MPE Calculator	Transcore		Test Number	101123	
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)	3
		Output Power	dBd + 2.17 = dBi	dBi to dBd	2.17
Tx Frequency (MHz)	915	(Watts)	0.032000		0.83
				Antenna minus cable (dBi)	3.00
Cable Loss (dB)	0.0	(dBm)	15.05		
	Calculated ERP (mw)	38.739		Radiated (EIRP) dBm	18.051
	Calculated EIRP (mw)	63.848			
				Radiated (ERP) dBm	15.881

Occupational Limit

3.05000 **mW/cm^2**

General Public Limit

0.61000 **mW/cm^2**

Power density (S) = EIRP / (4 p r^2) = 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
1,500-100,000	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	3.05	0.61
1,500-100,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm^2
63.848	5.00	1.97	0.20324
63.848	4.00	1.57	0.31756
63.848	3.00	1.18	0.56454
63.848	2.90	1.14	0.60415
63.848	2.89	1.14	0.60834
63.848	2.50	0.98	0.81294
63.848	2.25	0.89	1.00363
63.848	2.00	0.79	1.27022
63.848	2.95	1.16	0.58384
63.848	2.90	1.14	0.60415
63.848	2.89	1.14	0.60834
63.848	2.80	1.10	0.64807
63.848	1.30	0.51	3.00645
63.848	1.29	0.51	3.05324
63.848	1.20	0.47	3.52840

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	1.29 cm	2.89 cm
1,500-10,000	N/A	N/A