

MPE Calculator	DMP	Test Number	100223A	
MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.				
dBi = dB gain compared to an isotropic radiator.				
S = power density in mW/cm <sup>2</sup>			Antenna Gain (dBi)	1
Output Power			dBi to dBd	2.17
Tx Frequency (MHz)	915	(Watts)	0.000599	-1.17
			Antenna minus cable (dBi)	1.00
Cable Loss (dB)	0.0	(dBm)	-2.23	
Calculated ERP (mw)			Radiated (EIRP) dBm	-1.229
Calculated EIRP (mw)				
			Radiated (ERP) dBm	-3.399
<b>Occupational Limit</b>		<div style="border: 1px solid black; padding: 5px; width: fit-content;">           Power density (S) =            EIRP            ----- = mW/cm<sup>2</sup>            4 p r<sup>2</sup>            [ r (cm), EIRP (mW)]         </div>		
3.05000	mW/cm <sup>2</sup>			
<b>General Public Limit</b>				
0.61000	mW/cm <sup>2</sup>			
FCC radio frequency radiation exposure limits per 1.1310				
Frequency (MHz)		Occupational Limit	Public Limit	
300-1,500		f/300	f/1500	
1,500-10,000		5	1	
FCC radio frequency radiation exposure limits per 1.1310				
Frequency (MHz)		Occupational Limit @ Tx Freq (mW/cm <sup>2</sup> )	Public Limit @ Tx Freq (mW/cm <sup>2</sup> )	
300-1,500		3.05	0.61	
1,500-10,000		5	1	
EIRP Distance Distance S				
milliwatts		cm	inches	mW/cm <sup>2</sup>
0.754		70.00	27.56	0.00001
0.754		60.00	23.62	0.00002
0.754		50.00	19.69	0.00002
0.754		40.00	15.75	0.00004
0.754		30.00	11.81	0.00007
0.754		20.00	7.87	0.00015
0.754		10.00	3.94	0.00060
0.754		9.00	3.54	0.00074
0.754		8.00	3.15	0.00094
0.754		7.00	2.76	0.00122
0.754		6.00	2.36	0.00167
0.754		5.00	1.97	0.00240
0.754		4.00	1.57	0.00375
0.754		3.00	1.18	0.00666
0.754		1.00	0.39	0.05997
Frequency (MHz) Occupational Limit minimum Distance (cm) Public Limit minimum distance (cm)				
300-1,500		1 cm	1 cm	
1,500-10,000		N/A	N/A	