

	Model: 051064B	Test Number: 200116			
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 <sup>2</sup>				
	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	Calculation power (Watts)	0.001	$dBd + 2.17 = dBi$ $dBi$ to $dBd$ 2.2 $Antenna Gain (dB) -1.17$	
Cable Loss (dB)	0.0	Adjusted Power (dBm)	0.0	Antenna minus cable (dB) 1.00	
	Calculated ERP (mW) 0.764			$EIRP = Po(dBM) + Gain (dB)$	
	Calculated EIRP (mW) 1.259			Radiated (EIRP) dBm 1.000	
	$Power\ density\ (S)\ mW/cm^2 = \frac{EIRP}{4\pi r^2}$ $r\ (cm)\ EIRP\ (mW)$			$EIRP = EIRP - 2.17\ dB$ Radiated (ERP) dBm -1.170	
	<b>Occupational Limit</b>	FCC radio frequency radiation exposure limits per 1.1310			
f300	mW/cm <sup>2</sup>	Frequency (MHz)	Occupational Limit (mW/cm <sup>2</sup> )	Public Limit (mW/cm <sup>2</sup> )	
30.5	W/m <sup>2</sup>	30-300	1	0.2	
	<b>General Public Limit</b>	300-1,500	f300	f1500	
f1500	mW/cm <sup>2</sup>	1,500-10,000	5	1	
6.1	W/m <sup>2</sup>				
	<b>Occupational Limit</b>	IC radio frequency radiation exposure limits per RSS-102			
0.6455f <sup>0.5</sup>	W/m <sup>2</sup>	Frequency (MHz)	Occupational Limit (W/m <sup>2</sup> )	Public Limit (W/m <sup>2</sup> )	
24.3	W/m <sup>2</sup>	100-6,000	0.6455f <sup>0.5</sup>		
	<b>General Public Limit</b>	6,000-15,000	50		
0.02619f <sup>0.6834</sup>	W/m <sup>2</sup>	48-300		1.291	
2.8	W/m <sup>2</sup>	300-6,000		0.02619f <sup>0.6834</sup>	
		6,000-15,000	50	10	
$f = \text{Transmit Frequency (MHz)}$ $P_T = \text{Power Input to Antenna (mW)}$ Duty cycle (percentage of operation) $P_A = \text{Adjusted Power due to Duty cycle or Cable Loss (mW)}$ $G_N = \text{Numeric Gain of the Antenna}$ $S_{20} = \text{Power Density of device at 20cm (mW/m}^2)$ $S_{20} = \text{Power Density of device at 20cm (W/m}^2)$ $S_L = \text{Power Density Limit (W/m}^2)$ $R_C = \text{Minimum distance to the Radiating Element for Compliance (cm)}$ $S_C = \text{Power Density of the device at the Compliance Distance } R_C \text{ (W/m}^2)$ $R_{20} = 20\text{cm}$ For Compliance with Canada General Population Limits, User Manual must indicate a minimum separation distance of Or in Meters for Compliance with Canada General Population Limits, a minimum separation distance of					
				$f\ (\text{MHz}) =$	915
				$P_T\ (\text{mW}) =$	1.0000
				$\% =$	100
				$P_A\ (\text{mW}) =$	1.00
				$GN\ (\text{numeric}) =$	1.26
				$S_{20}\ (\text{mW/m}^2) =$	0.00
				$S_{20}\ (\text{W/m}^2) =$	0.00
				$S_L\ (\text{W/m}^2) =$	2.767
				$R_C\ (\text{cm}) =$	0.6
				$S_C\ (\text{W/m}^2) =$	2.77
				$R_{20} =$	20
					0.6 cm
					0.006 Meters

Rogers Labs, Inc.  
4405 West 259<sup>th</sup> Terrace  
Louisburg, KS 66053  
Phone/Fax: (913) 837-3214  
Revision 1

Transcore  
Model: 051064B, Basic IAG Tag  
Test: 200116  
File: 051064B RFExemption

SN: 061003-01  
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IC: 1584A-FIH051064B  
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