

# CALCULATION OF RF HAZARD LIMITS (MPE)

FOXCOT WIRELESS LTD

FCC ID: OJFLITENNA0DB0P1

## RF Hazard Distance

### Calculation

Maximum antenna gain, per user manual: 10 dBi

mW/cm<sup>2</sup> from Table1:                      **0.60**                      = f/1500                      (f = 869 MHz)

Max RF Power P, dBm	TX Antenna G, dBi	MPE Safe Distance, cm
<b>24.0</b>	<b>10.0</b>	<b>18.3</b>

### Basis of Calculations:

$$E^2/3770 = S, \text{ mW/cm}^2$$

$$E, \text{ V/m} = (P_{\text{watts}} * G_{\text{gain}} * 30)^{.5} / d, \text{ meters}$$

$$d = ((P_{\text{watts}} * G * 30) / 3770 * S)^{.5}$$

$$P_{\text{watts}} * G_{\text{gain}} = 10^{(P_{\text{dBm}} - 30 + G_{\text{dBi}}) / 10}$$

**NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less**