

**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 *dBi* 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.