

Effective Radiated Power Output Data

<u>§22.913(a)(2); RSS-129 (9.1)</u>

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.70	-16.700	V	0.287	24.573	Standard
836.49	-17.000	V	0.278	24.433	Standard
848.31	-16.700	V	0.308	24.883	Standard

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

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used detector is used, with RBW = VBW = 1 MHz. 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. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS	Reviewed by: Quality Manager
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Equivalent Isotropic Radiated Power Output Data §24.232(c); RSS-133 (6.4) [SRSP-510 (5.1.2)]

FREQ. (MHz)	REF. LEVEL (dBm)	POL (H/V)	Azimuth (o angle)	EIRP (dBm)	EIRP (W)	Battery
1851.25	-18.600	V	180	24.481	0.281	Standard
1880.00	-18.800	V	180	24.451	0.279	Standard
1908.75	-18.800	V	180	24.621	0.291	Standard

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

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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 receive spectrum analyzer reading. 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.

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Cellular CDMA Radiated Measurements §2.1053, 22.917(a): RSS-129 (8.1.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	824	.70	MHz
CHANNEL:	1013 (Low)		_
MEASURED OUTPUT POWER:	24.883	dBm =	<u>0.308</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.88	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBd)	LEVEL (dBm)	(H/V)	(dBc)
1649.40	-37.98	6.10	-31.88	V	56.8
2474.10	-33.48	6.70	-26.78	V	51.7
3298.80	-48.28	6.80	-41.48	V	66.4
4123.50	-65.68	6.50	-59.18	V	84.1
4948.20	-63.38	7.00	-56.38	V	81.3

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS.	Reviewed by: Quality Manager
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Cellular CDMA Radiated Measurements (Cont'd) §2.1053, 22.917(a); RSS-129 (8.1.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	836.	52	MHz
CHANNEL:	384		_
MEASURED OUTPUT POWER:	24.883	dBm =	<u>0.308</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.88	dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1672.04				V	59.6
1673.04	-39.78	6.10	-33.68	V	58.6
2509.56	-33.58	6.70	-26.88	V	51.8
3346.08	-47.48	6.80	-40.68	V	65.6
4182.60	-58.98	6.50	-52.48	V	77.4
5019.12	-63.78	7.00	-56.78	V	81.7

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS	Reviewed by: Quality Manager	
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Cellular CDMA Radiated Measurements (Cont'd) §2.1053, 22.917(a); RSS-129 (8.1.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	848.	.31	MHz
CHANNEL:	0777 (High)		_
MEASURED OUTPUT POWER:	24.883	dBm =	<u>0.308</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.88	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBd)	LEVEL (dBm)	(H/V)	(dBc)
1696.62	-39.58	6.10	-33.48	V	58.4
2544.93	-31.98	6.70	-25.28	V	50.2
3393.24	-42.08	6.80	-35.28	V	60.2
4241.55	-64.38	6.50	-57.88	V	82.8
5089.86	-60.98	7.00	-53.98	V	78.9

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS	Reviewed by: Quality Manager
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PCS CDMA Radiated Measurements §2.1053, 24.238(a); RSS-133 (6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1851	.25	MHz
CHANNEL:	0025 (Low)		_
MEASURED OUTPUT POWER:	24.621	dBm =	<u>0.291</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.63	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBi)	LEVEL (dBm)	(H/V)	(dBc)
3702.50	-32.63	8.70	-23.93	V	48.6
5553.75	-45.23	9.70	-35.53	V	60.2
7405.00	-42.73	9.90	-32.83	V	57.5
9256.25	-47.43	11.40	-36.03	V	60.7
11107.50	-47.63	12.10	-35.53	V	60.2

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS.	Reviewed by: Quality Manager
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PCS CDMA Radiated Measurements (Cont'd) §2.1053, 24.238(a); RSS-133 (6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1880	0.00	MHz
CHANNEL:	0600 (Mid)		_
MEASURED OUTPUT POWER:	24.621	dBm =	<u>0.291</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.63	dBc

FREQ.	LEVEL @ ANTENNA	SUBSTITUTE ANTENNA	CORRECT GENERATOR	POL	
(MHz)	TERMINALS (dBm)	GAIN (dBi)	LEVEL (dBm)	(H/V)	(dBc)
3760.00	-34.93	8.70	-26.23	V	50.9
5640.00	-47.93	9.70	-38.23	V	62.9
7520.00	-43.13	9.90	-33.23	V	57.9
9400.00	-52.43	11.40	-41.03	V	65.7
11280.00	-50.53	12.10	-38.43	V	63.1

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS.	Reviewed by: Quality Manager
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PCS CDMA Radiated Measurements (Cont'd) §2.1053, 24.238(a); RSS-133 (6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1908.75		MHz
CHANNEL:	1175 (High)		_
MEASURED OUTPUT POWER:	24.621	dBm =	<u>0.291</u> W
MODULATION SIGNAL:	CDMA (Internal)		
DISTANCE:	3	meters	
LIMIT:	$43 + 10 \log_{10} (W) =$	37.63	dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3817.50	-35.63	8.70	-26.93	V	51.6
5726.25	-45.83	9.70	-36.13	V	60.8
7635.00	-44.93	9.90	-35.03	V	59.7
9543.75	-54.93	11.40	-43.53	V	68.2
11452.50	-49.33	12.10	-37.23	V	61.9

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:

FCC ID: PKRNVWMX720	PCTEST	FCC Pt. 22/24 MEASUREMENT DATA Class II Permissive Change	NOVATEL WIRELESS.	Reviewed by: Quality Manager
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