

WJ Communications

FCCIDs: NTTWJMPR6XXX, NTTWJMPR7XXX

RF Hazard Distance Calculation

mW/cm2 from Table1: **0.60**

Max RF Power P, dBm	TX Antenna G, dBi	MPE Safe Distance, cm	MPE, inches	Comment
29.8	6.0*	22.5	8.8	-MPR7XXX
26.8	9.0	22.4	8.8	-MPR6XXX

Basis of Calculations:

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

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

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

For mobile or fixed location transmitters, minimum separation is 20 cm, even if calculations yield lower numbers

*Maxrad antenna MP9026CPRXFPTNF gain = 8.5 dBi

Cable loss 12ft x 0.21 dB/ft = 2.5 dB

Effective antenna gain = 8.5 dB – 2.5 dB = 6.0 dB