

Date:	December 17, 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: FCC Rules:	PKRNVWE725 collocated with E2K512ANHM PKRNVWE725 Radio Frequency Radiation Exposure Limits 47 CFR 1.1310 MPE - Mobiles <u>X</u>	N 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.

Hoosamuddin S. Bandukwala, Lab Director

Supervised By:



Date:	December 17, 2008	
Attention: Via:	Federal Communications Commission Authorization & Evaluation Division	
via.	Electronic Filing	
Applicant:	Novatel Wireless Inc.	
Equipment: FCC ID: FCC Rules:	PKRNVWE725 collocated with E2K512ANHM PKRNVWE725 Radio Frequency Radiation Exposure Limits 47 CFR 1.1310 MPE - Mobiles <u>X</u>	N Fixed Based Station

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.

Hoosamuddin S. Bandukwala, Lab Director

Supervised By:



Environmental Assessment

for

Mobiles

for

FCC ID:

Model: PKRNVWE725 co located with E2K512ANHMW

to

Federal Communications Commission

47 CFR 1.1310

Radio Frequency Radiation Exposure Limits

Date Of Report: December 17, 2008

On the Behalf of the Applicant: Novatel Wireless Inc.

At the Request of:

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:



Test Report Revision History

Revision	Date	Revised By	Reason for revision
1.0	December 17, 2008	J Erhard	Original Document



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.

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Hoosamuddin S. Bandukwala, Lab Director

Supervised By:



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Required information per ISO 17025-2005, paragraph 5.10:

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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:	d08c0020
d) Client:	Novatel Wireless Inc. 9645 Scranton Rd, Suite 205 San Diego, CA 92121
e) Identification: Description:	PKRNVWE725 collocated with E2K512ANHMW Laptop model latitude XT2
f) EUT Condition:	Not required unless specified in individual tests.
g) Report Date:	December 17, 2008
h, j, k):	As indicated in individual tests.
i) Sampling method:	No sampling procedure used.
I) Uncertainty:	In accordance with FTL internal quality manual.
m) Supervised by:	

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:	Latitude XT2				
Description:	Laptop model latitude XT2				
Type of Emission:	CDMA				
Frequency Range, MHz:	824 – 848, 1851 - 1908				
Power Rating, Watts: Switchable	296 mW Variable X_ N/A				
Modulation:	AMPS TDMA X CDMA X OTHER				
Antenna:	Helical <u>X</u> Monopole Whip 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.



<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





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 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.



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:	1.1307, 1.1310, 1.1311, 2.1091	
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	$\text{Limit}_{[\text{mW/cm2}]} = 0.549$	
Test Frequencies, MHz Power, Conducted, mW Antenna Gain Antenna Model Distance cm	1851 - 1908 = 296 = 3 dBi Planer Inverted F Antenna 20	
Limit Calculations	$\text{Limit}_{[\text{mW/cm2}]} = 1.0$	



PKRNVWE725 CDMA

CDMA Frequency MHz	TX Power (m)W	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
824 - 848	291	0.116	0.549	Pass
1851 - 1908	296	0.118	1.0	Pass

E2K512ANHMW 802.11

802.11 Frequency MHz	TX Power (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
2412 - 2462	72	0.0286	1.0	Pass
5180 - 5320	45	0.0179	1.0	Pass
5500 - 5700	71	0.0282	1.0	Pass
5745 - 5825	62	0.0246	1.0	Pass

PKRNVWE725 CDMA Collocated with E2K512ANHMW 802.11

CDMA Frequency MHz	802.11 Frequency MHz	CDMA Power Density (mW/cm ²)	802.11 Power Density (mW/cm ²)	Total Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
824 - 848	2412 - 2462	0.116	0.0286	0.1446	0.549	Pass
824 - 848	5180 - 5320	0.116	0.0179	0.1339	0.549	Pass
824 - 848	5500 - 5700	0.116	0.0282	0.1442	0.549	Pass
824 - 848	5745 - 5825	0.116	0.0246	0.1406	0.549	Pass
1851 - 1908	2412 - 2462	0.118	0.0286	0.1466	1.0	Pass
1851 - 1908	5180 - 5320	0.118	0.0179	0.1359	1.0	Pass
1851 - 1908	5500 - 5700	0.118	0.0282	0.1462	1.0	Pass
1851 - 1908	5745 - 5825	0.118	0.0246	0.1426	1.0	Pass

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Hoosamuddin S. Bandukwala, Lab Director

Supervised By: