

Lectrosonics		Model: M4T	Test Number:	101116M4T	
MPE Calculator	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)	3
		Output Power		dBd + 2.17 = dBi	2.2
Tx Frequency (MHz)	915.8	Maximum (Watts)	0.7063	Antenna Gain (dBd)	0.83
Cable Loss (dB)	0.0	(dBm)	28.49	Antenna minus cable (dBi)	3.00
	Calculated ERP (mw)	855.045		EIRP = Po(dBm) + Gain (dB)	
	Calculated EIRP (mw)	1409.254		Radiated (EIRP) dBm	31.490
				ERP = EIRP - 2.17 dB	
				Radiated (ERP) dBm	29.320
<b>Occupational Limit</b>		<div style="border: 1px solid black; padding: 5px;">           Power density (S)            EIRP            ----- = mW/cm<sup>2</sup>  <math>4 \pi r^2</math>            r (cm) EIRP (mW)         </div>			
3.05267	mW/cm <sup>2</sup>				
<b>General Public Limit</b>					
0.61053	mW/cm <sup>2</sup>				
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	3.052666667	0.610533333		
	1,500-10,000	5	1		
	EIRP	Distance	Distance	S	Distance
	milliwatts	cm	inches	mW/cm <sup>2</sup>	Feet
	1409.254	100.00	39.37	0.01121	3.28
	1409.254	90.00	35.43	0.01385	2.95
	1409.254	80.00	31.50	0.01752	2.62
	1409.254	70.00	27.56	0.02289	2.30
	1409.254	60.00	23.62	0.03115	1.97
	1409.254	50.00	19.69	0.04486	1.64
	1409.254	40.00	15.75	0.07009	1.31
	1409.254	30.00	11.81	0.12461	0.98
	1409.254	20.00	7.87	0.28036	0.66
	1409.254	15.00	5.91	0.49842	0.49
	1409.254	14.00	5.51	0.57217	0.46
	1409.254	13.00	5.12	0.66358	0.43
	1409.254	10.00	3.94	1.12145	0.33
	1409.254	8.00	3.15	1.75226	0.26
	1409.254	6.10	2.40	3.01384	0.20
	1409.254	6.00	2.36	3.11513	0.20
	1409.254	5.00	1.97	4.48579	0.16
	Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)		
	300-1,500	6.1 / 2.4	14.0 / 5.5		
	1,500-10,000	N/A	N/A		