

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

LCD Monitor

Model No.: IPS277LY

Serial No.: E1205610-01/01

FCC ID : BEJIPS277LY

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1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Description of Test Item	Standard	Limits	Results
EMISSION			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2011 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2011 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. : IPS277LY

Serial No. : E1205610-01/01

Real Power : 27.83W (Adapter #1)
 26.66W (Adapter #2)
 27.54W (Adapter #3)
 27.62W (Adapter #4)

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

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

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

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

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

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

LCD Panel : Manufacturer: LG Electronics Inc.
M/N : LM270WF5

Max Resolution : 1920*1080@60Hz

D-Sub Cable #1 : Shielded, Detachable, 1.85m

D-Sub Cable #2 : Shielded, Detachable, 1.50m

MHL Cable : Shielded, Detachable, 1.00m

Power Cord : Unshielded, Detachable, 1.80m

Note : The D-Sub cable #2 was 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 HDMI Port : Connected with DVD PLAYER / PC
- (3) One MHL Port : Connected with Mobile Phone
- (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

2.2.9 Mobile Phone

Manufacturer : Samsung
Model Number : GT-I9100G
Serial Number : RV1C2250B7J

2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on
Apr 29, 2009 Renewed
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3F 34Bldg 680 Guiping Rd,
Caohejing Hi-Tech Park,
Shanghai 200233, China

NVLAP Lab Code : 200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty: U = 3.43 dB

Radiated Emission Expanded Uncertainty (30-200MHz):
U = 4.67 dB (Horizontal)
U = 4.72 dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):
U = 4.81 dB (Horizontal)
U = 4.69 dB (Vertical)

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

3 CONDUCTED EMISSION TEST

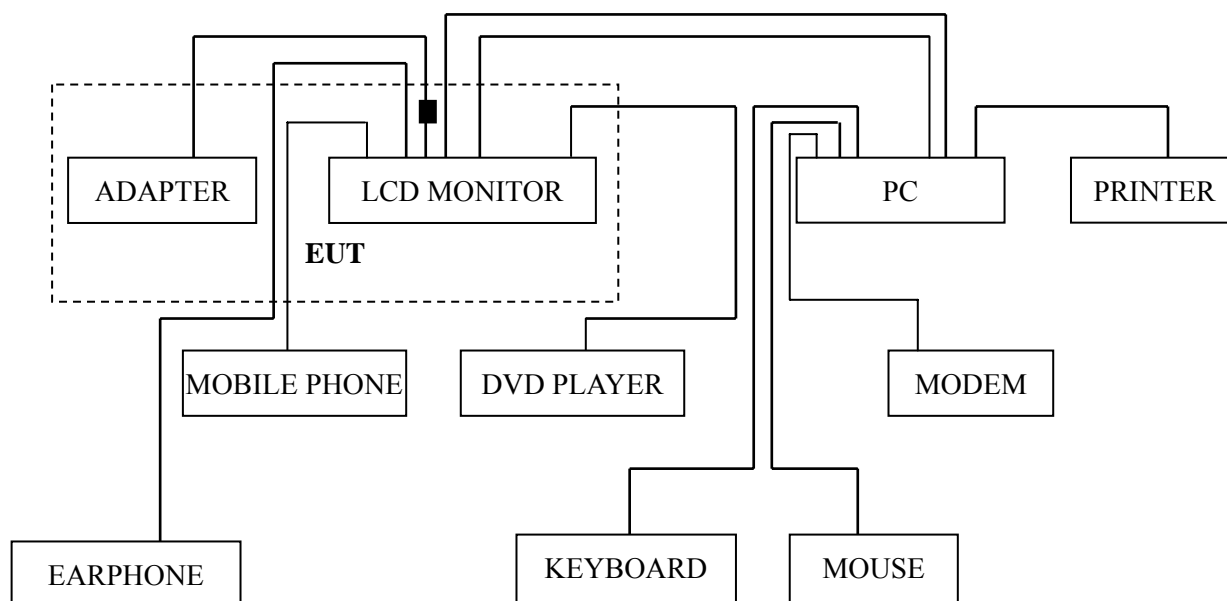
3.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	100841	Mar 22, 2012	Mar 22, 2013
2.	Artificial Mains Network (AMN #1)	R&S	ESH2-Z5	843890/011	Feb 13, 2012	Feb 13, 2013
3.	Artificial Mains Network (AMN #2)	R&S	ENV4200	100125	Mar 22, 2012	Mar 22, 2013
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Mar 18, 2012	Sep 18, 2012
5.	50Ω Terminator	Anritsu	BNC	001	Mar 22, 2012	Mar 22, 2013
6.	Software	Audix	E3	SET00200 9804M592	--	--

3.2 Block Diagram of Test Setup

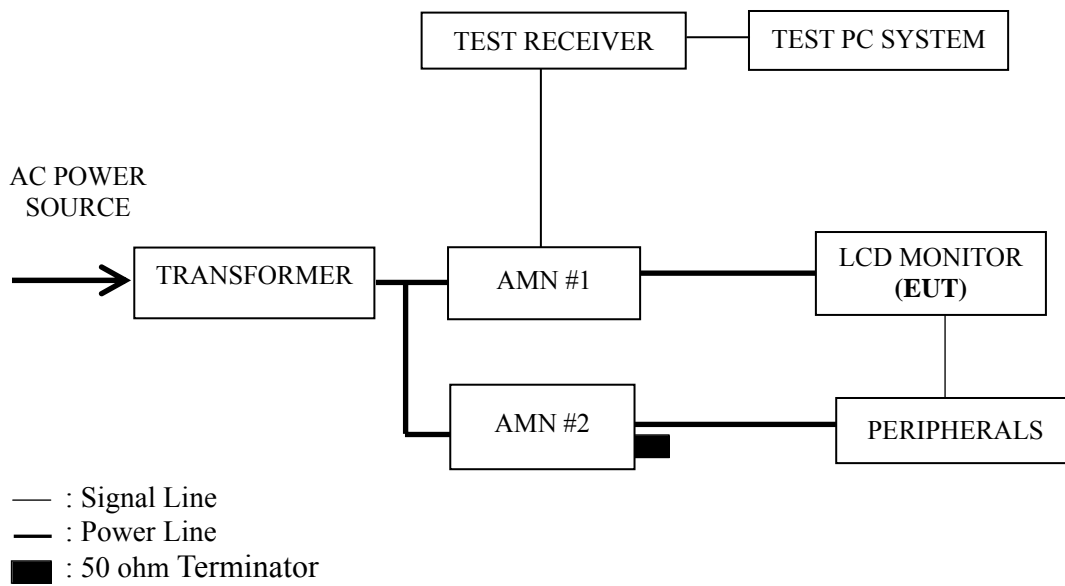
3.2.1 EUT & Peripherals



■ : Ferrite core

Note: Ferrite core only for Adapter #1

3.2.2 Conducted Disturbance Test Setup



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

Frequency Range (MHz)	Limits dB (μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 30	60	50

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

3.4 Test Configuration

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

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.
- 3.5.2 Turn on the power of all equipments and the EUT.
- 3.5.3 Set the contrast & brightness of EUT to maximum.
- 3.5.4 PC system ran the self-test program "EMC Test" by windows XP and sent "H" characters to EUT through graphic card (we use white letters on a black background to represent all colors), the EUT's screen displayed and filled with "H" pattern by its resolution (Via D-Sub Input).
- 3.5.5 In HDMI mode, the EUT connected to PC or DVD PLAYER through HDMI port.
- 3.5.6 In MHL mode, the EUT connected to mobile phone through MHL port.
- 3.5.7 Repeat above procedure from 3.5.3 to 3.5.6 for difference test mode.
- 3.5.8 The other peripherals devices were driven and operated during the test.
- 3.5.9 The test modes are as follows:

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

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

3.6 Test Procedures

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

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

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

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

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

3.7 Test Results

< **PASS** >

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

Adapter	Test Mode	Data Page
Adapter #1	D-Sub 1920*1080@60Hz	P13
	HDMI 1920*1080@60Hz	P14
	HDMI 1080P	P15
	HDMI 1680*1050@60Hz	P16
	HDMI 1280*1024@75Hz	P17
	HDMI 640*480@60Hz	P18
	MHL	P19
Adapter #2	HDMI 1920*1080@60Hz	P20
Adapter #3	HDMI 1920*1080@60Hz	P21
Adapter #4	HDMI 1920*1080@60Hz	P22

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

NOTE 2 – Factor = Cable Loss + AMN Factor.

NOTE 3 – Emission Level = Meter Reading + Factor.

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

NOTE 5 – The worst case is for HDMI 1920*1080@60Hz test mode (Adapter #3). The worst emission is detected at 0.489 MHz (Quasi-Peak Value) with corrected signal level of 45.93 dB (µV) (limit is 56.19 dB (µV)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : D-Sub 1920*1080@60Hz Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.164	53.09	0.24	53.33	65.25	11.92	QP
	0.256	45.27	0.25	45.52	61.56	16.04	
	0.421	36.53	0.34	36.87	57.42	20.55	
	4.202	37.46	0.49	37.95	56.00	18.05	
	6.186	36.19	0.59	36.78	60.00	23.22	
	23.636	30.70	1.14	31.84	60.00	28.16	
	0.164	42.80	0.24	43.04	55.25	12.21	AV
	0.256	35.10	0.25	35.35	51.56	16.21	
	0.421	26.50	0.34	26.84	47.42	20.58	
	4.202	27.20	0.49	27.69	46.00	18.31	
	6.186	26.20	0.59	26.79	50.00	23.21	
	23.636	20.20	1.14	21.34	50.00	28.66	
Neutral	0.164	53.75	0.13	53.88	65.25	11.37	QP
	0.247	45.68	0.11	45.79	61.86	16.07	
	0.426	35.44	0.17	35.61	57.33	21.72	
	4.027	36.30	0.40	36.70	56.00	19.30	
	6.186	34.84	0.52	35.36	60.00	24.64	
	23.888	32.14	1.04	33.18	60.00	26.82	
	0.164	43.20	0.13	43.33	55.25	11.92	AV
	0.247	35.50	0.11	35.61	51.86	16.25	
	0.426	25.19	0.17	25.36	47.33	21.97	
	4.027	26.19	0.40	26.59	46.00	19.41	
	6.186	24.60	0.52	25.12	50.00	24.88	
	23.888	21.99	1.04	23.03	50.00	26.97	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 1920*1080@60Hz Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.172	54.00	0.24	54.24	64.86	10.62	QP	
	0.230	45.71	0.24	45.95	62.44	16.49		
	0.431	36.82	0.35	37.17	57.24	20.07		
	2.869	33.35	0.41	33.76	56.00	22.24		
	4.202	37.29	0.49	37.78	56.00	18.22		
	24.529	30.53	1.16	31.69	60.00	28.31		
	0.172	43.60	0.24	43.84	54.86	11.02	AV	
	0.230	35.61	0.24	35.85	52.44	16.59		
	0.431	26.79	0.35	27.14	47.24	20.10		
	2.869	23.20	0.41	23.61	46.00	22.39		
	4.202	27.20	0.49	27.69	46.00	18.31		
	24.529	20.11	1.16	21.27	50.00	28.73		
	Neutral	0.174	54.00	0.12	54.12	64.77	10.65	QP
		0.252	45.77	0.11	45.88	61.69	15.81	
0.421		36.40	0.17	36.57	57.42	20.85		
2.309		32.47	0.19	32.66	56.00	23.34		
5.005		34.90	0.42	35.32	60.00	24.68		
24.529		31.42	1.04	32.46	60.00	27.54		
0.174		43.50	0.12	43.62	54.77	11.15	AV	
0.252		35.51	0.11	35.62	51.69	16.07		
0.421		26.19	0.17	26.36	47.42	21.06		
2.309		22.20	0.19	22.39	46.00	23.61		
5.005		24.60	0.42	25.02	50.00	24.98		
24.529		21.21	1.04	22.25	50.00	27.75		

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 1080P Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.161	53.58	0.24	53.82	65.43	11.61	QP
	0.247	45.21	0.25	45.46	61.86	16.40	
	0.435	36.47	0.35	36.82	57.15	20.33	
	3.840	37.23	0.48	37.71	56.00	18.29	
	5.929	34.49	0.57	35.06	60.00	24.94	
	24.400	30.03	1.16	31.19	60.00	28.81	
	0.161	43.50	0.24	43.74	55.43	11.69	AV
	0.247	35.00	0.25	35.25	51.86	16.61	
	0.435	26.19	0.35	26.54	47.15	20.61	
	3.840	27.20	0.48	27.68	46.00	18.32	
	5.929	24.20	0.57	24.77	50.00	25.23	
	24.400	20.21	1.16	21.37	50.00	28.63	
Neutral	0.170	53.92	0.12	54.04	64.94	10.90	QP
	0.226	44.90	0.11	45.01	62.61	17.60	
	0.389	34.35	0.16	34.51	58.08	23.57	
	4.027	35.73	0.40	36.13	56.00	19.87	
	5.929	34.80	0.49	35.29	60.00	24.71	
	23.888	31.09	1.04	32.13	60.00	27.87	
	0.170	43.50	0.12	43.62	54.94	11.32	AV
	0.226	34.50	0.11	34.61	52.61	18.00	
	0.389	24.20	0.16	24.36	48.08	23.72	
	4.027	25.59	0.40	25.99	46.00	20.01	
	5.929	24.60	0.49	25.09	50.00	24.91	
	23.888	20.89	1.04	21.93	50.00	28.07	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 1680*1050@60Hz Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	53.90	0.24	54.14	64.68	10.54	QP
	0.234	45.12	0.25	45.37	62.30	16.93	
	0.440	36.78	0.35	37.13	57.07	19.94	
	4.269	37.13	0.49	37.62	56.00	18.38	
	6.488	34.31	0.62	34.93	60.00	25.07	
	24.529	31.25	1.16	32.41	60.00	27.59	
	0.176	43.60	0.24	43.84	54.68	10.84	AV
	0.234	35.00	0.25	35.25	52.30	17.05	
	0.440	26.49	0.35	26.84	47.07	20.23	
	4.269	26.80	0.49	27.29	46.00	18.71	
	6.488	24.00	0.62	24.62	50.00	25.38	
	24.529	21.21	1.16	22.37	50.00	27.63	
Neutral	0.176	53.80	0.12	53.92	64.68	10.76	QP
	0.233	45.06	0.11	45.17	62.35	17.18	
	0.413	34.45	0.17	34.62	57.59	22.97	
	4.070	35.06	0.40	35.46	56.00	20.54	
	6.252	34.15	0.53	34.68	60.00	25.32	
	24.529	31.66	1.04	32.70	60.00	27.30	
	0.176	43.60	0.12	43.72	54.68	10.96	AV
	0.233	35.20	0.11	35.31	52.35	17.04	
	0.413	24.19	0.17	24.36	47.59	23.23	
	4.070	24.90	0.40	25.30	46.00	20.70	
	6.252	24.00	0.53	24.53	50.00	25.47	
	24.529	21.51	1.04	22.55	50.00	27.45	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 1280*1024@75Hz Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.172	53.93	0.24	54.17	64.86	10.69	QP
	0.234	44.86	0.25	45.11	62.30	17.19	
	0.421	37.04	0.34	37.38	57.42	20.04	
	4.070	36.47	0.49	36.96	56.00	19.04	
	6.056	35.11	0.59	35.70	60.00	24.30	
	24.400	30.68	1.16	31.84	60.00	28.16	
	0.172	43.50	0.24	43.74	54.86	11.12	AV
	0.234	34.20	0.25	34.45	52.30	17.85	
	0.421	26.80	0.34	27.14	47.42	20.28	
	4.070	26.20	0.49	26.69	46.00	19.31	
	6.056	25.20	0.59	25.79	50.00	24.21	
	24.400	20.61	1.16	21.77	50.00	28.23	
Neutral	0.169	53.83	0.12	53.95	64.99	11.04	QP
	0.226	44.64	0.11	44.75	62.61	17.86	
	0.440	34.65	0.17	34.82	57.07	22.25	
	3.985	36.03	0.39	36.42	56.00	19.58	
	6.121	36.34	0.52	36.86	60.00	23.14	
	23.636	30.89	1.02	31.91	60.00	28.09	
	0.169	43.50	0.12	43.62	54.99	11.37	AV
	0.226	34.50	0.11	34.61	52.61	18.00	
	0.440	24.50	0.17	24.67	47.07	22.40	
	3.985	26.00	0.39	26.39	46.00	19.61	
	6.121	26.20	0.52	26.72	50.00	23.28	
	23.636	20.61	1.02	21.63	50.00	28.37	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 640*480@60Hz Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.164	54.43	0.24	54.67	65.25	10.58	QP
	0.249	46.11	0.25	46.36	61.78	15.42	
	0.431	36.84	0.35	37.19	57.24	20.05	
	4.180	35.86	0.49	36.35	56.00	19.65	
	6.056	35.69	0.59	36.28	60.00	23.72	
	24.529	31.12	1.16	32.28	60.00	27.72	
	0.164	44.20	0.24	44.44	55.25	10.81	AV
	0.249	36.00	0.25	36.25	51.78	15.53	
	0.431	26.49	0.35	26.84	47.24	20.40	
	4.180	25.60	0.49	26.09	46.00	19.91	
	6.056	25.50	0.59	26.09	50.00	23.91	
	24.529	20.91	1.16	22.07	50.00	27.93	
Neutral	0.174	53.43	0.12	53.55	64.77	11.22	QP
	0.244	46.08	0.11	46.19	61.95	15.76	
	0.417	35.79	0.17	35.96	57.51	21.55	
	2.736	33.48	0.21	33.69	56.00	22.31	
	5.005	34.45	0.42	34.87	60.00	25.13	
	25.321	32.41	1.06	33.47	60.00	26.53	
	0.174	43.20	0.12	43.32	54.77	11.45	AV
	0.244	35.90	0.11	36.01	51.95	15.94	
	0.417	25.59	0.17	25.76	47.51	21.75	
	2.736	23.20	0.21	23.41	46.00	22.59	
	5.005	24.50	0.42	24.92	50.00	25.08	
	25.321	22.50	1.06	23.56	50.00	26.44	

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : MHL Adapter #1 : LCAP21A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.159	53.57	0.24	53.81	65.52	11.71	QP	
	0.252	45.29	0.25	45.54	61.69	16.15		
	0.431	37.38	0.35	37.73	57.24	19.51		
	4.070	36.48	0.49	36.97	56.00	19.03		
	6.186	35.02	0.59	35.61	60.00	24.39		
	24.142	31.14	1.16	32.30	60.00	27.70		
	0.159	43.20	0.24	43.44	55.52	12.08	AV	
	0.252	35.20	0.25	35.45	51.69	16.24		
	0.431	27.19	0.35	27.54	47.24	19.70		
	4.070	26.20	0.49	26.69	46.00	19.31		
	6.186	25.20	0.59	25.79	50.00	24.21		
	24.142	21.20	1.16	22.36	50.00	27.64		
	Neutral	0.174	52.60	0.12	52.72	64.77	12.05	QP
		0.233	44.26	0.11	44.37	62.35	17.98	
0.417		34.61	0.17	34.78	57.51	22.73		
4.070		37.66	0.40	38.06	56.00	17.94		
6.121		33.66	0.52	34.18	60.00	25.82		
24.142		31.03	1.04	32.07	60.00	27.93		
0.174		42.50	0.12	42.62	54.77	12.15	AV	
0.233		34.20	0.11	34.31	52.35	18.04		
0.417		24.19	0.17	24.36	47.51	23.15		
4.070		27.20	0.40	27.60	46.00	18.40		
6.121		23.50	0.52	24.02	50.00	25.98		
24.142		21.00	1.04	22.04	50.00	27.96		

TEST ENGINEER: SAWEN LI

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 48%RH
 Serial No. : E1205610-01/01 Date of Test : May 22, 2012
 Test Mode : HDMI 1920*1080@60Hz Adapter #4 : LCAP26A-A

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	53.10	0.24	53.34	64.68	11.34	QP
	0.252	45.41	0.25	45.66	61.69	16.03	
	0.431	38.88	0.35	39.23	57.24	18.01	
	1.374	35.03	0.35	35.38	56.00	20.62	
	4.454	36.48	0.50	36.98	56.00	19.02	
	17.568	33.31	0.89	34.20	60.00	25.80	
	0.176	43.20	0.24	43.44	54.68	11.24	AV
	0.252	35.20	0.25	35.45	51.69	16.24	
	0.431	28.49	0.35	28.84	47.24	18.40	
	1.374	24.80	0.35	25.15	46.00	20.85	
	4.454	26.19	0.50	26.69	46.00	19.31	
	17.568	23.20	0.89	24.09	50.00	25.91	
Neutral	0.180	52.91	0.12	53.03	64.50	11.47	QP
	0.237	44.73	0.11	44.84	62.22	17.38	
	0.389	36.68	0.16	36.84	58.08	21.24	
	2.581	34.58	0.20	34.78	56.00	21.22	
	4.926	37.04	0.42	37.46	56.00	18.54	
	15.885	33.63	0.74	34.37	60.00	25.63	
	0.180	42.50	0.12	42.62	54.50	11.88	AV
	0.237	34.50	0.11	34.61	52.22	17.61	
	0.389	26.50	0.16	26.66	48.08	21.42	
	2.581	24.20	0.20	24.40	46.00	21.60	
	4.926	27.00	0.42	27.42	46.00	18.58	
	15.885	23.50	0.74	24.24	50.00	25.76	

TEST ENGINEER: SAWEN LI

4 RADIATED EMISSION TEST

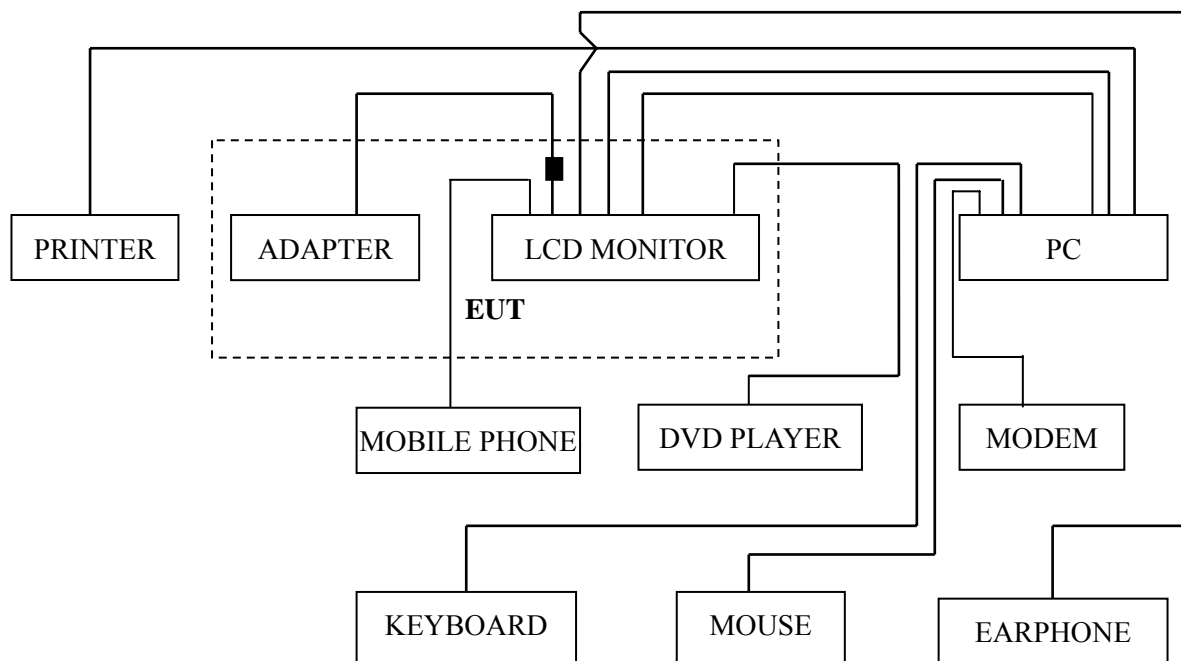
4.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESVS10	844594/001	Mar 22, 2012	Mar 22, 2013
2.	Preamplifier	Agilent	8447D	2944A10548	Mar 18, 2012	Sep 18, 2012
3.	Preamplifier	HP	8449B	3008A00864	Mar 22, 2012	Mar 22, 2013
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2011	Dec 01, 2012
5.	Horn Antenna	EMCO	3115	9607-4878	May 06, 2012	May 06, 2013
6.	Spectrum	Agilent	E7405A	MY45106600	Mar 22, 2012	Mar 22, 2013
7.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Mar 18, 2012	Sep 18, 2012
8.	Software	Audix	E3	SET00200 9912M295-2	--	--

4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals

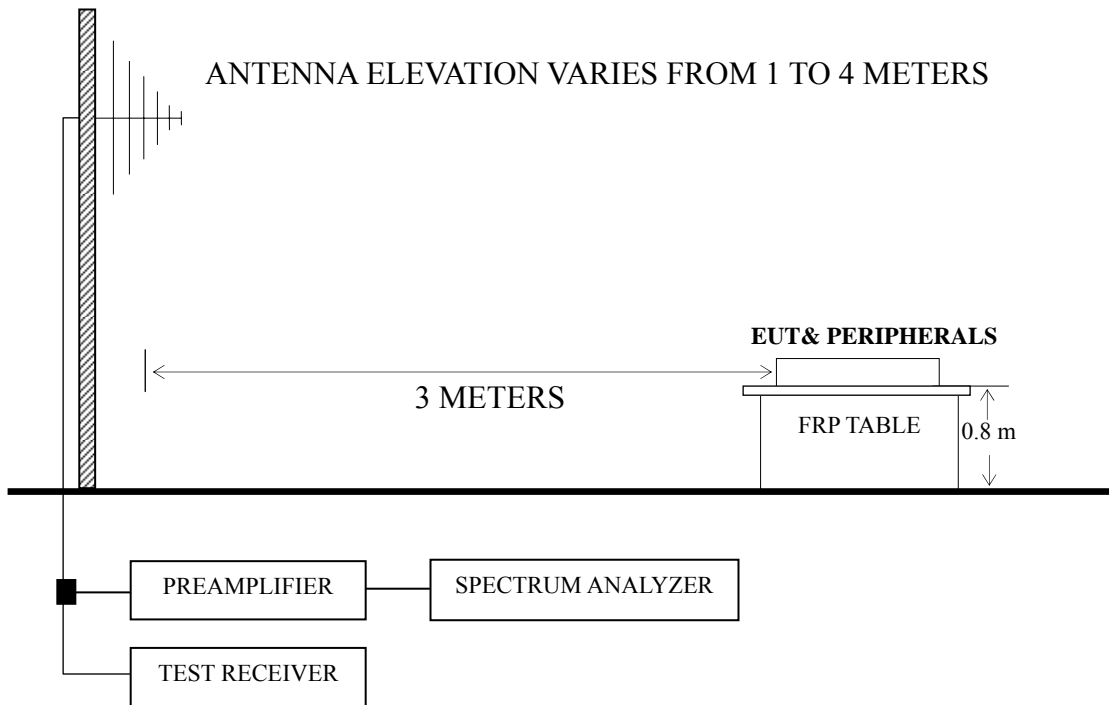


■ : Ferrite core

Note: Ferrite core only for Adapter #1

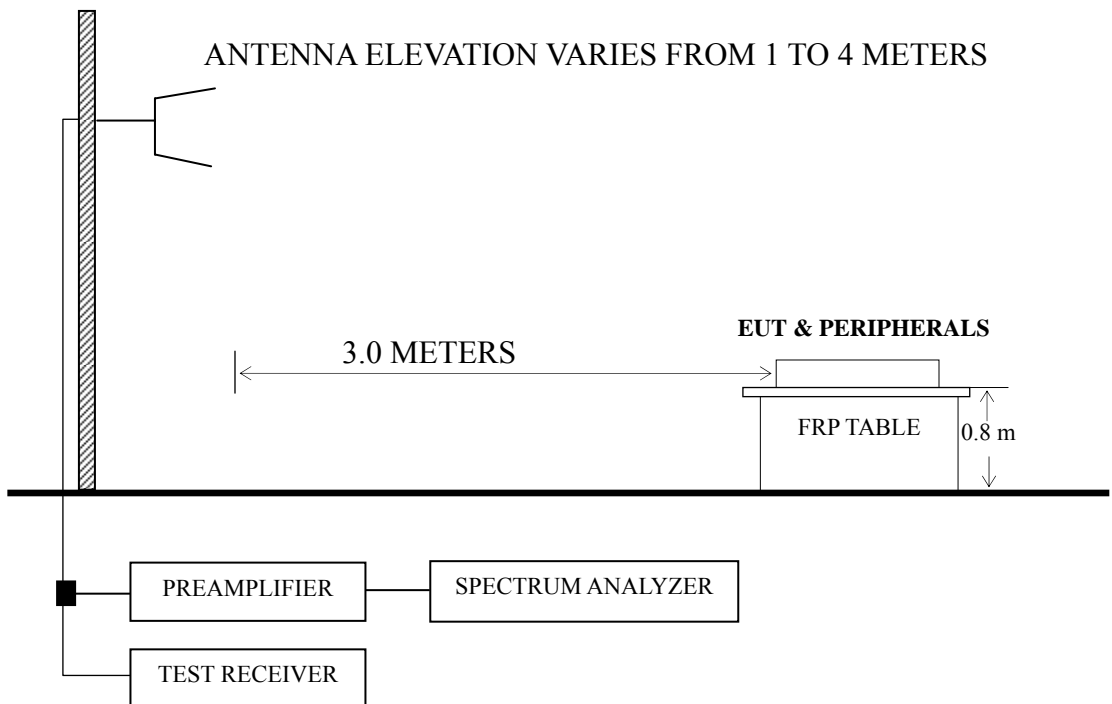
4.2.2 Radiated emission test setup

4.2.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz



■ : 50 ohm Coaxial Switch

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

Frequency (MHz)	Distance (m)	Field strength limits	
		($\mu\text{V/m}$)	dB ($\mu\text{V/m}$)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0

NOTE 1 - Emission Level dB ($\mu\text{V/m}$) = 20 log Emission Level ($\mu\text{V/m}$)
 NOTE 2 - The tighter limit applies at the band edges.
 NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
 NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz.
 NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT.

4.4 Test Configuration

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

Please refer to Sec.3.4.

4.5 Operating Condition of EUT

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

4.6 Test Procedures

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

The I.F. bandwidth of Test Receiver R&S ESVS10 was set at 120 kHz below 1GHz and The Spectrum Agilent E7405A was set at 1MHz above 1GHz.

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

The frequency range from 1 GHz to 2 GHz was checked for maximum resolution 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.

Adapter	Test Mode	Data Page
Adapter #1	D-Sub 1920*1080@60Hz	P28
	HDMI 1920*1080@60Hz	P29 – P30
	HDMI 1080P	P31
	HDMI 1680*1050@60Hz	P32
	HDMI 1280*1024@75Hz	P33
	HDMI 640*480@60Hz	P34
	MHL	P35
Adapter #2	HDMI 1920*1080@60Hz	P36 – P37
Adapter #3	HDMI 1920*1080@60Hz	P38 – P39
Adapter #4	HDMI 1920*1080@60Hz	P40 – P41

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

NOTE 2 – Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz)

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

NOTE 4 – All readings are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.

NOTE 5 – The emission levels that are 20dB below the official limit are not reported.

NOTE 6 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 7 – We tested the EUT using adapter #1, and selected the worst test mode to perform test with other adapters.

NOTE 8 – The worst case is for HDMI 1920*1080@60Hz test mode (Adapter #3). The worst emission at horizontal polarization was detected at 47.460 MHz with corrected signal level of 38.52 dB (µV/m) (limit is 40.00 dB (µV/m)), when the antenna was 1.00 m height and the turntable was at 110°. The worst emission at vertical polarization was detected at 75.590 MHz with corrected signal level of 30.02 dB (µV/m) (limit is 40.00 dB (µV/m)), when the antenna was 1.00 m height and the turntable was at 70°.

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
Horizontal	48.430	22.72	9.62	0.75	33.09	40.00	6.91
	101.780	20.68	11.63	1.05	33.36	43.50	10.14
	203.630	25.37	10.85	1.47	37.69	43.50	5.81
	368.530	23.07	15.81	1.96	40.84	46.00	5.16
	412.180	20.53	16.67	2.07	39.27	46.00	6.73
	662.440	19.44	19.52	2.62	41.58	46.00	4.42
Vertical	82.380	24.18	8.19	0.98	33.35	40.00	6.65
	202.500	27.00	10.81	1.46	39.27	43.50	4.23
	293.840	21.24	13.79	1.76	36.79	46.00	9.21
	405.390	14.54	16.57	2.04	33.15	46.00	12.85
	672.140	19.90	19.57	2.59	42.06	46.00	3.94
	809.880	12.45	20.80	2.87	36.12	46.00	9.88

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Horizontal	82.380	23.78	8.19	0.98	--	32.95	40.00	7.05	QP
	145.430	23.86	11.66	1.22	--	36.74	43.50	6.76	
	182.290	27.03	9.99	1.38	--	38.40	43.50	5.10	
	202.500	26.00	10.81	1.46	--	38.27	43.50	5.23	
	288.990	21.35	13.71	1.71	--	36.77	46.00	9.23	
	664.380	22.33	19.54	2.62	--	44.49	46.00	1.51	
	1075.000	50.88	22.16	5.27	38.04	40.27	74.00	33.73	PK
	1180.000	41.35	23.49	5.34	37.81	32.37	74.00	41.63	
	1250.000	38.46	24.05	5.42	37.65	30.28	74.00	43.72	
	1365.000	46.43	24.80	5.55	37.33	39.45	74.00	34.55	
	1595.000	42.72	26.41	5.93	36.77	38.29	74.00	35.71	
	1760.000	45.18	26.96	6.17	36.49	41.82	74.00	32.18	
	1075.000	37.88	22.16	5.27	38.04	27.27	54.00	26.73	AV
	1180.000	34.35	3.49	5.34	37.81	25.37	54.00	28.63	
	1250.000	35.46	24.05	5.42	37.65	27.28	54.00	26.72	
	1365.000	33.43	24.80	5.55	37.33	26.45	54.00	27.55	
	1595.000	32.72	26.41	5.93	36.77	28.29	54.00	25.71	
	1760.000	31.18	26.96	6.17	36.49	27.82	54.00	26.18	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Vertical	48.430	24.27	9.62	0.75	--	34.64	40.00	5.36	QP
	101.780	20.98	11.63	1.05	--	33.66	43.50	9.84	
	368.530	23.25	15.81	1.96	--	41.02	46.00	4.98	
	412.180	21.87	16.67	2.07	--	40.61	46.00	5.39	
	668.000	20.00	19.55	2.62	--	42.17	46.00	3.83	
	732.280	16.15	20.04	2.75	--	38.94	46.00	7.06	
	1080.000	49.01	22.24	4.50	38.03	37.72	74.00	36.28	PK
	1275.000	46.59	24.25	4.53	37.57	37.80	74.00	36.20	
	1365.000	46.67	24.80	4.54	37.33	38.68	74.00	35.32	
	1600.000	47.89	26.40	4.56	36.76	42.09	74.00	31.91	
	1760.000	49.67	26.96	4.58	36.49	44.72	74.00	29.28	
	1850.000	43.62	26.52	4.64	36.37	38.41	74.00	35.59	
	1080.000	40.01	22.24	4.50	38.03	28.72	54.00	25.28	AV
	1275.000	31.59	24.25	4.53	37.57	22.80	54.00	31.20	
	1365.000	33.67	24.80	4.54	37.33	25.68	54.00	28.32	
1600.000	35.89	26.40	4.56	36.76	30.09	54.00	23.91		
1760.000	36.67	26.96	4.58	36.49	31.72	54.00	22.28		
1850.000	29.62	26.52	4.64	36.37	24.41	54.00	29.59		

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

Test Mode : HDMI 1080P Adapter #1 : LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	82.380	21.97	8.19	0.98	31.14	40.00	8.86
	101.780	17.60	11.63	1.05	30.28	43.50	13.22
	153.190	12.89	11.04	1.24	25.17	43.50	18.33
	203.630	23.57	10.85	1.47	35.89	43.50	7.61
	303.540	14.22	14.00	1.75	29.97	46.00	16.03
	405.390	12.60	16.57	2.04	31.21	46.00	14.79
Vertical	48.430	21.20	9.62	0.75	31.57	40.00	8.43
	77.530	20.12	7.49	0.93	28.54	40.00	11.46
	101.780	16.33	11.63	1.05	29.01	43.50	14.49
	203.630	20.37	10.85	1.47	32.69	43.50	10.81
	363.680	20.32	15.69	1.94	37.95	46.00	8.05
	652.740	16.00	19.47	2.61	38.08	46.00	7.92

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 60%RH
 Serial No. : E1205610-01/01 Date of Test : May 25, 2012
 Test Mode : HDMI 1680*1050@60Hz Adapter #1 : LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	82.380	23.97	8.19	0.98	33.14	40.00	6.86
	101.780	19.60	11.63	1.05	32.28	43.50	11.22
	202.500	25.80	10.81	1.46	38.07	43.50	5.43
	271.530	17.26	13.37	1.67	32.30	46.00	13.70
	405.390	14.60	16.57	2.04	33.21	46.00	12.79
	667.290	15.93	19.55	2.62	38.10	46.00	7.90
Vertical	48.430	24.20	9.62	0.75	34.57	40.00	5.43
	77.530	23.12	7.49	0.93	31.54	40.00	8.46
	101.780	20.33	11.63	1.05	33.01	43.50	10.49
	203.630	23.37	10.85	1.47	35.69	43.50	7.81
	271.530	18.46	13.37	1.67	33.50	46.00	12.50
	363.680	22.32	15.69	1.94	39.95	46.00	6.05

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

Test Mode : HDMI 1280*1024@75Hz Adapter #1 : LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
Horizontal	82.380	21.78	8.19	0.98	30.95	40.00	9.05
	145.430	20.86	11.66	1.22	33.74	43.50	9.76
	203.630	24.41	10.85	1.47	36.73	43.50	6.77
	288.990	17.35	13.71	1.71	32.77	46.00	13.23
	366.590	14.65	15.77	1.96	32.38	46.00	13.62
	664.380	18.33	19.54	2.62	40.49	46.00	5.51
Vertical	48.430	20.27	9.62	0.75	30.64	40.00	9.36
	101.780	15.98	11.63	1.05	28.66	43.50	14.84
	288.990	15.82	13.71	1.71	31.24	46.00	14.76
	368.530	18.25	15.81	1.96	36.02	46.00	9.98
	412.180	16.87	16.67	2.07	35.61	46.00	10.39
	669.230	17.04	19.55	2.62	39.21	46.00	6.79

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

Test Mode : HDMI 640*480@60Hz Adapter #1 : LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	48.430	19.72	9.62	0.75	30.09	40.00	9.91
	101.780	18.68	11.63	1.05	31.36	43.50	12.14
	203.630	23.37	10.85	1.47	35.69	43.50	7.81
	368.530	21.07	15.81	1.96	38.84	46.00	7.16
	412.180	18.53	16.67	2.07	37.27	46.00	8.73
	662.440	17.44	19.52	2.62	39.58	46.00	6.42
Vertical	82.380	21.18	8.19	0.98	30.35	40.00	9.65
	101.780	16.18	11.63	1.05	28.86	43.50	14.64
	203.630	24.00	10.85	1.47	36.32	43.50	7.18
	293.840	16.24	13.79	1.76	31.79	46.00	14.21
	405.390	9.54	16.57	2.04	28.15	46.00	17.85
	672.140	14.90	19.57	2.59	37.06	46.00	8.94

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

Test Mode : MHL Adapter #1 : LCAP21A

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	49.100	28.00	8.82	0.78	37.60	40.00	2.40
	70.740	50.36	9.93	0.90	33.40	40.00	6.60
	98.870	46.31	11.31	1.03	30.75	43.50	12.75
	183.260	52.00	9.96	1.39	36.03	43.50	7.47
	265.710	45.79	12.62	1.65	33.18	46.00	12.82
	803.090	38.05	20.59	2.90	33.81	46.00	12.19
Vertical	49.400	48.09	8.69	0.78	29.52	40.00	10.48
	76.560	44.31	10.34	0.93	27.70	40.00	12.30
	175.500	48.85	10.04	1.36	32.85	43.50	10.65
	272.500	42.11	12.86	1.68	29.77	46.00	16.23
	496.570	30.82	17.56	2.26	22.54	46.00	23.46
	808.910	37.53	20.58	2.90	33.30	46.00	12.70

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Horizontal	47.460	56.48	9.37	0.77	--	38.52	40.00	1.48	QP
	73.650	48.61	10.15	0.91	--	31.84	40.00	8.16	
	99.840	46.70	11.34	1.04	--	31.18	43.50	12.32	
	183.260	51.88	9.96	1.39	--	35.91	43.50	7.59	
	361.740	36.15	15.45	1.96	--	26.24	46.00	19.76	
	819.580	32.06	20.54	2.92	--	27.83	46.00	18.17	
	1075.000	55.88	22.16	5.27	38.04	45.27	74.00	28.73	PK
	1250.000	50.46	24.05	5.42	37.65	42.28	74.00	31.72	
	1365.000	51.43	24.80	5.55	37.33	44.45	74.00	29.55	
	1465.000	46.20	26.11	5.72	37.06	40.97	74.00	33.03	
	1595.000	47.72	26.41	5.93	36.77	43.29	74.00	30.71	
	1760.000	50.18	26.96	6.17	36.49	46.82	74.00	27.18	AV
	1075.000	44.88	22.16	5.27	38.04	34.27	54.00	19.73	
	1250.000	35.46	24.05	5.42	37.65	27.28	54.00	26.72	
	1365.000	38.43	24.80	5.55	37.33	31.45	54.00	22.55	
	1465.000	35.20	26.11	5.72	37.06	29.97	54.00	24.03	
1595.000	38.72	26.41	5.93	36.77	34.29	54.00	19.71		
1760.000	36.18	26.96	6.17	36.49	32.82	54.00	21.18		

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : IPS277LY Humidity : 60%RH

Serial No. : E1205610-01/01 Date of Test : May 25, 2012

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Vertical	50.370	48.12	8.51	0.78	--	29.39	40.00	10.61	QP
	75.590	46.70	10.27	0.92	--	30.02	40.00	9.98	
	159.980	47.63	10.25	1.28	--	31.66	43.50	11.84	
	212.360	44.47	10.29	1.49	--	29.23	43.50	14.27	
	266.680	41.91	12.66	1.66	--	29.35	46.00	16.65	
	828.310	37.91	20.52	2.93	--	33.69	46.00	12.31	
	1080.000	46.24	22.24	5.27	38.03	35.72	74.00	38.28	PK
	1170.000	44.47	23.38	5.34	37.83	35.36	74.00	38.64	
	1315.000	46.87	24.50	5.51	37.48	39.40	74.00	34.60	
	1465.000	41.26	26.11	5.72	37.06	36.03	74.00	37.97	
	1600.000	44.52	26.40	5.93	36.76	40.09	74.00	33.91	
	1760.000	46.08	26.96	6.17	36.49	42.72	74.00	31.28	AV
	1080.000	37.24	22.24	5.27	38.03	26.72	54.00	27.28	
	1170.000	29.47	23.38	5.34	37.83	20.36	54.00	33.64	
	1315.000	35.87	24.50	5.51	37.48	28.40	54.00	25.60	
	1465.000	27.26	26.11	5.72	37.06	22.03	54.00	31.97	
1600.000	33.52	26.40	5.93	36.76	29.09	54.00	24.91		
1760.000	30.08	26.96	6.17	36.49	26.72	54.00	27.28		

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 60%RH
 Serial No. : E1205610-01/01 Date of Test : May 25, 2012
 Test Mode : HDMI 1920*1080@60Hz Adapter #4 : LCAP26A-A

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Horizontal	72.680	46.64	10.08	0.91	--	29.81	40.00	10.19	QP
	185.200	51.76	9.94	1.40	--	35.81	43.50	7.69	
	216.400	29.69	10.45	1.50	--	41.64	46.00	4.36	
	282.200	54.14	13.21	1.72	--	42.19	46.00	3.81	
	708.030	37.15	19.60	2.70	--	31.39	46.00	14.61	
	903.970	35.10	20.32	3.04	--	30.98	46.00	15.02	
	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	41.18	26.96	6.17	36.49	37.82	74.00	36.18	AV
	1075.000	41.88	22.16	5.27	38.04	31.27	54.00	22.73	
	1250.000	29.46	24.05	5.42	37.65	21.28	54.00	32.72	
	1365.000	36.43	24.80	5.55	37.33	29.45	54.00	24.55	
1465.000	30.20	26.11	5.72	37.06	24.97	54.00	29.03		
1595.000	35.72	26.41	5.93	36.77	31.29	54.00	22.71		
1760.000	31.18	26.96	6.17	36.49	27.82	54.00	26.18		

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C
 Model No. : IPS277LY Humidity : 60%RH
 Serial No. : E1205610-01/01 Date of Test : May 25, 2012
 Test Mode : HDMI 1920*1080@60Hz Adapter #4 : LCAP26A-A

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)	Remark
Vertical	47.500	26.39	9.37	0.77	--	36.53	40.00	3.47	QP
	69.770	45.41	9.85	0.89	--	28.37	40.00	11.63	
	105.660	46.49	11.26	1.07	--	30.98	43.50	12.52	
	186.170	51.84	9.93	1.40	--	35.90	43.50	7.60	
	357.860	42.61	15.33	1.95	--	32.60	46.00	13.40	
	708.030	33.93	19.60	2.70	--	28.17	46.00	17.83	
	1080.000	44.24	22.24	5.27	38.03	33.72	74.00	40.28	PK
	1170.000	42.47	23.38	5.34	37.83	33.36	74.00	40.64	
	1315.000	40.87	24.50	5.51	37.48	33.40	74.00	40.60	
	1465.000	33.26	26.11	5.72	37.06	28.05	74.00	45.95	
	1600.000	42.52	26.40	5.93	36.76	38.09	74.00	35.91	
	1760.000	44.08	26.96	6.17	36.49	40.72	74.00	33.28	
	1080.000	34.24	22.24	5.27	38.03	23.72	54.00	30.28	AV
	1170.000	32.47	23.38	5.34	37.83	23.36	54.00	30.64	
	1315.000	34.87	24.50	5.51	37.48	27.40	54.00	26.60	
	1465.000	29.26	26.11	5.72	37.06	24.03	54.00	29.97	
1600.000	22.52	26.40	5.93	36.76	18.09	54.00	35.91		
1760.000	34.08	26.96	6.17	36.49	30.72	54.00	23.28		

TEST ENGINEER: RAVEN JIN

5 DEVIATION TO TEST SPECIFICATIONS

None.