

MPE Calculation page for 011-01326-0x.

MPE Calculator Garmin IPH-01017 Test 060208
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

		Output Power	dBd + 2.17 = dBi	Antenna Gain (dBi)	1
Tx Frequency (MHz)	2457	(Watts)	0.0005	dBi to dBd	2.17
				Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	(dBm)	-3.01	Antenna minus cable (dBi)	1.00

Calculated ERP (mw) 0.382 EIRP = Po(dBm) + Gain (dB)
Calculated EIRP (mw) 0.629 Radiated (EIRP) dBm -2.010
ERP = EIRP - 2.17 dB
Radiated (ERP) dBm -4.180

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	8.19	1.638
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
0.629	50.00	19.69	0.00002
0.629	40.00	15.75	0.00003
0.629	30.00	11.81	0.00006
0.629	25.00	9.84	0.00008
0.629	20.00	7.87	0.00013
0.629	15.00	5.91	0.00022
0.629	14.00	5.51	0.00026
0.629	13.00	5.12	0.00030
0.629	12.00	4.72	0.00035
0.629	11.00	4.33	0.00041
0.629	10.00	3.94	0.00050
0.629	9.00	3.54	0.00062
0.629	8.00	3.15	0.00078
0.629	7.00	2.76	0.00102
0.629	6.00	2.36	0.00139
0.629	5.00	1.97	0.00200
0.629	4.00	1.57	0.00313
0.629	3.00	1.18	0.00557
0.629	2.00	0.79	0.01252
0.629	1.75	0.69	0.01636
0.629	1.50	0.59	0.02226
0.629	1.25	0.49	0.03206
0.629	1.00	0.39	0.05009
0.629	0.75	0.30	0.08905
0.629	0.50	0.20	0.20036