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TEST REPORT FOR COM DEV Network Link Terminal (NLT)
Certificate Of Compliance FCC Part 24 Certification

Test Dates:	**9/3-9/02**
Test Report:	**10/20/2002**
Test Site:	**REC Laboratory, Los Osos, CA**
FCC ID:	**JJA-9001000101**
Applicant:	**COM DEV WIRELESS GROUP**
FCC Confirmation:	**#: EA467668**
FCC Class:	**Part 24**
FCC Rules:	**24 Subpart E & §2 Subpart J**
Test Unit Type	**PCSCDMADATA**
Trade Name	**COM DEV (NLT) Network Link Terminal**
TX Freq. Range	**1.850 to 1.910 GHz**
RX Freq. Range	**1.930 to 1.990 GHz**
Maximum RF Output Power	**.923 W EIRP** **29.652 dBm**
Emission Tolerance	**2.5 PPM**
Emission Designator	**1M25F9W**

This equipment has been shown to be capable of complying with the applicable technical standards as indicated in the attached Test Report, including all applicable Rules and Regulations and Policies of the Federal Communications Commission (FCC). The Tests were made in compliance with measurement procedures of the FCC Rules & Regulations §2.947 and as outlined in §2.1033 thru (1) ~ (17) as appropriate.

All measurements recorded herein were performed by me, or under my direct supervision, a are correct to the best of my knowledge. As to all other data relied upon herein, I also believe that information to be accurate.

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

Norwood J. Patterson,
10/20/2002
Norwood J. Patterson, Owner and

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FCC ID: JJA-9001000101

MEASUREMENT TEST REPORT

1.1 SCOPE OF REPORT

To determine compliance of FCC Rules & Regulations for a mobile device, defined by US Code of Regulations Telecommunications 47 §24, 2 & 15. This is a mobile station defined under §24.5, and an unintentional radiator (receiver co-located with the transmitter defined as a Mobile in FCC §2.1091. The procedure is FCC Certification §2.1033(c)(1) to (17) as appropriate.

General Information

Applicant Name:	COM DEV Wireless Group
Address:	805 Aerovista Place
	San Luis Obispo, CA 93401
Attention:	Mr. Josh Lober, Vice President

- FCC ID JJA-9001000101
- Trade Name: M!!ERGY
- Model No.: 9001000101
- Quantity: Large amount
- Emission Designator: 1M25FW
- TX Frequency: 1850 – 1910 MHz

- RX Frequency: 1930 – 1990 MHz
- Equipment Class: Licensed Mobile Part 24 (PCS)
- Equipment Type: PCS CDMA PC DATA (Digital I. Q.)
- Frequency Tolerance: ±00025% (2.5 PPM)
- Max. RF Output Power: 0.920 W EIRP (29.638 dBm)
- FCC Rule Parts: §24(e)§2
- Dates of Tests: 9/3 to 9/10/2002
- Place of Tests: REC Test Lab, Los Osos, CA
- Test Report S/N: JJA2002NJP

2.1 INTRODUCTION

These measurements were conducted at the Radio & TV Engineering Co. (REC) facilities in Los Osos, CA, at 1416 Hollister Lane, Los Osos 93402. The Test Site is clear and level, on 1.6 acres. Site co-ordinates are 35º 19' 8.0" N. Lat. ; 120º 49' 17.0" W. Long. The signal noise level is very low. The closest FM transmitter site is over nine (9) miles removed.

Detailed description of the measurement facilities is on file with the FCC Lab, The REC Test Site has been built per ANSI C63.4-1992.

REC has made type acceptance, certification, and verification measurements for over 20 years, which applications for client have been filed with the FCC Laboratory and all have been Granted by the FCC. REC owns and uses calibration equipment to calibrate it's Equipment frequently which insures the measurements are always accurate.

Equipment is owned by REC which permits conducted and radiated measurements of frequency and power from below the audio range to over 20 GHz, and in some cases to 60 GHz.

2.2 REC LOCATION

REC Laboratory is within the proximity of the Federal Highway 101, State Highway 1 and San Luis Obispo Airport. Easy access is available by air, train, State and Federal highways removed by 10 miles to the East. See Exhibit X Map (Quadrangle Sheet) Attached.

3.1 INSERTS

3.1.1 FUNCTION of ACTIVE DEVICES (Confidential)

See Parts List Exhibit 10 amended 8/14/02.

3.1.2.1.1 CIRCUIT DIAGRAMS & DESCRIPTION (Confidential)
See Exhibit 5 amended 8/14/02.

3.1.3 BLOCK DIAGRAMS (Confidential)
See Exhibit E dated 3/20/02 previously filed w/FCC Laboratory.

3.1.4 OPERATING INSTRUCTIONS
See Exhibit A Instruction Manual previously filed w/FCC Lab.

3.1.5 TUNE-UP PROCEDURE (Confidential)
There is no tune-up for the User. It is tuned at the time of manufacture. Frequency is changed by software. See Manual in Exhibit A.

3.1.6 PARTS LIST (Confidential)
See attached Exhibit 10.

3.1 INSERTS (continued)

3.1.7 DESCRIPTION OF FREQUENCY STABILIZATION CIRCUIT (Confidential)
See Exhibit F dated 4/4/02

3.1.8 DESCRIPTION FOR SUPPRESSION OF SPURIOUS RADIATION, for LIMITING MODULATION and HARMONIC SUPPRESION CIRCUITS (Confidential)
See schematic diagram Exhibit J2 for modulation dated 4/2/02.
Also see Manual, Exhibit A.

4.1 DESCRIPTION OF TESTS

4.2 Occupied Bandwidth Emission Limits §24.238(a – d)

(a) **On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43+10 $\log_{10}$ (P) dB.**

(b) **Compliance with these provisions is based on the use of measurement instrumentation employing a resolution band width of 1 MHz or**

greater. However, in the 1 MHz bands immediately outside or adjacent to the frequency block, a resolution bandwidth of at lease one percent (1%) of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points on below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 20 dB below the transmitter power.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(d) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

4.3 Spurious & Harmonic Emission at Antenna Terminal

The level of the carrier and various conducted spurious and harmonic frequencies are measured by means of a calibrated spectrum analyzer and microwave pre-amplifier (Agilent E4407B) with Options IDN, IDS, ID5 & UKB. The spectrum was scanned from 10 MHz or the lowest frequency generated in the equipment up to 20 GHz. The transmitter is set to its maximum rated output power, and modulated according to the manufactured supplied modulation characteristics, Digital I,. Q. Methodology.

4.3 Spurious continued

Block	Freq. Range (GHz) Transmitter (Tx)	Freq. Range (GHz) Receiver (Rx)
A	1850–1865	1930–1945
B	1870–1885	1950–1965
C	1895–1910	1975–1990
D	1865–1870	1945–1950
E	1885–1890	1965–1970
F	1890–1895	1970–1975

Table 1. Broadband PCS Mobile Service
Frequency Blocks.

4.4 Frequencies

At the input terminals of the spectrum analyzer, an isolator (RF Pad) and a notch filter are connected as needed between the test transceiver (for conducted tests) or the receive antenna (for radiated tests) and the analyzer. The notch filter is to eliminate the fundamental frequency from interfering with the measurement of the low level spurious and harmonic emissions, and to insure that the pre-amplifier is not overloaded.

4.4 Radiation Spurious & Harmonic Emissions

Radiations of spurious and Harmonic emissions are measured at REC's 3-meter open field Test Site. Equipment under test (EUT) is placed on the turntable connected to a dummy load in normal operation using the intended power source. A receiving antenna located 3-meters from the turntable receives any radiated signal from the transmitter and its operating accessories. The antenna is varied from 1 to 4 meters and polarization is varied (horizontal and vertical) to determine the worst-case emission level. To obtain actual radiated signal strength, a signal generator and Antenna, replaces the transmitter, and is adjusted in output until a reading identical to that obtained with the actual transmitter is obtained at the receiver or Spectrum Analyzer. Signal strength is read directly from the generator and recorded in the attached Table.

4.5 Frequency Stability/Temperature and Voltage vs Frequency

The frequency stability of the transmitter is measured using the frequency-controlling oscillator, which is placed, in an Environmental Chamber.

(a) Temperature: Varied from -30º to +50º C using an environmental chamber.

(b) During the adjustment of oven temperature, a ten (10) minute period is waited for the unit to stabilize at each new temperature adjustment before the measurement is taken. Temperature is taken at each ten-degree interval. The unit is turned on only for a short period for the measurement to record the measurement.

4.5 continued

(c) Primary supply voltage is varied from 85% to 115% of normal voltage at input to the device or at the power supply terminals if cables are not normally supplied with the unit. The Frequency is measured at each voltage change with an appropriate Counter and recorded.

Specification: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized block. The frequency of the transmitter shall be maintained within ±0.00025% (±2.5 PPM) of center frequency.

Note: When the EUT is battery operated, it is tested to the battery end point voltage.

5.1 TEST DATA

Equivalent Isotropic Radiated Power (E.I.R.P.)

Radiated Measurements @ 3-meters:

Supply Voltage: 3.7 vdc

Modulation PCS CDMA

FREQ. (MHz)	Level (dBm)	AFCL (dB)	POL (H/V)	Height (m)	Azimuth (0 angle)	F/S (µV/m)	Margin (dBm)	EIRP (W)
1851.25	-16.25	32.829	**H**	1.6	50	1,509,906.3	28.439	.923
1880.00	-15.5	32.967	H	1.7	52	1,653,674.4	29.191	.820
1908.75	-15.0	32.869	**H**	1.5	48	1,753,678.0	29.640	.684

Notes:

1. The bandwidth is set per §24.238 (RBW = 3 MHz, VBW = 3 MHz).
2. The spectrum was checked from 25 MHz up to the 10th harmonic
3. All emissions not listed were found to be more than 20dB below the limit.
4. < -135 dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and the worse-case are reported.
6. The EUT is placed 3 m. away from the receiving antenna and the EIRP

is calculated using the formula:

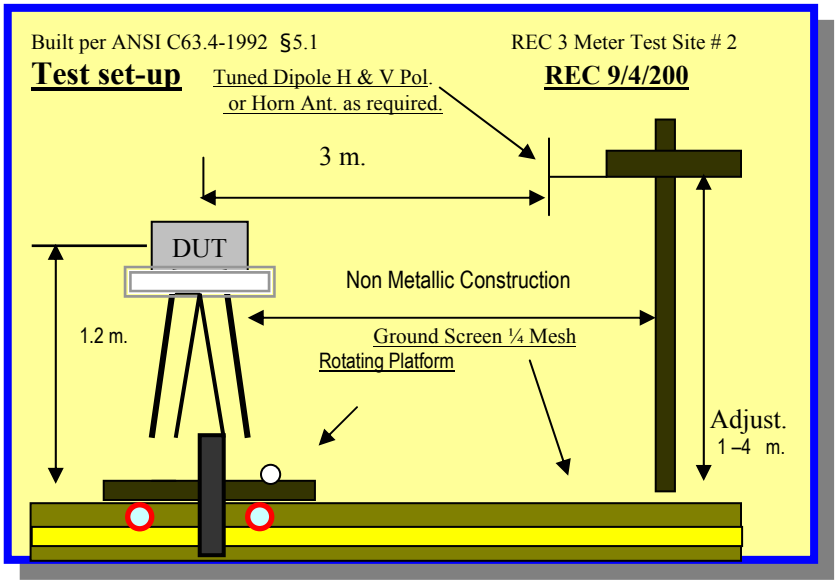
EIRP (dBm) = $10 \text{ Log}_{10} (((r(\mu V/m)/1 \times 10^6)^2 /30.0/1x10^{-3})$

EIRP (dBm) = $10 \text{ Log}_{10} [(3 \times FS/1 \times 10^6)^2 / (30.0) \times 1000]$

EIRP (Watts) = $\{(3 \times FS)/1 \times 10^6)^2 / 30.0\}$

Table EIRP Test Data 5.1-A

SEE Photo Sec. 10.2



Radiated Measurements

6.2 Field Strength of SPURIOUS Radiation

Operating Frequency	1851.25 MHz
Channel	0025 LOW
Measured Maximum Output Power	29.638 DBm
	0.920 Watts (EIRP)
Modulation	CDMA (internal)
Distance	3-meters
Limit	43 + Log_{10} (W) = 42.6 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (µV/m)	EIRP (dBm)	(dBc)	EIRP W P_{sig}
3702.50	- 87.1	33.36	H	460.25	-41.96	-71.6	6.36 E^{-8}
5553.75	-110.2	40.60	H	74.13	-57.86	-87.5	1.65 E^{-9}
7405.00	-117.3	42.50	H	32.73	-64.93	-94.6	3.21 E^{-10}
9256.25	-120.4	42.96	H	30.1	-65.66	-95.29	2.72 E^{-10}
11107.50	-116.2	44.2	H	56.2	-60.23	-89.8	9.47 E^{-10}
12958.75	< -135						

NOTES:

1. The bandwidth is set per §24.238.
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20 dB below the limit.
4. < -135 dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and worst-cases are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:
   EIRP (dBm) = $10Log_{10}(((r(mV/m)1 \times 10^6)^2/30.0/1x10^{-3}$
   EIRP (dBm) = $10Log_{10}[(3 \times FS/1 \times 10^6)^2/(30.0) \times 1000]$
   EIRP (Watts) = $[3 \times FS)/1 \times 10^6]^2/30.0$
7. $dBc = 10Log_{10} \frac{P_{sig}}{P_{tx}}$

See 5-1 Test Data for REC Test Site

6.1 Test Data (Continued)

Radiated Measurements

6.3 Field Strength of SPURIOUS Radiation

Operating Frequency	1880.00 MHz
Channel	0600 (middle)
Maximum Measured Output Power	0.923 Watts = 29.652 dBm
Modulation Signal:	CDMA (Internal)
Distance:	3 Meters
Limit:	43 + 10 $\log_{10}$ (W) = -42.65 DBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (µV/m)	EIRP (dBm)	(dBc)	EIRP W P_{SIG}
3760.00	-83.2	33.30	H	716.14	-38.13	-67.78	1.54 E^{-7}
5640.00	-113.0	37.65	H	38.21	-63.58	-93.23	4.39 E^{-10}
7520.00	116.5	40.94	H	37.83	-63.79	-93.44	4.18 E^{-10}
9400.00	-118.0	42.85	H	39.13	-63.38	-93.03	4.59 E^{-10}
11280.00	<-135						

NOTES:

1. The bandwidth is set per §24.238.
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20 dB below the limit.
4. < -135 dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and worst-cases are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:

   EIRP (dBm) = $10\text{Log}_{10}(((r(\text{mV/m})1 \times 10^6)^2/30.0/1\text{x}10^{-3}$

   EIRP (dBm) = $10\text{Log}_{10}[(3 \times \text{FS}/1 \times 10^6)^2/(30.0) \times 1000]$

   EIRP (Watts) = $[3 \times \text{FS})/1 \times 10^6]^2/30.0$

7. $\text{dBc} = 10\text{Log}_{10} \frac{P_{sig}}{P_{tx}}$

See 5.1 Test Data
for REC Test Site

Radiated Measurements

6.4 Field Strength of SPURIOUS Radiation

Operating Frequency:	1908.75 MHz
Channel:	1175 (High)
Measured Output Power:	0.685 Watts = 28.36 dBm
Modulation Signal:	CDMA (Internal)
Distance:	3 Meters
Limit:	$43 + 10 \log_{10}(W) = 41.36$ dBc

6.4 Field Strength of SPURIOUS Radiation (continued)

Freq. (MHz)	Level dBm	AFCL (dB)	POL (H / V)	F / S (µV/m)	EIRP (dBm)	(dBc)	EIRP W P_o (sig)
3817.50	- 89.3	36.48	H	511.68	-41.05	- 69.41	$7.85\ E^{-8}$
5726.25	-115.2	36.88	H	27.16	-66.55	- 94.91	$2.21\ E^{-10}$
7635.00	-117.5	41.10	H	33.88	-39.87	- 68.23	$1.03\ E^{-7}$
9543.75	-127.3	42.16	H	12.39	-73.36	-101.72	$4.61\ E^{-11}$
11452.50	-123.2	45.34	H	28.64	-66.09	- 94.45	$2.46\ E^{-10}$
13,361.25	-119.8	46.70	H	49.55	-61.32	- 89.68	$7.37\ E^{-10}$
15,270.0	> -135.0	48.51	H	>-10.60	-75.52	-103.08	$3.37\ E^{-11}$

NOTES:

1. The bandwidth is set per §24.238.
2. The spectrum was checked from 25 MHz up to the 10^{th} harmonic.
3. All emissions not listed were found to be more than 20 dB below the limit.
4. < -135 dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and worst-cases are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:

   $EIRP\ (dBm) = 10Log_{10}(((r(mV/m)1 \times 10^6)^2/30.0/1x10^{-3}$

   $EIRP\ (dBm) = 10Log_{10}[(3 \times FS/1 \times 10^6)^2/(30.0) \times 1000]$

   $EIRP\ (Watts) = [3 \times FS)/1 \times 10^6]^2/30.0$

7. $dBc = 10Log_{10} \frac{P_{sig}}{P_{tx}}$

See 5.1 Test Data for REC Test Site

7.1 TEST DATA

7.2 Frequency Stability:

Test Date: 9/02/02

Operating Frequency:	10,000,000.0 Hz (osc.)
Channel:	Master Oscillor placed in oven
Reference Voltage:	3.7 vdc
Deviation Limit:	±0.00025% or 2.5 ppm
Measured with TEK Counter:	Model DC-508

7.1 TEST DATA - Continued

7.2 Frequency Stability, continued

Voltage (%)	Pwr (vdc)	Temp (*C)	Frequency (Hz)	Deviation (%)	Dev. (ppm)
100%	3.7	+25° Ref.	10,000,000.0	0.000000	-o-
100%		-30	9,999,995.0	-0.00005	-.5
100%		-20	9,999,996.0	-0.00004	-.4
100%		-10	9,999,997.0	-0.00003	-.3
100%		-o-	10,000,003.0	+0.00007	+.3
100%		+10	10,000,003.0	+0.00003	+.3
100%		+20	10,000,002.0	+0.00002	+.2

100%		+25	10,000,000.0	+0.00000	-0-
100%		+30	10,000,002.0	+0.00002	+.2
100%		+40	10,000,003.0	+0.00003	+.3
100%		+50	10,000,004.0	+0.00004	+.4
100%	4.8	+60	10,000,006.0	+0.00006	+.6
======	=====	=======	==========	=========	=======
85%	3.15	+25	10,000,000.0	0.000000	0.0
115%	4.26	+25	10,000,000.0	0.000000	0.0
Batt. End Voltage	2.8	25	10,000,000.0	0.000000	0.0

Note:

See Graph Exhibit # TT attached!

8.1 Emissions (See Sec. 6.1 and Ex. D attached.

Contained in the New Exhibit # D attached are Emission Plots of the Spectrum Analyzer (Angilent E4407B) taken during Spectrum Measurements for Spurious Emissions, Harmonics, Band Edges and Occupied Bandwidth. These plots show compliance with FCC Rules and Regulations.

Norwood J. Patterson

Norwood J. Patterson
October 20, 2002

9.1 Test Equipment Use with this project.

9.2 EQUIPMENT USED FCC §2.947(d)

COM DEV "NetLink Terminal" (NLT)

Description	Make & Model	Cal. Due	Serial Number
1.Spectrum Analyzers	TEK 492/01/02/03 Fc 50 kHz to 60 GHz	9/2003	
	Agilent (HP) E4407B options (100 Hz to 26.5 GHz) (Track generator& Pre-amplifier dc to 3 GHz)	9/2003	US4024323
2. Frequency Standard	Sections 8131 RX Locked to NBS, WWVB of Ft. Collins, Co.	10/2003	
3. RF Attenuators	HP 8495B 11 dB	117161	
	HP 8494B 1 db	11716	
	HP 8498A dc to 18 GHz	0072	
	HP 11581A Set	20312, 019806, 34123 & 31245	
	Weinschell 48-30-43 dc to 18 GHz	AN7909	
	Weinschell SMA Set .1 to 20 dB 3300	E6671	
4. Calibrated Antennas	Ailtech Horn 94627-1	12/2003	0122
	Ailtech Horn 94626-1	12/2003	0122
	Stoddard Discone AT570		
	REC 1.9 GHz ground plane	10/2003	REC-1.9
	Dipole AH (1to 1.0 GHz)	12/2003	128-134
	ETS Horn (1 to 18 GHz)	12/2003	6721
	ETS Horn (1 to 18 GHz)	12/2003	6751
5. RF Radiation	NARDA Test Set 8718 with Probes 300 kHz to 40 GHz "Power Density Meter"	10/2003	

9.2 Equipment Used, continued

6.	**Frequency Counters**	**Agilent E53150A (10 Hz to 20 GHz) Lock with 10 MHz to WWVB Ft. Collins, Co.**	**10/2003**	
		TEK 508	**12/2003**	
		HP 5342 10 Hz to 18 GHz	**11/2003**	
7.	**Power**	**HP 435B (100 kHz to 26.5 GHz)**	**10/2003**	**7679**
		HP 3150A (Resolution 01 kHz to 20 GHz)		
		Agilent 53150A 50 (100 MHz to 20 GHz) (Res. 1 Hz at 1.0 GHz)	**8/2003**	**us01324**
		HP434 Calorimetric Power Meter dc to 12.4 GHz	**11/2003**	**02890**
8.	**Power Sensors**	**For HP 435B**	**12/23003**	**7679**
		HP 8481a (.01 to 18 GHz)	**12/2003**	**0699**
		HP 8484a (.01 to 18 GHz)	**12/2003**	**6537**
9.	**RF Signal Generator**	**HP 8640B**	**10/2003**	**A01904**
		HP 8656A	**12/2003**	**A00479**
		Spectrum 8131	**11/2003**	
		HP 618 (TS621)	**8/2003**	**CAQI**
		HP 616a (TS403)	**8/2003**	
		TEK TR503	**9/1003**	**B010267**
		Agilent E 82510 A (250 kHz to 20 GHz) Output Level 0 to 20 dBm.)	**5/2003**	**us40131**
		Tracking Generator with the Agilent S/A E4407B	**5/2003**	
10.	**Frequency Dubler**	**HP 11721A**		**0395**
11.	**Power Supplies**	**HP 6269B (4 ea.)**		
12.	**Digital Volt Meters**	**TEK TM503**	**B119131**	
		TEK DM501A	**BO245746**	

9.1 Equipment Used, continued

13.	**Directional Couplers**	**BIRD 4275-020** **BIRD 4274-025**	
14.	**RF Loads**	**SMA 50 Ω** **Weinschell** **TEK 50Ω 011-0123-00** **GR 874-W50B** **GR 50Ω 874**	
15.	**RF Cables**	**Various Lengths RG 55** **13' Andrew FSJ1**	
16.	**Receiver**	**WWVB Spectrum 8163** **(Part of Frequency Standard)**	**10/2003**
17.	**RF Mixers**	**TEK PN016-0631-03** **(18 to 26.5 GHz)**	
18.	**RF Power Density**	**Narda Model 8718** **s/n 01226** **Narda Probe model** **8722B s/n 14002** **Narda Probe model** **98723 s/n 05012**	**8/2003** **8/2003** **8/2003**

Procedures Used US & Canada:

IS-856	**IS-2000 Rev. A** **(CDMA 2000 Series)**
IS-138-A	**OST-55**
OST-65	**SS133**
TRC-49	**SP-510**
IS-95	**EIA 603-A-2-2001**

Notes:

Standards are replaced as, new "updated" Standards, become available.

Equipment is calibrated in house as required.

Com Dev Ex. L.

10.1 Sample Calculations

A. EIRP Calculation

$$\text{Signal level } \mu V/m \text{ @ 3 meters} = \text{Log}_{10}{}^{-1}\left(\frac{-15+107+AFCL}{20}\right)$$

$$= \text{Log}_{10}{}^{-1}\left(\frac{-15+107+32.5}{20}\right)$$

$$= 1{,}678{,}804.0\ \mu V/m \text{ @ 3 meters}$$

A.1 Sample Calculation (relative to a 1/2 λ dipole)

$$EIRP\ (dBm) = 10 \text{ Log }_{10}(((r(\mu V/m)/1x10^{6})^{2}/30.E^{3})$$

$$EIRP\ (dBm) = 10 \text{ Log }_{10}(((3(1{,}678{,}804.4)/1E10^{6})^{2}/30.0E^{3})$$

EIRP (dBm) = −30.729 = .845 Watts

Note: AFCL = Antenna factor adjusted for cable loss.

B. Emission Designator

CDMA Sample

2M + 2DK

CDMA BW = 1.25 MHz

F = Frequency Modulation

G = Composite digital information

W = Combination (Audio/Data)

Emission Designator = 1M25F9W (See test oscillogram Exhibit D attached)

C. Decibels Below Carrier (dBc)

$dBc = 10 \text{ Log}_{10} (P_{sig} / P_{Tx})$

$dBc = 10 \text{ Log}_{10} (2.3E^{-7} / .960) = -66.21$

Certification

10.2 Photo. 3Meter Test Site


text 1.jpg


test 2.jpg

11.0 Conclusion

The data contained in this report shows that the NLT data transmitter FCC ID: JJA-9001000101 is capable of complying with the FCC Rules, Regulations and Policies with specific application of Parts 2 and 24. No changes were made to the device to make it comply. It was tested just as Com Dev delivered the unit to REC Lab.

Norwood J. Patterson,10/20/2002

Norwood J. Patterson
Engineering Consultant