Application for FCC Certificate
On Behalf of
Hisense Electric Co., Ltd.

LCD TV

Model No.: LCD42V68PAM

Serial No.: E2009062601

Brand: Hisense

FCC ID: W9HLCDD0001

Prepared For: Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy & Technology

Development Zone, Qingdao, China

Prepared By: Audix Technology (Shanghai) Co., Ltd.

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

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Report No.: ACI-F09055A1

Date of Test: Jun 26 - Jul 13, 2009

Date of Report: Jul 16, 2009

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### TEST REPORT FOR FCC CERTIFICATE

**Applicant** 

: Hisense Electric Co., Ltd.

Manufacturer

Hisense Electric Co., Ltd.

**EUT Description** 

LCD TV

(A) Model No.

LCD42V68PAM

(B) Serial No.

E2009062601

(C) Brand

\_\_\_\_\_

Hisense

(D) 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) 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: LCD42V68PAM; S/N: E2009062601) which was tested in 3m anechoic chamber Jun 26 – Jul 13, 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.

The test results for EUT's TV function are contained in No.F09054A1, a Verification report. Because of the request from the client that, the EUT use different LCD Panel & main board from the original model (The original Test Report No.: ACI-F09055). We tested and reissued the report on the basis of the new sample.

Date of Test:	Jun 26 - Jul 13, 2009	_ Date of Report : _	Jul 16, 2009
Producer:	Zem Gu ZENO GU / Assistant	_	
Review:	BYRON WU / Supervisor	_	
AUDIX® Fo	r and on behalf of Shanghai) Co., Ltd.		

# 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:

<b>Description of Test Item</b>	Standard	Limits	Results
	EMISSION		
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 TV

Type of EUT :  $\square$  Production  $\square$  Pre-product  $\square$  Pro-type

Model No. : LCD42V68PAM

Serial No. : E2009062601

Brand : Hisense

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

Model No.	Brand	Main Board	LCD Panel	Report No.
LTDN42V85GUS	Hisense	RSAG7.820.1802\	CHI MEI	ACI-F09055
NX4203S120	NEXUS	VERB\ROH	V420H1-LH5	ACI-F09033
I CDANIGODAM	Higgman	RSAG7.820.1637\	CHI MEI	A CL E00055 A 1
LCD42V68PAM	Hisense	VER.E\ROH	V420H1-L15	ACI-F09055A1

Note 2 : The LCD42V68PAM was tested and recorded in

this report.

Applicant : Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy &

Technology Development Zone, Qingdao, China

Manufacturer : Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy &

Technology Development Zone, Qingdao, China

LCD Panel : Manufacturer : CHI MEI optoelectronics Corp.

M/N : V420H1-L15

Tuner : Manufacturer : Wuxi Components 6th Factory

M/N : FTDC3Y13MH05/ROH

Max Resolution : 1920\*1080@60Hz

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

with two cores on cable

HDMI Cable : Shielded, Detachable, 1.85m,

without core on cable

Power Cord : Unshielded, Detachable, 1.80m

#### **Remark:**

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

Rear	View:
IX Cal	V ICW

(1)	One component of YPbPr1 Port	
	-	Connected with DVD #1

(2) One component of YPbPr1 Audio Port

Connected with DVD #1

(3) One component of YPbPr2 Port

Connected with DVD #2

(4) One component of YPbPr2 Audio Port

Connected with DVD #2

(5) One HDMI3 Port

Connected with DVD#1

(6) One HDMI2 Port

Connected with DVD #2

(7) One VGA Port

Connected with PC

(8) One VGA Audio Port

Connected with PC

(9) One COAXIAL Port

Connected with TV

(10) One Component of AV Out Port

Connected with TV

#### Side Port:

(11) One S-Video Port

Connected with TV SG

(12) One RF Port

Connected with ATSC SG

(13) Two Component of AV Port

Connected with DVD#1/DVD#2

(14) One HDMI1 Port

Connected with PC

(15) One Earphone Port

Connected with Earphone

(16) Two USB Port

Connected with U-Disk\*2

## 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, 1.8m.

Certificate : CE/EMC, FCC DoC, VCCI, MIC, C-Tick,

**BSMI** 

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 Earphone

Manufacturer : SONY Model Number : MDR-E808

Serial Number: 1808030805305506

2.2.7 TV Signal Generator

Manufacturer : FLUKE Model Number : 54200m01 Serial Number : 814008

Data Cable : Shielded, detachable, 2.0m Power Cord : Unshielded, detachable, 2.0m Certificate : CE/EMC, FCC DoC, CCC

### 2.2.8 ATSC Signal Generator

Manufacturer : SENCORE Model Number : ATSC997 Serial Number : 6790071

2.2.9 DVD#1

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120108

Certificate : FCC DoC, CE/EMC, CCC

2.2.10 DVD#2

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120082

Certificate : FCC DoC, CE/EMC, CCC

2.2.11 TV

Manufacturer : SOYEA Model Number : V1453 (M)

Data Cable : Unshielded, undetachable, 1.5m Certificate : FCC DoC, CE/EMC, CCC

2.2.12 U-Disk\*2

Manufacturer : LG Model Number : 1GB Serial Number : N/A

## 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 = 1.26 dBRadiated Emission Expanded Uncertainty : U = 3.02 dB

# 3 CONDUCTED EMISSION TEST

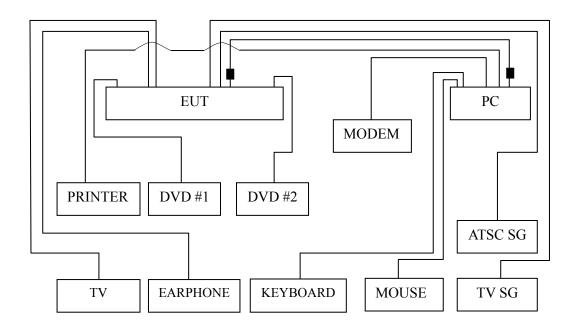
## 3.1.1 Test Equipment

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	Mar 19, 2009	Sep 19, 2009
5.	50Ω Terminator	Anritsu	BNC	001	Apr 02, 2009	Apr 02, 2010
6.	Software	Audix	E3	SET00200 9804M592		

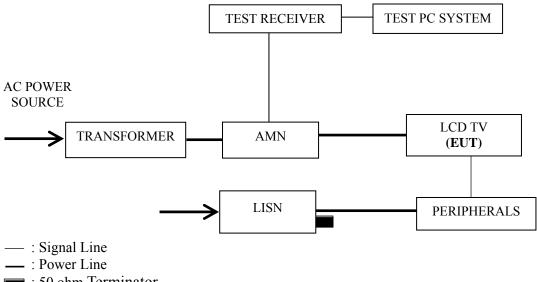
# 3.2 Block Diagram of Test Setup

## 3.2.1 EUT & Peripherals



: Ferrite core

### 3.2.2 Conducted Disturbance Test Setup



■ : 50 ohm Terminator

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

Frequency Range	Limits o	dB (μV)
(MHz)	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 & HDMI Input).
- 3.5.5 Repeat above procedure from 3.5.3 to 3.5.4 for difference test mode.
- 3.5.6 The other peripherals devices were driven and operated during the test.
- 3.5.7 The test modes are as follows:

Test Mode
D-Sub 640*480@60Hz
D-Sub 1024*768@60Hz
D-Sub 1680*1050@60Hz
D-Sub 1920*1080@60Hz
HDMI 640*480@60Hz
HDMI 1024*768@60Hz
HDMI 1680*1050@60Hz
HDMI 1920*1080@60Hz
USB Play

### 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.

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## 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 1680*1050@60Hz	P15
D-Sub 1920*1080@60Hz	P16
HDMI 640*480@60Hz	P17
HDMI 1024*768@60Hz	P18
HDMI 1680*1050@60Hz	P19
HDMI 1920*1080@60Hz	P20
USB Play	P21

NOTE 1 - Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

NOTE 3 – "QP" means "Quasi-Peak" values, "AV" means "Average" values.

NOTE 4 – The worst case is for D-Sub 640\*480@60Hz test mode. The worst emission is detected at 19.532 MHz (Average value) with corrected signal level of 41.35 dB ( $\mu$ V) (limit is 50.00 dB ( $\mu$ V)), when the Line of the EUT is connected to AMN.

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : <u>E2009062601</u> Date of Test : <u>Jun 26, 2009</u>

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
	0.280	37.37	0.25	37.62	60.81	23.19	
	0.440	39.08	0.28	39.36	57.07	17.71	
	1.094	40.32	0.30	40.62	56.00	15.38	$\bigcirc \mathbf{D}$
	1.781	37.19	0.36	37.55	56.00	18.45	QP
	6.352	46.38	0.45	46.83	60.00	13.17	
Line	19.532	48.93	0.88	49.81	60.00	10.19	
Line	0.280	28.02	0.25	28.27	50.81	22.54	
	0.440	29.79	0.28	30.07	47.07	17.00	
	1.094	27.01	0.30	27.31	46.00	18.69	AV
	1.781	24.41	0.36	24.77	46.00	21.23	
	6.352	26.09	0.45	26.54	50.00	23.46	
	19.532	40.47	0.88	41.35	50.00	8.65	
	0.417	40.30	0.25	40.55	57.51	16.96	
	0.476	40.56	0.26	40.82	56.41	15.59	
	1.094	41.02	0.30	41.32	56.00	14.68	QP
	1.503	39.33	0.34	39.67	56.00	16.33	ŲΓ
	6.488	46.96	0.47	47.43	60.00	12.57	
Neutral	19.740	49.25	0.85	50.10	60.00	9.90	
Neutrai	0.417	23.98	0.25	24.23	47.51	23.28	
	0.476	28.08	0.26	28.34	46.41	18.07	
	1.094	26.59	0.30	26.89	46.00	19.11	AV
	1.503	21.17	0.34	21.51	46.00	24.49	AV
	6.488	28.07	0.47	28.54	50.00	21.46	
	19.740	39.22	0.85	40.07	50.00	9.93	

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 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
	0.219	43.87	0.23	44.10	62.88	18.78	
	0.435	38.63	0.28	38.91	57.15	18.24	
	1.094	39.09	0.30	39.39	56.00	16.61	ΩD
	2.133	37.76	0.37	38.13	56.00	17.87	QP
	6.488	45.92	0.46	46.38	60.00	13.62	
Line	19.740	48.21	0.88	49.09	60.00	10.91	
Line	0.219	40.03	0.23	40.26	52.88	12.62	
	0.435	31.50	0.28	31.78	47.15	15.37	
	1.094	26.51	0.30	26.81	46.00	19.19	AV
	2.133	22.02	0.37	22.39	46.00	23.61	
	6.488	28.09	0.46	28.55	50.00	21.45	
	19.740	39.77	0.88	40.65	50.00	9.35	
	0.417	40.25	0.25	40.50	57.51	17.01	
	0.481	39.76	0.26	40.02	56.32	16.30	
	0.880	38.82	0.29	39.11	56.00	16.89	QP
	1.310	39.89	0.32	40.21	56.00	15.79	ŲI
	6.420	45.22	0.46	45.68	60.00	14.32	
Neutral	19.532	49.18	0.85	50.03	60.00	9.97	
Neutrai	0.417	24.69	0.25	24.94	47.51	22.57	
	0.481	26.96	0.26	27.22	46.32	19.10	
	0.880	26.00	0.29	26.29	46.00	19.71	AV
	1.310	25.75	0.32	26.07	46.00	19.93	AV
	6.420	27.48	0.46	27.94	50.00	22.06	
	19.532	39.39	0.85	40.24	50.00	9.76	

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

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			
	0.280	36.61	0.25	36.86	60.81	23.95				
	0.435	38.17	0.28	38.45	57.15	18.70				
	1.094	38.96	0.30	39.26	56.00	16.74	ΩD			
	1.949	36.43	0.36	36.79	56.00	19.21	QP			
	19.224	47.97	0.87	48.84	60.00	11.16				
Line	23.636	44.27	0.83	45.10	60.00	14.90				
Line	0.280	28.64	0.25	28.89	50.81	21.92				
	0.435	32.01	0.28	32.29	47.15	14.86				
	1.094	26.11	0.30	26.41	46.00	19.59	AV			
	1.949	25.30	0.36	25.66	46.00	20.34	AV			
	19.224	39.45	0.87	40.32	50.00	9.68				
	23.636	30.41	0.83	31.24	50.00	18.76				
	0.277	42.80	0.22	43.02	60.90	17.88				
	0.417	40.22	0.25	40.47	57.51	17.04				
	1.071	39.16	0.30	39.46	56.00	16.54	QP			
	1.716	39.57	0.34	39.91	56.00	16.09	ŲI			
	6.627	46.52	0.48	47.00	60.00	13.00				
Neutral	19.326	46.74	0.84	47.58	60.00	12.42				
Neutrai	0.277	29.96	0.22	30.18	50.90	20.72				
	0.417	25.92	0.25	26.17	47.51	21.34				
	1.071	24.95	0.30	25.25	46.00	20.75	AV			
	1.716	24.07	0.34	24.41	46.00	21.59	AV			
	6.627	27.33	0.48	27.81	50.00	22.19				
	19.326	39.44	0.84	40.28	50.00	9.72				

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

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	
	0.219	42.81	0.23	43.04	62.88	19.84		
	0.435	39.27	0.28	39.55	57.15	17.60		
	0.665	37.13	0.27	37.40	56.00	18.60	OD	
Line	1.094	39.02	0.30	39.32	56.00	16.68	QP	
	6.420	45.93	0.45	46.38	60.00	13.62		
	19.224	47.66	0.87	48.53	60.00	11.47		
	0.219	40.11	0.23	40.34	52.88	12.54		
	0.435	31.49	0.28	31.77	47.15	15.38		
	0.665	24.78	0.27	25.05	46.00	20.95	AV	
	1.094	26.71	0.30	27.01	46.00	18.99	AV	
	6.420	34.21	0.45	34.66	50.00	15.34		
	19.224	39.06	0.87	39.93	50.00	10.07		
	0.417	39.22	0.25	39.47	57.51	18.04		
	0.481	40.63	0.26	40.89	56.32	15.43		
	1.094	41.36	0.30	41.66	56.00	14.34	QP	
	1.296	42.41	0.32	42.73	56.00	13.27	ŲI	
	6.557	44.91	0.48	45.39	60.00	14.61		
Neutral	19.224	47.04	0.84	47.88	60.00	12.12		
Neutrai	0.417	24.68	0.25	24.93	47.51	22.58		
	0.481	26.79	0.26	27.05	46.32	19.27		
	1.094	26.23	0.30	26.53	46.00	19.47	AV	
	1.296	24.69	0.32	25.01	46.00	20.99	AV	
_	6.557	27.61	27.61 0.48 28.		50.00	21.91		
	19.224	38.89	0.84	39.73	50.00	10.27		

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : <u>E2009062601</u> Date of Test : <u>Jun 26, 2009</u>

Test Mode : HDMI 640\*480@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark		
	0.219	43.80	0.23	44.03	62.88	18.85			
	0.440	39.16	0.28	39.44	57.07	17.63			
	1.094	39.25	0.30	39.55	56.00	16.45	QP		
Line	1.503	38.25	0.34	38.59	56.00	17.41	Qr		
	6.285	45.19	0.45	45.64	60.00	14.36			
	19.740	50.13	0.88	51.01	60.00	8.99			
	0.219	40.78	0.23	41.01	52.88	11.87			
	0.440	31.18	0.28	31.46	47.07	15.61			
	1.094	24.14	0.30	24.44	46.00	21.56	AV		
	1.503	21.39	0.34	21.73	46.00	24.27	710		
	6.285	25.00	0.45	25.45	50.00	24.55			
	19.740	39.73	0.88	40.61	50.00	9.39			
	0.274	42.56	0.22	42.78	60.98	18.20			
	0.440	41.38	0.26	41.64	57.07	15.43			
	0.661	41.91	0.27	42.18	56.00	13.82	QP		
	1.106	40.84	0.30	41.14	56.00	14.86	Q1		
	6.627	44.46	0.48	44.94	60.00	15.06			
Neutral	19.224	47.95	0.84	48.79	60.00	11.21			
Neutrai	0.274	28.81	0.22	29.03	50.98	21.95			
	0.440	30.82	0.26	31.08	47.07	15.99			
	0.661	28.60	0.27	28.87	46.00	17.13	AV		
	1.106	27.53	0.30	27.83	46.00	18.17	AV		
	6.627	27.39	0.48	27.87	50.00	22.13			
	19.224	38.41	0.84	39.25	50.00	10.75			

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

Test Mode : HDMI 1024\*768@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark			
	0.219	43.42	0.23	43.65	62.88	19.23				
	0.440	39.61	0.28	39.89	57.07	17.18				
	0.665	39.80	0.27	40.07	56.00	15.93	OD			
Line	0.943	38.90	0.30	39.20	56.00	16.80	QP			
	6.488	46.88	0.46	47.34	60.00	12.66				
	19.326	49.26	0.87	50.13	60.00	9.87				
Line	0.219	40.17	0.23	40.40	52.88	12.48				
	0.440	30.57	0.28	30.85	47.07	16.22				
	0.665	26.96	0.27	27.23	46.00	18.77	AV			
	0.943	22.95	0.30	23.25	46.00	22.75	AV			
	6.488	26.58	0.46	27.04	50.00	22.96				
	19.326	38.79	0.87	39.66	50.00	10.34				
	0.277	40.80	0.22	41.02	60.90	19.88				
	0.421	40.49	0.25	40.74	57.42	16.68				
	1.324	39.91	0.32	40.23	56.00	15.77	QP			
	2.422	39.58	0.39	39.97	56.00	16.03	Qr			
	6.352	46.27	0.46	46.73	60.00	13.27				
Neutral	19.532	46.97	0.85	47.82	60.00	12.18				
Neutrai	0.277	26.02	0.22	26.24	50.90	24.66				
	0.421	27.84	0.25	28.09	47.42	19.33				
-	1.324	25.03	0.32	25.35	46.00	20.65	AX7			
	2.422	22.01	0.39	22.40	46.00	23.60	AV			
	6.352	25.00	0.46	25.46	50.00	24.54				
	19.532	39.72	0.85	40.57	50.00	9.43				

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

Test Mode : HDMI 1680\*1050@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark	
	0.277	38.20	0.25	38.45	60.90	22.45		
	0.440	39.12	0.28	39.40	57.07	17.67		
	1.094	39.36	0.30	39.66	56.00	16.34	OD	
Line	1.324	39.90	0.32	40.22	56.00	15.78	QP	
	6.627	45.79	0.47	46.26	60.00	13.74		
	19.532	48.08	0.88	48.96	60.00	11.04		
	0.277	25.81	0.25	26.06	50.90	24.84		
	0.440	30.84	0.28	31.12	47.07	15.95	AV	
	1.094	24.76	0.30	25.06	46.00	20.94		
	1.324	25.52	0.32	25.84	46.00	20.16	AV	
	6.627	28.42	0.47	28.89	50.00	21.11		
	19.532	39.92	0.88	40.80	50.00	9.20		
	0.219	42.74	0.21	42.95	62.88	19.93		
	0.421	40.35	0.25	40.60	57.42	16.82		
	0.665	42.63	0.27	42.90	56.00	13.10	QP	
	2.554	40.54	0.39	40.93	56.00	15.07	ŲI	
	6.488	46.15	0.47	46.62	60.00	13.38		
Neutral	19.740	48.54	0.85	49.39	60.00	10.61		
Neutrai	0.219	40.63	0.21	40.84	52.88	12.04		
	0.421	24.45	0.25	24.70	47.42	22.72		
	0.665	26.21	0.27	26.48	46.00	19.52	AV	
	2.554	22.30	0.39	22.69	46.00	23.31	AV	
	6.488	26.69	0.47	27.16	50.00	22.84		
	19.740	39.04	0.85	39.89	50.00	10.11		

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

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	
	0.219	42.55	0.23	42.78	62.88	20.10		
	0.440	38.22	0.28	38.50	57.07	18.57		
	1.082	38.94	0.30	39.24	56.00	16.76	ΩD	
	1.762	38.16	0.36	38.52	56.00	17.48	QP	
	19.950	48.45	0.89	49.34	60.00	10.66		
Line	23.888	44.08	0.82	44.90	60.00	15.10		
Line	0.219	40.34	0.23	40.57	52.88	12.31		
	0.440	31.12	0.28	31.40	47.07	15.67		
	1.082	27.11	0.30	27.41	46.00	18.59	AV	
	1.762	25.18	0.36	25.54	46.00	20.46	AV	
	19.950	38.73	0.89	39.62	50.00	10.38		
	23.888	30.29	0.82	31.11	50.00	18.89		
	0.219	43.02	0.21	43.23	62.88	19.65		
	0.421	40.57	0.25	40.82	57.42	16.60		
	1.082	41.25	0.30	41.55	56.00	14.45	QP	
	1.734	41.52	0.35	41.87	56.00	14.13	Qr	
	6.878	43.71	0.48	44.19	60.00	15.81		
Neutral	19.326	47.77	0.84	48.61	60.00	11.39		
Neutrai	0.219	40.22	0.21	40.43	52.88	12.45		
	0.421	28.64	0.25	28.89	47.42	18.53		
	1.082	24.68	0.30	24.98	46.00	21.02	AXI	
	1.734	24.69	0.35	25.04	46.00	20.96	AV	
_	6.878	27.60	0.48	28.08	50.00	21.92		
	19.326	39.42	0.84	40.26	50.00	9.74		

Model No. : LCD42V68PAM Humidity : 47%RH

Serial No. : E2009062601 Date of Test : Jun 26, 2009

Test Mode : USB Play

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark	
	0.219	40.74	0.23	40.97	62.88	21.91		
	0.389	37.40	0.28	37.68	58.08	20.40		
	0.839	38.45	0.29	38.74	56.00	17.26	ΩD	
	1.106	38.11	0.30	38.41	56.00	17.59	QP	
Line	7.935	41.33	0.48	41.81	60.00	18.19		
	19.532	46.23	0.88	47.11	60.00	12.89		
	0.219	34.60	0.23	34.83	52.88	18.05		
	0.389	26.60	0.28	26.88	48.08	21.20		
	0.839	28.52	0.29	28.81	46.00	17.19	AV	
	1.106	25.75	0.30	26.05	46.00	19.95		
	7.935	23.60	0.48	24.08	50.00	25.92		
	19.532	34.35	0.88	35.23	50.00	14.77		
	0.219	40.87	0.21	41.08	62.88	21.80		
	0.426	41.82	0.25	42.07	57.33	15.26		
	0.665	40.47	0.27	40.74	56.00	15.26	QP	
	1.094	40.78	0.30	41.08	56.00	14.92	Qr	
	7.175	43.44	0.48	43.92	60.00	16.08		
Neutral	19.740	46.85	0.85	47.70	60.00	12.30		
Neuman	0.219	36.09	0.21	36.30	52.88	16.58		
	0.426	31.75	0.25	32.00	47.33	15.33		
	0.665	26.16	0.27	26.43	46.00	19.57	A37	
	1.094	27.41	0.30	27.71	46.00	18.29	AV	
	7.175	29.30	0.48	29.78	50.00	20.22		
	19.740	35.16	0.85	36.01	50.00	13.99		

# 4 RADIATED EMISSION TEST

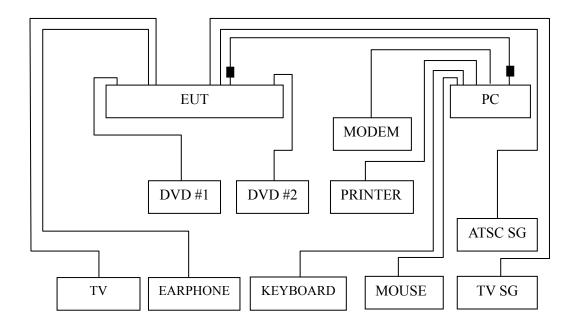
# 4.1 Test Equipment

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

				+	+	
Item	Туре	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	Mar 19, 2009	Sep 19, 2009
3.	Preamplifier	HP	8449B	3008A00864	May 19, 2009	May 19, 2010
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2010
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2009	May 19, 2010
6.	Software	Audix	Е3	SET00200 9912M295-2		

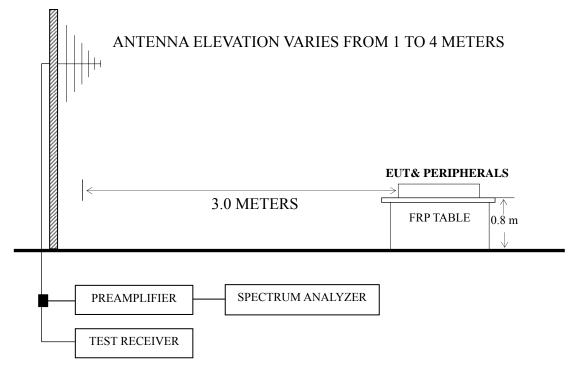
# 4.2 Block Diagram of Test Setup

# 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	Distance	Field strength limits			
(MHz)	(m)	(µV/m)	dB (μV/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 ( $\mu V/m$ ) = 20 log Emission Level ( $\mu V/m$ )
- 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) 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 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 D-Sub/HDMI 1680\*1050@60Hz and 1920\*1080@60Hz mode.

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	P26
D-Sub 1024*768@60Hz	P27
D-Sub 1680*1050@60Hz	P28
D-Sub 1920*1080@60Hz	P29
HDMI 640*480@60Hz	P30
HDMI 1024*768@60Hz	P31
HDMI 1680*1050@60Hz	P32
HDMI 1920*1080@60Hz	P33
USB Play	P34

- NOTE 1 Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz)
- NOTE 2 Emission Level = Antenna Factor + Cable Loss Preamp Factor + Meter Reading.(> 1GHz)
- NOTE 3 The emission levels that are 20dB below the official limit are not reported.
- NOTE  $4 0^{\circ}$  was the table front facing the antenna. Degree is calculated from  $0^{\circ}$  clockwise facing the antenna.
- NOTE 5 All reading are Quasi-Peak values below or equal to 1GHz and Peak values above 1GHz. For measurements above 1 GHz, the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
- NOTE 6 The worst case is for D-Sub 1680\*1050@60Hz test mode. The worst emission at horizontal polarization was detected at 269.590 MHz with corrected signal level of 40.04 dB ( $\mu$ V/m) (limit is 46.00dB ( $\mu$ V/m)), when the antenna was 1.90 m height and the turntable was at 330°. The worst emission at vertical polarization was detected at 107.600 MHz with corrected signal level of 37.77 dB ( $\mu$ V/m) (limit is 43.50 dB ( $\mu$ V/m)), when the antenna was 2.00 m height and the turntable was at 250°.

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

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

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB ( $\mu V/m$ )	Margin (dB)
	99.840	16.26	11.42	1.07	28.75	43.50	14.75
	121.180	21.90	12.95	1.15	36.00	43.50	7.50
Horizontal	222.060	16.97	11.75	1.61	30.33	46.00	15.67
Пописна	364.650	12.11	15.73	2.10	29.94	46.00	16.06
	485.900	12.96	17.73	2.40	33.09	46.00	12.91
	971.870	12.15	22.22	3.58	37.95	54.00	16.05
	98.870	20.72	11.27	1.07	33.06	43.50	10.44
	121.180	19.12	12.95	1.15	33.22	43.50	10.28
Vertical	243.400	18.45	12.64	1.68	32.77	46.00	13.23
vertical	364.650	9.63	15.73	2.10	27.46	46.00	18.54
	485.900	10.08	17.73	2.40	30.21	46.00	15.79
	818.610	10.31	20.87	3.24	34.42	46.00	11.58

EUT : LCD TV Temperature : 22°C

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : <u>D-Sub1024\*768@60Hz</u>

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	87.230	19.80	8.96	1.00	29.76	40.00	10.24
	121.180	21.99	12.95	1.15	36.09	43.50	7.41
Horizontal	217.210	20.91	11.48	1.60	33.99	46.00	12.01
Пописна	302.570	16.00	13.97	1.89	31.86	46.00	14.14
	595.510	9.88	19.17	2.72	31.77	46.00	14.23
	971.870	10.59	22.22	3.58	36.39	54.00	17.61
	87.230	22.64	8.96	1.00	32.60	40.00	7.40
	107.600	21.70	12.10	1.10	34.90	43.50	8.60
Vertical	217.210	21.14	11.48	1.60	34.22	46.00	11.78
vertical	367.560	10.90	15.81	2.10	28.81	46.00	17.19
	485.900	12.09	17.73	2.40	32.22	46.00	13.78
	971.870	9.18	22.22	3.58	34.98	54.00	19.02

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : D-Sub 1680\*1050@60Hz

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	
	90.140	24.50	9.40	1.02	-	34.92	43.50	8.58		
	126.030	22.90	12.71	1.16	i	36.77	43.50	6.73		
	269.590	24.95	13.32	1.77	i	40.04	46.00	5.96	ΩD	
	378.230	16.45	16.03	2.13	I	34.61	46.00	11.39	QP	
	431.580	11.64	16.95	2.28	I	30.87	46.00	15.13		
Horizontal	971.870	10.52	22.22	3.58	1	36.32	54.00	17.68		
попиона	1012.000	57.60	24.16	3.88	37.67	47.97	74.00	26.03		
	1167.000	51.96	24.68	4.16	37.25	43.55	74.00	30.45	PK	
	1215.000	50.58	24.86	4.24	37.14	42.54	74.00	31.46		
	1327.000	47.94	25.24	4.42	36.89	40.71	74.00	33.29		
	1549.000	55.37	26.15	4.81	36.44	49.89	74.00	24.11		
	1823.000	49.81	27.23	5.21	35.97	46.28	74.00	27.72		
	90.140	26.52	9.40	1.02		36.94	43.50	6.56		
	107.600	24.57	12.10	1.10		37.77	43.50	5.73		
	216.240	25.64	11.43	1.59		38.66	46.00	7.34	QP	
	378.230	15.03	16.03	2.13		33.19	46.00	12.81	ŲΓ	
	431.580	15.51	16.95	2.28	I	34.74	46.00	11.26		
Vertical	816.670	11.98	20.87	3.24	-	36.09	46.00	9.91		
Vertical	1023.000	49.83	24.16	3.88	37.63	40.24	74.00	33.76		
	1208.000	52.45	24.80	4.21	37.15	44.31	74.00	29.69	PK	
	1316.000	47.98	25.24	4.42	36.90	40.74	74.00	33.26		
	1511.000	50.40	26.00	4.74	36.51	44.63	74.00	29.37		
	1632.000	45.05	26.50	4.99	36.28	40.26	74.00	33.74		
	1823.000	52.58	27.23	5.21	35.97	49.05	74.00	24.95		

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : D-Sub 1920\*1080@60Hz

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
	71.710	23.50	6.69	0.87		31.06	40.00	8.94	
	144.460	24.70	11.76	1.21		37.67	43.50	5.83	
	288.020	23.74	13.71	1.84	•	39.29	46.00	6.71	OD
	359.800	15.03	15.61	2.07		32.71	46.00	13.29	QP
	485.900	13.28	17.73	2.40		33.41	46.00	12.59	
Horizontal	971.870	11.19	22.22	3.58		36.99	54.00	17.01	
попізопіаї	1020.000	58.03	24.16	3.88	37.64	48.43	74.00	25.57	
	1056.000	53.91	24.27	3.96	37.54	44.60	74.00	29.40	PK
	1167.000	52.88	24.68	4.16	37.25	44.47	74.00	29.53	
	1359.000	51.23	25.38	4.48	36.82	44.27	74.00	29.73	
	1530.000	46.03	26.07	4.78	36.47	40.41	74.00	33.59	
	1823.000	47.55	27.23	5.21	35.97	44.02	74.00	29.98	
	38.730	16.87	14.62	0.67		32.16	40.00	7.84	
	144.460	24.40	11.76	1.21		37.37	43.50	6.13	
	243.400	18.39	12.64	1.68		32.71	46.00	13.29	OD
	359.800	13.54	15.61	2.07		31.22	46.00	14.78	QP
	446.130	12.95	17.17	2.31		32.43	46.00	13.57	
Vertical	815.700	12.36	20.84	3.24		36.44	46.00	9.56	
verticai	1064.000	56.86	24.33	3.99	37.52	47.66	74.00	26.34	
	1180.000	47.57	24.74	4.18	37.22	39.27	74.00	34.73	PK
	1384.000	60.25	25.51	4.54	36.76	53.54	74.00	20.46	
	1569.000	49.47	26.22	4.85	36.40	44.14	74.00	29.86	
	1697.000	49.18	26.78	5.11	36.17	44.90	74.00	29.10	
	1823.000	54.53	27.23	5.21	35.97	51.00	74.00	23.00	

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : HDMI 640\*480@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB ( $\mu V/m$ )	Margin (dB)
	73.650	22.65	6.98	0.89	30.52	40.00	9.48
	121.180	19.90	12.95	1.15	34.00	43.50	9.50
Horizontal	297.720	17.77	13.86	1.88	33.51	46.00	12.49
попідопіаї	364.650	17.11	15.73	2.10	34.94	46.00	11.06
	594.540	11.90	19.14	2.72	33.76	46.00	12.24
	818.610	15.01	20.87	3.24	39.12	46.00	6.88
	97.900	22.51	11.11	1.07	34.69	43.50	8.81
	121.180	22.12	12.95	1.15	36.22	43.50	7.28
Vertical	243.400	21.45	12.64	1.68	35.77	46.00	10.23
vertical	364.650	15.63	15.73	2.10	33.46	46.00	12.54
	447.100	12.06	17.17	2.32	31.55	46.00	14.45
	850.620	10.76	21.20	3.32	35.28	46.00	10.72

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : <u>HDMI 1024\*768@60Hz</u>

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	99.840	15.36	11.42	1.07	27.85	43.50	15.65
	121.180	20.99	12.95	1.15	35.09	43.50	8.41
Horizontal	217.210	21.91	11.48	1.60	34.99	46.00	11.01
Пописний	364.650	15.88	15.73	2.10	33.71	46.00	12.29
	446.130	17.10	17.17	2.31	36.58	46.00	9.42
	688.630	15.74	19.65	2.92	38.31	46.00	7.69
	97.900	21.42	11.11	1.07	33.60	43.50	9.90
	152.220	22.97	11.09	1.25	35.31	43.50	8.19
Vertical	217.210	20.14	11.48	1.60	33.22	46.00	12.78
vertical	367.560	13.90	15.81	2.10	31.81	46.00	14.19
	485.900	15.09	17.73	2.40	35.22	46.00	10.78
	818.610	13.32	20.87	3.24	37.43	46.00	8.57

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : HDMI 1680\*1050@60Hz

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	
	90.140	21.50	9.40	1.02		31.92	43.50	11.58		
	126.030	22.90	12.71	1.16		36.77	43.50	6.73		
	216.240	23.63	11.43	1.59		36.65	46.00	9.35	OD	
	378.230	19.45	16.03	2.13		37.61	46.00	8.39	QP	
	431.580	15.64	16.95	2.28		34.87	46.00	11.13		
Horizontal	971.870	10.52	22.22	3.58		36.32	54.00	17.68		
поптенца	1007.000	55.39	24.10	3.84	37.68	45.65	74.00	28.35		
	1082.000	57.51	24.38	4.02	37.47	48.44	74.00	25.56	PK	
	1348.000	51.57	25.31	4.45	36.83	44.50	74.00	29.50		
	1549.000	52.91	26.15	4.81	36.44	47.43	74.00	26.57		
	1675.000	48.39	26.71	5.08	36.21	43.97	74.00	30.03		
	1823.000	48.56	27.23	5.21	35.97	45.03	74.00	28.97		
	90.140	25.52	9.40	1.02		35.94	43.50	7.56		
	107.600	23.57	12.10	1.10		36.77	43.50	6.73		
	216.240	23.64	11.43	1.59		36.66	46.00	9.34	OD	
	378.230	16.03	16.03	2.13		34.19	46.00	11.81	QP	
	431.580	17.51	16.95	2.28		36.74	46.00	9.26		
Vertical	816.670	10.98	20.87	3.24		35.09	46.00	10.91		
Vertical	1019.000	57.00	24.16	3.88	37.65	47.39	74.00	26.61		
	1057.000	57.69	24.27	3.96	37.54	48.38	74.00	25.62		
	1175.000	52.37	24.68	4.16	37.23	43.98	74.00	30.02	DIZ	
	1358.000	43.71	25.38	4.48	36.82	36.75	74.00	37.25	PK	
	1583.000	47.01	26.29	4.88	36.38	41.80	74.00	32.20		
	1823.000	48.52	27.23	5.21	35.97	44.99	74.00	29.01		

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : HDMI 1920\*1080@60Hz

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
	95.960	22.73	10.70	1.05	-	34.48	43.50	9.02	
	144.460	23.70	11.76	1.21		36.67	43.50	6.83	
	288.020	17.74	13.71	1.84	•	33.29	46.00	12.71	OD
	395.690	15.61	16.40	2.19		34.20	46.00	11.80	QP
	485.900	18.28	17.73	2.40		38.41	46.00	7.59	
Horizontal	741.980	15.14	20.13	3.07		38.34	46.00	7.66	
Horizoniai	1020.000	57.03	24.16	3.88	37.64	47.43	74.00	26.57	
	1057.000	56.44	24.27	3.96	37.54	47.13	74.00	26.87	- PK
	1166.000	52.65	24.68	4.16	37.26	44.23	74.00	29.77	
	1328.000	52.41	25.24	4.42	36.88	45.19	74.00	28.81	
	1530.000	48.71	26.07	4.78	36.47	43.09	74.00	30.91	
	1700.000	52.85	26.78	5.11	36.17	48.57	74.00	25.43	
	35.820	16.50	16.45	0.65		33.60	40.00	6.40	
	144.460	23.40	11.76	1.21		36.37	43.50	7.13	
	243.400	20.39	12.64	1.68		34.71	46.00	11.29	QP
	359.800	18.54	15.61	2.07		36.22	46.00	9.78	Qr
	446.130	16.95	17.17	2.31		36.43	46.00	9.57	
Vertical	815.700	15.36	20.84	3.24		39.44	46.00	6.56	
verticai	1063.000	61.25	24.33	3.99	37.53	52.04	74.00	21.96	
	1200.000	50.46	24.80	4.21	37.17	42.30	74.00	31.70	PK
	1386.000	54.11	25.51	4.54	36.76	47.40	74.00	26.60	
	1549.000	53.75	26.15	4.81	36.44	48.27	74.00	25.73	
	1697.000	46.65	26.78	5.11	36.17	42.37	74.00	31.63	
	1823.000	50.71	27.23	5.21	35.97	47.18	74.00	26.82	

Model No. : LCD42V68PAM Humidity : 60%RH

Serial No. : E2009062601 Date of Test : Jul 13, 2009

Test Mode : USB Play

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)
	43.580	19.43	11.88	0.68	31.99	40.00	8.01
	120.210	21.81	12.98	1.15	35.94	43.50	7.56
Horizontal	279.290	20.08	13.52	1.80	35.40	46.00	10.60
Honzona	389.870	18.21	16.30	2.18	36.69	46.00	9.31
	519.850	18.62	18.15	2.49	39.26	46.00	6.74
	842.860	14.18	21.12	3.32	38.62	46.00	7.38
	87.230	22.19	8.96	1.00	32.15	40.00	7.85
	107.600	22.38	12.10	1.10	35.58	43.50	7.92
Vertical	237.580	23.81	12.44	1.67	37.92	46.00	8.08
vertical	279.290	22.44	13.52	1.80	37.76	46.00	8.24
	519.850	17.71	18.15	2.49	38.35	46.00	7.65
	812.790	14.58	20.84	3.24	38.66	46.00	7.34

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# 5 DEVIATION TO TEST SPECIFICATIONS

None.

## **6 DEBUG DESCRIPTION**

The following components are used during the countermeasure procedures:

Name	M/N	Specifications (mm)	Manufacturer	Location
Ferrite Core	ZCAT3035-1330	30*35*13	ROH	See Appendix Figure 17
Ferrite Core	ZCAT2132-1130	21*32*11	ROH	See Appendix Figure 18
Aluminum foil		40*50	ROH	See Appendix Figure 19

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: Line . Jin

(RAVEN JIN)