

MPE Calculator	Lectrosonics	UH400A	Test 080502		
	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)	0
				dBi to dBd	2.17
	Output Power			dBd + 2.17 = dBi	
Tx Frequency (MHz)	503	(Watts)	0.1000	Antenna Gain (dBd)	-2.17
		(dBm)	20.00		
Cable Loss (dB)	0.0			Antenna minus cable (dBi)	0.00
Calculated ERP (mw)	60.674			EIRP = Po(dBm) + Gain (dB)	
Calculated EIRP (mw)	100.000			Radiated (EIRP) dBm	20.000
				ERP = EIRP - 2.17 dB	
Occupational Limit				Radiated (ERP) dBm	17.830
1.67667	mW/cm²	Power density (S) EIRP ----- = mW/cm ² 4 π r ² r (cm) EIRP (mW)			
General Public Limit					
0.33533	mW/cm²				
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 ²)	Public Limit @ Tx Freq (mW/cm ²)			
300-1,500	1.676666667	0.335333333			
1,500-10,000	5	1			
EIRP Distance Distance S					
milliwatts		cm	inches	mW/cm ²	
100.000		50.00	19.69	0.00318	
100.000		40.00	15.75	0.00497	
100.000		30.00	11.81	0.00884	
100.000		25.00	9.84	0.01273	
100.000		20.00	7.87	0.01989	
100.000		15.00	5.91	0.03537	
100.000		14.00	5.51	0.04060	
100.000		13.00	5.12	0.04709	
100.000		12.00	4.72	0.05526	
100.000		11.00	4.33	0.06577	
100.000		10.00	3.94	0.07958	
100.000		9.00	3.54	0.09824	
100.000		8.00	3.15	0.12434	
100.000		7.00	2.76	0.16240	
100.000		6.00	2.36	0.22105	
100.000		5.75	2.26	0.24069	
100.000		5.50	2.17	0.26307	
100.000		5.00	1.97	0.31831	
100.000		4.90	1.93	0.33143	
100.000		3.00	1.18	0.88419	
100.000		2.50	0.98	1.27324	
100.000		2.20	0.87	1.64416	
100.000		2.00	0.79	1.98944	
100.000		1.00	0.39	7.95775	
100.000		0.50	0.20	31.83099	
Occupational Limit minimum Distance (cm) General Public Limit minimum distance (cm)					
Frequency (MHz)	Occupational Limit		General Public Limit		
300-1,500	2.20		4.90		
1,500-10,000	N/A		N/A		

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Lectrosonics, Inc.
Model: UH400A
Test #: 080502
Test to: FCC Parts 2 and 74
File: RFExp DBZUH400E

FCC ID#: DBZUH400E
SN: P551
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