

RF Exposure Report

Project Number: 5251870

Offer Number: SUW-202411007378

Report Number: 5251870EMC04

Revision Level: 1

Client: Orpyx Medical Technologies Inc.

Equipment Under Test: Orpyx® Sensory Insoles

Model Number: SI000010

FCC ID: 2AAH8-SI000011 and 2AAH8-SI000012

Applicable Standards: 47 CFR §§ 2.1093 (Portable)

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: 12 June 2025

Result: Exempt from SAR evaluation



FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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Prepared by:


Martin Taylor, Project Engineer

Reviewed by:


Sean Vick, Advanced EMC Engineer

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1 General Information

1.1 Client Information

Company Name: Orpyx Medical Technologies Inc.
Address: Suite 205, 1240 20th Avenue SE
City, State, Zip, Country: Calgary, Alberta T2G 1M8 Canada

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Equipment Under Test: Orpyx® Sensory Insoles
Model Number: SI000010
Serial Numbers: 2222-5017 & 2222-4021 (left & right Conducted Samples)
2222-5012 & 2222-5003 (left & right Radiated Samples)
FCC ID: 2AAH8-SI000011 (right insole)
2AAH8-SI000012 (left insole)

Frequency Range: 2402 – 2480 MHz
Data Modes: Bluetooth Low Energy (BLE) – GFSK – 1Mbps & 2Mbps
Antenna/Gain*: Chip Antenna (4.5dBi gain)
Maximum Conducted Power: 3.61dBm (right insole)
5.87dBm (left insole)

Rated Voltage: 3.7Vdc Internal Battery
Test Voltage: 3.7Vdc Internal Battery

Sample Received Date: 17 December 2024
Dates of testing: 24 - 26 December 2024 and 5 - 10 June 2025

*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 Separation Distance

The radio antenna is located within the insole worn in the user's shoe, placing it a few mm from the user's foot. For cases where the separation distance is 0mm to 5mm, a separation distance of 5mm is used for the evaluation.

2 SAR Exclusion Calculations

The highest output power in conjunction with the upper and lower frequency boundaries have been used to demonstrate compliance for both the right and left insoles.

The EUT is considered an extremity application.

2AAH8-SI000011 (right insole) – Low Channel

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SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

| | Input | Select Units | |
|--------------------------|--------|--------------|---|
| Max Power: | 3.53 | dBm | |
| Duty Cycle: | 100.0% | | <= Source based time average duty cycle |
| Min separation distance: | 5 | mm | |
| Frequency, f: | 2402 | MHz | |

| Value reference Number | Values used for Calculation | | Reference number definition |
|------------------------|-----------------------------|----|--|
| v1 | 2.000 | mW | [max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW' |
| v2 | 5 | mm | [min. test separation distance, mm] 'Rounded to nearest mm' |
| v3 | 1.550 | | [f(GHz)] |

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [f(\text{GHz})] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

| | | | |
|-----------------------------|--------|--------|---|
| Exclusion Calculation(1g): | 0.6199 | number | $\leq [v2 / v3] \text{ must be less than } 3$ |
| Exclusion Calculation(10g): | 0.6199 | number | $\leq [v2 / v3] \text{ must be less than } 7.5$ |

| | | | |
|--------------------------|--|--|--|
| Conclusions (Body): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications | | |
| Conclusions (Extremity): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications | | |

2AAH8-SI000011 (right insole) – High Channel

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SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

| | Input | Select Units | |
|--------------------------|--------|--------------|---|
| Max Power: | 3.61 | dBm | |
| Duty Cycle: | 100.0% | | <= Source based time average duty cycle |
| Min separation distance: | 5 | mm | |
| Frequency, f: | 2480 | MHz | |

| Value reference Number | Values used for Calculation | | Reference number definition |
|------------------------|-----------------------------|----|--|
| v1 | 2.000 | mW | [max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW' |
| v2 | 5 | mm | [min. test separation distance, mm] 'Rounded to nearest mm' |
| v3 | 1.575 | | [f(GHz)] |

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [f(\text{GHz})] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

| | | | |
|-----------------------------|--------|--------|---|
| Exclusion Calculation(1g): | 0.6299 | number | $\leq [v2 / v3] \text{ must be less than } 3$ |
| Exclusion Calculation(10g): | 0.6299 | number | $\leq [v2 / v3] \text{ must be less than } 7.5$ |

| | | | |
|--------------------------|--|--|--|
| Conclusions (Body): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications | | |
| Conclusions (Extremity): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications | | |

2AAH8-SI000012 (left insole) – Low Channel

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SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

| | Input | Select Units | |
|---------------------------------|--------|--------------|---|
| Max Power: | 5.87 | dBm | |
| Duty Cycle: | 100.0% | | <= Source based time average duty cycle |
| Min separation distance: | 5 | mm | |
| Frequency, f: | 2402 | MHz | |

| Value reference Number | Values used for Calculation | | Reference number definition |
|------------------------|-----------------------------|----|--|
| v1 | 4.000 | mW | [max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW' |
| v2 | 5 | mm | [min. test separation distance, mm] 'Rounded to nearest mm' |
| v3 | 1.550 | | [f(GHz)] |

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [f(\text{GHz})] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

| | | | |
|-----------------------------|--------|--------|------------------------------------|
| Exclusion Calculation(1g): | 1.2399 | number | <= [v2 / v3] must be less than 3 |
| Exclusion Calculation(10g): | 1.2399 | number | <= [v2 / v3] must be less than 7.5 |

| | | | |
|---------------------------------|--|--|--|
| Conclusions (Body): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications | | |
| Conclusions (Extremity): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications | | |

2AAH8-SI000012 (left insole) – High Channel

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SAR test exclusion calculations

Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations

| | Input | Select Units | |
|---------------------------------|--------|--------------|---|
| Max Power: | 5.71 | dBm | |
| Duty Cycle: | 100.0% | | <= Source based time average duty cycle |
| Min separation distance: | 5 | mm | |
| Frequency, f: | 2480 | MHz | |

| Value reference Number | Values used for Calculation | | Reference number definition |
|------------------------|-----------------------------|----|--|
| v1 | 4.000 | mW | [max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW' |
| v2 | 5 | mm | [min. test separation distance, mm] 'Rounded to nearest mm' |
| v3 | 1.575 | | [f(GHz)] |

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [f(\text{GHz})] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

| | | | |
|-----------------------------|--------|--------|------------------------------------|
| Exclusion Calculation(1g): | 1.2598 | number | <= [v2 / v3] must be less than 3 |
| Exclusion Calculation(10g): | 1.2598 | number | <= [v2 / v3] must be less than 7.5 |

| | | | |
|---------------------------------|--|--|--|
| Conclusions (Body): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Body applications | | |
| Conclusions (Extremity): | The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications | | |

3 Revision History

| Revision Level | Description of changes | Revision Date |
|----------------|--|---------------|
| 0 | Initial Release | 28 May 2025 |
| 1 | Added information and calculations on second insole. | 12 June 2025 |
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