

MPE Calculator	DMP		Test Number	100301	
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 ²		Antenna Gain (dBi)	1	
	Output Power		dBd + 2.17 = dBi	dBi to dBd	2.17
Tx Frequency (MHz)	915	(Watts)	0.000314		-1.17
				Antenna minus cable (dBi)	1.00
Cable Loss (dB)	0.0	(dBm)	-5.03		
	Calculated ERP (mw)	0.240		Radiated (EIRP) dBm	-4.029
	Calculated EIRP (mw)	0.395			
				Radiated (ERP) dBm	-6.199
Occupational Limit		<div style="border: 1px solid black; padding: 5px; width: fit-content;"> Power density (S) = EIRP ----- = mW/cm² 4 p r² [r (cm), EIRP (mW)] </div>			
3.05000	mW/cm ²				
General Public Limit					
0.61000	mW/cm ²				
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 ²)	Public Limit @ Tx Freq (mW/cm ²)		
	300-1,500	3.05	0.61		
	1,500-10,000	5	1		
	EIRP	Distance	Distance	S	
	milliwatts	cm	inches	mW/cm ²	
	0.395	70.00	27.56	0.00001	
	0.395	60.00	23.62	0.00001	
	0.395	50.00	19.69	0.00001	
	0.395	40.00	15.75	0.00002	
	0.395	30.00	11.81	0.00003	
	0.395	20.00	7.87	0.00008	
	0.395	10.00	3.94	0.00031	
	0.395	9.00	3.54	0.00039	
	0.395	8.00	3.15	0.00049	
	0.395	7.00	2.76	0.00064	
	0.395	6.00	2.36	0.00087	
	0.395	5.00	1.97	0.00126	
	0.395	4.00	1.57	0.00197	
	0.395	3.00	1.18	0.00350	
	0.395	1.00	0.39	0.03147	
	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		