# FCC ID: RWB-MT9100R
# RF Exposure Statement for MT9100R:

**Notice in Installation Manual:**
FCC Radiation Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 1.88cm (0.75 inches) between the radiator and your body.

**RF Exposure Calculations:**

The following information provides the minimum separation distances for the two major antenna types used in this system.

**Directional Antenna:**
The 8dBi antenna is the maximum gain antenna certified for use with the product. The minimum separation distance is calculated from **FCC OET 65 Appendix B, Table 1B** Guidelines for General Population/Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain. The exposure limit for a transmitter operating at 905.5MHz is found in mW/cm^2 using the equations f/1200. Since the operating frequency in channel DA produced the lowest limit, that limit will be used in calculation. (905.5/1200 = 0.75mW/cm^2)

S = (Po * G) / (4 * Pi * r^2) or r = SQRT [ (Po * G) / (4 * Pi * S) ]

Where S = 0.75 mW/cm^2 for 915 MHz
Where Po = 5.38 mW (Peak RF, 7.31dBm)
Where G = 6.31 (numeric equivalent to 8dBi antenna gain with 0.0 dB cable loss)
Where r = Minimum Safe Distance from antenna (cm)

**For Po = 5.38mW, r = 1.88cm ( 0.75 inches)**

For a distance [r] of 20cm from this antenna, the field density S = 0.0068 mW/cm^2

Notes:
1. The minimum safe distance is based on a conservative “worst case” prediction, i.e. using the formula shown above and no duty factor. In practice the minimum distance will be much shorter. (Ref. 2)
2. The minimum safe distance has been calculated for the maximum allowed Power Density (S) limit of 0.75 mW/cm^2 for the frequency 915 MHz for uncontrolled environments (Ref. 2).

References:
1. FCC Part 15, sub-clause 15.247 (b) (4) (i)
2. FCC OET Bulletin 65, Edition 97-01
3. FCC Supplement C to OET Bulletin 65, edition 01-01