

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

LCD Monitor

Model No.: E2711TX

Serial No.: E20110216-02-02/02

FCC ID : BEJE2711TX

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.
3F 34Bldg 680 Guiping Rd,
Caohejing Hi-Tech Park,
Shanghai 200233, China

Tel: +86-21-64955500
Fax: +86-21-64955491

Report No. : ACI-F11023
Date of Test : Feb 22 - 24, 2011
Date of Report : Mar 03, 2011

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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. : E2711TX
(B) Serial No. : E20110216-02-02/02
(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: E2711TX; S/N: E20110216-02-02/02) which was tested in 3m anechoic chamber Feb 22 - 24, 2011 is technically compliance with the FCC official limits also.

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

This report contains data that are not covered by the NVLAP accreditation.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Feb 22 - 24, 2011 Date of Report : Mar 03, 2011

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 : Byron Kwo
Authorized Signature EMC BYRON KWO / 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.	: E2711TX
Serial No.	: E20110216-02-02/02
Real Power	: 30.70W
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 M/N : LM270WF2(TL)(A1)
Max Resolution	: 1920*1080@60Hz
D-Sub Cable #1	: Shielded, Detachable, 1.50m, with two cores on cable
D-Sub Cable #2	: Shielded, Detachable, 1.50m, with two cores in connector
DVI Cable #1	: Shielded, Detachable, 1.50m, with two cores on cable
DVI Cable #2	: Shielded, Detachable, 1.50m, with two cores in connector
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 AC In Port : Connected with Power

2.2 Peripherals

2.2.1 PC

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

2.2.4 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

2.2.5 Modem

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

2.3 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

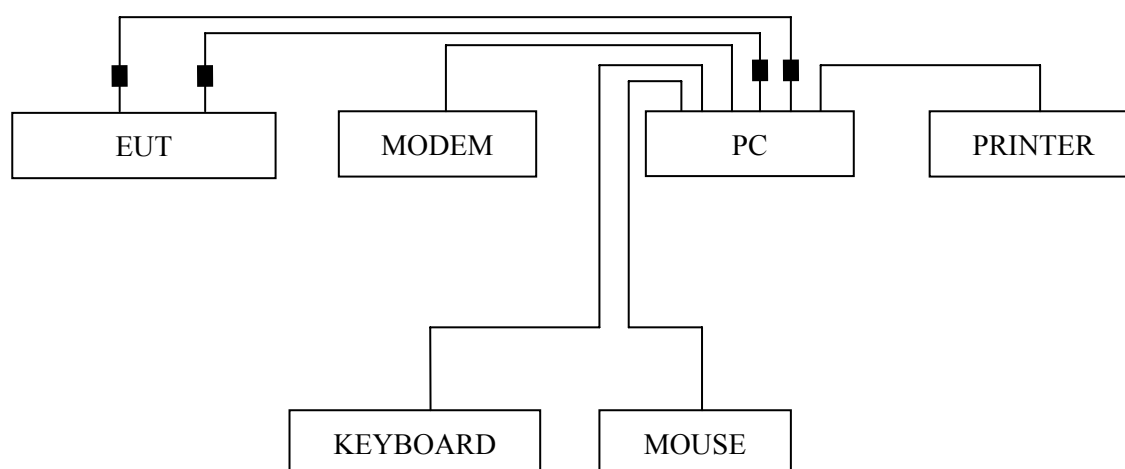
3.1 Test Equipment

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	--	--

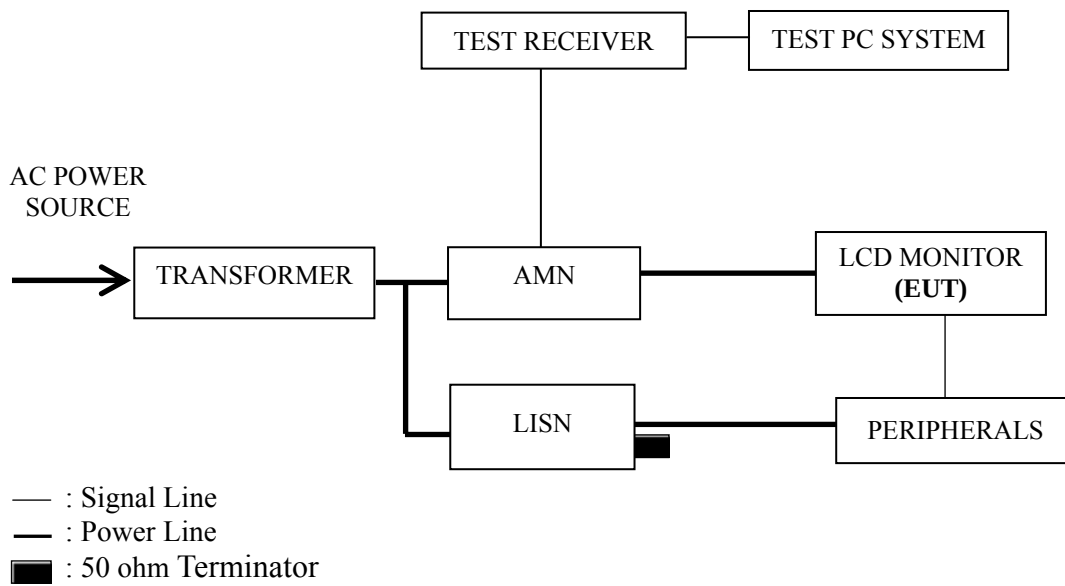
3.2 Block Diagram of Test Setup

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 & 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 640*480@60Hz test mode. The worst emission is detected at 0.190 MHz (Quasi-Peak Value) with corrected signal level of 50.92 dB (μV) (limit is 64.02 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	48.66	0.38	49.04	64.02	14.98	QP
	0.252	41.85	0.42	42.27	61.69	19.42	
	0.317	36.38	0.45	36.83	59.80	22.97	
	0.381	32.13	0.47	32.60	58.25	25.65	
	4.574	36.94	0.78	37.72	56.00	18.28	
	8.412	37.33	0.98	38.31	60.00	21.69	
	0.190	36.43	0.38	36.81	54.02	17.21	AV
	0.252	29.76	0.42	30.18	51.69	21.51	
	0.317	24.60	0.45	25.05	49.80	24.75	
	0.381	19.87	0.47	20.34	48.25	27.91	
	4.574	24.76	0.78	25.54	46.00	20.46	
	8.412	25.40	0.98	26.38	50.00	23.62	
Neutral	0.190	48.93	0.31	49.24	64.02	14.78	QP
	0.253	42.01	0.35	42.36	61.64	19.28	
	0.317	36.48	0.40	36.88	59.80	22.92	
	0.381	29.33	0.43	29.76	58.25	28.49	
	4.574	36.45	0.72	37.17	56.00	18.83	
	8.501	37.41	0.95	38.36	60.00	21.64	
	0.190	37.57	0.31	37.88	54.02	16.14	AV
	0.253	30.43	0.35	30.78	51.64	20.86	
	0.317	24.34	0.40	24.74	49.80	25.06	
	0.381	17.26	0.43	17.69	48.25	30.56	
	4.574	24.28	0.72	25.00	46.00	21.00	
	8.501	26.38	0.95	27.33	50.00	22.67	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	49.16	0.38	49.54	64.02	14.48	QP
	0.252	42.23	0.42	42.65	61.69	19.04	
	0.317	36.93	0.45	37.38	59.80	22.42	
	0.377	32.59	0.47	33.06	58.34	25.28	
	4.721	37.30	0.79	38.09	56.00	17.91	
	8.412	37.84	0.98	38.82	60.00	21.18	
	0.190	36.80	0.38	37.18	54.02	16.84	AV
	0.252	29.40	0.42	29.82	51.69	21.87	
	0.317	24.50	0.45	24.95	49.80	24.85	
	0.377	20.34	0.47	20.81	48.34	27.53	
	4.721	25.40	0.79	26.19	46.00	19.81	
	8.412	25.40	0.98	26.38	50.00	23.62	
Neutral	0.190	49.64	0.31	49.95	64.02	14.07	QP
	0.264	42.69	0.36	43.05	61.29	18.24	
	0.317	37.07	0.40	37.47	59.80	22.33	
	0.381	30.59	0.43	31.02	58.25	27.23	
	4.721	35.62	0.73	36.35	56.00	19.65	
	8.729	37.58	0.96	38.54	60.00	21.46	
	0.190	37.40	0.31	37.71	54.02	16.31	AV
	0.264	30.40	0.36	30.76	51.29	20.53	
	0.317	25.00	0.40	25.40	49.80	24.40	
	0.381	18.37	0.43	18.80	48.25	29.45	
	4.721	23.40	0.73	24.13	46.00	21.87	
	8.729	25.37	0.96	26.33	50.00	23.67	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22 2011

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	0.190	48.77	0.38	49.15	64.02	14.87	QP
	0.252	41.98	0.42	42.40	61.69	19.29	
	0.317	36.53	0.45	36.98	59.80	22.82	
	0.381	32.24	0.47	32.71	58.25	25.54	
	4.721	36.45	0.79	37.24	56.00	18.76	
	8.412	37.54	0.98	38.52	60.00	21.48	
	0.190	36.50	0.38	36.88	54.02	17.14	AV
	0.252	29.76	0.42	30.18	51.69	21.51	
	0.317	24.16	0.45	24.61	49.80	25.19	
	0.381	20.17	0.47	20.64	48.25	27.61	
	4.721	24.60	0.79	25.39	46.00	20.61	
	8.412	25.67	0.98	26.65	50.00	23.35	
Neutral	0.190	49.21	0.31	49.52	64.02	14.50	QP
	0.264	42.42	0.36	42.78	61.29	18.51	
	0.317	36.79	0.40	37.19	59.80	22.61	
	0.385	29.55	0.43	29.98	58.17	28.19	
	4.772	36.12	0.73	36.85	56.00	19.15	
	8.501	36.97	0.95	37.92	60.00	22.08	
	0.190	37.30	0.31	37.61	54.02	16.41	AV
	0.264	30.16	0.36	30.52	51.29	20.77	
	0.317	24.70	0.40	25.10	49.80	24.70	
	0.385	16.89	0.43	17.32	48.17	30.85	
	4.772	23.80	0.73	24.53	46.00	21.47	
	8.501	24.76	0.95	25.71	50.00	24.29	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.188	48.92	0.39	49.31	64.11	14.80	QP
	0.264	42.12	0.43	42.55	61.29	18.74	
	0.317	36.73	0.45	37.18	59.80	22.62	
	0.377	32.32	0.47	32.79	58.34	25.55	
	4.772	36.53	0.79	37.32	56.00	18.68	
	8.412	37.97	0.98	38.95	60.00	21.05	
	0.188	36.48	0.39	36.87	54.11	17.24	AV
	0.264	29.69	0.43	30.12	51.29	21.17	
	0.317	24.80	0.45	25.25	49.80	24.55	
	0.377	20.40	0.47	20.87	48.34	27.47	
	4.772	24.61	0.79	25.40	46.00	20.60	
	8.412	25.60	0.98	26.58	50.00	23.42	
Neutral	0.190	49.37	0.31	49.68	64.02	14.34	QP
	0.256	42.58	0.35	42.93	61.56	18.63	
	0.317	36.54	0.40	36.94	59.80	22.86	
	0.377	30.40	0.43	30.83	58.34	27.51	
	4.501	35.86	0.72	36.58	56.00	19.42	
	8.501	36.91	0.95	37.86	60.00	22.14	
	0.190	37.20	0.31	37.51	54.02	16.51	AV
	0.256	30.40	0.35	30.75	51.56	20.81	
	0.317	24.30	0.40	24.70	49.80	25.10	
	0.377	18.42	0.43	18.85	48.34	29.49	
	4.501	23.76	0.72	24.48	46.00	21.52	
	8.501	24.60	0.95	25.55	50.00	24.45	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	50.04	0.38	50.42	64.02	13.60	QP
	0.252	43.11	0.42	43.53	61.69	18.16	
	0.317	37.54	0.45	37.99	59.80	21.81	
	0.377	33.08	0.47	33.55	58.34	24.79	
	4.772	36.27	0.79	37.06	56.00	18.94	
	8.729	38.44	0.99	39.43	60.00	20.57	
	0.190	38.38	0.38	38.76	54.02	15.26	AV
	0.252	31.20	0.42	31.62	51.69	20.07	
	0.317	25.43	0.45	25.88	49.80	23.92	
	0.377	20.67	0.47	21.14	48.34	27.20	
	4.772	24.40	0.79	25.19	46.00	20.81	
	8.729	26.51	0.99	27.50	50.00	22.50	
Neutral	0.190	50.61	0.31	50.92	64.02	13.10	QP
	0.252	43.45	0.35	43.80	61.69	17.89	
	0.317	37.88	0.40	38.28	59.80	21.52	
	0.377	30.34	0.43	30.77	58.34	27.57	
	4.721	36.23	0.73	36.96	56.00	19.04	
	9.011	37.89	0.98	38.87	60.00	21.13	
	0.190	37.84	0.31	38.15	54.02	15.87	AV
	0.252	31.26	0.35	31.61	51.69	20.08	
	0.317	25.94	0.40	26.34	49.80	23.46	
	0.377	18.67	0.43	19.10	48.34	29.24	
	4.721	24.68	0.73	25.41	46.00	20.59	
	9.011	25.73	0.98	26.71	50.00	23.29	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	49.47	0.38	49.85	64.02	14.17	QP
	0.252	42.59	0.42	43.01	61.69	18.68	
	0.317	37.19	0.45	37.64	59.80	22.16	
	0.377	32.62	0.47	33.09	58.34	25.25	
	4.549	37.37	0.78	38.15	56.00	17.85	
	8.412	38.01	0.98	38.99	60.00	21.01	
	0.190	37.10	0.38	37.48	54.02	16.54	AV
	0.252	30.20	0.42	30.62	51.69	21.07	
	0.317	25.00	0.45	25.45	49.80	24.35	
	0.377	20.13	0.47	20.60	48.34	27.74	
	4.549	25.13	0.78	25.91	46.00	20.09	
	8.412	25.60	0.98	26.58	50.00	23.42	
Neutral	0.190	49.72	0.31	50.03	64.02	13.99	QP
	0.264	42.93	0.36	43.29	61.29	18.00	
	0.317	37.14	0.40	37.54	59.80	22.26	
	0.377	30.80	0.43	31.23	58.34	27.11	
	4.549	35.32	0.72	36.04	56.00	19.96	
	8.501	37.28	0.95	38.23	60.00	21.77	
	0.190	37.30	0.31	37.61	54.02	16.41	AV
	0.264	30.40	0.36	30.76	51.29	20.53	
	0.317	24.67	0.40	25.07	49.80	24.73	
	0.377	17.95	0.43	18.38	48.34	29.96	
	4.549	23.40	0.72	24.12	46.00	21.88	
	8.501	25.40	0.95	26.35	50.00	23.65	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	50.20	0.38	50.58	64.02	13.44	QP
	0.253	43.24	0.42	43.66	61.64	17.98	
	0.317	37.59	0.45	38.04	59.80	21.76	
	0.398	30.64	0.48	31.12	57.90	26.78	
	4.721	35.47	0.79	36.26	56.00	19.74	
	8.729	37.38	0.99	38.37	60.00	21.63	
	0.190	37.60	0.38	37.98	54.02	16.04	AV
	0.253	31.60	0.42	32.02	51.64	19.62	
	0.317	25.40	0.45	25.85	49.80	23.95	
	0.398	18.75	0.48	19.23	47.90	28.67	
	4.721	23.60	0.79	24.39	46.00	21.61	
	8.729	25.41	0.99	26.40	50.00	23.60	
Neutral	0.190	50.21	0.31	50.52	64.02	13.50	QP
	0.264	43.35	0.36	43.71	61.29	17.58	
	0.317	37.62	0.40	38.02	59.80	21.78	
	0.377	30.49	0.43	30.92	58.34	27.42	
	4.772	36.39	0.73	37.12	56.00	18.88	
	8.822	37.59	0.97	38.56	60.00	21.44	
	0.190	38.40	0.31	38.71	54.02	15.31	AV
	0.264	31.40	0.36	31.76	51.29	19.53	
	0.317	25.43	0.40	25.83	49.80	23.97	
	0.377	18.60	0.43	19.03	48.34	29.31	
	4.772	24.10	0.73	24.83	46.00	21.17	
	8.822	25.60	0.97	26.57	50.00	23.43	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 48%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 22, 2011

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	0.190	49.60	0.38	49.98	64.02	14.04	QP
	0.252	42.65	0.42	43.07	61.69	18.62	
	0.317	37.14	0.45	37.59	59.80	22.21	
	0.377	32.73	0.47	33.20	58.34	25.14	
	4.158	35.71	0.76	36.47	56.00	19.53	
	8.501	37.77	0.99	38.76	60.00	21.24	
	0.190	37.40	0.38	37.78	54.02	16.24	AV
	0.252	30.40	0.42	30.82	51.69	20.87	
	0.317	24.90	0.45	25.35	49.80	24.45	
	0.377	20.16	0.47	20.63	48.34	27.71	
	4.158	23.40	0.76	24.16	46.00	21.84	
	8.501	25.46	0.99	26.45	50.00	23.55	
Neutral	0.190	50.10	0.31	50.41	64.02	13.61	QP
	0.252	43.08	0.35	43.43	61.69	18.26	
	0.317	37.41	0.40	37.81	59.80	21.99	
	0.377	31.11	0.43	31.54	58.34	26.80	
	4.772	35.47	0.73	36.20	56.00	19.80	
	8.501	37.87	0.95	38.82	60.00	21.18	
	0.190	38.60	0.31	38.91	54.02	15.11	AV
	0.252	30.94	0.35	31.29	51.69	20.40	
	0.317	25.60	0.40	26.00	49.80	23.80	
	0.377	19.40	0.43	19.83	48.34	28.51	
	4.772	23.60	0.73	24.33	46.00	21.67	
	8.501	25.60	0.95	26.55	50.00	23.45	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

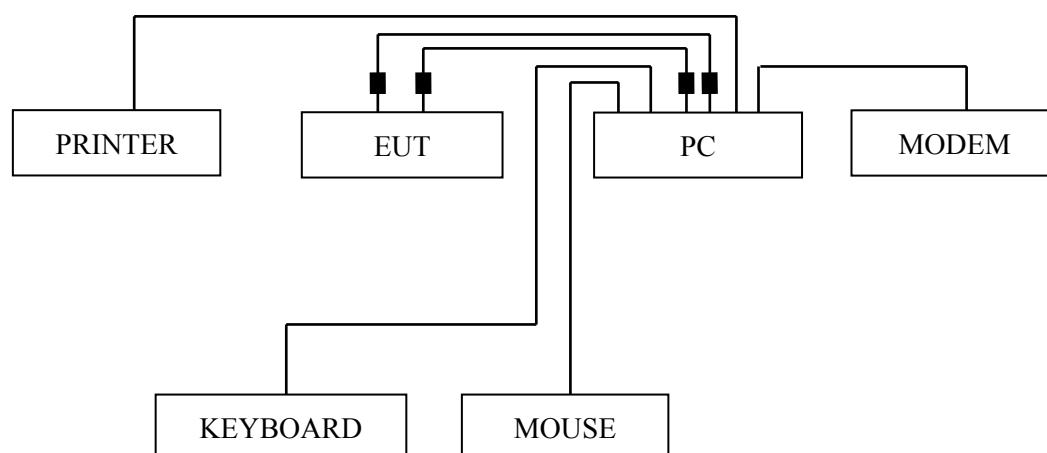
4.1 Test Equipment

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, 2010	Dec 01, 2011
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2010	May 19, 2011
6.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2010	Mar 18, 2011
7.	Software	Audix	E3	SET00200 9912M295-2	--	--

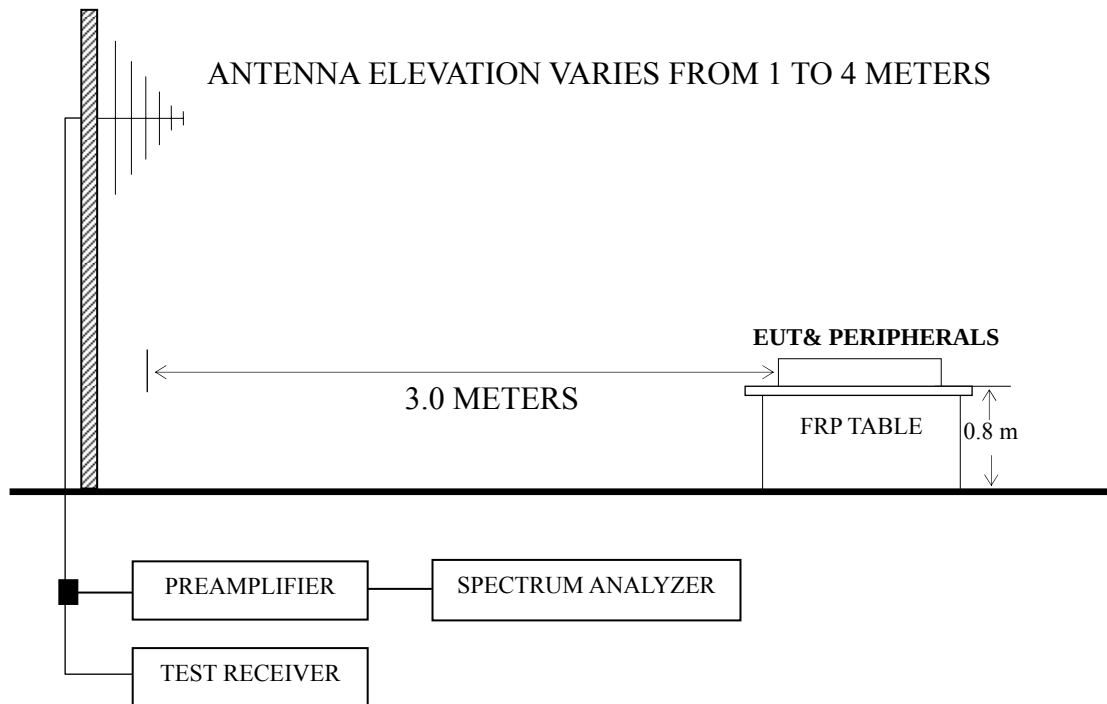
4.2 Block Diagram of Test Setup

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 – All readings are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.

NOTE 5 – The emission levels that are 20dB below the official limit are not reported.

NOTE 6 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 7 – The worst case is for DVI 1680*1050@60Hz test mode. The worst emission at horizontal polarization was detected at 800.180 MHz with corrected signal level of 36.69 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 70°. The worst emission at vertical polarization was detected at 47.460 MHz with corrected signal level of 36.71 dB (μV/m) (limit is 40.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 140°.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	145.430	16.30	11.66	1.23	29.19	43.50	14.31
	220.120	18.38	11.66	1.51	31.55	46.00	14.45
	344.280	11.78	15.16	1.90	28.84	46.00	17.16
	501.420	6.73	17.93	2.26	26.92	46.00	19.08
	871.960	7.69	21.42	2.98	32.09	46.00	13.91
	920.460	6.83	21.84	3.22	31.89	46.00	14.11
Vertical	47.460	23.78	10.09	0.77	34.64	40.00	5.36
	138.640	13.13	12.17	1.21	26.51	43.50	16.99
	204.600	16.96	10.89	1.46	29.31	43.50	14.19
	344.280	10.43	15.16	1.90	27.49	46.00	18.51
	515.970	7.22	18.09	2.29	27.60	46.00	18.40
	872.930	11.11	21.46	2.98	35.55	46.00	10.45

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	124.090	11.64	12.81	1.15	--	25.60	43.50	17.90	QP
	140.580	15.83	12.05	1.21	--	29.09	43.50	14.41	
	220.120	20.77	11.66	1.51	--	33.94	46.00	12.06	
	282.200	14.08	13.59	1.72	--	29.39	46.00	16.61	
	446.130	7.24	17.17	2.16	--	26.57	46.00	19.43	
	870.990	12.02	21.42	2.98	--	36.42	46.00	9.58	
	1041.000	50.32	22.69	4.49	37.33	40.17	74.00	33.83	PK
	1201.000	49.87	23.74	4.51	37.00	41.12	74.00	32.88	
	1334.000	49.86	24.78	4.53	36.71	42.46	74.00	31.54	
	1467.000	49.89	25.60	4.55	36.36	43.68	74.00	30.32	
	1600.000	51.16	26.40	4.56	36.10	46.02	74.00	27.98	
	1716.000	49.00	26.71	4.57	35.92	44.36	74.00	29.64	
	1041.000	38.32	22.69	4.49	37.33	28.17	54.00	25.83	AV
	1201.000	33.87	23.74	4.51	37.00	25.12	54.00	28.88	
	1334.000	37.86	24.78	4.53	36.71	30.46	54.00	23.54	
	1467.000	37.89	25.60	4.55	36.36	31.68	54.00	22.32	
	1600.000	41.16	26.40	4.56	36.10	36.02	54.00	17.98	
	1716.000	39.00	26.71	4.57	35.92	34.36	54.00	19.64	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	33.880	17.61	17.44	0.67	--	35.72	40.00	4.28	QP
	47.460	24.90	10.09	0.77	--	35.76	40.00	4.24	
	149.310	24.08	11.35	1.24	--	36.67	43.50	6.83	
	372.410	17.77	15.92	1.99	--	35.68	46.00	10.32	
	457.770	12.81	17.35	2.18	--	32.34	46.00	13.66	
	871.960	15.34	21.42	2.98	--	39.74	46.00	6.26	
	1125.000	52.35	23.27	4.50	37.16	42.96	74.00	31.04	PK
	1233.000	50.07	23.98	4.52	36.94	41.63	74.00	32.37	
	1286.000	50.80	24.40	4.53	36.82	42.91	74.00	31.09	
	1396.000	49.57	25.16	4.54	36.55	42.72	74.00	31.28	
	1600.000	53.50	26.40	4.56	36.10	48.36	74.00	25.64	
	1794.000	49.57	26.88	4.58	35.82	45.21	74.00	28.79	
	1125.000	40.35	23.27	4.50	37.16	30.96	54.00	23.04	AV
	1233.000	40.07	23.98	4.52	36.94	31.63	54.00	22.37	
	1286.000	38.80	24.40	4.53	36.82	30.91	54.00	23.09	
	1396.000	38.57	25.16	4.54	36.55	31.72	54.00	22.28	
	1600.000	45.50	26.40	4.56	36.10	40.36	54.00	13.64	
	1794.000	41.57	26.88	4.58	35.82	37.21	54.00	16.79	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	127.000	13.05	12.66	1.16	--	26.87	43.50	16.63	QP
	140.580	13.72	12.05	1.21	--	26.98	43.50	16.52	
	220.120	18.41	11.66	1.51	--	31.58	46.00	14.42	
	344.280	11.13	15.16	1.90	--	28.19	46.00	17.81	
	501.420	6.43	17.93	2.26	--	26.62	46.00	19.38	
	899.120	4.97	21.70	3.02	--	29.69	46.00	16.31	
	1041.000	44.32	22.69	4.49	37.33	34.17	74.00	39.83	PK
	1201.000	43.87	23.74	4.51	37.00	35.12	74.00	38.88	
	1393.000	43.61	25.16	4.54	36.55	36.76	74.00	37.24	
	1500.000	42.44	25.80	4.55	36.30	36.49	74.00	37.51	
	1716.000	43.00	26.71	4.57	35.92	38.36	74.00	35.64	
	1797.000	42.70	26.90	4.58	35.81	38.37	74.00	35.63	
	1041.000	33.32	22.69	4.49	37.33	23.17	54.00	30.83	AV
	1201.000	28.87	23.74	4.51	37.00	20.12	54.00	33.88	
	1393.000	26.61	25.16	4.54	36.55	19.76	54.00	34.24	
	1500.000	29.44	25.80	4.55	36.30	23.49	54.00	30.51	
	1716.000	34.00	26.71	4.57	35.92	29.36	54.00	24.64	
	1797.000	30.70	26.90	4.58	35.81	26.37	54.00	27.63	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	47.460	25.46	10.09	0.77	--	36.32	40.00	3.68	QP
	140.580	25.96	12.05	1.21	--	39.22	43.50	4.28	
	257.950	16.96	13.06	1.62	--	31.64	46.00	14.36	
	372.410	16.93	15.92	1.99	--	34.84	46.00	11.16	
	457.770	13.39	17.35	2.18	--	32.92	46.00	13.08	
	871.960	17.29	21.42	2.98	--	41.69	46.00	4.31	
	1044.000	51.62	22.69	4.49	37.32	41.48	74.00	32.52	PK
	1200.000	51.51	23.70	4.51	37.00	42.72	74.00	31.28	
	1333.000	49.06	24.74	4.53	36.71	41.62	74.00	32.38	
	1600.000	52.50	26.40	4.56	36.10	47.36	74.00	26.64	
	1799.000	49.35	26.90	4.58	35.81	45.02	74.00	28.98	
	1921.000	46.54	27.60	4.72	35.68	43.18	74.00	30.82	
	1044.000	40.62	22.69	4.49	37.32	30.48	54.00	23.52	AV
	1200.000	35.51	23.70	4.51	37.00	26.72	54.00	27.28	
	1333.000	30.06	24.74	4.53	36.71	22.62	54.00	31.38	
	1600.000	33.50	26.40	4.56	36.10	28.36	54.00	25.64	
	1799.000	39.35	26.90	4.58	35.81	35.02	54.00	18.98	
	1921.000	36.54	27.60	4.72	35.68	33.18	54.00	20.82	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

Test Mode : D-Sub 1920*1080@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	137.670	16.25	12.19	1.20	--	29.64	43.50	13.86	QP
	220.120	20.79	11.66	1.51	--	33.96	46.00	12.04	
	281.230	14.95	13.57	1.70	--	30.22	46.00	15.78	
	344.280	13.42	15.16	1.90	--	30.48	46.00	15.52	
	429.640	12.76	16.92	2.13	--	31.81	46.00	14.19	
	871.960	9.74	21.42	2.98	--	34.14	46.00	11.86	
	1041.000	55.32	22.69	4.49	37.33	45.17	74.00	28.83	PK
	1201.000	54.87	23.74	4.51	37.00	46.12	74.00	27.88	
	1334.000	54.86	24.78	4.53	36.71	47.46	74.00	26.54	
	1467.000	54.89	25.60	4.55	36.36	48.68	74.00	25.32	
	1797.000	53.70	26.90	4.58	35.81	49.37	74.00	24.63	
	1880.000	51.63	27.35	4.67	35.72	47.93	74.00	26.07	
	1041.000	42.32	22.69	4.49	37.33	32.17	54.00	21.83	AV
	1201.000	41.87	23.74	4.51	37.00	33.12	54.00	20.88	
	1334.000	33.86	24.78	4.53	36.71	26.46	54.00	27.54	
	1467.000	43.89	25.60	4.55	36.36	37.68	54.00	16.32	
	1797.000	43.70	26.90	4.58	35.81	39.37	54.00	14.63	
	1880.000	40.63	27.35	4.67	35.72	36.93	54.00	17.07	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	47.460	24.28	10.09	0.77	--	35.14	40.00	4.86	QP
	147.370	22.95	11.51	1.23	--	35.69	43.50	7.81	
	205.570	20.43	10.93	1.47	--	32.83	43.50	10.67	
	344.280	17.31	15.16	1.90	--	34.37	46.00	11.63	
	515.970	12.16	18.09	2.29	--	32.54	46.00	13.46	
	872.930	14.67	21.46	2.98	--	39.11	46.00	6.89	
	1031.000	49.82	22.60	4.49	37.34	39.57	74.00	34.43	PK
	1125.000	49.35	23.27	4.50	37.16	39.96	74.00	34.04	
	1200.000	49.51	23.70	4.51	37.00	40.72	74.00	33.28	
	1333.000	47.06	24.74	4.53	36.71	39.62	74.00	34.38	
	1498.000	51.44	25.80	4.55	36.30	45.49	74.00	28.51	
	1600.000	50.50	26.40	4.56	36.10	45.36	74.00	28.64	
	1031.000	34.82	22.60	4.49	37.34	24.57	54.00	29.43	AV
	1125.000	36.35	23.27	4.50	37.16	26.96	54.00	27.04	
	1200.000	36.51	23.70	4.51	37.00	27.72	54.00	26.28	
	1333.000	35.06	24.74	4.53	36.71	27.62	54.00	26.38	
	1498.000	39.44	25.80	4.55	36.30	33.49	54.00	20.51	
	1600.000	37.50	26.40	4.56	36.10	32.36	54.00	21.64	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	153.190	20.37	11.04	1.25	32.66	43.50	10.84
	221.090	19.87	11.71	1.52	33.10	46.00	12.90
	372.410	17.80	15.92	1.99	35.71	46.00	10.29
	429.640	15.99	16.92	2.13	35.04	46.00	10.96
	747.800	14.12	20.20	2.80	37.12	46.00	8.88
	870.990	9.82	21.42	2.98	34.22	46.00	11.78
Vertical	33.880	14.65	17.44	0.67	32.76	40.00	7.24
	43.580	20.44	11.88	0.74	33.06	40.00	6.94
	139.610	23.02	12.12	1.21	36.35	43.50	7.15
	205.570	18.54	10.93	1.47	30.94	43.50	12.56
	344.280	15.32	15.16	1.90	32.38	46.00	13.62
	457.770	12.96	17.35	2.18	32.49	46.00	13.51

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

Test Mode : DVI 1280*1024@75Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	128.940	13.09	12.58	1.17	--	26.84	43.50	16.66	QP
	147.370	17.08	11.51	1.23	--	29.82	43.50	13.68	
	221.090	18.30	11.71	1.52	--	31.53	46.00	14.47	
	344.280	11.80	15.16	1.90	--	28.86	46.00	17.14	
	501.420	8.44	17.93	2.26	--	28.63	46.00	17.37	
	902.030	5.57	21.70	3.04	--	30.31	46.00	15.69	
	1075.000	53.81	22.92	4.50	37.26	43.97	74.00	30.03	PK
	1250.000	51.57	24.10	4.52	36.90	43.29	74.00	30.71	
	1365.000	52.94	24.98	4.54	36.62	45.84	74.00	28.16	
	1595.000	49.77	26.36	4.56	36.11	44.58	74.00	29.42	
	1720.000	47.46	26.71	4.57	35.92	42.82	74.00	31.18	
	1850.000	46.84	27.17	4.64	35.75	42.90	74.00	31.10	
	1075.000	47.81	22.92	4.50	37.26	37.97	54.00	16.03	AV
	1250.000	36.57	24.10	4.52	36.90	28.29	54.00	25.71	
	1365.000	36.94	24.98	4.54	36.62	29.84	54.00	24.16	
	1595.000	37.77	26.36	4.56	36.11	32.58	54.00	21.42	
	1720.000	37.46	26.71	4.57	35.92	32.82	54.00	21.18	
	1850.000	36.84	27.17	4.64	35.75	32.90	54.00	21.10	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

Test Mode : DVI 1280*1024@75Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	47.460	25.29	10.09	0.77	--	36.15	40.00	3.85	QP
	140.580	26.22	12.05	1.21	--	39.48	43.50	4.02	
	344.280	17.73	15.16	1.90	--	34.79	46.00	11.21	
	372.410	16.49	15.92	1.99	--	34.40	46.00	11.60	
	457.770	13.96	17.35	2.18	--	33.49	46.00	12.51	
	872.930	16.98	21.46	2.98	--	41.42	46.00	4.58	
	1080.000	49.22	22.95	4.50	37.25	39.42	74.00	34.58	PK
	1185.000	49.35	23.62	4.51	37.04	40.44	74.00	33.56	
	1315.000	52.22	24.62	4.53	36.75	44.62	74.00	29.38	
	1520.000	43.62	25.96	4.55	36.24	37.89	74.00	36.11	
	1600.000	48.54	26.40	4.56	36.10	43.40	74.00	30.60	
	1760.000	51.78	26.81	4.58	35.86	47.31	74.00	26.69	
	1080.000	45.22	22.95	4.50	37.25	35.42	54.00	18.58	AV
	1185.000	37.35	23.62	4.51	37.04	28.44	54.00	25.56	
	1315.000	39.22	24.62	4.53	36.75	31.62	54.00	22.38	
	1520.000	32.62	25.96	4.55	36.24	26.89	54.00	27.11	
	1600.000	38.54	26.40	4.56	36.10	33.40	54.00	20.60	
	1760.000	39.78	26.81	4.58	35.86	35.31	54.00	18.69	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	140.580	16.48	12.05	1.21	--	29.74	43.50	13.76	QP
	162.890	16.42	10.42	1.30	--	28.14	43.50	15.36	
	315.180	11.75	14.32	1.81	--	27.88	46.00	18.12	
	515.970	6.77	18.09	2.29	--	27.15	46.00	18.85	
	800.180	13.10	20.70	2.89	--	36.69	46.00	9.31	
	920.460	7.50	21.84	3.22	--	32.56	46.00	13.44	
	1075.000	47.81	22.92	4.50	37.26	37.97	74.00	36.03	PK
	1250.000	44.57	24.10	4.52	36.90	36.29	74.00	37.71	
	1365.000	43.94	24.98	4.54	36.62	36.84	74.00	37.16	
	1520.000	35.65	25.96	4.55	36.24	29.92	74.00	44.08	
	1665.000	38.06	26.56	4.57	36.00	33.19	74.00	40.81	
	1760.000	39.87	26.81	4.58	35.86	35.40	74.00	38.60	
	1075.000	41.81	22.92	4.50	37.26	31.97	54.00	22.03	AV
	1250.000	32.57	24.10	4.52	36.90	24.29	54.00	29.71	
	1365.000	27.94	24.98	4.54	36.62	20.84	54.00	33.16	
	1520.000	21.65	25.96	4.55	36.24	15.92	54.00	38.08	
	1665.000	27.06	26.56	4.57	36.00	22.19	54.00	31.81	
	1760.000	29.87	26.81	4.58	35.86	25.40	54.00	28.60	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	33.880	18.40	17.44	0.67	--	36.51	40.00	3.49	QP
	47.460	25.85	10.09	0.77	--	36.71	40.00	3.29	
	139.610	26.30	12.12	1.21	--	39.63	43.50	3.87	
	344.280	17.13	15.16	1.90	--	34.19	46.00	11.81	
	372.410	16.45	15.92	1.99	--	34.36	46.00	11.64	
	851.590	13.52	21.24	2.97	--	37.73	46.00	8.27	
	1080.000	50.22	22.95	4.50	37.25	40.42	74.00	33.58	PK
	1185.000	49.35	23.62	4.51	37.04	40.44	74.00	33.56	
	1315.000	49.22	24.62	4.53	36.75	41.62	74.00	32.38	
	1500.000	45.93	25.80	4.55	36.30	39.98	74.00	34.02	
	1600.000	51.54	26.40	4.56	36.10	46.40	74.00	27.60	
	1760.000	52.78	26.81	4.58	35.86	48.31	74.00	25.69	
	1080.000	40.22	22.95	4.50	37.25	30.42	54.00	23.58	AV
	1185.000	35.35	23.62	4.51	37.04	26.44	54.00	27.56	
	1315.000	37.22	24.62	4.53	36.75	29.62	54.00	24.38	
	1500.000	36.93	25.80	4.55	36.30	30.98	54.00	23.02	
	1600.000	38.54	26.40	4.56	36.10	33.40	54.00	20.60	
	1760.000	44.78	26.81	4.58	35.86	40.31	54.00	13.69	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24, 2011

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	149.310	22.13	11.35	1.24	--	34.72	43.50	8.78	QP
	224.970	26.82	11.89	1.53	--	40.24	46.00	5.76	
	372.410	19.39	15.92	1.99	--	37.30	46.00	8.70	
	429.640	16.66	16.92	2.13	--	35.71	46.00	10.29	
	593.570	10.11	19.14	2.44	--	31.69	46.00	14.31	
	871.960	9.92	21.42	2.98	--	34.32	46.00	11.68	
	1075.000	50.81	22.92	4.50	37.26	40.97	74.00	33.03	PK
	1180.000	50.20	23.59	4.51	37.05	41.25	74.00	32.75	
	1365.000	50.94	24.98	4.54	36.62	43.84	74.00	30.16	
	1465.000	45.89	25.60	4.55	36.37	39.67	74.00	34.33	
	1665.000	45.06	26.56	4.57	36.00	40.19	74.00	33.81	
	1760.000	47.87	26.81	4.58	35.86	43.40	74.00	30.60	
	1075.000	45.81	22.92	4.50	37.26	35.97	54.00	18.03	AV
	1180.000	37.20	23.59	4.51	37.05	28.25	54.00	25.75	
	1365.000	37.94	24.98	4.54	36.62	30.84	54.00	23.16	
	1465.000	28.89	25.60	4.55	36.37	22.67	54.00	31.33	
	1665.000	37.06	26.56	4.57	36.00	32.19	54.00	21.81	
	1760.000	36.87	26.81	4.58	35.86	32.40	54.00	21.60	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2711TX Humidity : 60%RH

Serial No. : E20110216-02-02/02 Date of Test : Feb 24 2011

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	47.460	24.59	10.09	0.77	--	35.45	40.00	4.55	QP
	140.580	25.23	12.05	1.21	--	38.49	43.50	5.01	
	205.570	19.09	10.93	1.47	--	31.49	43.50	12.01	
	344.280	15.14	15.16	1.90	--	32.20	46.00	13.80	
	699.300	7.48	19.70	2.67	--	29.85	46.00	16.15	
	870.990	15.19	21.42	2.98	--	39.59	46.00	6.41	
	1080.000	53.22	22.95	4.50	37.25	43.42	74.00	30.58	PK
	1185.000	54.35	23.62	4.51	37.04	45.44	74.00	28.56	
	1315.000	50.22	24.62	4.53	36.75	42.62	74.00	31.38	
	1600.000	48.54	26.40	4.56	36.10	43.40	74.00	30.60	
	1760.000	46.78	26.81	4.58	35.86	42.31	74.00	31.69	
	1985.000	39.32	28.00	4.78	35.62	36.48	74.00	37.52	
	1080.000	47.22	22.95	4.50	37.25	37.42	54.00	16.58	AV
	1185.000	40.35	23.62	4.51	37.04	31.44	54.00	22.56	
	1315.000	33.22	24.62	4.53	36.75	25.62	54.00	28.38	
	1600.000	34.54	26.40	4.56	36.10	29.40	54.00	24.60	
	1760.000	32.78	26.81	4.58	35.86	28.31	54.00	25.69	
	1985.000	30.32	28.00	4.78	35.62	27.48	54.00	26.52	

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
EMI Conductive Tape	7250CP0005J	50*120	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix Figure 14
EMI Conductive Tape	7250CP0005J	40*60	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix Figure 14
Gasket	LG END 3940TKK043C	28*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix II Figure 15
Gasket	LG END 3940TKK043C	120*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix II Figure 15
Gasket	LG END 3940TKK043C	295*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix II Figure 15
Gasket	LG END 3940TKK043C	155*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Appendix II Figure 15

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)