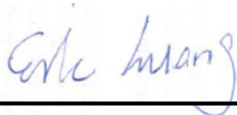


# RF Exposure Evaluation Report

APPLICANT : Psion Inc  
EQUIPMENT : Vehicle Mount Computer  
BRAND NAME : Psion  
MODEL NAME : 8516  
FCC ID : GM38516  
STANDARD : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Deputy Manager



Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

**No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)**



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**Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA573122	Rev. 01	Initial issue of report	Sep. 04, 2015



## 1. Administration Data

### 1.1. Testing Laboratory

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	Psion Inc
Address	One Motorola Plaza Holtsville, NY

Manufacturer	
Company Name	Psion Inc
Address	One Motorola Plaza Holtsville, NY

## 2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Vehicle Mount Computer
Brand Name	Psion
Model Name	8516
FCC ID	GM38516
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	• 802.11a/b/g/n HT20 • Bluetooth v2.1+EDR
Antenna Type	WLAN: Monopole Antenna Bluetooth: PCB Antenna
EUT Stage	Production Unit

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



3. Maximum RF average output power among production units

Table with 3 columns: Band / Frequency (MHz), IEEE 802.11 Average Power (dBm), and sub-columns for 11a and HT20. Row 1: 5.8GHz Band, 11a: 12, HT20: 12.

4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Table with 5 columns: Frequency range (MHz), Electric field strength (V/m), Magnetic field strength (A/m), Power density (mW/cm²), Averaging time (minutes). Includes sub-sections (A) Limits for Occupational/Controlled Exposures and (B) Limits for General Population/Uncontrolled Exposure.

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

S = PG / (4πR²)

Where:

- S = Power Density
P = Output Power at Antenna Terminals
G = Gain of Transmit Antenna (linear gain)
R = Distance from Transmitting Antenna



## **5. Radio Frequency Radiation Exposure Evaluation**

### **5.1. Standalone Power Density Calculation**

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
5GHz WLAN	5745.0	2.0	12.0	14.000	0.025	25.119	0.005	1.000

**General Note:**

1. Update 5GHz WLAN power and re-calculated power density result, other frequency band evaluation please refer original report.
2. For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band

### **Conclusion:**

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.