

MPE Calculation page for Nuvi 310/360.

MPE Calculator Garmin Nuvi 310/360 Test 060221

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) **2441** (Watts) **0.0012** Antenna Gain (dBd) **-1.17**

Cable Loss (dB) **0.0** (dBm) 0.79 Antenna minus cable (dBi) 1.00

Calculated ERP (mw) 0.917 EIRP = Po(dBm) + Gain (dB)

Calculated EIRP (mw) 1.511 Radiated (EIRP) dBm 1.792

ERP = EIRP - 2.17 dB

Radiated (ERP) dBm -0.378

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	8.13666667	1.62733333
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
1.511	50.00	19.69	0.00005
1.511	40.00	15.75	0.00008
1.511	30.00	11.81	0.00013
1.511	25.00	9.84	0.00019
1.511	20.00	7.87	0.00030
1.511	15.00	5.91	0.00053
1.511	14.00	5.51	0.00061
1.511	13.00	5.12	0.00071
1.511	12.00	4.72	0.00083
1.511	11.00	4.33	0.00099
1.511	10.00	3.94	0.00120
1.511	9.00	3.54	0.00148
1.511	8.00	3.15	0.00188
1.511	7.00	2.76	0.00245
1.511	6.00	2.36	0.00334
1.511	5.00	1.97	0.00481
1.511	4.00	1.57	0.00751
1.511	3.00	1.18	0.01336
1.511	2.00	0.79	0.03005
1.511	1.75	0.69	0.03926
1.511	1.50	0.59	0.05343
1.511	1.25	0.49	0.07694
1.511	1.00	0.39	0.12022
1.511	0.75	0.30	0.21372
1.511	0.50	0.20	0.48087

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