Dbii		Model: F49	Test Number:	80918B	
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)	26
		Output Power		dBd + 2.17 = dBi	dBi to dBd	2.2
Tx Frequency (MHz)	4967.5	Maximum (Watts)	0.5000	Antenna Gain (dBd)	23.83
Cable Loss (dB)	0.0	(dBm)	26.99	Antenna minus cable (dBi)	26.00

Calculated ERP (mw) 120773.042
Calculated EIRP (mw) 199053.585

EIRP = Po(dBM) + Gain (dB)
Radiated (EIRP) dBm 52.990

ERP = EIRP - 2.17 dB
Radiated (ERP) dBm 50.820

Occupational Limit
5.00000 mW/cm^2

General Public Limit
1.00000 mW/cm^2

Power density (S)
$$\frac{\text{EIRP}}{4 \pi r^2} = \text{mW/cm}^2$$
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	16.55833333	3.311666667
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm^2	Feet
199053.585	350.00	137.80	0.12931	11.48
199053.585	300.00	118.11	0.17600	9.84
199053.585	200.00	78.74	0.39600	6.56
199053.585	150.00	59.06	0.70401	4.92
199053.585	126.00	49.61	0.99774	4.13
199053.585	125.00	49.21	1.01377	4.10
199053.585	100.00	39.37	1.58402	3.28
199053.585	90.00	35.43	1.95558	2.95
199053.585	75.00	29.53	2.81603	2.46
199053.585	60.00	23.62	4.40005	1.97
199053.585	56.00	22.05	5.05108	1.84
199053.585	50.00	19.69	6.33607	1.64

Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)
300-1,500	N/A	N/A
1,500-10,000	56 / 22	126 / 50