

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

LCD Monitor

Model No.: E2742VA

Serial No.: E1202155-01/01

FCC ID : BEJE2742VA

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Report No. : ACI-F12027  
Date of Test : Feb 16 – 22, 2012  
Date of Report : Feb 27, 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. : E2742VA  
(B) Serial No. : E1202155-01/01  
(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: E2742VA; S/N: E1202155-01/01) which was tested in 3m anechoic chamber Feb 16 – 22, 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 : Feb 16 – 22, 2012 Date of Report : Feb 27, 2012

Producer : Yenny Yu  
YENNY YU / 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 |
|------------------------------------------------|------------------------------------------------------------------------------------|----------------------|---------|
| <b>EMISSION</b>                                |                                                                                    |                      |         |
| Conducted Disturbance<br>at the Mains Terminal | FCC RULES AND REGULATIONS PART<br>15 SUBPART B OCTOBER 2010<br>AND ANSI C63.4-2003 | 15.107(a)<br>Class B | Pass    |
| Radiated Disturbance                           | FCC RULES AND REGULATIONS PART<br>15 SUBPART B OCTOBER 2010<br>AND ANSI C63.4-2003 | 15.109(a)<br>Class B | Pass    |

## 2 GENERAL INFORMATION

### 2.1 Description of Equipment Under Test

|                |                                                                                                                                                                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description    | : LCD Monitor                                                                                                                                                                                                                                                   |
| Model No.      | : E2742VA                                                                                                                                                                                                                                                       |
| Serial No.     | : E1202155-01/01                                                                                                                                                                                                                                                |
| Real Power     | : 29.60W                                                                                                                                                                                                                                                        |
| AC Adapter     | : Manufacturer : LITE-ON<br>Model Number : PA-1650-68<br>Input : 100-240V~, 50-60Hz 2.0A<br>Output : 19V  3.42A<br>Output Cable : Unshielded, Undetachable, 1.8m with one core |
| Applicant      | : LG Electronics Nanjing Display Co., Ltd.<br>No.346, YaoXin Road Economic&Technical Development Zone,<br>Nanjing, China                                                                                                                                        |
| Manufacturer   | : LG Electronics Nanjing Display Co., Ltd.<br>No.346, YaoXin Road Economic&Technical Development Zone,<br>Nanjing, China                                                                                                                                        |
| LCD Panel      | : Manufacturer : CHI MEI OPTOELECTRONICS<br>M/N : M270HGE                                                                                                                                                                                                       |
| 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, 1.50m                                                                                                                                                                                                                                   |
| 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 : 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

### 2.2.7 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 : 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

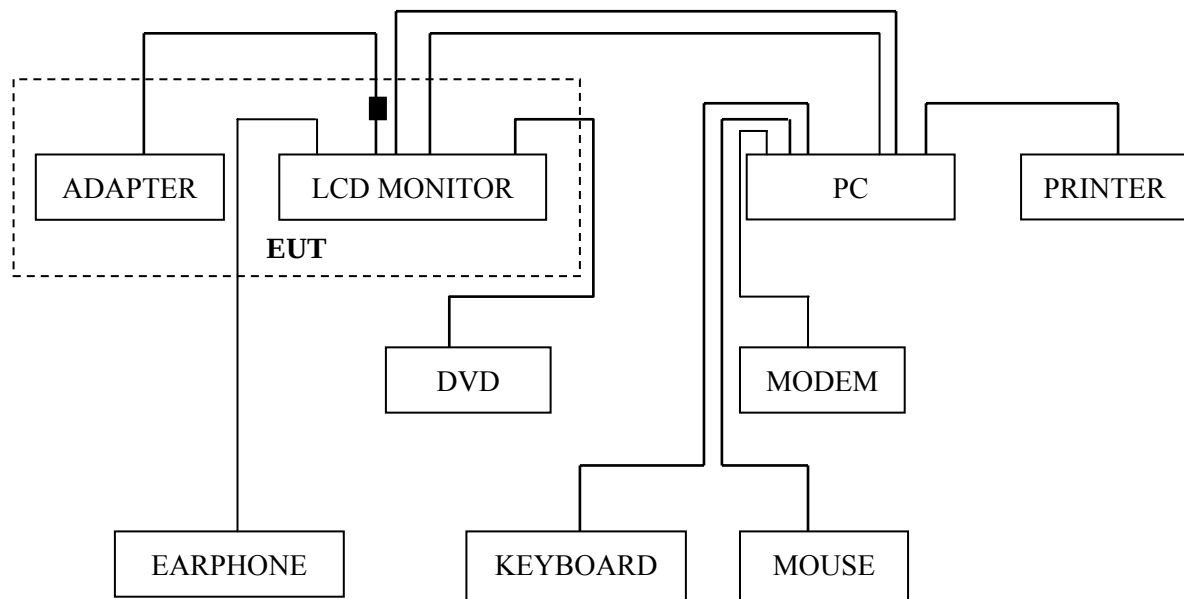
#### 3.1 Test Equipment

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 $\Omega$ Coaxial Switch        | Anritsu      | MP59B     | 6200426389           | Sep 18, 2011 | Mar 18, 2012 |
| 5.   | 50 $\Omega$ Terminator            | Anritsu      | BNC       | 001                  | Mar 22, 2011 | Mar 22, 2012 |
| 6.   | Software                          | Audix        | E3        | SET00200<br>9804M592 | --           | --           |

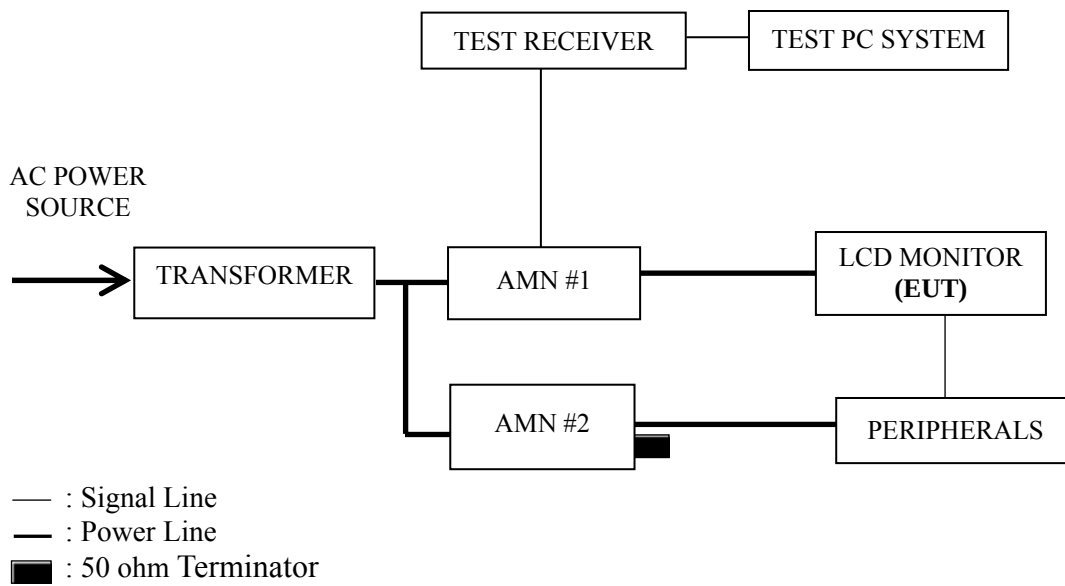
#### 3.2 Block Diagram of Test Setup

##### 3.2.1 EUT & Peripherals



■ : Ferrite core

### 3.2.2 Conducted Disturbance Test Setup



### 3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)]

| Frequency Range<br>(MHz)                                                                                                                                                        | Limits dB ( $\mu$ 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.<br>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           |
| D-Sub 1680*1050@60Hz |
| D-Sub 1280*1024@75Hz |
| D-Sub 640*480@60Hz   |

### 3.6 Test Procedures

The EUT and peripherals were connected to the power mains through an Artificial Mains Network (AMN). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line (Line & Neutral) were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to ANSI C63.4:2003 during conducted emission test.

The bandwidth of R&S Test Receiver ESCI was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

### 3.7 Test Results

< **PASS** >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

| Test Mode                   | Page       |
|-----------------------------|------------|
| <b>D-Sub 1920*1080@60Hz</b> | <b>P12</b> |
| DVI 1920*1080@60Hz          | P13        |
| HDMI 1920*1080@60Hz         | P14        |
| HDMI 1080P                  | P15        |
| D-Sub 1680*1050@60Hz        | P16        |
| D-Sub 1280*1024@75Hz        | P17        |
| D-Sub 640*480@60Hz          | P18        |

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 0.150 MHz (Quasi-Peak Value) with corrected signal level of 64.67 dB (μV) (limit is 66.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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      | 0.150           | 64.39                | 0.22        | 64.61                 | 66.00         | 1.39        | QP     |
|           | 0.194           | 56.52                | 0.23        | 56.75                 | 63.84         | 7.09        |        |
|           | 0.230           | 48.27                | 0.22        | 48.49                 | 62.44         | 13.95       |        |
|           | 0.352           | 42.14                | 0.28        | 42.42                 | 58.91         | 16.49       |        |
|           | 4.315           | 36.75                | 0.54        | 37.29                 | 56.00         | 18.71       |        |
|           | 12.988          | 36.25                | 0.84        | 37.09                 | 60.00         | 22.91       |        |
|           | 0.150           | 50.60                | 0.22        | 50.82                 | 56.00         | 5.18        | AV     |
|           | 0.194           | 46.90                | 0.23        | 47.13                 | 53.84         | 6.71        |        |
|           | 0.230           | 38.63                | 0.22        | 38.85                 | 52.44         | 13.59       |        |
|           | 0.352           | 32.26                | 0.28        | 32.54                 | 48.91         | 16.37       |        |
|           | 4.315           | 26.59                | 0.54        | 27.13                 | 46.00         | 18.87       |        |
|           | 12.988          | 26.47                | 0.84        | 27.31                 | 50.00         | 22.69       |        |
| Neutral   | <b>0.150</b>    | <b>64.49</b>         | <b>0.18</b> | <b>64.67</b>          | <b>66.00</b>  | <b>1.33</b> | QP     |
|           | 0.194           | 56.67                | 0.19        | 56.86                 | 63.84         | 6.98        |        |
|           | 0.242           | 47.45                | 0.18        | 47.63                 | 62.04         | 14.41       |        |
|           | 0.356           | 41.90                | 0.21        | 42.11                 | 58.83         | 16.72       |        |
|           | 4.315           | 35.65                | 0.74        | 36.39                 | 56.00         | 19.61       |        |
|           | 12.920          | 37.23                | 1.13        | 38.36                 | 60.00         | 21.64       |        |
|           | 0.150           | 54.12                | 0.18        | 54.30                 | 56.00         | 1.70        | AV     |
|           | 0.194           | 46.26                | 0.19        | 46.45                 | 53.84         | 7.39        |        |
|           | 0.242           | 37.48                | 0.18        | 37.66                 | 52.04         | 14.38       |        |
|           | 0.356           | 31.27                | 0.21        | 31.48                 | 48.83         | 17.35       |        |
|           | 4.315           | 25.41                | 0.74        | 26.15                 | 46.00         | 19.85       |        |
|           | 12.920          | 27.49                | 1.13        | 28.62                 | 50.00         | 21.38       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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      | 0.150           | 63.92                | 0.22        | 64.14                 | 66.00         | 1.86        | QP     |
|           | 0.194           | 55.76                | 0.23        | 55.99                 | 63.84         | 7.85        |        |
|           | 0.242           | 47.40                | 0.23        | 47.63                 | 62.04         | 14.41       |        |
|           | 0.350           | 41.66                | 0.28        | 41.94                 | 58.96         | 17.02       |        |
|           | 4.361           | 37.40                | 0.54        | 37.94                 | 56.00         | 18.06       |        |
|           | 12.784          | 36.29                | 0.83        | 37.12                 | 60.00         | 22.88       |        |
|           | 0.150           | 52.36                | 0.22        | 52.58                 | 56.00         | 3.42        | AV     |
|           | 0.194           | 45.26                | 0.23        | 45.49                 | 53.84         | 8.35        |        |
|           | 0.242           | 37.15                | 0.23        | 37.38                 | 52.04         | 14.66       |        |
|           | 0.350           | 31.00                | 0.28        | 31.28                 | 48.96         | 17.68       |        |
|           | 4.361           | 27.45                | 0.54        | 27.99                 | 46.00         | 18.01       |        |
|           | 12.784          | 26.59                | 0.83        | 27.42                 | 50.00         | 22.58       |        |
| Neutral   | <b>0.150</b>    | <b>64.35</b>         | <b>0.18</b> | <b>64.53</b>          | <b>66.00</b>  | <b>1.47</b> | QP     |
|           | 0.192           | 56.26                | 0.19        | 56.45                 | 63.93         | 7.48        |        |
|           | 0.244           | 47.09                | 0.18        | 47.27                 | 61.95         | 14.68       |        |
|           | 0.367           | 41.15                | 0.21        | 41.36                 | 58.56         | 17.20       |        |
|           | 4.315           | 36.75                | 0.74        | 37.49                 | 56.00         | 18.51       |        |
|           | 12.988          | 38.41                | 1.14        | 39.55                 | 60.00         | 20.45       |        |
|           | 0.150           | 53.26                | 0.18        | 53.44                 | 56.00         | 2.56        | AV     |
|           | 0.192           | 46.26                | 0.19        | 46.45                 | 53.93         | 7.48        |        |
|           | 0.244           | 37.49                | 0.18        | 37.67                 | 51.95         | 14.28       |        |
|           | 0.367           | 31.27                | 0.21        | 31.48                 | 48.56         | 17.08       |        |
|           | 4.315           | 26.60                | 0.74        | 27.34                 | 46.00         | 18.66       |        |
|           | 12.988          | 28.47                | 1.14        | 29.61                 | 50.00         | 20.39       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

Test Mode : HDMI 1920\*1080@60Hz

| Test Line | Frequency (MHz) | Meter Reading dB(μV) | Factor (dB) | Emission Level dB(μV) | Limits dB(μV) | Margin (dB) | Remark |
|-----------|-----------------|----------------------|-------------|-----------------------|---------------|-------------|--------|
| Line      | 0.150           | 62.98                | 0.22        | 63.20                 | 66.00         | 2.80        | QP     |
|           | 0.192           | 53.97                | 0.23        | 54.20                 | 63.93         | 9.73        |        |
|           | 0.230           | 48.37                | 0.22        | 48.59                 | 62.44         | 13.85       |        |
|           | 0.350           | 40.98                | 0.28        | 41.26                 | 58.96         | 17.70       |        |
|           | 4.070           | 35.19                | 0.54        | 35.73                 | 56.00         | 20.27       |        |
|           | 12.516          | 36.09                | 0.81        | 36.90                 | 60.00         | 23.10       |        |
|           | 0.150           | 52.15                | 0.22        | 52.37                 | 56.00         | 3.63        | AV     |
|           | 0.192           | 42.26                | 0.23        | 42.49                 | 53.93         | 11.44       |        |
|           | 0.230           | 38.51                | 0.22        | 38.73                 | 52.44         | 13.71       |        |
|           | 0.350           | 30.15                | 0.28        | 30.43                 | 48.96         | 18.53       |        |
|           | 4.070           | 25.48                | 0.54        | 26.02                 | 46.00         | 19.98       |        |
|           | 12.516          | 26.51                | 0.81        | 27.32                 | 50.00         | 22.68       |        |
| Neutral   | <b>0.150</b>    | <b>63.05</b>         | <b>0.18</b> | <b>63.23</b>          | <b>66.00</b>  | <b>2.77</b> | QP     |
|           | 0.194           | 54.42                | 0.19        | 54.61                 | 63.84         | 9.23        |        |
|           | 0.230           | 48.41                | 0.18        | 48.59                 | 62.44         | 13.85       |        |
|           | 0.356           | 40.63                | 0.21        | 40.84                 | 58.83         | 17.99       |        |
|           | 4.202           | 35.20                | 0.74        | 35.94                 | 56.00         | 20.06       |        |
|           | 12.516          | 38.30                | 1.11        | 39.41                 | 60.00         | 20.59       |        |
|           | 0.150           | 52.90                | 0.18        | 53.08                 | 56.00         | 2.92        | AV     |
|           | 0.194           | 44.80                | 0.19        | 44.99                 | 53.84         | 8.85        |        |
|           | 0.230           | 38.50                | 0.18        | 38.68                 | 52.44         | 13.76       |        |
|           | 0.356           | 30.13                | 0.21        | 30.34                 | 48.83         | 18.49       |        |
|           | 4.202           | 25.16                | 0.74        | 25.90                 | 46.00         | 20.10       |        |
|           | 12.516          | 28.59                | 1.11        | 29.70                 | 50.00         | 20.30       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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      | 0.150           | 61.86                | 0.22        | 62.08                 | 66.00         | 3.92        | QP     |
|           | 0.197           | 53.81                | 0.23        | 54.04                 | 63.76         | 9.72        |        |
|           | 0.239           | 45.82                | 0.22        | 46.04                 | 62.13         | 16.09       |        |
|           | 0.352           | 40.77                | 0.28        | 41.05                 | 58.91         | 17.86       |        |
|           | 4.361           | 36.20                | 0.54        | 36.74                 | 56.00         | 19.26       |        |
|           | 12.516          | 36.03                | 0.81        | 36.84                 | 60.00         | 23.16       |        |
|           | 0.150           | 51.26                | 0.22        | 51.48                 | 56.00         | 4.52        | AV     |
|           | 0.197           | 42.60                | 0.23        | 42.83                 | 53.76         | 10.93       |        |
|           | 0.239           | 35.27                | 0.22        | 35.49                 | 52.13         | 16.64       |        |
|           | 0.352           | 30.20                | 0.28        | 30.48                 | 48.91         | 18.43       |        |
|           | 4.361           | 26.59                | 0.54        | 27.13                 | 46.00         | 18.87       |        |
|           | 12.516          | 26.58                | 0.81        | 27.39                 | 50.00         | 22.61       |        |
| Neutral   | <b>0.150</b>    | <b>62.96</b>         | <b>0.18</b> | <b>63.14</b>          | <b>66.00</b>  | <b>2.86</b> | QP     |
|           | 0.194           | 54.14                | 0.19        | 54.33                 | 63.84         | 9.51        |        |
|           | 0.230           | 46.27                | 0.18        | 46.45                 | 62.44         | 15.99       |        |
|           | 0.352           | 40.44                | 0.21        | 40.65                 | 58.91         | 18.26       |        |
|           | 4.315           | 35.01                | 0.74        | 35.75                 | 56.00         | 20.25       |        |
|           | 12.784          | 37.70                | 1.12        | 38.82                 | 60.00         | 21.18       |        |
|           | 0.150           | 52.60                | 0.18        | 52.78                 | 56.00         | 3.22        | AV     |
|           | 0.194           | 44.12                | 0.19        | 44.31                 | 53.84         | 9.53        |        |
|           | 0.230           | 36.59                | 0.18        | 36.77                 | 52.44         | 15.67       |        |
|           | 0.352           | 30.11                | 0.21        | 30.32                 | 48.91         | 18.59       |        |
|           | 4.315           | 25.41                | 0.74        | 26.15                 | 46.00         | 19.85       |        |
|           | 12.784          | 27.81                | 1.12        | 28.93                 | 50.00         | 21.07       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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      | 0.150           | 63.27                | 0.22        | 63.49                 | 66.00         | 2.51        | QP     |
|           | 0.194           | 54.73                | 0.23        | 54.96                 | 63.84         | 8.88        |        |
|           | 0.230           | 48.11                | 0.22        | 48.33                 | 62.44         | 14.11       |        |
|           | 0.360           | 41.45                | 0.28        | 41.73                 | 58.74         | 17.01       |        |
|           | 4.224           | 35.60                | 0.54        | 36.14                 | 56.00         | 19.86       |        |
|           | 12.920          | 37.50                | 0.83        | 38.33                 | 60.00         | 21.67       |        |
|           | 0.150           | 52.89                | 0.22        | 53.11                 | 56.00         | 2.89        | AV     |
|           | 0.194           | 44.10                | 0.23        | 44.33                 | 53.84         | 9.51        |        |
|           | 0.230           | 38.50                | 0.22        | 38.72                 | 52.44         | 13.72       |        |
|           | 0.360           | 31.26                | 0.28        | 31.54                 | 48.74         | 17.20       |        |
|           | 4.224           | 25.49                | 0.54        | 26.03                 | 46.00         | 19.97       |        |
|           | 12.920          | 27.89                | 0.83        | 28.72                 | 50.00         | 21.28       |        |
| Neutral   | <b>0.150</b>    | <b>63.69</b>         | <b>0.18</b> | <b>63.87</b>          | <b>66.00</b>  | <b>2.13</b> | QP     |
|           | 0.192           | 54.96                | 0.19        | 55.15                 | 63.93         | 8.78        |        |
|           | 0.230           | 48.71                | 0.18        | 48.89                 | 62.44         | 13.55       |        |
|           | 0.356           | 40.87                | 0.21        | 41.08                 | 58.83         | 17.75       |        |
|           | 4.202           | 36.41                | 0.74        | 37.15                 | 56.00         | 18.85       |        |
|           | 12.784          | 37.23                | 1.12        | 38.35                 | 60.00         | 21.65       |        |
|           | 0.150           | 53.26                | 0.18        | 53.44                 | 56.00         | 2.56        | AV     |
|           | 0.192           | 44.60                | 0.19        | 44.79                 | 53.93         | 9.14        |        |
|           | 0.230           | 38.59                | 0.18        | 38.77                 | 52.44         | 13.67       |        |
|           | 0.356           | 30.17                | 0.21        | 30.38                 | 48.83         | 18.45       |        |
|           | 4.202           | 26.50                | 0.74        | 27.24                 | 46.00         | 18.76       |        |
|           | 12.784          | 27.50                | 1.12        | 28.62                 | 50.00         | 21.38       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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

| Test Line | Frequency (MHz) | Meter Reading dB(μV) | Factor (dB) | Emission Level dB(μV) | Limits dB(μV) | Margin (dB) | Remark |
|-----------|-----------------|----------------------|-------------|-----------------------|---------------|-------------|--------|
| Line      | 0.150           | 63.20                | 0.22        | 63.42                 | 66.00         | 2.58        | QP     |
|           | 0.197           | 54.74                | 0.23        | 54.97                 | 63.76         | 8.79        |        |
|           | 0.233           | 47.15                | 0.22        | 47.37                 | 62.35         | 14.98       |        |
|           | 0.360           | 41.20                | 0.28        | 41.48                 | 58.74         | 17.26       |        |
|           | 4.158           | 36.13                | 0.54        | 36.67                 | 56.00         | 19.33       |        |
|           | 12.920          | 37.29                | 0.83        | 38.12                 | 60.00         | 21.88       |        |
|           | 0.150           | 52.48                | 0.22        | 52.70                 | 56.00         | 3.30        | AV     |
|           | 0.197           | 44.80                | 0.23        | 45.03                 | 53.76         | 8.73        |        |
|           | 0.233           | 37.49                | 0.22        | 37.71                 | 52.35         | 14.64       |        |
|           | 0.360           | 31.26                | 0.28        | 31.54                 | 48.74         | 17.20       |        |
|           | 4.158           | 26.50                | 0.54        | 27.04                 | 46.00         | 18.96       |        |
|           | 12.920          | 27.49                | 0.83        | 28.32                 | 50.00         | 21.68       |        |
| Neutral   | <b>0.150</b>    | <b>63.48</b>         | <b>0.18</b> | <b>63.66</b>          | <b>66.00</b>  | <b>2.34</b> | QP     |
|           | 0.192           | 54.42                | 0.19        | 54.61                 | 63.93         | 9.32        |        |
|           | 0.244           | 45.95                | 0.18        | 46.13                 | 61.95         | 15.82       |        |
|           | 0.352           | 40.86                | 0.21        | 41.07                 | 58.91         | 17.84       |        |
|           | 4.361           | 34.82                | 0.74        | 35.56                 | 56.00         | 20.44       |        |
|           | 12.988          | 37.63                | 1.14        | 38.77                 | 60.00         | 21.23       |        |
|           | 0.150           | 52.15                | 0.18        | 52.33                 | 56.00         | 3.67        | AV     |
|           | 0.192           | 44.59                | 0.19        | 44.78                 | 53.93         | 9.15        |        |
|           | 0.244           | 35.29                | 0.18        | 35.47                 | 51.95         | 16.48       |        |
|           | 0.352           | 31.03                | 0.21        | 31.24                 | 48.91         | 17.67       |        |
|           | 4.361           | 24.60                | 0.74        | 25.34                 | 46.00         | 20.66       |        |
|           | 12.988          | 27.48                | 1.14        | 28.62                 | 50.00         | 21.38       |        |

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 48%RH

Serial No. : E1202155-01/01 Date of Test : Feb 16, 2012

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      | <b>0.150</b>    | <b>63.45</b>         | <b>0.22</b> | <b>63.67</b>          | <b>66.00</b>  | <b>2.33</b> | QP     |
|           | 0.194           | 55.14                | 0.23        | 55.37                 | 63.84         | 8.47        |        |
|           | 0.233           | 46.88                | 0.22        | 47.10                 | 62.35         | 15.25       |        |
|           | 0.360           | 41.37                | 0.28        | 41.65                 | 58.74         | 17.09       |        |
|           | 4.315           | 35.34                | 0.54        | 35.88                 | 56.00         | 20.12       |        |
|           | 12.649          | 35.84                | 0.83        | 36.67                 | 60.00         | 23.33       |        |
|           | 0.150           | 52.80                | 0.22        | 53.02                 | 56.00         | 2.98        | AV     |
|           | 0.194           | 45.60                | 0.23        | 45.83                 | 53.84         | 8.01        |        |
|           | 0.233           | 36.60                | 0.22        | 36.82                 | 52.35         | 15.53       |        |
|           | 0.360           | 31.48                | 0.28        | 31.76                 | 48.74         | 16.98       |        |
|           | 4.315           | 25.90                | 0.54        | 26.44                 | 46.00         | 19.56       |        |
|           | 12.649          | 25.40                | 0.83        | 26.23                 | 50.00         | 23.77       |        |
| Neutral   | 0.150           | 63.44                | 0.18        | 63.62                 | 66.00         | 2.38        | QP     |
|           | 0.192           | 55.59                | 0.19        | 55.78                 | 63.93         | 8.15        |        |
|           | 0.230           | 46.76                | 0.18        | 46.94                 | 62.44         | 15.50       |        |
|           | 0.360           | 40.68                | 0.21        | 40.89                 | 58.74         | 17.85       |        |
|           | 4.158           | 36.93                | 0.74        | 37.67                 | 56.00         | 18.33       |        |
|           | 12.649          | 36.53                | 1.12        | 37.65                 | 60.00         | 22.35       |        |
|           | 0.150           | 52.48                | 0.18        | 52.66                 | 56.00         | 3.34        | AV     |
|           | 0.192           | 45.18                | 0.19        | 45.37                 | 53.93         | 8.56        |        |
|           | 0.230           | 36.59                | 0.18        | 36.77                 | 52.44         | 15.67       |        |
|           | 0.360           | 30.16                | 0.21        | 30.37                 | 48.74         | 18.37       |        |
|           | 4.158           | 26.58                | 0.74        | 27.32                 | 46.00         | 18.68       |        |
|           | 12.649          | 26.47                | 1.12        | 27.59                 | 50.00         | 22.41       |        |

TEST ENGINEER: WENCY YANG

## 4 RADIATED EMISSION TEST

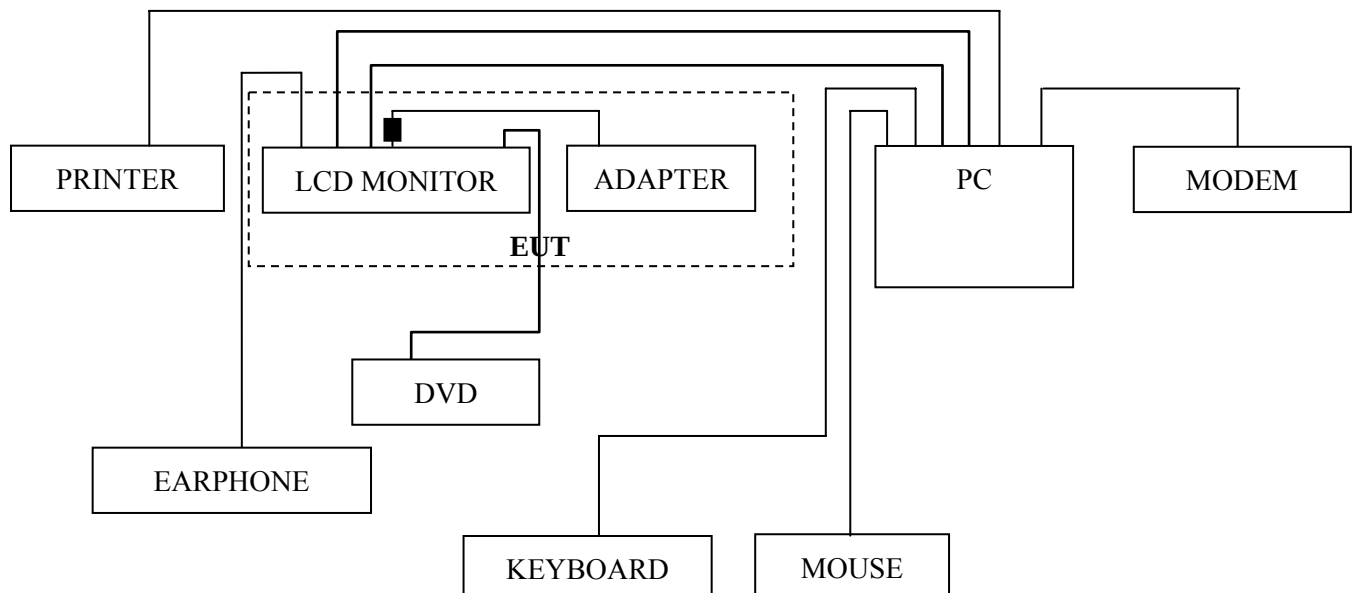
### 4.1 Test Equipment

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 $\Omega$ Coaxial Switch | Anritsu      | MP59B     | 6200426390             | Sep 18, 2011 | Mar 18, 2012 |
| 8.   | Software                   | Audix        | E3        | SET00200<br>9912M295-2 | --           | --           |

### 4.2 Block Diagram of Test Setup

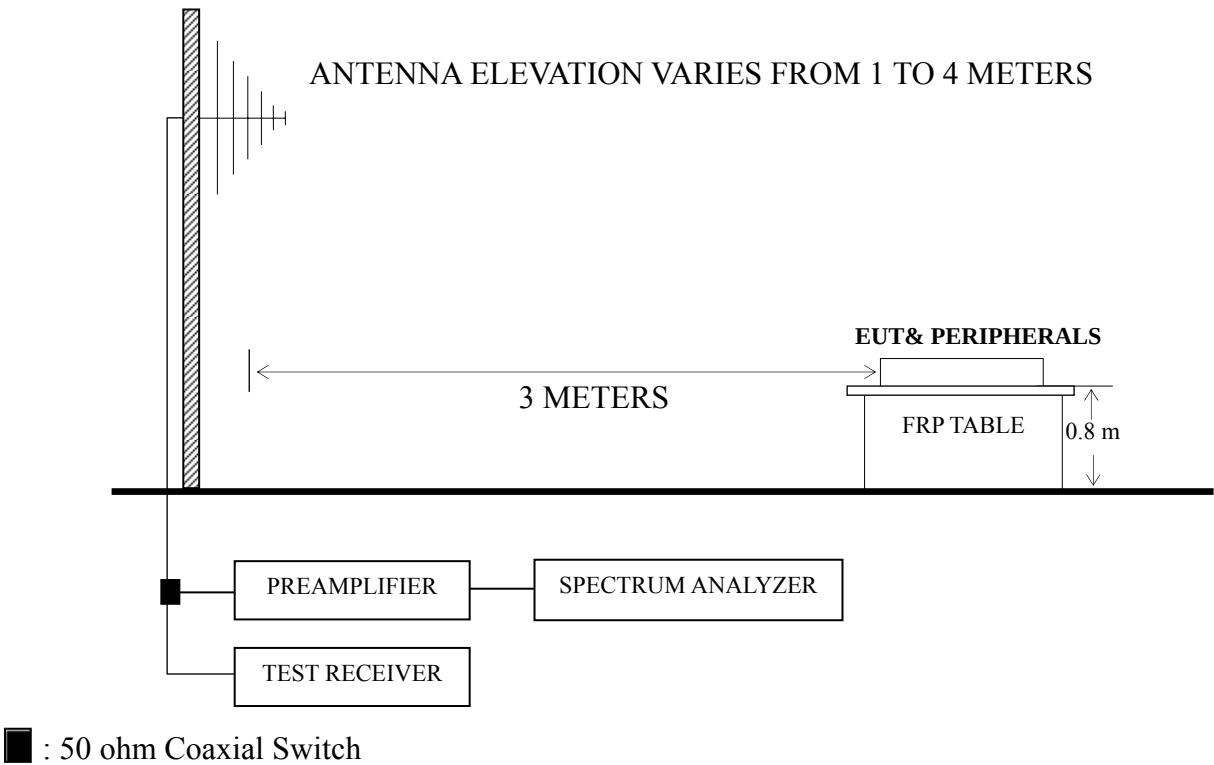
#### 4.2.1 EUT and Peripherals



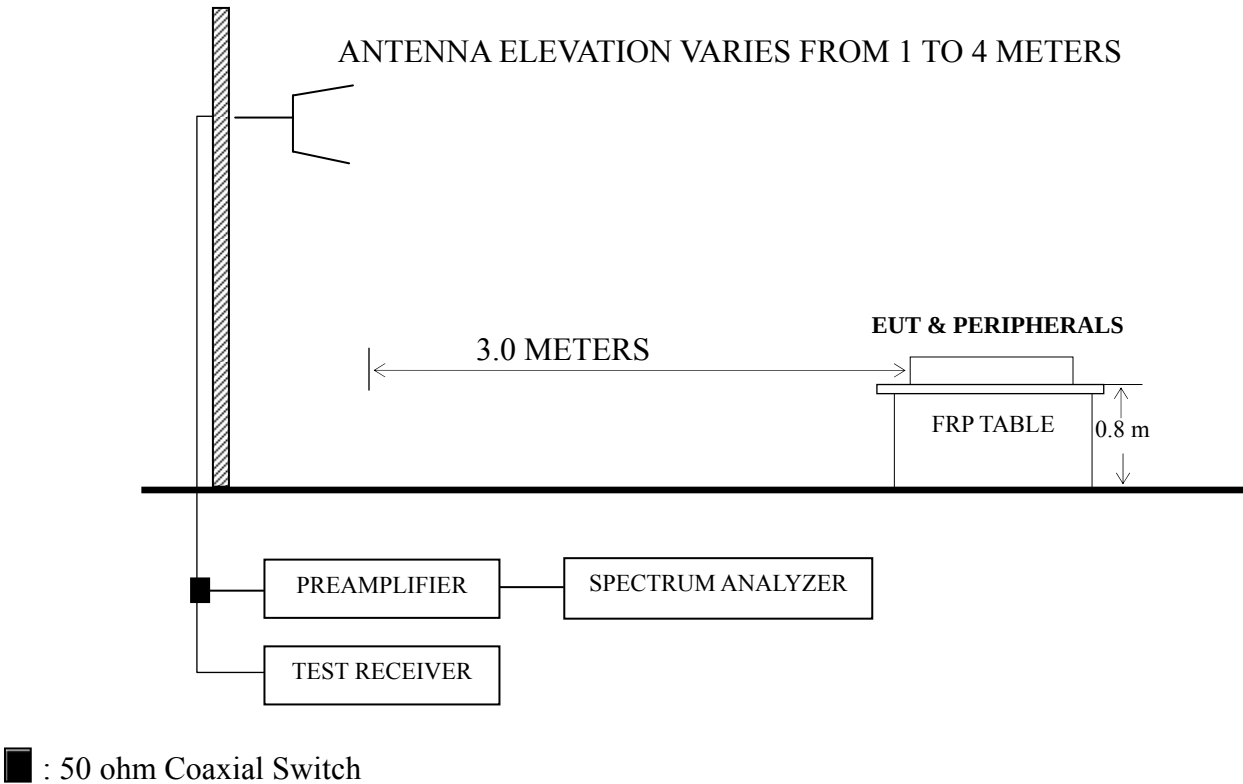
■ : Ferrite core

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<br>(MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Distance<br>(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 ( $\mu\text{V/m}$ )<br>NOTE 2 - The tighter limit applies at the band edges.<br>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.<br>NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz.<br>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.

| Test Mode                 | Data Page |
|---------------------------|-----------|
| D-Sub 1920*1080@60Hz      | P24       |
| <b>DVI 1920*1080@60Hz</b> | P25 – P26 |
| HDMI 1920*1080@60Hz       | P27       |
| HDMI 1080P                | P28       |
| DVI 1680*1050@60Hz        | P29       |
| DVI 1280*1024@75Hz        | P30       |
| DVI 640*480@60Hz          | P31       |

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 –  $0^\circ$  was the table front facing the antenna. Degree is calculated from  $0^\circ$  clockwise facing the antenna.

NOTE 7 – The worst case is for DVI 1920\*1080@60Hz test mode. The worst emission at horizontal polarization was detected at 290.930 MHz with corrected signal level of 44.71 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  $150^\circ$ . The worst emission at vertical polarization was detected at 290.930 MHz with corrected signal level of 44.13 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  $250^\circ$ .

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : D-Sub 1920\*1080@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   | 109.540         | 12.19                 | 11.19                 | 1.93            | 25.31                    | 43.50            | 18.19       |
|              | 143.490         | 19.22                 | 10.54                 | 2.19            | 31.95                    | 43.50            | 11.55       |
|              | 213.330         | 21.28                 | 10.33                 | 2.47            | 34.08                    | 43.50            | 9.42        |
|              | <b>286.080</b>  | <b>23.19</b>          | <b>13.32</b>          | <b>2.72</b>     | <b>39.23</b>             | <b>46.00</b>     | <b>6.77</b> |
|              | 499.480         | 11.14                 | 17.60                 | 3.27            | 32.01                    | 46.00            | 13.99       |
|              | 904.940         | 10.88                 | 20.32                 | 5.03            | 36.23                    | 46.00            | 9.77        |
| Vertical     | 33.880          | 13.26                 | 16.26                 | 0.83            | 30.35                    | 40.00            | 9.65        |
|              | 51.340          | 18.77                 | 8.58                  | 0.95            | 28.30                    | 40.00            | 11.70       |
|              | 92.080          | 17.21                 | 11.08                 | 1.75            | 30.04                    | 43.50            | 13.46       |
|              | 140.580         | 18.87                 | 10.60                 | 2.18            | 31.65                    | 43.50            | 11.85       |
|              | 213.330         | 22.69                 | 10.33                 | 2.47            | 35.49                    | 43.50            | 8.01        |
|              | <b>286.080</b>  | <b>28.50</b>          | <b>13.32</b>          | <b>2.72</b>     | <b>44.54</b>             | <b>46.00</b>     | <b>1.46</b> |

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : DVI 1920\*1080@60Hz

| Polarization | Frequency (MHz) | Meter Reading dB (μV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Emission Level dB (μV/m) | Limits dB (μV/m) | Margin (dB) | Remark |
|--------------|-----------------|-----------------------|-----------------------|-----------------|--------------------------|--------------------------|------------------|-------------|--------|
| Horizontal   | 87.230          | 43.10                 | 10.88                 | 1.70            | --                       | 27.78                    | 40.00            | 12.22       | QP     |
|              | 145.430         | 48.39                 | 10.50                 | 2.20            | --                       | 33.58                    | 43.50            | 9.92        |        |
|              | 216.240         | 51.49                 | 10.45                 | 2.49            | --                       | 37.43                    | 46.00            | 8.57        |        |
|              | <b>290.930</b>  | <b>55.40</b>          | <b>13.46</b>          | <b>2.74</b>     | --                       | <b>44.71</b>             | <b>46.00</b>     | <b>1.29</b> |        |
|              | 502.390         | 42.04                 | 17.61                 | 3.27            | --                       | 34.79                    | 46.00            | 11.21       |        |
|              | 788.540         | 41.23                 | 20.47                 | 3.86            | --                       | 37.78                    | 46.00            | 8.22        |        |
|              | 1075.000        | 52.88                 | 22.16                 | 5.27            | 38.04                    | 42.27                    | 74.00            | 31.73       | PK     |
|              | 1250.000        | 47.46                 | 24.05                 | 5.42            | 37.65                    | 39.28                    | 74.00            | 34.72       |        |
|              | 1365.000        | 48.43                 | 24.80                 | 5.55            | 37.33                    | 41.45                    | 74.00            | 32.55       |        |
|              | 1465.000        | 43.20                 | 26.11                 | 5.72            | 37.06                    | 37.97                    | 74.00            | 36.03       |        |
|              | 1595.000        | 44.72                 | 26.41                 | 5.93            | 36.77                    | 40.29                    | 74.00            | 33.71       |        |
|              | 1760.000        | 47.18                 | 26.96                 | 6.17            | 36.49                    | 43.82                    | 74.00            | 30.18       |        |
|              | 1075.000        | 37.88                 | 22.16                 | 5.27            | 38.04                    | 27.27                    | 54.00            | 26.73       | AV     |
|              | 1250.000        | 34.46                 | 24.05                 | 5.42            | 37.65                    | 26.28                    | 54.00            | 27.72       |        |
|              | 1365.000        | 34.43                 | 24.80                 | 5.55            | 37.33                    | 27.45                    | 54.00            | 26.55       |        |
|              | 1465.000        | 32.20                 | 26.11                 | 5.72            | 37.06                    | 26.97                    | 54.00            | 27.03       |        |
|              | 1595.000        | 34.72                 | 26.41                 | 5.93            | 36.77                    | 30.29                    | 54.00            | 23.71       |        |
|              | 1760.000        | 35.18                 | 26.96                 | 6.17            | 36.49                    | 31.82                    | 54.00            | 22.18       |        |

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : DVI 1920\*1080@60Hz

| Polarization | Frequency (MHz) | Meter Reading dB (μV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Emission Level dB (μV/m) | Limits dB (μV/m) | Margin (dB) | Remark |
|--------------|-----------------|-----------------------|-----------------------|-----------------|--------------------------|--------------------------|------------------|-------------|--------|
| Vertical     | 33.880          | 14.06                 | 16.26                 | 0.83            | --                       | 31.15                    | 40.00            | 8.85        | QP     |
|              | 111.480         | 18.27                 | 11.15                 | 1.96            | --                       | 31.38                    | 43.50            | 12.12       |        |
|              | 143.490         | 23.45                 | 10.54                 | 2.19            | --                       | 36.18                    | 43.50            | 7.32        |        |
|              | 218.180         | 28.05                 | 10.52                 | 2.50            | --                       | 41.07                    | 46.00            | 4.93        |        |
|              | <b>290.930</b>  | <b>27.93</b>          | <b>13.46</b>          | <b>2.74</b>     | --                       | <b>44.13</b>             | <b>46.00</b>     | <b>1.87</b> |        |
|              | 509.180         | 18.26                 | 17.65                 | 3.28            | --                       | 39.19                    | 46.00            | 6.81        |        |
|              | 1080.000        | 50.01                 | 22.24                 | 4.50            | 38.03                    | 38.72                    | 74.00            | 35.28       | PK     |
|              | 1275.000        | 47.59                 | 24.25                 | 4.53            | 37.57                    | 38.80                    | 74.00            | 35.20       |        |
|              | 1365.000        | 47.67                 | 24.80                 | 4.54            | 37.33                    | 39.68                    | 74.00            | 34.32       |        |
|              | 1465.000        | 45.43                 | 26.11                 | 4.55            | 37.06                    | 39.03                    | 74.00            | 34.97       |        |
|              | 1600.000        | 48.89                 | 26.40                 | 4.56            | 36.76                    | 43.09                    | 74.00            | 30.91       |        |
|              | 1760.000        | 50.67                 | 26.96                 | 4.58            | 36.49                    | 45.72                    | 74.00            | 28.28       |        |
|              | 1080.000        | 41.01                 | 22.24                 | 4.50            | 38.03                    | 29.72                    | 54.00            | 24.28       | AV     |
|              | 1275.000        | 32.59                 | 24.25                 | 4.53            | 37.57                    | 23.80                    | 54.00            | 30.20       |        |
|              | 1365.000        | 35.67                 | 24.80                 | 4.54            | 37.33                    | 27.68                    | 54.00            | 26.32       |        |
|              | 1465.000        | 32.43                 | 26.11                 | 4.55            | 37.06                    | 26.03                    | 54.00            | 27.97       |        |
|              | 1600.000        | 37.89                 | 26.40                 | 4.56            | 36.76                    | 32.09                    | 54.00            | 21.91       |        |
|              | 1760.000        | 35.67                 | 26.96                 | 4.58            | 36.49                    | 30.72                    | 54.00            | 23.28       |        |

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : HDMI 1920\*1080@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   | 75.590          | 10.92                 | 10.27                 | 1.53            | 22.72                    | 40.00            | 17.28       |
|              | 143.490         | 18.05                 | 10.54                 | 2.19            | 30.78                    | 43.50            | 12.72       |
|              | 179.380         | 22.46                 | 10.00                 | 2.35            | 34.81                    | 43.50            | 8.69        |
|              | 305.480         | 17.07                 | 13.87                 | 2.77            | 33.71                    | 46.00            | 12.29       |
|              | 502.390         | 10.25                 | 17.61                 | 3.27            | 31.13                    | 46.00            | 14.87       |
|              | <b>892.330</b>  | <b>14.04</b>          | <b>20.32</b>          | <b>4.89</b>     | <b>39.25</b>             | <b>46.00</b>     | <b>6.75</b> |
| Vertical     | 33.880          | 13.17                 | 16.26                 | 0.83            | 30.26                    | 40.00            | 9.74        |
|              | 56.190          | 16.98                 | 8.88                  | 1.08            | 26.94                    | 40.00            | 13.06       |
|              | 92.080          | 18.33                 | 11.08                 | 1.75            | 31.16                    | 43.50            | 12.34       |
|              | 143.490         | 19.34                 | 10.54                 | 2.19            | 32.07                    | 43.50            | 11.43       |
|              | 269.590         | 23.09                 | 12.78                 | 2.66            | 38.53                    | 46.00            | 7.47        |
|              | <b>882.630</b>  | <b>19.43</b>          | <b>20.35</b>          | <b>4.75</b>     | <b>44.53</b>             | <b>46.00</b>     | <b>1.47</b> |

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

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   | 90.140          | 13.02                 | 11.00                 | 1.73            | 25.75                    | 43.50            | 17.75       |
|              | 143.490         | 19.02                 | 10.54                 | 2.19            | 31.75                    | 43.50            | 11.75       |
|              | 177.440         | 20.57                 | 10.02                 | 2.35            | 32.94                    | 43.50            | 10.56       |
|              | 269.590         | 14.78                 | 12.78                 | 2.66            | 30.22                    | 46.00            | 15.78       |
|              | 458.740         | 12.26                 | 17.09                 | 3.15            | 32.50                    | 46.00            | 13.50       |
|              | <b>895.240</b>  | <b>15.84</b>          | <b>20.31</b>          | <b>4.89</b>     | <b>41.04</b>             | <b>46.00</b>     | <b>4.96</b> |
| Vertical     | 33.880          | 11.97                 | 16.26                 | 0.83            | 29.06                    | 40.00            | 10.94       |
|              | 90.140          | 18.50                 | 11.00                 | 1.73            | 31.23                    | 43.50            | 12.27       |
|              | 143.490         | 19.22                 | 10.54                 | 2.19            | 31.95                    | 43.50            | 11.55       |
|              | 269.590         | 25.08                 | 12.78                 | 2.66            | 40.52                    | 46.00            | 5.48        |
|              | 298.690         | 22.55                 | 13.67                 | 2.75            | 38.97                    | 46.00            | 7.03        |
|              | <b>882.630</b>  | <b>17.88</b>          | <b>20.35</b>          | <b>4.75</b>     | <b>42.98</b>             | <b>46.00</b>     | <b>3.02</b> |

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : DVI 1680\*1050@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   | 75.590          | 10.92                 | 10.27                 | 1.53            | 22.72                    | 40.00            | 17.28       |
|              | 143.490         | 18.05                 | 10.54                 | 2.19            | 30.78                    | 43.50            | 12.72       |
|              | 179.380         | 22.46                 | 10.00                 | 2.35            | 34.81                    | 43.50            | 8.69        |
|              | 305.480         | 17.07                 | 13.87                 | 2.77            | 33.71                    | 46.00            | 12.29       |
|              | 502.390         | 10.25                 | 17.61                 | 3.27            | 31.13                    | 46.00            | 14.87       |
|              | <b>892.330</b>  | <b>14.04</b>          | <b>20.32</b>          | <b>4.89</b>     | <b>39.25</b>             | <b>46.00</b>     | <b>6.75</b> |
| Vertical     | 33.880          | 13.17                 | 16.26                 | 0.83            | 30.26                    | 40.00            | 9.74        |
|              | 56.190          | 16.98                 | 8.88                  | 1.08            | 26.94                    | 40.00            | 13.06       |
|              | 92.080          | 18.33                 | 11.08                 | 1.75            | 31.16                    | 43.50            | 12.34       |
|              | 143.490         | 19.34                 | 10.54                 | 2.19            | 32.07                    | 43.50            | 11.43       |
|              | 269.590         | 23.09                 | 12.78                 | 2.66            | 38.53                    | 46.00            | 7.47        |
|              | <b>882.630</b>  | <b>19.43</b>          | <b>20.35</b>          | <b>4.75</b>     | <b>44.53</b>             | <b>46.00</b>     | <b>1.47</b> |

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

Test Mode : DVI 1280\*1024@75Hz

| 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   | 90.140          | 14.69                 | 11.00                 | 1.73            | 27.42                    | 43.50            | 16.08       |
|              | 143.490         | 18.89                 | 10.54                 | 2.19            | 31.62                    | 43.50            | 11.88       |
|              | 177.440         | 21.21                 | 10.02                 | 2.35            | 33.58                    | 43.50            | 9.92        |
|              | 269.590         | 22.22                 | 12.78                 | 2.66            | 37.66                    | 46.00            | 8.34        |
|              | 308.390         | 21.09                 | 13.94                 | 2.78            | 37.81                    | 46.00            | 8.19        |
|              | <b>892.330</b>  | <b>16.31</b>          | <b>20.32</b>          | <b>4.89</b>     | <b>41.52</b>             | <b>46.00</b>     | <b>4.48</b> |
| Vertical     | 33.880          | 12.91                 | 16.26                 | 0.83            | 30.00                    | 40.00            | 10.00       |
|              | 90.140          | 19.42                 | 11.00                 | 1.73            | 32.15                    | 43.50            | 11.35       |
|              | 177.440         | 20.98                 | 10.02                 | 2.35            | 33.35                    | 43.50            | 10.15       |
|              | 305.480         | 17.99                 | 13.87                 | 2.77            | 34.63                    | 46.00            | 11.37       |
|              | 618.790         | 12.32                 | 18.46                 | 3.51            | 34.29                    | 46.00            | 11.71       |
|              | <b>882.630</b>  | <b>18.09</b>          | <b>20.35</b>          | <b>4.75</b>     | <b>43.19</b>             | <b>46.00</b>     | <b>2.81</b> |

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : E2742VA Humidity : 60%RH

Serial No. : E1202155-01/01 Date of Test : Feb 22, 2012

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   | 75.590          | 12.88                 | 10.27                 | 1.53            | 24.68                    | 40.00            | 15.32       |
|              | 143.490         | 18.77                 | 10.54                 | 2.19            | 31.50                    | 43.50            | 12.00       |
|              | 201.690         | 20.60                 | 9.87                  | 2.43            | 32.90                    | 43.50            | 10.60       |
|              | <b>300.630</b>  | <b>27.59</b>          | <b>13.73</b>          | <b>2.76</b>     | <b>44.08</b>             | <b>46.00</b>     | <b>1.92</b> |
|              | 518.880         | 12.43                 | 17.72                 | 3.31            | 33.46                    | 46.00            | 12.54       |
|              | 749.740         | 14.61                 | 20.05                 | 3.80            | 38.46                    | 46.00            | 7.54        |
| Vertical     | 33.880          | 13.15                 | 16.26                 | 0.83            | 30.24                    | 40.00            | 9.76        |
|              | 72.680          | 17.07                 | 10.08                 | 1.47            | 28.62                    | 40.00            | 11.38       |
|              | 143.490         | 21.82                 | 10.54                 | 2.19            | 34.55                    | 43.50            | 8.95        |
|              | 213.330         | 26.19                 | 10.33                 | 2.47            | 38.99                    | 43.50            | 4.51        |
|              | <b>288.990</b>  | <b>27.64</b>          | <b>13.39</b>          | <b>2.72</b>     | <b>43.75</b>             | <b>46.00</b>     | <b>2.25</b> |
|              | 504.330         | 18.08                 | 17.62                 | 3.28            | 38.98                    | 46.00            | 7.02        |

TEST ENGINEER: RAVEN JIN

## 5 DEVIATION TO TEST SPECIFICATIONS

None.