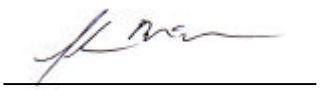
CERTIFICATE OF COMPLIANCE
FCC PART 22 CERTIFICATION

Test Lab:	**Applicant:**
CELLTECH RESEARCH INC. Testing and Engineering Services 1955 Moss Court Kelowna, B.C. Canada V1Y 9L3 Phone: 250 - 860-3130 Fax: 250 - 860-3110 e-mail: info@celltechlabs.com web site: www.celltechlabs.com	**ENFORA, INC.** 661 East 18th Street Plano, TX 75074-5601

FCC Classification:	**Licensed Non-Broadcast Station Transmitter (TNB)**
FCC Rule Part(s):	**§22.901(d), §2**
FCC ID:	**MIVCFS0100PS2C**
Model Name:	**Pocket Spider IIc**
Model No.:	**CFS0100**
Equipment Type:	**CDPD Wireless Data Modem Module (for Sharp SL5000 PDA)**
Tx Frequency Range:	**824.04 - 848.97 MHz**
Rx Frequency Range:	**869.04 - 893.97 MHz**
Max. RF Output Power:	**0.382 Watts (ERP)**
Frequency Tolerance(s):	**203 Hz**
Emission Designator(s):	**30K0DXW**
Antenna Type:	**Fixed Stubby**

This equipment is 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 of FCC Rules.

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.



Shawn McMillen
General Manager
Celltech Research Inc.

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FCC PART 22 MEASUREMENT REPORT

1.0 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.

1.1 GENERAL INFORMATION §2.1033(a)

APPLICANT:

ENFORA, INC.
661 East 18th Street
Plano, Texas 75074-5601

FCC ID	**MIVCFS0100PS2C**
Model(s)	**Pocket Spider IIc**
EUT Type	**CDPD Wireless Data Modem Module for Sharp SL5000 Handheld PDA**
Classification	**Licensed Non-Broadcast Station Transmitter (TNE)**
Rule Part(s)	**§22.901(d), §2**
Modulation(s)	**GMSK**
Max. RF Output Power	**0.382 Watts (ERP)**
Tx Freq. Range	**824.04 - 848.97 MHz**
Rx Freq. Range	**869.04 - 893.97 MHz**
Emission Designator(s)	**30K0DXW**
Antenna Type	**Fixed Stubby**
Power Supply	**3.7V 550mAH Lithium-ion**

2.0 MEASUREMENT PROCEDURES

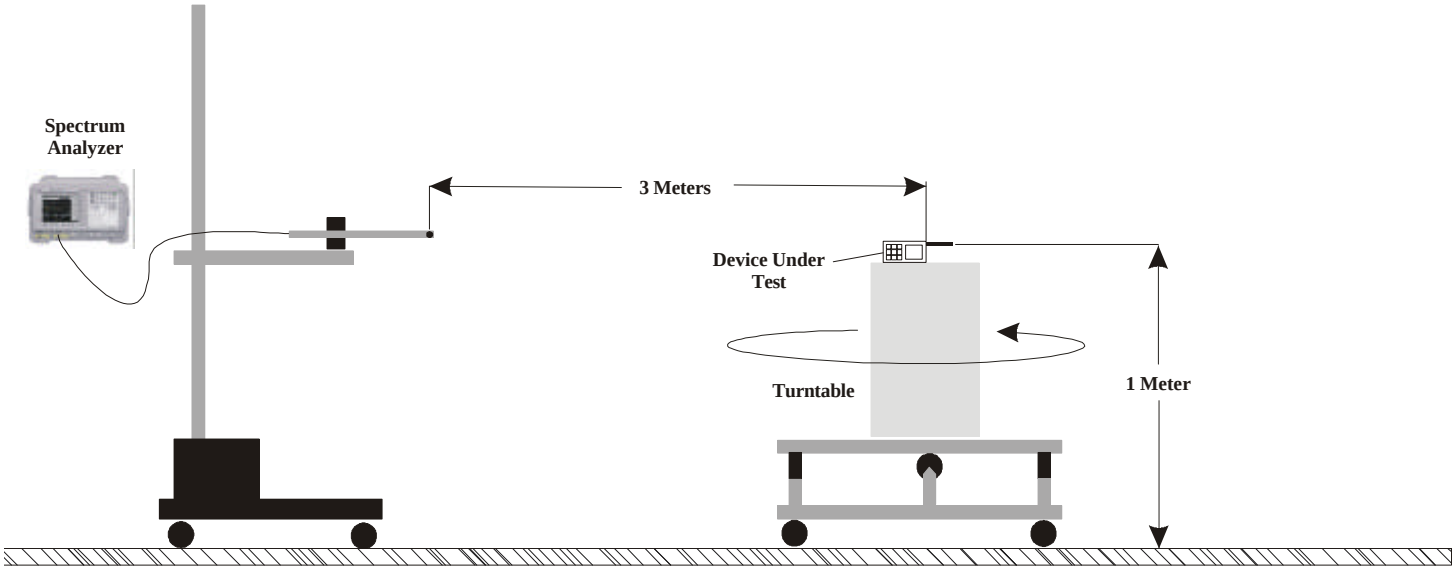
2.1 RF OUTPUT POWER - §2.1046

The conducted power was measured with a Gigatronics 8650A Universal Power Meter in CW mode. An offset was entered into the power meter to correct for the losses of the attenuator and cable installed before the sensor input. The transmitter terminal was coupled to the power meter and the EUT was placed into test mode via keypad access or a base station simulator. All subsequent tests were performed using the same tune up procedures.

2.2 FIELD STRENGTH OF SPURIOUS RADIATION - §2.1053

Radiated and harmonic emissions were measured on a 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 in height from 1 to 4 meters and the polarization was varied (horizontal and vertical) to determine the worst-case emission level.

2.3 RADIATED MEASUREMENT TEST SETUP



Radiated Measurement Test Setup Diagram

3.0 TEST DATA

3.1 EFFECTIVE RADIATED POWER OUTPUT - §2.1046

Freq. Tuned	**EUT Conducted Power**	**Max. Field Strength of EUT (Vertical Polariz.)**	**Dipole Gain**	**Dipole Forward Conducted Power**	**ERP of EUT Dipole Gain + Dipole Forward Conducted Power**	
(MHz)	(dBm)	(dBm)	(dBd)	(dBm)	(dBm)	(Watts)
824.04	28.4	- 10.07	- 1.44	27.26	25.82	0.382
836.49	28.1	- 12.23	- 1.34	26.88	25.54	0.358
848.97	27.6	- 13.23	- 1.24	25.03	23.79	0.239

Notes:

1. 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. A CW signal with the same bandwidth as the EUT was generated, amplified, and fed through a directional coupler. The height and direction of the dipole was adjusted in order to give the field of maximum intensity. The power to the dipole was adjusted in order to give the same field strength reading as previously recorded for the EUT. The power at the coupler port was recorded at this point. 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 ERP level was determined by adding the dipole forward conducted power and the dipole gain in dB. For readings above 1GHz the above method is repeated using standard gain horn antennas.

2. EUT measurements were performed in both horizontal and vertical antenna polarizations. The worst-case configuration is reported.

4.6 FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053

Operating Frequency (MHz): **824.04**
Channel: 991 (Low)
Conducted Power (dBm): 28.4
Measured ERP (dBm): 25.82
Distance: 3 Meters
Limit: 43 + 10 log (W) = 38.8 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	-78.31	-53.42	6.6	V	-46.82	-48.96	74.78
2472.12	-80.26	-51.46	7.8	V	-43.66	-45.80	71.62
3296.16	-83.57	-55.99	7.75	V	-48.24	-50.38	76.20
4120.20	-86.82	-59.80	7.6	V	-52.20	-54.34	80.16
4944.24	-90.63	-63.27	8.5	V	-54.77	-56.91	82.73
5768.28	-95.36	-66.48	8.8	V	-57.68	-59.82	85.64
6592.32	-98.77	-69.89	9.6	V	-60.29	-62.43	88.25
7416.36	-100.18	-72.65	9.0	V	-63.65	-65.79	91.61
8240.40	-101.45	-76.24	9.3	V	-66.94	-69.08	94.90

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 conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

Notes:
1. All other spurious emissions were found to be below the magnitude of each harmonic.
2. Spurious emissions more than 20 dB below the limit are reported, though not required per §2.1051.

FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053

Operating Frequency (MHz): **836.49**
Channel: 383 (Mid)
Conducted Power (dBm): 28.1
Measured ERP (dBm): 25.54
Distance: 3 Meters
Limit: 43 + 10 log (W) = 38.5 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	-80.31	-55.42	6.6	V	-48.82	-50.96	76.50
2509.47	-82.64	-53.84	7.8	V	-46.04	-48.18	73.72
3345.96	-86.93	-59.35	7.75	V	-51.60	-53.74	79.28
4182.45	-91.37	-64.35	7.6	V	-56.75	-58.89	84.43
5018.94	-95.20	-67.84	8.5	V	-59.34	-61.48	87.02
5855.43	-97.78	-68.90	8.8	V	-60.10	-62.24	87.78
6691.92	-100.06	-71.18	9.6	V	-61.58	-63.72	89.26
7528.41	-101.21	-73.68	9.0	V	-64.68	-66.82	92.36
8364.90	-101.93	-76.72	9.3	V	-67.42	-69.56	95.10

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 conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

Notes:
1. All other spurious emissions were found to be below the magnitude of each harmonic.
2. Spurious emissions more than 20 dB below the limit are reported, though not required per §2.1051.

FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053

Operating Frequency (MHz): **848.97**
Channel: 799 (High)
Conducted Power (dBm): 27.6
Measured ERP (dBm): 23.79
Distance: 3 Meters
Limit: 43 + 10 log (W) = 36.8 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	-76.78	-51.89	6.6	V	-45.29	-47.43	71.22
2546.91	-79.35	-50.55	7.8	V	-42.75	-44.89	68.68
3395.88	-83.67	-56.09	7.75	V	-48.34	-50.48	74.27
4244.85	-86.42	-59.40	7.6	V	-51.80	-53.94	77.73
5093.82	-88.94	-61.58	8.5	V	-53.08	-55.22	79.01
5942.79	-92.51	-63.63	8.8	V	-54.83	-56.97	80.76
6791.76	-95.22	-66.34	9.6	V	-56.74	-58.88	82.67
7640.73	-98.08	-70.55	9.0	V	-61.55	-63.69	87.48
8489.70	-100.63	-75.42	9.3	V	-66.12	-68.26	92.05

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 conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

Notes:
1. All other spurious emissions were found to be below the magnitude of each harmonic.
2. Spurious emissions more than 20 dB below the limit are reported, though not required per §2.1051.

4.0 TEST EQUIPMENT

Type	Model	Calib. Due Date	Serial No.
HP Signal Generator	8648D (9kHz-4.0GHz)	Nov 2002	3847A00611
Rohde & Schwarz Signal Generator	SMR40 (10MHz-40GHz)	Nov 2002	835537/022
Gigatronics Power Meter	8652A	Oct 2002	1835272
Gigatronics Power Sensor	80701A (0.05-18GHz)	Sept. 2002	1833535
Gigatronics Power Sensor	80701A (0.05-18GHz)	Sept. 2002	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 2002	US38433013
Audio Analyzer	HP 8903B	Nov 2002	3729A18691
Modulation Analyzer	HP 8901A	July 2002	3749A07154
Frequency Counter	HP 53181A (3GHz)	May 2002	3736A05175
DC Power Supply	HP E3611A	N/A	KR83015294
CDMA Base Station Simulator	Agilent E8285A	Feb. 2003	US40332926
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. 2002	6267
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	Oct. 2002	6276
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 2002	9120A-239
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 2002	9120A-240
Roberts Dipole	ETS DB-4 (400MHz-1GHz)	June 2002	1474
Spectrum Analyzer	HP 8594E	Feb 2003	3543A02721
Spectrum Analyzer	HP E4408B	Nov 2002	US39240170
Shielded Screen Room	Lindgren R.F. 18W-2/2-0	N/A	16297
Environmental Chamber	ESPEC ECT-2 (Temperature/Humidity)	Feb 2003	0510154-B

5.0 CONCLUSION

The data collected shows that the ENFORA, INC. Model: Pocket Spider IIc CDPD Data Modem Module FCC ID: MIVCFS0100PS2C for Sharp SL5000 Handheld PDA complies with the requirements of Parts 2 and 22 of the FCC rules.