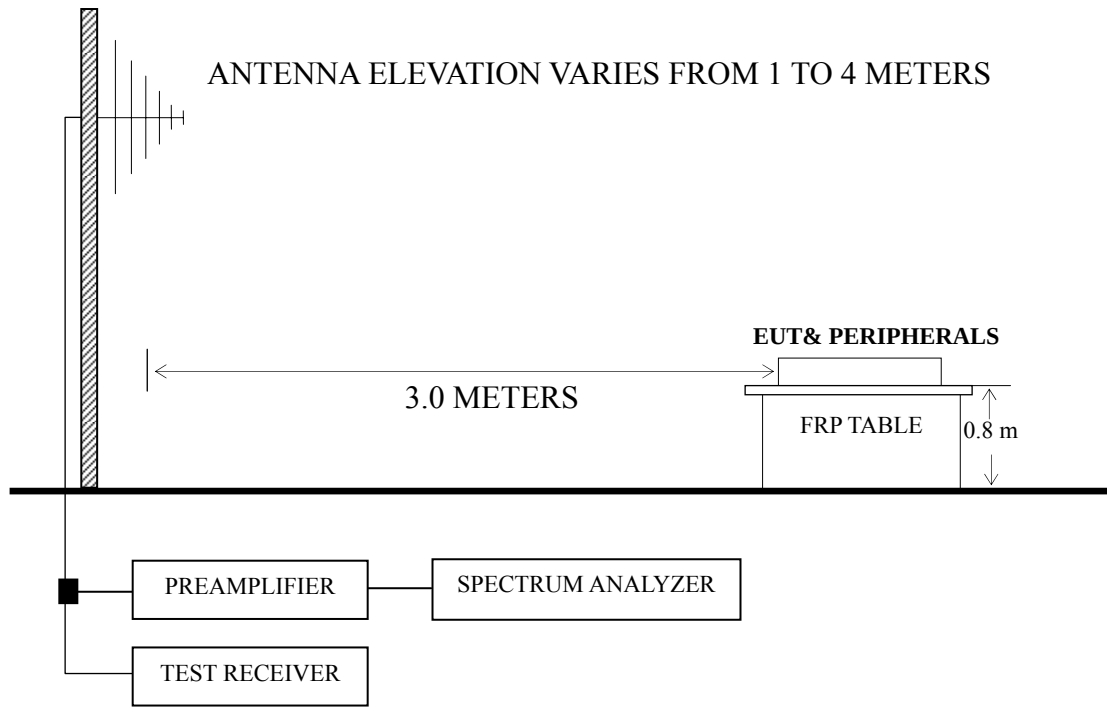
4.2 Block Diagram of Test Setup

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 below 1GHz and The Spectrum Agilent E7405A was set at 1MHz above 1GHz.

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 & D-Sub 1920*1080@60Hz mode.

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.

Test Mode	Data Page
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 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.(< 1GHz)

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

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 below or equal to 1GHz and Peak values above 1GHz. For measurements above 1 GHz, the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.

NOTE 6 – The worst case is for D-Sub 640*480@60Hz test mode. The worst emission at horizontal polarization was detected at 315.180MHz with corrected signal level of 40.46 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.20 m height and the turntable was at 280°. The worst emission at vertical polarization was detected at 859.350MHz with corrected signal level of 41.75dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 50°.

EUT : LCD Monitor Temperature : 22°C

Model No. : W2253SQV Humidity : 60%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 08, 2008

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	6.21	18.49	0.59	25.29	40.00	14.71
	142.520	24.91	11.91	0.91	37.73	43.50	5.77
	212.360	18.16	11.26	1.13	30.55	43.50	12.95
	315.180	24.52	14.32	1.62	40.46	46.00	5.54
	536.340	11.37	18.39	2.46	32.22	46.00	13.78
	863.230	13.41	21.35	3.44	38.20	46.00	7.80
Vertical	32.910	14.89	17.95	0.60	33.44	40.00	6.56
	49.400	22.57	9.16	0.77	32.50	40.00	7.50
	142.520	24.77	11.91	0.91	37.59	43.50	5.91
	315.180	16.90	14.32	1.62	32.84	46.00	13.16
	486.870	15.88	17.75	2.33	35.96	46.00	10.04
	859.350	17.00	21.31	3.44	41.75	46.00	4.25

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2253SQV Humidity : 60%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 08, 2008

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	30.970	6.34	19.03	0.57	25.94	40.00	14.06
	123.120	9.97	12.86	0.89	23.72	43.50	19.78
	147.370	21.83	11.51	0.92	34.26	43.50	9.24
	210.420	20.09	11.18	1.12	32.39	43.50	11.11
	315.180	21.08	14.32	1.62	37.02	46.00	8.98
	880.690	12.08	21.53	3.48	37.09	46.00	8.91
Vertical	32.910	13.81	17.95	0.60	32.36	40.00	7.64
	50.370	21.50	8.85	0.77	31.12	40.00	8.88
	144.460	25.61	11.76	0.92	38.29	43.50	5.21
	315.180	20.18	14.32	1.62	36.12	46.00	9.88
	486.870	13.23	17.75	2.33	33.31	46.00	12.69
	976.720	15.38	22.24	3.76	41.38	54.00	12.62

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2253SQV Humidity : 60%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 08, 2008

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	49.400	10.57	9.16	0.77	--	20.50	40.00	19.50	QP
	97.900	13.53	11.11	0.85	--	25.49	43.50	18.01	
	146.400	22.67	11.61	0.92	--	35.20	43.50	8.30	
	219.150	18.73	11.57	1.15	--	31.45	46.00	14.55	
	315.180	21.39	14.32	1.62	--	37.33	46.00	8.67	
	872.930	13.42	21.46	3.46	--	38.34	46.00	7.66	
	1046.000	63.54	22.72	3.96	37.57	52.65	74.00	21.35	PK
	1122.000	59.80	23.24	4.07	37.37	49.74	74.00	24.26	
	1271.000	53.56	24.27	4.33	37.01	45.15	74.00	28.85	
	1386.000	50.90	25.13	4.54	36.76	43.81	74.00	30.19	
	1544.000	54.31	26.07	4.81	36.44	48.75	74.00	25.25	
	1704.000	53.08	26.67	5.11	36.16	48.70	74.00	25.30	
Vertical	49.400	23.71	9.16	0.77	--	33.64	40.00	6.36	QP
	97.900	19.29	11.11	0.85	--	31.25	43.50	12.25	
	142.520	24.86	11.91	0.91	--	37.68	43.50	5.82	
	323.910	15.18	14.58	1.66	--	31.42	46.00	14.58	
	486.870	10.67	17.75	2.33	--	30.75	46.00	15.25	
	870.990	14.90	21.42	3.46	--	39.78	46.00	6.22	
	1046.000	61.41	22.72	3.96	37.57	50.52	74.00	23.48	PK
	1122.000	60.35	23.24	4.07	37.37	50.29	74.00	23.71	
	1181.000	59.00	23.62	4.18	37.22	49.58	74.00	24.42	
	1495.000	53.77	25.80	4.71	36.54	47.74	74.00	26.26	
	1644.000	56.14	26.50	5.02	36.26	51.40	74.00	22.60	
	1679.000	55.59	26.59	5.08	36.20	51.06	74.00	22.94	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2253SQV Humidity : 60%RH

Serial No. : 811NDGL4J279 Date of Test : Dec 08, 2008

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	13.51	8.85	0.77	--	23.13	40.00	16.87	QP
	98.870	13.81	11.27	0.85	--	25.93	43.50	17.57	
	142.520	22.23	11.91	0.91	--	35.05	43.50	8.45	
	315.180	16.86	14.32	1.62	--	32.80	46.00	13.20	
	602.300	9.60	19.21	2.59	--	31.40	46.00	14.60	
	948.590	10.07	22.05	3.68	--	35.80	46.00	10.20	
	1046.000	63.67	22.72	3.96	37.57	52.78	74.00	21.22	PK
	1122.000	61.10	23.24	4.07	37.37	51.04	74.00	22.96	
	1196.000	60.09	23.70	4.21	37.18	50.82	74.00	23.18	
	1533.000	58.33	26.04	4.78	36.46	52.69	74.00	21.31	
	1644.000	57.07	26.50	5.02	36.26	52.33	74.00	21.67	
	1720.000	56.51	26.71	5.14	36.13	52.23	74.00	21.77	
Vertical	50.370	24.63	8.85	0.77	--	34.25	40.00	5.75	QP
	98.870	23.04	11.27	0.85	--	35.16	43.50	8.34	
	142.520	24.55	11.91	0.91	--	37.37	43.50	6.13	
	315.180	19.73	14.32	1.62	--	35.67	46.00	10.33	
	486.870	12.03	17.75	2.33	--	32.11	46.00	13.89	
	859.350	13.50	21.31	3.44	--	38.25	46.00	7.75	
	1043.000	58.40	22.69	3.96	37.58	47.47	74.00	26.53	PK
	1122.000	58.88	23.24	4.07	37.37	48.82	74.00	25.18	
	1196.000	59.82	23.70	4.21	37.18	50.55	74.00	23.45	
	1498.000	54.87	25.80	4.71	36.53	48.85	74.00	25.15	
	1690.000	54.92	26.63	5.11	36.18	50.48	74.00	23.52	
	1756.000	54.66	26.80	5.18	36.07	50.57	74.00	23.43	

TEST ENGINEER: TOM SI

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
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photos 2, 14
Aluminum foil	EKA-2	50*20	JUST ENTER TECHNOLOGY CO.,LTD	See Internal Photos 15