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

Per FCC 1.1310 Table 1, the maximum permissible RF exposure for an uncontrolled environment is 1 mW/cm^2 for the frequencies used in this device. The worst case power of the band of operation is used for the calculation below.

The 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 (mW)
G = antenna numeric gain
d = distance to radiation center (cm)

Note that 4.4 dBi = 2.75 numeric.

Environment	Numeric Gain	Power (W)	Separation Distance (cm)	Calculated Power Density (mW/cm^2)
General Population/ Uncontrolled	2.75	0.078	20	0.04

As shown above, the calculated power density at 20 cm is well below the limit.

Radiation Exposure Statement

This equipment shall only be installed and operated with antenna gain not more than that shown in the table above, and installed with a minimum of 20 cm of separation distance between the antenna and the general public.