

Rhein Tech Laboratories, Inc.
360 Herndon Parkway
Suite 1400
Herndon, VA 20170
<http://www.rheintech.com>

Client: HandEra, Inc.
Model: WF-100
Standards: FCC 15.247 & RSS-210
FCC/IC ID: URZ-WF10011/6827A-WF10011
Report #: 2006180

Appendix A: FCC Part 1.1307, 1.1310, 2.1091, 2.1093: RF Exposure

From FCC 1.1310 Table 1A, the maximum permissible RF exposure for an uncontrolled environment is 1 mW/cm². The electric field generated for a 1 mW/cm² exposure (S) is calculated as follows:

$$S = (P \times G) / (4 \times \pi \times d^2)$$

where:

S = Power density

P = Transmitter conducted power in watts

G = Numeric gain

d = distance to radiation center

Fundamental Operating Frequency: 2412 - 2462 MHz

Maximum Measured Output Power: 0.089 Watts

Antenna Gain = 4.4 dBi; Numeric Gain = 2.75

$$S = (89 \times 2.75) / (4 \times \pi \times 20^2) = 0.05 \text{ mW/cm}^2$$

Under normal operating conditions, the antenna is designed to maintain a separation distance of 20 cm from all persons. The EUT is mobile and fixed.

Calculated Power Density:

Antenna Gain = 4.4 dBi Conducted Power (milli-Watt) = 89	
Separation Distance = 20 cm	
FCC Power Density Limit	Calculated Power Density at 20 cm Distance
1 mW/cm ²	0.05 mW/cm ²