

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

LCD Monitor

Model No.: E2250VV

Serial No.: 911NDHB9D977

FCC ID : BEJE2250VV

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

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Report No. : ACI-F10004
Date of Test : Jan 01-05, 2010
Date of Report : Jan 08, 2010

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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. : E2250VV
(B) Serial No. : 911NDHB9D977
(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: E2250VV; S/N: 911NDHB9D977) which was tested in 3m anechoic chamber Jan 01-05, 2010 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 01-05, 2010 Date of Report : Jan 08, 2010

Producer : Alan He
ALAN HE / Assistant

Review : Dio Yang
DIO YANG / Deputy Assistant Manager

 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.	: E2250VV
Serial No.	: 911NDHB9D977
Real Power	: 24.00W
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 : LM215WF4 (TL) (A1)
Adapter	: SMPS Adapter Manufacturer : LIEN CHANG M/N : LCAP07F Input : 100-240V AC, 50/60Hz, 1.0A (1.0A) Max. Output : 12V DC 3.0A (3.0A) Output Cable : Unshielded, Undetachable, 1.80m, with one core
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 Earphone Port : Connected with Earphone
- (4) One HDMI Port : Connected with DVD
- (5) One AC In Port : Connected with Power

2.2 Peripherals

2.2.1 PC #1

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 PC #2

Manufacturer : HP
Model Number : dx7400MT
Serial Number : CNG8130K89
Power Cord : Unshielded, Detachable, 1.8m
Certificate : FCC DoC; CE/EMC; VCCI; C-Tick; UL
BSMI (R33001) 3C (A000111)
MIC (E-A011-04-2659(B))

2.2.3 Printer

Manufacturer : HP
Model Number : C3990A
Serial Number : JPZX020487
Data Cable : Shielded, Detachable, 1.5m
Certificate : GS, CE/EMC, C-Tick, FCC DoC

2.2.4 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

2.2.5 Mouse

Manufacturer : Microsoft
Model Number : RT2300
Serial Number : 6965712071551
Data Cable : Shielded, Undetachable, 1.85m.
Certificate : FCC DoC, VCCI, CE/EMC, MIC, GS

2.2.6 Modem

Manufacturer : TP-LINK
Model Number : TM-EC5658V
Serial Number : 07123301053
Data Cable : Shielded, Detachable, 1.8m
Certificate : FCC DoC, CE/EMC, CCC

2.2.7 DVD

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120108
Data Cable : Unshielded, Detachable, 1.8m

2.2.8 Earphone

Manufacturer : SONY
Model Number : MDR-E808
Serial Number : 1808030805305506

Note: PC #2 was used in Radiated Emission test and PC #1 was used in the Conducted Emission test.

2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber)	:	Sept. 17, 1998 file on Apr 29, 2009 Renewed Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA
Name of Firm	:	Audix Technology (Shanghai) Co., Ltd.
Site Location	:	3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China
NVLAP Lab Code	:	200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:	U = 1.26 dB
Radiated Emission Expanded Uncertainty :	U = 3.02 dB

3 CONDUCTED EMISSION TEST

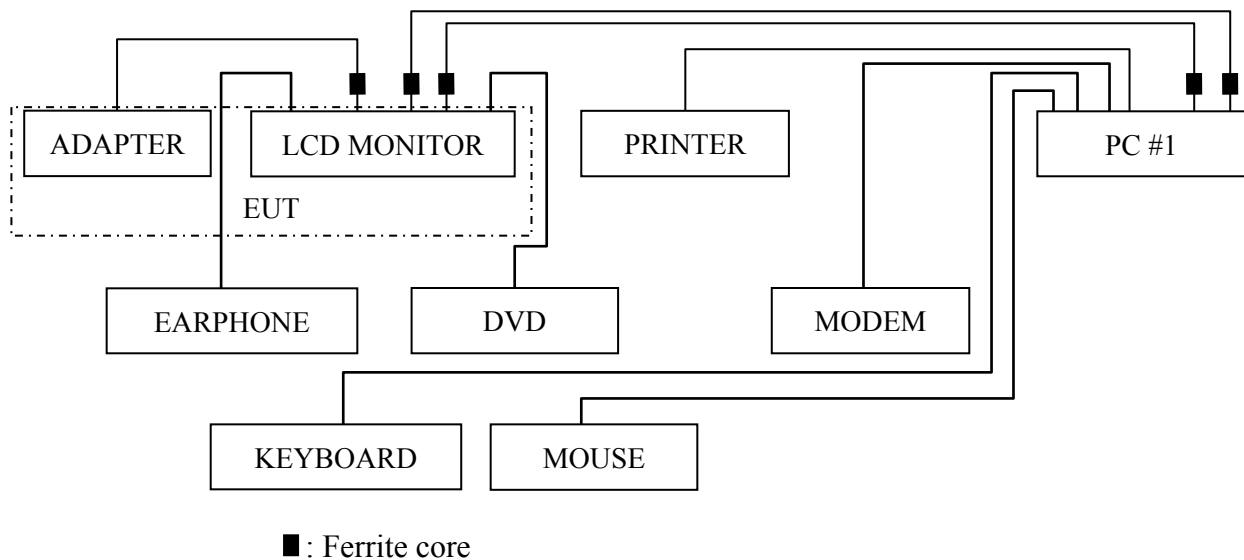
3.1.1 Test Equipment

The following test equipments are used during the conducted emission test in a shielded room:

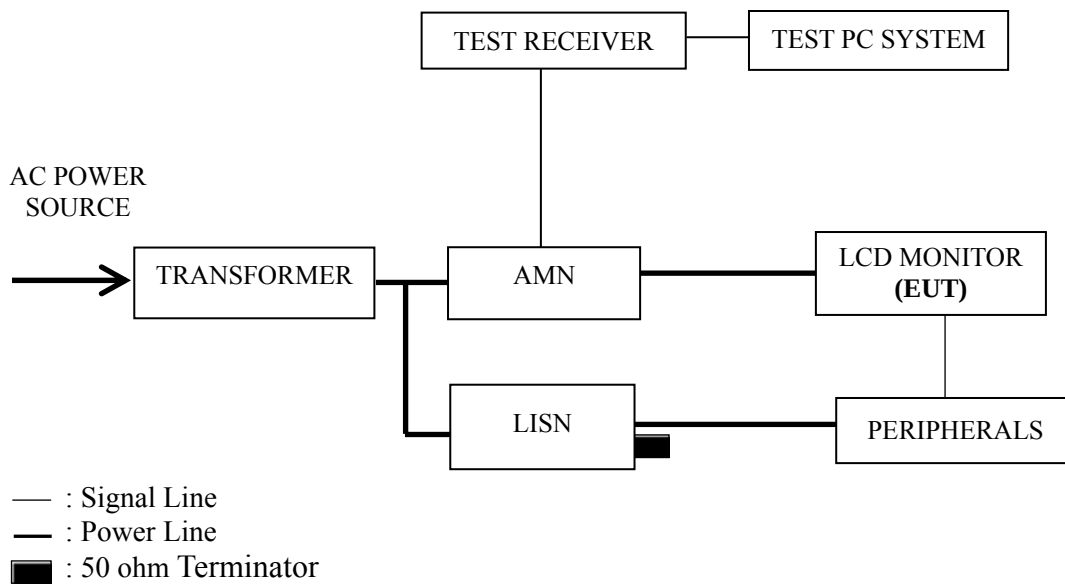
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	100841	Oct 15, 2009	Oct 15, 2010
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2009	Apr 02, 2010
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2009	Apr 02, 2010
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2009	Mar 19, 2010
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 02, 2009	Apr 02, 2010
6.	Software	Audix	E3	SET00200 9804M592	--	--

3.2 Block Diagram of Test Setup

3.2.1 EUT & Peripherals



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 Input).

3.5.5 In HDMI mode, the EUT connected to DVD through HDMI port.

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
D-Sub 1024*768@60Hz
D-Sub 1680*1050@60Hz
D-Sub 1920*1080@60Hz
DVI 640*480@60Hz
DVI 1024*768@60Hz
DVI 1680*1050@60Hz
DVI 1920*1080@60Hz
HDMI 480P
HDMI 720P
HDMI 1080P

3.6 Test Procedures

The EUT and peripherals were connected to the power mains through an Artificial Mains Network (AMN). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line (Line & Neutral) were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to ANSI C63.4:2003 during conducted emission test.

The bandwidth of R&S Test Receiver ESCI was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

3.7 Test Results

< PASS >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

Test Mode	Page
D-Sub 640*480@60Hz	P13
D-Sub 1024*768@60Hz	P14
D-Sub 1680*1050@60Hz	P15
D-Sub 1920*1080@60Hz	P16
DVI 640*480@60Hz	P17
DVI 1024*768@60Hz	P18
DVI 1680*1050@60Hz	P19
DVI 1920*1080@60Hz	P20
HDMI 480P	P21
HDMI 720P	P22
HDMI 1080P	P23

NOTE 1 – The **bold test mode** listed above means the worst test mode.

NOTE 2 – Factor = Cable Loss + AMN Factor.

NOTE 3 – Emission Level = Meter Reading + Factor.

NOTE 4 – “QP” means “Quasi-Peak” values, “AV” means “Average” values.

NOTE 5 – The worst case is for D-Sub 1920*1080@60Hz test mode. The worst emission is detected at 0.170 MHz (Average Value) with corrected signal level of 46.61 dB (μV) (limit is 54.94 dB (μV)), when the Line the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.169	48.95	0.22	49.17	64.99	15.82	QP
	0.300	34.67	0.25	34.92	60.24	25.32	
	0.510	27.36	0.29	27.65	56.00	28.35	
	4.926	33.37	0.44	33.81	56.00	22.19	
	5.112	36.70	0.44	37.14	60.00	22.86	
	22.655	38.31	0.84	39.15	60.00	20.85	
	0.169	45.82	0.22	46.04	54.99	8.95	AV
	0.300	31.83	0.25	32.08	50.24	18.16	
	0.510	23.87	0.29	24.16	46.00	21.84	
	4.926	30.36	0.44	30.80	46.00	15.20	
	5.112	30.64	0.44	31.08	50.00	18.92	
	22.655	30.27	0.84	31.11	50.00	18.89	
Neutral	0.169	49.02	0.20	49.22	64.99	15.77	QP
	0.300	38.00	0.23	38.23	60.24	22.01	
	0.505	28.84	0.26	29.10	56.00	26.90	
	4.926	32.83	0.45	33.28	56.00	22.72	
	5.277	35.94	0.45	36.39	60.00	23.61	
	22.063	38.66	0.81	39.47	60.00	20.53	
	0.169	41.34	0.20	41.54	54.99	13.45	AV
	0.300	32.89	0.23	33.12	50.24	17.12	
	0.505	22.27	0.26	22.53	46.00	23.47	
	4.926	27.62	0.45	28.07	46.00	17.93	
	5.277	28.65	0.45	29.10	50.00	20.90	
	22.063	32.48	0.81	33.29	50.00	16.71	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.25	0.22	49.47	64.94	15.47	QP
	0.300	34.70	0.25	34.95	60.24	25.29	
	0.510	27.47	0.29	27.76	56.00	28.24	
	5.005	33.53	0.44	33.97	60.00	26.03	
	5.333	35.76	0.44	36.20	60.00	23.80	
	22.655	37.43	0.84	38.27	60.00	21.73	
	0.170	45.60	0.22	45.82	54.94	9.12	AV
	0.300	31.78	0.25	32.03	50.24	18.21	
	0.510	23.88	0.29	24.17	46.00	21.83	
	5.005	31.43	0.44	31.87	50.00	18.13	
	5.333	30.74	0.44	31.18	50.00	18.82	
	22.655	33.66	0.84	34.50	50.00	15.50	
Neutral	0.169	48.77	0.20	48.97	64.99	16.02	QP
	0.303	35.84	0.23	36.07	60.15	24.08	
	0.505	29.61	0.26	29.87	56.00	26.13	
	4.952	32.39	0.45	32.84	56.00	23.16	
	5.112	35.64	0.45	36.09	60.00	23.91	
	22.535	36.81	0.79	37.60	60.00	22.40	
	0.169	42.19	0.20	42.39	54.99	12.60	AV
	0.303	31.83	0.23	32.06	50.15	18.09	
	0.505	20.10	0.26	20.36	46.00	25.64	
	4.952	28.61	0.45	29.06	46.00	16.94	
	5.112	32.58	0.45	33.03	50.00	16.97	
	22.535	32.16	0.79	32.95	50.00	17.05	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.27	0.22	49.49	64.94	15.45	QP
	0.300	38.56	0.25	38.81	60.24	21.43	
	0.510	27.51	0.29	27.80	56.00	28.20	
	4.952	32.98	0.44	33.42	56.00	22.58	
	5.112	34.61	0.44	35.05	60.00	24.95	
	22.298	38.54	0.85	39.39	60.00	20.61	
	0.170	43.14	0.22	43.36	54.94	11.58	AV
	0.302	30.84	0.25	31.09	50.19	19.10	
	0.510	24.21	0.29	24.50	46.00	21.50	
	4.952	28.47	0.44	28.91	46.00	17.09	
	5.112	31.63	0.44	32.07	50.00	17.93	
	22.298	34.18	0.85	35.03	50.00	14.97	
Neutral	0.170	49.54	0.20	49.74	64.94	15.20	QP
	0.302	37.04	0.23	37.27	60.19	22.92	
	0.510	29.68	0.26	29.94	56.00	26.06	
	4.952	31.43	0.45	31.88	56.00	24.12	
	5.112	35.09	0.45	35.54	60.00	24.46	
	22.298	38.18	0.80	38.98	60.00	21.02	
	0.170	45.13	0.20	45.33	54.94	9.61	AV
	0.302	33.83	0.23	34.06	50.19	16.13	
	0.510	22.21	0.26	22.47	46.00	23.53	
	4.952	27.47	0.45	27.92	46.00	18.08	
	5.112	31.63	0.45	32.08	50.00	17.92	
	22.298	33.18	0.80	33.98	50.00	16.02	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.23	0.22	49.45	64.94	15.49	QP
	0.300	34.56	0.25	34.81	60.24	25.43	
	0.510	27.40	0.29	27.69	56.00	28.31	
	5.058	37.58	0.44	38.02	60.00	21.98	
	14.063	38.12	0.68	38.80	60.00	21.20	
	22.063	37.99	0.85	38.84	60.00	21.16	
	0.170	46.39	0.22	46.61	54.94	8.33	AV
	0.300	30.65	0.25	30.90	50.24	19.34	
	0.510	23.69	0.29	23.98	46.00	22.02	
	5.058	34.14	0.44	34.58	50.00	15.42	
	14.063	34.13	0.68	34.81	50.00	15.19	
	22.063	32.55	0.85	33.40	50.00	16.60	
Neutral	0.170	49.48	0.20	49.68	64.94	15.26	QP
	0.303	37.50	0.23	37.73	60.15	22.42	
	0.510	28.79	0.26	29.05	56.00	26.95	
	4.822	30.44	0.45	30.89	56.00	25.11	
	5.277	34.59	0.45	35.04	60.00	24.96	
	22.655	37.87	0.79	38.66	60.00	21.34	
	0.170	46.06	0.20	46.26	54.94	8.68	AV
	0.303	32.64	0.23	32.87	50.15	17.28	
	0.510	24.30	0.26	24.56	46.00	21.44	
	4.822	26.72	0.45	27.17	46.00	18.83	
	5.277	32.49	0.45	32.94	50.00	17.06	
	22.655	32.69	0.79	33.48	50.00	16.52	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.11	0.22	49.33	64.94	15.61	QP
	0.303	33.50	0.25	33.75	60.15	26.40	
	0.510	27.34	0.29	27.63	56.00	28.37	
	4.952	34.40	0.44	34.84	56.00	21.16	
	5.277	37.73	0.44	38.17	60.00	21.83	
	14.364	38.78	0.69	39.47	60.00	20.53	
	0.170	45.30	0.22	45.52	54.94	9.42	AV
	0.303	29.46	0.25	29.71	50.15	20.44	
	0.510	22.75	0.29	23.04	46.00	22.96	
	4.952	30.72	0.44	31.16	46.00	14.84	
	5.277	32.31	0.44	32.75	50.00	17.25	
	14.364	32.84	0.69	33.53	50.00	16.47	
Neutral	0.169	49.84	0.20	50.04	64.99	14.95	QP
	0.300	38.55	0.23	38.78	60.24	21.46	
	0.510	28.51	0.26	28.77	56.00	27.23	
	4.926	32.48	0.45	32.93	56.00	23.07	
	5.112	36.31	0.45	36.76	60.00	23.24	
	14.364	37.47	0.65	38.12	60.00	21.88	
	0.169	46.12	0.20	46.32	54.99	8.67	AV
	0.300	33.67	0.23	33.90	50.24	16.34	
	0.510	22.98	0.26	23.24	46.00	22.76	
	4.926	26.51	0.45	26.96	46.00	19.04	
	5.112	29.63	0.45	30.08	50.00	19.92	
	14.364	32.19	0.65	32.84	50.00	17.16	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.169	48.41	0.22	48.63	64.99	16.36	QP
	0.300	35.28	0.25	35.53	60.24	24.71	
	0.510	27.36	0.29	27.65	56.00	28.35	
	5.005	35.73	0.44	36.17	60.00	23.83	
	5.221	37.41	0.44	37.85	60.00	22.15	
	14.213	38.63	0.68	39.31	60.00	20.69	
	0.169	43.48	0.22	43.70	54.99	11.29	AV
	0.300	30.59	0.25	30.84	50.24	19.40	
	0.510	23.60	0.29	23.89	46.00	22.11	
	5.005	32.08	0.44	32.52	50.00	17.48	
	5.221	32.31	0.44	32.75	50.00	17.25	
	14.213	30.87	0.68	31.55	50.00	18.45	
Neutral	0.170	50.31	0.22	50.53	64.94	14.41	QP
	0.300	37.46	0.25	37.71	60.24	22.53	
	0.510	26.73	0.29	27.02	56.00	28.98	
	4.952	31.90	0.44	32.34	56.00	23.66	
	5.333	33.89	0.44	34.33	60.00	25.67	
	14.672	36.17	0.69	36.86	60.00	23.14	
	0.170	45.82	0.22	46.04	54.94	8.90	AV
	0.302	33.67	0.25	33.92	50.19	16.27	
	0.510	23.48	0.29	23.77	46.00	22.23	
	4.952	28.18	0.44	28.62	46.00	17.38	
	5.333	31.16	0.44	31.60	50.00	18.40	
	14.672	30.55	0.69	31.24	50.00	18.76	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.07	0.22	49.29	64.94	15.65	QP
	0.303	34.68	0.25	34.93	60.15	25.22	
	0.510	27.30	0.29	27.59	56.00	28.41	
	5.005	35.13	0.44	35.57	60.00	24.43	
	5.112	38.15	0.44	38.59	60.00	21.41	
	14.517	38.69	0.69	39.38	60.00	20.62	
	0.170	43.30	0.22	43.52	54.94	11.42	AV
	0.303	29.56	0.25	29.81	50.15	20.34	
	0.510	23.61	0.29	23.90	46.00	22.10	
	5.005	31.55	0.44	31.99	50.00	18.01	
	5.112	32.71	0.44	33.15	50.00	16.85	
	14.517	32.90	0.69	33.59	50.00	16.41	
Neutral	0.170	49.21	0.20	49.41	64.94	15.53	QP
	0.300	38.61	0.23	38.84	60.24	21.40	
	0.510	28.46	0.26	28.72	56.00	27.28	
	5.005	34.99	0.45	35.44	60.00	24.56	
	5.112	37.85	0.45	38.30	60.00	21.70	
	22.535	36.34	0.79	37.13	60.00	22.87	
	0.170	45.88	0.20	46.08	54.94	8.86	AV
	0.300	33.80	0.23	34.03	50.24	16.21	
	0.510	23.39	0.26	23.65	46.00	22.35	
	5.005	30.75	0.45	31.20	50.00	18.80	
	5.112	30.53	0.45	30.98	50.00	19.02	
	22.535	31.76	0.79	32.55	50.00	17.45	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

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	0.170	49.05	0.22	49.27	64.94	15.67	QP
	0.303	35.76	0.25	36.01	60.15	24.14	
	0.505	28.61	0.29	28.90	56.00	27.10	
	4.926	34.93	0.44	35.37	56.00	20.63	
	5.166	37.20	0.44	37.64	60.00	22.36	
	14.213	37.53	0.68	38.21	60.00	21.79	
	0.170	39.40	0.22	39.62	54.94	15.32	AV
	0.303	30.68	0.25	30.93	50.15	19.22	
	0.505	22.55	0.29	22.84	46.00	23.16	
	4.926	29.96	0.44	30.40	46.00	15.60	
	5.166	31.45	0.44	31.89	50.00	18.11	
	14.213	30.37	0.68	31.05	50.00	18.95	
Neutral	0.169	48.81	0.20	49.01	64.99	15.98	QP
	0.303	37.87	0.23	38.10	60.15	22.05	
	0.505	28.67	0.26	28.93	56.00	27.07	
	4.926	35.46	0.45	35.91	56.00	20.09	
	5.221	37.60	0.45	38.05	60.00	21.95	
	14.517	37.18	0.66	37.84	60.00	22.16	
	0.169	44.94	0.20	45.14	54.99	9.85	AV
	0.303	32.57	0.23	32.80	50.15	17.35	
	0.505	23.90	0.26	24.16	46.00	21.84	
	4.926	30.15	0.45	30.60	46.00	15.40	
	5.221	30.37	0.45	30.82	50.00	19.18	
	14.517	32.83	0.66	33.49	50.00	16.51	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

Test Mode : HDMI 480P

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.170	47.51	0.22	47.73	64.94	17.21	QP
	0.300	35.15	0.25	35.40	60.24	24.84	
	0.516	24.76	0.29	25.05	56.00	30.95	
	4.952	34.84	0.44	35.28	56.00	20.72	
	5.221	38.96	0.44	39.40	60.00	20.60	
	23.387	44.46	0.82	45.28	60.00	14.72	
	0.170	40.53	0.22	40.75	54.94	14.19	AV
	0.302	30.83	0.25	31.08	50.19	19.11	
	0.516	19.58	0.29	19.87	46.00	26.13	
	4.952	27.37	0.44	27.81	46.00	18.19	
	5.221	30.26	0.44	30.70	50.00	19.30	
	23.387	36.59	0.82	37.41	50.00	12.59	
Neutral	0.172	48.95	0.20	49.15	64.86	15.71	QP
	0.302	38.41	0.23	38.64	60.19	21.55	
	0.579	25.15	0.26	25.41	56.00	30.59	
	5.058	36.18	0.45	36.63	60.00	23.37	
	14.364	36.96	0.65	37.61	60.00	22.39	
	23.140	40.61	0.77	41.38	60.00	18.62	
	0.172	39.05	0.20	39.25	54.86	15.61	AV
	0.302	30.51	0.23	30.74	50.19	19.45	
	0.579	17.92	0.26	18.18	46.00	27.82	
	5.058	28.34	0.45	28.79	50.00	21.21	
	14.364	31.77	0.65	32.42	50.00	17.58	
	23.140	35.06	0.77	35.83	50.00	14.17	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

Test Mode : HDMI 720P

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.170	49.33	0.22	49.55	64.94	15.39	QP
	0.300	35.21	0.25	35.46	60.24	24.78	
	0.621	25.42	0.28	25.70	56.00	30.30	
	5.005	34.41	0.44	34.85	60.00	25.15	
	5.166	36.52	0.44	36.96	60.00	23.04	
	23.387	44.43	0.82	45.25	60.00	14.75	
	0.170	38.63	0.22	38.85	54.94	16.09	AV
	0.300	29.14	0.25	29.39	50.24	20.85	
	0.621	20.51	0.28	20.79	46.00	25.21	
	5.005	29.77	0.44	30.21	50.00	19.79	
	5.166	30.17	0.44	30.61	50.00	19.39	
	23.387	33.46	0.82	34.28	50.00	15.72	
Neutral	0.172	49.06	0.20	49.26	64.86	15.60	QP
	0.300	37.46	0.23	37.69	60.24	22.55	
	0.499	23.97	0.26	24.23	56.01	31.78	
	5.005	33.48	0.45	33.93	60.00	26.07	
	5.277	35.50	0.45	35.95	60.00	24.05	
	23.140	44.83	0.77	45.60	60.00	14.40	
	0.172	42.41	0.20	42.61	54.86	12.25	AV
	0.300	30.94	0.23	31.17	50.24	19.07	
	0.499	20.67	0.26	20.93	46.01	25.08	
	5.005	24.42	0.45	24.87	50.00	25.13	
	5.277	26.41	0.45	26.86	50.00	23.14	
	23.140	33.93	0.77	34.70	50.00	15.30	

TEST ENGINEER: HUGH HUANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 48%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 04, 2010

Test Mode : HDMI 1080P

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.170	47.72	0.22	47.94	64.94	17.00	QP
	0.303	35.23	0.25	35.48	60.15	24.67	
	0.516	25.83	0.29	26.12	56.00	29.88	
	5.005	35.93	0.44	36.37	60.00	23.63	
	5.166	37.76	0.44	38.20	60.00	21.80	
	23.140	45.14	0.83	45.97	60.00	14.03	
	0.170	33.16	0.22	33.38	54.94	21.56	AV
	0.303	28.32	0.25	28.57	50.15	21.58	
	0.516	14.95	0.29	15.24	46.00	30.76	
	5.005	29.62	0.44	30.06	50.00	19.94	
	5.166	29.15	0.44	29.59	50.00	20.41	
	23.140	35.14	0.83	35.97	50.00	14.03	
Neutral	0.172	49.46	0.20	49.66	64.86	15.20	QP
	0.300	37.53	0.23	37.76	60.24	22.48	
	0.494	24.94	0.26	25.20	56.10	30.90	
	4.874	32.94	0.45	33.39	56.00	22.61	
	5.221	35.65	0.45	36.10	60.00	23.90	
	23.140	43.71	0.77	44.48	60.00	15.52	
	0.172	44.38	0.20	44.58	54.86	10.28	AV
	0.300	31.10	0.23	31.33	50.24	18.91	
	0.494	24.28	0.26	24.54	46.10	21.56	
	4.874	26.38	0.45	26.83	46.00	19.17	
	5.221	27.33	0.45	27.78	50.00	22.22	
	23.140	31.15	0.77	31.92	50.00	18.08	

TEST ENGINEER: HUGH HUANG

4 RADIATED EMISSION TEST

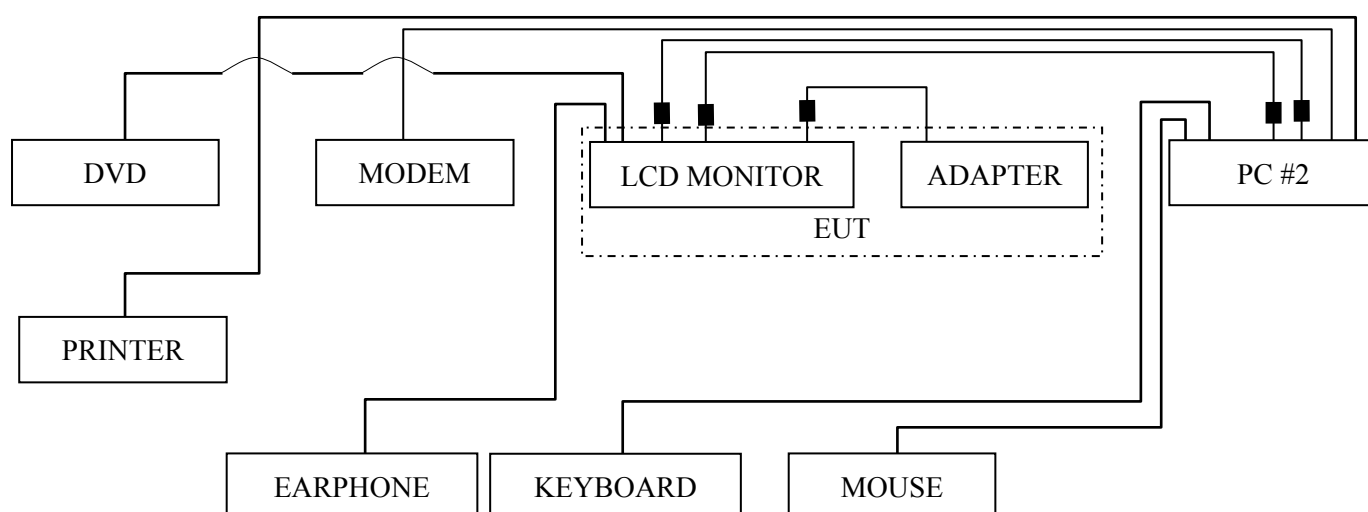
4.1 Test Equipment

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, 2009	Mar 07, 2010
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2009	Mar 19, 2010
3.	Preamplifier	HP	8449B	3008A00864	Apr 29, 2009	Apr 29, 2010
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2010
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2009	May 19, 2010
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

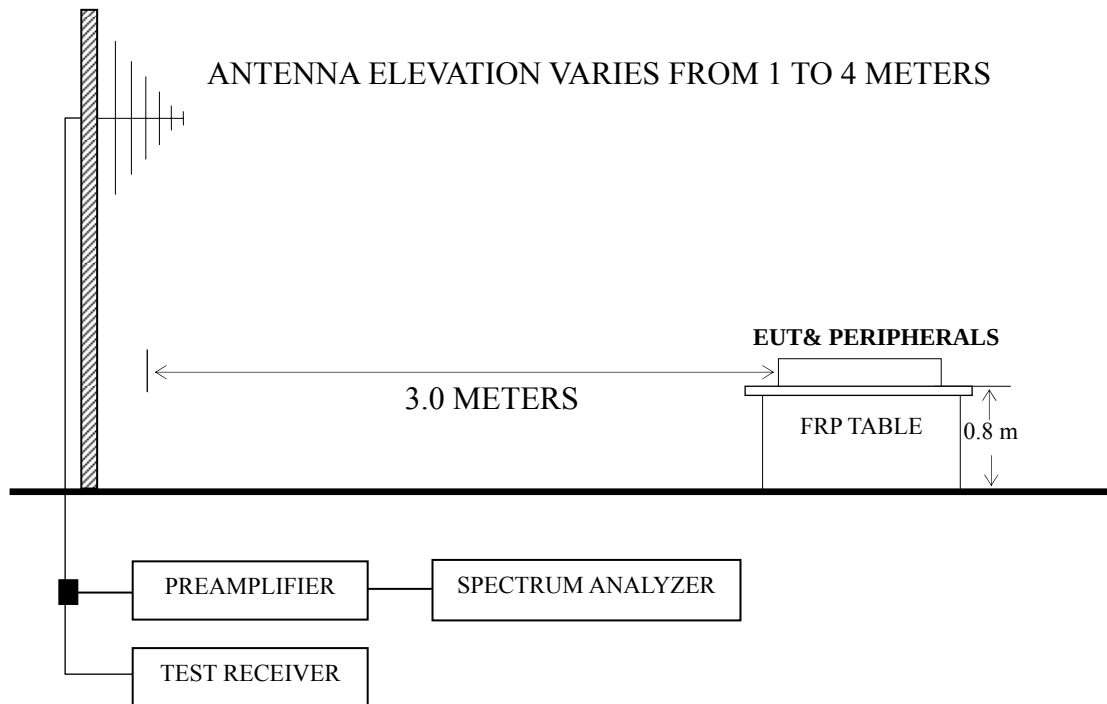
4.2 Block Diagram of Test Setup

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 I.F. 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 1680*1050@60Hz and D-Sub/DVI 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	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 480P	P36
HDMI 720P	P37
HDMI 1080P	P38

NOTE 1 – **The bold test mode** listed above means the worst test mode.

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

NOTE 3 – Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading.($> 1\text{GHz}$)

NOTE 4 – The emission levels that are 20dB below the official limit are not reported.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 6 – The worst case is for DVI 1920*1080@60Hz test mode. The worst emission at horizontal polarization was detected at 825.400 MHz with corrected signal level of 42.70 dB ($\mu\text{V/m}$) (limit is 46.00dB ($\mu\text{V/m}$)), when the antenna was 1.20 m height and the turntable was at 250° . The worst emission at vertical polarization was detected at 593.570MHz with corrected signal level of 42.97 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 70° .

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	50.370	18.78	8.85	0.76	28.39	40.00	11.61
	98.870	22.29	11.27	1.04	34.60	43.50	8.90
	182.290	25.69	9.99	1.38	37.06	43.50	6.44
	197.810	27.01	10.60	1.44	39.05	43.50	4.45
	329.730	24.97	14.74	1.85	41.56	46.00	4.44
	789.510	13.89	20.61	2.88	37.38	46.00	8.62
Vertical	31.940	14.78	18.49	0.62	33.89	40.00	6.11
	50.370	21.92	8.85	0.76	31.53	40.00	8.47
	131.850	16.83	12.42	1.20	30.45	43.50	13.05
	197.810	20.79	10.60	1.44	32.83	43.50	10.67
	230.790	21.53	12.15	1.57	35.25	46.00	10.75
	336.520	20.09	14.94	1.83	36.86	46.00	9.14

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	50.370	22.23	8.85	0.76	31.84	40.00	8.16
	83.350	25.64	8.30	0.98	34.92	40.00	5.08
	98.870	23.93	11.27	1.04	36.24	43.50	7.26
	182.290	26.65	9.99	1.38	38.02	43.50	5.48
	197.810	26.06	10.60	1.44	38.10	43.50	5.40
	335.550	24.35	14.90	1.83	41.08	46.00	4.92
Vertical	32.910	15.30	17.95	0.62	33.87	40.00	6.13
	50.370	23.89	8.85	0.76	33.50	40.00	6.50
	164.830	19.44	10.35	1.31	31.10	43.50	12.40
	230.790	20.98	12.15	1.57	34.70	46.00	11.30
	335.550	20.31	14.90	1.83	37.04	46.00	8.96
	999.030	8.36	22.40	3.21	33.97	54.00	20.03

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	50.370	15.02	8.85	0.76	--	24.63	40.00	15.37	QP
	98.870	17.78	11.27	1.04	--	30.09	43.50	13.41	
	197.810	24.20	10.60	1.44	--	36.24	43.50	7.26	
	278.320	22.23	13.50	1.68	--	37.41	46.00	8.59	
	322.940	24.00	14.54	1.84	--	40.38	46.00	5.62	
	680.870	13.19	19.61	2.67	--	35.47	46.00	10.53	
	1157.000	50.37	23.48	4.10	34.11	43.84	74.00	30.16	PK
	1255.000	52.47	24.14	4.31	34.12	46.80	74.00	27.20	
	1572.000	47.61	26.26	4.95	34.16	44.66	74.00	29.34	
	1683.000	48.40	26.61	5.16	34.17	46.00	74.00	28.00	
	1846.000	46.40	27.17	5.45	34.19	44.83	74.00	29.17	
	1948.000	45.86	27.81	5.55	34.20	45.02	74.00	28.98	
Vertical	32.910	18.23	17.95	0.62	--	36.80	40.00	3.20	QP
	50.370	26.81	8.85	0.76	--	36.42	40.00	3.58	
	116.330	21.24	12.78	1.16	--	35.18	43.50	8.32	
	230.790	25.32	12.15	1.57	--	39.04	46.00	6.96	
	248.250	21.71	12.83	1.60	--	36.14	46.00	9.86	
	332.640	19.43	14.82	1.85	--	36.10	46.00	9.90	
	1140.000	51.39	23.36	4.06	34.11	44.70	74.00	29.30	PK
	1313.000	48.18	24.62	4.43	34.13	43.10	74.00	30.90	
	1419.000	51.51	25.31	4.64	34.14	47.32	74.00	26.68	
	1499.000	48.06	25.80	4.80	34.15	44.51	74.00	29.49	
	1664.000	42.74	26.56	5.12	34.17	40.25	74.00	33.75	
	1857.000	45.48	27.21	5.46	34.19	43.96	74.00	30.04	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	214.300	23.69	11.35	1.48	--	36.52	43.50	6.98	QP
	342.340	18.38	15.11	1.85	--	35.34	46.00	10.66	
	446.130	19.90	17.17	2.11	--	39.18	46.00	6.82	
	527.610	15.01	18.27	2.33	--	35.61	46.00	10.39	
	742.950	18.66	20.13	2.78	--	41.57	46.00	4.43	
	825.400	16.84	20.94	2.92	--	40.70	46.00	5.30	
	1145.000	43.30	23.39	4.08	34.11	36.66	74.00	37.34	PK
	1275.000	48.91	24.32	4.35	34.13	43.45	74.00	30.55	
	1425.000	43.35	25.34	4.66	34.14	39.21	74.00	34.79	
	1572.000	46.61	26.26	4.95	34.16	43.66	74.00	30.34	
	1683.000	46.40	26.61	5.16	34.17	44.00	74.00	30.00	
	1846.000	44.40	27.17	5.45	34.19	42.83	74.00	31.17	
Vertical	32.910	14.56	17.95	0.62	--	33.13	40.00	6.87	QP
	50.370	21.14	8.85	0.76	--	30.75	40.00	9.25	
	65.890	26.02	6.54	0.85	--	33.41	40.00	6.59	
	83.350	22.15	8.30	0.98	--	31.43	40.00	8.57	
	142.520	14.15	11.91	1.21	--	27.27	43.50	16.23	
	742.950	19.23	20.13	2.78	--	42.14	46.00	3.86	
	1157.000	46.89	23.48	4.10	34.11	40.36	74.00	33.64	PK
	1253.000	46.92	24.14	4.31	34.12	41.25	74.00	32.75	
	1461.000	46.18	25.56	4.73	34.14	42.33	74.00	31.67	
	1564.000	43.43	26.19	4.93	34.16	40.39	74.00	33.61	
	1664.000	41.74	26.56	5.12	34.17	39.25	74.00	34.75	
	1857.000	44.48	27.21	5.46	34.19	42.96	74.00	31.04	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	98.870	15.29	11.27	1.04	27.60	43.50	15.90
	182.290	23.69	9.99	1.38	35.06	43.50	8.44
	197.810	26.01	10.60	1.44	38.05	43.50	5.45
	329.730	25.97	14.74	1.85	42.56	46.00	3.44
	680.870	12.70	19.61	2.67	34.98	46.00	11.02
	789.510	10.89	20.61	2.88	34.38	46.00	11.62
Vertical	31.940	17.78	18.49	0.62	36.89	40.00	3.11
	50.370	25.92	8.85	0.76	35.53	40.00	4.47
	131.850	18.83	12.42	1.20	32.45	43.50	11.05
	197.810	22.79	10.60	1.44	34.83	43.50	8.67
	230.790	23.53	12.15	1.57	37.25	46.00	8.75
	336.520	22.09	14.94	1.83	38.86	46.00	7.14

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	98.870	15.93	11.27	1.04	28.24	43.50	15.26
	182.290	25.65	9.99	1.38	37.02	43.50	6.48
	197.810	26.06	10.60	1.44	38.10	43.50	5.40
	277.350	22.67	13.50	1.68	37.85	46.00	8.15
	335.550	25.35	14.90	1.83	42.08	46.00	3.92
	729.370	14.71	20.00	2.76	37.47	46.00	8.53
Vertical	32.910	18.30	17.95	0.62	36.87	40.00	3.13
	50.370	26.89	8.85	0.76	36.50	40.00	3.50
	131.850	17.68	12.42	1.20	31.30	43.50	12.20
	197.810	21.61	10.60	1.44	33.65	43.50	9.85
	230.790	22.98	12.15	1.57	36.70	46.00	9.30
	335.550	22.31	14.90	1.83	39.04	46.00	6.96

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	98.870	15.78	11.27	1.04	--	28.09	43.50	15.41	QP
	182.290	22.85	9.99	1.38	--	34.22	43.50	9.28	
	197.810	25.20	10.60	1.44	--	37.24	43.50	6.26	
	278.320	25.23	13.50	1.68	--	40.41	46.00	5.59	
	322.940	26.00	14.54	1.84	--	42.38	46.00	3.62	
	680.870	16.19	19.61	2.67	--	38.47	46.00	7.53	
	1391.000	45.79	25.16	4.59	34.14	41.40	74.00	32.60	PK
	1500.000	45.38	25.80	4.80	34.15	41.83	74.00	32.17	
	1572.000	48.61	26.26	4.95	34.16	45.66	74.00	28.34	
	1683.000	49.40	26.61	5.16	34.17	47.00	74.00	27.00	
	1846.000	47.40	27.17	5.45	34.19	45.83	74.00	28.17	
	1948.000	47.86	27.81	5.55	34.20	47.02	74.00	26.98	
Vertical	32.910	17.23	17.95	0.62	--	35.80	40.00	4.20	QP
	50.370	25.81	8.85	0.76	--	35.42	40.00	4.58	
	116.330	18.24	12.78	1.16	--	32.18	43.50	11.32	
	230.790	21.32	12.15	1.57	--	35.04	46.00	10.96	
	332.640	18.43	14.82	1.85	--	35.10	46.00	10.90	
	547.010	10.32	18.52	2.36	--	31.20	46.00	14.80	
	1148.000	44.17	23.42	4.09	34.11	37.57	74.00	36.43	PK
	1253.000	46.92	24.14	4.31	34.12	41.25	74.00	32.75	
	1419.000	47.51	25.31	4.64	34.14	43.32	74.00	30.68	
	1499.000	47.06	25.80	4.80	34.15	43.51	74.00	30.49	
	1573.000	42.70	26.26	4.95	34.16	39.75	74.00	34.25	
	1857.000	43.48	27.21	5.46	34.19	41.96	74.00	32.04	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

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	214.300	17.69	11.35	1.48	--	30.52	43.50	12.98	QP
	342.340	17.38	15.11	1.85	--	34.34	46.00	11.66	
	446.130	19.90	17.17	2.11	--	39.18	46.00	6.82	
	527.610	14.01	18.27	2.33	--	34.61	46.00	11.39	
	742.950	19.66	20.13	2.78	--	42.57	46.00	3.43	
	825.400	18.84	20.94	2.92	--	42.70	46.00	3.30	
	1255.000	43.47	24.14	4.31	34.12	37.80	74.00	36.20	PK
	1500.000	42.38	25.80	4.80	34.15	38.83	74.00	35.17	
	1572.000	38.69	26.26	4.95	34.16	35.74	74.00	38.26	
	1683.000	44.40	26.61	5.16	34.17	42.00	74.00	32.00	
	1846.000	43.40	27.17	5.45	34.19	41.83	74.00	32.17	
	1948.000	43.86	27.81	5.55	34.20	43.02	74.00	30.98	
Vertical	32.910	17.56	17.95	0.62	--	36.13	40.00	3.87	QP
	83.350	24.15	8.30	0.98	--	33.43	40.00	6.57	
	296.750	23.12	13.86	1.76	--	38.74	46.00	7.26	
	329.730	16.62	14.74	1.85	--	33.21	46.00	12.79	
	593.570	21.37	19.14	2.46	--	42.97	46.00	3.03	
	742.950	19.23	20.13	2.78	--	42.14	46.00	3.86	
	1150.000	53.21	23.42	4.09	34.11	46.61	74.00	27.39	PK
	1253.000	47.92	24.14	4.31	34.12	42.25	74.00	31.75	
	1461.000	47.18	25.56	4.73	34.14	43.33	74.00	30.67	
	1564.000	44.43	26.19	4.93	34.16	41.39	74.00	32.61	
	1857.000	46.48	27.21	5.46	34.19	44.96	74.00	29.04	
	1963.000	44.12	27.91	5.56	34.20	43.39	74.00	30.61	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

Test Mode : HDMI 480P

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	154.160	22.79	10.94	1.27	35.00	43.50	8.50
	222.060	14.92	11.75	1.50	28.17	46.00	17.83
	296.750	25.56	13.86	1.76	41.18	46.00	4.82
	446.130	11.55	17.17	2.11	30.83	46.00	15.17
	593.570	14.49	19.14	2.46	36.09	46.00	9.91
	795.330	15.04	20.64	2.88	38.56	46.00	7.44
Vertical	30.970	14.79	19.03	0.62	34.44	40.00	5.56
	149.310	20.69	11.35	1.23	33.27	43.50	10.23
	296.750	17.38	13.86	1.76	33.00	46.00	13.00
	593.570	15.68	19.14	2.46	37.28	46.00	8.72
	742.950	18.43	20.13	2.78	41.34	46.00	4.66
	891.360	14.72	21.63	3.02	39.37	46.00	6.63

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

Test Mode : HDMI 720P

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	149.310	20.10	11.35	1.23	32.68	43.50	10.82
	223.030	27.29	11.80	1.52	40.61	46.00	5.39
	296.750	27.16	13.86	1.76	42.78	46.00	3.22
	446.130	9.52	17.17	2.11	28.80	46.00	17.20
	669.230	8.96	19.55	2.62	31.13	46.00	14.87
	742.950	17.77	20.13	2.78	40.68	46.00	5.32
Vertical	30.970	14.92	19.03	0.62	34.57	40.00	5.43
	149.310	20.84	11.35	1.23	33.42	43.50	10.08
	433.520	13.70	16.97	2.12	32.79	46.00	13.21
	506.270	16.20	17.98	2.28	36.46	46.00	9.54
	742.950	18.82	20.13	2.78	41.73	46.00	4.27
	891.360	13.92	21.63	3.02	38.57	46.00	7.43

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2250VV Humidity : 60%RH

Serial No. : 911NDHB9D977 Date of Test : Jan 05, 2010

Test Mode : HDMI 1080P

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	182.290	21.43	9.99	1.38	32.80	43.50	10.70
	217.210	23.21	11.48	1.49	36.18	46.00	9.82
	296.750	20.07	13.86	1.76	35.69	46.00	10.31
	593.570	15.98	19.14	2.46	37.58	46.00	8.42
	795.330	17.87	20.64	2.88	41.39	46.00	4.61
	868.080	18.05	21.39	3.01	42.45	46.00	3.55
Vertical	30.970	16.04	19.03	0.62	35.69	40.00	4.31
	88.200	18.00	9.13	1.00	28.13	43.50	15.37
	149.310	23.96	11.35	1.23	36.54	43.50	6.96
	217.210	25.12	11.48	1.49	38.09	46.00	7.91
	296.750	20.64	13.86	1.76	36.26	46.00	9.74
	506.270	12.28	17.98	2.28	32.54	46.00	13.46

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
Adhesive Tape	7250CP0005J	50*60	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 10, 11
Gasket	MCQ57884403 2EA	102*9*1T	DAEHUNG SUBSIDIARY MATERIALS.	See Appendix II Figure 12-1, 12-3
Gasket	MCQ57884402 2EA	170*9*1T	DAEHUNG SUBSIDIARY MATERIALS.	See Appendix II Figure 12-2, 12-4

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:



(RAVEN JIN)