

	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	Calculation power (Watts)	0.001	dBd + 2.17 = dBi
				dBi to dBd
				Antenna Gain (dBd)
Cable Loss (dB)	0.0	Adjusted Power (dBm)	0.0	Antenna minus cable (dBi)
	Calculated ERP (mw)	0.764	EIRP = Po(dBm) + Gain (dB)	
	Calculated EIRP (mw)	1.259	Radiated (EIRP) dBm	1.000
	Power density (S) mW/cm² = $\frac{\text{EIRP}}{4\pi r^2}$ r (cm) EIRP (mW)		ERP = EIRP - 2.17 dB	
			Radiated (ERP) dBm	-1.170
	Occupational Limit	FCC radio frequency radiation exposure limits per 1.1310		
		Frequency (MHz)	Occupational Limit (mW/cm ²)	Public Limit (mW/cm ²)
f/300	mW/cm ²	30-300	1	0.2
30.5	W/m 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		
		Frequency (MHz)	Occupational Limit (W/m ²)	Public Limit (W/m ²)
0.6455f ^{0.5}	W/m ²	100-6,000	0.6455f ^{0.5}	
24.3	W/m ²			
	General Public Limit	6,000-15,000	50	
0.02619f ^{0.6834}	W/m ²	48-300		1.291
2.8	W/m ²	300-6,000		0.02619f ^{0.6834}
		6,000-15,000	50	10
f = Transmit Frequency (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)/(4πR 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)/(4πR 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 =√(P _A G _N /4πS _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)/(4πR _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 separation distance of				0.6 cm
Or in Meters for Compliance with Canada General Population Limits, a minimum separation distance of				0.006 Meters

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 Revision 1

Transcore
 Model: 051064S, Secure IAG Tag
 Test: 200117
 Test to: 47CFR Parts 2, 90 and RSS-137
 File: 051064S RFExpemtion

SN: 061003-03 Secure
 FCC ID: FIH051064S
 IC: 1584A-FIH051064S
 Date: February 8, 2020
 Page 1 of 1