

GESTEK

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Report #:983038F

PENTIUM-233 866 KHz
3 type LCDs

**Test Report
Application for Certification
On Behalf Of
First International Computer Inc.
Notebook Computer**

Model : 7100XT, 7100XT1, 7100T

FCC ID : EUNDESIGNOTE70

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.
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6000 72-70.3

1. Test Report Certification

Applicant : First International Computer Inc.

Manufacturer : First International Computer Inc.

EUT Description : Notebook Computer

(A) FCC ID : EUNDESIGNOTE70

(B) Model No. : 7100XT, 7100XT1, 7100T

(C) Serial No. : N/A

(D) Power : 100~240V , 50/60Hz

MEASUREMENT PROCEDURE 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 FCC LIMITS APPLICABLE.

NVLAQ®

Sample Received Date : Mar. 20, 1998

Final Test Date : Apr. 12, 1998

Documented by : Cindy Chiu

Test Engineer :

Approve & Authorized Signer :

Paul Lee

Terry Clure

ROBERT LEE

TERRY CHUNG

This test data shown below is traceable to NIST.

2. General Information

2.1 Production Description

Description : Notebook Computer

Model Number : 7100XT, 7100XT1, 7100T

Serial Number : 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.

FCC ID : EUNDESIGNOTE70

CPU : Pentium 233MHz with MMX, Clock: 66.8MHz

LCD Panel : 13.3" XGA (SANSUMG), LT133X2-126
14.1" XGA (Hitachi), TX36D61VC
12.1" TFT (Hitachi), TX31D21VC

Power Adaptor : I-Lan, 50W

Mode 1: Pentium 233MHz with MMX, Clock: 66.8MHz, 13.3" XGA, 1024X768 Resolution,
H-sync 48KHz, V-Sync 60Hz.

Mode 2: Pentium 233MHz with MMX, Clock: 66.8MHz, 14.1" XGA, 1024X768 Resolution,
H-sync 48KHz, V-Sync 60Hz.

Mode 3: Pentium 233MHz with MMX, Clock: 66.8MHz, 12.1" TFT, 1024X768 Resolution,
H-sync 48KHz, V-Sync 60Hz.

Note: 1. This Notebook computer can support three differential LCD Panel modes. All available option were investigated. The data show in this test report reflects the worst-case data for each clock frequency/video resolution and for each option listed in Section 2.2.

2.2 Tested System Details

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

☒ Host Notebook Computer (EUT)

Model Number	: 7100XT, 7100XT1, 7100T
Serial Number	: N/A
FCC ID	: EUNDESIGNOTE70
Manufacturer	: First International Computer Inc.
CPU	: Pentium 233MHz with MMX, Clock: 66.8MHz
1.44MB Floppy Disk Driver	: TEAC, FD-05HG-5661
3.2 GB Hard Disk Driver	: Hitachi, DK226-32
13.3" XGA LCD	: Sansumg, LT133X2-126
14.1" XGA LCD	: Hitachi, TX36D61VC
12.1" TFT LCD	: Hitachi, TX31D21VC
24X CD-ROM	: Toshiba, XM-1702B
CCD Camera	: AXIS, PCAM-QU
Li-Ion Battery Pack	: Simplo, SMP-202P
I/O Card	: On Board
VGA Card	: On Board
Power Adaptor	: Li-Lan, 50W
Power Cord	: Non-Shielded, Detachable.

☒ Monitor

Model Number	: C562DU
Serial Number	: 544FA000E00130
FCC ID	: GKR562DU
Manufacturer	: ATEC
Data Cable	: Shielded, Undetachable, 1.5m
Power Cord	: Shielded, Detachable, 1.8m

☒ Keyboard(PS2)

Model Number	: 5140
Serial Number	: 867110685
FCC ID	: E5XKBM10410
Manufacturer	: BTC
Data Cable	: Sheiled, Undetachable, 1.2 m

☒ Printer

Model Number : C2642A(DJ-400)
Serial Number : MY7951C4J5
FCC ID : B94C2642X
Manufacturer : HP
Data Cable : Shielded, Detachable, 1.8m
Adaptor & Power Cord : AC 110V, 60Hz To DC 30V
: Non-Shielded, Detachable, 1.9m

☒ Modem

Model Number : 1414
Serial Number : 960018052
FCC ID : IFAXDM1414
Manufacturer : ACEEX
Adaptor & Power Cord : Non-Shielded, Detachable, 1.5m
Data Cable : Shielded, Detachable, 1.2m

☒ Mouse(USB)

Model Number : M-UA34
Serial Number : LTC70500272
FCC ID : DZL211087
Manufacturer : LOGITECH
Data Cable : Shielded, Undetachable, 1.5m

☒ Joystick

Model Number : 3001
Serial Number : AE62901417
FCC ID : N/A
Manufacturer : Logitech
Data Cable : Shielded, Undetachable, 0.8m

☒ LCD PROJECTOR

Model Number : CPJ-200
Serial Number : 87881
FCC ID : N/A
Manufacturer : SONY
Power Cord : Non-Shielded, Detachable, 1.8m
Data Cable : Shielded, Detachable, 1.2m*4

☒ Speaker

Model Number : DS-203
Serial Number : N/A
FCC ID : N/A
Manufacturer : Crocodile
Power Cord : N/A
Data Cable : Shielded, Undetachable, 1m

☒ Radio Receiver

Model Number : HS-GS162
Serial Number : LYJ1084567
FCC ID : N/A
Manufacturer : AIWA CO., LTD
Power Cord : N/A (Battery)

☒ Microphone

Model Number : N/A
Serial Number : N/A
FCC ID : N/A
Manufacturer : AIWA
Data Cable : Non-Shielded, Undetachable, 1m

☒ Earphone

Model Number : PH-12B
Serial Number : N/A
Manufacturer : PRO2 International Corp.
Power Cord : N/A
Data Cable : Non-Shielded, Undetachable, 1.2 m

2.3 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.

2.4 Test Facility

Site Description	: Aug. 10, 1995 File on Federal Communication Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046 Reference 31040/SIT1300F2
Name of firm	: Global EMC Standard Tech. Corp.
Site location	: No. 3 Pau-Tou Valley, Chia-Pau Tsuen, Lin Kou Tsiang, Taipei Country, Taiwan, R.O.C.

3. Conducted Power Line Test

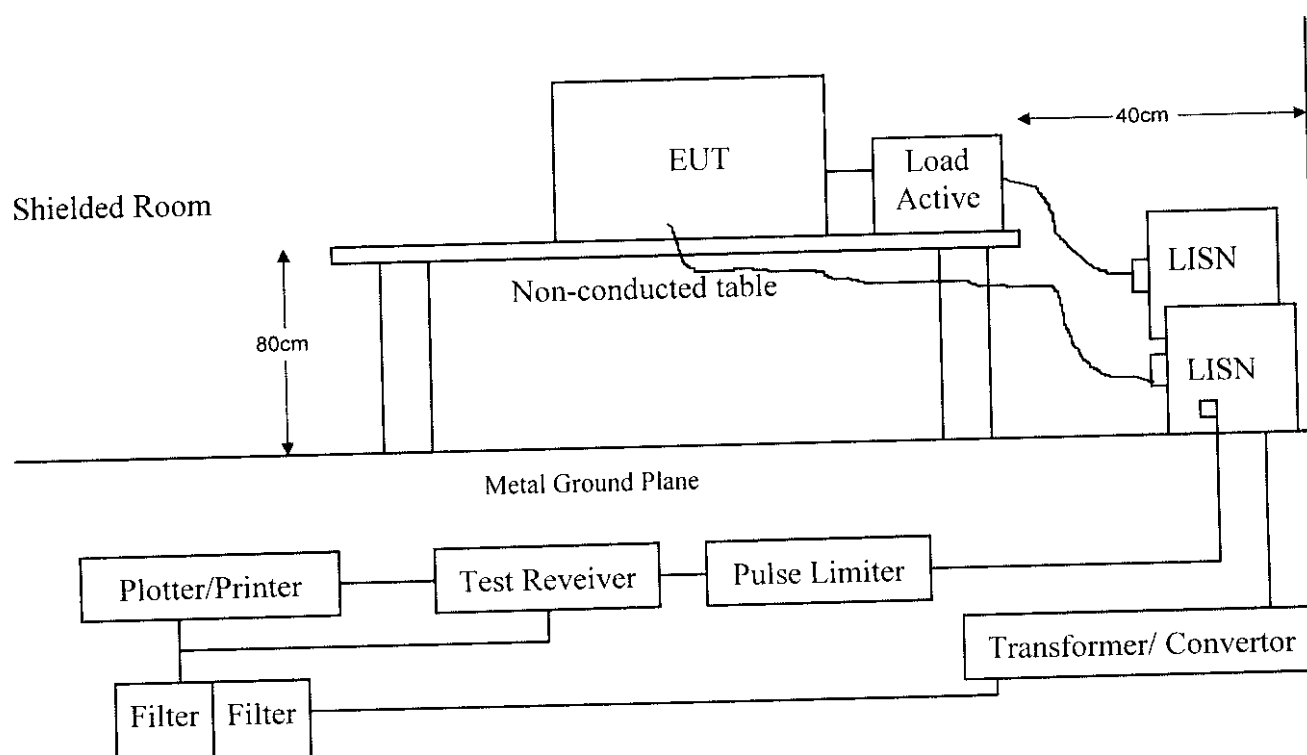
3.1 Test Equipments

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

Instrument	Manufacturer	Type /Serial No.	Last Calibration	Location	C.E.
Test Receiver	Rohde & Schwarz	ESHS 30 / 8281091010	Dec. 24, 1997	Shield Room #1	✓
L.I.S.N.	Kyoritsu	KNW-407	Jul.1997	Shield Room #1	
L.I.S.N.	Solar	8012-50-R24 / 90038	Jun. 05, 1997	Shield Room #1	✓
L.I.S.N.	EMCO	3825/2 / 91111-1902	Jul.1997	Shield Room #1	
L.I.S.N.	Rohde & Schwarz	ESH3-Z5 / 840567/002	Jun. 05, 1997	Shield Room #1	✓
L.I.S.N.	Schwarzbeck	NNLK 8121	Apr. 1998	Shield Room #1	
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	Jan. 11, 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



3.3 Conducted Powerline Emission Limit

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.

3.4 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.

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 form Hard Disk.
- 3.5.4 Play CD Disk Music in windows environment.
- 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 3.5.5 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. 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.

CONDUCTED EMISSION DATA

Date of Test	: Feb. 24, 1998	Temperature	: 22.2 °C
EUT	: Notebook Computer	Humidity	: 68.0 %
Test Mode	: Mode 1	Display Pattern	: H Pattern

FREQUENCY	READING LEVEL				LIMITS
	LINE 1		LINE 2		
MHz	dBuV	Uv	dBuV	Uv	Uv
0.50833	31.2	36.3	39.5	94.4	250
1.07921	34.3	51.9	40.1	101.2	250
1.90709	35.5	59.6	39.3	92.3	250
**4.19781	37.6	75.9	41.8	123.0	250
11.32339	20.5	10.6	21.6	12.0	250
27.77608	36.9	70.0	35.8	61.7	250

Remarks : 1. All readings are Quasi-peak and average values.

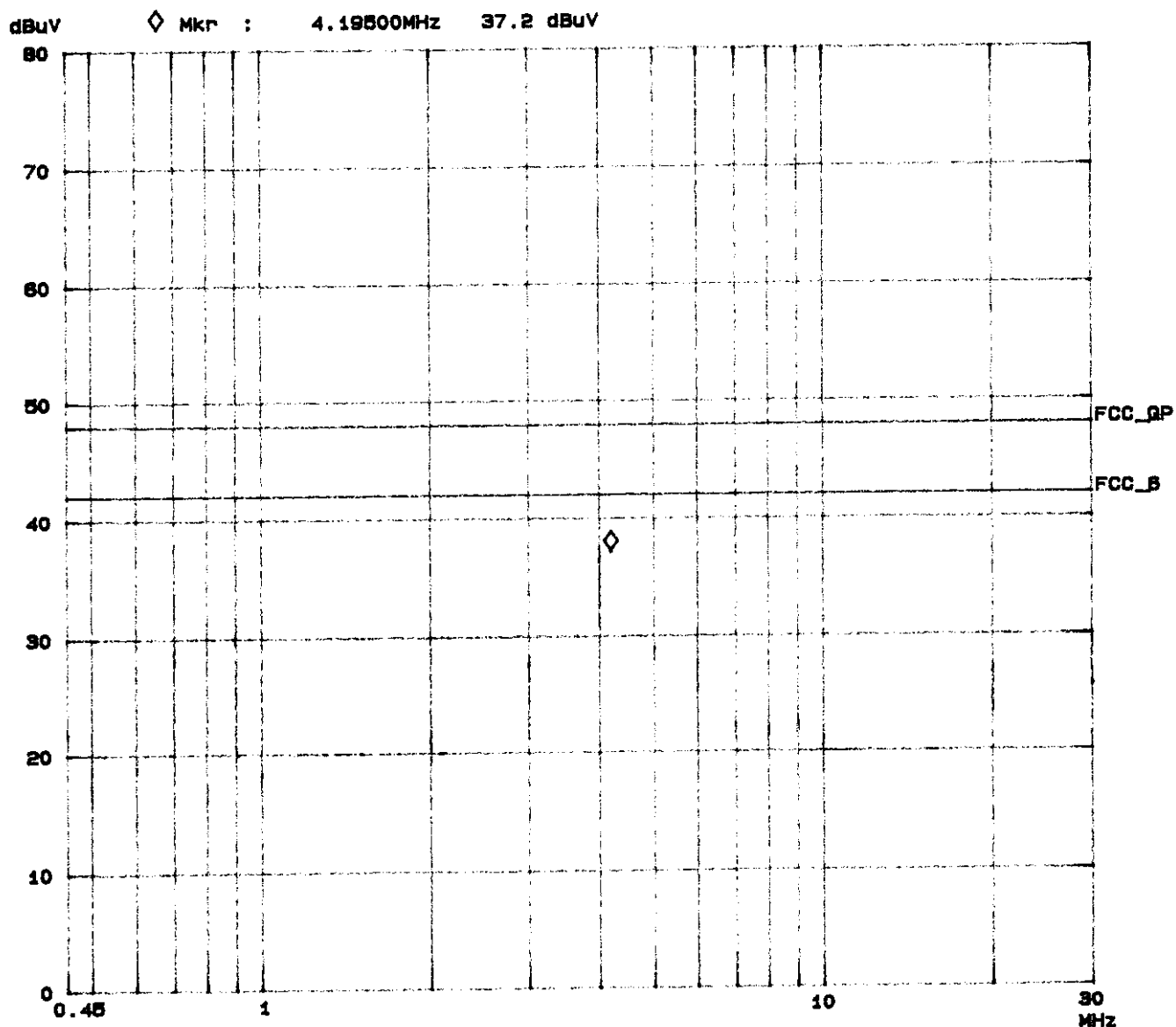
2. " * " means that the quasi-peak reading level is lower then the average limits, it is not necessary to measure the average level.

3. " ** " means that this data is the worst case emission level.

Attached 2 individual pages of peak scan curve data sheets.

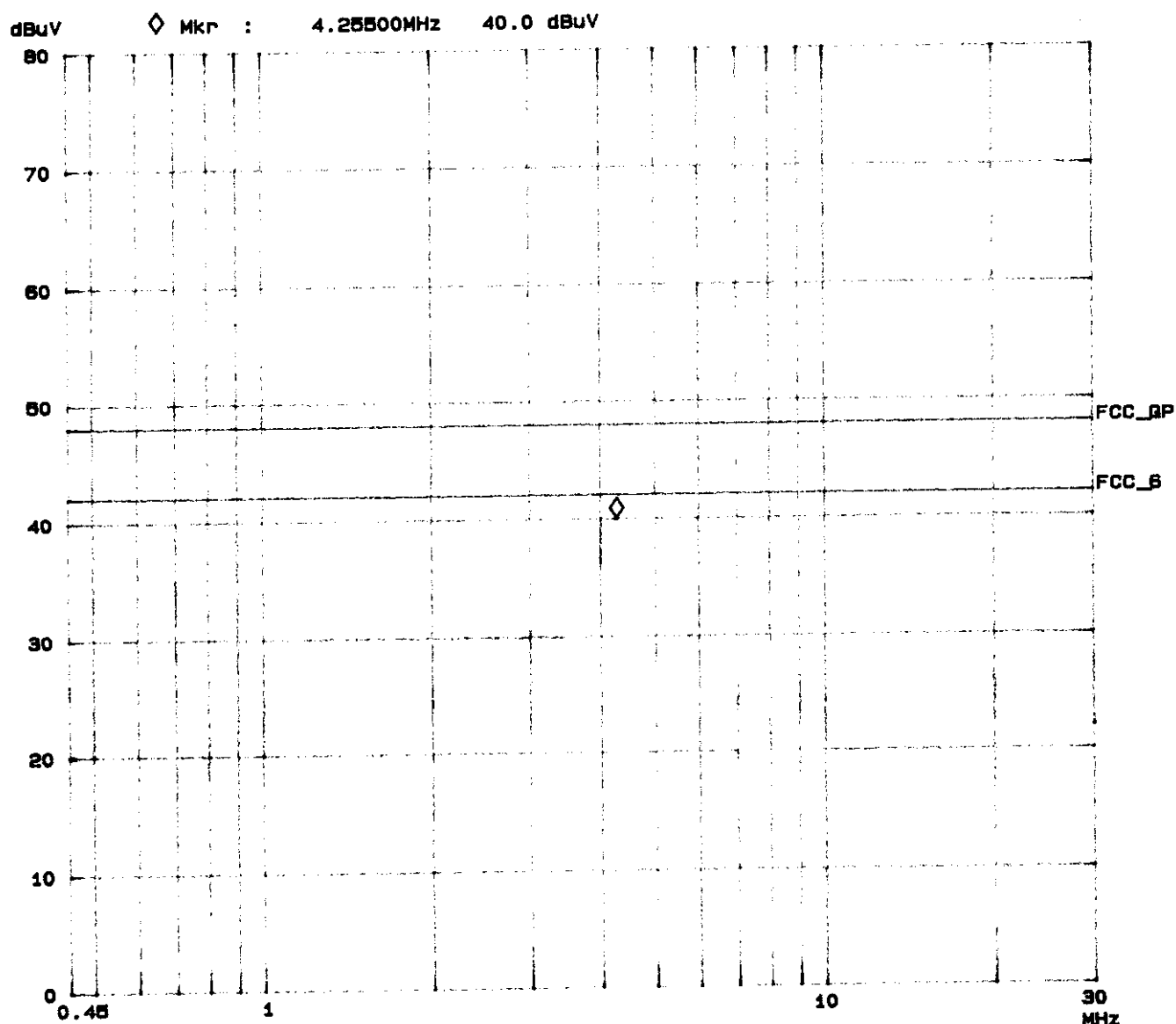
ROHDE & SCHWARZ ESHS 30
GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK P.C.
Manuf: FIC
Op Cond: FULL SYSTEM
Operator: ROBERT
Test Spec: FCC CLASS B
Comment: Line 1
M/N: DESIGNOTE70



ROHDE & SCHWARZ ESHS 30
GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK P.C.
Manuf: FIC
Op Cond: FULL SYSTEM
Operator: ROBERT
Test Spec: FCC CLASS B
Comment: Line 2
M/N: DESIGNOTE70



CONDUCTED EMISSION DATA

Date of Test	:	Feb. 24, 1998	Temperature	:	22.2 °C
EUT	:	Notebook Computer	Humidity	:	68.0 %
Test Mode	:	Mode 2	Display Pattern	:	H Pattern

FREQUENCY		READING LEVEL			LIMITS
	LINE 1		LINE 2		
MHz	dBuV	uV	dBuV	uV	uV
0.50396	30.3	32.7	37.9	78.5	250
**0.88305	29.5	29.9	38.3	82.2	250
1.76794	33.5	47.3	36.4	66.1	250
3.97820	34.5	53.1	37.8	77.6	250
8.62460	20.7	10.8	21.9	12.4	250
24.00167	31.7	38.5	30.5	33.5	250

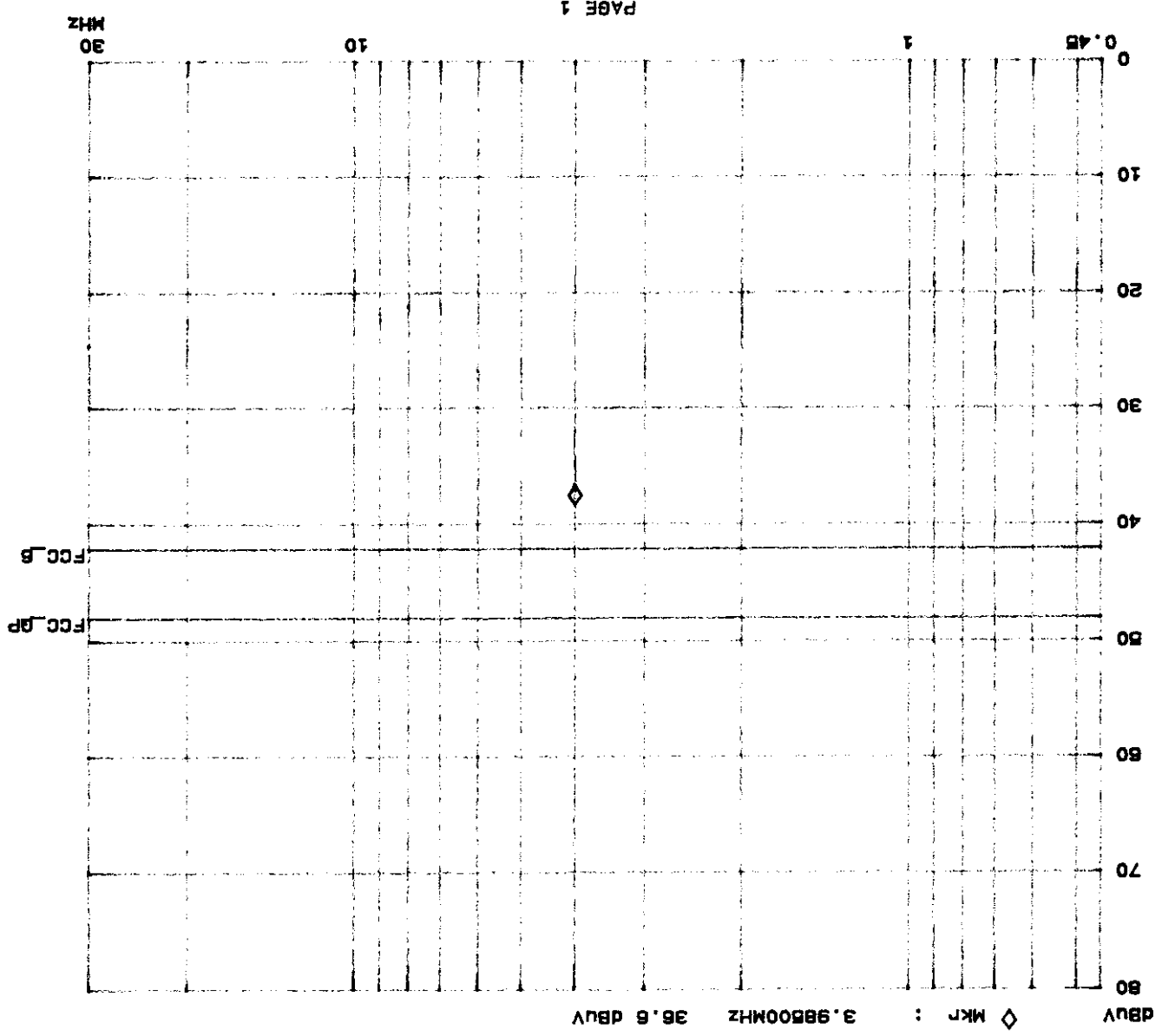
Remarks : 1. All readings are Quasi-peak and average values.

2. “ * ” means that the quasi-peak reading level is lower then the average limits, it is not necessary to measure the average level.
- 3.“ ** ” means that this data is the worst case emission level.

Attached 2 individual pages of peak scan curve data sheets.

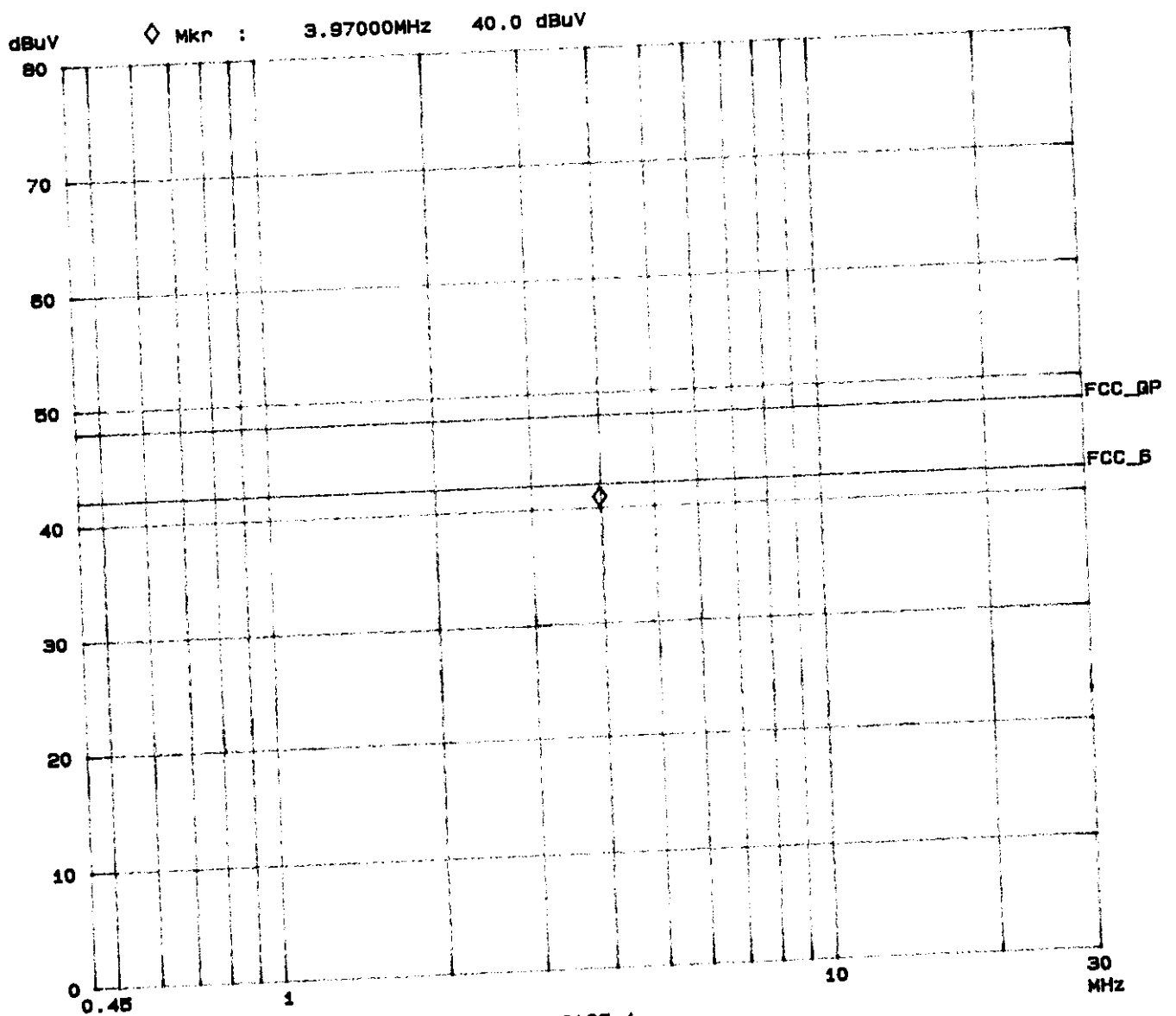
ROHDE & SCHWARZ ESHS 30 Gestek, Powerline Conducted Emission

EUT:
 Manuf:
 Op Cond:
 Operator:
 Test Spec:
 Comment:
 FULL SYSTEM, MODE 2
 ROBERT
 FCC CLASS_B
 Line 1
 M/N: DESIGNOTE70



ROHDE & SCHWARZ ESHS 30
GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK P.C.
Manuf: FIC
Op Cond: FULL SYSTEM, MODE 2
Operator: ROBERT
Test Spec: FCC CLASS_B
Comment: Line 2
M/N: DESIGNOTE70



CONDUCTED EMISSION DATA

Date of Test	: Apr. 12, 1998	Temperature	: 25.5 °C
EUT	: Notebook Computer	Humidity	: 67.0 %
Test Mode	: Mode 3	Display Pattern	: H Pattern

FREQUENCY	READING LEVEL				LIMITS
	LINE 1		LINE 2		
MHz	dBuV	uV	dBuV	uV	uV
0.63182	39.9	98.86	38.5	84.14	250
0.94770	39.7	96.61	37.4	74.13	250
2.46441	38.3	82.22	37.8	77.62	250
5.94173	39.5	94.41	38.2	81.28	250
**16.02934	43.4	147.91	42.9	139.64	250
23.39359	39.6	95.5	36.7	68.39	250

Remarks : 1. All readings are Quasi-peak and average values.

2. " * " means that the quasi-peak reading level is lower then the average limits, it is not necessary to measure the average level.

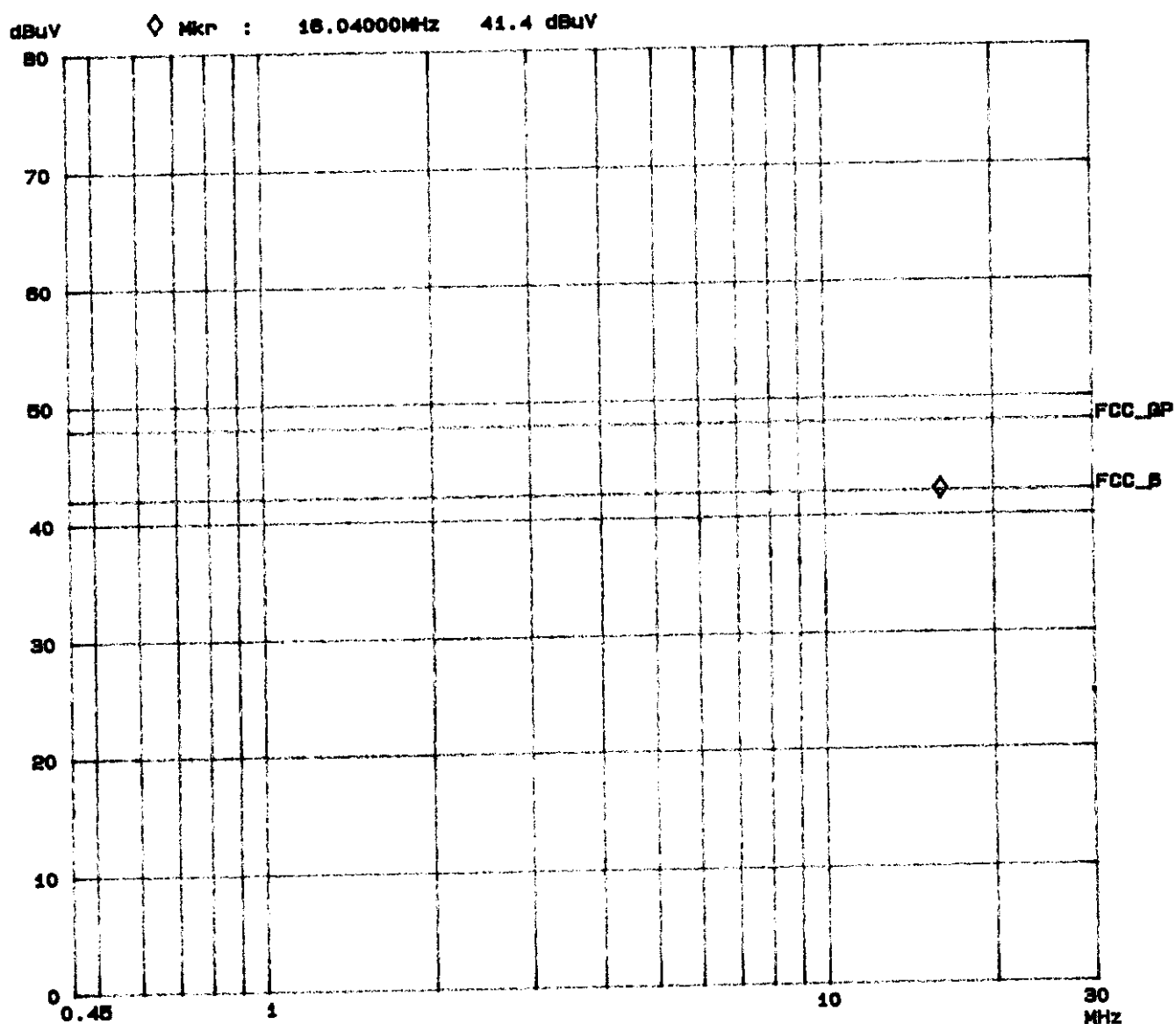
3. " ** " means that this data is the worst case emission level.

Attached 2 individual pages of peak scan curve data sheets.

ROHDE & SCHWARZ ESHS 30

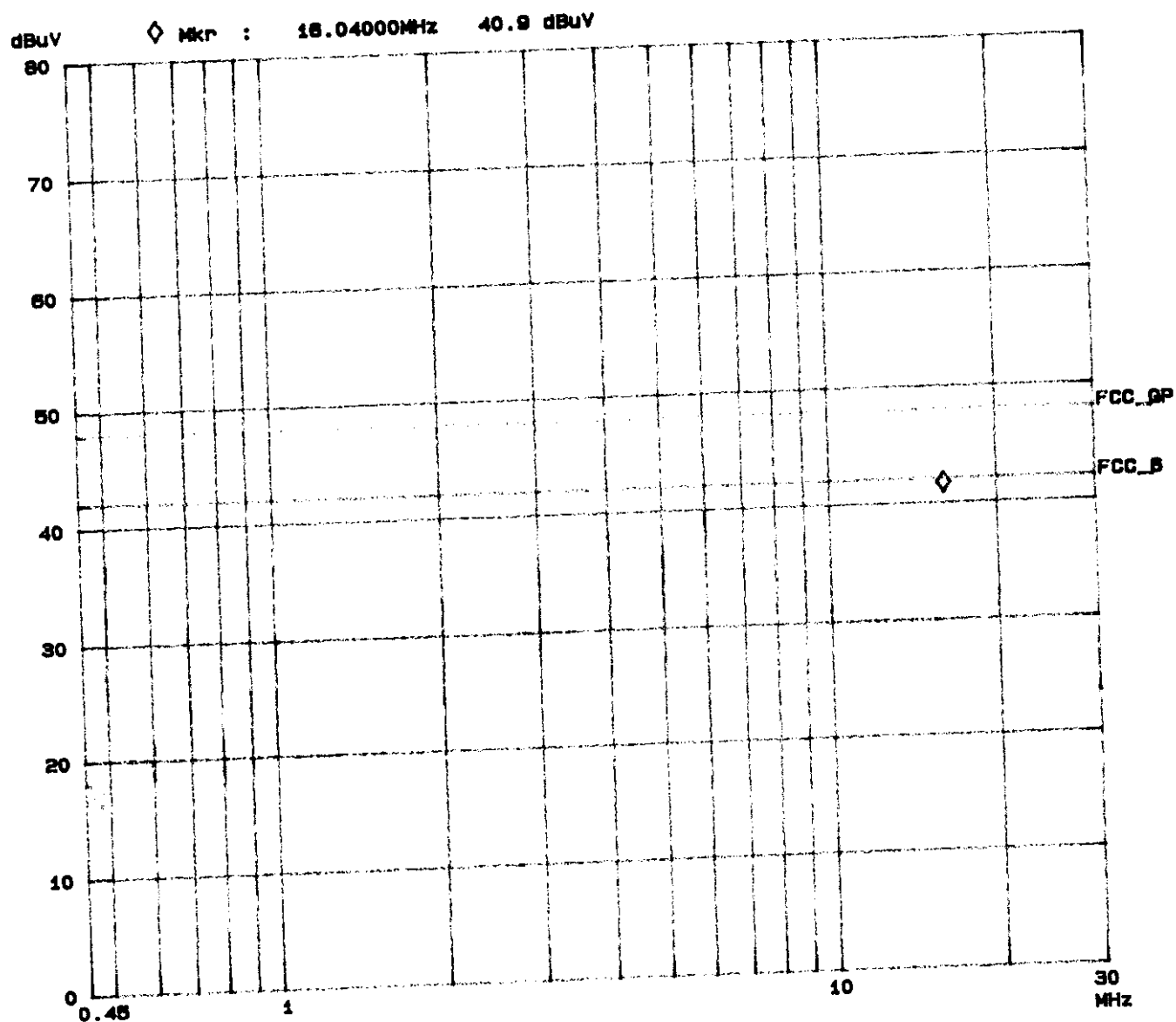
GesTek, PowerLine Conducted Emission

EUT: NOTEBOOK P.C
Manuf: FIC
Op Cond: FULL SYSTEM, MODE 3
Operator: ROBERT
Test Spec: FCC CLASS B
Comment: Line 1
M/N: DESIGNOTE70



ROHDE & SCHWARZ ESHS 30
Gestek, PowerLine Conducted Emission

EUT: NOTEBOOK P.C
Manuf: FIC
Op Cond: FULL SYSTEM< MODE: 3
Operator: ROBERT
Test Spec: FCC CLASS B
Comment: Line 2
M/N: DESIGNNOTE70



4. Radiation Emission Test

4.1 Test Equipment

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

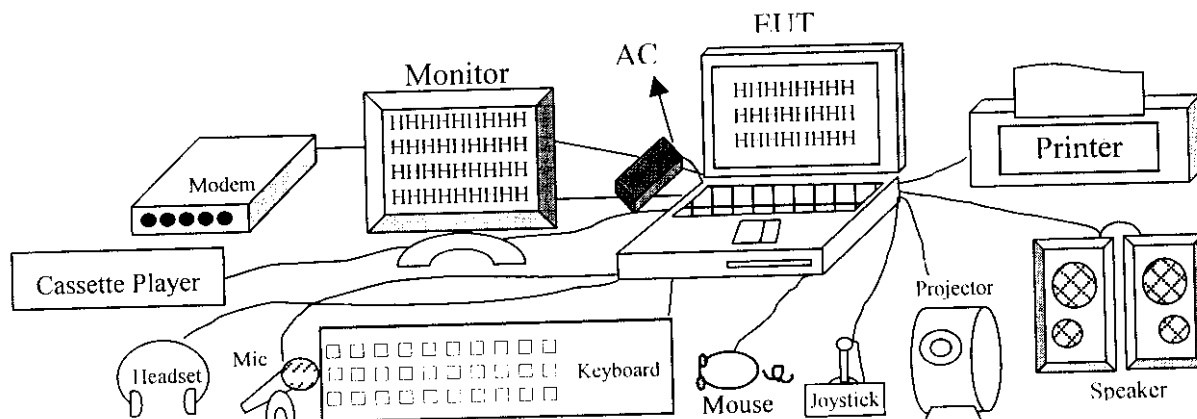
Radiated test was performed on : ☒ Site #1 ☐ Site #2

Instrument	Manufacturer	Type /Serial No.	Last Calibration	Site #1	Site #2
Test Receiver	Rohde & Schwarz	ESVS 30/829007/014	Nov. 15,1997	✓	
Spectrum Analyzer	Anristu	MA2601B/MT16442	Jun. 11,1997	✓	
Pre-Amplifier	HP	7447F/3113A04998	Nov. 16,1997	✓	
Test Receiver	Rohde & Schwarz	ESVS 10/8421122/001	Dec. 26,1997		✓
Spectrum Analyzer	HP	8568B/4315B05847	Jan. 05,1998		✓
Pre Amplifier	HP	8447D/3113A04487	Jan. 05,1998		✓
Antenna 30Mhz-2Ghz	Chase	CBL 6112/2039	Jan. 05,1998	✓	
Bilog Antenna	Chase	CBL6111/1380	May. 22,1997		✓
Dipole Antenna	Schwarzbeck	VHAP/719,UHAP/736	Jun.11,1997		

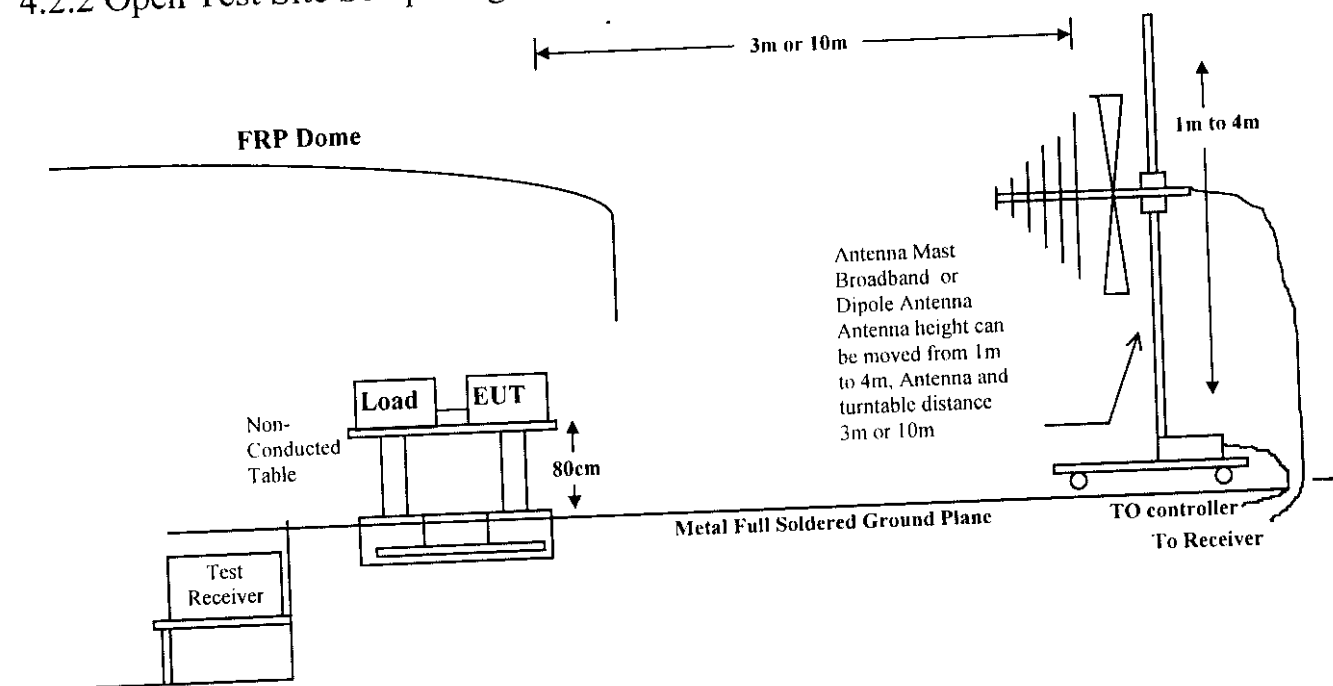
Note: All equipment upon which need to calibrated are with calibration period of 1 year.

4.2 Test Setup

4.2.1 Block Diagram of Connections between EUT and simulators



4.2.2 Open Test Site Setup Diagram



4.3 Radiated Emission Limit

4.3.1 FCC Class B Limits at 3m

Frequency MHz	Distance Meter	Field Strength	
		$\mu\text{V/M}$	$\text{dB}\mu\text{V/M}$
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 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.

4.5 Operating Condition of EUT

Same as Conducted Power Line Test which is listed in 3.5.

4.6 Radiated Emission Data

The measurement range of radiated emission which is from 30 MHz to 2 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. 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): $< \pm 4$ dB
- Uncertainty in the field strength measured (10m antenna distance): $< \pm 4$ 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 :03-24,1998
 EUT :NOTEBOOK PC
 Test Mode. :Mode 1

Temperature :22.5 deg/C
 Humidity :69 %RH
 Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Horizontal (dBuV/m)	Emission Level Horizontal (dBuV/m)	(uV/m)	Limits (uV/m)
110.599	2.54	11.62	22.98	37.15	72.00	150
122.881	2.60	12.35	22.74	37.69	76.67	150
147.455	2.71	10.77	21.63	35.11	56.95	150
166.889	2.79	10.14	19.73	32.66	42.96	150
184.324	2.87	9.47	25.08	37.42	74.33	150
200.470	2.94	9.32	25.32	37.58	75.67	150
233.805	3.09	11.81	21.95	36.86	69.63	200
258.806	3.21	13.03	22.26	38.50	84.18	200
300.530	3.40	13.22	19.22	35.84	61.95	200
367.700	3.62	14.65	9.30	27.57	23.90	200
*452.910	3.90	17.22	21.48	42.59	134.80	200
466.950	3.95	17.34	16.08	37.37	73.87	200
601.575	4.39	18.71	11.10	34.20	51.30	200

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
 4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 1 Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
66.812	1.71	6.78	18.49	26.98	22.34	100
135.190	2.65	11.92	17.78	32.35	41.47	150
159.758	2.76	11.36	14.88	28.99	28.16	150
188.998	2.89	9.94	18.62	31.45	37.37	150
194.120	2.92	9.97	23.64	36.53	67.03	150
200.465	2.94	10.00	25.49	38.43	83.50	150
233.633	3.09	12.01	16.85	31.95	39.60	200
*368.655	3.63	16.03	23.15	42.81	138.20	200
452.928	3.90	17.50	18.86	40.27	103.13	200
534.768	4.17	18.77	14.99	37.93	78.77	200

- 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
 4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 1 (Peak) Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Horizontal (dBuV/m)	Emission Level Horizontal (dBuV/m)	(uV/m)	Limits (uV/m)
1035.544	5.81	21.14	40.85	32.16	40.53	500
*1102.354	6.02	21.41	41.30	33.19	45.68	500
1169.163	6.23	21.88	38.57	31.25	36.51	500

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are Peak value.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor (35.64, 35.54, 35.43)
4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 1 (Peak) Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
*1035.526	5.81	22.37	42.33	34.86	55.36	500
1102.348	6.02	21.41	39.62	31.51	37.65	500
1169.163	6.23	21.88	35.20	27.88	24.77	500

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are Peak value.
2. " * ", means this data is worse case emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor (35.64, 35.54, 35.43)
4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test	:03-24,1998	Temperature	:22.5 deg/C
EUT	:NOTEBOOK PC	Humidity	:69 %RH
Test Mode.	:Mode 1 (Average)	Display Pattern:	H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level		Limits
(MHz)	Loss	Factor	Horizontal	Horizontal	(uV/m)	(uV/m)
	(dB)	(dB)	(dBuV/m)	(dBuV/m)		
1035.544	5.81	21.14	28.12	19.43	9.36	500
*1102.354	6.02	21.41	28.89	20.78	10.95	500
1169.163	6.23	21.88	26.08	18.76	8.67	500

Remarks:1. All Readings below 1GHz are Quasi-Peak, above are average value.

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

$$3. \text{Emission Level} = \text{Reading Level} + \text{Antenna Factor} + \text{Cable loss} \\ - \text{Amp Factor} \quad (35.64, 35.54, 35.43)$$

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test	:03-24,1998	Temperature	:22.5 deg/C
EUT	:NOTEBOOK PC	Humidity	:69 %RH
Test Mode.	:Mode 1 (Average)	Display Pattern:	H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
*1035.526	5.81	22.37	28.69	21.22	11.51	500
1102.348	6.02	21.41	27.43	19.32	9.25	500
1169.163	6.23	21.88	22.51	15.19	5.75	500

- 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 (35.64, 35.54, 35.43)
4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 2 Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limits
(MHz)	Loss	Factor	Horizontal	Horizontal	
	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(uV/m)
110.594	2.54	11.62	15.00	29.17	28.73
144.040	2.70	10.88	19.27	32.85	43.90
194.114	2.92	9.37	25.07	37.36	73.80
200.013	2.94	9.32	24.51	36.77	68.94
*208.898	2.99	10.02	24.95	37.96	79.03
258.050	3.21	13.03	17.05	33.29	46.21
319.490	3.46	13.65	23.28	40.39	104.63
452.929	3.90	17.23	19.78	40.92	111.12
517.635	4.11	18.00	15.79	37.90	78.50
712.705	4.75	19.41	16.67	40.83	110.06

- 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
 4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 2 Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
* 66.825	1.71	6.78	22.54	31.03	35.61	100
128.880	2.62	12.04	20.11	34.78	54.81	150
144.041	2.70	11.70	22.24	36.64	67.89	150
147.262	2.70	11.65	21.94	36.30	65.28	150
194.115	2.92	9.97	21.44	34.33	52.03	150
200.483	2.94	10.00	21.11	34.05	50.43	150
221.190	3.04	11.30	21.37	35.71	61.03	200
258.819	3.21	13.20	22.00	38.41	83.31	200
368.646	3.63	16.03	21.09	40.75	109.02	200
452.930	3.90	17.50	19.83	41.24	115.31	200
663.555	4.60	19.80	13.10	37.50	74.97	200
712.713	4.75	19.97	15.64	40.36	104.21	200

Remarks:1. All Readings below 1GHz are Quasi-Peak, above are Peak value.

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 :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 2 (Peak) Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Horizontal (dBuV/m)	Emission Level Horizontal (dBuV/m)	(uV/m)	Limits (uV/m)
*1002.415	5.71	21.01	42.83	33.85	49.25	500
1035.829	5.81	21.14	39.06	30.37	32.98	500
1102.656	6.02	21.41	40.87	32.76	43.47	500
1202.898	6.33	22.13	38.42	31.50	37.58	500

Remarks:1. All Readings below 1GHz are Quasi-Peak, above are Peak value.

2.“ * ”, means this data is worse case emission level.

3.Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor(35.70, 35.64, 65.54, 35.38)

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :03-24,1998 Temperature :22.5 deg/C
 EUT :NOTEBOOK PC Humidity :69 %RH
 Test Mode. :Mode 2 (Peak) Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
1035.829	5.81	22.37	39.42	31.95	39.60	500
*1102.656	6.02	21.41	40.11	32.00	39.83	500
1202.898	6.33	22.12	35.94	29.01	28.22	500

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(35.64, 35.54, 35.38)

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test	:03-24,1998	Temperature	:22.5 deg/C
EUT	:NOTEBOOK PC	Humidity	:69 %RH
Test Mode.	:Mode 2 (Average)	Display Pattern:	H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level		Limits
(MHz)	Loss	Factor	Horizontal	Horizontal	(uV/m)	(uV/m)
	(dB)	(dB)	(dBuV/m)	(dBuV/m)		
1002.415	5.71	21.01	28.94	19.96	9.95	500
1035.829	5.81	21.14	26.80	18.11	8.04	500
*1102.656	6.02	21.41	28.33	20.22	10.26	500
1202.898	6.33	22.13	25.16	18.24	8.17	500

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, 35.64, 35.54, 35.38)

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :04-12,1998 Temperature :25.5 deg/C
 EUT :NOTEBOOK PC Humidity :67 %RH
 Test Mode. :Mode 3 Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Horizontal (dBuV/m)	Emission Level Horizontal (dBuV/m)	(uV/m)	Limits (uV/m)
*66.878	1.76	6.43	22.83	31.02	35.55	100
86.019	2.16	7.82	18.68	28.67	27.12	100
110.594	2.54	11.62	17.06	31.23	36.42	150
122.880	2.60	12.35	18.74	33.69	48.37	150
135.169	2.65	11.48	23.79	37.92	78.72	150
157.518	2.76	10.48	16.50	29.73	30.67	150
172.036	2.82	9.88	17.56	30.26	32.57	150
199.998	2.94	9.32	25.95	38.21	81.37	150
208.900	2.99	10.02	23.19	36.20	64.53	150
221.180	3.04	10.95	25.27	39.26	91.85	200
233.192	3.09	11.81	21.87	36.78	68.99	200
270.336	3.26	13.08	23.16	39.50	94.45	200
319.487	3.46	13.65	21.94	39.05	89.67	200
417.793	3.78	15.96	15.73	35.48	59.40	200
614.407	4.43	18.86	13.59	36.88	69.84	200
761.855	4.91	20.15	14.85	39.91	98.98	200

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

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :04-12,1998 Temperature :25.5 deg/C
 EUT :NOTEBOOK PC Humidity :67 %RH
 Test Mode. :Mode 3 Display Pattern:H Pattern

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Reading Level Vertical (dBuV/m)	Emission Level Vertical (dBuV/m)	(uV/m)	Limits (uV/m)
120.286	2.59	12.20	16.67	31.46	37.41	150
122.883	2.60	12.16	18.55	33.31	46.28	150
157.520	2.76	11.36	18.11	32.22	40.85	150
184.322	2.87	9.92	14.60	27.39	23.42	150
*200.477	2.94	10.00	23.11	36.05	63.48	150
208.897	2.99	10.59	17.30	30.88	34.99	150
270.339	3.26	13.51	19.33	36.10	63.86	200
350.996	3.56	15.60	13.37	32.53	42.32	200
368.635	3.63	16.03	19.59	39.25	91.73	200
400.954	3.73	16.70	15.88	36.31	65.39	200
417.794	3.78	16.92	18.10	38.80	87.12	200
466.948	3.95	17.86	17.36	39.17	90.90	200
565.248	4.27	18.94	11.44	34.65	53.98	200
811.007	5.08	20.78	12.33	38.19	81.15	200

Remarks:1. All Readings below 1GHz are Quasi-Peak, above are Peak value.

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 :04-12,1998 Temperature :25.5 deg/C
 EUT :NOTEBOOK PC Humidity :67 %RH
 Test Mode. :Mode 3 (Peak) Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limits
(MHz)	Loss	Factor	Horizontal	Horizontal	
	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(uV/m)
1069.125	5.91	21.28	41.56	33.16	45.50
1136.110	6.12	21.65	39.36	31.65	38.24
*1202.637	6.33	22.13	42.99	36.07	63.60

Remarks:1. All Readings below 1GHz are Quasi-Peak, above are Peak value.

2.“ * ”, means this data is worse case emission level.

3.Emission Level = Reading Level + Antenna Factor + Cable loss
 - Amp Factor(35.59, 35.48, 35.38)

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test :04-12,1998	Temperature :25.5 deg/C
EUT :NOTEBOOK PC	Humidity :67 %RH
Test Mode. :Mode 3 (Peak)	Display Pattern:H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limits
(MHz)	Loss	Factor	Vertical	Vertical	
	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(uV/m)
1000.089	5.70	22.90	40.98	33.88	49.43
*1069.539	5.91	21.87	43.07	35.26	57.94
1203.688	6.33	22.12	40.23	33.30	46.25

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, 35.59, 35.38)

4.Deviations from the specifications: None.

Radiated Emission Data

Date of Test : 04-12, 1998 Temperature : 25.5 deg/C
 EUT : NOTEBOOK PC Humidity : 67 %RH
 Test Mode. : Mode 3 (Average) Display Pattern: H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level	Limits	
	Loss	Factor	Horizontal	Horizontal		
(MHz)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(uV/m)	(uV/m)
1069.125	5.91	21.28	24.88	16.48	6.67	500
1136.110	6.12	21.65	25.44	17.73	7.70	500
*1202.637	6.33	22.13	27.51	20.59	10.70	500

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 (35.59, 35.48, 35.38)

4. Deviations from the specifications: None.

Radiated Emission Data

Date of Test	:04-12,1998	Temperature	:25.5 deg/C
EUT	:NOTEBOOK PC	Humidity	:67 %RH
Test Mode.	:Mode 3 (Average)	Display Pattern:	H Pattern

Frequency	Cable	Antenna	Reading Level	Emission Level		Limits
(MHz)	Loss	Factor	Vertical	Vertical	(uV/m)	(uV/m)
	(dB)	(dB)	(dBuV/m)	(dBuV/m)		
*1000.089	5.70	22.90	34.93	27.83	24.63	500
1069.539	5.91	21.87	32.29	24.48	16.75	500
1203.688	6.33	22.12	27.04	20.11	10.13	500

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, 35.59, 35.38)
4. Deviations from the specifications: None.