MPE Calculation page

MPE Calculator	Garmin IPH-01402		Test Number	080708A	
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	2.17
Tx Frequency (MHz)	2457	(Watts)	0.000286		-1.17
				Antenna minus cable (dBi)	1.00
Cable Loss (dB)	0.0	(dBm)	-5.43		
	Calculated ERP (mw)	0.219		Radiated (EIRP) dBm	-4.429
	Calculated EIRP (mw)	0.361			
				Radiated (ERP) dBm	-6.599

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
0.361	10.00	3.94	0.00029
0.361	9.00	3.54	0.00035
0.361	8.00	3.15	0.00045
0.361	7.00	2.76	0.00059
0.361	6.00	2.36	0.00080
0.361	5.00	1.97	0.00115
0.361	4.00	1.57	0.00179
0.361	3.00	1.18	0.00319
0.361	2.00	0.79	0.00718
0.361	1.00	0.39	0.02870
0.361	0.50	0.20	0.11481
0.361	0.40	0.16	0.17939
0.361	0.30	0.12	0.31891
0.361	0.20	0.08	0.71755
0.361	0.17	0.07	0.99315

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	N/A	N/A
1,500-10,000	N/A	0.17