



**Test Report
Application for
Declaration of Conformity
On Behalf Of**

WinMate Communications INC.

**EUT:
42" LCD Monitor**

**Model Number:
W42XXXX-XXXXXX**

**Prepared for:
WinMate Communications INC.
9F, No. 111-6, Shing-De Rd., San-Chung City, Taipei 241, Taiwan, R.O.C.**

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All data in this report are traceable to national standard or international standard.

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1. CERTIFICATION

Applicant : **WinMate Communications INC.**
 EUT Description : 42" LCD Monitor
 Model Number : W42XXXX-XXXXXX
 Brand Name : WinMate
 Serial Number : N/A
 Tested Power Supply : 120Vac/60Hz

MEASUREMENT PROCEDURES USED:

- CFR 47, Part 15** Radio Frequency Device Subpart B Unintentional Radiators Class B
- CISPR 22 3rd Edition:1997** Limits and methods of measurement of radio disturbance Characteristics of information technology equipment: 1997
- ANSI C63.4** Methods of Measurements of Radio-Noise Emissions from Low- Voltage Electrical and Electronic Equipment in the range of 9kHz To 40GHz:2003
- Canadian ICES-003** Implementation and Interpretation off the Interference-Causing Equipment Standard for Digital Apparatus, ICES-003

THE MEASUREMENT SHOWN IN THE ATTACHMENT WAS MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED, AND THE MAXIMUM ENERGY EMITTED BY THE EQUIPMENT WAS FOUND TO BE WITHIN THE ABOVE LIMITS APPLICABLE.



Sample Received Date : **August 09, 2006**
 Final Test Date : **August 09, 2006**

In order to ensure the quality and accuracy of this document, the contents have been thoroughly reviewed by the following qualified personnel from GesTek Lab.

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This test data shown below is traceable to National or international standard such as NIST/USA, etc. The laboratory's NVLAP accreditation in no way constitutes or implies product certification, approval, or endorsement by NVLAP or the United States government.

2. SUMMARY OF TEST RESULTS

The Worst Emission data was found as following

STANDARD	TEST ITEM	TEST RESULT	REMARKS
(1)FCC Part 15 (2)CISPR 22 3 rd Edition:1997	Conducted emission (Mode 1)	PASS	The worst emission frequency is <u>1.0349</u> MHz. And minimum passing margin is <u>-7.31</u> dB.
(3)Canadian ICES-003. Class B	Radiated emission (Mode 1)	PASS	The worst emission frequency is <u>607.5213</u> MHz at <u>Vertical</u> . And minimum passing margin is <u>-6.60</u> dB. Height of antenna is <u>2.73</u> M. Angle of turntable is <u>17°</u> .

3. GENERAL INFORMATION

3.1 PRODUCTION DESCRIPTION

Product Name : 42" LCD Monitor
Model Number : W42XXXX-XXXXXX
Brand Name : WinMate
Serial Number : N/A
Applicant : WinMate Communications INC.
Address : 9F, No. 111-6, Shing-De Rd., San-Chung City, Taipei 241, Taiwan, R.O.C.
Manufacturer : WinMate Communications INC.
Address : 9F, No. 111-6, Shing-De Rd., San-Chung City, Taipei 241, Taiwan, R.O.C.
Power Supply : AC 100~240V
Power Cord : 3Pins, Detachable, 1.8m, Non-shielded

3.2 TEST MODES & EUT COMPONENTS DESCRIPTION

EUT: 42" LCD Monitor, M/N: W42XXXX-XXXXXX				
Test Mode Name	Mode 1 – VGA Mode (1360*768 V-Sync:60Hz) (Test Mode)	Mode 2 – VGA Mode (1024*768 V-Sync:60Hz) (Pre-scan Mode)	Mode 3 – VGA Mode (800*600 V-Sync:60Hz) (Pre-scan Mode)	Mode 4 – DVI Mode (1360*768 V-Sync:60Hz) (Pre-scan Mode)
	Mode 5 – DVI Mode (1024*768 V-Sync:60Hz) (Pre-scan Mode)	Mode 6 – DVI Mode (800*600 V-Sync:60Hz) (Pre-scan Mode)	Mode 7 – AV Mode (Pre-scan Mode)	Mode 8 – S Mode (Pre-scan Mode)

Note:

1. According to pre-scan data, we determine the data (Mode 1) shown in this test report, which Reflects the worst-case data for each operation mode.
2. The EUT has a series model numbers for the requirement of marketing.

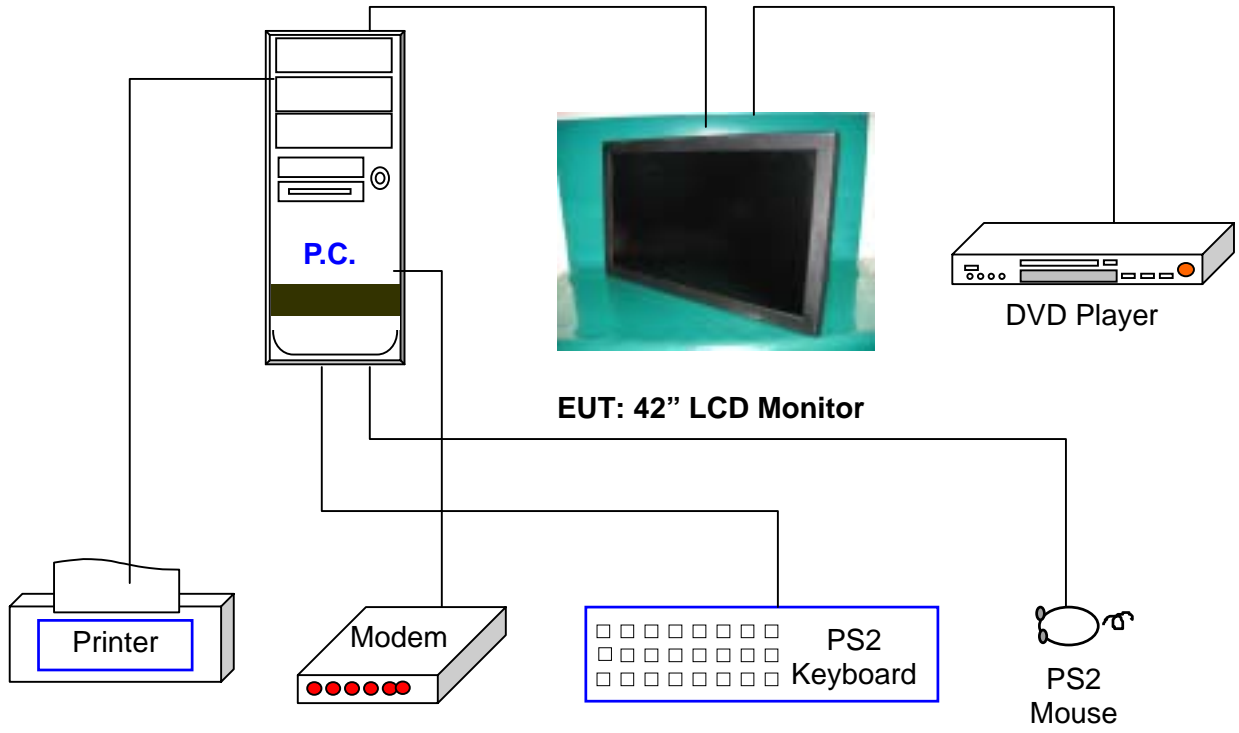
3.3 CONFIGURATION OF THE TESTED SYSTEM

The FCC IDs/Types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards, which have grants) are:

Device	No.	Configuration
DVD PLAYER	D01-009	Manufacturer : HIPLUS Model Number : DV-999 AC INPUT : 100V-240V, 15W, 50~60Hz Power Cord : Non-Shielded, Detachable, 2Pin, 1.8m
Printer	P01-030	Manufacturer : EPSON Model Number : LQ-300+ BSMI ID : R33126 Data Cable : Shielded, Detachable, 1.2m, Parallel Cable Power Cord : Non-Shielded, undetachable, 2m
Modem	M03-021	Manufacturer : ACEEX Model Number : 1414V Serial Number : 0046174 BSMI ID : N/A FCC ID : IFAXDM1414 Data Cable : T Type:RS232, Shielded, Detachable, 1.2m Power Cord : Non-Shielded, Detachable, 1.5m Line : Type:RJ11(4P2C), Detachable, 1.8m Phone : Type:RJ11(4P2C), Detachable, 1.8m
PS2 Mouse	M02-334	Manufacturer : Logitech Model Number : M-SBF83 BSMI ID : R41126 FCC ID : N/A Data Cable : Shielded, Undetachable, 1.5m
PS2 Keyboard	K01-099	Manufacturer : acer Model Number : T200-P BSMI ID : R41097 FCC ID : N/A Data Cable : Shielded, Undetachable, 1.8 m

Device	No.	Configuration
PC System	HP PC 07	Model Number : Pavilion a000 BSMI ID : R33001 Serial Number : TWL410000F C.P.U : AMD Athlon XP 2400+ DDR : infineon PC2700 256M *2 DDR333 FDD : MITSUMI M/N:D353M3D BSMI ID:D63119 H.D.D. : Manufacturer :SAMSUNG M/N:SV041IN 40G BSMI ID:D33475 DVD-ROM : Manufacturer :PHILIPS M/N:DR0M6016/4A BSMI ID:D43002 Mother Board : ASUS M/N:A7V8X-LA BSMI ID:D33005 S.P.S : HIPRO M/N:HP-D2537F3H Input:100-127V /6 A , 200-240V/ 4A 47~63 Hz Output:+5V/22A,-12V/0.8A,+12V/14A,+3.3V/18A +5VSB/2A BSMI ID:D33036

3.4 BLOCK DIAGRAM OF CONNECTIONS BETWEEN EUT AND SIMULATORS



3.5 TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003.

Radiated testing was performed at an antenna to EUT distance of 10 meters.

(For frequencies below 1000MHz)

3.6 TEST FACILITY

Ambient conditions in the laboratory:

Items	Requirement
Temperature (°C)	15-35
Humidity (%RH)	30-60
Barometric pressure (mbar)	860-1060
FCC SITE DESCRIPTION	Aug. 10, 1995 /Aug. 25, 1998 File on FCC Engineering Laboratory Federal Communication Commission 7435 Oakland Mills Road Columbia, MD 21046 Reference 31040/SIT1300F2
NVLAP LAB. CODE	200085-0 United States Department of commerce National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program Accreditation on NVLAP effective through Sep. 30,2006 For CISPR 22, FCC Method and AS/NZS CISPR 22 Measurement.
Chinese National Laboratory Accreditation Certificate R.O.C.	Recognized by the Council of Chinese National Laboratory Accreditation and confirmed to meet the requirements of ISO/IEC 17025 also has been registered for fifteen items, and meet the requirements of the Article 4 of Measures Governing the Recognition both Approval of Designated Laboratory for Commodities Inspection and has been registered for four items within the field of Electrical Testing. Registration No.: 1082 Registration on CNLA effective through April 30, 2006.

4. CONDUCTED EMISSION MEASUREMENT

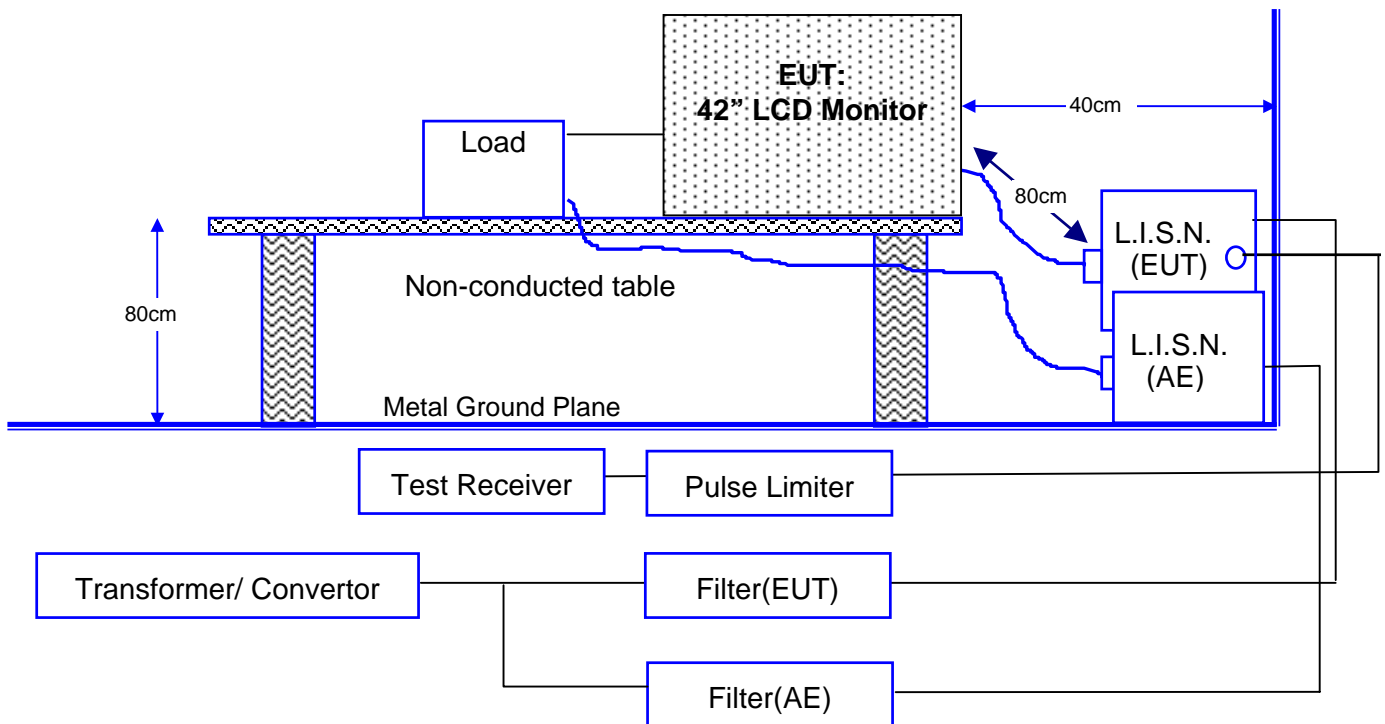
4.1 TEST EQUIPMENTS

The following test equipment are used during the conducted power line tests:

Item	Instrument	Manufacturer	Model	Serial No.	Last Cal. Date
1	Test Receiver	R & S	ESCS30	825022/003	06/08/06
2	LISN.(EUT)	ROLF HEINE	NNB-2/16Z	98091	12/06/05
3	L.I.S.N.(AE)	ROLF HEINE	NNB-2/16Z	99042	12/20/05
4	Pulse Limiter	R & S	ESH3-Z2	357.8810.52	08/03/06
5	RF CABLE	GTK	N/A	GTK-E-A154-01	11/29/05
6	50 Ohm Terminator	GTK	N/A	GTK-E-A130-01	10/07/05
7	Shielded Room	GTK	N/A	B5	N/A

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

4.2 BLOCK DIAGRAM OF TEST SETUP



Note: This is a representative setup diagram for Table-top EUT.

For Floor-standing EUT, the table will be removed with all others setup condition remain the same.

4.3 CONDUCTED EMISSION LIMIT

FCC Limit

Frequency	Maximum RF Line Voltage			
	Class A		Class B	
MHz	μV	dBμV	μV	dBμV
0.45 to 1.705	1000	60.0	250	48.0
1.705 to 30	3000	69.5	250	48.0

Remarks : 1. RF Line Voltage (dBμV) = 20 log RF Line Voltage (μV).
 2. In the Above Table, the tighter limit applies at the band edges.

CISPR Limit

Frequency	Maximum RF Line Voltage dB(μV)			
	Class A		Class B	
MHz	QUASI-PEAK	AVERAGE	QUASI-PEAK	AVERAGE
0.15 to 0.50	79	66	66 to 56	56 to 46
0.50 to 5.0	73	60	56	46
5.0 to 30	73	60	60	50

Remarks : In the Above Table, the tighter limit applies at the band edges.

4.4 EUT CONFIGURATION ON MEASUREMENT

The equipments that are listed 4.1 are installed on Conducted Power Line Test to meet the Commission requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 4.2, was placed on a non-conductive table whose total height equal to 80cm. Powered from one L.I.S.N. which signal output to receiver, and the other peripherals were powered from another L.I.S.N. which signal output was terminated by 50Ω.

4.5 CONDUCTED EMISSION DATA

The measurement range of conducted emission, which is from **0.15 MHz to 30 MHz**, was investigated. All readings are quasi-peak and average values with a resolution Bandwidth of 9 KHz. The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range for all the test modes. Then the worst modes were reported the following data pages.

4.6 OPERATING CONDITIONS OF THE EUT

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below:

1. Setup the EUT and simulators as shown on 4.2.
2. Turn on the power of all equipments.
3. Boot the P.C. from Hard Disk and setup the video to windows XP OS, active all devices.
4. Adjust to appropriate video resolution.
5. Run "EMCTEST.EXE" & "Play Music" test program under Windows XP OS.
6. P.C. sent "H" pattern to monitor, make the "H" pattern full in the screen.
7. P.C. sent "H" pattern to parallel and serial port.
8. Repeat above steps.

4.7 CONDUCTED EMISSION MEASUREMENT RESULTS

Date of Test	August 09, 2006	Temperature	24
EUT	42" LCD Monitor	Humidity	53 %
Test Mode	Mode 1	Display Pattern	H Pattern

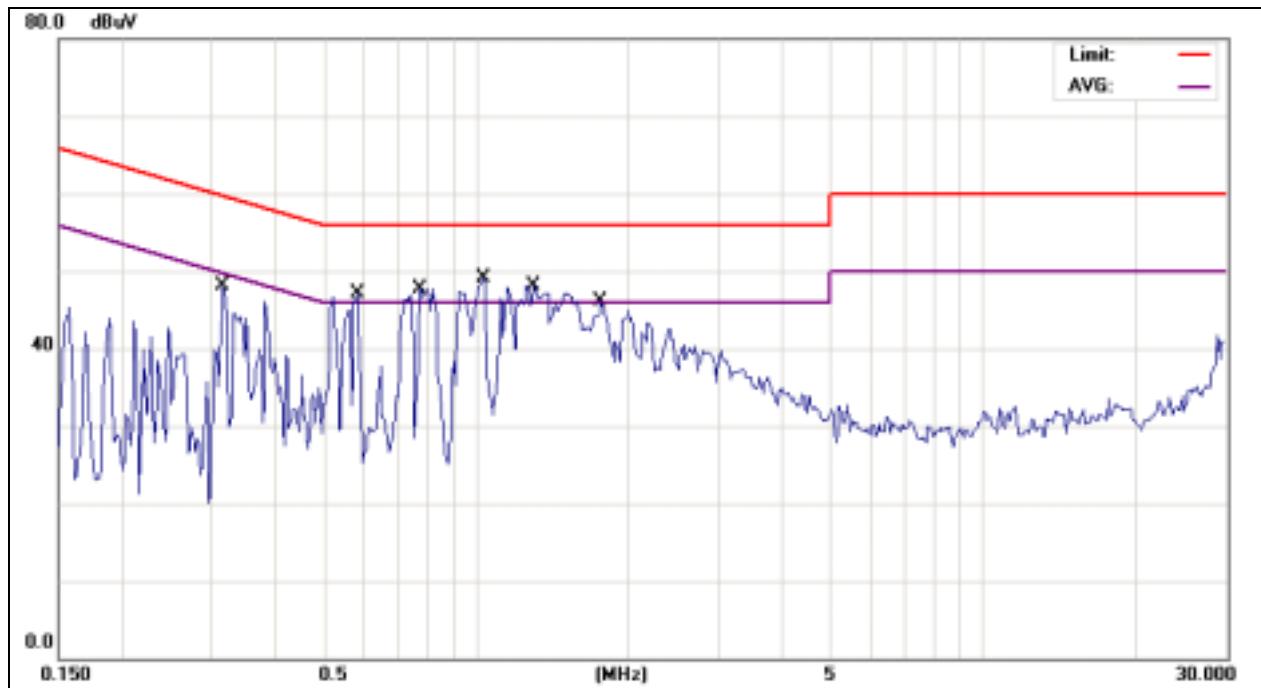
Line

No.	Frequency MHz	Reading Level dBμV	Factor dB	Measurement dBμV	Limit dBμV	Over Limit dB	Detector
1	0.3181	35.20	9.97	45.17	59.76	-14.59	QP
2	0.3181	25.95	9.97	35.92	49.76	-13.84	AVG
3	0.5833	37.24	10.05	47.29	56.00	-8.71	QP
4	0.5833	27.17	10.05	37.22	46.00	-8.78	AVG
5	0.7783	35.04	10.06	45.10	56.00	-10.90	QP
6	0.7783	26.07	10.06	36.13	46.00	-9.87	AVG
7	1.0349	38.62	10.07	48.69	56.00	-7.31	QP
8	1.0349	27.41	10.07	37.48	46.00	-8.52	AVG
9	1.3052	35.04	10.08	45.12	56.00	-10.88	QP
10	1.3052	15.18	10.08	25.26	46.00	-20.74	AVG
11	1.7718	35.22	10.09	45.31	56.00	-10.69	QP
12	1.7718	21.33	10.09	31.42	46.00	-14.58	AVG

Remarks :

- 1 All readings are Quasi-peak and Average values.
- 2 " " means that this data is the worse case emission level.

Line



Date of Test	August 09, 2006	Temperature	24
EUT	42" LCD Monitor	Humidity	53 %
Test Mode	Mode 1	Display Pattern	H Pattern

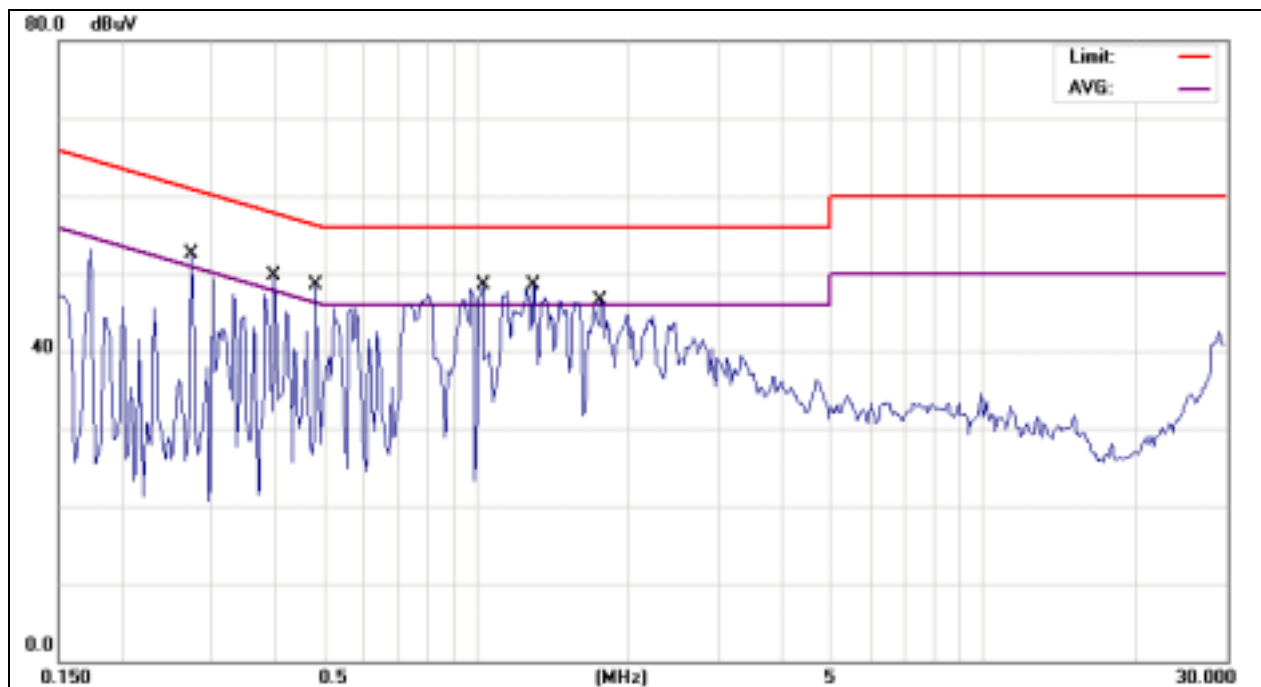
Neutral

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV	Limit dBµV	Over Limit dB	Detector
1	0.2706	27.66	9.95	37.61	61.10	-23.49	QP
2	0.2706	11.72	9.95	21.67	51.10	-29.43	AVG
3	0.4002	29.98	10.00	39.98	57.85	-17.87	QP
4	0.4002	15.43	10.00	25.43	47.85	-22.42	AVG
5	0.4814	28.06	10.03	38.09	56.31	-18.22	QP
6	0.4814	8.65	10.03	18.68	46.31	-27.63	AVG
7	1.0361	38.34	10.07	48.41	56.00	-7.59	QP
8	1.0361	27.41	10.07	37.48	46.00	-8.52	AVG
9	1.3001	37.08	10.08	47.16	56.00	-8.84	QP
10	1.3001	20.22	10.08	30.30	46.00	-15.70	AVG
11	1.7708	35.26	10.09	45.35	56.00	-10.65	QP
12	1.7708	21.82	10.09	31.91	46.00	-14.09	AVG

Remarks :

- 1 All readings are Quasi-peak and Average values.
- 2 " " means that this data is the worse case emission level.

Neutral



5. RADIATED EMISSION MEASUREMENT

5.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:

Radiated emission measurement was performed at: Site #1 Site #2 Site #3 Site #4

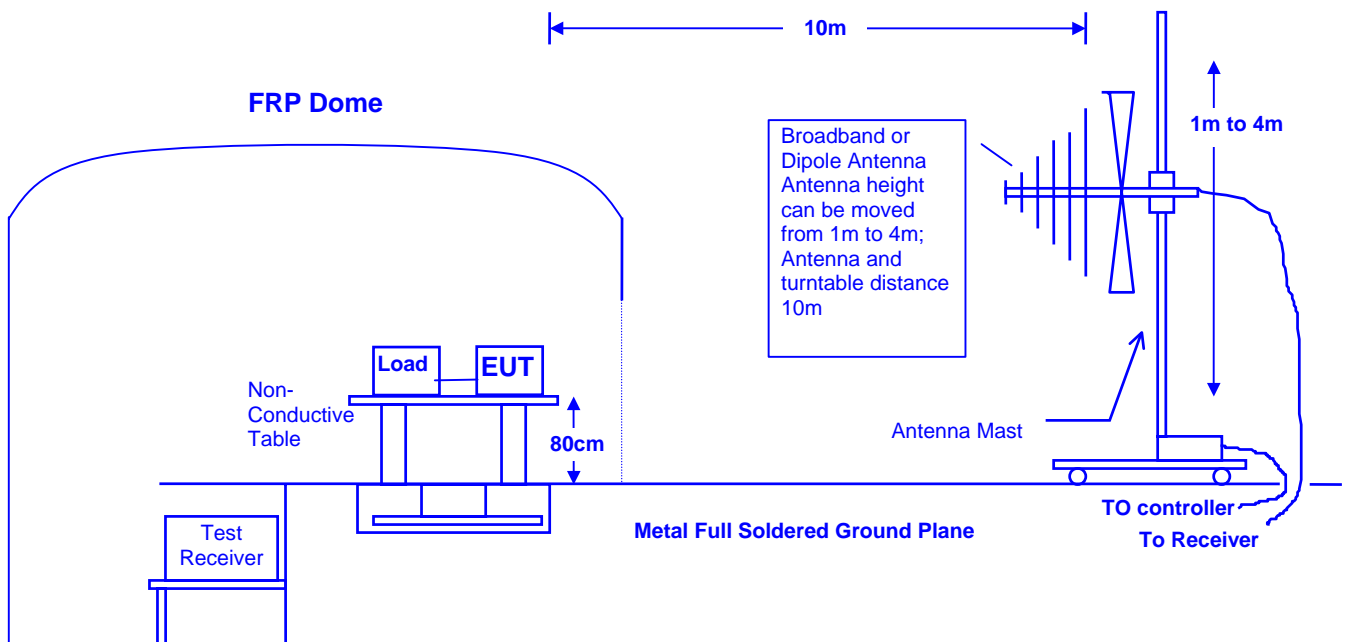
Item	Instrument	Manufacturer	Model	Serial No.	Last Cal. Date
1	TEST RECEIVER	R & S	ESCS30	825022/003	06/08/06
2	SPECTRUM	HP	8594E	3911A07933	12/12/05
3	PRE-AMPLIFIER	HP	8447D	2944A08610	09/13/05
4	BILOG Antenna	SCHAFFNER	CBL6112B	2833	11/26/05
5	RF Cable	GTK	N/A	GTK-E-A316-01	11/09/05
6	Open Site	GTK	N/A	A2	11/24/05

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

5.2 OPEN TEST SITE SETUP DIAGRAM

Note: This is a reprehensive setup diagram for Table-top EUT.

For Floor-standing EUT, the table will be removed with all others setup condition remain the same.



5.3 RADIATED EMISSION LIMIT

FCC Class B Limit at 3m

Frequency	Distance	Field Strength	
MHz	Meter	$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0

Note: The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.

(Refer 47CFR Ch. 1 (10-1-98 Edition §15.35(b)))

FCC Class A Limit at 10m

Frequency	Distance	Field Strength	
MHz	Meter	$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 to 88	10	90	39.0
88 to 216	10	150	43.5
216 to 960	10	210	46.4
Above 960	10	300	49.5

Remark :1. The tighter limit shall apply at the edge between two frequency bands.

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

CISPR Class B Limit at 10m

Frequency	Distance	Field Strength
MHz	Meter	$\text{dB}(\mu\text{V/m})$
30 to 230	10	30
230 to 1000	10	37

Remark :1. The tighter limit shall apply at the edge between two frequency bands.

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

5.4 EUT CONFIGURATION

The equipment which is listed 5.1 are installed on Radiated Emission Test to meet the Commission requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 5.2, was placed on a non-conductive table whose total height equaled 80 cm. This table can be rotated 360 degree. The measurement antenna was mounted to a non-conductive mast capable of moving the antenna vertically. Antenna height was varied from 1 meter to 4 meters and the system under test was rotated from 0 degree through 360 degrees relative to the antenna position and polarization (Horizontal and Vertical). Also the I/O cable position was investigated to find the maximum emission condition.

5.5 OPERATING CONDITION OF EUT

Same as section 4.6.

5.6 RADIATED EMISSION DATA

The measurement range of radiated emission, which is from **30 MHz to 1 GHz**, was investigated. All readings are quasi-peak values with a resolution Bandwidth of 120 KHz. The initial step in collecting radiated emission data is a spectrum analyzer peak scans of the measurement range for all the test modes and then use test receiver for final measurement. Then the worst modes were reported the following data pages.

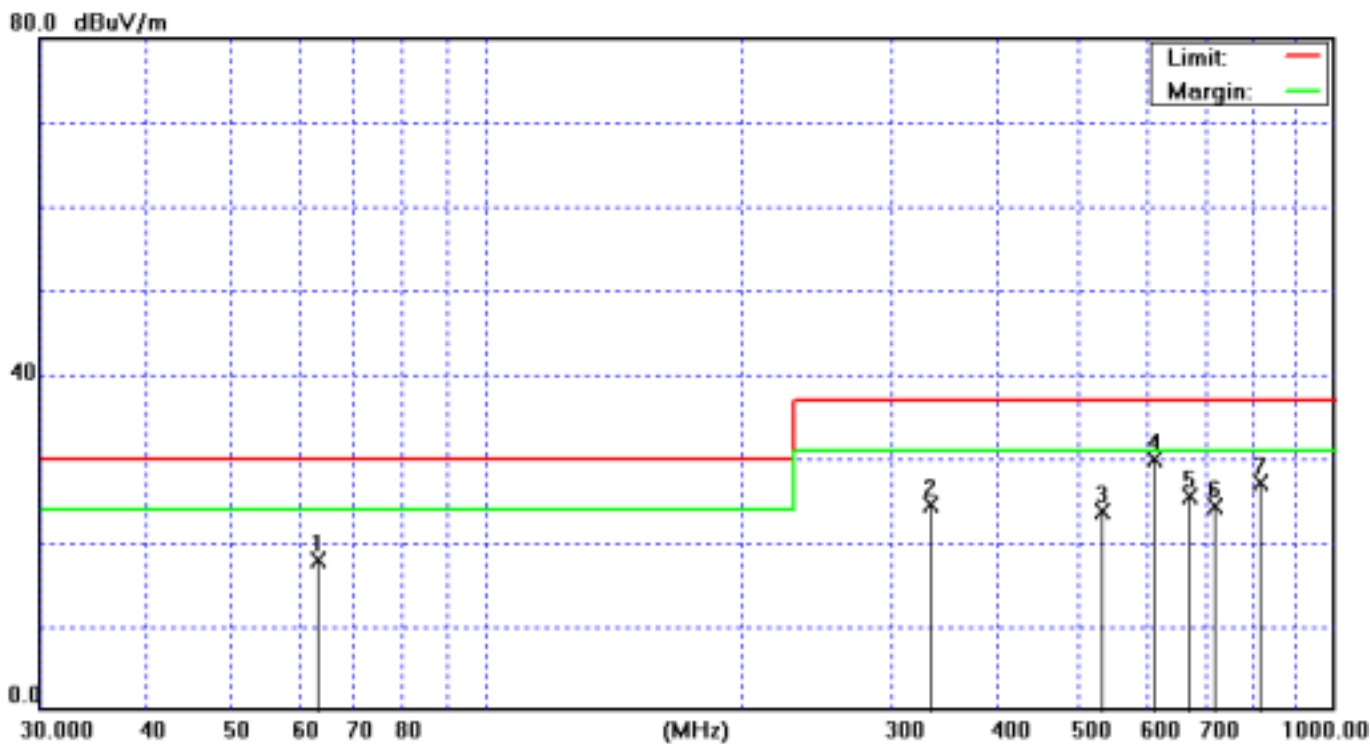
5.7 RADIATED EMISSIONS MEASUREMENT RESULTS

Date of Test	August 09, 2006	Temperature	26 deg/C
EUT	42" LCD Monitor	Humidity	55 %RH
Working Cond.	Mode 1	Display Pattern	H Pattern
Antenna distance	10m at Horizontal	Frequency Range	30-1000MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	63.4900	36.85	-18.89	17.96	30.00	-12.04	QP
2	334.2050	32.93	-8.35	24.58	37.00	-12.42	QP
3	528.0808	27.83	-4.03	23.80	37.00	-13.20	QP
4	607.5200	32.61	-2.65	29.96	37.00	-7.04	QP
5	672.1028	27.64	-2.06	25.58	37.00	-11.42	QP
6	720.1098	25.86	-1.54	24.32	37.00	-12.68	QP
7	816.1225	27.45	-0.25	27.20	37.00	-9.80	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement= Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. The " " means this data is worst-case Measurement level.

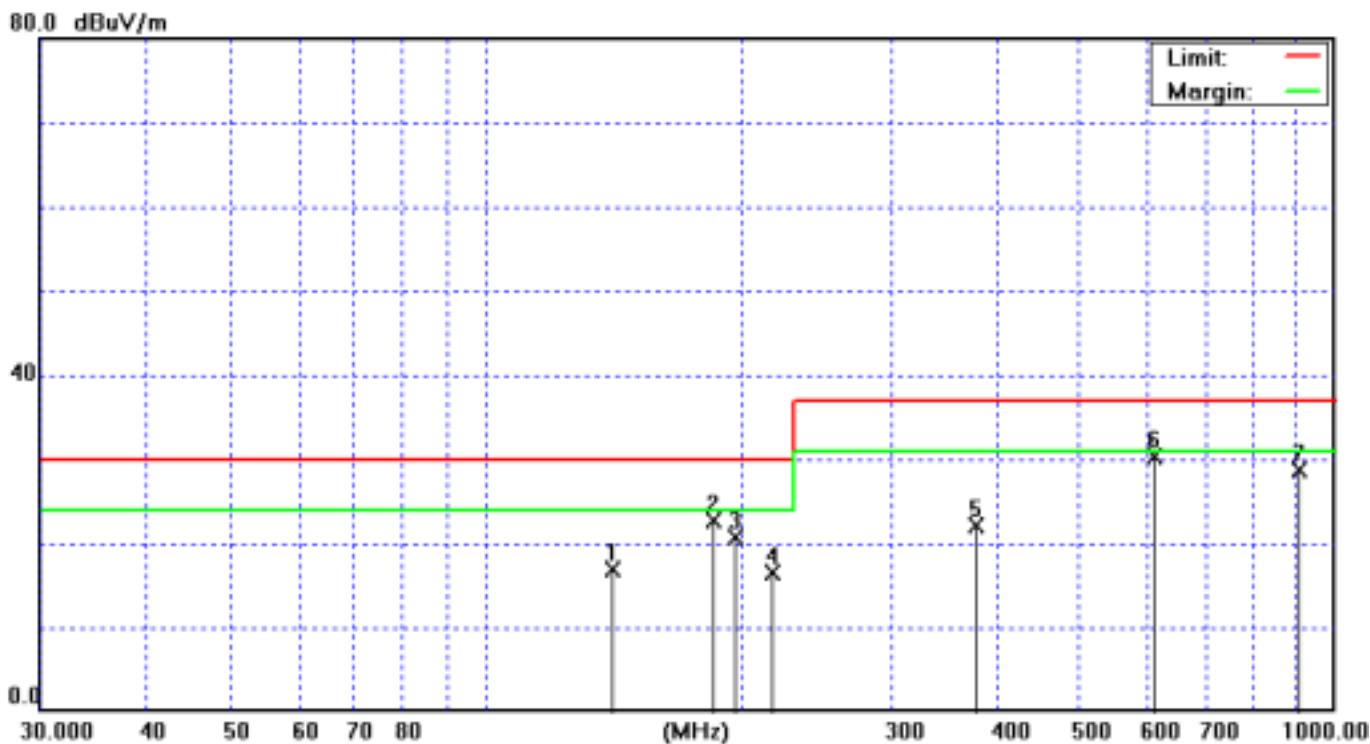


Date of Test	August 09, 2006	Temperature	26 deg/C
EUT	42" LCD Monitor	Humidity	55 %RH
Working Cond.	Mode 1	Display Pattern	H Pattern
Antenna distance	10m at Vertical	Frequency Range	30-1000MHz

No.	Frequency MHz	Reading Level dBµV	Factor dB	Measurement dBµV/m	Limit dBµV/m	Over Limit dB	Detector
1	141.5313	30.76	-13.88	16.88	30.00	-13.12	QP
2	184.2495	37.11	-14.46	22.65	30.00	-7.35	QP
3	196.6215	35.06	-14.44	20.62	30.00	-9.38	QP
4	215.8713	29.67	-13.18	16.49	30.00	-13.51	QP
5	375.0045	29.53	-7.44	22.09	37.00	-14.91	QP
6	607.5213	33.05	-2.65	30.40	37.00	-6.60	QP
7	900.7102	27.58	1.04	28.62	37.00	-8.38	QP

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Measurement= Reading + Factor (Could have ±0.01 tolerance due to computer automatically round off calculation).
3. Over Limit (Margin Value)=Measurement level-Limit value.
4. The " " means this data is worst-case Measurement level.



6. PHOTOGRAPHS FOR TEST

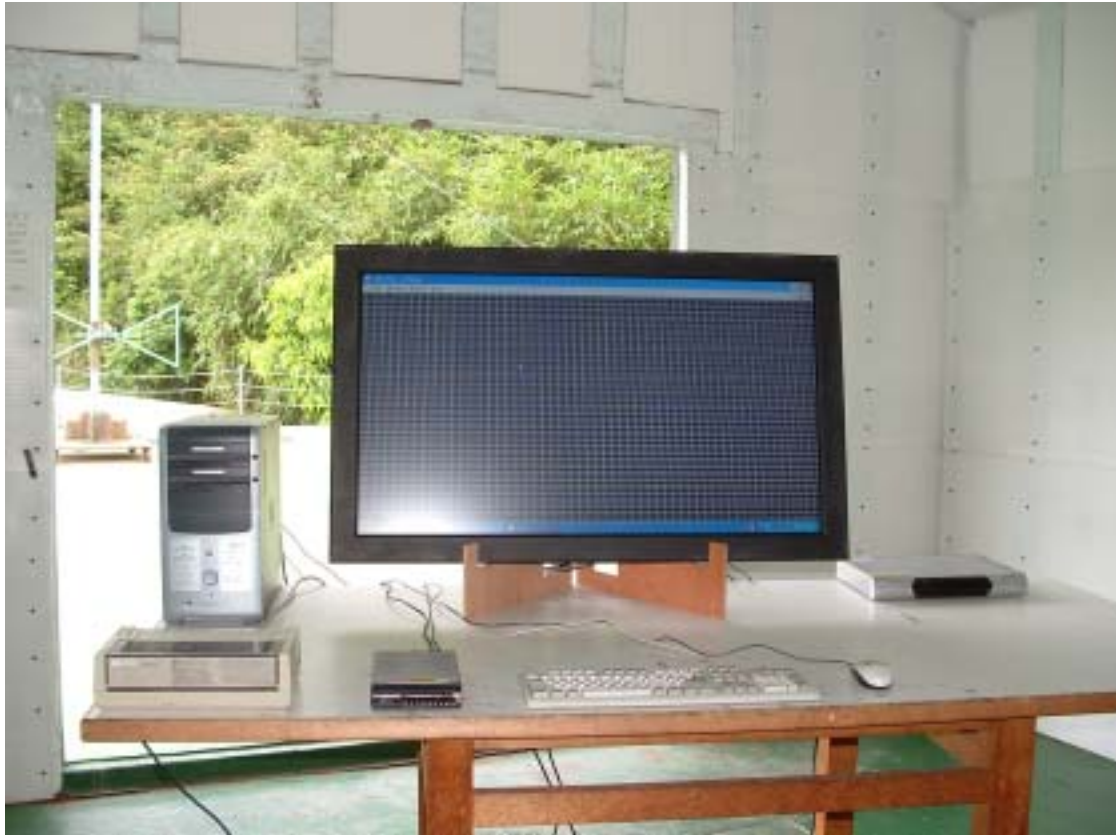
6.1 TEST PHOTOGRAPHS FOR CONDUCTION

Mode 1



6.2 TEST PHOTOGRAPHS FOR RADIATED

Mode 1



7. PHOTOGRAPHS FOR PRODUCT

1. Front View Of 42" LCD Monitor (EUT)
2. Back View Of 42" LCD Monitor (EUT)



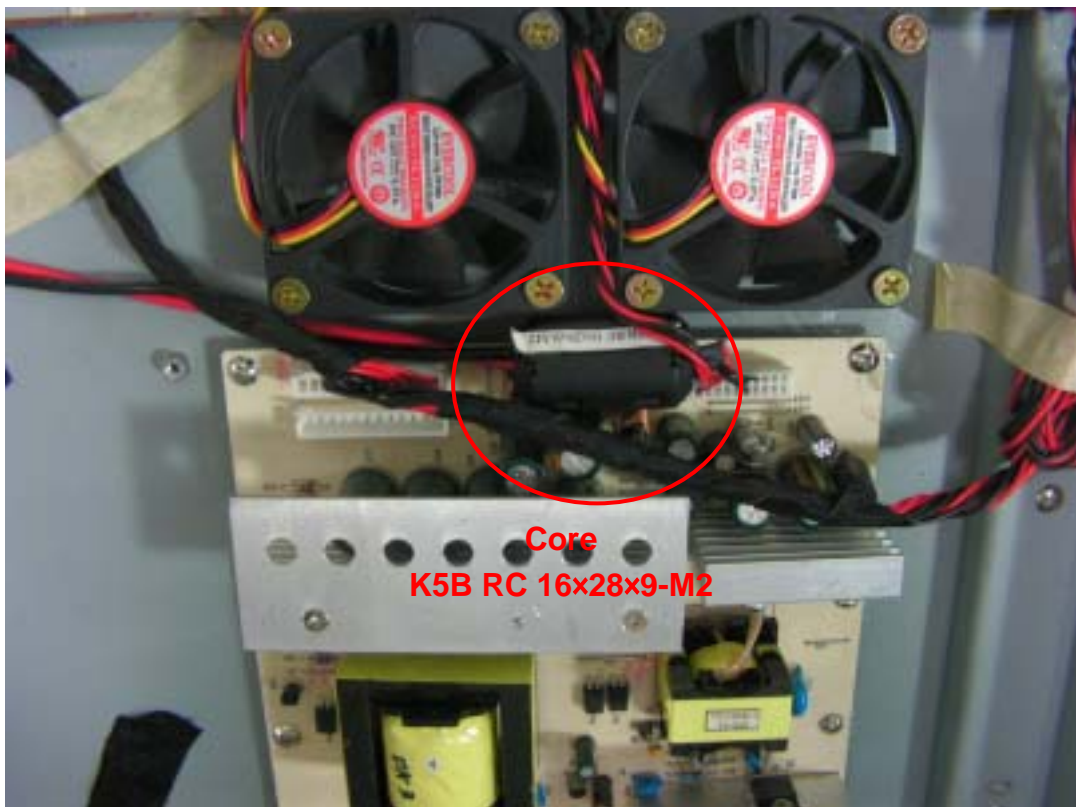
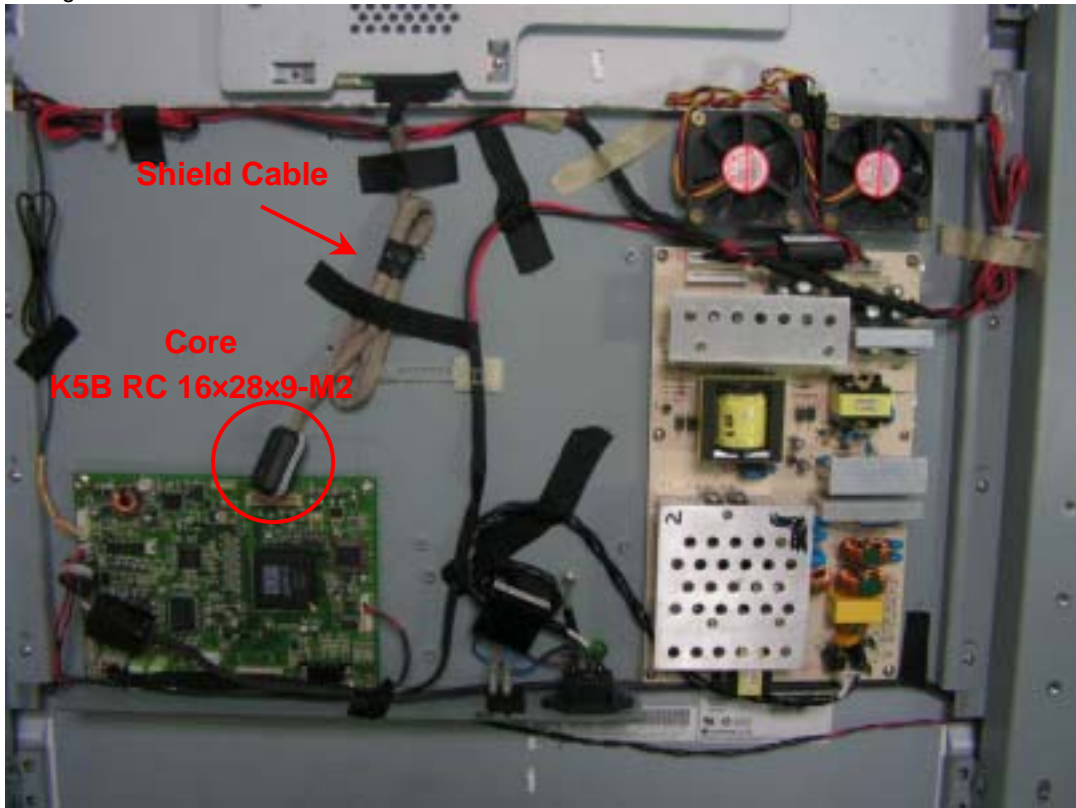
3. IO Port.



8. EMI/EMS REDUCTION METHOD DURING COMPLIANCE TESTING

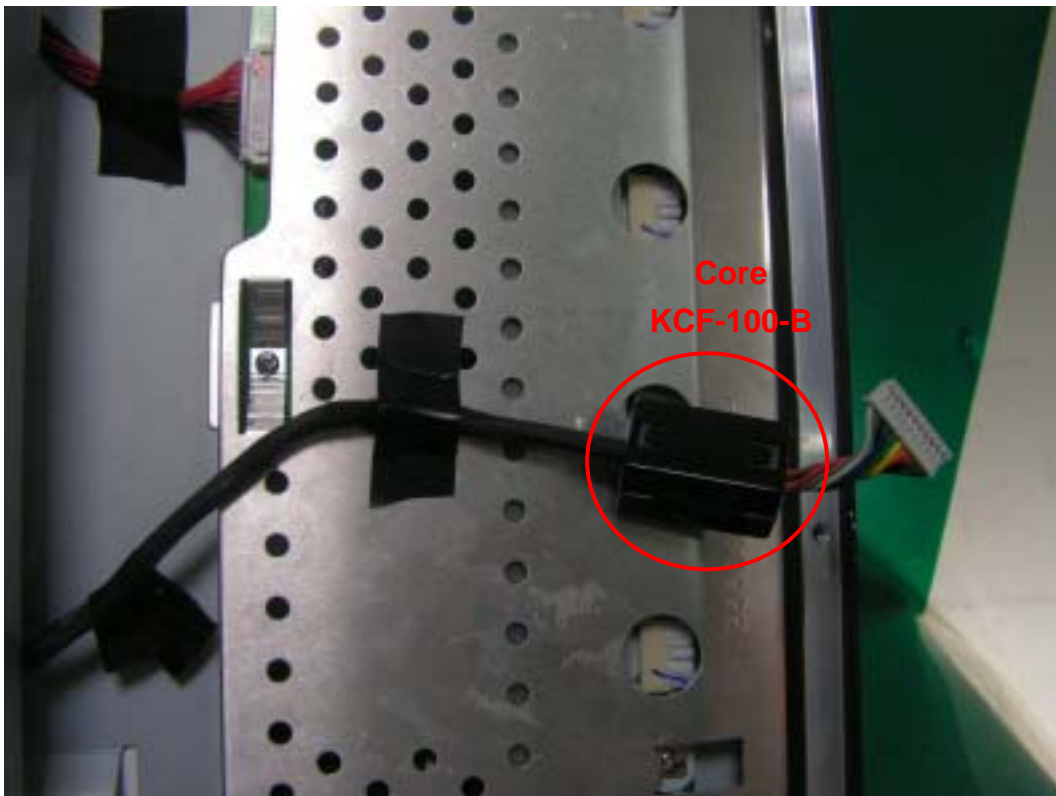
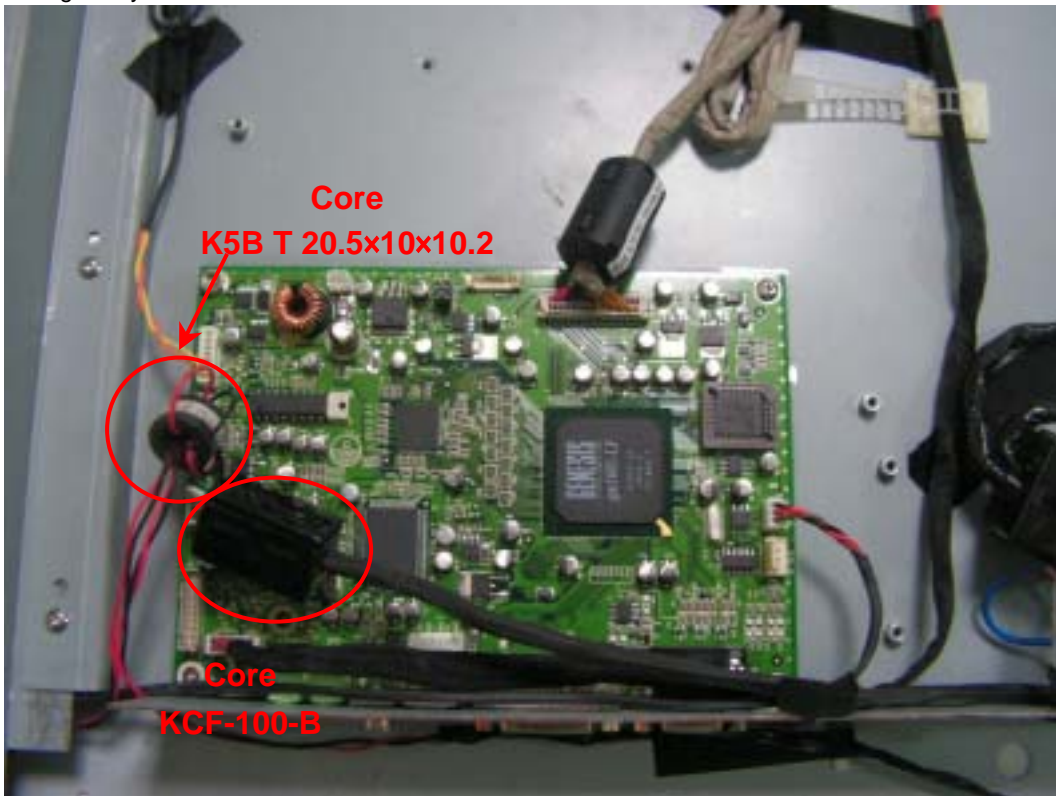
Debug-1:LVDS Cable with Shield & Core.

Debug-2:M/B Power cable with Core.



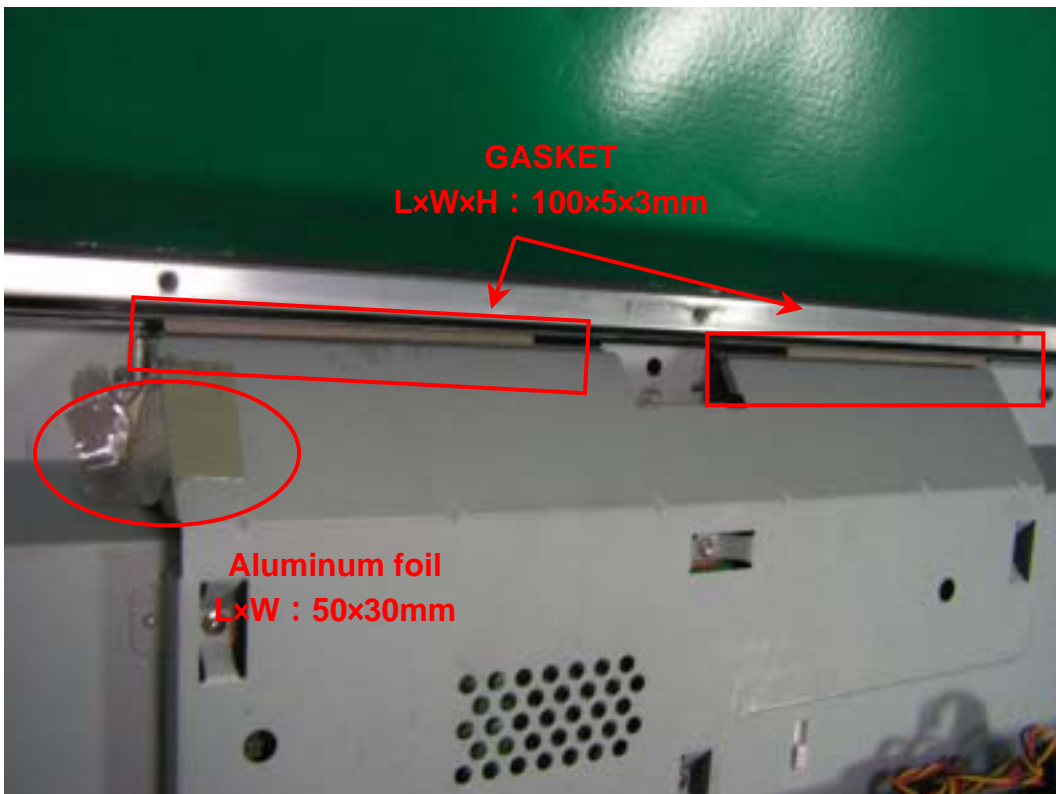
Debug-3:Key Pad Cable with Core(M/B Side) ; Speaker Cable with Core.

Debug-4:Key Pad Cable with Core.



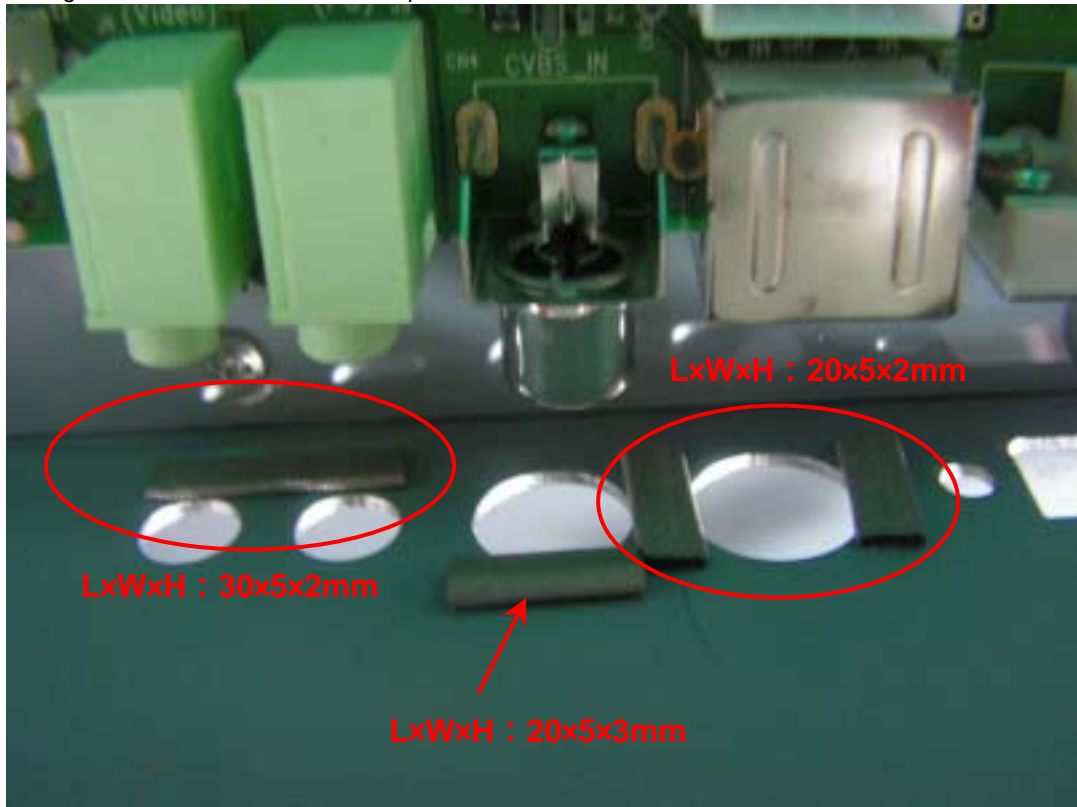
Debug-5:AC Power Cable with Core.

Debug-6:Add Gasket & Aluminum foil Between T-Com Metal and Metal chase ; .



Debug-7:Add Gasket Between Connector and Metal chase.

Debug-8: Metal chase add Gasketx16 piece.



Appendix A

Circuit (Block) Diagram

(Shall be added by Applicant)

Appendix B

User Manual

(Shall be added by Applicant)