

MPE Exposure Formula:

$$S = (P \times G) / (4 \times \pi \times d^2)$$

where:

S = power density

P = transmitter conducted power in (mW)

G = antenna numeric gain

d = distance to radiation center (m) or $(.02^2) = .020$ m

Enter Data in Linear Units			
Gain =	7.1	Numeric	9.2 dBi
Power =	5012	mW	37 dBm
Frequency =	221	MHz	0.200 mW/cm ²
Cable Loss =	0	dB	
EIRP =	35584.29	mW	41686.94 mW
R (cm) =	118.9896657		S (20cm) = 8.293

Microwave Data Systems will be using different antennas so only the highest gain antenna to be used with transmitter is stated. For worse case scenario this does not include any cable loss. The calculated safe distance is 1.2 meters.