

CERTIFICATE OF COMPLIANCE **FCC PART 22 MEASUREMENTS**

Test Lab:

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Applicant Information:

SIERRA WIRELESS INC.
13575 Commerce Parkway, Suite 150
Richmond, B.C. Canada V6V 2L1
Attn: Trent McKeen, Senior RF Engineer

FCC Classification:	Licensed Non-Broadcast Station Transmitter (TNB)
FCC Rule Part(s):	§22.901(d), §2
FCC ID:	N7NACRD2
Model(s):	AirCard 300/350
Equipment Type:	PCMCIA CDPD Modem Card installed in Itronix IX250 Rugged Laptop PC with Itronix Dipole Antenna
Tx Frequency Range:	824-849 MHz
Rx Frequency Range:	869-894 MHz
Max. RF Output Power:	0.336 Watts (ERP)
Frequency Tolerance:	2.5 PPM
Emission Designator:	31K5FXW
Class II Change(s):	Add Itronix IX250 Laptop PC & Itronix Dipole Antenna

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Celltech Research Inc. certifies that no party to this application has been denied FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).



Shawn McMillen
General Manager
Celltech Research Inc.



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MEASUREMENT REPORT - FCC PART 22

1.1 SCOPE

Measurement and determination of electromagnetic emissions (EME) from radio frequency devices for compliance with the technical rules and regulations of the Federal Communications Commission.

§2.1033(a) General Information

<u>APPLICANT:</u> SIERRA WIRELESS INC. 13575 Commerce Parkway, Suite 150 Richmond, B.C. Canada V6V 2L1 Attn: Trent McKeen, Senior RF Engineer	
FCC ID	N7NACRD2
Model(s)	AirCard 300/350
EUT Type	PCMCIA CDPD Modem Card installed in Itronix IX250 Laptop PC with Itronix Dipole Antenna
Classification	Licensed Non-Broadcast Station Transmitter (TNB)
Rule Part(s)	§22.901(d), §2
Max. RF Output Power	0.336 Watts (ERP)
Tx Freq. Range	824-849 MHz
Rx Freq. Range	869-894 MHz
Emission Designator	31K5FXW
Signal Modulation	GMSK
Mode(s) Tested	Unmodulated Carrier
Class II Change(s)	Add Itronix IX250 Laptop PC & Dipole Antenna

2.1 MEASUREMENT PROCEDURES

2.2 SPURIOUS EMISSIONS AT ANTENNA TERMINAL - §2.1051

The level of the carrier and the various conducted spurious and harmonic frequencies were measured by means of a calibrated spectrum analyzer. The spectrum was scanned from 10MHz to 20GHz. The antenna output terminal of the EUT was connected to the input of a 50Ω spectrum analyzer through a matched 40dB attenuator and coaxial cable. The transmitter was operating at maximum power with internal data modulation.

2.3 RADIATED SPURIOUS AND HARMONIC EMISSIONS - §2.1053

Radiated and harmonic emissions above 1 GHz were measured at our 3-meter outdoor site. The EUT was placed on the turntable with the transmitter transmitting into a non-radiating load. A receiving antenna located 3 meters from the turntable received any signal radiated from the transmitter and its operating accessories. The receiving antenna was varied from 1 to 4 meters and the polarization was varied (horizontal and vertical) to determine the worst-case emission level.

3.1 TEST DATA

3.2 EFFECTIVE RADIATED POWER OUTPUT - §2.1046

Freq. Tuned	EUT Conducted Power	Max. Field Strength of EUT (dBm)	Dipole Gain	Dipole Forward Conducted Power	ERP of EUT Dipole Gain + Dipole Forward Conducted Power	
(MHz)	(dBm)	Vertical Pol.	(dBd)	(dBm)	(dBm)	(Watts)
824.04	25.84	- 12.31	- 1.44	26.70	25.26	0.336
836.49	26.83	- 11.77	- 1.34	26.57	25.23	0.333
848.97	26.01	- 14.37	- 1.24	24.45	23.21	0.209

Notes:

ERP Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A half-wave dipole was substituted in place of the EUT. The dipole was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the dipole, and the input level of the dipole was adjusted to the same field strength level as the EUT. The feed point for the dipole was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the dipole antenna. The conducted power at the antenna feed point was recorded. The forward power for the dipole was then determined and the ERP level was determined by adding the forward dipole power and the dipole gain in dB. For readings above 1GHz the above method is repeated using standard gain horn antennas.

3.3 FIELD STRENGTH OF SPURIOUS RADIATION - 2.1053

Operating Frequency (MHz): 824.04
Channel: 991 (Low)
Measured Cond. Pwr. (dBm): 25.84
Measured ERP (dBm): 25.26
Modulation: Unmodulated Carrier
Distance: 3 Meters
Limit: $43 + 10 \log (W) = 40.31 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
1648.08	-67.11	-41.93	6.6	V	-35.33	-37.47	62.73
2472.12	-73.20	-46.00	7.8	V	-38.20	-40.34	65.60
3296.16	-79.31	-44.65	7.8	V	-36.90	-39.04	64.30
4120.20	-96.63	-67.61	7.6	V	-60.01	-62.15	87.41
4944.24	-95.00	-68.64	8.5	V	-60.14	-62.28	87.54
5768.28	-97.81	-70.93	8.8	V	-62.13	-64.27	89.53
6592.32	< -104						
7416.36	< -104						
8240.40	< -104						

Notes:

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward power for the antenna was then determined and the EIRP level was determined by adding the forward power and the antenna gain in dB.

FIELD STRENGTH OF SPURIOUS RADIATION - 2.1053

Operating Frequency (MHz): 836.49
Channel: 383 (Mid)
Measured Cond. Pwr. (dBm): 26.83
Measured ERP (dBm): 25.23
Modulation: Unmodulated Carrier
Distance: 3 Meters
Limit: $43 + 10 \log (W) = 40.31 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
1672.98	-72.19	-49.30	6.6	V	-42.70	-44.84	70.07
2509.47	-68.69	-38.89	7.8	V	-31.09	-33.23	58.46
3345.96	-74.56	-47.98	7.8	V	-40.23	-42.37	67.60
4182.45	-89.06	-61.04	7.6	V	-53.44	-55.58	80.81
5018.94	-89.57	-63.21	8.5	V	-54.71	-56.85	82.08
5855.43	-92.65	-71.77	8.8	V	-62.97	-65.11	90.34
6691.92	< -104						
7528.41	< -104						
8364.90	< -104						

Notes:

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward power for the antenna was then determined and the EIRP level was determined by adding the forward power and the antenna gain in dB.

FIELD STRENGTH OF SPURIOUS RADIATION - 2.1053

Operating Frequency (MHz): 848.97
Channel: 799 (High)
Measured Cond. Pwr. (dBm): 26.01
Measured ERP (dBm): 23.21
Modulation: Unmodulated Carrier
Distance: 3 Meters
Limit: $43 + 10 \log (W) = 40.31 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
1697.94	-72.69	-47.11	6.6	V	-40.51	-42.65	65.86
2546.91	-72.12	-44.52	7.8	V	-36.72	-38.86	62.07
3395.88	-85.89	-48.00	7.8	V	-40.25	-42.39	65.60
4244.85	-89.12	-60.10	7.6	V	-52.50	-54.64	77.85
5093.82	-94.48	-68.12	8.5	V	-59.62	-61.76	84.97
5942.79	-91.40	-70.52	8.8	V	-61.72	-63.86	87.07
6791.76	-91.71	-72.43	9.6	V	-62.83	-64.97	88.18
7640.73	< -104						
8489.70	< -104						

Notes:

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward power for the antenna was then determined and the EIRP level was determined by adding the forward power and the antenna gain in dB.

4.1 TEST EQUIPMENT

<u>Type</u>	<u>Model</u>	<u>Calib. Date</u>	<u>Serial No.</u>
Signal Generator	HP 8648D (9kHz-4.0GHz)	Nov 1999	3847A00611
Gigatronics Power Meter	8652A	Oct 1999	1835272
Gigatronics Power Sensor (2)	80701A (0.05-18GHz)	Oct 1999	1833535, 1833542
Amplifier Research Power Amp.	5S1G4 (5W, 800MHz-4.2GHz)	N/A	26235
Microwave System Amplifier	HP 83017A (0.5-26.5GHz)	N/A	3123A00587
Network Analyzer	HP 8753E (30kHz-3GHz)	Nov 1999	US38433013
Audio Analyzer	HP 8903B	March 1999	3729A18691
Modulation Analyzer	HP 8901A	March 1999	3749A07154
Frequency Counter	HP 53181A (3GHz)	May 1999	3736A05175
CDMA Base Station Test Set	Agilent E8285A	N/A	US40332926
DC Power Supply	HP E3611A	N/A	KR83015294
Multi-Device Controller	EMCO 2090	N/A	9912-1484
Mini Mast	EMCO 2075	N/A	0001-2277
Turntable	EMCO 2080-1.2/1.5	N/A	0002-1002
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	Oct. 2000	6267
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	Oct. 2000	6276
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 1998	9120A-239
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 1998	9120A-240
Roberts Dipoles	Compliance Design (2 sets) 3121C	June 2000	
Spectrum Analyzer	HP 8594E	March 2000	3543A02721
Spectrum Analyzer	HP E4408B	Nov 1999	US39240170
Shielded Screen Room	Lindgren R.F. 18W-2/2-0	N/A	16297
Environmental Chamber	ESPEC ECT-2 (Temperature/Humidity)	Feb 2000	0510154-B

5.1 CONCLUSION

The data collected shows that the SIERRA WIRELESS PCMCIA CDPD Modem Card FCC ID: N7NACRD2 (installed in ITRONIX IX250 Rugged Laptop PC with ITRONIX dipole antenna) complies with all the requirements of Parts 2 and 22.901(d) of the FCC rules.

ATTACHMENT A – TEST PLOTS



09:19:14 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 991

Mkr1 1.647 GHz

Ref 26.71 dBm

Atten 5 dB

-21.92 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

-13.0

dBm

M1 S2

S3 FC

AA

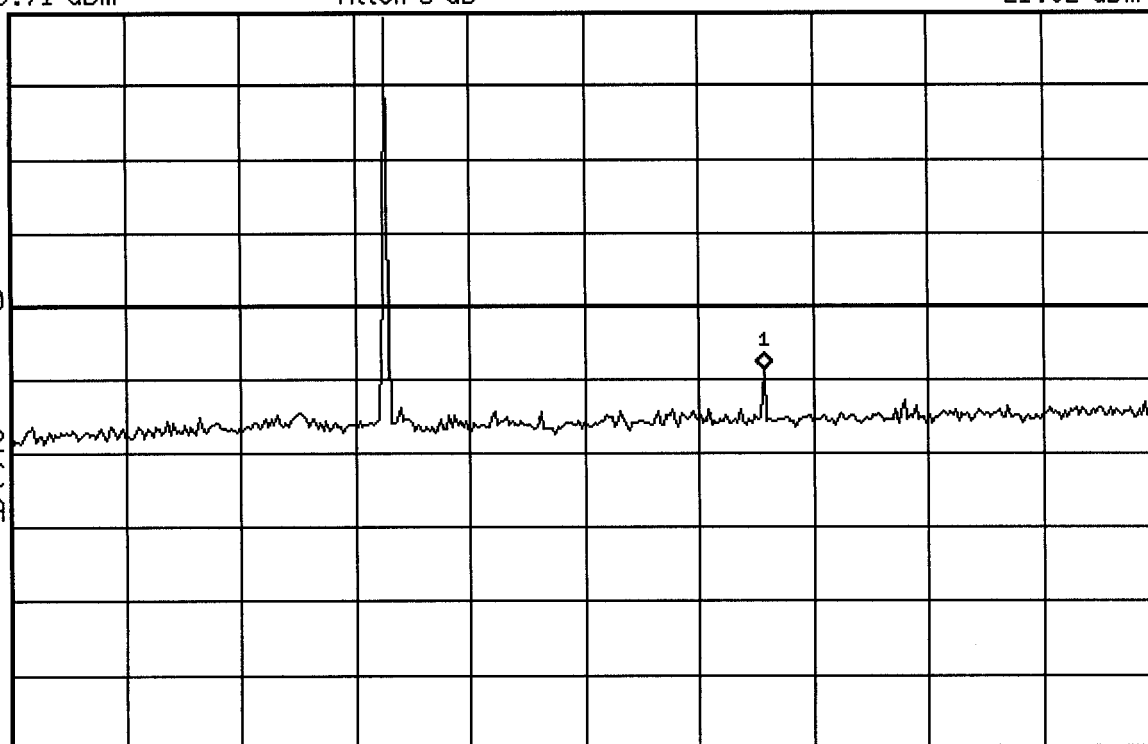
Start 10 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms





09:19:35 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 991

Mkr1 2.988 GHz

Ref 26.71 dBm

Atten 5 dB

-28.22 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

-13.0

dBm

M1 S2

S3 FC

AA

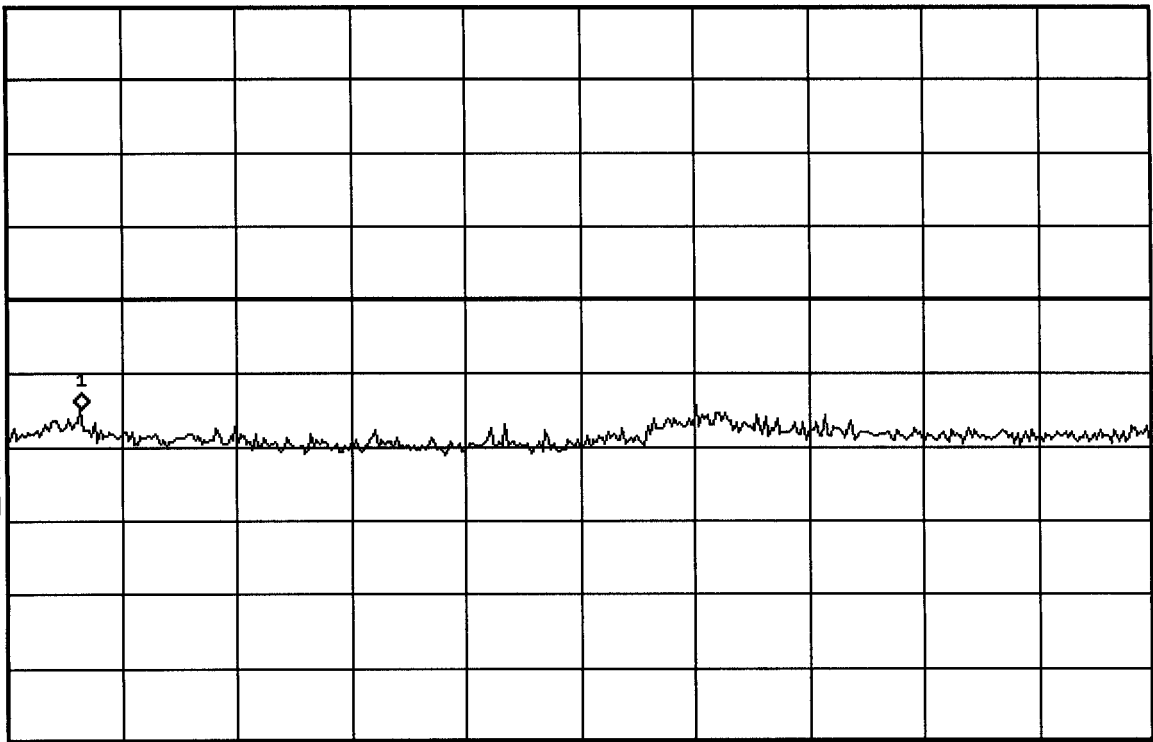
Start 2.5 GHz

*Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz

Sweep 18.75 ms





09:20:01 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 991

Mkr1 13.30 GHz

Ref 26.71 dBm

Atten 5 dB

-24.6 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

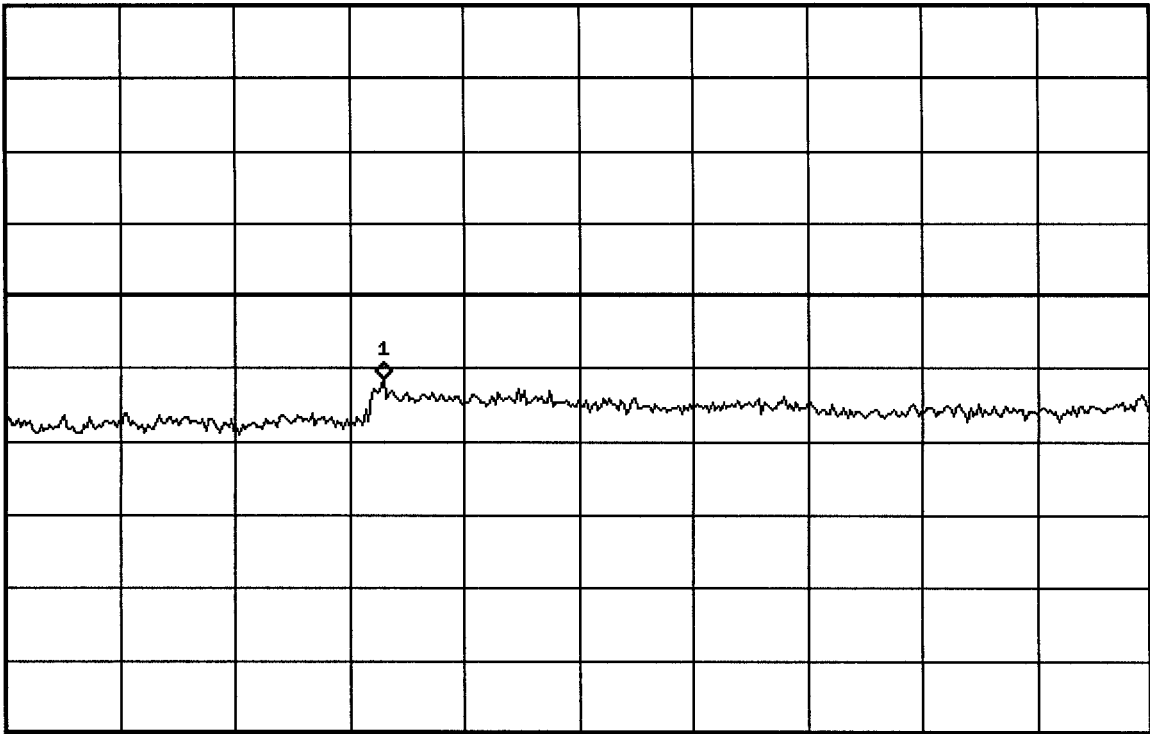
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 GHz

*Res BW 1 MHz

VBW 1 MHz

Stop 20 GHz

Sweep 100 ms



09:20:52 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 383

Ref 26.71 dBm

Atten 5 dB

Mkr1 1.672 GHz

-23.34 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

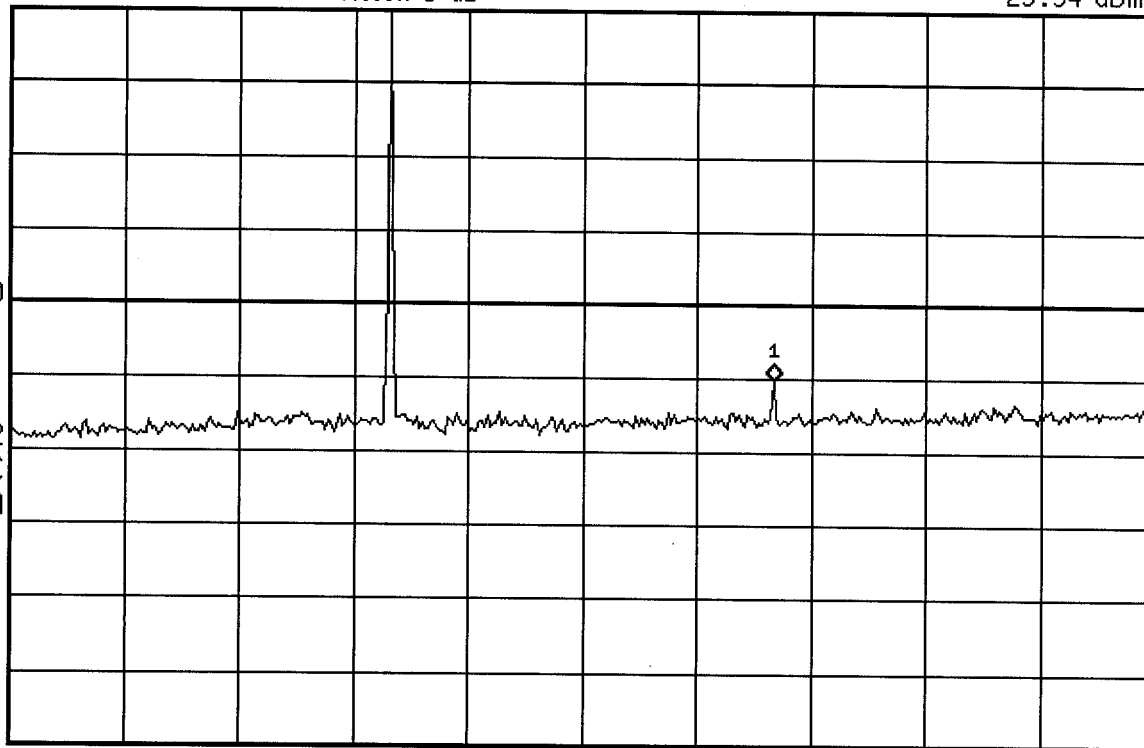
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms

hp 09:24:11 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 383

Mkr1 7.075 GHz

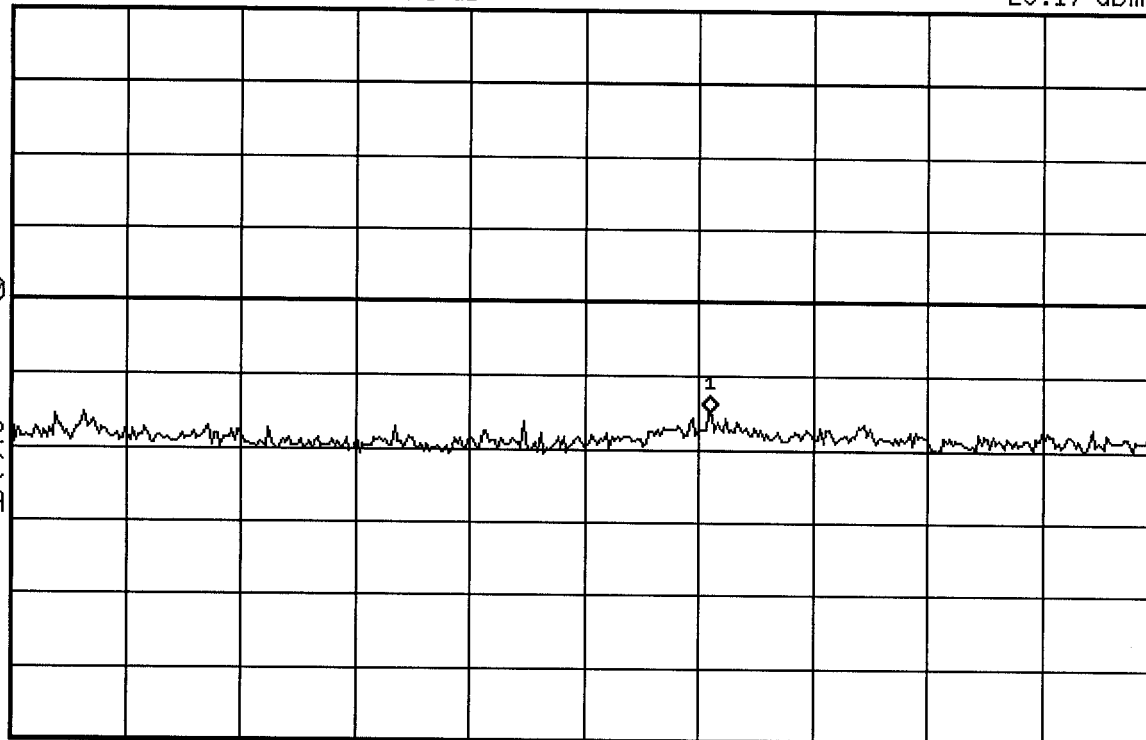
Ref 26.71 dBm

Atten 5 dB

-28.17 dBm

Peak
Log
10
dB/
Offst
41
dB
DI
-13.0
dBm

M1 S2
S3 FC
AA



Start 2.5 GHz
*Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz
Sweep 18.75 ms

hp 09:21:30 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 383

Ref 26.71 dBm

Atten 5 dB

Mkr1 24988 GHz

-28.52 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

-13.0

dBm

M1 S2

S3 FC

AA

1

Start 10 GHz

*Res BW 1 MHz

VBW 1 MHz

Stop 20 GHz

Sweep 100 ms

hp 09:25:46 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 799

Ref 26.5 dBm

Atten 5 dB

Mkr1 1.697 GHz

-20.89 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

-13.0

dBm

M1 S2

S3 FC

AA

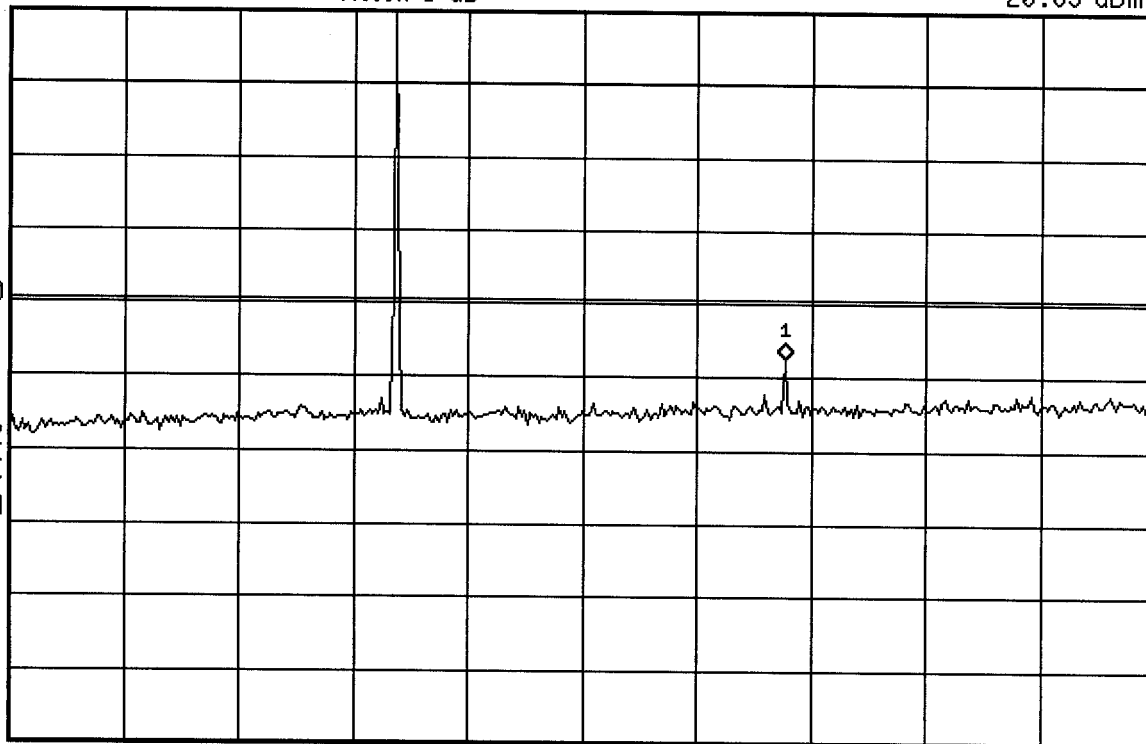
Start 10 MHz

*Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms





09:26:07 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 799

Mkr1 6.925 GHz

Ref 26.5 dBm

Atten 5 dB

-27.45 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

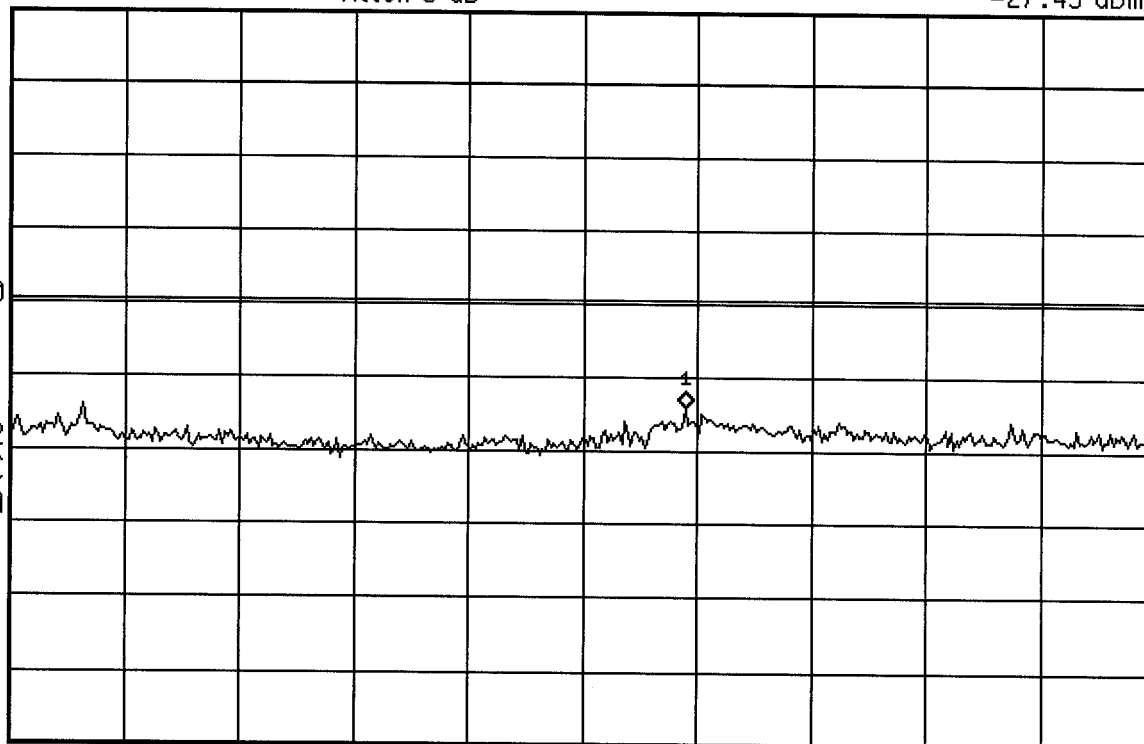
-13.0

dBm

M1 S2

S3 FC

AA



Start 2.5 GHz

*Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz

Sweep 18.75 ms



09:26:27 May 24, 2001

ITRONIX AIRCARD 300 COND SPURS CH 799

Mkr1 13.40 GHz

Ref 26.5 dBm

Atten 5 dB

-25.28 dBm

Peak

Log

10

dB/

Offst

41

dB

DI

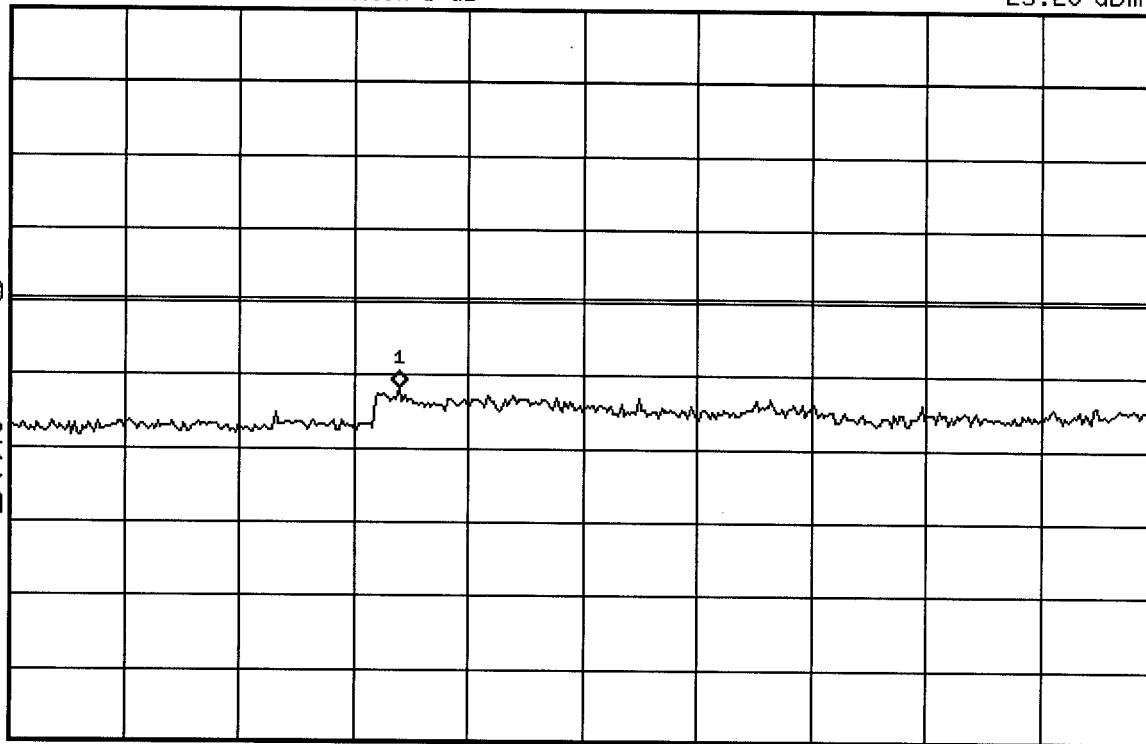
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 GHz

*Res BW 1 MHz

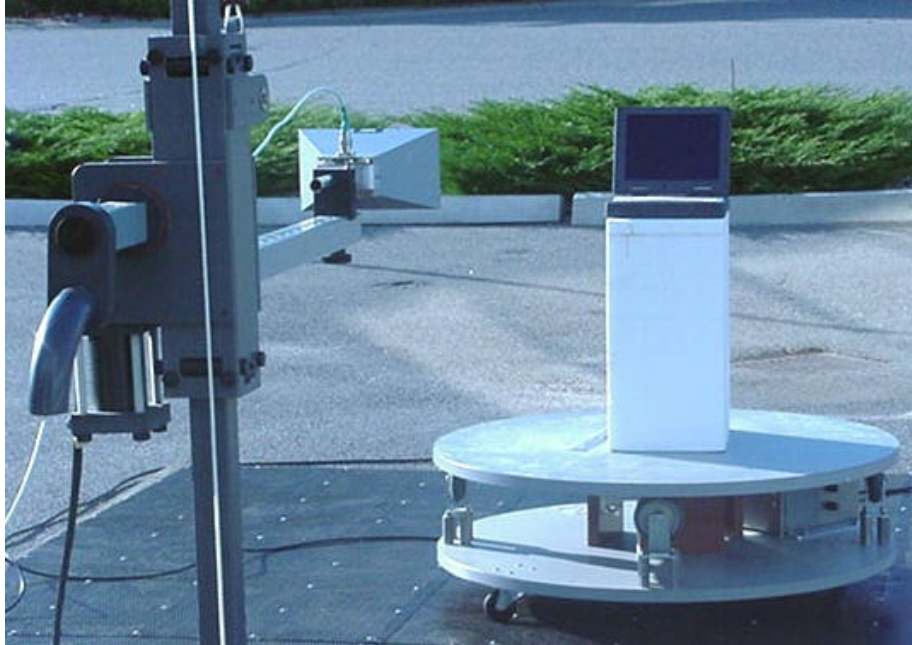
VBW 1 MHz

Stop 20 GHz

Sweep 100 ms

ATTACHMENT B – TEST SETUP PHOTOGRAPHS

RADIATED TEST SETUP PHOTOGRAPHS



RADIATED TEST SETUP PHOTOGRAPHS



RADIATED TEST SETUP PHOTOGRAPHS



ATTACHMENT C – EUT PHOTOGRAPHS

EUT PHOTOGRAPHS
PCMCIA CDPD Modem Card
Front View



EUT PHOTOGRAPHS
PCMCIA CDPD Modem Card
Rear View



EUT PHOTOGRAPHS
Itronix IX250 Laptop PC



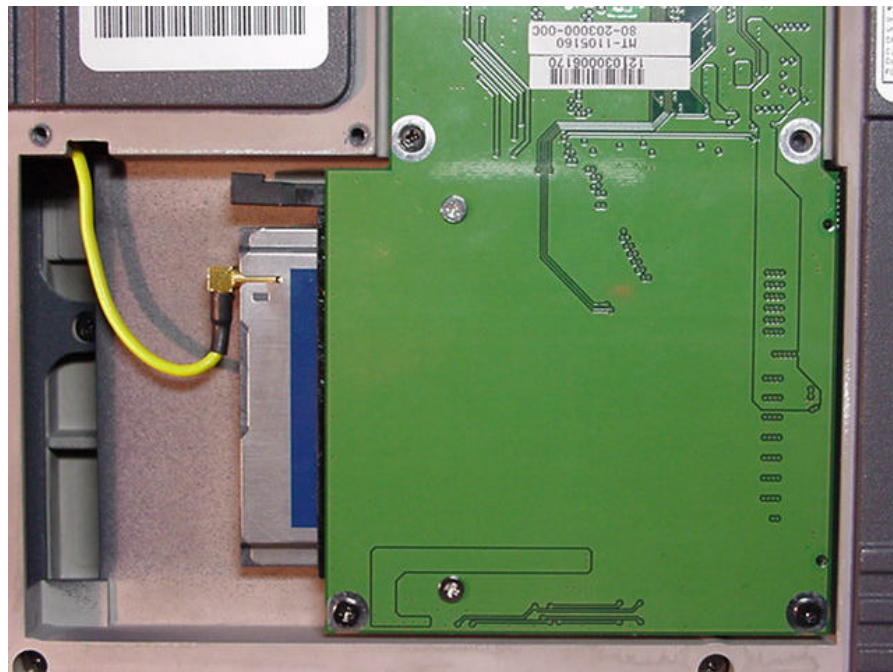
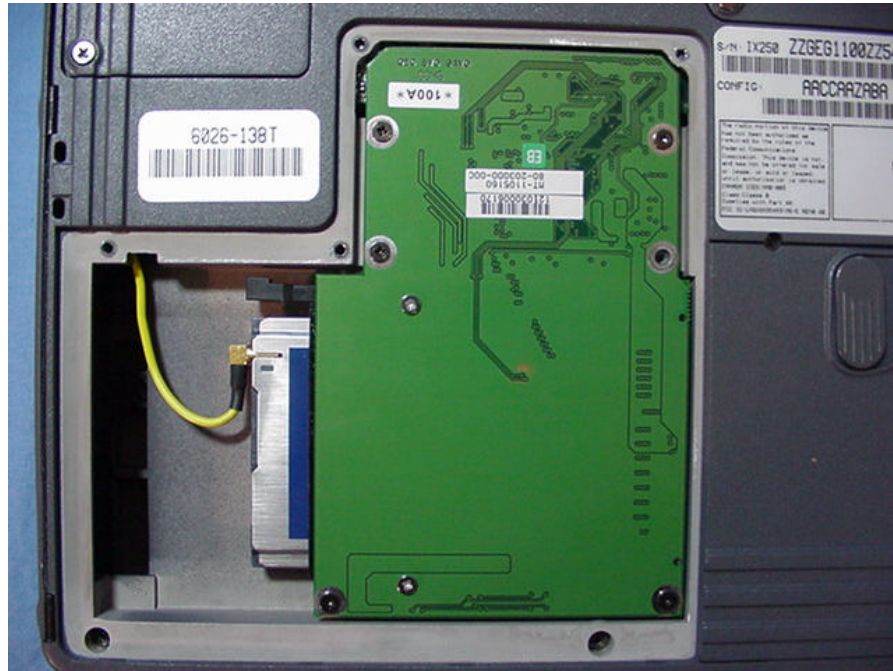
EUT PHOTOGRAPHS
Itronix IX250 Laptop PC



EUT PHOTOGRAPHS
Itronix Dipole Antenna



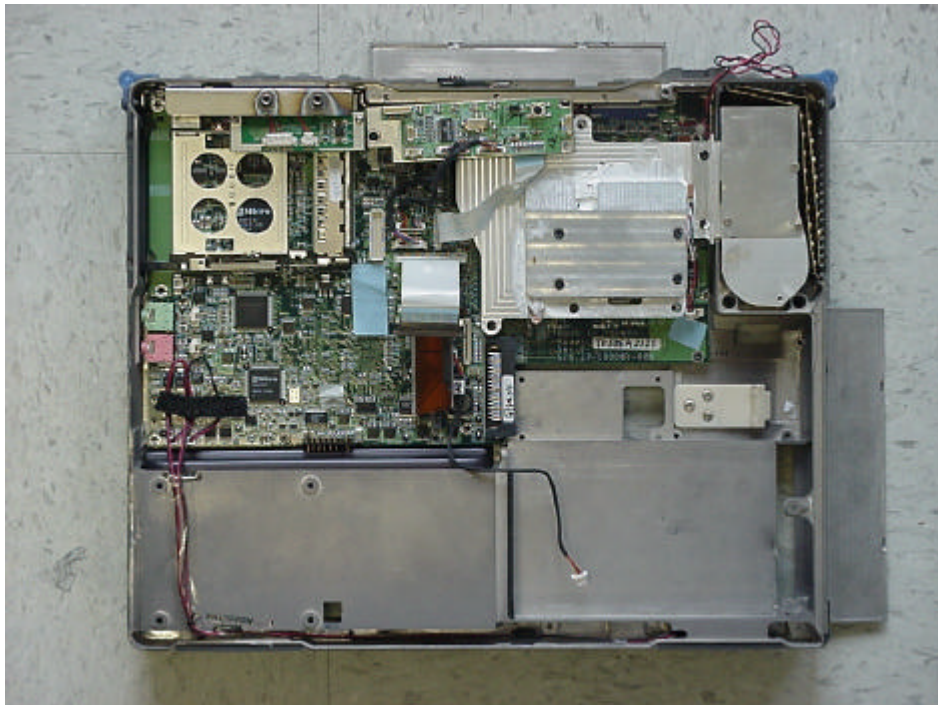
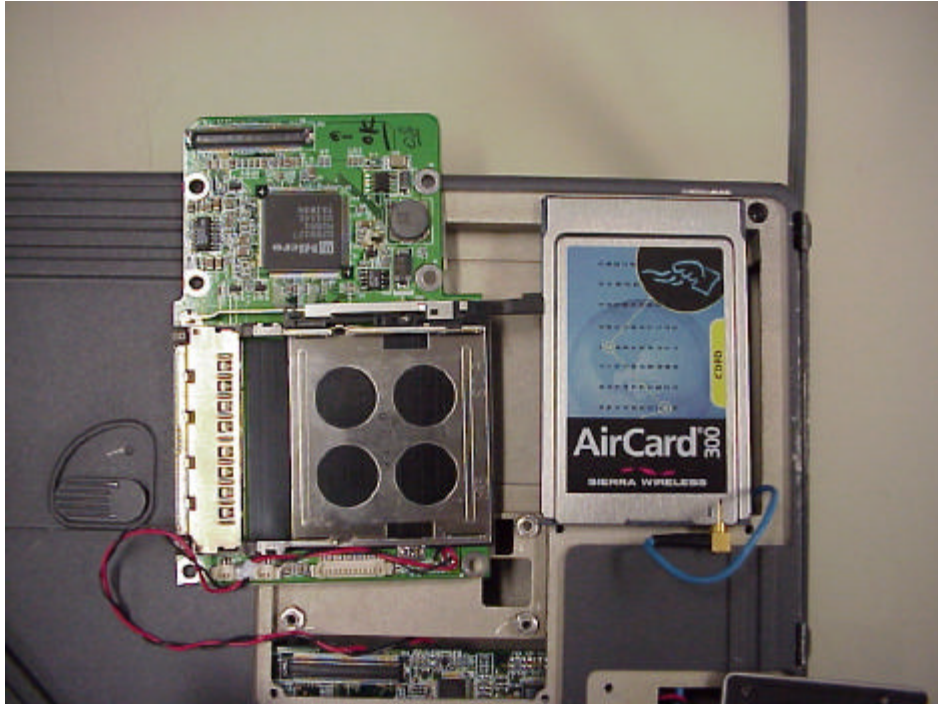
EUT PHOTOGRAPHS CDPD Card installed in PC



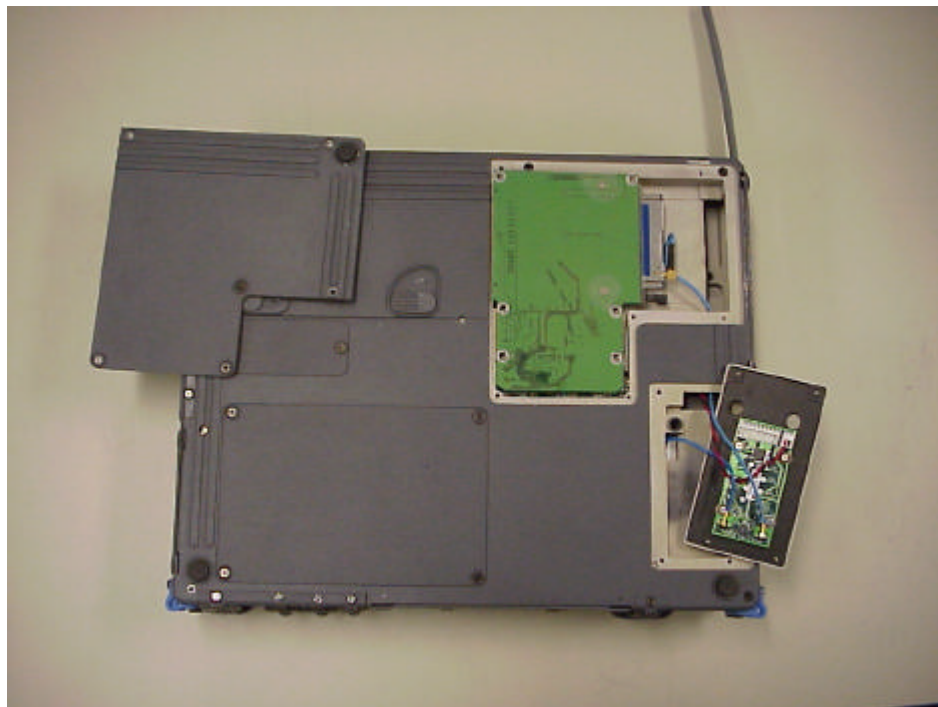
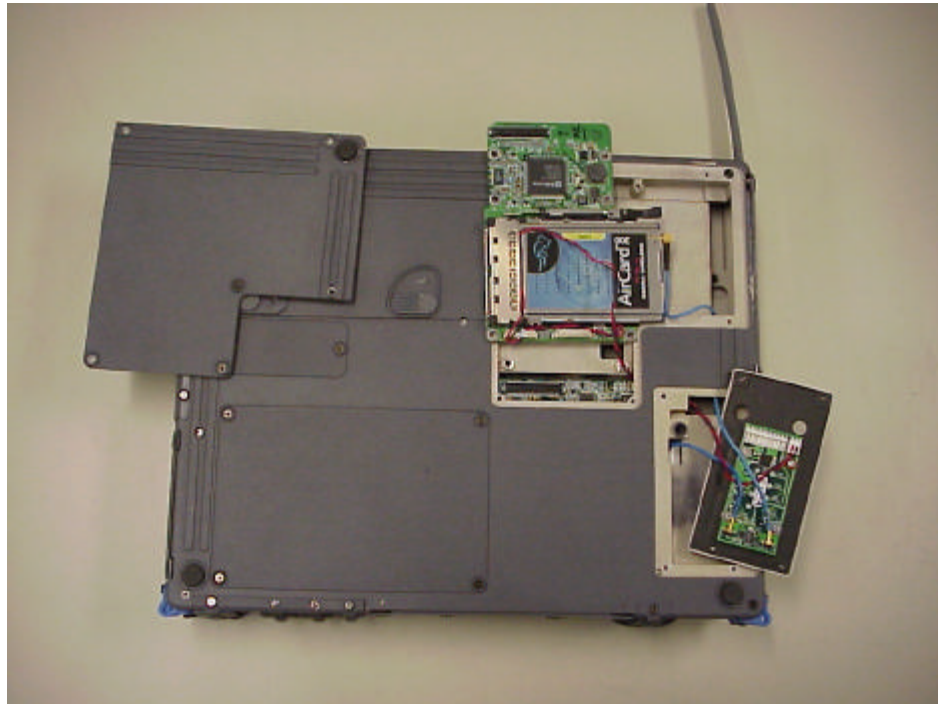
EUT PHOTOGRAPHS CDPD Card installed in PC



EUT PHOTOGRAPHS CDPD Card installed in PC

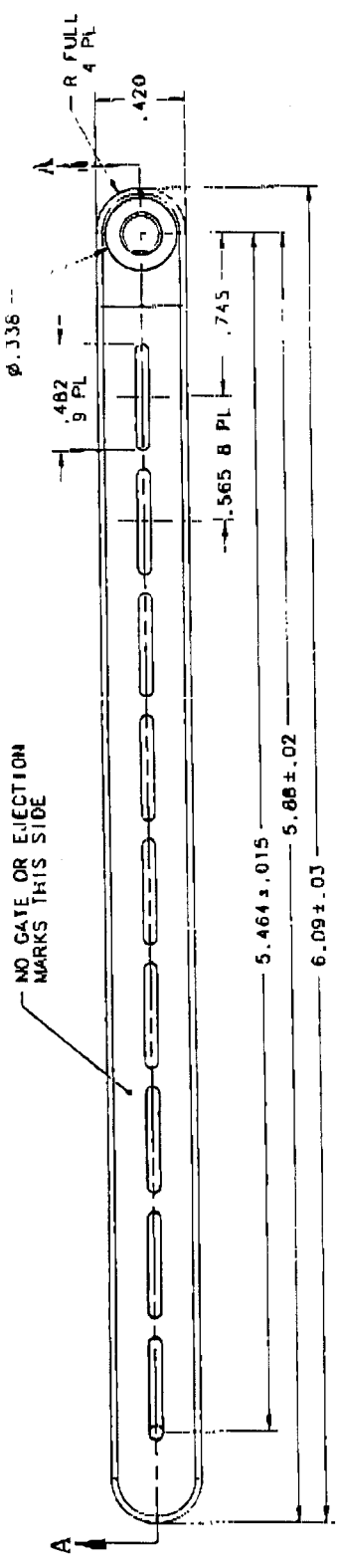


EUT PHOTOGRAPHS CDPD Card installed in PC

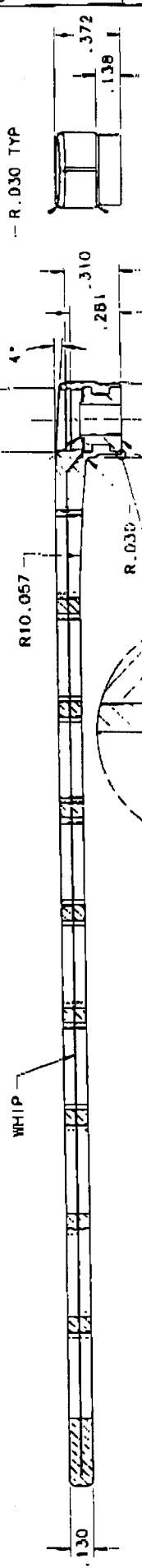


ATTACHMENT D – ANTENNA SPECIFICATIONS

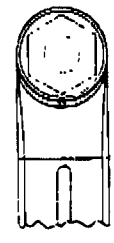
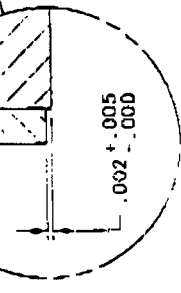
NO GATE OR EJECTION
MARKS THIS SIDE



SWAGE WHIP TO INSERT
PER STANDARD PROCEDURE



R. D14



VIEW "C-C"

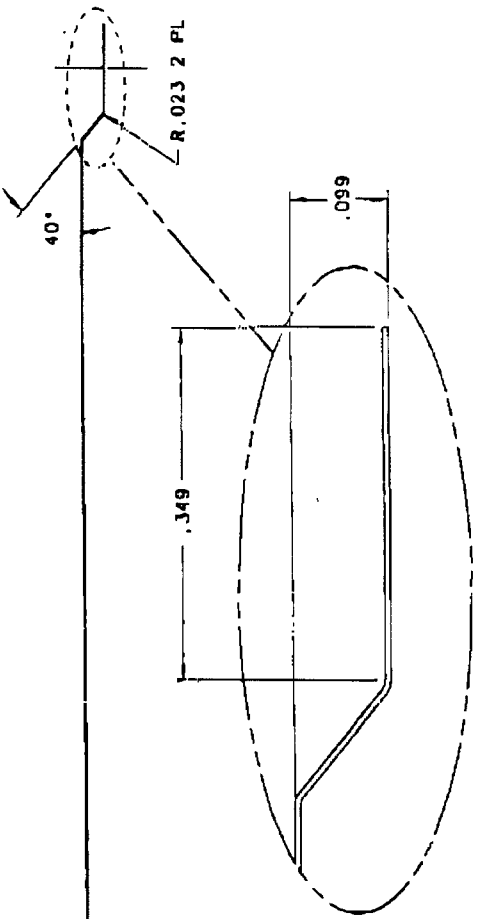
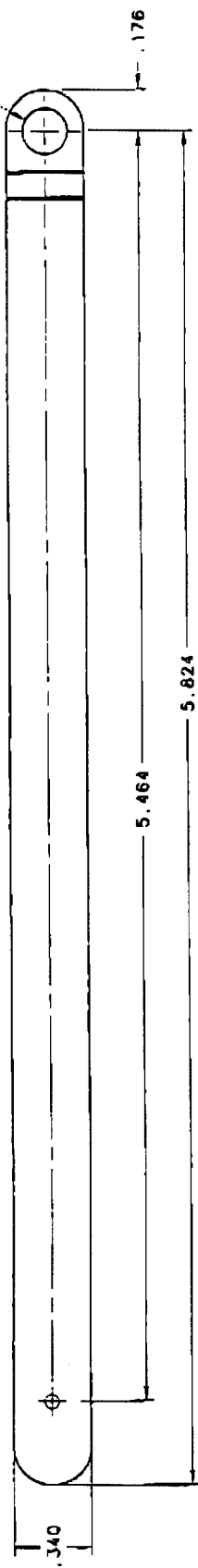
DOCUMENT
JUL 22 1997
CONTROL

NOTES: (UNLESS OTHERWISE SPECIFIED).

1. MATERIAL: RUBBER SANTOPRENE, 221-80, DARK GRAY.
2. FINISH: SPI D-3
3. FLASH: .015 MAX.
4. DEGATE: .015 MAX.
5. EJECTOR MARKS: .010 MAX.
6. CORNERS AND FILLETS SHOWN SHARP: .015 MAX.
7. SINK: .015 MAX.
8. PART(S) SHALL BE PACKAGED FOR SHIPMENT AND/OR STORAGE IN A CLEAN PROTECTIVE CONTAINER.

DATE	REV.	BY	APP.	DATE	DESCRIPTION
7/18/97	1	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	2	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	3	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	4	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	5	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	6	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	7	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	8	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	9	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	10	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	11	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	12	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	13	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	14	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	15	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	16	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	17	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	18	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	19	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	20	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	21	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	22	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	23	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	24	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	25	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	26	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	27	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	28	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	29	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	30	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	31	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	32	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	33	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	34	111.3			ANTENNA WHIP, XC6, CDDP
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7/18/97	38	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	39	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	40	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	41	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	42	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	43	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	44	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	45	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	46	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	47	111.3			ANTENNA WHIP, XC6, CDDP
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7/18/97	67	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	68	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	69	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	70	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	71	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	72	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	73	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	74	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	75	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	76	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	77	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	78	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	79	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	80	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	81	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	82	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	83	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	84	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	85	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	86	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	87	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	88	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	89	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	90	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	91	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	92	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	93	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	94	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	95	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	96	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	97	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	98	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	99	111.3			ANTENNA WHIP, XC6, CDDP
7/18/97	100	111.3			ANTENNA WHIP, XC6, CDDP

φ. 196 ± .002



- NOTES: (UNLESS OTHERWISE SPECIFIED).
1. MATERIAL: (300 SERIES) STAINLESS STEEL.
FULL HARD, .005 IN THICK.
 2. DEBURR AND BREAK SHARP EDGES.

ZONE		DESCRIPTION	
IN. 1000 IN. 1000		TITLE	
ANTENNA WHIP, XC6, CDP0		ANTENNA WHIP, XC6, CDP0	
R.023 2 PL		SIZE B	
47-0054-001		PROJECT	
HARVEY		SCALE	
2 X		SHEET	
2 of 3		REV	

ATTACHMENT E – SAR MEASUREMENT REPORT
