

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

LCD Monitor

Model No.: W2452VQT

Serial No.: 803NDZJ4Q805

FCC ID : BEJW2452VQT

Prepared For : LG Electronics U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs,
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Report No. : ACI-F08018
Date of Test : Mar 29 – 30, 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. : W2452VQT
(B) Serial No. : 803NDZJ4Q805
(C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B 2007.10
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: W2452VQT; S/N: 803NDZJ4Q805) which was tested in 3m anechoic chamber on Mar 29 – 30, 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 : Mar 29 – 30, 2008

Prepared By:

Kathy Wang 2008.4.7
KATHY WANG / Assistant

Reviewer:

Dio Yang 2008.4.7
DIO YANG / Supervisor

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

Approved Signatory:

Sammy Chen 2008.4.7
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 main terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 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.	:	W2452VQT
Serial No.	:	803NDZJ4Q805
Real Power	:	79.00W
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. PHILIPS LCD M/N : LM240WU3(TL)(B1)
Max Resolution	:	1920*1200@60Hz
D-Sub Cable	:	Shielded, Detachable, 1.85m, with two cores
DVI Cable	:	Shielded, Detachable, 1.90m, with two cores
Power Cord	:	Unshielded, Detachable, 1.80m

Remark:

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

- | | |
|-----------------------|---------------------------|
| (1) One D-Sub Port | : Connected with PC |
| (2) One DVI Port | : Connected with PC |
| (3) One HDMI Port | : Connected with DVD |
| (4) One Earphone Port | : Connected with Earphone |
| (5) One AC In Port | : Connected with Power |

2.2 Peripherals

2.2.1 PC

Manufacturer : HP
Model Number : dx6120MT
Serial Number : CNG53004J2
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

2.2.6 Earphone

Manufacturer : FEIDIE
Model Number : SD-747
Serial Number : N/A

2.2.7 DVD

Manufacturer	:	LG
Model Number	:	DF9921N
Serial Number	:	3850R-M846W
Power	:	110V/60Hz
Power Cord	:	Unshielded, Undetachable, 1.80m
Data Cable	:	Shielded, detachable, 1.80m
Ports	:	One HDMI Port One S-Video Output Port One Set L/R Audio Output Port One Video Output Port One Set Component Video Output Ports One Optical Digital Output Port

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, China 200233
NVLAP Lab Code	:	200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:	U = 1.84 dB
Radiated Emission Expanded Uncertainty :	U = 2.96 dB

3 CONDUCTED EMISSION TEST

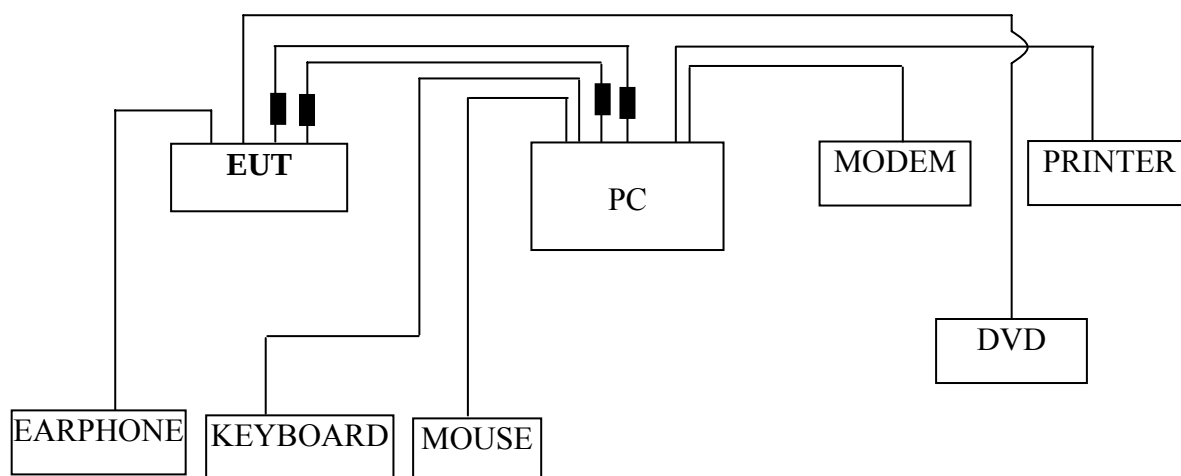
3.1 Test Equipment

The following test equipment 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	Oct 26, 2007	Oct 26, 2008
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 06, 2007	Apr 06, 2008
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 06, 2007	Apr 06, 2008
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Mar 18, 2008	Sep 18, 2008
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 06, 2007	Apr 06, 2008
6.	Software	Audix	E3	SET00200 9804M592	--	--

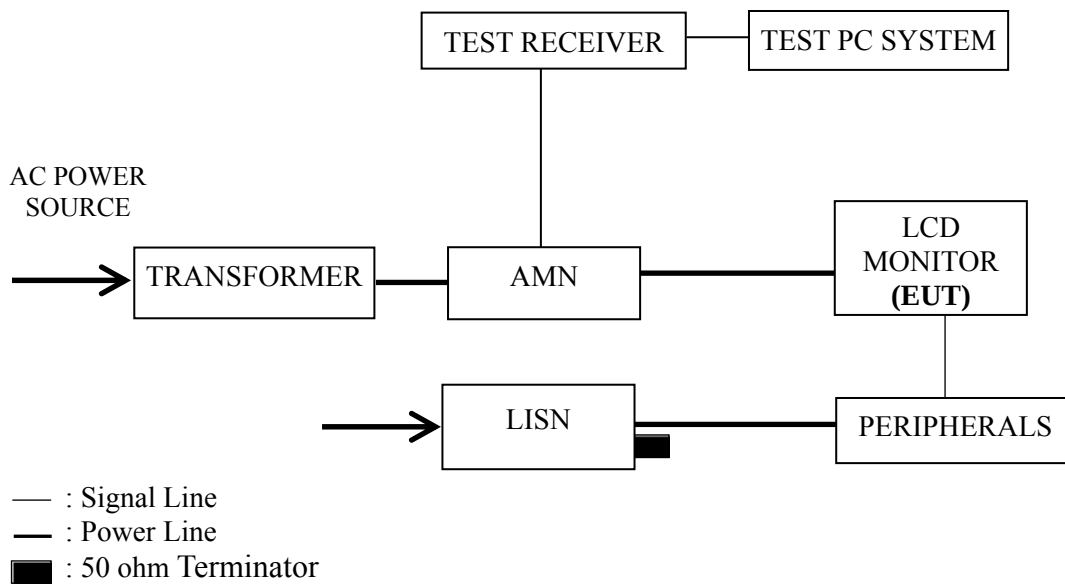
3.2 Block Diagram of Test Setup

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 (μV)	
	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 set “H” characters to EUT through graphic card, the EUT’s screen displayed and filled with “H” pattern by it’s resolution (Via D-Sub or DVI Input).

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

3.5.6 For HDMI test mode, the DVD play DVD disk and sent video to EUT through HDMI port.

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

3.5.8 The test modes are as follows:

Test Mode	
VGA 640*480@60Hz	DVI 640*480@60Hz
VGA 1024*768@60Hz	DVI 1024*768@60Hz
VGA 1680*1050@60Hz	DVI 1680*1050@60Hz
VGA 1920*1200@60Hz	DVI 1920*1200@60Hz
HDMI	

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
VGA 640*480@60Hz	P12
VGA 1024*768@60Hz	P13
VGA 1680*1050@60Hz	P14
VGA 1920*1200@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1024*768@60Hz	P17
DVI 1680*1050@60Hz	P18
DVI 1920*1200@60Hz	P19
HDMI	P20

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 VGA 640*480@60Hz test mode. The worst emission is detected at 28.603 MHz (Average Value) with corrected signal level of 39.54 dB (μV) (limit is 50.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : VGA 640*480@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.174	43.80	0.62	44.42	64.77	20.35	QP
	0.471	35.89	0.60	36.49	56.49	20.00	
	1.100	36.10	0.47	36.57	56.00	19.43	
	1.403	34.19	0.45	34.64	56.00	21.36	
	4.384	32.60	0.56	33.16	56.00	22.84	
	29.061	35.80	0.85	36.65	60.00	23.35	
	0.174	35.70	0.62	36.32	54.77	18.45	AV
	0.471	31.89	0.60	32.49	46.49	14.00	
	1.100	32.10	0.47	32.57	46.00	13.43	
	1.403	31.19	0.45	31.64	46.00	14.36	
	4.384	28.40	0.56	28.96	46.00	17.04	
	29.061	31.60	0.85	32.45	50.00	17.55	
Neutral	0.177	44.10	0.52	44.62	64.64	20.02	QP
	0.469	37.70	0.58	38.28	56.54	18.26	
	1.100	35.91	0.46	36.37	56.00	19.63	
	2.978	33.90	0.46	34.36	56.00	21.64	
	4.384	33.70	0.46	34.16	56.00	21.84	
	28.603	43.30	0.94	44.24	60.00	15.76	
	0.177	40.10	0.52	40.62	54.64	14.02	AV
	0.469	32.60	0.58	33.18	46.54	13.36	
	1.100	31.21	0.46	31.67	46.00	14.33	
	2.978	30.85	0.46	31.31	46.00	14.69	
	4.384	28.70	0.46	29.16	46.00	16.84	
	28.603	38.60	0.94	39.54	50.00	10.46	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : VGA 1024*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	43.70	0.62	44.32	64.68	20.36	QP
	0.469	36.49	0.60	37.09	56.54	19.45	
	0.779	35.50	0.50	36.00	56.00	20.00	
	1.403	35.09	0.45	35.54	56.00	20.46	
	2.664	34.10	0.48	34.58	56.00	21.42	
	28.755	36.80	0.85	37.65	60.00	22.35	
	0.176	35.90	0.62	36.52	54.68	18.16	AV
	0.469	32.39	0.60	32.99	46.54	13.55	
	0.779	31.60	0.50	32.10	46.00	13.90	
	1.403	30.79	0.45	31.24	46.00	14.76	
	2.664	31.40	0.48	31.88	46.00	14.12	
	28.755	32.20	0.85	33.05	50.00	16.95	
Neutral	0.176	43.90	0.52	44.42	64.68	20.26	QP
	0.469	36.50	0.58	37.08	56.54	19.46	
	1.100	36.01	0.46	36.47	56.00	19.53	
	2.664	35.10	0.46	35.56	56.00	20.44	
	4.384	32.80	0.46	33.26	56.00	22.74	
	28.755	44.70	0.94	45.64	60.00	14.36	
	0.176	37.10	0.52	37.62	54.68	17.06	AV
	0.469	31.60	0.58	32.18	46.54	14.36	
	1.100	32.51	0.46	32.97	46.00	13.03	
	2.664	30.60	0.46	31.06	46.00	14.94	
	4.384	28.40	0.46	28.86	46.00	17.14	
	28.755	35.90	0.94	36.84	50.00	13.16	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : VGA 1680*1050@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.173	43.70	0.61	44.31	64.81	20.50	QP
	0.469	36.09	0.60	36.69	56.54	19.85	
	1.100	35.30	0.47	35.77	56.00	20.23	
	1.403	35.39	0.45	35.84	56.00	20.16	
	2.664	34.50	0.48	34.98	56.00	21.02	
	29.216	35.80	0.85	36.65	60.00	23.35	AV
	0.173	36.70	0.61	37.31	54.81	17.50	
	0.469	32.59	0.60	33.19	46.54	13.35	
	1.100	31.50	0.47	31.97	46.00	14.03	
	1.403	31.09	0.45	31.54	46.00	14.46	
Neutral	2.664	31.30	0.48	31.78	46.00	14.22	QP
	29.216	30.80	0.85	31.65	50.00	18.35	
	0.179	43.50	0.53	44.03	64.55	20.52	
	0.469	36.20	0.58	36.78	56.54	19.76	
	0.788	35.70	0.49	36.19	56.00	19.81	
	1.403	35.79	0.46	36.25	56.00	19.75	AV
	2.664	35.50	0.46	35.96	56.00	20.04	
	28.755	45.30	0.94	46.24	60.00	13.76	
	0.179	35.90	0.53	36.43	54.55	18.12	
	0.469	32.40	0.58	32.98	46.54	13.56	
	0.788	31.80	0.49	32.29	46.00	13.71	
	1.403	31.39	0.46	31.85	46.00	14.15	
	2.664	30.90	0.46	31.36	46.00	14.64	
	28.755	37.80	0.94	38.74	50.00	11.26	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : VGA 1920*1200@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	43.60	0.62	44.22	64.68	20.46	QP
	0.469	37.19	0.60	37.79	56.54	18.75	
	0.779	36.40	0.50	36.90	56.00	19.10	
	1.100	36.70	0.47	37.17	56.00	18.83	
	2.664	35.40	0.48	35.88	56.00	20.12	
	28.755	36.60	0.85	37.45	60.00	22.55	
	0.176	35.90	0.62	36.52	54.68	18.16	AV
	0.469	32.39	0.60	32.99	46.54	13.55	
	0.779	32.40	0.50	32.90	46.00	13.10	
	1.100	31.80	0.47	32.27	46.00	13.73	
	2.664	31.40	0.48	31.88	46.00	14.12	
	28.755	31.90	0.85	32.75	50.00	17.25	
Neutral	0.179	43.90	0.53	44.43	64.55	20.12	QP
	0.469	36.00	0.58	36.58	56.54	19.96	
	0.779	35.40	0.49	35.89	56.00	20.11	
	1.100	35.71	0.46	36.17	56.00	19.83	
	2.664	35.20	0.46	35.66	56.00	20.34	
	29.061	44.61	0.94	45.55	60.00	14.45	
	0.179	38.40	0.53	38.93	54.55	15.62	AV
	0.469	32.40	0.58	32.98	46.54	13.56	
	0.779	31.60	0.49	32.09	46.00	13.91	
	1.100	32.11	0.46	32.57	46.00	13.43	
	2.664	31.20	0.46	31.66	46.00	14.34	
	29.061	36.91	0.94	37.85	50.00	12.15	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : DVI 640*480@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.171	43.80	0.61	44.41	64.90	20.49	QP
	0.469	36.49	0.60	37.09	56.54	19.45	
	0.779	35.70	0.50	36.20	56.00	19.80	
	1.403	35.69	0.45	36.14	56.00	19.86	
	2.664	34.60	0.48	35.08	56.00	20.92	
	29.061	36.90	0.85	37.75	60.00	22.25	
	0.171	36.80	0.61	37.41	54.90	17.49	AV
	0.469	32.09	0.60	32.69	46.54	13.85	
	0.779	31.60	0.50	32.10	46.00	13.90	
	1.403	30.69	0.45	31.14	46.00	14.86	
	2.664	31.20	0.48	31.68	46.00	14.32	
	29.061	32.90	0.85	33.75	50.00	16.25	
Neutral	0.174	44.20	0.52	44.72	64.77	20.05	QP
	0.469	37.00	0.58	37.58	56.54	18.96	
	0.779	36.60	0.49	37.09	56.00	18.91	
	1.403	36.59	0.46	37.05	56.00	18.95	
	2.978	35.80	0.46	36.26	56.00	19.74	
	29.061	44.31	0.94	45.25	60.00	14.75	
	0.174	38.40	0.52	38.92	54.77	15.85	AV
	0.469	32.10	0.58	32.68	46.54	13.86	
	0.779	31.60	0.49	32.09	46.00	13.91	
	1.403	31.79	0.46	32.25	46.00	13.75	
	2.978	30.90	0.46	31.36	46.00	14.64	
	29.061	38.41	0.94	39.35	50.00	10.65	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : DVI 1024*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.174	43.90	0.62	44.52	64.77	20.25	QP
	0.469	37.39	0.60	37.99	56.54	18.55	
	0.779	35.10	0.50	35.60	56.00	20.40	
	1.689	36.90	0.42	37.32	56.00	18.68	
	2.664	34.80	0.48	35.28	56.00	20.72	
	28.755	38.30	0.85	39.15	60.00	20.85	
	0.174	36.80	0.62	37.42	54.77	17.35	AV
	0.469	31.39	0.60	31.99	46.54	14.55	
	0.779	31.10	0.50	31.60	46.00	14.40	
	1.689	32.80	0.42	33.22	46.00	12.78	
	2.664	30.10	0.48	30.58	46.00	15.42	
	28.755	33.10	0.85	33.95	50.00	16.05	
Neutral	0.174	44.00	0.52	44.52	64.77	20.25	QP
	0.469	37.30	0.58	37.88	56.54	18.66	
	0.779	36.10	0.49	36.59	56.00	19.41	
	1.403	36.19	0.46	36.65	56.00	19.35	
	2.978	35.70	0.46	36.16	56.00	19.84	
	28.755	44.10	0.94	45.04	60.00	14.96	
	0.174	38.70	0.52	39.22	54.77	15.55	AV
	0.469	32.70	0.58	33.28	46.54	13.26	
	0.779	32.40	0.49	32.89	46.00	13.11	
	1.403	32.49	0.46	32.95	46.00	13.05	
	2.978	31.80	0.46	32.26	46.00	13.74	
	28.755	36.90	0.94	37.84	50.00	12.16	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : DVI 1680*1050@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.173	43.80	0.61	44.41	64.81	20.40	QP
	0.469	36.09	0.60	36.69	56.54	19.85	
	0.779	35.50	0.50	36.00	56.00	20.00	
	1.403	35.99	0.45	36.44	56.00	19.56	
	2.664	35.20	0.48	35.68	56.00	20.32	
	29.527	37.50	0.86	38.36	60.00	21.64	
	0.173	38.10	0.61	38.71	54.81	16.10	AV
	0.469	31.79	0.60	32.39	46.54	14.15	
	0.779	31.40	0.50	31.90	46.00	14.10	
	1.403	32.79	0.45	33.24	46.00	12.76	
	2.664	31.60	0.48	32.08	46.00	13.92	
	29.527	32.90	0.86	33.76	50.00	16.24	
Neutral	0.174	44.00	0.52	44.52	64.77	20.25	QP
	0.469	37.10	0.58	37.68	56.54	18.86	
	1.100	36.11	0.46	36.57	56.00	19.43	
	1.403	36.09	0.46	36.55	56.00	19.45	
	2.664	36.20	0.46	36.66	56.00	19.34	
	28.603	44.50	0.94	45.44	60.00	14.56	
	2.664	31.70	0.46	32.16	46.00	13.84	AV
	0.174	36.40	0.52	36.92	54.77	17.85	
	0.469	32.10	0.58	32.68	46.54	13.86	
	1.100	31.91	0.46	32.37	46.00	13.63	
	1.403	32.49	0.46	32.95	46.00	13.05	
	28.603	37.80	0.94	38.74	50.00	11.26	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : DVI 1920*1200@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.174	43.70	0.62	44.32	64.77	20.45	QP
	0.469	36.29	0.60	36.89	56.54	19.65	
	1.100	35.10	0.47	35.57	56.00	20.43	
	1.403	35.99	0.45	36.44	56.00	19.56	
	3.140	38.41	0.50	38.91	56.00	17.09	
	28.302	37.59	0.85	38.44	60.00	21.56	
	0.174	36.70	0.62	37.32	54.77	17.45	AV
	0.469	33.09	0.60	33.69	46.54	12.85	
	1.100	32.50	0.47	32.97	46.00	13.03	
	1.403	32.39	0.45	32.84	46.00	13.16	
	3.140	33.61	0.50	34.11	46.00	11.89	
	28.302	31.79	0.85	32.64	50.00	17.36	
Neutral	0.174	44.10	0.52	44.62	64.77	20.15	QP
	0.469	36.30	0.58	36.88	56.54	19.66	
	0.779	36.00	0.49	36.49	56.00	19.51	
	1.403	36.29	0.46	36.75	56.00	19.25	
	2.664	36.10	0.46	36.56	56.00	19.44	
	28.755	44.60	0.94	45.54	60.00	14.46	
	0.174	38.40	0.52	38.92	54.77	15.85	AV
	0.469	32.70	0.58	33.28	46.54	13.26	
	0.779	31.60	0.49	32.09	46.00	13.91	
	1.403	32.09	0.46	32.55	46.00	13.45	
	2.664	32.40	0.46	32.86	46.00	13.14	
	28.755	38.40	0.94	39.34	50.00	10.66	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 30, 2008

Test Mode : HDMI

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.174	43.80	0.62	44.42	64.77	20.35	QP
	0.469	36.19	0.60	36.79	56.54	19.75	
	0.779	35.80	0.50	36.30	56.00	19.70	
	1.403	35.69	0.45	36.14	56.00	19.86	
	2.664	35.30	0.48	35.78	56.00	20.22	
	29.684	36.70	0.86	37.56	60.00	22.44	
	0.174	35.70	0.62	36.32	54.77	18.45	AV
	0.469	32.59	0.60	33.19	46.54	13.35	
	0.779	31.80	0.50	32.30	46.00	13.70	
	1.403	31.49	0.45	31.94	46.00	14.06	
	2.664	31.40	0.48	31.88	46.00	14.12	
	29.684	32.10	0.86	32.96	50.00	17.04	
Neutral	0.173	43.90	0.51	44.41	64.81	20.40	QP
	0.469	38.00	0.58	38.58	56.54	17.96	
	0.779	36.10	0.49	36.59	56.00	19.41	
	1.403	36.59	0.46	37.05	56.00	18.95	
	2.978	36.00	0.46	36.46	56.00	19.54	
	28.755	44.60	0.94	45.54	60.00	14.46	
	0.173	36.70	0.51	37.21	54.81	17.60	AV
	0.469	32.40	0.58	32.98	46.54	13.56	
	0.779	31.60	0.49	32.09	46.00	13.91	
	1.403	31.69	0.46	32.15	46.00	13.85	
	2.978	32.10	0.46	32.56	46.00	13.44	
	28.755	36.70	0.94	37.64	50.00	12.36	

TEST ENGINEER: TOM SI

4 RADIATED EMISSION TEST

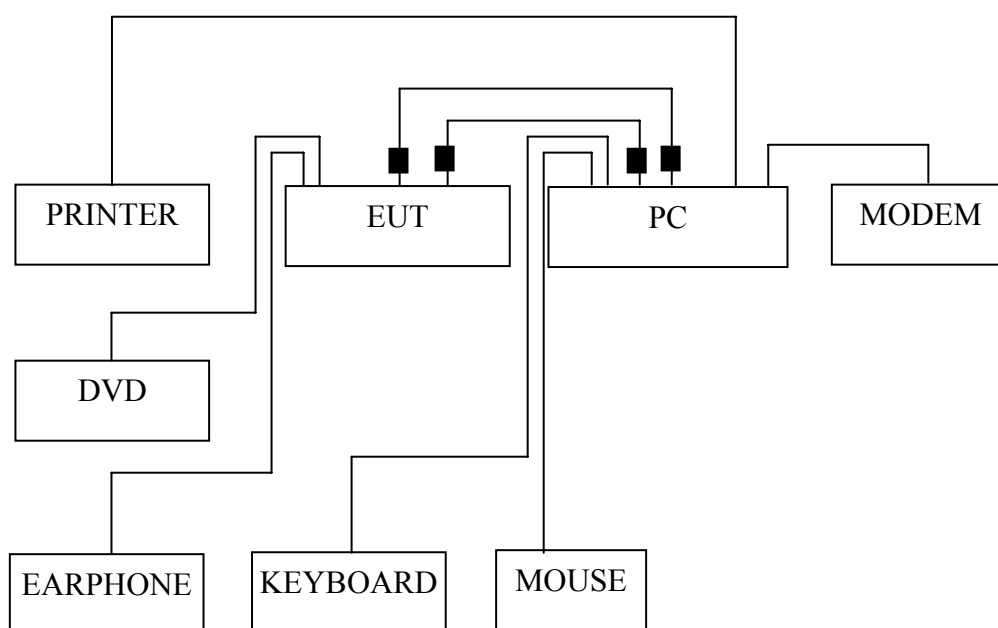
4.1 Test Equipment

The following test equipment 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	Oct 26, 2007	Oct 26, 2008
2.	Preamplifier	Agilent	8447D	2944A10548	Mar 19, 2008	Sep 19, 2008
3.	Preamplifier	HP	8449B	3008A00864	Apr 06, 2007	Apr 06, 2008
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	Aug 16, 2007	Aug 16, 2008
5.	Spectrum	Agilent	E7405A	MY45106600	Apr 06, 2007	Apr 06, 2008
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

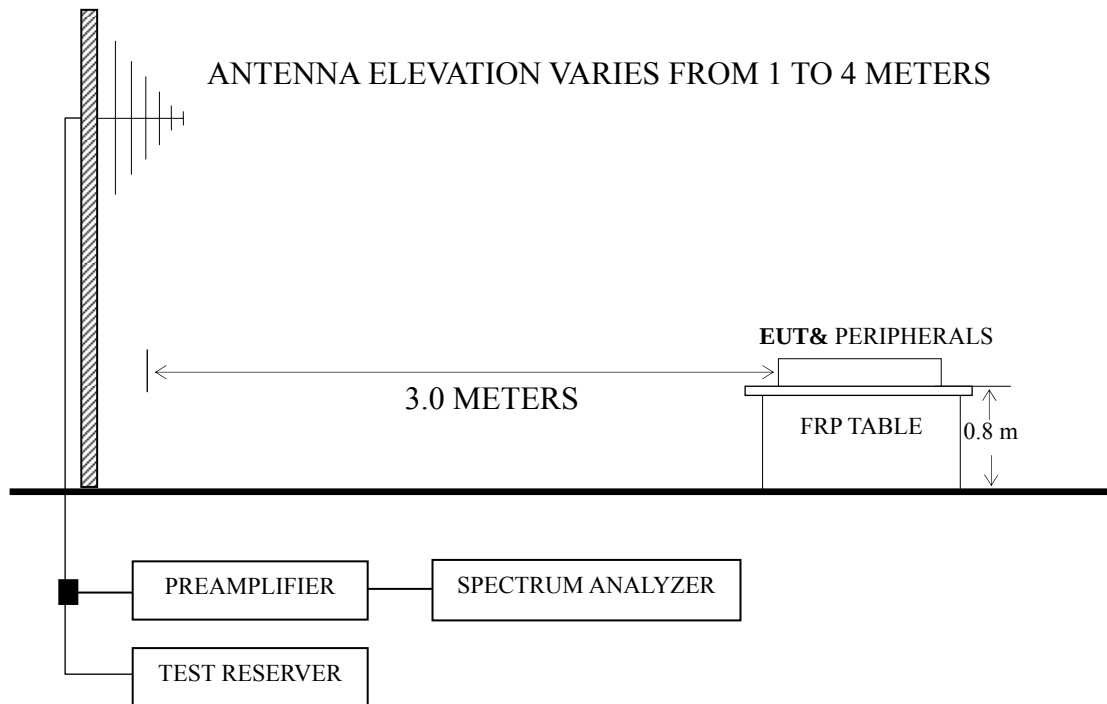
4.2 Block Diagram of Test Setup

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 VGA / DVI 1680*1050@60Hz, 1920*1200@60Hz and HDMI 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.

Test Mode	Data Page
VGA 640*480@60Hz	P25
VGA 1024*768@60Hz	P26
VGA 1680*1050@60Hz	P27
VGA 1920*1200@60Hz	P28
DVI 640*480@60Hz	P29
DVI 1024*768@60Hz	P30
DVI 1680*1050@60Hz	P31
DVI 1920*1200@60Hz	P32
HDMI	P33

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.($< 1\text{GHz}$)

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

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.

NOTE 6 – The worst case is for DVI 1680*1050@60Hz test mode. The worst emission at horizontal polarization was detected at 534.400 MHz with corrected signal level of 36.96 dB ($\mu\text{V/m}$) (limit is 46.00 dB ($\mu\text{V/m}$)), when the antenna was 1.10 m height and the turntable was at 115° . The worst emission at vertical polarization was detected at 30.970 MHz with corrected signal level of 36.91 dB ($\mu\text{V/m}$) (limit is 40.00 dB ($\mu\text{V/m}$)), when the antenna was 1.00 m height and the turntable was at 70° .

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : VGA 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	30.970	15.75	17.55	0.97	34.27	40.00	5.73
	115.360	18.73	11.21	1.83	31.77	43.50	11.73
	152.220	24.88	9.65	2.14	36.67	43.50	6.83
	193.930	23.54	8.45	2.44	34.43	43.50	9.07
	350.100	21.44	14.50	3.39	39.33	46.00	6.67
	545.070	19.30	18.48	4.28	42.06	46.00	3.94
Vertical	34.850	19.66	15.15	1.02	35.83	40.00	4.17
	94.020	24.99	9.40	1.64	36.03	43.50	7.47
	193.930	21.82	8.45	2.44	32.71	43.50	10.79
	513.060	16.23	17.44	4.12	37.79	46.00	8.21
	540.220	18.45	18.50	4.28	41.23	46.00	4.77
	607.150	14.66	18.94	4.55	38.15	46.00	7.85

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : VGA 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	15.29	17.55	0.97	33.81	40.00	6.19
	77.530	22.65	6.43	1.50	30.58	40.00	9.42
	152.220	24.32	9.65	2.14	36.11	43.50	7.39
	455.830	15.71	16.45	3.90	36.06	46.00	9.94
	533.430	18.86	18.01	4.25	41.12	46.00	4.88
	608.120	15.29	18.99	4.55	38.83	46.00	7.17
Vertical	37.760	21.53	13.64	1.06	36.23	40.00	3.77
	92.080	23.77	9.00	1.62	34.39	43.50	9.11
	114.390	22.30	11.20	1.82	35.32	43.50	8.18
	190.050	21.49	8.25	2.41	32.15	43.50	11.35
	345.250	12.92	14.25	3.36	30.53	46.00	15.47
	532.460	18.97	18.01	4.22	41.20	46.00	4.80

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : VGA 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	30.000	14.48	18.20	0.96	--	33.64	40.00	6.36	QP
	77.530	20.69	6.43	1.50	--	28.62	40.00	11.38	
	152.220	23.51	9.65	2.14	--	35.30	43.50	8.20	
	312.270	17.59	13.30	3.16	--	34.05	46.00	11.95	
	545.070	17.34	18.48	4.28	--	40.10	46.00	5.90	
	621.700	12.33	19.09	4.61	--	36.03	46.00	9.97	
	1125.000	58.02	22.40	6.95	37.36	50.01	74.00	23.99	PK
	1200.000	54.99	22.75	7.07	37.17	47.64	74.00	26.36	
	1396.000	54.46	24.25	8.01	36.74	49.98	74.00	24.02	
	1499.000	54.11	25.35	8.43	36.53	51.36	74.00	22.64	
	1600.000	54.04	25.45	8.71	36.34	51.86	74.00	22.14	
	1793.000	48.28	25.85	9.32	36.01	47.44	74.00	26.56	
Vertical	30.970	17.41	17.55	0.97	--	35.93	40.00	4.07	QP
	78.500	19.28	6.57	1.51	--	27.36	40.00	12.64	
	107.600	18.25	10.98	1.75	--	30.98	43.50	12.52	
	200.720	15.37	8.68	2.47	--	26.52	43.50	16.98	
	288.020	9.82	12.50	3.02	--	25.34	46.00	20.66	
	535.370	7.64	18.17	4.25	--	30.06	46.00	15.94	
	1123.000	59.57	22.40	6.95	37.36	51.56	74.00	22.44	PK
	1261.000	54.68	23.40	7.41	37.03	48.46	74.00	25.54	
	1337.000	57.69	23.77	7.75	36.86	52.35	74.00	21.65	
	1496.000	56.25	25.35	8.43	36.54	53.49	74.00	20.51	
	1664.000	50.10	25.83	8.92	36.23	48.62	74.00	25.38	
	1792.000	53.50	25.85	9.32	36.01	52.66	74.00	21.34	

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : VGA 1920*1200@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	30.000	10.18	18.20	0.96	--	29.34	40.00	10.66	QP
	75.590	19.89	6.03	1.48	--	27.40	40.00	12.60	
	191.020	19.48	8.30	2.42	--	30.20	43.50	13.30	
	232.730	20.01	9.93	2.68	--	32.62	46.00	13.38	
	467.470	12.53	16.93	3.94	--	33.40	46.00	12.60	
	545.070	9.42	18.48	4.28	--	32.18	46.00	13.82	
	1016.000	58.63	21.54	6.73	37.66	49.24	74.00	24.76	PK
	1075.000	56.73	22.54	6.85	37.49	48.63	74.00	25.37	
	1330.000	54.15	23.72	7.66	36.88	48.65	74.00	25.35	
	1459.000	54.58	25.13	8.26	36.61	51.36	74.00	22.64	
	1702.000	52.16	26.23	8.99	36.16	51.22	74.00	22.78	
	1934.000	45.19	27.16	9.73	35.80	46.28	74.00	27.72	
Vertical	30.970	17.64	17.55	0.97	--	36.16	40.00	3.84	QP
	77.530	24.16	6.43	1.50	--	32.09	40.00	7.91	
	152.220	14.81	9.65	2.14	--	26.60	43.50	16.90	
	288.020	10.36	12.50	3.02	--	25.88	46.00	20.12	
	538.280	18.35	18.34	4.25	--	40.94	46.00	5.06	
	607.150	9.05	18.94	4.55	--	32.54	46.00	13.46	
	1132.000	60.14	22.40	6.95	37.35	52.14	74.00	21.86	PK
	1196.000	60.54	22.75	7.07	37.18	53.18	74.00	20.82	
	1397.000	55.90	24.30	8.01	36.73	51.48	74.00	22.52	
	1592.000	53.50	25.42	8.71	36.36	51.27	74.00	22.73	
	1716.000	48.33	26.30	9.07	36.14	47.56	74.00	26.44	
	1888.000	47.61	26.88	9.65	35.86	48.28	74.00	25.72	

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : DVI 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	30.970	7.27	17.55	0.97	25.79	40.00	14.21
	77.530	19.55	6.43	1.50	27.48	40.00	12.52
	152.220	19.67	9.65	2.14	31.46	43.50	12.04
	185.200	15.79	8.00	2.37	26.16	43.50	17.34
	266.680	12.22	12.51	2.89	27.62	46.00	18.38
	463.590	9.56	16.80	3.92	30.28	46.00	15.72
Vertical	30.970	17.83	17.55	0.97	36.35	40.00	3.65
	52.310	21.33	6.84	1.19	29.36	40.00	10.64
	94.990	19.36	9.50	1.64	30.50	43.50	13.00
	152.220	17.68	9.65	2.14	29.47	43.50	14.03
	462.620	11.45	16.70	3.92	32.07	46.00	13.93
	532.460	16.04	18.01	4.22	38.27	46.00	7.73

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : DVI 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	30.000	9.45	18.20	0.96	28.61	40.00	11.39
	77.530	20.62	6.43	1.50	28.55	40.00	11.45
	185.200	20.07	8.00	2.37	30.44	43.50	13.06
	307.420	13.54	13.10	3.14	29.78	46.00	16.22
	467.470	16.32	16.93	3.94	37.19	46.00	8.81
	533.430	18.12	18.01	4.25	40.38	46.00	5.62
Vertical	30.970	17.55	17.55	0.97	36.07	40.00	3.93
	53.280	21.56	6.52	1.21	29.29	40.00	10.71
	77.530	23.49	6.43	1.50	31.42	40.00	8.58
	107.600	18.06	10.98	1.75	30.79	43.50	12.71
	192.960	18.72	8.40	2.42	29.54	43.50	13.96
	544.100	10.40	18.48	4.28	33.16	46.00	12.84

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : DVI 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	30.970	12.27	17.55	0.97	--	30.79	40.00	9.21	QP
	77.530	19.89	6.43	1.50	--	27.82	40.00	12.18	
	156.100	18.93	9.48	2.17	--	30.58	43.50	12.92	
	185.200	20.17	8.00	2.37	--	30.54	43.50	12.96	
	310.330	13.81	13.20	3.16	--	30.17	46.00	15.83	
	534.400	14.54	18.17	4.25	--	36.96	46.00	9.04	
	1091.000	58.97	22.40	6.89	37.45	50.81	74.00	23.19	PK
	1268.000	54.01	23.41	7.41	37.02	47.81	74.00	26.19	
	1460.000	54.56	25.13	8.26	36.61	51.34	74.00	22.66	
	1574.000	51.60	25.36	8.64	36.39	49.21	74.00	24.79	
	1747.000	49.95	25.97	9.15	36.09	48.98	74.00	25.02	
	1859.000	48.07	26.72	9.57	35.91	48.45	74.00	25.55	
Vertical	30.970	18.39	17.55	0.97	--	36.91	40.00	3.09	QP
	77.530	21.47	6.43	1.50	--	29.40	40.00	10.60	
	107.600	18.76	10.98	1.75	--	31.49	43.50	12.01	
	200.720	12.71	8.68	2.47	--	23.86	43.50	19.64	
	461.650	9.22	16.70	3.92	--	29.84	46.00	16.16	
	530.520	9.02	17.85	4.22	--	31.09	46.00	14.91	
	1192.000	57.61	22.92	7.07	37.19	50.41	74.00	23.59	PK
	1370.000	55.64	24.10	7.84	36.79	50.79	74.00	23.21	
	1533.000	52.80	25.09	8.50	36.46	49.93	74.00	24.07	
	1641.000	51.94	25.65	8.85	36.27	50.17	74.00	23.83	
	1758.000	48.87	26.01	9.24	36.07	48.05	74.00	25.95	
	1977.000	44.77	27.04	9.90	35.73	45.98	74.00	28.02	

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : DVI 1920*1200@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	30.000	9.00	18.20	0.96	--	28.16	40.00	11.84	QP
	77.530	14.76	6.43	1.50	--	22.69	40.00	17.31	
	156.100	16.28	9.48	2.17	--	27.93	43.50	15.57	
	339.430	7.01	14.00	3.34	--	24.35	46.00	21.65	
	538.280	8.74	18.34	4.25	--	31.33	46.00	14.67	
	612.000	9.95	19.01	4.55	--	33.51	46.00	12.49	
	1093.000	58.89	22.40	6.89	37.44	50.74	74.00	23.26	PK
	1247.000	53.52	23.27	7.33	37.06	47.06	74.00	26.94	
	1436.000	49.92	24.98	8.18	36.65	46.43	74.00	27.57	
	1579.000	53.07	25.35	8.64	36.38	50.68	74.00	23.32	
	1757.000	50.05	26.01	9.24	36.07	49.23	74.00	24.77	
	1942.000	46.38	27.08	9.81	35.78	47.49	74.00	26.51	
Vertical	30.970	18.12	17.55	0.97	--	36.64	40.00	3.36	QP
	80.440	20.27	6.80	1.53	--	28.60	40.00	11.40	
	155.130	13.06	9.50	2.15	--	24.71	43.50	18.79	
	288.020	9.38	12.50	3.02	--	24.90	46.00	21.10	
	465.530	9.58	16.87	3.94	--	30.39	46.00	15.61	
	544.100	9.90	18.48	4.28	--	32.66	46.00	13.34	
	1046.000	57.67	22.42	6.79	37.57	49.31	74.00	24.69	PK
	1181.000	55.56	23.28	7.04	37.22	48.66	74.00	25.34	
	1283.000	51.44	23.45	7.50	36.98	45.41	74.00	28.59	
	1438.000	54.20	24.98	8.18	36.65	50.71	74.00	23.29	
	1641.000	52.94	25.65	8.85	36.27	51.17	74.00	22.83	
	1952.000	43.94	27.09	9.81	35.77	45.07	74.00	28.93	

TEST ENGINEER: LEO XUE

EUT : LCD Monitor Temperature : 22°C

Model No. : W2452VQT Humidity : 60%

Serial No. : 803NDZJ4Q805 Date of Test : Mar 29, 2008

Test Mode : HDMI

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	77.530	19.55	6.43	1.50	--	27.48	40.00	12.52	QP
	152.220	19.67	9.65	2.14	--	31.46	43.50	12.04	
	185.200	15.79	8.00	2.37	--	26.16	43.50	17.34	
	266.680	12.22	12.51	2.89	--	27.62	46.00	18.38	
	311.300	11.26	13.25	3.16	--	27.67	46.00	18.33	
	463.590	9.56	16.80	3.92	--	30.28	46.00	15.72	
	1069.000	55.61	22.52	6.30	37.51	46.92	74.00	27.08	PK
	1175.000	55.39	23.23	6.67	37.23	48.06	74.00	25.94	
	1297.000	54.89	23.62	6.89	36.95	48.45	74.00	25.55	
	1427.000	55.99	24.94	7.05	36.67	51.31	74.00	22.69	
	1723.000	53.62	26.18	8.36	36.12	52.04	74.00	21.96	
	1789.000	58.07	25.85	8.58	36.02	56.48	74.00	17.52	
Vertical	30.970	16.83	17.55	0.97	--	35.35	40.00	4.65	QP
	52.310	21.33	6.84	1.19	--	29.36	40.00	10.64	
	94.990	19.36	9.50	1.64	--	30.50	43.50	13.00	
	152.220	17.68	9.65	2.14	--	29.47	43.50	14.03	
	462.620	11.45	16.70	3.92	--	32.07	46.00	13.93	
	532.460	16.04	18.01	4.22	--	38.27	46.00	7.73	
	1193.000	56.73	22.92	6.75	37.19	49.21	74.00	24.79	PK
	1265.000	54.25	23.41	6.86	37.02	47.50	74.00	26.50	
	1390.000	54.25	24.20	7.00	36.75	48.70	74.00	25.30	
	1552.000	57.57	25.27	7.48	36.43	53.89	74.00	20.11	
	1670.000	57.56	25.92	8.12	36.22	55.38	74.00	18.62	
	1841.000	54.60	26.31	8.76	35.93	53.74	74.00	20.26	

TEST ENGINEER: LEO XUE

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
Conductive Tape	7250CP0005J	50*60	LG ELECTRONICS INC.	See Internal Photos Figure 22
Gasket	--	45*8*0.5T	EXPAN	See Internal Photos Figure 23
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photos Figure 24
Gasket	--	50*8*0.5T	EXPAN	See Internal Photos Figure 24
Gasket	--	70*8*0.5T	EXPAN	See Internal Photos Figure 24
Gasket	--	100*8*0.5T	EXPAN	See Internal Photos Figure 24
Gasket	--	50*25*0.5T	EXPAN	See Internal Photos Figure 25