TEST REPORT

Applicant:	Particle Industries, Inc.
EUT Description:	Tachyon
Model:	TACH4NA, TACH8NA
Brand:	Particle
FCC ID:	2AEMI-TACHYON
Standards:	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part 96.47
Date of Receipt:	2025/06/25
Date of Test:	Reference report SZCR240100038411
Date of Issue:	2025/09/05

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.

Jim Huang
Approved By:

Carey Chen
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2025/09/05	Original	Carey Chen

Summary of Test Results

FCC Part	Test Item	Verdict
§96.47	End user device additional requirements	Reference report SZCR240100038411

Remark: All the testing items in this report do not need to be tested, and all test data please refer to the previous report with report number SZCR240100038411 (FCC ID: XMR2024SG560DNA) issued by SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch.

Contents

1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014
Tel.: +86-755-27212361
Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)
This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353
Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory. Designation Number: CN1353.

ISED CAB identifier: CN0152
Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.
CAB identifier: CN0152
Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	Particle Industries, Inc.
Address:	548 Market St, PMB 34833, San Francisco, CA 94104, USA

1.2.2 Manufacturer

Manufacturer:	Particle Industries, Inc.
Address:	548 Market St, PMB 34833, San Francisco, CA 94104, USA

1.3 Product Information

EUT Description:	Tachyon		
Model:	TACH4NA, TACH8NA		
Brand:	Particle		
Hardware Version:	V1.2		
Software Version:	1.0.160		
Technical specification:			
Modulation Type:	LTE: ☒ QPSK, ☒ 16QAM, ☒ 64QAM, ☒ 256QAM		
	NR: ☒ DFT-s-OFDM: Pi/2-BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM ☒ CP-OFDM: QPSK, 16-QAM, 64-QAM, 256-QAM		
Operation Frequency Range:	Band	TX Frequency	RX Frequency
	LTE Band 48	3550 to 3700 MHz	3550 to 3700 MHz
	NR Band n48	3550 to 3700 MHz	3550 to 3700 MHz
Antenna Type:	☐ External, ☒ Integrated		
Antenna Gain:	Band	Ant (dBi)	
	LTE Band 48	1.0	
	NR Band n48	1.0	
Remark: 1. The above EUT's information was declared by applicant, please refer to the specifications or user's manual for more detailed description. 2. According to the customer's Letter of model difference, TACH4NA and TACH8NA are identical with each other, except for RAM and model number difference.			

2 Test Configuration

2.1 Description of test setup

The EUT has been tested as an independent unit.

2.2 Test Environment

Please reference report SZCR240100038411.

2.3 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.

2.4 Modifications

No modifications were made during testing.

3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable recognized national standards.

3.1 Test Equipment List

Please reference report SZCR240100038411.

3.2 Measurement Uncertainty

Please reference report SZCR240100038411.

4 Test Results

Please reference report SZCR240100038411.

~The End~