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

LCD Monitor

Model No.: W2052TQT

Serial No.: E08021501

FCC ID : BEJW2052TQT

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F08006
Date of Test : Feb 18, 2008
Date of Report : Feb 20, 2008

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TEST REPORT FOR FCC CERTIFICATE

Applicant	:	LG Electronics U.S.A., Inc.
Manufacturer	:	LG Electronics Nanjing Display Co., Ltd.
EUT Description	:	LCD Monitor
		(A) Model No. : W2052TQT
		(B) Serial No. : E08021501
		(C) Power Supply : 120V/60Hz

Test Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B 2007.10 AND ANSI C63.4-2003

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B (Class B) and ICES-003, Issue 4 February 2004 (CISPR 22:2002) limits both radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: W2052TQT; S/N: E08021501) which was tested in 3m anechoic chamber on Feb 18, 2008 is technically compliance with the FCC official limits also.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report contains data that are not covered by the NVLAP accreditation.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Feb 18, 2008

Prepared By: Kathy Wang 2008.2.25
KATHY WANG / Assistant

Reviewer: Dio Yang 2008.2.25
DIO YANG / Supervisor

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

Approved Signatory: Sammy Chen 2008.02.25
Authorized Signature EMC SAMMY CHEN / Assistant Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

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

Description / Test Item	Test Standard	Results	Meets Limit
EMISSION			
Conducted Disturbance At main terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	Pass	15.107(a) Class B
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	Pass	15.109(a) Class B

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description	:	LCD Monitor
Type of EUT	:	☑ Production ☐ Pre-product ☐ Pro-type
Model No.	:	W2052TQT
Serial No.	:	E08021501
Real Power	:	41.5W
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
Panel	:	Manufacturer: AU Optronics M/N : M201EW02
Max Resolution	:	1680*1050@60Hz.
D-Sub Cable	:	Shielded, Detachable, 1.85m, with two cores
DVI Cable	:	Shielded, Detachable, 1.90m, with two cores
Power Cord	:	Unshielded, Detachable, 1.80m, with no core

Remark:

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

(1) One D-Sub Input Port : Connected with PC

(2) One DVI Input Port : Connected with PC

(3) AC In Port : Connected with Power

2.2 Peripherals

2.2.1 PC

Manufacturer	:	HP
Model Number	:	dx6120MT
Serial Number	:	CNG53004J2
Power Cord	:	Unshielded, Detachable, 1.8m
Certificate	:	FCC DoC; CE/EMC; VCCI; C-Tick; UL BSMI (R33001) 3C (A000111) MIC (E-A011-04-2659(B))

2.2.2 Printer

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

2.2.3 Keyboard

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

2.2.4 Mouse

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

2.2.5 Modem

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

2.3 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, China 200233
NVLAP Lab Code	:	200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty:		U = 1.84 dB
Radiated Emission Expanded Uncertainty	:	U = 2.96 dB

3 CONDUCTED EMISSION TEST

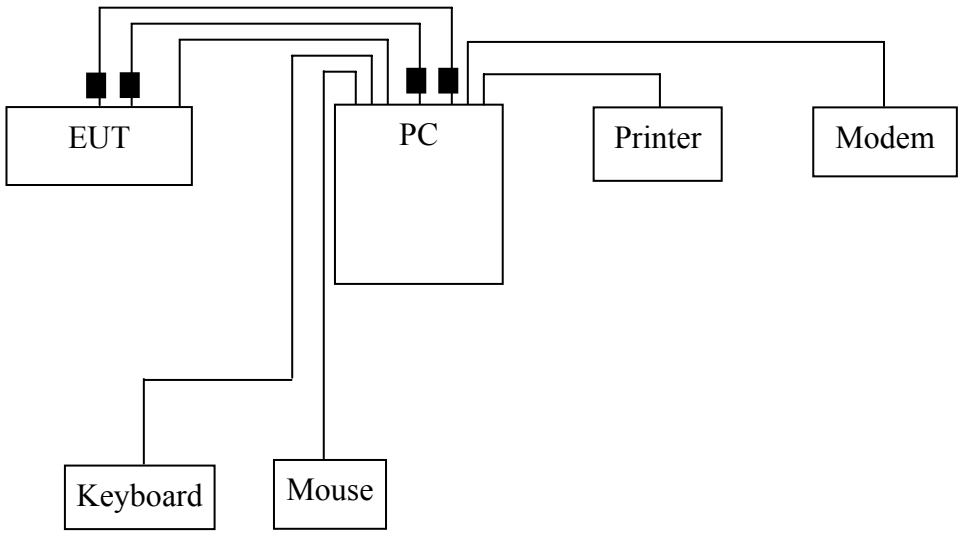
3.1 Test Equipment

The following test equipment 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	ESHS10	830223/007	Oct 26, 2007	Oct 26, 2008
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 06, 2007	Apr 06, 2008
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 06, 2007	Apr 06, 2008
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 18, 2007	Mar 18, 2008
5.	50Ω Terminator	Anritsu	BNC	001	May 11, 2007	May 11, 2008
6.	Software	Audix	E3	SET00200 9804M592	--	--

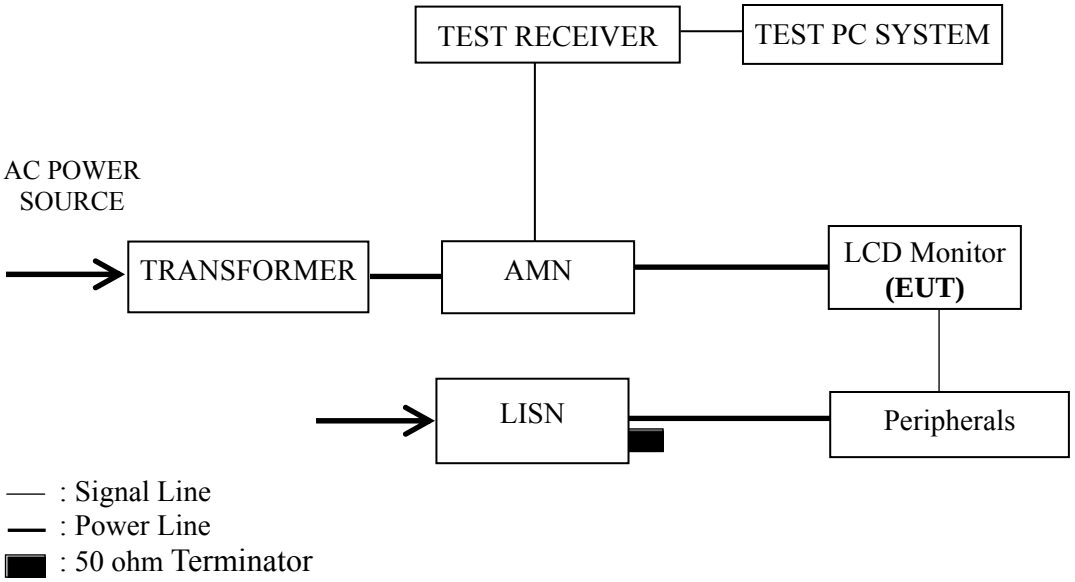
3.2 Block Diagram of Test Setup

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 (μV)	
	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 equipment 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 it's resolution. (Via D-Sub or DVI 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
VGA 640*480@60Hz
VGA 1024*768@60Hz
VGA 1680*1050@60Hz
DVI 640*480@60Hz
DVI 1024*768@60Hz
DVI 1680*1050@60Hz

3.6 Test Procedures

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

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

The bandwidth of R&S Test Receiver ESHS10 was set at 10 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
VGA 640*480@60Hz	P12
VGA 1024*768@60Hz	P13
VGA 1680*1050@60Hz	P14
DVI 640*480@60Hz	P15
DVI 1024*768@60Hz	P16
DVI 1680*1050@60Hz	P17

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 DVI 1680*1050@60Hz mode. The worst emission is detected at 0.15 MHz with corrected signal level of 53.83 (μV) (limit is 66.00 dB (μV)), when the Neutral (Quasi-Peak) of the EUT is connected to AMN.

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity :	60%	
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008	
Test Mode	:	VGA 640*480@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.15	51.30	0.66	51.96	66.00	14.04	QP
	0.21735	43.40	0.73	44.13	62.92	18.79	
	0.36531	36.90	0.68	37.58	58.61	21.03	
	0.51007	33.40	0.65	34.05	56.00	21.95	
	2.554	33.30	0.54	33.84	56.00	22.16	
	6.186	38.21	0.66	38.87	60.00	21.13	
	0.15	36.30	0.66	36.96	56.00	19.04	AV
	0.21735	38.40	0.73	39.13	52.92	13.79	
	0.36531	31.20	0.68	31.88	48.61	16.73	
	0.51007	28.40	0.65	29.05	46.00	16.95	
	2.554	28.30	0.54	28.84	46.00	17.16	
	6.186	33.21	0.66	33.87	50.00	16.13	
Neutral	**0.15**	**51.90**	**0.53**	**52.43**	**66.00**	**13.57**	QP
	0.21735	43.99	0.67	44.66	62.92	18.26	
	0.36531	34.30	0.65	34.95	58.61	23.66	
	0.43974	33.10	0.65	33.75	57.07	23.32	
	3.436	31.00	0.54	31.54	56.00	24.46	
	6.488	35.69	0.74	36.43	60.00	23.57	
	0.15	36.90	0.53	37.43	56.00	18.57	AV
	0.21735	37.99	0.67	38.66	52.92	14.26	
	0.36531	25.00	0.65	25.65	48.61	22.96	
	0.43974	26.50	0.65	27.15	47.07	19.92	
	3.436	28.00	0.54	28.54	46.00	17.46	
	6.488	30.69	0.74	31.43	50.00	18.57	

TEST ENGINEER: TOM SI

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity :	60%	
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008	
Test Mode	:	VGA 1024*768@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	**0.15**	**51.30**	**0.66**	**51.96**	**66.00**	**14.04**	QP
	0.2162	43.70	0.73	44.43	62.96	18.53	
	0.29554	38.00	0.70	38.70	60.37	21.67	
	0.36531	36.70	0.68	37.38	58.61	21.23	
	0.51007	33.10	0.65	33.75	56.00	22.25	
	6.488	38.60	0.67	39.27	60.00	20.73	
	0.15	36.30	0.66	36.96	56.00	19.04	AV
	0.2162	33.70	0.73	34.43	52.96	18.53	
	0.29554	32.00	0.70	32.70	50.37	17.67	
	0.36531	31.70	0.68	32.38	48.61	16.23	
	0.51007	28.10	0.65	28.75	46.00	17.25	
	6.488	31.60	0.67	32.27	50.00	17.73	
Neutral	0.15	51.00	0.53	51.53	66.00	14.47	QP
	0.22083	43.99	0.67	44.66	62.79	18.13	
	0.24682	40.50	0.66	41.16	61.86	20.70	
	0.36531	36.40	0.65	37.05	58.61	21.56	
	0.43511	33.30	0.65	33.95	57.15	23.20	
	3.436	32.60	0.54	33.14	56.00	22.86	
	0.15	36.00	0.53	36.53	56.00	19.47	AV
	0.22083	35.99	0.67	36.66	52.79	16.13	
	0.24682	30.50	0.66	31.16	51.86	20.70	
	0.36531	31.20	0.65	31.85	48.61	16.76	
	0.43511	28.20	0.65	28.85	47.15	18.30	
	3.436	26.30	0.54	26.84	46.00	19.16	

TEST ENGINEER: TOM SI

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity :	60%	
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008	
Test Mode	:	VGA 1680*1050@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	**0.15**	**52.00**	**0.66**	**52.66**	**66.00**	**13.34**	QP
	0.21967	43.60	0.73	44.33	62.83	18.50	
	0.29554	38.00	0.70	38.70	60.37	21.67	
	0.36531	36.20	0.68	36.88	58.61	21.73	
	2.554	32.80	0.54	33.34	56.00	22.66	
	6.186	37.71	0.66	38.37	60.00	21.63	
	0.15	38.00	0.66	38.66	56.00	17.34	AV
	0.21967	37.60	0.73	38.33	52.83	14.50	
	0.29554	32.00	0.70	32.70	50.37	17.67	
	0.36531	31.21	0.68	31.89	48.61	16.72	
	2.554	28.20	0.54	28.74	46.00	17.26	
	6.186	32.71	0.66	33.37	50.00	16.63	
Neutral	0.15	51.40	0.53	51.93	66.00	14.07	QP
	0.22083	43.89	0.67	44.56	62.79	18.23	
	0.24682	39.90	0.66	40.56	61.86	21.30	
	0.36338	34.40	0.65	35.05	58.65	23.60	
	0.43974	33.00	0.65	33.65	57.07	23.42	
	0.5854	32.10	0.62	32.72	56.00	23.28	
	0.15	36.40	0.53	36.93	56.00	19.07	AV
	0.22083	37.89	0.67	38.56	52.79	14.23	
	0.24682	33.90	0.66	34.56	51.86	17.30	
	0.36338	29.40	0.65	30.05	48.65	18.60	
	0.43974	28.00	0.65	28.65	47.07	18.42	
	0.5854	27.10	0.62	27.72	46.00	18.28	

TEST ENGINEER: TOM SI

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity :	60%	
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008	
Test Mode	:	DVI 640*480@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.15	51.85	0.66	52.51	66.00	13.49	QP
	0.2162	43.80	0.73	44.53	62.96	18.43	
	0.36531	36.70	0.68	37.38	58.61	21.23	
	0.51007	31.90	0.65	32.55	56.00	23.45	
	2.554	33.00	0.54	33.54	56.00	22.46	
	6.352	38.30	0.67	38.97	60.00	21.03	
	0.15	38.20	0.66	38.86	56.00	17.14	AV
	0.2162	36.80	0.73	37.53	52.96	15.43	
	0.36531	33.70	0.68	34.38	48.61	14.23	
	0.51007	26.80	0.65	27.45	46.00	18.55	
	2.554	28.00	0.54	28.54	46.00	17.46	
	6.352	33.30	0.67	33.97	50.00	16.03	
Neutral	**0.15**	**52.40**	**0.53**	**52.93**	**66.00**	**13.07**	QP
	0.21735	44.09	0.67	44.76	62.92	18.16	
	0.36338	34.70	0.65	35.35	58.65	23.30	
	0.43511	33.40	0.65	34.05	57.15	23.10	
	0.5854	31.70	0.62	32.32	56.00	23.68	
	3.436	31.60	0.54	32.14	56.00	23.86	
	0.15	36.87	0.53	37.40	56.00	18.60	AV
	0.21735	34.89	0.67	35.56	52.92	17.36	
	0.36338	30.20	0.65	30.85	48.65	17.80	
	0.43511	28.50	0.65	29.15	47.15	18.00	
	0.5854	28.50	0.62	29.12	46.00	16.88	
	3.436	27.20	0.54	27.74	46.00	18.26	

TEST ENGINEER: TOM SI

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity	:	60%
Serial No.	:	E08021501	Date of Test	:	Feb 18, 2008
Test Mode	:	DVI 1024*768@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	**0.15**	**52.10**	**0.66**	**52.76**	**66.00**	**13.24**	QP
	0.22083	43.90	0.73	44.63	62.79	18.16	
	0.29554	38.30	0.70	39.00	60.37	21.37	
	0.36531	36.60	0.68	37.28	58.61	21.33	
	2.707	32.60	0.55	33.15	56.00	22.85	
	6.186	38.51	0.66	39.17	60.00	20.83	
	0.15	35.60	0.66	36.26	56.00	19.74	AV
	0.22083	33.90	0.73	34.63	52.79	18.16	
	0.29554	30.30	0.70	31.00	50.37	19.37	
	0.36531	26.60	0.68	27.28	48.61	21.33	
	2.707	28.60	0.55	29.15	46.00	16.85	
	6.186	30.51	0.66	31.17	50.00	18.83	
Neutral	0.15	51.90	0.42	52.43	66.00	13.57	QP
	0.22083	44.19	0.55	44.86	62.79	17.93	
	0.3692	32.30	0.53	32.95	58.52	25.57	
	0.43511	32.80	0.52	33.45	57.15	23.70	
	0.5854	31.80	0.49	32.42	56.00	23.58	
	3.436	31.20	0.34	31.74	56.00	24.26	
	0.15	36.90	0.42	37.43	56.00	18.57	AV
	0.22083	36.19	0.55	36.86	52.79	15.93	
	0.3692	28.50	0.53	29.15	48.52	19.37	
	0.43511	28.20	0.52	28.85	47.15	18.30	
	0.5854	27.00	0.49	27.62	46.00	18.38	
	3.436	26.25	0.34	26.79	46.00	19.21	

TEST ENGINEER: TOM SI

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity :	60%	
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008	
Test Mode	:	DVI 1680*1050@60Hz			

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.15	51.50	0.66	52.16	66.00	13.84	QP
	0.22083	44.00	0.73	44.73	62.79	18.06	
	0.36531	36.30	0.68	36.98	58.61	21.63	
	2.554	32.80	0.54	33.34	56.00	22.66	
	2.707	33.90	0.55	34.45	56.00	21.55	
	6.121	38.61	0.66	39.27	60.00	20.73	
	0.15	35.50	0.66	36.16	56.00	19.84	AV
	0.22083	34.00	0.73	34.73	52.79	18.06	
	0.36531	30.30	0.68	30.98	48.61	17.63	
	2.554	22.80	0.54	23.34	46.00	22.66	
	2.707	23.90	0.55	24.45	46.00	21.55	
	6.121	28.61	0.66	29.27	50.00	20.73	
Neutral	**0.15**	**53.30**	**0.53**	**53.83**	**66.00**	**12.17**	QP
	0.22083	44.69	0.67	45.36	62.79	17.43	
	0.29243	38.30	0.66	38.96	60.46	21.50	
	0.36531	36.60	0.65	37.25	58.61	21.36	
	0.43974	33.80	0.65	34.45	57.07	22.62	
	3.436	32.50	0.54	33.04	56.00	22.96	
	0.15	38.50	0.53	39.03	56.00	16.97	AV
	0.22083	34.69	0.67	35.36	52.79	17.43	
	0.29243	27.30	0.66	27.96	50.46	22.50	
	0.36531	26.60	0.65	27.25	48.61	21.36	
	0.43974	23.90	0.65	24.55	47.07	22.52	
	3.436	22.50	0.54	23.04	46.00	22.96	

TEST ENGINEER: TOM SI

4 RADIATED EMISSION TEST

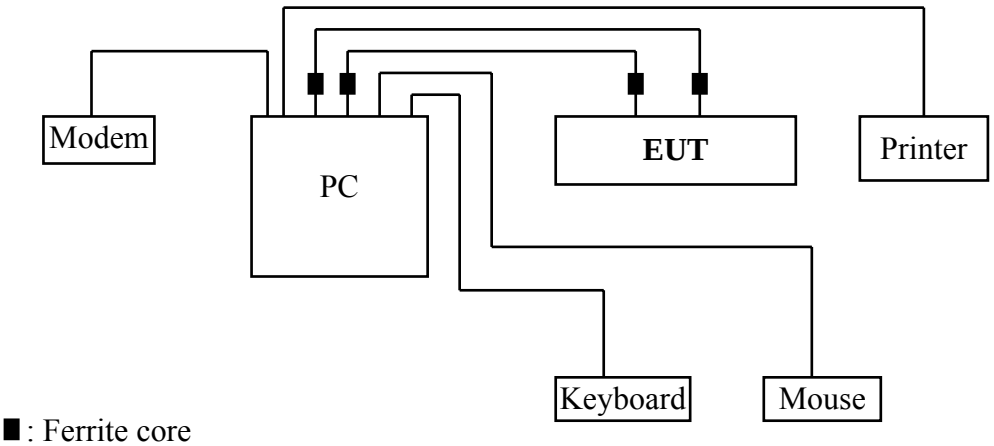
4.1 Test Equipment

The following test equipment 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	Oct 26, 2007	Oct 26, 2008
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2007	Mar 19, 2008
3.	Preamplifier	HP	8449B	3008A00864	Apr 06, 2007	Apr 06, 2008
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	Aug 16, 2007	Aug 16, 2008
5.	Spectrum	Agilent	E7405A	MY45106600	Apr 06, 2007	Apr 06, 2008
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

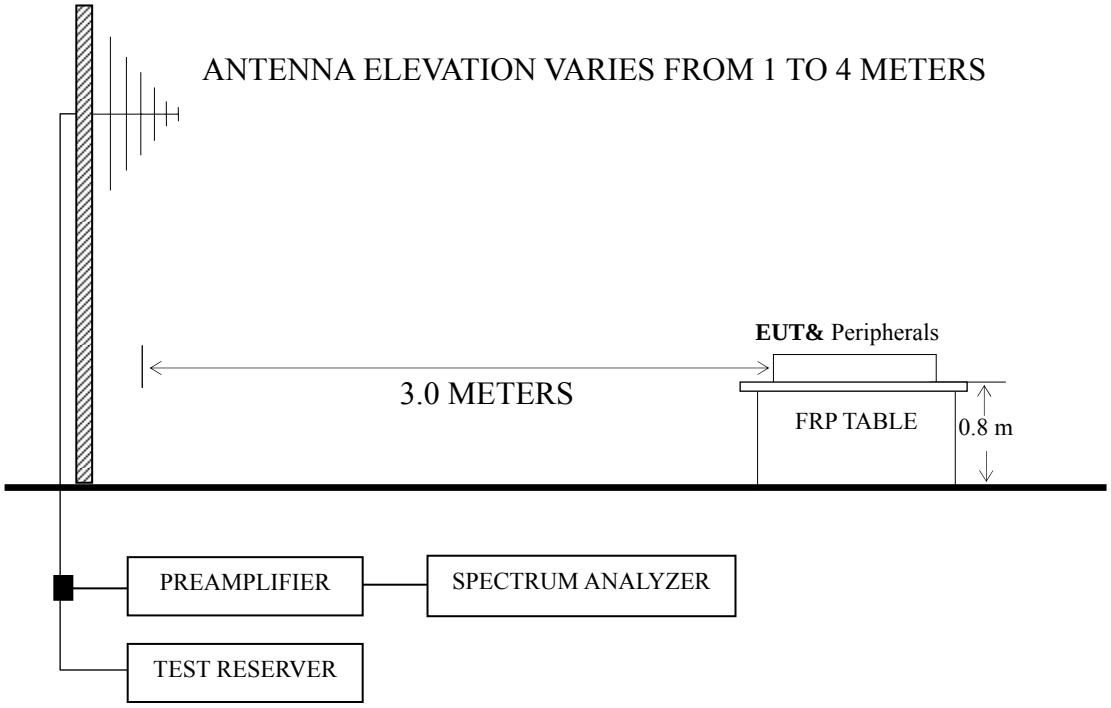
4.2 Block Diagram of Test Setup

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	
		(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 (μV/m) = 20 log Emission Level (μV/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 2000 MHz was checked.

The frequency range from 1 GHz to 2 GHz was checked for VGA 1680*1050@60Hz and DVI 1680*1050@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
VGA 640*480@60Hz	P22
VGA 1024*768@60Hz	P23
VGA 1680*1050@60Hz	P24
DVI 640*480@60Hz	P25
DVI 1024*768@60Hz	P26
DVI 1680*1050@60Hz	P27

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.

NOTE 6 – The worst case is for VGA 1024*768@60Hz. The worst emission at horizontal polarization was detected at 851.59 MHz with corrected signal level of 42.86 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.20 m height and the turntable was at 220°. The worst emission at vertical polarization was detected at 538.28 MHz with corrected signal level of 38.92 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 132°.

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	W2052TQT	Humidity :	60%
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008
Test Mode	:	VGA 640*480@60Hz		

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	71.71	22.29	5.57	1.43	29.29	40.00	10.71
	127.00	17.28	11.45	1.92	30.65	43.50	12.85
	190.05	26.40	8.25	2.29	36.94	43.50	6.56
	315.18	13.59	13.40	3.20	30.19	46.00	15.81
	443.22	18.52	16.33	3.79	38.64	46.00	7.36
	683.78	**18.17**	**18.98**	**4.75**	**41.90**	**46.00**	**4.10**
Vertical	32.91	10.77	16.30	0.92	27.99	40.00	12.01
	71.71	22.04	5.57	1.43	29.04	40.00	10.96
	190.05	24.14	8.25	2.29	34.68	43.50	8.82
	444.19	17.24	16.33	3.79	37.36	46.00	8.64
	506.27	18.76	17.40	4.00	40.16	46.00	5.84
	870.99	**16.40**	**20.24**	**5.60**	**42.24**	**46.00**	**3.76**

TEST ENGINEER: JACKY CHEN

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	W2052TQT	Humidity :	60%
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008
Test Mode	:	VGA 1024*768@60Hz		

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	55.22	17.37	5.94	1.12	24.43	40.00	15.57
	71.71	22.84	5.57	1.43	29.84	40.00	10.16
	183.26	26.55	8.00	2.25	36.80	43.50	6.70
	424.79	16.58	16.53	3.70	36.81	46.00	9.19
	670.20	13.61	18.94	4.67	37.22	46.00	8.78
	851.59	**16.94**	**20.37**	**5.55**	**42.86**	**46.00**	**3.14**
Vertical	30.97	13.54	17.55	0.91	32.00	40.00	8.00
	95.96	18.51	9.60	1.66	29.77	43.50	13.73
	183.26	25.16	8.00	2.25	35.41	43.50	8.09
	418.97	13.54	16.60	3.69	33.83	46.00	12.17
	538.28	**16.50**	**18.34**	**4.08**	**38.92**	**46.00**	**7.08**
	671.17	13.78	18.94	4.67	37.39	46.00	8.61

TEST ENGINEER: JACKY CHEN

EUT	:	LCD Monitor	Temperature :	22℃	
Model No.	:	W2052TQT	Humidity	:	60%
Serial No.	:	E08021501	Date of Test	:	Feb 18, 2008
Test Mode	:	VGA 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
Horizontal	71.71	23.42	5.57	1.43	--	30.42	40.00	9.58	QP
	181.32	25.75	8.00	2.24	--	35.99	43.50	7.51	
	302.57	17.44	12.90	3.13	--	33.47	46.00	12.53	
	422.85	15.78	16.55	3.70	--	36.03	46.00	9.97	
	603.27	11.93	18.90	4.27	--	35.10	46.00	10.90	
	845.77	**16.11**	**20.41**	**5.52**	**--**	**42.04**	**46.00**	**3.96**	
	1064.00	45.66	22.51	6.26	37.52	36.91	74.00	37.09	PK
	1193.00	47.20	22.92	6.75	37.19	39.68	74.00	34.32	
	1322.00	44.62	23.64	6.92	36.89	38.29	74.00	35.71	
	1500.00	46.18	25.35	7.12	36.53	42.12	74.00	31.88	
	1669.00	46.79	25.92	8.12	36.22	44.61	74.00	29.39	
	1834.00	44.38	26.22	8.76	35.95	43.41	74.00	30.59	
Vertical	71.71	22.73	5.57	1.43	--	29.73	40.00	10.27	QP
	96.93	18.32	9.70	1.67	--	29.69	43.50	13.81	
	181.32	21.34	8.00	2.24	--	31.58	43.50	11.92	
	422.85	15.61	16.55	3.70	--	35.86	46.00	10.14	
	508.21	16.08	17.40	4.02	--	37.50	46.00	8.50	
	845.77	**14.92**	**20.41**	**5.52**	**--**	**40.85**	**46.00**	**5.15**	
	1069.00	45.61	22.52	6.30	37.51	36.92	74.00	37.08	PK
	1175.00	45.39	23.23	6.67	37.23	38.06	74.00	35.94	
	1297.00	44.89	23.62	6.89	36.95	38.45	74.00	35.55	
	1427.00	45.99	24.94	7.05	36.67	41.31	74.00	32.69	
	1723.00	43.62	26.18	8.36	36.12	42.04	74.00	31.96	
	1789.00	48.07	25.85	8.58	36.02	46.48	74.00	27.52	

TEST ENGINEER: JACKY CHEN

EUT	:	LCD Monitor	Temperature :	22℃
Model No.	:	W2052TQT	Humidity :	60%
Serial No.	:	E08021501	Date of Test :	Feb 18, 2008
Test Mode	:	DVI 640*480@60Hz		

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	53.28	18.01	6.52	1.07	25.60	40.00	14.40
	126.03	17.25	11.48	1.91	30.64	43.50	12.86
	190.05	26.90	8.25	2.29	37.44	43.50	6.06
	443.22	19.61	16.33	3.79	39.73	46.00	6.27
	683.78	16.95	18.98	4.75	40.68	46.00	5.32
	870.02	**16.66**	**20.24**	**5.60**	**42.50**	**46.00**	**3.50**
Vertical	30.97	13.30	17.55	0.91	31.76	40.00	8.24
	95.96	17.74	9.60	1.66	29.00	43.50	14.50
	190.05	24.30	8.25	2.29	34.84	43.50	8.66
	497.54	16.53	17.36	3.97	37.86	46.00	8.14
	683.78	**18.92**	**18.98**	**4.75**	**42.65**	**46.00**	**3.35**
	871.96	14.60	20.24	5.60	40.44	46.00	5.56

TEST ENGINEER: JACKY CHEN

EUT	:	LCD Monitor	Temperature :		22℃
Model No.	:	W2052TQT	Humidity	:	60%
Serial No.	:	E08021501	Date of Test	:	Feb 18, 2008
Test Mode	:	DVI 1024*768@60Hz			

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	52.31	16.80	6.84	1.04	24.68	40.00	15.32
	120.21	15.24	11.32	1.86	28.42	43.50	15.08
	149.31	**26.90**	**9.84**	**2.07**	**38.81**	**43.50**	**4.69**
	393.75	14.84	15.50	3.59	33.93	46.00	12.07
	521.79	19.28	17.60	4.04	40.92	46.00	5.08
	680.87	15.06	18.95	4.71	38.72	46.00	7.28
Vertical	31.94	14.65	16.90	0.92	32.47	40.00	7.53
	71.71	21.20	5.57	1.43	28.20	40.00	11.80
	152.22	27.10	9.65	2.09	38.84	43.50	4.66
	288.99	13.42	12.50	3.05	28.97	46.00	17.03
	518.88	**20.06**	**17.55**	**4.04**	**41.65**	**46.00**	**4.35**
	682.81	15.45	18.98	4.71	39.14	46.00	6.86

TEST ENGINEER: JACKY CHEN

EUT	:	LCD Monitor	Temperature :		22℃
Model No.	:	W2052TQT	Humidity	:	60%
Serial No.	:	E08021501	Date of Test	:	Feb 18, 2008
Test Mode	:	DVI 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
Horizontal	90.14	16.50	8.70	1.61	--	26.81	43.50	16.69	QP
	162.89	15.75	9.18	2.15	--	27.08	43.50	16.42	
	238.55	14.48	10.79	2.71	--	27.98	46.00	18.02	
	278.32	17.92	12.32	3.00	--	33.24	46.00	12.76	
	517.91	11.01	17.51	4.03	--	32.55	46.00	13.45	
	689.60	**9.55**	**19.04**	**4.75**	**--**	**33.34**	**46.00**	**12.66**	
	1064.00	45.50	22.51	6.26	37.52	36.75	74.00	37.25	PK
	1138.00	45.29	22.40	6.55	37.33	36.91	74.00	37.09	
	1283.00	44.93	23.45	6.88	36.98	38.28	74.00	35.72	
	1442.00	46.18	25.03	7.06	36.64	41.63	74.00	32.37	
	1550.00	44.58	25.17	7.48	36.44	40.79	74.00	33.21	
	1789.00	46.96	25.85	8.58	36.02	45.37	74.00	28.63	
Vertical	56.19	20.39	5.70	1.13	--	27.22	40.00	12.78	QP
	95.96	19.00	9.60	1.66	--	30.26	43.50	13.24	
	238.55	17.08	10.79	2.71	--	30.58	46.00	15.42	
	410.24	13.62	16.45	3.65	--	33.72	46.00	12.28	
	517.91	**21.04**	**17.51**	**4.03**	**--**	**42.58**	**46.00**	**3.42**	
	859.35	13.43	20.39	5.57	--	39.39	46.00	6.61	
	1193.00	46.73	22.92	6.75	37.19	39.21	74.00	34.79	PK
	1265.00	44.25	23.41	6.86	37.02	37.50	74.00	36.50	
	1390.00	44.25	24.20	7.00	36.75	38.70	74.00	35.30	
	1552.00	47.57	25.27	7.48	36.43	43.89	74.00	30.11	
	1670.00	47.56	25.92	8.12	36.22	45.38	74.00	28.62	
	1841.00	44.60	26.31	8.76	35.93	43.74	74.00	30.26	

TEST ENGINEER: JACKY CHEN

5 DEVIATION TO TEST SPECIFICATIONS

None.

6 DEBUG DESCRIPTION

Name	M/N	Specifications (mm)	Manufacturer	Location
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal photo Figure 1
Aluminum foil	T-308	40*20	DAEHUNG SUBSIDIARY MATERIALS	See Internal photo Figure 1
Gasket	--	45.2*23*1T	EXPAN	See Internal photo Figure 19
Gasket	--	8*12*9T	EXPAN	See Internal photo Figure 19