

RF Exposure Report

Report Number: 209803-3**Revision Level:** 2**Client:** Trackonomy Systems, Inc.

214 Devcon Dr., San Jose, CA 95112 USA

Manufacturer: Trackonomy Systems, Inc.**Equipment Under Test:** Multifunctional IoT Platform Sensor Device**Model:** FBO-2005 (C2PC)**FCC ID:** 2AXA8-FBO-2005**IC ID:** 27299-FBO2005**Applicable Standards:** 47 CFR § 2.1091

RSS-102, Issue 6 (December 2023)

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: 09/02/2025**Result:** Compliant

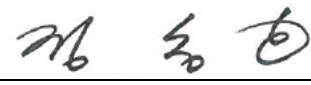
FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 1935.01

Report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

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1 General Information

1.1 Client Information

Company Name: Trackonomy Systems, Inc.
Address: 214 Devcon Dr.
City, State, Zip, Country: San Jose, CA 95112 USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 12310 World Trade Drive, Suite 106/107
City, State, Zip, Country: San Diego, CA 92128, USA
Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 1935.01
Designation ID: US1346
CAB ID: US0236

1.3 General Information of EUT

Type of Product: Multifunctional IoT Platform Sensor Device
Model: FBO-2005 (C2PC)
Hardware Version: V2
Software Version: V2
Serial Number: MAC ID: CC79C9D85436
Frequency Ranges: 2402MHz – 2480MHz
Antenna Model: ANT-2.4-FPC-LH
Antenna Type: Flexible Embedded FPC Antenna
Antenna Gain*: 6.1dBi
Max Conducted Output Power: 10dBm

*Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous filing or other.

1.4 Operating Modes and Conditions

Maximum power levels were utilized for all calculations. Single transmission only.

2 RF Exposure

2.1 Test Results

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 2.1091 RSS-102	Compliant

2.2 Test Method

The formula below calculates power density.

$$S = \frac{PG}{4\pi R^2} \quad \text{Or} \quad S = \frac{EIRP}{4\pi R^2}$$

Where;

S = Power density (mW/cm²)

P = Maximum sourced based average power delivered to antenna port (mW)

G = Maximum power gain of the antenna in the direction of interest relative to an isotropic radiator (dBi) (numerical value)

R = Distance between by-stander and antenna (cm)

EIRP = Equivalent (or effective) isotropically radiated power

2.3 Limits

The table below shows the limits applicable for equipment subject to FCC §15.247 and §2.1091.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power Density (mW/cm ²)	Averaging Time (Minutes)
0.3 – 1.34	614	20.4	*(100)	30
1.34 - 30	824/f	26.97	*(180/f ²)	30
30 - 300	27.5	33.62	0.2	30
300 - 1500	/	/	f/1500	30
1500 – 100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

The table below shows the limits applicable for equipment subject to RSS-102 issue 6.

Limits for General Public/Uncontrolled Environment

Frequency Range (MHz)	Electric field strength (V _{RMS} /m)	Magnetic field strength (A _{RMS} /m)	Power Density (W/m ²)	Averaging Time (Minutes)
10 - 20	27.46	1.63	2	6
20 - 48	58.07/f ^{0.25}	0.1540/f ^{0.25}	8.944/f ^{0.5}	6
48 - 300	22.06	0.05852	1.291	6
300 - 6000	3.142f ^{0.3417}	0.008335f ^{0.3417}	0.02619f ^{0.6834}	6
6000 - 15000	61.4	0.163	10	6
15000 - 150000	61.4	0.163	10	616000/f ^{1.2}
150000 - 300000	0.158f ^{0.5}	4.21x10 ⁻⁴ f ^{0.5}	6.67x10 ⁻⁵ f	616000/f ^{1.2}

f = frequency in MHz

2.4 Single transmission RF Exposure Levels

2.4 GHz band, BLE per FCC §2.1091

Freq. (MHz)	Antenna Gain		Tune up conducted power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
	(dBi)	numerical	(dBm)	(mW)			
2402.0	6.1	4.074	10.0	10.0	20.0	0.008	1.0

2.4 GHz band, BLE per RSS-102

Freq. (MHz)	Antenna Gain		Tune up conducted power		Evaluation Distance (m)	Power Density (W/m ²)	MPE Limit (W/m ²)
	(dBi)	numerical	(dBm)	(W)			
2402.0	6.1	4.074	10.0	0.01	0.2	0.081	5.351

2.5 Simultaneous Conditions

N/A

3 Revision History

Revision Level	Description of changes	Page Affected	Revision Date
1	Initial release	-	09/02/2025
2	Updated Device Information	3	11/04/2025