

**Maximum Permissible Exposure Calculation for
FCC ID: WK5-915-1000-0**

In accordance with OET Bulletin 65

$$S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2} \quad (\text{Equation 1})$$

Where

S= Power Density in mW/cm^2

P= Power input to the antenna in mW . (= 690 per test report)

G= Power gain of the antenna (=1.58, for a 2 dB_i antenna)

R= Distance to center of radiation

The power density limit for uncontrolled exposure = $f/1500 mW/cm^2$. At 915 MHz this becomes $915/1500 = 0.61 mW/cm^2$

Re-arranging equation 1 to solve for R and substituting the values above, we get:

$$R = \sqrt{\frac{P \cdot G}{4\pi S}} = \sqrt{\frac{690(mW) \cdot 1.58}{4\pi \cdot 0.61 \left(\frac{mW}{cm^2}\right)}} \quad (\text{Equation 2})$$

Solving equation 2 for R gives R=11.9 cm or 4.7 inches as the minimum distance.