

Date:	January 21, 2008					
Applicant:	Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121					
Attention of:	John Spall, Project Manager Ph: 858-812-0697 Fax: 858-450-7183 Email: jspall@nvtl.com					
Equipment: FCC ID: P.O. Number:	PKRNVWE725 Collocated with QDS-BRCM1022 802.11.a,b,g PKRNVWE725					
FCC Rules:	Radio Frequency Radiation Exposure Limits 47 CFR 1.1310 MPE - Mobiles X Fixed Based Station					

Gentlemen:

Enclosed please find your copy of the Supplemental Test Data Report, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

Please allow from 8-12 weeks to hear from the Commission, who may request additional data or information, and even a sample for pre-grant audit testing.

Should you need any clarification, just fax or phone. Thank you again for this order - it has been a pleasure to be of service.

Sincerely yours,

ande

Hoosamuddin S. Bandukwala, Lab Director

enclosure(s) HSB/jhe

Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 (866) 311-3268 phone, (480) 926-3598 fax



Date:

January 21, 2008

Federal Communications Commission Via: Electronic Filing

Attention:	Authorization & Evaluation Division				
Applicant: Equipment: FCC ID: FCC Rules:	Novatel Wireless Inc. PKRNVWE725 Collocated with QDS-BRCM1022 802.11.a,b,g PKRNVWE725 Radio Frequency Radiation Exposure Limits 47 CFR 1.1310 MPE - Mobiles <u>X</u> Fixed Based Sta	ation			

Gentlemen:

On behalf of the Applicant, enclosed please find the Supplemental Test Data Report, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Hoosamuddin S. Bandukwala, Lab Director

enclosure(s) cc: Applicant HSB/jhe

Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 (866) 311-3268 phone, (480) 926-3598 fax



Environmental Assessment

for

Mobiles

for

FCC ID: FCC ID: PKRNVWE725

Model:PKRNVWE725

to

Federal Communications Commission

47 CFR 1.1310 (MPE)

Radio Frequency Radiation Exposure Limits

Date Of Report: January 21, 2008

On the Behalf of the Applicant:

At the Request of:

Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121

Novatel Wireless Inc.

Attention of:

John Spall, Project Manager Ph: 858-812-0697 Fax: 858-450-7183 Email: jspall@nvtl.com

Hoosamuddin S. Bandukwala, Lab Director

Supervised By:

Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 (866) 311-3268 phone, (480) 926-3598 fax



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Required information per ISO 17025-2005, paragraph 5.0:

a)	Test Report (Supplemental)
b) Laboratory: (FCC: 31040/SIT) (Canada: IC 2044)	Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, AZ 85225
c) Report Number:	d0810014
d) Client:	Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121
e) Identification:	PKRNVWE725 FCC ID: PKRNVWE725
Description:	Dell laptop model XFR630
f) EUT Condition:	Not required unless specified in individual tests.
g) Report Date:	January 21, 2008
h, j, k):	As indicated in individual tests.
i) Sampling method:	No sampling procedure used.
I) Uncertainty:	In accordance with MFA internal quality manual.
m) Supervised by:	

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Hoosamuddin S. Bandukwala, Lab Director

n) Results:

The results presented in this report relate only to the item tested.

o) Reproduction:

This report must not be reproduced, except in full, without written permission from this laboratory.



Identification of the Equipment Under Test (EUT)

Name and Address of Applicant:	Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121			
Manufacturer:	Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121			
FCC ID:	PKRNVWE725			
Model Number:	PKRNVWE725			
Description:	Dell laptop model XFR630			
Type of Emission:	CDMA collocated with 802.11. a,b,g			
Frequency Range, MHz:	CDMA 824 - 848 and 1851 - 1908 802.11.a,b,g 2412 – 2462 and 5745 - 5825			
Power Rating, Watts: Switchable	0.296 Variable XN/A			
Modulation :	AMPS TDMA X CDMA X OTHER			
Antenna:	Helical Monopole Whip X Other			

Note: For RF Safety test antenna gain taken at the upper range of expected gain (i.e. 0 dBd) and RF Power set to highest nominal power across all channels.



Standard Test Conditions and Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.4-2004, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40° C (50° to 104° F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10° to 90° relative humidity.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

Measurement results, unless otherwise noted, are worst-case measurements.

<u>A2LA</u>

"A2LA has accredited Flom Test Labs, Inc. Chandler, AZ for technical competence in the field of Electrical testing. The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO 17025:2005 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Please refer to <u>www.a2la.org</u> for current scope of accreditation.

Certificate number: 2152.01





Name of Test:	Environmental Assessment	
Specification:	FCC: 47 CFR 1.1310	
Measurement Guide:	ANSI/IEEE C95.1 1992	
Name of Test:	R.F. Radiation Exposure	
FCC Rules: Description, EUT:	1.1307, 1.1310, 1.1311, 2.1091 See page 2 of Test Report	
Limits: Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)	0.3-1.234 MHz: 1.34-30 MHz: 30-300 MHz: 300-1500 MHz 1500-100,000 MHz:	Limit $[mW/cm^{2}] = 100$ Limit $[mW/cm^{2}] = (180/f^{2})$ Limit $[mW/cm^{2}] = 0.2$ Limit $[mW/cm^{2}] = f/1500$ Limit $[mW/cm^{2}] = 1.0$
Test Frequencies, MHz Power, Conducted, mW Antenna Gain Antenna Model Distance cm	824 – 848 = 291 = 3 dBi Planer Inverted F Antenna 20	
Limit Calculations	$\text{Limit}_{[mW/cm2]} = 0.549$	
Test Frequencies, MHz Power, Conducted, mW Antenna Gain Antenna Model Distance cm	1851 - 1908 = 296 = 3 dBi Planer Inverted F Antenna 20	
Limit Calculations	$\text{Limit}_{[mW/cm2]} = 1.0$	



PKRNVWE725 CDMA

CDMA Frequency	TX Power	Power Density	Limit	Result
MHz	(m)W	(mW/cm ²)	(mW/cm ²)	
824 - 848	291	0.116	0.549	Pass
1851 - 1908	296	0.117	1.0	Pass

QDS-BRCM1022 802.11.a,b,g

802.11 a,b,g Frequency	TX Power	Power Density	Limit	Result
MHz	(mW)	(mW/cm ²)	(mW/cm ²)	
2412 - 2462	489	0.195	1.0	Pass
5745 - 5825	406	0.162	1.0	Pass

PKRNVWE725 CDMA Collocated with QDS-BRCM1022 802.11.a,b,g

CDMA Frequency	802.11.a,b,g	CDMA	802.11.a,b,g	Total	Limit	Result
MHz	Frequency	Power	Power	Power	(mW/cm ²)	
	MHz	Density	Density	Density		
		(mW/cm ²)	(mW/cm ²)	(mW/cm ²)		
824 - 848	2412 – 2462	0.116	0.195	0.311	0.549	Pass
824 - 848	5745 - 5825	0.116	0.162	0.278	0.549	Pass
1851 - 1908	2412 – 2462	0.117	0.195	0.312	1.0	Pass
1851 - 1908	5745 - 5825	0.117	0.162	0.279	1.0	Pass

End of Test Report

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Hoosamuddin S. Bandukwala, Lab Director

Supervised By:



Testimonial and Statement of Certification

This is to certify that:

- 1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.
- 2. **That** the technical data supplied with the application was taken under my direction and supervision.
- 3. **That** the data was obtained on representative units, randomly selected.
- 4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

and

Hoosamuddin S. Bandukwala, Lab Director

Certifying Engineer:

Flom Test Labs 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 (866) 311-3268 phone, (480) 926-3598 fax