

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								
				Antenna Gain (dBi)	18				
		Output Power		dBd + 2.17 = dBi		2.2			
Tx Frequency (MHz)	5785	Maximum (Watts)	0.623633	Antenna Gain (dBd)	15.83				
Cable Loss (dB)	0.0	(dBm)	27.95	Antenna minus cable (dBi)	18.00				
	Calculated ERP (mw)	23874.213		EIRP = Po(dBm) + Gain (dB)					
	Calculated EIRP (mw)	39348.580		Radiated (EIRP) dBm	45.949				
				ERP = EIRP - 2.17 dB					
	Occupational Limit			Radiated (ERP) dBm	43.779				
49.09621	W/m^2	<div>Power density (S) EIRP ----- = mW/cm^2 4 π r^2 r (cm) EIRP (mW)</div>							
	General Public Limit								
9.75649	W/m^2								
IC radio frequency radiation exposure limits per RSS-102									
	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)						
	100-6,000	0.6455f^0.5							
	6,000-15,000	50							
	300-6,000		0.02619f^0.6834						
	6,000-15,000		10						
IC radio frequency radiation exposure limits per RSS-102									
	Frequency (MHz)	Occupational Limit (W/m2)	Public Limit (W/m2)						
	5785	49.10	9.76						
EIRP	S	S	Distance	Distance	Distance	Distance			
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet			
39348.580	0.01253	0.12525	500.00	5.00	196.85	16.40			
39348.580	0.01957	0.19570	400.00	4.00	157.48	13.12			
39348.580	0.03479	0.34792	300.00	3.00	118.11	9.84			
39348.580	0.07828	0.78282	200.00	2.00	78.74	6.56			
39348.580	0.26846	2.68455	108.00	1.08	42.52	3.54			
39348.580	0.31313	3.13126	100.00	1.00	39.37	3.28			
39348.580	0.38658	3.86575	90.00	0.90	35.43	2.95			
39348.580	0.48926	4.89259	80.00	0.80	31.50	2.62			
39348.580	0.63903	6.39033	70.00	0.70	27.56	2.30			
39348.580	0.86979	8.69795	60.00	0.60	23.62	1.97			
39348.580	1.25250	12.52504	50.00	0.500	19.69	1.64			
39348.580	1.86274	18.62737	41.00	0.410	16.14	1.35			
39348.580	1.95704	19.57038	40.00	0.400	15.75	1.31			
39348.580	2.55613	25.56131	35.00	0.350	13.78	1.15			
39348.580	3.47918	34.79178	30.00	0.300	11.81	0.98			
39348.580	4.29528	42.95282	27.00	0.270	10.63	0.89			
39348.580	7.82815	78.28151	20.00	0.200	7.87	0.66			