Learn.Net		Model: 800-2407	Test Number:	120220			
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)	2474	Maximum (Watts)	0.001000			Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	(dBm)	0.00			Antenna minus cable (dBi)	1.00
	Calculated ERP (mw)	0.764		EIRP = Po(dBM) + Gain (dB)			
	Calculated EIRP (mw)	1.259				Radiated (EIRP) dBm	1.000
				ERP = EIRP - 2.17 dB			
	Occupational Limit					Radiated (ERP) dBm	-1.170

Power density (S)

$$\frac{EIRP}{4 \, p \, r^2} = \text{mW/cm}^2$$

r (cm) EIRP (mW)

Occupational Limit	
5.00000	mW/cm^2
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/cm2)	8.246666667	1.649333333
300-1,500 (W/m2)	82.46666667	16.49333333
1,500-10,000 (mW/cm2)	5	1
1,500-10,000 (W/m2)	50	10

EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm^2	W/m^2	cm	meter	inches	Feet
1.259	0.00100	0.01002	10.00	0.10	3.94	0.01
1.259	0.00124	0.01237	9.00	0.09	3.54	0.01
1.259	0.00157	0.01565	8.00	0.08	3.15	0.01
1.259	0.00204	0.02045	7.00	0.07	2.76	0.01
1.259	0.00278	0.02783	6.00	0.06	2.36	0.01
1.259	0.00401	0.04007	5.00	0.05	1.97	0.00
1.259	0.00626	0.06261	4.00	0.04	1.57	0.00
1.259	0.01113	0.11131	3.00	0.03	1.18	0.00
1.259	0.02505	0.25046	2.00	0.02	0.79	0.00
1.259	0.10018	1.00182	1.00	0.01	0.39	0.00
1.259	0.12368	1.23682	0.90	0.009	0.35	0.001
1.259	0.15653	1.56535	0.80	0.008	0.31	0.001
1.259	0.20445	2.04453	0.70	0.007	0.28	0.001
1.259	0.27828	2.78284	0.60	0.006	0.24	0.001
1.259	0.40073	4.00728	0.50	0.005	0.20	0.000
1.259	0.62614	6.26138	0.40	0.004	0.16	0.000
1.259	1.11313	11.13134	0.30	0.003	0.12	0.000

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