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/cm^2

				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
Calculated EIRP (mw) 1.511

EIRP = Po(dBM) + Gain (dB)
Radiated (EIRP) dBm 1.792
ERP = EIRP - 2.17 dB
Radiated (ERP) dBm -0.378

Occupational Limit
5.00000 mW/cm^2

General Public Limit
1.00000 mW/cm^2

Power density (S)
EIRP
------- = mW/cm^2
4 π r^2
r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	ccupational Lir	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