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Client: Full Spectrum Inc. Models: BS100 & MS400 FCC ID: X27-FS-NPCS000 Standard: FCC Part 24

Report #: 2009306

Appendix A: **RF Exposure Compliance**

As described in section 1.4 of this report, the EUT can be used in mobile and base station configurations. RF exposure compliance for base station configurations is addressed at the time of site licensing. RF exposure for mobile configurations is shown below.

Per FCC 1.1310 Table 1, the maximum permissible RF exposure for an uncontrolled environment is f/1500 mW/cm² for the frequencies used in this device (0.6 mW/cm²), and a controlled environment f/300 mW/cm² (3 mW/cm²). The worst case power of the band of operation is used for the calculation below. The distance for the EUT is calculated as shown below.

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

where:

S = power density

P = transmitter conducted power in (mW)

G = antenna numeric gain

d = distance to radiation center (cm)

Note that the EUT has an inherent source-based time average when operating in the mobile configuration corresponding to a duty cycle of 66%. The power shown below reflects that duty cycle (4.7 W * 66% = 3.1 W). Also note that 5 dBi = 3.16 numeric, 13 dBi = 20 numeric.

Environment	Numeric Gain	Power (W)	Separation Distance (cm)	Power Density (mW/cm²)
General Population/ Uncontrolled	3.16	3.1	36	0.6
Occupational/ Controlled	3.16	3.1	20	3
General Population/ Uncontrolled	20	3.1	91	0.6
Occupational/ Controlled	20	3.1	41	3

Notice:

Radiation Exposure Statement for Mobile Configurations

This equipment shall only be installed and operated with an antenna gain not more than that shown in the table above, and installed with a minimum separation distance between the antenna and the general public. and between the antenna and trained personnel as stated in the table above for the respective antenna gains.