

Customer:	IOSiX, LLC	Notes
Model:	IO-2050	BLE Transmitter
FCC ID:	2AICQ-2050	
IC ID:	21520-2050	
Classification:	General Population	

MPE Calculator	RF Exposure Calculations	
Lowest Frequency	2404.000	MHz
Highest Frequency	2480.000	MHz
Wavelength (lowest frequency)	0.125	m
Antenna aperture (1/4 wavelength radiator assumed)	0.031	m
Far Field Distance	1.560	cm
Power (Conducted)	0.0000	dBm
Ant Gain dBi	-15.8300	dB
Cable Loss	0.0000	dB
EIRP dBm	-15.8300	dB
EIRP mW	0.0261	mW
R	0.5000	cm
S	0.008319	mW/cm ²

Standards
CFR 47 Part 1.1310
RSS-102 Issue 5

Occupational/Controlled Exposure Limit			inches	cm	time
OSHA	10.000	mW/cm ²	0.197	0.500	6
FCC	5.000	mW/cm ²	0.197	0.500	6
IC	3.165	mW/cm ²	0.197	0.500	6
General Population/Uncontrolled Exposure Limit					
OSHA	10.000	mW/cm ²	0.197	0.500	6
FCC	1.000	mW/cm ²	0.197	0.500	30
IC	0.535	mW/cm ²	0.197	0.500	6

SAR Test Exclusion per FDB 447498 D01 4.3.1a					
	Value				
Maximum conducted output power (mW)	1				
Tune up tolerance (mW)	0				
Minimum Test Separation distance ≤ 5mm	5		Exemption Limit (mW)		Result
Frequency in GHz	2.404		Head	Limb	
Formula = OP+TU/Separation*vFreq in GHz	Result →	0.310	3.00	7.50	Pass

SAR Test Exclusion per RSS-102 Issue 5 Clause 2.5.1						
	EIRP mW	Separation	Freq MHz	Exemption Limit (mW)		Result
				Head	Limb	
Compared to Table 1 @ 1900MHz	0.0261	≤ 5mm	2404	7.00	17.50	Pass
Compared to Table 1 @ 2450MHz	0.0261	≤ 5mm	2480	4.00	10.00	Pass
Conclusion: Transmitter operates between the two given frequencies and ERP mW is below the exemption limit in both cases, therefore this device is below the Exemption limits for routine evaluations						