

Lectrosonics	Model: HHE	Test Number:	111114A				
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 ²						
				Antenna Gain (dBi)		1	
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2	
Tx Frequency (MHz)	504	Maximum (Watts)	0.1000		Antenna Gain (dBd)	-1.17	
Cable Loss (dB)	0.0	(dBm)	20.00		Antenna minus cable (dBi)	1.00	
	Calculated ERP (mw)	76.384		EIRP = Po(dBm) + Gain (dB)			
	Calculated EIRP (mw)	125.893			Radiated (EIRP) dBm	21.000	
				ERP = EIRP - 2.17 dB			
	Occupational Limit	<div style="border: 1px solid black; padding: 5px;"> Power density (S) EIRP ----- = mW/cm² 4 π r² r (cm) EIRP (mW) </div>				Radiated (ERP) dBm	18.830
	1.68000 mW/cm ²						
	16.80000 W/m ²						
	General Public Limit						
	0.33600 mW/cm ²						
	3.36000 W/m ²						
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	Public Limit @ Tx Freq (mW/cm ²)				
	300-1,500 (mW/cm2)	1.68	0.336				
	300-1,500 (W/m2)	16.8	3.36				
	1,500-10,000 (mW/cm2)	5	1				
	1,500-10,000 (W/m2)	50	10				
EIRP	S	S	Distance	Distance	Distance	Distance	
milliwatts	mW/cm ²	W/m ²	cm	meter	inches	Feet	
125.893	0.00100	0.01002	100.00	1.00	39.37	0.08	
125.893	0.00401	0.04007	50.00	0.50	19.69	0.04	
125.893	0.00626	0.06261	40.00	0.40	15.75	0.03	
125.893	0.01113	0.11131	30.00	0.30	11.81	0.03	
125.893	0.02505	0.25046	20.00	0.20	7.87	0.02	
125.893	0.03092	0.30920	18.00	0.18	7.09	0.02	
125.893	0.04453	0.44525	15.00	0.15	5.91	0.01	
125.893	0.05111	0.51113	14.00	0.14	5.51	0.01	
125.893	0.05928	0.59279	13.00	0.13	5.12	0.01	
125.893	0.06957	0.69571	12.00	0.12	4.72	0.01	
125.893	0.10018	1.00182	10.00	0.10	3.94	0.01	
125.893	0.12368	1.23682	9.00	0.09	3.54	0.01	
125.893	0.27828	2.78284	6.00	0.06	2.36	0.01	
125.893	0.33118	3.31180	5.50	0.06	2.17	0.00	
125.893	0.62614	6.26138	4.00	0.04	1.57	0.00	
125.893	1.11313	11.13134	3.00	0.03	1.18	0.00	
125.893	1.60291	16.02914	2.50	0.03	0.98	0.00	
			Occupational Limit minimum Distance (meters)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (meters)	Public Limit minimum distance (cm / inches)	
		Frequency (MHz)					
		300-1,500	0.03	2.5 / 1.0	0.06	5.5 / 2.2	
		1,500-10,000	N/A	N/A	N/A	N/A	