

MPE Calculator	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					
		Output Power	dBd + 2.17 = dBi	Antenna Gain (dBi)	18.5	
Tx Frequency (MHz)	9425	Maximum (Watts)	5.100000	dBi to dBd	2.2	
Cable Loss (dB)	0.0	(dBm)	37.08	Antenna minus cable (dBi)	18.50	
Calculated ERP (mw)	219063.578	EIRP = Po(dBm) + Gain (dB)				
Calculated EIRP (mw)	361052.350	Radiated (EIRP) dBm	55.576			
Occupational Limit		ERP = EIRP - 2.17 dB	Radiated (ERP) dBm 53.406			
5.00000 mW/cm ²	Power density (S) EIRP ----- = mW/cm² $4 \pi r^2$ r (cm) EIRP (mW)					
50.00000 W/m ²						
General Public Limit						
1.00000 mW/cm ²						
10.00000 W/m 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	Public Limit @ Tx Freq (mW/cm ²)			
	300-1,500 (mW/cm ²)	31.41666667	6.283333333			
	300-1,500 (W/m ²)	314.1666667	62.83333333			
	1,500-10,000 (mW/cm ²)	5	1			
	1,500-10,000 (W/m ²)	50	10			
EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm ²	W/m ²	cm	meter	inches	Feet
361052.350	0.02873	0.28732	1000.00	10.00	393.70	0.83
361052.350	0.05108	0.51078	750.00	7.50	295.28	0.63
361052.350	0.05864	0.58636	700.00	7.00	275.59	0.58
361052.350	0.07981	0.79810	600.00	6.00	236.22	0.50
361052.350	0.09498	0.94981	550.00	5.50	216.54	0.46
361052.350	0.09853	0.98531	540.00	5.40	212.60	0.45
361052.350	0.11493	1.14927	500.00	5.00	196.85	0.42
361052.350	0.17957	1.79573	400.00	4.00	157.48	0.33
361052.350	0.31924	3.19240	300.00	3.00	118.11	0.25
361052.350	0.45971	4.59706	250.00	2.50	98.43	0.21
361052.350	0.71829	7.18291	200.00	2.000	78.74	0.167
361052.350	0.93818	9.38176	175.00	1.750	68.90	0.146
361052.350	0.99417	9.94174	170.00	1.700	66.93	0.142
361052.350	1.05534	10.55340	165.00	1.650	64.96	0.138
361052.350	1.12233	11.22329	160.00	1.600	62.99	0.133
361052.350	1.27696	12.76961	150.00	1.500	59.06	0.125
361052.350	1.83882	18.38825	125.00	1.250	49.21	0.104
	Frequency (MHz)	Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)	
	300-1,500	N/A	N/A	N/A	N/A	
	1,500-10,000	N/A	N/A	5.40	540 / 213	