

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

LCD Monitor

Model No.	L1942PQT	L1942TQT
Serial No.	E08061803	E08061809

FCC ID : BEJL1942HQT

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

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Report No. : ACI-F08041
Date of Test : Jun 25 – 26, 2008
Date of Report : Jun 30, 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	L1942PQT	L1942TQT
(B) Serial No	E08061803	E08061809
(C) Power Supply	AC 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: L1942PQT; S/N: E08061803) which was tested in 3m anechoic chamber on Jun 25 – 26, 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 : Jun 25 – 26, 2008

Prepared By:

Alan He 2008.07.01
ALAN HE / Assistant

Reviewer:

Dio Yang 2008.7.1
DIO YANG / Supervisor

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

Approved Signatory:

Sammy Chen 2008.7.1
Authorized Signature EMC SAMMY CHEN / Assistant Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

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

Description of Test Item	Standard	Limits	Results
EMISSION			
Conducted Disturbance at the Mains Terminals	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : LCD Monitor

Type of EUT : ☒ Production ☐ Pre-product ☐ Pro-type

Model No. : L1942PQT, L1942TQT

Serial No. : E08061803, E08061809

Real Power : 38.00W

Note 1 : The difference between the above two models are as following only:

	L1942PQT	L192TQT
D-Sub Port	○	○
DVI Port	○	○
Screen 90 Degree Rotatable	○	--
Stand Height Adjustable	○	--
NOTE 1 – “○” means the item is applicable. NOTE 2 – “--” means the item is no applicable.		

Note 2 : The data of L1942PQT was tested and recorded in this report.

Note 3 : The data of L1942PQT at rotate 90 degree condition (only radiated emission) is also tested and recorded in this report. The mode tested was the worst case of L1942PQT in normal condition.

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

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

LCD Panel : Manufacturer: LG.PHILIPS LCD
M/N : LM190E08 (TL) (G4)

Max Resolution : 1280*1024@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

Remark:

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

- (1) One D-Sub Port : Connected with PC
- (2) One DVI Port : Connected with PC
- (3) One 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 200233, China
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

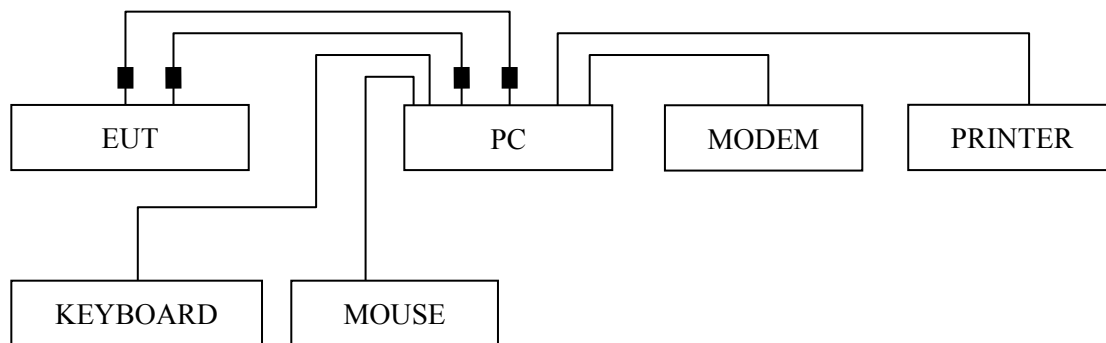
3.1 Test Equipment

The following test 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	ESHS10	830223/007	Oct 26, 2007	Oct 26, 2008
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 06, 2008	Apr 06, 2009
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 06, 2008	Apr 06, 2009
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Mar 18, 2008	Sep 18, 2008
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 06, 2008	Apr 06, 2009
6.	Software	Audix	E3	SET00200 9804M592	--	--

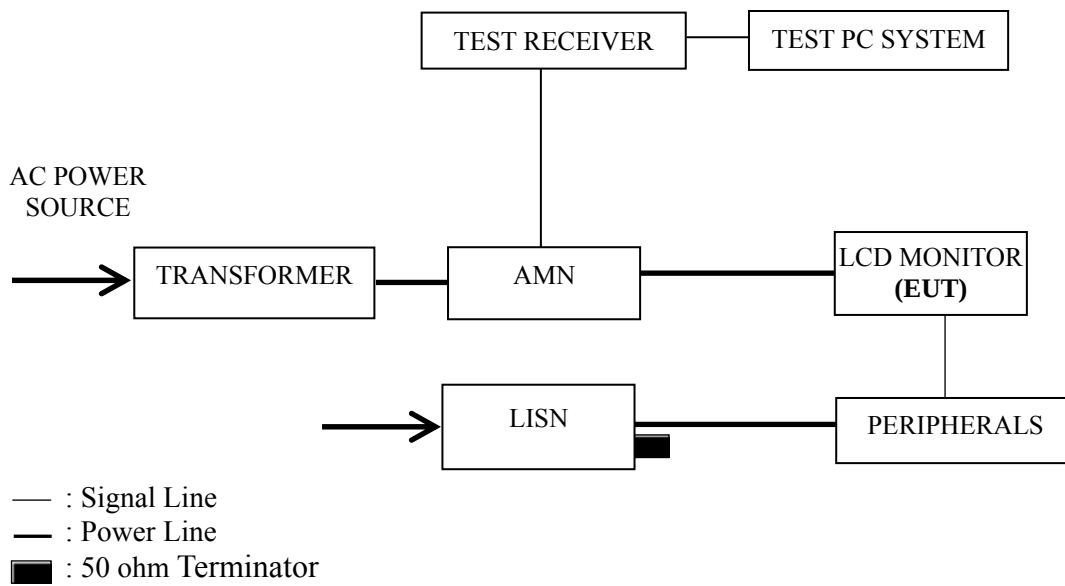
3.2 Block Diagram of Test Setup

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 & 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 1280*1024@60Hz
DVI 640*480@60Hz
DVI 1024*768@60Hz
DVI 1280*1024@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	P13
VGA 1024*768@60Hz	P14
VGA 1280*1024@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1024*768@60Hz	P17
DVI 1280*1024@60Hz	P18

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 1024*768@60Hz test mode. The worst emission is detected at 11.317 MHz (Average Value) with corrected signal level of 38.00 dB (μV) (limit is 50.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 25, 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	0.209	42.92	0.15	43.07	63.23	20.16	QP
	0.346	39.42	0.16	39.58	59.05	19.47	
	0.690	36.10	0.18	36.28	56.00	19.72	
	6.698	38.39	0.29	38.68	60.00	21.32	
	10.620	39.26	0.37	39.63	60.00	20.37	
	24.015	41.35	0.79	42.14	60.00	17.86	
	0.209	37.92	0.15	38.07	53.23	15.16	AV
	0.346	34.42	0.16	34.58	49.05	14.47	
	0.690	30.10	0.18	30.28	46.00	15.72	
	6.698	31.39	0.29	31.68	50.00	18.32	
	10.620	33.26	0.37	33.63	50.00	16.37	
	24.015	32.35	0.79	33.14	50.00	16.86	
Neutral	0.207	41.74	0.15	41.89	63.32	21.43	QP
	0.415	36.77	0.17	36.94	57.55	20.61	
	0.690	36.61	0.18	36.79	56.00	19.21	
	6.698	38.79	0.24	39.03	60.00	20.97	
	10.620	39.56	0.35	39.91	60.00	20.09	
	20.594	41.63	0.50	42.13	60.00	17.87	
	0.207	34.74	0.15	34.89	53.32	18.43	AV
	0.415	31.77	0.17	31.94	47.55	15.61	
	0.690	30.61	0.18	30.79	46.00	15.21	
	6.698	31.79	0.24	32.03	50.00	17.97	
	10.620	33.56	0.35	33.91	50.00	16.09	
	20.594	33.63	0.50	34.13	50.00	15.87	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 25, 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	0.207	42.44	0.15	42.59	63.32	20.73	QP
	0.343	38.40	0.16	38.56	59.13	20.57	
	0.690	36.35	0.18	36.53	56.00	19.47	
	6.698	38.53	0.29	38.82	60.00	21.18	
	10.620	39.32	0.37	39.69	60.00	20.31	
	24.015	40.95	0.79	41.74	60.00	18.26	
	0.207	35.44	0.15	35.59	53.32	17.73	AV
	0.343	32.40	0.16	32.56	49.13	16.57	
	0.690	31.35	0.18	31.53	46.00	14.47	
	6.698	34.53	0.29	34.82	50.00	15.18	
	10.620	34.32	0.37	34.69	50.00	15.31	
	24.015	34.95	0.79	35.74	50.00	14.26	
Neutral	0.204	41.88	0.15	42.03	63.45	21.42	QP
	0.274	38.24	0.15	38.39	60.98	22.59	
	0.415	37.49	0.17	37.66	57.55	19.89	
	0.690	36.02	0.18	36.20	56.00	19.80	
	6.914	38.85	0.24	39.09	60.00	20.91	
	11.317	39.84	0.36	40.20	60.00	19.80	
	0.204	35.88	0.15	36.03	53.45	17.42	AV
	0.274	33.24	0.15	33.39	50.98	17.59	
	0.415	31.49	0.17	31.66	47.55	15.89	
	0.690	30.02	0.18	30.20	46.00	15.80	
	6.914	32.85	0.24	33.09	50.00	16.91	
	11.317	31.84	0.36	32.20	50.00	17.80	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 25, 2008

Test Mode : VGA 1280*1024@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.206	41.60	0.15	41.75	63.36	21.61	QP
	0.346	38.54	0.16	38.70	59.05	20.35	
	0.552	36.18	0.18	36.36	56.00	19.64	
	6.698	38.43	0.29	38.72	60.00	21.28	
	10.620	39.56	0.37	39.93	60.00	20.07	
	24.922	41.10	0.82	41.92	60.00	18.08	
	0.206	35.60	0.15	35.75	53.36	17.61	AV
	0.346	32.54	0.16	32.70	49.05	16.35	
	0.552	30.18	0.18	30.36	46.00	15.64	
	6.698	32.43	0.29	32.72	50.00	17.28	
	10.620	32.56	0.37	32.93	50.00	17.07	
	24.922	35.10	0.82	35.92	50.00	14.08	
Neutral	0.209	41.58	0.15	41.73	63.23	21.50	QP
	0.415	37.53	0.17	37.70	57.55	19.85	
	0.690	35.98	0.18	36.16	56.00	19.84	
	6.698	39.21	0.24	39.45	60.00	20.55	
	10.620	39.90	0.35	40.25	60.00	19.75	
	22.655	40.59	0.56	41.15	60.00	18.85	
	0.209	34.58	0.15	34.73	53.23	18.50	AV
	0.415	31.53	0.17	31.70	47.55	15.85	
	0.690	30.98	0.18	31.16	46.00	14.84	
	6.698	33.21	0.24	33.45	50.00	16.55	
	10.620	33.90	0.35	34.25	50.00	15.75	
	22.655	33.59	0.56	34.15	50.00	15.85	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 25, 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	0.207	41.06	0.15	41.21	63.32	22.11	QP
	0.277	38.42	0.15	38.57	60.90	22.33	
	0.343	38.36	0.16	38.52	59.13	20.61	
	6.914	39.49	0.29	39.78	60.00	20.22	
	10.620	38.20	0.37	38.57	60.00	21.43	
	23.762	40.20	0.78	40.98	60.00	19.02	
	0.207	38.06	0.15	38.21	53.32	15.11	AV
	0.277	36.42	0.15	36.57	50.90	14.33	
	0.343	34.36	0.16	34.52	49.13	14.61	
	6.914	36.49	0.29	36.78	50.00	13.22	
	10.620	36.20	0.37	36.57	50.00	13.43	
	23.762	38.20	0.78	38.98	50.00	11.02	
Neutral	0.206	40.46	0.15	40.61	63.36	22.75	QP
	0.274	37.40	0.15	37.55	60.98	23.43	
	0.415	36.21	0.17	36.38	57.55	21.17	
	6.914	39.35	0.24	39.59	60.00	20.41	
	11.317	39.32	0.36	39.68	60.00	20.32	
	20.594	40.57	0.50	41.07	60.00	18.93	
	0.206	37.46	0.15	37.61	53.36	15.75	AV
	0.277	33.17	0.15	33.32	50.90	17.58	
	0.415	33.21	0.17	33.38	47.55	14.17	
	6.914	35.35	0.24	35.59	50.00	14.41	
	11.317	35.32	0.36	35.68	50.00	14.32	
	20.594	25.94	0.50	26.44	50.00	23.56	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 25, 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	0.207	42.08	0.15	42.23	63.32	21.09	QP
	0.277	39.08	0.15	39.23	60.90	21.67	
	0.343	38.24	0.16	38.40	59.13	20.73	
	6.698	39.05	0.29	39.34	60.00	20.66	
	11.317	38.96	0.40	39.36	60.00	20.64	
	24.790	39.96	0.82	40.78	60.00	19.22	
	0.207	37.08	0.15	37.23	53.32	16.09	AV
	0.277	36.08	0.15	36.23	50.90	14.67	
	0.343	35.24	0.16	35.40	49.13	13.73	
	6.698	36.05	0.29	36.34	50.00	13.66	
	11.317	35.96	0.40	36.36	50.00	13.64	
	24.790	36.96	0.82	37.78	50.00	12.22	
Neutral	0.209	39.88	0.15	40.03	63.23	23.20	QP
	0.274	38.24	0.15	38.39	60.98	22.59	
	0.413	36.49	0.17	36.66	57.59	20.93	
	0.686	34.94	0.18	35.12	56.00	20.88	
	6.698	39.39	0.24	39.63	60.00	20.37	
	11.317	40.64	0.36	41.00	60.00	19.00	
	0.209	36.88	0.15	37.03	53.23	16.20	AV
	0.274	36.24	0.15	36.39	50.98	14.59	
	0.413	33.49	0.17	33.66	47.59	13.93	
	0.686	32.94	0.18	33.12	46.00	12.88	
	6.698	37.39	0.24	37.63	50.00	12.37	
	11.317	37.64	0.36	38.00	50.00	12.00	

TEST ENGINEER: TOM SI

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

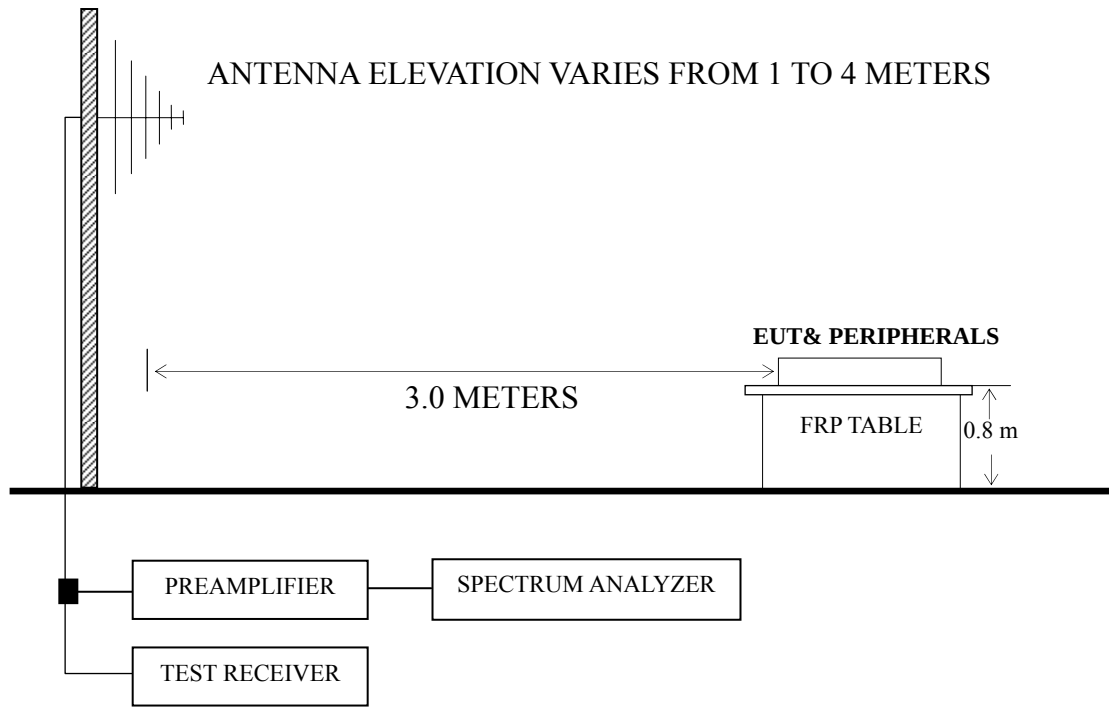
Serial No. : E08061803 Date of Test : Jun 25, 2008

Test Mode : DVI 1280*1024@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.207	42.12	0.15	42.27	63.32	21.05	QP
	0.274	37.74	0.15	37.89	60.98	23.09	
	0.343	37.30	0.16	37.46	59.13	21.67	
	6.698	37.69	0.29	37.98	60.00	22.02	
	11.317	37.07	0.40	37.47	60.00	22.53	
	22.655	41.53	0.75	42.28	60.00	17.72	
	0.207	39.12	0.15	39.27	53.32	14.05	AV
	0.274	34.74	0.15	34.89	50.98	16.09	
	0.343	34.30	0.16	34.46	49.13	14.67	
	6.698	35.69	0.29	35.98	50.00	14.02	
	11.317	34.07	0.40	34.47	50.00	15.53	
	22.655	36.53	0.75	37.28	50.00	12.72	
Neutral	0.204	41.64	0.15	41.79	63.45	21.66	QP
	0.277	36.92	0.15	37.07	60.90	23.83	
	0.413	36.33	0.17	36.50	57.59	21.09	
	0.690	34.76	0.18	34.94	56.00	21.06	
	6.914	38.23	0.24	38.47	60.00	21.53	
	11.317	39.18	0.36	39.54	60.00	20.46	
	0.204	37.64	0.15	37.79	53.45	15.66	AV
	0.277	34.92	0.15	35.07	50.90	15.83	
	0.413	34.33	0.17	34.50	47.59	13.09	
	0.690	28.76	0.18	28.94	46.00	17.06	
	6.914	33.23	0.24	33.47	50.00	16.53	
	11.317	35.18	0.36	35.54	50.00	14.46	

TEST ENGINEER: TOM SI

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 VGA/DVI 1280*1024@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
VGA 640*480@60Hz	P23
VGA 1024*768@60Hz	P24
VGA 1280*1024@60Hz	P25
DVI 640*480@60Hz	P26
DVI 1024*768@60Hz	P27
DVI 1280*1024@60Hz	P28
DVI 1024*768@60Hz (Rotate 90 degree)	P29

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.($< 1\text{GHz}$)

NOTE 2 – Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading.($> 1\text{GHz}$)

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 DVI 1024*768@60Hz test mode. The worst emission at horizontal polarization was detected at 218.180 MHz with corrected signal level of 38.28 dB ($\mu\text{V/m}$) (limit is 46.00 dB ($\mu\text{V/m}$)), when the antenna was 1.20 m height and the turntable was at 55° . The worst emission at vertical polarization was detected at 30.970 MHz with corrected signal level of 34.97 dB ($\mu\text{V/m}$) (limit is 40.00 dB ($\mu\text{V/m}$)), when the antenna was 1.00 m height and the turntable was at 330° .

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 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	30.970	4.13	19.03	0.91	24.07	40.00	15.93
	48.430	12.91	9.62	0.98	23.51	40.00	16.49
	169.680	15.74	10.20	2.18	28.12	43.50	15.38
	227.880	25.39	12.02	2.60	40.01	46.00	5.99
	281.230	17.08	13.57	3.01	33.66	46.00	12.34
	892.330	5.08	21.63	5.67	32.38	46.00	13.62
Vertical	53.280	17.46	8.14	1.07	26.67	40.00	13.33
	172.590	15.82	10.11	2.20	28.13	43.50	15.37
	225.940	17.66	11.94	2.58	32.18	46.00	13.82
	281.230	15.40	13.57	3.01	31.98	46.00	14.02
	453.890	8.09	17.29	3.82	29.20	46.00	16.80
	846.740	7.52	21.16	5.52	34.20	46.00	11.80

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 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	30.970	4.78	19.03	0.91	24.72	40.00	15.28
	48.430	12.07	9.62	0.98	22.67	40.00	17.33
	153.190	13.68	11.04	2.10	26.82	43.50	16.68
	216.240	23.89	11.43	2.50	37.82	46.00	8.18
	269.590	20.09	13.32	2.93	36.34	46.00	9.66
	856.440	6.47	21.28	5.55	33.30	46.00	12.70
Vertical	30.970	13.92	19.03	0.91	33.86	40.00	6.14
	53.280	17.49	8.14	1.07	26.70	40.00	13.30
	109.540	10.35	12.25	1.78	24.38	43.50	19.12
	216.240	18.85	11.43	2.50	32.78	46.00	13.22
	429.640	11.02	16.92	3.74	31.68	46.00	14.32
	861.290	9.38	21.31	5.57	36.26	46.00	9.74

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 2008

Test Mode : VGA 1280*1024@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	30.970	4.77	19.03	0.91	--	24.71	40.00	15.29	QP
	48.430	12.75	9.62	0.98	--	23.35	40.00	16.65	
	145.430	15.37	11.66	2.05	--	29.08	43.50	14.42	
	218.180	23.52	11.52	2.52	--	37.56	46.00	8.44	
	271.530	17.52	13.37	2.94	--	33.83	46.00	12.17	
	856.440	6.54	21.28	5.55	--	33.37	46.00	12.63	
	1119.000	55.85	23.24	6.95	37.37	48.67	74.00	25.33	PK
	1234.000	48.31	23.98	7.24	37.09	42.44	74.00	31.56	
	1279.000	50.63	24.36	7.50	36.99	45.50	74.00	28.50	
	1429.000	51.66	25.38	8.09	36.67	48.46	74.00	25.54	
	1632.000	48.70	26.49	8.85	36.28	47.76	74.00	26.24	
	1709.000	48.37	26.69	9.07	36.15	47.98	74.00	26.02	
Vertical	30.970	13.30	19.03	0.91	--	33.24	40.00	6.76	QP
	56.190	18.16	7.46	1.13	--	26.75	40.00	13.25	
	133.790	11.41	12.35	1.97	--	25.73	43.50	17.77	
	216.240	16.43	11.43	2.50	--	30.36	46.00	15.64	
	281.230	13.11	13.57	3.01	--	29.69	46.00	16.31	
	861.290	6.65	21.31	5.57	--	33.53	46.00	12.47	
	1069.000	57.38	22.88	6.82	37.51	49.57	74.00	24.43	PK
	1175.000	54.58	23.56	7.04	37.23	47.95	74.00	26.05	
	1324.000	50.35	24.70	7.66	36.89	45.82	74.00	28.18	
	1602.000	51.81	26.40	8.71	36.34	50.58	74.00	23.42	
	1767.000	50.28	26.83	9.24	36.05	50.30	74.00	23.70	
	1942.000	44.50	27.76	9.81	35.78	46.29	74.00	27.71	

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 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	30.970	5.73	19.03	0.91	25.67	40.00	14.33
	48.430	11.43	9.62	0.98	22.03	40.00	17.97
	158.040	18.11	10.64	2.12	30.87	43.50	12.63
	211.390	22.68	11.22	2.46	36.36	43.50	7.14
	324.880	14.36	14.58	3.25	32.19	46.00	13.81
	541.190	14.78	18.45	4.10	37.33	46.00	8.67
Vertical	30.970	14.15	19.03	0.91	34.09	40.00	5.91
	53.280	19.01	8.14	1.07	28.22	40.00	11.78
	158.040	18.62	10.64	2.12	31.38	43.50	12.12
	211.390	15.00	11.22	2.46	28.68	43.50	14.82
	324.880	11.44	14.58	3.25	29.27	46.00	16.73
	541.190	16.24	18.45	4.10	38.79	46.00	7.21

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 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	30.970	4.36	19.03	0.91	24.30	40.00	15.70
	48.430	12.37	9.62	0.98	22.97	40.00	17.03
	164.830	19.44	10.35	2.16	31.95	43.50	11.55
	218.180	24.24	11.52	2.52	38.28	46.00	7.72
	269.590	19.89	13.32	2.93	36.14	46.00	9.86
	455.830	11.15	17.32	3.84	32.31	46.00	13.69
Vertical	30.970	15.03	19.03	0.91	34.97	40.00	5.03
	53.280	18.09	8.14	1.07	27.30	40.00	12.70
	162.890	16.01	10.42	2.15	28.58	43.50	14.92
	218.180	16.06	11.52	2.52	30.10	46.00	15.90
	455.830	11.22	17.32	3.84	32.38	46.00	13.62
	858.380	7.19	21.31	5.57	34.07	46.00	11.93

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 2008

Test Mode : DVI 1280*1024@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	30.970	4.67	19.03	0.91	--	24.61	40.00	15.39	QP
	48.430	12.75	9.62	0.98	--	23.35	40.00	16.65	
	169.680	18.59	10.20	2.18	--	30.97	43.50	12.53	
	225.940	21.60	11.94	2.58	--	36.12	46.00	9.88	
	281.230	16.00	13.57	3.01	--	32.58	46.00	13.42	
	504.330	8.78	17.95	4.00	--	30.73	46.00	15.27	
	1014.000	56.75	22.49	6.73	37.66	48.31	74.00	25.69	PK
	1247.000	52.69	24.10	7.33	37.06	47.06	74.00	26.94	
	1392.000	46.75	25.16	8.01	36.75	43.17	74.00	30.83	
	1594.000	48.54	26.36	8.71	36.35	47.26	74.00	26.74	
	1712.000	48.13	26.69	9.07	36.15	47.74	74.00	26.26	
	1976.000	44.43	27.96	9.90	35.73	46.56	74.00	27.44	
Vertical	30.970	15.02	19.03	0.91	--	34.96	40.00	5.04	QP
	58.130	18.34	6.96	1.18	--	26.48	40.00	13.52	
	169.680	17.50	10.20	2.18	--	29.88	43.50	13.62	
	227.880	16.61	12.02	2.60	--	31.23	46.00	14.77	
	281.230	16.77	13.57	3.01	--	33.35	46.00	12.65	
	504.330	10.46	17.95	4.00	--	32.41	46.00	13.59	
	1084.000	56.66	22.98	6.85	37.47	49.02	74.00	24.98	PK
	1291.000	54.01	24.45	7.50	36.96	49.00	74.00	25.00	
	1487.000	48.95	25.72	8.35	36.56	46.46	74.00	27.54	
	1662.000	51.70	26.56	8.92	36.23	50.95	74.00	23.05	
	1747.000	46.34	26.78	9.15	36.09	46.18	74.00	27.82	
	1849.000	48.49	27.17	9.48	35.93	49.21	74.00	24.79	

TEST ENGINEER: JACKY CHEN

EUT : LCD Monitor Temperature : 22°C

Model No. : L1942PQT Humidity : 60%RH

Serial No. : E08061803 Date of Test : Jun 26, 2008

Test Mode : DVI 1024*768@60Hz
(Rotate 90 degree)

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	215.270	22.04	11.39	2.50	35.93	43.50	7.57
	271.530	17.01	13.37	2.94	33.32	46.00	12.68
	538.280	14.40	18.39	4.08	36.87	46.00	9.13
	591.630	12.28	19.11	4.22	35.61	46.00	10.39
	644.980	10.28	19.44	4.53	34.25	46.00	11.75
	977.690	9.76	22.27	5.96	37.99	54.00	16.01
Vertical	30.000	13.70	19.60	0.91	34.21	40.00	5.79
	48.430	13.92	9.62	0.98	24.52	40.00	15.48
	217.210	19.42	11.48	2.50	33.40	46.00	12.60
	389.870	8.73	16.30	3.57	28.60	46.00	17.40
	486.870	9.02	17.75	3.94	30.71	46.00	15.29
	649.830	6.29	19.45	4.53	30.27	46.00	15.73

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
Aluminum foil	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photo Figure 17, 18, 19