

MPE Calculation page for 011-01410-xx.

MPE Calculator Garmin Nuvi 6xx Test 60726

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 = dBi dBi to dBd 2.17

Tx Frequency (MHz) **2457** (Watts) **0.0009** Antenna Gain (dBd) **-1.17**

Cable Loss (dB) **0.0** (dBm) -0.32 Antenna minus cable (dBi) 1.00

Calculated ERP (mw) 0.710 EIRP = Po(dBm) + Gain (dB)

Calculated EIRP (mw) 1.171 Radiated (EIRP) dBm 0.685

ERP = EIRP - 2.17 dB

Radiated (ERP) dBm -1.485

Occupational Limit
5.00000 mW/cm²

Power density (S)
EIRP
----- = mW/cm²
4 π r²

General Public Limit
1.00000 mW/cm²

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
1.171	50.00	19.69	0.00004
1.171	40.00	15.75	0.00006
1.171	30.00	11.81	0.00010
1.171	25.00	9.84	0.00015
1.171	20.00	7.87	0.00023
1.171	15.00	5.91	0.00041
1.171	14.00	5.51	0.00048
1.171	13.00	5.12	0.00055
1.171	12.00	4.72	0.00065
1.171	11.00	4.33	0.00077
1.171	10.00	3.94	0.00093
1.171	9.00	3.54	0.00115
1.171	8.00	3.15	0.00146
1.171	7.00	2.76	0.00190
1.171	6.00	2.36	0.00259
1.171	5.00	1.97	0.00373
1.171	4.00	1.57	0.00582
1.171	3.00	1.18	0.01035
1.171	2.00	0.79	0.02329
1.171	1.75	0.69	0.03042
1.171	1.50	0.59	0.04141
1.171	1.25	0.49	0.05963
1.171	1.00	0.39	0.09317
1.171	0.75	0.30	0.16563
1.171	0.50	0.20	0.37268

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	N/A