

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

LCD Monitor

Model No.: E2742VA, 27EA33VA

FCC ID : BEJE2742VA

Prepared For : LG Electronics U.S.A., Inc.
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NJ 07632, United States

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Report No. : ACI-F12027A4
Date of Test : Jan 24, 2013
Date of Report : Feb 04, 2013

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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. : E2742VA, 27EA33VA
(B) Serial No. : N/A
(C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2012
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: E2742VA, 27EA33VA) which was tested in 3m anechoic chamber Jan 24, 2013 is technically compliance with the FCC official limits also.

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

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

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

Date of Test : Jan 24, 2013 Date of Report : Feb 04, 2013

Producer : Yenny Yu.
YENNY YU / Assistant

Review : Dio Yang.
DIO YANG / Assistant Manager

AUDIX® 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 2012 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2012 AND ANSI C63.4-2003	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : LCD Monitor

Model No. : E2742VA, 27EA33VA

Note #1 : The different list for all the models are as follows:

Report No.	Model No.	Rev. Summary	Edition No.	Data of Rev.
ACI-F12027	E2742VA	Original Report	0	Feb 27, 2012
ACI-F12027A1	E2742VA	To add a new panel.	Rev.A1	Mar 26, 2012
ACI-F12027A2	E2742VA, 27EA33VA	1.To add a new model. 2.To add a new panel. 3.To update the standards.	Rev.A2	Sep 04, 2012
ACI-F12027A3	E2742VA, 27EA33VA	To add a new adapter.	Rev.A3	Oct 22, 2012
ACI-F12027A4	E2742VA, 27EA33VA	1.To add four new adapters. 2. To update the standards.	Rev.A4	Feb 04, 2013

Note #2 : E2742VA and 27EA33VA are all the same except for the model name.
27EA33VA was tested and recorded in the report.

Adapter #1 : Manufacturer : LIEN CHANG
Model Number : LCAP21A
Input : 100-240V~, 50-60Hz 1.1A
Output : 19V $\overline{\text{---}}$ 1.7A
Output Cable : Unshielded, Undetachable, 1.8m, with one core

Adapter #2 : Manufacturer : HONOR
Model Number : ADS-40SG-19-3 19032G
Input : 100-240V~, 50-60Hz 1.0A
Output : 19V $\overline{\text{---}}$ 1.7A
Output Cable : Unshielded, Undetachable, 1.8m

Adapter #3 : Manufacturer : HONOR
Model Number : ADS-40FSG-19 19032G***-1
(*** can be PG, PBR, PI, PCU, ADS-40FSG-19 19032GPCU-1 was selected as the test model.)
Input : 100-240V~, 50-60Hz 1.0A
Output : 19V $\overline{\text{---}}$ 1.7A
Output Cable : Unshielded, Undetachable, 1.8m

Adapter #4 : Manufacturer : LIEN CHANG
Model Number : LCAP26A-
(* can be A, E, I, B, LCAP26A-A was selected as the test model.)
Input : 100-240V~, 50-60Hz 1.1A
Output : 19V  1.7A
Output Cable : Unshielded, Undetachable, 1.8m

Adapter :

Original Adapter	New Adapter
Manufacturer : LITE-ON TECHNOLOGY CORPORATION M/N : PA-1650-68	Manufacturer : LIEN CHANG M/N : LCAP21A
Manufacturer : LG M/N : LCAP21B	Manufacturer : HONOR M/N : ADS-40SG-19-3 19032G
--	Manufacturer : HONOR M/N : ADS-40FSG-19 19032G***-1 (***) can be PG, PBR, PI, PCU, ADS-40FSG-19 19032GPCU-1 was selected as the test model.)
--	Manufacturer : LIEN CHANG M/N : LCAP26A-* (* can be A, E, I, B, LCAP26A-A was selected as the test model.)

Real Power : 30.76W (Adapter#1)
30.09W (Adapter#2)
29.90W (Adapter#3)
30.10W (Adapter#4)

Applicant : LG Electronics U.S.A., Inc.
No.346, YaoXin Road Economic&Technical Development Zone,
Nanjing, China

Manufacturer : LG Electronics Nanjing Display Co., Ltd.
No.346, YaoXin Road Economic&Technical Development Zone,
Nanjing, China

LCD Panel	:	Original Panel	Rev. A1 added Panel
	:	Manufacturer : CHI MEI OPTOELECTRONICS	Manufacturer : LG Display
	:	M/N : M270HGE	M/N : LM270WF2
	:	Rev. A2 added Panel	--
	:	Manufacturer : LG Display	--
	:	M/N : LM270WF5	

Note #3 : We evaluated and selected the original panel(M/N: M270HGE) to test and record in the report.

Max Resolution : 1920*1080@60Hz

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

D-Sub Cable #2 : Shielded, Detachable, 1.50m, with two cores in connector

DVI Cable #1 : Shielded, Detachable, 1.85m, with two cores on cable

DVI Cable #2 : Shielded, Detachable, 1.50m, with two cores in connector

Power Cord : Unshielded, Detachable, 1.50m

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 HDMI Port : Connected with PC / DVD PLAYER
- (4) One Earphone Port : Connected with Earphone
- (5) One DC In Port : Connected with Adapter

2.2 Peripherals

2.2.1 PC

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

2.2.2 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

2.2.7 DVD PLAYER

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120108
Data Cable : Shielded, Detachable, 1.80m
Certificate : FCC DoC, CE/EMC, CCC

2.2.8 Earphone

Manufacturer : SONY
Model Number : MDR-E808
Serial Number : 1808030805305506
Data Cable : Shielded, Detachable, 1.8m

2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on
Mar 16, 2012 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 = 3.42 dB

Radiated Emission Expanded Uncertainty (30-200MHz):
U = 4.14 dB (Horizontal)
U = 4.28 dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):
U = 4.18 dB (Horizontal)
U = 4.26 dB (Vertical)

Radiated Emission Expanded Uncertainty (Above 1GHz):
U= 4.50 dB (Horizontal)
U= 4.16 dB (Vertical)

3 CONDUCTED EMISSION TEST

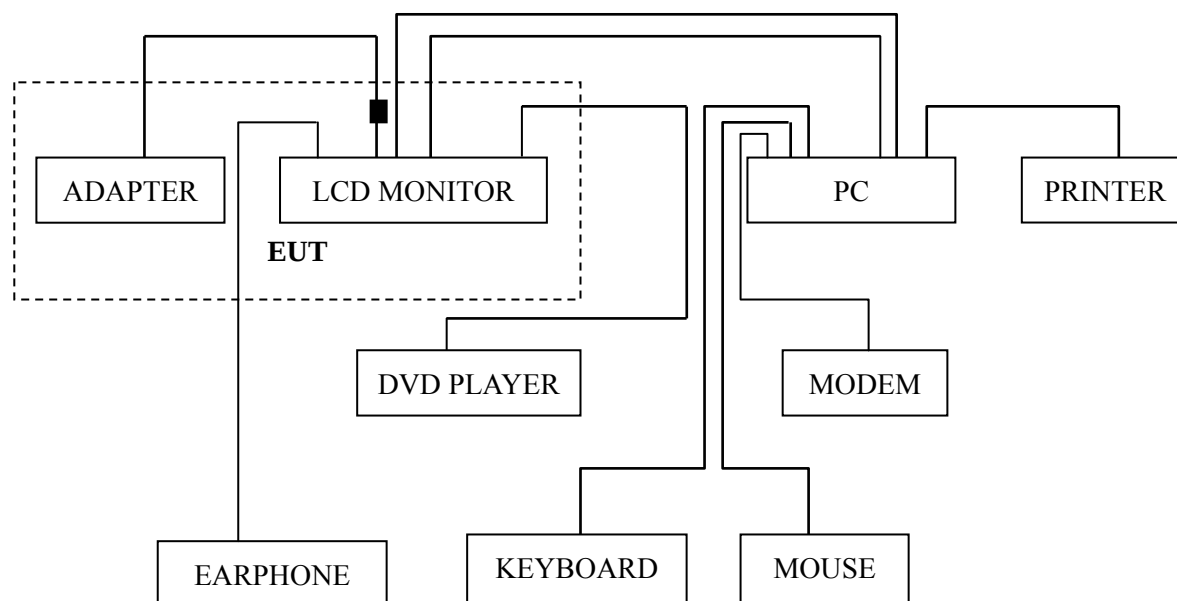
3.1 Test Equipment

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, 2012	Mar 22, 2013
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Feb 13, 2012	Feb 13, 2013
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 22, 2012	Mar 22, 2013
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 18, 2012	Mar 18, 2013
5.	50 Ω Terminator	Anritsu	BNC	001	Mar 22, 2012	Mar 22, 2013
6.	Software	Audix	E3	SET00200 9804M592	--	--

3.2 Block Diagram of Test Setup

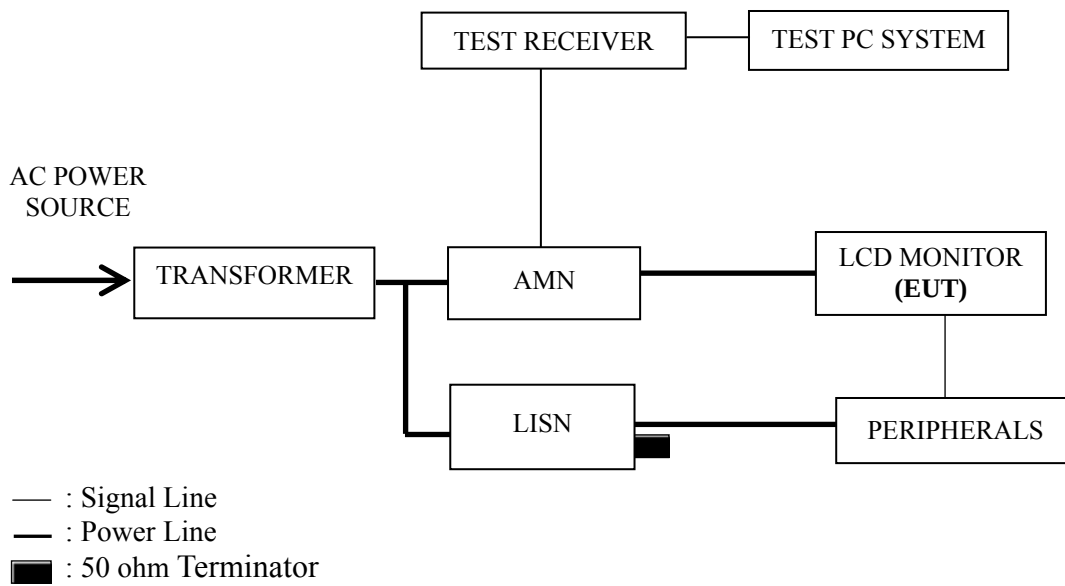
3.2.1 EUT & Peripherals



■ : Ferrite core

Note: Ferrite core only for Adapter #1

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 In HDMI mode, the EUT connected to PC or DVD PLAYER 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 1920*1080@60Hz
DVI 1920*1080@60Hz
HDMI 1920*1080@60Hz
HDMI 1080P
DVI 1680*1050@60Hz
DVI 1280*1024@75Hz
DVI 640*480@60Hz

NOTE: We tested the EUT with adapter #1 and selected the worst test mode to perform test with adapter #2/#3/#4.

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.

Adapter	Test Mode	Data Page
Adapter #1	D-Sub 1920*1080@60Hz	P14
	DVI 1920*1080@60Hz	P15
	HDMI 1920*1080@60Hz	P16
	HDMI 1080P	P17
	D-Sub 1280*1024@75Hz	P18
	D-Sub 640*480@60Hz	P19
Adapter #2	D-Sub 1920*1080@60Hz	P20
Adapter #3	D-Sub 1920*1080@60Hz	P21
Adapter #4	D-Sub 1920*1080@60Hz	P22

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

NOTE 2 – Factor = Cable Loss + AMN Factor.

NOTE 3 – Emission Level = Meter Reading + Factor.

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

NOTE 5 – The worst case is for D-Sub 1920*1080@60Hz test mode. The worst emission is detected at 4.361 MHz (Quasi-Peak Value) with corrected signal level of 47.72 dB (μV) (limit is 56.00 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	48.08	0.24	48.32	64.68	16.36	QP
	0.296	35.68	0.26	35.94	60.37	24.43	
	0.494	32.84	0.35	33.19	56.10	22.91	
	1.184	33.42	0.33	33.75	56.00	22.25	
	4.361	47.23	0.49	47.72	56.00	8.28	
	18.039	35.96	0.90	36.86	60.00	23.14	
	0.176	36.22	0.24	36.46	54.68	18.22	AV
	0.296	22.86	0.26	23.12	50.37	27.25	
	0.494	19.40	0.35	19.75	46.10	26.35	
	1.184	20.45	0.33	20.78	46.00	25.22	
	4.361	35.40	0.49	35.89	46.00	10.11	
	18.039	22.55	0.90	23.45	50.00	26.55	
Neutral	0.174	49.27	0.12	49.39	64.77	15.38	QP
	0.262	38.78	0.11	38.89	61.38	22.49	
	0.292	36.25	0.12	36.37	60.46	24.09	
	0.634	31.41	0.19	31.60	56.00	24.40	
	4.952	36.59	0.42	37.01	56.00	18.99	
	20.162	35.98	0.82	36.80	60.00	23.20	
	0.174	36.41	0.12	36.53	54.77	18.24	AV
	0.262	25.98	0.11	26.09	51.38	25.29	
	0.292	24.56	0.12	24.68	50.46	25.78	
	0.634	18.64	0.19	18.83	46.00	27.17	
	4.952	25.02	0.42	25.44	46.00	20.56	
	20.162	22.81	0.82	23.63	50.00	26.37	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : DVI 1920*1080@60Hz Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.178	48.63	0.25	48.88	64.59	15.71	QP
	0.297	35.10	0.26	35.36	60.32	24.96	
	0.499	32.00	0.35	32.35	56.01	23.66	
	1.117	32.61	0.32	32.93	56.00	23.07	
	4.549	46.51	0.50	47.01	56.00	8.99	
	18.039	35.94	0.90	36.84	60.00	23.16	
	0.178	36.25	0.25	36.50	54.59	18.09	AV
	0.297	23.45	0.26	23.71	50.32	26.61	
	0.499	20.55	0.35	20.90	46.01	25.11	
	1.117	19.67	0.32	19.99	46.00	26.01	
	4.549	34.70	0.50	35.20	46.00	10.80	
	18.039	23.16	0.90	24.06	50.00	25.94	
Neutral	0.180	47.92	0.12	48.04	64.50	16.46	QP
	0.247	38.27	0.11	38.38	61.86	23.48	
	0.297	36.52	0.12	36.64	60.32	23.68	
	0.614	31.23	0.19	31.42	56.00	24.58	
	4.027	36.89	0.40	37.29	56.00	18.71	
	20.814	36.54	0.84	37.38	60.00	22.62	
	0.180	34.90	0.12	35.02	54.50	19.48	AV
	0.247	27.60	0.11	27.71	51.86	24.15	
	0.297	24.81	0.12	24.93	50.32	25.39	
	0.614	19.42	0.19	19.61	46.00	26.39	
	4.027	23.84	0.40	24.24	46.00	21.76	
	20.814	23.89	0.84	24.73	50.00	25.27	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : HDMI 1920*1080@60Hz Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	48.94	0.24	49.18	64.68	15.50	QP
	0.260	37.44	0.25	37.69	61.42	23.73	
	0.297	35.03	0.26	35.29	60.32	25.03	
	0.614	32.97	0.22	33.19	56.00	22.81	
	4.501	46.10	0.50	46.60	56.00	9.40	
	20.377	37.20	0.92	38.12	60.00	21.88	
	0.176	36.56	0.24	36.80	54.68	17.88	AV
	0.260	26.56	0.25	26.81	51.42	24.61	
	0.297	23.81	0.26	24.07	50.32	26.25	
	0.614	19.71	0.22	19.93	46.00	26.07	
	4.501	34.84	0.50	35.34	46.00	10.66	
	20.377	26.46	0.92	27.38	50.00	22.62	
Neutral	0.178	48.87	0.12	48.99	64.59	15.60	QP
	0.297	37.39	0.12	37.51	60.32	22.81	
	0.426	33.17	0.17	33.34	57.33	23.99	
	0.552	31.57	0.17	31.74	56.00	24.26	
	4.269	37.51	0.40	37.91	56.00	18.09	
	18.039	37.19	0.80	37.99	60.00	22.01	
	0.178	35.85	0.12	35.97	54.59	18.62	AV
	0.297	26.58	0.12	26.70	50.32	23.62	
	0.426	22.94	0.17	23.11	47.33	24.22	
	0.552	19.49	0.17	19.66	46.00	26.34	
	4.269	24.59	0.40	24.99	46.00	21.01	
	18.039	24.96	0.80	25.76	50.00	24.24	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : HDMI 1080P Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	49.39	0.25	49.64	64.50	14.86	QP
	0.242	37.39	0.25	37.64	62.04	24.40	
	0.297	34.81	0.26	35.07	60.32	25.25	
	0.614	32.64	0.22	32.86	56.00	23.14	
	4.454	47.03	0.50	47.53	56.00	8.47	
	20.162	36.43	0.92	37.35	60.00	22.65	
	0.180	37.32	0.25	37.57	54.50	16.93	AV
	0.242	24.74	0.25	24.99	52.04	27.05	
	0.297	22.45	0.26	22.71	50.32	27.61	
	0.614	19.41	0.22	19.63	46.00	26.37	
	4.454	34.77	0.50	35.27	46.00	10.73	
	20.162	24.19	0.92	25.11	50.00	24.89	
Neutral	0.180	47.53	0.12	47.65	64.50	16.85	QP
	0.262	38.21	0.11	38.32	61.38	23.06	
	0.426	33.84	0.17	34.01	57.33	23.32	
	0.634	31.63	0.19	31.82	56.00	24.18	
	4.224	36.44	0.40	36.84	56.00	19.16	
	18.039	36.36	0.80	37.16	60.00	22.84	
	0.180	34.77	0.12	34.89	54.50	19.61	AV
	0.262	26.45	0.11	26.56	51.38	24.82	
	0.426	20.13	0.17	20.30	47.33	27.03	
	0.634	18.49	0.19	18.68	46.00	27.32	
	4.224	24.70	0.40	25.10	46.00	20.90	
	18.039	23.80	0.80	24.60	50.00	25.40	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 1280*1024@75Hz Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.178	47.95	0.25	48.20	64.59	16.39	QP
	0.244	37.19	0.25	37.44	61.95	24.51	
	0.494	31.94	0.35	32.29	56.10	23.81	
	1.010	32.77	0.32	33.09	56.00	22.91	
	4.549	46.92	0.50	47.42	56.00	8.58	
	17.755	36.49	0.89	37.38	60.00	22.62	
	0.178	35.56	0.25	35.81	54.59	18.78	AV
	0.244	25.91	0.25	26.16	51.95	25.79	
	0.494	18.49	0.35	18.84	46.10	27.26	
	1.010	20.94	0.32	21.26	46.00	24.74	
	4.549	34.50	0.50	35.00	46.00	11.00	
	17.755	24.56	0.89	25.45	50.00	24.55	
Neutral	0.176	48.38	0.12	48.50	64.68	16.18	QP
	0.297	38.48	0.12	38.60	60.32	21.72	
	0.421	33.58	0.17	33.75	57.42	23.67	
	0.634	31.93	0.19	32.12	56.00	23.88	
	4.269	37.82	0.40	38.22	56.00	17.78	
	17.755	37.24	0.79	38.03	60.00	21.97	
	0.176	37.45	0.12	37.57	54.68	17.11	AV
	0.297	26.48	0.12	26.60	50.32	23.72	
	0.421	21.44	0.17	21.61	47.42	25.81	
	0.634	18.70	0.19	18.89	46.00	27.11	
	4.269	25.86	0.40	26.26	46.00	19.74	
	17.755	24.79	0.79	25.58	50.00	24.42	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 640*480@60Hz Adapter #1: LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.178	48.17	0.25	48.42	64.59	16.17	QP
	0.237	37.65	0.25	37.90	62.22	24.32	
	0.303	35.08	0.27	35.35	60.15	24.80	
	0.634	32.91	0.21	33.12	56.00	22.88	
	4.501	46.44	0.50	46.94	56.00	9.06	
	17.849	35.65	0.90	36.55	60.00	23.45	
	0.178	34.59	0.25	34.84	54.59	19.75	AV
	0.237	25.58	0.25	25.83	52.22	26.39	
	0.303	23.45	0.27	23.72	50.15	26.43	
	0.634	20.23	0.21	20.44	46.00	25.56	
	4.501	34.70	0.50	35.20	46.00	10.80	
	17.849	22.74	0.90	23.64	50.00	26.36	
Neutral	0.180	47.89	0.12	48.01	64.50	16.49	QP
	0.242	38.11	0.11	38.22	62.04	23.82	
	0.296	36.12	0.12	36.24	60.37	24.13	
	0.621	31.22	0.19	31.41	56.00	24.59	
	4.224	37.59	0.40	37.99	56.00	18.01	
	20.162	35.62	0.82	36.44	60.00	23.56	
	0.180	34.77	0.12	34.89	54.50	19.61	AV
	0.242	26.48	0.11	26.59	52.04	25.45	
	0.296	24.78	0.12	24.90	50.37	25.47	
	0.621	19.26	0.19	19.45	46.00	26.55	
	4.224	25.40	0.40	25.80	46.00	20.20	
	20.162	23.64	0.82	24.46	50.00	25.54	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #2: ADS-40SG-19-3
19032G

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.184	54.31	0.25	54.56	64.28	9.72	QP
	0.260	44.84	0.25	45.09	61.42	16.33	
	0.489	41.25	0.35	41.60	56.19	14.59	
	1.172	41.37	0.32	41.69	56.00	14.31	
	1.367	42.16	0.34	42.50	56.00	13.50	
	7.025	37.06	0.66	37.72	60.00	22.28	
	0.184	41.82	0.25	42.07	54.28	12.21	AV
	0.260	31.45	0.25	31.70	51.42	19.72	
	0.489	28.66	0.35	29.01	46.19	17.18	
	1.172	28.50	0.32	28.82	46.00	17.18	
	1.367	30.45	0.34	30.79	46.00	15.21	
	7.025	25.44	0.66	26.10	50.00	23.90	
Neutral	0.190	54.84	0.12	54.96	64.02	9.06	QP
	0.260	45.05	0.11	45.16	61.42	16.26	
	0.505	40.93	0.17	41.10	56.00	14.90	
	0.974	41.21	0.22	41.43	56.00	14.57	
	1.800	39.87	0.17	40.04	56.00	15.96	
	18.232	35.82	0.80	36.62	60.00	23.38	
	0.190	42.40	0.12	42.52	54.02	11.50	AV
	0.260	34.13	0.11	34.24	51.42	17.18	
	0.505	29.10	0.17	29.27	46.00	16.73	
	0.974	28.59	0.22	28.81	46.00	17.19	
	1.800	27.11	0.17	27.28	46.00	18.72	
	18.232	23.26	0.80	24.06	50.00	25.94	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #3: ADS-40FSG-19
19032GPCU-1

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	43.19	0.23	43.42	65.91	22.49	QP
	0.190	45.23	0.25	45.48	64.02	18.54	
	0.262	36.79	0.25	37.04	61.38	24.34	
	0.592	30.58	0.26	30.84	56.00	25.16	
	4.721	37.84	0.50	38.34	56.00	17.66	
	16.661	31.34	0.86	32.20	60.00	27.80	
	0.152	30.25	0.23	30.48	55.91	25.43	AV
	0.190	31.28	0.25	31.53	54.02	22.49	
	0.262	24.58	0.25	24.83	51.38	26.55	
	0.592	19.11	0.26	19.37	46.00	26.63	
	4.721	24.74	0.50	25.24	46.00	20.76	
	16.661	17.99	0.86	18.85	50.00	31.15	
Neutral	0.153	42.93	0.13	43.06	65.82	22.76	QP
	0.192	43.85	0.12	43.97	63.93	19.96	
	0.262	34.61	0.11	34.72	61.38	26.66	
	0.573	28.57	0.18	28.75	56.00	27.25	
	4.622	35.81	0.42	36.23	56.00	19.77	
	8.592	26.59	0.52	27.11	60.00	32.89	
	0.153	30.29	0.13	30.42	55.82	25.40	AV
	0.192	30.70	0.12	30.82	53.93	23.11	
	0.262	22.51	0.11	22.62	51.38	28.76	
	0.573	17.40	0.18	17.58	46.00	28.42	
	4.622	24.31	0.42	24.73	46.00	21.27	
	8.592	14.82	0.52	15.34	50.00	34.66	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 48%RH

Serial No. : N/A Date of Test : Feb 04, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #4: LCAP26A-A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.183	54.34	0.25	54.59	64.33	9.74	QP
	0.260	44.27	0.25	44.52	61.42	16.90	
	0.307	42.38	0.27	42.65	60.06	17.41	
	0.634	32.20	0.21	32.41	56.00	23.59	
	4.501	37.74	0.50	38.24	56.00	17.76	
	18.426	32.65	0.91	33.56	60.00	26.44	
	0.183	42.36	0.25	42.61	54.33	11.72	AV
	0.260	31.74	0.25	31.99	51.42	19.43	
	0.307	29.41	0.27	29.68	50.06	20.38	
	0.634	19.89	0.21	20.10	46.00	25.90	
	4.501	26.40	0.50	26.90	46.00	19.10	
	18.426	20.42	0.91	21.33	50.00	28.67	
Neutral	0.190	51.83	0.12	51.95	64.02	12.07	QP
	0.262	45.47	0.11	45.58	61.38	15.80	
	0.307	41.13	0.12	41.25	60.06	18.81	
	0.573	29.20	0.18	29.38	56.00	26.62	
	5.221	34.99	0.42	35.41	60.00	24.59	
	19.021	32.50	0.82	33.32	60.00	26.68	
	0.190	42.10	0.12	42.22	54.02	11.80	AV
	0.262	33.49	0.11	33.60	51.38	17.78	
	0.307	28.56	0.12	28.68	50.06	21.38	
	0.573	17.33	0.18	17.51	46.00	28.49	
	5.221	22.71	0.42	23.13	50.00	26.87	
	19.021	20.69	0.82	21.51	50.00	28.49	

TEST ENGINEER: SAWEN LI

4 RADIATED EMISSION TEST

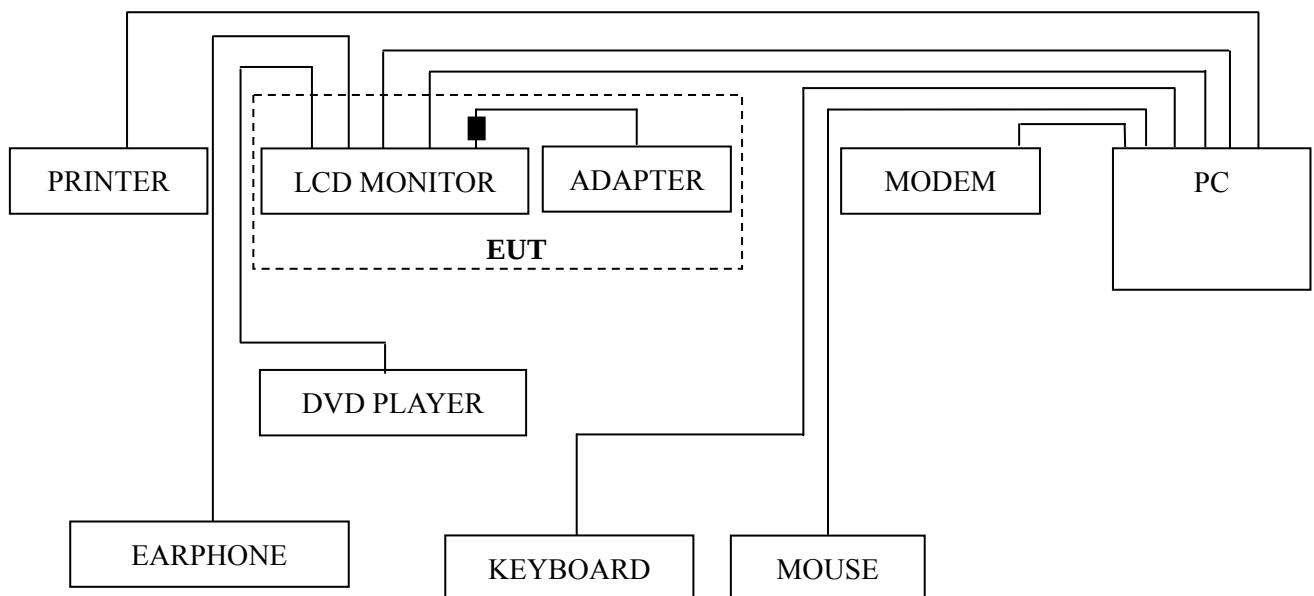
4.1 Test Equipment

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	ESCI	101302	Sep 11, 2012	Sep 11, 2013
2.	Preamplifier	Agilent	8447D	2944A10548	Mar 18, 2012	Sep 18, 2012
3.	Preamplifier	HP	8449B	3008A00864	Mar 22, 2012	Mar 22, 2013
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 03, 2012	May 03, 2013
5.	Horn Antenna	EMCO	3115	9607-4878	May 03, 2012	May 03, 2013
6.	Spectrum	Agilent	E7405A	MY45106600	Dec 17, 2012	Dec 17, 2013
7.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2012	Mar 18, 2013
8.	Software	Audix	E3	SET00200 9912M295-2	--	--

4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals

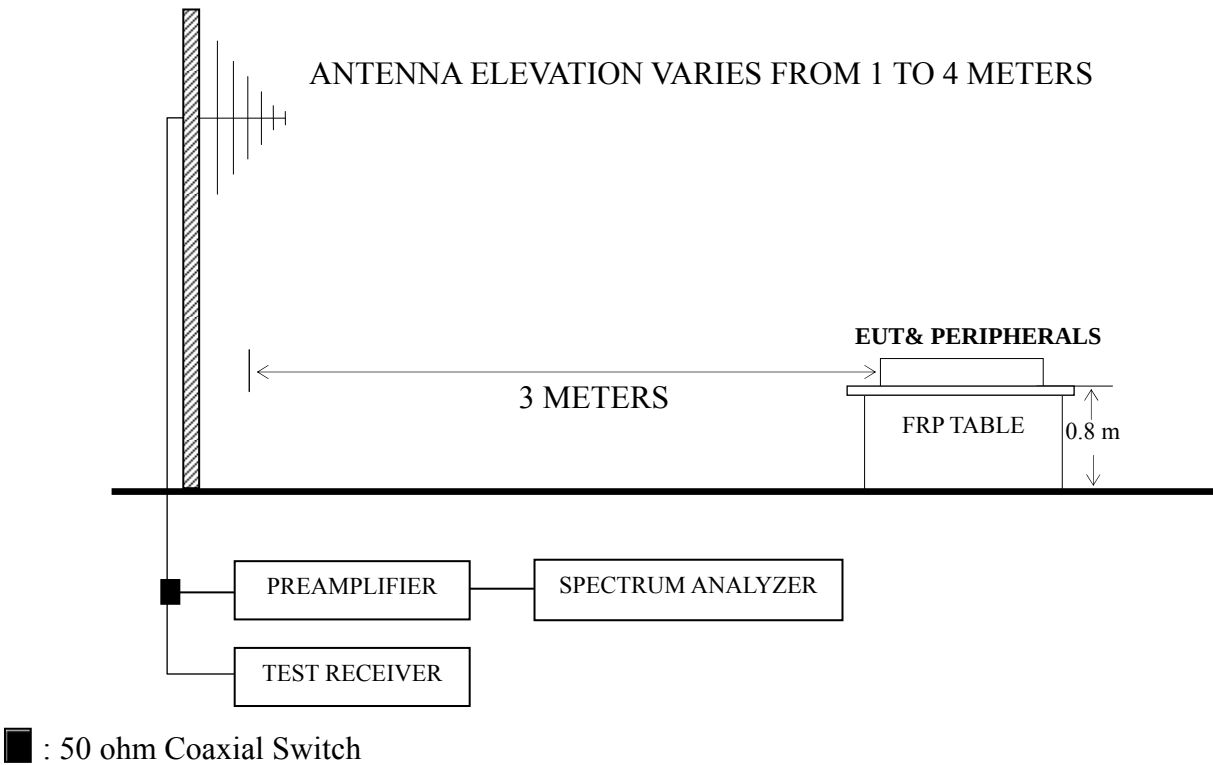


■ : Ferrite core

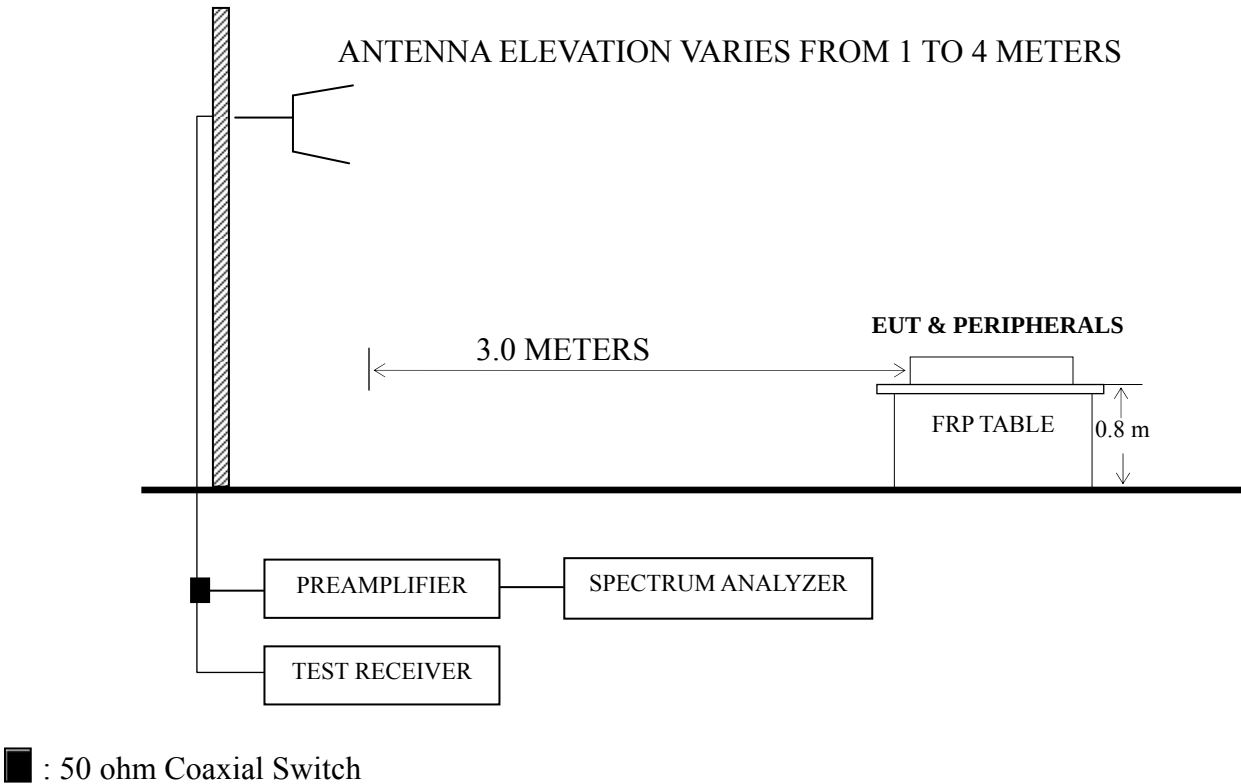
Note: Ferrite core only for Adapter #1

4.2.2 Radiated emission test setup

4.2.2.1 Below 1GHz



4.2.2.2 Above 1GHz



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.

Adapter	Test Mode	Data Page
Adapter #1	D-Sub 1920*1080@60Hz	P28 – P29
	DVI 1920*1080@60Hz	P30
	HDMI 1920*1080@60Hz	P31
	HDMI 1080P	P32
	DVI 1280*1024@75Hz	P33
	DVI 640*480@60Hz	P34
Adapter #2	D-Sub 1920*1080@60Hz	P35
Adapter #3	D-Sub 1920*1080@60Hz	P36
Adapter #4	D-Sub 1920*1080@60Hz	P37

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

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

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

NOTE 4 – 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 using adapter #1, and selected the worst test mode to perform test with other adapters.

NOTE 8 – The worst case is for D-Sub 1920*1080@60Hz test mode (Adapter #1). The worst emission at horizontal polarization was detected at 773.990 MHz with corrected signal level of 42.70 dB ($\mu\text{V/m}$) (limit is 46.00 dB ($\mu\text{V/m}$)), when the antenna was 1.00 m height and the turntable was at 120° . The worst emission at vertical polarization was detected at 776.900 MHz with corrected signal level of 44.41 dB ($\mu\text{V/m}$) (limit is 46.00 dB ($\mu\text{V/m}$)), when the antenna was 1.00 m height and the turntable was at 225° .

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #1: LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	140.580	15.49	10.60	1.60	--	27.69	43.50	15.81	QP
	197.810	22.39	9.82	1.94	--	34.15	43.50	9.35	
	248.250	27.56	11.90	2.20	--	41.66	46.00	4.34	
	395.690	17.63	16.20	2.68	--	36.51	46.00	9.49	
	494.630	17.09	17.53	2.96	--	37.58	46.00	8.42	
	773.990	18.76	20.34	3.60	--	42.70	46.00	3.30	
	1075.000	52.83	25.21	5.27	38.04	45.27	74.00	28.73	PK
	1180.000	47.13	25.71	5.34	37.81	40.37	74.00	33.63	
	1280.000	47.93	26.23	5.47	37.56	42.07	74.00	31.93	
	1365.000	49.64	26.59	5.55	37.33	44.45	74.00	29.55	
	1465.000	45.41	26.90	5.72	37.06	40.97	74.00	33.03	
	1595.000	47.05	27.08	5.93	36.77	43.29	74.00	30.71	
	1075.000	39.80	25.21	5.27	38.04	32.24	54.00	21.76	AV
	1180.000	35.50	25.71	5.34	37.81	28.74	54.00	25.26	
	1280.000	33.29	26.23	5.47	37.56	27.43	54.00	26.57	
	1365.000	34.30	26.59	5.55	37.33	29.11	54.00	24.89	
	1465.000	34.40	26.90	5.72	37.06	29.96	54.00	24.04	
	1595.000	34.10	27.08	5.93	36.77	30.34	54.00	23.66	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #1: LCAP21A

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	30.000	17.14	18.30	0.65	--	36.09	40.00	3.91	QP
	70.740	21.66	9.93	0.94	--	32.53	40.00	7.47	
	248.250	21.68	11.90	2.20	--	35.78	46.00	10.22	
	494.630	20.24	17.53	2.96	--	40.73	46.00	5.27	
	776.900	20.44	20.37	3.60	--	44.41	46.00	1.59	
	845.770	17.64	20.46	3.98	--	42.08	46.00	3.92	
	1080.000	50.24	25.24	5.27	38.03	42.72	74.00	31.28	PK
	1170.000	49.19	25.66	5.34	37.83	42.36	74.00	31.64	
	1315.000	50.98	26.39	5.51	37.48	45.40	74.00	28.60	
	1465.000	45.47	26.90	5.72	37.06	41.03	74.00	32.97	
	1600.000	49.84	27.08	5.93	36.76	46.09	74.00	27.91	
	1760.000	49.81	27.23	6.17	36.49	46.72	74.00	27.28	
	1080.000	40.30	25.24	5.27	38.03	32.78	54.00	21.22	AV
	1170.000	37.59	25.66	5.34	37.83	30.76	54.00	23.24	
	1315.000	36.41	26.39	5.51	37.48	30.83	54.00	23.17	
	1465.000	34.40	26.90	5.72	37.06	29.96	54.00	24.04	
	1600.000	34.30	27.08	5.93	36.76	30.55	54.00	23.45	
	1760.000	33.10	27.23	6.17	36.49	30.01	54.00	23.99	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : DVI 1920*1080@60Hz Adapter #1: LCAP21A

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	158.040	16.32	10.28	1.70	28.30	43.50	15.20
	220.120	21.16	10.64	2.04	33.84	46.00	12.16
	355.920	18.03	15.29	2.63	35.95	46.00	10.05
	446.130	17.49	16.92	2.82	37.23	46.00	8.77
	593.570	13.65	18.17	3.20	35.02	46.00	10.98
	774.960	19.61	20.34	3.60	43.55	46.00	2.45
Vertical	31.940	13.46	17.29	0.68	31.43	40.00	8.57
	84.320	19.21	10.75	1.13	31.09	40.00	8.91
	142.520	19.52	10.56	1.60	31.68	43.50	11.82
	296.750	19.45	13.63	2.52	35.60	46.00	10.40
	446.130	21.68	16.92	2.82	41.42	46.00	4.58
	512.090	21.19	17.68	3.01	41.88	46.00	4.12

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : HDMI 1920*1080@60Hz Adapter #1: LCAP21A

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	197.810	22.81	9.82	1.94	34.57	43.50	8.93
	248.250	22.95	11.90	2.20	37.05	46.00	8.95
	347.190	23.90	15.04	2.62	41.56	46.00	4.44
	446.130	20.55	16.92	2.82	40.29	46.00	5.71
	593.570	22.32	18.17	3.20	43.69	46.00	2.31
	891.360	18.88	20.32	4.43	43.63	46.00	2.37
Vertical	34.850	17.55	15.70	0.71	33.96	40.00	6.04
	141.550	21.84	10.59	1.60	34.03	43.50	9.47
	296.750	24.23	13.63	2.52	40.38	46.00	5.62
	446.130	21.85	16.92	2.82	41.59	46.00	4.41
	593.570	22.16	18.17	3.20	43.53	46.00	2.47
	742.950	15.87	19.98	3.57	39.42	46.00	6.58

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : HDMI 1080P Adapter #1: LCAP21A

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	140.580	16.95	10.60	1.60	29.15	43.50	14.35
	197.810	23.64	9.82	1.94	35.40	43.50	8.10
	248.250	24.19	11.90	2.20	38.29	46.00	7.71
	355.920	21.77	15.29	2.63	39.69	46.00	6.31
	395.690	21.52	16.20	2.68	40.40	46.00	5.60
	494.630	19.79	17.53	2.96	40.28	46.00	5.72
Vertical	32.910	16.06	16.79	0.69	33.54	40.00	6.46
	50.370	19.06	8.51	0.85	28.42	40.00	11.58
	83.350	21.06	10.70	1.13	32.89	40.00	7.11
	98.870	23.61	11.31	1.32	36.24	43.50	7.26
	197.810	21.95	9.82	1.94	33.71	43.50	9.79
	395.690	19.29	16.20	2.68	38.17	46.00	7.83

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1280*1024@75Hz Adapter #1: LCAP21A

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	197.810	23.55	9.82	1.94	35.31	43.50	8.19
	248.250	24.87	11.90	2.20	38.97	46.00	7.03
	329.730	19.29	14.54	2.59	36.42	46.00	9.58
	395.690	17.26	16.20	2.68	36.14	46.00	9.86
	494.630	15.74	17.53	2.96	36.23	46.00	9.77
	782.720	16.00	20.44	3.60	40.04	46.00	5.96
Vertical	30.970	15.67	17.78	0.67	34.12	40.00	5.88
	84.320	19.56	10.75	1.13	31.44	40.00	8.56
	98.870	22.65	11.31	1.32	35.28	43.50	8.22
	197.810	21.66	9.82	1.94	33.42	43.50	10.08
	248.250	19.28	11.90	2.20	33.38	46.00	12.62
	494.630	16.91	17.53	2.96	37.40	46.00	8.60

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 640*480@60Hz Adapter #1: LCAP21A

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	197.810	23.38	9.82	1.94	35.14	43.50	8.36
	263.770	23.92	12.57	2.30	38.79	46.00	7.21
	347.190	24.82	15.04	2.62	42.48	46.00	3.52
	395.690	20.46	16.20	2.68	39.34	46.00	6.66
	494.630	17.52	17.53	2.96	38.01	46.00	7.99
	784.660	18.47	20.44	3.60	42.51	46.00	3.49
Vertical	30.970	16.48	17.78	0.67	34.93	40.00	5.07
	98.870	23.29	11.31	1.32	35.92	43.50	7.58
	197.810	24.90	9.82	1.94	36.66	43.50	6.84
	395.690	19.83	16.20	2.68	38.71	46.00	7.29
	494.630	18.67	17.53	2.96	39.16	46.00	6.84
	784.660	15.57	20.44	3.60	39.61	46.00	6.39

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #2: ADS-40SG-19-3
19032G

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	197.810	23.55	9.82	1.94	35.31	43.50	8.19
	263.770	25.56	12.57	2.30	40.43	46.00	5.57
	347.190	24.54	15.04	2.62	42.20	46.00	3.80
	395.690	20.46	16.20	2.68	39.34	46.00	6.66
	494.630	19.49	17.53	2.96	39.98	46.00	6.02
	783.690	17.23	20.44	3.60	41.27	46.00	4.73
Vertical	32.910	16.37	16.79	0.69	33.85	40.00	6.15
	98.870	22.33	11.31	1.32	34.96	43.50	8.54
	197.810	23.78	9.82	1.94	35.54	43.50	7.96
	248.250	18.80	11.90	2.20	32.90	46.00	13.10
	356.890	18.47	15.33	2.63	36.43	46.00	9.57
	452.920	14.38	17.01	2.84	34.23	46.00	11.77

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #3: ADS-40FSG-19
19032GPCU-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	98.870	16.73	11.31	1.32	29.36	43.50	14.14
	197.810	22.59	9.82	1.94	34.35	43.50	9.15
	248.250	24.54	11.90	2.20	38.64	46.00	7.36
	347.190	24.44	15.04	2.62	42.10	46.00	3.90
	494.630	18.86	17.53	2.96	39.35	46.00	6.65
	782.720	16.15	20.44	3.60	40.19	46.00	5.81
Vertical	30.970	16.73	17.78	0.67	35.18	40.00	4.82
	98.870	22.26	11.31	1.32	34.89	43.50	8.61
	197.810	23.49	9.82	1.94	35.25	43.50	8.25
	248.250	17.74	11.90	2.20	31.84	46.00	14.16
	452.920	13.82	17.01	2.84	33.67	46.00	12.33
	494.630	12.83	17.53	2.96	33.32	46.00	12.68

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : 27EA33VA Humidity : 60%RH

Serial No. : N/A Date of Test : Jan 24, 2013

Test Mode : D-Sub 1920*1080@60Hz Adapter #4: LCAP26A-A

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	197.810	23.55	9.82	1.94	35.31	43.50	8.19
	263.770	23.40	12.57	2.30	38.27	46.00	7.73
	347.190	24.53	15.04	2.62	42.19	46.00	3.81
	395.690	20.48	16.20	2.68	39.36	46.00	6.64
	494.630	19.25	17.53	2.96	39.74	46.00	6.26
	784.660	17.50	20.44	3.60	41.54	46.00	4.46
Vertical	30.970	17.37	17.78	0.67	35.82	40.00	4.18
	98.870	23.07	11.31	1.32	35.70	43.50	7.80
	248.250	18.57	11.90	2.20	32.67	46.00	13.33
	347.190	18.53	15.04	2.62	36.19	46.00	9.81
	494.630	16.25	17.53	2.96	36.74	46.00	9.26
	784.660	15.50	20.44	3.60	39.54	46.00	6.46

TEST ENGINEER: RAVEN JIN

5 DEVIATION TO TEST SPECIFICATIONS

None.