



PCTEST ENGINEERING LABORATORY, INC.

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



RF EXPOSURE EVALUATION

Applicant Name:

NextWave Broadband, Inc.
3611 Valley Centre Drive
San Diego, CA 92130
United States

Date of Testing:

December 2, 2008

Test Site/Location:

PCTEST Lab, Columbia, MD, USA

FCC ID: WKH-BMX-SPT

APPLICANT: NextWave Broadband, Inc.

EUT Type: Satellite Personal Tracker (SPoT)

FCC Rule Part(s): Part 2 (§2.1093)

FCC Classification: Licensed Non-Broadcast Transmitter Worn on Body (TNT)

Operating Frequency: 1611.23 – 1618.75 MHz

Conducted Output Power: 22.5dBm, (178mW)



Note: This report is prepared based on FCC Order FCC-08-98A1 regarding the GlobalStar ATC waiver request.

I authorize and 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.

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: WKH-BMX-SPT		RF EXPOSURE EVALUATION		Reviewed by: Quality Manager
Test Dates: December 2, 2008		EUT Type: Satellite Personal Tracker (SPoT)		Page 1 of 2

1.1 Introduction

This document is prepared on behalf of NextWave Broadband, Inc. to show compliance with the RF Exposure requirements as required in §2.1093 of the FCC Rules and Regulations.

The device is a dual-use device which contains a Satellite Personal Tracker (SPoT) module and a WiMAX module. The WiMAX module RF Exposure is covered by a separate MPE evaluation report as it is a mobile device. This report addresses the RF evaluation of the SPoT transmitter.

The SPoT transmitter is body worn and therefore classified as a portable device as defined by the FCC for RF Exposure evaluation. Transmitters that are portable are evaluated by SAR test methodology.

1.2 EUT Description

The NextWave FCC ID: WKH-BMX-SPT is a WiMAX module integrated into a Spot Satellite Personal Tracker, previously certified under FCC ID: L2V-PT1. The Spot transmitter is a satellite locating system (GlobalStar) operating in the 1.6GHz band and the WiMAX transmitter operates at 2489.25MHz. Only one of the two transmitters can operate at any given time while the other transmitter is shutdown through internal software.

EUT:

Grantee:	NextWave Broadband, Inc.
FCC ID:	WKH-BMX-SPT
WiMAX Operating Frequency:	2489.25MHz
SPoT Operating Frequency:	1611.23 – 1618.75 MHz
SPoT Maximum Output Power (Conducted):	22.5dBm, (178mW)
SPoT Maximum Output Power (EIRP):	18.77dBm, (75.34mW)

1.3 Procedure

The following procedure was agreed upon in a teleconference with the FCC on December 2, 2008.

Portable devices operating under FCC Part 25 require routine SAR evaluation unless it can be shown that the output power of the device is below the applicable SAR limit. The SAR limit is 1.6mW/g and therefore if it can be shown that the output power is below this level the device will comply with the SAR limit without further evaluation and testing.



Per the manufacturers operational description the device operates with a maximum duty cycle of 0.4433%. Based on this duty cycle the source-based time-averaged power is calculated as follows:

Conducted: $178\text{mW} \times 0.4433\% = 0.788\text{mW}$

Radiated: $75.34\text{mW} \times 0.4433\% = 0.334\text{mW}$

1.4 Conclusion

The calculations show that the SPoT device complies with the SAR limits as specified in §2.1093 of the FCC Rules and Regulations as the source-based time-averaged output power is below 1.6mW per FCC guidance.

FCC ID: WKH-BMX-SPT		RF EXPOSURE EVALUATION		Reviewed by: Quality Manager
Test Dates: December 2, 2008		EUT Type: Satellite Personal Tracker (SPoT)		Page 2 of 2