

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

LCD Monitor

Model No.	LCD42B29GPUS	NVU42FX5
Serial No.	E2009031903	--
Brand	Hisense	Nuvision

FCC ID : W9HNVU42FX5

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

Tel: +86-21-64955500

Fax: +86-21-64955491

Report No. : ACI-F09028
Date of Test : Apr 01 – 03, 2009
Date of Report : Apr 07, 2009

TABLE OF CONTENTS

	Page
1 SUMMARY OF STANDARDS AND RESULTS	4
1.1 Description of Standards and Results.....	4
2 GENERAL INFORMATION	5
2.1 Description of Equipment Under Test.....	5
2.2 Peripherals.....	7
2.3 Description of Test Facility.....	8
2.4 Measurement Uncertainty.....	8
3 CONDUCTED EMISSION TEST	9
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
4 RADIATED EMISSION TEST	25
4.1 Test Equipment.....	25
4.2 Block Diagram of Test Setup.....	25
4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)].....	26
4.4 Test Configuration.....	26
4.5 Operating Condition of EUT.....	27
4.6 Test Procedures.....	27
4.7 Test Results.....	28
5 DEVIATION TO TEST SPECIFICATIONS	41
6 DEBUG DESCRIPTION	42

TEST REPORT FOR FCC CERTIFICATE

Applicant : Hisense Electric Co., Ltd.
 Manufacturer : Hisense Electric Co., Ltd.
 EUT Description : LCD Monitor

(A) Model No.	LTDN40W07US	NVU42FX5
(B) Serial No.	E2009031903	--
(C) Brand	Hisense	Nuvision
(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: Refer to Sec.2.1; S/N: Refer to Sec.2.1) which was tested in 3m anechoic chamber Apr 01 – 03, 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 : Apr 01 – 03, 2009 Date of Report : Apr 07, 2009

Producer : Zeno Gu
ZENO GU / Assistant

Review : Dio Yang
DIO YANG / Supervisor

AUDIX[®] For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Sammy Chen
Authorized Signature EMCSAMMY 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
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	:	<input checked="" type="checkbox"/> Production <input type="checkbox"/> Pre-product <input type="checkbox"/> Pro-type						
Model Number	:	<table border="1"> <tr> <td>LCD42B29GPUS</td> <td>NVU42FX5</td> </tr> <tr> <td>E2009031903</td> <td>--</td> </tr> <tr> <td>Hisense</td> <td>Nuvision</td> </tr> </table>	LCD42B29GPUS	NVU42FX5	E2009031903	--	Hisense	Nuvision
LCD42B29GPUS	NVU42FX5							
E2009031903	--							
Hisense	Nuvision							
Serial Number	:							
Brand	:							
Note 1	:	The LCD42B29GPUS and NVU42FX5 are all the same except for the different model number and brand.						
Note 2	:	The LCD42B29GPUS 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 : LG Display M/N : LC420WUD (SB)(01)						
Max Resolution	:	1920*1080@60Hz						
D-Sub Cable	:	Shielded, Detachable, 1.85m, with two cores on cable						
RS232 Cable	:	Shielded, Detachable, 1.80m, with one core on cable						
Power Cord	:	Unshielded, Detachable, 1.80m						

Remark:

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

Bottom View:

- | | | |
|-----|------------------------------|-------------------------|
| (1) | One component of AV Out Port | Connected with TV |
| (2) | One PC RS232 Port | Connected with PC RS232 |
| (3) | One S-Video Port | Connected with DVD #1 |
| (4) | One S-Video Port | Connected with PC |

Side Port:

- | | | |
|------|------------------------------------|-----------------------|
| (5) | One component of YPbPr1 Port | Connected with DVD #1 |
| (6) | One component of YPbPr1 Audio Port | Connected with DVD #1 |
| (7) | One component of YPbPr2 Port | Connected with DVD #2 |
| (8) | One component of YPbPr2 Audio Port | Connected with DVD #2 |
| (9) | One HDMI1 Port | Connected with DVD #1 |
| (10) | One HDMI2 Port | Connected with DVD #2 |
| (11) | One HDMI3 Port | Connected with PC |
| (12) | One VGA Port | Connected with PC |
| (13) | One VGA Audio In Port | Connected with PC |
| (14) | One Digital Audio Port | Connected with Speak |

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 Speaker

Manufacturer : SONY
Model Number : FS-04
Serial Number : 002

2.2.6 TV

Manufacturer : SOYEA
Model Number : V1453(M)
Serial Number : 814008
Power Cord : Shielded, detachable, 1.5m
Certificate : CE/EMC, FCC DoC, CCC

2.2.7 DVD#1

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120108
Certificate : FCC DoC, CE/EMC, CCC

2.2.8 DVD#2

Manufacturer : PHILIPS
Model Number : DVP3986K/93
Serial Number : KX1A0902120082
Certificate : FCC DoC, CE/EMC, CCC

2.3 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on
July 26, 2006 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

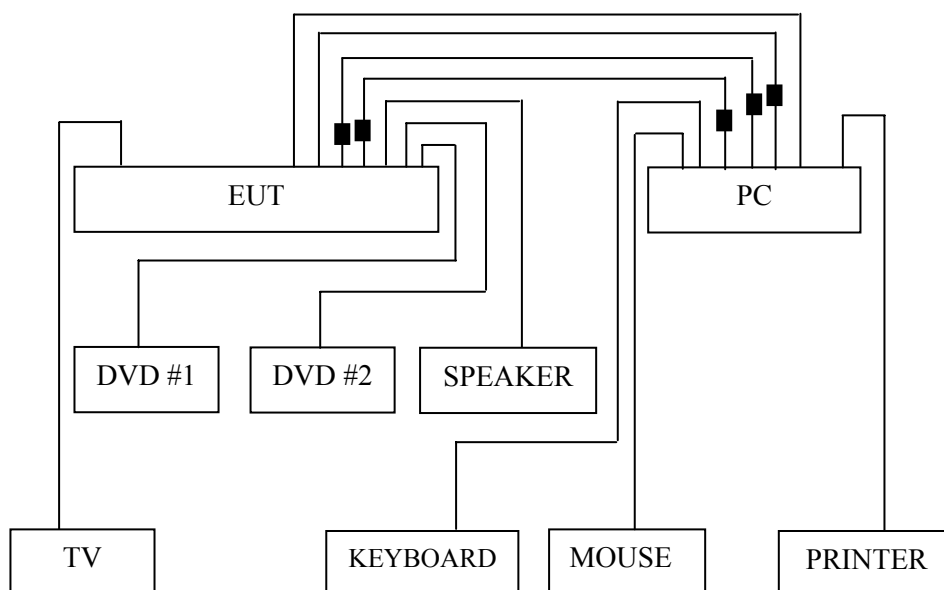
3.1.1 Test Equipment

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

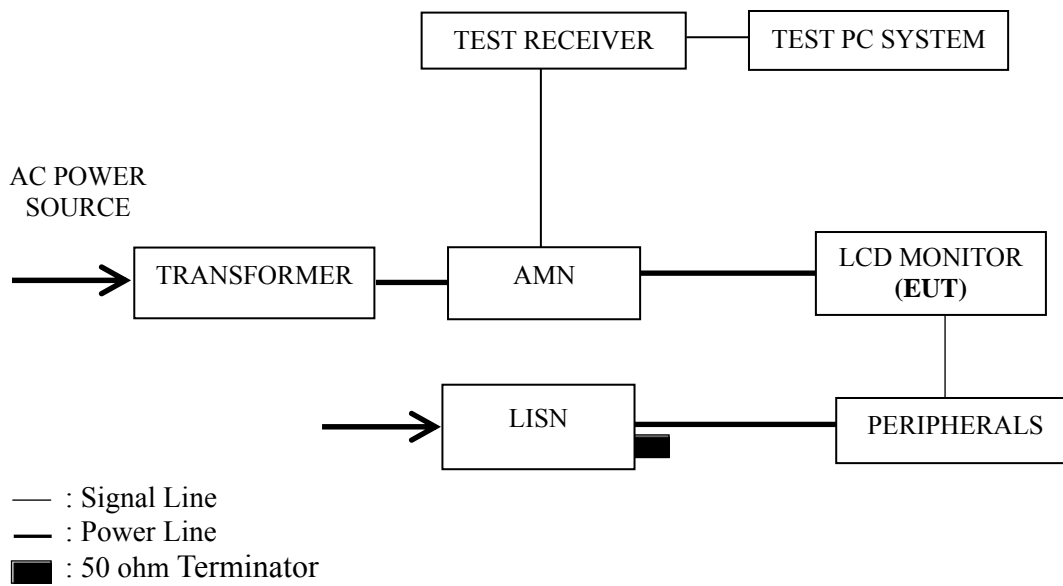
3.2 Block Diagram of Test Setup

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 (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, 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 1280*1024@60Hz
D-Sub 1600*1200@60Hz
D-Sub 1920*1080@60Hz
HDMI 640*480@60Hz
HDMI 1280*1024@60Hz
HDMI 1600*1200@60Hz
HDMI 1920*1080@60Hz
S-Video
YPbPr
AV
HDMI

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 1280*1024@60Hz	P14
D-Sub 1600*1200@60Hz	P15
D-Sub 1920*1080@60Hz	P16
HDMI 640*480@60Hz	P17
HDMI 1280*1024@60Hz	P18
HDMI 1600*1200@60Hz	P19
HDMI 1920*1080@60Hz	P20
S-Video	P21
YPbPr	P22
AV	P23
HDMI	P24

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 HDMI 1280*1024@60Hz test mode. The worst emission is detected at 19.021 MHz (Average) with corrected signal level of 46.00 dB (μ V) (limit is 50.00 dB (μ V)), when the Line of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

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

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.197	49.05	0.70	49.75	63.76	14.01	QP
	0.393	36.30	0.65	36.95	57.99	21.04	
	0.598	33.00	0.59	33.59	56.00	22.41	
	4.772	34.87	0.67	35.54	56.00	20.46	
	11.317	37.85	0.87	38.72	60.00	21.28	
	19.224	51.69	0.88	52.57	60.00	7.43	
	0.197	45.47	0.70	46.17	53.76	7.59	AV
	0.393	25.86	0.65	26.51	47.99	21.48	
	0.598	21.69	0.59	22.28	46.00	23.72	
	4.772	25.36	0.67	26.03	46.00	19.97	
	11.317	28.64	0.87	29.51	50.00	20.49	
	19.224	43.03	0.88	43.91	50.00	6.09	
Neutral	0.197	49.11	0.62	49.73	63.76	14.03	QP
	0.398	38.06	0.63	38.69	57.90	19.21	
	0.592	35.23	0.58	35.81	56.00	20.19	
	2.993	35.64	0.52	36.16	56.00	19.84	
	11.807	36.82	0.91	37.73	60.00	22.27	
	19.021	47.36	0.95	48.31	60.00	11.69	
	0.197	45.45	0.62	46.07	53.76	7.69	AV
	0.398	31.49	0.63	32.12	47.90	15.78	
	0.592	25.69	0.58	26.27	46.00	19.73	
	2.993	24.36	0.52	24.88	46.00	21.12	
	11.807	21.36	0.91	22.27	50.00	27.73	
	19.021	38.83	0.95	39.78	50.00	10.22	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : D-Sub 1280*1024@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	49.02	0.70	49.72	63.67	13.95	QP
	0.402	37.19	0.65	37.84	57.81	19.97	
	0.604	33.05	0.59	33.64	56.00	22.36	
	3.603	36.08	0.60	36.68	56.00	19.32	
	11.683	38.48	0.89	39.37	60.00	20.63	
	19.021	51.99	0.88	52.87	60.00	7.13	
	0.199	45.67	0.70	46.37	53.67	7.30	AV
	0.402	24.69	0.65	25.34	47.81	22.47	
	0.604	21.82	0.59	22.41	46.00	23.59	
	3.603	24.89	0.60	25.49	46.00	20.51	
	11.683	24.67	0.89	25.56	50.00	24.44	
	19.021	43.93	0.88	44.81	50.00	5.19	
Neutral	19.021	48.29	0.95	49.24	60.00	10.76	QP
	11.438	37.37	0.92	38.29	60.00	21.71	
	3.759	36.91	0.54	37.45	56.00	18.55	
	0.592	34.50	0.58	35.08	56.00	20.92	
	0.398	38.33	0.63	38.96	57.90	18.94	
	0.200	48.93	0.63	49.56	63.62	14.06	
	19.021	39.95	0.95	40.90	50.00	9.10	AV
	11.438	24.97	0.92	25.89	50.00	24.11	
	3.759	24.94	0.54	25.48	46.00	20.52	
	0.592	23.17	0.58	23.75	46.00	22.25	
	0.398	27.69	0.63	28.32	47.90	19.58	
	0.200	45.08	0.63	45.71	53.62	7.91	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : D-Sub 1600*1200@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.197	48.75	0.70	49.45	63.76	14.31	QP
	0.389	36.71	0.65	37.36	58.08	20.72	
	0.592	33.12	0.60	33.72	56.00	22.28	
	4.158	36.46	0.63	37.09	56.00	18.91	
	11.317	38.55	0.87	39.42	60.00	20.58	
	18.622	51.68	0.89	52.57	60.00	7.43	
	0.197	45.30	0.70	46.00	53.76	7.76	AV
	0.389	25.87	0.65	26.52	48.08	21.56	
	0.592	22.65	0.60	23.25	46.00	22.75	
	4.158	24.99	0.63	25.62	46.00	20.38	
	11.317	27.46	0.87	28.33	50.00	21.67	
	18.622	43.43	0.89	44.32	50.00	5.68	
Neutral	0.199	48.95	0.63	49.58	63.67	14.09	QP
	0.393	38.69	0.63	39.32	57.99	18.67	
	0.592	34.60	0.58	35.18	56.00	20.82	
	3.547	36.85	0.54	37.39	56.00	18.61	
	10.676	36.96	0.93	37.89	60.00	22.11	
	18.820	48.15	0.94	49.09	60.00	10.91	
	0.199	45.52	0.63	46.15	53.67	7.52	AV
	0.393	27.98	0.63	28.61	47.99	19.38	
	0.592	24.17	0.58	24.75	46.00	21.25	
	3.547	24.84	0.54	25.38	46.00	20.62	
	10.676	24.97	0.93	25.90	50.00	24.10	
	18.820	39.87	0.94	40.81	50.00	9.19	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

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

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.197	48.84	0.70	49.54	63.76	14.22	QP	
	0.393	36.86	0.65	37.51	57.99	20.48		
	3.681	36.18	0.61	36.79	56.00	19.21		
	4.926	36.28	0.68	36.96	56.00	19.04		
	11.438	39.36	0.87	40.23	60.00	19.77		
	19.230	52.59	0.88	53.47	60.00	6.53		
	0.197	45.23	0.70	45.93	53.76	7.83	AV	
	0.393	24.85	0.65	25.50	47.99	22.49		
	3.681	25.97	0.61	26.58	46.00	19.42		
	4.926	24.85	0.68	25.53	46.00	20.47		
	11.438	27.64	0.87	28.51	50.00	21.49		
	19.230	43.99	0.88	44.87	50.00	5.13		
	Neutral	0.197	48.79	0.62	49.41	63.76	14.35	QP
		0.398	38.39	0.63	39.02	57.90	18.88	
0.598		35.22	0.58	35.80	56.00	20.20		
3.759		37.97	0.54	38.51	56.00	17.49		
11.198		37.24	0.92	38.16	60.00	21.84		
19.050		49.19	0.95	50.14	60.00	9.86		
0.197		45.17	0.62	45.79	53.76	7.97	AV	
0.398		27.49	0.63	28.12	47.90	19.78		
0.598		24.17	0.58	24.75	46.00	21.25		
3.759		24.16	0.54	24.70	46.00	21.30		
11.198		22.36	0.92	23.28	50.00	26.72		
19.050		40.42	0.95	41.37	50.00	8.63		

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : HDMI 640*480@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	48.54	0.70	49.24	63.67	14.43	QP
	0.398	36.17	0.65	36.82	57.90	21.08	
	0.585	32.68	0.60	33.28	56.00	22.72	
	3.603	36.54	0.60	37.14	56.00	18.86	
	7.100	36.85	0.79	37.64	60.00	22.36	
	18.820	52.23	0.88	53.11	60.00	6.89	
	0.199	45.63	0.70	46.33	53.67	7.34	AV
	0.398	25.84	0.65	26.49	47.90	21.41	
	0.585	22.54	0.60	23.14	46.00	22.86	
	3.603	24.82	0.60	25.42	46.00	20.58	
7.100	27.64	0.79	28.43	50.00	21.57		
18.820	44.76	0.88	45.64	50.00	4.36		
Neutral	0.200	48.32	0.63	48.95	63.62	14.67	QP
	0.402	36.07	0.63	36.70	57.81	21.11	
	0.585	33.66	0.59	34.25	56.00	21.75	
	4.407	37.17	0.55	37.72	56.00	18.28	
	11.683	36.74	0.92	37.66	60.00	22.34	
	18.820	48.56	0.94	49.50	60.00	10.50	
	0.200	45.09	0.63	45.72	53.62	7.90	AV
	0.402	24.85	0.63	25.48	47.81	22.33	
	0.585	21.35	0.59	21.94	46.00	24.06	
	4.407	24.68	0.55	25.23	46.00	20.77	
11.683	27.27	0.92	28.19	50.00	21.81		
18.820	40.92	0.94	41.86	50.00	8.14		

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : HDMI 1280*1024@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	48.47	0.70	49.17	63.67	14.50	QP
	0.389	35.18	0.65	35.83	58.08	22.25	
	0.585	32.93	0.60	33.53	56.00	22.47	
	3.720	36.10	0.61	36.71	56.00	19.29	
	11.683	38.47	0.89	39.36	60.00	20.64	
	19.021	52.95	0.88	53.83	60.00	6.17	
	0.199	45.66	0.70	46.36	53.67	7.31	AV
	0.389	24.89	0.65	25.54	48.08	22.54	
	0.585	20.36	0.60	20.96	46.00	25.04	
	3.720	24.86	0.61	25.47	46.00	20.53	
	11.683	25.45	0.89	26.34	50.00	23.66	
	19.021	45.12	0.88	46.00	50.00	4.00	
Neutral	0.199	48.45	0.63	49.08	63.67	14.59	QP
	0.402	37.22	0.63	37.85	57.81	19.96	
	1.800	33.53	0.49	34.02	56.00	21.98	
	3.681	37.89	0.54	38.43	56.00	17.57	
	11.021	36.57	0.92	37.49	60.00	22.51	
	19.021	48.86	0.95	49.81	60.00	10.19	
	0.199	45.53	0.63	46.16	53.67	7.51	AV
	0.402	24.85	0.63	25.48	47.81	22.33	
	1.800	22.05	0.49	22.54	46.00	23.46	
	3.681	24.86	0.54	25.40	46.00	20.60	
	11.021	25.46	0.92	26.38	50.00	23.62	
	19.021	40.86	0.95	41.81	50.00	8.19	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : HDMI 1600*1200@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	48.53	0.70	49.23	63.67	14.44	QP
	0.389	35.95	0.65	36.60	58.08	21.48	
	0.779	32.28	0.56	32.84	56.00	23.16	
	3.642	37.65	0.61	38.26	56.00	17.74	
	11.933	37.96	0.89	38.85	60.00	21.15	
	18.820	52.38	0.88	53.26	60.00	6.74	
	0.199	45.70	0.70	46.40	53.67	7.27	AV
	0.389	24.36	0.65	25.01	48.08	23.07	
	0.779	21.55	0.56	22.11	46.00	23.89	
	3.642	26.34	0.61	26.95	46.00	19.05	
	11.933	28.64	0.89	29.53	50.00	20.47	
	18.820	44.84	0.88	45.72	50.00	4.28	
Neutral	0.200	48.50	0.63	49.13	63.62	14.49	QP
	0.398	37.66	0.63	38.29	57.90	19.61	
	0.804	32.66	0.55	33.21	56.00	22.79	
	3.759	37.61	0.54	38.15	56.00	17.85	
	11.198	36.92	0.92	37.84	60.00	22.16	
	19.021	48.58	0.95	49.53	60.00	10.47	
	0.200	45.13	0.63	45.76	53.62	7.86	AV
	0.398	24.85	0.63	25.48	47.90	22.42	
	0.804	25.64	0.55	26.19	46.00	19.81	
	3.759	24.86	0.54	25.40	46.00	20.60	
	11.198	25.35	0.92	26.27	50.00	23.73	
	19.021	40.93	0.95	41.88	50.00	8.12	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 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	
Line	0.199	48.63	0.70	49.33	63.67	14.34	QP	
	0.402	36.28	0.65	36.93	57.81	20.88		
	0.989	31.55	0.54	32.09	56.00	23.91		
	3.603	36.14	0.60	36.74	56.00	19.26		
	11.559	37.95	0.88	38.83	60.00	21.17		
	18.730	52.04	0.89	52.93	60.00	7.07		
	0.199	45.63	0.70	46.33	53.67	7.34	AV	
	0.402	24.68	0.65	25.33	47.81	22.48		
	0.989	21.03	0.54	21.57	46.00	24.43		
	3.603	23.35	0.60	23.95	46.00	22.05		
	11.559	25.55	0.88	26.43	50.00	23.57		
	18.730	44.46	0.89	45.35	50.00	4.65		
	Neutral	0.199	48.58	0.63	49.21	63.67	14.46	QP
		0.398	38.04	0.63	38.67	57.90	19.23	
0.796		32.81	0.55	33.36	56.00	22.64		
3.759		37.43	0.54	37.97	56.00	18.03		
11.683		37.93	0.92	38.85	60.00	21.15		
18.820		48.26	0.94	49.20	60.00	10.80		
0.199		45.53	0.63	46.16	53.67	7.51	AV	
0.398		25.36	0.63	25.99	47.90	21.91		
0.796		22.46	0.55	23.01	46.00	22.99		
3.759		24.68	0.54	25.22	46.00	20.78		
11.683		26.55	0.92	27.47	50.00	22.53		
18.820		40.62	0.94	41.56	50.00	8.44		

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : S-Video

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.200	48.22	0.70	48.92	63.62	14.70	QP
	0.389	37.25	0.65	37.90	58.08	20.18	
	0.598	32.56	0.59	33.15	56.00	22.85	
	3.565	35.74	0.60	36.34	56.00	19.66	
	13.408	36.50	0.95	37.45	60.00	22.55	
	19.224	52.41	0.88	53.29	60.00	6.71	
	0.200	45.38	0.70	46.08	53.62	7.54	AV
	0.389	24.82	0.65	25.47	48.08	22.61	
	0.598	21.36	0.59	21.95	46.00	24.05	
	3.565	24.10	0.60	24.70	46.00	21.30	
	13.408	24.68	0.95	25.63	50.00	24.37	
	19.224	44.99	0.88	45.87	50.00	4.13	
Neutral	0.199	48.11	0.63	48.74	63.67	14.93	QP
	0.402	35.50	0.63	36.13	57.81	21.68	
	0.585	33.92	0.59	34.51	56.00	21.49	
	3.759	37.11	0.54	37.65	56.00	18.35	
	11.317	34.96	0.92	35.88	60.00	24.12	
	18.820	47.90	0.94	48.84	60.00	11.16	
	0.199	45.39	0.63	46.02	53.67	7.65	AV
	0.402	24.15	0.63	24.78	47.81	23.03	
	0.585	22.56	0.59	23.15	46.00	22.85	
	3.759	24.86	0.54	25.40	46.00	20.60	
	11.317	21.36	0.92	22.28	50.00	27.72	
	18.820	41.07	0.94	42.01	50.00	7.99	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : YPbPr

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.199	48.41	0.70	49.11	63.67	14.56	QP	
	0.393	35.34	0.65	35.99	57.99	22.00		
	1.197	31.61	0.52	32.13	56.00	23.87		
	3.720	36.33	0.61	36.94	56.00	19.06		
	11.559	38.22	0.88	39.10	60.00	20.90		
	19.224	52.59	0.88	53.47	60.00	6.53		
	0.199	45.62	0.70	46.32	53.67	7.35	AV	
	0.393	24.98	0.65	25.63	47.99	22.36		
	1.197	21.10	0.52	21.62	46.00	24.38		
	3.720	25.46	0.61	26.07	46.00	19.93		
	11.559	27.10	0.88	27.98	50.00	22.02		
	19.224	45.05	0.88	45.93	50.00	4.07		
	Neutral	0.200	48.30	0.63	48.93	63.62	14.69	QP
		0.406	35.84	0.63	36.47	57.73	21.26	
0.585		31.96	0.59	32.55	56.00	23.45		
3.565		36.28	0.54	36.82	56.00	19.18		
11.438		36.20	0.92	37.12	60.00	22.88		
19.224		48.30	0.95	49.25	60.00	10.75		
0.200		45.13	0.63	45.76	53.62	7.86	AV	
0.406		26.35	0.63	26.98	47.73	20.75		
0.585		21.03	0.59	21.62	46.00	24.38		
3.565		21.53	0.54	22.07	46.00	23.93		
11.438		24.68	0.92	25.60	50.00	24.40		
19.224		40.82	0.95	41.77	50.00	8.23		

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : AV

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	48.49	0.70	49.19	63.67	14.48	QP
	0.393	34.76	0.65	35.41	57.99	22.58	
	0.585	32.20	0.60	32.80	56.00	23.20	
	3.720	36.35	0.61	36.96	56.00	19.04	
	10.342	37.20	0.83	38.03	60.00	21.97	
	19.326	51.98	0.86	52.84	60.00	7.16	
	0.199	45.62	0.70	46.32	53.67	7.35	AV
	0.393	21.36	0.65	22.01	47.99	25.98	
	0.585	20.36	0.60	20.96	46.00	25.04	
	3.720	25.41	0.61	26.02	46.00	19.98	
	10.342	26.32	0.83	27.15	50.00	22.85	
	19.326	44.64	0.86	45.50	50.00	4.50	
Neutral	0.199	48.44	0.63	49.07	63.67	14.60	QP
	0.402	36.14	0.63	36.77	57.81	21.04	
	0.585	33.53	0.59	34.12	56.00	21.88	
	3.720	37.01	0.54	37.55	56.00	18.45	
	11.683	36.92	0.92	37.84	60.00	22.16	
	18.622	47.62	0.94	48.56	60.00	11.44	
	0.199	45.56	0.63	46.19	53.67	7.48	AV
	0.402	24.65	0.63	25.28	47.81	22.53	
	0.585	21.36	0.59	21.95	46.00	24.05	
	3.720	24.30	0.54	24.84	46.00	21.16	
	11.683	24.67	0.92	25.59	50.00	24.41	
	18.622	40.02	0.94	40.96	50.00	9.04	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 20°C

Model No. : LCD42B29GPUS Humidity : 46%RH

Serial No. : E2009031903 Date of Test : Apr 03, 2009

Test Mode : HDMI

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.199	48.55	0.70	49.25	63.67	14.42	QP
	0.393	35.46	0.65	36.11	57.99	21.88	
	0.585	33.33	0.60	33.93	56.00	22.07	
	3.720	36.82	0.61	37.43	56.00	18.57	
	11.021	38.66	0.86	39.52	60.00	20.48	
	19.224	52.57	0.88	53.45	60.00	6.55	
	0.199	45.67	0.70	46.37	53.67	7.30	AV
	0.393	21.35	0.65	22.00	47.99	25.99	
	0.585	25.64	0.60	26.24	46.00	19.76	
	3.720	21.35	0.61	21.96	46.00	24.04	
	11.021	24.16	0.86	25.02	50.00	24.98	
	19.224	44.85	0.88	45.73	50.00	4.27	
Neutral	0.199	48.45	0.63	49.08	63.67	14.59	QP
	0.402	36.74	0.63	37.37	57.81	20.44	
	0.804	33.47	0.55	34.02	56.00	21.98	
	3.547	36.71	0.54	37.25	56.00	18.75	
	11.933	37.45	0.91	38.36	60.00	21.64	
	18.820	48.44	0.94	49.38	60.00	10.62	
	0.199	45.47	0.63	46.10	53.67	7.57	AV
	0.402	24.82	0.63	25.45	47.81	22.36	
	0.804	21.35	0.55	21.90	46.00	24.10	
	3.547	23.35	0.54	23.89	46.00	22.11	
	11.933	25.64	0.91	26.55	50.00	23.45	
	18.820	40.77	0.94	41.71	50.00	8.29	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

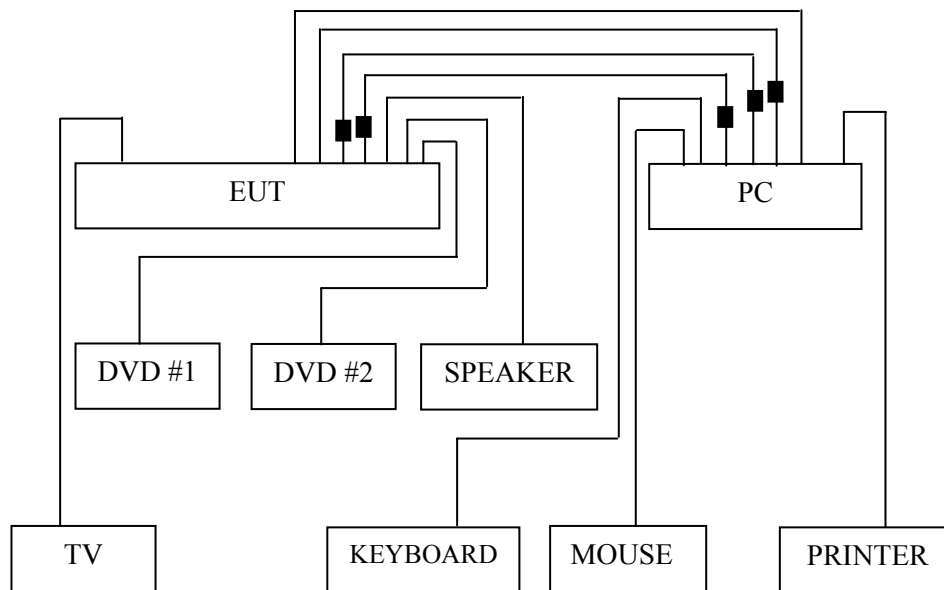
4.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESVS10	844594/001	Mar 07, 2009	Mar 07, 2010
2.	Preamplifier	Agilent	8447D	2944A10548	Mar 19, 2009	Sep 19, 2009
3.	Preamplifier	HP	8449B	3008A00864	May 19, 2008	May 19, 2009
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2009
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2008	May 19, 2009
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

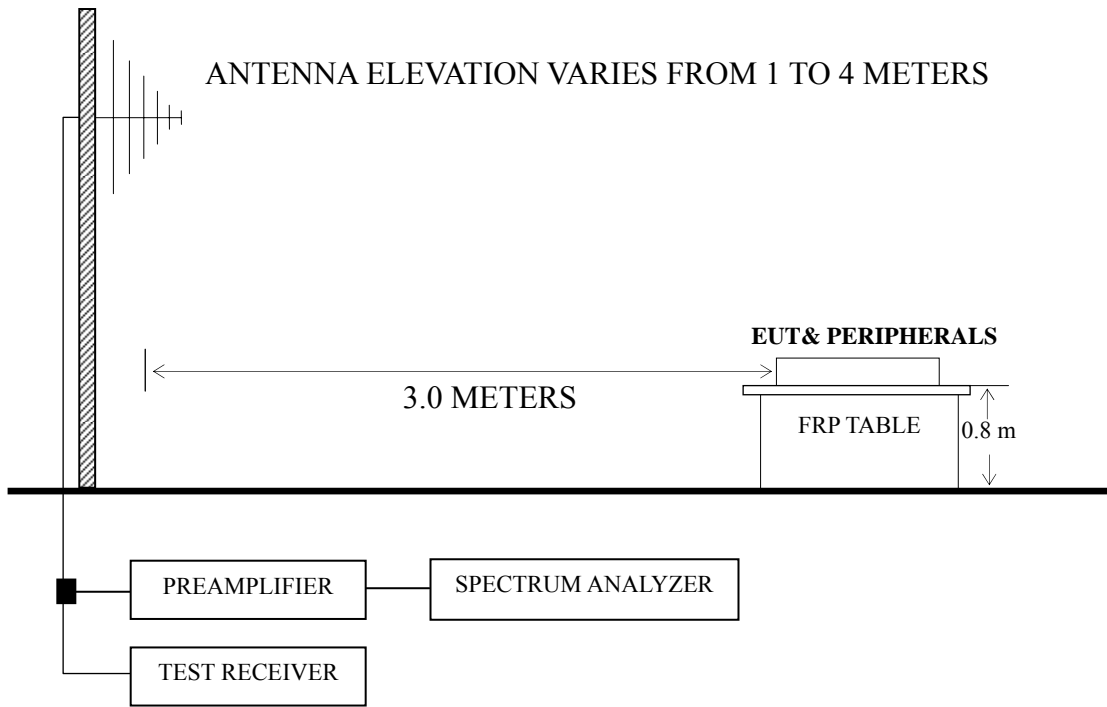
4.2 Block Diagram of Test Setup

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	
		($\mu\text{V/m}$)	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) 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 1600*1200@60Hz and 1920*1080@60Hz 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	P29
D-Sub 1280*1024@60Hz	P30
D-Sub 1600*1200@60Hz	P31
D-Sub 1920*1080@60Hz	P32
HDMI 640*480@60Hz	P33
HDMI 1280*1024@60Hz	P34
HDMI 1600*1200@60Hz	P35
HDMI 1920*1080@60Hz	P36
S-Video	P37
YPbPr	P38
AV	P39
HDMI	P40

- 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° was the table front facing the antenna. Degree is calculated from 0° 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 HDMI test mode. The worst emission at horizontal polarization was detected at 589.690 MHz with corrected signal level of 44.02 dB ($\mu\text{V}/\text{m}$) (limit is 46.00dB ($\mu\text{V}/\text{m}$)), when the antenna was 2.10 m height and the turntable was at 305°. The worst emission at vertical polarization was detected at 741.980 MHz with corrected signal level of 44.29 dB ($\mu\text{V}/\text{m}$) (limit is 46.00 dB ($\mu\text{V}/\text{m}$)), when the antenna was 2.00 m height and the turntable was at 275°.

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

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

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	216.240	25.34	11.43	1.14	37.91	46.00	8.09
	233.700	22.93	12.28	1.21	36.42	46.00	9.58
	269.590	27.35	13.32	1.38	42.05	46.00	3.95
	296.750	24.22	13.86	1.52	39.60	46.00	6.40
	378.230	19.54	16.03	1.93	37.50	46.00	8.50
	589.690	17.86	19.09	2.56	39.51	46.00	6.49
Vertical	107.600	25.13	12.10	0.86	38.09	43.50	5.41
	126.030	25.21	12.71	0.89	38.81	43.50	4.69
	149.310	22.86	11.35	0.92	35.13	43.50	8.37
	216.240	25.74	11.43	1.14	38.31	46.00	7.69
	269.590	22.28	13.32	1.38	36.98	46.00	9.02
	491.720	20.56	17.80	2.35	40.71	46.00	5.29

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : D-Sub 1280*1024@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	216.240	27.34	11.43	1.14	39.91	46.00	6.09
	269.590	23.35	13.32	1.38	38.05	46.00	7.95
	485.900	19.86	17.73	2.33	39.92	46.00	6.08
	589.690	19.86	19.09	2.56	41.51	46.00	4.49
	647.890	20.04	19.45	2.83	42.32	46.00	3.68
	877.780	16.48	21.49	3.48	41.45	46.00	4.55
Vertical	44.550	23.67	11.38	0.73	35.78	40.00	4.22
	107.600	26.13	12.10	0.86	39.09	43.50	4.41
	126.030	25.21	12.71	0.89	38.81	43.50	4.69
	216.240	25.74	11.43	1.14	38.31	46.00	7.69
	269.590	22.28	13.32	1.38	36.98	46.00	9.02
	491.720	21.56	17.80	2.35	41.71	46.00	4.29

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : D-Sub 1600*1200@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	107.600	24.15	12.10	0.86	--	37.11	43.50	6.39	QP
	149.310	27.54	11.35	0.92	--	39.81	43.50	3.69	
	269.590	28.35	13.32	1.38	--	43.05	46.00	2.95	
	378.230	23.54	16.03	1.93	--	41.50	46.00	4.50	
	485.900	23.86	17.73	2.33	--	43.92	46.00	2.08	
	589.000	22.10	19.09	2.56	--	43.75	46.00	2.25	PK
	2228.000	46.79	28.38	5.30	35.46	45.01	74.00	28.99	
	2704.000	44.56	29.55	6.07	35.03	45.15	74.00	28.85	
	3200.000	45.11	30.76	7.18	34.54	48.51	74.00	25.49	
	3668.000	43.73	32.40	7.73	33.96	49.90	74.00	24.10	
	3984.000	42.70	33.40	8.59	33.62	51.07	74.00	22.93	
4236.000	42.80	33.38	9.17	33.91	51.44	74.00	22.56		
Vertical	33.880	19.25	17.44	0.61	--	37.30	40.00	2.70	QP
	107.600	25.13	12.10	0.86	--	38.09	43.50	5.41	
	216.000	29.11	11.43	1.14	--	41.68	43.50	1.82	
	269.590	24.28	13.32	1.38	--	38.98	46.00	7.02	
	491.720	21.56	17.80	2.35	--	41.71	46.00	4.29	
	589.690	21.95	19.09	2.56	--	43.60	46.00	2.40	PK
	1564.000	47.09	26.22	4.85	36.41	41.75	74.00	32.25	
	1824.000	48.58	27.23	5.21	35.96	45.06	74.00	28.94	
	2228.000	45.77	28.38	5.30	35.46	43.99	74.00	30.01	
	2940.000	44.99	30.06	6.85	34.85	47.05	74.00	26.95	
	3492.000	44.79	31.80	7.38	34.17	49.80	74.00	24.20	
3720.000	43.48	32.57	7.89	33.90	50.04	74.00	23.96		

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	107.600	24.15	12.10	0.86	--	37.11	43.50	6.39	QP
	216.000	28.41	11.43	1.14	--	40.98	43.50	2.52	
	269.590	26.35	13.32	1.38	--	41.05	46.00	4.95	
	485.900	19.86	17.73	2.33	--	39.92	46.00	6.08	
	589.690	18.86	19.09	2.56	--	40.51	46.00	5.49	
	647.890	18.04	19.45	2.83	--	40.32	46.00	5.68	PK
	1036.000	54.34	24.21	3.93	37.60	44.88	74.00	29.12	
	1216.000	53.40	24.86	4.24	37.14	45.36	74.00	28.64	
	1548.000	54.22	26.15	4.81	36.44	48.74	74.00	25.26	
	2708.000	45.64	29.55	6.07	35.03	46.23	74.00	27.77	
3160.000	44.27	30.65	7.16	34.59	47.49	74.00	26.51	Vertical	
4404.000	43.52	33.36	9.53	34.12	52.29	74.00	21.71		
33.880	18.25	17.44	0.61	--	36.30	40.00	3.70		QP
44.550	25.67	11.38	0.73	--	37.78	40.00	2.22		
108.000	27.01	12.13	0.86	--	40.00	43.50	3.50		
216.240	27.74	11.43	1.14	--	40.31	46.00	5.69		
491.720	20.56	17.80	2.35	--	40.71	46.00	5.29		
589.690	18.95	19.09	2.56	--	40.60	46.00	5.40		PK
1824.000	50.71	27.23	5.21	35.96	47.19	74.00	26.81		
2580.000	46.17	29.26	5.72	35.14	46.01	74.00	27.99		
2964.000	46.01	30.13	6.99	34.83	48.30	74.00	25.70		
3048.000	46.19	30.30	7.07	34.74	48.82	74.00	25.18		
3496.000	44.43	31.80	7.38	34.16	49.45	74.00	24.55	Vertical	
3700.000	44.42	32.51	7.83	33.92	50.84	74.00	23.16		

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : HDMI 640*480@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	107.600	25.15	12.10	0.86	38.11	43.50	5.39
	149.310	27.54	11.35	0.92	39.81	43.50	3.69
	216.240	27.34	11.43	1.14	39.91	46.00	6.09
	269.590	26.35	13.32	1.38	41.05	46.00	4.95
	378.230	24.54	16.03	1.93	42.50	46.00	3.50
	485.900	19.86	17.73	2.33	39.92	46.00	6.08
Vertical	32.910	17.51	17.95	0.60	36.06	40.00	3.94
	44.550	23.67	11.38	0.73	35.78	40.00	4.22
	90.140	27.04	9.40	0.86	37.30	43.50	6.20
	107.600	27.13	12.10	0.86	40.09	43.50	3.41
	126.030	25.21	12.71	0.89	38.81	43.50	4.69
	194.900	28.23	10.51	1.07	39.81	43.50	3.69

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : HDMI 1280*1024@60Hz

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	51.340	27.87	8.61	0.78	37.26	40.00	2.74
	90.140	24.96	9.40	0.86	35.22	43.50	8.28
	107.600	22.15	12.10	0.86	35.11	43.50	8.39
	149.310	24.54	11.35	0.92	36.81	43.50	6.69
	269.590	26.35	13.32	1.38	41.05	46.00	4.95
	342.340	26.08	15.11	1.77	42.96	46.00	3.04
Vertical	107.600	24.13	12.10	0.86	37.09	43.50	6.41
	126.030	25.21	12.71	0.89	38.81	43.50	4.69
	216.240	24.74	11.43	1.14	37.31	46.00	8.69
	371.440	21.07	15.88	1.91	38.86	46.00	7.14
	491.720	22.56	17.80	2.35	42.71	46.00	3.29
	589.690	19.95	19.09	2.56	41.60	46.00	4.40

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : HDMI 1600*1200@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
Horizontal	149.310	25.54	11.35	0.92	--	37.81	43.50	5.69	QP
	216.240	25.34	11.43	1.14	--	37.91	46.00	8.09	
	269.590	26.35	13.32	1.38	--	41.05	46.00	4.95	
	371.440	21.10	15.88	1.91	--	38.89	46.00	7.11	
	485.900	19.86	17.73	2.33	--	39.92	46.00	6.08	
	589.690	18.86	19.09	2.56	--	40.51	46.00	5.49	PK
	1084.000	55.64	24.38	4.02	37.47	46.57	74.00	27.43	
	1388.000	52.57	25.51	4.54	36.76	45.86	74.00	28.14	
	1716.000	52.22	26.85	5.14	36.14	48.07	74.00	25.93	
	2620.000	46.85	29.35	5.82	35.10	46.92	74.00	27.08	
3344.000	44.61	31.26	7.24	34.35	48.76	74.00	25.24	Vertical	
3608.000	44.39	32.17	7.56	34.04	50.08	74.00	23.92		
33.880	18.25	17.44	0.61	--	36.30	40.00	3.70		QP
44.550	23.67	11.38	0.73	--	35.78	40.00	4.22		
107.600	26.13	12.10	0.86	--	39.09	43.50	4.41		
194.900	26.23	10.51	1.07	--	37.81	43.50	5.69		
269.590	25.28	13.32	1.38	--	39.98	46.00	6.02		
491.720	21.56	17.80	2.35	--	41.71	46.00	4.29		PK
1084.000	55.38	24.38	4.02	37.47	46.31	74.00	27.69		
1192.000	54.23	24.74	4.18	37.19	45.96	74.00	28.04		
1548.000	55.28	26.15	4.81	36.44	49.80	74.00	24.20		
2692.000	45.40	29.55	6.07	35.04	45.98	74.00	28.02		
3160.000	45.22	30.65	7.16	34.59	48.44	74.00	25.56	Vertical	
3712.000	43.14	32.57	7.89	33.91	49.69	74.00	24.31		

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 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
Horizontal	107.600	25.15	12.10	0.86	--	38.11	43.50	5.39	QP
	149.310	26.54	11.35	0.92	--	38.81	43.50	4.69	
	216.240	26.34	11.43	1.14	--	38.91	46.00	7.09	
	269.590	28.35	13.32	1.38	--	43.05	46.00	2.95	
	378.230	22.54	16.03	1.93	--	40.50	46.00	5.50	
	485.900	21.86	17.73	2.33	--	41.92	46.00	4.08	
	1520.000	46.66	26.07	4.78	36.49	41.02	74.00	32.98	PK
	1740.000	45.39	26.98	5.18	36.10	41.45	74.00	32.55	
	2132.000	44.85	28.19	5.30	35.55	42.79	74.00	31.21	
	2676.000	44.23	29.51	6.02	35.05	44.71	74.00	29.29	
2932.000	44.33	30.06	6.85	34.85	46.39	74.00	27.61		
3160.000	44.67	30.65	7.16	34.59	47.89	74.00	26.11		
Vertical	33.880	16.25	17.44	0.61	--	34.30	40.00	5.70	QP
	44.550	22.67	11.38	0.73	--	34.78	40.00	5.22	
	107.600	26.13	12.10	0.86	--	39.09	43.50	4.41	
	216.240	28.74	11.43	1.14	--	41.31	46.00	4.69	
	269.590	26.28	13.32	1.38	--	40.98	46.00	5.02	
	491.720	22.56	17.80	2.35	--	42.71	46.00	3.29	
	2500.000	44.68	29.05	5.50	35.20	44.03	74.00	29.97	PK
	2940.000	44.51	30.06	6.85	34.85	46.57	74.00	27.43	
	3440.000	44.29	31.61	7.33	34.24	48.99	74.00	25.01	
	3748.000	43.40	32.68	7.97	33.88	50.17	74.00	23.83	
3900.000	43.68	33.15	8.39	33.71	51.51	74.00	22.49		
4940.000	42.63	33.30	9.90	34.74	51.09	74.00	22.91		

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : S-Video

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	338.460	24.14	14.98	1.75	40.87	46.00	5.13
	443.220	21.75	17.11	2.20	41.06	46.00	4.94
	541.190	19.47	18.45	2.48	40.40	46.00	5.60
	589.000	22.00	19.09	2.56	43.65	46.00	2.35
	639.160	20.47	19.39	2.79	42.65	46.00	3.35
	877.780	17.45	21.49	3.48	42.42	46.00	3.58
Vertical	38.730	22.09	14.62	0.67	37.38	40.00	2.62
	107.600	26.04	12.10	0.86	39.00	43.50	4.50
	149.310	28.74	11.35	0.92	41.01	43.50	2.49
	216.240	25.30	11.43	1.14	37.87	46.00	8.13
	335.550	23.87	14.90	1.73	40.50	46.00	5.50
	485.900	22.57	17.73	2.33	42.63	46.00	3.37

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : YPbPr

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	323.910	27.17	14.58	1.66	43.41	46.00	2.59
	443.220	19.68	17.11	2.20	38.99	46.00	7.01
	589.690	20.21	19.09	2.56	41.86	46.00	4.14
	639.160	19.86	19.39	2.79	42.04	46.00	3.96
	877.780	17.03	21.49	3.48	42.00	46.00	4.00
	918.520	15.85	21.84	3.56	41.25	46.00	4.75
Vertical	37.760	20.13	15.20	0.66	35.99	40.00	4.01
	149.310	28.80	11.35	0.92	41.07	43.50	2.43
	216.240	28.45	11.43	1.14	41.02	46.00	4.98
	220.120	27.22	11.66	1.16	40.04	46.00	5.96
	307.420	24.54	14.10	1.58	40.22	46.00	5.78
	639.160	18.32	19.39	2.79	40.50	46.00	5.50

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 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	149.310	28.17	11.35	0.92	40.44	43.50	3.06
	223.030	30.70	11.80	1.17	43.67	46.00	2.33
	283.170	26.98	13.62	1.46	42.06	46.00	3.94
	371.440	24.32	15.88	1.91	42.11	46.00	3.89
	443.220	24.06	17.11	2.20	43.37	46.00	2.63
	589.690	21.25	19.09	2.56	42.90	46.00	3.10
Vertical	39.700	22.78	14.08	0.68	37.54	40.00	2.46
	148.340	27.76	11.41	0.92	40.09	43.50	3.41
	335.550	26.24	14.90	1.73	42.87	46.00	3.13
	371.440	24.72	15.88	1.91	42.51	46.00	3.49
	491.720	23.70	17.80	2.35	43.85	46.00	2.15
	639.160	20.45	19.39	2.79	42.63	46.00	3.37

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : LCD42B29GPUS Humidity : 60%RH

Serial No. : E2009031903 Date of Test : Apr 01, 2009

Test Mode : HDMI

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	144.460	25.00	11.76	0.92	37.68	43.50	5.82
	323.910	24.14	14.58	1.66	40.38	46.00	5.62
	589.690	22.37	19.09	2.56	44.02	46.00	1.98
	639.160	21.75	19.39	2.79	43.93	46.00	2.07
	877.780	18.74	21.49	3.48	43.71	46.00	2.29
	971.870	18.21	22.22	3.76	44.19	54.00	9.81
Vertical	37.760	21.91	15.20	0.66	37.77	40.00	2.23
	149.310	28.25	11.35	0.92	40.52	43.50	2.98
	335.550	25.15	14.90	1.73	41.78	46.00	4.22
	485.900	23.75	17.73	2.33	43.81	46.00	2.19
	541.190	22.70	18.45	2.48	43.63	46.00	2.37
	741.980	20.97	20.13	3.19	44.29	46.00	1.71

TEST ENGINEER: JACKY CHEN

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	HF70T	25*13*15	TDK	See Internal Photo Figure 26
Gasket	--	5*5*20	Xinghe	See Internal Photo Figure 27
Ferrite Core	HF70RH	16*28*9	TDK	See Internal Photo Figure 28