MPE Calculation page

MPE Calculator		Test Number:	080606		
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)	0
		Output Power	dBd + 2.17 = dBi	dBi to dBd	2.17
Tx Frequency (MHz)	2457	(Watts)	0.006000		-2.17
				Antenna minus cable (dBi)	0.00
Cable Loss (dB)	0.0	(dBm)	7.78		
	Calculated ERP (mw)	3.640		Radiated (EIRP) dBm	7.782
	Calculated EIRP (mw)	6.000			
				Radiated (ERP) dBm	5.612

Occupational Limit

5.00000 mW/cm^2

General Public Limit

1.00000 mW/cm^2

Power density (S) = EIRP / $4 \pi r^2$ (mW/cm^2)
[r (cm), EIRP (mW)]

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	8.19	1.638
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm^2
6.000	50.00	19.69	0.00019
6.000	25.00	9.84	0.00076
6.000	20.00	7.87	0.00119
6.000	15.00	5.91	0.00212
6.000	10.00	3.94	0.00477
6.000	5.00	1.97	0.01910
6.000	4.00	1.57	0.02984
6.000	3.00	1.18	0.05305
6.000	2.00	0.79	0.11937
6.000	1.00	0.39	0.47746
6.000	0.75	0.30	0.84883
6.000	0.70	0.28	0.97442
6.000	0.50	0.20	1.90986

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm) / inches
300-1,500	N/A	N/A
1,500-10,000	N/A	(0.70) / 0.10