



TEST REPORT

Report Number: 14916801-E4V4

Applicant : SRAM LLC
1000 W Fulton Market 4th Floor
Chicago, IL 60607, United States

Model : 55503

Brand : SRAM

FCC ID : C9O-PMB3

EUT Description : Pressure Sensor

Test Standard(s) : FCC Part 1 Subpart I
FCC Part 2 Subpart J

Date Of Issue:

2024-12-30

Prepared by:

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-11-15	Initial Issue	
V2	2024-12-13	Updated Section 8	Kiya Kedida
V3	2024-12-26	Updated Section 8	Kiya Kedida
V4	2024-12-30	Updated Sections 7 and 8	Kiya Kedida

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
3. TEST METHODOLOGY	6
4. REFERENCES	6
5. FACILITIES AND ACCREDITATION	6
6. DEVICE UNDER TEST	6
7. MAXIMUM OUTPUT POWER	7
8. STANDALONE SAR TEST EXCLUSION CONSIDERATIONS	7

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SRAM LLC
1000 W Fulton Market 4th Floor
Chicago, IL 60607, United States

EUT DESCRIPTION: Pressure Sensor

MODEL: 55503

BRAND: SRAM

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 1 SUBPART I & PART 2 SUBPART J	Complies

UL Verification Services Inc. 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 to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples 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.

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.

Approved & Released For
UL Verification Services Inc. By:



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UL Verification Services Inc.

Prepared By:



Kiya Kedida
Lead Project Engineer
Consumer Technology Division
UL Verification Services Inc.

3. TEST METHODOLOGY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for correctly integrating customer-provided data with measurements performed by UL Verification Services Inc.

All calculations were made in accordance with FCC KDB 447498 D01 v06, KDB 447498 D03 V01.

4. REFERENCES

All measurements were documented in the test report UL Verification Services Inc. Document 14916801-E1, 14916801-E2, and 14916801-E3 for the 2.4 GHz band operation. Output power, Duty cycle, and Antenna gain data are excerpted from the applicable test reports or client declarations.

5. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47658 Kato Road, Fremont, California, USA.

UL Verification Services Inc. is accredited by A2LA, Certificate Number #0751.05, for all testing performed within the scope of this report.

6. DEVICE UNDER TEST

The EUT is an Pressure Sensor with BLE, AIREA, and ANT+ Radios.

The BLE operates in the frequency range of 2402 to 2480MHz.

The AIREA and ANT+ operate in the frequency range of 2405 to 2475MHz.

7. MAXIMUM OUTPUT POWER

The maximum output power of the device is declared as the following:

BLE = Power: 8.03dBm.

AIREA = Power: 8.05dBm.

ANT+= Power: -14.95dBm(80.28 dBuV/m @3m - 95.23 = -14.95dBm)

The antenna(s) gain and type, as provided by the manufacturer' are as follows:

The radio utilizes a ceramic chip antenna, with a maximum gain of -0.5dBi for BLE, AIREA, & ANT+.

8. STANDALONE SAR TEST EXCLUSION CONSIDERATIONS

SAR test exclusion in accordance with KDB 447498 D01.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$, for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

This test exclusion is applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is $<$ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

SAR Exclusion Calculation Table for Portable Devices (Separation distance $<$ 50mm)

Tx	Frequency (MHz)	Max Output Power		Separation distances (mm)	Calculated Threshold Value
		dBm	mW		
BLE	2480	8.50	4.50	5	1.4
AIREA	2475	8.50	4.50	5	1.4
ANT+	2440	-14.95	0.03	5	0.01

Conclusion:

The max output power used for RF exposure evaluation is based on the level stated in operational description. The calculated threshold is ≤ 3 for 1-g SAR and ≤ 7 for 10-g extremity SAR; therefore, this device qualifies for Standalone SAR test exclusion.

END OF REPORT