Test report

Number:	**T251-0260/22 M1**	Project file:	C20220138
		Date:	2022-08-17
		Pages:	5
Product:	**BLE bracelet**		
Type reference:	**PacSana Edge**		
Ratings:	3 Vdc (Built in battery) Protection class: III		
Trademark:	PacSana		
Applicant:	**Pac Sane Limited, Springfield House, Albert Road Lower, Glenageary, Dublin A96 Y9C6, Ireland**		
Manufacturer:	Pac Sane Limited, Springfield House, Albert Road Lower, Glenageary, Dublin A96 Y9C6, Ireland		
Place of manufacture:	Pac Sane Limited, Springfield House, Albert Road Lower, Glenageary, Dublin A96 Y9C6, Ireland		

Summary of testing

Testing method:	47 CFR FCC Part 1.1307(b)(1)(B) in conjunction with Part 1.1310(d)(2), 2.1093(d)(2) and KDB 447498 D01 General RF Exposure Guidance v06
Testing location:	SIQ Ljubljana, Mašera-Spasićeva ulica 10, SI-1000 Ljubljana, Slovenia
Remarks:	Date of receipt of test items: 2022-01-14 Number of items tested: 1 Date of performance of tests: 2022-04-11 The test results presented in this report relate only to the items tested. The product complies with the requirements of the testing methods.

Tested by: Luka Tosetto **Approved by:** Marjan Mak

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CONTENTS page

1 GENERAL

History sheet			
Date	Report No.	Change	Revision
2022-04-11	T251-0260/22	Initial Test Report issued.	--
2022-08-17	T251-0260/22 M1	Modified test report with request for adding FCC ID number.	1.0

1.1 Equipment under test

BLE bracelet
Type: **PacSana Edge**
Environment: Uncontrolled / General Public
Assessment distance: 5 mm
FCC ID: **2A693-EDGE1**

Reviewed test report T251-0210/22 from SIQ Ljubljana.

2 ASSESSMENT PROCEDURE

According to 1.1307(b)(1)(B):
Prepare an evaluation of the human exposure to RF radiation pursuant to § 1.1310 and include in the application a statement confirming compliance with the limits in § 1.1310.

According to 1.1310(d)(2):
For operations within the frequency range of 300 kHz and 6 GHz (inclusive), the limits for maximum permissible exposure (MPE), derived from whole-body SAR limits and listed in Table 1 in paragraph (e)(1) of this section, may be used instead of whole-body SAR limits as set forth in paragraphs (a) through (c) of this section to evaluate the environmental impact of human exposure to RF radiation as specified in § 1.1307(b) of this part, except for portable devices as defined in § 2.1093 of this chapter as these evaluations shall be performed according to the SAR provisions in § 2.1093.

According to 2.1093(d)(2):
Evaluation of compliance with the SAR limits can be demonstrated by either laboratory measurement techniques or by computational modeling. The latter must be supported by adequate documentation showing that the numerical method as implemented in the computational software has been fully validated; in addition, the equipment under test and exposure conditions must be modeled according to protocols established by FCC-accepted numerical computation standards or available FCC procedures for the specific computational method. Guidance regarding SAR measurement techniques can be found in the Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB).

KDB 447498 D01 General RF Exposure Guidance v06 Clause 4.3.1. Standalone SAR test exclusion considerations

SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz

The test exclusions are applicable only when the minimum test separation distance is ≤ 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.

3 MEASUREMENTS / CALCULATIONS

Values for each configuration are listed in the following table:

Frequency (MHz)	Maximum* output power of a channel with tune-up (dBm)	Maximum* output power of a channel with tune-up (mW)	SAR Test Exclusion Threshold (mW)
2402	5.60	3.63	9.68
2440	5.40	3.47	9.60
2480	5.50	3.55	9.53

* Gated power with Duty Cycle calculated in
** maximum tolerance provided from manufacturer is ±2dB.

Conclusion: PASS; SAR Evaluation is not required due to SAR Test Exclusion Thresholds are met.

There is no simultaneous transmission between any other transmitter.