



**Date:** February 25, 2009

**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](mailto:jspall@nvtl.com)

**Equipment:** PKRNVWE760D Collocated with QDS-BRCM1030 802.11  
**FCC ID:** PKRNVWE760D  
**FCC Rules:** Radio Frequency Radiation Exposure Limits  
47 CFR 1.1310  
MPE - Mobiles  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,

Hoosamuddin S. Bandukwala, Lab Director



# Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

toll-free: (866) 311-3268  
fax: (480) 926-3598  
[www.flomlabs.com](http://www.flomlabs.com)  
[info@flomlabs.com](mailto:info@flomlabs.com)

**Date:** February 25, 2009

**Attention:** Federal Communications Commission  
Authorization & Evaluation Division

**Via:** Electronic Filing

**Applicant:** Novatel Wireless Inc.

**Equipment:** PKRNVWE760D Collocated with QDS-BRCM1030 802.11

**FCC ID:** PKRNVWE760D

**FCC Rules:** Radio Frequency Radiation Exposure Limits  
47 CFR 1.1310

MPE - Mobiles	<input checked="" type="checkbox"/> X	Fixed Based Station	<input type="checkbox"/>
---------------	---------------------------------------	---------------------	--------------------------

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



## Environmental Assessment

for

### **Mobiles**

for

**FCC ID: PKRNVWE760D**

**Model:PKRNVWE760D Collocated with QDS-BRCM1030**

to

**Federal Communications Commission**

**47 CFR 1.1310 (MPE)**

Radio Frequency Radiation Exposure Limits

**Date Of Report:** February 24, 2009

**On the Behalf of the Applicant:** Novatel Wireless Inc.

**At the Request of:** 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](mailto:jspall@nvtl.com)

Supervised By:

Hoosamuddin S. Bandukwala, Lab Director

## Test Report Revision History

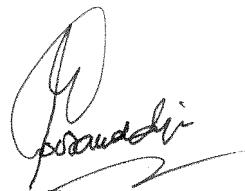
Revision	Date	Revised By	Reason for revision
1.0	February 24, 2009	H Bandukwala	Original Document

## 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.

Certifying Engineer:



Hoosamuddin S. Bandukwala, Lab Director

## Table of Contents

Rule	Description	Page
1.1310	Test Report	1
	Identification of the Equipment Under Test	2
	Standard Test Conditions and Engineering Practices	3
	Environmental Assessment	4

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:

d) Client:  
Novatel Wireless Inc.  
9645 Scranton Rd, Suite 205  
San Diego, CA 92121

e) Identification:

PKRNVWE760D  
FCC ID: PKRNVWE760D  
Description: Laptop model Paltrow 16M (Studio XPS 1640)

f) EUT Condition:

Not required unless specified in individual tests.

g) Report Date:

February 25, 2009

h, j, k):

As indicated in individual tests.

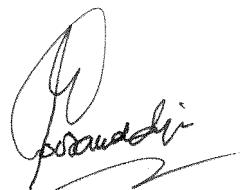
i) Sampling method:

No sampling procedure used.

l) 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:** PKRNVWE760D

**Model Number:** Paltrow 16M (Studio XPS 1640)

**Description:** Laptop model Paltrow 16M (Studio XPS 1640)

**Type of Emission:** CDMA collocated with 802.11

**Frequency Range, MHz:** CDMA 824.7 – 848.31 and 1851.25 – 1908.75  
802.11 2412 – 2462

**Power Rating, Watts:** 0.877  
 Switchable       Variable       N/A

**Modulation:**  
 AMPS  
 TDMA  
 CDMA  
 OTHER

**Antenna:**  
 Helical  
 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.

## Standard Test Conditions and Engineering Practices

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

In accordance with ANSI C63.4-2003 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.

### A2LA

"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 [www.a2la.org](http://www.a2la.org) for current scope of accreditation.

Certificate number: 2152.01



<b>Name of Test:</b>	Environmental Assessment	
<b>Specification:</b>	FCC: 47 CFR 1.1310	
<b>Measurement Guide:</b>	ANSI/IEEE C95.1 1992	
<b>Name of Test:</b>	R.F. Radiation Exposure	
FCC Rules:	1.1307, 1.1310, 1.1311, 2.1091	
Description, EUT:	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 $[\text{mW/cm}^2] = 100$ Limit $[\text{mW/cm}^2] = (180/f^2)$ Limit $[\text{mW/cm}^2] = 0.2$ Limit $[\text{mW/cm}^2] = f/1500$ Limit $[\text{mW/cm}^2] = 1.0$
Test Frequencies, MHz	824 – 848	
Power, Conducted, mW	= 877	
Antenna Gain	= 3 dBi	
Antenna Model	Planer Inverted F Antenna	
Distance cm	20	
Limit Calculations	Limit $_{[\text{mW/cm}^2]} = 0.549$	
Test Frequencies, MHz	1851 - 1908	
Power, Conducted, mW	= 628	
Antenna Gain	= 3 dBi	
Antenna Model	Planer Inverted F Antenna	
Distance cm	20	
Limit Calculations	Limit $_{[\text{mW/cm}^2]} = 1.0$	

**PKRNVWE760D CDMA**

CDMA Frequency MHz	TX Power (m)W	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
824 - 848	877	0.348	0.549	Pass
1851 - 1908	628	0.249	1.0	Pass

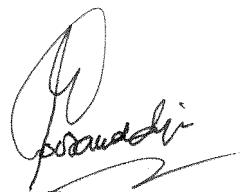
**QDS-BRCM1030 802.11**

802.11 a,b,g Frequency MHz	TX Power (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
2412 – 2462	202	0.080	1.0	Pass

**PKRNVWE760D CDMA Collocated with QDS-BRCM1030 802.11**

CDMA Frequency MHz	802.11.a,b,g Frequency MHz	CDMA Power Density (mW/cm <sup>2</sup> )	802.11.a,b,g Power Density (mW/cm <sup>2</sup> )	Total Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
824 – 848	2412 – 2462	0.348	0.080	0.428	0.549	Pass
1851 - 1908	2412 – 2462	0.249	0.080	0.329	1.0	Pass

Supervised By:



Hoosamuddin S. Bandukwala, Lab Director