

MPE Calculation page for IPH-01093

MPE Calculator Garmin IPH-01093 Test Number 070425
 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) 1
 Output Power dBd + 2.17 = dE dBi to dBd 2.17
 Tx Frequency (MHz) 2460 (Watts) 0.000344 -1.17
 Antenna minus cable (dBi) 1.00
 Cable Loss (dB) 0.0 (dBm) -4.63
 Calculated ERP (mw) 0.263 Radiated (EIRP) dBm -3.634
 Calculated EIRP (mw) 0.433 Radiated (ERP) dBm -5.804

Occupational Limit Power density (S) =
 5.00000 mW/cm² EIRP
 ----- = mW/cm²
 4 π r²
General Public Limit [r (cm), EIRP (mW)]
 1.00000 mW/cm²

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	8.2	1.64
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
0.433	50.00	19.69	0.00001
0.433	40.00	15.75	0.00002
0.433	30.00	11.81	0.00004
0.433	25.00	9.84	0.00006
0.433	20.00	7.87	0.00009
0.433	15.00	5.91	0.00015
0.433	14.00	5.51	0.00018
0.433	13.00	5.12	0.00020
0.433	12.00	4.72	0.00024
0.433	11.00	4.33	0.00028
0.433	10.00	3.94	0.00034
0.433	9.00	3.54	0.00043
0.433	8.00	3.15	0.00054
0.433	7.00	2.76	0.00070
0.433	6.00	2.36	0.00096
0.433	5.00	1.97	0.00138
0.433	4.00	1.57	0.00215
0.433	3.00	1.18	0.00383
0.433	2.00	0.79	0.00862
0.433	1.00	0.39	0.03446
0.433	0.50	0.20	0.13785
0.433	0.40	0.16	0.21539
0.433	0.30	0.12	0.38292
0.433	0.20	0.08	0.86157
0.433	0.18	0.07	1.06366

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	N/A	N/A
1,500-10,000	N/A	0.18

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Garmin International, Inc.
 MODEL: 011-01478-xx
 Test #: 070425T SN: 33
 Test to: FCC Parts 2 and 15.249, RSS-210

FCC ID#: IPH-01093
 IC:1792A-01093
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