

| <b>TEST REPORT</b><br><b>47 CFR § 2.1091 Radiofrequency radiation exposure evaluation:</b><br><b>mobile devices.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                      |                                                                            |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------|
| <b>Applicant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A.R. Hungary, Inc. Alkotas utca 41. Budapest 1123, HUNGARY                           |                                                                            |                           |
| <b>Test item:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Passport Reader and ID scanner                                                       |                                                                            |                           |
| <b>Identification / Type No.:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Osmond N                                                                             |                                                                            |                           |
| <b>IC:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | XCW-OSMOND-R                                                                         |                                                                            |                           |
| <b>Order content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Radiofrequency radiation exposure evaluation according to the following standard(s): |                                                                            |                           |
| <b>Test specification:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>47 CFR § 2.1091</b>                                                               |                                                                            |                           |
| <b>Date of receipt:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 05/05/2022                                                                           | <i>Photos were removed for confidentiality as demanded by the customer</i> |                           |
| <b>Internal storage No.:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | A003255761-008                                                                       |                                                                            |                           |
| <b>Testing period:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 27/02/2023                                                                           |                                                                            |                           |
| <b>Place of testing:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TÜV Rheinland Italia S.r.l.<br>Via E. Mattei, 3<br>20005 Pogliano Milanese (MI) - IT |                                                                            |                           |
| <b>Testing laboratory:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | TÜV Rheinland Italia S.r.l.<br>Via E. Mattei,3<br>20005 Pogliano Milanese (MI) - IT  |                                                                            |                           |
| <b>Test result:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Pass                                                                                 |                                                                            |                           |
| <b>Tested by:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Roberto Radice                                                                       | <b>Authorized by:</b>                                                      | Andrea Bortolotti         |
| <b>Date:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19/01/2024                                                                           | <b>Date:</b>                                                               | 19/01/2024                |
| <b>Position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Sachverständige(r)/Expert                                                            | <b>Position</b>                                                            | Sachverständige(r)/Expert |
| <b>Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ---                                                                                  |                                                                            |                           |
| <b>Condition of the test item at delivery:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Test item complete and undamaged                                                     |                                                                            |                           |
| <p>The test results reported in this test report shall refer only to the samples tested as received.<br/> TÜV Rheinland Italia is not responsible for the sampling phase.<br/> This report may not be partially reproduced, except with the prior written permission of the issuing Laboratory<br/> TÜV Rheinland refuses any responsibility about information supplied by the customer contained in this test report<br/> (# ) Test sample(s), as well sample information, description, product details and intended usage was provided by customer.</p> |                                                                                      |                                                                            |                           |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.</i></p> <p><i>Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>                                  |
| 2 | <p><i>As contractually agreed, this document has been signed digitally only. TÜV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TÜV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i></p> |
| 3 | <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                             |
| 4 | <p><i>Unless otherwise agreed with the customer, a conformity assessment is always carried out based on the applied standards.</i></p> <p><i>At the customer's request, the statement on the conformity of the product tested in this test report is carried out according to the criteria/requirements of the applied standards.</i></p> <p><i>Evaluation conditions deviating from these are documented separately in the respective chapters.</i></p>                                                                                            |

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| 1. General description of test item(s) |                                                                                                                                                          |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identification / Type No.:             | Passport Reader and ID scanner Osmond N                                                                                                                  |
| Serial number                          | 1215319                                                                                                                                                  |
| Manufacturer                           | A.R. Hungary, Inc.<br>Alkotas utca 41. Budapest 1123, HUNGARY                                                                                            |
| Trade Mark                             |                                                                         |
| Rated voltage / frequency              | 100-240 V AC, 50/60 Hz via universal external power supply                                                                                               |
| Rated current / power                  | Input Max 1.5 A                                                                                                                                          |
| Equipment type                         | Mobile equipment                                                                                                                                         |
| Number of phases                       | 1ph.                                                                                                                                                     |
| Hardware version (#)                   | ASM-1054.19                                                                                                                                              |
| Software version (#)                   | PR 2.1.10.3                                                                                                                                              |
| Dimensions                             | 178 × 203 × 157 mm                                                                                                                                       |
| Weight                                 | 2.25 kg                                                                                                                                                  |
| Temperature Range                      | 5 °C to 40 °C                                                                                                                                            |
| Test sample obtaining:                 | <input checked="" type="checkbox"/> Sampling by customer<br><input type="checkbox"/> Sampling by TÜV Rheinland Group<br><input type="checkbox"/> others: |

**2. Reference documents**

|                                                   |                                                                                             |
|---------------------------------------------------|---------------------------------------------------------------------------------------------|
| 47 CFR § 1.1310                                   | Radiofrequency radiation exposure limits                                                    |
| 47 CFR § 2.1091                                   | Radiofrequency radiation exposure evaluation: mobile devices                                |
| 447498 D01 General<br>RF Exposure<br>Guidance v06 | RF exposure procedures and equipment authorization policies for mobile and portable devices |

### 3. Equipment used during test

#### Equipment under test

| No. | Product type                   | Manufacturer       | Model    | Comments |
|-----|--------------------------------|--------------------|----------|----------|
| 1   | Passport Reader and ID scanner | A.R. Hungary, Inc. | Osmond N | —        |
| 2   | —                              | —                  | —        | —        |

#### Auxiliary Equipment / Peripherals

| No. | Product type | Manufacturer | Model | Comments |
|-----|--------------|--------------|-------|----------|
| 1   | —            | —            | —     | —        |
| 2   | —            | —            | —     | —        |
| 3   | —            | —            | —     | —        |

| 4. Radio type identification                         |                                                                                                                                                            |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brand name and model of radio module                 | highly integrated NFC Initiator / HF Reader IC, AMS mod. AS3911-BQFT                                                                                       |
| Antenna model and Gain                               | LC antenna                                                                                                                                                 |
| Antenna type                                         | <input type="checkbox"/> External antenna<br><input type="checkbox"/> Dedicated antenna<br><input checked="" type="checkbox"/> Integral antenna            |
| Type of equipment                                    | <input type="checkbox"/> stand-alone equipment<br><input checked="" type="checkbox"/> combined equipment<br><input type="checkbox"/> multi-radio equipment |
| Type of modulation                                   | OOK                                                                                                                                                        |
| Nominal voltage of stand-alone or combined equipment | voltage range from 2.4 V to 5.5 V                                                                                                                          |
| Operating frequency                                  | 13.56MHz                                                                                                                                                   |
| Number of channels                                   | 1                                                                                                                                                          |
| Transmit operating mode                              | <input checked="" type="checkbox"/> single antenna<br><input type="checkbox"/> multiple antennas                                                           |
| Temperature range                                    | -40°C to 125°C                                                                                                                                             |

## 5. Operating modes

| No. | Description |
|-----|-------------|
|-----|-------------|

|   |                                                |
|---|------------------------------------------------|
| 1 | Continuous modulated transmission at 13.56MHz. |
|---|------------------------------------------------|

## 6. EUT configuration

|                                                                    |
|--------------------------------------------------------------------|
| The test setup was made in accordance with mentioned FF standards. |
|--------------------------------------------------------------------|

|                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurements and tests were executed under "worst case" conditions. Typical EUT arrangements or operating modes were chosen or assumed which let suspect maximum emission or susceptibility (a so called "unfavourable configuration"). |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Details of test setup or adjustments are (particularly) shown inside the photo documentation.<br>As far as not mentioned otherwise these statements are valid for all following tests. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**REVISION HISTORY****7. Change history**

| Test report number   | List of revisions | Date       |
|----------------------|-------------------|------------|
| IT23SWZZ 001 Annex 4 | First edition     | 19/01/2024 |

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### 8. Limits for Maximum Permissible Exposure (MPE)

**(e)** Table 1 below sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

**TABLE 1 - LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

| Frequency range (MHz)                                          | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0                                                        | 614                           | 1.63                          | * 100                               | 6                        |
| 3.0-30                                                         | 1842/f                        | 4.89/f                        | * 900/f <sup>2</sup>                | 6                        |
| 30-300                                                         | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500                                                      |                               |                               | f/300                               | 6                        |
| 1,500-100,000                                                  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 0.3-1.34                                                       | 614                           | 1.63                          | * 100                               | 30                       |
| 1.34-30                                                        | 824/f                         | 2.19/f                        | * 180/f <sup>2</sup>                | 30                       |
| 30-300                                                         | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1,500                                                      |                               |                               | f/1500                              | 30                       |
| 1,500-100,000                                                  |                               |                               | 1.0                                 | 30                       |

f = frequency in MHz \* = Plane-wave equivalent power density

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### FCC SAR limits

| Region                                                    | Occupational SAR values<br>(W/Kg) | General public SAR values (W/Kg) |
|-----------------------------------------------------------|-----------------------------------|----------------------------------|
| Whole body<br>SAR averaging mass = entire body            | 0,4                               | 0,08                             |
| Partial body<br>SAR averaging mass = 1g                   | 8,0                               | 1,6                              |
| Hands, wrists, feet and akles<br>SAR averaging mass = 10g | 20                                | 4                                |

### FCC SAR test exclusion

#### General SAR test exclusion guidance according to KDB 447498 (Par. 4.3)

#### Standalone SAR test exclusion considerations:

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity 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. The minimum test separation distance defined in 4.1 f) is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander. To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified, typically in the SAR measurement or SAR analysis report, by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting are required, a statement of justification and compliance

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must be included in the equipment approval, in lieu of the SAR report, to qualify for SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops and tablets, etc.

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$   
 $\leq 3.0$  for 1-g SAR, and  $\leq 7.5$  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
- ☐ The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are 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 according to 4.1 f) is applied to determine SAR test exclusion.

b) 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 (also illustrated in Appendix B):<sup>32</sup>

- 1)  $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}$  mW, for 100 MHz to 1500 MHz
- 2)  $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}$  mW, for  $> 1500$  MHz and  $\leq 6$  GHz

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

- 1) For test separation distances  $> 50$  mm and  $< 200$  mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$
- 2) For test separation distances  $\leq 50$  mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$
- 3) SAR measurement procedures are not established below 100 MHz.

When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.

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### *SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm*

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

| MHz  | 5   | 10  | 15  | 20  | 25  | mm                                               |
|------|-----|-----|-----|-----|-----|--------------------------------------------------|
| 150  | 39  | 77  | 116 | 155 | 194 | <i>SAR Test<br/>Exclusion<br/>Threshold (mW)</i> |
| 300  | 27  | 55  | 82  | 110 | 137 |                                                  |
| 450  | 22  | 45  | 67  | 89  | 112 |                                                  |
| 835  | 16  | 33  | 49  | 66  | 82  |                                                  |
| 900  | 16  | 32  | 47  | 63  | 79  |                                                  |
| 1500 | 12  | 24  | 37  | 49  | 61  |                                                  |
| 1900 | 11  | 22  | 33  | 44  | 54  |                                                  |
| 2450 | 10  | 19  | 29  | 38  | 48  |                                                  |
| 3600 | 8   | 16  | 24  | 32  | 40  |                                                  |
| 5200 | 7   | 13  | 20  | 26  | 33  |                                                  |
| 5400 | 6   | 13  | 19  | 26  | 32  |                                                  |
| 5800 | 6   | 12  | 19  | 25  | 31  |                                                  |
| MHz  | 30  | 35  | 40  | 45  | 50  | mm                                               |
| 150  | 232 | 271 | 310 | 349 | 387 | <i>SAR Test<br/>Exclusion<br/>Threshold (mW)</i> |
| 300  | 164 | 192 | 219 | 246 | 274 |                                                  |
| 450  | 134 | 157 | 179 | 201 | 224 |                                                  |
| 835  | 98  | 115 | 131 | 148 | 164 |                                                  |
| 900  | 95  | 111 | 126 | 142 | 158 |                                                  |
| 1500 | 73  | 86  | 98  | 110 | 122 |                                                  |
| 1900 | 65  | 76  | 87  | 98  | 109 |                                                  |
| 2450 | 57  | 67  | 77  | 86  | 96  |                                                  |
| 3600 | 47  | 55  | 63  | 71  | 79  |                                                  |
| 5200 | 39  | 46  | 53  | 59  | 66  |                                                  |
| 5400 | 39  | 45  | 52  | 58  | 65  |                                                  |
| 5800 | 37  | 44  | 50  | 56  | 62  |                                                  |

**Note:** 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g *SAR Test Exclusion Thresholds* indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

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### *SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and > 50 mm*

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

| MHz  | 50  | 60  | 70  | 80  | 90  | 100 | 110 | 120 | 130 | 140  | 150  | 160  | 170  | 180  | 190  | mm |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|----|
| 100  | 474 | 481 | 487 | 494 | 501 | 507 | 514 | 521 | 527 | 534  | 541  | 547  | 554  | 561  | 567  | mW |
| 150  | 387 | 397 | 407 | 417 | 427 | 437 | 447 | 457 | 467 | 477  | 487  | 497  | 507  | 517  | 527  |    |
| 300  | 274 | 294 | 314 | 334 | 354 | 374 | 394 | 414 | 434 | 454  | 474  | 494  | 514  | 534  | 554  |    |
| 450  | 224 | 254 | 284 | 314 | 344 | 374 | 404 | 434 | 464 | 494  | 524  | 554  | 584  | 614  | 644  |    |
| 835  | 164 | 220 | 275 | 331 | 387 | 442 | 498 | 554 | 609 | 665  | 721  | 776  | 832  | 888  | 943  |    |
| 900  | 158 | 218 | 278 | 338 | 398 | 458 | 518 | 578 | 638 | 698  | 758  | 818  | 878  | 938  | 998  |    |
| 1500 | 122 | 222 | 322 | 422 | 522 | 622 | 722 | 822 | 922 | 1022 | 1122 | 1222 | 1322 | 1422 | 1522 |    |
| 1900 | 109 | 209 | 309 | 409 | 509 | 609 | 709 | 809 | 909 | 1009 | 1109 | 1209 | 1309 | 1409 | 1509 |    |
| 2450 | 96  | 196 | 296 | 396 | 496 | 596 | 696 | 796 | 896 | 996  | 1096 | 1196 | 1296 | 1396 | 1496 |    |
| 3600 | 79  | 179 | 279 | 379 | 479 | 579 | 679 | 779 | 879 | 979  | 1079 | 1179 | 1279 | 1379 | 1479 |    |
| 5200 | 66  | 166 | 266 | 366 | 466 | 566 | 666 | 766 | 866 | 966  | 1066 | 1166 | 1266 | 1366 | 1466 |    |
| 5400 | 65  | 165 | 265 | 365 | 465 | 565 | 665 | 765 | 865 | 965  | 1065 | 1165 | 1265 | 1365 | 1465 |    |
| 5800 | 62  | 162 | 262 | 362 | 462 | 562 | 662 | 762 | 862 | 962  | 1062 | 1162 | 1262 | 1362 | 1462 |    |

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### *SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm*

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

| MHz  | < 50 | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  | 190  | mm |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| 100  | 237  | 474  | 481  | 487  | 494  | 501  | 507  | 514  | 521  | 527  | 534  | 541  | 547  | 554  | 561  | 567  | mW |
| 50   | 308  | 617  | 625  | 634  | 643  | 651  | 660  | 669  | 677  | 686  | 695  | 703  | 712  | 721  | 729  | 738  |    |
| 10   | 474  | 948  | 961  | 975  | 988  | 1001 | 1015 | 1028 | 1041 | 1055 | 1068 | 1081 | 1095 | 1108 | 1121 | 1135 |    |
| 1    | 711  | 1422 | 1442 | 1462 | 1482 | 1502 | 1522 | 1542 | 1562 | 1582 | 1602 | 1622 | 1642 | 1662 | 1682 | 1702 |    |
| 0.1  | 948  | 1896 | 1923 | 1949 | 1976 | 2003 | 2029 | 2056 | 2083 | 2109 | 2136 | 2163 | 2189 | 2216 | 2243 | 2269 |    |
| 0.05 | 1019 | 2039 | 2067 | 2096 | 2125 | 2153 | 2182 | 2211 | 2239 | 2268 | 2297 | 2325 | 2354 | 2383 | 2411 | 2440 |    |
| 0.01 | 1185 | 2370 | 2403 | 2437 | 2470 | 2503 | 2537 | 2570 | 2603 | 2637 | 2670 | 2703 | 2737 | 2770 | 2803 | 2837 |    |

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### 9. SAR Exclusion

|                             |                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Evaluation date</b>      | 27/02/2023                                                                                                                                                                                                                                                                                                                                        |
| <b>Applied Standard</b>     | 47 CFR § 2.1091                                                                                                                                                                                                                                                                                                                                   |
| <b>EUT classification</b>   | <input checked="" type="checkbox"/> Mobile: transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons (47 cfr 2.1091) |
| <b>Temperature</b>          | 21.5° C                                                                                                                                                                                                                                                                                                                                           |
| <b>Humidity</b>             | 46%                                                                                                                                                                                                                                                                                                                                               |
| <b>Evaluated by</b>         | Roberto Radice                                                                                                                                                                                                                                                                                                                                    |
| <b>Model</b>                | Osmond N                                                                                                                                                                                                                                                                                                                                          |
| <b>Internal Storage No.</b> | A003255761-008                                                                                                                                                                                                                                                                                                                                    |
| <b>Remarks</b>              | None                                                                                                                                                                                                                                                                                                                                              |

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| SAR TEST EXCLUSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                   |                                   |        |                                                               |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------|--------|---------------------------------------------------------------|-----------|
| Frequency<br>(MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Measured field<br>strenght at 3 meter<br>distance | Calculated Electric<br>Field (E)* | ERP**  | Sar test<br>Exclusion<br>Threshold at<br><50mm<br>distance*** | PASS/FAIL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (dBuV/m)                                          | (V/m)                             | (mW)   | (mW)                                                          | /         |
| 13.56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 74.77                                             | 0.0054                            | 0.0090 | 442.65                                                        | P         |
| VERDICT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                   |                                   |        |                                                               |           |
| <p> <math display="block">*E(V/m) = 10^{\left(\frac{dB\mu V/m - 120}{20}\right)}</math> </p> <p> <math display="block">**ERP (W) = (E \times d)^2 / 30</math> </p> <p>           where<br/>           ERP = equivalent radiated power in Watts<br/>           E = electrical field strength in V/m<br/>           d = measured distance in metres         </p> <p>           The SAR exclusion threshold for &lt;50mm at 10MHz is 474mW.<br/>           For separation distances between 50mm and 200mm, the power threshold is multiplied by a factor of:<br/> <math>(1 + \log_{10}(100/f(\text{MHz})))</math><br/>           Using 13.56MHz as the transmit frequency, the factor is 1.86         </p> <p>           For test separation distance below 50mm, the power threshold determined with the previous formula, is multiplied<br/>           by 0.5         </p> <p> <math display="block">*** = [474 \times (1 + \log_{10}(100/f(\text{MHz}))) ] / 2</math> </p> <p>           The maximum output power, 0.0090 mW is much lower than the limit of 442.65 mW, thus SAR measurement is<br/>           NOT necessary.         </p> |                                                   |                                   |        |                                                               |           |

---END OF TEST REPORT---