

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

LCD Monitor

Model No.: D2341PY

Serial No.: 101NDBP06557

FCC ID : BEJD2341PY

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

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

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Date of Test : Nov 16-29, 2010
Date of Report : Jan 25, 2011

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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. : D2341PY
(B) Serial No. : 101NDBP06557
(C) Power Supply : 120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2009
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: D2341PY; S/N: 101NDBP06557) which was tested in 3m anechoic chamber Nov 16-29, 2010 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 : Nov 16-29, 2010 Date of Report : Jan 25, 2011

Producer : Kathy Wang
KATHY WANG / Assistant

Review : Dio Yang
DIO YANG / Deputy Assistant Manager

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

Signatory : Sammy Chen
Authorized Signature EMC SAMMY CHEN / Deputy 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 2009 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2009 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.	: D2341PY
Serial No.	: 101NDBP06557
Real Power	: 40.10W
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 Display M/N : LM230WF8 (TL) (A1)
Max Resolution	: 1920*1080@60Hz
D-Sub Cable #1	: Shielded, Detachable, 1.85m, with two cores on cable
D-Sub Cable #2	: Shielded, Detachable, 1.85m, with two cores in connector
DVI Cable #1	: Shielded, Detachable, 1.85m, with two cores on cable
DVI Cable #2	: Shielded, Detachable, 1.85m, with two cores in connector
Power Cord	: Unshielded, Detachable, 1.80m
Note	: After evaluation, the D-Sub cable#1 and DVI cable#1 were used in the test for they will cause the maximum emission.

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 : dx7400MT
Serial Number : CNG8130K89
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 : KU-0459
Serial Number : 7691402450604
Data Cable : Shielded, Undetachable, 1.8m
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

2.2.4 Mouse

Manufacturer : DELL
Model Number : MO56UO
Serial Number : 443048231
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

2.2.5 Modem

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

2.3 Description of Test Facility

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

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

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

NVLAP Lab Code : 200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty: U = 1.26 dB
Radiated Emission Expanded Uncertainty : U = 3.02 dB

3 CONDUCTED EMISSION TEST

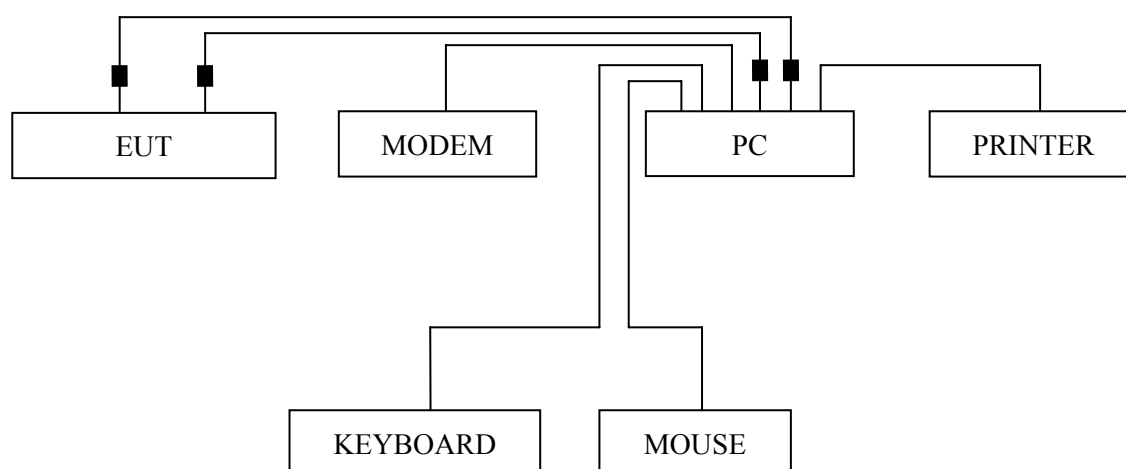
3.1 Test Equipment

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	ESCI	100841	Oct 15, 2010	Oct 15, 2011
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2010	Apr 02, 2011
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2010	Apr 02, 2011
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2010	Mar 19, 2011
5.	50 Ω Terminator	Anritsu	BNC	001	Apr 02, 2010	Apr 02, 2011
6.	Software	Audix	E3	SET00200 9804M592	--	--

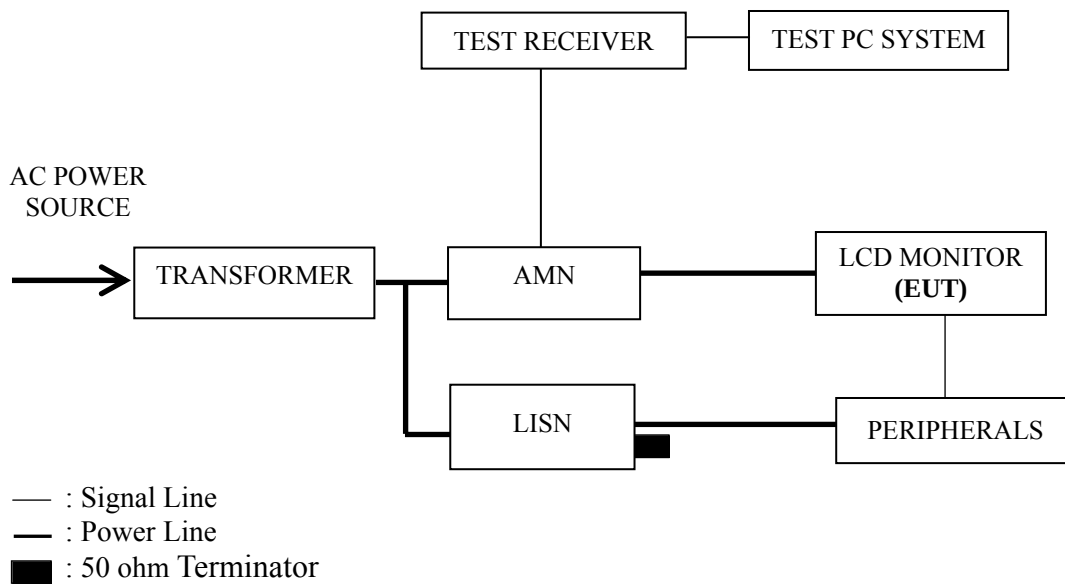
3.2 Block Diagram of Test Setup

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
D-Sub 640*480@60Hz
D-Sub 1280*1024@75Hz
D-Sub 1680*1050@60Hz
D-Sub 1920*1080@60Hz
DVI 640*480@60Hz
DVI 1280*1024@75Hz
DVI 1680*1050@60Hz
DVI 1920*1080@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 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	Page
D-Sub 640*480@60Hz	P12
D-Sub 1280*1024@75Hz	P13
D-Sub 1680*1050@60Hz	P14
D-Sub 1920*1080@60Hz	P15
DVI 640*480@60Hz	P16
DVI 1280*1024@75Hz	P17
DVI 1680*1050@60Hz	P18
DVI 1920*1080@60Hz	P19

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

NOTE 2 – Factor = Cable Loss + AMN Factor.

NOTE 3 – Emission Level = Meter Reading + Factor.

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

NOTE 5 – The worst case is for D-Sub 640*480@60Hz test mode. The worst emission is detected at 0.192 MHz (Quasi-Peak Value) with corrected signal level of 47.63 dB (μV) (limit is 63.93 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.199	46.54	0.38	46.92	63.67	16.75	QP
	0.267	40.80	0.43	41.23	61.20	19.97	
	0.332	34.70	0.45	35.15	59.40	24.25	
	0.627	27.08	0.52	27.60	56.00	28.40	
	2.474	36.44	0.66	37.10	56.00	18.90	
	26.139	26.92	1.83	28.75	60.00	31.25	
	0.199	35.80	0.38	36.18	53.67	17.49	AV
	0.267	30.19	0.43	30.62	51.20	20.58	
	0.332	23.61	0.45	24.06	49.40	25.34	
	0.627	16.40	0.52	16.92	46.00	29.08	
	2.474	25.70	0.66	26.36	46.00	19.64	
	26.139	16.19	1.83	18.02	50.00	31.98	
Neutral	0.192	47.32	0.31	47.63	63.93	16.30	QP
	0.264	42.52	0.36	42.88	61.29	18.41	
	0.322	36.61	0.40	37.01	59.66	22.65	
	0.627	29.15	0.49	29.64	56.00	26.36	
	2.527	34.85	0.63	35.48	56.00	20.52	
	26.139	36.80	1.89	38.69	60.00	21.31	
	0.192	36.40	0.31	36.71	53.93	17.22	AV
	0.264	31.76	0.36	32.12	51.29	19.17	
	0.322	25.80	0.40	26.20	49.66	23.46	
	0.627	18.40	0.49	18.89	46.00	27.11	
	2.527	24.10	0.63	24.73	46.00	21.27	
	26.139	25.69	1.89	27.58	50.00	22.42	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 1280*1024@75Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.192	45.58	0.38	45.96	63.93	17.97	QP
	0.267	40.36	0.43	40.79	61.20	20.41	
	0.329	33.55	0.45	34.00	59.49	25.49	
	0.627	25.63	0.52	26.15	56.00	29.85	
	2.309	37.18	0.64	37.82	56.00	18.18	
	22.535	25.88	1.72	27.60	60.00	32.40	
	0.192	34.70	0.38	35.08	53.93	18.85	AV
	0.267	29.59	0.43	30.02	51.20	21.18	
	0.329	22.55	0.45	23.00	49.49	26.49	
	0.627	14.70	0.52	15.22	46.00	30.78	
	2.309	26.30	0.64	26.94	46.00	19.06	
	22.535	15.20	1.72	16.92	50.00	33.08	
Neutral	0.192	45.37	0.31	45.68	63.93	18.25	QP
	0.267	40.48	0.36	40.84	61.20	20.36	
	0.339	34.60	0.41	35.01	59.22	24.21	
	0.621	23.88	0.49	24.37	56.00	31.63	
	2.309	35.73	0.61	36.34	56.00	19.66	
	28.003	26.32	1.91	28.23	60.00	31.77	
	0.192	34.60	0.31	34.91	53.93	19.02	AV
	0.267	29.46	0.36	29.82	51.20	21.38	
	0.339	23.76	0.41	24.17	49.22	25.05	
	0.621	12.92	0.49	13.41	46.00	32.59	
	2.309	24.93	0.61	25.54	46.00	20.46	
	28.003	15.42	1.91	17.33	50.00	32.67	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 25, 2011

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.192	46.24	0.38	46.62	63.93	17.31	QP
	0.267	40.67	0.43	41.10	61.20	20.10	
	0.332	34.34	0.45	34.79	59.40	24.61	
	0.627	26.68	0.52	27.20	56.00	28.80	
	2.309	36.00	0.64	36.64	56.00	19.36	
	25.055	26.52	1.80	28.32	60.00	31.68	
	0.192	35.60	0.38	35.98	53.93	17.95	AV
	0.267	29.89	0.43	30.32	51.20	20.88	
	0.332	23.61	0.45	24.06	49.40	25.34	
	0.627	15.90	0.52	16.42	46.00	29.58	
	2.309	25.40	0.64	26.04	46.00	19.96	
	25.055	15.70	1.80	17.50	50.00	32.50	
Neutral	0.192	46.08	0.31	46.39	63.93	17.54	QP
	0.273	41.04	0.36	41.40	61.03	19.63	
	0.322	34.18	0.40	34.58	59.66	25.08	
	0.614	24.42	0.49	24.91	56.00	31.09	
	2.201	35.14	0.60	35.74	56.00	20.26	
	26.418	26.87	1.89	28.76	60.00	31.24	
	0.192	35.20	0.31	35.51	53.93	18.42	AV
	0.273	30.51	0.36	30.87	51.03	20.16	
	0.322	23.50	0.40	23.90	49.66	25.76	
	0.614	13.60	0.49	14.09	46.00	31.91	
	2.201	24.60	0.60	25.20	46.00	20.80	
	26.418	15.70	1.89	17.59	50.00	32.41	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 25, 2011

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.194	45.56	0.38	45.94	63.84	17.90	QP
	0.256	40.54	0.42	40.96	61.56	20.60	
	0.336	34.45	0.45	34.90	59.31	24.41	
	0.627	25.96	0.52	26.48	56.00	29.52	
	2.309	36.37	0.64	37.01	56.00	18.99	
	25.055	27.21	1.80	29.01	60.00	30.99	
	0.194	34.70	0.38	35.08	53.84	18.76	AV
	0.256	29.76	0.42	30.18	51.56	21.38	
	0.336	23.61	0.45	24.06	49.31	25.25	
	0.627	15.10	0.52	15.62	46.00	30.38	
	2.309	24.40	0.64	25.04	46.00	20.96	
	25.055	16.30	1.80	18.10	50.00	31.90	
Neutral	0.192	45.80	0.31	46.11	63.93	17.82	QP
	0.270	40.54	0.36	40.90	61.12	20.22	
	0.339	34.15	0.41	34.56	59.22	24.66	
	0.604	25.07	0.49	25.56	56.00	30.44	
	2.309	35.39	0.61	36.00	56.00	20.00	
	23.387	26.82	1.84	28.66	60.00	31.34	
	0.192	35.00	0.31	35.31	53.93	18.62	AV
	0.270	29.30	0.36	29.66	51.12	21.46	
	0.339	23.40	0.41	23.81	49.22	25.41	
	0.604	14.70	0.49	15.19	46.00	30.81	
	2.309	24.10	0.61	24.71	46.00	21.29	
	23.387	15.70	1.84	17.54	50.00	32.46	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

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	0.192	44.55	0.38	44.93	63.93	19.00	QP
	0.256	41.27	0.42	41.69	61.56	19.87	
	0.322	32.16	0.45	32.61	59.66	27.05	
	0.634	26.28	0.52	26.80	56.00	29.20	
	2.237	37.00	0.64	37.64	56.00	18.36	
	25.055	25.92	1.80	27.72	60.00	32.28	
	0.192	33.72	0.38	34.10	53.93	19.83	AV
	0.256	30.16	0.42	30.58	51.56	20.98	
	0.322	21.19	0.45	21.64	49.66	28.02	
	0.634	15.23	0.52	15.75	46.00	30.25	
	2.237	26.14	0.64	26.78	46.00	19.22	
	25.055	14.81	1.80	16.61	50.00	33.39	
Neutral	0.192	44.62	0.31	44.93	63.93	19.00	QP
	0.273	40.23	0.36	40.59	61.03	20.44	
	0.320	33.37	0.40	33.77	59.71	25.94	
	0.634	24.11	0.49	24.60	56.00	31.40	
	2.237	35.14	0.60	35.74	56.00	20.26	
	22.535	27.05	1.83	28.88	60.00	31.12	
	0.192	34.12	0.31	34.43	53.93	19.50	AV
	0.273	29.44	0.36	29.80	51.03	21.23	
	0.320	22.67	0.40	23.07	49.71	26.64	
	0.634	13.06	0.49	13.55	46.00	32.45	
	2.237	24.61	0.60	25.21	46.00	20.79	
	22.535	15.93	1.83	17.76	50.00	32.24	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 25, 2011

Test Mode : DVI 1280*1024@75Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.194	45.04	0.38	45.42	63.84	18.42	QP
	0.267	40.01	0.43	40.44	61.20	20.76	
	0.322	32.55	0.45	33.00	59.66	26.66	
	0.634	25.19	0.52	25.71	56.00	30.29	
	2.309	36.60	0.64	37.24	56.00	18.76	
	22.535	26.60	1.72	28.32	60.00	31.68	
	0.194	34.10	0.38	34.48	53.84	19.36	AV
	0.267	29.12	0.43	29.55	51.20	21.65	
	0.322	21.67	0.45	22.12	49.66	27.54	
	0.634	14.32	0.52	14.84	46.00	31.16	
	2.309	25.86	0.64	26.50	46.00	19.50	
	22.535	15.83	1.72	17.55	50.00	32.45	
Neutral	0.192	45.37	0.31	45.68	63.93	18.25	QP
	0.273	40.69	0.36	41.05	61.03	19.98	
	0.336	34.51	0.40	34.91	59.31	24.40	
	0.634	25.13	0.49	25.62	56.00	30.38	
	2.309	36.73	0.61	37.34	56.00	18.66	
	22.535	26.41	1.83	28.24	60.00	31.76	
	0.192	34.61	0.31	34.92	53.93	19.01	AV
	0.273	29.49	0.36	29.85	51.03	21.18	
	0.336	23.69	0.40	24.09	49.31	25.22	
	0.634	14.37	0.49	14.86	46.00	31.14	
	2.309	25.79	0.61	26.40	46.00	19.60	
	22.535	15.91	1.83	17.74	50.00	32.26	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 25, 2011

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	0.192	44.85	0.38	45.23	63.93	18.70	QP
	0.270	39.74	0.43	40.17	61.12	20.95	
	0.322	32.10	0.45	32.55	59.66	27.11	
	0.634	28.03	0.52	28.55	56.00	27.45	
	2.309	36.75	0.64	37.39	56.00	18.61	
	22.535	26.51	1.72	28.23	60.00	31.77	
	0.192	33.79	0.38	34.17	53.93	19.76	AV
	0.270	28.78	0.43	29.21	51.12	21.91	
	0.322	21.13	0.45	21.58	49.66	28.08	
	0.634	17.43	0.52	17.95	46.00	28.05	
	2.309	25.72	0.64	26.36	46.00	19.64	
	22.535	15.45	1.72	17.17	50.00	32.83	
Neutral	0.192	45.04	0.31	45.35	63.93	18.58	QP
	0.270	39.97	0.36	40.33	61.12	20.79	
	0.325	33.35	0.40	33.75	59.57	25.82	
	0.735	24.53	0.49	25.02	56.00	30.98	
	2.285	35.77	0.60	36.37	56.00	19.63	
	24.400	26.91	1.85	28.76	60.00	31.24	
	0.192	34.20	0.31	34.51	53.93	19.42	AV
	0.270	28.76	0.36	29.12	51.12	22.00	
	0.325	22.46	0.40	22.86	49.57	26.71	
	0.735	13.65	0.49	14.14	46.00	31.86	
	2.285	24.62	0.60	25.22	46.00	20.78	
	24.400	15.77	1.85	17.62	50.00	32.38	

TEST ENGINEER: WENCY YANG

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 48%RH

Serial No. : 101NDBP06557 Date of Test : Jan 25, 2011

Test Mode : DVI 1920*1080@60Hz

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.192	45.22	0.38	45.60	63.93	18.33	QP
	0.267	40.16	0.43	40.59	61.20	20.61	
	0.320	32.18	0.45	32.63	59.71	27.08	
	0.614	24.54	0.52	25.06	56.00	30.94	
	2.309	37.57	0.64	38.21	56.00	17.79	
	22.535	26.44	1.72	28.16	60.00	31.84	AV
	0.192	34.76	0.38	35.14	53.93	18.79	
	0.267	29.12	0.43	29.55	51.20	21.65	
	0.320	20.20	0.45	20.65	49.71	29.06	
	0.614	13.68	0.52	14.20	46.00	31.80	
Neutral	2.309	26.46	0.64	27.10	46.00	18.90	QP
	22.535	15.75	1.72	17.47	50.00	32.53	
	0.192	45.00	0.31	45.31	63.93	18.62	
	0.270	41.45	0.36	41.81	61.12	19.31	
	0.320	34.30	0.40	34.70	59.71	25.01	
	0.627	25.97	0.49	26.46	56.00	29.54	AV
	2.309	37.01	0.61	37.62	56.00	18.38	
	20.924	26.88	1.79	28.67	60.00	31.33	
	0.192	34.10	0.31	34.41	53.93	19.52	
	0.270	30.84	0.36	31.20	51.12	19.92	
	0.320	23.67	0.40	24.07	49.71	25.64	
	0.627	14.76	0.49	15.25	46.00	30.75	
	2.309	26.30	0.61	26.91	46.00	19.09	
	20.924	14.95	1.79	16.74	50.00	33.26	

TEST ENGINEER: WENCY YANG

4 RADIATED EMISSION TEST

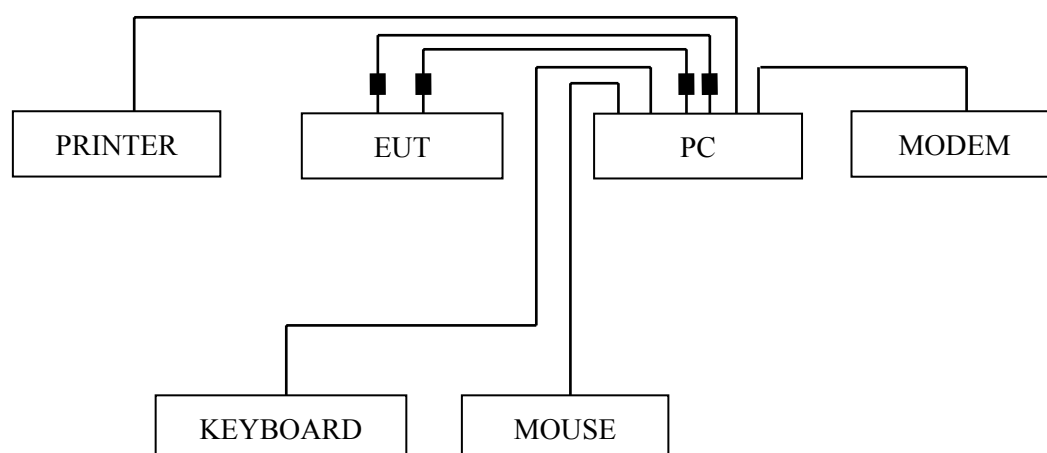
4.1 Test Equipment

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, 2010	Mar 07, 2011
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2010	Mar 19, 2011
3.	Preamplifier	HP	8449B	3008A00864	Apr 29, 2010	Apr 29, 2011
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Dec 01, 2010	Dec 01, 2011
5.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2010	May 19, 2011
6.	Software	Audix	E3	SET00200 9912M295-2	--	--

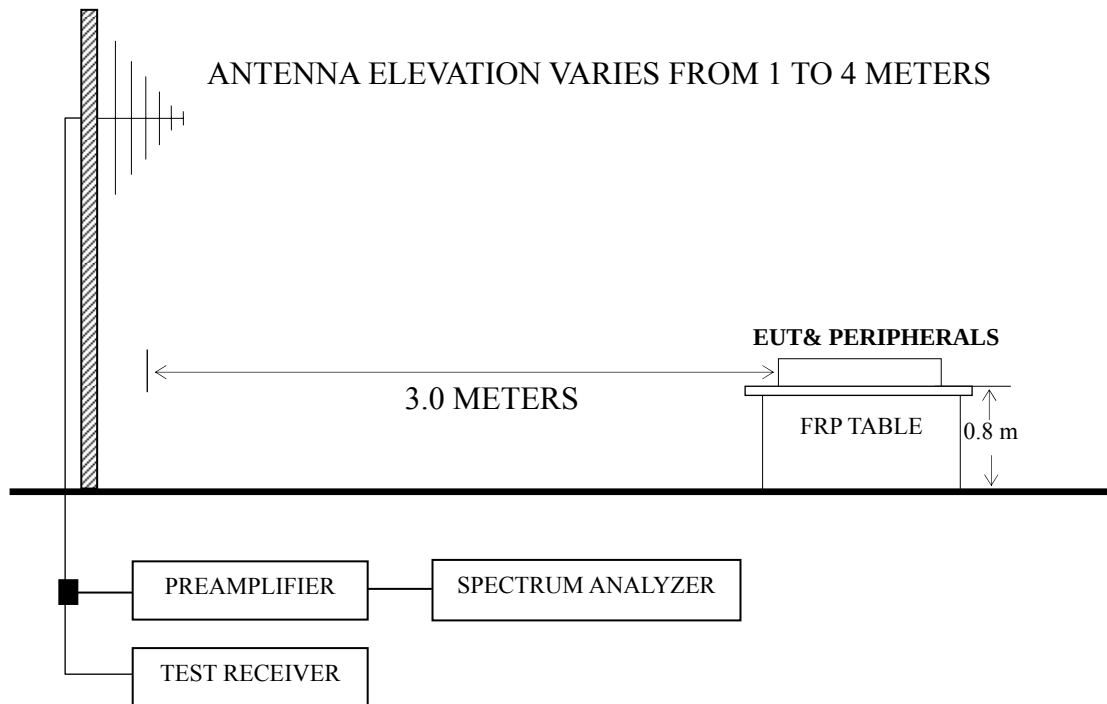
4.2 Block Diagram of Test Setup

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

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

The frequency range from 1 GHz to 2 GHz was checked for D-Sub/DVI 1280*1024@75Hz, 1680*1050@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	Page
D-Sub 640*480@60Hz	P24
D-Sub 1280*1024@75Hz	P25 – P26
D-Sub 1680*1050@60Hz	P27 – P28
D-Sub 1920*1080@60Hz	P29 – P30
DVI 640*480@60Hz	P31
DVI 1280*1024@75Hz	P32 – P33
DVI 1680*1050@60Hz	P34 – P35
DVI 1920*1080@60Hz	P36 – P37

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

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

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

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

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

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

NOTE 7 – The worst case is for D-Sub 640*480@60Hz test mode. The worst emission at horizontal polarization was detected at 188.110 MHz with corrected signal level of 37.57 dB (μV/m) (limit is 43.50dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 350°. The worst emission at vertical polarization was detected at 33.210 MHz with corrected signal level of 37.20 dB (μV/m) (limit is 40.00 dB (μV/m)), when the antenna was 1.00 m height and the turntable was at 70°.

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 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	76.560	15.44	10.34	0.93	26.71	40.00	13.29
	188.110	26.25	9.91	1.41	37.57	43.50	5.93
	344.280	20.37	14.96	1.90	37.23	46.00	8.77
	372.410	19.09	15.72	1.99	36.80	46.00	9.20
	400.540	21.04	16.30	2.06	39.40	46.00	6.60
	872.930	11.30	20.37	2.98	34.65	46.00	11.35
Vertical	33.210	19.90	16.64	0.66	37.20	40.00	2.80
	79.470	20.24	10.51	0.94	31.69	40.00	8.31
	153.190	23.55	10.36	1.25	35.16	43.50	8.34
	344.280	24.45	14.96	1.90	41.31	46.00	4.69
	372.410	24.49	15.72	1.99	42.20	46.00	3.80
	872.930	16.52	20.37	2.98	39.87	46.00	6.13

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 1280*1024@75Hz

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	75.590	15.01	10.27	0.92	--	26.20	40.00	13.80	QP
	175.500	22.78	10.04	1.36	--	34.18	43.50	9.32	
	205.570	25.35	10.01	1.47	--	36.83	43.50	6.67	
	372.410	20.66	15.72	1.99	--	38.37	46.00	7.63	
	400.540	19.79	16.30	2.06	--	38.15	46.00	7.85	
	871.960	10.41	20.38	2.98	--	33.77	46.00	12.23	
	1041.000	48.32	22.69	4.49	37.33	38.17	74.00	35.83	PK
	1201.000	47.87	23.74	4.51	37.00	39.12	74.00	34.88	
	1334.000	47.86	24.78	4.53	36.71	40.46	74.00	33.54	
	1467.000	47.89	25.60	4.55	36.36	41.68	74.00	32.32	
	1600.000	49.16	26.40	4.56	36.10	44.02	74.00	29.98	
	1716.000	47.00	26.71	4.57	35.92	42.36	74.00	31.64	
	1041.000	41.32	22.69	4.49	37.33	31.17	54.00	22.83	AV
	1201.000	34.87	23.74	4.51	37.00	26.12	54.00	27.88	
	1334.000	37.86	24.78	4.53	36.71	30.46	54.00	23.54	
	1467.000	38.89	25.60	4.55	36.36	32.68	54.00	21.32	
	1600.000	41.16	26.40	4.56	36.10	36.02	54.00	17.98	
	1716.000	37.00	26.71	4.57	35.92	32.36	54.00	21.64	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 1280*1024@75Hz

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
Vertical	31.940	18.90	17.29	0.65	--	36.84	40.00	3.16	QP
	76.560	19.34	10.34	0.93	--	30.61	40.00	9.39	
	149.310	23.41	10.43	1.24	--	35.08	43.50	8.42	
	200.720	25.00	9.83	1.45	--	36.28	43.50	7.22	
	344.280	24.81	14.96	1.90	--	41.67	46.00	4.33	
	372.410	23.58	15.72	1.99	--	41.29	46.00	4.71	
	1031.000	50.82	22.60	4.49	37.34	40.57	74.00	33.43	PK
	1200.000	50.51	23.70	4.51	37.00	41.72	74.00	32.28	
	1286.000	48.80	24.40	4.53	36.82	40.91	74.00	33.09	
	1600.000	51.50	26.40	4.56	36.10	46.36	74.00	27.64	
	1799.000	48.35	26.90	4.58	35.81	44.02	74.00	29.98	
	1944.000	45.35	27.76	4.75	35.65	42.21	74.00	31.79	
	1031.000	42.82	22.60	4.49	37.34	32.57	54.00	21.43	AV
	1200.000	39.51	23.70	4.51	37.00	30.72	54.00	23.28	
	1286.000	37.80	24.40	4.53	36.82	29.91	54.00	24.09	
	1600.000	38.50	26.40	4.56	36.10	33.36	54.00	20.64	
	1799.000	41.35	26.90	4.58	35.81	37.02	54.00	16.98	
	1944.000	34.35	27.76	4.75	35.65	31.21	54.00	22.79	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 1680*1050@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	57.160	13.37	8.96	0.83	--	23.16	40.00	16.84	QP
	76.560	15.03	10.34	0.93	--	26.30	40.00	13.70	
	148.340	20.04	10.44	1.23	--	31.71	43.50	11.79	
	207.510	24.28	10.11	1.47	--	35.86	43.50	7.64	
	344.280	20.83	14.96	1.90	--	37.69	46.00	8.31	
	400.540	19.34	16.30	2.06	--	37.70	46.00	8.30	
	1041.000	53.32	22.69	4.49	37.33	43.17	74.00	30.83	PK
	1101.000	52.11	23.11	4.50	37.20	42.52	74.00	31.48	
	1201.000	52.87	23.74	4.51	37.00	44.12	74.00	29.88	
	1264.000	51.32	24.23	4.52	36.86	43.21	74.00	30.79	
	1467.000	52.89	25.60	4.55	36.36	46.68	74.00	27.32	
	1716.000	52.00	26.71	4.57	35.92	47.36	74.00	26.64	
	1041.000	43.32	22.69	4.49	37.33	33.17	54.00	20.83	AV
	1101.000	38.11	23.11	4.50	37.20	28.52	54.00	25.48	
	1201.000	39.87	23.74	4.51	37.00	31.12	54.00	22.88	
	1264.000	38.32	24.23	4.52	36.86	30.21	54.00	23.79	
	1467.000	39.89	25.60	4.55	36.36	33.68	54.00	20.32	
	1716.000	40.00	26.71	4.57	35.92	35.36	54.00	18.64	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : D-Sub 1680*1050@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
Vertical	32.910	18.69	16.79	0.66	--	36.14	40.00	3.86	QP
	76.560	18.87	10.34	0.93	--	30.14	40.00	9.86	
	148.340	22.49	10.44	1.23	--	34.16	43.50	9.34	
	200.720	24.31	9.83	1.45	--	35.59	43.50	7.91	
	257.950	21.47	12.31	1.62	--	35.40	46.00	10.60	
	400.540	16.66	16.30	2.06	--	35.02	46.00	10.98	
	1031.000	56.82	22.60	4.49	37.34	46.57	74.00	27.43	PK
	1200.000	56.51	23.70	4.51	37.00	47.72	74.00	26.28	
	1333.000	54.06	24.74	4.53	36.71	46.62	74.00	27.38	
	1676.000	53.05	26.59	4.57	35.97	48.24	74.00	25.76	
	1840.000	52.75	27.12	4.64	35.77	48.74	74.00	25.26	
	1944.000	51.35	27.76	4.75	35.65	48.21	74.00	25.79	
	1031.000	44.82	22.60	4.49	37.34	34.57	54.00	19.43	AV
	1200.000	44.51	23.70	4.51	37.00	35.72	54.00	18.28	
	1333.000	40.06	24.74	4.53	36.71	32.62	54.00	21.38	
	1676.000	41.05	26.59	4.57	35.97	36.24	54.00	17.76	
	1840.000	41.75	27.12	4.64	35.77	37.74	54.00	16.26	
	1944.000	40.35	27.76	4.75	35.65	37.21	54.00	16.79	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

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	41.640	10.21	11.78	0.73	--	22.72	40.00	17.28	QP
	90.140	18.41	11.00	1.00	--	30.41	43.50	13.09	
	121.180	19.88	10.99	1.13	--	32.00	43.50	11.50	
	182.000	28.00	9.97	1.38	--	39.35	43.50	4.15	
	242.430	24.41	11.65	1.58	--	37.64	46.00	8.36	
	300.630	21.64	13.73	1.77	--	37.14	46.00	8.86	
	1041.000	51.32	22.69	4.49	37.33	41.17	74.00	32.83	PK
	1201.000	50.87	23.74	4.51	37.00	42.12	74.00	31.88	
	1334.000	50.86	24.78	4.53	36.71	43.46	74.00	30.54	
	1467.000	50.89	25.60	4.55	36.36	44.68	74.00	29.32	
	1600.000	52.16	26.40	4.56	36.10	47.02	74.00	26.98	
	1716.000	50.00	26.71	4.57	35.92	45.36	74.00	28.64	
	1041.000	39.32	22.69	4.49	37.33	29.17	54.00	24.83	AV
	1201.000	39.87	23.74	4.51	37.00	31.12	54.00	22.88	
	1334.000	40.86	24.78	4.53	36.71	33.46	54.00	20.54	
	1467.000	42.89	25.60	4.55	36.36	36.68	54.00	17.32	
	1600.000	46.16	26.40	4.56	36.10	41.02	54.00	12.98	
	1716.000	39.00	26.71	4.57	35.92	34.36	54.00	19.64	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

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
Vertical	30.970	16.59	17.78	0.64	--	35.01	40.00	4.99	QP
	62.980	24.58	9.36	0.86	--	34.80	40.00	5.20	
	256.980	21.30	12.27	1.62	--	35.19	46.00	10.81	
	371.440	18.06	15.68	1.99	--	35.73	46.00	10.27	
	400.540	18.36	16.30	2.06	--	36.72	46.00	9.28	
	851.590	17.39	20.44	2.97	--	40.80	46.00	5.20	
	1031.000	52.82	22.60	4.49	37.34	42.57	74.00	31.43	PK
	1200.000	52.51	23.70	4.51	37.00	43.72	74.00	30.28	
	1286.000	50.80	24.40	4.53	36.82	42.91	74.00	31.09	
	1396.000	49.57	25.16	4.54	36.55	42.72	74.00	31.28	
	1676.000	49.05	26.59	4.57	35.97	44.24	74.00	29.76	
	1799.000	50.35	26.90	4.58	35.81	46.02	74.00	27.98	
	1031.000	46.82	22.60	4.49	37.34	36.57	54.00	17.43	AV
	1200.000	41.51	23.70	4.51	37.00	32.72	54.00	21.28	
	1286.000	37.80	24.40	4.53	36.82	29.91	54.00	24.09	
	1396.000	41.57	25.16	4.54	36.55	34.72	54.00	19.28	
	1676.000	39.05	26.59	4.57	35.97	34.24	54.00	19.76	
	1799.000	41.35	26.90	4.58	35.81	37.02	54.00	16.98	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

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	62.980	18.17	9.36	0.86	28.39	40.00	11.61
	218.180	26.05	10.52	1.51	38.08	46.00	7.92
	383.080	23.96	15.93	2.02	41.91	46.00	4.09
	405.390	22.53	16.37	2.08	40.98	46.00	5.02
	538.280	20.03	17.83	2.33	40.19	46.00	5.81
	674.080	20.65	19.19	2.63	42.47	46.00	3.53
Vertical	56.190	25.35	8.88	0.82	35.05	40.00	4.95
	133.790	19.99	10.74	1.18	31.91	43.50	11.59
	256.980	22.61	12.27	1.62	36.50	46.00	9.50
	288.990	26.79	13.39	1.73	41.91	46.00	4.09
	538.280	18.23	17.83	2.33	38.39	46.00	7.61
	870.990	15.69	20.38	2.98	39.05	46.00	6.95

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 1280*1024@75Hz

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	62.980	16.25	9.36	0.86	--	26.47	40.00	13.53	QP
	138.640	21.26	10.65	1.21	--	33.12	43.50	10.38	
	182.290	24.23	9.97	1.38	--	35.58	43.50	7.92	
	419.940	22.99	16.55	2.10	--	41.64	46.00	4.36	
	557.000	22.10	17.96	2.36	--	42.42	46.00	3.58	
	698.000	20.10	19.47	2.67	--	42.24	46.00	3.76	
	1041.000	46.32	22.69	4.49	37.33	36.17	74.00	37.83	PK
	1264.000	44.32	24.23	4.52	36.86	36.21	74.00	37.79	
	1393.000	45.61	25.16	4.54	36.55	38.76	74.00	35.24	
	1467.000	45.89	25.60	4.55	36.36	39.68	74.00	34.32	
	1600.000	47.16	26.40	4.56	36.10	42.02	74.00	31.98	
	1797.000	44.70	26.90	4.58	35.81	40.37	74.00	33.63	
	1041.000	39.32	22.69	4.49	37.33	29.17	54.00	24.83	AV
	1264.000	30.32	24.23	4.52	36.86	22.21	54.00	31.79	
	1393.000	35.61	25.16	4.54	36.55	28.76	54.00	25.24	
	1467.000	34.89	25.60	4.55	36.36	28.68	54.00	25.32	
	1600.000	40.16	26.40	4.56	36.10	35.02	54.00	18.98	
	1797.000	33.70	26.90	4.58	35.81	29.37	54.00	24.63	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 1280*1024@75Hz

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
Vertical	61.040	24.94	9.21	0.85	--	35.00	40.00	5.00	QP
	138.640	21.84	10.65	1.21	--	33.70	43.50	9.80	
	247.280	26.22	11.85	1.59	--	39.66	46.00	6.34	
	315.180	21.32	14.12	1.81	--	37.25	46.00	8.75	
	512.090	19.93	17.68	2.29	--	39.90	46.00	6.10	
	698.330	17.36	19.47	2.67	--	39.50	46.00	6.50	
	1031.000	48.82	22.60	4.49	37.34	38.57	74.00	35.43	PK
	1200.000	48.51	23.70	4.51	37.00	39.72	74.00	34.28	
	1286.000	46.80	24.40	4.53	36.82	38.91	74.00	35.09	
	1498.000	50.44	25.80	4.55	36.30	44.49	74.00	29.51	
	1600.000	49.50	26.40	4.56	36.10	44.36	74.00	29.64	
	1676.000	45.05	26.59	4.57	35.97	40.24	74.00	33.76	
	1031.000	41.82	22.60	4.49	37.34	31.57	54.00	22.43	AV
	1200.000	36.51	23.70	4.51	37.00	27.72	54.00	26.28	
	1286.000	32.80	24.40	4.53	36.82	24.91	54.00	29.09	
	1498.000	36.44	25.80	4.55	36.30	30.49	54.00	23.51	
	1600.000	38.50	26.40	4.56	36.10	33.36	54.00	20.64	
	1676.000	33.05	26.59	4.57	35.97	28.24	54.00	25.76	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 1680*1050@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	62.980	15.45	9.36	0.86	--	25.67	40.00	14.33	QP
	138.640	20.57	10.65	1.21	--	32.43	43.50	11.07	
	225.940	24.63	10.88	1.53	--	37.04	46.00	8.96	
	419.940	22.76	16.55	2.10	--	41.41	46.00	4.59	
	557.680	21.71	17.96	2.38	--	42.05	46.00	3.95	
	698.330	20.31	19.47	2.67	--	42.45	46.00	3.55	
	1041.000	54.32	22.69	4.49	37.33	44.17	74.00	29.83	PK
	1101.000	53.11	23.11	4.50	37.20	43.52	74.00	30.48	
	1201.000	53.87	23.74	4.51	37.00	45.12	74.00	28.88	
	1264.000	52.32	24.23	4.52	36.86	44.21	74.00	29.79	
	1558.000	51.23	26.19	4.56	36.18	45.80	74.00	28.20	
	1634.000	51.57	26.49	4.57	36.04	46.59	74.00	27.41	
	1041.000	41.32	22.69	4.49	37.33	31.17	54.00	22.83	AV
	1101.000	40.11	23.11	4.50	37.20	30.52	54.00	23.48	
	1201.000	43.87	23.74	4.51	37.00	35.12	54.00	18.88	
	1264.000	43.32	24.23	4.52	36.86	35.21	54.00	18.79	
	1558.000	42.23	26.19	4.56	36.18	36.80	54.00	17.20	
	1634.000	40.57	26.49	4.57	36.04	35.59	54.00	18.41	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 1680*1050@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
Vertical	58.130	23.23	9.02	0.83	--	33.08	40.00	6.92	QP
	138.640	21.60	10.65	1.21	--	33.46	43.50	10.04	
	256.980	20.34	12.27	1.62	--	34.23	46.00	11.77	
	400.540	17.70	16.30	2.06	--	36.06	46.00	9.94	
	557.680	16.50	17.96	2.38	--	36.84	46.00	9.16	
	698.000	20.30	19.47	2.67	--	42.44	46.00	3.56	
	1024.000	54.53	22.57	4.49	37.36	44.23	74.00	29.77	PK
	1125.000	54.35	23.27	4.50	37.16	44.96	74.00	29.04	
	1286.000	52.80	24.40	4.53	36.82	44.91	74.00	29.09	
	1388.000	50.22	25.13	4.54	36.56	43.33	74.00	30.67	
	1676.000	51.05	26.59	4.57	35.97	46.24	74.00	27.76	
	1944.000	49.35	27.76	4.75	35.65	46.21	74.00	27.79	
	1024.000	47.53	22.57	4.49	37.36	37.23	54.00	16.77	AV
	1125.000	43.35	23.27	4.50	37.16	33.96	54.00	20.04	
	1286.000	41.80	24.40	4.53	36.82	33.91	54.00	20.09	
	1388.000	41.22	25.13	4.54	36.56	34.33	54.00	19.67	
	1676.000	41.05	26.59	4.57	35.97	36.24	54.00	17.76	
	1944.000	37.35	27.76	4.75	35.65	34.21	54.00	19.79	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 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	62.980	16.97	9.36	0.86	--	27.19	40.00	12.81	QP
	126.030	22.53	10.89	1.16	--	34.58	43.50	8.92	
	189.080	22.26	9.90	1.41	--	33.57	43.50	9.93	
	315.180	20.98	14.12	1.81	--	36.91	46.00	9.09	
	533.430	11.62	17.80	2.32	--	31.74	46.00	14.26	
	870.990	12.38	20.38	2.98	--	35.74	46.00	10.26	
	1041.000	46.32	22.69	4.49	37.33	36.17	74.00	37.83	PK
	1334.000	45.86	24.78	4.53	36.71	38.46	74.00	35.54	
	1467.000	45.89	25.60	4.55	36.36	39.68	74.00	34.32	
	1600.000	47.16	26.40	4.56	36.10	42.02	74.00	31.98	
	1716.000	45.00	26.71	4.57	35.92	40.36	74.00	33.64	
	1797.000	44.70	26.90	4.58	35.81	40.37	74.00	33.63	
	1041.000	39.32	22.69	4.49	37.33	29.17	54.00	24.83	AV
	1334.000	32.86	24.78	4.53	36.71	25.46	54.00	28.54	
	1467.000	33.89	25.60	4.55	36.36	27.68	54.00	26.32	
	1600.000	34.16	26.40	4.56	36.10	29.02	54.00	24.98	
	1716.000	37.00	26.71	4.57	35.92	32.36	54.00	21.64	
	1797.000	31.70	26.90	4.58	35.81	27.37	54.00	26.63	

TEST ENGINEER: RAVEN JIN

EUT : LCD Monitor Temperature : 22°C

Model No. : D2341PY Humidity : 60%RH

Serial No. : 101NDBP06557 Date of Test : Jan 21, 2011

Test Mode : DVI 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
Vertical	62.980	24.54	9.36	0.86	--	34.76	40.00	5.24	QP
	126.030	26.04	10.89	1.16	--	38.09	43.50	5.41	
	256.980	22.54	12.27	1.62	--	36.43	46.00	9.57	
	315.180	21.85	14.12	1.81	--	37.78	46.00	8.22	
	400.540	19.88	16.30	2.06	--	38.24	46.00	7.76	
	458.740	14.18	17.09	2.18	--	33.45	46.00	12.55	
	1031.000	47.82	22.60	4.49	37.34	37.57	74.00	36.43	PK
	1200.000	47.51	23.70	4.51	37.00	38.72	74.00	35.28	
	1396.000	44.57	25.16	4.54	36.55	37.72	74.00	36.28	
	1498.000	49.44	25.80	4.55	36.30	43.49	74.00	30.51	
	1600.000	48.50	26.40	4.56	36.10	43.36	74.00	30.64	
	1799.000	45.35	26.90	4.58	35.81	41.02	74.00	32.98	
	1031.000	38.82	22.60	4.49	37.34	28.57	54.00	25.43	AV
	1200.000	36.51	23.70	4.51	37.00	27.72	54.00	26.28	
	1396.000	34.57	25.16	4.54	36.55	27.72	54.00	26.28	
	1498.000	39.44	25.80	4.55	36.30	33.49	54.00	20.51	
	1600.000	41.50	26.40	4.56	36.10	36.36	54.00	17.64	
	1799.000	33.35	26.90	4.58	35.81	29.02	54.00	24.98	

TEST ENGINEER: RAVEN JIN

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 Tape	T-308	50*30	DAEHUNG SUBSIDIARY MATERIALS.	See Internal Photos Figure 12
EMI Conductive Tape	7250CP0005J	50*120	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 12
Gasket	LG END 3940TKK043C	28*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 13
Gasket	LG END 3940TKK043C	120*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 13
Gasket	LG END 3940TKK043C	295*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 13
Gasket	LG END 3940TKK043C	155*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 13
Gasket	LG END 3940TKK043C	120*10*1	EXPAN Electronics SUZHOU Co., Ltd.	See Internal Photos Figure 13

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:



(RAVEN JIN)