

Garmin		A03302	Test Number:	170927		
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)		3
				dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	1621	Peak Power (Watts)	1.4300	Antenna Gain (dBd)		0.83
Cable Loss (dB)	0.0	(dBm)	31.6	Antenna minus cable (dBi)		3.00
	Calculated ERP (mw)	1731.155		EIRP = Po(dBm) + Gain (dB)		
	Calculated EIRP (mw)	2853.225		Radiated (EIRP) dBm		34.553
				ERP = EIRP - 2.17 dB		
				Radiated (ERP) dBm		32.383
Occupational Limit	<div style="border: 1px solid black; padding: 5px;"> Power density (S) EIRP ----- = mW/cm² $4 \pi r^2$ r (cm) EIRP (mW) </div>					
5 mW/cm ²						
50.00000 W/m ²						
General Public Limit						
1 mW/cm ²						
10.00000 W/m ²						
FCC radio frequency radiation exposure limits per 1.1310						
	Frequency (MHz)	Occupational Limit mW/cm ²	Public Limit mW/cm ²			
	300-1,500	f/300	f/1500			
	1,500-10,000	5	1			
Canada Occupational Limit						
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
2853.225	0.02271	0.22705	100.00	1.00	39.37	3.28
2853.225	0.02803	0.28031	90.00	0.90	35.43	2.95
2853.225	0.03548	0.35477	80.00	0.80	31.50	2.62
2853.225	0.04634	0.46337	70.00	0.70	27.56	2.30
2853.225	0.06307	0.63070	60.00	0.60	23.62	1.97
2853.225	0.09082	0.90821	50.00	0.50	19.69	1.64
2853.225	0.14191	1.41908	40.00	0.40	15.75	1.31
2853.225	0.25228	2.52280	30.00	0.30	11.81	0.98
2853.225	0.36328	3.63284	25.00	0.25	9.84	0.82
2853.225	0.39419	3.94188	24.00	0.24	9.45	0.79
2853.225	0.56763	5.67631	20.00	0.200	7.87	0.66
2853.225	0.70078	7.00779	18.00	0.180	7.09	0.59
2853.225	0.78565	7.85649	17.00	0.170	6.69	0.56
2853.225	0.88692	8.86924	16.00	0.160	6.30	0.52
2853.225	1.00912	10.09122	15.00	0.150	5.91	0.49
2853.225	1.15843	11.58431	14.00	0.140	5.51	0.46
2853.225	2.27052	22.70524	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	0.24	24 / 9.5
		1,500-10,000	N/A	N/A	N/A	N/A

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 Revision 1

Garmin International, Inc.
 Model: A03302
 Test #: 170927
 Test to: 47CFR (Part 25), RSS-170
 File: A03302 RFEExp

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