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

LCD Monitor

Model No.: D2242PY

Serial No.: E1105354-01/01

FCC ID : BEJD2242PY

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F11070
Date of Test : May 10 – 14, 2011
Date of Report : May 26, 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. : D2242PY

(B) Serial No. : E1105354-01/01

(C) Power Supply : 120V/60Hz

Test Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2010 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: D2242PY; S/N: E1105354-01/01) which was tested in 3m anechoic chamber May 10 – 14, 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 : May 10 – 14, 2011 Date of Report : May 26, 2011

Producer : Yenny Yu.
YENNY YU / Assistant

Review : Dio Yang.
DIO YANG / Deputy Assistant Manager

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

Signatory : Byron Kwo
BYRON KWO / Manager

Authorized Signature EMC

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 2010 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2010 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.	: D2242PY
Serial No.	: E1105354-01/01
Real Power	: 33.60W
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 : LM215WF8 (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	: The D-Sub cable #2 and DVI cable #2 were selected to be used in the test.

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 / PC
(5) One AC In Port
: Connected with Power

2.2 Peripherals

2.2.1 PC

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))

2.2.2 Printer

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

2.2.3 Keyboard

Manufacturer	:	Microsoft
Model Number	:	RT2300
Serial Number	:	7668200662248
Data Cable	:	Shielded, Undetachable, 1.8m
Certificate	:	CE/EMC, FCC DoC, VCCI, MIC, C-Tick, BSMI

2.2.4 Mouse

Manufacturer	:	Microsoft
Model Number	:	RT2300
Serial Number	:	6965712071551
Data Cable	:	Shielded, Undetachable, 1.8m.
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

2.2.6 DVD

Manufacturer	:	PHILIPS
Model Number	:	DVP3986K/93
Serial Number	:	KX1A0902120108
HDMI Cable	:	Shielded, Detachable, 1.8m
Certificate	:	FCC DoC, CE/EMC, CCC

2.2.7 Earphone

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

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 = 3.38 dB

Radiated Emission Expanded Uncertainty (30-200MHz):

U = 4.58 dB (horizontal)

U = 4.70 dB (vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):

U = 4.84 dB (horizontal)

U = 4.70 dB (vertical)

3 CONDUCTED EMISSION TEST

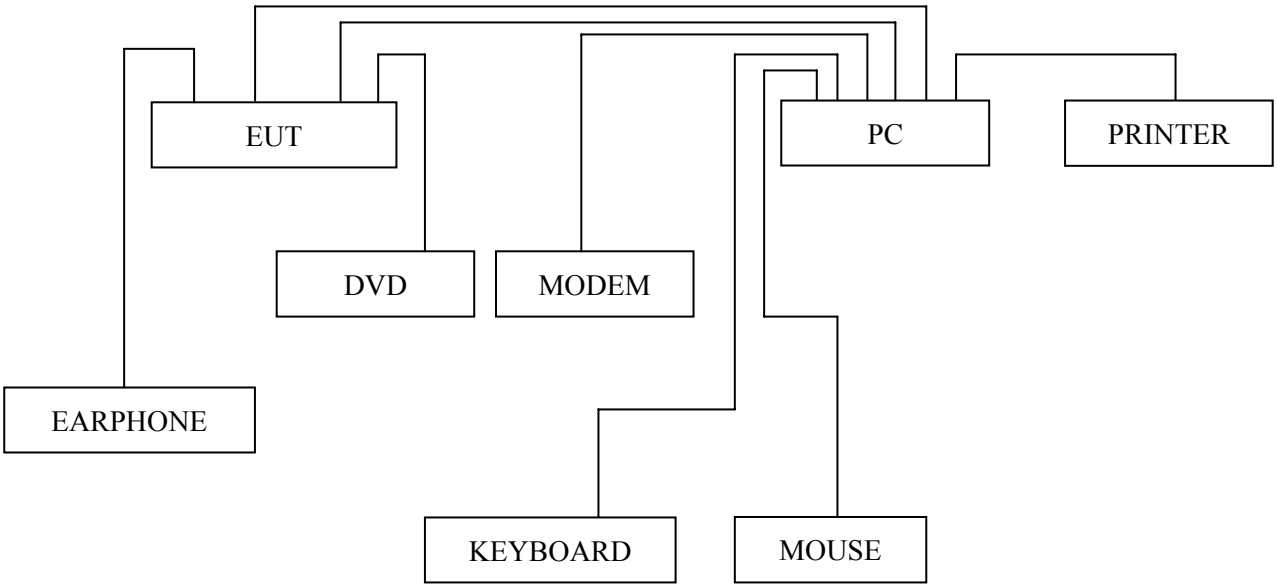
3.1 Test Equipment

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

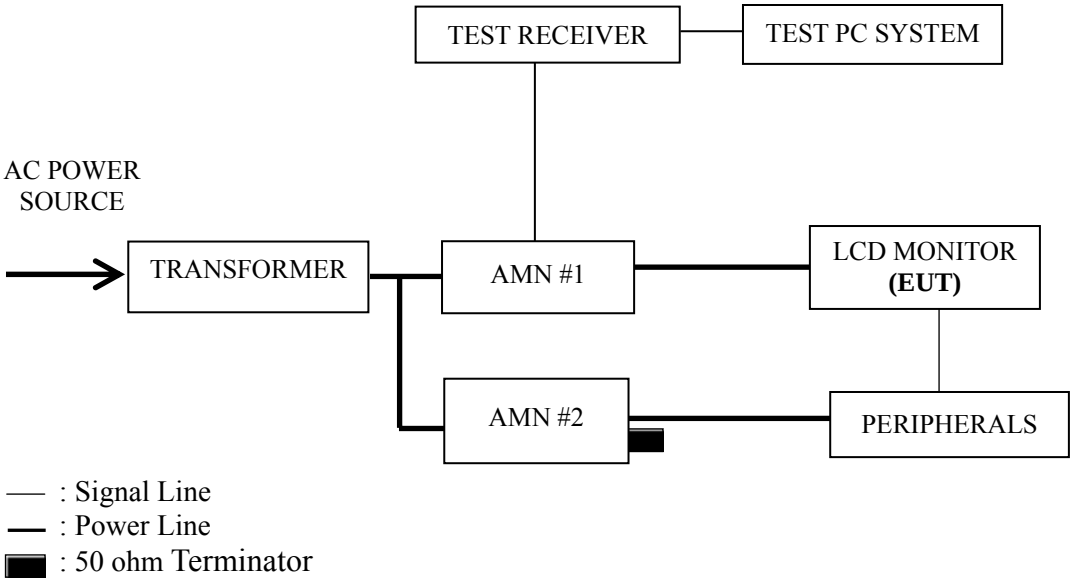
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	100841	Mar 22, 2011	Mar 22, 2012
2.	Artificial Mains Network (AMN #1)	R&S	ESH2-Z5	843890/011	Mar 22, 2011	Mar 22, 2012
3.	Artificial Mains Network (AMN #2)	R&S	ENV4200	100125	Mar 22, 2011	Mar 22, 2012
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Mar 18, 2011	Sep 18, 2011
5.	50Ω Terminator	Anritsu	BNC	001	Mar 22, 2011	Mar 22, 2012
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 (μV)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE 1 – The lower limit shall apply at the transition frequencies.
NOTE 2 – The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz

3.4 Test Configuration

The EUT (listed in Sec.2.1) and the peripherals (listed in Sec 2.2) were installed as shown on Sec.3.2 to meet FCC requirement and operating in a manner that tends to maximize its emission level in a normal application.

3.5 Operating Condition of EUT

3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.

3.5.2 Turn on the power of all equipments and the EUT.

3.5.3 Set the contrast & brightness of EUT to maximum.

3.5.4 PC system ran the self-test program "EMC Test" by windows XP and sent "H" characters to EUT through graphic card (we use white letters on a black background to represent all colors), the EUT's screen displayed and filled with "H" pattern by its resolution (Via D-Sub/DVI/HDMI Input).

3.5.5 In HDMI mode, 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 1280*1024@60Hz
D-Sub 1680*1050@60Hz
D-Sub 1920*1080@60Hz
DVI 640*480@60Hz
DVI 1280*1024@60Hz
DVI 1680*1050@60Hz
DVI 1920*1080@60Hz
HDMI 720p
HDMI 1080p
HDMI PC Mode (see 4.7 NOTE2)

Note: HDMI PC Mode was selected to perform the additional Radiated Emission Test.

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@60Hz	P13
D-Sub 1680*1050@60Hz	**P14**
D-Sub 1920*1080@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1280*1024@60Hz	P17
DVI 1680*1050@60Hz	P18
DVI 1920*1080@60Hz	P19
HDMI 720p	P20
HDMI 1080p	P21

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 1680*1050@60Hz test mode. The worst emission is detected at 0.199 MHz (Quasi-Peak Value) with corrected signal level of 45.26 dB (μV) (limit is 63.67 dB (μV)), when the Line of the EUT is connected to AMN.

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 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	**0.200**	**44.93**	**0.23**	**45.16**	**63.62**	**18.46**	QP
	0.273	37.48	0.23	37.71	61.03	23.32	
	0.339	35.35	0.27	35.62	59.22	23.60	
	3.881	27.30	0.53	27.83	56.00	28.17	
	8.062	29.92	0.69	30.61	60.00	29.39	
	24.529	33.22	1.19	34.41	60.00	25.59	
	0.200	34.60	0.23	34.83	53.62	18.79	AV
	0.273	26.89	0.23	27.12	51.03	23.91	
	0.339	24.97	0.27	25.24	49.22	23.98	
	3.881	16.80	0.53	17.33	46.00	28.67	
	8.062	19.40	0.69	20.09	50.00	29.91	
	24.529	22.81	1.19	24.00	50.00	26.00	
Neutral	0.199	44.07	0.19	44.26	63.67	19.41	QP
	0.264	37.00	0.19	37.19	61.29	24.10	
	0.343	32.65	0.21	32.86	59.13	26.27	
	2.931	27.19	0.60	27.79	56.00	28.21	
	8.062	31.55	1.00	32.55	60.00	27.45	
	23.636	32.34	1.31	33.65	60.00	26.35	
	0.199	34.86	0.19	35.05	53.67	18.62	AV
	0.264	25.87	0.19	26.06	51.29	25.23	
	0.343	22.10	0.21	22.31	49.13	26.82	
	2.931	16.80	0.60	17.40	46.00	28.60	
	8.062	21.30	1.00	22.30	50.00	27.70	
	23.636	22.11	1.31	23.42	50.00	26.58	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature	:	22℃
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 2011
Test Mode	:	D-Sub 1280*1024@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	**0.200**	**44.81**	**0.23**	**45.04**	**63.62**	**18.58**	QP
	0.274	36.31	0.23	36.54	60.98	24.44	
	0.329	33.86	0.27	34.13	59.49	25.36	
	3.881	27.44	0.53	27.97	56.00	28.03	
	7.977	29.32	0.69	30.01	60.00	29.99	
	23.387	32.92	1.16	34.08	60.00	25.92	
	0.200	33.80	0.23	34.03	53.62	19.59	AV
	0.274	25.86	0.23	26.09	50.98	24.89	
	0.329	23.40	0.27	23.67	49.49	25.82	
	3.881	16.80	0.53	17.33	46.00	28.67	
	7.977	18.70	0.69	19.39	50.00	30.61	
	23.387	22.40	1.16	23.56	50.00	26.44	
Neutral	0.199	44.65	0.19	44.84	63.67	18.83	QP
	0.283	37.13	0.19	37.32	60.72	23.40	
	0.346	31.18	0.21	31.39	59.05	27.66	
	2.931	26.94	0.60	27.54	56.00	28.46	
	7.977	31.72	1.00	32.72	60.00	27.28	
	25.055	32.95	1.34	34.29	60.00	25.71	
	0.199	33.87	0.19	34.06	53.67	19.61	AV
	0.283	26.40	0.19	26.59	50.72	24.13	
	0.346	20.60	0.21	20.81	49.05	28.24	
	2.931	16.20	0.60	16.80	46.00	29.20	
	7.977	21.20	1.00	22.20	50.00	27.80	
	25.055	22.84	1.34	24.18	50.00	25.82	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 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	**0.199**	**45.07**	**0.19**	**45.26**	**63.67**	**18.41**	QP
	0.264	37.01	0.19	37.20	61.29	24.09	
	0.346	31.15	0.21	31.36	59.05	27.69	
	3.074	26.08	0.61	26.69	56.00	29.31	
	7.977	31.71	1.00	32.71	60.00	27.29	
	24.529	33.72	1.33	35.05	60.00	24.95	
	0.199	34.60	0.19	34.79	53.67	18.88	AV
	0.264	26.20	0.19	26.39	51.29	24.90	
	0.346	20.80	0.21	21.01	49.05	28.04	
	3.074	15.60	0.61	16.21	46.00	29.79	
	7.977	21.20	1.00	22.20	50.00	27.80	
	24.529	23.00	1.33	24.33	50.00	25.67	
Neutral	0.199	44.58	0.23	44.81	63.67	18.86	QP
	0.274	35.80	0.23	36.03	60.98	24.95	
	0.346	33.54	0.28	33.82	59.05	25.23	
	4.070	27.74	0.54	28.28	56.00	27.72	
	7.977	29.93	0.69	30.62	60.00	29.38	
	24.529	32.83	1.19	34.02	60.00	25.98	
	0.199	34.00	0.23	34.23	53.67	19.44	AV
	0.274	25.00	0.23	25.23	50.98	25.75	
	0.346	23.10	0.28	23.38	49.05	25.67	
	4.070	17.10	0.54	17.64	46.00	28.36	
	7.977	19.20	0.69	19.89	50.00	30.11	
	24.529	22.31	1.19	23.50	50.00	26.50	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 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	**0.199**	**44.58**	**0.23**	**44.81**	**63.67**	**18.86**	QP
	0.280	36.90	0.23	37.13	60.81	23.68	
	0.336	34.74	0.27	35.01	59.31	24.30	
	4.070	28.15	0.54	28.69	56.00	27.31	
	7.977	29.31	0.69	30.00	60.00	30.00	
	24.400	32.53	1.19	33.72	60.00	26.28	
	0.199	34.00	0.23	34.23	53.67	19.44	AV
	0.280	26.00	0.23	26.23	50.81	24.58	
	0.336	24.10	0.27	24.37	49.31	24.94	
	4.070	17.60	0.54	18.14	46.00	27.86	
	7.977	18.76	0.69	19.45	50.00	30.55	
	24.400	22.11	1.19	23.30	50.00	26.70	
Neutral	0.199	44.38	0.19	44.57	63.67	19.10	QP
	0.264	36.76	0.19	36.95	61.29	24.34	
	0.346	32.51	0.21	32.72	59.05	26.33	
	2.869	27.62	0.60	28.22	56.00	27.78	
	7.935	32.02	1.00	33.02	60.00	26.98	
	24.142	33.10	1.33	34.43	60.00	25.57	
	0.199	33.86	0.19	34.05	53.67	19.62	AV
	0.264	26.40	0.19	26.59	51.29	24.70	
	0.346	22.05	0.21	22.26	49.05	26.79	
	2.869	17.39	0.60	17.99	46.00	28.01	
	7.935	21.70	1.00	22.70	50.00	27.30	
	24.142	22.80	1.33	24.13	50.00	25.87	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 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	0.199	43.97	0.23	44.20	63.67	19.47	QP
	0.259	35.84	0.23	36.07	61.47	25.40	
	0.343	33.54	0.27	33.81	59.13	25.32	
	3.642	27.11	0.52	27.63	56.00	28.37	
	7.935	29.47	0.69	30.16	60.00	29.84	
	24.400	33.16	1.19	34.35	60.00	25.65	
	0.199	33.28	0.23	33.51	53.67	20.16	AV
	0.259	25.46	0.23	25.69	51.47	25.78	
	0.343	23.01	0.27	23.28	49.13	25.85	
	3.642	16.80	0.52	17.32	46.00	28.68	
	7.935	18.94	0.69	19.63	50.00	30.37	
	24.400	22.81	1.19	24.00	50.00	26.00	
Neutral	**0.199**	**44.02**	**0.19**	**44.21**	**63.67**	**19.46**	QP
	0.267	36.61	0.19	36.80	61.20	24.40	
	0.339	32.28	0.21	32.49	59.22	26.73	
	2.554	25.49	0.57	26.06	56.00	29.94	
	7.935	32.77	1.00	33.77	60.00	26.23	
	24.400	33.64	1.33	34.97	60.00	25.03	
	0.199	33.87	0.19	34.06	53.67	19.61	AV
	0.267	26.13	0.19	26.32	51.20	24.88	
	0.339	21.86	0.21	22.07	49.22	27.15	
	2.554	15.10	0.57	15.67	46.00	30.33	
	7.935	22.16	1.00	23.16	50.00	26.84	
	24.400	23.23	1.33	24.56	50.00	25.44	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 2011
Test Mode	:	DVI 1280*1024@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	**0.199**	**43.89**	**0.23**	**44.12**	**63.67**	**19.55**	QP
	0.262	35.28	0.23	35.51	61.38	25.87	
	0.332	33.99	0.27	34.26	59.40	25.14	
	4.070	27.99	0.54	28.53	56.00	27.47	
	8.062	29.76	0.69	30.45	60.00	29.55	
	24.529	32.73	1.19	33.92	60.00	26.08	
	0.199	33.20	0.23	33.43	53.67	20.24	AV
	0.262	24.80	0.23	25.03	51.38	26.35	
	0.332	23.24	0.27	23.51	49.40	25.89	
	4.070	17.31	0.54	17.85	46.00	28.15	
	8.062	19.21	0.69	19.90	50.00	30.10	
	24.529	22.27	1.19	23.46	50.00	26.54	
Neutral	0.199	43.72	0.19	43.91	63.67	19.76	QP
	0.283	36.06	0.19	36.25	60.72	24.47	
	0.444	28.67	0.24	28.91	56.98	28.07	
	3.140	25.62	0.63	26.25	56.00	29.75	
	7.935	32.02	1.00	33.02	60.00	26.98	
	24.790	33.24	1.34	34.58	60.00	25.42	
	0.199	33.20	0.19	33.39	53.67	20.28	AV
	0.283	25.70	0.19	25.89	50.72	24.83	
	0.444	18.24	0.24	18.48	46.98	28.50	
	3.140	15.10	0.63	15.73	46.00	30.27	
	7.935	21.46	1.00	22.46	50.00	27.54	
	24.790	22.79	1.34	24.13	50.00	25.87	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	D2242PY	Humidity :	48%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 14, 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	0.202	43.82	0.23	44.05	63.54	19.49	QP
	0.264	36.38	0.23	36.61	61.29	24.68	
	0.329	33.57	0.27	33.84	59.49	25.65	
	3.759	27.48	0.53	28.01	56.00	27.99	
	8.062	29.51	0.69	30.20	60.00	29.80	
	24.400	33.24	1.19	34.43	60.00	25.57	
	0.202	33.20	0.23	33.43	53.54	20.11	AV
	0.264	25.90	0.23	26.13	51.29	25.16	
	0.329	23.00	0.27	23.27	49.49	26.22	
	3.759	17.00	0.53	17.53	46.00	28.47	
	8.062	19.00	0.69	19.69	50.00	30.31	
	24.400	22.81	1.19	24.00	50.00	26.00	
Neutral	**0.200**	**44.86**	**0.19**	**45.05**	**63.62**	**18.57**	QP
	0.274	37.35	0.19	37.54	60.98	23.44	
	0.444	27.84	0.24	28.08	56.98	28.90	
	3.025	26.62	0.61	27.23	56.00	28.77	
	7.852	32.57	1.00	33.57	60.00	26.43	
	24.529	33.49	1.33	34.82	60.00	25.18	
	0.200	34.00	0.19	34.19	53.62	19.43	AV
	0.274	26.90	0.19	27.09	50.98	23.89	
	0.444	17.00	0.24	17.24	46.98	29.74	
	3.025	16.20	0.61	16.81	46.00	29.19	
	7.852	21.99	1.00	22.99	50.00	27.01	
	24.529	23.10	1.33	24.43	50.00	25.57	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	IPS235VX	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 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	0.200	44.32	0.23	44.55	63.62	19.07	QP
	0.280	37.12	0.23	37.35	60.81	23.46	
	0.329	34.51	0.27	34.78	59.49	24.71	
	3.759	27.22	0.53	27.75	56.00	28.25	
	8.062	30.47	0.69	31.16	60.00	28.84	
	24.529	32.51	1.19	33.70	60.00	26.30	
	0.200	33.94	0.23	34.17	53.62	19.45	AV
	0.280	26.40	0.23	26.63	50.81	24.18	
	0.329	24.00	0.27	24.27	49.49	25.22	
	3.759	16.80	0.53	17.33	46.00	28.67	
	8.062	19.70	0.69	20.39	50.00	29.61	
	24.529	22.11	1.19	23.30	50.00	26.70	
Neutral	**0.208**	**44.14**	**0.19**	**44.33**	**63.27**	**18.94**	QP
	0.264	36.85	0.19	37.04	61.29	24.25	
	0.339	32.46	0.21	32.67	59.22	26.55	
	3.140	25.51	0.63	26.14	56.00	29.86	
	7.852	31.27	1.00	32.27	60.00	27.73	
	24.400	32.87	1.33	34.20	60.00	25.80	
	0.208	33.70	0.19	33.89	53.27	19.38	AV
	0.264	26.40	0.19	26.59	51.29	24.70	
	0.339	22.00	0.21	22.21	49.22	27.01	
	3.140	15.00	0.63	15.63	46.00	30.37	
	7.852	20.79	1.00	21.79	50.00	28.21	
	24.400	22.40	1.33	23.73	50.00	26.27	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 2011
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	0.199	43.77	0.23	44.00	63.67	19.67	QP
	0.274	35.63	0.23	35.86	60.98	25.12	
	0.343	35.25	0.27	35.52	59.13	23.61	
	4.027	28.94	0.54	29.48	56.00	26.52	
	8.148	30.02	0.69	30.71	60.00	29.29	
	24.400	32.84	1.19	34.03	60.00	25.97	
	0.199	33.18	0.23	33.41	53.67	20.26	AV
	0.274	25.24	0.23	25.47	50.98	25.51	
	0.343	24.91	0.27	25.18	49.13	23.95	
	4.027	18.26	0.54	18.80	46.00	27.20	
	8.148	21.28	0.69	21.97	50.00	28.03	
	24.400	22.44	1.19	23.63	50.00	26.37	
Neutral	**0.200**	**44.41**	**0.19**	**44.60**	**63.62**	**19.02**	QP
	0.274	36.28	0.19	36.47	60.98	24.51	
	0.336	32.30	0.21	32.51	59.31	26.80	
	3.173	26.72	0.64	27.36	56.00	28.64	
	7.769	31.69	0.99	32.68	60.00	27.32	
	24.400	34.06	1.33	35.39	60.00	24.61	
	0.200	34.00	0.19	34.19	53.62	19.43	AV
	0.274	25.80	0.19	25.99	50.98	24.99	
	0.336	21.80	0.21	22.01	49.31	27.30	
	3.173	16.24	0.64	16.88	46.00	29.12	
	7.769	21.28	0.99	22.27	50.00	27.73	
	24.400	23.50	1.33	24.83	50.00	25.17	

TEST ENGINEER: WENCY YANG

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	48%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 14, 2011
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	**0.199**	**43.90**	**0.23**	**44.13**	**63.67**	**19.54**	QP
	0.274	37.19	0.23	37.42	60.98	23.56	
	0.336	33.48	0.27	33.75	59.31	25.56	
	3.720	27.63	0.53	28.16	56.00	27.84	
	7.935	28.42	0.69	29.11	60.00	30.89	
	24.790	33.25	1.21	34.46	60.00	25.54	
	0.199	33.52	0.23	33.75	53.67	19.92	AV
	0.274	26.80	0.23	27.03	50.98	23.95	
	0.336	23.00	0.27	23.27	49.31	26.04	
	3.720	17.20	0.53	17.73	46.00	28.27	
	7.935	18.00	0.69	18.69	50.00	31.31	
	24.790	22.89	1.21	24.10	50.00	25.90	
Neutral	0.199	43.72	0.19	43.91	63.67	19.76	QP
	0.274	35.59	0.19	35.78	60.98	25.20	
	0.444	29.07	0.24	29.31	56.98	27.67	
	3.207	28.54	0.64	29.18	56.00	26.82	
	7.852	32.24	1.00	33.24	60.00	26.76	
	24.529	32.66	1.33	33.99	60.00	26.01	
	0.199	33.10	0.19	33.29	53.67	20.38	AV
	0.274	25.00	0.19	25.19	50.98	25.79	
	0.444	18.76	0.24	19.00	46.98	27.98	
	3.207	17.81	0.64	18.45	46.00	27.55	
	7.852	21.85	1.00	22.85	50.00	27.15	
	24.529	22.10	1.33	23.43	50.00	26.57	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

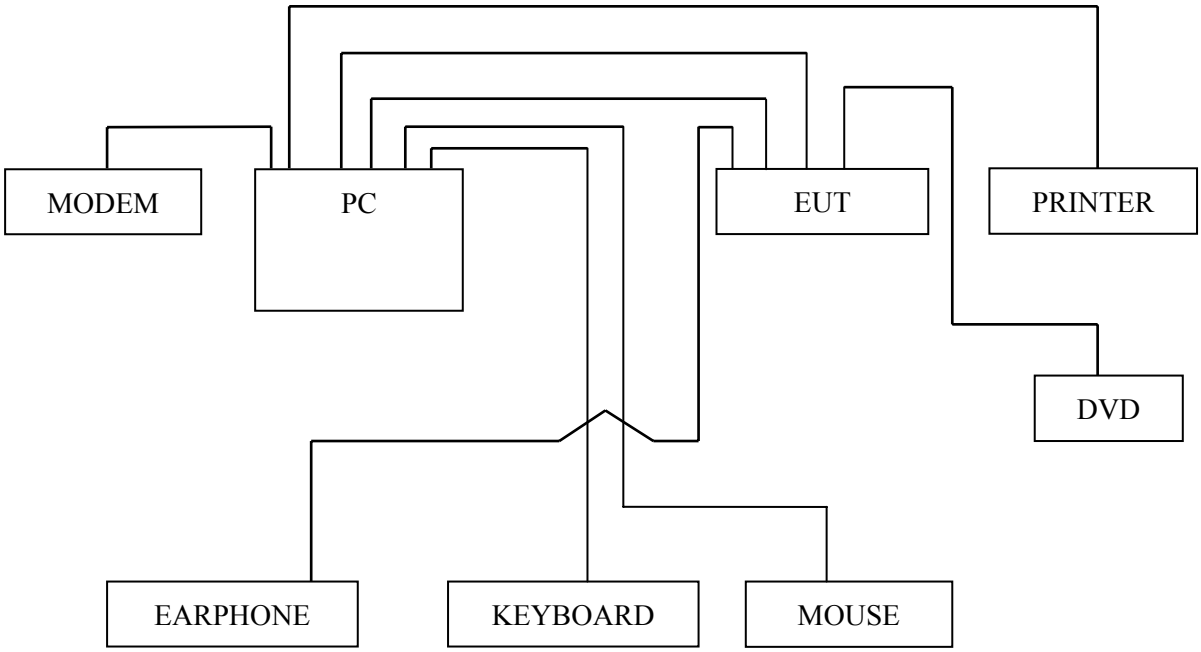
4.1 Test Equipment

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 22, 2011	Mar 22, 2012
2.	Preamplifier	Agilent	8447D	2944A10548	Mar 18, 2011	Sep 18, 2011
3.	Preamplifier	HP	8449B	3008A00864	Mar 22, 2011	Mar 22, 2012
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2010	Dec 01, 2011
5.	Horn Antenna	EMCO	3115	9607-4878	May 13, 2010	May 13, 2011
6.	Spectrum	Agilent	E7405A	MY45106600	Mar 22, 2011	Mar 22, 2012
7.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Mar 18, 2011	Sep 18, 2011
8.	Software	Audix	E3	SET00200 9912M295-2	--	--

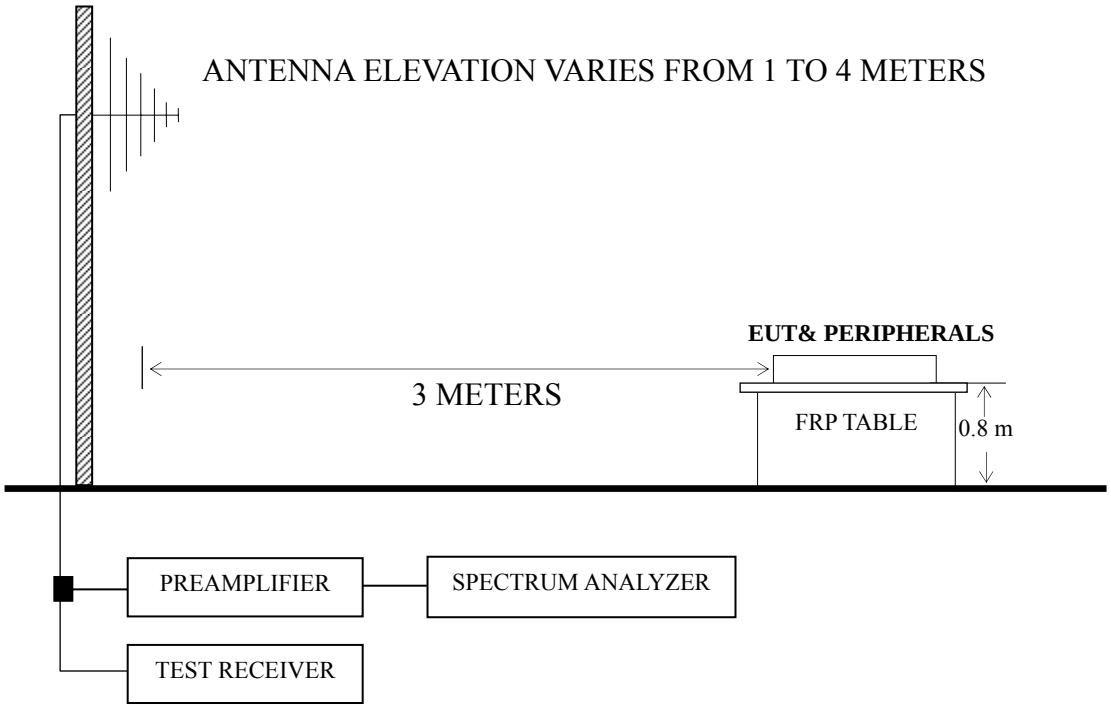
4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals



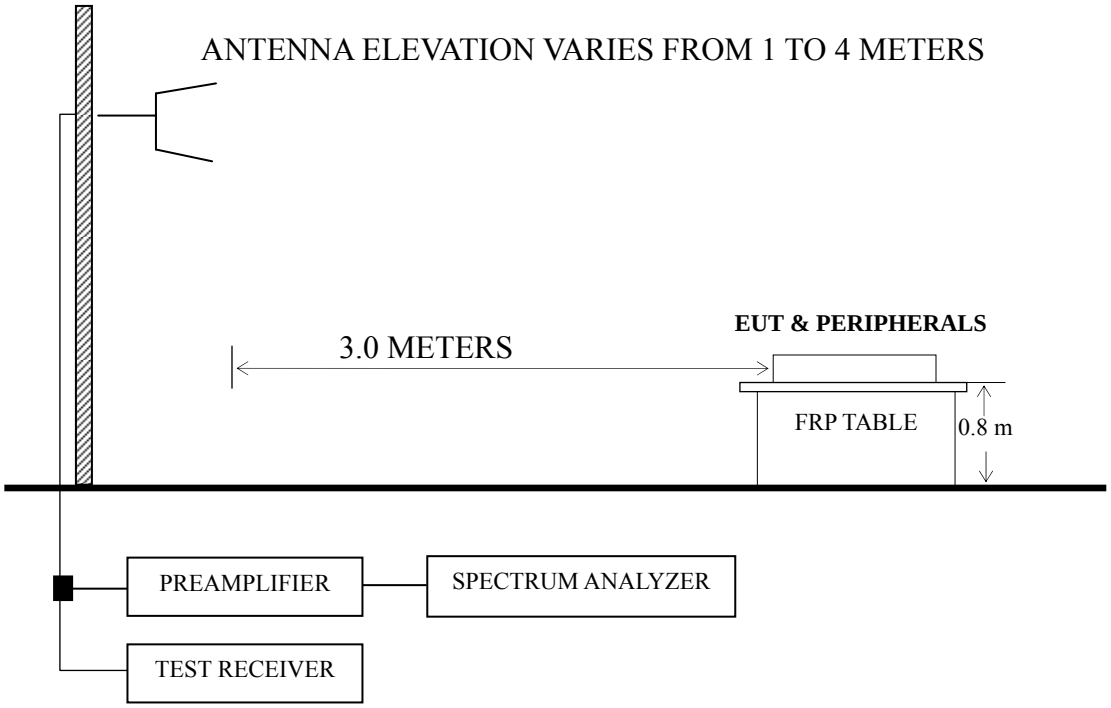
4.2.2 Radiated emission test setup

4.2.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz



■ : 50 ohm Coaxial Switch

4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)]

Frequency (MHz)	Distance (m)	Field strength limits	
		(μV/m)	dB (μV/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 (μV/m) = 20 log Emission Level (μV/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) or Horn 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@60Hz, 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	P26
D-Sub 1280*1024@60Hz	P27 – P28
D-Sub 1680*1050@60Hz	P29 – P30
D-Sub 1920*1080@60Hz	P31 – P32
DVI 640*480@60Hz	**P33**
DVI 1280*1024@60Hz	P34 – P35
DVI 1680*1050@60Hz	P36 – P37
DVI 1920*1080@60Hz	P38 – P39
HDMI 720p	P40
HDMI 1080p	P41
HDMI 640*480@60Hz	P42

NOTE 1 – **The bold test mode** listed above means the worst test mode.
NOTE 2 – We selected the worst resolution mode to perform the HDMI connected PC mode.
NOTE 3 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.(< 1GHz)
NOTE 4 – Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading.(> 1GHz)
NOTE 5 – All readings are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.
NOTE 6 – The emission levels that are 20dB below the official limit are not reported.
NOTE 7 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
NOTE 8 – The worst case is for DVI 640*480@60Hz test mode. The worst emission at horizontal polarization was detected at 881.400 MHz with corrected signal level of 42.93 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 330°. The worst emission at vertical polarization was detected at 881.660 MHz with corrected signal level of 43.87 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 120°.

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 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	39.700	7.84	14.08	0.72	22.64	40.00	17.36
	68.800	16.98	6.51	0.89	24.38	40.00	15.62
	153.190	24.96	11.04	1.25	37.25	43.50	6.25
	231.760	20.80	12.20	1.55	34.55	46.00	11.45
	534.400	11.01	18.36	2.33	31.70	46.00	14.30
	806.000	**17.68**	**20.77**	**2.90**	**41.35**	**46.00**	**4.65**
Vertical	**38.730**	**21.38**	**14.62**	**0.71**	**36.71**	**40.00**	**3.29**
	66.860	21.72	6.53	0.88	29.13	40.00	10.87
	147.370	25.27	11.51	1.23	38.01	43.50	5.49
	306.450	20.21	14.07	1.78	36.06	46.00	9.94
	515.000	15.49	18.09	2.29	35.87	46.00	10.13
	872.930	16.08	21.46	2.98	40.52	46.00	5.48

TEST ENGINEER: RAVEN JIN

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	60%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 10, 2011
Test Mode	:	D-Sub 1280*1024@60Hz			

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	**33.880**	**16.77**	**17.44**	**0.67**	--	**34.88**	**40.00**	**5.12**	QP
	52.310	18.59	8.41	0.79	--	27.79	40.00	12.21	
	107.600	21.38	12.10	1.07	--	34.55	43.50	8.95	
	215.270	14.86	11.39	1.50	--	27.75	43.50	15.75	
	492.690	15.92	17.80	2.25	--	35.97	46.00	10.03	
	878.750	15.11	21.49	3.00	--	39.60	46.00	6.40	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	D-Sub 1280*1024@60Hz		

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	39.700	5.55	14.08	0.72	--	20.35	40.00	19.65	QP
	92.080	7.53	9.82	1.00	--	18.35	43.50	25.15	
	141.550	**20.15**	**12.01**	**1.21**	--	**33.37**	**43.50**	**10.13**	
	263.770	15.93	13.20	1.65	--	30.78	46.00	15.22	
	515.000	7.94	18.09	2.29	--	28.32	46.00	17.68	
	806.000	10.69	20.77	2.90	--	34.36	46.00	11.64	
	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℃	
Model No.	:	D2242PY	Humidity :	60%RH	
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011	
Test Mode	:	D-Sub 1680*1050@60Hz			

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	39.700	9.90	14.08	0.72	--	24.70	40.00	15.30	QP
	69.770	20.65	6.50	0.89	--	28.04	40.00	11.96	
	146.400	**25.91**	**11.61**	**1.23**	**--**	**38.75**	**43.50**	**4.75**	
	303.540	16.58	14.00	1.78	--	32.36	46.00	13.64	
	513.060	12.18	18.06	2.29	--	32.53	46.00	13.47	
	806.000	16.99	20.77	2.90	--	40.66	46.00	5.34	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	D-Sub 1680*1050@60Hz		

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	**38.730**	**21.95**	**14.62**	**0.71**	--	**37.28**	**40.00**	**2.72**	QP
	60.070	20.10	6.60	0.84	--	27.54	40.00	12.46	
	131.850	20.32	12.42	1.18	--	33.92	43.50	9.58	
	215.270	15.42	11.39	1.50	--	28.31	43.50	15.19	
	364.650	15.28	15.73	1.96	--	32.97	46.00	13.03	
	856.440	12.21	21.28	2.97	--	36.46	46.00	9.54	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	D-Sub 1920*1080@60Hz		

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	**38.730**	**22.02**	**14.62**	**0.71**	--	**37.35**	**40.00**	**2.65**	QP
	94.020	16.43	10.27	1.02	--	27.72	43.50	15.78	
	153.190	17.02	11.04	1.25	--	29.31	43.50	14.19	
	279.290	18.60	13.52	1.70	--	33.82	46.00	12.18	
	512.090	9.96	18.06	2.29	--	30.31	46.00	15.69	
	878.750	13.91	21.49	3.00	--	38.40	46.00	7.60	
	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℃	
Model No.	:	D2242PY	Humidity :	60%RH	
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011	
Test Mode	:	D-Sub 1920*1080@60Hz			

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	39.700	7.83	14.08	0.72	--	22.63	40.00	17.37	QP
	69.770	17.24	6.50	0.89	--	24.63	40.00	15.37	
	146.400	23.95	11.61	1.23	--	36.79	43.50	6.71	
	349.130	14.25	15.29	1.91	--	31.45	46.00	14.55	
	715.790	9.77	19.85	2.72	--	32.34	46.00	13.66	
	806.000	**16.95**	**20.77**	**2.90**	--	**40.62**	**46.00**	**5.38**	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 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	40.670	6.95	13.62	0.72	21.29	40.00	18.71
	69.770	16.66	6.50	0.89	24.05	40.00	15.95
	132.820	19.08	12.40	1.18	32.66	43.50	10.84
	224.970	20.63	11.89	1.53	34.05	46.00	11.95
	368.530	11.44	15.81	1.98	29.23	46.00	16.77
	881.400	**18.40**	**21.53**	**3.00**	**42.93**	**46.00**	**3.07**
Vertical	40.670	21.72	13.62	0.72	36.06	40.00	3.94
	67.830	21.49	6.52	0.88	28.89	40.00	11.11
	154.160	24.84	10.94	1.26	37.04	43.50	6.46
	300.630	18.50	13.93	1.77	34.20	46.00	11.80
	516.940	17.04	18.12	2.29	37.45	46.00	8.55
	881.660	**19.34**	**21.53**	**3.00**	**43.87**	**46.00**	**2.13**

TEST ENGINEER: RAVEN JIN

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	DVI 1280*1024@60Hz		

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	32.910	15.77	17.95	0.66	--	34.38	40.00	5.62	QP
	67.830	22.20	6.52	0.88	--	29.60	40.00	10.40	
	132.820	21.59	12.40	1.18	--	35.17	43.50	8.33	
	291.900	15.50	13.77	1.74	--	31.01	46.00	14.99	
	511.120	18.20	18.04	2.29	--	38.53	46.00	7.47	
	838.980	**17.75**	**21.09**	**2.95**	--	**41.79**	**46.00**	**4.21**	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	DVI 1280*1024@60Hz		

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	40.670	7.21	13.62	0.72	--	21.55	40.00	18.45	QP
	67.830	16.19	6.52	0.88	--	23.59	40.00	16.41	
	146.400	24.15	11.61	1.23	--	36.99	43.50	6.51	
	265.710	18.76	13.22	1.65	--	33.63	46.00	12.37	
	559.620	11.84	18.72	2.38	--	32.94	46.00	13.06	
	826.370	**18.88**	**20.98**	**2.93**	--	**42.79**	**46.00**	**3.21**	
	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℃
Model No.	:	D2242PY	Humidity	:	60%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 10, 2011
Test Mode	:	DVI 1680*1050@60Hz			

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	31.940	0.80	18.49	0.65	--	19.94	40.00	20.06	QP
	62.010	20.47	6.58	0.85	--	27.90	40.00	12.10	
	139.610	21.65	12.12	1.21	--	34.98	43.50	8.52	
	216.240	**29.08**	**11.43**	**1.50**	**--**	**42.01**	**46.00**	**3.99**	
	420.910	20.05	16.79	2.10	--	38.94	46.00	7.06	
	701.240	16.21	19.70	2.67	--	38.58	46.00	7.42	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	DVI 1680*1050@60Hz		

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	32.910	14.11	17.95	0.66	--	32.72	40.00	7.28	QP
	67.830	21.03	6.52	0.88	--	28.43	40.00	11.57	
	139.610	**26.12**	**12.12**	**1.21**	**--**	**39.45**	**43.50**	**4.05**	
	290.930	16.81	13.75	1.74	--	32.30	46.00	13.70	
	515.000	14.19	18.09	2.29	--	34.57	46.00	11.43	
	870.990	16.64	21.42	2.98	--	41.04	46.00	4.96	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	DVI 1920*1080@60Hz		

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	39.700	22.39	14.08	0.72	--	37.19	40.00	2.81	QP
	67.830	22.11	6.52	0.88	--	29.51	40.00	10.49	
	179.380	24.91	9.92	1.37	--	36.20	43.50	7.30	
	358.830	**25.68**	**15.57**	**1.95**	**--**	**43.20**	**46.00**	**2.80**	
	540.000	21.20	18.42	2.33	--	41.95	46.00	4.05	
	809.880	16.33	20.80	2.90	--	40.03	46.00	5.97	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
Test Mode	:	DVI 1920*1080@60Hz		

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	40.670	9.18	13.62	0.72	--	23.52	40.00	16.48	QP
	89.170	18.92	9.24	0.99	--	29.15	43.50	14.35	
	179.380	27.44	9.92	1.37	--	38.73	43.50	4.77	
	540.000	15.70	18.42	2.33	--	36.45	46.00	9.55	
	809.900	16.41	20.80	2.90	--	40.11	46.00	5.89	
	870.020	**18.56**	**21.42**	**2.98**	--	**42.96**	**46.00**	**3.04**	
	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℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
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	39.700	5.94	14.08	0.72	20.74	40.00	19.26
	66.860	12.05	6.53	0.88	19.46	40.00	20.54
	141.550	17.25	12.01	1.21	30.47	43.50	13.03
	266.680	21.78	13.25	1.66	36.69	46.00	9.31
	399.570	10.32	16.50	2.06	28.88	46.00	17.12
	759.440	**18.94**	**20.30**	**2.82**	**42.06**	**46.00**	**3.94**
Vertical	40.670	7.21	13.62	0.72	21.55	40.00	18.45
	68.800	13.48	6.51	0.89	20.88	40.00	19.12
	144.460	**25.12**	**11.76**	**1.22**	**38.10**	**43.50**	**5.40**
	266.680	20.45	13.25	1.66	35.36	46.00	10.64
	500.450	10.56	17.90	2.26	30.72	46.00	15.28
	806.000	13.27	20.77	2.90	36.94	46.00	9.06

TEST ENGINEER: RAVEN JIN

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	D2242PY	Humidity :	60%RH
Serial No.	:	E1105354-01/01	Date of Test :	May 10, 2011
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	**40.670**	**18.83**	**13.62**	**0.72**	**33.17**	**40.00**	**6.83**
	67.830	21.16	6.52	0.88	28.56	40.00	11.44
	146.400	21.55	11.61	1.23	34.39	43.50	9.11
	290.930	23.44	13.75	1.74	38.93	46.00	7.07
	526.640	8.21	18.24	2.32	28.77	46.00	17.23
	878.750	12.44	21.49	3.00	36.93	46.00	9.07
Vertical	39.700	6.75	14.08	0.72	21.55	40.00	18.45
	76.560	15.27	7.36	0.93	23.56	40.00	16.44
	141.550	**26.87**	**12.01**	**1.21**	**40.09**	**43.50**	**3.41**
	266.680	18.36	13.25	1.66	33.27	46.00	12.73
	496.570	10.16	17.85	2.26	30.27	46.00	15.73
	759.440	10.34	20.30	2.82	33.46	46.00	12.54

TEST ENGINEER: RAVEN JIN

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	D2242PY	Humidity	:	60%RH
Serial No.	:	E1105354-01/01	Date of Test	:	May 10, 2011
Test Mode	:	HDMI 640*480@60Hz			

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	98.870	14.12	11.27	1.04	26.43	43.50	17.07
	145.430	16.97	11.66	1.22	29.85	43.50	13.65
	185.200	24.44	10.08	1.39	35.91	43.50	7.59
	302.570	**25.12**	**13.97**	**1.73**	**40.82**	**46.00**	**5.18**
	334.580	20.44	14.86	1.84	37.14	46.00	8.86
	702.210	15.81	19.73	2.71	38.25	46.00	7.75
Vertical	**32.910**	**17.07**	**17.95**	**0.62**	**35.64**	**40.00**	**4.36**
	48.430	19.05	9.62	0.75	29.42	40.00	10.58
	98.870	21.74	11.27	1.04	34.05	43.50	9.45
	125.060	19.45	12.76	1.13	33.34	43.50	10.16
	302.570	24.84	13.97	1.73	40.54	46.00	5.46
	658.560	14.12	19.49	2.60	36.21	46.00	9.79

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 3940TKK043C	295*10*1	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 13
SPONGE	LG END 3940TKK043C	155*10*1	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 13
SPONGE	LG END 3940TKK043C	120*10*1	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 13
SPONGE	LG END 3940TKK043C	90*10*2	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 13
EMI TAPE	7250CP0005S	50*120	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 14
Aluminum Tape	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal photo 12
DVI EMI SPONGE	--	36*21*1	EXPAN Elactronics SUZHOU Co., Ltd.	See Internal photo 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

(RAVEN JIN)