

FCC Part 15.247 Certification **Test Report**

Frequency Hopping Spread Spectrum Transceiver Modular Approval

FCC ID: HSW-910M

FCC Rule Part: 15.247

ACS Report Number: 04-0132-15C

Manufacturer: Cirronet, Inc.
Equipment Type: Transceiver
Model: WIT910

RF Exposure Information

General Information:

Applicant: Cirronet, Inc.
 ACS Project: 04-0132
 FCC ID: HSW-910M
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Yagi
 Antenna Gain: 8.5dB
 Transmitter Conducted Power: 27.567dBm
 Maximum System EIRP: 36.07dBm
 Operating Configuration: Module to be installed in Mobile or Fixed mount host devices only.
 Exposure Conditions: Greater than 23 centimeters

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P_x G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*					
Transmit Freq. (MHz)	Radio Power (dBm)	Radio Power (W)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	MPE Distance (cm)
914.28	27.56	0.57108	8.5	7.08	22.98

Installation Guidelines

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

“RF Exposure (Intentional Radiators Only)”

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of (23cm).”

Conclusion

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