

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

LCD Monitor

Model No.: E2441TX

Serial No.: E2010101803

FCC ID : BEJE2441TX

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

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Date of Test : Oct 21-Nov 02, 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. : E2441TX
(B) Serial No. : E2010101803
(C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2009
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: E2441TX; S/N: E2010101803) which was tested in 3m anechoic chamber Oct 21-Nov 02, 2010 is technically compliance with the FCC official limits also.

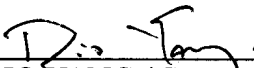
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

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 : Oct 21-Nov 02, 2010 Date of Report : Nov 15, 2010

Producer : 
CANDY XI / Assistant

Review : 
DIO YANG / Supervisor

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

Signatory : 
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 2009 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2009 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. : E2441TX

Serial No. : E2010101803

Real Power : 24.9W

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: AU Optronics
M/N : M240HW01

Max Resolution : 1920*1080@60Hz

D-Sub Cable #1 : Shielded, Detachable, 1.85m,
with two cores on cable

D-Sub Cable #2 : Shielded, Detachable, 1.50m,
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

Power Cord : Unshielded, Detachable, 1.80m

Note : After evaluation, the D-Sub cable#1 was used in the test
for they will cause the maximum emission.

Remark:

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

- (1) One D-Sub Port : Connected with PC
- (1) One DVI Port : Connected with PC
- (2) One AC In Port : Connected with Power

2.2 Peripherals

2.2.1 PC #1

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

2.2.2 PC #2

Manufacturer : HP
Model Number : dx7200MT
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 : KU-0459
Serial Number : 7691402450604
Data Cable : Shielded, Undetachable, 1.8m
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

2.2.5 Mouse

Manufacturer : DELL
Model Number : MO56UO
Serial Number : 443048231
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

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

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

2.3 Description of Test Facility

Site Description (No.3 3m 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

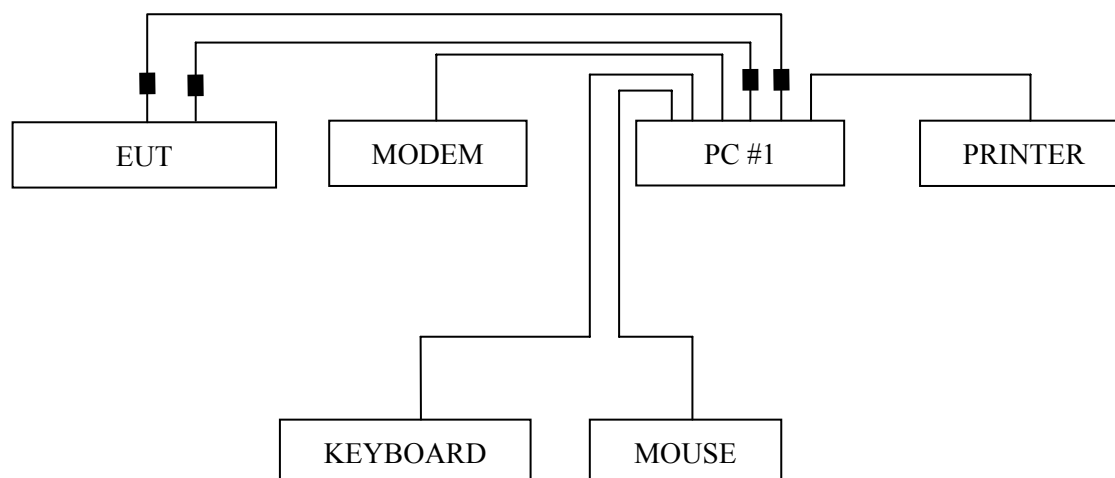
3.1 Test Equipment

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, 2010	Oct 15, 2011
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2010	Apr 02, 2011
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2010	Apr 02, 2011
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2010	Mar 19, 2011
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 02, 2010	Apr 02, 2011
6.	Software	Audix	E3	SET00200 9804M592	--	--

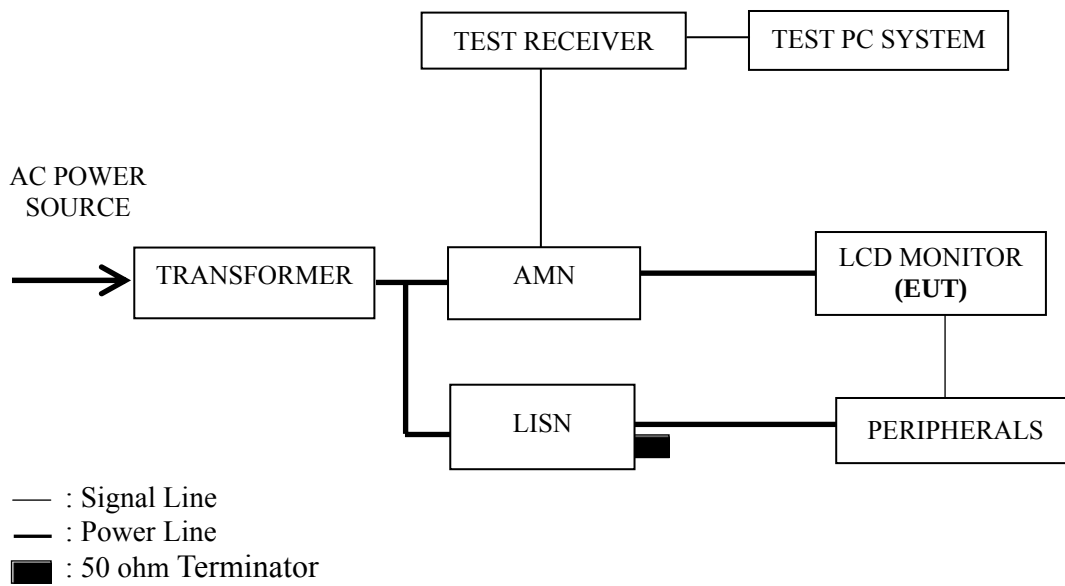
3.2 Block Diagram of Test Setup

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 and DVI Input).

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

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

3.5.7 The test modes are as follows:

Test Mode
D-Sub 640*480@60Hz
D-Sub 1280*1024@75Hz
D-Sub 1680*1050@60Hz
D-Sub 1920*1080@60Hz
DVI 640*480@60Hz
DVI 1280*1024@75Hz
DVI 1680*1050@60Hz
DVI 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 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	P12
D-Sub 1280*1024@75Hz	P13
D-Sub 1680*1050@60Hz	P14
D-Sub 1920*1080@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1280*1024@75Hz	P17
DVI 1680*1050@60Hz	P18
DVI 1920*1080@60Hz	P19

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 DVI 1680*1050@60Hz test mode. The worst emission is detected at 0.199 MHz (Quasi-Peak Value) with corrected signal level of 47.45 dB (μV) (limit is 63.67 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.197	45.10	0.38	45.48	63.76	18.28	QP
	0.264	35.99	0.43	36.42	61.29	24.87	
	0.398	35.86	0.48	36.34	57.90	21.56	
	2.678	33.93	0.67	34.60	56.00	21.40	
	8.412	32.42	0.98	33.40	60.00	26.60	
	21.373	36.44	1.67	38.11	60.00	21.89	
	0.197	31.24	0.38	31.62	53.76	22.14	AV
	0.264	25.46	0.43	25.89	51.29	25.40	
	0.398	24.15	0.48	24.63	47.90	23.27	
	2.678	21.27	0.67	21.94	46.00	24.06	
	8.412	21.35	0.98	22.33	50.00	27.67	
	21.373	23.47	1.67	25.14	50.00	24.86	
Neutral	0.197	45.16	0.30	45.46	63.76	18.30	QP
	0.259	36.20	0.35	36.55	61.47	24.92	
	0.398	37.36	0.44	37.80	57.90	20.10	
	2.033	31.93	0.58	32.51	56.00	23.49	
	7.687	38.63	0.90	39.53	60.00	20.47	
	22.063	38.97	1.81	40.78	60.00	19.22	
	0.197	31.25	0.30	31.55	53.76	22.21	AV
	0.259	26.34	0.35	26.69	51.47	24.78	
	0.398	21.64	0.44	22.08	47.90	25.82	
	2.033	21.25	0.58	21.83	46.00	24.17	
	7.687	28.54	0.90	29.44	50.00	20.56	
	22.063	28.54	1.81	30.35	50.00	19.65	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 2010

Test Mode : D-Sub 1280*1024@75Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.199	45.88	0.38	46.26	63.67	17.41	QP
	0.252	35.58	0.42	36.00	61.69	25.69	
	0.398	35.86	0.48	36.34	57.90	21.56	
	2.900	33.77	0.69	34.46	56.00	21.54	
	8.592	32.62	0.99	33.61	60.00	26.39	
	21.830	35.87	1.69	37.56	60.00	22.44	
	0.199	31.24	0.38	31.62	53.67	22.05	AV
	0.252	25.34	0.42	25.76	51.69	25.93	
	0.398	21.34	0.48	21.82	47.90	26.08	
	2.900	23.14	0.69	23.83	46.00	22.17	
	8.592	22.34	0.99	23.33	50.00	26.67	
	21.830	25.34	1.69	27.03	50.00	22.97	
Neutral	0.194	45.68	0.31	45.99	63.84	17.85	QP
	0.256	36.65	0.35	37.00	61.56	24.56	
	0.398	36.84	0.44	37.28	57.90	20.62	
	2.237	31.60	0.60	32.20	56.00	23.80	
	7.100	39.14	0.86	40.00	60.00	20.00	
	21.600	38.08	1.81	39.89	60.00	20.11	
	0.194	31.34	0.31	31.65	53.84	22.19	AV
	0.256	23.15	0.35	23.50	51.56	28.06	
	0.398	24.51	0.44	24.95	47.90	22.95	
	2.237	21.24	0.60	21.84	46.00	24.16	
	7.100	21.35	0.86	22.21	50.00	27.79	
	21.600	21.46	1.81	23.27	50.00	26.73	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.199	45.35	0.38	45.73	63.67	17.94	QP
	0.253	36.13	0.42	36.55	61.64	25.09	
	0.398	35.74	0.48	36.22	57.90	21.68	
	2.765	34.72	0.68	35.40	56.00	20.60	
	8.062	31.76	0.96	32.72	60.00	27.28	
	22.063	36.19	1.70	37.89	60.00	22.11	
	0.199	31.25	0.38	31.63	53.67	22.04	AV
	0.253	26.35	0.42	26.77	51.64	24.87	
	0.398	25.47	0.48	25.95	47.90	21.95	
	2.765	24.57	0.68	25.25	46.00	20.75	
	8.062	20.24	0.96	21.20	50.00	28.80	
	22.063	25.34	1.70	27.04	50.00	22.96	
Neutral	0.199	45.54	0.30	45.84	63.67	17.83	QP
	0.256	35.06	0.35	35.41	61.56	26.15	
	0.398	36.91	0.44	37.35	57.90	20.55	
	2.033	31.74	0.58	32.32	56.00	23.68	
	7.100	38.49	0.86	39.35	60.00	20.65	
	21.373	40.31	1.79	42.10	60.00	17.90	
	0.199	31.26	0.30	31.56	53.67	22.11	AV
	0.256	25.36	0.35	25.71	51.56	25.85	
	0.398	25.34	0.44	25.78	47.90	22.12	
	2.033	21.47	0.58	22.05	46.00	23.95	
	7.100	28.18	0.86	29.04	50.00	20.96	
	21.373	30.22	1.79	32.01	50.00	17.99	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.199	45.70	0.38	46.08	63.67	17.59	QP
	0.249	35.87	0.42	36.29	61.78	25.49	
	0.393	34.92	0.48	35.40	57.99	22.59	
	3.074	33.56	0.70	34.26	56.00	21.74	
	7.100	32.07	0.89	32.96	60.00	27.04	
	22.655	36.20	1.72	37.92	60.00	22.08	
	0.199	31.25	0.38	31.63	53.67	22.04	AV
	0.249	25.35	0.42	25.77	51.78	26.01	
	0.393	23.54	0.48	24.02	47.99	23.97	
	3.074	23.14	0.70	23.84	46.00	22.16	
	7.100	22.15	0.89	23.04	50.00	26.96	
	22.655	23.14	1.72	24.86	50.00	25.14	
Neutral	0.199	44.78	0.30	45.08	63.67	18.59	QP
	0.249	35.91	0.35	36.26	61.78	25.52	
	0.398	36.94	0.44	37.38	57.90	20.52	
	2.012	32.45	0.58	33.03	56.00	22.97	
	7.687	38.74	0.90	39.64	60.00	20.36	
	21.373	38.85	1.79	40.64	60.00	19.36	
	0.199	31.45	0.30	31.75	53.67	21.92	AV
	0.249	25.14	0.35	25.49	51.78	26.29	
	0.398	26.14	0.44	26.58	47.90	21.32	
	2.012	22.14	0.58	22.72	46.00	23.28	
	7.687	28.14	0.90	29.04	50.00	20.96	
	21.373	21.36	1.79	23.15	50.00	26.85	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.199	46.38	0.38	46.76	63.67	16.91	QP
	0.253	35.72	0.42	36.14	61.64	25.50	
	0.393	36.22	0.48	36.70	57.99	21.29	
	3.140	33.76	0.70	34.46	56.00	21.54	
	7.100	32.23	0.89	33.12	60.00	26.88	
	22.298	36.26	1.70	37.96	60.00	22.04	
	0.199	36.24	0.38	36.62	53.67	17.05	AV
	0.253	25.17	0.42	25.59	51.64	26.05	
	0.393	26.54	0.48	27.02	47.99	20.97	
	3.140	23.54	0.70	24.24	46.00	21.76	
	7.100	22.16	0.89	23.05	50.00	26.95	
	22.298	23.13	1.70	24.83	50.00	25.17	
Neutral	0.197	46.61	0.30	46.91	63.76	16.85	QP
	0.262	36.48	0.35	36.83	61.38	24.55	
	0.398	37.19	0.44	37.63	57.90	20.27	
	2.962	31.97	0.65	32.62	56.00	23.38	
	8.235	38.70	0.93	39.63	60.00	20.37	
	22.535	40.03	1.83	41.86	60.00	18.14	
	0.197	36.24	0.30	36.54	53.76	17.22	AV
	0.262	25.65	0.35	26.00	51.38	25.38	
	0.398	27.15	0.44	27.59	47.90	20.31	
	2.962	20.14	0.65	20.79	46.00	25.21	
	8.235	28.47	0.93	29.40	50.00	20.60	
	22.535	30.26	1.83	32.09	50.00	17.91	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 2010

Test Mode : DVI 1280*1024@75Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.199	45.93	0.38	46.31	63.67	17.36	QP
	0.249	35.76	0.42	36.18	61.78	25.60	
	0.393	35.46	0.48	35.94	57.99	22.05	
	2.962	34.39	0.70	35.09	56.00	20.91	
	6.988	30.99	0.89	31.88	60.00	28.12	
	21.600	36.15	1.68	37.83	60.00	22.17	
	0.199	31.25	0.38	31.63	53.67	22.04	AV
	0.249	21.33	0.42	21.75	51.78	30.03	
	0.393	21.13	0.48	21.61	47.99	26.38	
	2.962	21.46	0.70	22.16	46.00	23.84	
	6.988	21.34	0.89	22.23	50.00	27.77	
	21.600	22.34	1.68	24.02	50.00	25.98	
Neutral	0.199	45.55	0.30	45.85	63.67	17.82	QP
	0.249	37.10	0.35	37.45	61.78	24.33	
	0.398	36.85	0.44	37.29	57.90	20.61	
	2.213	32.06	0.60	32.66	56.00	23.34	
	7.687	38.98	0.90	39.88	60.00	20.12	
	20.162	39.25	1.77	41.02	60.00	18.98	
	0.199	23.64	0.30	23.94	53.67	29.73	AV
	0.249	23.64	0.35	23.99	51.78	27.79	
	0.398	26.47	0.44	26.91	47.90	20.99	
	2.213	22.34	0.60	22.94	46.00	23.06	
	7.687	28.14	0.90	29.04	50.00	20.96	
	20.162	21.47	1.77	23.24	50.00	26.76	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.199	47.07	0.38	47.45	63.67	16.22	QP
	0.256	26.00	0.42	26.42	61.56	35.14	
	0.398	36.42	0.48	36.90	57.90	21.00	
	3.107	34.35	0.70	35.05	56.00	20.95	
	8.412	31.48	0.98	32.46	60.00	27.54	
	22.535	35.68	1.72	37.40	60.00	22.60	
	0.199	32.12	0.38	32.50	53.67	21.17	AV
	0.256	26.00	0.42	26.42	51.56	25.14	
	0.398	23.64	0.48	24.12	47.90	23.78	
	3.107	23.64	0.70	24.34	46.00	21.66	
	8.412	23.45	0.98	24.43	50.00	25.57	
	22.535	25.13	1.72	26.85	50.00	23.15	
Neutral	0.199	46.16	0.30	46.46	63.67	17.21	QP
	0.249	35.83	0.35	36.18	61.78	25.60	
	0.398	36.67	0.44	37.11	57.90	20.79	
	2.285	31.79	0.60	32.39	56.00	23.61	
	7.100	38.93	0.86	39.79	60.00	20.21	
	22.535	39.80	1.83	41.63	60.00	18.37	
	0.199	33.15	0.30	33.45	53.67	20.22	AV
	0.249	25.34	0.35	25.69	51.78	26.09	
	0.398	26.34	0.44	26.78	47.90	21.12	
	2.285	21.15	0.60	21.75	46.00	24.25	
	7.100	28.16	0.86	29.02	50.00	20.98	
	22.535	21.46	1.83	23.29	50.00	26.71	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 48%RH

Serial No. : E2010101803 Date of Test : Nov 02, 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	0.197	45.76	0.38	46.14	63.76	17.62	QP
	0.249	34.97	0.42	35.39	61.78	26.39	
	0.398	35.75	0.48	36.23	57.90	21.67	
	2.962	36.24	0.70	36.94	56.00	19.06	
	8.235	31.20	0.96	32.16	60.00	27.84	
	21.373	36.01	1.67	37.68	60.00	22.32	
	0.197	22.34	0.38	22.72	53.76	31.04	AV
	0.249	23.34	0.42	23.76	51.78	28.02	
	0.398	25.34	0.48	25.82	47.90	22.08	
	2.962	23.53	0.70	24.23	46.00	21.77	
	8.235	22.35	0.96	23.31	50.00	26.69	
	21.373	21.35	1.67	23.02	50.00	26.98	
Neutral	0.199	46.14	0.30	46.44	63.67	17.23	QP
	0.253	36.67	0.35	37.02	61.64	24.62	
	0.398	36.82	0.44	37.26	57.90	20.64	
	2.237	32.39	0.60	32.99	56.00	23.01	
	7.100	39.17	0.86	40.03	60.00	19.97	
	22.298	39.47	1.81	41.28	60.00	18.72	
	0.199	34.14	0.30	34.44	53.67	19.23	AV
	0.253	21.25	0.35	21.60	51.64	30.04	
	0.398	25.31	0.44	25.75	47.90	22.15	
	2.237	22.15	0.60	22.75	46.00	23.25	
	7.100	24.16	0.86	25.02	50.00	24.98	
	22.298	24.52	1.81	26.33	50.00	23.67	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

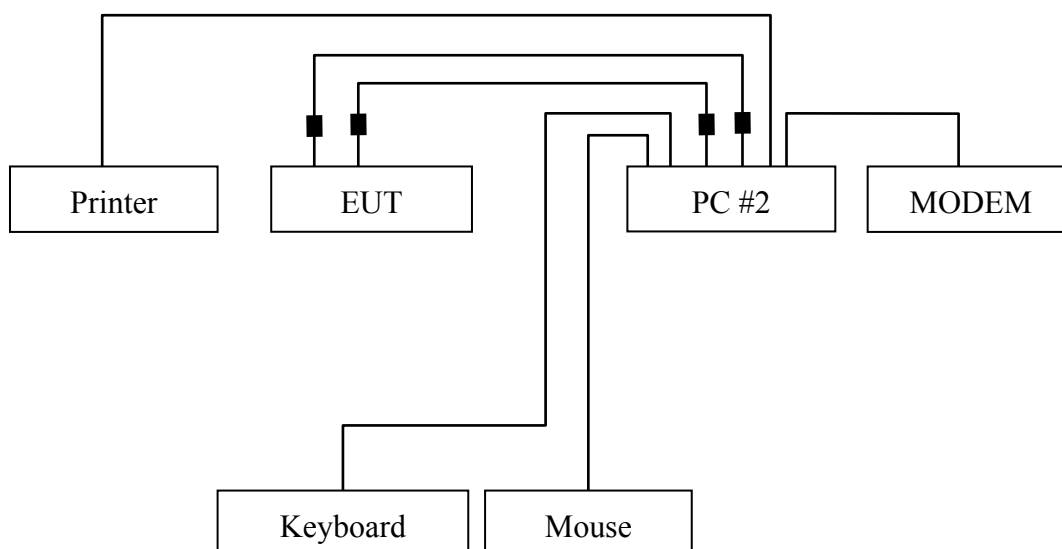
4.1 Test Equipment

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, 2010	Mar 07, 2011
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2010	Mar 19, 2011
3.	Preamplifier	HP	8449B	3008A00864	Apr 29, 2010	Apr 29, 2011
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2009	Dec 01, 2010
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2010	May 19, 2011
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

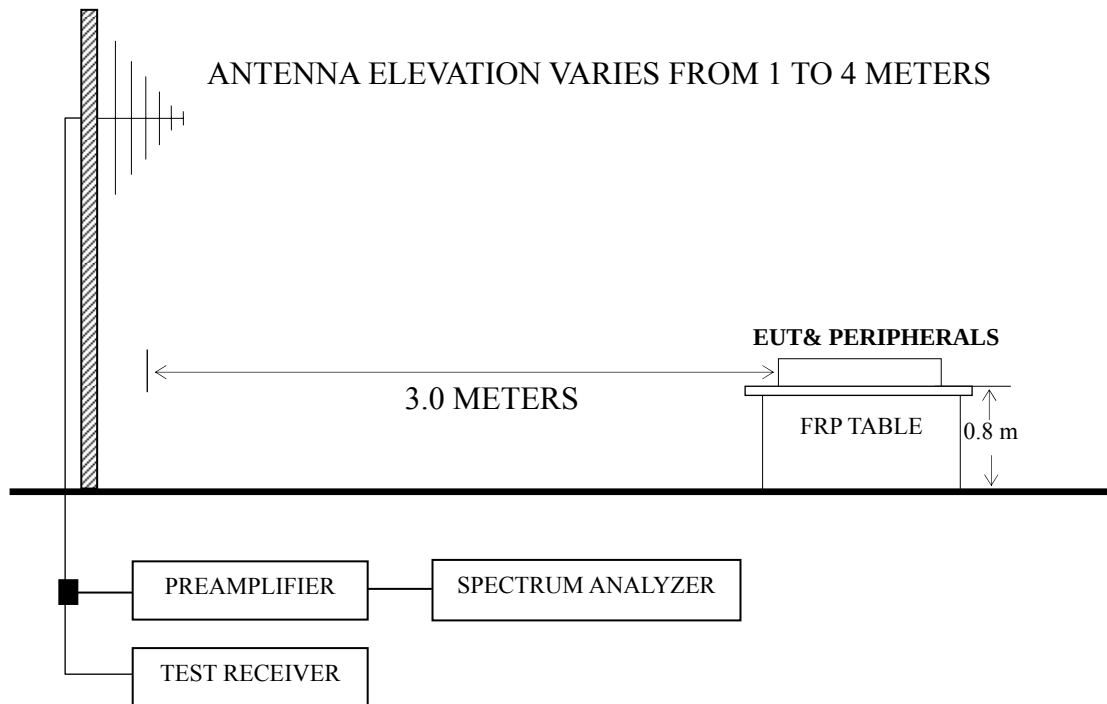
4.2 Block Diagram of Test Setup

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 1280*1024@75Hz, 1680*1050@60Hz and 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	P24
D-Sub 1280*1024@75Hz	P25 – P26
D-Sub 1680*1050@60Hz	P27 – P28
D-Sub 1920*1080@60Hz	P29 – P30
DVI 640*480@60Hz	P31
DVI 1280*1024@75Hz	P32-P33
DVI 1680*1050@60Hz	P34-P35
DVI 1920*1080@60Hz	P36-P37

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

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

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

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 1680*1050@60Hz test mode. The worst emission at horizontal polarization was detected at 36.790 MHz with corrected signal level of 37.40 dB (μV/m) (limit is 40.00dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 220°. The worst emission at vertical polarization was detected at 809.880 MHz with corrected signal level of 41.45 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 310°.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	36.790	19.78	15.80	0.68	36.26	40.00	3.74
	85.290	23.75	8.66	0.97	33.38	40.00	6.62
	119.240	18.78	12.97	1.13	32.88	43.50	10.62
	455.830	12.92	17.32	2.15	32.39	46.00	13.61
	606.180	19.18	19.24	2.47	40.89	46.00	5.11
	866.140	17.18	21.39	2.97	41.54	46.00	4.46
Vertical	33.880	7.13	17.44	0.65	25.22	40.00	14.78
	135.730	23.46	12.28	1.19	36.93	43.50	6.57
	300.630	22.30	13.93	1.76	37.99	46.00	8.01
	455.830	11.40	17.32	2.15	30.87	46.00	15.13
	678.930	19.20	19.61	2.64	41.45	46.00	4.55
	837.040	18.51	21.09	2.94	42.54	46.00	3.46

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 2010

Test Mode : D-Sub 1280*1024@75Hz

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	36.790	8.43	15.80	0.68	--	24.91	40.00	15.09	QP
	87.230	25.39	8.96	0.99	--	35.34	40.00	4.66	
	174.530	25.36	10.07	1.33	--	36.76	43.50	6.74	
	240.490	13.90	12.56	1.58	--	28.04	46.00	17.96	
	620.730	13.47	19.30	2.51	--	35.28	46.00	10.72	
	837.040	15.93	21.09	2.94	--	39.96	46.00	6.04	
	1075.000	53.82	25.21	4.50	37.26	46.27	74.00	27.73	PK
	1250.000	51.58	26.08	4.52	36.90	45.28	74.00	28.72	
	1365.000	52.94	26.59	4.54	36.62	47.45	74.00	26.55	
	1595.000	49.76	27.08	4.56	36.11	45.29	74.00	28.71	
	1720.000	47.47	27.19	4.57	35.92	43.31	74.00	30.69	
	1850.000	46.84	27.30	4.64	35.75	43.03	74.00	30.97	
	1075.000	47.82	25.21	4.50	37.26	40.27	54.00	13.73	AV
	1250.000	36.58	26.08	4.52	36.90	30.28	54.00	23.72	
	1365.000	36.94	26.59	4.54	36.62	31.45	54.00	22.55	
	1595.000	37.76	27.08	4.56	36.11	33.29	54.00	20.71	
	1720.000	37.47	27.19	4.57	35.92	33.31	54.00	20.69	
	1850.000	36.84	27.30	4.64	35.75	33.03	54.00	20.97	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 2010

Test Mode : D-Sub 1280*1024@75Hz

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
Vertical	36.790	19.86	15.80	0.68	--	36.34	40.00	3.66	QP
	87.230	26.96	8.96	0.99	--	36.91	40.00	3.09	
	109.540	20.45	12.25	1.09	--	33.79	43.50	9.71	
	174.530	22.65	10.07	1.33	--	34.05	43.50	9.45	
	604.240	19.03	19.22	2.47	--	40.72	46.00	5.28	
	866.140	16.76	21.39	2.97	--	41.12	46.00	4.88	
	1080.000	49.23	25.24	4.50	37.25	41.72	74.00	32.28	PK
	1185.000	49.36	25.74	4.51	37.04	42.57	74.00	31.43	
	1315.000	52.23	26.39	4.53	36.75	46.40	74.00	27.60	
	1520.000	43.62	27.02	4.55	36.24	38.95	74.00	35.05	
	1600.000	48.55	27.08	4.56	36.10	44.09	74.00	29.91	
	1760.000	51.77	27.23	4.58	35.86	47.72	74.00	26.28	
	1080.000	45.23	25.24	4.50	37.25	37.72	54.00	16.28	AV
	1185.000	37.36	25.74	4.51	37.04	30.57	54.00	23.43	
	1315.000	39.23	26.39	4.53	36.75	33.40	54.00	20.60	
	1520.000	32.62	27.02	4.55	36.24	27.95	54.00	26.05	
	1600.000	38.55	27.08	4.56	36.10	34.09	54.00	19.91	
	1760.000	39.77	27.23	4.58	35.86	35.72	54.00	18.28	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	36.790	20.90	15.80	0.68	--	37.38	40.00	2.62	QP
	94.990	25.30	10.45	1.03	--	36.78	43.50	6.72	
	135.730	23.81	12.28	1.19	--	37.28	43.50	6.22	
	458.740	12.01	17.35	2.15	--	31.51	46.00	14.49	
	601.330	17.59	19.21	2.47	--	39.27	46.00	6.73	
	863.230	17.31	21.35	2.97	--	41.63	46.00	4.37	
	1075.000	47.82	25.21	4.50	37.26	40.27	74.00	33.73	PK
	1250.000	44.58	26.08	4.52	36.90	38.28	74.00	35.72	
	1365.000	43.94	26.59	4.54	36.62	38.45	74.00	35.55	
	1520.000	35.65	27.02	4.55	36.24	30.98	74.00	43.02	
	1665.000	38.06	27.14	4.57	36.00	33.77	74.00	40.23	
	1760.000	39.87	27.23	4.58	35.86	35.82	74.00	38.18	
	1075.000	41.82	25.21	4.50	37.26	34.27	54.00	19.73	AV
	1250.000	32.58	26.08	4.52	36.90	26.28	54.00	27.72	
	1365.000	27.94	26.59	4.54	36.62	22.45	54.00	31.55	
	1520.000	21.65	27.02	4.55	36.24	16.98	54.00	37.02	
	1665.000	27.06	27.14	4.57	36.00	22.77	54.00	31.23	
	1760.000	29.87	27.23	4.58	35.86	25.82	54.00	28.18	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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
Vertical	33.880	6.60	17.44	0.65	--	24.69	40.00	15.31	QP
	135.730	24.28	12.28	1.19	--	37.75	43.50	5.75	
	303.540	21.61	14.00	1.77	--	37.38	46.00	8.62	
	458.740	10.09	17.35	2.15	--	29.59	46.00	16.41	
	676.990	17.86	19.59	2.64	--	40.09	46.00	5.91	
	837.040	16.68	21.09	2.94	--	40.71	46.00	5.29	
	1080.000	50.23	25.24	4.50	37.25	42.72	74.00	31.28	PK
	1185.000	49.36	25.74	4.51	37.04	42.57	74.00	31.43	
	1315.000	49.23	26.39	4.53	36.75	43.40	74.00	30.60	
	1500.000	45.93	27.00	4.55	36.30	41.18	74.00	32.82	
	1600.000	51.55	27.08	4.56	36.10	47.09	74.00	26.91	
	1760.000	52.77	27.23	4.58	35.86	48.72	74.00	25.28	
	1080.000	40.23	25.24	4.50	37.25	32.72	54.00	21.28	AV
	1185.000	35.36	25.74	4.51	37.04	28.57	54.00	25.43	
	1315.000	37.23	26.39	4.53	36.75	31.40	54.00	22.60	
	1500.000	36.93	27.00	4.55	36.30	32.18	54.00	21.82	
	1600.000	38.55	27.08	4.56	36.10	34.09	54.00	19.91	
	1760.000	44.77	27.23	4.58	35.86	40.72	54.00	13.28	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	36.790	6.14	15.80	0.68	--	22.62	40.00	17.38	QP
	135.730	23.40	12.28	1.19	--	36.87	43.50	6.63	
	300.630	20.44	13.93	1.76	--	36.13	46.00	9.87	
	453.890	9.11	17.29	2.13	--	28.53	46.00	17.47	
	620.730	18.46	19.30	2.51	--	40.27	46.00	5.73	
	863.230	15.11	21.35	2.97	--	39.43	46.00	6.57	
	1075.000	50.82	25.21	4.50	37.26	43.27	74.00	30.73	PK
	1180.000	50.20	25.71	4.51	37.05	43.37	74.00	30.63	
	1365.000	50.94	26.59	4.54	36.62	45.45	74.00	28.55	
	1465.000	45.89	26.90	4.55	36.37	40.97	74.00	33.03	
	1665.000	45.06	27.14	4.57	36.00	40.77	74.00	33.23	
	1760.000	47.87	27.23	4.58	35.86	43.82	74.00	30.18	
	1075.000	45.82	25.21	4.50	37.26	38.27	54.00	15.73	AV
	1180.000	37.20	25.71	4.51	37.05	30.37	54.00	23.63	
	1365.000	37.94	26.59	4.54	36.62	32.45	54.00	21.55	
	1465.000	28.89	26.90	4.55	36.37	23.97	54.00	30.03	
	1665.000	37.06	27.14	4.57	36.00	32.77	54.00	21.23	
	1760.000	36.87	27.23	4.58	35.86	32.82	54.00	21.18	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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
Vertical	36.790	19.66	15.80	0.68	--	36.14	40.00	3.86	QP
	135.730	23.84	12.28	1.19	--	37.31	43.50	6.19	
	279.290	11.68	13.52	1.70	--	26.90	46.00	19.10	
	458.740	12.04	17.35	2.15	--	31.54	46.00	14.46	
	676.990	14.92	19.59	2.64	--	37.15	46.00	8.85	
	863.230	13.75	21.35	2.97	--	38.07	46.00	7.93	
	1080.000	53.23	25.24	4.50	37.25	45.72	74.00	28.28	PK
	1185.000	54.36	25.74	4.51	37.04	47.57	74.00	26.43	
	1315.000	50.23	26.39	4.53	36.75	44.40	74.00	29.60	
	1600.000	48.55	27.08	4.56	36.10	44.09	74.00	29.91	
	1760.000	46.77	27.23	4.58	35.86	42.72	74.00	31.28	
	1985.000	39.32	27.39	4.78	35.62	35.87	74.00	38.13	
	1080.000	47.23	25.24	4.50	37.25	39.72	54.00	14.28	AV
	1185.000	40.36	25.74	4.51	37.04	33.57	54.00	20.43	
	1315.000	33.23	26.39	4.53	36.75	27.40	54.00	26.60	
	1600.000	34.55	27.08	4.56	36.10	30.09	54.00	23.91	
	1760.000	32.77	27.23	4.58	35.86	28.72	54.00	25.28	
	1985.000	30.32	27.39	4.78	35.62	26.87	54.00	27.13	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	33.880	16.87	17.44	0.65	34.96	40.00	5.04
	94.990	23.32	10.45	1.03	34.80	43.50	8.70
	135.730	21.24	12.28	1.19	34.71	43.50	8.79
	405.390	10.63	16.57	2.01	29.21	46.00	16.79
	601.330	18.22	19.21	2.47	39.90	46.00	6.10
	863.230	17.27	21.35	2.97	41.59	46.00	4.41
Vertical	36.790	8.03	15.80	0.68	24.51	40.00	15.49
	135.730	25.56	12.28	1.19	39.03	43.50	4.47
	281.230	13.93	13.57	1.70	29.20	46.00	16.80
	455.830	9.48	17.32	2.15	28.95	46.00	17.05
	601.330	18.72	19.21	2.47	40.40	46.00	5.60
	809.880	14.83	20.80	2.89	38.52	46.00	7.48

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 2010

Test Mode : DVI 1280*1024@75Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	30.970	2.25	19.03	0.63	--	21.91	40.00	18.09	QP
	135.730	25.20	12.28	1.19	--	38.67	43.50	4.83	
	300.630	17.70	13.93	1.76	--	33.39	46.00	12.61	
	455.830	10.20	17.32	2.15	--	29.67	46.00	16.33	
	676.990	16.39	19.59	2.64	--	38.62	46.00	7.38	
	863.230	14.31	21.35	2.97	--	38.63	46.00	7.37	
	1075.000	48.16	25.21	4.50	37.26	40.61	74.00	33.39	PK
	1180.000	43.20	25.71	4.51	37.05	36.37	74.00	37.63	
	1250.000	47.58	26.08	4.52	36.90	41.28	74.00	32.72	
	1365.000	43.94	26.59	4.54	36.62	38.45	74.00	35.55	
	1465.000	38.89	26.90	4.55	36.37	33.97	74.00	40.03	
	1595.000	41.76	27.08	4.56	36.11	37.29	74.00	36.71	
	1075.000	38.16	25.21	4.50	37.26	30.61	54.00	23.39	AV
	1180.000	29.20	25.71	4.51	37.05	22.37	54.00	31.63	
	1250.000	32.58	26.08	4.52	36.90	26.28	54.00	27.72	
	1365.000	31.94	26.59	4.54	36.62	26.45	54.00	27.55	
	1465.000	30.89	26.90	4.55	36.37	25.97	54.00	28.03	
	1595.000	30.76	27.08	4.56	36.11	26.29	54.00	27.71	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 2010

Test Mode : DVI 1280*1024@75Hz

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
Vertical	36.790	20.75	15.80	0.68	--	37.23	40.00	2.77	QP
	94.990	24.34	10.45	1.03	--	35.82	43.50	7.68	
	135.730	23.31	12.28	1.19	--	36.78	43.50	6.72	
	458.740	12.44	17.35	2.15	--	31.94	46.00	14.06	
	604.240	18.44	19.22	2.47	--	40.13	46.00	5.87	
	863.230	16.71	21.35	2.97	--	41.03	46.00	4.97	
	1080.000	45.23	25.24	4.50	37.25	37.72	74.00	36.28	PK
	1275.000	40.90	26.21	4.53	36.84	34.80	74.00	39.20	
	1365.000	40.17	26.59	4.54	36.62	34.68	74.00	39.32	
	1465.000	38.95	26.90	4.55	36.37	34.03	74.00	39.97	
	1670.000	39.97	27.14	4.57	35.99	35.69	74.00	38.31	
	1760.000	40.77	27.23	4.58	35.86	36.72	74.00	37.28	
	1080.000	37.23	25.24	4.50	37.25	29.72	54.00	24.28	AV
	1275.000	21.90	26.21	4.53	36.84	15.80	54.00	38.20	
	1365.000	33.17	26.59	4.54	36.62	27.68	54.00	26.32	
	1465.000	24.95	26.90	4.55	36.37	20.03	54.00	33.97	
	1670.000	31.97	27.14	4.57	35.99	27.69	54.00	26.31	
	1760.000	25.77	27.23	4.58	35.86	21.72	54.00	32.28	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	36.790	20.92	15.80	0.68	--	37.40	40.00	2.60	QP
	135.730	22.00	12.28	1.19	--	35.47	43.50	8.03	
	174.530	22.40	10.07	1.33	--	33.80	43.50	9.70	
	487.840	10.53	17.75	2.23	--	30.51	46.00	15.49	
	604.240	18.53	19.22	2.47	--	40.22	46.00	5.78	
	863.230	18.31	21.35	2.97	--	42.63	46.00	3.37	
	1180.000	49.20	25.71	4.51	37.05	42.37	74.00	31.63	PK
	1430.000	44.23	26.80	4.54	36.45	39.12	74.00	34.88	
	1595.000	44.76	27.08	4.56	36.11	40.29	74.00	33.71	
	1665.000	46.06	27.14	4.57	36.00	41.77	74.00	32.23	
	1820.000	43.39	27.28	4.61	35.79	39.49	74.00	34.51	
	1995.000	41.93	27.40	4.78	35.61	38.50	74.00	35.50	
	1180.000	43.20	25.71	4.51	37.05	36.37	54.00	17.63	AV
	1430.000	30.23	26.80	4.54	36.45	25.12	54.00	28.88	
	1595.000	26.76	27.08	4.56	36.11	22.29	54.00	31.71	
	1665.000	32.06	27.14	4.57	36.00	27.77	54.00	26.23	
	1820.000	34.39	27.28	4.61	35.79	30.49	54.00	23.51	
	1995.000	28.93	27.40	4.78	35.61	25.50	54.00	28.50	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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
Vertical	36.790	7.28	15.80	0.68	--	23.76	40.00	16.24	QP
	135.730	25.35	12.28	1.19	--	38.82	43.50	4.68	
	298.690	13.97	13.88	1.75	--	29.60	46.00	16.40	
	458.740	8.70	17.35	2.15	--	28.20	46.00	17.80	
	601.330	14.91	19.21	2.47	--	36.59	46.00	9.41	
	809.880	17.76	20.80	2.89	--	41.45	46.00	4.55	
	1080.000	48.23	25.24	4.50	37.25	40.72	74.00	33.28	PK
	1205.000	50.63	25.85	4.51	37.00	43.99	74.00	30.01	
	1405.000	49.02	26.73	4.54	36.52	43.77	74.00	30.23	
	1490.000	45.52	26.98	4.55	36.32	40.73	74.00	33.27	
	1670.000	47.97	27.14	4.57	35.99	43.69	74.00	30.31	
	1930.000	46.36	27.36	4.72	35.67	42.77	74.00	31.23	
	1080.000	40.23	25.24	4.50	37.25	32.72	54.00	21.28	AV
	1205.000	39.63	25.85	4.51	37.00	32.99	54.00	21.01	
	1405.000	39.02	26.73	4.54	36.52	33.77	54.00	20.23	
	1490.000	36.52	26.98	4.55	36.32	31.73	54.00	22.27	
	1670.000	36.97	27.14	4.57	35.99	32.69	54.00	21.31	
	1930.000	37.36	27.36	4.72	35.67	33.77	54.00	20.23	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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	36.790	5.88	15.80	0.68	--	22.36	40.00	17.64	QP
	135.730	25.70	12.28	1.19	--	39.17	43.50	4.33	
	305.480	19.62	14.07	1.77	--	35.46	46.00	10.54	
	458.740	12.28	17.35	2.15	--	31.78	46.00	14.22	
	676.990	13.46	19.59	2.64	--	35.69	46.00	10.31	
	809.880	16.71	20.80	2.89	--	40.40	46.00	5.60	
	1020.000	53.50	24.98	4.49	37.36	45.61	74.00	28.39	PK
	1135.000	49.35	25.49	4.51	37.14	42.21	74.00	31.79	
	1430.000	49.23	26.80	4.54	36.45	44.12	74.00	29.88	
	1595.000	44.76	27.08	4.56	36.11	40.29	74.00	33.71	
	1665.000	49.06	27.14	4.57	36.00	44.77	74.00	29.23	
	1720.000	46.47	27.19	4.57	35.92	42.31	74.00	31.69	
	1020.000	47.50	24.98	4.49	37.36	39.61	54.00	14.39	AV
	1135.000	35.35	25.49	4.51	37.14	28.21	54.00	25.79	
	1430.000	36.23	26.80	4.54	36.45	31.12	54.00	22.88	
	1595.000	27.76	27.08	4.56	36.11	23.29	54.00	30.71	
	1665.000	40.06	27.14	4.57	36.00	35.77	54.00	18.23	
	1720.000	39.47	27.19	4.57	35.92	35.31	54.00	18.69	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2441TX Humidity : 60%RH

Serial No. : E2010101803 Date of Test : Oct 21, 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
Vertical	33.880	17.36	17.44	0.65	--	35.45	40.00	4.55	QP
	133.790	21.60	12.35	1.18	--	35.13	43.50	8.37	
	295.780	12.51	13.84	1.75	--	28.10	46.00	17.90	
	405.390	16.93	16.57	2.01	--	35.51	46.00	10.49	
	601.330	18.72	19.21	2.47	--	40.40	46.00	5.60	
	863.230	17.29	21.35	2.97	--	41.61	46.00	4.39	
	1080.000	53.23	25.24	4.50	37.25	45.72	74.00	28.28	PK
	1275.000	45.90	26.21	4.53	36.84	39.80	74.00	34.20	
	1430.000	49.00	26.80	4.54	36.45	43.89	74.00	30.11	
	1670.000	49.97	27.14	4.57	35.99	45.69	74.00	28.31	
	1800.000	44.81	27.26	4.58	35.81	40.84	74.00	33.16	
	1930.000	44.36	27.36	4.72	35.67	40.77	74.00	33.23	
	1080.000	47.23	25.24	4.50	37.25	39.72	54.00	14.28	AV
	1275.000	29.90	26.21	4.53	36.84	23.80	54.00	30.20	
	1430.000	34.00	26.80	4.54	36.45	28.89	54.00	25.11	
	1670.000	36.97	27.14	4.57	35.99	32.69	54.00	21.31	
	1800.000	29.81	27.26	4.58	35.81	25.84	54.00	28.16	
	1930.000	36.36	27.36	4.72	35.67	32.77	54.00	21.23	

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
Sponge	LG END 3940TKK 043C	90*10*1	EXPAN Electronics SuZhou co.,Ltd	See Internal photos Figure 12
Sponge	LG END 3940TKK 043C	90*10*2	EXPAN Electronics SuZhou co.,Ltd	See Internal photos Figure 12
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal photos Figure 13

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)