



Excellence in Compliance Testing

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## **Certification Exhibit**

**FCC ID: 2AB7YVPR9XYLN  
IC: 20699-VPR9XYLN**

**FCC Rule Part: 15.247  
ISED Canada Radio Standards Specification: RSS-247**

**ACS Project Number: 16-2053**

Manufacturer: Viper Design LLC  
Model: VPR9XYLND

## **RF Exposure**

**General Information:**

Applicant: Viper Design LLC  
 ACS Project: 16-2053  
 Device Category: Mobile  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Antenna Type: Wire Antenna  
 Antenna Gain: 2.2 dBi  
 Maximum Transmitter Conducted Power: -1.85 dBm, 0.653 mW  
 Maximum System EIRP: 0.35 dBm, 1.084 mW  
 Exposure Conditions: Greater than 20 centimeters

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

**Table 1: FCC Requirements**

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm <sup>2</sup> )	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )
900	-1.85	0.60	0.65	2.2	1.660	20	0.000

**Table 2: Innovation Science Economic Development Canada Requirements**

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (W/m <sup>2</sup> )	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (W/m <sup>2</sup> )
900	-1.85	2.74	0.65	2.2	1.660	20	0.002

**Installation Guidelines**

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

**RF Exposure**

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

**Conclusion**

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.