

PCTEST ENGINEERING LABORATORY, INC.

6660-B Dobbin Road, Columbia, MD 21045 USA Tel. 410.290.6652 / Fax 410.290.6554 http://www.pctestlab.com



CERTIFICATE OF COMPLIANCE FCC Part 22 & 24 Certification

Applicant Name:

Novatel Wireless Inc. 9645 Scranton Road, Suite 205 San Diego, CA 92121-3030 United States

Date of Testing: March 5 - 6, 2009 Test Site/Location: PCTEST Lab., Columbia, MD, USA Test Report Serial No.: 0902230323.PKR

FCC ID:

PKRNVWCC760

APPLICANT:

NOVATEL WIRELESS INC.

Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§2; §22(H), §24(E)
EUT Type:	Cellular/PCS CDMA/EvDO Modem
Model(s):	CC760, PC760, C777
Tx Frequency Range:	824.70 - 848.31MHz (Cell. CDMA) / 1851.25 - 1908.75MHz (PCS CDMA)
Max. RF Output Power:	0.442 W ERP Cell. CDMA (26.45 dBm)
	0.176 W EIRP PCS CDMA (22.46 dBm)
Emission Designator(s):	1M27F9W (CDMA) / 1M27F9W (PCS)
Test Device Serial No.:	identical prototype [S/N: FCC #3078]

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. Test results reported herein relate only to the item(s) tested.

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.

Grant Conditions: Power output listed is ERP for Part 22 and EIRP for Part 24.

PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.

Randy Ortanez President



FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 1 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 1 01 30
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REV 7.8C 02/09/2009

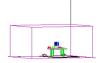


TABLE OF CONTENTS

FCC	PART 2	22 & 24 MEASUREMENT REPORT	3
1.0	INTF	RODUCTION	4
	1.1	SCOPE	4
	1.2	TESTING FACILITY	4
2.0	PRC	DDUCT INFORMATION	5
	2.1	EQUIPMENT DESCRIPTION	5
	2.2	EMI SUPPRESSION DEVICE(S)/MODIFICATIONS	5
	2.3	LABELING REQUIREMENTS	5
3.0	DES	CRIPTION OF TESTS	6
	3.1	MEASUREMENT PROCEDURE	6
	3.2	OCCUPIED BANDWIDTH EMISSION LIMITS	6
	3.3	CELLULAR - BASE FREQUENCY BLOCKS	6
	3.4	CELLULAR - MOBILE FREQUENCY BLOCKS	7
	3.5	PCS - BASE FREQUENCY BLOCKS	7
	3.6	PCS - MOBILE FREQUENCY BLOCKS	7
	3.7	SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL	7
	3.8	RADIATED SPURIOUS AND HARMONIC EMISSIONS	8
	3.9	PEAK-AVERAGE RATIO	8
	3.10	FREQUENCY STABILITY / TEMPERATURE VARIATION	8
4.0	TES	T EQUIPMENT CALIBRATION DATA	9
5.0	SAM	IPLE CALCULATIONS	10
6.0	TES	T RESULTS	11
	6.1	SUMMARY	11
	6.2	EFFECTIVE RADIATED POWER OUTPUT DATA	12
	6.3	EQUIVALENT ISOTROPIC RADIATED POWER OUTPUT DATA	13
	6.4	CELLULAR CDMA RADIATED MEASUREMENTS	14
	6.5	PCS CDMA RADIATED MEASUREMENTS	17
	6.6	CELLULAR CDMA FREQUENCY STABILITY MEASUREMENTS	20
	6.7	PCS CDMA FREQUENCY STABILITY MEASUREMENTS	22
7.0	PLO	T(S) OF EMISSIONS	24
8.0	CON	NCLUSION	

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 2 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 2 01 50
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MEASUREMENT REPORT FCC Part 22 & 24



APPLICANT:	Novatel Wireless Inc.				
APPLICANT ADDRESS:	9645 Scranton Road, Suite 205				
	San Diego, CA 92121-3030				
TEST SITE:	PCTEST ENGINEERING LABORATORY, INC.				
TEST SITE ADDRESS:	6660-B Dobbin Road, Columbia, MD 21045 USA				
FCC RULE PART(S):	§2; §22(H), §24(E)				
BASE MODEL:	CC760				
FCC ID:	PKRNVWCC760				
FCC CLASSIFICATION:	PCS Licensed Transmitter (PCB)				
EMISSION DESIGNATOR(S):	1M27F9W (CDMA) / 1M27F9W (PCS)				
MODE:	CDMA / EvDO				
FREQUENCY TOLERANCE:	±0.00025 % (2.5 ppm)				
Test Device Serial No.:	FCC #3078 Production Pre-Production Engineering				
DATE(S) OF TEST:	March 5 - 6, 2009				
TEST REPORT S/N:	0902230323.PKR				

Test Facility / Accreditations

Measurements were performed at PCTEST Engineering Lab. located in Columbia, MD 21045, U.S.A.



of Accreditation to ISO/EC 17025/2001

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- PCTEST facility is an FCC registered (PCTEST Reg. No. 90864) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (IC-2451).
- PCTEST Lab is accredited to ISO 17025 by U.S. National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP Lab code: 100431-0) in EMC, FCC and Telecommunications.
- PCTEST Lab is accredited to ISO 17025-2005 by the American Association for Laboratory Accreditation (A2LA) in Specific Absorption Rate (SAR) testing, Hearing Aid Compatibility (HAC) testing, CTIA Test Plans, and wireless testing for FCC and Industry Canada Rules.
- PCTEST Lab is a recognized U.S. Conformity Assessment Body (CAB) in EMC and R&TTE (n.b. 0982) under the U.S.-EU Mutual Recognition Agreement (MRA).
- PCTEST TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC Guide 65 by the American National Standards Institute (ANSI) in all scopes of FCC Rules and Industry Canada Standards (RSS).
- PCTEST facility is an IC registered (IC-2451) test laboratory with the site description on file at Industry Canada.
- PCTEST is a CTIA Authorized Test Laboratory (CATL) for AMPS, CDMA, and EvDO wireless devices and for Over-the-Air (OTA) Antenna Performance testing for AMPS, CDMA, GSM, GPRS, EGPRS, UMTS (W-CDMA), CDMA 1xEVDO, and CDMA 1xRTT.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 3 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 5 01 50
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1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

1.2 Testing Facility

The map below shows the location of the PCTEST LABORATORY, its proximity to the FCC Laboratory, the Columbia vicinity are, the Baltimore-Washington Internt'I (BWI) airport, the city of Baltimore and the Washington, DC area. (*See Figure 1-1*).

These measurement tests were conducted at the PCTEST Engineering Laboratory, Inc. facility in New Concept Business Park, Guilford Industrial Park, Columbia, Maryland. The site address is 6660-B Dobbin Road, Columbia, MD 21045. The test site is one of the highest points in the Columbia area with an elevation of 390 feet above mean sea level. The site coordinates are 39° 11'15" N latitude and 76° 49'38" W longitude. The facility is 1.5 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. There are no FM or TV transmitters within 15 miles of the site. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2003 on January 27, 2006.

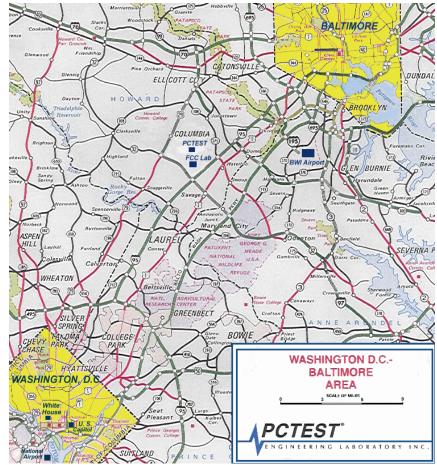


Figure 1-1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 4 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 4 01 50



2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Novatel Cellular/PCS CDMA/EvDO Modem FCC ID: PKRNVWCC760**. The EUT consisted of the following component(s):

Trade Name / Base Model	FCC ID	Description
Novatel / Model: CC760	PKRNVWCC760	Cellular/PCS CDMA/EvDO Modem

Table 2-1. EUT Equipment Description

2.2 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and no modifications were made during testing.

2.3 Labeling Requirements

Per 2.925

The FCC identifier shall be permanently affixed to the equipment and shall be readily visible to the purchaser at the time of purchase.

Per 15.19; Docket 95-19

In addition to this requirement, a device subject to certification shall be labeled as follows:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the trade name and FCC ID must be displayed on the device per Section 15.19(b)(2).

Please see attachment for FCC ID label and label location.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 5 of 36	
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 5 01 50	
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DESCRIPTION OF TESTS 3.0

3.1 Measurement Procedure

The radiated spurious measurements were made outdoors at a 3meter test range (see Figure 3-1). The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. This power level was recorded using a broadband average power meter. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This level is recorded with the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

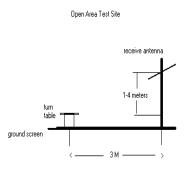
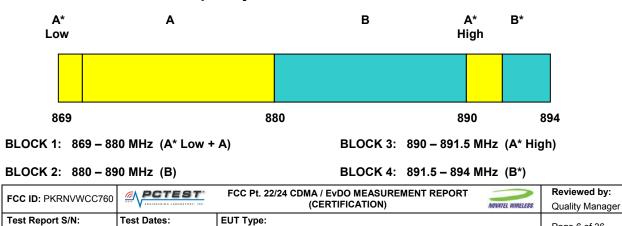


Figure 3-1. Diagram of 3-meter outdoor test range

Deviation from Measurement Procedure......None

3.2 **Occupied Bandwidth Emission Limits** §2.1049, 22.917(a), 24.238(a)

- On any frequency outside a licensee's frequency block, the power of any emission shall be a. attenuated below the transmitter power (P) by at least $43 + 10 \log(P) dB$.
- Compliance with these provisions is based on the use of measurement instrumentation employing a b. resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent 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, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.
- When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the C. licensee's frequency block edges, both upper and lower, as the design permits.
- The measurement of emission power can be expressed in peak or average values, provided they d. are expressed in the same parameters as the transmitter power.



Cellular/PCS CDMA/EvDO Modem

3.3 **Cellular - Base Frequency Blocks**

March 5 - 6, 2009

0902230323.PKR

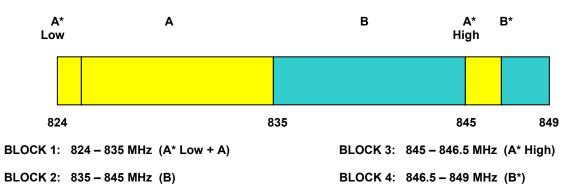
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Page 6 of 36

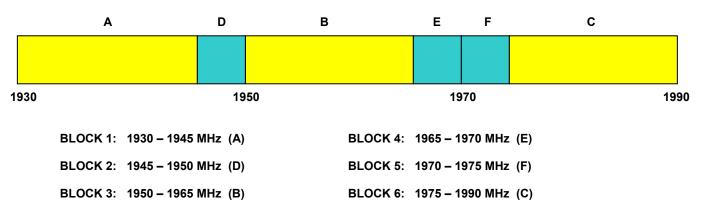
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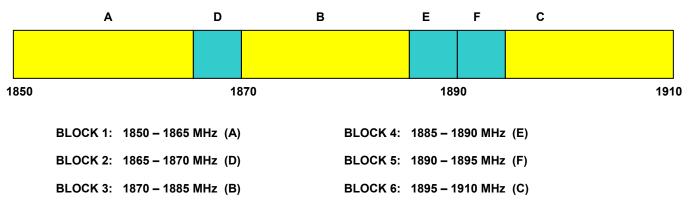
3.4 Cellular - Mobile Frequency Blocks



3.5 PCS - Base Frequency Blocks



3.6 PCS - Mobile Frequency Blocks



3.7 Spurious and Harmonic Emissions at Antenna Terminal §2.1051, 22.917(a), 24.238(a)

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 7 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 7 01 30
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3.8 Radiated Spurious and Harmonic Emissions §2.1053, 22.917(a), 24.238(a)

Spurious and harmonic radiated emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. This level is then measured with a broadband average power meter. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive average power meter reading. This spurious level is recorded with the power meter. For readings above 1 GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration. This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits.

3.9 Peak-Average Ratio

<u>§24.232(d)</u>

A peak to average ratio measurement is performed at the conducted port of the EUT. For CDMA and WCDMA signals, the spectrum analyzers' Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level. For GSM signals, an average and a peak trace are used on a spectrum analyzer to determine the largest deviation between the average and the peak power of the EUT in a bandwidth greater than the emission bandwidth.

3.10 Frequency Stability / Temperature Variation

<u>§2.1055, 22.355, 24.235</u>

The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

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

Time Period and Procedure:

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).

2. The equipment is turned on in a "standby" condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A sufficient stabilization period at each temperature shall be used prior to each frequency requirement.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 8 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 6 01 30
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TEST EQUIPMENT CALIBRATION DATA 4.0

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST).

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	263-10dB	(DC-18GHz) 10 dB Attenuator	N/A		N/A	N/A
-	No.165	(30MHz - 1000MHz) RG58 Coax Cable	N/A		N/A	N/A
-	No.166	(1000-26500MHz) Microwave RF Cable	N/A		N/A	N/A
-	No.167	(100kHz - 100MHz) RG58 Coax Cable	N/A		N/A	N/A
Agilent	11713A	Attenuation/Switch Driver	12/4/2008	Annual	12/4/2009	3439A02645
Agilent	8449B	(1-26.5GHz) Pre-Amplifier	12/4/2008	Annual	12/4/2009	3008A00985
Agilent	8495A	(0-70dB) DC-4GHz Attenuator	N/A		N/A	N/A
Agilent	85650A	Quasi-Peak Adapter	3/13/2008	Annual	3/13/2009	2043A00301
Agilent	8566B	(100Hz-22GHz) Spectrum Analyzer	12/5/2008	Annual	12/5/2009	3638A08713
Agilent	8566B	Opt. 462 Impulse Bandwidth	12/5/2008	Annual	12/5/2009	3701A22204
Agilent	8591A	(9kHz-1.8GHz) Spectrum Analyzer	8/19/2008	Annual	8/19/2009	3144A02458
Agilent	8648D	(9kHz-4GHz) Signal Generator	10/11/2007	Biennial	10/11/2009	3613A00315
Agilent	E4407B	ESA Spectrum Analyzer	3/13/2008	Annual	3/13/2009	US39210313
Agilent	E4432B	ESG-D Series Signal Generator	8/18/2008	Annual	8/18/2009	US40053896
Agilent	E4448A	(3Hz-50GHz) Spectrum Analyzer	12/5/2008	Annual	12/5/2009	US42510244
Agilent	E5515C	Wireless Communications Test Set	6/8/2007	Biennial	6/8/2009	GB46110872
Compliance Design	Roberts	Dipole Set	11/9/2007	Biennial	11/9/2009	146
Compliance Design	Roberts	Dipole Set	11/9/2007	Biennial	11/9/2009	147
Emco	3115	Horn Antenna (1-18GHz)	9/24/2007	Biennial	9/24/2009	9704-5182
Emco	3115	Horn Antenna (1-18GHz)	10/4/2007	Biennial	10/4/2009	9205-3874
Espec	ESX-2CA	Environmental Chamber	3/12/2008	Annual	3/12/2009	17620
Gigatronics	80701A	(0.05-18GHz) Power Sensor	8/18/2008	Annual	8/18/2009	1833460
Gigatronics	8651A	Universal Power Meter	8/18/2008	Annual	8/18/2009	1835299
MiniCircuits	VHF-1300+	High Pass Filter	N/A		N/A	30716
MiniCircuits	VHF-3100+	High Pass Filter	N/A		N/A	30721
Pasternack	PE2208-6	Bidirectional Coupler	N/A		N/A	N/A
Schwarzbeck	UHA9105	Dipole Antenna (400 - 1GHz) Rx	6/19/2007	Biennial	6/18/2009	9105-2404
Schwarzbeck	UHA9105	Dipole Antenna (400 - 1GHz) Tx	6/19/2007	Biennial	6/18/2009	9105-2403
Solar Electronics	8012-50-R-24-BNC	LISN	11/8/2007	Biennial	11/8/2009	310233
Sunol	DRH-118	Horn Antenna (1 - 18GHz)	5/9/2007	Biennial	5/9/2009	A050307

Table 4-1. Test Equipment

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 9 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 9 01 30
2009 PCTEST Engineering Laboratory, Inc.				REV 7.8C

02/09/2009



5.0 SAMPLE CALCULATIONS

Emission Designator

Emission Designator = 1M25F9W

CDMA BW = 1.25 MHz F = Frequency Modulation 9 = Composite Digital Info W = Combination (Audio/Data) (Measured at the 99.75% power bandwidth)

Spurious Radiated Emission - PCS Band

Example: Channel 25 PCS Mode 2nd Harmonic (3702.50 MHz)

The average receive power meter reading at 3 meters with the EUT on the turntable was -81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of -81.0 dBm on the power meter. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 3702.50 MHz. So 6.1 dB is added to the power meter reading of -30.9 dBm yielding -24.80 dBm. The fundamental EIRP was 25.501 dBm so this harmonic was 25.501 dBm - (-24.80) = 50.3 dBc.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 10 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 10 01 50
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02/09/2009



6.0 **TEST RESULTS**

6.1 Summary

Company Name:	Novatel Wireless Inc.
FCC ID:	PKRNVWCC760
FCC Classification:	PCS Licensed Transmitter (PCB)
Mode(s):	<u>CDMA / EvDO</u>

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
TRANSMITTER MODE	(<u>TX)</u>				
2.1049, 22.917(a), 24.238(a)	Occupied Bandwidth	N/A		PASS	Section 7.0
2.1051, 22.917(a), 24.238(a)	Band Edge / Conducted Spurious Emissions	< 43 + 10log ₁₀ (P[Watts]) at Band Edge and for all out-of-band emissions		PASS	Section 7.0
24.232(d)	Peak-Average Ratio	< 13 dB	CONDUCTED	PASS	Section 7.0
2.1046	Transmitter Conducted Output Power	N/A		PASS	SAR Report
22.913(a)(2)	Effective Radiated Power	< 7 Watts max. ERP		PASS	Section 6.2
24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts max. EIRP	- 	PASS	Section 6.3
2.1053, 22.917(a), 24.238(a)	Undesirable Emissions	< 43 + 10log ₁₀ (P[Watts]) for all out-of-band emissions	RADIATED	PASS	Sections 6.4, 6.5
2.1055, 22.355, 24.235	Frequency Stability	< 2.5 ppm		PASS	Sections 6.6, 6.7
RECEIVER MODE (RX)	/ DIGITAL EMISSIONS				-
15.107	AC Conducted Emissions 150kHz – 30MHz	< FCC 15.107 limits	LINE CONDUCTED	PASS	Pt. 15B Test Report
15.109	General Field Strength Limits (Restricted Bands and Radiated Emissions Limits)	< FCC 15.109 limits	RADIATED (30MHz-1GHz) (1-25 GHz)	PASS	Pt. 15B Test Report
RF EXPOSURE	-	•	· · · · · ·		
2.1091 / 2.1093	SAR Test	1.6 W/kg (SAR Limit)	SAR	PASS	SAR Report

Table 6-1. Summary of Test Results

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 11 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 11 01 30
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6.2 Effective Radiated Power Output Data §22.913(a)(2)

Frequency [MHz]	Measured Level [dBm]	Substitute Level [dBm]	Antenna Gain [dBd]	Pol [H/V]	ERP [dBm]	ERP [Watts]	Battery Type
824.70	-18.790	22.26	0.00	Н	22.26	0.168	Standard
836.52	-14.600	26.45	0.00	Н	26.45	0.442	Standard
848.31	-15.180	25.87	0.00	Н	25.87	0.386	Standard

POWER: "All Up" Bits (Cellular CDMA Mode)

Table 6-2. Effective Radiated Power Output Data

NOTES:

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This level is recorded using the power meter. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits. This unit was tested with its standard battery.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 12 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 12 01 50
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02/09/2009



6.3 Equivalent Isotropic Radiated Power Output Data §24.232(c)

Frequency [MHz]	Measured Level [dBm]	Substitute Level [dBm]	Antenna Gain [dBi]	Pol [H/V]	EIRP [dBm]	EIRP [Watts]	Battery Type
1851.25	-22.250	13.86	8.00	Н	21.86	0.153	Standard
1880.00	-21.650	14.46	8.00	Н	22.46	0.176	Standard
1908.75	-22.460	13.65	8.00	Н	21.65	0.146	Standard

POWER: "All Up" Bits (PCS CDMA Mode)

 Table 6-3. Equivalent Isotropic Radiated Power Output Data

NOTES:

Equivalent Isotropic Radiated Power Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A Horn antenna was substituted in place of the EUT. This Horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This level is recorded using the power meter. The conducted power at the terminals of the Horn antenna is measured. The difference between the gain of the horn and an isotropic antenna is taken into consideration and the EIRP is recorded.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 13 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 13 01 30
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6.4 Cellular CDMA Radiated Measurements §2.1053, 22.917(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	824.70		MHz
CHANNEL:	101	_	
MEASURED OUTPUT POWER:	26.450	dBm =	0.442 W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log10 (W) =	39.45	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1649.40	-61.86	6.08	-55.78	Н	82.2
2474.10	-68.31	6.08	-62.23	Н	88.7
3298.80	-69.61	6.53	-63.08	Н	89.5
4123.50	-68.43	6.87	-61.56	Н	88.0
4948.20	-91.56	7.21	-84.35	Н	110.8

 Table 6-4. Radiated Spurious Data (Cellular CDMA Mode – Ch. 1013)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

This device was tested under all R.C.s and S.O.s and the worst case is reported with RC3/SO55 with "All Up" power control bits. This unit was tested with its standard battery.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 14 of 26
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Page 14 of 36
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02/09/2009



Cellular CDMA Radiated Measurements (Cont'd) §2.1053, 22.917(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	836.52		MHz
CHANNEL:	384	4	_
MEASURED OUTPUT POWER:	26.450	dBm =	<u>0.442</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log10 (W) =	39.45	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1673.04	-57.78	6.09	-51.69	Н	78.1
2509.56	-63.59	6.55	-57.04	Н	83.5
3346.08	-67.48	6.89	-60.59	Н	87.0
4182.60	-65.44	7.43	-58.00	Н	84.5
5019.12	-90.50	8.35	-82.16	Н	108.6

Table 6-5. Radiated Spurious Data (Cellular CDMA Mode – Ch. 384)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 15 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 15 01 50
© 2009 PCTEST Engineering Laboratory, Inc.				REV 7.8C



Cellular CDMA Radiated Measurements (Cont'd) §2.1053, 22.917(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	848.31		MHz
CHANNEL:	777	7	-
MEASURED OUTPUT POWER:	26.450	dBm =	<u>0.442</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log10 (W) =	39.45	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1696.62	-55.85	6.09	-49.76	Н	76.2
2544.93	-65.53	6.57	-58.96	Н	85.4
3393.24	-67.44	6.91	-60.53	Н	87.0
4241.55	-66.11	7.65	-58.47	Н	84.9
5089.86	-90.23	8.33	-81.90	Н	108.3

Table 6-6. Radiated Spurious Data (Cellular CDMA Mode – Ch. 777)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 16 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 10 01 30
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6.5 PCS CDMA Radiated Measurements §2.1053, 24.238(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1851.25		MHz
CHANNEL:	25		_
MEASURED OUTPUT POWER:	22.460	dBm =	<u>0.176</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log10 (W) =	35.46	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBI)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3702.50	-65.85	9.02	-56.83	Н	79.3
5553.75	-64.02	10.40	-53.62	Н	76.1
7405.00	-58.74	10.51	-48.23	Н	70.7
9256.25	-86.23	11.84	-74.39	Н	96.9
11107.50	-83.73	12.76	-70.97	Н	93.4

 Table 6-7. Radiated Spurious Data (PCS CDMA Mode – Ch. 25)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 17 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 17 01 30
2009 PCTEST Engineering Laboratory, Inc.				REV 7.80



PCS CDMA Radiated Measurements (Cont'd) §2.1053, 24.238(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1880.00	MHz
CHANNEL:	600	
MEASURED OUTPUT POWER:	dBm =	<u>0.176</u> W
MODULATION SIGNAL:	CDMA (Internal)	
DISTANCE:	3meters	
LIMIT:	43 + 10 log10 (W) = <u>35.46</u>	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBI)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3760.00	-65.83	8.99	-56.83	Н	79.3
5640.00	-63.06	10.40	-52.66	Н	75.1
7520.00	-60.36	10.62	-49.74	Н	72.2
9400.00	-86.05	11.70	-74.35	Н	96.8
11280.00	-82.98	12.69	-70.29	Н	92.8

 Table 6-8. Radiated Spurious Data (PCS CDMA Mode – Ch. 600)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 18 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 10 01 30
2009 PCTEST Engineering Laboratory, Inc.				REV 7.80



PCS CDMA Radiated Measurements (Cont'd) §2.1053, 24.238(a)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1908	MHz			
CHANNEL:	117	1175			
MEASURED OUTPUT POWER:	22.460	dBm =	<u>0.176</u> W		
MODULATION SIGNAL:	CDMA (Internal)				
DISTANCE:	3	meters			
LIMIT:	43 + 10 log10 (W) =	35.46	dBc		

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBI)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3817.50	-65.21	8.97	-56.24	Н	78.7
5726.25	-62.60	10.40	-52.20	Н	74.7
7635.00	-59.42	10.71	-48.71	Н	71.2
9543.75	-85.88	11.64	-74.25	Н	96.7
11452.50	-82.24	12.62	-69.62	Н	92.1

 Table 6-9. Radiated Spurious Data (PCS CDMA Mode – Ch. 1175)

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A halfwave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 10 of 26	
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Page 19 of 36	
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6.6 Cellular CDMA Frequency Stability Measurements §2.1055, 22.355

OPERATING FREQUENCY: 836,520,000 Hz

CHANNEL: ______ 384

REFERENCE VOLTAGE: 3.3 VDC

DEVIATION LIMIT: <u>± 0.00025</u> % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.30	+ 20 (Ref)	836,520,005	5	0.000001
100 %		- 30	836,519,993	-7	-0.000001
100 %		- 20	836,520,010	10	0.000001
100 %		- 10	836,519,994	-6	-0.000001
100 %		0	836,520,011	11	0.000001
100 %		+ 10	836,519,996	-4	0.000000
100 %		+ 20	836,520,001	1	0.000000
100 %		+ 30	836,520,011	11	0.000001
100 %		+ 40	836,519,998	-2	0.000000
100 %		+ 50	836,520,002	2	0.000000
115 %	3.80	+ 20	836,519,991	-9	-0.000001
BATT. ENDPOINT	3.01	+ 20	836,520,003	3	0.000000

Table 6-10. Frequency Stability Data (Cellular CDMA Mode – Ch. 384)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Page 20 of 36		
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 20 01 50		
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Cellular CDMA Frequency Stability Measurements (Cont'd) §2.1055, 22.355

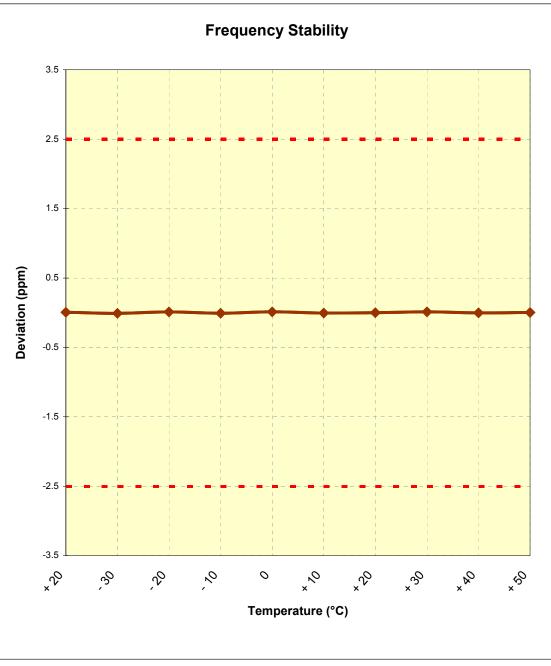


Figure 6-1. Frequency Stability Graph (Cellular CDMA Mode – Ch. 384)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 21 of 36	
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Page 21 01 30	
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6.7 PCS CDMA Frequency Stability Measurements §2.1055, 24.235

OPERATING FREQUENCY: 1,880,000,000 Hz

CHANNEL: 600

REFERENCE VOLTAGE: 3.3 VDC

DEVIATION LIMIT: <u>± 0.00025</u> % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.30	+ 20 (Ref)	1,879,999,998	-2	0.000000
100 %		- 30	1,879,999,994	-6	0.000000
100 %		- 20	1,880,000,005	5	0.000000
100 %		- 10	1,880,000,007	7	0.000000
100 %		0	1,880,000,010	10	0.000001
100 %		+ 10	1,879,999,988	-12	-0.000001
100 %		+ 20	1,879,999,995	-5	0.000000
100 %		+ 30	1,880,000,001	1	0.000000
100 %		+ 40	1,879,999,996	-4	0.000000
100 %		+ 50	1,879,999,993	-7	0.000000
115 %	3.80	+ 20	1,880,000,006	6	0.000000
BATT. ENDPOINT	3.01	+ 20	1,880,000,001	1	0.000000

Table 6-11. Frequency Stability Data (PCS CDMA Mode – Ch. 600)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Page 22 of 36		
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 22 01 30		
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PCS CDMA Frequency Stability Measurements (Cont'd) §2.1055, 24.235

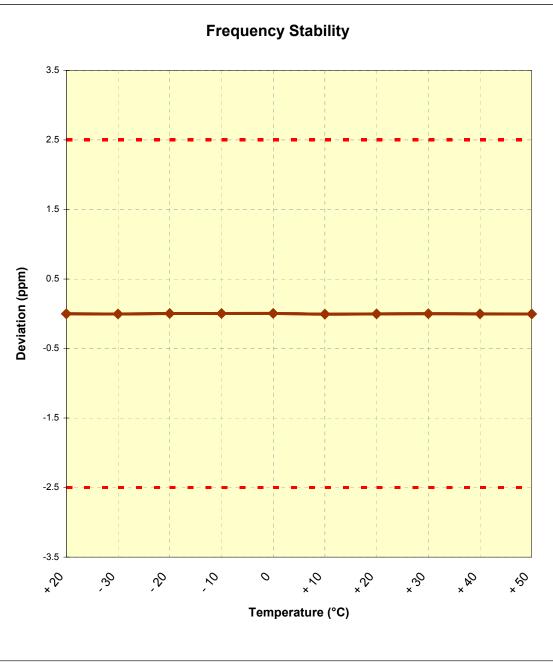
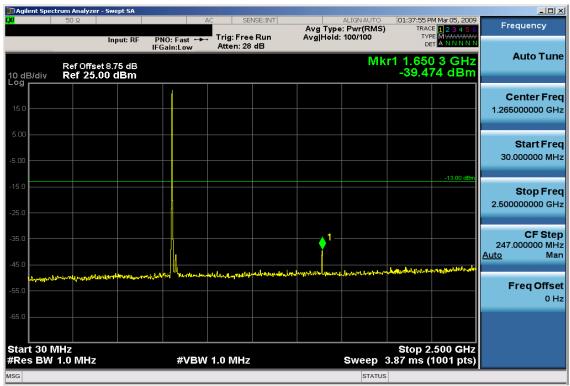


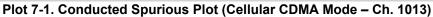
Figure 6-2. Frequency Stability Graph (PCS CDMA Mode – Ch. 600)

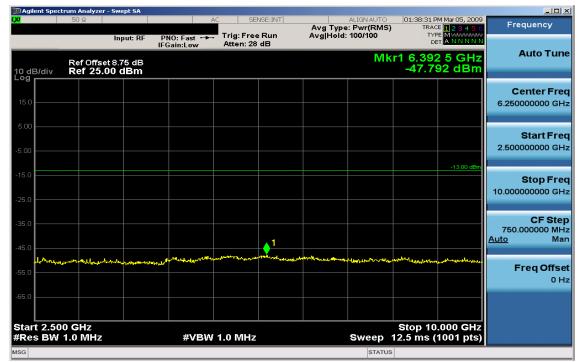
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Test Report S/N:	Test Dates:	EUT Type:		Page 23 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 23 01 30
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7.0 PLOT(S) OF EMISSIONS







Plot 7-2. Conducted Spurious Plot (Cellular CDMA Mode – Ch. 1013)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Page 24 of 36		
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 24 01 50		



🗊 Agilent Spect		- Swept SA								
L X I	50 Ω				NSE:INT		ALIGNAUTO Pwr(RMS)	TRA	PM Mar 05, 2009 CE <mark>1 2 3 4 5 6</mark>	Frequency
		Input: RF	PNO: >30k ↔ IFGain:Low	Trig: Free Atten: 28		Avg Hold:	: 10/10	TY D	ET A N N N N N	
	Ref Offse	1875 dB					Mkr	1 824.0	00 MHz	Auto Tune
10 dB/div Log	Ref 25.							-14.4	96 dBm	
										Center Freq
15.0									<u> </u>	824.000000 MHz
							.	mangaghter and a life	المريد	
5.00					- Aller	Handred Bart Market	- art-threedgese artel		the second second	Start Freq
-5.00					/					823.000000 MHz
0.00					1				-13.00 dBm	
-15.0									-13.00 dBm	Stop Freq
										825.000000 MHz
-25.0		. In the ballock								
-35.0	en transfer		Constant of the second							CF Step
										200.000 kHz <u>Auto</u> Man
-45.0									<u> </u>	
										Freq Offset
-55.0										0 Hz
-65.0										
Center 82	4.000 MH	17						Span 2	2.000 MHz	
#Res BW	13 kHz		#VBW	13 kHz			#Sweep	2.00 s (1001 pts)	
ISG							STATUS			



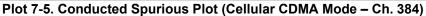


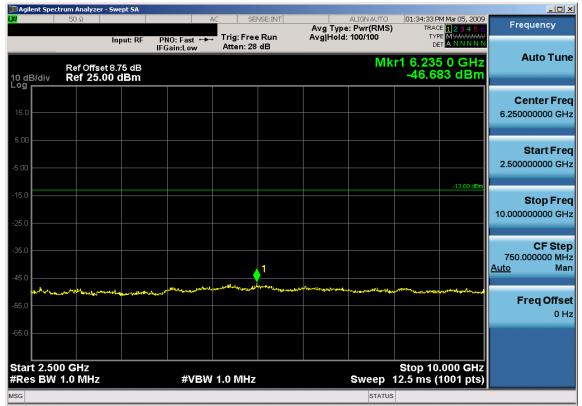
Plot 7-4. 4MHz Span Plot (Cellular CDMA Mode – Ch. 1013)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 25 of 36	
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 25 01 50	
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Agilent Spect		- Swept SA								
	50 Ω	Input: RF	PNO: Fast ↔ IFGain:Low			Avg Type Avg Hold:	ALIGN AUTO : Pwr(RMS) : 100/100	TRAC	M Mar 05, 2009 E 1 2 3 4 5 6 E M W M M M T A N N N N N	Frequency
0 dB/div		et8.75 dB 00 dBm	II CAINEON				Mk	1 1.672 -41.52	26 GHz 28 dBm	Auto Tune
15.0										Center Free 1.265000000 GH
5.00									-13.00 dBm	Start Fre 30.000000 MH
25.0									-13.00 dBm	Stop Fre 2.500000000 GH
45.0						• 1 ·				CF Ste 247.000000 MH <u>Auto</u> Ma
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65.0 Start 30 M Res BW			#VBV	/ 1.0 MHz			Sweep 3	Stop 2. 8.87 ms (/	.500 GHz 1001 pts)	
SG							STATUS			

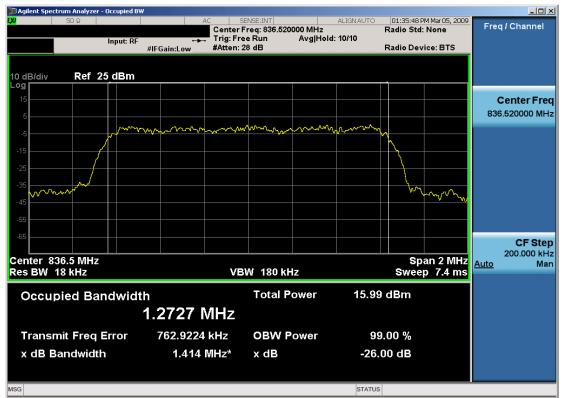




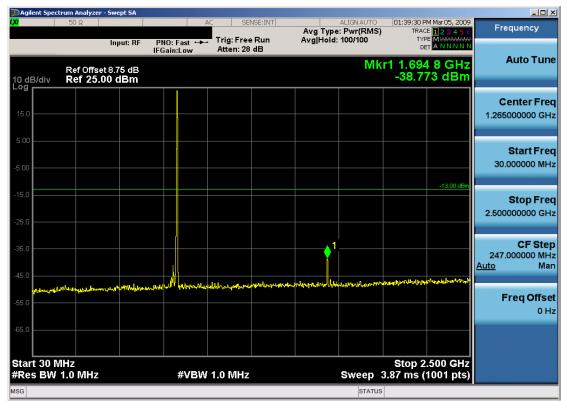
Plot 7-6. Conducted Spurious Plot (Cellular CDMA Mode - Ch. 384)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 26 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 20 01 30
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Plot 7-8. Conducted Spurious Plot (Cellular CDMA Mode – Ch. 777)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 27 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 27 01 30
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Agilent Spectrum Analyzer	- Swept SA							<u>_ ×</u>
📶 🦳 50 Ω	Input: RF	PNO: Fast ↔→ IFGain:Low	Trig: Free Ru Atten: 28 dB	Avg	ALIGN AUTO Type: Pwr(RMS) Hold: 100/100	01:39:06 PM TRACE TYPE DET	123456 MWWWWW ANNNNN	Frequency
Ref Offse IO dB/div Ref 25.0		II Gam.cow			Mł	r1 6.257 -47.61	5 GHz 7 dBm	Auto Tune
15.0								Center Free 6.250000000 GH
5.00							-13.00 dBm	Start Fre 2.500000000 GH
25.0							-13.00 000	Stop Fre 10.000000000 GH
15.0			1					CF Ste 750.000000 M⊢ <u>Auto</u> Ma
55.0	Blain, and a start and	en internet and a second second	hadisere ^{n a} bbanan digara di Bara	anan an	anne an the second was	ntra tangan tanggan sa	dellanes have	Freq Offse 0 H
65.0 Start 2.500 GHz Res BW 1.0 MHz		#VBW	1.0 MHz		Sweep	Stop 10.0 12.5 ms (1	000 GHz	
G		<u> </u>			STATU			



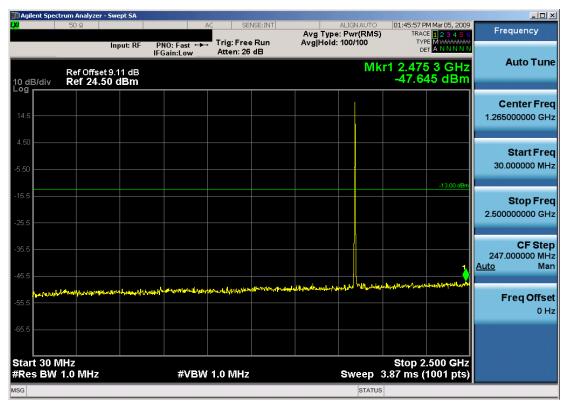
Plot 7-9. Conducted Spurious Plot (Cellular CDMA Mode - Ch. 777)

Plot 7-10. Band Edge Plot (Cellular CDMA Mode – Ch. 777)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 28 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 20 01 50
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Agilent Spectrum Analy	zer - Swept SA	1				×
Χυ 50 Ω	Input: RF		SENSE:INT Frig: Free Run Atten: 28 dB	ALIGN AUTO Avg Type: Pwr(RMS Avg Hold: 10/10	01:40:19 PM Mar 05, 2009) TRACE 1 2 3 4 5 6 TYPE MWWWWW DET A N N N N N	Frequency
Ref Of 10 dB/div Ref 2	fset 8.75 dB 5.00 dBm			Mk	r1 850.064 MHz -27.573 dBm	Auto Tune
15.0						Center Fred 852.000000 MH2
5.00					-13.00 dBm	Start Free 850.000000 MH:
15.0 1						Stop Free 854.000000 MH
45.0		maller				CF Step 400.000 kH <u>Auto</u> Ma
55.0					**************************************	Freq Offse 0 H
Start 850.000 MI Res BW 100 kF		#VBW 1	00 kHz	#Swee	Stop 854.000 MHz p 2.00 s (1001 pts)	
sg				STATU		



Plot 7-11. 4MHz Span Plot (Cellular CDMA Mode – Ch. 777)

Plot 7-12. Conducted Spurious Plot (PCS CDMA Mode - Ch. 25)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 29 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		F aye 29 01 30
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	50 Ω	nput: RF	PNO: Fast ↔→			Avg Type Avg Hold	ALIGNAUTO : Pwr(RMS) : 100/100	TRA	PM Mar 05, 2009 CE 1 2 3 4 5 6 PE M WWWWW ET A N N N N N	Frequency
I0 dB/div	Ref Offset 9 Ref 24.50	.11 dB dBm					Mkr	1 16.90 -47.3	2 5 GHz 66 dBm	Auto Tune
14.5										Center Free 11.250000000 GH:
5.50									-13.00 dBm	Start Fre 2.500000000 GH
25.5										Stop Fre 20.000000000 GH
.5.5								↓ ¹		CF Ste 1.750000000 GH <u>Auto</u> Ma
6.5	and have been and	and any many and an and an	and an and a second		tangan kan kan na an si da sa		and the second			Freq Offse 0 H
55.5 Start 2.500 Res BW 1.			#VBW	1.0 MH			Sweep	Stop 20	.000 GHz 1001 pts)	
G							STATUS			



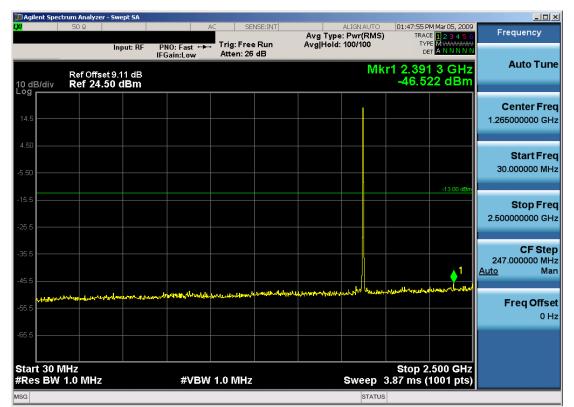


Plot 7-14. Band Edge Plot (PCS CDMA Mode - Ch. 25)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 30 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 30 01 30
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Agilent Spect		Swept SA					-			
	50 Ω	Input: RF	PNO: Fast ↔► IFGain:Low	.		ALIGN AUTO : Pwr(RMS) 10/10	01:45:25 Pf TRACI TYP DE	M Mar 05, 2009 E 1 2 3 4 5 6 E M M M M M M M T A N N N N N N	Fr	equency
10 dB/div Log	Ref Offset Ref 24.5	19.11 dB 10 dBm				Mkr1	1.849 0 -22.35	00 GHz 56 dBm		Auto Tune
14.5										enter Freq 7000000 GHz
4.50								-13.00 dBm	1.84	Start Freq
-15.5								1	1.849	Stop Freq
-35.5			and a first the state of the st	19-19-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	adar and the second second	*****			<u>Auto</u>	CF Step 400.000 kHz Man
-55.5									I	F req Offset 0 Hz
-65.5 Start 1.84 #Res BW			#VBW	1.0 MHz		S #Sween	top 1.849 2.00 s (1	0000 GHz 1001 pts)		
ISG						STATUS				



Plot 7-15. 4MHz Span Plot (PCS CDMA Mode - Ch. 25)

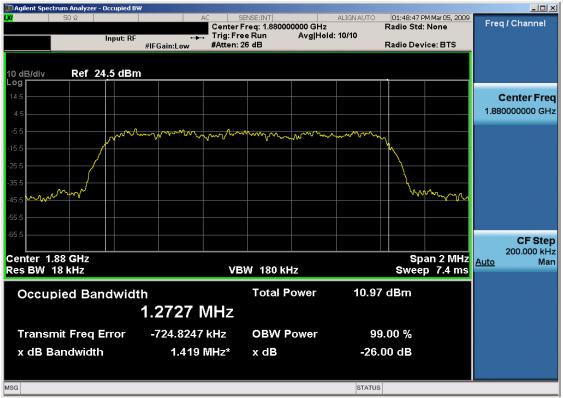
Plot 7-16. Conducted Spurious Plot (PCS CDMA Mode - Ch. 600)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 31 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 31 01 30
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Agilent Spectrum Analyze	er - Swept SA								×
Δ 50 Ω	Input: RF	A PNO: Fast ↔→ IFGain:Low			Avg Type Avg Hold:	ALIGN AUTO :: Pwr(RMS) 100/100	I TRA	PM Mar 05, 2009 CE 1 2 3 4 5 6 PE M WWWWWW ET A N N N N N	Frequency
	et 9.11 dB .50 dBm					Mkr	1 16.99 -46.9	0 0 GHz 54 dBm	Auto Tune
14.5									Center Fred 11.250000000 GH:
5.50								-13.00 dBm	Start Fre 2.500000000 GH
25.5									Stop Free 20.000000000 GH
15.5							∮ ¹		CF Ste 1.75000000 GH <u>Auto</u> Ma
55.5 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	en e		-	مۇمىيەتلەرلىيەتلەرمەتلەر مەربىيەتلەرلىيەتلەرمەتلەر		And a start of the		lengting of the factor in the second	Freq Offse 0 H
65.5 Start 2.500 GHz Res BW 1.0 MHz		#VBW	1.0 MHz			Sweep	Stop 20).000 GHz (1001 pts)	
G						STATUS			

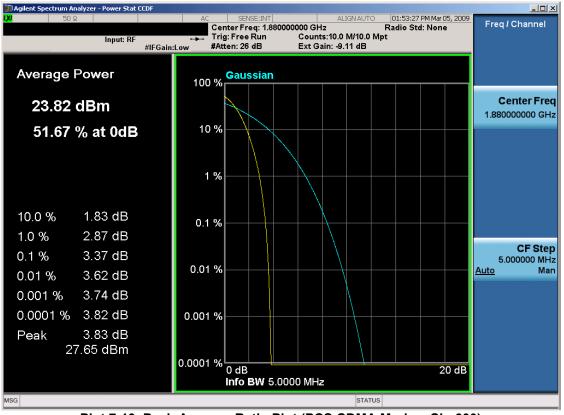




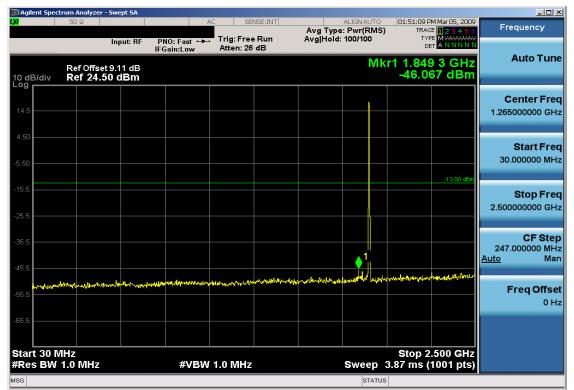
Plot 7-18. Occupied Bandwidth Plot (PCS CDMA Mode - Ch. 600)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 32 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		r aye 52 01 30
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Plot 7-20. Conducted Spurious Plot (PCS CDMA Mode - Ch. 1175)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 33 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 33 01 30
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<mark>Χ</mark> 50 Ω	Input: RF	PNO: Fast ++			Avg Type Avg Hold:	ALIGN AUTO : Pwr(RMS) 100/100	TRAC	PM Mar 05, 2009 CE 1 2 3 4 5 6 PE M WWWWWW ET A N N N N N	Frequency
	Offset 9.11 dB 24.50 dBm					Mkr	1 17.04: -47.0	2 5 GHz 48 dBm	Auto Tune
14.5									Center Fred 11.250000000 GHz
-5.50								-13.00 dBm	Start Fred 2.500000000 GH:
.15.5									Stop Free 20.000000000 GH:
45.5							1		CF Step 1.750000000 GH <u>Auto</u> Mar
55.5 Manula in	<u></u>	·····		ala ang ang ang ang ang ang ang ang ang an	-		- Loaluin		Freq Offse 0 H:
Start 2.500 GH #Res BW 1.0 N		#VBW	(1.0 MHz			Sweep -	Stop 20 43.8 m <u>s (</u>	.000 GHz (1001 pts)	
SG						STATUS	;		







Agilent Spect		- Swept SA			1					_ 🗆 ×
XI	50 Ω	Input: RF	PNO: Fast ↔→→ IFGain:Low			ALIGN AUTO : Pwr(RMS) 10/10	01:50:39 P TRAC TYF DE	M Mar 05, 2009 E <mark>1</mark> 2 3 4 5 6 E M WWWWWW T A N N N N N	Fre	equency
0 dB/div	Ref Offse Ref 24.5	t9.11 dB 50 dBm				Mkr1	1.911 0 -23.6	00 GHz 22 dBm		Auto Tune
14.5										enter Fred
5.50									1.911	Start Free 000000 GH
15.5								-13.00 dBm	1.915	Stop Free
45.5									<u>Auto</u>	CF Stej 400.000 kH Ma
55.5									F	F req Offse 0 H
65.5 Start 1.91 Res BW	1000 GHz	2	#\/B10(1.0 MHz		S #Sween	top 1.915	i000 GHz 1001 pts)		
SG SG			#VDVV	1.0 10112		STATUS	2.00 5 (roorpisj		

Plot 7-23. 4MHz Span Plot (PCS CDMA Mode – Ch. 1175)

FCC ID: PKRNVWCC760		FCC Pt. 22/24 CDMA / EvDO MEASUREMENT REPORT (CERTIFICATION)	NOVATEL WIRELESS.	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 35 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 35 01 50
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REV 7.8C 02/09/2009



8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Novatel Cellular/PCS CDMA/EvDO Modem FCC ID: PKRNVWCC760** complies with all the requirements of Parts 2, 22, and 24 of the FCC rules.

FCC ID: PKRNVWCC760	PKRNVWCC760			Reviewed by:
	ENGINEERING LABORATORY, INC.	(CERTIFICATION)	NOVATEL WIRELESS	Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 36 of 36
0902230323.PKR	March 5 - 6, 2009	Cellular/PCS CDMA/EvDO Modem		Fage 50 01 50
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