

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

LCD Monitor

Model No.: W2361VV

Serial No.: 811NDKD6R741

FCC ID : BEJW2361VV

Prepared For : LG Electronics U.S.A., Inc.
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Date of Test : Jan 05 – 08, 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. : W2361VV
(B) Serial No. : 811NDKD6R741
(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: W2361VV; S/N: 811NDKD6R741) which was tested in 3m anechoic chamber Jan 05 – 08, 2009, 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 : Jan 05 – 08, 2009 Date of Report : Jan 13, 2009

Producer : Kathy Wang
KATHY WANG / Assistant

Review : Dio Yang
DIO YANG / Supervisor

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

Signature : 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.	:	W2361VV
Serial No.	:	811NDKD6R741
Real Power	:	46.00W
Applicant	:	LG Electronics U.S.A., Inc. 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632, United States
Manufacturer	:	LG Electronics Nanjing Display Co., Ltd. No.346, Yao Xin Road, Economic & Technical Development Zone, Nanjing, China
LCD Panel	:	Manufacturer : LG Display M/N : LM230WF1 (TL) (B2)
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, 1.85m, Without core
Power Cord	:	Unshielded, Detachable, 1.80m
Note	:	After evaluation, the D-Sub cable#1 and DVI cable#1 were used in the final 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

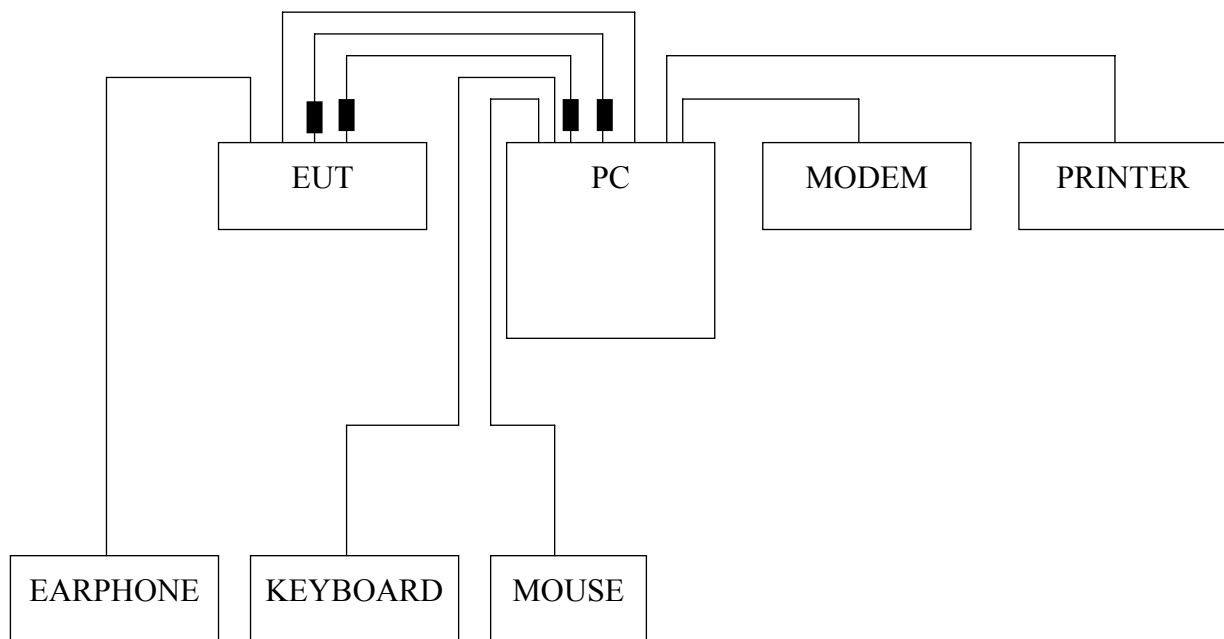
3.1.1 Test Equipment

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	--	--

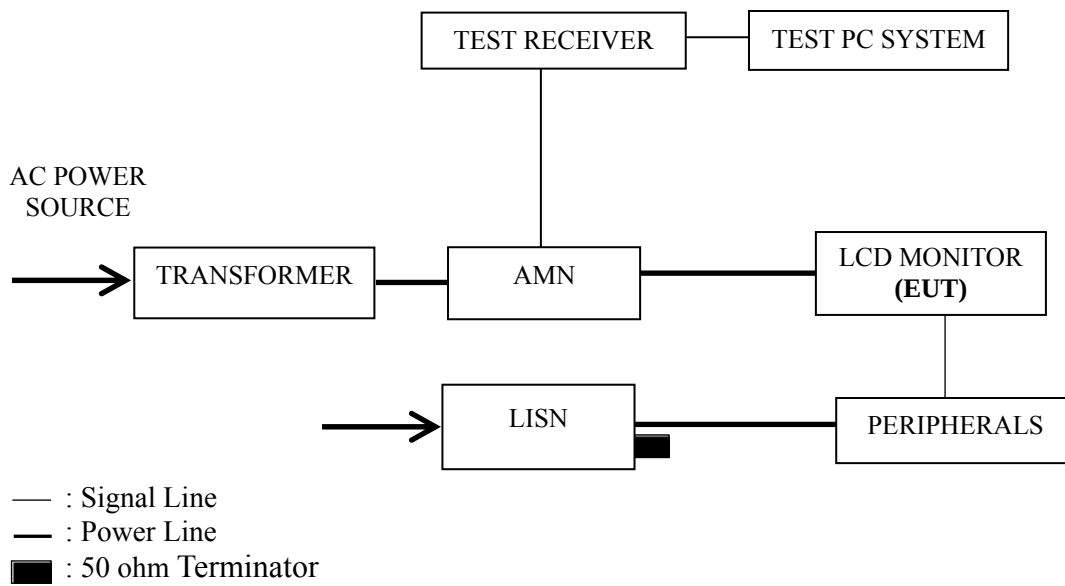
3.2 Block Diagram of Test Setup

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 (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 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 HDMI 1024*768@60Hz test mode. The worst emission is detected at 0.155 MHz (Average Value) with corrected signal level of 45.86 dB (μV) (limit is 55.74 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.156	53.22	0.22	53.44	65.65	12.21	QP
	0.234	42.22	0.21	42.43	62.30	19.87	
	0.716	33.48	0.23	33.71	56.00	22.29	
	4.202	32.66	0.36	33.02	56.00	22.98	
	9.011	26.32	0.60	26.92	60.00	33.08	
	20.924	26.81	0.76	27.57	60.00	32.43	
	0.156	43.25	0.22	43.47	55.65	12.18	AV
	0.234	32.16	0.21	32.37	52.30	19.93	
	0.716	23.18	0.23	23.41	46.00	22.59	
	4.202	23.52	0.36	23.88	46.00	22.12	
	9.011	16.28	0.60	16.88	50.00	33.12	
	20.924	16.25	0.76	17.01	50.00	32.99	
Neutral	0.156	52.74	0.19	52.93	65.65	12.72	QP
	0.234	42.96	0.21	43.17	62.30	19.13	
	0.621	31.46	0.22	31.68	56.00	24.32	
	4.202	37.33	0.33	37.66	56.00	18.34	
	5.898	37.46	0.40	37.86	60.00	22.14	
	21.147	39.11	0.59	39.70	60.00	20.30	
	0.156	42.13	0.19	42.32	55.65	13.33	AV
	0.234	32.16	0.21	32.37	52.30	19.93	
	0.621	21.36	0.22	21.58	46.00	24.42	
	4.202	27.54	0.33	27.87	46.00	18.13	
	5.898	27.46	0.40	27.86	50.00	22.14	
	21.147	29.65	0.59	30.24	50.00	19.76	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.156	52.33	0.22	52.55	65.65	13.10	QP
	0.230	41.73	0.21	41.94	62.44	20.50	
	0.716	32.56	0.23	32.79	56.00	23.21	
	3.964	32.28	0.36	32.64	56.00	23.36	
	5.505	32.30	0.42	32.72	60.00	27.28	
	19.950	28.21	0.72	28.93	60.00	31.07	
	0.156	42.13	0.22	42.35	65.65	23.30	AV
	0.230	31.26	0.21	31.47	62.44	30.97	
	0.716	23.15	0.23	23.38	56.00	32.62	
	3.964	23.51	0.36	23.87	56.00	32.13	
	5.505	23.16	0.42	23.58	60.00	36.42	
	19.950	18.52	0.72	19.24	60.00	40.76	
Neutral	0.156	52.09	0.19	52.28	65.65	13.37	QP
	0.234	41.81	0.21	42.02	62.30	20.28	
	0.716	32.12	0.23	32.35	56.00	23.65	
	3.964	31.71	0.33	32.04	56.00	23.96	
	5.505	31.92	0.38	32.30	60.00	27.70	
	19.845	27.73	0.55	28.28	60.00	31.72	
	0.156	42.13	0.19	42.32	55.65	13.33	AV
	0.234	31.26	0.21	31.47	52.30	20.83	
	0.716	23.51	0.23	23.74	46.00	22.26	
	3.964	21.46	0.33	21.79	46.00	24.21	
	5.505	21.60	0.38	21.98	50.00	28.02	
	19.845	17.52	0.55	18.07	50.00	31.93	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.154	52.23	0.22	52.45	65.78	13.33	QP
	0.310	35.91	0.22	36.13	59.97	23.84	
	0.716	34.07	0.23	34.30	56.00	21.70	
	3.964	32.44	0.36	32.80	56.00	23.20	
	5.505	32.81	0.42	33.23	60.00	26.77	
	20.162	27.78	0.73	28.51	60.00	31.49	
	0.154	42.36	0.22	42.58	55.78	13.20	AV
	0.310	25.16	0.22	25.38	49.97	24.59	
	0.716	24.50	0.23	24.73	46.00	21.27	
	3.964	23.16	0.36	23.52	46.00	22.48	
	5.505	23.15	0.42	23.57	50.00	26.43	
	20.162	17.45	0.73	18.18	50.00	31.82	
Neutral	0.155	52.06	0.19	52.25	65.74	13.49	QP
	0.234	42.36	0.21	42.57	62.30	19.73	
	0.621	31.10	0.22	31.32	56.00	24.68	
	4.430	39.50	0.34	39.84	56.00	16.16	
	10.733	35.57	0.59	36.16	60.00	23.84	
	20.270	42.91	0.56	43.47	60.00	16.53	
	0.155	42.16	0.19	42.35	55.74	13.39	AV
	0.234	32.15	0.21	32.36	52.30	19.94	
	0.621	21.48	0.22	21.70	46.00	24.30	
	4.430	29.58	0.34	29.92	46.00	16.08	
	10.733	25.47	0.59	26.06	50.00	23.94	
	20.270	32.18	0.56	32.74	50.00	17.26	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.154	53.05	0.22	53.27	65.78	12.51	QP
	0.237	42.52	0.21	42.73	62.22	19.49	
	0.716	32.94	0.23	33.17	56.00	22.83	
	4.136	31.47	0.36	31.83	56.00	24.17	
	5.505	32.57	0.42	32.99	60.00	27.01	
	20.486	28.25	0.74	28.99	60.00	31.01	
	0.154	43.25	0.22	43.47	55.78	12.31	AV
	0.237	32.16	0.21	32.37	52.22	19.85	
	0.716	23.45	0.23	23.68	46.00	22.32	
	4.136	21.58	0.36	21.94	46.00	24.06	
	5.505	22.15	0.42	22.57	50.00	27.43	
	20.486	18.47	0.74	19.21	50.00	30.79	
Neutral	0.154	52.16	0.19	52.35	65.78	13.43	QP
	0.237	42.16	0.21	42.37	62.22	19.85	
	0.621	32.25	0.22	32.47	56.00	23.53	
	4.430	36.80	0.34	37.14	56.00	18.86	
	13.841	37.12	0.58	37.70	60.00	22.30	
	20.486	40.55	0.56	41.11	60.00	18.89	
	0.154	42.18	0.19	42.37	55.78	13.41	AV
	0.237	32.14	0.21	32.35	52.22	19.87	
	0.621	23.14	0.22	23.36	46.00	22.64	
	4.430	26.15	0.34	26.49	46.00	19.51	
	13.841	27.48	0.58	28.06	50.00	21.94	
	20.486	31.27	0.56	31.83	50.00	18.17	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.155	52.37	0.22	52.59	65.74	13.15	QP
	0.237	41.99	0.21	42.20	62.22	20.02	
	0.716	33.38	0.23	33.61	56.00	22.39	
	3.491	31.72	0.34	32.06	56.00	23.94	
	6.988	28.25	0.52	28.77	60.00	31.23	
	26.558	26.01	0.97	26.98	60.00	33.02	
	0.155	42.18	0.22	42.40	55.74	13.34	AV
	0.237	31.26	0.21	31.47	52.22	20.75	
	0.716	23.18	0.23	23.41	46.00	22.59	
	3.491	21.99	0.34	22.33	46.00	23.67	
	6.988	18.29	0.52	18.81	50.00	31.19	
	26.558	16.28	0.97	17.25	50.00	32.75	
Neutral	0.155	52.58	0.19	52.77	65.74	12.97	QP
	0.233	41.51	0.21	41.72	62.35	20.63	
	0.621	32.64	0.22	32.86	56.00	23.14	
	4.574	36.05	0.34	36.39	56.00	19.61	
	13.989	36.82	0.58	37.40	60.00	22.60	
	20.814	40.07	0.58	40.65	60.00	19.35	
	0.155	42.16	0.19	42.35	55.74	13.39	AV
	0.233	31.26	0.21	31.47	52.35	20.88	
	0.621	23.46	0.22	23.68	46.00	22.32	
	4.574	26.18	0.34	26.52	46.00	19.48	
	13.989	26.48	0.58	27.06	50.00	22.94	
	20.814	31.49	0.58	32.07	50.00	17.93	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.156	52.80	0.22	53.02	65.65	12.63	QP
	0.234	43.04	0.21	43.25	62.30	19.05	
	0.716	33.97	0.23	34.20	56.00	21.80	
	3.720	31.57	0.35	31.92	56.00	24.08	
	9.204	26.79	0.60	27.39	60.00	32.61	
	20.486	27.33	0.74	28.07	60.00	31.93	
	0.156	42.16	0.22	42.38	55.65	13.27	AV
	0.234	34.18	0.21	34.39	52.30	17.91	
	0.716	23.16	0.23	23.39	46.00	22.61	
	3.720	22.16	0.35	22.51	46.00	23.49	
	9.204	16.49	0.60	17.09	50.00	32.91	
	20.486	17.45	0.74	18.19	50.00	31.81	
Neutral	0.156	53.22	0.19	53.41	65.65	12.24	QP
	0.234	41.74	0.21	41.95	62.30	20.35	
	0.716	32.46	0.23	32.69	56.00	23.31	
	5.594	36.46	0.39	36.85	60.00	23.15	
	10.233	36.43	0.60	37.03	60.00	22.97	
	20.594	40.48	0.57	41.05	60.00	18.95	
	0.716	23.16	0.23	23.39	46.00	22.61	AV
	0.156	43.25	0.19	43.44	55.65	12.21	
	0.234	31.25	0.21	31.46	52.30	20.84	
	5.594	26.13	0.39	26.52	50.00	23.48	
	10.233	27.48	0.60	28.08	50.00	21.92	
	20.594	31.26	0.57	31.83	50.00	18.17	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 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	0.154	52.90	0.22	53.12	65.78	12.66	QP
	0.234	41.52	0.21	41.73	62.30	20.57	
	0.716	33.20	0.23	33.43	56.00	22.57	
	3.881	32.46	0.36	32.82	56.00	23.18	
	5.505	32.81	0.42	33.23	60.00	26.77	
	20.162	27.15	0.73	27.88	60.00	32.12	
	0.154	42.13	0.22	42.35	55.78	13.43	AV
	0.234	31.62	0.21	31.83	52.30	20.47	
	0.716	23.49	0.23	23.72	46.00	22.28	
	3.881	23.18	0.36	23.54	46.00	22.46	
	5.505	23.49	0.42	23.91	50.00	26.09	
	20.162	17.49	0.73	18.22	50.00	31.78	
Neutral	0.155	52.94	0.19	53.13	65.74	12.61	QP
	0.234	42.30	0.21	42.51	62.30	19.79	
	0.716	34.17	0.23	34.40	56.00	21.60	
	3.881	32.82	0.33	33.15	56.00	22.85	
	5.505	33.20	0.38	33.58	60.00	26.42	
	19.950	28.15	0.55	28.70	60.00	31.30	
	0.155	40.16	0.19	40.35	55.74	15.39	AV
	0.234	32.19	0.21	32.40	52.30	19.90	
	0.716	24.65	0.23	24.88	46.00	21.12	
	3.881	23.16	0.33	23.49	46.00	22.51	
	5.505	23.18	0.38	23.56	50.00	26.44	
	19.950	18.94	0.55	19.49	50.00	30.51	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 2008

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	0.154	53.52	0.22	53.74	65.78	12.04	QP
	0.189	44.14	0.21	44.35	64.06	19.71	
	0.716	31.93	0.23	32.16	56.00	23.84	
	4.338	38.86	0.37	39.23	56.00	16.77	
	18.039	38.30	0.71	39.01	60.00	20.99	
	20.814	40.04	0.76	40.80	60.00	19.20	
	0.154	43.12	0.22	43.34	55.78	12.44	AV
	0.189	34.16	0.21	34.37	54.06	19.69	
	0.716	21.46	0.23	21.69	46.00	24.31	
	4.338	28.46	0.37	28.83	46.00	17.17	
	18.039	28.47	0.71	29.18	50.00	20.82	
	20.814	31.23	0.76	31.99	50.00	18.01	
Neutral	0.155	54.94	0.19	55.13	65.74	10.61	QP
	0.233	42.80	0.21	43.01	62.35	19.34	
	0.716	33.89	0.23	34.12	56.00	21.88	
	3.642	31.11	0.32	31.43	56.00	24.57	
	5.505	31.14	0.38	31.52	60.00	28.48	
	21.147	25.51	0.59	26.10	60.00	33.90	
	0.155	44.18	0.19	44.37	55.74	11.37	AV
	0.233	32.16	0.21	32.37	52.35	19.98	
	0.716	23.14	0.23	23.37	46.00	22.63	
	3.642	21.35	0.32	21.67	46.00	24.33	
	5.505	23.16	0.38	23.54	50.00	26.46	
	21.147	16.98	0.59	17.57	50.00	32.43	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 2008

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	0.152	55.22	0.23	55.45	65.91	10.46	QP
	0.229	43.12	0.21	43.33	62.48	19.15	
	0.716	35.46	0.23	35.69	56.00	20.31	
	4.549	31.07	0.37	31.44	56.00	24.56	
	5.505	30.10	0.42	30.52	60.00	29.48	
	18.039	25.53	0.71	26.24	60.00	33.76	
	0.152	45.39	0.23	45.62	55.91	10.29	AV
	0.229	33.25	0.21	33.46	52.48	19.02	
	0.716	26.98	0.23	27.21	46.00	18.79	
	4.549	21.46	0.37	21.83	46.00	24.17	
	5.505	21.48	0.42	21.90	50.00	28.10	
	18.039	21.49	0.71	22.20	50.00	27.80	
Neutral	0.155	55.28	0.19	55.47	65.74	10.27	QP
	0.229	44.75	0.21	44.96	62.48	17.52	
	0.716	32.31	0.23	32.54	56.00	23.46	
	4.478	36.10	0.34	36.44	56.00	19.56	
	5.867	36.63	0.40	37.03	60.00	22.97	
	20.924	39.31	0.58	39.89	60.00	20.11	
	0.155	45.09	0.19	45.28	55.74	10.46	AV
	0.229	34.57	0.21	34.78	52.48	17.70	
	0.716	22.16	0.23	22.39	46.00	23.61	
	4.478	27.98	0.34	28.32	46.00	17.68	
	5.867	26.49	0.40	26.89	50.00	23.11	
	20.924	29.88	0.58	30.46	50.00	19.54	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 2008

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	0.155	54.94	0.22	55.16	65.74	10.58	QP
	0.233	43.67	0.21	43.88	62.35	18.47	
	0.716	32.56	0.23	32.79	56.00	23.21	
	4.407	37.53	0.37	37.90	56.00	18.10	
	6.089	36.34	0.45	36.79	60.00	23.21	
	20.270	40.38	0.73	41.11	60.00	18.89	
	0.155	45.26	0.22	45.48	55.74	10.26	AV
	0.233	33.78	0.21	33.99	52.35	18.36	
	0.716	24.49	0.23	24.72	46.00	21.28	
	4.407	27.45	0.37	27.82	46.00	18.18	
	6.089	26.45	0.45	26.90	50.00	23.10	
	20.270	31.42	0.73	32.15	50.00	17.85	
Neutral	0.155	55.08	0.19	55.27	65.74	10.47	QP
	0.230	42.69	0.21	42.90	62.44	19.54	
	0.716	32.70	0.23	32.93	56.00	23.07	
	4.407	37.17	0.34	37.51	56.00	18.49	
	6.089	36.49	0.41	36.90	60.00	23.10	
	17.568	38.47	0.56	39.03	60.00	20.97	
	0.155	45.67	0.19	45.86	55.74	9.88	AV
	0.230	32.46	0.21	32.67	52.44	19.77	
	0.716	22.46	0.23	22.69	46.00	23.31	
	4.407	27.94	0.34	28.28	46.00	17.72	
	6.089	26.49	0.41	26.90	50.00	23.10	
	17.568	28.97	0.56	29.53	50.00	20.47	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 2008

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	0.155	55.10	0.22	55.32	65.74	10.42	QP
	0.233	43.24	0.21	43.45	62.35	18.90	
	0.716	32.31	0.23	32.54	56.00	23.46	
	4.407	36.08	0.37	36.45	56.00	19.55	
	6.089	35.56	0.45	36.01	60.00	23.99	
	20.486	39.17	0.74	39.91	60.00	20.09	
	0.155	45.38	0.22	45.60	55.74	10.14	AV
	0.233	34.15	0.21	34.36	52.35	17.99	
	0.716	23.15	0.23	23.38	46.00	22.62	
	4.407	26.13	0.37	26.50	46.00	19.50	
	6.089	25.16	0.45	25.61	50.00	24.39	
	20.486	29.48	0.74	30.22	50.00	19.78	
Neutral	0.155	54.78	0.19	54.97	65.74	10.77	QP
	0.230	43.06	0.21	43.27	62.44	19.17	
	0.716	31.79	0.23	32.02	56.00	23.98	
	4.092	36.59	0.33	36.92	56.00	19.08	
	5.419	35.31	0.38	35.69	60.00	24.31	
	20.486	39.20	0.56	39.76	60.00	20.24	
	0.155	45.35	0.19	45.54	55.74	10.20	AV
	0.230	33.12	0.21	33.33	52.44	19.11	
	0.716	21.43	0.23	21.66	46.00	24.34	
	4.092	26.13	0.33	26.46	46.00	19.54	
	5.419	25.13	0.38	25.51	50.00	24.49	
	20.486	29.49	0.56	30.05	50.00	19.95	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 18°C

Model No. : W2361VV Humidity : 48%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 08, 2008

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	0.155	54.98	0.22	55.20	65.74	10.54	QP
	0.233	43.69	0.21	43.90	62.35	18.45	
	0.716	32.39	0.23	32.62	56.00	23.38	
	4.338	37.83	0.37	38.20	56.00	17.80	
	18.135	39.46	0.71	40.17	60.00	19.83	
	20.594	39.64	0.74	40.38	60.00	19.62	
	0.155	44.38	0.22	44.60	55.74	11.14	AV
	0.233	33.12	0.21	33.33	52.35	19.02	
	0.716	23.15	0.23	23.38	46.00	22.62	
	4.338	27.48	0.37	27.85	46.00	18.15	
	18.135	29.49	0.71	30.20	50.00	19.80	
	20.594	29.47	0.74	30.21	50.00	19.79	
Neutral	0.154	54.68	0.19	54.87	65.78	10.91	QP
	0.233	42.68	0.21	42.89	62.35	19.46	
	0.716	33.10	0.23	33.33	56.00	22.67	
	4.338	37.77	0.34	38.11	56.00	17.89	
	18.328	38.15	0.55	38.70	60.00	21.30	
	20.594	39.31	0.57	39.88	60.00	20.12	
	0.154	44.37	0.19	44.56	55.78	11.22	AV
	0.233	31.16	0.21	31.37	52.35	20.98	
	0.716	23.16	0.23	23.39	46.00	22.61	
	4.338	27.12	0.34	27.46	46.00	18.54	
	18.328	28.50	0.55	29.05	50.00	20.95	
	20.594	29.55	0.57	30.12	50.00	19.88	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

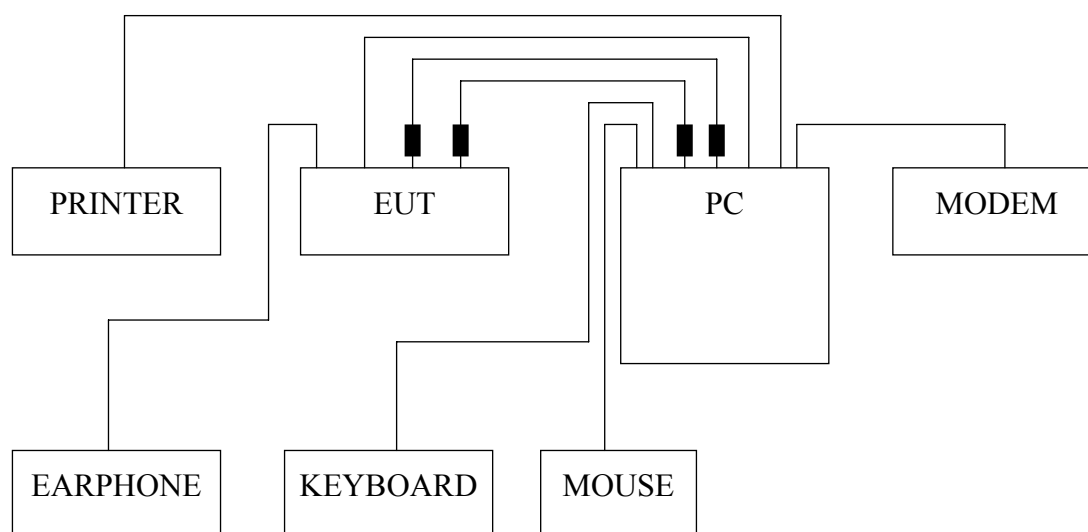
4.1 Test Equipment

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	--	--

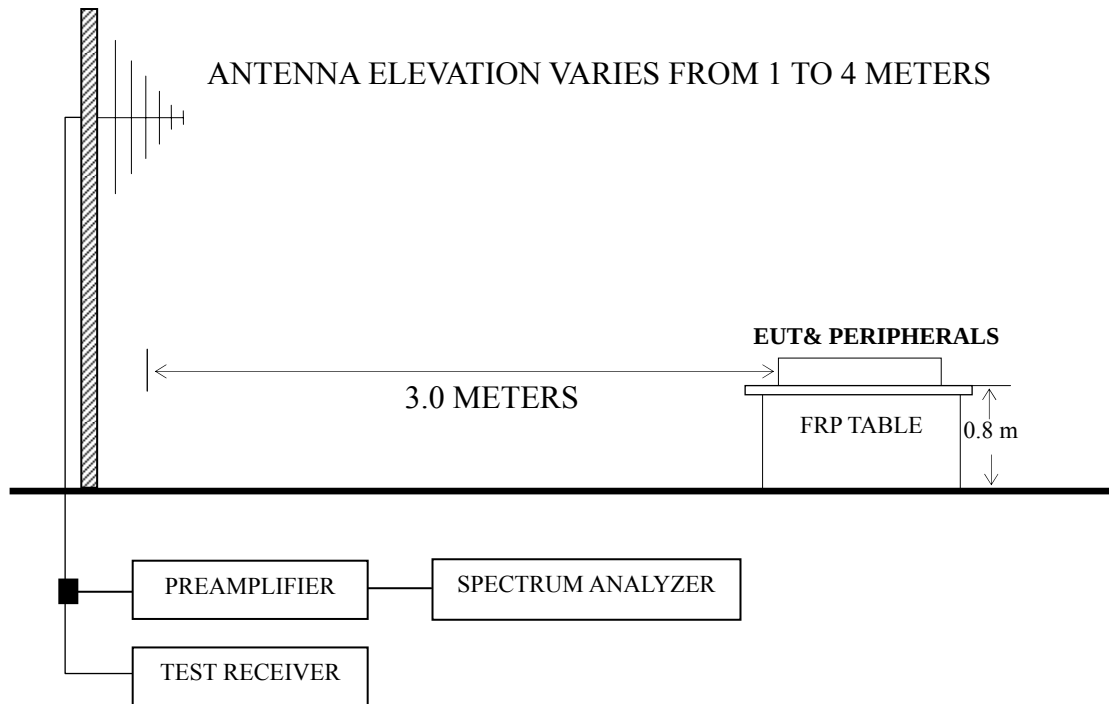
4.2 Block Diagram of Test Setup

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 DVI 1920*1080@60Hz test mode. The worst emission at horizontal polarization was detected at 168.710 MHz with corrected signal level of 40.48 dB ($\mu\text{V/m}$) (limit is 43.50 dB ($\mu\text{V/m}$)), when the antenna was 1.20 m height and the turntable was at 220° . The worst emission at vertical polarization was detected at 288.990 MHz with corrected signal level of 42.61 dB ($\mu\text{V/m}$) (limit is 46.00 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. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	100.810	7.03	11.57	0.85	19.45	43.50	24.05
	151.250	13.75	11.19	0.93	25.87	43.50	17.63
	168.710	22.81	10.25	0.99	34.05	43.50	9.45
	249.220	21.47	12.86	1.27	35.60	46.00	10.40
	331.670	17.72	14.78	1.71	34.21	46.00	11.79
	415.090	3.89	16.72	2.10	22.71	46.00	23.29
Vertical	32.910	15.37	17.95	0.60	33.92	40.00	6.08
	100.810	12.82	11.57	0.85	25.24	43.50	18.26
	151.250	21.44	11.19	0.93	33.56	43.50	9.94
	165.800	17.86	10.33	0.97	29.16	43.50	14.34
	249.220	15.02	12.86	1.27	29.15	46.00	16.85
	291.900	21.08	13.77	1.50	36.35	46.00	9.65

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	166.770	23.95	10.31	0.98	35.24	43.50	8.26
	290.930	22.93	13.75	1.50	38.18	46.00	7.82
	338.460	20.13	14.98	1.75	36.86	46.00	9.14
	415.090	9.14	16.72	2.10	27.96	46.00	18.04
	926.280	10.34	21.90	3.60	35.84	46.00	10.16
	996.120	10.11	22.37	3.84	36.32	54.00	17.68
Vertical	32.910	16.73	17.95	0.60	35.28	40.00	4.72
	168.710	24.98	10.25	0.99	36.22	43.50	7.28
	249.220	22.54	12.86	1.27	36.67	46.00	9.33
	289.960	23.09	13.73	1.48	38.30	46.00	7.70
	415.090	15.33	16.72	2.10	34.15	46.00	11.85
	580.960	9.05	19.00	2.55	30.60	46.00	15.40

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	31.940	1.06	18.49	0.59	--	20.14	40.00	19.86	QP
	151.250	16.98	11.19	0.93	--	29.10	43.50	14.40	
	168.710	26.01	10.25	0.99	--	37.25	43.50	6.25	
	200.720	13.01	10.74	1.08	--	24.83	43.50	18.67	
	291.900	15.85	13.77	1.50	--	31.12	46.00	14.88	
	334.580	20.77	14.86	1.73	--	37.36	46.00	8.64	
	1183.000	55.61	23.62	7.04	37.22	49.05	74.00	24.95	PK
	1268.000	49.31	24.23	7.41	37.02	43.93	74.00	30.07	
	1350.000	51.98	24.86	7.75	36.83	47.76	74.00	26.24	
	1497.000	49.71	25.80	8.43	36.53	47.41	74.00	26.59	
	1654.000	44.61	26.54	8.85	36.25	43.75	74.00	30.25	
	1686.000	51.27	26.61	8.99	36.19	50.68	74.00	23.32	
Vertical	32.910	16.95	17.95	0.60	--	35.50	40.00	4.50	QP
	112.450	14.97	12.51	0.87	--	28.35	43.50	15.15	
	151.250	18.04	11.19	0.93	--	30.16	43.50	13.34	
	250.190	18.15	12.90	1.27	--	32.32	46.00	13.68	
	281.230	19.89	13.57	1.44	--	34.90	46.00	11.10	
	539.250	8.20	18.42	2.46	--	29.08	46.00	16.92	
	1182.000	56.46	23.62	7.04	37.22	49.90	74.00	24.10	PK
	1344.000	48.78	24.82	7.75	36.84	44.51	74.00	29.49	
	1498.000	46.99	25.80	8.43	36.53	44.69	74.00	29.31	
	1676.000	45.77	26.59	8.92	36.21	45.07	74.00	28.93	
	1811.000	44.91	26.94	9.40	35.99	45.26	74.00	28.74	
	1929.000	44.45	27.66	9.73	35.80	46.04	74.00	27.96	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	168.710	24.24	10.25	0.99	--	35.48	43.50	8.02	QP
	249.220	18.00	12.86	1.27	--	32.13	46.00	13.87	
	272.500	19.83	13.37	1.40	--	34.60	46.00	11.40	
	289.960	20.37	13.73	1.48	--	35.58	46.00	10.42	
	338.460	16.15	14.98	1.75	--	32.88	46.00	13.12	
	930.160	12.08	21.93	3.60	--	37.61	46.00	8.39	
	1079.000	48.54	22.95	6.85	37.48	40.86	74.00	33.14	PK
	1099.000	50.79	23.08	6.89	37.42	43.34	74.00	30.66	
	1165.000	51.87	23.51	7.01	37.26	45.13	74.00	28.87	
	1254.000	48.44	24.14	7.33	37.04	42.87	74.00	31.13	
	1328.000	51.55	24.70	7.66	36.88	47.03	74.00	26.97	
	1506.000	47.02	25.84	8.43	36.51	44.78	74.00	29.22	
Vertical	32.910	14.04	17.95	0.60	--	32.59	40.00	7.41	QP
	105.660	15.06	11.95	0.86	--	27.87	43.50	15.63	
	151.250	15.41	11.19	0.93	--	27.53	43.50	15.97	
	230.790	16.08	12.15	1.20	--	29.43	46.00	16.57	
	288.990	24.42	13.71	1.48	--	39.61	46.00	6.39	
	336.520	18.35	14.94	1.73	--	35.02	46.00	10.98	
	1334.000	48.70	24.78	7.75	36.87	44.36	74.00	29.64	PK
	1498.000	50.44	25.80	8.43	36.53	48.14	74.00	25.86	
	1521.000	49.62	25.96	8.50	36.49	47.59	74.00	26.41	
	1655.000	46.85	26.54	8.92	36.25	46.06	74.00	27.94	
	1707.000	47.15	26.67	9.07	36.16	46.73	74.00	27.27	
	1747.000	46.88	26.78	9.15	36.09	46.72	74.00	27.28	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	31.940	0.71	18.49	0.59	19.79	40.00	20.21
	100.810	10.03	11.57	0.85	22.45	43.50	21.05
	168.710	24.81	10.25	0.99	36.05	43.50	7.45
	249.220	22.47	12.86	1.27	36.60	46.00	9.40
	288.020	18.83	13.71	1.48	34.02	46.00	11.98
	331.670	20.72	14.78	1.71	37.21	46.00	8.79
Vertical	32.910	16.37	17.95	0.60	34.92	40.00	5.08
	151.250	23.44	11.19	0.93	35.56	43.50	7.94
	165.800	19.86	10.33	0.97	31.16	43.50	12.34
	227.880	15.87	12.02	1.19	29.08	46.00	16.92
	267.650	18.38	13.27	1.36	33.01	46.00	12.99
	291.900	23.08	13.77	1.50	38.35	46.00	7.65

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	106.630	13.94	12.02	0.86	26.82	43.50	16.68
	166.770	27.95	10.31	0.98	39.24	43.50	4.26
	290.930	26.93	13.75	1.50	42.18	46.00	3.82
	338.460	24.13	14.98	1.75	40.86	46.00	5.14
	506.270	11.17	17.98	2.39	31.54	46.00	14.46
	926.280	13.34	21.90	3.60	38.84	46.00	7.16
Vertical	32.910	17.73	17.95	0.60	36.28	40.00	3.72
	96.930	19.47	10.87	0.85	31.19	43.50	12.31
	168.710	27.98	10.25	0.99	39.22	43.50	4.28
	249.220	25.54	12.86	1.27	39.67	46.00	6.33
	289.960	27.09	13.73	1.48	42.30	46.00	3.70
	393.750	18.13	16.37	2.02	36.52	46.00	9.48

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 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	95.960	12.04	10.70	0.85	--	23.59	43.50	19.91	QP
	151.250	18.98	11.19	0.93	--	31.10	43.50	12.40	
	168.710	28.01	10.25	0.99	--	39.25	43.50	4.25	
	334.580	23.77	14.86	1.73	--	40.36	46.00	5.64	
	393.750	14.74	16.37	2.02	--	33.13	46.00	12.87	
	415.090	13.33	16.72	2.10	--	32.15	46.00	13.85	
	1014.000	54.09	22.49	6.73	37.66	45.65	74.00	28.35	PK
	1024.000	46.87	22.57	6.73	37.63	38.54	74.00	35.46	
	1095.000	47.15	23.08	6.89	37.44	39.68	74.00	34.32	
	1263.000	51.97	24.23	7.41	37.02	46.59	74.00	27.41	
	1339.000	47.89	24.78	7.75	36.86	43.56	74.00	30.44	
	1733.000	48.28	26.74	9.15	36.11	48.06	74.00	25.94	
Vertical	32.910	16.95	17.95	0.60	--	35.50	40.00	4.50	QP
	112.450	17.97	12.51	0.87	--	31.35	43.50	12.15	
	151.250	22.04	11.19	0.93	--	34.16	43.50	9.34	
	250.190	21.15	12.90	1.27	--	35.32	46.00	10.68	
	281.230	21.89	13.57	1.44	--	36.90	46.00	9.10	
	415.090	9.64	16.72	2.10	--	28.46	46.00	17.54	
	1079.000	49.73	22.95	6.85	37.48	42.05	74.00	31.95	PK
	1179.000	55.57	23.59	7.04	37.22	48.98	74.00	25.02	
	1268.000	51.39	24.23	7.41	37.02	46.01	74.00	27.99	
	1342.000	54.47	24.82	7.75	36.85	50.19	74.00	23.81	
	1432.000	49.39	25.38	8.18	36.66	46.29	74.00	27.71	
	1497.000	52.19	25.80	8.43	36.53	49.89	74.00	24.11	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 2008

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	168.710	29.24	10.25	0.99	--	40.48	43.50	3.02	QP
	249.220	21.00	12.86	1.27	--	35.13	46.00	10.87	
	289.960	24.37	13.73	1.48	--	39.58	46.00	6.42	
	338.460	19.15	14.98	1.75	--	35.88	46.00	10.12	
	507.240	11.54	17.98	2.40	--	31.92	46.00	14.08	
	930.160	15.08	21.93	3.60	--	40.61	46.00	5.39	
	1010.000	52.08	22.46	6.70	37.67	43.57	74.00	30.43	PK
	1170.000	52.35	23.54	7.04	37.25	45.68	74.00	28.32	
	1244.000	48.08	24.06	7.33	37.07	42.40	74.00	31.60	
	1339.000	48.17	24.78	7.75	36.86	43.84	74.00	30.16	
	1392.000	46.40	25.16	8.01	36.75	42.82	74.00	31.18	
	1499.000	53.14	25.80	8.43	36.53	50.84	74.00	23.16	
Vertical	32.910	16.04	17.95	0.60	--	34.59	40.00	5.41	QP
	228.850	19.73	12.07	1.20	--	33.00	46.00	13.00	
	249.220	20.97	12.86	1.27	--	35.10	46.00	10.90	
	288.990	27.42	13.71	1.48	--	42.61	46.00	3.39	
	336.520	21.35	14.94	1.73	--	38.02	46.00	7.98	
	851.590	10.91	21.24	3.42	--	35.57	46.00	10.43	
	1007.000	53.41	22.46	6.70	37.68	44.89	74.00	29.11	PK
	1097.000	46.70	23.08	6.89	37.43	39.24	74.00	34.76	
	1418.000	45.86	25.31	8.09	36.69	42.57	74.00	31.43	
	1522.000	47.24	25.96	8.50	36.49	45.21	74.00	28.79	
	1627.000	47.42	26.47	8.78	36.30	46.37	74.00	27.63	
	1774.000	46.31	26.83	9.24	36.05	46.33	74.00	27.67	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 2008

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	100.810	11.03	11.57	0.85	23.45	43.50	20.05
	151.250	16.75	11.19	0.93	28.87	43.50	14.63
	168.710	25.81	10.25	0.99	37.05	43.50	6.45
	249.220	24.47	12.86	1.27	38.60	46.00	7.40
	288.020	21.83	13.71	1.48	37.02	46.00	8.98
	331.670	20.72	14.78	1.71	37.21	46.00	8.79
Vertical	33.880	18.59	17.44	0.61	36.64	40.00	3.36
	100.810	17.82	11.57	0.85	30.24	43.50	13.26
	151.250	23.44	11.19	0.93	35.56	43.50	7.94
	228.850	18.26	12.07	1.20	31.53	46.00	14.47
	266.680	21.27	13.25	1.36	35.88	46.00	10.12
	291.900	26.08	13.77	1.50	41.35	46.00	4.65

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 2008

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	94.990	10.28	10.45	0.85	21.58	43.50	21.92
	166.770	26.95	10.31	0.98	38.24	43.50	5.26
	273.470	25.60	13.40	1.40	40.40	46.00	5.60
	338.460	23.13	14.98	1.75	39.86	46.00	6.14
	506.270	9.17	17.98	2.39	29.54	46.00	16.46
	926.280	13.34	21.90	3.60	38.84	46.00	7.16
Vertical	32.910	17.73	17.95	0.60	36.28	40.00	3.72
	151.250	21.02	11.19	0.93	33.14	43.50	10.36
	249.220	25.54	12.86	1.27	39.67	46.00	6.33
	289.960	27.09	13.73	1.48	42.30	46.00	3.70
	415.090	19.33	16.72	2.10	38.15	46.00	7.85
	507.240	13.63	17.98	2.40	34.01	46.00	11.99

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 2008

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	151.250	16.98	11.19	0.93	--	29.10	43.50	14.40	QP
	168.710	27.01	10.25	0.99	--	38.25	43.50	5.25	
	251.160	15.18	12.92	1.27	--	29.37	46.00	16.63	
	288.020	14.28	13.71	1.48	--	29.47	46.00	16.53	
	334.580	20.77	14.86	1.73	--	37.36	46.00	8.64	
	393.750	12.74	16.37	2.02	--	31.13	46.00	14.87	
	1515.000	47.38	25.92	8.43	36.50	45.23	74.00	28.77	PK
	1600.000	46.04	26.40	8.71	36.34	44.81	74.00	29.19	
	1681.000	45.76	26.61	8.99	36.20	45.16	74.00	28.84	
	1744.000	46.40	26.76	9.15	36.09	46.22	74.00	27.78	
	1785.000	47.35	26.87	9.32	36.03	47.51	74.00	26.49	
	1811.000	49.51	26.94	9.40	35.99	49.86	74.00	24.14	
Vertical	32.910	17.95	17.95	0.60	--	36.50	40.00	3.50	QP
	112.450	18.97	12.51	0.87	--	32.35	43.50	11.15	
	151.250	22.04	11.19	0.93	--	34.16	43.50	9.34	
	250.190	19.15	12.90	1.27	--	33.32	46.00	12.68	
	291.900	20.01	13.77	1.50	--	35.28	46.00	10.72	
	539.250	9.20	18.42	2.46	--	30.08	46.00	15.92	
	1004.000	55.68	22.43	6.70	37.69	47.12	74.00	26.88	PK
	1169.000	54.04	23.54	7.04	37.25	47.37	74.00	26.63	
	1181.000	55.02	23.62	7.04	37.22	48.46	74.00	25.54	
	1339.000	50.48	24.78	7.75	36.86	46.15	74.00	27.85	
	1500.000	55.60	25.80	8.43	36.53	53.30	74.00	20.70	
	1681.000	47.22	26.61	8.99	36.20	46.62	74.00	27.38	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : W2361VV Humidity : 60%RH

Serial No. : 811NDKD6R741 Date of Test : Jan 05, 2008

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	168.710	26.24	10.25	0.99	--	37.48	43.50	6.02	QP
	249.220	20.00	12.86	1.27	--	34.13	46.00	11.87	
	289.960	22.37	13.73	1.48	--	37.58	46.00	8.42	
	338.460	17.15	14.98	1.75	--	33.88	46.00	12.12	
	418.970	11.43	16.77	2.10	--	30.30	46.00	15.70	
	507.240	10.54	17.98	2.40	--	30.92	46.00	15.08	
	1089.000	55.79	23.02	6.89	37.46	48.24	74.00	25.76	PK
	1175.000	57.76	23.56	7.04	37.23	51.13	74.00	22.87	
	1248.000	52.22	24.10	7.33	37.06	46.59	74.00	27.41	
	1418.000	50.22	25.31	8.09	36.69	46.93	74.00	27.07	
	1621.000	50.69	26.45	8.78	36.31	49.61	74.00	24.39	
	1654.000	51.49	26.54	8.85	36.25	50.63	74.00	23.37	
Vertical	32.910	16.04	17.95	0.60	--	34.59	40.00	5.41	QP
	105.660	18.06	11.95	0.86	--	30.87	43.50	12.63	
	229.820	19.01	12.11	1.20	--	32.32	46.00	13.68	
	249.220	19.97	12.86	1.27	--	34.10	46.00	11.90	
	288.990	26.42	13.71	1.48	--	41.61	46.00	4.39	
	336.520	21.35	14.94	1.73	--	38.02	46.00	7.98	
	1183.000	54.76	23.62	7.04	37.22	48.20	74.00	25.80	PK
	1255.000	54.68	24.14	7.33	37.04	49.11	74.00	24.89	
	1274.000	53.54	24.32	7.41	37.00	48.27	74.00	25.73	
	1335.000	52.29	24.78	7.75	36.87	47.95	74.00	26.05	
	1521.000	50.18	25.96	8.50	36.49	48.15	74.00	25.85	
	1775.000	49.72	26.85	9.24	36.04	49.77	74.00	24.23	

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
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photos Figure 17, 18, 19
Sponge	--	--	EXPAN	See Internal Photos Figure 6, 7
Sponge	--	95mm*10mm*1T	EXPAN	See Internal Photos Figure 20
Sponge	--	85mm*10mm*2T	EXPAN	See Internal Photos Figure 21