

Garmin		Model: Astro 320	Test Number:	110420		
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					
		Output Power		dBd + 2.17 = dBi	Antenna Gain (dBi)	1
		Maximum (Watts)	0.000370		dBi to dBd	2.2
Tx Frequency (MHz)	2457				Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	(dBm)	-4.32		Antenna minus cable (dBi)	1.00
Calculated ERP (mw)	0.282			EIRP = Po(dBm) + Gain (dB)		
Calculated EIRP (mw)	0.466				Radiated (EIRP) dBm	-3.320
Occupational Limit				ERP = EIRP - 2.17 dB		
5.00000 mW/cm ²					Radiated (ERP) dBm	-5.490
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		
		300-1,500 (mW/cm2)	8.19	1.638		
		300-1,500 (W/m2)	81.9	16.38		
		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
0.466	0.00037	0.00371	10.00	0.10	3.94	0.01
0.466	0.00046	0.00457	9.00	0.09	3.54	0.01
0.466	0.00058	0.00579	8.00	0.08	3.15	0.01
0.466	0.00076	0.00756	7.00	0.07	2.76	0.01
0.466	0.00103	0.01029	6.00	0.06	2.36	0.01
0.466	0.00148	0.01482	5.00	0.05	1.97	0.00
0.466	0.00232	0.02316	4.00	0.04	1.57	0.00
0.466	0.00412	0.04117	3.00	0.03	1.18	0.00
0.466	0.00926	0.09263	2.00	0.02	0.79	0.00
0.466	0.03705	0.37050	1.00	0.01	0.39	0.00
0.466	0.04574	0.45741	0.90	0.009	0.35	0.001
0.466	0.05789	0.57891	0.80	0.008	0.31	0.001
0.466	0.07561	0.75613	0.70	0.007	0.28	0.001
0.466	0.10292	1.02917	0.60	0.006	0.24	0.001
0.466	0.14820	1.48201	0.50	0.005	0.20	0.000
0.466	0.23156	2.31564	0.40	0.004	0.16	0.000
0.466	0.41167	4.11668	0.30	0.003	0.12	0.000
		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	N/A	N/A
		1,500-10,000	N/A	N/A	N/A	N/A