

MPE Calculator Garmin Int. IPH-01393 Test 080306
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/cm² Antenna Gain (dBi) 0
Output Power dBd + 2.17 = dBi dBi to dBd 2.17
Tx Frequency (MHz) 2440 (Watts) 0.000027 Antenna Gain (dBd) -2.17
(dBm) -15.62
Cable Loss (dB) 0.0 Antenna minus cable (dBi) 0.00

Calculated ERP (mw) 0.017 EIRP = Po(dBM) + Gain (dB)
Calculated EIRP (mw) 0.027 Radiated (EIRP) dBm -15.622
ERP = EIRP - 2.17 dB
Radiated (ERP) dBm -17.792

Occupational Limit

5.00000 mW/cm²

General Public Limit

1.00000 mW/cm²

Power density (S)
EIRP
----- = mW/cm²
4 π r²
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	8.133333333	1.626666667
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
0.027	100.00	39.37	0.00000
0.027	90.00	35.43	0.00000
0.027	80.00	31.50	0.00000
0.027	70.00	27.56	0.00000
0.027	60.00	23.62	0.00000
0.027	50.00	19.69	0.00000
0.027	40.00	15.75	0.00000
0.027	30.00	11.81	0.00000
0.027	25.00	9.84	0.00000
0.027	20.00	7.87	0.00001
0.027	19.00	7.48	0.00001
0.027	18.00	7.09	0.00001
0.027	17.00	6.69	0.00001
0.027	16.00	6.30	0.00001
0.027	15.00	5.91	0.00001
0.027	14.00	5.51	0.00001
0.027	13.00	5.12	0.00001
0.027	12.00	4.72	0.00002
0.027	10.00	3.94	0.00002
0.027	7.00	2.76	0.00004
0.027	5.00	1.97	0.00009
0.027	4.00	1.57	0.00014
0.027	2.00	0.79	0.00055
0.027	1.00	0.39	0.00218
0.027	0.10	0.04	0.21804

Frequency (MHz)	Occupational Limit minimum Distance (cm)	General Public Limit minimum distance (cm)
300-1,500	0.10	0.10
1,500-10,000	N/A	N/A