

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 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 (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.