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)	1
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2437	Maximum (Watts)	0.053456		Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	(dBm)	17.3		Antenna minus cable (dBi)	1.00
	Calculated ERP (mw)	40.832		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	67.298			Radiated (EIRP) dBm	18.280
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	16.110

Power density (S)

EIRP
------- = mW/cm^2
4 ρ r^2

EIRP (mW), r (cm)

	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310		
5	mW/cm^2	Frequency (MHz)	Occupational Limit (mW/cm^2)	Public Limit (mW/cm^2)
50	W/m^2	300-1,500	f/300	f/1500
	General Public Limit	1,500-10,000	5	1
1	mW/cm^2			
10	W/m^2			

	Occupational Limit	IC radio frequency radiation exposure limits per RSS-102		
$0.6455f^{0.5}$	W/m^2	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)
31.86574	W/m^2	100-6,000	$0.6455f^{0.5}$	
	General Public Limit	6,000-15,000	50	
$0.02619f^{0.6834}$	W/m^2	48-300		1.291
5.40397	W/m^2	300-6,000		$0.02619f^{0.6834}$
		6,000-15,000	50	10

EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet
67.298	0.00054	0.005	100.00	1.00	39.37	3.28
67.298	0.00066	0.007	90.00	0.90	35.43	2.95
67.298	0.00084	0.008	80.00	0.80	31.50	2.62
67.298	0.00109	0.011	70.00	0.70	27.56	2.30
67.298	0.00149	0.015	60.00	0.60	23.62	1.97
67.298	0.00214	0.021	50.00	0.50	19.69	1.64
67.298	0.00335	0.033	40.00	0.40	15.75	1.31
67.298	0.00595	0.060	30.00	0.30	11.81	0.98
67.298	0.01339	0.134	20.00	0.20	7.87	0.66
67.298	0.02380	0.238	15.00	0.15	5.91	0.49
67.298	0.05355	0.536	10.00	0.100	3.94	0.33
67.298	0.06612	0.661	9.00	0.090	3.54	0.30
67.298	0.08368	0.837	8.00	0.080	3.15	0.26
67.298	0.10929	1.093	7.00	0.070	2.76	0.23
67.298	0.14876	1.488	6.00	0.060	2.36	0.20
67.298	0.21422	2.142	5.00	0.050	1.97	0.16
67.298	0.33471	3.347	4.00	0.040	1.57	0.13

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Public Limit minimum distance (meters)
47CFR 1.1310		
RSS-102		0.20