

Report Number: 04-0017
Customer: Axonn, L.L.C.
Model: STU

FCC Part 25, Certification

SECTION 4

RF EXPOSURE INFORMATION

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4.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

Power Output

The EUT's maximum expected output power as shown in section 2.6 is

Frequency of Fundamental (MHz)	Measurement (dBm)	Measurement (Watt)
1618.60	22.01	0.159

Calculating +5.5 dBi gain antenna (worst case – vs – 4 dBi gain antenna)

$$0.159 * 5.5 = 0.875 \text{ W}$$

Source Based Time Averaging

This information has not been included and the MPE calculations specified below do not take into consideration any duty cycle correction.

MPE Calculations

The limits for this unit (uncontrolled exposure) is 1.0 mW/cm². Taking the RF Density Field Equation:

$$S = (\text{EIRP in mW}) / (4\pi R^2) \text{ and solving for Field Density } S$$

Solving the above equation yields

$$S = (875(\text{mW}) / (4 * \pi * (20 \text{ cm})^2) = 0.174 \text{ mW/cm}^2$$

The device should be installed to maintain 20 cm from humans during use. Information regarding installation and use should be contained in the users manual.