

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

LCD Monitor

Model No.: E2242TA

Serial No.: 112NDTC97185, 202INZY11453

FCC ID : BEJE2242TA

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 and 4F 34Bldg 680 Guiping Rd,
Caohejing Hi-Tech Park,
Shanghai 200233, China

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

Report No. : ACI-F12002A2
Date of Test : Mar 16 – 20, 2012
Date of Report : Mar 26, 2012

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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. : E2242TA
(B) Serial No. : 112NDTC97185, 202INZY11453
(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: E2242TA; S/N: 112NDTC97185, 202INZY11453) which was tested in 3m anechoic chamber Mar 16 – 20, 2012 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 : Mar 16 – 20, 2012 Date of Report : Mar 26, 2012

Producer : Kathy Wang
KATHY WANG / Assistant

Review : Dio Yang
DIO YANG / Assistant Manager

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

Signatory : Sammy Chen
Authorized Signature EMC SAMMY CHEN / Deputy 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 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. : E2242TA

Serial No. : 112NDTC97185 (For LCD Panel #1)
202INZY11453 (For LCD Panel #2)

Real Power : For LCD Panel #1
22.00W (Adapter #1)
23.00W (Adapter #2)
22.50W (Adapter #3)
23.60W (Adapter #4)

For LCD Panel #2
22.00W (Adapter #1)
22.60W (Adapter #2)
22.00W (Adapter #3)
23.00W (Adapter #4)

Note : The different list for all the models are as follows:

Report No.	Model No.	Rev. Summary	Edition No.	Data of Rev.
ACI-F12002	E2242TA	Original Report	0	Jan 06, 2012
ACI-F12002A1	E2242TA	1.To add two new panels 2.To add a new appearance	Rev. A1	Mar 10, 2012
ACI- F12002A2	E2242TA	To add two new panels	Rev. A2	Mar 26, 2012

AC Adapter #1 : Manufacturer : HONOR
Model Number : ADS-40SG-19-3 19025G
Input : 100-240V~, 50-60Hz 1.0A
Output : 19V  1.3A
Output Cable : Unshielded, Undetachable, 1.8m

AC Adapter #2 : Manufacturer : LIEN CHANG
Model Number : LCAP21
Input : 100-240V~, 50-60Hz 1.1A
Output : 19V  1.3A
Output Cable : Unshielded, Undetachable, 1.8m,
with one core

AC Adapter #3 : Manufacturer : LIEN CHANG
 Model Number : LCAP26-*
 (* can be A, E, I, B, LCAP26-A was selected as the test model.)
 Input : 100-240V~, 50-60Hz 1.1A
 Output : 19V $\overline{\text{---}}$ 1.3A
 Output Cable : Unshielded, Undetachable, 1.8m

AC Adapter #4 : Manufacturer : HONOR
 Model Number : ADS-40FSG-19 19025G***-1
 (***) can be PG, PBR, PI, PCU, ADS-40FSG-19 19025GPCU-1 was selected as the test model.)
 Input : 100-240V~, 50-60Hz 1.0A
 Output : 19V $\overline{\text{---}}$ 1.3A
 Output Cable : Unshielded, Undetachable, 1.8m

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 :

	Original Panel	New Panel
1.	Manufacturer : LG Display; M/N : LM215WF4	Manufacturer : AU Optronics M/N : M215HW03
2.	Manufacturer : LG Electronics Inc. M/N : LGM215AB01	Manufacturer : CHIMEI INNOLUX M/N : M215HGE
3.	Manufacturer : LG Electronics Inc. M/N : LGM215AC01	--

Max Resolution : 1920*1080@60Hz

D-Sub Cable #1 : Shielded, Detachable, 1.50m, with two cores on cable

D-Sub Cable #2 : Shielded, Detachable, 1.85m, with two cores in connector

DVI Cable #1 : Shielded, Detachable, 1.50m, with two cores on cable

DVI Cable #2 : Shielded, Detachable, 1.85m, 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 DC In Port | : Connected with Adapter |

2.2 Peripherals

2.2.1 PC

Manufacturer	:	HP
Model Number	:	dx7200MT
Serial Number	:	CNG622017W
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 Graphics Card (Used in PC)

Manufacturer	:	ASUS
Model Number	:	EAH6670
Output port	:	DVI, D-Sub, HDMI

2.2.3 Printer

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

2.2.4 Keyboard

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

2.2.5 Mouse

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

2.3 Description of Test Facility

Site Description : Sept. 17, 1998 file on
(Semi-Anechoic Chamber) 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)

Radiated Emission Expanded Uncertainty (Above 1GHz) :
U= 4.60 dB (Horizontal)
U= 4.18 dB (Vertical)

3 CONDUCTED EMISSION TEST

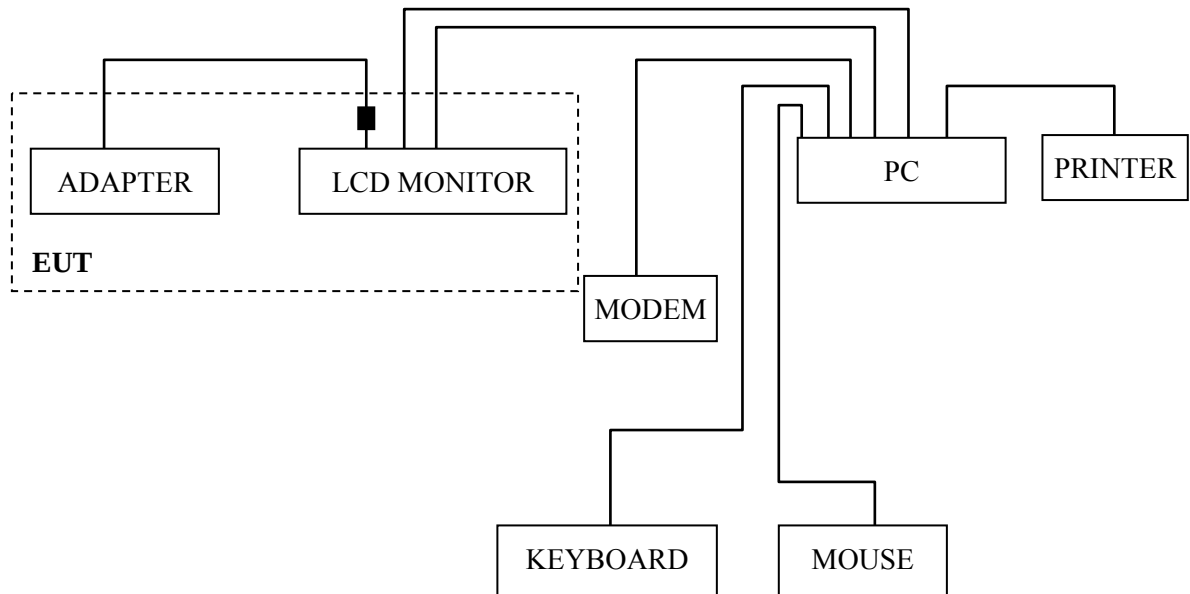
3.1 Test Equipment

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	Sep 18, 2011	Mar 18, 2012
5.	50 Ω Terminator	Anritsu	BNC	001	Mar 22, 2011	Mar 22, 2012
6.	Software	Audix	E3	SET00200 9804M592	--	--

3.2 Block Diagram of Test Setup

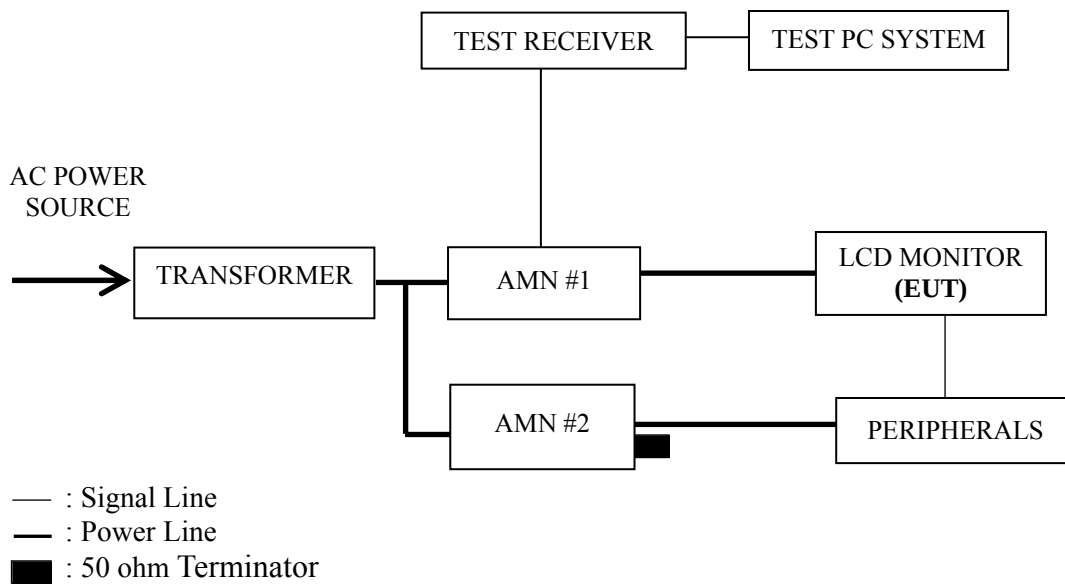
3.2.1 EUT & Peripherals



■ : Ferrite core

Note: Ferrite core only for Adapter #2

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 (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 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:

LCD Panel	Adapter	Test Mode
LCD Panel #1	Adapter #1	D-Sub 1920*1080@60Hz
		DVI 1920*1080@60Hz
		DVI 1680*1050@60Hz
		DVI 1280*1024@75Hz
		DVI 640*480@60Hz
	Adapter #2	DVI 1920*1080@60Hz
	Adapter #3	DVI 1920*1080@60Hz
LCD Panel #2	Adapter #4	DVI 1920*1080@60Hz
	Adapter #1	DVI 1920*1080@60Hz
	Adapter #2	DVI 1920*1080@60Hz
	Adapter #3	DVI 1920*1080@60Hz
	Adapter #4	DVI 1920*1080@60Hz

NOTE: We tested the EUT with LCD panel #1 and adapter #1, then selected the worst test mode to perform test with other adapters and LCD panel.

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.

LCD Panel	Adaptor	Test Mode	Page
LCD Panel #1	Adapter #1	D-Sub 1920*1080@60Hz	P13
		DVI 1920*1080@60Hz	P14
		DVI 1680*1050@60Hz	P15
		DVI 1280*1024@75Hz	P16
		DVI 640*480@60Hz	P17
	Adapter #2	DVI 1920*1080@60Hz	P18
	Adapter #3	DVI 1920*1080@60Hz	P19
LCD Panel #2	Adapter #4	DVI 1920*1080@60Hz	P20
	Adapter #1	DVI 1920*1080@60Hz	P21
	Adapter #2	DVI 1920*1080@60Hz	P22
	Adapter #3	DVI 1920*1080@60Hz	P23
	Adapter #4	DVI 1920*1080@60Hz	P24

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 1920*1080@60Hz test mode (Adapter #3, Panel #2). The worst emission is detected at 0.155 MHz (Quasi-Peak Value) with corrected signal level of 58.82 dB (μV) (limit is 65.74 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : D-Sub 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.161	50.18	0.22	50.40	65.43	15.03	QP
	0.339	37.12	0.27	37.39	59.22	21.83	
	0.529	39.51	0.32	39.83	56.00	16.17	
	0.933	36.16	0.37	36.53	56.00	19.47	
	2.554	35.67	0.45	36.12	56.00	19.88	
	5.713	34.49	0.59	35.08	60.00	24.92	
	0.161	39.68	0.22	39.90	55.43	15.53	AV
	0.339	26.39	0.27	26.66	49.22	22.56	
	0.529	28.63	0.32	28.95	46.00	17.05	
	0.933	25.63	0.37	26.00	46.00	20.00	
	2.554	25.17	0.45	25.62	46.00	20.38	
	5.713	24.18	0.59	24.77	50.00	25.23	
Neutral	0.164	48.38	0.19	48.57	65.25	16.68	QP
	0.339	38.18	0.21	38.39	59.22	20.83	
	0.535	40.30	0.24	40.54	56.00	15.46	
	0.933	37.16	0.43	37.59	56.00	18.41	
	2.474	36.88	0.57	37.45	56.00	18.55	
	5.419	36.36	0.79	37.15	60.00	22.85	
	0.164	37.68	0.19	37.87	55.25	17.38	AV
	0.339	27.64	0.21	27.85	49.22	21.37	
	0.535	29.63	0.24	29.87	46.00	16.13	
	0.933	26.38	0.43	26.81	46.00	19.19	
	2.474	26.37	0.57	26.94	46.00	19.06	
	5.419	25.83	0.79	26.62	50.00	23.38	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	57.11	0.23	57.34	64.50	7.16	QP
	0.242	46.37	0.23	46.60	62.04	15.44	
	0.352	41.92	0.28	42.20	58.91	16.71	
	0.471	36.69	0.31	37.00	56.49	19.49	
	4.315	35.70	0.54	36.24	56.00	19.76	
	17.755	32.46	0.94	33.40	60.00	26.60	
	0.180	47.00	0.23	47.23	54.50	7.27	AV
	0.242	35.82	0.23	36.05	52.04	15.99	
	0.352	31.08	0.28	31.36	48.91	17.55	
	0.471	26.34	0.31	26.65	46.49	19.84	
	4.315	25.16	0.54	25.70	46.00	20.30	
	17.755	22.17	0.94	23.11	50.00	26.89	
Neutral	0.178	57.03	0.19	57.22	64.59	7.37	QP
	0.237	47.00	0.18	47.18	62.22	15.04	
	0.317	42.64	0.20	42.84	59.80	16.96	
	0.471	36.73	0.24	36.97	56.49	19.52	
	4.202	37.07	0.74	37.81	56.00	18.19	
	17.849	32.61	1.17	33.78	60.00	26.22	
	0.178	45.50	0.19	45.69	54.59	8.90	AV
	0.237	36.21	0.18	36.39	52.22	15.83	
	0.317	32.12	0.20	32.32	49.80	17.48	
	0.471	26.37	0.24	26.61	46.49	19.88	
	4.202	26.34	0.74	27.08	46.00	18.92	
	17.849	22.16	1.17	23.33	50.00	26.67	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1680*1050@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.164	48.06	0.22	48.28	65.25	16.97	QP
	0.343	38.15	0.27	38.42	59.13	20.71	
	0.529	40.53	0.32	40.85	56.00	15.15	
	0.943	37.31	0.37	37.68	56.00	18.32	
	2.650	37.37	0.45	37.82	56.00	18.18	
	5.419	34.97	0.56	35.53	60.00	24.47	
	0.164	37.20	0.22	37.42	55.25	17.83	AV
	0.343	27.61	0.27	27.88	49.13	21.25	
	0.529	30.28	0.32	30.60	46.00	15.40	
	0.943	26.82	0.37	27.19	46.00	18.81	
	2.650	26.80	0.45	27.25	46.00	18.75	
	5.419	24.59	0.56	25.15	50.00	24.85	
Neutral	0.161	48.72	0.19	48.91	65.43	16.52	QP
	0.339	38.10	0.21	38.31	59.22	20.91	
	0.521	39.82	0.24	40.06	56.00	15.94	
	1.338	36.89	0.47	37.36	56.00	18.64	
	2.839	36.87	0.59	37.46	56.00	18.54	
	5.419	35.82	0.79	36.61	60.00	23.39	
	0.161	38.25	0.19	38.44	55.43	16.99	AV
	0.339	27.56	0.21	27.77	49.22	21.45	
	0.521	29.36	0.24	29.60	46.00	16.40	
	1.338	26.37	0.47	26.84	46.00	19.16	
	2.839	26.27	0.59	26.86	46.00	19.14	
	5.419	25.39	0.79	26.18	50.00	23.82	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1280*1024@75Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.157	47.01	0.22	47.23	65.60	18.37	QP
	0.363	38.95	0.28	39.23	58.65	19.42	
	0.447	40.32	0.31	40.63	56.93	16.30	
	1.628	36.76	0.42	37.18	56.00	18.82	
	2.869	36.36	0.46	36.82	56.00	19.18	
	5.476	33.87	0.57	34.44	60.00	25.56	
	0.157	36.24	0.22	36.46	55.60	19.14	AV
	0.363	28.41	0.28	28.69	48.65	19.96	
	0.447	30.10	0.31	30.41	46.93	16.52	
	1.628	26.30	0.42	26.72	46.00	19.28	
	2.869	26.30	0.46	26.76	46.00	19.24	
	5.476	23.10	0.57	23.67	50.00	26.33	
Neutral	0.159	46.77	0.19	46.96	65.52	18.56	QP
	0.360	38.55	0.21	38.76	58.74	19.98	
	0.440	41.13	0.24	41.37	57.07	15.70	
	1.223	37.27	0.45	37.72	56.00	18.28	
	2.422	36.96	0.57	37.53	56.00	18.47	
	5.535	34.47	0.80	35.27	60.00	24.73	
	0.159	36.27	0.19	36.46	55.52	19.06	AV
	0.360	28.41	0.21	28.62	48.74	20.12	
	0.440	30.83	0.24	31.07	47.07	16.00	
	1.223	26.69	0.45	27.14	46.00	18.86	
	2.422	26.34	0.57	26.91	46.00	19.09	
	5.535	24.16	0.80	24.96	50.00	25.04	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 640*480@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.166	47.54	0.22	47.76	65.16	17.40	QP
	0.346	38.23	0.28	38.51	59.05	20.54	
	0.524	40.15	0.31	40.46	56.00	15.54	
	0.923	37.00	0.37	37.37	56.00	18.63	
	2.594	36.81	0.45	37.26	56.00	18.74	
	5.476	36.33	0.57	36.90	60.00	23.10	
	0.166	36.82	0.22	37.04	55.16	18.12	AV
	0.346	27.61	0.28	27.89	49.05	21.16	
	0.524	29.73	0.31	30.04	46.00	15.96	
	0.923	26.39	0.37	26.76	46.00	19.24	
	2.594	26.37	0.45	26.82	46.00	19.18	
	5.476	25.84	0.57	26.41	50.00	23.59	
Neutral	0.162	47.97	0.19	48.16	65.34	17.18	QP
	0.329	37.82	0.21	38.03	59.49	21.46	
	0.529	40.30	0.24	40.54	56.00	15.46	
	0.923	37.45	0.42	37.87	56.00	18.13	
	2.044	35.84	0.55	36.39	56.00	19.61	
	5.535	35.24	0.80	36.04	60.00	23.96	
	0.162	37.15	0.19	37.34	55.34	18.00	AV
	0.329	27.43	0.21	27.64	49.49	21.85	
	0.529	29.68	0.24	29.92	46.00	16.08	
	0.923	26.85	0.42	27.27	46.00	18.73	
	2.044	25.21	0.55	25.76	46.00	20.24	
	5.535	24.63	0.80	25.43	50.00	24.57	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #2 : LCAP21

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.157	46.28	0.22	46.50	65.60	19.10	QP
	0.197	40.28	0.23	40.51	63.76	23.25	
	0.440	41.65	0.31	41.96	57.07	15.11	
	1.734	36.89	0.44	37.33	56.00	18.67	
	2.178	36.50	0.44	36.94	56.00	19.06	
	5.221	35.08	0.55	35.63	60.00	24.37	
	0.157	35.20	0.22	35.42	55.60	20.18	AV
	0.197	29.35	0.23	29.58	53.76	24.18	
	0.440	31.23	0.31	31.54	47.07	15.53	
	1.734	26.33	0.44	26.77	46.00	19.23	
	2.178	26.10	0.44	26.54	46.00	19.46	
	5.221	24.19	0.55	24.74	50.00	25.26	
Neutral	0.154	46.61	0.19	46.80	65.78	18.98	QP
	0.363	39.02	0.21	39.23	58.65	19.42	
	0.440	41.05	0.24	41.29	57.07	15.78	
	1.010	36.81	0.44	37.25	56.00	18.75	
	2.594	36.44	0.57	37.01	56.00	18.99	
	5.277	34.57	0.78	35.35	60.00	24.65	
	0.154	35.20	0.19	35.39	55.78	20.39	AV
	0.363	28.44	0.21	28.65	48.65	20.00	
	0.440	30.28	0.24	30.52	47.07	16.55	
	1.010	26.30	0.44	26.74	46.00	19.26	
	2.594	26.11	0.57	26.68	46.00	19.32	
	5.277	24.10	0.78	24.88	50.00	25.12	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #3 : LCAP26-A

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.154	46.69	0.22	46.91	65.78	18.87	QP
	0.363	38.11	0.28	38.39	58.65	20.26	
	0.444	40.70	0.31	41.01	56.98	15.97	
	1.071	37.03	0.37	37.40	56.00	18.60	
	2.237	37.06	0.44	37.50	56.00	18.50	
	5.362	35.58	0.56	36.14	60.00	23.86	
	0.154	36.27	0.22	36.49	55.78	19.29	AV
	0.363	27.43	0.28	27.71	48.65	20.94	
	0.444	30.28	0.31	30.59	46.98	16.39	
	1.071	26.53	0.37	26.90	46.00	19.10	
	2.237	26.43	0.44	26.87	46.00	19.13	
	5.362	25.18	0.56	25.74	50.00	24.26	
Neutral	0.155	47.16	0.19	47.35	65.74	18.39	QP
	0.363	39.21	0.21	39.42	58.65	19.23	
	0.440	41.39	0.24	41.63	57.07	15.44	
	1.249	37.35	0.46	37.81	56.00	18.19	
	2.309	36.58	0.57	37.15	56.00	18.85	
	5.419	34.78	0.79	35.57	60.00	24.43	
	0.155	36.52	0.19	36.71	55.74	19.03	AV
	0.363	28.74	0.21	28.95	48.65	19.70	
	0.440	31.20	0.24	31.44	47.07	15.63	
	1.249	26.80	0.46	27.26	46.00	18.74	
	2.309	26.33	0.57	26.90	46.00	19.10	
	5.419	24.81	0.79	25.60	50.00	24.40	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 112NDTC97185 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #4 : ADS-40FSG-19
19025GPCU-1

LCD Panel : Panel #1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.156	47.13	0.22	47.35	65.65	18.30	QP
	0.363	38.73	0.28	39.01	58.65	19.64	
	0.440	41.01	0.31	41.32	57.07	15.75	
	1.065	36.85	0.37	37.22	56.00	18.78	
	2.396	36.44	0.45	36.89	56.00	19.11	
	5.221	34.51	0.55	35.06	60.00	24.94	
	0.156	36.28	0.22	36.50	55.65	19.15	AV
	0.363	28.31	0.28	28.59	48.65	20.06	
	0.440	30.41	0.31	30.72	47.07	16.35	
	1.065	26.54	0.37	26.91	46.00	19.09	
	2.396	26.47	0.45	26.92	46.00	19.08	
	5.221	24.01	0.55	24.56	50.00	25.44	
Neutral	0.157	46.54	0.19	46.73	65.60	18.87	QP
	0.356	38.54	0.21	38.75	58.83	20.08	
	0.440	41.51	0.24	41.75	57.07	15.32	
	1.858	37.35	0.55	37.90	56.00	18.10	
	2.650	37.04	0.58	37.62	56.00	18.38	
	5.277	34.69	0.78	35.47	60.00	24.53	
	0.157	36.10	0.19	36.29	55.60	19.31	AV
	0.356	28.14	0.21	28.35	48.83	20.48	
	0.440	30.80	0.24	31.04	47.07	16.03	
	1.858	26.94	0.55	27.49	46.00	18.51	
	2.650	26.37	0.58	26.95	46.00	19.05	
	5.277	24.15	0.78	24.93	50.00	25.07	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 202INZY11453 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #2

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.159	46.45	0.22	46.67	65.52	18.85	QP
	0.367	37.98	0.28	38.26	58.56	20.30	
	0.447	40.97	0.31	41.28	56.93	15.65	
	1.762	36.91	0.44	37.35	56.00	18.65	
	2.678	36.40	0.45	36.85	56.00	19.15	
	5.221	34.15	0.55	34.70	60.00	25.30	
	0.159	35.28	0.22	35.50	55.52	20.02	AV
	0.367	27.34	0.28	27.62	48.56	20.94	
	0.447	30.12	0.31	30.43	46.93	16.50	
	1.762	26.30	0.44	26.74	46.00	19.26	
	2.678	25.85	0.45	26.30	46.00	19.70	
	5.221	23.59	0.55	24.14	50.00	25.86	
Neutral	0.156	47.01	0.19	47.20	65.65	18.45	QP
	0.360	38.82	0.21	39.03	58.74	19.71	
	0.444	41.06	0.24	41.30	56.98	15.68	
	0.953	36.98	0.43	37.41	56.00	18.59	
	2.474	36.99	0.57	37.56	56.00	18.44	
	5.333	36.09	0.78	36.87	60.00	23.13	
	0.156	36.25	0.19	36.44	55.65	19.21	AV
	0.360	28.42	0.21	28.63	48.74	20.11	
	0.444	30.52	0.24	30.76	46.98	16.22	
	0.953	26.34	0.43	26.77	46.00	19.23	
	2.474	26.37	0.57	26.94	46.00	19.06	
	5.333	25.41	0.78	26.19	50.00	23.81	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 202INZY11453 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #2 : LCAP21

LCD Panel : Panel #2

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.154	57.97	0.22	58.19	65.78	7.59	QP
	0.273	48.11	0.23	48.34	61.03	12.69	
	0.476	39.15	0.31	39.46	56.41	16.95	
	1.734	26.61	0.44	27.05	56.00	28.95	
	4.224	33.68	0.54	34.22	56.00	21.78	
	6.488	30.70	0.64	31.34	60.00	28.66	
	0.154	45.36	0.22	45.58	55.78	10.20	AV
	0.273	37.29	0.23	37.52	51.03	13.51	
	0.476	28.47	0.31	28.78	46.41	17.63	
	1.734	16.26	0.44	16.70	46.00	29.30	
	4.224	23.42	0.54	23.96	46.00	22.04	
	6.488	20.49	0.64	21.13	50.00	28.87	
Neutral	0.156	57.70	0.19	57.89	65.65	7.76	QP
	0.273	48.18	0.19	48.37	61.03	12.66	
	0.440	40.63	0.24	40.87	57.07	16.20	
	1.781	27.41	0.54	27.95	56.00	28.05	
	4.269	32.05	0.74	32.79	56.00	23.21	
	6.698	31.07	0.96	32.03	60.00	27.97	
	0.156	45.27	0.19	45.46	55.65	10.19	AV
	0.273	37.20	0.19	37.39	51.03	13.64	
	0.440	29.68	0.24	29.92	47.07	17.15	
	1.781	17.30	0.54	17.84	46.00	28.16	
	4.269	21.68	0.74	22.42	46.00	23.58	
	6.698	20.87	0.96	21.83	50.00	28.17	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 202INZY11453 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #3 : LCAP26-A

LCD Panel : Panel #2

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.156	58.47	0.22	58.69	65.65	6.96	QP
	0.277	47.75	0.23	47.98	60.90	12.92	
	0.444	39.66	0.31	39.97	56.98	17.01	
	1.464	29.66	0.41	30.07	56.00	25.93	
	4.269	35.83	0.54	36.37	56.00	19.63	
	6.056	29.25	0.61	29.86	60.00	30.14	
	0.156	46.27	0.22	46.49	55.65	9.16	AV
	0.277	37.10	0.23	37.33	50.90	13.57	
	0.444	29.10	0.31	29.41	46.98	17.57	
	1.464	19.20	0.41	19.61	46.00	26.39	
	4.269	25.17	0.54	25.71	46.00	20.29	
	6.056	18.90	0.61	19.51	50.00	30.49	
Neutral	0.155	58.63	0.19	58.82	65.74	6.92	QP
	0.274	48.96	0.19	49.15	60.98	11.83	
	0.440	39.87	0.24	40.11	57.07	16.96	
	1.800	28.93	0.54	29.47	56.00	26.53	
	4.224	34.88	0.74	35.62	56.00	20.38	
	5.993	29.46	0.87	30.33	60.00	29.67	
	0.155	46.07	0.19	46.26	55.74	9.48	AV
	0.274	38.50	0.19	38.69	50.98	12.29	
	0.440	29.17	0.24	29.41	47.07	17.66	
	1.800	18.43	0.54	18.97	46.00	27.03	
	4.224	24.13	0.74	24.87	46.00	21.13	
	5.993	18.76	0.87	19.63	50.00	30.37	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 48%RH

Serial No. : 202INZY11453 Date of Test : Mar 16, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #4 : ADS-40FSG-19
19025GPCU-1

LCD Panel : Panel #2

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.154	53.50	0.22	53.72	65.78	12.06	QP
	0.273	36.12	0.23	36.35	61.03	24.68	
	0.440	32.53	0.31	32.84	57.07	24.23	
	1.021	28.02	0.37	28.39	56.00	27.61	
	2.133	26.46	0.44	26.90	56.00	29.10	
	5.476	28.64	0.57	29.21	60.00	30.79	
	0.154	41.30	0.22	41.52	55.78	14.26	AV
	0.273	25.13	0.23	25.36	51.03	25.67	
	0.440	21.38	0.31	21.69	47.07	25.38	
	1.021	17.53	0.37	17.90	46.00	28.10	
	2.133	16.10	0.44	16.54	46.00	29.46	
	5.476	18.40	0.57	18.97	50.00	31.03	
Neutral	0.154	54.06	0.19	54.25	65.78	11.53	QP
	0.273	35.86	0.19	36.05	61.03	24.98	
	0.440	32.24	0.24	32.48	57.07	24.59	
	1.236	28.32	0.46	28.78	56.00	27.22	
	2.678	25.81	0.58	26.39	56.00	29.61	
	8.501	27.84	1.02	28.86	60.00	31.14	
	0.154	41.82	0.19	42.01	55.78	13.77	AV
	0.273	25.10	0.19	25.29	51.03	25.74	
	0.440	21.54	0.24	21.78	47.07	25.29	
	1.236	17.83	0.46	18.29	46.00	27.71	
	2.678	15.42	0.58	16.00	46.00	30.00	
	8.501	17.40	1.02	18.42	50.00	31.58	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

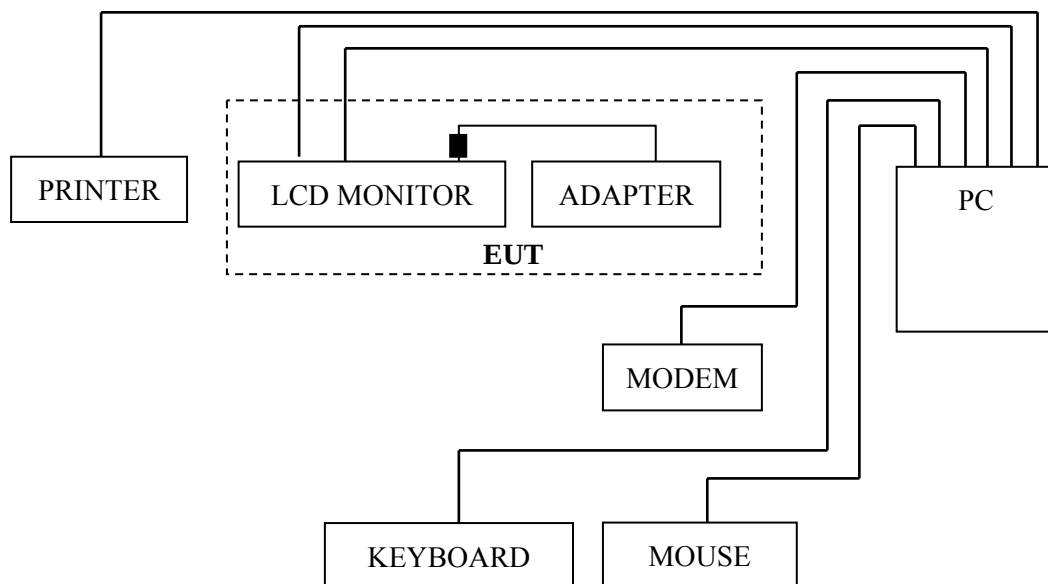
4.1 Test Equipment

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	Sep 18, 2011	Mar 18, 2012
3.	Preamplifier	HP	8449B	3008A00864	Mar 22, 2011	Mar 22, 2012
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2011	Dec 01, 2012
5.	Horn Antenna	EMCO	3115	9607-4878	May 06, 2011	May 06, 2012
6.	Spectrum	Agilent	E7405A	MY45106600	Mar 22, 2011	Mar 22, 2012
7.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2011	Mar 18, 2012
8.	Software	Audix	E3	SET00200 9912M295-2	--	--

4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals

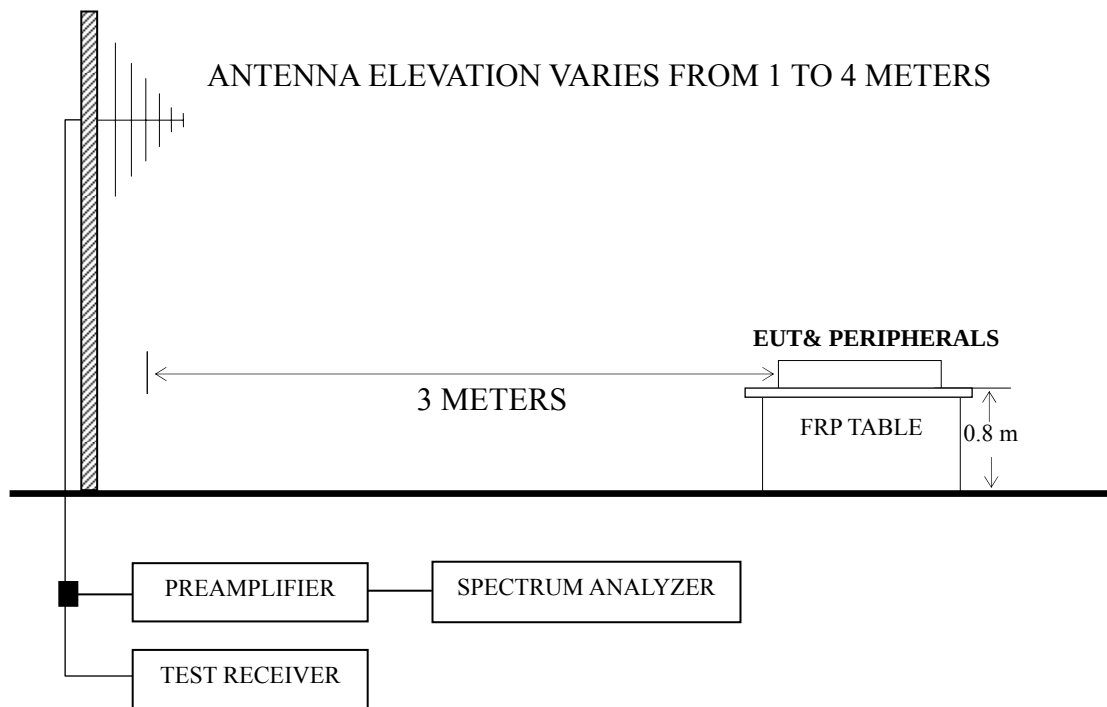


■ : Ferrite core

Note: Ferrite core only for Adapter #2

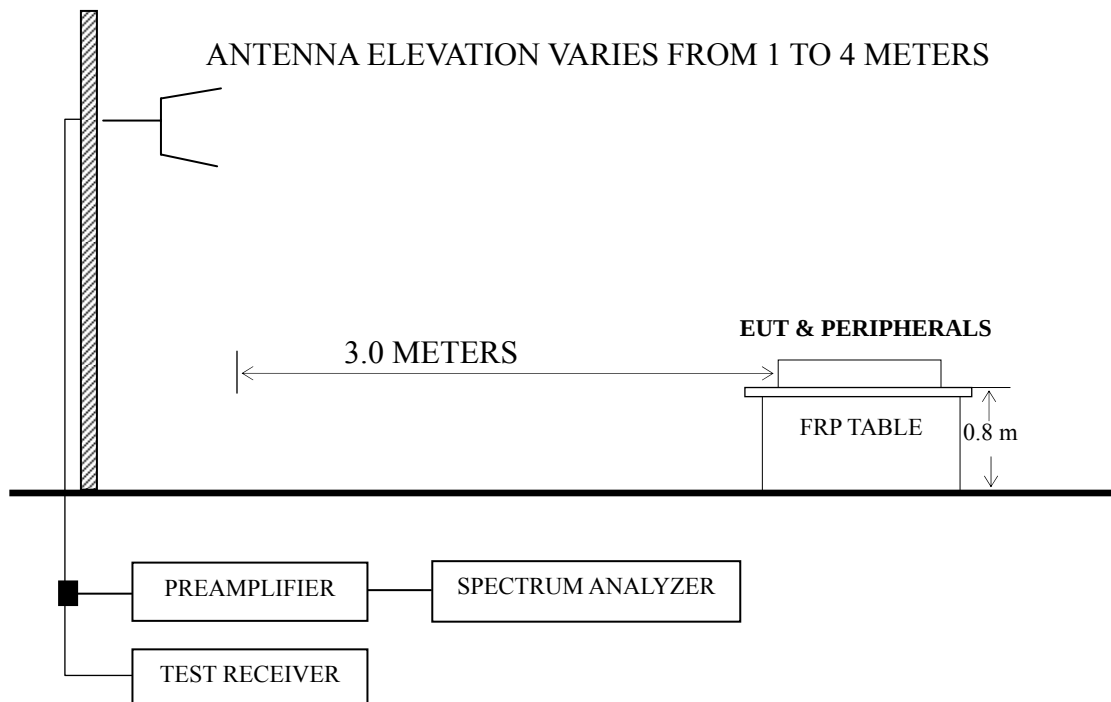
4.2.2 Radiated emission test setup

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	
		($\mu\text{V/m}$)	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) 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 worst test mode in 30 – 1000 MHz test.

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.

LCD Panel	Adapter	Test Mode	Data Page
Panel #1	Adapter #1	D-Sub 1920*1080@60Hz	P30
		DVI 1920*1080@60Hz	P31 – P32
		DVI 1680*1050@60Hz	P33
		DVI 1280*1024@75Hz	P34
		DVI 640*480@60Hz	P35
	Adapter #2	DVI 1920*1080@60Hz	P36
	Adapter #3	DVI 1920*1080@60Hz	P37
	Adapter #4	DVI 1920*1080@60Hz	P38
Panel #2	Adapter #1	DVI 1920*1080@60Hz	P39
	Adapter #2	DVI 1920*1080@60Hz	P40
	Adapter #3	DVI 1920*1080@60Hz	P41
	Adapter #4	DVI 1920*1080@60Hz	P42

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 – We tested the EUT with LCD panel #1 and adapter #1, then selected the worst test mode to perform test with other adapters and LCD panel.

NOTE 8 – The worst case is for DVI 1920*1080@60Hz test mode (Adapter #2, Panel #2). The worst emission at horizontal polarization was detected at 649.830 MHz with corrected signal level of 44.99 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 572.230 MHz with corrected signal level of 42.43 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 150°.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : D-Sub 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

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	105.660	22.24	11.26	1.90	35.40	43.50	8.10
	191.990	23.12	9.87	2.40	35.39	43.50	8.11
	239.520	24.61	11.51	2.57	38.69	46.00	7.31
	321.970	25.86	14.30	2.82	42.98	46.00	3.02
	527.610	17.24	17.77	3.33	38.34	46.00	7.66
	872.930	14.19	20.37	4.60	39.16	46.00	6.84
Vertical	37.760	22.49	14.00	0.86	37.35	40.00	2.65
	88.200	20.51	10.93	1.70	33.14	43.50	10.36
	157.070	22.85	10.30	2.26	35.41	43.50	8.09
	291.900	21.51	13.49	2.74	37.74	46.00	8.26
	465.530	17.62	17.19	3.17	37.98	46.00	8.02
	710.940	15.09	19.63	3.70	38.42	46.00	7.58

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

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	51.340	12.02	8.58	0.95	--	21.55	40.00	18.45	QP
	254.070	22.33	12.18	2.62	--	37.13	46.00	8.87	
	321.970	27.25	14.30	2.82	--	44.37	46.00	1.63	
	365.620	18.41	15.53	2.91	--	36.85	46.00	9.15	
	527.610	19.80	17.77	3.33	--	40.90	46.00	5.10	
	768.170	12.67	20.27	3.84	--	36.78	46.00	9.22	
	1040.000	47.36	25.07	4.49	38.12	38.80	70.00	31.20	PK
	1175.000	47.74	25.69	4.51	37.82	40.12	70.00	29.88	
	1305.000	44.89	26.34	4.53	37.50	38.26	70.00	31.74	
	1445.000	44.73	26.84	4.55	37.11	39.01	70.00	30.99	
	1570.000	44.72	27.06	4.56	36.82	39.52	70.00	30.48	
	1680.000	45.02	27.15	4.57	36.62	40.12	70.00	29.88	
	1040.000	38.36	25.07	4.49	38.12	29.80	50.00	20.20	AV
	1175.000	37.74	25.69	4.51	37.82	30.12	50.00	19.88	
	1305.000	32.89	26.34	4.53	37.50	26.26	50.00	23.74	
	1445.000	35.73	26.84	4.55	37.11	30.01	50.00	19.99	
	1570.000	35.72	27.06	4.56	36.82	30.52	50.00	19.48	
	1680.000	37.02	27.15	4.57	36.62	32.12	50.00	17.88	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

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	39.700	22.56	12.80	0.87	--	36.23	40.00	3.77	QP
	88.200	20.10	10.93	1.70	--	32.73	43.50	10.77	
	156.100	23.23	10.31	2.26	--	35.80	43.50	7.70	
	186.170	24.21	9.93	2.38	--	36.52	43.50	6.98	
	291.900	24.07	13.49	2.74	--	40.30	46.00	5.70	
	468.440	22.15	17.22	3.19	--	42.56	46.00	3.44	
	1065.000	47.05	25.17	4.50	38.07	38.65	70.00	31.35	PK
	1125.000	46.78	25.45	4.50	37.93	38.80	70.00	31.20	
	1225.000	46.22	25.95	4.52	37.70	38.99	70.00	31.01	
	1370.000	42.27	26.60	4.54	37.32	36.09	70.00	33.91	
	1565.000	45.60	27.05	4.56	36.83	40.38	70.00	29.62	
	1710.000	41.99	27.18	4.57	36.56	37.18	70.00	32.82	
	1065.000	40.05	25.17	4.50	38.07	31.65	50.00	18.35	AV
	1125.000	37.78	25.45	4.50	37.93	29.80	50.00	20.20	
	1225.000	37.22	25.95	4.52	37.70	29.99	50.00	20.01	
	1370.000	32.27	26.60	4.54	37.32	26.09	50.00	23.91	
	1565.000	36.60	27.05	4.56	36.83	31.38	50.00	18.62	
	1710.000	31.99	27.18	4.57	36.56	27.18	50.00	22.82	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : DVI 1680*1050@60Hz Adapter #1 : ADS-40SG-19-3
19025G

LCD Panel : Panel #1

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	54.250	15.49	8.76	1.03	25.28	40.00	14.72
	105.660	19.56	11.26	1.90	32.72	43.50	10.78
	291.900	23.97	13.49	2.74	40.20	46.00	5.80
	321.970	24.55	14.30	2.82	41.67	46.00	4.33
	431.580	21.01	16.72	3.08	40.81	46.00	5.19
	527.610	20.36	17.77	3.33	41.46	46.00	4.54
Vertical	39.700	22.23	12.80	0.87	35.90	40.00	4.10
	53.280	25.30	8.70	1.01	35.01	40.00	4.99
	88.200	18.60	10.93	1.70	31.23	43.50	12.27
	186.170	23.17	9.93	2.38	35.48	43.50	8.02
	291.900	20.54	13.49	2.74	36.77	46.00	9.23
	468.440	17.83	17.22	3.19	38.24	46.00	7.76

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C
 Model No. : E2242TA Humidity : 60%RH
 Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012
 Test Mode : DVI 1280*1024@60Hz Adapter #1 : ADS-40SG-19-3
19025G
 LCD Panel : Panel #1

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	53.280	16.94	8.70	1.01	26.65	40.00	13.35
	105.660	18.77	11.26	1.90	31.93	43.50	11.57
	239.520	25.39	11.51	2.57	39.47	46.00	6.53
	321.970	25.26	14.30	2.82	42.38	46.00	3.62
	365.620	19.57	15.53	2.91	38.01	46.00	7.99
	527.610	20.38	17.77	3.33	41.48	46.00	4.52
Vertical	40.670	20.48	12.33	0.87	33.68	40.00	6.32
	53.280	21.79	8.70	1.01	31.50	40.00	8.50
	88.200	19.24	10.93	1.70	31.87	43.50	11.63
	186.170	22.48	9.93	2.38	34.79	43.50	8.71
	291.900	22.64	13.49	2.74	38.87	46.00	7.13
	465.530	17.81	17.19	3.17	38.17	46.00	7.83

TEST ENGINEER: RAVEN JIN

EUT	:	<u>LCD Monitor</u>	Temperature :	<u>22°C</u>
Model No.	:	<u>E2242TA</u>	Humidity :	<u>60%RH</u>
Serial No.	:	<u>112NDTC97185</u>	Date of Test :	<u>Mar 20, 2012</u>
Test Mode	:	<u>DVI 640*480@60Hz</u>	Adapter #1 :	<u>ADS-40SG-19-3 19025G</u>
LCD Panel	:	<u>Panel #1</u>		

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	53.280	19.99	8.70	1.01	29.70	40.00	10.30
	105.660	17.92	11.26	1.90	31.08	43.50	12.42
	167.740	21.94	10.14	2.31	34.39	43.50	9.11
	191.990	24.76	9.87	2.40	37.03	43.50	6.47
	291.900	24.77	13.49	2.74	41.00	46.00	5.00
	321.970	22.58	14.30	2.82	39.70	46.00	6.30
Vertical	32.910	17.30	16.79	0.82	34.91	40.00	5.09
	39.700	20.89	12.80	0.87	34.56	40.00	5.44
	53.280	25.25	8.70	1.01	34.96	40.00	5.04
	88.200	20.50	10.93	1.70	33.13	43.50	10.37
	132.820	21.37	10.77	2.12	34.26	43.50	9.24
	186.170	24.44	9.93	2.38	36.75	43.50	6.75

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #2 : LCAP21

LCD Panel : Panel #1

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	105.660	20.02	11.26	1.90	33.18	43.50	10.32
	167.740	21.49	10.14	2.31	33.94	43.50	9.56
	264.740	22.39	12.62	2.65	37.66	46.00	8.34
	291.900	27.28	13.49	2.74	43.51	46.00	2.49
	321.970	21.37	14.30	2.82	38.49	46.00	7.51
	701.240	14.45	19.50	3.68	37.63	46.00	8.37
Vertical	39.700	19.15	12.80	0.87	32.82	40.00	7.18
	53.280	22.82	8.70	1.01	32.53	40.00	7.47
	132.820	23.18	10.77	2.12	36.07	43.50	7.43
	186.170	24.31	9.93	2.38	36.62	43.50	6.88
	291.900	24.14	13.49	2.74	40.37	46.00	5.63
	527.610	20.96	17.77	3.33	42.06	46.00	3.94

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 112NDTC97185 Date of Test : Mar 20, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #3 : LCAP26-A

LCD Panel : Panel #1

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	132.820	16.47	10.77	2.12	29.36	43.50	14.14
	167.740	22.34	10.14	2.31	34.79	43.50	8.71
	191.990	23.61	9.87	2.40	35.88	43.50	7.62
	254.070	25.22	12.18	2.62	40.02	46.00	5.98
	291.900	27.73	13.49	2.74	43.96	46.00	2.04
	701.240	17.17	19.50	3.68	40.35	46.00	5.65
Vertical	39.700	21.31	12.80	0.87	34.98	40.00	5.02
	53.280	24.17	8.70	1.01	33.88	40.00	6.12
	88.200	19.05	10.93	1.70	31.68	43.50	11.82
	153.190	23.82	10.36	2.24	36.42	43.50	7.08
	186.170	24.52	9.93	2.38	36.83	43.50	6.67
	291.900	26.09	13.49	2.74	42.32	46.00	3.68

TEST ENGINEER: RAVEN JIN

EUT	:	<u>LCD Monitor</u>	Temperature :	<u>22°C</u>
Model No.	:	<u>E2242TA</u>	Humidity :	<u>60%RH</u>
Serial No.	:	<u>202INZY11453</u>	Date of Test :	<u>Mar 20, 2012</u>
Test Mode	:	<u>DVI 1920*1080@60Hz</u>	Adapter #1 :	<u>ADS-40SG-19-3 19025G</u>
LCD Panel	:	<u>Panel #2</u>		

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	32.910	15.20	16.79	0.66	32.65	40.00	7.35
	106.630	19.03	11.24	1.07	31.34	43.50	12.16
	167.740	25.34	10.14	1.32	36.80	43.50	6.70
	376.290	24.78	15.79	1.99	42.56	46.00	3.44
	557.680	22.15	17.96	2.38	42.49	46.00	3.51
	851.590	17.43	20.44	2.97	40.84	46.00	5.16
Vertical	36.790	7.47	15.80	0.69	23.96	40.00	16.04
	96.930	20.29	10.87	1.03	32.19	43.50	11.31
	193.930	23.96	10.44	1.43	35.83	43.50	7.67
	218.180	22.48	11.52	1.51	35.51	46.00	10.49
	368.530	25.48	15.81	1.98	43.27	46.00	2.73
	565.440	20.50	18.78	2.38	41.66	46.00	4.34

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2242TA Humidity : 60%RH

Serial No. : 202INZY11453 Date of Test : Mar 20, 2012

Test Mode : DVI 1920*1080@60Hz Adapter #2 : LCAP21

LCD Panel : Panel #2

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	48.430	21.13	9.62	0.77	31.52	40.00	8.48
	61.040	25.21	6.59	0.85	32.65	40.00	7.35
	109.540	21.56	12.25	1.08	34.89	43.50	8.61
	196.840	24.59	10.57	1.44	36.60	43.50	6.90
	390.840	20.97	16.30	2.03	39.30	46.00	6.70
	649.830	22.97	19.45	2.57	44.99	46.00	1.01
Vertical	31.940	15.51	18.49	0.65	34.65	40.00	5.35
	57.160	18.50	7.18	0.83	26.51	40.00	13.49
	166.770	21.08	10.31	1.31	32.70	43.50	10.80
	196.840	23.23	10.57	1.44	35.24	43.50	8.26
	390.840	22.61	16.30	2.03	40.94	46.00	5.06
	572.230	21.16	18.88	2.39	42.43	46.00	3.57

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C
 Model No. : E2242TA Humidity : 60%RH
 Serial No. : 202INZY11453 Date of Test : Mar 20, 2012
 Test Mode : DVI 1920*1080@60Hz Adapter #3 : LCAP26-A
 LCD Panel : Panel #2

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	12.80	15.80	0.69	29.29	40.00	10.71
	58.130	20.84	6.96	0.83	28.63	40.00	11.37
	96.930	20.56	10.87	1.03	32.46	43.50	11.04
	177.440	22.94	9.98	1.37	34.29	43.50	9.21
	368.530	23.29	15.81	1.98	41.08	46.00	4.92
	494.630	22.47	17.83	2.25	42.55	46.00	3.45
Vertical	37.760	18.38	15.20	0.70	34.28	40.00	5.72
	58.130	24.76	6.96	0.83	32.55	40.00	7.45
	96.930	22.54	10.87	1.03	34.44	43.50	9.06
	159.980	23.59	10.50	1.28	35.37	43.50	8.13
	361.740	23.96	15.65	1.96	41.57	46.00	4.43
	565.000	22.10	18.78	2.38	43.26	46.00	2.74

TEST ENGINEER: RAVEN JIN

EUT	:	<u>LCD Monitor</u>	Temperature :	<u>22°C</u>
Model No.	:	<u>E2242TA</u>	Humidity :	<u>60%RH</u>
Serial No.	:	<u>202INZY11453</u>	Date of Test :	<u>Mar 20, 2012</u>
Test Mode	:	<u>DVI 1920*1080@60Hz</u>	Adapter #4 :	<u>ADS-40FSG-19 19025GPCU-1</u>
LCD Panel	:	<u>Panel #2</u>		

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	10.24	15.80	0.69	26.73	40.00	13.27
	56.190	17.96	7.46	0.82	26.24	40.00	13.76
	135.730	18.58	12.28	1.19	32.05	43.50	11.45
	218.180	23.17	11.52	1.51	36.20	46.00	9.80
	371.440	23.60	15.88	1.99	41.47	46.00	4.53
	565.440	20.05	18.78	2.38	41.21	46.00	4.79
Vertical	30.970	14.31	19.03	0.64	33.98	40.00	6.02
	43.580	17.66	11.88	0.74	30.28	40.00	9.72
	106.630	24.25	12.02	1.07	37.34	43.50	6.16
	158.040	25.40	10.64	1.28	37.32	43.50	6.18
	366.590	23.75	15.77	1.98	41.50	46.00	4.50
	562.530	22.70	18.75	2.38	43.83	46.00	2.17

TEST ENGINEER: RAVEN JIN

5 DEVIATION TO TEST SPECIFICATIONS

None.