

RF Exposure Report

Report Number: 208745-8

Revision Level: 1

Client: Trackonomy Systems, Inc.

214 Devcon Dr. San Jose, CA 95112

Equipment Under Test: Multifunctional IoT Platform Sensor Device

Model Number: GBP-3001

FCC ID: 2AXA8-GBP-3001

Applicable Standards: 47 CFR § 2.1091

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: June 25, 2024

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

Name: Trackonomy Systems, Inc.
Address: 214 Devcon Dr.
City, State, Zip, Country: San Jose, CA 95132

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 Number: GBP-3001
Serial Number: N/A
Frequency Ranges: 2402 – 2480 MHz
Antenna Model: 2J6C86BCFc
Antenna Type: Radome - Screw Mount
Antenna Gain*: 4.2 dBi (Peak max.)
Max Conducted Output Power: 6.26 dBm (Peak)

*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 FCC KDB 447498 D01	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 §2.1091 and FCC KDB 447498 D01.

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

2.4 Single transmission RF Exposure Levels (mW/cm²)

2.4 GHz band, BLE per FCC KDB 447498 D01

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)			
2480	4.2	2.63	7	5.01	25	0.002	1

2.5 Simultaneous Conditions

N/A

3 Revision History

Revision Level	Description of changes	Revision Date
1	Initial release	June 25, 2024