

RF Exposure Evaluation Report

Product : SUUNTO SEAL
Trade mark : SUUNTO
Model/Type reference : HS241
Serial Number : N/A
Report Number : EED32Q80531503
FCC ID : 2BBLIHS241
Date of Issue : May 22, 2024
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

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2 Version

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4 General Information

4.1 Client Information

Applicant:	Suunto Sports Technology(Dongguan)Co., Ltd.
Address of Applicant:	Room 108, No. 5, Longxi Road, Nancheng Street, Dongguan City, Guangdong Province, China
Manufacturer:	Suunto Sports Technology(Dongguan)Co., Ltd.
Address of Manufacturer:	Room 108, No. 5, Longxi Road, Nancheng Street, Dongguan City, Guangdong Province, China
Factory:	Suunto Sports Technology(Dongguan)Co., Ltd.
Address of Factory:	Room 108, No. 5, Longxi Road, Nancheng Street, Dongguan City, Guangdong Province, China

4.2 General Description of EUT

Product Name:	SUUNTO SEAL
Model No.(EUT):	HS241
Trade Mark:	SUUNTO

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	BLE: GFSK BT: GFSK, $\pi/4$ DQPSK, 8DPSK	
Test Power Grade:	Default	
Test Software of EUT:	BQB.exe	
Antenna Type:	PIFA Antenna	
Antenna Gain:	-1.56 dBi	
Power Supply:	Battery:	DC 3.8V
Sample Received Date:	Apr. 23, 2024	
Sample tested Date:	Apr. 23, 2024 to May 09, 2024	
Remark:	Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

5.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

5.1.3 EUT RF Exposure Evaluation

For Stand alone:

For Bluetooth LE:

Frequency (MHz)	Available maximum time-averaged power (dBm)	Antenna gain (dBi)	ERP (dBm)	Available maximum time-averaged power (mW)	Limit (mW)	Result
2480	3.32	-1.56	-0.39	2.148	≤2.717	PASS

For Bluetooth Classic:

Frequency (MHz)	Available maximum time-averaged power (dBm)	Antenna gain (dBi)	ERP (dBm)	Available maximum time-averaged power (mW)	Limit (mW)	Result
2480	3.37	-1.56	-0.34	2.173	≤2.717	PASS

Note:

- ① EIRP=Available maximum time-averaged power+Antenna gain;
- ② ERP=EIRP-2.15;
- ③ According to §1.1307(b)(3)(i)(B), RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).
- ④ The test data refer to the report of No. EED32Q80531501 and EED32Q80531502. Only the worst case data was recorded in the report.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***