Garmin		03294	Test Number:	170808C		
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
				dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	2440	Average Power (Watts)	0.0630		Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	(dBm)	18.0		Antenna minus cable (dBi)	1.00
Calculated ERP (mw)		48.084		EIRP = Po(dBM) + Gain (dB)		
Calculated EIRP (mw)		79.250			Radiated (EIRP) dBm	18.990
				ERP = EIRP - 2.17 dB		
Occupational Limit					Radiated (ERP) dBm	16.820
5	mW/cm^2					
5.00000	W/m^2					
General Public Limit						
1	mW/cm^2					
1.00000	W/m^2					

Power density (S)
EIRP
------- = mW/cm^2
4 p r^2
r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit (mW/cm^2)	Public Limit (mW/cm2)
300-1,500	f/300	f/1500
1,500-10,000	5	1

Canada Occupational Limit	
$0.6455f^{0.5}$	W/m^2
31.88535	W/m^2
Canada General Public Limit	
$0.02619f^{0.6834}$	W/m^2
5.40851	W/m^2

IC radio frequency radiation exposure limits per RSS-102		
Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)
100-6,000	$0.6455f^{0.5}$	
6,000-15,000	50	
48-300		1.291
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
79.250	0.00063	0.00631	100.00	1.00	39.37	3.28
79.250	0.00078	0.00779	90.00	0.90	35.43	2.95
79.250	0.00099	0.00985	80.00	0.80	31.50	2.62
79.250	0.00129	0.01287	70.00	0.70	27.56	2.30
79.250	0.00175	0.01752	60.00	0.60	23.62	1.97
79.250	0.00252	0.02523	50.00	0.50	19.69	1.64
79.250	0.00394	0.03942	40.00	0.40	15.75	1.31
79.250	0.00701	0.07007	30.00	0.30	11.81	0.98
79.250	0.01009	0.10090	25.00	0.25	9.84	0.82
79.250	0.01577	0.15766	20.00	0.20	7.87	0.66
79.250	0.01747	0.17470	19.00	0.190	7.48	0.62
79.250	0.01946	0.19465	18.00	0.180	7.09	0.59
79.250	0.02182	0.21822	17.00	0.170	6.69	0.56
79.250	0.02463	0.24635	16.00	0.160	6.30	0.52
79.250	0.02803	0.28029	15.00	0.150	5.91	0.49
79.250	0.03218	0.32176	14.00	0.140	5.51	0.46
79.250	0.06307	0.63065	10.00	0.100	3.94	0.33

Frequency (MHz)	Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)
300-1,500	N/A	N/A	0.20	20 / 7.8
1,500-10,000	N/A	N/A	N/A	N/A