

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

Client: Strategic Services Group, Inc.
Model #: REN91812
Standards: FCC 15.247/RSS-210
ID's: UJX-SSG-REN91812/6715A-SSG91812
Report #: 2006070

Appendix A: FCC Part 1.1307, 1.1310, 2.1091, 2.1093; IC RSS-Gen: RF Exposure

From FCC 1.1310 Table 1A, the maximum permissible RF exposure for an uncontrolled environment is $f/1500$ or 0.61 mW/cm^2 . The electric field generated for a 1 mW/cm^2 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: 903–927 MHz

Measured Maximum Output Power: 0.063 Watts (63 mW)

Antenna Gain = -0.7 dBi; Numeric Gain = 0.85

$$S = (63 \times .85) / (4 \times \pi \times 20^2) = 0.01 \text{ mW/cm}^2$$

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 = -0.7 dBi Conducted Power (milli-Watt) = 63	
Separation Distance = 20 cm	
FCC Power Density Limit	Calculated Power Density at 20 cm Distance
0.61 mW/cm ²	0.01 mW/cm ²