

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

LCD Monitor

Model No.: W2753VQV

Serial No.: E2009020503

FCC ID : BEJW2753HQV

Prepared For : LG Electronics U.S.A., Inc.
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Report No. : ACI-F09014
Date of Test : Feb 07 – 11, 2009
Date of Report : Feb 18, 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. : W2753VQV
(B) Serial No. : E2009020503
(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: W2753VQV; S/N: E2009020503) which was tested in 3m anechoic chamber Feb 07 – 11, 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 : Feb 07 – 11, 2009 Date of Report : Feb 18, 2009

Producer : Kathy Wang
KATHY WANG / 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.	:	W2753VQV
Serial No.	:	E2009020503
Real Power	:	107.0W
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 : LM270WF1 (TL) (B1)
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
DVI Cable #1	:	Shielded, Detachable, 1.85m, with two cores on cable
DVI Cable #2	:	Shielded, Detachable, 1.85m, with two cores in connector
HDMI Cable	:	Shielded, Detachable, 1.00m, without core
Power Cord	:	Unshielded, Detachable, 1.80m
Note	:	After evaluation, the D-Sub cable#1 and DVI cable#1 were 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 DVI Port : Connected with PC
- (3) One HDMI Port : Connected with PC
- (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 : SONY
Model Number : MDR-E808
Serial Number : 1808030805305063
Data Cable : Unshielded, Undetachable, 2.0m

2.3 Description of Test Facility

Site Description : Sept. 17, 1998 file on
(Semi-Anechoic Chamber) 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

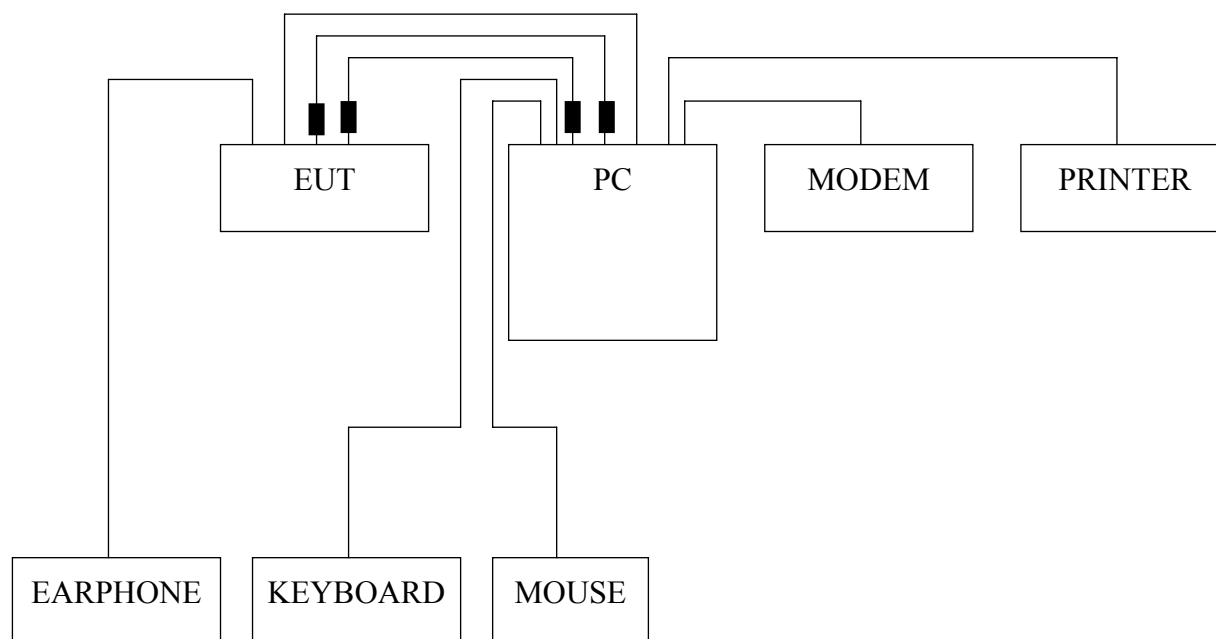
3.1.1 Test Equipment

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	--	--

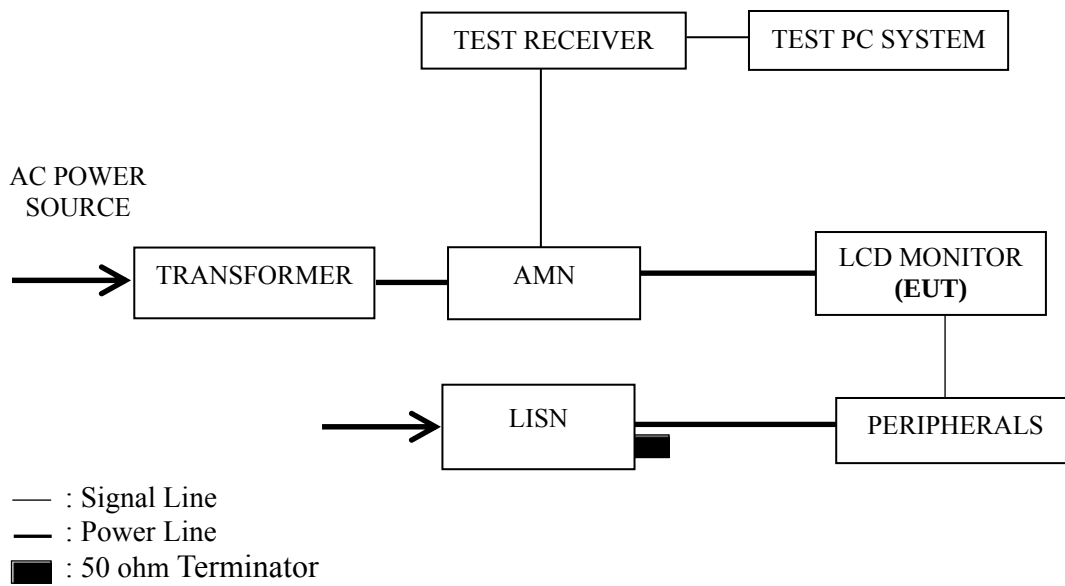
3.2 Block Diagram of Test Setup

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, DVI & HDMI Input).

3.5.5 In HDMI mode, PC system played music and sent audio signal to EUT through the HDMI port of EUT.

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

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	
D-Sub 640*480@60Hz	DVI 1680*1050@60Hz
D-Sub 1024*768@60Hz	DVI 1920*1080@60Hz
D-Sub 1680*1050@60Hz	HDMI 640*480@60Hz
D-Sub 1920*1080@60Hz	HDMI 1024*768@60Hz
DVI 640*480@60Hz	HDMI 1680*1050@60Hz
DVI 1024*768@60Hz	HDMI 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
DVI 640*480@60Hz	P16
DVI 1024*768@60Hz	P17
DVI 1680*1050@60Hz	P18
DVI 1920*1080@60Hz	P19
HDMI 640*480@60Hz	P20
HDMI 1024*768@60Hz	P21
HDMI 1680*1050@60Hz	P22
HDMI 1920*1080@60Hz	P23

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 1680*1050@60Hz test mode. The worst emission is detected at 0.150 MHz (Quasi-Peak Value) with corrected signal level of 55.10 dB (μV) (limit is 66.00 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 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	0.150	53.10	0.23	53.33	66.00	12.67	QP
	0.199	32.16	0.20	32.36	63.67	31.31	
	0.521	26.16	0.22	26.38	56.00	29.62	
	3.642	27.19	0.35	27.54	56.00	28.46	
	18.426	29.62	0.72	30.34	60.00	29.66	
	29.061	25.56	1.09	26.65	60.00	33.35	
	0.150	44.63	0.23	44.86	56.00	11.14	AV
	0.199	22.61	0.20	22.81	53.67	30.86	
	0.521	15.61	0.22	15.83	46.00	30.17	
	3.642	17.81	0.35	18.16	46.00	27.84	
	18.426	19.65	0.72	20.37	50.00	29.63	
	29.061	15.28	1.09	16.37	50.00	33.63	
Neutral	0.150	53.49	0.19	53.68	66.00	12.32	QP
	0.192	33.15	0.20	33.35	63.93	30.58	
	0.521	26.40	0.22	26.62	56.00	29.38	
	3.720	27.04	0.32	27.36	56.00	28.64	
	17.568	28.40	0.56	28.96	60.00	31.04	
	27.708	23.92	0.72	24.64	60.00	35.36	
	0.150	43.52	0.19	43.71	56.00	12.29	AV
	0.192	25.44	0.20	25.64	53.93	28.29	
	0.521	16.25	0.22	16.47	46.00	29.53	
	3.720	17.45	0.32	17.77	46.00	28.23	
	17.568	18.96	0.56	19.52	50.00	30.48	
	27.708	13.64	0.72	14.36	50.00	35.64	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 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	0.150	53.63	0.23	53.86	66.00	12.14	QP
	0.197	33.16	0.20	33.36	63.76	30.40	
	0.521	26.39	0.22	26.61	56.00	29.39	
	3.642	27.40	0.35	27.75	56.00	28.25	
	16.661	29.06	0.72	29.78	60.00	30.22	
	28.003	25.62	1.05	26.67	60.00	33.33	
	0.150	44.62	0.23	44.85	56.00	11.15	AV
	0.197	23.60	0.20	23.80	53.76	29.96	
	0.521	16.52	0.22	16.74	46.00	29.26	
	3.642	17.54	0.35	17.89	46.00	28.11	
	16.661	19.84	0.72	20.56	50.00	29.44	
	28.003	15.63	1.05	16.68	50.00	33.32	
Neutral	0.150	52.53	0.19	52.72	66.00	13.28	QP
	0.194	38.89	0.20	39.09	63.84	24.75	
	0.775	28.99	0.23	29.22	56.00	26.78	
	3.642	27.17	0.32	27.49	56.00	28.51	
	16.661	28.90	0.57	29.47	60.00	30.53	
	28.603	26.99	0.73	27.72	60.00	32.28	
	0.150	42.61	0.19	42.80	56.00	13.20	AV
	0.194	28.64	0.20	28.84	53.84	25.00	
	0.775	18.64	0.23	18.87	46.00	27.13	
	3.642	17.65	0.32	17.97	46.00	28.03	
	16.661	18.93	0.57	19.50	50.00	30.50	
	28.603	17.61	0.73	18.34	50.00	31.66	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 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	0.150	54.87	0.23	55.10	66.00	10.90	QP
	0.194	39.06	0.20	39.26	63.84	24.58	
	0.521	30.23	0.22	30.45	56.00	25.55	
	3.565	26.76	0.35	27.11	56.00	28.89	
	17.383	27.44	0.72	28.16	60.00	31.84	
	28.302	25.15	1.06	26.21	60.00	33.79	
	0.150	44.29	0.23	44.52	56.00	11.48	AV
	0.194	29.61	0.20	29.81	53.84	24.03	
	0.521	20.51	0.22	20.73	46.00	25.27	
	3.565	16.52	0.35	16.87	46.00	29.13	
	17.383	17.52	0.72	18.24	50.00	31.76	
	28.302	15.62	1.06	16.68	50.00	33.32	
Neutral	0.150	52.58	0.19	52.77	66.00	13.23	QP
	0.194	39.10	0.20	39.30	63.84	24.54	
	0.796	28.41	0.23	28.64	56.00	27.36	
	3.565	25.70	0.32	26.02	56.00	29.98	
	16.661	27.94	0.57	28.51	60.00	31.49	
	28.302	25.14	0.72	25.86	60.00	34.14	
	0.150	43.61	0.19	43.80	56.00	12.20	AV
	0.194	29.45	0.20	29.65	53.84	24.19	
	0.796	18.64	0.23	18.87	46.00	27.13	
	3.565	15.61	0.32	15.93	46.00	30.07	
	16.661	17.51	0.57	18.08	50.00	31.92	
	28.302	15.62	0.72	16.34	50.00	33.66	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 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	0.150	54.34	0.23	54.57	66.00	11.43	QP
	0.194	39.61	0.20	39.81	63.84	24.03	
	0.521	30.23	0.22	30.45	56.00	25.55	
	3.720	26.93	0.35	27.28	56.00	28.72	
	18.232	28.22	0.72	28.94	60.00	31.06	
	28.003	23.77	1.05	24.82	60.00	35.18	
	0.150	44.61	0.23	44.84	56.00	11.16	AV
	0.194	29.84	0.20	30.04	53.84	23.80	
	0.521	21.61	0.22	21.83	46.00	24.17	
	3.720	15.61	0.35	15.96	46.00	30.04	
	18.232	18.64	0.72	19.36	50.00	30.64	
	28.003	13.62	1.05	14.67	50.00	35.33	
Neutral	0.150	54.81	0.19	55.00	66.00	11.00	QP
	0.194	39.29	0.20	39.49	63.84	24.35	
	0.822	28.22	0.23	28.45	56.00	27.55	
	3.720	27.52	0.32	27.84	56.00	28.16	
	17.568	28.72	0.56	29.28	60.00	30.72	
	28.003	23.52	0.72	24.24	60.00	35.76	
	0.150	44.61	0.19	44.80	56.00	11.20	AV
	0.194	29.74	0.20	29.94	53.84	23.90	
	0.822	18.64	0.23	18.87	46.00	27.13	
	3.720	17.61	0.32	17.93	46.00	28.07	
	17.568	18.94	0.56	19.50	50.00	30.50	
	28.003	13.64	0.72	14.36	50.00	35.64	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

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	0.150	53.48	0.23	53.71	66.00	12.29	QP
	0.264	27.01	0.22	27.23	61.29	34.06	
	0.521	27.02	0.22	27.24	56.00	28.76	
	3.642	27.40	0.35	27.75	56.00	28.25	
	18.039	28.43	0.71	29.14	60.00	30.86	
	29.061	26.20	1.09	27.29	60.00	32.71	
	0.150	43.64	0.23	43.87	56.00	12.13	AV
	0.264	17.65	0.22	17.87	51.29	33.42	
	0.521	17.98	0.22	18.20	46.00	27.80	
	3.642	17.65	0.35	18.00	46.00	28.00	
	18.039	18.65	0.71	19.36	50.00	30.64	
	29.061	16.94	1.09	18.03	50.00	31.97	
Neutral	0.150	53.38	0.19	53.57	66.00	12.43	QP
	0.267	29.29	0.22	29.51	61.20	31.69	
	0.521	27.04	0.22	27.26	56.00	28.74	
	3.642	27.03	0.32	27.35	56.00	28.65	
	17.568	28.68	0.56	29.24	60.00	30.76	
	28.302	26.05	0.72	26.77	60.00	33.23	
	0.150	43.61	0.19	43.80	56.00	12.20	AV
	0.267	19.84	0.22	20.06	51.20	31.14	
	0.521	17.85	0.22	18.07	46.00	27.93	
	3.642	17.94	0.32	18.26	46.00	27.74	
	17.568	18.94	0.56	19.50	50.00	30.50	
	28.302	16.32	0.72	17.04	50.00	32.96	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

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	0.150	53.46	0.23	53.69	66.00	12.31	QP
	0.270	28.73	0.22	28.95	61.12	32.17	
	0.521	26.98	0.22	27.20	56.00	28.80	
	3.642	27.65	0.35	28.00	56.00	28.00	
	16.661	28.94	0.72	29.66	60.00	30.34	
	28.003	25.00	1.05	26.05	60.00	33.95	
	0.150	43.61	0.23	43.84	56.00	12.16	AV
	0.270	18.65	0.22	18.87	51.12	32.25	
	0.521	16.62	0.22	16.84	46.00	29.16	
	3.642	17.82	0.35	18.17	46.00	27.83	
	16.661	18.64	0.72	19.36	50.00	30.64	
	28.003	14.82	1.05	15.87	50.00	34.13	
Neutral	0.150	53.35	0.19	53.54	66.00	12.46	QP
	0.192	33.75	0.20	33.95	63.93	29.98	
	0.521	26.53	0.22	26.75	56.00	29.25	
	3.642	27.89	0.32	28.21	56.00	27.79	
	16.661	28.43	0.57	29.00	60.00	31.00	
	28.603	25.09	0.73	25.82	60.00	34.18	
	0.150	43.61	0.19	43.80	56.00	12.20	AV
	0.192	23.61	0.20	23.81	53.93	30.12	
	0.521	16.61	0.22	16.83	46.00	29.17	
	3.642	17.65	0.32	17.97	46.00	28.03	
	16.661	18.39	0.57	18.96	50.00	31.04	
	28.603	15.62	0.73	16.35	50.00	33.65	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

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	0.150	53.45	0.23	53.68	66.00	12.32	QP
	0.194	33.16	0.20	33.36	63.84	30.48	
	0.521	26.93	0.22	27.15	56.00	28.85	
	3.642	27.93	0.35	28.28	56.00	27.72	
	17.199	27.36	0.71	28.07	60.00	31.93	
	22.063	25.37	0.79	26.16	60.00	33.84	
	0.150	43.61	0.23	43.84	56.00	12.16	AV
	0.194	23.61	0.20	23.81	53.84	30.03	
	0.521	16.52	0.22	16.74	46.00	29.26	
	3.642	17.84	0.35	18.19	46.00	27.81	
	17.199	17.36	0.71	18.07	50.00	31.93	
	22.063	15.63	0.79	16.42	50.00	33.58	
Neutral	0.150	53.74	0.19	53.93	66.00	12.07	QP
	0.194	33.16	0.20	33.36	63.84	30.48	
	0.521	27.22	0.22	27.44	56.00	28.56	
	3.901	27.47	0.33	27.80	56.00	28.20	
	17.383	27.52	0.56	28.08	60.00	31.92	
	28.302	25.68	0.72	26.40	60.00	33.60	
	0.150	43.52	0.19	43.71	56.00	12.29	AV
	0.194	23.51	0.20	23.71	53.84	30.13	
	0.521	17.54	0.22	17.76	46.00	28.24	
	3.901	17.54	0.33	17.87	46.00	28.13	
	17.383	17.85	0.56	18.41	50.00	31.59	
	28.302	15.59	0.72	16.31	50.00	33.69	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

Test Mode : DVI 1920*1080@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	53.55	0.23	53.78	66.00	12.22	QP
	0.192	33.13	0.20	33.33	63.93	30.60	
	0.521	26.96	0.22	27.18	56.00	28.82	
	3.799	28.06	0.35	28.41	56.00	27.59	
	16.839	28.32	0.71	29.03	60.00	30.97	
	28.003	24.49	1.05	25.54	60.00	34.46	
	0.150	44.20	0.23	44.43	56.00	11.57	AV
	0.192	23.61	0.20	23.81	53.93	30.12	
	0.521	16.52	0.22	16.74	46.00	29.26	
	3.799	18.40	0.35	18.75	46.00	27.25	
	16.839	18.47	0.71	19.18	50.00	30.82	
	28.003	14.82	1.05	15.87	50.00	34.13	
Neutral	0.150	53.59	0.19	53.78	66.00	12.22	QP
	0.192	33.64	0.20	33.84	63.93	30.09	
	0.521	26.83	0.22	27.05	56.00	28.95	
	3.901	27.21	0.33	27.54	56.00	28.46	
	18.232	28.20	0.55	28.75	60.00	31.25	
	28.302	24.15	0.72	24.87	60.00	35.13	
	0.150	44.62	0.19	44.81	56.00	11.19	AV
	0.192	23.61	0.20	23.81	53.93	30.12	
	0.521	16.52	0.22	16.74	46.00	29.26	
	3.901	17.84	0.33	18.17	46.00	27.83	
	18.232	18.66	0.55	19.21	50.00	30.79	
	28.302	14.52	0.72	15.24	50.00	34.76	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

Test Mode : HDMI 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	52.86	0.23	53.09	66.00	12.91	QP
	0.256	27.64	0.21	27.85	61.56	33.71	
	0.521	24.35	0.22	24.57	56.00	31.43	
	3.547	24.76	0.35	25.11	56.00	30.89	
	10.790	16.84	0.62	17.46	60.00	42.54	
	23.636	31.07	0.85	31.92	60.00	28.08	
	0.150	42.68	0.23	42.91	56.00	13.09	AV
	0.256	17.82	0.21	18.03	51.56	33.53	
	0.521	14.68	0.22	14.90	46.00	31.10	
	3.547	14.68	0.35	15.03	46.00	30.97	
	10.790	10.35	0.62	10.97	50.00	39.03	
	23.636	21.69	0.85	22.54	50.00	27.46	
Neutral	0.150	52.34	0.19	52.53	66.00	13.47	QP
	0.194	38.54	0.20	38.74	63.84	25.10	
	0.788	27.90	0.23	28.13	56.00	27.87	
	3.603	26.05	0.32	26.37	56.00	29.63	
	9.654	20.93	0.59	21.52	60.00	38.48	
	25.591	34.15	0.70	34.85	60.00	25.15	
	0.150	42.36	0.19	42.55	56.00	13.45	AV
	0.194	28.34	0.20	28.54	53.84	25.30	
	0.788	17.49	0.23	17.72	46.00	28.28	
	3.603	16.39	0.32	16.71	46.00	29.29	
	9.654	10.38	0.59	10.97	50.00	39.03	
	25.591	24.49	0.70	25.19	50.00	24.81	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

Test Mode : HDMI 1024*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	53.46	0.23	53.69	66.00	12.31	QP
	0.194	38.75	0.20	38.95	63.84	24.89	
	0.796	28.10	0.24	28.34	56.00	27.66	
	3.642	25.73	0.35	26.08	56.00	29.92	
	9.654	19.41	0.60	20.01	60.00	39.99	
	17.755	24.04	0.72	24.76	60.00	35.24	
	0.150	43.68	0.23	43.91	56.00	12.09	AV
	0.194	28.76	0.20	28.96	53.84	24.88	
	0.796	18.76	0.24	19.00	46.00	27.00	
	3.642	15.42	0.35	15.77	46.00	30.23	
	9.654	9.68	0.60	10.28	50.00	39.72	
	17.755	14.89	0.72	15.61	50.00	34.39	
Neutral	0.150	52.49	0.19	52.68	66.00	13.32	QP
	0.194	38.64	0.20	38.84	63.84	25.00	
	0.796	28.35	0.23	28.58	56.00	27.42	
	3.603	24.74	0.32	25.06	56.00	30.94	
	8.729	19.14	0.58	19.72	60.00	40.28	
	17.755	23.02	0.56	23.58	60.00	36.42	
	0.150	42.67	0.19	42.86	56.00	13.14	AV
	0.194	28.72	0.20	28.92	53.84	24.92	
	0.796	18.72	0.23	18.95	46.00	27.05	
	3.603	14.82	0.32	15.14	46.00	30.86	
	8.729	9.81	0.58	10.39	50.00	39.61	
	17.755	13.57	0.56	14.13	50.00	35.87	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

Test Mode : HDMI 1680*1050@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	52.49	0.23	52.72	66.00	13.28	QP
	0.197	38.15	0.20	38.35	63.76	25.41	
	0.521	29.37	0.22	29.59	56.00	26.41	
	3.565	24.44	0.35	24.79	56.00	31.21	
	8.637	19.67	0.59	20.26	60.00	39.74	
	17.755	22.41	0.72	23.13	60.00	36.87	
	0.150	42.15	0.23	42.38	56.00	13.62	AV
	0.197	28.46	0.20	28.66	53.76	25.10	
	0.521	19.68	0.22	19.90	46.00	26.10	
	3.565	14.28	0.35	14.63	46.00	31.37	
	8.637	9.85	0.59	10.44	50.00	39.56	
	17.755	12.58	0.72	13.30	50.00	36.70	
Neutral	0.150	54.50	0.19	54.69	66.00	11.31	QP
	0.194	38.07	0.20	38.27	63.84	25.57	
	0.788	27.42	0.23	27.65	56.00	28.35	
	3.881	24.11	0.33	24.44	56.00	31.56	
	18.426	23.45	0.55	24.00	60.00	36.00	
	20.162	22.51	0.55	23.06	60.00	36.94	
	0.150	44.35	0.19	44.54	56.00	11.46	AV
	0.194	28.73	0.20	28.93	53.84	24.91	
	0.788	17.46	0.23	17.69	46.00	28.31	
	3.881	14.28	0.33	14.61	46.00	31.39	
	18.426	13.50	0.55	14.05	50.00	35.95	
	20.162	12.30	0.55	12.85	50.00	37.15	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : W2753VQV Humidity : 46%RH

Serial No. : E2009020503 Date of Test : Feb 11, 2009

Test Mode : HDMI 1920*1080@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	52.49	0.23	52.72	66.00	13.28	QP
	0.197	38.25	0.20	38.45	63.76	25.31	
	0.779	27.03	0.24	27.27	56.00	28.73	
	3.565	25.53	0.35	25.88	56.00	30.12	
	10.125	19.69	0.60	20.29	60.00	39.71	
	17.755	23.08	0.72	23.80	60.00	36.20	
	0.150	42.59	0.23	42.82	56.00	13.18	AV
	0.197	28.37	0.20	28.57	53.76	25.19	
	0.779	17.49	0.24	17.73	46.00	28.27	
	3.565	15.29	0.35	15.64	46.00	30.36	
	10.125	9.68	0.60	10.28	50.00	39.72	
	17.755	13.57	0.72	14.29	50.00	35.71	
Neutral	0.150	53.63	0.19	53.82	66.00	12.18	QP
	0.197	32.79	0.20	32.99	63.76	30.77	
	0.521	26.43	0.22	26.65	56.00	29.35	
	3.881	25.57	0.33	25.90	56.00	30.10	
	8.729	18.26	0.58	18.84	60.00	41.16	
	17.755	23.11	0.56	23.67	60.00	36.33	
	0.150	43.28	0.19	43.47	56.00	12.53	AV
	0.197	22.51	0.20	22.71	53.76	31.05	
	0.521	17.85	0.22	18.07	46.00	27.93	
	3.881	15.26	0.33	15.59	46.00	30.41	
	8.729	11.53	0.58	12.11	50.00	37.89	
	17.755	13.62	0.56	14.18	50.00	35.82	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

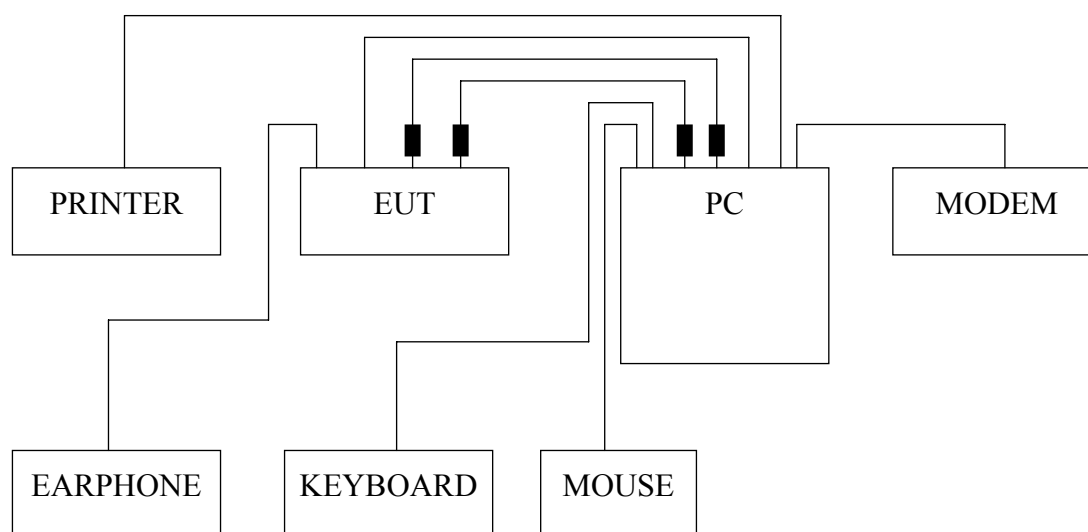
4.1 Test Equipment

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	--	--

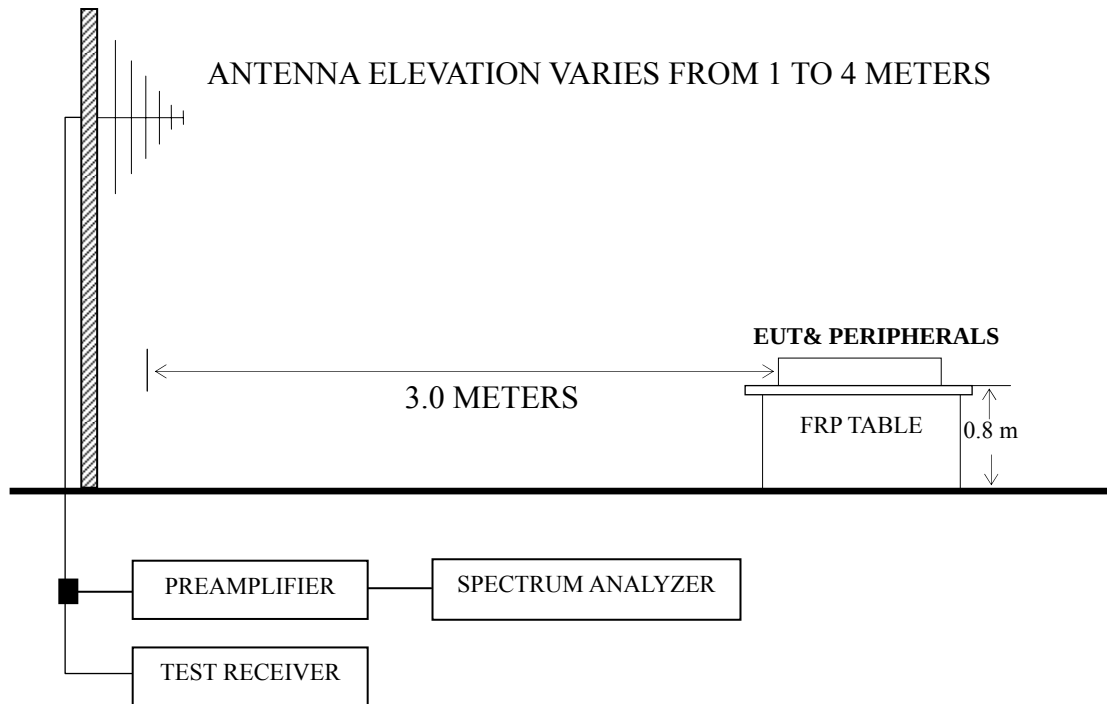
4.2 Block Diagram of Test Setup

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/DVI /HDMI 1680*1050@60Hz & D-Sub/DVI/HDMI 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.

Test Mode	Data Page
D-Sub 640*480@60Hz	P28
D-Sub 1024*768@60Hz	P29
D-Sub 1680*1050@60Hz	P30
D-Sub 1920*1080@60Hz	P31
DVI 640*480@60Hz	P32
DVI 1024*768@60Hz	P33
DVI 1680*1050@60Hz	P34
DVI 1920*1080@60Hz	P35
HDMI 640*480@60Hz	P36
HDMI 1024*768@60Hz	P37
HDMI 1680*1050@60Hz	P38
HDMI 1920*1080@60Hz	P39

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. 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 301.600 MHz with corrected signal level of 35.58 dB ($\mu\text{V/m}$) (limit is 46.00dB ($\mu\text{V/m}$)), when the antenna was 1.00 m height and the turntable was at 85° . The worst emission at vertical polarization was detected at 30.970 MHz with corrected signal level of 36.77 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 280° .

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 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	140.580	14.60	12.05	0.91	27.56	43.50	15.94
	151.250	15.55	11.19	0.93	27.67	43.50	15.83
	200.720	16.58	10.74	1.08	28.40	43.50	15.10
	220.120	16.33	11.66	1.16	29.15	46.00	16.85
	301.600	20.05	13.97	1.56	35.58	46.00	10.42
	451.950	14.73	17.26	2.22	34.21	46.00	11.79
Vertical	30.970	17.17	19.03	0.57	36.77	40.00	3.23
	151.250	15.79	11.19	0.93	27.91	43.50	15.59
	166.770	16.53	10.31	0.98	27.82	43.50	15.68
	281.230	21.18	13.57	1.44	36.19	46.00	9.81
	451.950	13.29	17.26	2.22	32.77	46.00	13.23
	515.970	12.14	18.09	2.42	32.65	46.00	13.35

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 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	142.520	20.30	11.91	0.91	33.12	43.50	10.38
	151.250	22.70	11.19	0.93	34.82	43.50	8.68
	301.600	17.59	13.97	1.56	33.12	46.00	12.88
	451.950	13.23	17.26	2.22	32.71	46.00	13.29
	811.820	8.23	20.80	3.36	32.39	46.00	13.61
	958.290	6.72	22.13	3.72	32.57	46.00	13.43
Vertical	30.970	15.55	19.03	0.57	35.15	40.00	4.85
	31.940	11.57	18.49	0.59	30.65	40.00	9.35
	281.230	20.22	13.57	1.44	35.23	46.00	10.77
	517.910	10.07	18.12	2.42	30.61	46.00	15.39
	666.320	7.79	19.54	2.91	30.24	46.00	15.76
	859.350	8.90	21.31	3.44	33.65	46.00	12.35

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 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	140.580	18.81	12.05	0.91	--	31.77	43.50	11.73	QP
	151.250	19.70	11.19	0.93	--	31.82	43.50	11.68	
	203.630	19.10	10.85	1.10	--	31.05	43.50	12.45	
	222.060	18.15	11.75	1.16	--	31.06	46.00	14.94	
	301.600	16.82	13.97	1.56	--	32.35	46.00	13.65	
	451.950	14.81	17.26	2.22	--	34.29	46.00	11.71	
	1090.000	53.98	23.02	4.02	37.45	43.57	74.00	30.43	PK
	1170.000	55.23	23.54	4.16	37.25	45.68	74.00	28.32	
	1365.000	53.48	24.98	4.48	36.80	46.14	74.00	27.86	
	1539.000	51.18	26.07	4.81	36.45	45.61	74.00	28.39	
	1733.000	52.97	26.74	5.17	36.11	48.77	74.00	25.23	
	1790.000	49.64	26.88	5.20	36.02	45.70	74.00	28.30	
Vertical	53.280	16.69	8.14	0.79	--	25.62	40.00	14.38	QP
	80.440	15.71	7.85	0.86	--	24.42	40.00	15.58	
	151.250	18.83	11.19	0.93	--	30.95	43.50	12.55	
	281.230	17.66	13.57	1.44	--	32.67	46.00	13.33	
	451.950	14.02	17.26	2.22	--	33.50	46.00	12.50	
	517.910	13.57	18.12	2.42	--	34.11	46.00	11.89	
	1056.000	53.50	22.79	3.96	37.54	42.71	74.00	31.29	PK
	1173.000	54.56	23.56	4.16	37.24	45.04	74.00	28.96	
	1335.000	55.27	24.78	4.45	36.87	47.63	74.00	26.37	
	1452.000	53.40	25.53	4.66	36.63	46.96	74.00	27.04	
	1647.000	51.94	26.52	5.02	36.25	47.23	74.00	26.77	
	1810.000	49.58	26.94	5.21	35.99	45.74	74.00	28.26	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 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	137.670	15.92	12.19	0.91	--	29.02	43.50	14.48	QP
	151.250	18.60	11.19	0.93	--	30.72	43.50	12.78	
	301.600	17.76	13.97	1.56	--	33.29	46.00	12.71	
	451.950	12.52	17.26	2.22	--	32.00	46.00	14.00	
	811.820	8.56	20.80	3.36	--	32.72	46.00	13.28	
	959.260	7.29	22.13	3.72	--	33.14	46.00	12.86	
	1102.000	52.99	23.11	4.04	37.42	42.72	74.00	31.28	PK
	1255.000	49.86	24.14	4.30	37.04	41.26	74.00	32.74	
	1435.000	51.20	25.41	4.63	36.65	44.59	74.00	29.41	
	1499.000	48.86	25.80	4.71	36.53	42.84	74.00	31.16	
	1733.000	48.97	26.74	5.17	36.11	44.77	74.00	29.23	
	1754.000	48.27	26.80	5.18	36.07	44.18	74.00	29.82	
Vertical	30.970	32.29	0.00	0.57	--	32.86	40.00	7.14	QP
	151.250	26.99	0.00	0.93	--	27.92	43.50	15.58	
	281.230	32.04	0.00	1.44	--	33.48	46.00	12.52	
	451.950	38.54	0.00	2.22	--	40.76	46.00	5.24	
	516.940	34.48	0.00	2.42	--	36.90	46.00	9.10	
	813.760	30.22	0.00	3.36	--	33.58	46.00	12.42	
	1056.000	53.50	22.79	3.96	37.54	42.71	74.00	31.29	PK
	1162.000	57.73	23.51	4.16	37.27	48.13	74.00	25.87	
	1430.000	50.94	25.38	4.60	36.67	44.25	74.00	29.75	
	1622.000	52.33	26.45	4.99	36.31	47.46	74.00	26.54	
	1714.000	47.98	26.69	5.14	36.14	43.67	74.00	30.33	
	1890.000	52.98	27.45	5.24	35.86	49.81	74.00	24.19	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

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	125.060	15.13	12.76	0.89	28.78	43.50	14.72
	140.580	19.60	12.05	0.91	32.56	43.50	10.94
	151.250	20.55	11.19	0.93	32.67	43.50	10.83
	220.120	18.33	11.66	1.16	31.15	46.00	14.85
	301.600	20.05	13.97	1.56	35.58	46.00	10.42
	451.950	14.73	17.26	2.22	34.21	46.00	11.79
Vertical	30.970	14.17	19.03	0.57	33.77	40.00	6.23
	59.100	19.06	6.80	0.82	26.68	40.00	13.32
	80.440	17.07	7.85	0.86	25.78	40.00	14.22
	166.770	18.53	10.31	0.98	29.82	43.50	13.68
	281.230	19.18	13.57	1.44	34.19	46.00	11.81
	515.970	14.14	18.09	2.42	34.65	46.00	11.35

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

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	142.520	21.30	11.91	0.91	34.12	43.50	9.38
	151.250	22.70	11.19	0.93	34.82	43.50	8.68
	301.600	21.59	13.97	1.56	37.12	46.00	8.88
	451.950	17.23	17.26	2.22	36.71	46.00	9.29
	811.820	14.23	20.80	3.36	38.39	46.00	7.61
	958.290	12.72	22.13	3.72	38.57	46.00	7.43
Vertical	30.970	14.55	19.03	0.57	34.15	40.00	5.85
	151.250	17.40	11.19	0.93	29.52	43.50	13.98
	281.230	22.22	13.57	1.44	37.23	46.00	8.77
	438.370	7.94	17.06	2.18	27.18	46.00	18.82
	517.910	10.07	18.12	2.42	30.61	46.00	15.39
	859.350	7.90	21.31	3.44	32.65	46.00	13.35

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

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	80.440	20.60	7.85	0.86	--	29.31	40.00	10.69	QP
	124.090	17.57	12.81	0.89	--	31.27	43.50	12.23	
	140.580	18.81	12.05	0.91	--	31.77	43.50	11.73	
	151.250	19.70	11.19	0.93	--	31.82	43.50	11.68	
	203.630	21.10	10.85	1.10	--	33.05	43.50	10.45	
	301.600	19.82	13.97	1.56	--	35.35	46.00	10.65	
	1093.000	59.34	23.05	4.02	37.44	48.97	74.00	25.03	PK
	1244.000	58.14	24.06	4.27	37.07	49.40	74.00	24.60	
	1411.000	57.74	25.27	4.57	36.70	50.88	74.00	23.12	
	1615.000	54.29	26.43	4.96	36.31	49.37	74.00	24.63	
	1654.000	53.87	26.54	5.02	36.25	49.18	74.00	24.82	
	1754.000	49.27	26.80	5.18	36.07	45.18	74.00	28.82	
Vertical	30.970	14.69	19.03	0.57	--	34.29	40.00	5.71	QP
	55.220	20.87	7.69	0.80	--	29.36	40.00	10.64	
	151.250	22.83	11.19	0.93	--	34.95	43.50	8.55	
	281.230	22.66	13.57	1.44	--	37.67	46.00	8.33	
	451.950	18.02	17.26	2.22	--	37.50	46.00	8.50	
	517.910	16.57	18.12	2.42	--	37.11	46.00	8.89	
	1134.000	54.05	23.33	4.10	37.34	44.14	74.00	29.86	PK
	1331.000	54.71	24.74	4.42	36.88	46.99	74.00	27.01	
	1471.000	54.07	25.64	4.68	36.58	47.81	74.00	26.19	
	1544.000	50.10	26.07	4.81	36.44	44.54	74.00	29.46	
	1673.000	50.05	26.58	5.08	36.21	45.50	74.00	28.50	
	1790.000	52.64	26.88	5.20	36.02	48.70	74.00	25.30	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

Test Mode : DVI 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	139.610	21.50	12.12	0.91	--	34.53	43.50	8.97	QP
	151.250	22.60	11.19	0.93	--	34.72	43.50	8.78	
	219.150	23.58	11.57	1.15	--	36.30	46.00	9.70	
	301.600	24.76	13.97	1.56	--	40.29	46.00	5.71	
	442.250	16.81	17.11	2.20	--	36.12	46.00	9.88	
	451.950	18.52	17.26	2.22	--	38.00	46.00	8.00	
	1055.000	46.83	22.79	3.96	37.54	36.04	74.00	37.96	PK
	1281.000	48.75	24.36	4.36	36.98	40.49	74.00	33.51	
	1431.000	48.48	25.38	4.60	36.66	41.80	74.00	32.20	
	1497.000	50.93	25.80	4.71	36.53	44.91	74.00	29.09	
	1647.000	52.94	26.52	5.02	36.25	48.23	74.00	25.77	
	1790.000	47.64	26.88	5.20	36.02	43.70	74.00	30.30	
Vertical	30.970	12.26	19.03	0.57	--	31.86	40.00	8.14	QP
	141.550	17.99	12.01	0.91	--	30.91	43.50	12.59	
	151.250	18.80	11.19	0.93	--	30.92	43.50	12.58	
	281.230	18.47	13.57	1.44	--	33.48	46.00	12.52	
	451.950	21.28	17.26	2.22	--	40.76	46.00	5.24	
	516.940	19.36	18.12	2.42	--	39.90	46.00	6.10	
	1056.000	58.50	22.79	3.96	37.54	47.71	74.00	26.29	PK
	1162.000	52.73	23.51	4.16	37.27	43.13	74.00	30.87	
	1244.000	52.14	24.06	4.27	37.07	43.40	74.00	30.60	
	1452.000	56.40	25.53	4.66	36.63	49.96	74.00	24.04	
	1585.000	48.62	26.33	4.88	36.37	43.46	74.00	30.54	
	1810.000	51.58	26.94	5.21	35.99	47.74	74.00	26.26	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

Test Mode : HDMI 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	140.580	16.60	12.05	0.91	29.56	43.50	13.94
	151.250	18.55	11.19	0.93	30.67	43.50	12.83
	220.120	18.33	11.66	1.16	31.15	46.00	14.85
	301.600	21.05	13.97	1.56	36.58	46.00	9.42
	451.950	14.73	17.26	2.22	34.21	46.00	11.79
	515.970	11.03	18.09	2.42	31.54	46.00	14.46
Vertical	30.970	13.17	19.03	0.57	32.77	40.00	7.23
	55.220	21.88	7.69	0.80	30.37	40.00	9.63
	90.140	18.23	9.40	0.86	28.49	43.50	15.01
	151.250	17.79	11.19	0.93	29.91	43.50	13.59
	281.230	22.18	13.57	1.44	37.19	46.00	8.81
	515.970	12.14	18.09	2.42	32.65	46.00	13.35

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

Test Mode : HDMI 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	129.910	18.21	12.52	0.90	31.63	43.50	11.87
	151.250	23.70	11.19	0.93	35.82	43.50	7.68
	196.840	24.68	10.57	1.07	36.32	43.50	7.18
	220.120	22.91	11.66	1.16	35.73	46.00	10.27
	301.600	21.59	13.97	1.56	37.12	46.00	8.88
	451.950	17.23	17.26	2.22	36.71	46.00	9.29
Vertical	30.970	16.55	19.03	0.57	36.15	40.00	3.85
	84.320	18.08	8.48	0.86	27.42	40.00	12.58
	140.580	15.57	12.05	0.91	28.53	43.50	14.97
	151.250	20.40	11.19	0.93	32.52	43.50	10.98
	281.230	21.22	13.57	1.44	36.23	46.00	9.77
	517.910	13.07	18.12	2.42	33.61	46.00	12.39

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

Test Mode : HDMI 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	124.090	16.57	12.81	0.89	--	30.27	43.50	13.23	QP
	140.580	22.81	12.05	0.91	--	35.77	43.50	7.73	
	151.250	22.70	11.19	0.93	--	34.82	43.50	8.68	
	203.630	20.10	10.85	1.10	--	32.05	43.50	11.45	
	301.600	18.82	13.97	1.56	--	34.35	46.00	11.65	
	451.950	17.81	17.26	2.22	--	37.29	46.00	8.71	
	1090.000	55.98	23.02	4.02	37.45	45.57	74.00	28.43	PK
	1214.000	53.26	23.82	4.24	37.14	44.18	74.00	29.82	
	1264.000	51.39	24.23	4.33	37.02	42.93	74.00	31.07	
	1339.000	51.47	24.78	4.45	36.86	43.84	74.00	30.16	
	1499.000	50.86	25.80	4.71	36.53	44.84	74.00	29.16	
	1637.000	50.45	26.49	4.99	36.27	45.66	74.00	28.34	
Vertical	30.970	14.69	19.03	0.57	--	34.29	40.00	5.71	QP
	80.440	20.71	7.85	0.86	--	29.42	40.00	10.58	
	151.250	17.83	11.19	0.93	--	29.95	43.50	13.55	
	281.230	19.66	13.57	1.44	--	34.67	46.00	11.33	
	451.950	19.02	17.26	2.22	--	38.50	46.00	7.50	
	517.910	17.57	18.12	2.42	--	38.11	46.00	7.89	
	1056.000	57.50	22.79	3.96	37.54	46.71	74.00	27.29	PK
	1163.000	55.30	23.51	4.16	37.27	45.70	74.00	28.30	
	1339.000	54.47	24.78	4.45	36.86	46.84	74.00	27.16	
	1499.000	53.86	25.80	4.71	36.53	47.84	74.00	26.16	
	1622.000	52.33	26.45	4.99	36.31	47.46	74.00	26.54	
	1700.000	53.98	26.65	5.11	36.17	49.57	74.00	24.43	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2753VQV Humidity : 60%RH

Serial No. : E2009020503 Date of Test : Feb 07, 2009

Test Mode : HDMI 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	139.610	20.50	12.12	0.91	--	33.53	43.50	9.97	QP
	151.250	20.60	11.19	0.93	--	32.72	43.50	10.78	
	281.230	18.46	13.57	1.44	--	33.47	46.00	12.53	
	301.600	22.76	13.97	1.56	--	38.29	46.00	7.71	
	451.950	20.52	17.26	2.22	--	40.00	46.00	6.00	
	515.970	16.02	18.09	2.42	--	36.53	46.00	9.47	PK
	1063.000	56.40	22.85	3.99	37.53	45.71	74.00	28.29	
	1244.000	54.14	24.06	4.27	37.07	45.40	74.00	28.60	
	1411.000	51.74	25.27	4.57	36.70	44.88	74.00	29.12	
	1557.000	50.53	26.15	4.85	36.42	45.11	74.00	28.89	
	1654.000	52.87	26.54	5.02	36.25	48.18	74.00	25.82	
	1754.000	52.27	26.80	5.18	36.07	48.18	74.00	25.82	
Vertical	30.970	13.26	19.03	0.57	--	32.86	40.00	7.14	QP
	55.220	22.45	7.69	0.80	--	30.94	40.00	9.06	
	80.440	21.22	7.85	0.86	--	29.93	40.00	10.07	
	281.230	20.47	13.57	1.44	--	35.48	46.00	10.52	
	451.950	22.28	17.26	2.22	--	41.76	46.00	4.24	
	516.940	16.36	18.12	2.42	--	36.90	46.00	9.10	PK
	1056.000	52.50	22.79	3.96	37.54	41.71	74.00	32.29	
	1162.000	48.73	23.51	4.16	37.27	39.13	74.00	34.87	
	1392.000	50.87	25.16	4.54	36.75	43.82	74.00	30.18	
	1471.000	48.07	25.64	4.68	36.58	41.81	74.00	32.19	
	1700.000	48.98	26.65	5.11	36.17	44.57	74.00	29.43	
	1810.000	48.58	26.94	5.21	35.99	44.74	74.00	29.26	

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
Sponge	3940TKK043C	2*9*90T	EXPAN	See Internal Photos Figure 23
Sponge	3940TKK041Y	180*10*4T	EXPAN	See Internal Photos Figure 23
Sponge	3940TKK043D	2*9*90T	EXPAN	See Internal Photos Figure 23
Tape	7250CP0005J	500*600	EXPAN	See Internal Photos Figure 21
Tape	7250CP0005A	500*1200	EXPAN	See Internal Photos Figure 22
Sponge	--	36*12	EXPAN	See Internal Photos Figure 24