

MPE CALCULATION for Axesstel Inc. FCC
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Formular used in the MPE Calculations:

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

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

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

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

Since

S (mW/cm ²) = 1.00	from 1.1310 Table 1
P (dBm) = 26.9	EUT output power
G (dBi) = 2.0	EUT antenna gain

Substitute these parameters into the A above, we have

$$\text{MPE safe distance } d \text{ (cm)} = 7.8$$

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