

## Appendix A: RF Exposure Compliance

Using FCC 1.1310 Table 1B as guidance, the maximum permissible RF exposure for an uncontrolled environment is  $0.567 \text{ mW/cm}^2$ , using the lowest frequency of operation which gives the lowest (and most conservative) value (range of operation is 851 - 869 MHz, 851 MHz was used for the calculation). The worst case power is used for the calculation below.

The actual power density for the EUT 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)

The general public can be in close proximity to the downlink antennas; therefore, general population limits were used. The max antenna gain to be used with this device is 0.6 dBi.

Frequency (MHz)	Antenna Gain (dBi)	Conducted Power* (mW)	Separation Distance (cm)	Power Density ( $\text{mW/cm}^2$ )
573	0.6	2466	20	0.563

\* max composite conducted power

### NOTICE:

#### Radiation Exposure Statement

The calculated separation is 20 cm. All users must stay greater than 20 cm away from the antenna.