

MPE Calculator	Ligowave	Test Number	090805
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 <sup>2</sup>	Antenna Gain (dBi)	32.5
	Output Power	dBd + 2.17 = dBi	dBi to dBd
Tx Frequency (MHz)	5785	(Watts)	0.372400
			30.33
			Antenna minus cable (dBi)
Cable Loss (dB)	0.0	(dBm)	25.71
	Calculated ERP (mw)	401799.759	Radiated (EIRP) dBm
	Calculated EIRP (mw)	662231.252	
			Radiated (ERP) dBm
			56.040
<b>Occupational Limit</b>		Power density (S) =	
5.00000	mW/cm <sup>2</sup>	EIRP	
		----- = mW/cm <sup>2</sup>	
<b>General Public Limit</b>		4 p r^2	
1.00000	mW/cm <sup>2</sup>	[ 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 <sup>2</sup> )	Public Limit @ Tx Freq (mW/cm <sup>2</sup> )
	300-1,500	19.28333333	3.856666667
	1,500-10,000	5	1
	EIRP	Distance	Distance
	milliwatts	cm	Feet
	662231.252	400.00	13.12
	662231.252	350.00	11.48
	662231.252	300.00	9.84
	662231.252	250.00	8.20
	662231.252	225.00	7.38
	662231.252	200.00	6.56
	662231.252	175.00	5.74
	662231.252	150.00	4.92
	662231.252	125.00	4.10
	662231.252	120.00	3.94
	662231.252	115.00	3.77
	662231.252	110.00	3.61
	662231.252	105.00	3.44
	662231.252	102.00	3.35
	662231.252	100.00	3.28
	Frequency (MHz)	Occupational Limit minimum Distance (cm / feet)	Public Limit minimum distance (cm / feet)
	300-1,500	N/A	N/A
	1,500-10,000	102 / 3.35	225 / 7.38