

APPENDIX A: FCC PART 1.1307, 1.1310, 2.1091, 2.1093 RF EXPOSURE

From FCC 1.1310 Table 1B, the maximum permissible RF exposure for an uncontrolled environment is $f/1500 \text{ mW/cm}^2$ for the 824.04 – 848.97 MHz mode of operation, and 1 mW/cm^2 for the 1851.25 – 1908.75 MHz mode of operation.

The actual power density 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 (W)

G = antenna numeric gain

d = distance to radiation center (m)

Mode	Frequency (MHz)	Antenna Max Gain (dBi)	Numeric Gain	Power (W)	Separation Distance (cm)	Power Density (W/m^2)	Power Density (mW/cm^2)
AMPS	836.5	1	1.26	0.423	6 (calculated) 20 per FCC	5.6	0.56
PCS	1880	1	1.26	0.204	5 (calculated) 20 per FCC	10	1

NOTICE:

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment when installed as directed. This equipment should be installed and operated with an antenna with gain not more than 1 dBi and installed with a minimum of 20 cm of separation distance between the antenna and all persons during normal operation.