Test Report
Application for Certification
On Behalf Of

First International Computer Inc.

Notebook P.C.

Model Name : S220

Prepared for :

First International Computer Inc.
6F.,Formosa Plastics Rear Bldg 201-24,Tun-Hwa N. Road,
Taipei, Taiwan, R.O.C.

Report By : Global EMC Standard Tech. Corp.
No.3 Pau-Tou-Tsuo Valley, Chia-Pau
Tsuen, Lin Kou Hsiang, Taipei County,
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1. STATEMENT OF RESULTS:

Applicant : First International Computer Inc.

EUT Description	: Notebook P.C.
Model Name	: S220
Serial Number	: N/A
FCC ID	: EUNS220
Tested Power Supply	: 110V/60Hz

MEASUREMENT PROCEDURES USED:

☑ **CFR 47, Part 15** Radio Frequency Device Subpart B Unintentional Radiators ClassB: 1996

☑ **CISPR 22** Limits and methods of measurement of radio disturbance Characteristics of information technology equipment: 1993

☑ **ANSI C63.4** Methods of Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9kHz To 40GHz. 1992

THE MEASUREMENT SHOWN IN THE ATTACHMENT WERE 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 : July 28,2000
Final Test Date : Aug. 17,2000

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.

Documented By :	Administrative Review By:
Rita Tsai / adm. Dept. Technical Report Author	Joan Chein / adm. Dept. Supervisor
Technical Review By:	**Approved By :**
Allen Chen / eng. Dept. Engineer	Terry Chung / Manager

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. General Information

2.1 Production Description

Description	:	Notebook P.C.
Model Name	:	S220
Serial Number	:	N/A
FCC ID	:	EUNS220
Applicant	:	First International Computer Inc.
Address	:	6F.,Formosa Plastics Rear Bldg 201-24,Tun-Hwa N. Road, Taipei, Taiwan, R.O.C.
Manufacturer	:	First International Computer Inc.
Address	:	122, Nan-Lin Rd., Taishan Hsiang, 243 , Taipei, Taiwan, R.O.C.
Power Supply	:	100-240Vac, 50-60Hz, 1.5A (Mode 1) 100-240Vac, 50-60Hz, 1.2A (Mode 2)
Power Cord	:	Non-Shielded, Detachable, 1.5m, 3Pin (Mode 1) Non-Shielded, Detachable, 1.5m, 2Pin (Mode 2)

2.2 Results:

The EUT(s) met the FCC Part 15 / CISPR 22 Class B requirements.
This Class B digital apparatus complies with Canadian ICES-003.
The Worst Emission data was found as following,

	Worst Emission Frequency (MHz)	Emission Level	Limit	Height of Antenna, Angel of Turntable
Conduction (Mode 2)	0.16533	57.1 dBμV Line 1, Q.P.	65.2 dBμV	N/A
Radiation (Mode 2)	397.570	34.42 [dB(μV/m)] Vertical	37.0 [dB(μV/m)]	1M 106°

Test Engineer By: Elli Chang、Kent Chang

☐ The EUT did not require modification during testing to achieve compliance.

☒ The EUT required modification during testing in order to achieve compliance. Please refer to attached section of this report for details.

Test Mode :

	Mode 1	Mode 2
CPU	Intel Pentium III 500MHz clock:100MHz	Intel Celeron 500MHz clock:66MHz
12.1" TFT Panel	ADI, M/N:AA121XF01 (XGA)	ADI, M/N:AA121SJ23 (SVGA)
H.D.D.	Hitachi, M/N:DK23AA-60	Fujitsu, M/N:MHK2060AT
FDD/CD-ROM COMBO	Addonic, M/N:CF-2405	
FDD/DVD-ROM COMBO		Addonic, M/N:DF-2205
3-in-1 Port Bar	Addonic, M/N:S220-PB	Addonic, M/N:S220-PB
Li-Ion Battery	SMP/GS, M/N:S220-A	SMP/GS, M/N:S220-A
External Li-Ion Battery	SMP/GS, M/N:S220-B	SMP/GS, M/N:S220-B
Modem Board	Askey, M/N:1456VQL19S	
Modem Jack	FIC, M/N:80-319W235-1	
LAN Board		D-Link, M/N:FICNS-1
LAN Jack		FIC, M/N:FICNS-2
Glide Pad	Synaptics, M/N:TM-41PDC-220-2	Synaptics, M/N:TM-41PDC-220-2
Main Board	FIC, M/N:S220MB	FIC, M/N:S220MB
DC/DC/Charger Board	FIC, M/N:50-70475-04	FIC, M/N:50-70475-04
Inverter	AMBIT, M/N:T901024.00	Sumida, M/N:IV14145/T
Adapter	LI-Shin, M/N:LSE-9802A1660, 3Pin	Delta, M/N:ADP-45LH, 2pin
Resolution	1024x768 H-Sync:48KHz, V-Sync:60Hz	800x600 H-Sync:38KHz, V-Sync:60Hz

Note:

1. The EUT is Notebook P.C. used Intel Pentium III 、Celeron CPU, which speed can up to 500MHz and All the components listed at section 2.3.
2. The data shown in this test report reflects the worst-case data for each operation mode.

2.3 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:

No.	CATEGORY	MODEL NO.	VENDOR
1.	12.1" TFT	AA121SJ23 / LVDS/ SVGA 800x600	ADI 12.1" / SVGA
2.	12.1" TFT	AA121XF01 / LVDS / XGA 1024x768	ADI 12.1" / XGA
3.	CPU	Pentium III 500MHz	Intel
4.	CPU	Celeron 500MHz	Intel
5.	H.D.D. (6GB)	MHK2060AT	Fujitsu
6.	H.D.D. (6GB)	DK23AA-60	Hitachi
7.	H.D.D. (10GB)	DCXA-210000	IBM
8.	H.D.D. (12GB)	MHK2120AT	Fujitsu
9.	H.D.D. (12GB)	DK23AA-12	Hitachi
10.	FDD/CD-ROM COMBO	S220-CF / CF-2405 / MKE, Mitsumi	Addonic
11.	FDD/DVD COMBO	S220-DF / DF-2205 / MKE, Mitsumi	Addonic
12.	3-in-1 Port Bar	S220-PB	Addonic
13.	Li-Ion Battery	S220-A (1700mAh)	SMP/GS
14.	External Li-Ion Battery	S220-B (3200mAh)	SMP/GS
15.	AC Adapter (2pin)	ADP-45LH (45watt)	Delta
16.	AC Adapter (3pin)	LSE-9802A1660 (60watt)	LI-Shin
17.	Modem/Bd, Jack/Bd, wire	1456VQL19S	Askey
18.	LAN/Bd,Jack/Bd,wire	FIC-NS	D-Link
19.	Glide Pad	TM-41PDC-220-2	Synaptics

☒ **Far End Network Server (Only Mode 2)**

Model Number	: Targa PC-2
Motherboard	: Asus,P/I-P55T2P4
Serial Number	: AC644101338
Manufacturer	: ACTEBIS
Floppy Disk Driver	: Manufacturer: Panasonic
3.5" #1	Model: JU-257A606P
Hard Disk :	Manufacturer: Seagate, M/N:ST31621A
CD-ROM	: Sony, M/N:CDU311, S/N:5004428
Disk Ctrl Card	: On Board
I/O Card	: On Board
Graphic Card	: Diamond, M/N:Staelth 64Video 2MB Dram
S. P. S.	: Manufacturer: Enhance, M/NI:V520
Power Cord	: Non-Shielded, Detachable, 1.5m

☒ **HUB H01-001 (Only Mode 2)**

Model Number	: DE-816TP (10BASE-T Ethernet Hub)
Serial Number	: AN68900072
FCC ID	: KA2OPCH16
Manufacturer	: D-Link.
Data Cable	: Non-Shielded, Detachable, 12 m
Power Cord	: Non-Shielded, Detachable, 1.5m

☒ **Electronic Private Automatic Branch Exchange O01-003 (Only Mode 1)**

Model Number	: EASYSWITCH PX-4
Serial Number	: 95030015
FCC ID	: N/A
Manufacturer	: VIDAR CO., LTD.
Power Cord	: Non-Shielded, Detachable, 1.5m
Data Cable	: Non-Shielded, Detachable, 1.5m

☒ **Monitor M01-009**

Model Number	: SyncMaster 700p
Serial Number	: H3MH903253H
Manufacturer	: SAMSUNG
FCC ID	: A3LCGH760
BSMI ID	: 3872A230
Data Cable	: Shielded, Undetachable, 1.5m
Power Cord	: Shielded, Detachable, 1.5m

☒ **Keyboard K01-034**

Model Number	: KB-5923
Serial Number	: 8060032205
FCC ID	: E8HKB-5923
Manufacturer	: TATUNG
BSMI ID	: 3862A177
Data Cable	: Sheiled, Undetachable, 2.0 m

☒ **Printer P01-009**

Model Number	: C2642A(DJ-400)
Serial Number	: MY7951C4RW
FCC ID	: B94C2642X
Manufacturer	: HP
Adaptor,Power Cord	: Non-Shielded, Detachable, 1.9m
Data Cable	: Shielded, Detachable, 1.8m

☒ **Modem M03-007**

Model Number	: 1414
Serial Number	: 960011394
FCC ID	: IFAXDM1414
Manufacturer	: ACEEX
Power Cord	: Non-Shielded, Detachable, 1.5m
Data Cable	: Shielded, Detachable, 1.2m

☒ **Mouse #1 M02-058 (USB)**

Model Number	: M-BB48
Serial Number	: LZE93050386
Mnufacturer	: Logitech Inc..
Data Cable	: Shielded, Undetachable, 1.5m

☒ **Mouse #2 M02-059 (USB)**

Model Number : M-BB48
Serial Number : LZE93050322
Manufacturer : Logitech Inc..
Data Cable : Shielded, Undetachable, 1.5m

☒ **Headset & Microphone E01-026**

Model Number : SX-M1
Serial Number : N/A
Manufacturer : TOKYO
Power Cord : N/A
Data Cable : Non-Shielded, Undetachable, 1.8 m

2.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992.

Radiated testing was performed at an antenna to EUT distance of __10_meters.
(For frequencies below 1000MHz)

Radiated testing was performed at an antenna to EUT distance of __3_meters.
(For frequencies above 1000MHz)

2.5 Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	24-27
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

FCC Site Description : Aug. 10, 1995 /Aug. 25, 1998 File on
Federal Communication Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2

NVLAP Lab Code : 200085-0
United Stated Department of commerce
National Institute of Standards and Technology
National Voluntary Laboratory Accreditation Program
Accreditation on NVLAP effective through Sep. 30, 2000
For CISPR22, FCC Method and AS/NZS 3548 Measurement.

Name of firm : Global EMC Standard Tech. Corp.
Site location : No. 3 Pau-Tou Valley, Chia-Pau Tsuen, Lin Kou Hsiang, Taipei County, Taiwan, R.O.C.

3. Conduction Emission Test

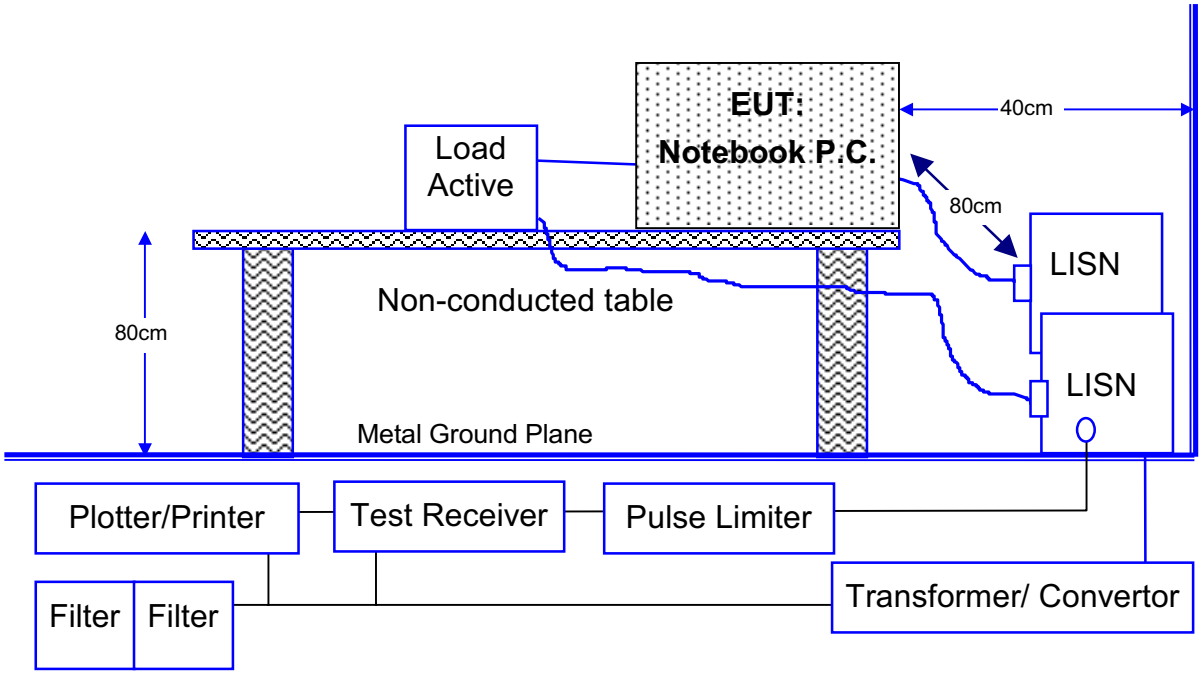
3.1 Test Equipments

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

Item	Instrument	Manufacturer	Type / Serial No.	Last Cal. Date
1	Test Receiver	Rohde & Schwarz	ESHS 30 / 828109/010	Jan. 21, 2000
2	L.I.S.N.	Kyoritsu	KNW-407	Nov. 05, 1999
3	L.I.S.N.	Schwarzbeck	NNLK 8121/8121358	May. 10, 2000
4	Pulse Limiter	Rohde & Schwarz	ESH3-Z2/357.8810.52	Sep. 05, 1999
5	RF CABLE	GesTek	GTK-RF-C07	Sep. 05, 1999
6	50 Ohm Terminator	GesTek	GTK-RF-T01	Nov. 05, 1999
7	Shielded Room	GesTek	GTK-RF-S04	Sep. 05, 1999

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

3.2 Block Diagram of Test Setup



Note: This is a representive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.

3.3 Conducted Emission Limit

☐FCC Limit

Frequency	Maximum RF Line Voltage			
	Class A		Class B	
MHz	μV	dBμV	μV	dBμV
0.45 - 1.705	1000	60.0	250	48.0
1.705 - 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 - 0.50	79	66	66-56	56-46
0.50-5.0	73	60	56	46
5.0 - 30	73	60	60	50

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

3.4 EUT Configuration on Measurement

The equipments which is listed 3.2 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 3.2, 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 was powered from another L.I.S.N. which signal output was terminated by 50Ω.

3.5 EUT Exercise Software

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 3.2.
2. Turn on the power of all equipments.
3. Boot the P.C. from Hard Disk and setup the video to windows 98, active all devices.
4. Connected the modem and dial repeatedly. (Mode 1)
5. The EUT exchange the information with the network via and telephone exchange. (Mode 1)
6. Connect the Far End Network Server and run test program “test.bat “. (Mode 2)
7. The EUT exchange the information with the GesTek server via HUB. (Mode 2)
8. Run “EMITEST.EXE” test program.
9. Run “CD-Player” program under Windows OS. (Mode 1)
10. DVD-ROM playing film. (Mode 2)
11. P.C. sent “H” pattern to monitor, make the “H” pattern full in the screen.
12. P.C. sent “H” pattern to parallel and serial port.
13. Active other internal devices such as network function.
14. Repeat above steps.

3.6 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.

The total uncertainty for this test is as follows: • Uncertainty in the field strength measured: < ± 2.0 dB The uncertainty is calculated in accordance with NAMAS document NIS 81, and is given as 2 standard deviations.

CONDUCTED EMISSION DATA

Date of Test	: August 08, 2000	Temperature	: 27.3 ℃
EUT	: Notebook P.C.	Humidity	: 45 %
Test Mode	: Mode 1	Display Pattern	: H Pattern

FREQUENCY	READING LEVEL dBuV				LIMIT	
MHz	LINE1 QP	LINE1 AV	LINE2 QP	LINE2 AV	QP	AV
0.17555	41.8	*	39.4	*	64.7	54.7
0.23687	37.1	*	34.4	*	62.2	52.2
0.35440	33.3	*	32.3	*	58.8	48.8
1.47709	32.5	*	30.1	*	56.0	46.0
2.12995	32.2	*	31.2	*	56.0	46.0
** 19.02890	43.3	*	42.6	*	60.0	50.0

Remarks :

1. All readings are Quasi-peak.
2. " * " means that the quasi-peak reading level is lower than the average limits, it is not necessary to measure the average level.
3. " ** " means that this data is the worse case emission level.
4. Final measurement = (Receiver reading) + (Correction factor if available)

Attached 2 individual pages of peak scan curve data sheets.

CONDUCTED EMISSION DATA

Date of Test	: August 08, 2000	Temperature	: 28 ℃
EUT	: Notebook P.C.	Humidity	: 45 %
Test Mode	: Mode 2	Display Pattern	: H Pattern

FREQUENCY	READING LEVEL dBuV				LIMIT	
MHz	LINE1 QP	LINE1 AV	LINE2 QP	LINE2 AV	QP	AV
** 0.16533	57.1	40.2	55.7	37.0	65.2	55.2
0.24198	44.9	*	42.0	*	62.0	52.0
0.32885	39.1	*	38.5	*	59.5	49.5
6.12244	35.3	*	36.2	*	60.0	50.0
10.68730	32.5	*	32.2	*	60.0	50.0
19.00387	32.3	*	36.3	*	60.0	50.0

Remarks :

1. All readings are Quasi-peak.
2. " * " means that the quasi-peak reading level is lower than the average limits, it is not necessary to measure the average level.
3. " ** " means that this data is the worse case emission level.
4. Final measurement = (Receiver reading) + (Correction factor if available)

Attached 2 individual pages of peak scan curve data sheets.

4. Radiation Emission

4.1 Test Equipment

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

Radiated test was performed on : ☐Site #1 ☑Site #2 ☐Site #3 ☐Site #4

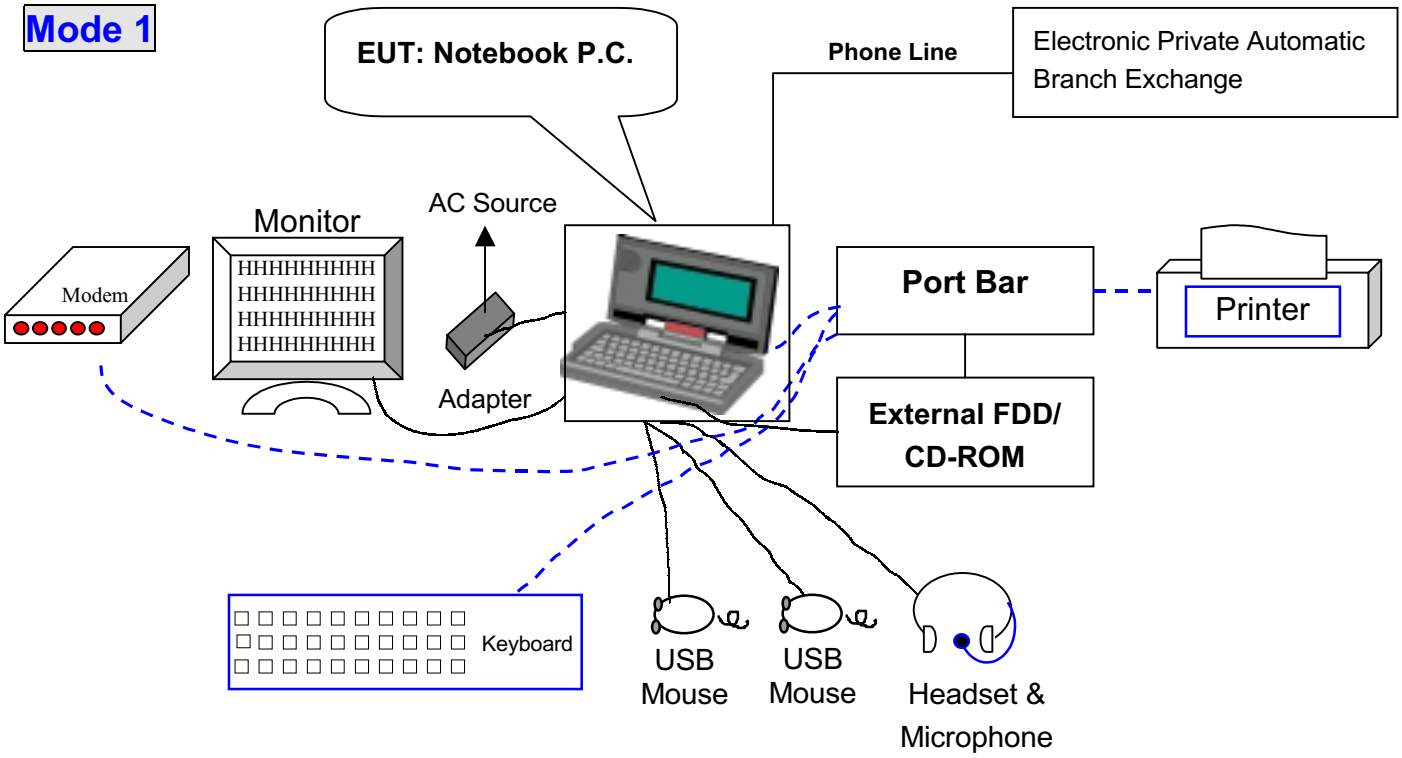
Item	Instrument	Manufacturer	Type / Serial No.	Last Cal.
1	Test Receiver	Rohde & Schwarz	ESCS 30 / 825022/003	Jun. 10, 2000
2	Spectrum Analyzer	ADVANTEST	R3272 / 82420372	N/A
3	Pre-Amplifier	HP	8447D / 2944A08273	N/A
4	Pre Amplifier	HP	8347A / 3307A01401	N/A
5	Pre Amplifier	HP	8449B / 3008A01264	N/A
6	BILOG ANTENNA	Chase	CBL6112B/2416	May 03, 2000
7	Horn Antenna	Electro-Metrics	EM-6961 / 103329	May 03, 2000
8	RF Cable	GesTek	GTK-RF-C03	Jan. 02, 2000
9	Open Site	GesTek	GTK-RF-SA2	Jan. 02, 2000
10	Test Program Software	GesTek	GTK-RF-P02	N/A

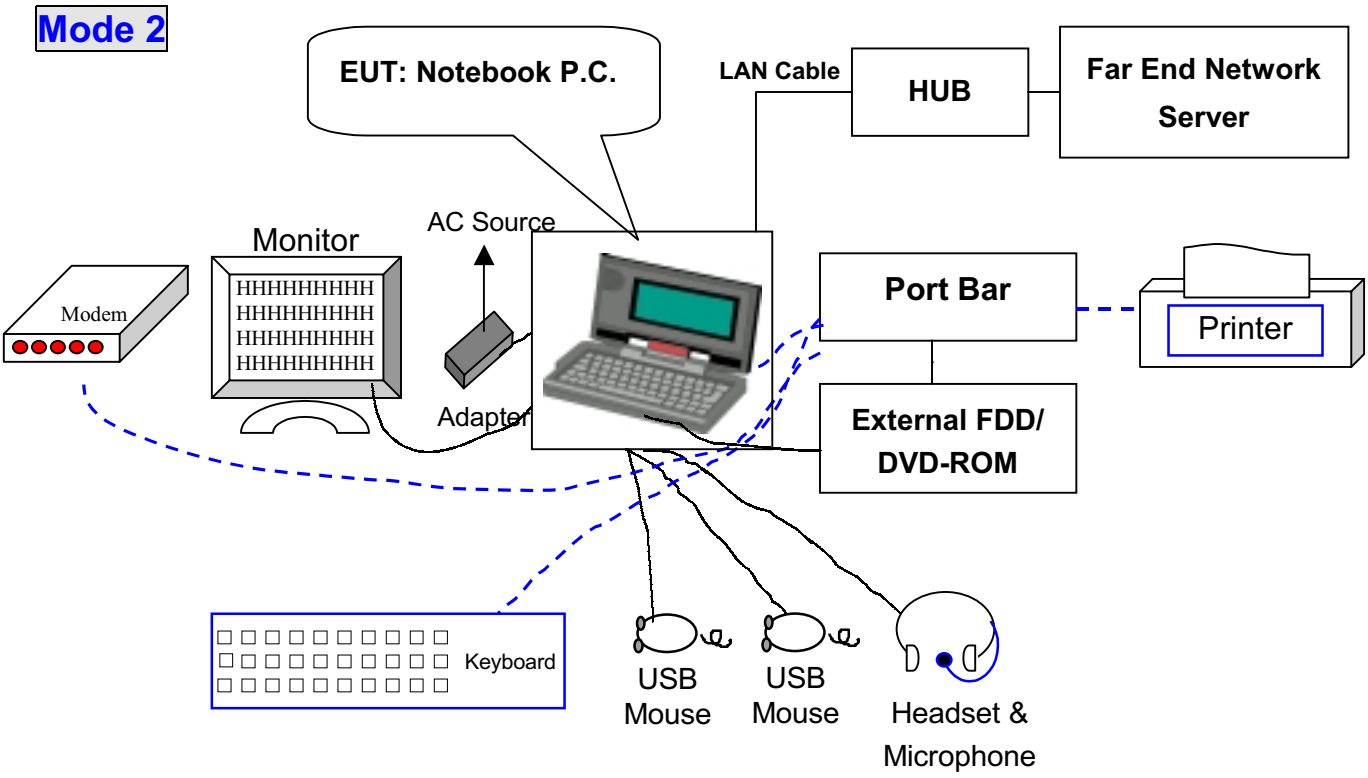
Note: All equipment upon which need to calibrated are with calibration period of 1 year.

4.2 Test Setup

4.2.1 Block Diagram of Connections between EUT and simulators

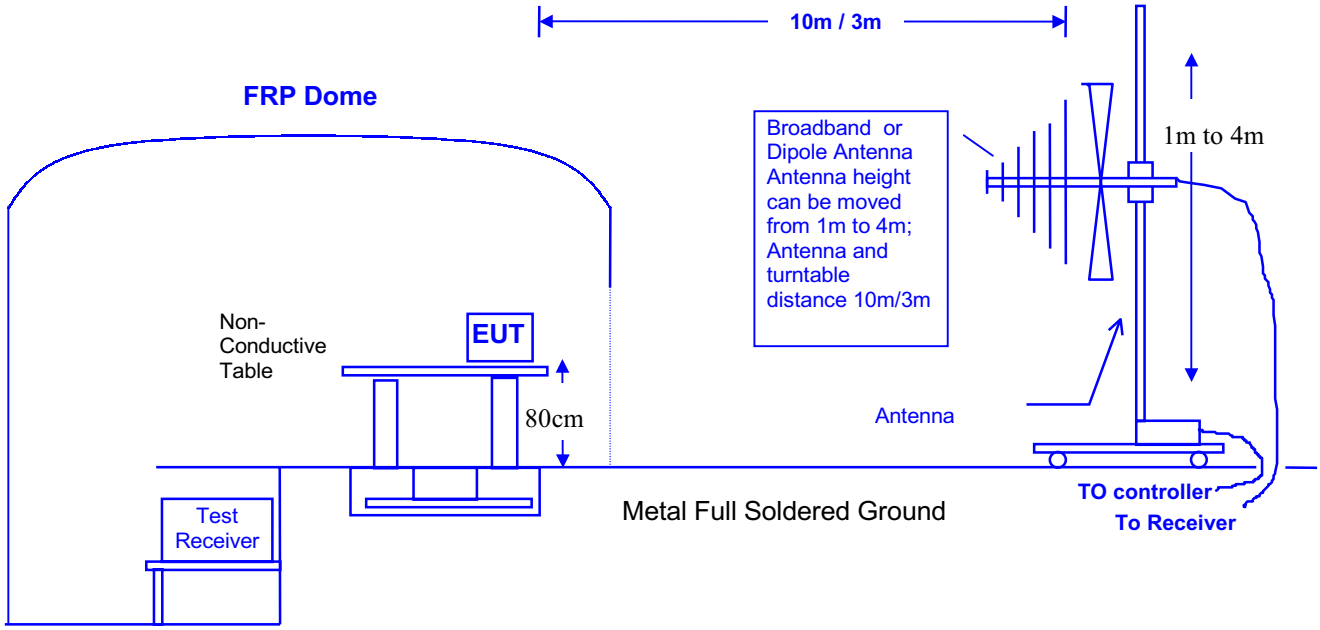
Note: This is a representive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.





4.2.2 Open Test Site Setup Diagram

Note: This is a representive 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 Radiated Emission Limit

☑FCC Class B Limit at 3m

Frequency	Distance	Field Strength	
MHz	Meter	μV/M	dBμV/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: 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	μV/M	dBμV/M
30 - 88	10	90	39.0
88 - 216	10	150	43.5
216 -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	dB(μV/M)
30 - 230	10	30
230 - 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.

4.4 EUT Configuration

The equipment which is listed 4.2.1 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 4.2.2, 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.

4.5 Operating Condition of EUT

Same as Conducted Emission Test which are listed in 3.5.

4.6 Radiated Emission Data

The measurement range of radiated emission, which is from **30 MHz to 5 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 scan 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.

The total uncertainty for this test is as follows:
- Uncertainty in the field strength measured (3m antenna distance): < ± 4 dB
- Uncertainty in the field strength measured (10m antenna distance): < ± 4 dB

The uncertainty is calculated in accordance with NAMAS document NIS 81, and is given as 2 standard deviations.

Radiated Emission Data

Date of Test :08-04, 2000 **Temperature :27 deg/C**
EUT :Notebook P.C. **Humidity :45 %RH**
Working Cond.:Mode 1 **Display Pattern :H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Horizontal [dB(uV)]	Emission Level Horizontal [dB(uV/m)]	Limit [dB(uV/m)]
74.200	1.10	5.70	9.03	15.83	30.00
85.300	1.34	8.35	11.76	21.44	30.00
*165.700	1.46	10.42	14.01	25.89	30.00
184.320	1.72	9.26	12.19	23.17	30.00
195.430	1.92	9.14	11.44	22.50	30.00
200.450	2.00	9.10	14.00	25.10	30.00
210.180	2.00	9.87	13.54	25.41	30.00
240.000	2.00	12.17	13.52	27.69	37.00
298.225	2.40	13.38	16.42	32.20	37.00
336.040	2.61	14.18	14.57	31.36	37.00
400.890	3.02	15.80	11.25	30.07	37.00
456.000	3.24	17.01	4.08	24.33	37.00
525.445	3.57	18.04	6.86	28.46	37.00
614.400	4.04	18.98	5.93	28.95	37.00
630.530	4.10	19.09	6.73	29.92	37.00
735.625	4.45	20.10	0.95	25.50	37.00

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss.
4. Deviations from the specifications: None.
5. Radiated testing was performed at an antenna to EUT distance of 10 meters.

Radiated Emission Data

Date of Test :08-04, 2000 **Temperature :27 deg/C**
EUT :Notebook P.C. **Humidity :45 %RH**
Working Cond.:Mode 1 **Display Pattern :H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Vertical [dB(uV)]	Emission Level Vertical [dB(uV/m)]	Limit [dB(uV/m)]
74.000	1.10	5.70	14.03	20.83	30.00
85.500	1.34	8.35	13.51	23.19	30.00
*165.900	1.46	10.29	14.42	26.17	30.00
196.600	1.92	9.14	13.14	24.20	30.00
200.450	2.00	9.10	13.55	24.65	30.00
210.180	2.00	9.87	11.01	22.88	30.00
240.038	2.00	12.17	13.74	27.91	37.00
298.242	2.40	13.38	16.63	32.41	37.00
336.040	2.61	14.18	12.75	29.54	37.00
400.880	3.02	15.80	9.74	28.56	37.00
455.995	3.24	17.01	9.66	29.91	37.00
525.440	3.57	18.04	10.66	32.26	37.00
614.400	4.04	18.98	4.94	27.96	37.00
630.530	4.10	19.09	7.38	30.57	37.00
735.620	4.45	20.10	4.12	28.67	37.00

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable Loss.
4. Deviations from the specifications: None.
5. Radiated testing was performed at an antenna to EUT distance of 10 meters.

Radiated Emission Data

Date of Test :08-04, 2000 **Temperature :28 deg/C**
EUT :Notebook P.C. **Humidity :45 %RH**
Working Cond.:Mode 2 **Display Pattern :H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Horizontal [dB(uV)]	Emission Level Horizontal [dB(uV/m)]	Limit [dB(uV/m)]
73.230	1.10	5.70	12.30	19.10	30.00
84.700	1.34	8.35	10.06	19.74	30.00
165.750	1.46	10.42	7.25	19.13	30.00
*200.450	2.00	9.10	15.06	26.16	30.00
210.180	2.00	9.87	9.80	21.67	30.00
231.870	2.00	11.56	16.81	30.37	37.00
240.027	2.00	12.17	17.31	31.48	37.00
319.497	2.52	13.83	16.07	32.42	37.00
336.041	2.61	14.18	12.94	29.73	37.00
368.650	2.82	15.01	10.15	27.98	37.00
397.559	3.00	15.73	11.82	30.54	37.00
496.900	3.40	17.75	8.15	29.30	37.00
614.410	4.04	18.98	4.74	27.76	37.00
741.600	4.47	20.18	4.85	29.50	37.00
840.800	4.78	20.96	1.80	27.54	37.00

Remarks:
1. All Readings below 1GHz are Quasi-Peak.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss.
4. Deviations from the specifications: None.
5. Radiated testing was performed at an antenna to EUT distance of 10 meters.

Radiated Emission Data

Date of Test :08-04, 2000 **Temperature :28 deg/C**
EUT :Notebook P.C. **Humidity :45 %RH**
Working Cond.:Mode 2 **Display Pattern :H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Vertical [dB(uV)]	Emission Level Vertical [dB(uV/m)]	Limit [dB(uV/m)]
56.500	1.00	6.90	16.25	24.15	30.00
86.900	1.34	8.66	15.40	25.40	30.00
165.700	1.46	10.42	15.29	27.17	30.00
184.320	1.72	9.26	15.84	26.82	30.00
200.450	2.00	9.10	13.95	25.05	30.00
210.170	2.00	9.87	13.85	25.72	30.00
240.000	2.00	12.17	15.42	29.59	37.00
298.200	2.40	13.38	13.00	28.78	37.00
319.490	2.52	13.83	13.54	29.89	37.00
336.043	2.61	14.18	12.78	29.57	37.00
*397.570	3.00	15.73	15.70	34.42	37.00
497.020	3.40	17.75	11.67	32.82	37.00
741.600	4.47	20.18	4.44	29.09	37.00
800.770	4.70	20.80	2.27	27.77	37.00
840.810	4.78	20.96	2.65	28.39	37.00

Remarks:
1. All Readings below 1GHz are Quasi-Peak.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable Loss.
4. Deviations from the specifications: None.
5. Radiated testing was performed at an antenna to EUT distance of 10 meters.

Radiated Emission Data

Date of Test :08-16,2000 **Temperature : 27 deg/C**
EUT :Notebook P.C. **Humidity : 42 %RH**
Working Cond. :Mode 1(PK+AV) **Display Pattern : H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Horizontal [dB(uV)]	Emission Level Horizontal [dB(uV/m)]	(uV/m)	Limit (uV/m)
1001.100	5.31	21.33	47.50	38.44	83.61	500 (PK)
1001.100	5.31	21.33	24.56	15.50	5.96	500 (AV)
1231.300	6.40	23.49	45.50	40.06	100.68	500 (PK)
1231.300	6.40	23.49	23.50	18.06	8.00	500 (AV)
2535.900	8.97	28.43	44.30	44.98	177.36	500 (PK)
2535.900	8.97	28.43	24.24	24.92	17.61	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss – Amp Factor(35.70、35.33、36.72)
3. Deviations from the specifications: None.
4. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.
5. Radiated testing was performed at an antenna to EUT distance of 3 meters.

Radiated Emission Data

Date of Test :08-16,2000 **Temperature : 27 deg/C**
EUT :Notebook P.C. **Humidity : 42 %RH**
Working Cond. :Mode 1(PK+AV) **Display Pattern : H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Vertical [dB(uV)]	Emission Level Vertical [dB(uV/m)]	(uV/m)	Limit (uV/m)
1001.400	5.31	21.33	47.80	38.74	86.55	500 (PK)
1001.400	5.31	21.33	25.21	16.15	6.42	500 (AV)
1241.700	6.43	23.55	45.00	39.66	96.20	500 (PK)
1241.700	6.43	23.55	24.30	18.96	8.88	500 (AV)
2531.300	8.96	28.43	44.30	44.97	177.24	500 (PK)
2531.300	8.96	28.43	23.50	24.17	16.16	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss – Amp Factor(35.70、35.31、36.72)
3. Deviations from the specifications: None.
4. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.
5. Radiated testing was performed at an antenna to EUT distance of 3 meters.

Radiated Emission Data

Date of Test :08-17,2000 **Temperature : 28 deg/C**
EUT :Notebook P.C. **Humidity : 44 %RH**
Working Cond. :Mode 2(PK+AV) **Display Pattern : H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Horizontal [dB(uV)]	Emission Level Horizontal [dB(uV/m)]	(uV/m)	Limit (uV/m)
1001.300	5.31	21.33	48.30	39.24	91.67	500 (PK)
1001.300	5.31	21.33	25.06	16.00	6.31	500 (AV)
1202.400	6.31	23.31	48.50	42.75	137.20	500 (PK)
1202.400	6.31	23.31	26.02	20.27	10.31	500 (AV)
2542.320	8.98	28.49	47.50	48.25	258.60	500 (PK)
2542.320	8.98	28.49	24.60	25.35	18.52	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss – Amp Factor(35.70、35.38、36.72)
3. Deviations from the specifications: None.
4. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.
5. Radiated testing was performed at an antenna to EUT distance of 3 meters.

Radiated Emission Data

Date of Test :08-17,2000 **Temperature : 28 deg/C**
EUT :Notebook P.C. **Humidity : 44 %RH**
Working Cond. :Mode 2(PK+AV) **Display Pattern : H Pattern**

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Vertical [dB(uV)]	Emission Level Vertical [dB(uV/m)]	(uV/m)	Limit (uV/m)
1002.050	5.34	21.33	48.30	39.27	91.98	500 (PK)
1002.050	5.34	21.33	25.65	16.62	6.78	500 (AV)
1202.200	6.31	23.31	48.80	43.05	142.02	500 (PK)
1202.200	6.31	23.31	26.85	21.10	11.35	500 (AV)
2524.200	8.94	28.43	48.30	48.95	280.32	500 (PK)
2524.200	8.94	28.43	24.51	25.16	18.12	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss – Amp Factor(35.70、35.31、36.72)
3. Deviations from the specifications: None.
4. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.
5. Radiated testing was performed at an antenna to EUT distance of 3 meters.