		Model: 051064S		Test Number: 200117			
MPE Calculator	RF Exposure 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						
	Transmitter Output power (dBm)		0.00				
	Transmitter Output power (mW)		1.00				
	Transmitter maximum Output power operating at 100% (Watts)		0.001		Antenna Gain (dBi)		1
	Output Power for 100% duty Cycle operation (Watts)		0.001		Antenna Gain (Numeric)		1.26
Tx Frequency (MHz)	915	Calcualtion power (Watts)	0.001		dBd + 2.17 = dBi	dBi to dBd	2.2
						Antenna Gain (dBd)	-1.17
Cable Loss (dB)	0.0	Adjusted Power (dBm)	0.0		Antenna minus cable (dBi)		1.00
	Calculated ERP (mw)	0.764			EIRP = Po(dBM) + Gain (dB)		
	Calculated EIRP (mw)	1.259			Radiated (EIRP) dBm		1.000
					ERP = EIRP - 2.17 dB		
					Radiated (ERP) dBm		-1.170

$$\text{Power density }(S)\ \text{mW/cm}^2 = \frac{\text{EIRP}}{4\,p\,r^2}$$

r (cm)   EIRP (mW)

	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310			
f/300	mW/cm^2	Frequency (MHz)	Occupational Limit (mW/cm^2)	Public Limit (mW/cm^2)	
30.5	W/m^2	30-300	1	0.2	
	General Public Limit	300-1,500	f/300	f/1500	
f/1500	mW/cm^2	1,500-10,000	5	1	
6.1	W/m^2				

	Occupational Limit	IC radio frequency radiation exposure limits per RSS-102			
0.6455$f^{0.5}$	W/m^2				
24.3	W/m^2	Frequency (MHz)	Occupational Limit (W/m^2)	Public Limit (W/m^2)	
	General Public Limit	100-6,000	0.6455$f^{0.5}$		
0.02619$f^{0.6834}$	W/m^2	6,000-15,000	50		
2.8	W/m^2	48-300		1.291	
		300-6,000		0.02619$f^{0.6834}$	
		6,000-15,000	50	10	

f = Transmit Frequecny (MHz)			f (MHz) =	915
P_T = Power Input to Antenna (mW)			P_T (mW) =	1.0000
Duty cycle (percentage of operation)			% =	100
P_A = Adjusted Power due to Duty cycle or Cable Loss (mW)			P_A (mW) =	1.00
G_N = Numeric Gain of the Antenna			GN (numeric) =	1.26
S_{20} = Power Density of device at 20cm (mW/m^2)		$S_{20} = (P_A G_N)/(4\pi R_{20})^2$	S_{20} (mW/m^2) =	0.00
S_{20} = Power Density of device at 20cm (W/m^2)		$S_{20} = (P_A G_N)/(4\pi R_{20})^2$	S_{20} (W/m^2) =	0.00
S_L = Power Density Limit (W/m^2)			S_L (W/m^2) =	2.767
R_C = Minimum distance to the Radiating Element for Compliance (cm)		$R_C = \sqrt{(P_A G_N/4\pi S_L)}$	R_C (cm) =	0.6
S_C = Power Density of the device at the Compliance Distance R_C (W/m^2)		$S_C = (P_A G_N)/(4\pi R_C)^2$	S_C (W/m^2) =	2.77
R_{20} = 20cm			R20=	20

For Compliance with Canada General Population Limits, User Manual must indicate a minimum seperation distance of	0.6	cm
Or in Meters for Compliance with Canada General Population Limits, a minimum seperation distance of	0.006	Meters