MPE Calculator	Test	081118				
	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
		Output Power	2 Watts 50%	dBd + 2.17 = dBi	dBi to dBd	2.17
Tx Frequency (MHz)	155.025	(Watts)	1.00		Antenna Gain (dBd)	-2.17
Cable Loss (dB)	0.0	(dBm)	30.00		Antenna minus cable (dBi)	0.00
Calculated ERP (mw)		606.736			EIRP = Po(dBM) + Gain (dB)	
Calculated EIRP (mw)		1000.000			Radiated (EIRP) dBm	30.000
					ERP = EIRP - 2.17 dB	
Occupational Limit					Radiated (ERP) dBm	27.830
0.51675	**mW/cm²**					
General Public Limit						
0.10335	**mW/cm²**					

Power density (S)
EIRP
------- = mW/cm^2
4 π r^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
1,500-10,000	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	0.51675	0.10335
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm²
1000.000	100.00	39.37	0.00796
1000.000	50.00	19.69	0.03183
1000.000	45.00	17.72	0.03930
1000.000	40.00	15.75	0.04974
1000.000	35.00	13.78	0.06496
1000.000	30.00	11.81	0.08842
1000.000	28.00	11.02	0.10150
1000.000	24.00	9.45	0.13816
1000.000	23.00	9.06	0.15043
1000.000	20.00	7.87	0.19894
1000.000	13.00	5.12	0.47087
1000.000	10.00	3.94	0.79577
1000.000	5.00	1.97	3.18310
1000.000	2.00	0.79	19.89437

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	13.00	28.00
1,500-10,000	N/A	N/A