FCC ID: IOU0610S02

REPORT NO:	F89032108
PRODUCT:	Wireless LAN
MODEL NO:	NWH610, NCP110, WL101
SERIAL NO:	N/A
CLIENT:	NATIONAL DATACOMM CORPORATION.
ADDRESS:	4F, No 24-2, INDUSTRY EAST 4th ROAD, Science Park Hsinchu, Taiwan, R.O.C.
ISSUED BY:	ADVANCE DATA TECHNOLOGY CORPORATION (ADT CORP.)
OFFICE ADDRESS:	11F, NO. 1, SEC. 4, NAN-KING EAST RD., TAIPEI, TAIWAN, R.O.C.
LABORATORY ADDRESS:	NO. 47, 14 LING, CHIA PAU TSUEN, LIN KOU HSIANG, TAIPEI HSIEN, TAIWAN, R.O.C.
TEST STANDARD:	47CFR Part 15, Subpart B & C
TEST DATE:	Mar 31, 2000
TEST RESULT:	Pass

NVLAP®

Accredited Laboratory

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APPENDIX EUT PHOTOS 62

1. CERTIFICATION

Issue Date: March 31, 2000

PRODUCT:	Wireless LAN PCMCIA Card
MODEL NO:	NWH610, NCP110 (NDC)
	WL101 (ZyXEL)
FCC ID:	IOU0610S02
CLIENT:	National Datacomm Corporation.
	ZyXEL Communications Corporation.
TEST STANDARD:	FCC 47CFR Part 15, Subpart C (Section 15.247) and Subpart B ANSI C63.4-1992

We, **ADVANCE DATA TECHNOLOGY CORPORATION,** hereby certify that one sample of the designated sample has been tested in our facility. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate representation of the measurements of the sample's characteristics and the energy emitted under the conditions herein specified.

TESTED BY: Ellis Wu **DATE:** 4/3/2000
Ellis Wu

CHECKED BY: Delphine Hsu **DATE:** 4/3/2000
Delphine Hsu

APPROVED BY: Alan Lane **DATE:** 4/3/2000
Dr. Alan Lane, Manager

2. SUMMARY OF TEST RESULTS & GENERAL STATEMENT OF CERTIFICATION

The EUT has been tested according to the EUT's specifications and the following requirements. The worst case were found at the data rate and modulation type of 11Mb/s(CCK).

47 CFR Part 15, Subpart C			
PARAGRAPH.	TEST REQUIREMENTS	COMPLIANCE (YES/NO)	TEST RESULT
15.107	**AC Power Conducted Emissions Spec.: 48 dBuV**	**Yes**	**Minimum passing margin is –10.2 dBuV At 22.57 MHz**
15.247(a)(2)	**Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Spec.: min. 500 kHz**	**Yes**	**9.63 MHz > 500 kHz**
15.247(b)	**Maximum Peak Output Power Spec.: max. 30 dBm**	**Yes**	**Minimum passing margin is –21.8 dBm**
15.247(c)	**Transmitter Radiated Emissions Spec.: Table 15.209**	**Yes**	**Minimum passing margin is –2.1 dBuV At 2038.00 MHz**
15.247(d)	**Power Spectral Density Spec.: max. 8dBm**	**Yes**	**Minimum passing margin is –18.8 dBm**
15.247(e)	**Processing Gain of Direct Sequence Spread Spectrum System Spec.: min. 10 dB**	**Yes**	**11.4dB ≧10dB**

Note 1 : The digital circuits and receiver portion of the EUT has been tested and verified to comply with FCC Part 15, Subpart B, Class B – computing Devices(FCC Doc). The engineering test report can be provided upon FCC requests.

3. GENERAL INFORMATION

3.1 General Description of EUT

Product:	**Wireless LAN PCMCIA Card**
Model No:	**NWH610, NCP110, WL101**
Power Supply:	**DC Power from Notebook**
Radio Technology:	**Direct Sequence Spread Spectrum**
Modulation Type:	**QPSK, CCK**
Data Rate:	**1 / 2 / 5.5 / 11 Mbps**
Operating Frequency:	**2412 ~ 2462 MHz**
Number of Channel:	**11**
Channel Spacing:	**5 MHz**
Power Rating:	**Max. 15dBm**
Antenna Gain:	**Max. -1 dBi**
Associated devices:	**N/A**

Note: 1. NWH610, NCP110, WL101 are the same products, they had different product names because of marketing requirement for OEM.

2. The wireless PCMCIA card, InstantWave was designed with a "Maximizing the convenience of networking" philosophy in mind. You will find that InstantWave is very easy to configure and use.

For other detailed information, please refer to user' s manual.

3.2 Description of Test mode

The EUT has 11 channels for data transmission. According to Part 15 Sec. 15.31(m), the channel 1, 6 and 11 were chosen for evaluation.

Mode	Channel	Frequency (MHz)
1	1	2412 MHz
2	6	2437 MHz
3	11	2462 MHz

3.3 Test Methodology

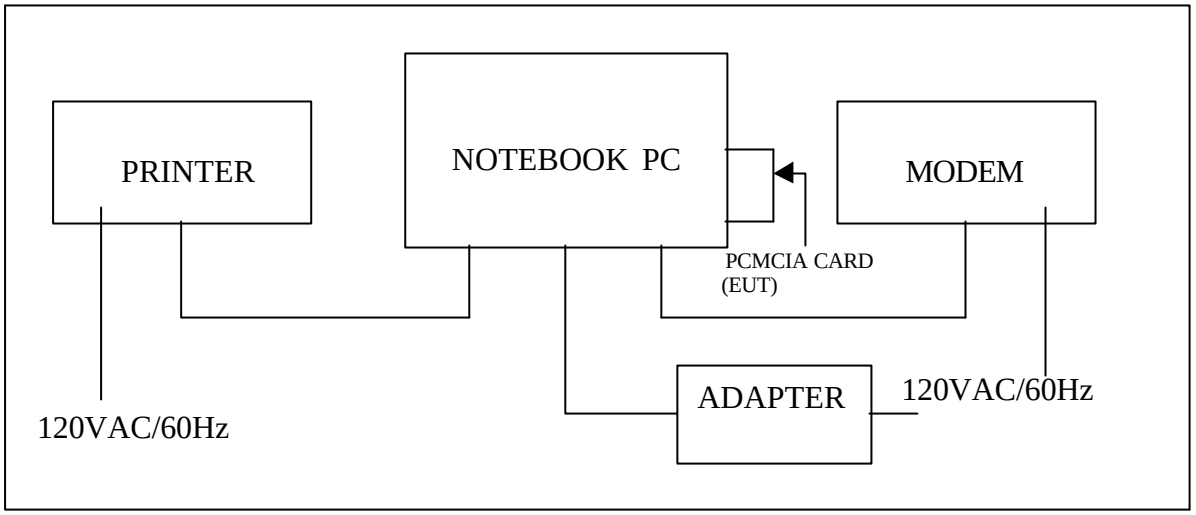
All tests were executed on a sample of EUT for the evaluation in compliance with FCC CFR47 Part 15, Subpart C.

Both conducted and radiated emissions measurements were conducted in accordance with ANSI C63.4:1992.

3.4 Support Units

No	Product	Brand	Model No.	Serial No.	FCC ID / DoC
1	**Notebook**	**IBM**	**ThinkPad 310**	**AM-D1DW998/07**	**HLZ315**
Cable : Non-shielded Power (1.8m)					
2	**Printer**	**HP**	**2225C+**	**3030S79116**	**DS16XU2225**
Cable : Non-shielded power (with a power adapter) Shielded Signal (1.2m)					
3	**Modem**	**ACCEX**	**1414**	**980020569**	**IFAXDM1414**
Cable : Non-shielded power (with a power adapter) Shielded Signal (1.2m)					

3.5 Configuration of Tested System



4. GENERAL INFORMATION OF TEST FACILITY

4.1 Test Lab.:

☑ **Lin Kuo EMC Lab.**

No. 47, 14 Ling, Chia Pau Tsuen, Lin Kuo Hsiang, Taipei, Taiwan, R.O.C.

☐ **Hsin Chu EMC Lab.**

No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, R.O.C.

4.2 Calibration Interval :

Calibration interval of the test sites and all the test instruments is 12 months. The calibrations are traceable to NML/ROC and NIST/USA.

5. TEST PROCEDURES AND TEST RESULTS

5.1 Conducted Emission Measurement

5.1.1 Test Instruments

ROHDE & SCHWARZ Test Receiver	ESH3	893495/006	July 7, 2000
ROHDE & SCHWARZ Spectrum Monitor	EZM	893787/013	July 8, 2000
ROHDE & SCHWARZ Artificial Mains Network	ESH2-Z5	892107/003	July 13, 2000
EMCO L.I.S.N.	3825/2	9504-2359	July 13, 2000
Shielded Room	Site 3	ADT-C03	NA

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

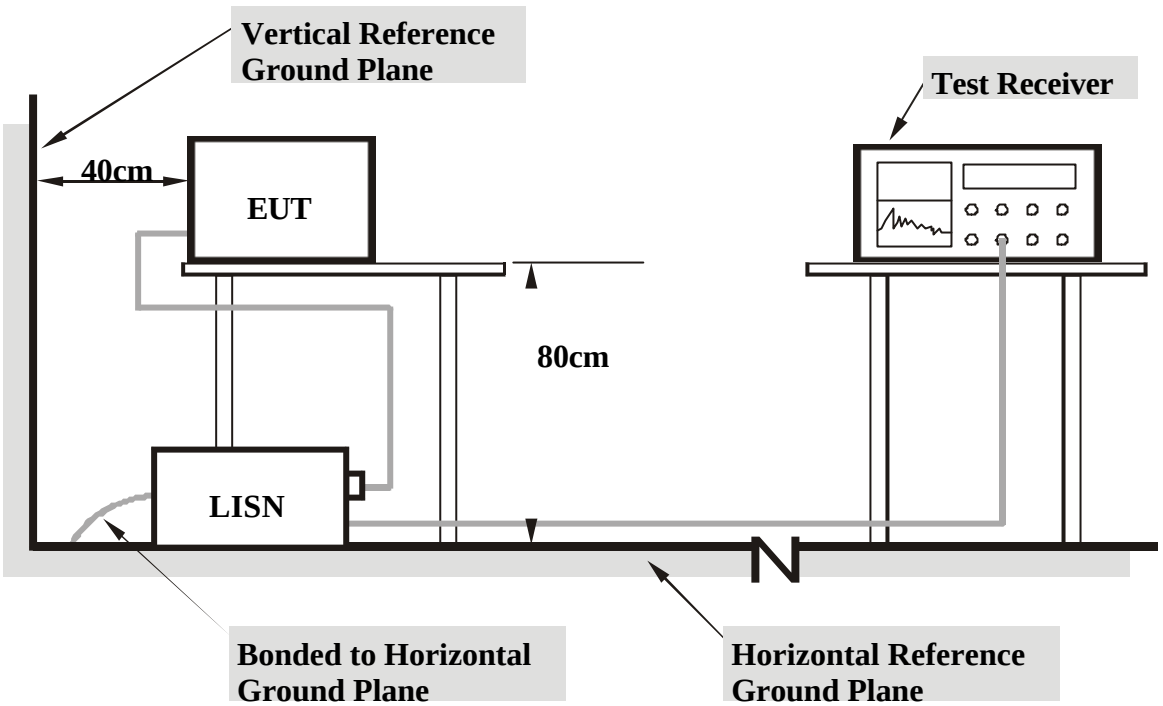
5.1.2 Test Procedure

The EUT was placed 0.4 meter far away from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50Ω/ 50μH coupling impedance for the measuring instrument.

Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

The frequency range from 450 kHz to 30 MHz was searched. The emission levels over 10dB under the prescribed limits could not be reported.

5.1.3 Test Setup



Note: 1. Support units were connected to second LISN.
2. Both LISNs (AMN) are 80cm away from EUT and at least 80cm from other units and toher metal planes.

5.1.4 Photograph of Test Setup

5.1.5 EUT Operating condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest frequency channels individually. "H" patterns and other messages were sent to support units and displayed on the screen of Notebook PC.

5.1.6 Climate Condition

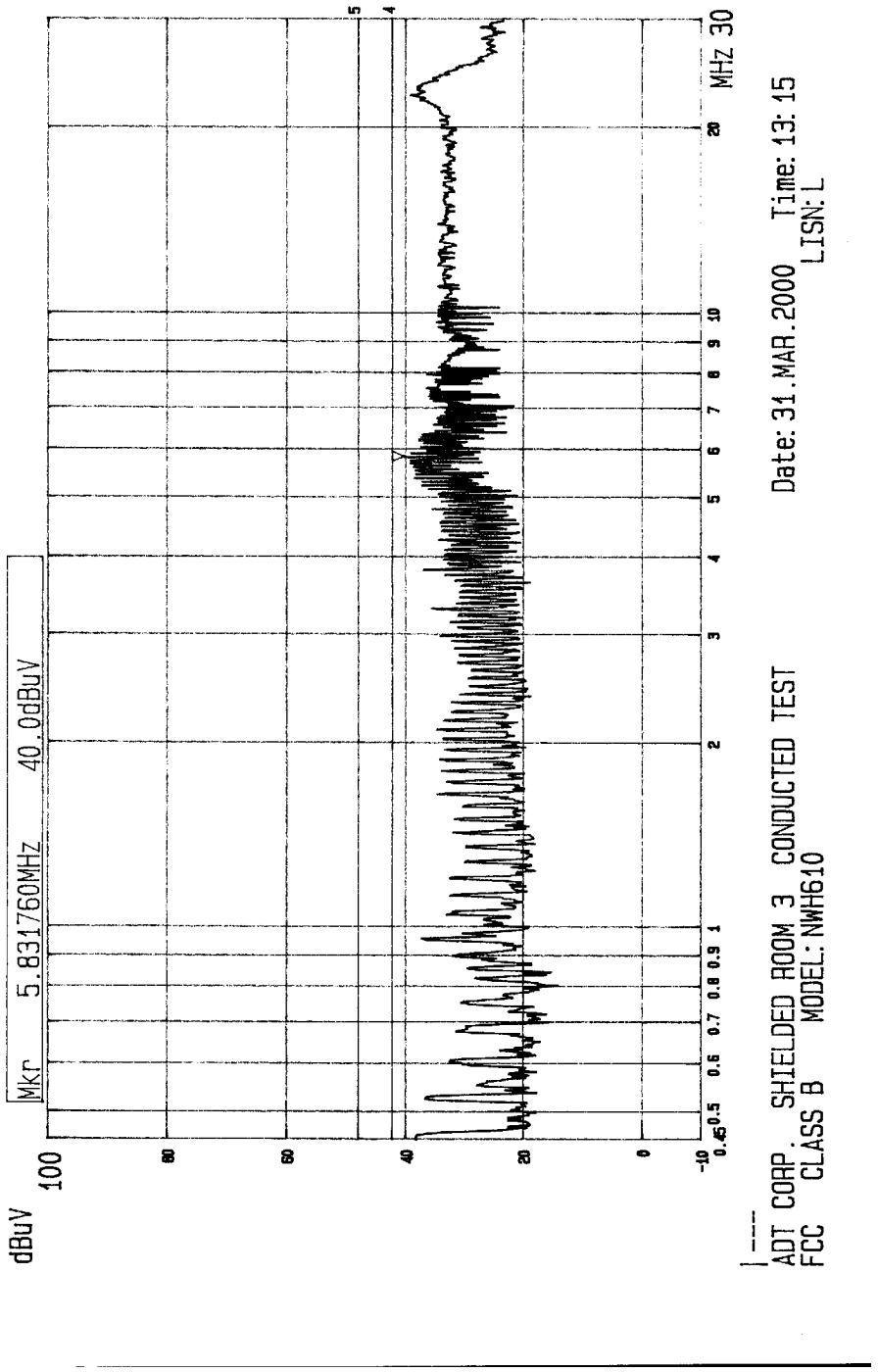
THE TEMPERATURE AND RELATED HUMIDITY: 23 ℃ AND 63% RH

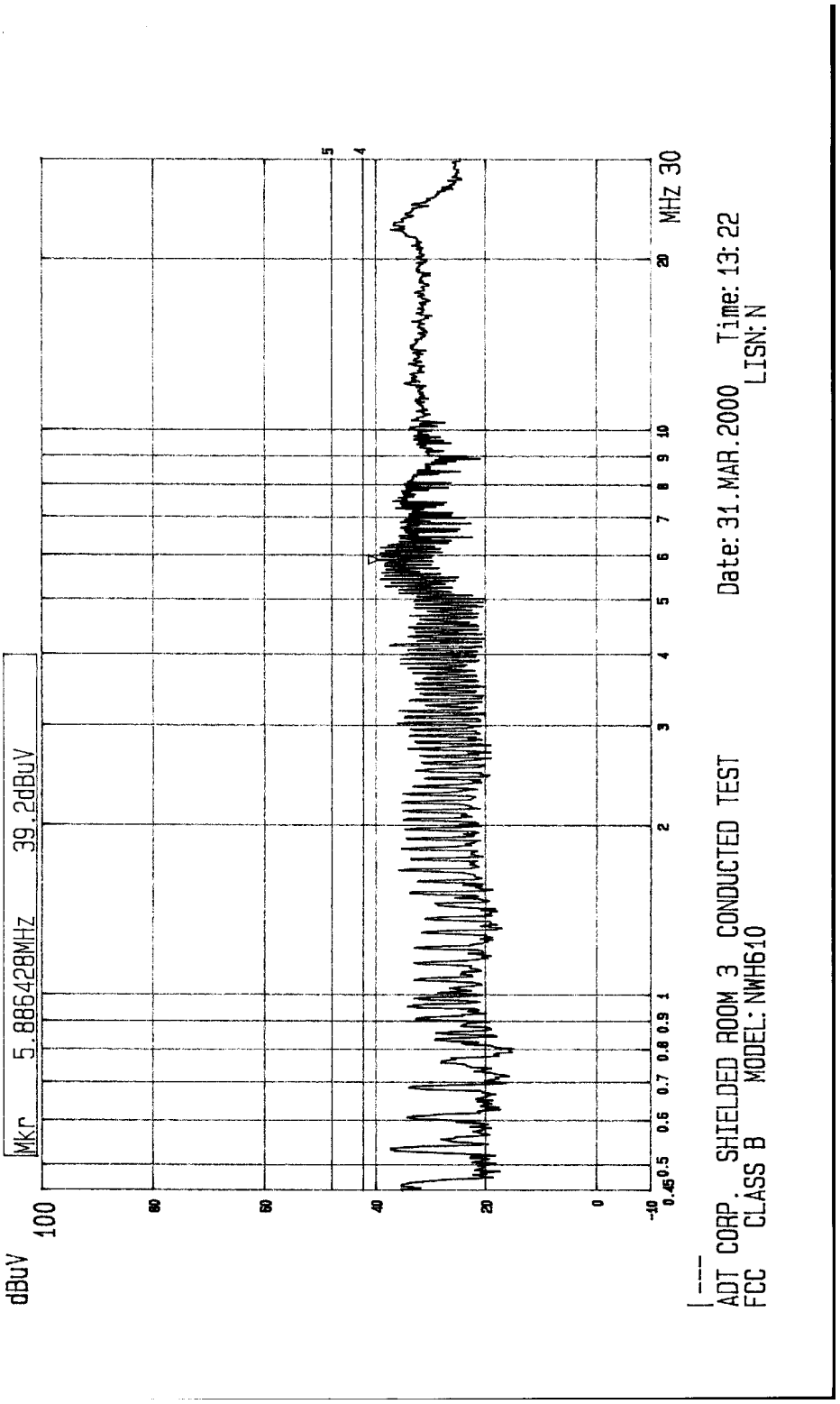
5.1.7 Test Results

MODE: CH 1		6 dB Bandwidth: 10 kHz				PHASE: LINE (L)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.46	**0.2**	**31.0**	**-**	**31.2**	**-**	**48**	**-**	**-16.8**	**-**
0.53	**0.3**	**31.8**	**-**	**32.1**	**-**	**48**	**-**	**-15.9**	**-**
1.68	**0.3**	**31.0**	**-**	**31.3**	**-**	**48**	**-**	**-16.7**	**-**
4.19	**0.5**	**33.4**	**-**	**33.9**	**-**	**48**	**-**	**-14.1**	**-**
5.86	**0.5**	**36.0**	**-**	**36.5**	**-**	**48**	**-**	**-11.5**	**-**
22.57	**1.3**	**35.1**	**-**	**36.4**	**-**	**48**	**-**	**-11.6**	**-**

MODE: CH1		6 dB Bandwidth: 10 kHz				PHASE: Neutral(N)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.46	**0.2**	**32.6**	**-**	**32.8**	**-**	**48**	**-**	**-15.2**	**-**
0.53	**0.3**	**33.0**	**-**	**33.3**	**-**	**48**	**-**	**-14.7**	**-**
1.68	**0.3**	**30.7**	**-**	**31.0**	**-**	**48**	**-**	**-17.0**	**-**
4.19	**0.5**	**32.6**	**-**	**33.1**	**-**	**48**	**-**	**-14.9**	**-**
5.86	**0.5**	**36.0**	**-**	**36.5**	**-**	**48**	**-**	**-11.5**	**-**
22.57	**1.3**	**36.5**	**-**	**37.8**	**-**	**48**	**-**	**-10.2**	**-**

Remarks:
1. **"*": Undetectable**
2. **Q.P. and AV. are abbreviations of quasi-peak and average individually.**
3. **"-": NA**
4. **The emission levels of other frequencies were very low against the limit.**
5. **Margin value = Emission level - Limit value**
6. **Emission Level = Correction Factor + Reading Value.**


dBuV
100
80
60
40
20
0
-10
Mkr 5.831760MHz 40.0dBuV
0.45 0.5 0.6 0.7 0.8 0.9 1 2 3 4 5 6 7 8 9 10 20 MHz 30
Date: 31.MAR.2000 Time: 13: 15
LISN: L
ADT CORP. SHIELDED ROOM 3 CONDUCTED TEST
FCC CLASS B MODEL: NWH610


dBuV
100
80
60
40
20
0
-10
Mkr 5.886428MHz 39.2dBuV
0.45 0.5 0.6 0.7 0.8 0.9 1 2 3 4 5 6 7 8 9 10 20 MHz 30
ADT CORP. SHIELDED ROOM 3 CONDUCTED TEST
FCC CLASS B MODEL: NWH610
Date: 31.MAR.2000 Time: 13:22
LISN: N

5.2 6 dB Bandwidth Measurement

5.2.1 Test Instruments

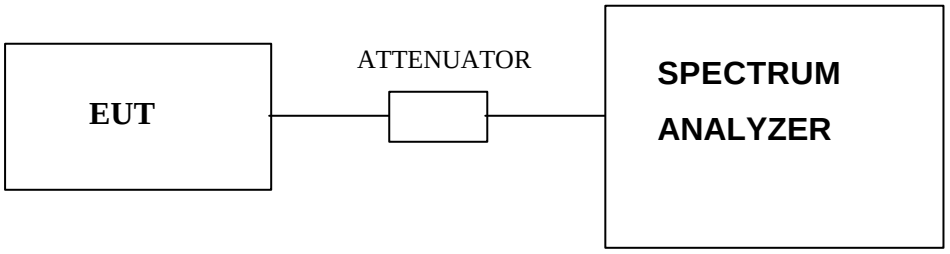
Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ TEST RECEIVER	**ESMI**	**846839/018 848926/005**	**Dec. 03, 2000**
HP ATTENUATOR	**8496B**	**3247A18505**	**Cal. on use**
HP PLOTTER	**7475A**	**2641V27755**	**N/A**

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

5.2.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 100 kHz RBW and 100 kHz VBW,. The 6 dB bandwidth was measured and recorded.

5.2.3 Test Setup



5.2.4 EUT Operating condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.

5.2.5 Climate Condition

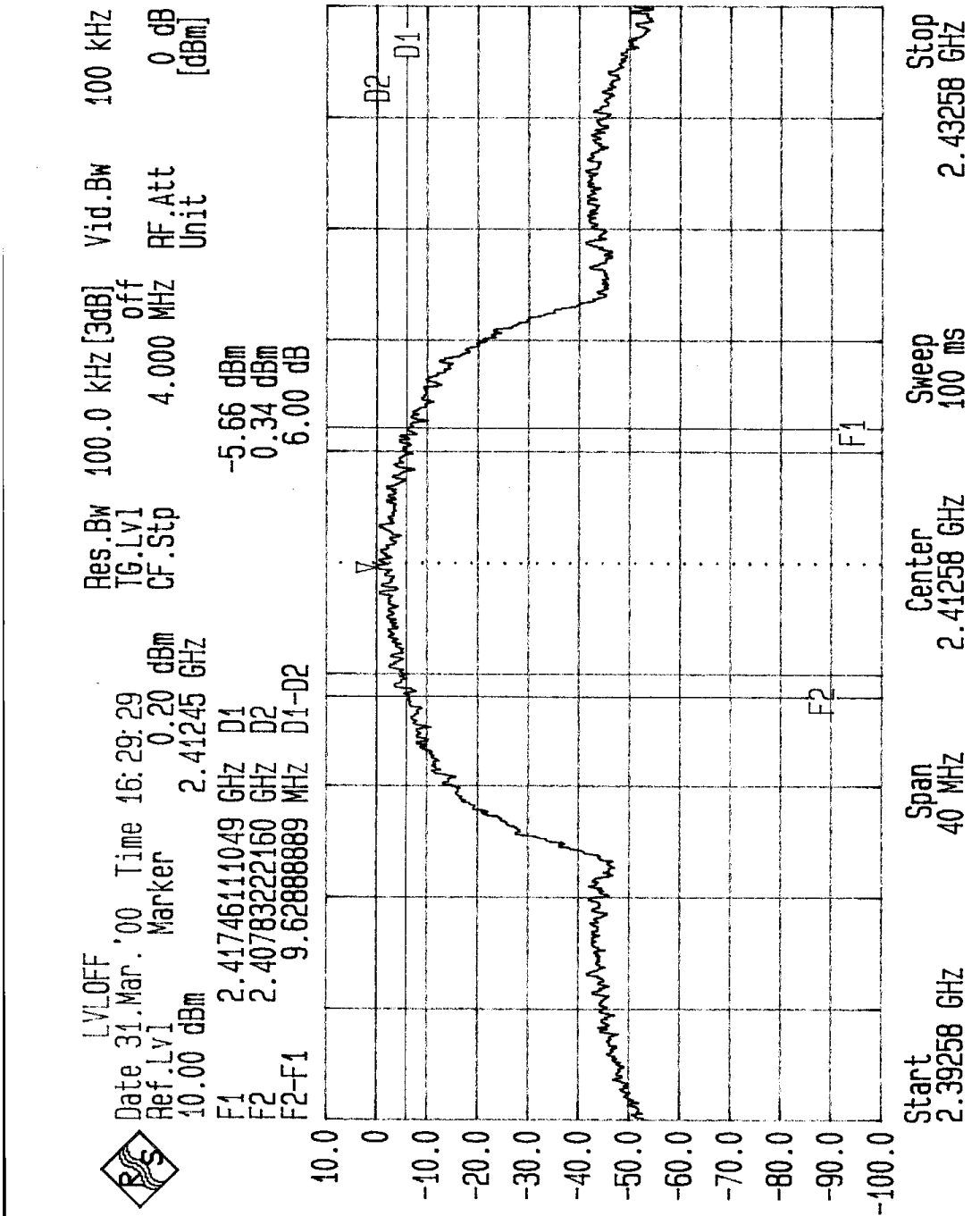
THE TEMPERATURE AND RELATED HUMIDITY: 18 ℃ AND 78% RH

5.2.6 Test Results

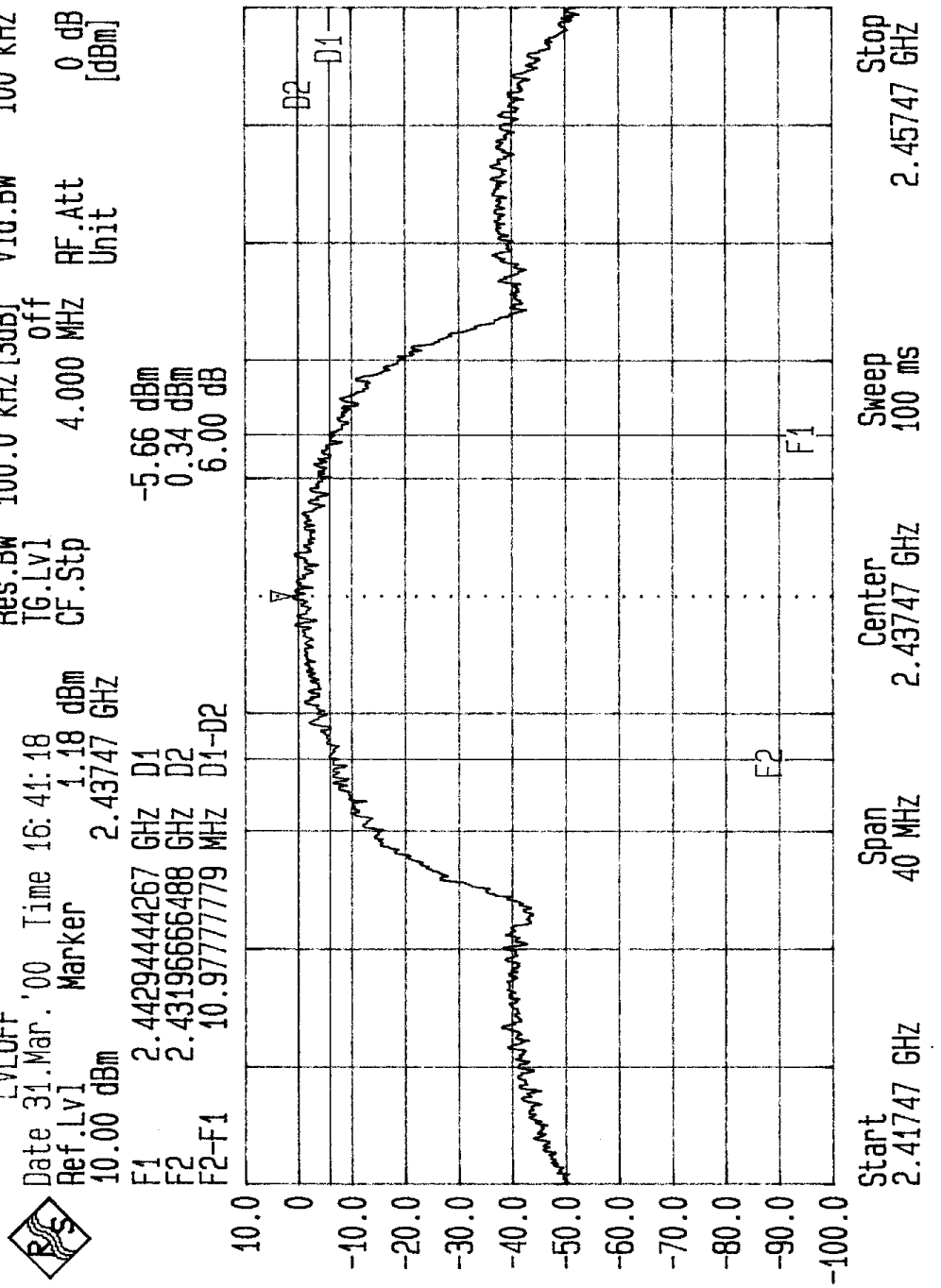
CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	9.63	0.5	PASS
6	2437	10.98	0.5	PASS
11	2462	10.00	0.5	PASS

The spectrum plots of test result are attached below.

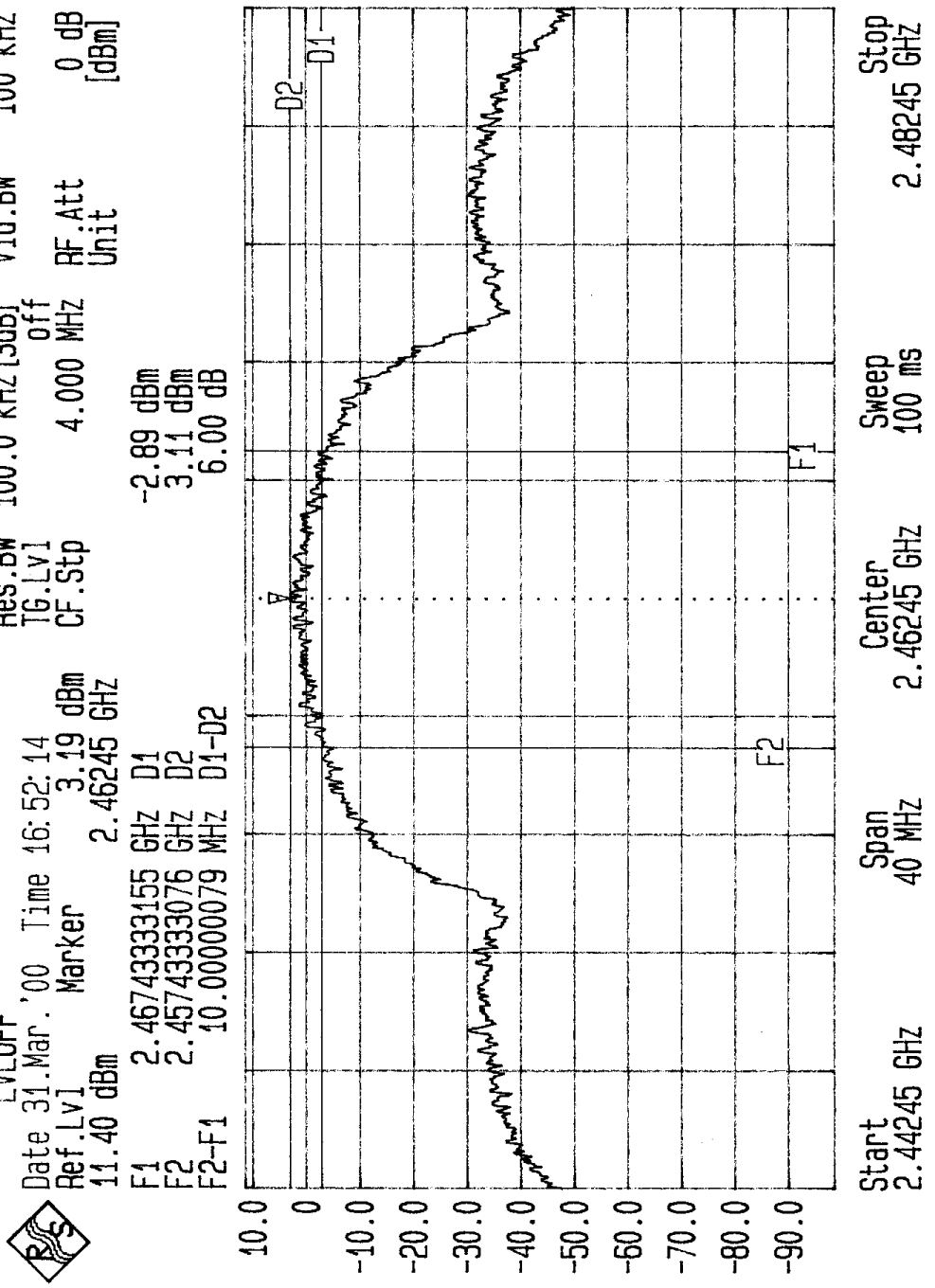
Channel 1


LVLOFF
Date 31.Mar.'00 Time 16:29:29
Ref.Lvl 0.20 dBm
Marker 2.41245 GHz
10.00 dBm
F1 2.417461111049 GHz D1
F2 2.407832221600 GHz D2
F2-F1 9.628888889 MHz D1-D2
Res.Bw 100.0 kHz [3dB]
TG.Lvl off
CF.Stp 4.000 MHz
-5.66 dBm
0.34 dBm
6.00 dB
Vid.Bw 100 kHz
RF.Att 0 dB
Unit [dBm]
Start 2.39258 GHz
Span 40 MHz
Center 2.41258 GHz
Sweep 100 ms
Stop 2.43258 GHz
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100.0
D1
D2
F1
F2

Channel 6


LVLOFF
Date 31.Mar.'00 Time 16:41:18
Ref.Lvl 1.18 dBm
10.00 dBm Marker 2.43747 GHz
F1 2.442944267 GHz D1 -5.66 dBm
F2 2.431966488 GHz D2 0.34 dBm
F2-F1 10.97777779 MHz D1-D2 6.00 dB
Res.Bw 100.0 kHz [3dB] Vid.Bw 100 kHz
TG.Lvl off
CF.Stp 4.000 MHz RF.Att 0 dB
Unit [dBm]
Start 2.41747 GHz
Span 40 MHz
Center 2.43747 GHz
Sweep 100 ms
Stop 2.45747 GHz
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100.0
D1
D2
F1
F2

Channel 11


LVLOFF
Date 31.Mar.'00 Time 16:52:14
Ref.Lvl 3.19 dBm
11.40 dBm
F1 2.46743333155 GHz D1 -2.89 dBm
F2 2.45743333076 GHz D2 3.11 dBm
F2-F1 10.00000079 MHz D1-D2 6.00 dB
Res.Bw 100.0 kHz [3dB]
T6.Lvl off
CF.Stp 4.000 MHz
Vid.Bw 100 kHz
RF.Att 0 dB
Unit [dBm]
D1
D2
F1
F2
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 2.44245 GHz
Span 40 MHz
Center 2.46245 GHz
Sweep 100 ms
Stop 2.48245 GHz

5.3 Maximum Peak Output Power and RF Exposure Limit Measurement

5.3.1 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ TEST RECEIVER	**ESMI**	**846839/018 848926/005**	**Dec. 03, 2000**
HP ATTENUATOR	**8496B**	**3247A18505**	**Cal. on use**
HP PLOTTER	**7475A**	**2641V27755**	**N/A**

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

5.3.2 Test Procedure

5.3.2.1 Maximum Peak Output Power

The transmitter output power was coupled to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 1 MHz RBW and 1 MHz VBW. The peak power was measured and recorded.

5.3.2.2 RF Exposure Limit

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
(A)Limits For Occupational / Control Exposures				
300-1500	…	…	F/300	6
1500-100,000	…	…	5	6
(B)Limits For General Population / Uncontrolled Exposure				
300-1500	…	…	F/1500	6
1500-100,000	…	…	1.0	30

F = Frequency in MHz

The 20cm separation requirement listed in section 2.1091 is met because the output power and the antenna gain is very low. Please see the calculation below.

Friis transmission formula : Pd = (Pout*G) / (4*pi*r^2)

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

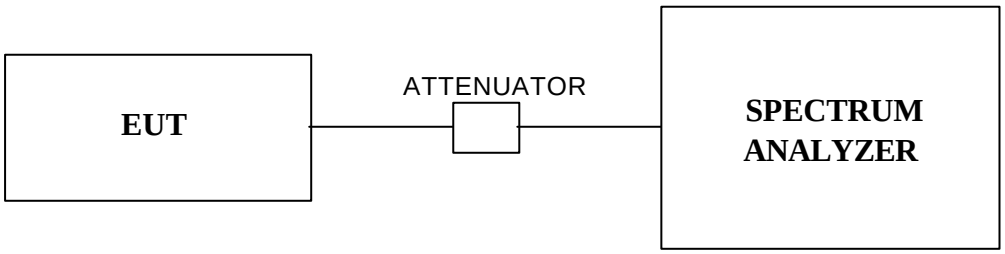
R = distance between observation point and center of the radiator in cm

Ref. : David K. Cheng, *Field and Wave Electromagnetics*, Second Edition, Page 640, Eq. (11-133).

.

The MPE limit in 2.4GHz band is 1 mW/cm^2. From the formula we can calculate the distance r where MPE limit is reached.

5.3.3 Test Setup



5.3.4 EUT Operating condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest frequency channels individually.

5.3.5 Climate Condition

The temperature and related humidity: 18 ℃ and 78%RH

5.3.6 Test Results

5.3.6.1 Output Power into antenna:

Antenna Gain: -1 dBi or 0.79 numeric

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	5.59	30	PASS
6	2437	7.13	30	PASS
11	2462	8.22	30	PASS

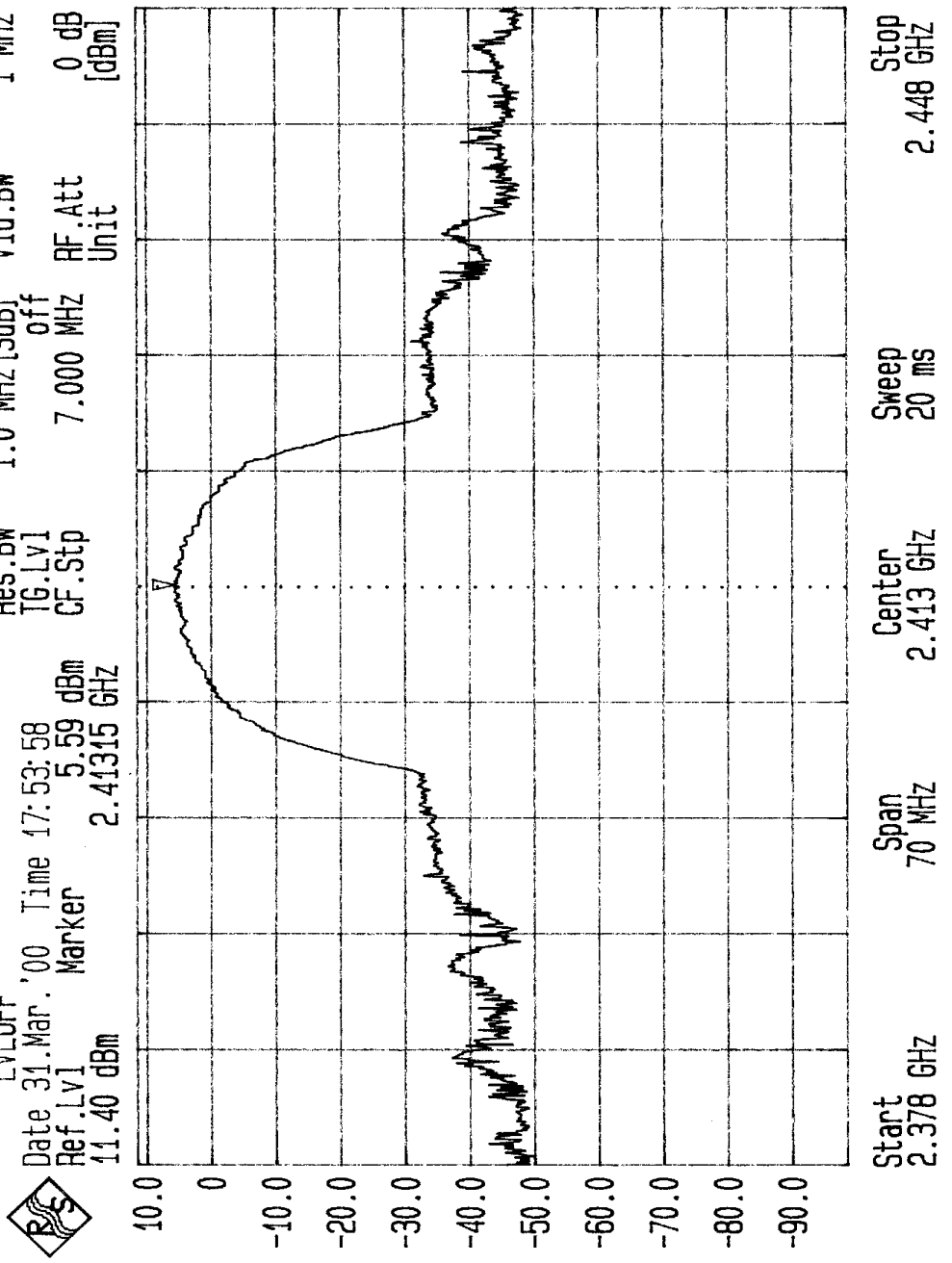
The spectrum plots are attached below.

5.3.6.2 RF Exposure Distance Limits :

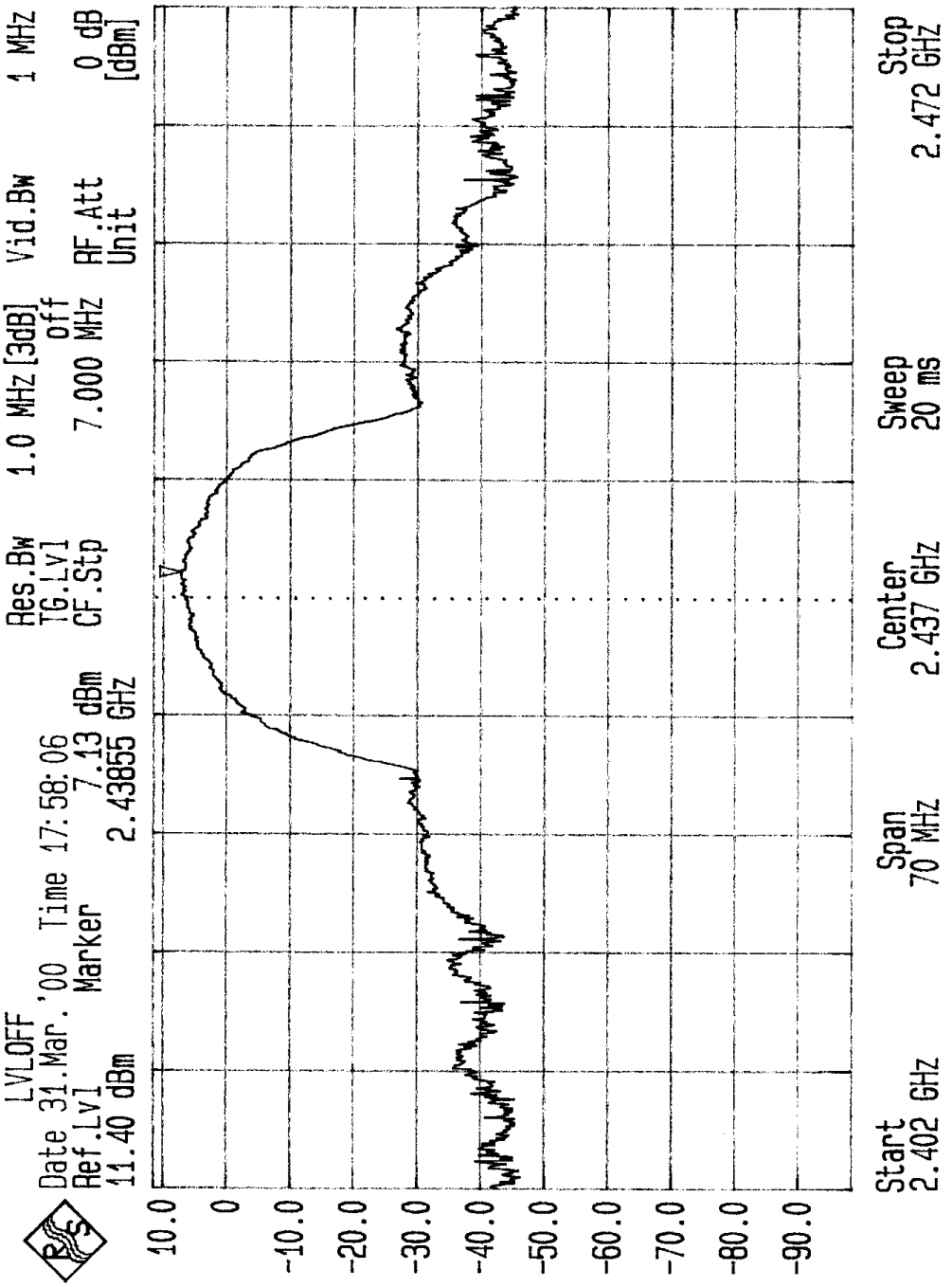
CHANNEL	CHANNEL FREQUENCY (MHz)	OUTPUT POWER TO ANTENNA (mW)	MINIMUM ALLOWABLE DISTANCE (r) FROM SKIN (Centi-Meter)
1	2412	3.62	0.48
6	2437	5.16	0.57
11	2462	6.64	0.65

The distance r calculated from the Friis transmission formula is far more shorter than 20 cm separation requirement. So, RF exposure limit warning or SAR test are not required.

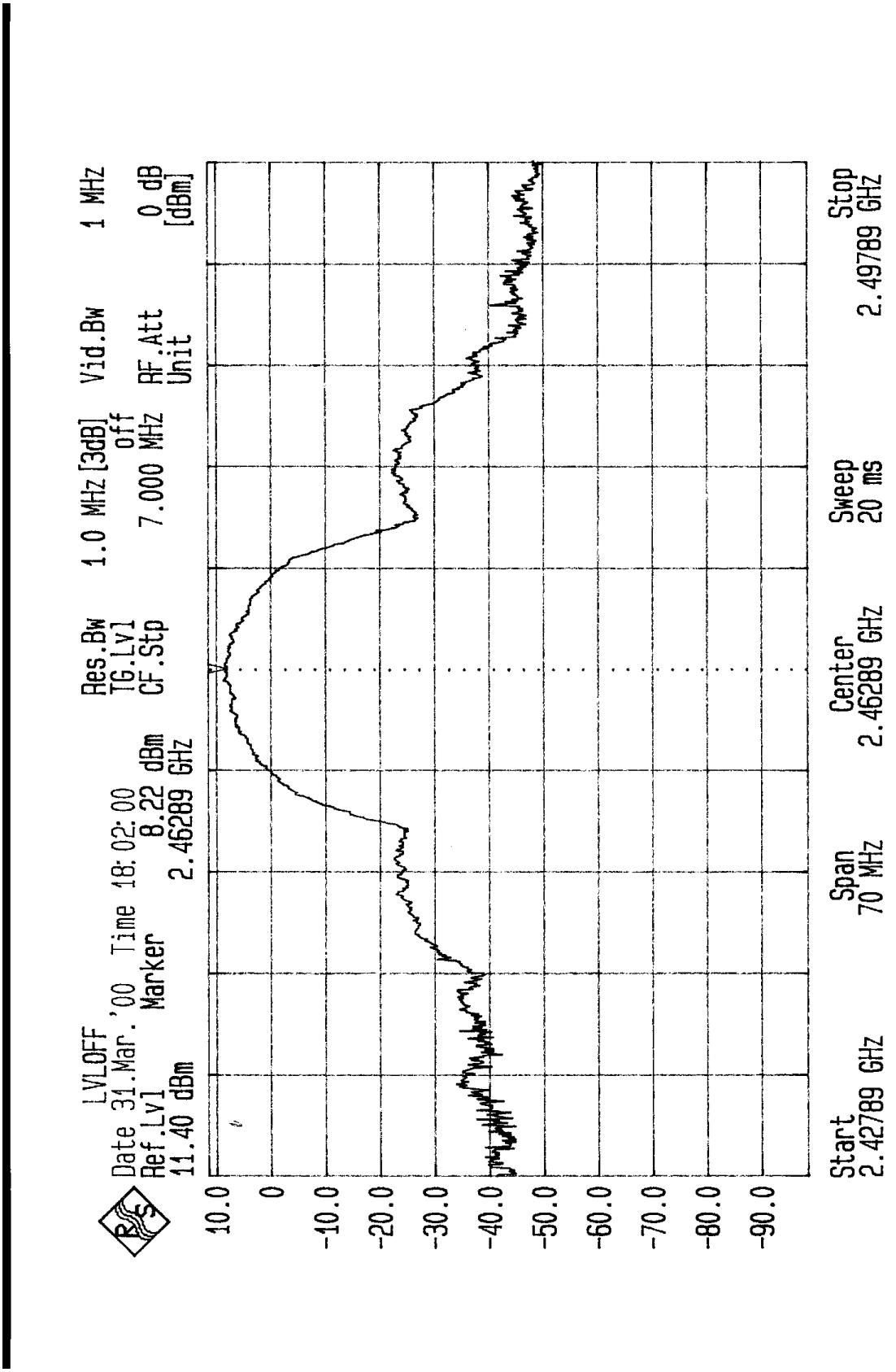
Channel 1


LVLOFF
Date 31.Mar.'00 Time 17:53:58
Ref.Lvl
11.40 dBm
Marker
5.59 dBm
2.41315 GHz
Res.Bw 1.0 MHz [3dB]
TG.Lvl off
CF.Stp 7.000 MHz
Vid.Bw 1 MHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 2.378 GHz
Span 70 MHz
Center 2.413 GHz
Sweep 20 ms
Stop 2.448 GHz

Channel 6


LVLOFF
Date 31.Mar.'00 Time 17:58:06
Ref.Lvl 7.13 dBm
11.40 dBm Marker 2.43855 GHz
Res.Bw 1.0 MHz [3dB]
TG.Lvl off
CF.Stp 7.000 MHz
Vid.Bw 1 MHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 2.402 GHz
Span 70 MHz
Center 2.437 GHz
Sweep 20 ms
Stop 2.472 GHz

Channel 11


LVLOFF
Date 31.Mar.'00 Time 18:02:00
Ref.Lvl 11.40 dBm
Marker 2.46289 GHz 8.22 dBm
Res.Bw 1.0 MHz [3dB]
TG.Lvl off
CF.Stp 7.000 MHz
Vid.Bw 1 MHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 2.42789 GHz
Span 70 MHz
Center 2.46289 GHz
Sweep 20 ms
Stop 2.49789 GHz

5.4 Radiated Emission Measurement

5.4.1 Test instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	**8590L**	**3544A01176**	**Apr 28, 2000**
HP Preamplifier	**8447D**	**2944A08485**	**May 01, 2000**
HP Preamplifier	**8347A**	**3307A01088**	**Sep. 09, 2000**
ROHDE & SCHWARZ TEST RECEIVER	**ESMI**	**839013/007 839379/002**	**Aug. 27, 2000**
SCHWARZBECK Tunable Dipole Antenna	**VHA 9103 UHA 9105**	**E101051 E101055**	**Nov. 25, 2000**
CHASE BILOG Antenna	**CBL6112A**	**2221**	**Aug. 10, 2000**
SCHWARZBECK Horn Antenna	**BBHA9120-D**	**D130**	**Jul. 09, 2000**
SCHWARZBECK Horn Antenna	**BBHA9170**	**123**	**Jan. 31, 2001**
EMCO Turn Table	**1060**	**1115**	**N/A**
SHOSHIN Tower	**AP-4701**	**A6Y005**	**N/A**
Open Field Test Site	**Site 5**	**ADT-R05**	**Aug. 09, 2000**

The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMAS document NIS81.

5.4.2 Test Procedure

a. The EUT was placed on the top of a turn table 0.8 meter above ground at an open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable height antenna tower.

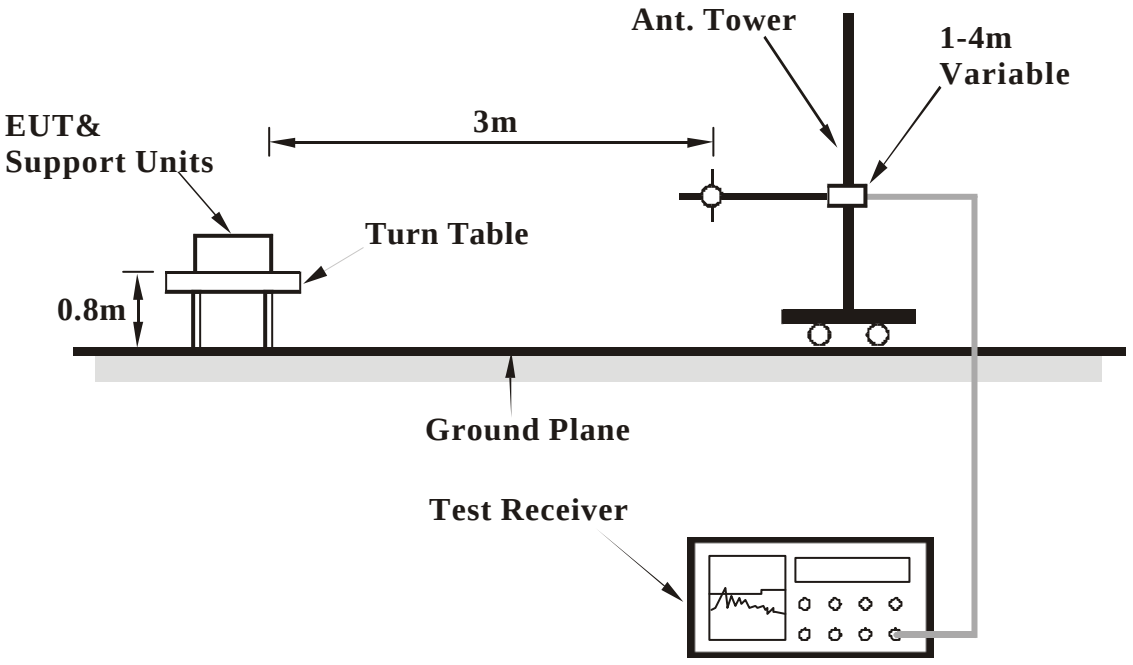
c. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.

d. For each suspected emission the EUT was arranged to its worst case and then tuned the antenna height from 1 meter to 4 meter and turned the turn table from 0 degree to 360 degrees to find the maximum reading.

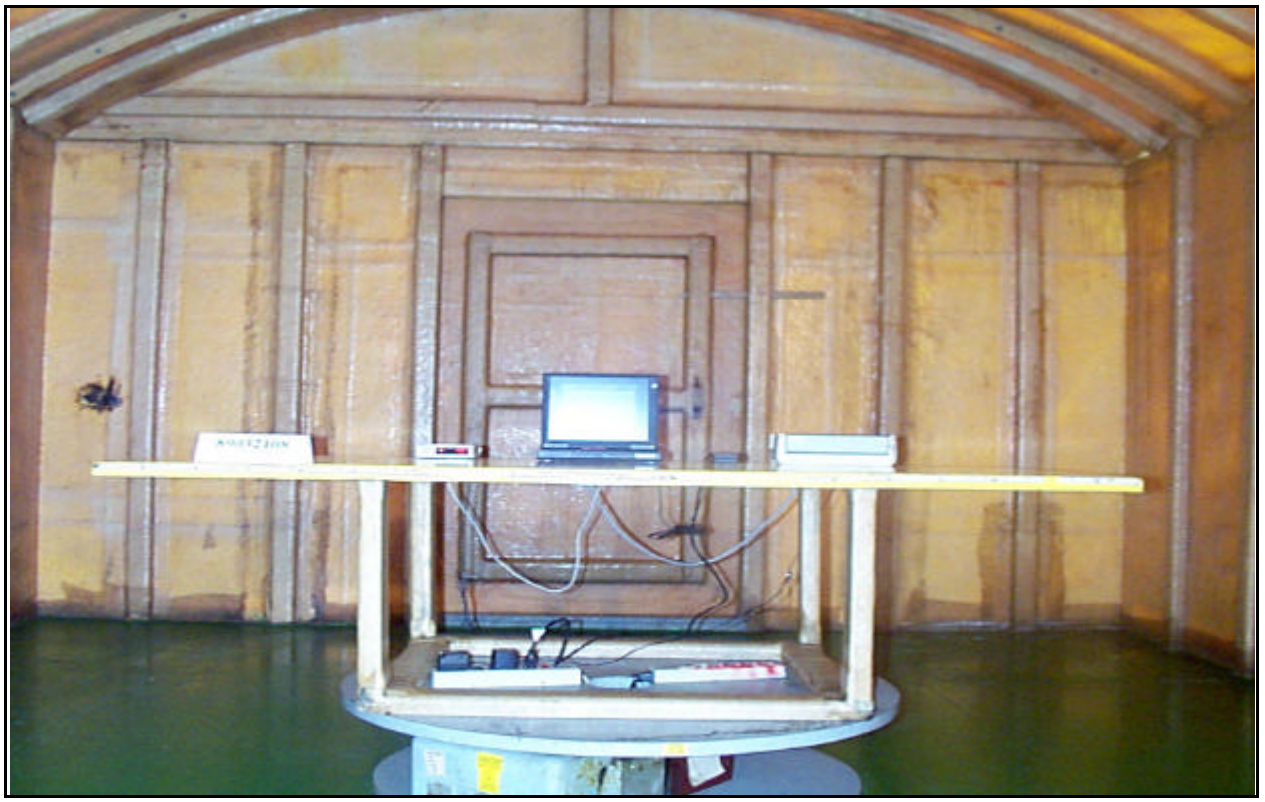
e. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

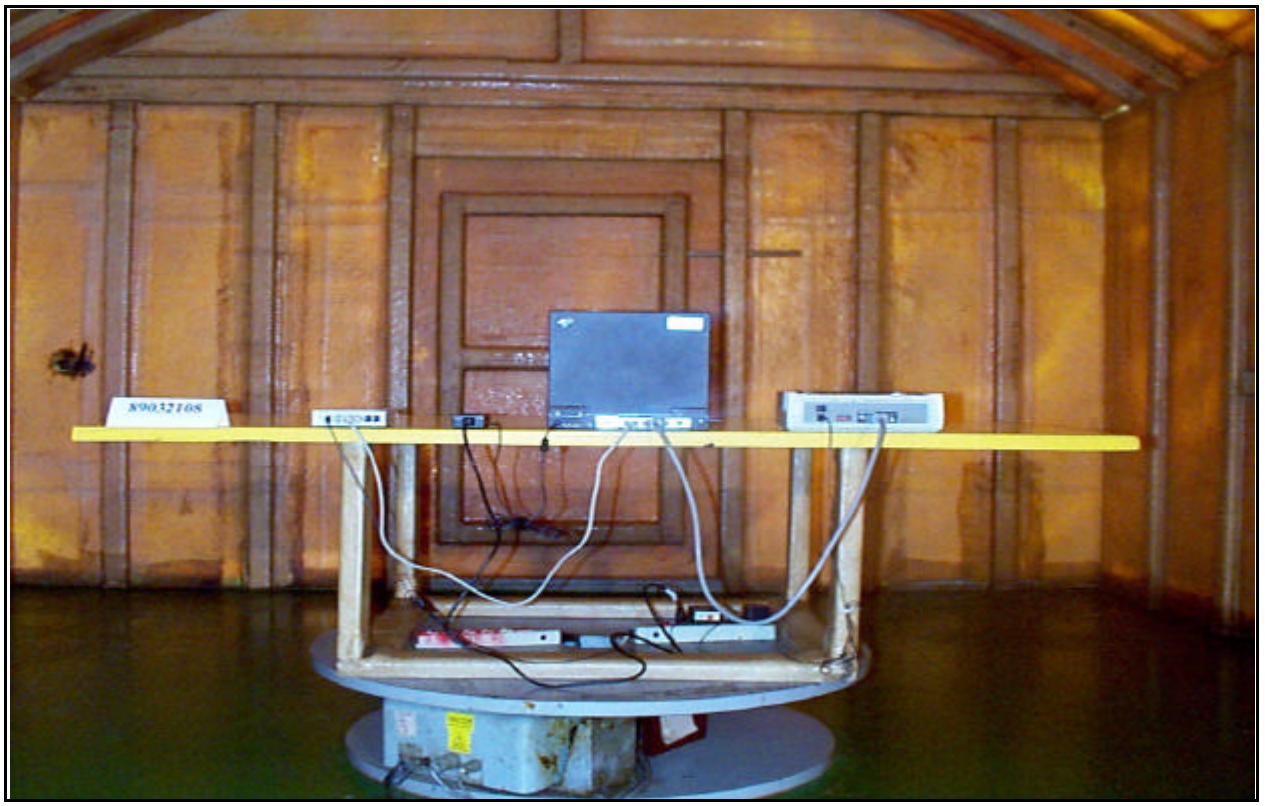
f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and peak values of EUT will be reported. Otherwise the emissions which do not have 10 dB margin will be re-tested one by one using the quasi- peak method or average method as specified and then reported. Data sheet peak mode and QP mode.

5.4.3 Test Setup



5.4.4 Photograph of Test Setup





5.4.5 EUT Operating condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest frequency channels individually. "H" patterns and other messages were sent to support units and displayed on the screen of Notebook PC.

5.4.6 Climate Condition

The temperature and related humidity: 25 ℃ and 65%RH

5.4.7 Test Results

5.4.7.1 Frequency range of measurement: 30 – 1000MHz

Mode: Channel 1 Antenna Polarity: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
44.16	10.9	21.2	32.1	40.0	-7.9	111	264
66.59	6.6	19.1	25.7	40.0	-14.3	173	6
110.58	12.3	17.6	29.9	43.5	-13.6	158	277
132.54	12.7	14.1	26.8	43.5	-16.7	100	102
176.75	10.9	16.0	26.9	43.5	-16.6	99	338
418.41	18.2	8.9	27.1	46.0	-18.9	124	155
439.93	18.5	16.0	34.5	46.0	-11.5	105	172
748.01	22.4	5.9	28.3	46.0	-17.7	99	293

Channel 1 Antenna Polarity: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
43.87	11.1	18.1	29.2	40.0	-10.8	108	98
132.56	12.7	8.4	21.1	43.5	-22.4	171	249
175.99	10.9	14.2	25.1	43.5	-18.4	126	104
220.00	11.6	13.9	25.5	46.0	-20.5	130	204
286.35	14.8	10.3	25.1	46.0	-20.9	99	294
418.40	18.2	10.3	28.5	46.0	-17.5	104	38
439.94	18.5	13.4	31.9	46.0	-14.1	107	45
748.00	22.4	9.1	31.5	46.0	-14.5	118	197

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247(c),

Channel 6 Antenna Polarity: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
44.00	11.0	21.3	32.3	40.0	-7.7	105	274
66.56	6.6	19.5	26.1	40.0	-13.9	173	5
110.57	12.3	13.6	25.9	43.5	-17.6	132	252
132.54	12.7	12.5	25.2	43.5	-18.3	102	134
176.8	10.9	10.8	21.7	43.5	-21.8	99	341
418.39	18.2	8.6	26.8	46.0	-19.2	119	117
439.93	18.5	16.0	34.5	46.0	-11.5	99	160
747.99	22.4	5.1	27.5	46.0	-18.5	99	285

Channel 6 Antenna Polarity: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
43.86	11.1	19.4	30.5	40.0	-9.5	113	108
132.55	12.7	107	23.4	43.5	-20.1	188	263
175.93	10.9	16.5	27.4	43.5	-16.1	108	106
220.02	11.6	17.3	28.9	46.0	-17.1	136	244
286.35	14.8	9.4	24.2	46.0	-21.8	107	287
418.4	18.2	7.8	26.0	46.0	-20.0	104	45
439.94	18.5	12.8	31.3	46.0	-14.7	106	57
748.00	22.4	7.9	30.3	46.0	-15.7	118	201

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).

2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level - Limit value

5. The limit value is defined as per 15.247(c),

Channel 11 Antenna Polarity: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
43.88	11.1	12.7	23.8	40.0	-16.2	169	41
66.56	6.6	16.2	22.8	40.0	-17.2	134	16
110.57	12.3	11.0	23.3	43.5	-20.2	109	276
132.52	12.7	12.9	25.6	43.5	-17.9	99	65
176.76	10.9	9.8	20.7	46.0	-22.8	99	105
418.43	18.2	9.6	27.8	46.0	-18.2	143	158
439.93	18.5	16.8	35.3	46.0	-10.7	135	200
748.00	22.4	4.6	27.0	46.0	-19.0	169	282

Channel 11 Antenna Polarity: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Freq. Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
43.89	11.0	10.5	21.5	40.0	-18.5	110	101
133.13	12.7	8.4	21.1	43.5	-22.4	109	312
175.99	10.9	11.9	22.8	43.5	-20.7	130	133
220.00	11.6	15.0	26.6	46.0	-19.4	108	361
286.34	14.8	7.4	22.2	46.0	-23.8	109	275
418.39	18.2	8.9	27.1	46.0	-18.9	108	347
439.95	18.5	12.8	31.3	46.0	-14.7	99	48
748.00	22.4	4.0	26.4	46.0	-19.6	123	171

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).

2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level - Limit value

5. The limit value is defined as per 15.247(c),

5.4.8.2 Frequency range of measurement: Above 1000 MHz

Channel 1 Antenna Polarity: Vertical		**Detector Function : Peak, Average**				**6dB Bandwidth : 1 MHz**				**Distance : 3 M Freq. Range : Above 1000 MHz.**	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2038.00	33.6	18.9	-	52.5	-	74	54	-21.5	-	99	274
2346.17	33.8	13.4	-	47.2		74	54	-26.8	-	99	195
*2412.00	34.0	62.9	56.2	96.9	90.2	-	-	-	-	107	39
4824.00	41.5	16.9	8.1	58.4	49.6	74	54	-15.6	-4.4	128	8
7236.04	39.6	11.9	-	51.5	-	74	54	-22.5	-	122	12
9648.00	42.1	-	-	-	-	-	-	-	-	-	-

Channel 1 Antenna Polarity: Horizontal		**Detector Function : Peak, Average**				**6dB Bandwidth : 1 MHz**				**Distance : 3 M Freq. Range : Above 1000 MHz.**	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2038.00	33.6	20.6	18.3	54.2	51.9	74	54	-19.8	-2.1	108	2
2345.98	33.8	17.7	-	51.5	-	74	54	-22.5	-	108	263
*2412.00	34.0	65.3	58.0	99.3	92.0	-	-	-	-	99	108
4824.00	41.5	20.1	7.6	61.6	49.1	74	54	-12.4	-4.9	151	275
7236.00	39.6	11.8	-	51.4	-	74	54	-22.6	-	143	32
9648.00	42.1	-	-	-	-	-	-	-	-	-	-

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).

2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level - Limit value

5. The limit value is defined as per 15.247(c),

6. " * " : Fundamental Frequency

Channel 6 Antenna Polarity: Vertical	Detector Function : Peak, Average	6dB Bandwidth : 1 MHz	Distance : 3 M Freq. Range : Above 1000 MHz.

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2062.00	33.6	17.3	-	50.9	-	74	54	-23.1	-	99	274
2370.95	33.9	16.7	-	50.6	-	74	54	-23.4	-	99	35
*2437.00	34.1	64.8	58.4	98.9	92.5	-	-	-	-	102	361
4874.00	41.5	15.8	7.9	57.3	49.4	74	54	-16.7	-4.6	134	7
7311.00	39.6	11.7	-	51.3	-	74	54	-22.7	-	130	6
9748.00	42.3	-	-	-	-	-	-	-	-	-	-

Channel 6 Antenna Polarity: Horizontal	Detector Function : Peak, Average	6dB Bandwidth : 1 MHz	Distance : 3 M Freq. Range : Above 1000 MHz.

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2063.10	33.6	17.6	-	51.2	-	74	54	-22.8	-	103	-2
2371.06	33.9	19.2	-	53.1	-	74	54	-20.9	-	105	262
*2437.00	34.0	66.7	59.2	100.8	93.3	-	-	-	-	99	257
4874.00	41.5	21.7	7.9	63.2	49.4	74	54	-10.8	-4.6	111	275
7311.00	39.6	11.4	-	51.0	-	74	54	-23.0	-	101	277
9748.00	42.3	-	-	-	-	-	-	-	-	-	-

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).

2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level - Limit value

5. The limit value is defined as per 15.247(c),

6. " * " : Fundamental Frequency

Channel 11 Antenna Polarity: Vertical	Detector Function : Peak, Average	6dB Bandwidth : 1 MHz	Distance : 3 M Freq. Range : Above 1000 MHz.

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2088.03	33.7	18.1	-	51.8	-	74	54	-22.2	-	99	277
2396.00	33.9	17.7	-	51.6	-	74	54	-22.4	-	180	361
*2462.00	34.1	64.8	57.6	98.9	91.7	-	-	-	-	99	35
4924.00	41.6	14.4	7.8	56.0	49.4	74	54	-18.0	-4.6	139	365
7386.00	39.6	12.0	-	51.6	-	74	54	-22.4	-	99	17
9848.00	42.3	-	-	-	-	-	-	-	-	-	-

Channel 11 Antenna Polarity: Horizontal	Detector Function : Peak, Average	6dB Bandwidth : 1 MHz	Distance : 3 M Freq. Range : Above 1000 MHz.

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
2087.85	33.7	16.6	-	50.3	-	74	54	-23.7	-	106	225
2395.91	33.9	22.0	17.8	55.9	51.7	74	54	-18.1	-2.3	101	264
*2462.00	34.1	66.7	59.1	100.8	93.2	-	-	-	-	129	263
4924.00	41.6	19.1	7.5	60.7	49.1	74	54	-13.3	-4.9	110	275
7386.00	39.6	11.9	-	51.5	-	74	54	-22.5	-	99	278
9848.00	42.3	-	-	-	-	-	-	-	-	-	-

Remarks: 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).

2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)

3. The other emission levels were very low against the limit.

4. Margin value = Emission level - Limit value

5. The limit value is defined as per 15.247(c),

6. " * " : Fundamental Frequency

5.5 Power Spectral Density Measurement

5.5.1 Test Instruments

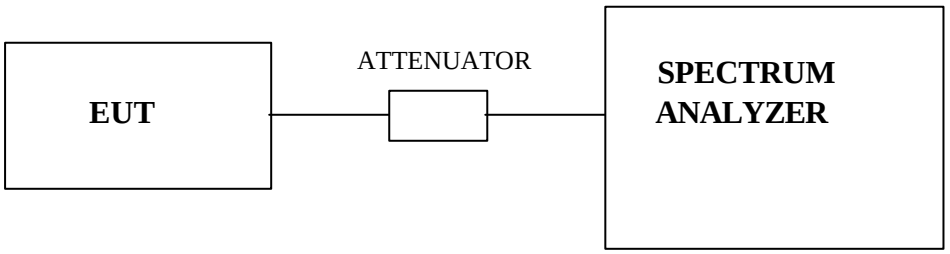
Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ TEST RECEIVER	**ESMI**	**846839/018 848926/005**	**Dec. 03, 2000**
HP ATTENUATOR	**8496B**	**3247A18505**	**Cal. on use**
HP PLOTTER	**7475A**	**2641V27755**	**N/A**

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

5.5.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW,. The power spectral density was measured and recorded.

5.5.3 Test Setup



5.5.4 EUT Operating condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest frequency channels individually.

5.5.5 Climate Condition

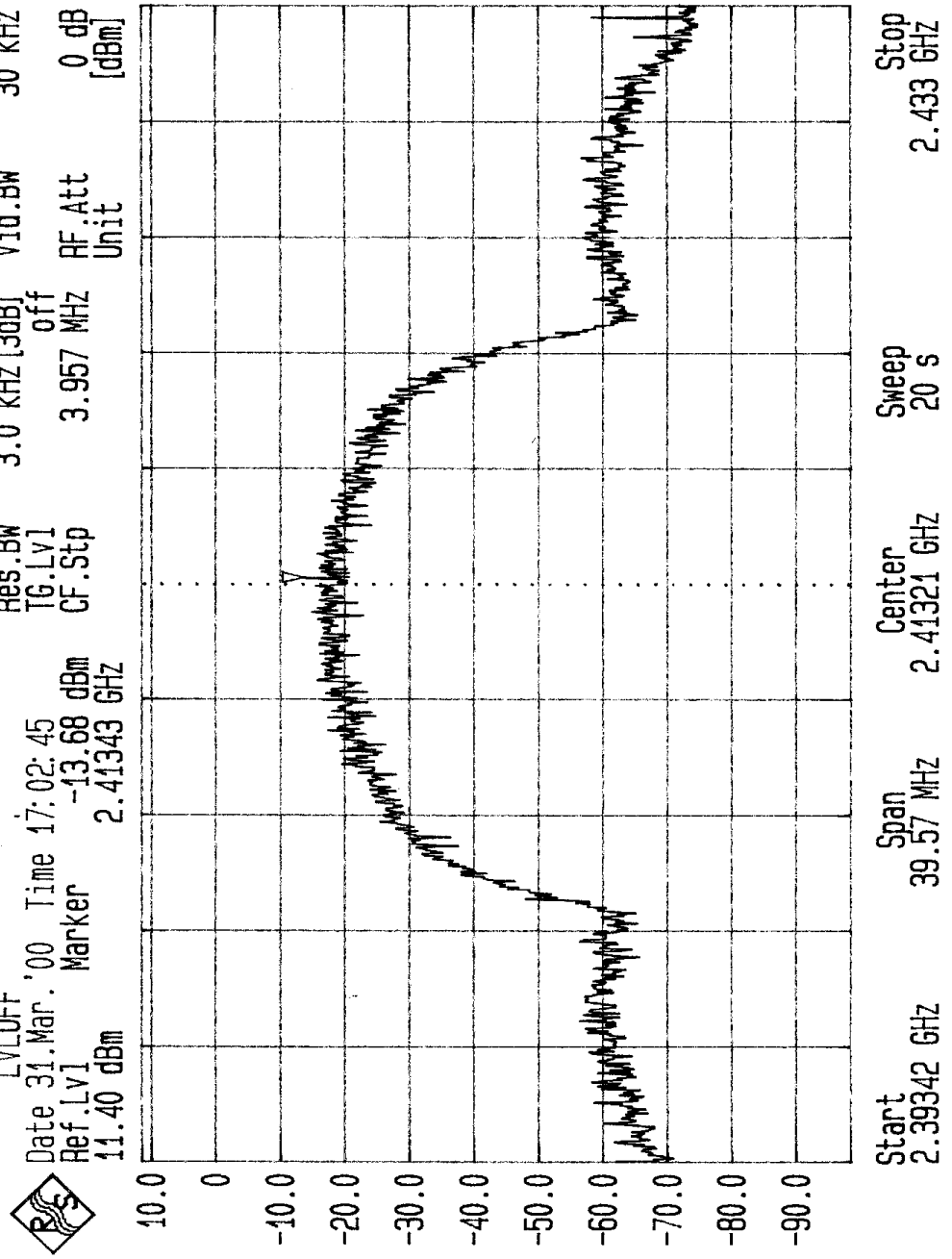
THE TEMPERATURE AND RELATED HUMIDITY: 18 ℃ AND 78%RH

5.5.6 Test Results

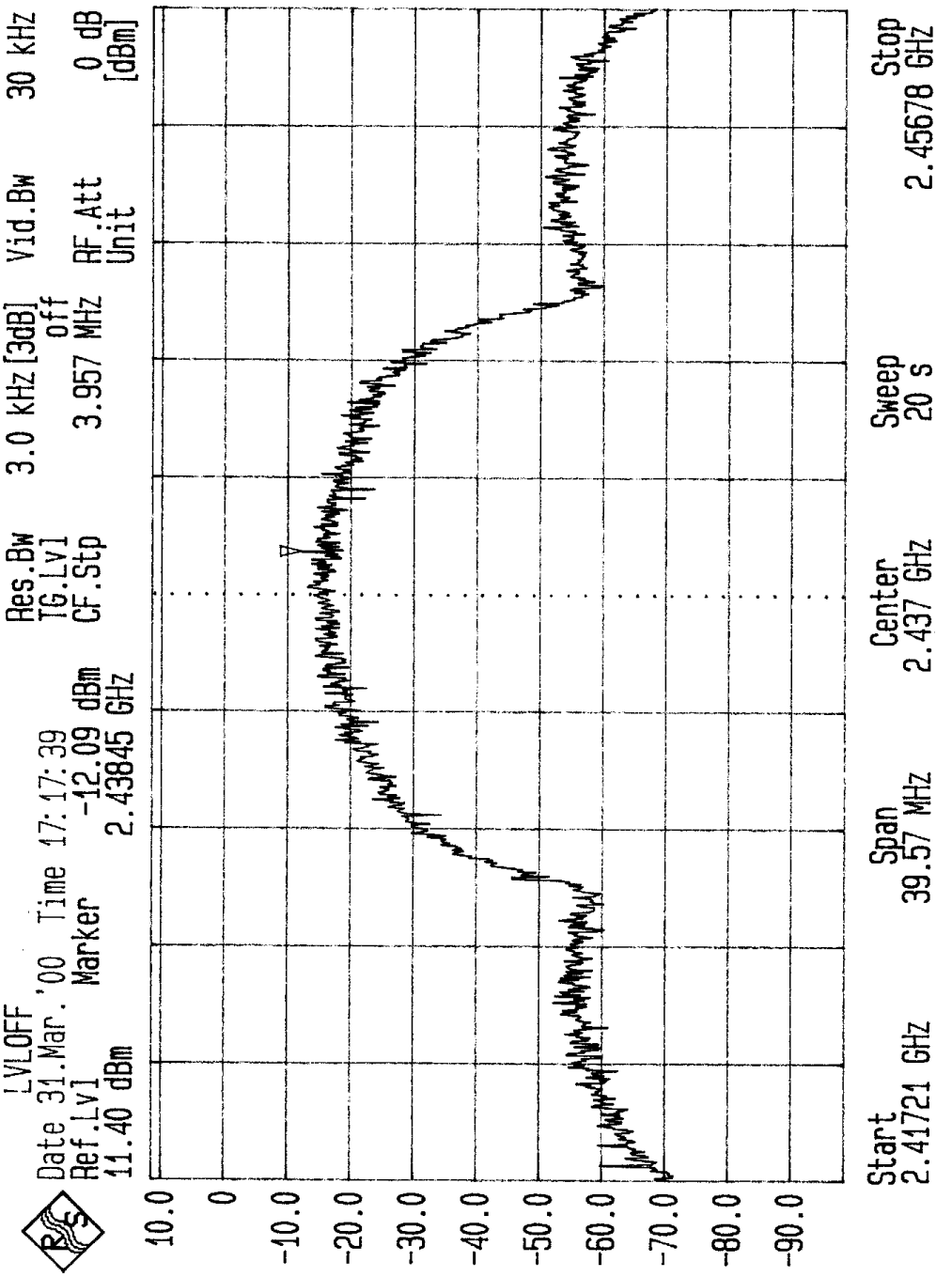
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW	MAXIMUM LIMIT (MHz)	PASS/FAIL
1	2412	-5.63dBm	8dBm	PASS
6	2437	-6.03dBm	8dBm	PASS
11	2462	-4.79dBm	8dBm	PASS

The spectrum plots of test result are attached below.

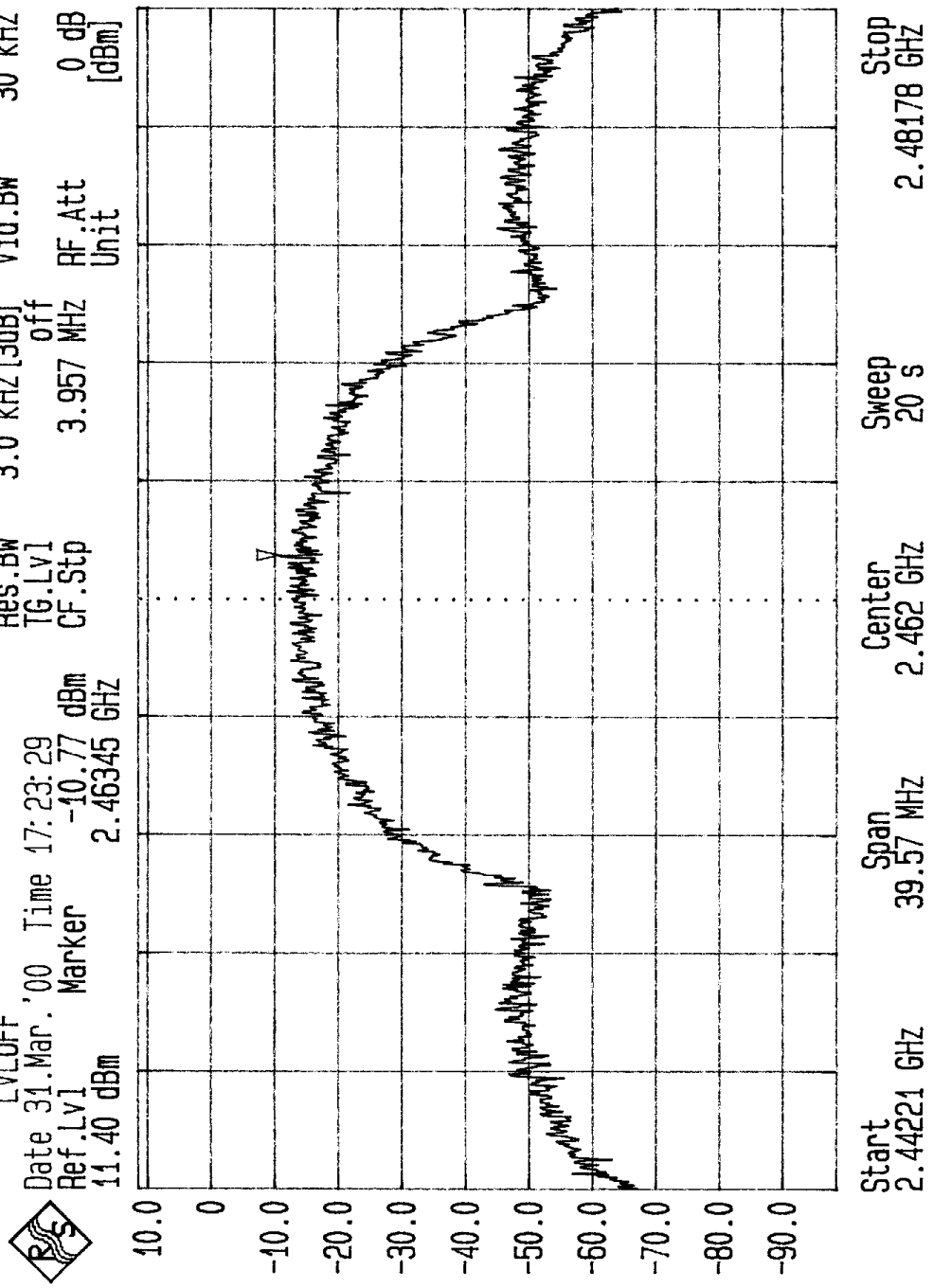
Channel 1


LVLOFF
Date 31.Mar.'00 Time 17:02:45
Ref.Lvl
11.40 dBm
Marker
-13.68 dBm
2.41343 GHz
Res.Bw 3.0 kHz [3dB]
TG.Lvl off
CF.Stp 3.957 MHz
Vid.Bw 30 kHz
RF.Att 0 dB
Unit [dBm]
Start 2.39342 GHz
Span 39.57 MHz
Center 2.41321 GHz
Sweep 20 s
Stop 2.433 GHz
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0

Channel 6


LVLOFF
Date 31.Mar.'00 Time 17:17:39
Ref.Lvl
11.40 dBm
Marker
-12.09 dBm
2.43845 GHz
Res.Bw 3.0 kHz [3dB]
TG.Lvl off
CF.Stp 3.957 MHz
Vid.Bw 30 kHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 2.41721 GHz
Span 39.57 MHz
Center 2.437 GHz
Sweep 20 s
Stop 2.45678 GHz

Channel 11


LVLOFF
Date 31.Mar.'00 Time 17:23:29
Ref.Lvl
11.40 dBm
Marker
-10.77 dBm
2.46345 GHz
Res.Bw 3.0 kHz [3dB]
TG.Lvl off
CF.Stp 3.957 MHz
Vid.Bw 30 kHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start
2.44221 GHz
Span
39.57 MHz
Center
2.462 GHz
Sweep
20 s
Stop
2.48178 GHz

5.6 Processing Gain of a Direct Sequence Spread Spectrum Measurement

5.6.1 Test Instruments and Support Units

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
Hewlett Packard Spectrum Analyzer, 9kHz to 22GHz	**HP8593E**	**S942848**	**15 Jun 2000**
Marconi Signal Generator, 10kHz to 2.7GHz	**2031**	**953426**	**06 Aug 2000**
Hewlett Packard Power Meter,	**HP438A**	**S952633**	**06 Jan 2000**
Hewlett Packard Power Sensor, -20 to –70dBm	**HP8481D**	**SCD15369**	**24 Feb 2000**
Hewlett Packard Attenuator, 6dB to 10 dB	**HP8493A**	**NA**	**NA**
Hewlett Packard Step Attenuator, 1dB steps	**HP8494A**	**NA**	**NA**
Hewlett Packard Step Attenuator, 10dB steps	**HP8495D**	**NA**	**NA**
Hewlett Packard Power Splitter,	**HP11667B**	**04390**	**NA**
Campaq Laptop Computer (Qty 2),	**Armada 1700**	**NA**	**NA**

5.6.2 Method of Measurement

The processing gain may be measured using the CW jamming margin method. Figure 1 shows the test configuration. The test consists of stepping a signal generator in 50 kHz increments across the passband of the system. At each point, the generator level required to produce the recommended Bit Error Rate (BER) is recorded. This level is jammer level. The output power of the transmitting unit is measured at the same point. The jammer to Signal (J/S) ratio is then calculated. Discard the worst 20% of the J/S data points. The lowest remaining J/S ratio is used when calculating the Process Gain.

Using equation (1) shown above, calculate the signal to noise ratio required for your chosen BER. This value and the measured J/S ratio are used in the following equation to calculate the Process Gain (Gp) of the system.

$$Gp = (S/N)_o + Mj + Lsys$$

Where:

$(S/N)_o$: Signal to noise ratio for the chosen BER.

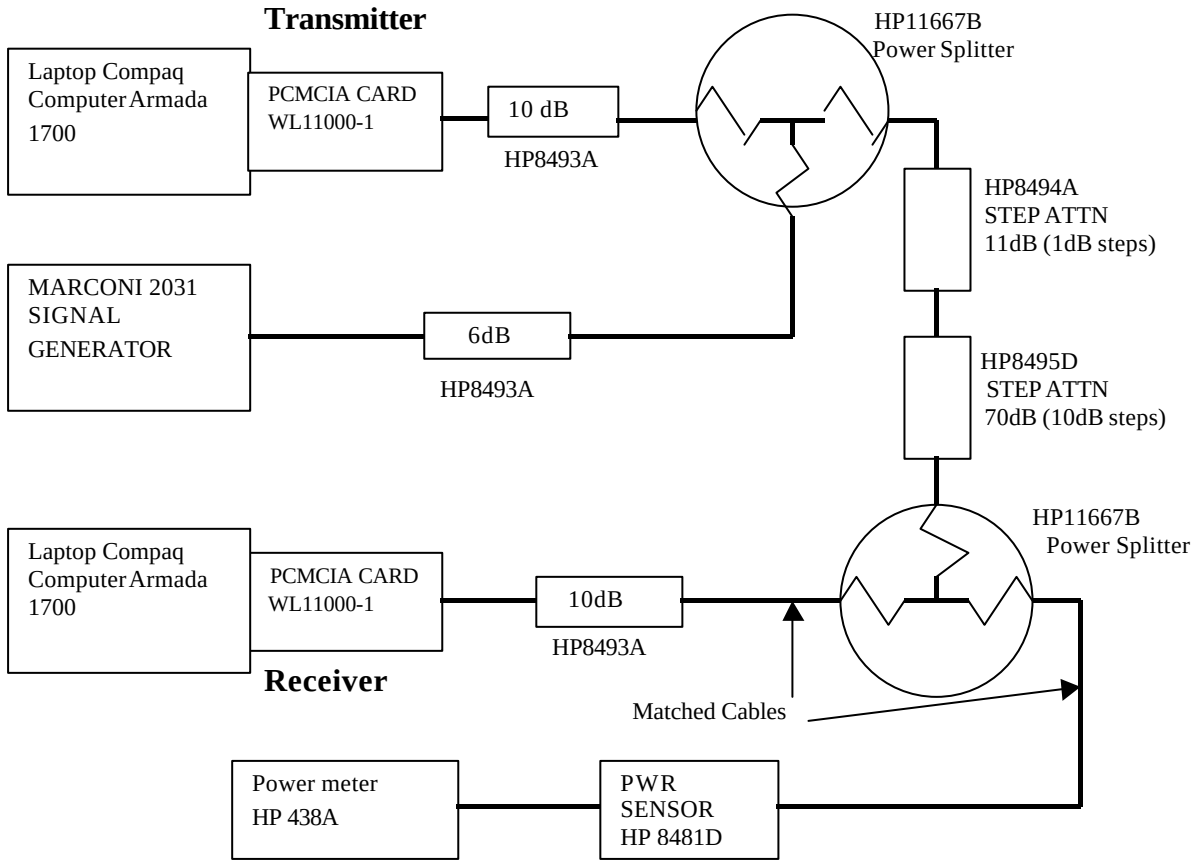
Mj : Maximum jammer to Signal Ratio that recorded at the detected BER.

Lsys : System losses . For the purpose of this processing gain calculation we assume a Lsys at its minimum value of 2 dB.

Applicable Reference Documents.

1. "HFA3861A Direct Sequence Spread Spectrum Baseband Processor" Harris Corporation Semiconductor Sector Preliminary Data Sheet, Melbourne FL, July 1999.
2. "M-ary Orthogonal Keying BER Curve".

5.6.3 Test Setup



5.6.4 Test Procedure

Obtain the simplex link shown. Perform all independent instrumentation calibrations prior to this procedure. Set operating power levels using fixed and variable attenuators in system to meet the following objectives:

1. Signal Power at receiver is approximately –60dBm (above thermal sensitivity such that thermal noise does not cause bit errors).

2. Signal Power at power meter between –20 and –30dBm for optimal linearity.

3. Use spectrum analyzer to monitor test.

4. Ensure that CW Jammer generator RF output is disabled and measure the power at the power meter port using the power meter. This is the relative signal power, Sr.

5. Disable Transmitter, and set CW Jammer generator RF output frequency equal to the carrier frequency and enable generator output. Set reference CW Jammer power level at power meter port 8.4dB below Sr (minimum J/S, or 10dB processing gain reference level). Note the power level setting on the generator, this is the reference CW Jammer power setting, Jr.

6. Disable CW Jammer, re-establish link. PER (Packet Error Rate) test should be operating essentially error-free.

7. Enable CW Jammer at the reference power level and verify that the PER test indicates a PER of less than 8%.

8. Alternatively, adjust the CW Jammer level to that which causes 8% PER and verify that the S/J is less than 8.4dB.

9. Repeat step 7 for uniform steps in frequency increments of 50 kHz across the receiver passband with the CW Jammer. In this case the receiver passband is +/- 8.5 MHz.

The numerical data associated with the following radio channel is tabulated and presented for :

CHANNEL 1 :2412 MHZ
Channel 6 :2437 MHz
Channel 11 :2462 MHz

5.6.5 EUT Operating condition

Software provided by client to set the EUT to transmit at lowest, middle and highest frequency channels.

5.6.6 Climate Condition

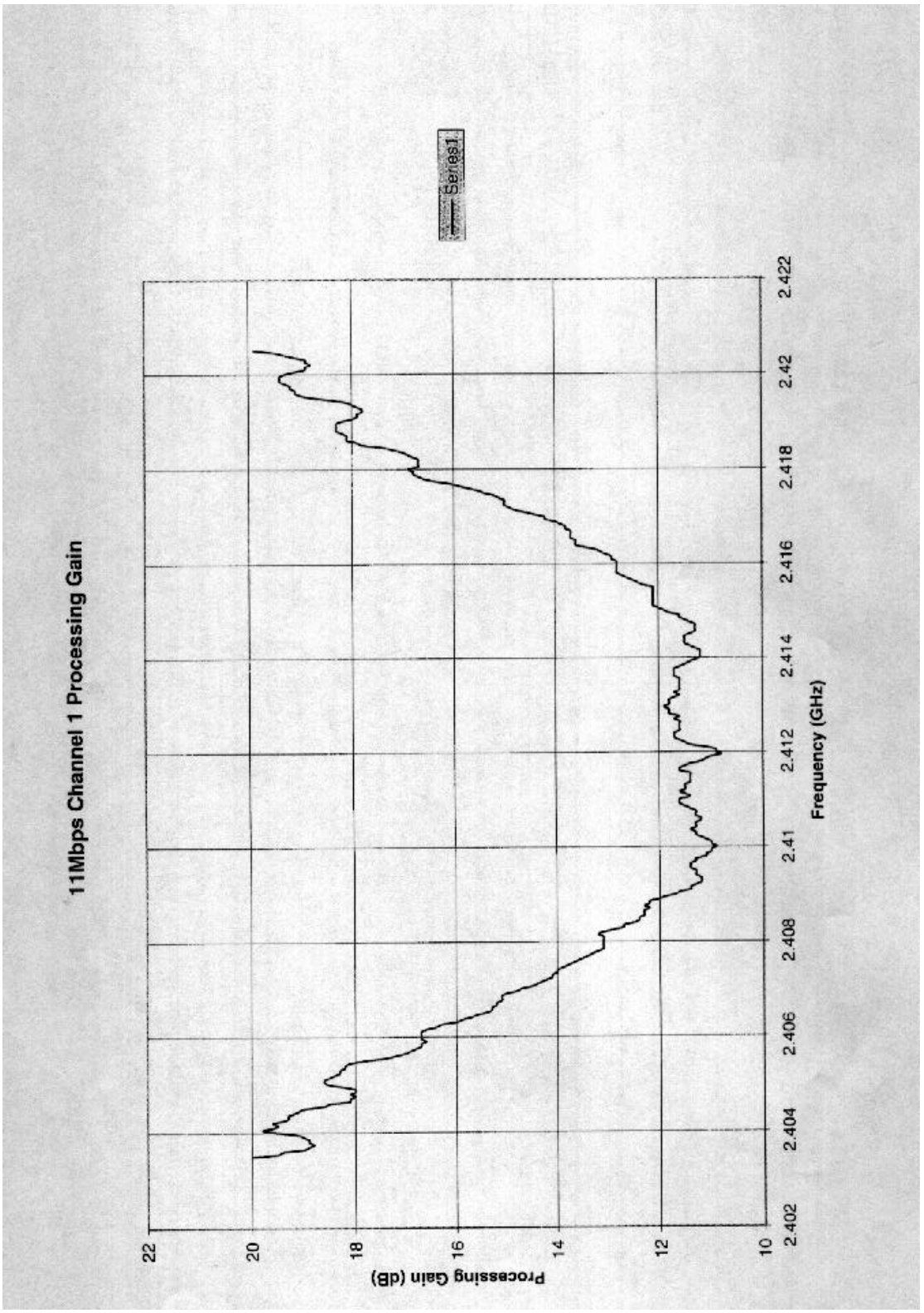
THE TEMPERATURE AND RELATED HUMIDITY: 25°C AND 50%RH

5.6.7 Test Results

11Mbps CHANNEL 1 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4095	11.3	16.4	-7.1	2	-47.1	-0.7	6.3
2.40955	11.4	16.4	-7	2	-47	-0.6	6.9
2.4096	11.4	16.4	-7	2	-47	-0.6	7.4
2.40965	11.4	16.4	-7	2	-47	-0.6	7.3
2.4097	11.3	16.4	-7.1	2	-47.1	-0.7	6.7
2.40975	11.3	16.4	-7.1	2	-47.1	-0.7	8
2.4098	11.1	16.4	-7.3	2	-47.3	-0.9	6.7
2.40985	11.1	16.4	-7.3	2	-47.3	0.9	7.6
2.4099	11	16.4	-7.4	2	-47.4	-1	6.5
2.40995	11	16.4	-7.4	2	-47.4	-1	7.4
2.41	10.9	16.4	-7.5	2	-47.5	-1.1	6.1
2.41005	11	16.4	-7.4	2	-47.4	-1	8
2.4101	11	16.4	-7.4	2	-47.4	-1	6.6
2.41015	11.1	16.4	-7.3	2	-47.3	-0.9	7.6
2.4102	11.2	16.4	-7.2	2	-47.2	-0.8	7.7
2.41025	11.3	16.4	-7.1	2	-47.1	-0.7	7.5
2.4103	11.3	16.4	-7.1	2	-47.1	-0.7	6.3
2.41035	11.4	16.4	-7	2	-47	-0.6	8
2.4104	11.3	16.4	-7.1	2	-47.1	-0.7	6.4
2.41045	11.3	16.4	-7.1	2	-47.1	-0.7	6.5
2.4105	11.3	16.4	-7.1	2	-47.1	-0.7	7.2
2.41055	11.2	16.4	-7.2	2	-47.2	-0.8	6.5
2.4106	11.2	16.4	-7.2	2	-47.2	-0.8	6.6
2.41065	11.3	16.4	-7.1	2	-47.1	-0.7	7.8
2.4107	11.3	16.4	-7.1	2	-47.1	-0.7	7
2.41075	11.3	16.4	-7.1	2	-47.1	-0.7	6
2.4108	11.4	16.4	-7	2	-47	-0.6	6.2
2.41085	11.5	16.4	-6.9	2	-46.9	-0.5	6.5
2.4109	11.6	16.4	-6.8	2	-46.8	-0.4	6.9
2.41095	11.6	16.4	-6.8	2	-46.8	-0.4	6.7
2.411	11.6	16.4	-6.8	2	-46.8	-0.4	7.8
2.41105	11.4	16.4	-7	2	-47	-0.6	7.2
2.4111	11.5	16.4	-6.9	2	-46.9	-0.5	7
2.41115	11.6	16.4	-6.8	2	-46.8	-0.4	7.4

11Mbps CHANNEL 1 Processing Gain							
Gp = (S/N)o + Mj + Lsys							
Freq.	Gp	(S/N)o	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4112	11.5	16.4	-6.9	2	-46.9	-0.5	6.3
2.41125	11.5	16.4	-6.9	2	-46.9	-0.5	6.6
2.4113	11.5	16.4	-6.9	2	-46.9	-0.5	6.9
2.41135	11.4	16.4	-7	2	-47	-0.6	6.1
2.4114	11.4	16.4	-7	2	-47	-0.6	6
2.41145	11.4	16.4	-7	2	-47	-0.6	6.7
2.4115	11.4	16.4	-7	2	-47	-0.6	7.3
2.41155	11.4	16.4	-7	2	-47	-0.6	6.6
2.4116	11.6	16.4	-6.8	2	-46.8	-0.4	7.7
2.41165	11.6	16.4	-6.8	2	-46.8	-0.4	6.6
2.4117	11.5	16.4	-6.9	2	-46.9	-0.5	6
2.41175	11.4	16.4	-7	2	-47	-0.6	6.8
2.4118	11.2	16.4	-7.2	2	-47.2	-0.8	5.8
2.41185	11.1	16.4	-7.3	2	-47.3	-0.9	7.1
2.4119	11	16.4	-7.4	2	-47.4	-1	5.6
2.41195	10.8	16.4	-7.6	2	-47.6	-1.2	6
2.412	10.9	16.4	-7.5	2	-47.5	-1.1	6.1
2.41205	10.9	16.4	-7.5	2	-47.5	-1.1	4
2.4121	11.1	16.4	-7.3	2	-47.3	-0.9	3.5
2.41215	11.4	16.4	-7	2	-47	-0.6	6.5
2.4122	11.5	16.4	-6.9	2	-46.9	-0.5	5.4
2.41225	11.6	16.4	-6.8	2	-46.8	-0.4	7.5
2.4123	11.7	16.4	-6.7	2	-46.7	-0.3	4.5
2.41235	11.7	16.4	-6.7	2	-46.7	-0.3	7.2
2.4124	11.7	16.4	-6.7	2	-46.7	-0.3	6.7
2.41245	11.6	16.4	-6.8	2	-46.8	-0.4	5.9
2.4125	11.6	16.4	-6.8	2	-46.8	-0.4	6.6
2.41255	11.6	16.4	-6.8	2	-46.8	-0.4	6.2
2.4126	11.6	16.4	-6.8	2	-46.8	-0.4	5.5
2.41265	11.6	16.4	-6.8	2	-46.8	-0.4	5.6
2.4127	11.7	16.4	-6.7	2	-46.7	-0.3	7
2.41275	11.6	16.4	-6.8	2	-46.8	-0.4	7.3
2.4128	11.8	16.4	-6.6	2	-46.6	-0.2	7
2.41285	11.8	16.4	-6.6	2	-46.6	-0.2	7.1

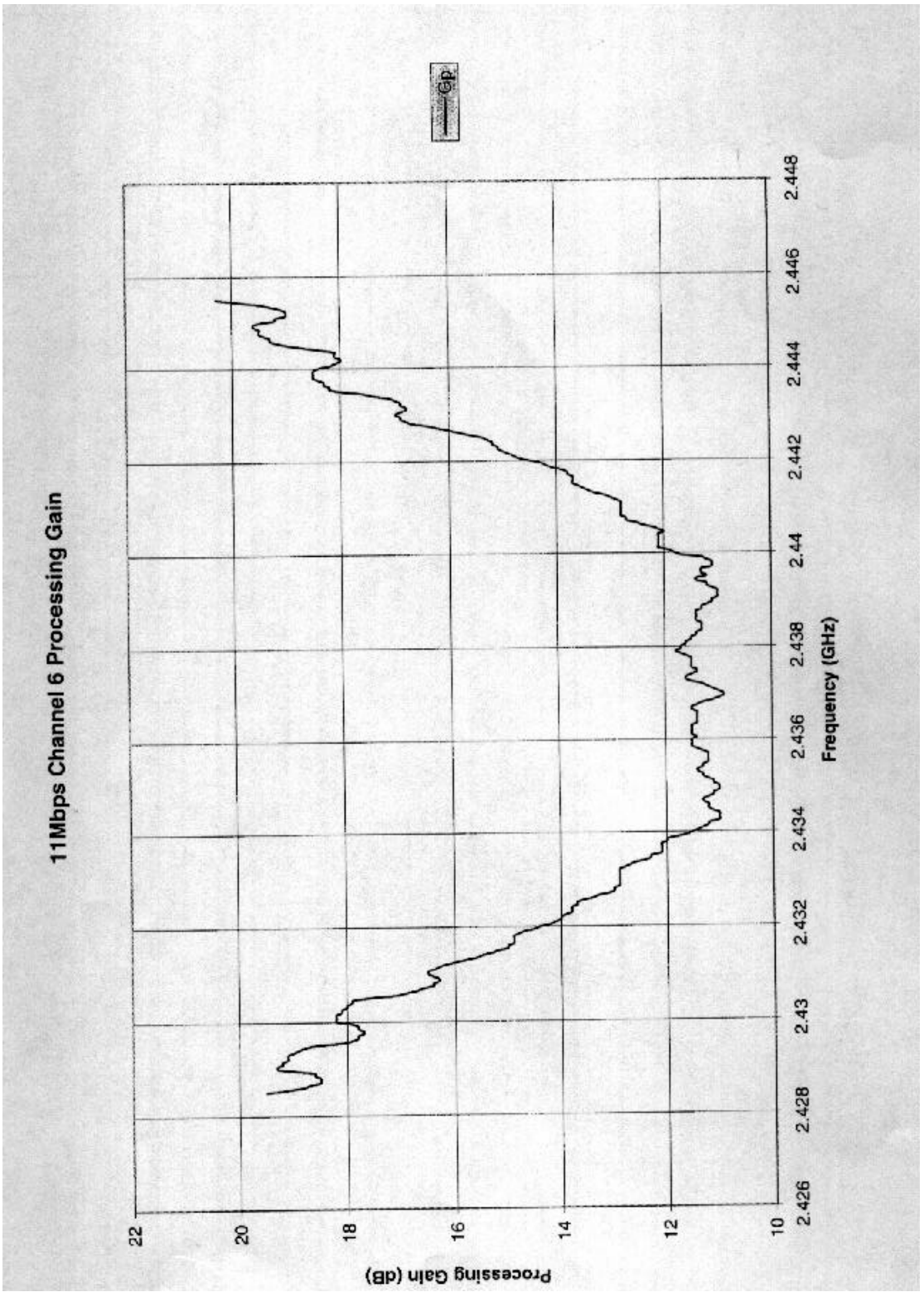
11Mbps CHANNEL 1 Processing Gain							
Gp = (S/N)o + Mj + Lsys							
Freq.	Gp	(S/N)o	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4129	11.8	16.4	-6.6	2	-46.6	-0.2	6.3
2.41295	11.9	16.4	-6.5	2	-46.5	-0.1	7.7
2.413	11.8	16.4	-6.6	2	-46.6	-0.2	5.9
2.41305	11.8	16.4	-6.6	2	-46.6	-0.2	6.5
2.4131	11.8	16.4	-6.6	2	-46.6	-0.2	7.5
2.41315	11.7	16.4	-6.7	2	-46.7	-0.3	6.3
2.4132	11.6	16.4	-6.8	2	-46.8	-0.4	7.6
2.41325	11.7	16.4	-6.7	2	-46.7	-0.3	7
2.4133	11.6	16.4	-6.8	2	-46.8	-0.4	6.8
2.41335	11.6	16.4	-6.8	2	46.8	-0.4	8
2.4134	11.6	16.4	-6.8	2	-46.8	-0.4	7.9
2.41345	11.6	16.4	-6.8	2	-46.8	-0.4	7.5
2.4135	11.6	16.4	-6.8	2	-46.8	-0.4	7.1
2.41355	11.7	16.4	-6.8	2	-46.8	-0.4	6.7
2.4136	11.6	16.4	-6.7	2	-46.7	-0.3	7.8
2.41365	11.7	16.4	-6.7	2	-46.7	-0.3	7.1
2.4137	11.7	16.4	-6.7	2	-46.7	-0.3	6.9
2.41375	11.7	16.4	-6.7	2	-46.7	-0.3	7.3
2.4138	11.6	16.4	-6.8	2	-46.8	-0.4	7
2.41385	11.5	16.4	-6.9	2	-46.9	-0.5	6.4
2.4139	11.4	16.4	-7	2	-47	-0.6	7.5
2.41395	11.3	16.4	-7.1	2	-47.1	-0.7	7.5
2.414	11.2	16.4	-7.2	2	-47.2	-0.8	6.3
2.41405	11.2	16.4	-7.2	2	-47.2	-0.8	6.9
2.4141	11.2	16.4	-7.2	2	-47.2	-0.8	6.4
2.41415	11.2	16.4	-7.2	2	-47.2	-0.8	6
2.4142	11.3	16.4	-7.1	2	-47.1	-0.7	6.6
2.41425	11.4	16.4	-7	2	-47	-0.6	6.7
2.4143	11.5	16.4	-6.9	2	-46.9	-0.5	7.5
2.41435	11.5	16.4	-6.9	2	-46.9	-0.5	6.3
2.4144	11.5	16.4	-6.9	2	-46.9	-0.5	6.5
2.41445	11.5	16.4	-6.9	2	-46.9	-0.5	7.4
2.4145	11.4	16.4	-7	2	-47	-0.6	6.6
Processing Gain : 11.5 dB							


11Mbps Channel 1 Processing Gain
Series1
Processing Gain (dB)
22
20
18
16
14
12
10
2.402
2.404
2.406
2.408
2.41
2.412
2.414
2.416
2.418
2.42
2.422
Frequency (GHz)

11Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4345	11.2	16.4	-7.2	2	-47.2	-3.1	7
2.43455	11.2	16.4	-7.2	2	-47.2	-3.1	6.1
2.4346	11.2	16.4	-7.2	2	-47.2	-3.1	5.7
2.43465	11.3	16.4	-7.1	2	-47.1	-3	6.4
2.4347	11.3	16.4	-7.1	2	-47.1	-3	7.4
2.43475	11.2	16.4	-7.2	2	-47.2	-3.1	7
2.4348	11.1	16.4	-7.3	2	-47.3	-3.2	6.9
2.43485	11.1	16.4	-7.3	2	-47.3	-3.2	7.8
2.4349	11	16.4	-7.4	2	-47.4	-3.3	7.4
2.43495	11	16.4	-7.4	2	-47.4	-3.3	6.7
2.435	11	16.4	-7.4	2	-47.4	-3.3	6.7
2.43505	11.1	16.4	-7.3	2	-47.3	-3.2	8
2.4351	11.1	16.4	-7.3	2	-47.3	-3.2	7.1
2.43515	11.2	16.4	-7.2	2	-47.2	-3.1	7.3
2.4352	11.3	16.4	-7.1	2	-47.1	-3	7.7
2.43525	11.3	16.4	-7.1	2	-47.1	-3	6
2.4353	11.4	16.4	-7	2	-47	-2.9	7.7
2.43535	11.4	16.4	-7	2	-47	-2.9	7.8
2.4354	11.3	16.4	-7.1	2	-47.1	-3	7.1
2.43545	11.3	16.4	-7.1	2	-47.1	-3	7.3
2.4355	11.2	16.4	-7.2	2	-47.2	-3.1	6.5
2.43555	11.2	16.4	-7.2	2	-47.2	-3.1	6.4
2.4356	11.2	16.4	-7.2	2	-47.2	-3.1	6.1
2.43565	11.2	16.4	-7.2	2	-47.2	-3.1	6
2.4357	11.2	16.4	-7.2	2	-47.2	-3.1	6.5
2.43575	11.3	16.4	-7.1	2	-47.1	-3	7.1
2.4358	11.4	16.4	-7	2	-47	-2.9	7.4
2.43585	11.5	16.4	-6.9	2	-46.9	-2.8	7.2
2.4359	11.5	16.4	-6.9	2	-46.9	-2.8	7.1
2.43595	11.5	16.4	-6.9	2	-476.9	-2.8	6.2
2.436	11.5	16.4	-6.9	2	-46.9	-2.8	6.4
2.43605	11.4	16.4	-7	2	-47	-2.9	7.3
2.4361	11.5	16.4	-6.9	2	-46.9	-2.8	7.9
2.43615	11.5	16.4	-6.9	2	-46.9	-2.8	7

11Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4362	11.5	16.4	-6.9	2	-46.9	-2.8	7.1
2.43625	11.5	16.4	-6.9	2	-46.9	-2.8	7.5
2.4363	11.5	16.4	-6.9	2	-46.9	-2.8	8
2.43635	11.4	16.4	-7	2	-47	-2.9	7.2
2.4364	11.4	16.4	-7	2	-47	-2.9	6.7
2.43645	11.4	16.4	-7	2	-47	-2.9	6.3
2.4365	11.4	16.4	-7	2	-47	-2.9	6.5
2.43655	11.4	16.4	-7	2	-47	-2.9	6.9
2.4366	11.4	16.4	-7	2	-47	-2.9	6.7
2.43665	11.5	16.4	-6.9	2	-46.9	-2.8	7.7
2.4367	11.5	16.4	-6.9	2	-46.9	-2.8	6.3
2.43675	11.4	16.4	-7	2	-47	-2.9	6.7
2.4368	11.3	16.4	-7.1	2	-47.1	-3	7.7
2.43685	11.1	16.4	-7.3	2	-47.3	-3.2	6.4
2.4369	11	16.4	-7.4	2	-47.4	-3.3	6.6
2.43695	10.9	16.4	-7.5	2	-47.5	-3.4	6.5
2.437	10.9	16.4	-7.5	2	-47.5	-3.4	5.6
2.43705	11	16.4	-7.4	2	-47.4	-3.3	8
2.4371	11.1	16.4	-7.3	2	-47.3	-3.2	7.2
2.43715	11.2	16.4	-7.2	2	-47.2	-3.1	5.5
2.4372	11.3	16.4	-7.1	2	-47.1	-3	5.3
2.43725	11.5	16.4	-6.9	2	-46.9	-2.8	6.6
2.4373	11.6	16.4	-6.8	2	-46.8	-2.7	6.3
2.43735	11.6	16.4	-6.8	2	-46.8	-2.7	6.1
2.4374	11.5	16.4	-6.9	2	-46.9	-2.8	5.8
2.43745	11.4	16.4	-7	2	-47	-2.9	5.6
2.4375	11.4	16.4	-7	2	-47	-2.9	6.3
2.43755	11.5	16.4	-6.9	2	-46.9	-2.8	7.8
2.4376	11.5	16.4	-6.9	2	-46.9	-2.8	7.1
2.43765	11.5	16.4	-6.9	2	-46.9	-2.8	5.6
2.4377	11.5	16.4	-6.9	2	-46.9	-2.8	6
2.43775	11.5	16.4	-6.9	2	-46.9	-2.8	7.9
2.4378	11.6	16.4	-6.8	2	-46.8	-2.7	6.4
2.43785	11.7	16.4	-6.7	2	-46.7	-2.6	7.2

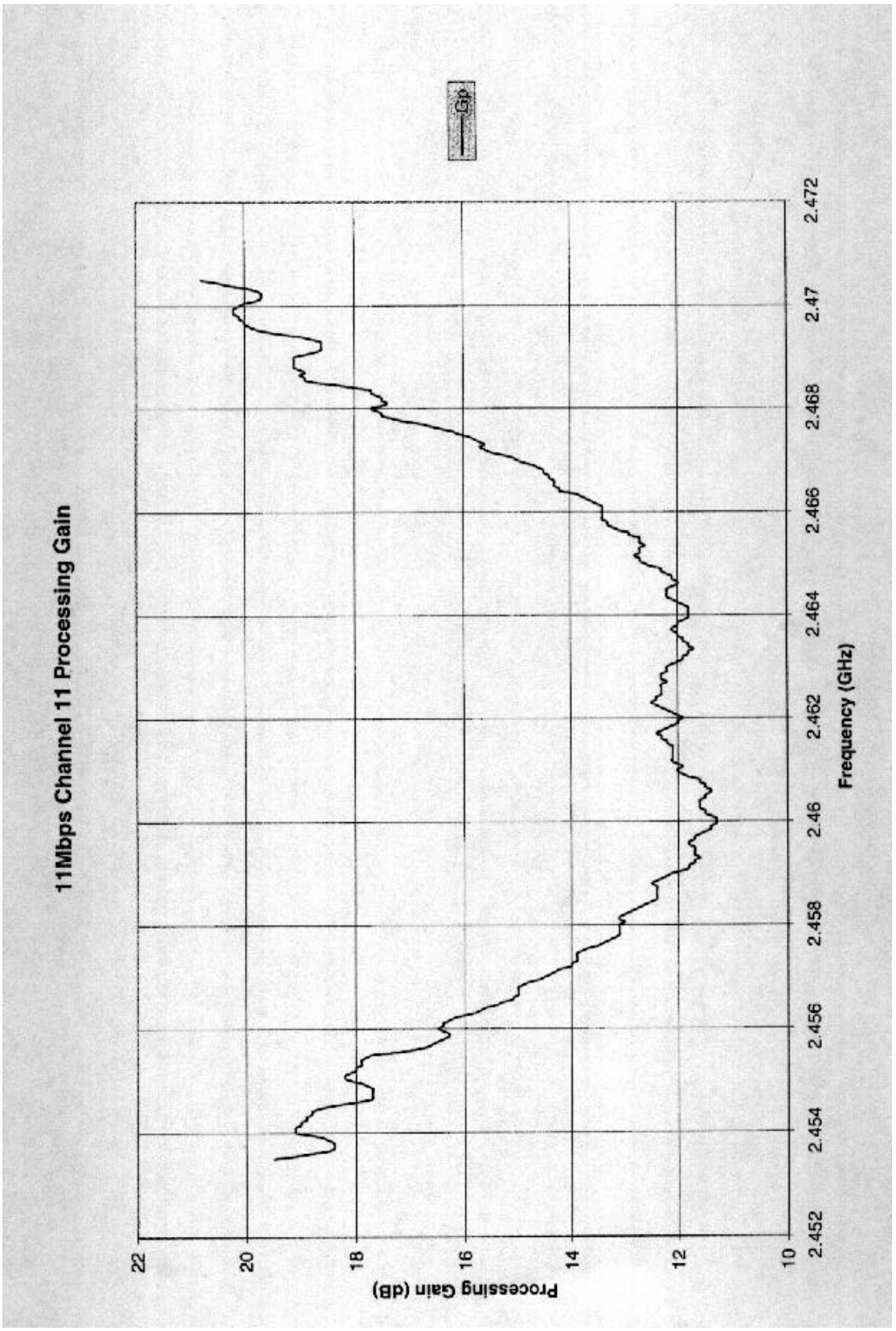
11Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4379	11.8	16.4	-6.6	2	-46.6	-2.5	6.6
2.43795	11.7	16.4	-6.7	2	-46.7	-2.6	7.4
2.438	11.7	16.4	-6.7	2	-46.7	-2.6	7.9
2.43805	11.6	16.4	-6.8	2	-46.8	-2.7	6.2
2.4381	11.6	16.4	-6.8	2	-46.8	-2.7	7.6
2.43815	11.5	16.4	-6.9	2	-46.9	-2.8	6.4
2.4382	11.5	16.4	-6.9	2	-46.9	-2.8	7.5
2.43825	11.4	16.4	-7	2	-47	-2.9	6.6
2.4383	11.4	16.4	-7	2	-47	-2.9	7.7
2.43835	11.3	16.4	-7.1	2	-47.1	-3	6.8
2.4384	11.3	16.4	-7.1	2	-47.1	-3	7.2
2.43845	11.3	16.4	-7.1	2	-47.1	-3	6.7
2.4385	11.3	16.4	-7.1	2	-47.1	-3	6.3
2.43855	11.4	16.4	-7	2	-47	-2.9	7.8
2.4386	11.4	16.4	-7	2	-47	-2.9	6.2
2.43865	11.4	16.4	-7	2	-47	-2.9	6.8
2.4387	11.4	16.4	-7	2	-47	-2.9	6.5
2.43875	11.4	16.4	-7	2	-47	-2.9	6.9
2.4388	11.3	16.4	-7.1	2	-47.1	-3	6.7
2.43885	11.3	16.4	-7.1	2	-47.1	-3	8
2.4389	11.2	16.4	-7.2	2	-47.2	-3.1	7.7
2.4895	11.1	16.4	-7.3	2	-47.3	-3.2	7.1
2.439	11.1	16.4	-7.3	2	-47.3	-3.2	7.8
2.43905	11	16.4	-7.4	2	-47.4	-3.3	6.5
2.4391	11	16.4	-7.4	2	-47.4	-3.3	7.8
2.43915	11	16.4	-7.4	2	-47.4	-3.3	7.8
2.4392	11	16.4	-7.4	2	-47.4	-3.3	6.7
2.43925	11.1	16.4	-7.3	2	-47.3	-3.2	6.8
2.4393	11.2	16.4	-7.2	2	-47.2	-3.1	7.4
2.43935	11.2	16.4	-7.2	2	-47.2	-3.1	6.5
2.4394	11.4	16.4	-7	2	-47	-2.9	6.5
2.43945	11.4	16.4	-7	2	-47	-2.9	6.5
2.4395	11.2	16.4	-7.2	2	-47.2	-3.1	6.5
Processing Gain : 11.4 dB							


11Mbps Channel 6 Processing Gain
Gp
Processing Gain (dB)
22
20
18
16
14
12
10
2.426
2.428
2.43
2.432
2.434
2.436
2.438
2.44
2.442
2.444
2.446
2.448
Frequency (GHz)

11Mbps CHANNEL 11 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4595	11.7	16.4	-6.7	2	-46.7	-4.9	5.8
2.45955	11.8	16.4	-6.6	2	-46.6	-4.8	7.1
5.4596	11.8	16.4	-6.6	2	-46.6	-4.8	6.5
2.45965	11.7	16.4	-6.7	2	-46.7	-4.9	5.9
2.4597	11.7	16.4	-6.7	2	-46.7	-4.9	7.6
2.45975	11.6	16.4	-6.8	2	-46.8	-5	8
2.4598	11.5	16.4	-6.9	2	-46.9	-5.1	7.1
2.45985	11.4	16.4	-7	2	-47	-5.2	7.5
2.4599	11.4	16.4	-7	2	-47	-5.2	8
2.45995	11.3	16.4	-7.1	2	-47.1	-5.3	7
2.46	11.3	16.4	-7.1	2	-47.1	-5.3	6.6
2.46005	11.3	16.4	-7.1	2	-47.1	-5.3	6.6
2.4601	11.4	16.4	-7	2	-47	-5.2	7.1
2.46015	11.5	16.4	-6.9	2	-46.9	-5.1	7.1
2.4602	11.5	16.4	-6.9	2	-46.9	-5.1	6
2.46025	11.6	16.4	-6.8	2	-46.8	-5	6.4
2.4603	11.6	16.4	-6.8	2	-46.8	-5	6
2.46035	11.6	16.4	-6.8	2	-46.8	-5	6.8
2.4604	11.6	16.4	-6.8	2	-46.8	-5	7.2
2.46045	11.5	16.4	-6.9	2	-46.9	-5.1	6.6
2.4605	11.5	16.4	-6.9	2	-46.9	-5.1	7.2
2.46055	11.4	16.4	-7	2	-47	-5.2	6.6
2.4606	11.4	16.4	-7	2	-47	-5.2	7.1
2.46065	11.5	16.4	-6.9	2	-46.9	-5.1	8
2.4607	11.5	16.4	-6.9	2	-46.9	-5.1	6.7
2.46075	11.6	16.4	-6.8	2	-46.8	-5	7.8
2.4608	11.6	16.4	-6.8	2	-46.8	-5	6
2.46085	11.8	16.4	-6.6	2	-46.6	-4.8	7.7
2.4609	11.9	16.4	-6.5	2	-46.5	-4.7	7.6
2.46095	12	16.4	-6.4	2	-46.4	-4.6	7.9
2.461	12	16.4	-6.4	2	-46.4	-4.6	7.8
2.46105	11.9	16.4	-6.5	2	-46.5	-4.7	8
2.4611	12	16.4	-6.4	2	-46.4	-4.6	7.7
2.46115	12.1	16.4	-6.3	2	-46.3	-4.5	7.4

11Mbps CHANNEL 11 Processing Gain							
Gp = (S/N)。 + Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4612	12.1	16.4	-6.3	2	-46.3	-4.5	6.8
2.46125	12.1	16.4	-6.3	2	-46.3	-4.5	6.5
2.4613	12.1	16.4	-6.3	2	-46.3	-4.5	7
2.46135	12.1	16.4	-6.3	2	-46.3	-4.5	6.5
2.4614	12.1	16.4	-6.3	2	-46.3	-4.5	6.5
2.46145	12.1	16.4	-6.3	2	-46.3	-4.5	6
2.4615	12.2	16.4	-6.2	2	-46.2	-4.4	7.8
2.46155	12.2	16.4	-6.2	2	-46.2	-4.4	6.8
2.4616	12.3	16.4	-6.1	2	-46.1	-4.3	6.8
2.46165	12.3	16.4	-6.1	2	-46.1	-4.3	5.4
2.4617	12.4	16.4	-6	2	-46	-4.2	7.1
2.46175	12.3	16.4	-6.1	2	-46.1	-4.3	5.8
2.4618	12.2	16.4	-6.2	2	-46.2	-4.4	6.5
2.46185	12.1	16.4	-6.3	2	-46.3	-4.5	7
2.4619	12	16.4	-6.4	2	-46.4	-4.6	6.2
2.46195	12	16.4	-6.4	2	-46.4	-4.6	7
2.462	11.9	16.4	-6.5	2	-46.5	-4.7	6.2
2.46205	12	16.4	-6.4	2	-46.4	-4.6	7
2.4621	12.1	16.4	-6.3	2	-46.3	-4.5	7
2.46215	12.2	16.4	-6.2	2	-46.2	-4.4	6.6
2.4622	12.3	16.4	-6.1	2	-46.1	-4.3	5.8
2.46225	12.4	16.4	-6	2	-46	-4.2	5.2
2.4623	12.5	16.4	-5.9	2	-45.9	-4.1	7.3
2.46235	12.4	16.4	-6	2	-46	-4.2	5.5
2.4624	12.4	16.4	-6	2	-46	-4.2	7.3
2.46245	12.3	16.4	-6.1	2	-46.1	-4.3	6.2
2.4625	12.3	16.4	-6.1	2	-46.1	-4.3	6.4
2.46255	12.3	16.4	-6.1	2	-46.1	-4.3	6.5
2.4626	12.3	16.4	-6.1	2	-46.1	-4.3	7.2
2.46265	12.3	16.4	-6.1	2	-46.1	-4.3	7.8
2.4627	12.2	16.4	-6.2	2	-46.2	-4.4	6.3
2.46275	12.3	16.4	-6.1	2	-46.1	-4.3	7.1
2.4628	12.3	16.4	-6.1	2	-46.1	-4.3	7.9
2.46285	12.3	16.4	-6.1	2	-46.1	-4.3	7.5

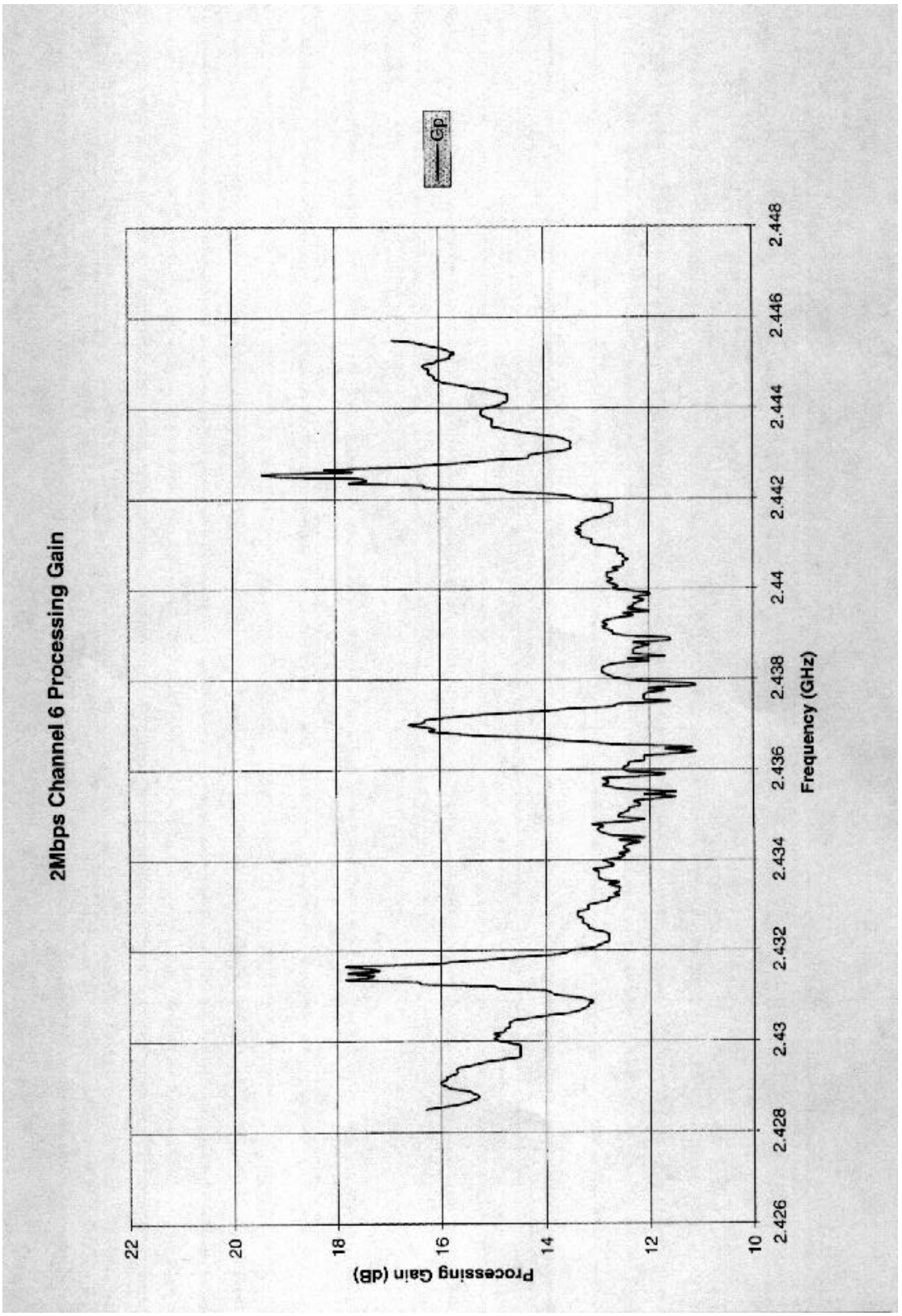
11Mbps CHANNEL 11 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4629	12.2	16.4	-6.2	2	-46.2	-4.4	6.6
2.46295	12.2	16.4	-6.2	2	-46.2	-4.4	6.7
2.463	12.2	16.4	-6.2	2	-46.2	-4.4	7.8
2.46305	12.1	16.4	-6.3	2	-46.3	-4.5	7.2
2.4631	12	16.4	-6.4	2	-46.4	-4.6	6.5
2.46315	11.9	16.4	-6.5	2	-46.5	-4.7	5.6
2.4632	11.9	16.4	-6.5	2	-46.5	-4.7	7.5
2.46325	11.8	16.4	-6.6	2	-46.6	-4.8	6.3
2.4633	11.8	16.4	-6.6	2	-46.6	-4.8	6.8
2.46335	11.7	16.4	-6.7	2	-46.7	-4.9	5.9
2.4634	11.8	16.4	-6.6	2	-46.6	-4.8	7
2.46345	11.8	16.4	-6.6	2	-46.6	-4.8	7.5
2.4635	11.9	16.4	-6.5	2	-46.5	-4.7	8.2
2.46355	11.9	16.4	-6.5	2	-46.5	-4.7	7.2
2.4636	12	16.4	-6.4	2	-46.4	-4.6	7.4
2.46365	12	16.4	-6.4	2	-46.4	-4.6	6.8
2.4637	12.1	16.4	-6.3	2	-46.3	-4.5	7.9
2.46375	12.1	16.4	-6.3	2	-46.3	-4.5	8
2.4638	12	16.4	-6.4	2	-46.4	-4.6	6.8
2.46385	12	16.4	-6.4	2	-46.4	-4.6	7.6
2.4639	11.9	16.4	-6.5	2	-46.5	-4.7	7
2.46395	11.8	16.4	-6.6	2	-46.6	-4.8	6.9
2.464	11.8	16.4	-6.6	2	-46.6	-4.8	7.5
2.46405	11.8	16.4	-6.6	2	-46.6	-4.8	7.8
2.4641	11.8	16.4	-6.6	2	-46.6	-4.8	7.6
2.46415	11.8	16.4	-6.6	2	-46.6	-4.8	6.6
2.4642	11.9	16.4	-6.5	2	-46.5	-4.7	7.2
2.46425	12	16.4	-6.4	2	-46.4	-4.6	7.4
2.4643	12.1	16.4	-6.3	2	-46.3	-4.5	7.2
2.46435	12.2	16.4	-6.2	2	-46.2	-4.4	7.4
4.4644	12.2	16.4	-6.2	2	-46.2	-4.4	6.8
2.46445	12.2	16.4	-6.2	2	-46.2	-4.4	6.2
2.4645	12.2	16.4	-6.2	2	-46.2	-4.4	7.9
Processing Gain : 12 dB							


11Mbps Channel 11 Processing Gain
Gp
Processing Gain (dB)
22
20
18
16
14
12
10
2.452
2.454
2.456
2.458
2.46
2.462
2.464
2.466
2.468
2.47
2.472
Frequency (GHz)

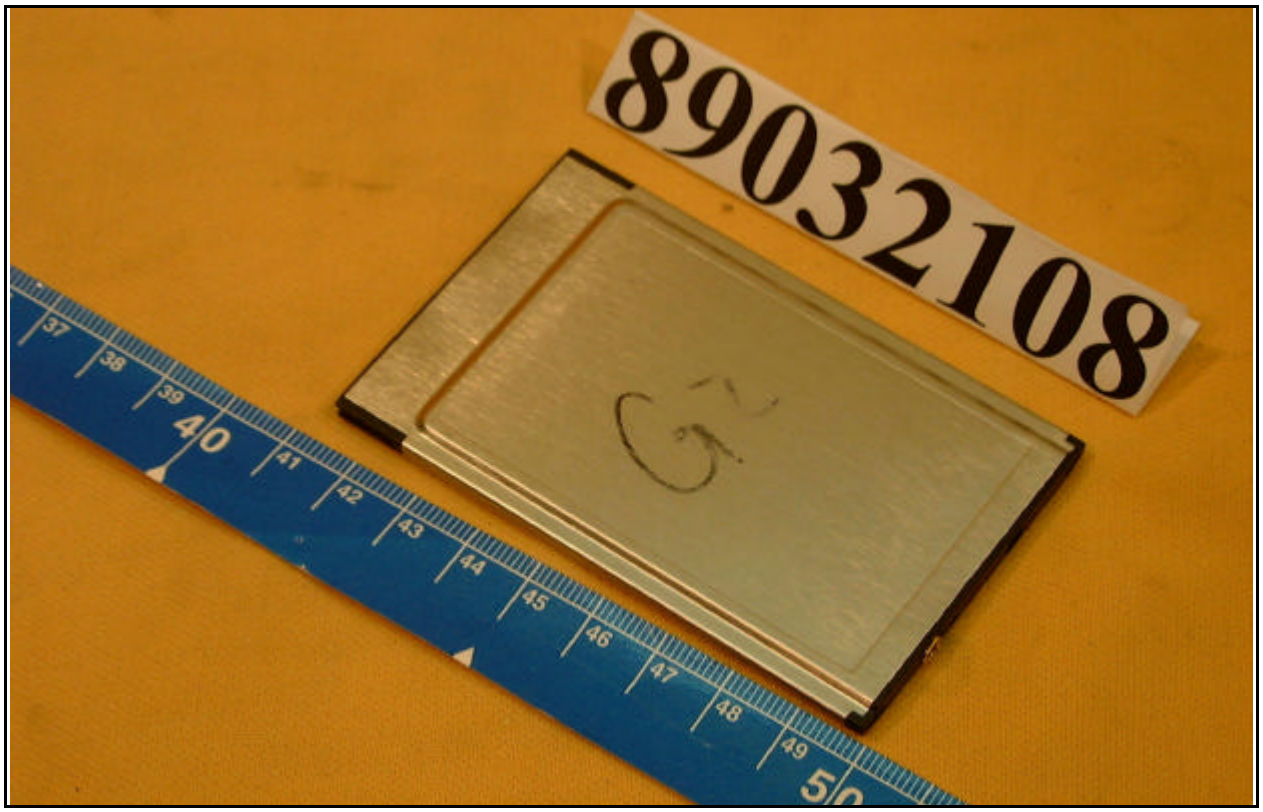
2Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4345	12.1	13.3	-3.2	2	-43.2	0.5	6.6
2.43455	12.7	13.3	-2.6	2	-42.6	1.1	5.7
2.4346	12.9	13.3	-2.4	2	-42.4	1.3	7.9
2.43465	13	13.3	-2.3	2	-42.3	1.4	6.5
2.4347	13	13.3	-2.3	2	-42.3	1.4	6.1
2.43475	12.9	13.3	-2.4	2	-42.4	1.3	5.1
2.4348	13.1	13.3	-2.2	2	-42.2	1.5	7.6
2.43485	12.4	13.3	-2.9	2	-42.9	0.8	7.1
2.4349	12.1	13.3	-3.2	2	-43.2	0.5	6.8
2.43495	12.6	13.3	-2.7	2	-42.7	1	6.5
2.435	12.6	13.3	-2.7	2	-42.7	1	5
2.43505	12.5	13.3	-2.8	2	-42.8	0.9	6.3
2.4351	12.4	13.3	-2.9	2	-42.9	0.8	5.9
2.43515	12.4	13.3	-2.9	2	-42.9	0.8	7.8
2.4352	12.2	13.3	-3.1	2	-43.1	0.6	7.7
2.43525	12.2	13.3	-3.1	2	-43.7	0.6	5.7
2.4353	12.3	13.3	-3	2	-43	0.7	7.3
2.43535	11.9	13.3	-3.4	2	-43.4	0.3	6.4
2.4354	11.5	13.3	-3.8	2	-43.8	-0.1	6
2.43545	12.1	13.3	-3.2	2	-43.2	0.5	6.4
2.4355	11.5	13.3	-3.8	2	-43.8	-0.1	7.8
2.43555	12.4	13.3	-2.9	2	-42.9	0.8	5.5
2.4356	12.7	13.3	-2.6	2	-42.6	1.1	7.4
2.43565	12.9	13.3	-2.4	2	-42.4	1.3	8.1
2.4357	12.8	13.3	-2.5	2	-42.5	1.2	5.6
5.43575	12.8	13.3	-2.5	2	-42.5	1.2	7.6
2.4358	12.9	13.3	-2.4	2	-42.4	1.3	6.3
2.43585	12.1	13.3	-3.2	2	-43.2	0.5	7.3
2.4359	11.7	13.3	-3.6	2	-43.6	0.1	6.1
2.43595	12.4	13.3	-2.9	2	-42.9	0.8	5.5
2.436	12.5	13.3	-2.8	2	-42.8	0.9	5.9
2.43605	12.5	13.3	-2.8	2	-42.8	0.9	6.2
2.4361	12.4	13.3	-2.9	2	-42.9	0.8	6.4
2.43615	12.4	13.3	-2.9	2	-42.9	0.8	6.3

2Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4362	12.1	13.3	-3.2	2	-43.2	0.5	6.2
2.43625	12.1	13.3	-3.2	2	-43.2	0.5	6.5
2.4363	12.1	13.3	-3.2	2	-43.2	0.5	6.3
2.43635	11.5	13.3	-3.8	2	-43.8	-0.1	7.2
2.4364	11.1	13.3	-4.2	2	-44.2	-0.5	6.7
2.43645	11.7	13.3	-3.6	2	-43.6	0.1	6.4
2.4365	11.2	13.3	-4.1	2	-44.1	-0.4	7.2
2.43655	12.6	13.3	-2.7	2	-42.7	1	7.2
2.4366	13.1	13.3	-2.2	2	-42.2	1.5	7
2.43665	13.7	13.3	-1.6	2	-41.6	2.1	6.6
2.4367	14.1	13.3	-1.2	2	-41.2	2.5	7
2.43675	15.1	13.3	-0.2	2	-40.2	3.5	7.3
2.4368	15.7	13.3	0.4	2	-39.6	4.1	5.9
2.43685	16.2	13.3	0.9	2	-39.1	4.6	7.4
2.4369	16.1	13.3	0.8	2	-39.2	4.5	5.9
2.43695	16.3	13.3	1	2	-39	4.7	5.8
2.437	16.6	13.3	1.3	2	-38.7	5	6.9
2.43705	16.3	13.3	1	2	-39	4.7	6.6
2.4371	16.3	13.3	1	2	-39	4.7	7.3
2.43715	16	13.3	0.7	2	-39.3	4.4	7.7
2.4372	15.5	13.3	0.2	2	-39.8	3.9	7.7
2.43725	14.8	13.3	-0.5	2	-40.5	3.2	7
2.4373	14	13.3	-1.3	2	-41.3	2.4	6.1
2.43735	13.5	13.3	-1.8	2	-41.8	1.9	7.9
2.4374	12.7	13.3	-2.6	2	-42.6	1.1	6.9
2.43745	12.6	13.3	-2.7	2	-42.7	1	6.7
2.4375	11.6	13.3	-3.7	2	-43.7	0	7.1
2.43755	12.1	13.3	-3.2	2	-43.2	0.5	5.6
2.4376	12.1	13.3	-3.2	2	-43.2	0.5	6.5
2.43765	12.1	13.3	-3.2	2	-43.2	0.5	5.3
2.4377	12	13.3	-3.3	2	-43.3	0.4	6.9
2.43775	11.7	13.3	-3.6	2	-43.6	0.1	7.1
2.4378	12	13.3	-3.3	2	43.3	0.4	6.8
2.43785	11.1	13.3	-4.2	2	-44.2	-0.5	7.1

2Mbps CHANNEL 6 Processing Gain							
Gp = (S/N)。+ Mj + Lsys							
Freq.	Gp	(S/N)。	Mj = J/S	Lsys	Jammer	LVL	FER
(GHz)	(dB)	(dB)	(dB)	(dB)	(dBm)	(dBm)	
2.4379	11.2	13.3	-4.1	2	-44.1	-0.4	8
2.43795	12.1	13.3	-3.2	2	-43.2	0.5	7.5
2.438	12.5	13.3	-2.8	2	-42.8	0.9	7
2.43805	12.7	13.3	-2.6	2	-42.6	1.1	6.3
2.4381	12.8	13.3	-2.5	2	-42.5	1.2	7.9
2.43815	12.9	13.3	-2.4	2	-42.4	1.3	4.9
2.4382	12.9	13.3	-2.4	2	-42.4	1.3	8
2.43825	12.9	13.3	-2.4	2	-42.4	1.3	7.6
2.4383	12.8	13.3	-2.5	2	-42.5	1.2	5.1
2.43835	12.6	13.3	-2.7	2	-42.7	1	7.5
2.4384	12	13.3	-3.3	2	-43.3	0.4	6.8
2.43845	12.4	13.3	-2.9	2	-42.9	0.8	6.3
2.4385	11.7	13.3	-3.6	2	-43.6	0.1	8
2.43855	12.3	13.3	-3	2	-43	0.7	6.8
2.4386	12.3	13.3	-3	2	-43	0.7	7.9
2.43865	12.3	13.3	-3	2	-43	0.7	7.2
2.4387	12.2	13.3	-3.1	2	-43.1	0.6	5.5
2.43875	12	13.3	-3.3	2	-43.3	0.4	6.6
2.4388	12.3	13.3	-3	2	-43	0.7	6.5
2.43885	11.6	13.3	-3.7	2	-43.7	0	6.7
2.4389	11.6	13.3	-3.7	2	-43.7	0	7.3
2.43895	12.4	13.3	-2.9	2	-42.9	0.8	7.5
2.439	12.7	13.3	-2.6	2	-42.6	1.1	8.1
2.43905	12.7	13.3	-2.6	2	-42.6	1.1	6.8
2.4391	12.8	13.3	-2.5	2	-42.5	1.2	7.3
2.43915	12.9	13.3	-2.4	2	-42.4	1.3	6
2.4392	12.8	13.3	-2.5	2	-42.5	1.2	6.2
2.43925	12.9	13.3	-2.4	2	-42.4	1.3	7.5
2.4393	12.8	13.3	-2.5	2	-42.5	1.2	5.2
2.43935	12.6	13.3	-2.7	2	-42.7	1	6
2.4394	12.3	13.3	-3	2	-43	0.7	6.7
2.43945	12.5	13.3	-2.8	2	-42.8	0.9	7
2.4395	12	13.3	-3.3	2	-43.3	0.4	7.7
Processing Gain : 12.5 dB							


2Mbps Channel 6 Processing Gain
Cp
Processing Gain (dB)
22
20
18
16
14
12
10
2.426
2.428
2.43
2.432
2.434
2.436
2.438
2.44
2.442
2.444
2.446
2.448
Frequency (GHz)

Appendix EUT Photos

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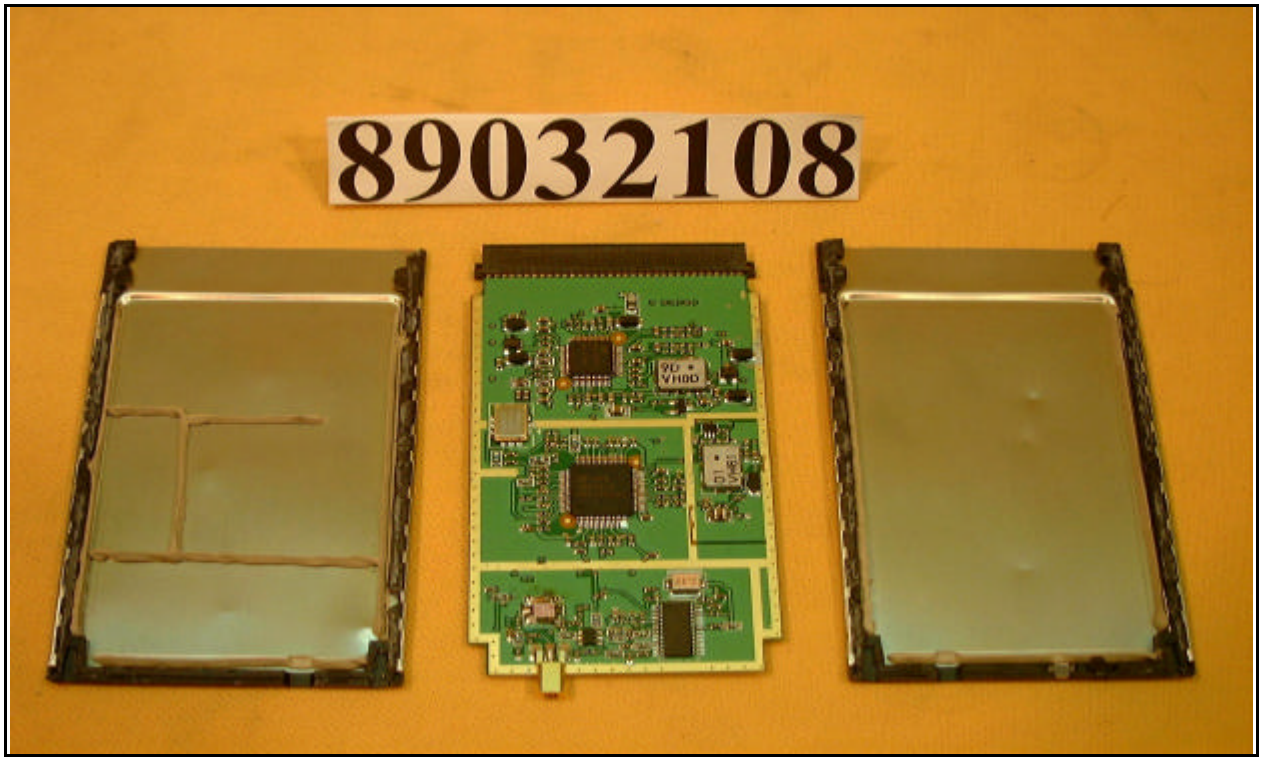
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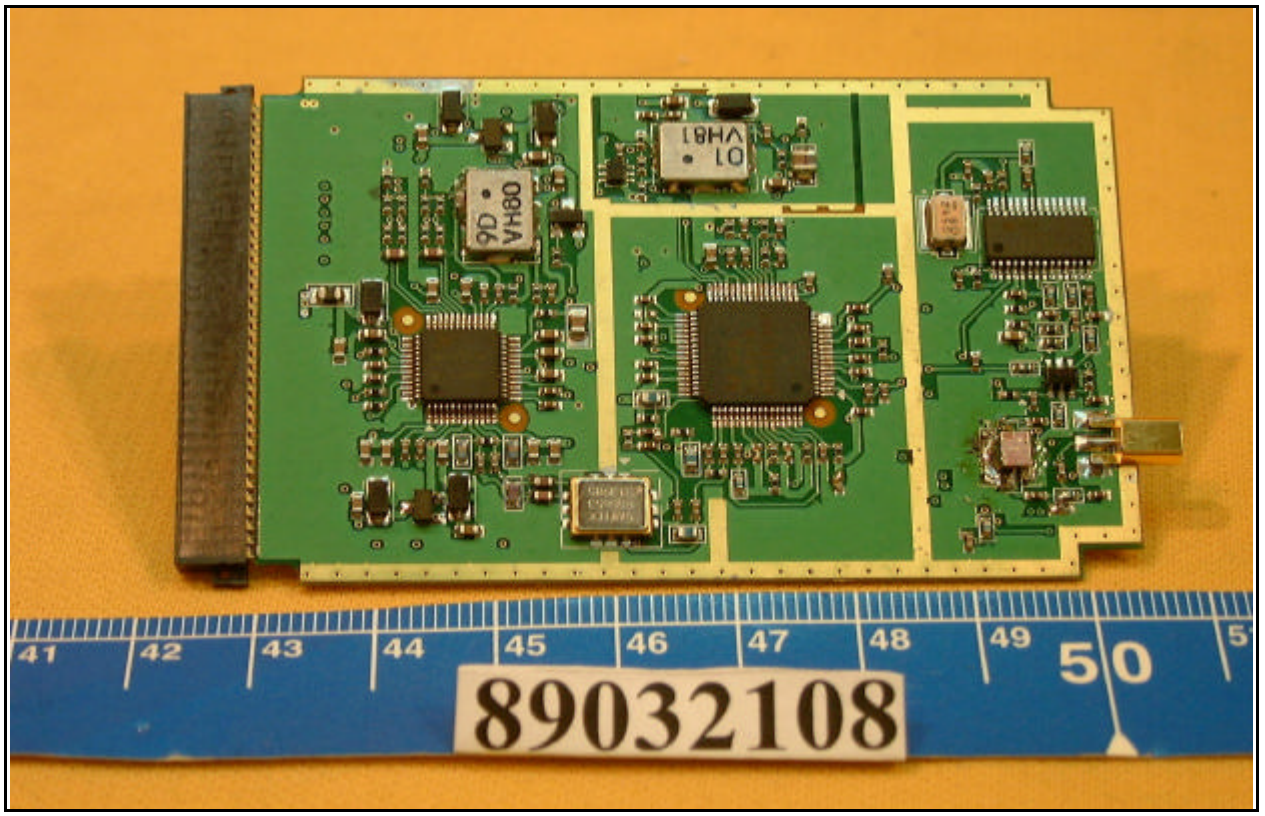
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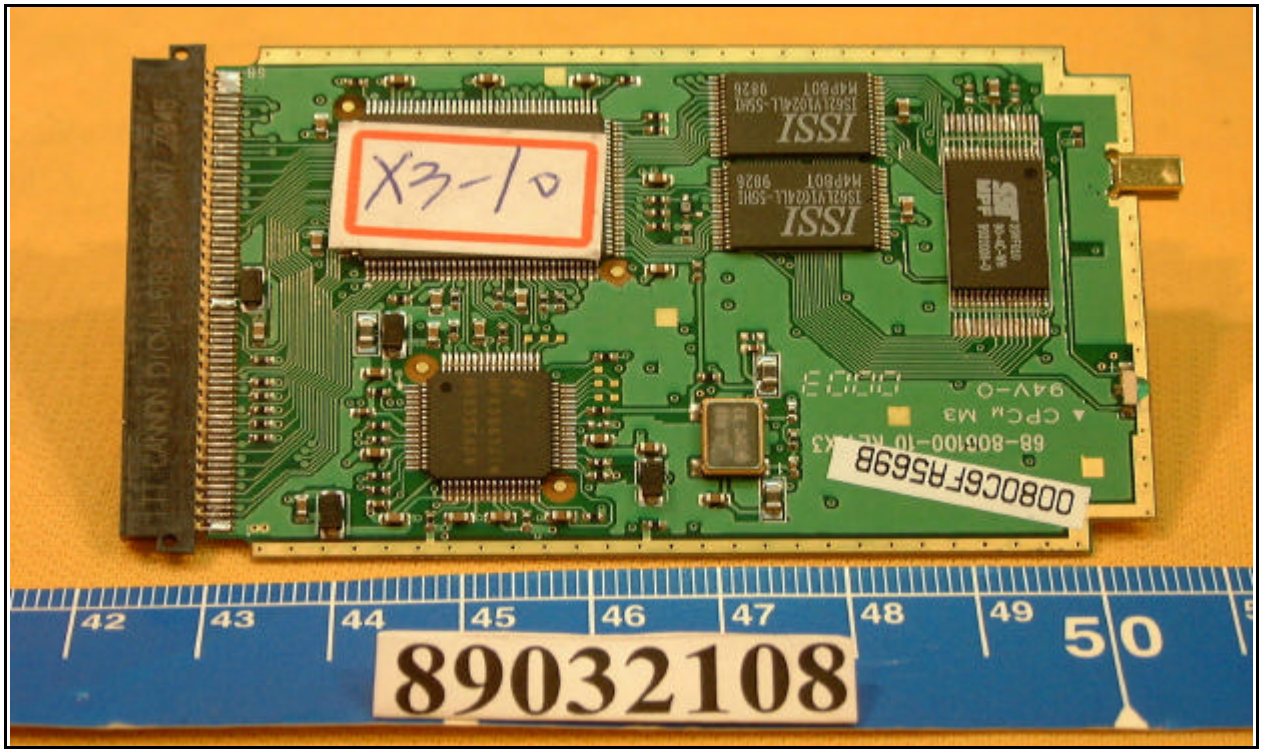
X3-10
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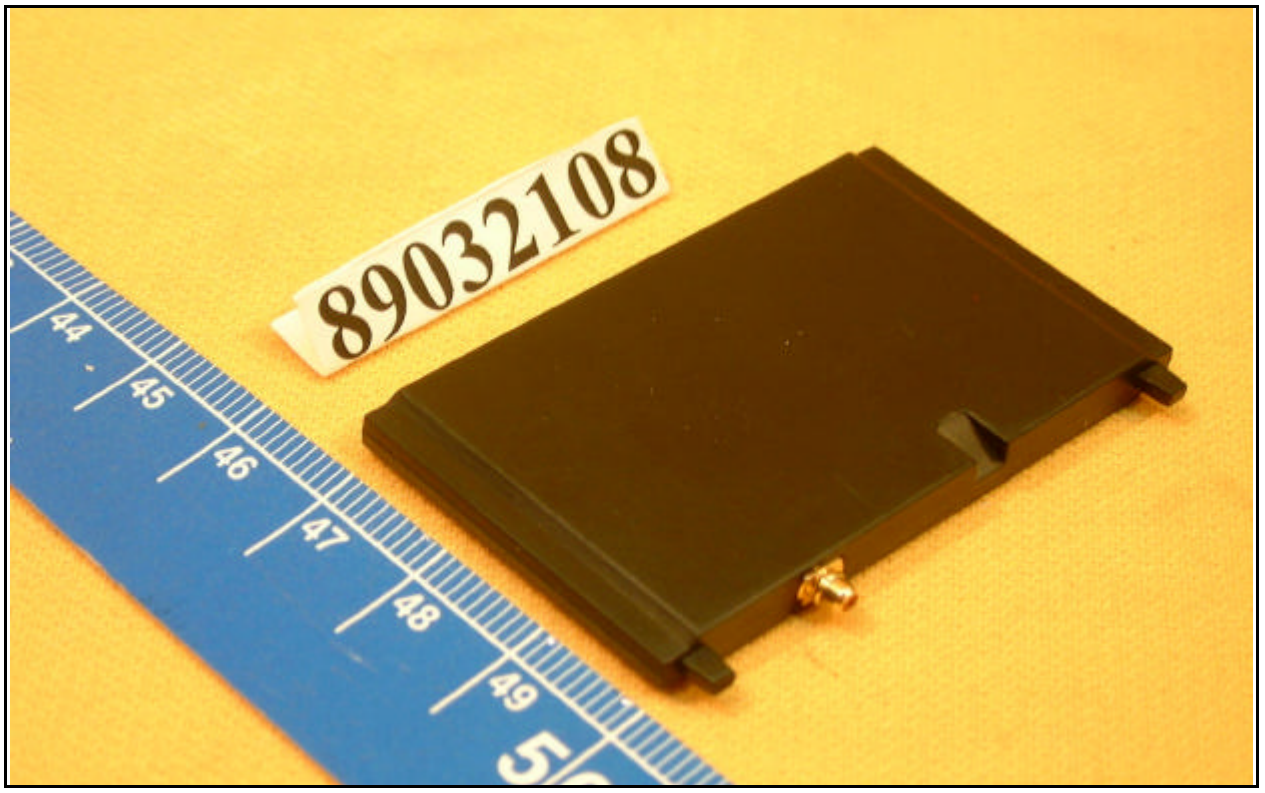
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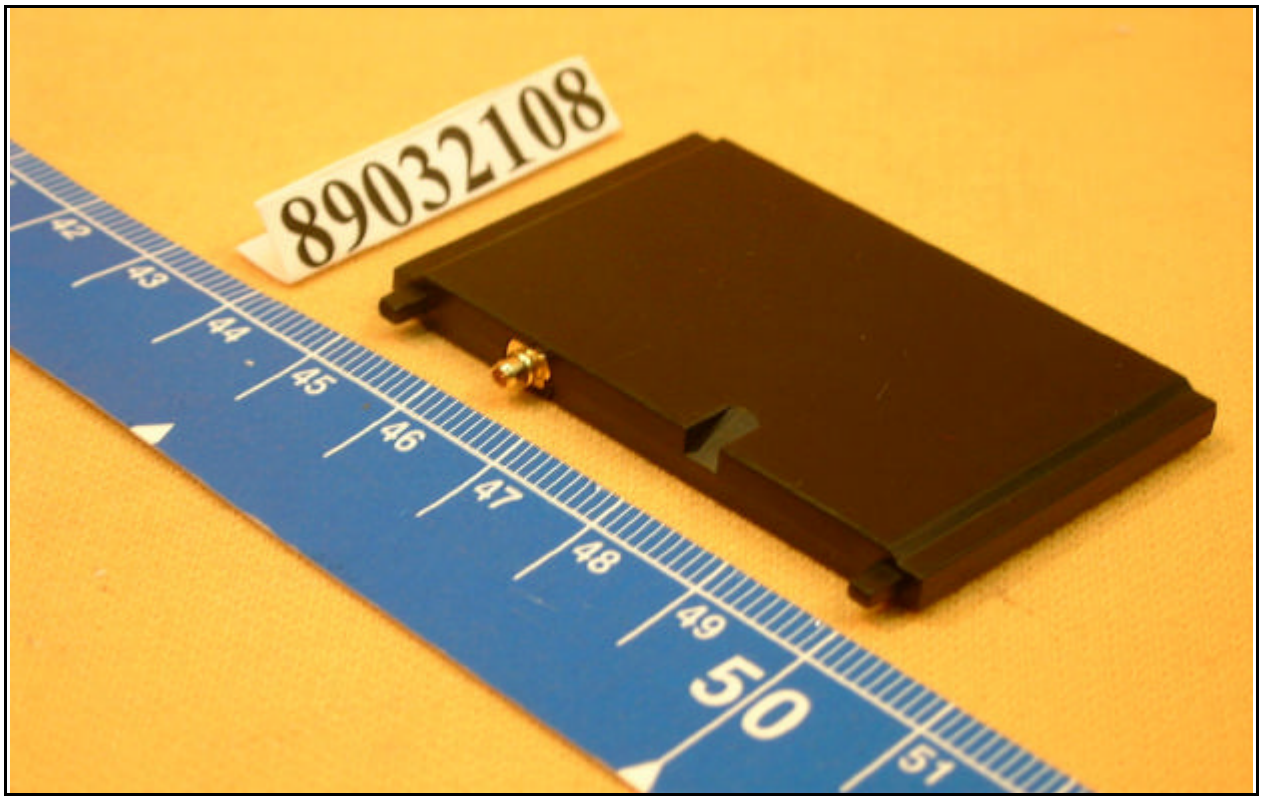
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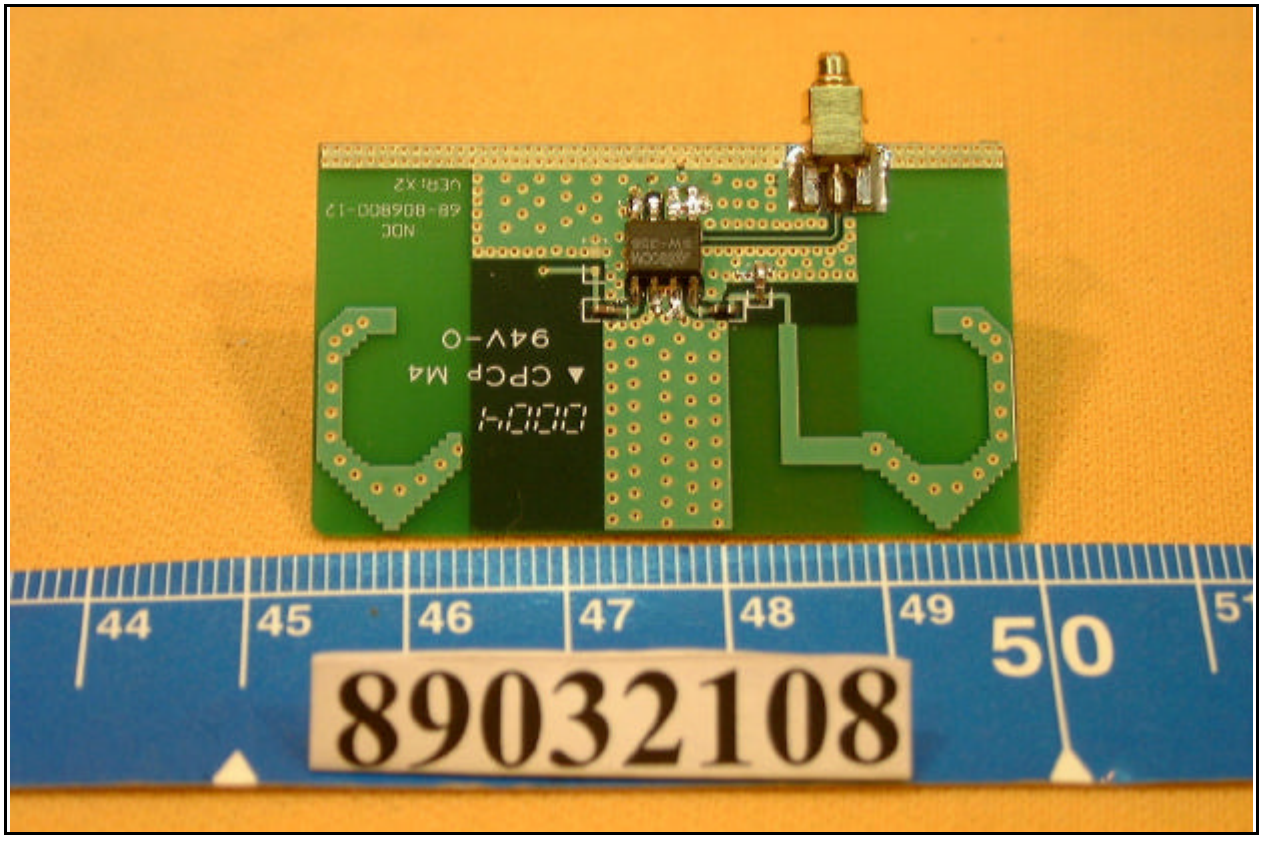
94V-0
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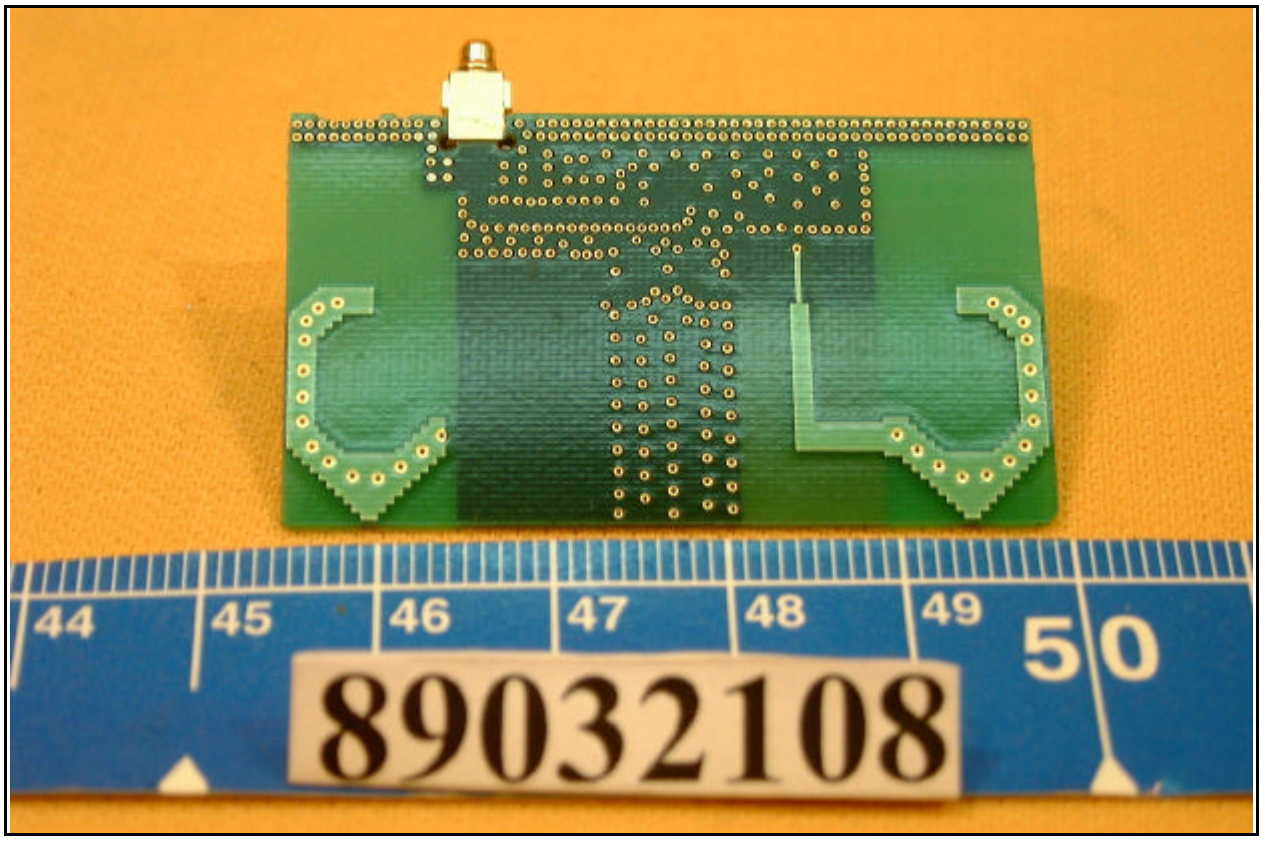
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