

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

LCD Monitor

Model No.: LSM1850HU

Serial No.: E2009110305

FCC ID : BEJLSM1850HU

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

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

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

Report No. : ACI-F09113  
Date of Test : Nov 06, 2009  
Date of Report : Nov 18, 2009

## TABLE OF CONTENTS

	Page
<b>1 SUMMARY OF STANDARDS AND RESULTS.....</b>	<b>4</b>
1.1 Description of Standards and Results.....	4
<b>2 GENERAL INFORMATION.....</b>	<b>5</b>
2.1 Description of Equipment Under Test.....	5
2.2 Peripherals.....	6
2.3 Description of Test Facility.....	8
2.4 Measurement Uncertainty.....	8
<b>3 CONDUCTED EMISSION TEST.....</b>	<b>9</b>
3.2 Block Diagram of Test Setup.....	9
3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)].....	10
3.4 Test Configuration.....	10
3.5 Operating Condition of EUT.....	11
3.6 Test Procedures.....	11
3.7 Test Results.....	12
<b>4 RADIATED EMISSION TEST.....</b>	<b>23</b>
4.1 Test Equipment.....	23
4.2 Block Diagram of Test Setup.....	23
4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)].....	24
4.4 Test Configuration.....	24
4.5 Operating Condition of EUT.....	24
4.6 Test Procedures.....	25
4.7 Test Results.....	26
<b>5 DEVIATION TO TEST SPECIFICATIONS.....</b>	<b>37</b>
<b>6 DEBUG DESCRIPTION.....</b>	<b>38</b>

## 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. : LSM1850HU  
                   (B) Serial No. : E2009110305  
                   (C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2008  
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: LSM1850HU; S/N: E2009110305) which was tested in 3m anechoic chamber Nov 06, 2009 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 : Nov 06, 2009 Date of Report : Nov 18, 2009

Producer : Alan He  
                   ALAN HE / Assistant

Review : Dio Yang  
                   DIO YANG / Deputy Assistant Manager

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

Signatory : Sammy Chen  
 Authorized Signature EMC SAMMY CHEN / Assistant 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 at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2008 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2008 AND ANSI C63.4-2003	15.109(a) Class B	Pass

## 2 GENERAL INFORMATION

### 2.1 Description of Equipment Under Test

Description : LCD Monitor

Type of EUT :  Production  Pre-product  Pro-type

Model No. : LSM1850HU

Serial No. : E2009110305

Real Power : 24.00W

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

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

LCD Panel : Manufacturer : LG Display  
M/N : LM185WH1 (TL) (D2)

Max Resolution : 1366\*768@60Hz

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

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

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

DVI Cable #2 : Shielded, Detachable, 1.85m,  
with two cores in connector

HDMI Cable : Shielded, Detachable, 1.00m,  
with two cores

Power Cord : Unshielded, Detachable, 1.80m

Note : After evaluation, the D-Sub cable#1 and DVI  
cable#1 were used in the test for they will cause  
the maximum emission.

**Remark:**

The EUT is a LCD Monitor which input/output ports as follows:

- (1) One D-Sub Port : Connected with PC
- (2) One DVI Port : Connected with PC
- (3) One HDMI Port : Connected with PC
- (4) Two Video In Ports : Connected with DVD #1 / DVD #2
- (5) Two Video Out Ports : Connected with Monitor
- (6) Two Component of Audio In Ports : Connected with DVD #1 / DVD #2
- (7) One AC In Port : Connected with Power

## 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 Printer

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

### 2.2.3 Keyboard

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

### 2.2.4 Mouse

Manufacturer : Microsoft  
 Model Number : RT2300  
 Serial Number : 6965712071551  
 Data Cable : Shielded, Undetachable, 1.85m.  
 Certificate : FCC DoC, VCCI, CE/EMC, MIC, GS

### 2.2.5 Modem

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

### 2.2.6 DVD #1

Manufacturer : PHILIPS  
Model Number : DVP3986K/93  
Serial Number : KX1A0902120108  
Data Cable : Unshielded, Detachable, 1.8m

### 2.2.7 DVD #2

Manufacturer : PHILIPS  
Model Number : DVP3986K/93  
Serial Number : KX1A0902120082  
Data Cable : Unshielded, Detachable, 1.8m

### 2.2.8 Monitor

Manufacturer : SONY  
Model Number : PVM-14L2  
Serial Number : 2006084

## 2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber)	:	Sept. 17, 1998 file on Apr 29, 2009 Renewed Federal Communications Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA
Name of Firm	:	Audix Technology (Shanghai) Co., Ltd.
Site Location	:	3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China
NVLAP Lab Code	:	200371-0

## 2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:	U = 1.26 dB
Radiated Emission Expanded Uncertainty :	U = 3.02 dB



### 3 CONDUCTED EMISSION TEST

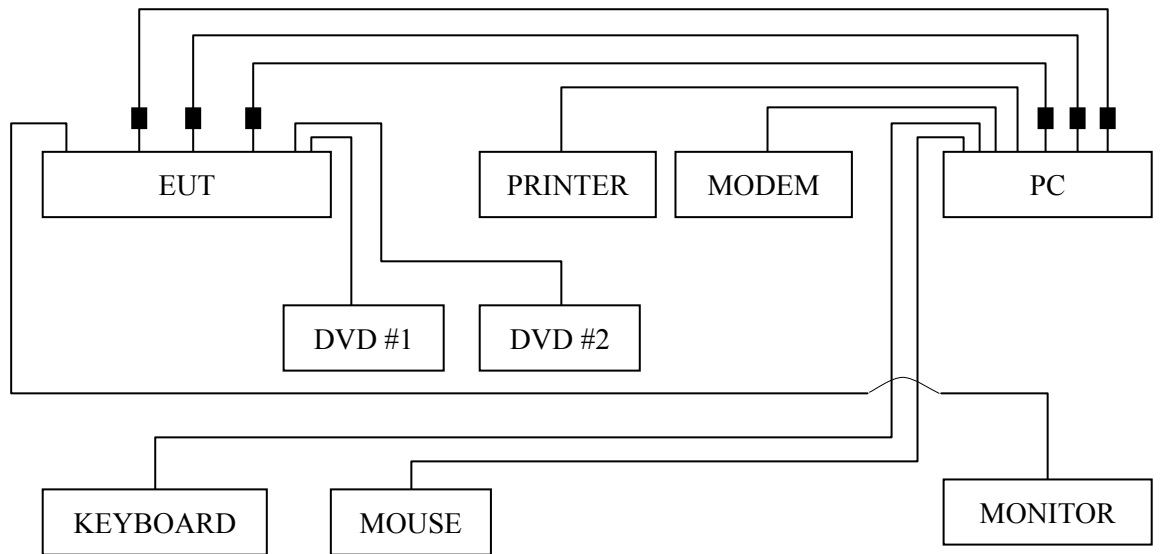
#### 3.1.1 Test Equipment

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	Nov 21, 2008	Nov 21, 2009
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2009	Apr 02, 2010
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2009	Apr 02, 2010
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2009	Mar 19, 2010
5.	50Ω Terminator	Anritsu	BNC	001	Apr 02, 2009	Apr 02, 2010
6.	Software	Audix	E3	SET00200 9804M592	--	--

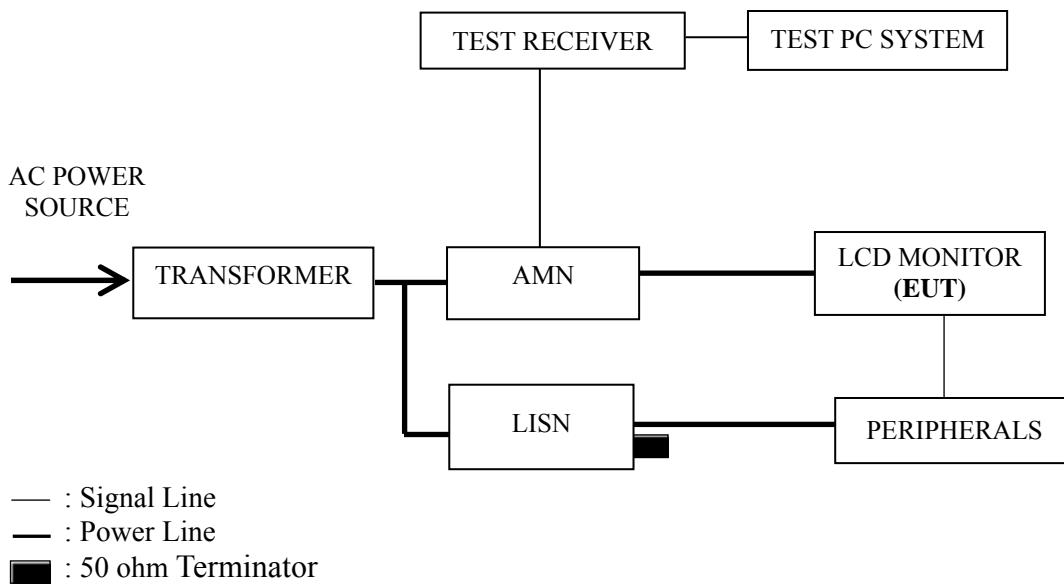
#### 3.2 Block Diagram of Test Setup

##### 3.2.1 EUT & Peripherals



■ : Ferrite core

### 3.2.2 Conducted Disturbance Test Setup



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

Frequency Range (MHz)	Limits dB ( $\mu$ 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.  
 NOTE 2 – The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz

### 3.4 Test Configuration

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

### 3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.
- 3.5.2 Turn on the power of all equipments and the EUT.
- 3.5.3 Set the contrast & brightness of EUT to maximum.
- 3.5.4 PC system ran the self-test program “EMC Test” by windows XP and sent “H” characters to EUT through graphic card, the EUT’s screen displayed and filled with “H” pattern by its resolution (Via D-Sub, DVI & HDMI Input).
- 3.5.5 In AV mode, DVD played movie and sent audio & video signal to the EUT through the composite of AV in ports, the EUT at the same time output video signal to the monitor through the video out port.
- 3.5.6 Repeat above procedure from 3.5.3 to 3.5.5 for difference test mode.
- 3.5.7 The other peripherals devices were driven and operated during the test.
- 3.5.8 The test modes are as follows:

Test Mode	
D-Sub 640*480@60Hz	DVI 1366*768@60Hz
D-Sub 1024*768@60Hz	HDMI 480p
D-Sub 1366*768@60Hz	HDMI 720p
DVI 640*480@60Hz	HDMI 1080i
DVI 1024*768@60Hz	AV

### 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	Data Page
D-Sub 640*480@60Hz	P13
D-Sub 1024*768@60Hz	P14
D-Sub 1366*768@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1024*768@60Hz	P17
DVI 1366*768@60Hz	P18
HDMI 480p	P19
HDMI 720p	P20
HDMI 1080i	P21
<b>AV</b>	<b>P22</b>

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

NOTE 2 – Factor = Cable Loss + LISN 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 AV test mode. The worst emission is detected at 6.077 MHz (Average Value) with corrected signal level of 36.43 dB (μV) (limit is 50.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 640\*480@60Hz          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.194	45.08	0.22	45.30	63.84	18.54	QP
	0.259	39.49	0.24	39.73	61.47	21.74	
	0.567	30.96	0.28	31.24	56.00	24.76	
	2.201	30.39	0.37	30.76	56.00	25.24	
	7.175	35.15	0.47	35.62	60.00	24.38	
	14.364	29.76	0.69	30.45	60.00	29.55	
	0.194	29.73	0.22	29.95	53.84	23.89	AV
	0.259	28.20	0.24	28.44	51.47	23.03	
	0.567	26.25	0.28	26.53	46.00	19.47	
	2.201	15.20	0.37	15.57	46.00	30.43	
	7.175	25.73	0.47	26.20	50.00	23.80	
	14.364	19.75	0.69	20.44	50.00	29.56	
Neutral	0.190	45.46	0.20	45.66	64.02	18.36	QP
	0.259	40.23	0.22	40.45	61.47	21.02	
	0.567	32.04	0.26	32.30	56.00	23.70	
	2.155	30.82	0.37	31.19	56.00	24.81	
	7.175	34.15	0.48	34.63	60.00	25.37	
	11.559	31.71	0.56	32.27	60.00	27.73	
	0.190	26.95	0.20	27.15	54.02	26.87	AV
	<b>0.259</b>	<b>33.29</b>	<b>0.22</b>	<b>33.51</b>	<b>51.47</b>	<b>17.96</b>	
	0.567	25.63	0.26	25.89	46.00	20.11	
	2.155	15.30	0.37	15.67	46.00	30.33	
	7.175	25.57	0.48	26.05	50.00	23.95	
	11.559	22.40	0.56	22.96	50.00	27.04	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 1024\*768@60Hz          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.199	44.92	0.22	45.14	63.67	18.53	QP
	0.253	38.58	0.24	38.82	61.64	22.82	
	0.672	30.09	0.27	30.36	56.00	25.64	
	1.610	29.32	0.34	29.66	56.00	26.34	
	7.175	36.02	0.47	36.49	60.00	23.51	
	11.317	32.29	0.55	32.84	60.00	27.16	
	0.199	29.70	0.22	29.92	53.67	23.75	AV
	0.253	24.77	0.24	25.01	51.64	26.63	
	0.672	24.82	0.27	25.09	46.00	20.91	
	1.610	15.01	0.34	15.35	46.00	30.65	
	7.175	26.50	0.47	26.97	50.00	23.03	
	11.317	23.68	0.55	24.23	50.00	25.77	
Neutral	0.188	46.44	0.20	46.64	64.11	17.47	QP
	0.259	40.53	0.22	40.75	61.47	20.72	
	1.324	29.91	0.32	30.23	56.00	25.77	
	2.237	28.67	0.37	29.04	56.00	26.96	
	7.175	34.88	0.48	35.36	60.00	24.64	
	10.905	30.88	0.54	31.42	60.00	28.58	
	0.188	26.60	0.20	26.80	54.11	27.31	AV
	<b>0.259</b>	<b>34.67</b>	<b>0.22</b>	<b>34.89</b>	<b>51.47</b>	<b>16.58</b>	
	1.324	12.31	0.32	12.63	46.00	33.37	
	2.237	11.89	0.37	12.26	46.00	33.74	
	7.175	24.72	0.48	25.20	50.00	24.80	
	10.905	21.26	0.54	21.80	50.00	28.20	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 1366\*768@60Hz          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.190</b>	<b>46.47</b>	<b>0.22</b>	<b>46.69</b>	<b>64.02</b>	<b>17.33</b>	QP
	0.256	38.49	0.24	38.73	61.56	22.83	
	0.672	29.29	0.27	29.56	56.00	26.44	
	2.133	29.60	0.37	29.97	56.00	26.03	
	7.175	34.68	0.47	35.15	60.00	24.85	
	11.559	32.29	0.56	32.85	60.00	27.15	
	0.190	26.55	0.22	26.77	54.02	27.25	AV
	0.256	27.55	0.24	27.79	51.56	23.77	
	0.672	24.71	0.27	24.98	46.00	21.02	
	2.133	14.83	0.37	15.20	46.00	30.80	
	7.175	26.66	0.47	27.13	50.00	22.87	
	11.559	23.11	0.56	23.67	50.00	26.33	
Neutral	0.190	46.22	0.20	46.42	64.02	17.60	QP
	0.262	39.31	0.22	39.53	61.38	21.85	
	0.567	30.77	0.26	31.03	56.00	24.97	
	2.178	28.71	0.37	29.08	56.00	26.92	
	7.175	34.81	0.48	35.29	60.00	24.71	
	11.317	32.59	0.56	33.15	60.00	26.85	
	0.190	26.76	0.20	26.96	54.02	27.06	AV
	0.262	30.67	0.22	30.89	51.38	20.49	
	0.567	27.17	0.26	27.43	46.00	18.57	
	2.178	9.71	0.37	10.08	46.00	35.92	
	7.175	25.19	0.48	25.67	50.00	24.33	
	11.317	21.91	0.56	22.47	50.00	27.53	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           DVI 640\*480@60Hz          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.157	45.33	0.23	45.56	65.60	20.04	QP	
	0.190	42.84	0.22	43.06	64.02	20.96		
	0.567	29.85	0.28	30.13	56.00	25.87		
	2.237	30.90	0.37	31.27	56.00	24.73		
	7.446	35.92	0.47	36.39	60.00	23.61		
	11.438	31.26	0.56	31.82	60.00	28.18	AV	
	0.157	29.70	0.23	29.93	55.60	25.67		
	0.190	25.13	0.22	25.35	54.02	28.67		
	0.567	24.91	0.28	25.19	46.00	20.81		
	2.237	14.73	0.37	15.10	46.00	30.90		
7.446	27.44	0.47	27.91	50.00	22.09	AV		
11.438	22.77	0.56	23.33	50.00	26.67			
Neutral	0.188	44.40	0.20	44.60	64.11		19.51	QP
	0.259	39.10	0.22	39.32	61.47		22.15	
	0.567	30.93	0.26	31.19	56.00		24.81	
	2.213	30.81	0.37	31.18	56.00	24.82		
	7.687	34.74	0.49	35.23	60.00	24.77		
	11.198	31.60	0.56	32.16	60.00	27.84	AV	
	0.188	24.14	0.20	24.34	54.11	29.77		
	<b>0.259</b>	<b>33.15</b>	<b>0.22</b>	<b>33.37</b>	<b>51.47</b>	<b>18.10</b>		
	0.567	26.23	0.26	26.49	46.00	19.51		
	2.213	16.56	0.37	16.93	46.00	29.07		
7.687	26.34	0.49	26.83	50.00	23.17	AV		
11.198	22.00	0.56	22.56	50.00	27.44			

TEST ENGINEER: HUGH HUANG



EUT : LCD Monitor Temperature : 22°C  
 Model No. : LSM1850HU Humidity : 52%RH  
 Serial No. : E2009110305 Date of Test : Nov 06, 2009  
 Test Mode : DVI 1024\*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.155	46.37	0.23	46.60	65.74	19.14	QP
	0.194	43.29	0.22	43.51	63.84	20.33	
	0.567	31.23	0.28	31.51	56.00	24.49	
	2.155	30.45	0.37	30.82	56.00	25.18	
	7.368	35.18	0.47	35.65	60.00	24.35	
	11.438	31.22	0.56	31.78	60.00	28.22	
	0.155	31.49	0.23	31.72	55.74	24.02	AV
	0.194	26.82	0.22	27.04	53.84	26.80	
	0.567	26.19	0.28	26.47	46.00	19.53	
	2.155	12.14	0.37	12.51	46.00	33.49	
	7.368	26.86	0.47	27.33	50.00	22.67	
	11.438	22.81	0.56	23.37	50.00	26.63	
Neutral	0.188	41.84	0.20	42.04	64.11	22.07	QP
	0.256	35.92	0.22	36.14	61.56	25.42	
	0.567	29.08	0.26	29.34	56.00	26.66	
	2.066	22.28	0.36	22.64	56.00	33.36	
	7.446	30.80	0.48	31.28	60.00	28.72	
	11.021	27.55	0.54	28.09	60.00	31.91	
	0.188	22.09	0.20	22.29	54.11	31.82	AV
	0.256	31.71	0.22	31.93	51.56	19.63	
	<b>0.567</b>	<b>27.87</b>	<b>0.26</b>	<b>28.13</b>	<b>46.00</b>	<b>17.87</b>	
	2.066	9.63	0.36	9.99	46.00	36.01	
	7.446	26.35	0.48	26.83	50.00	23.17	
	11.021	22.79	0.54	23.33	50.00	26.67	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           DVI 1366\*768@60Hz          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.166	43.72	0.23	43.95	65.16	21.21	QP
	0.256	37.24	0.24	37.48	61.56	24.08	
	0.567	31.09	0.28	31.37	56.00	24.63	
	2.285	29.37	0.37	29.74	56.00	26.26	
	7.329	34.62	0.47	35.09	60.00	24.91	
	10.790	31.51	0.53	32.04	60.00	27.96	
	0.166	17.77	0.23	18.00	55.16	37.16	AV
	0.256	27.47	0.24	27.71	51.56	23.85	
	0.567	25.58	0.28	25.86	46.00	20.14	
	2.285	14.52	0.37	14.89	46.00	31.11	
	7.329	27.18	0.47	27.65	50.00	22.35	
	10.790	22.76	0.53	23.29	50.00	26.71	
Neutral	0.194	44.03	0.20	44.23	63.84	19.61	QP
	0.253	37.92	0.22	38.14	61.64	23.50	
	0.567	30.27	0.26	30.53	56.00	25.47	
	2.201	29.51	0.37	29.88	56.00	26.12	
	7.252	33.15	0.48	33.63	60.00	26.37	
	10.905	31.47	0.54	32.01	60.00	27.99	
	0.194	32.34	0.20	32.54	53.84	21.30	AV
	0.253	27.44	0.22	27.66	51.64	23.98	
	<b>0.567</b>	<b>26.80</b>	<b>0.26</b>	<b>27.06</b>	<b>46.00</b>	<b>18.94</b>	
	2.201	15.15	0.37	15.52	46.00	30.48	
	7.252	25.60	0.48	26.08	50.00	23.92	
	10.905	22.55	0.54	23.09	50.00	26.91	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 480p          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.190	43.73	0.22	43.95	64.02	20.07	QP	
	0.277	34.79	0.25	35.04	60.90	25.86		
	0.567	29.81	0.28	30.09	56.00	25.91		
	2.527	28.26	0.39	28.65	56.00	27.35		
	6.056	33.27	0.45	33.72	60.00	26.28		
	7.446	34.00	0.47	34.47	60.00	25.53	AV	
	0.190	23.93	0.22	24.15	54.02	29.87		
	0.277	14.86	0.25	15.11	50.90	35.79		
	<b>0.567</b>	<b>28.37</b>	<b>0.28</b>	<b>28.65</b>	<b>46.00</b>	<b>17.35</b>		
	2.527	16.65	0.39	17.04	46.00	28.96		
6.056	19.90	0.45	20.35	50.00	29.65	AV		
7.446	26.84	0.47	27.31	50.00	22.69			
Neutral	0.155	47.42	0.20	47.62	65.74		18.12	QP
	0.197	41.70	0.20	41.90	63.76		21.86	
	0.567	29.38	0.26	29.64	56.00		26.36	
	2.237	29.81	0.37	30.18	56.00	25.82		
	6.056	36.34	0.46	36.80	60.00	23.20		
	7.446	35.20	0.48	35.68	60.00	24.32	AV	
	0.155	36.27	0.20	36.47	55.74	19.27		
	0.197	28.41	0.20	28.61	53.76	25.15		
	0.567	28.34	0.26	28.60	46.00	17.40		
	2.237	10.92	0.37	11.29	46.00	34.71		
6.056	30.15	0.46	30.61	50.00	19.39	AV		
7.446	26.67	0.48	27.15	50.00	22.85			

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 720p          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.166	42.75	0.23	42.98	65.16	22.18	QP
	0.211	39.61	0.22	39.83	63.18	23.35	
	0.567	29.84	0.28	30.12	56.00	25.88	
	2.178	29.53	0.37	29.90	56.00	26.10	
	6.078	36.90	0.45	37.35	60.00	22.65	
	7.368	34.69	0.47	35.16	60.00	24.84	
	0.166	15.22	0.23	15.45	55.16	39.71	AV
	0.211	22.65	0.22	22.87	53.18	30.31	
	0.567	26.90	0.28	27.18	46.00	18.82	
	2.178	15.32	0.37	15.69	46.00	30.31	
<b>6.078</b>	<b>34.00</b>	<b>0.45</b>	<b>34.45</b>	<b>50.00</b>	<b>15.55</b>		
7.368	27.95	0.47	28.42	50.00	21.58		
Neutral	0.159	42.86	0.20	43.06	65.52	22.46	QP
	0.256	37.13	0.22	37.35	61.56	24.21	
	0.567	30.13	0.26	30.39	56.00	25.61	
	2.155	30.51	0.37	30.88	56.00	25.12	
	6.079	36.50	0.46	36.96	60.00	23.04	
	7.526	30.87	0.49	31.36	60.00	28.64	
	0.159	32.36	0.20	32.56	55.52	22.96	AV
	0.256	32.06	0.22	32.28	51.56	19.28	
	0.567	27.50	0.26	27.76	46.00	18.24	
	2.155	16.75	0.37	17.12	46.00	28.88	
6.079	33.80	0.46	34.26	50.00	15.74		
7.526	26.31	0.49	26.80	50.00	23.20		

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 1080i          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	47.66	0.23	47.89	65.91	18.02	QP
	0.202	43.17	0.22	43.39	63.54	20.15	
	1.106	27.46	0.30	27.76	56.00	28.24	
	2.261	30.26	0.37	30.63	56.00	25.37	
	6.056	35.08	0.45	35.53	60.00	24.47	
	7.252	31.38	0.47	31.85	60.00	28.15	
	0.152	32.48	0.23	32.71	55.91	23.20	AV
	0.202	25.41	0.22	25.63	53.54	27.91	
	1.106	14.26	0.30	14.56	46.00	31.44	
	2.261	13.70	0.37	14.07	46.00	31.93	
	6.056	21.11	0.45	21.56	50.00	28.44	
	7.252	26.98	0.47	27.45	50.00	22.55	
Neutral	0.161	41.64	0.20	41.84	65.43	23.59	QP
	0.253	37.46	0.22	37.68	61.64	23.96	
	0.567	30.37	0.26	30.63	56.00	25.37	
	2.213	29.75	0.37	30.12	56.00	25.88	
	6.079	35.60	0.46	36.06	60.00	23.94	
	7.329	33.86	0.48	34.34	60.00	25.66	
	0.161	26.45	0.20	26.65	55.43	28.78	AV
	0.253	27.14	0.22	27.36	51.64	24.28	
	0.567	27.11	0.26	27.37	46.00	18.63	
	2.213	16.46	0.37	16.83	46.00	29.17	
	<b>6.079</b>	<b>34.50</b>	<b>0.46</b>	<b>34.96</b>	<b>50.00</b>	<b>15.04</b>	
	7.329	25.99	0.48	26.47	50.00	23.53	

TEST ENGINEER: HUGH HUANG

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           52%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           AV          

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.192	44.78	0.22	45.00	63.93	18.93	QP
	0.253	35.84	0.24	36.08	61.64	25.56	
	0.567	28.77	0.28	29.05	56.00	26.95	
	1.762	30.26	0.36	30.62	56.00	25.38	
	6.056	32.24	0.45	32.69	60.00	27.31	
	7.446	35.29	0.47	35.76	60.00	24.24	
	0.192	25.26	0.22	25.48	53.93	28.45	AV
	0.253	27.53	0.24	27.77	51.64	23.87	
	0.567	28.23	0.28	28.51	46.00	17.49	
	1.762	5.28	0.36	5.64	46.00	40.36	
	6.056	19.73	0.45	20.18	50.00	29.82	
	7.446	26.94	0.47	27.41	50.00	22.59	
Neutral	0.156	45.47	0.20	45.67	65.65	19.98	QP
	0.194	44.69	0.20	44.89	63.84	18.95	
	0.567	30.20	0.26	30.46	56.00	25.54	
	1.433	29.57	0.34	29.91	56.00	26.09	
	6.077	36.70	0.46	37.16	60.00	22.84	
	7.329	33.97	0.48	34.45	60.00	25.55	
	0.156	35.66	0.20	35.86	55.65	19.79	AV
	0.194	27.18	0.20	27.38	53.84	26.46	
	0.567	28.08	0.26	28.34	46.00	17.66	
	1.433	4.59	0.34	4.93	46.00	41.07	
	<b>6.077</b>	<b>35.97</b>	<b>0.46</b>	<b>36.43</b>	<b>50.00</b>	<b>13.57</b>	
	7.329	25.57	0.48	26.05	50.00	23.95	

TEST ENGINEER: HUGH HUANG

## 4 RADIATED EMISSION TEST

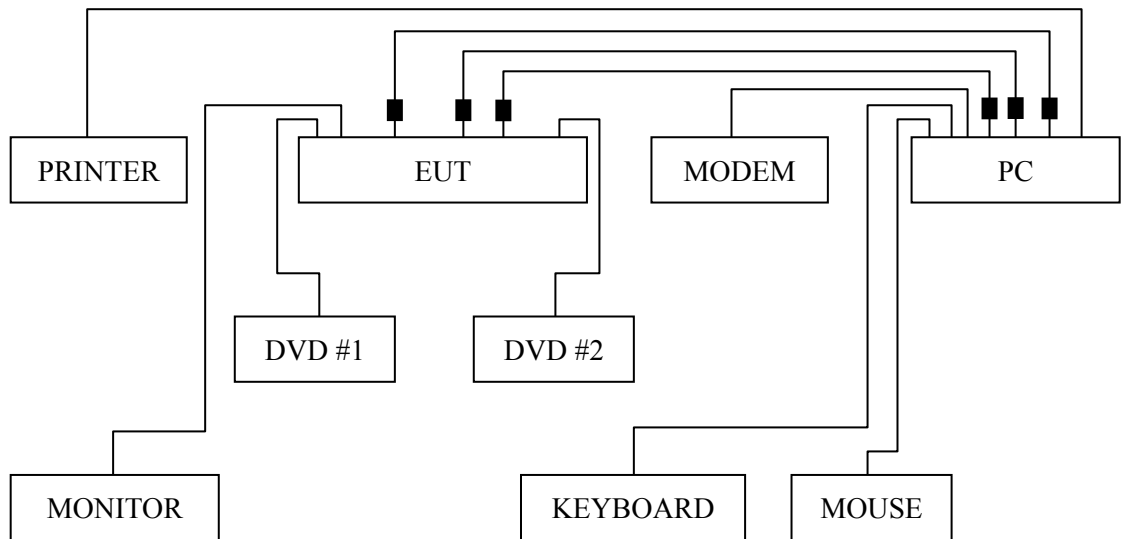
### 4.1 Test Equipment

The following test equipments are used during the radiated emission test in a semi-anechoic chamber:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESVS10	844594/001	Mar 07, 2009	Mar 07, 2010
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2009	Mar 19, 2010
3.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2010
4.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2009	May 19, 2010
5.	Software	Audix	E3	SET00200 9912M295-2	--	--

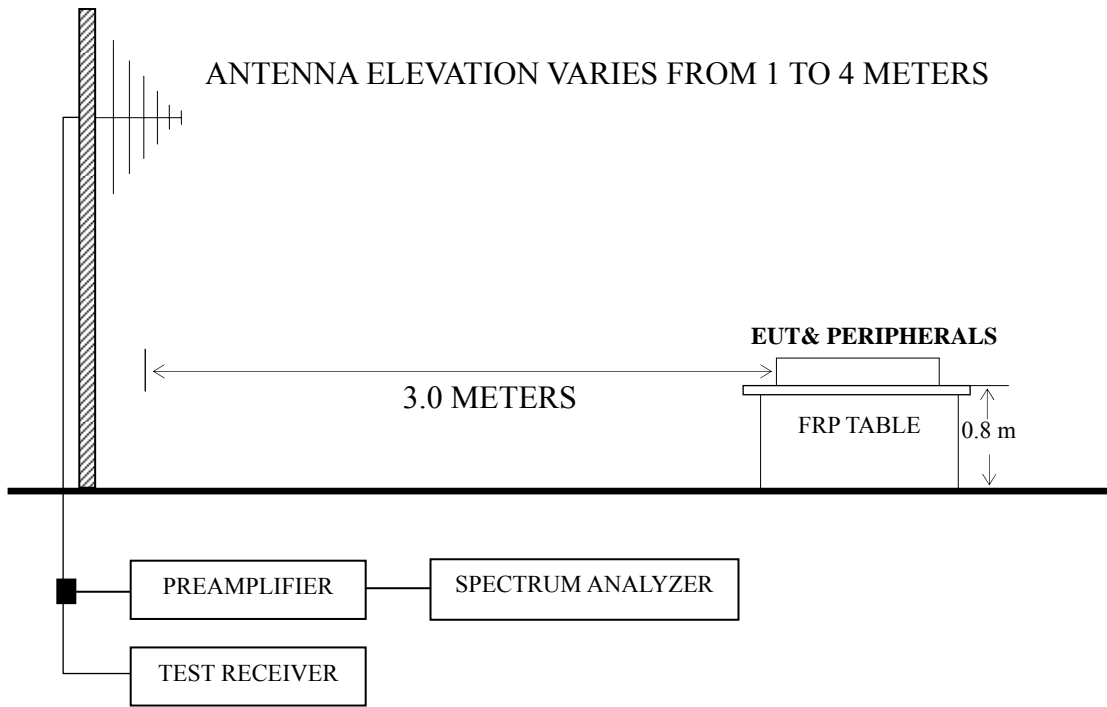
### 4.2 Block Diagram of Test Setup

#### 4.2.1 EUT and Peripherals



■ : Ferrite core

### 4.2.2 Radiated emission test setup



■ : 50 ohm Coaxial Switch

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

Frequency (MHz)	Distance (m)	Field strength limits	
		( $\mu\text{V}/\text{m}$ )	dB ( $\mu\text{V}/\text{m}$ )
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 ( $\mu\text{V}/\text{m}$ ) = 20 log Emission Level ( $\mu\text{V}/\text{m}$ )

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.

### 4.4 Test Configuration

The configuration of the EUT and peripherals are same as those used in conducted emission test.

Please refer to Sec.3.4.

### 4.5 Operating Condition of EUT

Same as conducted emission test which is listed in Sec.3.5, except for the test setup replaced by Sec.4.2.



## 4.6 Test Procedures

The EUT and peripherals were placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna) was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4:2003 requirements during radiated emission test.

The bandwidth of Test Receiver R&S ESVS10 was set at 120 kHz

The frequency range from 30 MHz to 1000MHz was checked for all test modes.

The test modes were done on radiated disturbance test and all the test results are listed in Sec.4.7.

## 4.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

Test Mode	Data Page
D-Sub 640*480@60Hz	P27
D-Sub 1024*768@60Hz	P28
D-Sub 1366*768@60Hz	P29
DVI 640*480@60Hz	P30
DVI 1024*768@60Hz	P31
DVI 1366*768@60Hz	P32
<b>HDMI 480p</b>	<b>P33</b>
HDMI 720p	P34
HDMI 1080i	P35
AV	P36

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

NOTE 2 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.

NOTE 4 – The emission levels that are 20dB below the official limit are not reported.

NOTE 5 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 6 – The worst case is for HDMI 480p test mode. The worst emission at horizontal polarization was detected at 73.650 MHz with corrected signal level of 36.82 dB (μV/m) (limit is 40.00dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 120°. The worst emission at vertical polarization was detected at 73.650 MHz with corrected signal level of 36.94 dB (μV/m) (limit is 40.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 40°.

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 640\*480@60Hz          

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	99.840	15.03	11.42	1.05	27.50	43.50	16.00
	<b>125.060</b>	<b>20.51</b>	<b>12.76</b>	<b>1.13</b>	<b>34.40</b>	<b>43.50</b>	<b>9.10</b>
	174.530	20.23	10.07	1.36	31.66	43.50	11.84
	183.260	19.35	10.02	1.39	30.76	43.50	12.74
	534.400	10.16	18.36	2.34	30.86	46.00	15.14
	702.210	7.57	19.73	2.71	30.01	46.00	15.99
Vertical	<b>33.880</b>	<b>17.67</b>	<b>17.44</b>	<b>0.64</b>	<b>35.75</b>	<b>40.00</b>	<b>4.25</b>
	41.640	20.90	13.02	0.70	34.62	40.00	5.38
	50.370	22.81	8.85	0.76	32.42	40.00	7.58
	125.060	22.43	12.76	1.13	36.32	43.50	7.18
	457.770	11.99	17.35	2.15	31.49	46.00	14.51
	545.070	14.99	18.49	2.37	35.85	46.00	10.15

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 1024\*768@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	50.370	11.18	8.85	0.76	20.79	40.00	19.21
	81.410	13.48	8.02	0.98	22.48	40.00	17.52
	<b>127.000</b>	<b>20.02</b>	<b>12.66</b>	<b>1.17</b>	<b>33.85</b>	<b>43.50</b>	<b>9.65</b>
	174.530	18.03	10.07	1.36	29.46	43.50	14.04
	184.230	17.56	10.05	1.41	29.02	43.50	14.48
	545.070	8.33	18.49	2.37	29.19	46.00	16.81
Vertical	<b>33.880</b>	<b>17.05</b>	<b>17.44</b>	<b>0.64</b>	<b>35.13</b>	<b>40.00</b>	<b>4.87</b>
	50.370	22.32	8.85	0.76	31.93	40.00	8.07
	92.080	19.34	9.82	1.01	30.17	43.50	13.33
	126.030	21.79	12.71	1.15	35.65	43.50	7.85
	457.770	11.67	17.35	2.15	31.17	46.00	14.83
	545.070	16.13	18.49	2.37	36.99	46.00	9.01

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           D-Sub 1366\*768@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	127.970	19.94	12.63	1.16	33.73	43.50	9.77
	<b>141.550</b>	<b>22.23</b>	<b>12.01</b>	<b>1.21</b>	<b>35.45</b>	<b>43.50</b>	<b>8.05</b>
	198.780	15.96	10.64	1.44	28.04	43.50	15.46
	226.910	14.69	11.98	1.55	28.22	46.00	17.78
	545.070	7.84	18.49	2.37	28.70	46.00	17.30
	702.210	8.32	19.73	2.71	30.76	46.00	15.24
Vertical	30.970	11.90	19.03	0.62	31.55	40.00	8.45
	57.160	24.45	7.18	0.78	32.41	40.00	7.59
	<b>127.000</b>	<b>22.46</b>	<b>12.66</b>	<b>1.17</b>	<b>36.29</b>	<b>43.50</b>	<b>7.21</b>
	141.550	21.01	12.01	1.21	34.23	43.50	9.27
	198.780	18.25	10.64	1.44	30.33	43.50	13.17
	545.070	16.92	18.49	2.37	37.78	46.00	8.22

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

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	99.840	15.03	11.42	1.05	27.50	43.50	16.00
	<b>125.060</b>	<b>20.51</b>	<b>12.76</b>	<b>1.13</b>	<b>34.40</b>	<b>43.50</b>	<b>9.10</b>
	174.530	20.23	10.07	1.36	31.66	43.50	11.84
	183.260	19.35	10.02	1.39	30.76	43.50	12.74
	534.400	10.16	18.36	2.34	30.86	46.00	15.14
	702.210	7.57	19.73	2.71	30.01	46.00	15.99
Vertical	<b>33.880</b>	<b>17.67</b>	<b>17.44</b>	<b>0.64</b>	<b>35.75</b>	<b>40.00</b>	<b>4.25</b>
	41.640	20.90	13.02	0.70	34.62	40.00	5.38
	50.370	22.81	8.85	0.76	32.42	40.00	7.58
	125.060	22.43	12.76	1.13	36.32	43.50	7.18
	457.770	11.99	17.35	2.15	31.49	46.00	14.51
	545.070	14.99	18.49	2.37	35.85	46.00	10.15

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           DVI 1024\*768@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	80.440	14.33	7.85	0.97	23.15	40.00	16.85
	127.970	12.68	12.63	1.16	26.47	43.50	17.03
	184.230	14.19	10.05	1.41	25.65	43.50	17.85
	256.980	12.72	13.03	1.61	27.36	46.00	18.64
	<b>599.390</b>	<b>8.68</b>	<b>19.20</b>	<b>2.46</b>	<b>30.34</b>	<b>46.00</b>	<b>15.66</b>
	702.210	6.41	19.73	2.71	28.85	46.00	17.15
Vertical	<b>30.970</b>	<b>9.73</b>	<b>19.03</b>	<b>0.62</b>	<b>29.38</b>	<b>40.00</b>	<b>10.62</b>
	43.580	15.58	11.88	0.69	28.15	40.00	11.85
	126.030	17.17	12.71	1.15	31.03	43.50	12.47
	457.770	13.58	17.35	2.15	33.08	46.00	12.92
	546.040	11.89	18.52	2.38	32.79	46.00	13.21
	599.390	9.99	19.20	2.46	31.65	46.00	14.35

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           DVI 1366\*768@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	127.000	13.26	12.66	1.17	27.09	43.50	16.41
	183.260	14.27	10.02	1.39	25.68	43.50	17.82
	256.980	15.26	13.03	1.61	29.90	46.00	16.10
	544.100	7.70	18.49	2.36	28.55	46.00	17.45
	599.390	7.96	19.20	2.46	29.62	46.00	16.38
	<b>634.310</b>	<b>9.49</b>	<b>19.38</b>	<b>2.57</b>	<b>31.44</b>	<b>46.00</b>	<b>14.56</b>
Vertical	<b>30.970</b>	<b>9.94</b>	<b>19.03</b>	<b>0.62</b>	<b>29.59</b>	<b>40.00</b>	<b>10.41</b>
	42.610	14.85	12.39	0.70	27.94	40.00	12.06
	127.970	17.61	12.63	1.16	31.40	43.50	12.10
	171.620	17.33	10.15	1.33	28.81	43.50	14.69
	545.070	12.33	18.49	2.37	33.19	46.00	12.81
	599.390	11.86	19.20	2.46	33.52	46.00	12.48

TEST ENGINEER: RAVEN JIN



EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 480p          

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	<b>73.650</b>	<b>28.93</b>	<b>6.98</b>	<b>0.91</b>	<b>36.82</b>	<b>40.00</b>	<b>3.18</b>
	223.030	26.23	11.80	1.52	39.55	46.00	6.45
	296.750	23.00	13.86	1.76	38.62	46.00	7.38
	371.440	24.34	15.88	1.96	42.18	46.00	3.82
	446.130	16.83	17.17	2.11	36.11	46.00	9.89
	742.950	14.72	20.13	2.78	37.63	46.00	8.37
Vertical	<b>73.650</b>	<b>29.05</b>	<b>6.98</b>	<b>0.91</b>	<b>36.94</b>	<b>40.00</b>	<b>3.06</b>
	223.030	22.31	11.80	1.52	35.63	46.00	10.37
	371.440	19.21	15.88	1.96	37.05	46.00	8.95
	445.160	14.93	17.14	2.12	34.19	46.00	11.81
	742.950	12.61	20.13	2.78	35.52	46.00	10.48
	965.080	11.90	22.16	3.16	37.22	54.00	16.78

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 720p          

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	<b>73.650</b>	<b>28.87</b>	<b>6.98</b>	<b>0.91</b>	<b>36.76</b>	<b>40.00</b>	<b>3.24</b>
	223.030	26.92	11.80	1.52	40.24	46.00	5.76
	296.750	26.09	13.86	1.76	41.71	46.00	4.29
	371.440	22.42	15.88	1.96	40.26	46.00	5.74
	446.130	18.99	17.17	2.11	38.27	46.00	7.73
	742.950	16.26	20.13	2.78	39.17	46.00	6.83
Vertical	<b>73.650</b>	<b>28.93</b>	<b>6.98</b>	<b>0.91</b>	<b>36.82</b>	<b>40.00</b>	<b>3.18</b>
	223.030	19.19	11.80	1.52	32.51	46.00	13.49
	371.440	18.43	15.88	1.96	36.27	46.00	9.73
	446.130	12.10	17.17	2.11	31.38	46.00	14.62
	742.950	11.18	20.13	2.78	34.09	46.00	11.91
	965.080	11.05	22.16	3.16	36.37	54.00	17.63

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           HDMI 1080i          

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	<b>73.650</b>	<b>28.48</b>	<b>6.98</b>	<b>0.91</b>	<b>36.37</b>	<b>40.00</b>	<b>3.63</b>
	223.030	27.84	11.80	1.52	41.16	46.00	4.84
	296.750	25.41	13.86	1.76	41.03	46.00	4.97
	371.440	22.49	15.88	1.96	40.33	46.00	5.67
	742.950	17.17	20.13	2.78	40.08	46.00	5.92
	965.080	14.51	22.16	3.16	39.83	54.00	14.17
Vertical	<b>73.650</b>	<b>28.97</b>	<b>6.98</b>	<b>0.91</b>	<b>36.86</b>	<b>40.00</b>	<b>3.14</b>
	223.030	21.58	11.80	1.52	34.90	46.00	11.10
	371.440	20.67	15.88	1.96	38.51	46.00	7.49
	446.130	14.19	17.17	2.11	33.47	46.00	12.53
	742.950	11.94	20.13	2.78	34.85	46.00	11.15
	965.080	12.11	22.16	3.16	37.43	54.00	16.57

TEST ENGINEER: RAVEN JIN

EUT :           LCD Monitor                Temperature :           22°C          

Model No. :           LSM1850HU                Humidity :           60%RH          

Serial No. :           E2009110305                Date of Test :           Nov 06, 2009          

Test Mode :           AV          

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	70.740	16.36	6.58	0.89	23.83	40.00	16.17
	80.440	16.18	7.85	0.97	25.00	40.00	15.00
	171.620	14.80	10.15	1.33	26.28	43.50	17.22
	393.750	5.08	16.37	1.97	23.42	46.00	22.58
	<b>634.310</b>	<b>11.03</b>	<b>19.38</b>	<b>2.57</b>	<b>32.98</b>	<b>46.00</b>	<b>13.02</b>
	959.260	0.47	22.13	3.15	25.75	46.00	20.25
Vertical	<b>32.910</b>	<b>10.34</b>	<b>17.95</b>	<b>0.62</b>	<b>28.91</b>	<b>40.00</b>	<b>11.09</b>
	53.280	19.08	8.14	0.77	27.99	40.00	12.01
	82.380	18.93	8.19	0.98	28.10	40.00	11.90
	171.620	16.00	10.15	1.33	27.48	43.50	16.02
	457.770	12.88	17.35	2.15	32.38	46.00	13.62
	635.280	8.36	19.38	2.58	30.32	46.00	15.68

TEST ENGINEER: RAVEN JIN

## **5 DEVIATION TO TEST SPECIFICATIONS**

None.

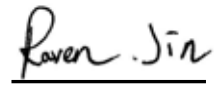
## 6 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	M/N	Specifications (cm)	Manufacturer	Location
Gasket	--	140*5*5	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 12-1, 12-2
Gasket	--	100*5*5	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 12-3, 12-4
Gasket	--	30*10*5	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 12-5, 12-6

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:



**(RAVEN JIN)**