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|                             |           |
|-----------------------------|-----------|
| <b>Report Reference ID:</b> | REP008103 |
|-----------------------------|-----------|

|                            |                                                                                 |
|----------------------------|---------------------------------------------------------------------------------|
| <b>Test specification:</b> | RSS-102 Issue 5 March 2015 + Amendment 1 (2021)<br>SPR-002 Issue 2 October 2022 |
|----------------------------|---------------------------------------------------------------------------------|

|                   |              |
|-------------------|--------------|
| <b>Applicant:</b> | Nalu Medical |
|-------------------|--------------|

|                 |                                                                   |
|-----------------|-------------------------------------------------------------------|
| Company name    | Nemko USA Inc.                                                    |
| Address         | 2210 Faraday Ave, Suite 150                                       |
| City            | Carlsbad                                                          |
| State           | California                                                        |
| Postal code     | 92008                                                             |
| Country         | USA                                                               |
| Telephone       | +1 760 444 3500                                                   |
| Website         | www.nemko.com                                                     |
| FCC Site Number | Test Firm Registration Number: 392943; Designation Number: US5058 |
| ISED Test Site  | 2040B-3                                                           |

|                     | <b>Name and title</b>                                                                                                   | <b>Date</b> |
|---------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Tested by:</b>   | Chenhao Ma Wireless test engineer                                                                                       | 2023-03-29  |
| <b>Reviewed by:</b> | James Cunningham, EMC/WL Manager<br> | 2023-04-10  |

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|                                                                                   | Specification: SPR-002 Issue 2 October 2022 |
|                                                                                   |                                             |

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|                                                                                   |                                             |

## Section 1: Report summary

This report contains an assessment of apparatus against specifications based upon tests carried out on samples submitted at Nemko

Test specification:

RSS-102 Issue 5 March 2015 + Amendment 1 (2021)  
SPR-002 Issue 2 October 2022

|                         |                  |
|-------------------------|------------------|
| Compliance status:      | Complies         |
| Exclusions:             | None             |
| Non-compliances:        | None             |
| Report release history: | Original release |
| Test location:          | RFI Chamber      |

The date of initial receipt of samples and the date of issue of the report.

Receipt date: 2023-03-08 Issue date: 2023-04-10

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|                                                                                   |                                               |
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|                                                                                   | Specification: SPR-002 Issue 1 September 2016 |
|                                                                                   |                                               |

## Section 2: Equipment under test

### 2.1 Identification of equipment under test (EUT)

The following information identifies the EUT under test:

|                               |                                             |
|-------------------------------|---------------------------------------------|
| Type of equipment:            | Wireless charger                            |
| Product marketing name (PMN): | Charging System for Wearable Medical Device |
| Models (HVIN) :               | BSC                                         |
| Serial number:                | Not provided                                |
| Nemko sample number:          | PRJ0029662                                  |
| IC:                           | None                                        |
| Date of receipt:              | 2023-03-08                                  |

### 2.2 Accessories and support equipment

The following information identifies accessories used to exercise the EUT during testing:

- None

### 2.3 EUT description

- Device is used to charge a medical wearable medical device
- Charging occurs via a Qi link and communication via NFC
- Device includes BLE and WiFi, but assumes use of approved module (2AEMI-P2)
- Charger powered via USB port
- Device includes one Qi Radio and one NFC Radio. This is what Nemko will test and certify
- Assume Qi is charge only (FCC Part 18)

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## Section 2: Equipment under test, continued

### 2.4 Technical specifications of the EUT

|                                 |                                                    |
|---------------------------------|----------------------------------------------------|
| Product name                    | Charging System for Wearable Medical Device        |
| Model                           | 43012                                              |
| Variant(s)                      | None                                               |
| Serial number                   | None                                               |
| Part number                     | None                                               |
| Power requirements              | 120 VAC                                            |
| Description/theory of operation | NFC: Data transfer via near field load modulation. |

### 2.5 Applicant details

|                                                                                               |                 |                           |
|-----------------------------------------------------------------------------------------------|-----------------|---------------------------|
| <b>Applicant</b><br>(certificate holder)                                                      | Name:           | Nalu Medical Inc          |
|                                                                                               | Address:        | 2320 Faraday Ave. Ste.100 |
|                                                                                               | City:           | Carlsbad                  |
|                                                                                               | Province/State: | CA                        |
|                                                                                               | Post code:      | 92008                     |
|                                                                                               | Country:        | United States             |
|                                                                                               |                 |                           |
| <b>Manufacturer</b><br>(partly responsible<br>for design and<br>production<br>specifications) | Name:           | Nalu Medical Inc          |
|                                                                                               | Address:        | 2320 Faraday Ave. Ste.100 |
|                                                                                               | City:           | Carlsbad                  |
|                                                                                               | Province/State: | CA                        |
|                                                                                               | Post code:      | 92008                     |
|                                                                                               | Country:        | United States             |
|                                                                                               |                 |                           |

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|                                                                                   |                                               |

|                                                 |                                                                                                                                                                                                                                 |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section 2: Equipment under test, continued      |                                                                                                                                                                                                                                 |
| 2.6 Certification details                       |                                                                                                                                                                                                                                 |
| <b>Services requested</b><br>Type of assessment | <input checked="" type="checkbox"/> New certification<br><input type="checkbox"/> New family<br><input type="checkbox"/> Re-assessment<br><input type="checkbox"/> Existing family<br><input type="checkbox"/> Multiple listing |
| 2.7 EUT setup diagram                           |                                                                                                                                                                                                                                 |
| See 2.12                                        |                                                                                                                                                                                                                                 |
| 2.8 Operation of the EUT during testing         |                                                                                                                                                                                                                                 |
| Continuous transmission mode                    |                                                                                                                                                                                                                                 |
| 2.9 Modifications incorporated in the EUT       |                                                                                                                                                                                                                                 |
| None                                            |                                                                                                                                                                                                                                 |
| 2.10 Operation of the EUT during testing        |                                                                                                                                                                                                                                 |
| Continuous transmission mode                    |                                                                                                                                                                                                                                 |
| 2.11 Modifications incorporated in the EUT      |                                                                                                                                                                                                                                 |
| None                                            |                                                                                                                                                                                                                                 |
| 2.12 EUT setup                                  |                                                                                                                                                                                                                                 |
|                                                 |                                                                                                                                                                                                                                 |

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|                                                                                   |                                               |
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## Section 3: Test conditions

### 3.1 Deviations from laboratory tests procedures

No deviations were made from laboratory test procedures.

### 3.2 Test conditions, power source and ambient temperatures

|                                                                      |                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Normal temperature, humidity and air pressure test conditions</b> | Temperature: 15–30 °C<br>Relative humidity: 20–75 %<br>Air pressure: 860–1060 hPa                                                                                                                                                                                                    |
|                                                                      | When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.                                                                                       |
| <b>Power supply range:</b>                                           | The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$ , for which the equipment was designed. |

### 3.3 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16-4-2 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Uncertainty in EMC measurements” and is documented in the Nemko. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device

|                                                                                   |                                               |
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|                                                                                   | Specification: SPR-002 Issue 1 September 2016 |
|                                                                                   |                                               |

### Section 3: Test conditions, continued

| Test              | Field    | Frequency range | Measurement Uncertainty | Notes |
|-------------------|----------|-----------------|-------------------------|-------|
| Field measurement | Electric | 0.003÷30 MHz    | 26 %                    | (1)   |
|                   |          | 0.03÷40 GHz     | 26 %                    |       |
|                   | Magnetic | 0.003÷30 MHz    | 26 %                    |       |

#### NOTES:

(1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2$  which has been derived from the assumed normal probability distribution with infinite degrees of freedom and for a coverage probability of 95 %;

## 3.4 Test equipment

| Equipment                            | Manufacturer | Model    | Serial N°  |
|--------------------------------------|--------------|----------|------------|
| Electric and Magnetic field analyzer | Narda        | EHP-200A | 170WX90208 |

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|                                                                                   |                                               |
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|                                                                                   |                                               |

## Section 4: Result summary

### 4.1 Summary of test results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

|     |                                                                  |
|-----|------------------------------------------------------------------|
| N   | No : not applicable / not relevant.                              |
| Y   | Yes : Mandatory i.e. the apparatus shall conform to these tests. |
| N/T | Not Tested, mandatory but not assessed. (See report summary)     |

| Clause                                       | Test description                                             | Verdict |
|----------------------------------------------|--------------------------------------------------------------|---------|
| <b>RSS-Gen, Issue 4 tests result summary</b> |                                                              |         |
| 6.1.1                                        | Direct Measurement Against the RSS-102 Nerve Stimulation RLs | P       |

Notes:

Possible test case verdicts:

test case does not apply to the test object: N/A (Not applicable)

test object does meet the requirement: P (Pass)

test object does not meet the requirement: F (Fail)

## Appendix A: Test results

### Direct Measurement Against the RSS-102 Nerve Stimulation RLs

#### Direct Measurement Against the RSS-102 Nerve Stimulation RLs

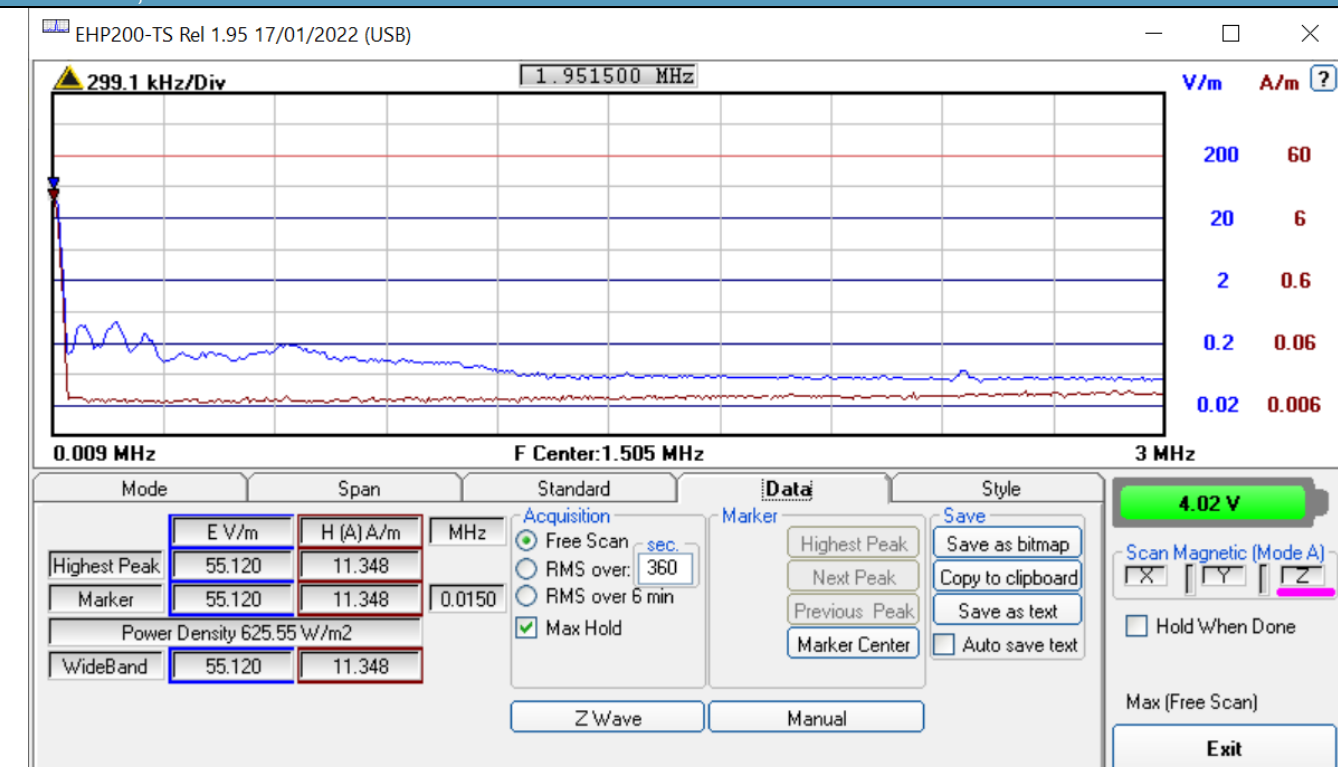
| Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)                                            |                                  |                                                 |                                    |                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------|------------------------------------|---------------------------------|
| Frequency Range (MHz)                                                                                                                          | Electric Field (V/m rms)         | Magnetic Field (A/m rms)                        | Power Density (W/m <sup>2</sup> )  | Reference Period (minutes)      |
| 0.003-10 <sup>21</sup>                                                                                                                         | 83                               | 90                                              | -                                  | Instantaneous*                  |
| 0.1-10                                                                                                                                         | -                                | 0.73/ <i>f</i>                                  | -                                  | 6**                             |
| 1.1-10                                                                                                                                         | 87/ <i>f</i> <sup>0.5</sup>      | -                                               | -                                  | 6**                             |
| 10-20                                                                                                                                          | 27.46                            | 0.0728                                          | -2                                 | 6                               |
| 20-48                                                                                                                                          | 58.07/ <i>f</i> <sup>0.25</sup>  | 0.1540/ <i>f</i> <sup>0.25</sup>                | 8.944/ <i>f</i> <sup>0.5</sup>     | 6                               |
| 48-300                                                                                                                                         | 22.06                            | 0.05852                                         | 1.291                              | 6                               |
| 300-6000                                                                                                                                       | 3.142 <i>f</i> <sup>0.3417</sup> | 0.008335 <i>f</i> <sup>0.3417</sup>             | 0.02619 <i>f</i> <sup>0.8834</sup> | 6                               |
| 6000-15000                                                                                                                                     | 61.4                             | 0.163                                           | 10                                 | 6                               |
| 15000-150000                                                                                                                                   | 61.4                             | 0.163                                           | 10                                 | 616000/ <i>f</i> <sup>1.2</sup> |
| 150000-300000                                                                                                                                  | 0.158 <i>f</i> <sup>0.5</sup>    | 4.21 x 10 <sup>-4</sup> <i>f</i> <sup>0.5</sup> | 6.67 x 10 <sup>-5</sup> <i>f</i>   | 616000/ <i>f</i> <sup>1.2</sup> |
| <p><b>Note:</b> <i>f</i> is frequency in MHz.</p> <p>* Based on nerve stimulation (NS).</p> <p>** Based on specific absorption rate (SAR).</p> |                                  |                                                 |                                    |                                 |

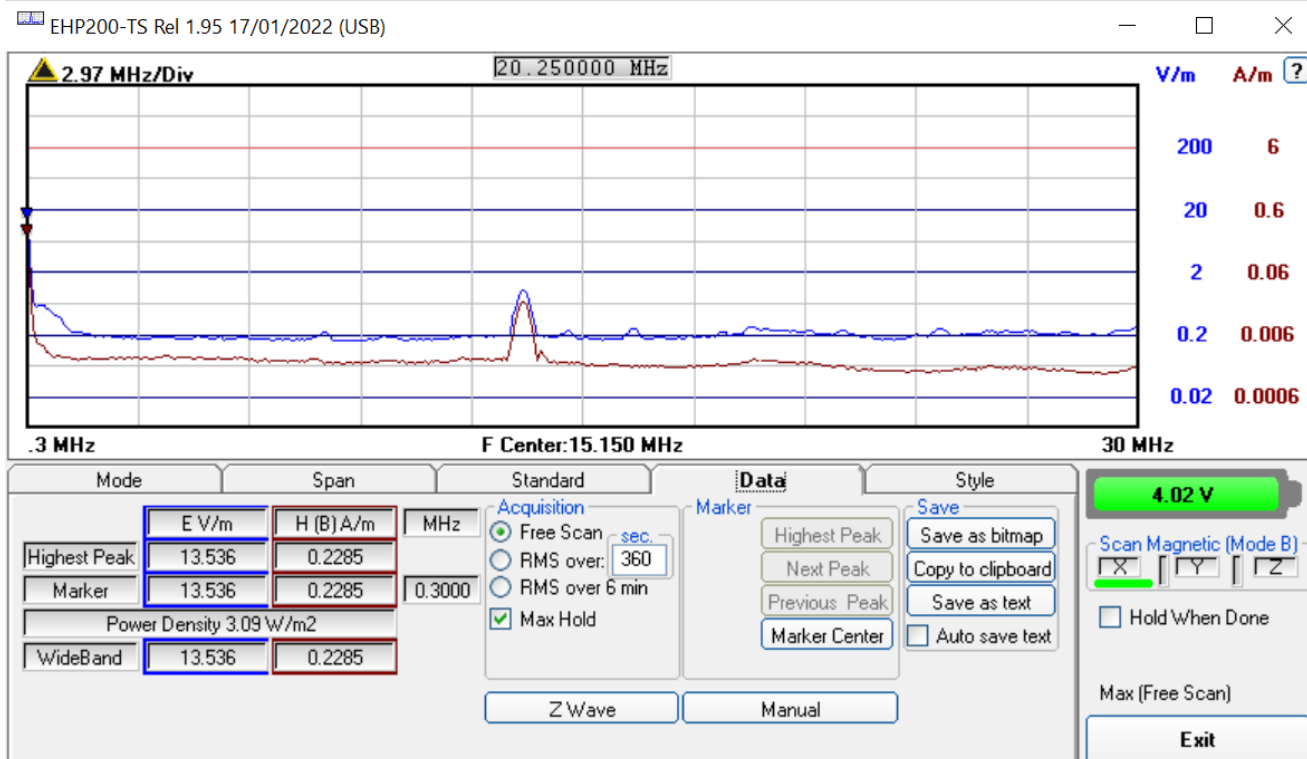
Test date: 2023-03-29

Test results: Pass

# Direct Measurement Against the RSS-102 Nerve Stimulation RLs, continued

## Test data, continued





Graph 2. Dual Band B, 300 kHz – 30 MHz  
Worst case was shown: maximum value measured

| Whole Body / Torso / Head Evaluation |                   |                                            |                    |                     |        |                                            |                    |                     |        |
|--------------------------------------|-------------------|--------------------------------------------|--------------------|---------------------|--------|--------------------------------------------|--------------------|---------------------|--------|
| Measurement Point <sup>(2)</sup>     | Relaxation Factor | Electric Field                             |                    |                     |        | Magnetic Field                             |                    |                     |        |
|                                      |                   | Field measured (V/m r.m.s.) <sup>(1)</sup> | Limit (V/m r.m.s.) | Margin (V/m r.m.s.) | Result | Field measured (A/m r.m.s.) <sup>(1)</sup> | Limit (A/m r.m.s.) | Margin (A/m r.m.s.) | Result |
| 1                                    | 1.0               | 55.12                                      | 83.0               | 27.88               | P      | 11.348                                     | 90.0               | 78.652              | P      |

<sup>(1)</sup> Measurement distance 20 cm;  
<sup>(2)</sup> Worst measurement point

## Appendix B: EUT photos



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