Garmin	Model: A03113		Test Number:	160922		
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)	8.4
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2437	Maximum (Watts)	0.011298		Antenna Gain (dBd)	6.23
Cable Loss (dB)	0.0	(dBm)	10.5		Antenna minus cable (dBi)	8.40
	Calculated ERP (mw)	47.424		EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	78.163			Radiated (EIRP) dBm	18.930
				ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm	16.760

Power density (S)

EIRP
------- = mW/cm^2
4 p 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
78.163	0.00077	0.00768	90.00	0.90	35.43	2.95
78.163	0.00097	0.00972	80.00	0.80	31.50	2.62
78.163	0.00127	0.01269	70.00	0.70	27.56	2.30
78.163	0.00173	0.01728	60.00	0.60	23.62	1.97
78.163	0.00249	0.02488	50.00	0.50	19.69	1.64
78.163	0.00389	0.03887	40.00	0.40	15.75	1.31
78.163	0.00691	0.06911	30.00	0.30	11.81	0.98
78.163	0.01555	0.15550	20.00	0.20	7.87	0.66
78.163	0.03680	0.36805	13.00	0.13	5.12	0.43
78.163	0.09719	0.97187	8.00	0.08	3.15	0.26
78.163	0.12694	1.26939	7.00	0.070	2.76	0.23
78.163	0.17278	1.72778	6.00	0.060	2.36	0.20
78.163	0.24880	2.48800	5.00	0.050	1.97	0.16
78.163	0.38875	3.88750	4.00	0.040	1.57	0.13
78.163	0.69111	6.91111	3.00	0.030	1.18	0.10
78.163	1.55500	15.54999	2.00	0.020	0.79	0.07
78.163	2.76444	27.64443	1.50	0.015	0.59	0.05

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Public Limit minimum distance (meters)
47CFR 1.1310	0.02	0.20
RSS-102	0.02	0.20