

GESTEK Lab.

FCC ID:EUNC2

Report #: 996058F

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G1K99-F010

**Test Report
Application for Certification
Class II Permissive Change
On Behalf Of**

**First International Computer Inc.
Notebook Computer**

**Model: Amber 2.0 / C2 / C2 Plus
(LaVie NX/ VersaPro NX/Avanza NX NB)
(NEC Versa Note/ ZDS Versa Note/ Easy Note)**

FCC ID:EUNC2

**Prepared For:
First International Computer Inc.
6F., Formosa Plastics Rear Bldg 201, Tung-Hwa N. Road,
Taipei, Taiwan, R.O.C.**



**Report By : Global EMC Standard Tech. Corp.
No.3 Pau-Tou-Tsuo Valley, Chia-Pau
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Test results given in this report only relate to the specimen(s) tested, calibrated or measured.
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GTR99-FO10

1. Test Report Certification

Applicant : First International Computer Inc.

Manufacturer : First International Computer Inc.

EUT Description: Notebook Computer

(A) Model No. : Amber 2.0/ C2 / C2 Plus
(B) Serial No. : N/A
(C) FCC ID : EUNC2
(D) Power : 110V/60Hz
(E) Rating DC-O/P : 19V

MEASUREMENT PROCEDURE / STANDARD USED :

- ☒ CFR 47, Part 15 Radio Frequency Device Subpart B Unintentional Radiators Class **B** :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 : June 17, 1999

Final Test Date : June 29, 1999

Documented by : Winnie Chiu

Test Engineer :

Jeff Chen
JEFF CHEN

Approve & Authorized Signer :

Terry Chung
TERRY CHUNG

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.

GTK99-F010

2. General Information

2.1 Production Description

Description : Notebook Computer
 Model Number : Amber 2.0/C2/C2 Plus
 Serial Number : N/A
 Condition : Prototype
 Applicant : First International Computer Inc.
 Address : 6F., Formosa Plastics Rear Bldg 201, Tung-Hwa N. Road,
 Taipei, Taiwan, R.O.C.
 Manufacturer : First International Computer Inc.
 Address : 6F., Formosa Plastics Rear Bldg 201, Tung-Hwa N. Road,
 Taipei, Taiwan, R.O.C.
 CPU #1 : Intel Dixon 400MHz, Clock:100MHz.
 CPU #2 : Intel Celeron 400MHz, Clock: 100MHz
 Power Cord : 1.8m, Non-shielded
 Power Adaptor : Delta, M/N:ADP-50MB, S/N:W8824000241,
 1.2m bound with a Ferrite core.
 I/P : 100~240V 1.5A 50~60Hz, O/P: DC 19V, 2.64A

2.2 Results:

The EUT(s) **met** the FCC Part 15 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 1	0.60180	42.7 dBuV Line 2, QP	48.0dBuV	N/A
Radiation Mode 2	516.098	39.76[dB(uV/m)], Vertical	46.0 [dB(uV/m)]	1.1M, 126°

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2.2.1 Test Mode:

Mode 1	Item	Manufacturer	M/N & S/N
* { 1.	CPU	Intel	Dixon 400MHz
2.	LCD Panel	Sanyo 12.1 TFT	M/N:TM121SV-02L03A
3.	3.2GB HDD	Hitachi	M/N:DK237A-32
4.	FDD 3.5"	NEC	FD-1238T-020
5.	CD ROM	Toshiba	XM-1802B
6.	Battery	Panasonic	3800mAh Ni-MH
7.	Adaptor	Delta	M/N:ADP-50MB
8.	FAX/MODEM 56K	ASKEY	
Mode 2			
1.	CPU	Intel	Celeron 400MHz.
2.	LCD Panel	Sanyo 12.1 TFT	M/N:TM121SV-02L03A
3.	3.2GB HDD	Hitachi	M/N:DK237A-32
4.	FDD 3.5"	NEC	FD-1238T-020
5.	CD ROM	Toshiba	XM-1802B
6.	Battery	Panasonic	3800mAh Ni-MH
7.	Adaptor	Delta	M/N:ADP-50MB
8.	FAX/MODEM 56K	ASKEY	

Note:

1. This Notebook computer can support different CPU/Clock frequency modes and can support different types of LCD panel. The test condition of 400MHz and all the components listed at section 2.3 were investigated. During the performance of the testing, peripherals were connected to all available ports. The data shown in this test report reflects the worst-case data for each frequency/video resolution.
- * 2. This Notebook computer added the LCD Panel(Sanyo,M/N:TM121SV-02L03A) and upgrade the CPU (intel Dixon 400MHz and Intel Celeron 400MHz). These change may be interfered EMI. So we tested again. The data shown in this test report reflects the worst-case data for each frequency/video resolution.

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2.3 Tested System Details

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

☒ Notebook PC (EUT)

No.	Category	Manufacturer	Model
1.	CPU #1	Intel	Dixon 400MHz.
2.	CPU #2	Intel	Celeron 400MHz.
3.	LCD Panel	Sanyo 12.1 TFT	M/N:TM121SV-02L03A
4.	3.2GB HDD	Hitachi	M/N:DK237A-32
5.	FDD 3.5"	NEC	FD-1238T-020
6.	CD ROM	Toshiba	XM-1802B
7.	Battery	Panasonic	3800mAh Ni-MH
8.	Adaptor	Delta	M/N:ADP-50MB
9.	Inverter Board	DCA-10B005, Rev:A1	
10.	Connect Board	Amber 2.0 ALCLD, Rev:0.2	
11.	FAX/MODEM 56K	ASKEY	

☒ Monitor M01-012

Model Number : SyncMaster 700p
 Serial Number : H3MH903257V
 Manufacturer : SAMSUNG
 FCC ID : A3LCGH760
 BCIQ No. : 3872A230
 Data Cable : Shielded, Undetachable, 1.2m
 Power Cord : Non-Shielded, Detachable, 1.8m

☒ Keyboard K01-032

Model Number : KB-5923
 Serial Number : 8060032216
 FCC ID : E8HKB-5923
 Manufacturer : TATUNG
 BCIQ ID : 3862A177
 Data Cable : Sheiled, Undetachable, 2.0 m

☒ Printer P01-003

Model Number : 2225C+
 Serial Number : 3125S98163
 FCC ID : DSI6XU2225
 Manufacturer : HP
 Adaptor, Power Cord : Non-Shielded, Detachable, 1.8m
 Data Cable : Shielded, Detachable, 1.2m

* C1099 II CHANGE

☒ Modem M03-011

Model Number : 1414
Serial Number : 960018041
FCC ID : IFAXDM1414
Manufacturer : ACEEX
Adaptor, Power Cord : Non-Shielded, Detachable, 1.5m
Data Cable : Shielded, Detachable, 1.2m

☒ Cassette Player R02-010

Model Number : HS-GS162
Serial Number : LYJ1084567
FCC ID : N/A
Manufacturer : AIWA CO., LTD
Power Cord : N/A (Battery)
Data Cable : Non-Shielded, Detachable, 1.5m

☒ Scanner (USB) S02-002

Model Number : S-UA1
Serial Number : LTC74803704
FCC ID : DZL211089
Manufacturer : Logitech
Power, Data cable : Shielded, Undetachable, 1.5m with DC 5V

☒ Headset&Microphone E01-022

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 3 meters.

2.5 Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	22-26
Humidity (%RH)	25-75	50-60
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 States Department of commerce

National Institute of Standards and Technology

National Voluntary Laboratory Accreditation Program

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. Conducted Emission Test

3.1 Test Equipments

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

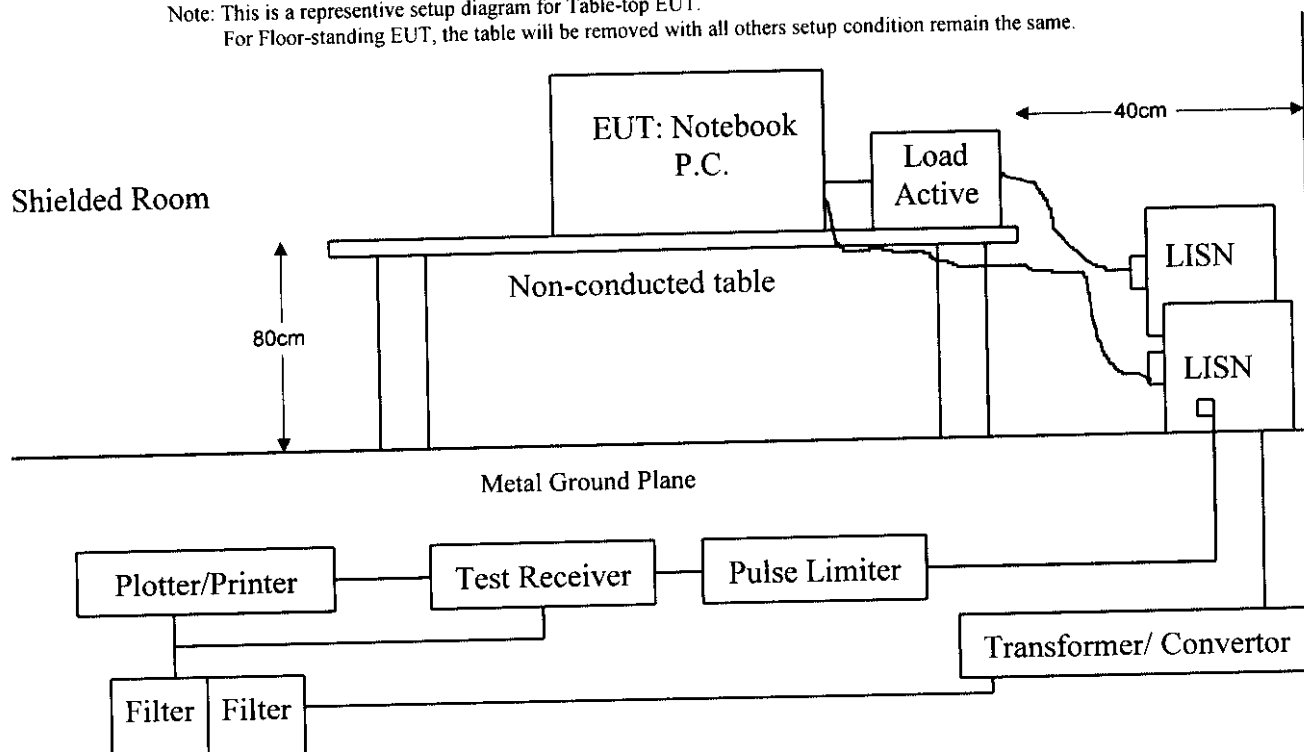
Item	Instrument	Manufacturer	Type /Serial No.	Last Calibration	Location	C.E.
1	Test Receiver	Rohde & Schwarz	ESHS 30 / 828109/010	Dec. 15, 1998	Shield Room #1	✓
2	L.I.S.N.	Kyoritsu	KNW-407	Oct. 03, 1998	Shield Room #1	✓
3	L.I.S.N.	Solar	8012-50-R24 / 90038	May 20, 1999	Shield Room #1	
4	L.I.S.N.	Rohde & Schwarz	ESH3-Z5 / 840567/002	Oct. 02, 1998	Shield Room #1	✓
5	L.I.S.N.	Schwarzbeck	NNLK 8121/8121358	May 20, 1999	Shield Room #1	
6	Pulse Limiter	Rohde & Schwarz	ESH3-Z2/357.8810.52	Jun. 02, 1999	Shield Room #1	✓
7	Shielded Room	GesTek	GTK-RF-S04	Sep. 17, 1998	Shield Room #1	✓
8	RF CABLE	GesTek	GTK-RF-C07	Sep. 17, 1998	Shield Room #1	✓
9	50 Ohm Terminator	GesTek	GTK-RF-T01	Oct. 03, 1998	Shield Room #1	✓

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

3.2 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.



3.3 Conducted Emission Limit

3.3.1 FCC Limits

Frequency	Maximum RF Line Voltage			
	Class A		Class B	
MHz	uV	dBuV	uV	dBuV
0.45 - 1.705	1000	60.0	250	48.0
1.705 - 30	3000	69.5	250	48.0

Remarks : 1. RF Line Voltage (dBuV) = $20 \log$ RF Line Voltage (uV)

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

3.3.2 CISPR Limits

Frequency	Maximum RF Line Voltage dB(uV)			
	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 equaled 80 CM. Powered from one LISN which signal output to receiver, and the other peripherals was powered from another LISN 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:

- 3.5.1 Setup the EUT and simulators as shown on 3.2.
- 3.5.2 Turn on the power of all equipments.
- 3.5.3 Boot the PC from Hard Disk and Enter to windows 98,
exercise EMI.EXE test program to active all devices.
- 3.5.4 Play CD Disk audio in windows environment, read HDD and FDD data.
- 3.5.5 PC sent "H" Pattern to Both LCD Panel And Ext. Monitor.
- 3.5.6 PC sent "H" Pattern to Parallel (printer) port.
- 3.5.7 PC sent "H" Pattern to Serial port.
- 3.5.8 Repeat 3.5.4 to 3.5.7

3.6 Conducted Emission Data

The measurement range of conducted emission which is from **0.45 MHz to 30 MHz** was investigated. All readings are quasi-peak and average values with a resolution Bandwidth of 9 KHz, unless otherwise noted. The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range for all the test modes. The two different lines were each measured separately, and the worst modes datas were reported on the following data pages. The final measurement equal to Receiver reading plus Correction factor if available. When LISN insertion loss bigger than 0.5dB then the receiver will add correction factor to reading level automatically.

The total uncertainty for this test is as follows:

- Uncertainty in the field strength measured: $< \pm 2.0 \text{ dB}$

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

CONDUCTED EMISSION DATA

Date of Test	: June 22, 1999	Temperature	: 25.9 °C
EUT	: Notebook PC	Humidity	: 58 %
Test Mode	: Mode 1	Display Pattern	: H Pattern

FREQUENCY	READING LEVEL				LIMIT
	LINE 1		LINE 2		
MHz	dBuV	uV	dBuV	uV	uV
0.49853	38.7	86.10	37.5	74.99	250
**0.60180	41.6	120.23	42.7	136.46	250
0.80022	39.0	89.13	38.0	79.43	250
3.00586	39.3	92.26	39.2	91.20	250
4.20874	38.4	83.18	38.6	85.11	250
28.39619	31.5	37.58	31.2	36.31	250

Remarks : 1. All readings are Quasi-peak.

2. " ** " means that this data is the worse case emission level.

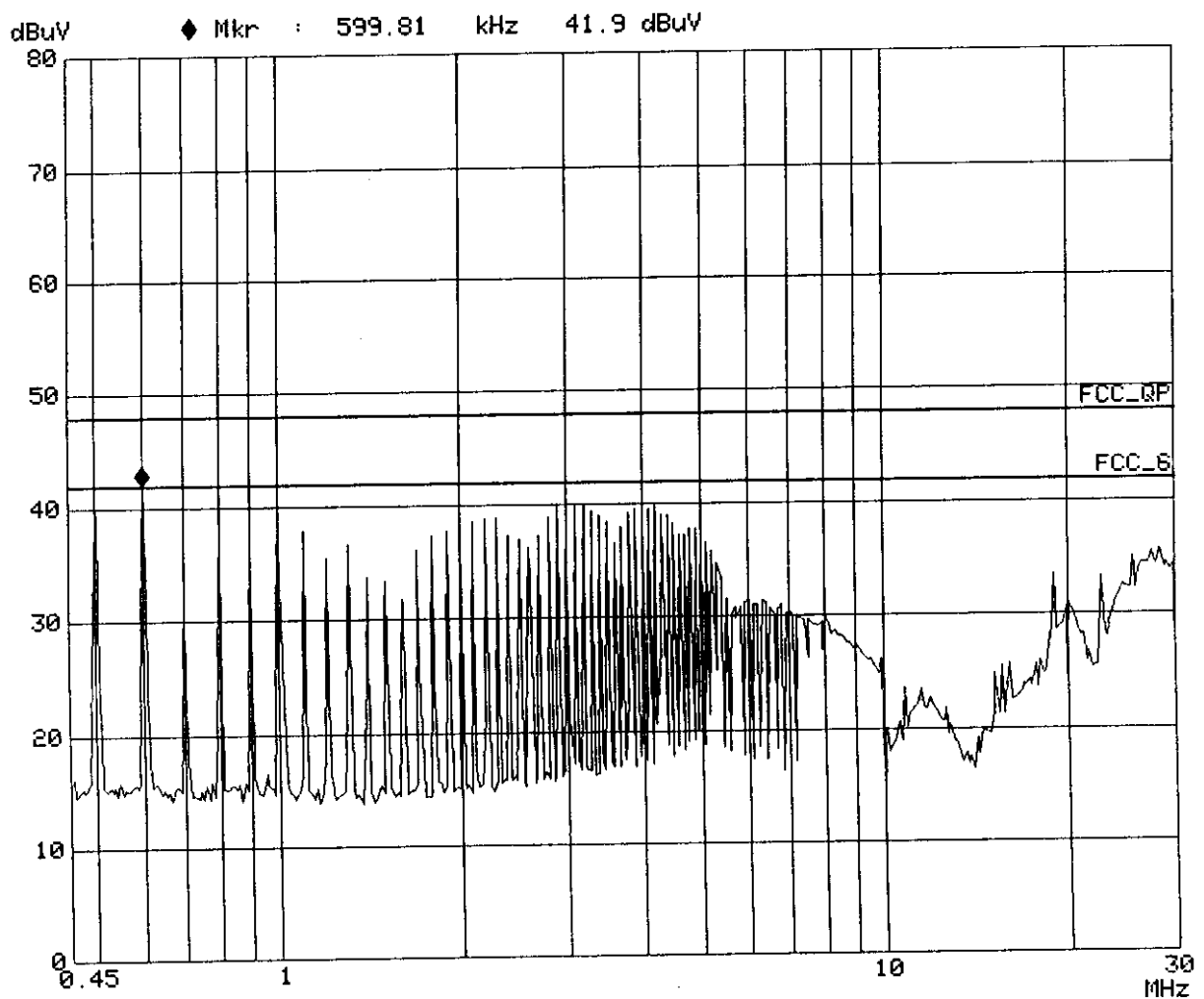
3. Deviations from the specifications: None.

4. Final measurement = (Receiver reading) + (Correction factor if available)

Attached 2 individual pages of peak scan curve data sheets.

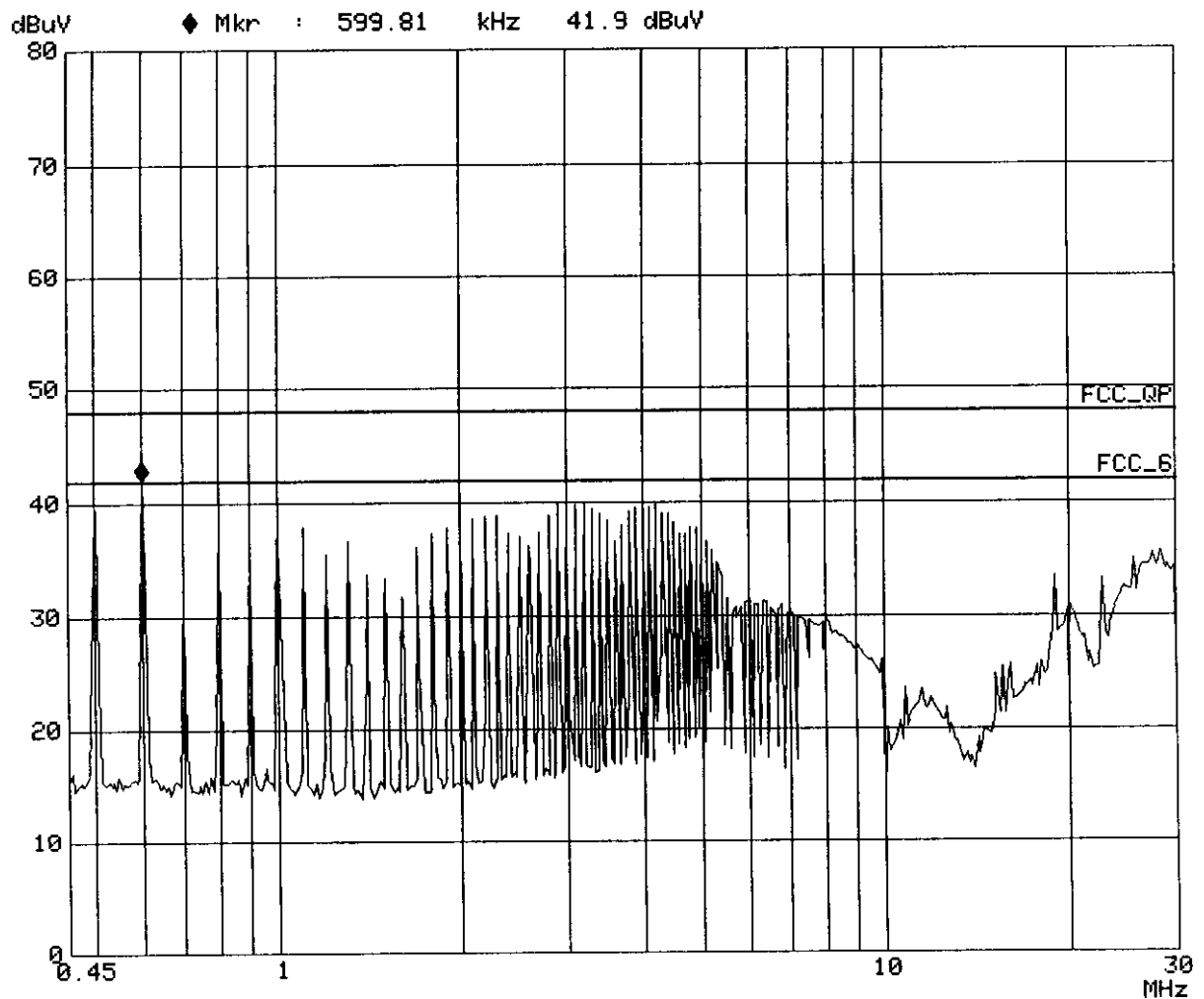
ROHDE & SCHWARZ ESHS 30 GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK
Manuf: FIC
Op Cond: DIXON 400, SANYO 12.1, HITACHI 3.2GB
Operator: IVAN
Test Spec: FCC B
Comment: Line 1
M/N: C II & C II+
Date: 22. Jun 99 10:25



ROHDE & SCHWARZ ESHS 30 GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK
Manuf: FIC
Op Cond: DIXON 400, SANYO 12.1, HITACHI 3.2GB
Operator: IVAN
Test Spec: FCC B
Comment: Line 2
M/N: C II & C II+
Date: 22. Jun 99 10:25



CONDUCTED EMISSION DATA

Date of Test	:	June 22, 1999	Temperature	:	26.8 °C
EUT	:	Notebook PC	Humidity	:	60 %
Test Mode	:	Mode 2	Display Pattern	:	H Pattern

FREQUENCY		READING LEVEL			LIMIT
		LINE 1		LINE 2	
MHz	dBuV	uV	dBuV	uV	uV
0.53440	35.9	62.37	33.9	49.55	250
0.66997	34.0	50.12	31.5	37.58	250
1.60761	34.3	51.88	32.8	43.65	250
**3.74520	42.2	128.82	42.3	130.32	250
13.91108	33.9	49.55	33.4	46.77	250
26.55415	36.4	66.07	36.1	63.83	250

Remarks : 1. All readings are Quasi-peak.

2. " ** " means that this data is the worse case emission level.

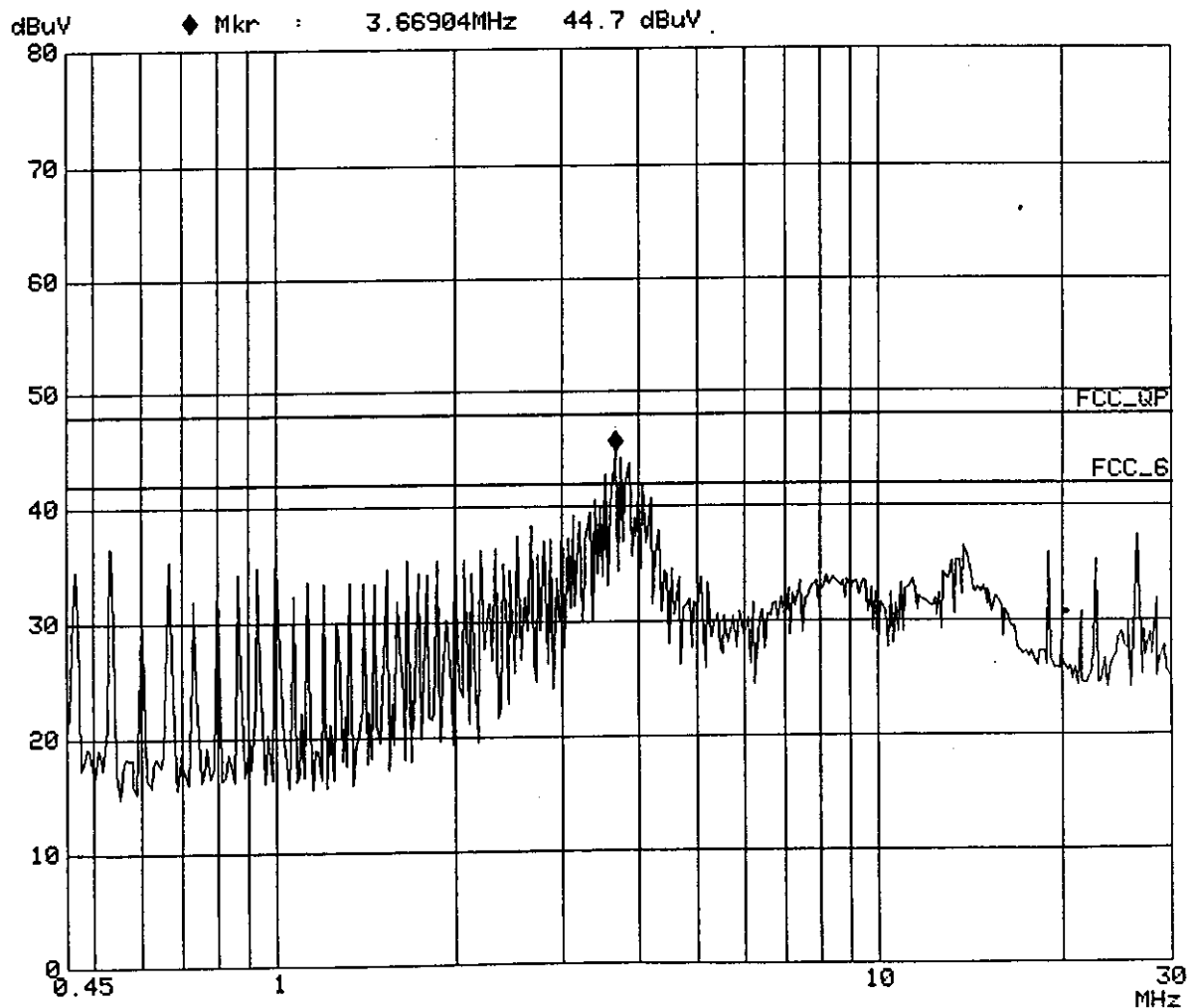
3. Deviations from the specifications: None.

4. Final measurement = (Receiver reading) + (Correction factor if available)

Attached 2 individual pages of peak scan curve data sheets.

ROHDE & SCHWARZ ESHS 30 GesTek, PowerLine Conducted Emission

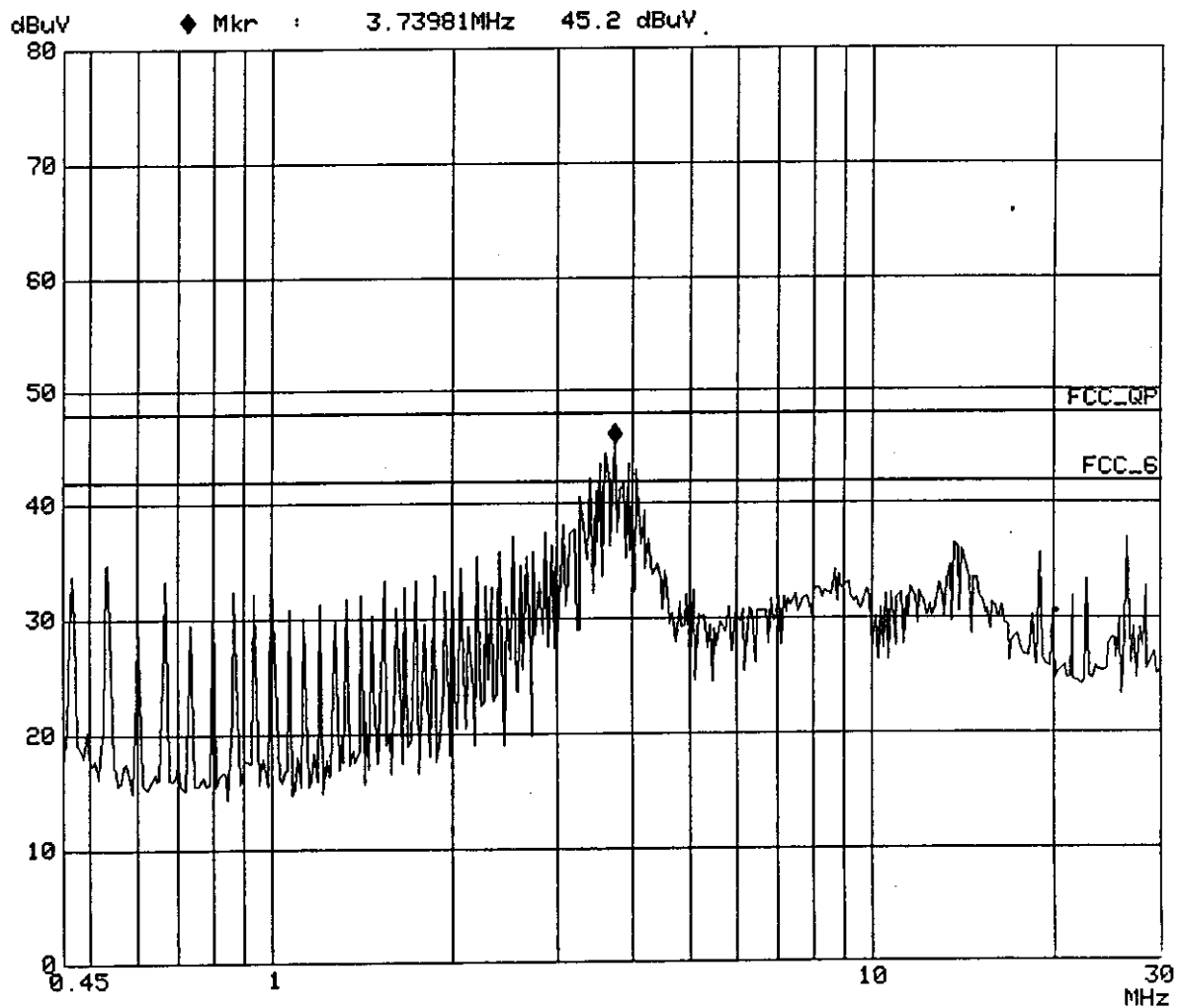
EUT: NOTEBOOK
Manuf: FIC
Op Cond: CELERON 400, SANYO 12.1, HITACHI 3.2GB
Operator: IVAN
Test Spec: FCC B
Comment: Line 1
M/N: C II & C II+
Date: 22. Jun 99 18:47



ROHDE & SCHWARZ ESHS 30

GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK
Manuf: FIC
Op Cond: CELERON 400, SANYO 12.1, HITACHI 3.2GB
Operator: IVAN
Test Spec: FCC B
Comment: Line 2
M/N: C II & C II+
Date: 22. Jun 99 18:44



4. Radiation Emission Test

4.1 Test Equipment

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

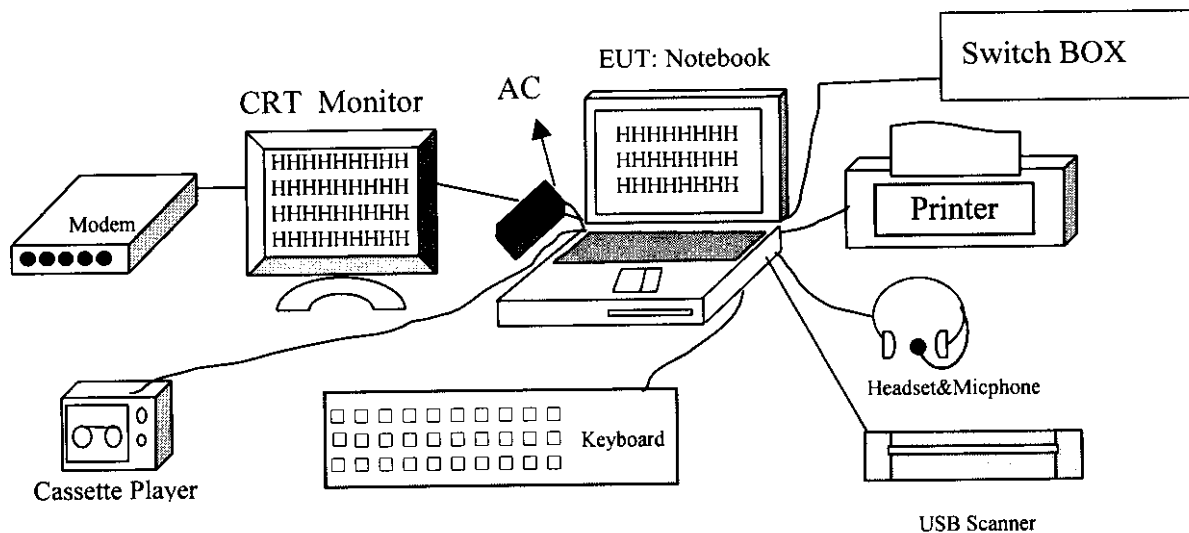
Radiated test was performed on : ☐ Site #1 ☒ Site #2

Item	Instrument	Manufacturer	Type /Serial No.	Last Cal.	Site #1	Site #2
1	Test Receiver	Rohde & Schwarz	ESVS 30 / 829007/014	Nov. 23,1998	✓	
2	Spectrum Analyzer	HP	8594E / 3543A02689	N/A	✓	
3	Pre-Amplifier	HP	8447D / 2944A08272	N/A	✓	
4	Test Receiver	Rohde & Schwarz	ESCS 30/825022/003	Jul. 08,1998		✓
5	Spectrum Analyzer	HP	8591E/3543A05040	N/A		✓
6	Pre Amplifier	HP	8447D/2944A08273	N/A		✓
7	BILOG ANTENNA	Chase	CBL6112B/2417	May. 15,1999	✓	
8	BILOG ANTENNA	Chase	CBL6112B/2416	May. 15,1999		✓
9	Pre Amplifier	HP	8347A/3307A01401	N/A	✓	✓
10	Open Site	GesTek	GTK-RF-S01	Jan. 05, 1999	✓	
11	Open Site	GesTek	GTK-RF-S02	Jan. 03, 1999		✓
12	RF Cable	GesTek	GTK-RF-C01	May. 15,1999	✓	
13	RF Cable	GesTek	GTK-RF-C02	May. 15,1999	✓	
14	RF Cable	GesTek	GTK-RF-C03	Mar. 26,1999		✓
15	Test Program Software	GesTek	GTK-RF-P01	N/A	✓	
16	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

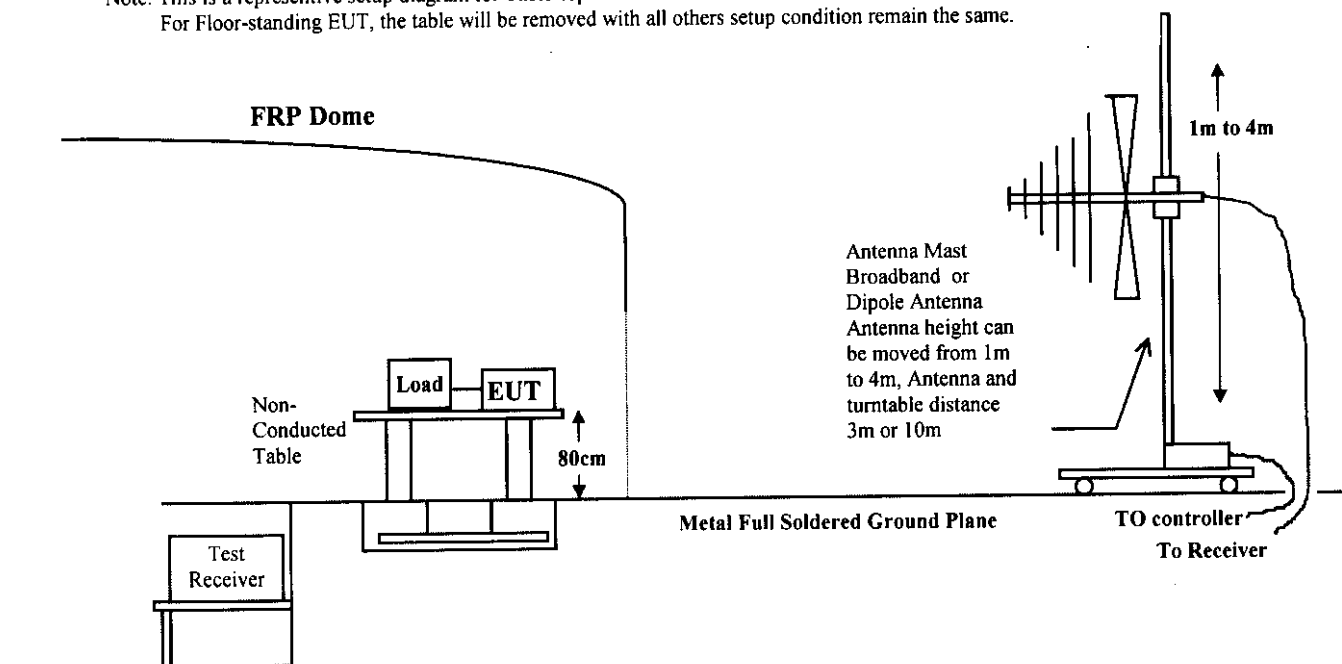
4.2.1 Block Diagram of Connections between EUT and simulators



4.2.2 Open Test Site Setup Diagram

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 Radiated Emission Limit

4.3.1 FCC Class B Limits at 3m

Frequency	Distance	Field Strength	
MHz	Meter	uV/M	dBuV/M
30 - 88	3	100	40.0
88 - 216	3	150	43.5
216 -960	3	200	46.0
960 - 2000	3	500	54.0

4.3.2 CISPR Class B Limits at 10m

Frequency	Distance	Field Strength
MHz	Meter	dB(uV/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 equipments which is listed 2.3 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 Power Line Test which is listed in 3.5.

4.6 Radiated Emission Data

Radiated emission were investigated over the frequency range of **30 MHz to 2 GHz**. All readings below 1GHz are quasi-peak values with a resolution Bandwidth of 120 KHz, unless otherwise noted. From 1-2GHz was investigated use both peak and average detector use bandwidth 1MHz. The initial step in collecting radiated emission data is a spectrum analyzer peak scan of the measurement range for all the test modes. Then the worst modes reading was measured use a test receiver and reported in the following data pages.

The total uncertainty for this test is as follows:

- Uncertainty in the field strength measured (3m antenna distance): $< \pm 4.0$ dB
- Uncertainty in the field strength measured (10m antenna distance): $< \pm 4.0$ 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 :06-21,1999

Temperature :27 deg/C

EUT :NOTEBOOK

Humidity :70 %RH

Working Cond.:Mode 1

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limit	
	Loss	Factor	Horizontal	Horizontal	(uV/m)	(uV/m)
[MHz]	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)]		
59.335	0.90	5.90	14.84	21.64	12.08	100
66.432	0.90	6.08	12.71	19.69	9.65	100
108.283	1.23	11.77	12.58	25.58	19.02	150
165.925	1.64	9.75	17.05	28.44	26.43	150
178.799	1.70	9.46	17.33	28.49	26.57	150
184.323	1.76	9.56	21.24	32.56	42.45	150
192.004	1.88	9.87	18.02	29.77	30.80	150
*199.549	2.00	10.20	23.38	35.58	60.12	150
208.899	2.04	10.65	21.77	34.46	52.86	150
221.187	2.09	11.20	20.64	33.92	49.68	200
233.475	2.13	11.74	17.87	31.74	38.66	200
258.052	2.26	12.67	17.28	32.22	40.82	200
265.542	2.31	12.80	16.02	31.13	36.03	200
288.005	2.48	13.28	18.49	34.25	51.60	200
319.998	2.74	13.95	20.71	37.40	74.15	200
331.781	2.82	14.17	20.55	37.54	75.32	200
356.357	2.99	14.80	20.24	38.02	79.63	200
368.645	3.08	15.49	10.76	29.33	29.27	200
432.016	3.39	17.25	7.17	27.82	24.59	200
528.031	3.85	18.68	7.09	29.61	30.25	200
565.256	4.17	19.04	13.30	36.51	66.87	200
663.562	4.83	20.00	6.25	31.08	35.79	200
811.019	5.63	21.00	8.46	35.09	56.81	200

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.

Radiated Emission Data

Date of Test :06-21,1999

Temperature :23 deg/C

EUT :NOTEBOOK

Humidity :66 %RH

Working Cond.:Mode 1

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limit
	Loss	Factor	Vertical	Vertical	
[MHz]	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)] (uV/m)	(uV/m)
66.558	0.90	6.08	17.71	24.69	17.15 100
84.195	1.04	8.01	18.65	27.70	24.26 100
108.224	1.23	11.77	13.74	26.74	21.73 150
159.746	1.58	10.06	17.55	29.19	28.80 150
172.034	1.68	9.60	16.51	27.79	24.53 150
192.014	1.88	9.87	15.64	27.39	23.42 150
199.423	2.00	10.20	21.41	33.61	47.92 150
208.899	2.04	10.65	16.77	29.46	29.73 150
232.505	2.13	11.65	20.86	34.64	53.93 200
287.999	2.48	13.28	16.55	32.31	41.28 200
334.171	2.83	14.20	12.83	29.87	31.14 200
360.771	3.03	15.09	14.18	32.30	41.20 200
383.999	3.18	16.17	14.44	33.79	48.94 200
521.113	3.78	18.60	7.65	30.02	31.71 200
*565.256	4.17	19.04	15.11	38.32	82.37 200
614.409	4.57	19.57	11.71	35.84	61.98 200
721.541	5.13	20.17	6.32	31.62	38.12 200

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.

Radiated Emission Data

Date of Test :06-23,1999

Temperature :27 deg/C

EUT :NOTEBOOK

Humidity :66 %RH

Working Cond.:Mode 2

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limit
[MHz]	Loss	Factor	Horizontal	Horizontal	
	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)] (uV/m)	(uV/m)
112.245	1.25	12.09	21.77	35.11 56.93	150
152.330	1.52	10.47	20.00	31.99 39.78	150
200.422	2.00	10.20	24.04	36.24 64.86	150
214.739	2.06	10.92	21.44	34.43 52.65	150
*232.501	2.13	11.65	25.86	39.64 95.90	200
240.005	2.16	12.01	24.40	38.57 84.82	200
280.595	2.44	13.15	23.54	39.13 90.43	200
331.776	2.82	14.17	21.68	38.67 85.78	200
356.354	2.99	14.80	18.95	36.73 68.64	200
368.641	3.08	15.49	20.63	39.20 91.18	200
384.005	3.18	16.17	18.11	37.46 74.68	200
400.848	3.30	17.00	18.30	38.60 85.11	200
417.794	3.35	17.13	17.89	38.36 82.83	200
432.007	3.39	17.25	17.81	38.46 83.72	200
466.945	3.50	17.75	16.90	38.16 80.87	200
516.099	3.74	18.56	14.97	37.27 73.03	200
565.251	4.17	19.04	13.78	36.99 70.67	200
589.824	4.40	19.29	12.27	35.96 62.82	200
614.401	4.57	19.57	14.91	39.04 89.58	200

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.

Radiated Emission Data

Date of Test :06-23,1999

Temperature :23 deg/C

EUT :NOTEBOOK

Humidity :67 %RH

Working Cond.:Mode 2

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limit
	Loss	Factor	Vertical	Vertical	
[MHz]	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)] (uV/m)	(uV/m)
66.218	0.90	6.08	21.29	28.27 25.90	100
112.245	1.25	12.09	18.94	32.28 41.10	150
166.012	1.64	9.75	18.11	29.50 29.86	150
186.106	1.79	9.64	18.10	29.53 29.94	150
200.422	2.00	10.20	23.02	35.22 57.68	150
232.502	2.13	11.65	23.82	37.60 75.82	200
331.779	2.82	14.17	18.26	35.25 57.86	200
400.849	3.30	17.00	16.45	36.75 68.79	200
466.946	3.50	17.75	16.90	38.16 80.87	200
481.019	3.54	17.99	14.71	36.24 64.84	200
*516.098	3.74	18.56	17.46	39.76 97.27	200
521.103	3.78	18.60	15.08	37.45 74.60	200
561.189	4.13	19.00	14.60	37.73 77.01	200
601.275	4.51	19.42	15.22	39.15 90.71	200
614.404	4.57	19.57	12.82	36.95 70.42	200
721.527	5.13	20.17	9.31	34.61 53.79	200
801.699	5.60	20.90	7.57	34.07 50.52	200
841.782	5.72	21.31	10.45	37.49 74.88	200
980.309	6.14	22.12	5.41	33.67 48.25	500

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.

Radiated Emission Data

Date of Test :06-22,1999

EUT :N/B PK+AV

Working Cond.:MODE:1

Temperature :26 deg/C

Humidity :60 %RH

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limit
[MHz]	Loss	Factor	Horizontal	Horizontal	
	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)]	(uV/m) (uV/m)
1000.360	6.20	21.30	46.30	38.10	80.35 500 AV
1000.360	6.20	21.30	50.30	42.10	127.35 500 PK
1100.360	6.60	22.80	37.90	31.76	38.73 500 AV
1100.360	6.60	22.80	50.20	44.06	159.59 500 PK
1200.036	7.10	23.30	40.30	35.32	58.34 500 AV
1200.036	7.10	23.30	51.20	46.22	204.64 500 PK

Date of Test :06-22,1999

EUT :N/B PK+AV

Working Cond.:MODE:1

Temperature :26 deg/C

Humidity :60 %RH

Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limits
[MHz]	Loss	Factor	Vertical	Vertical	
	[dB]	[dB/m]	[dB(uV)]	[dB(uV/m)]	(uV/m) (uV/m)
1000.360	6.20	21.30	36.90	28.70	27.23 500 AV
1000.360	6.20	21.30	49.30	41.10	113.50 500 PK
1100.360	6.60	22.80	40.30	34.16	51.05 500 AV
1100.360	6.60	22.80	50.10	43.96	157.76 500 PK
1200.036	7.10	23.30	39.60	34.62	53.83 500 AV
1200.036	7.10	23.30	50.36	45.38	185.78 500 PK

- Remarks: 1. All Readings below 1GHz are Quasi-Peak, above are average value.
 2. " * ", means this data is worse case emission level.
 3. Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor(35.70, 35.54, 35.38)(35.70, 35.54, 35.38)
 4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test :06-22,1999
 EUT :N/B PK+AV
 Working Cond.:MODE:2

Temperature :26 deg/C
 Humidity :60 %RH
 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 (uV/m)	(uV/m)
1000.360	6.20	21.30	50.20	42.00	125.89	500 AV
1000.360	6.20	21.30	53.60	45.40	186.21	500 PK
1100.360	6.60	22.80	45.30	39.16	90.78	500 AV
1100.360	6.60	22.80	52.30	46.16	203.24	500 PK
1200.036	7.10	23.30	43.60	38.62	85.31	500 AV
1200.036	7.10	23.30	50.30	45.32	184.50	500 PK

Date of Test :06-22,1999
 EUT :N/B PK+AV
 Working Cond.:MODE:2

Temperature :26 deg/C
 Humidity :60 %RH
 Display Pattern:H Pattern

Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level Vertical [dB(uV)]	Emission Level Vertical [dB(uV/m)]	Limits (uV/m)	(uV/m)
1000.360	6.20	21.30	51.60	43.40	147.91	500 PK
1000.360	6.20	21.30	45.90	37.70	76.74	500 AV
1100.360	6.60	22.80	50.12	43.98	158.12	500 PK
1100.360	6.60	22.80	43.30	37.16	72.11	500 AV
1200.036	7.10	23.30	46.30	41.32	116.41	500 AV
1200.036	7.10	23.30	52.30	47.32	232.27	500 PK

Remarks: 1. All Readings below 1GHz are Quasi-Peak, above are average value.
 2. " * ", means this data is worse case emission level.
 3. Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor(35.70, 35.54, 35.38)(35.70, 35.54, 35.38)
 4. Deviations from the specifications: None.