

MPE Calculator	Ligowave	Test Number	101229
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)	32
Output Power		dBd + 2.17 = dBi	dBi to dBd
Tx Frequency (MHz)	5785	(Watts)	0.436000
		Antenna minus cable (dBi)	32.00
Cable Loss (dB)	0.0	(dBm)	26.39
Calculated ERP (mw)		419262.953	Radiated (EIRP) dBm
Calculated EIRP (mw)		691013.432	
			Radiated (ERP) dBm
Occupational Limit		Power density (S) =	
5.00000	mW/cm^2	EIRP	
		----- = mW/cm^2	
General Public Limit		4 p r^2	
1.00000	mW/cm^2	[ 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
1,500-100,000		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		19.28333333	3.856666667
1,500-100,000		5	1
EIRP		Distance	Distance
milliwatts		cm	inches
691013.432		1000.00	393.70
691013.432		750.00	295.28
691013.432		500.00	196.85
691013.432		400.00	157.48
691013.432		300.00	118.11
691013.432		250.00	98.43
691013.432		240.00	94.49
691013.432		230.00	90.55
691013.432		200.00	78.74
691013.432		150.00	59.06
691013.432		120.00	47.24
691013.432		110.00	43.31
691013.432		105.00	41.34
691013.432		100.00	39.37
691013.432		95.00	37.40
Frequency (MHz)		Occupational Limit minimum Distance (cm / in)	Public Limit minimum distance (cm / in)
300-1,500		N/A	N/A
1,500-10,000		105cm / 41.3"	230cm / 90.6"