

**SAR TEST REPORT**

Project No. : JB-Z1582  
 Client : Sony Corporation  
 Address : 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan  
 Type of Equipment : Radio Equipment  
 Model No. : WW81782  
 FCC ID : AK8WW81782  
 Regulation Applied : FCC 47 CFR 2.1093

SAR Limits :

| Exposure Characteristics | Spatial Peak SAR<br>(Head and Trunk)<br>averaged over any 1 g of tissue | Spatial Peak SAR<br>(Extremities: Hands/Wrists/Feet/Ankles)<br>averaged over any 10 g of tissue |
|--------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| General Public Exposure  | 1.6 W/kg                                                                | 4 W/kg                                                                                          |

The Highest Reported SAR :

| RF Exposure Conditions |           | SAR        |
|------------------------|-----------|------------|
|                        |           | Bluetooth  |
| Body-Worn              |           | 0.611 W/kg |
| Extremity (Hand)       |           | 0.682 W/kg |
| Simultaneous Tx        | Body-Worn | 1.050 W/kg |
|                        | Extremity | 0.886 W/kg |

**Test Result : Complied**

Sample Receipt : May 12, 2026  
 Testing : May 22, 2026 - May 27, 2026 (for conducted power measurements)  
 June 5, 2026 - June 11, 2026 (for SAR measurements)  
 Reported : July 21, 2026

Reported by :

Approved Signatory :

K. OHYAMA

Koji Hayama

Koji Ohyama  
 Technical Manager  
 EMC/ RF Test Laboratory Main Lab.  
 Design Technology Division  
 Sony Global Manufacturing & Operations Corporation

Koji Hayama  
 Technical Manager  
 EMC/ RF Test Laboratory Main Lab.  
 Design Technology Division  
 Sony Global Manufacturing & Operations Corporation

**Notice**

- \* These test results relate only to the items (combination equipment, test configuration, operation condition etc.) tested.
- \* This report shall not be reproduced except in full, without written approval of the laboratory.
- \* This report must not be used by the client to claim product endorsement by A2LA or any agency of the U.S. Government.
- \* Hereby certify that no party is subject to a denial of federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act.
- \* All test results are traceable to the national and / or international standards.
- \* The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in Sony Global Manufacturing & Operations Corporation EMC/ RF Test Laboratory.



TESTING CERT #3203.01

Format No.: NV1-1-01 Version 5.0

**Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, Main Lab.**

8-4 Shiomi Kisarazu-shi Chiba-ken, 292-0834, Japan

PHONE +81 438 37 2750

## REVISION HISTORY

| Project No. | Revision | Page | Description | Issued date   |
|-------------|----------|------|-------------|---------------|
| JB-Z1582    | Original | -    | -           | July 21, 2026 |
|             |          |      |             |               |
|             |          |      |             |               |
|             |          |      |             |               |
|             |          |      |             |               |
|             |          |      |             |               |
|             |          |      |             |               |
|             |          |      |             |               |

## DISCLAIMER

This report includes the information provided by the customer as below;

- Cover page : Client and product related information
- Clause 1.1 : Description of Device Under Test (DUT)
- Clause 1.2 : Antenna Placement
- Clause 1.3 : Simultaneous Transmission Conditions
- Clause 1.4 : Nominal and Maximum Possible Power (Maximum Tune-up Tolerance Limit)

\* The laboratory is not responsible for results affected by the above information.

Note(s)

- ☒ - indicates that the listed condition, standard or equipment is applicable for this report.
- ☐ - indicates that the listed condition, standard or equipment is not applicable for this report.

## TABLE OF CONTENTS

|                                                                                 |           |
|---------------------------------------------------------------------------------|-----------|
| <b>1. General Information .....</b>                                             | <b>4</b>  |
| 1.1. Description of Device Under Test (DUT) .....                               | 4         |
| 1.2. Antenna Placement .....                                                    | 4         |
| 1.3. Simultaneous Transmission Conditions .....                                 | 4         |
| 1.4. Nominal and Maximum Possible Power (Maximum Tune-up Tolerance Limit) ..... | 5         |
| 1.5. RF Exposure Conditions .....                                               | 5         |
| 1.6. RF Exposure Limits .....                                                   | 5         |
| 1.7. SAR Test Exclusion .....                                                   | 6         |
| 1.8. Test Specification, Methods and Procedures .....                           | 8         |
| 1.9. Test Facilities and Accreditation .....                                    | 9         |
| <b>2. Test Set-up .....</b>                                                     | <b>10</b> |
| 2.1. Test Equipment and Measurement Software Lists .....                        | 10        |
| 2.2. Measurement System Description .....                                       | 11        |
| 2.3. Measurement System Main Components .....                                   | 12        |
| 2.4. Tissue Simulating Liquids .....                                            | 15        |
| 2.5. SAR Measurement .....                                                      | 16        |
| 2.6. Measurement Uncertainty .....                                              | 17        |
| 2.7. Dielectric Parameter Measurement of Tissue Simulating Liquids .....        | 19        |
| 2.8. System Check Measurement .....                                             | 21        |
| <b>3. Conducted Power Measurements .....</b>                                    | <b>23</b> |
| 3.1. Conducted Power Measurement Results .....                                  | 23        |
| <b>4. SAR Measurements .....</b>                                                | <b>25</b> |
| 4.1. SAR Measurement Results .....                                              | 26        |
| <b>5. Simultaneous Transmission SAR evaluation .....</b>                        | <b>29</b> |
| <b>Appendix A. Plots of SAR Measurement .....</b>                               | <b>30</b> |
| <b>Appendix B. Plots of System Check .....</b>                                  | <b>35</b> |
| <b>Appendix C. Calibration Certificate .....</b>                                | <b>41</b> |
| <b>Appendix D. Photographs .....</b>                                            | <b>74</b> |

## 1. General Information

### 1.1. Description of Device Under Test (DUT)

#### DUT Descriptions

|                              |                                                                                                                                                                                                                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Equipment            | Radio Equipment                                                                                                                                                                                                                                  |
| Model No.                    | WW81782                                                                                                                                                                                                                                          |
| FCC ID                       | AK8WW81782                                                                                                                                                                                                                                       |
| Test Sample Condition        | <input checked="" type="checkbox"/> Prototype<br><input type="checkbox"/> Pre-production<br><input type="checkbox"/> Mass-production<br>* Not for sale: The sample is equivalent to mass-production items.<br>* No modification by the test lab. |
| Serial No.                   | 1003                                                                                                                                                                                                                                             |
| Rating                       | Li-ion Battery DC 3.85 V<br><input checked="" type="checkbox"/> Not user accessible.                                                                                                                                                             |
| Body-Worn Accessories        | n/a                                                                                                                                                                                                                                              |
| Device Dimension (W x H x D) | See Appendix D                                                                                                                                                                                                                                   |
| Device Category              | Portable                                                                                                                                                                                                                                         |
| Exposure Category            | General population/ Uncontrolled environment                                                                                                                                                                                                     |

#### Wireless Technologies

| Wireless Technologies | Frequency Bands | Operating Mode |
|-----------------------|-----------------|----------------|
| Bluetooth             | 2.4 GHz         | BR / EDR / LE  |

#### Radio Specification

|              | Chain 1   | Chain 2          |
|--------------|-----------|------------------|
| Antenna Type | PIFA      | Monopole Antenna |
| Antenna Gain | - 1.2 dBi | - 0.2 dBi        |

### 1.2. Antenna Placement

| Antenna | Minimum Distance from Edges or Sides of DUT Platform (mm) |      |      |       |     |        |
|---------|-----------------------------------------------------------|------|------|-------|-----|--------|
|         | Front                                                     | Back | Left | Right | Top | Bottom |
| Chain 1 | *1                                                        | *1   | *1   | *1    | *1  | *1     |
| Chain 2 | *1                                                        | *1   | *1   | *1    | *1  | *1     |

\* Please refer to Appendix D for more details.

### 1.3. Simultaneous Transmission Conditions

| RF Exposure Conditions       | Capable Transmit Configurations |              |              |
|------------------------------|---------------------------------|--------------|--------------|
|                              | Chain 1                         |              | Chain 2      |
|                              | Bluetooth Classic               | Bluetooth LE | Bluetooth LE |
| Body-Worn / Extremity (Hand) | -                               | Yes          | Yes          |

## 1.4. Nominal and Maximum Possible Power (Maximum Tune-up Tolerance Limit)

| Antenna | Wireless Technologies | Mode | Band    | Frequency Band (MHz) |        | Channel | Data Rate | Full Power (Burst Averaged) | Ant. Gain (dBi) | Effective Radiated Power (dBm) *1 |
|---------|-----------------------|------|---------|----------------------|--------|---------|-----------|-----------------------------|-----------------|-----------------------------------|
|         |                       |      |         | Lower                | Higher |         |           | Max. Tune-up Limit (dBm)    |                 |                                   |
| Chain 1 | Bluetooth             | BR   | 2.4 GHz | 2402                 | 2480   | All     | -         | 14.50                       | -1.2            | 11.15                             |
|         |                       | EDR  |         | 2402                 | 2480   | All     | -         | 12.00                       | -1.2            | 8.65                              |
|         |                       | LE   |         | 2402                 | 2480   | All     | 1 Mbps    | 10.00                       | -1.2            | 6.65                              |
|         |                       | LE   |         | 2404                 | 2478   | All     | 2 Mbps    | 18.00                       | -1.2            | 14.65                             |
| Chain 2 |                       | LE   |         | 2402                 | 2480   | All     | 1 Mbps    | 10.00                       | -0.2            | 7.65                              |
|         |                       | LE   |         | 2404                 | 2478   | All     | 2 Mbps    | 18.00                       | -0.2            | 15.65                             |

\*1 Effective Radiated Power (dBm) = Max. Tune-up Limit (dBm) + Ant. Gain (dBi) - 2.15 dB

## 1.5. RF Exposure Conditions

| Wireless Technologies | RF Exposure Conditions | User-to-DUT Distance (mm) * 1 | Test Position | DUT-to-Ant. Distance (mm) |         | SAR to be Considered | Note(s) |
|-----------------------|------------------------|-------------------------------|---------------|---------------------------|---------|----------------------|---------|
|                       |                        |                               |               | Chain 1                   | Chain 2 |                      |         |
| Bluetooth             | Body-Worn              | 5                             | Front         | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Back          | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Left          | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Right         | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Top           | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Bottom        | *2                        | *2      | Yes                  | -       |
|                       | Extremity              | 0                             | Front         | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Back          | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Left          | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Right         | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Top           | *2                        | *2      | Yes                  | -       |
|                       |                        |                               | Bottom        | *2                        | *2      | Yes                  | -       |

\*1 According to the intended use as specified by the manufacturer in the user manual, SAR for the body-worn exposure conditions was evaluated with the separation distance of 5 mm.

\*2 Please refer to Appendix D.

## 1.6. RF Exposure Limits

| Human Exposure                                                    | General Population/ Uncontrolled Exposure | Occupational/ Controlled Exposure |
|-------------------------------------------------------------------|-------------------------------------------|-----------------------------------|
| Spatial Peak SAR (Head and Trunk) averaged over any 1 g of tissue | 1.6 W/kg*                                 | 8 W/kg                            |
| Spatial Average SAR (Whole Body) averaged over the whole body     | 0.08 W/kg                                 | 0.4 W/kg                          |
| Spatial Peak SAR (Limbs) averaged over any 10 g of tissue         | 4 W/kg*                                   | 20 W/kg                           |

\* The limit(s) applied in this report.

## 1.7. SAR Test Exclusion

☒ SAR test exclusion is applied according to KDB 447498 D01.

The 1-g or 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$  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
- \* When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

Body-Worn SAR (1-g SAR) Test Exclusion as per KDB 447498 D01 - Chain 1

| Freq. Band        | Freq. (MHz) | Test Position | User-to-Host Distance (mm) | DUT-to-Ant Distance (mm) | User-to-Ant Distance (mm) | Min. Test Sep. Distance (mm) | Max. Possible Power |      |              | Exclusion Threshold | SAR Required ( $> 3.0$ ) | SAR Tested |
|-------------------|-------------|---------------|----------------------------|--------------------------|---------------------------|------------------------------|---------------------|------|--------------|---------------------|--------------------------|------------|
|                   |             |               |                            |                          |                           |                              | (dBm)               | (mW) | rounded (mW) |                     |                          |            |
| Bluetooth Classic | 2450        | Front         | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                       | Yes *2     |
|                   | 2450        | Back          | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                      | Yes        |
|                   | 2450        | Left          | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                       | Yes *2     |
|                   | 2450        | Right         | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                      | Yes        |
|                   | 2450        | Top           | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                      | Yes        |
|                   | 2450        | Bottom        | 5                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                       | Yes *2     |
| Bluetooth LE      | 2450        | Front         | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                      | Yes        |
|                   | 2450        | Back          | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                      | Yes        |
|                   | 2450        | Left          | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                       | Yes *2     |
|                   | 2450        | Right         | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                      | Yes        |
|                   | 2450        | Top           | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                      | Yes        |
|                   | 2450        | Bottom        | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                      | Yes        |

\*1 Please refer to Appendix D.

\*2 Tested because its maximum possible power is close to the exemption limit, or for the simultaneous transmission analysis

Body-Worn SAR (1-g SAR) Test Exclusion as per KDB 447498 D01 - Chain 2

| Freq. Band   | Freq. (MHz) | Test Position | User-to-Host Distance (mm) | DUT-to-Ant Distance (mm) | User-to-Ant Distance (mm) | Min. Test Sep. Distance (mm) | Max. Possible Power |      |              | Exclusion Threshold | SAR Required (> 3.0) | SAR Tested |
|--------------|-------------|---------------|----------------------------|--------------------------|---------------------------|------------------------------|---------------------|------|--------------|---------------------|----------------------|------------|
|              |             |               |                            |                          |                           |                              | (dBm)               | (mW) | rounded (mW) |                     |                      |            |
| Bluetooth LE | 2450        | Front         | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Back          | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Left          | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Right         | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |
|              | 2450        | Top           | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Bottom        | 5                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |

Extremity SAR (10-g SAR) Test Exclusion as per KDB 447498 D01 - Chain 1

| Freq. Band        | Freq. (MHz) | Test Position | User-to-Host Distance (mm) | DUT-to-Ant Distance (mm) | User-to-Ant Distance (mm) | Min. Test Sep. Distance (mm) | Max. Possible Power |      |              | Exclusion Threshold | SAR Required (> 7.5) | SAR Tested |
|-------------------|-------------|---------------|----------------------------|--------------------------|---------------------------|------------------------------|---------------------|------|--------------|---------------------|----------------------|------------|
|                   |             |               |                            |                          |                           |                              | (dBm)               | (mW) | rounded (mW) |                     |                      |            |
| Bluetooth Classic | 2450        | Front         | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                   | Yes *2     |
|                   | 2450        | Back          | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                  | Yes        |
|                   | 2450        | Left          | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                   | Yes *2     |
|                   | 2450        | Right         | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                  | Yes        |
|                   | 2450        | Top           | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | Yes                  | Yes        |
|                   | 2450        | Bottom        | 0                          | *1                       | *1                        | *1                           | 14.5                | 28.2 | 28           | *1                  | No                   | Yes *2     |
| Bluetooth LE      | 2450        | Front         | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |
|                   | 2450        | Back          | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|                   | 2450        | Left          | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |
|                   | 2450        | Right         | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|                   | 2450        | Top           | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|                   | 2450        | Bottom        | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |

Extremity SAR (10-g SAR) Test Exclusion as per KDB 447498 D01 - Chain 2

| Freq. Band   | Freq. (MHz) | Test Position | User-to-Host Distance (mm) | DUT-to-Ant Distance (mm) | User-to-Ant Distance (mm) | Min. Test Sep. Distance (mm) | Max. Possible Power |      |              | Exclusion Threshold | SAR Required (> 7.5) | SAR Tested |
|--------------|-------------|---------------|----------------------------|--------------------------|---------------------------|------------------------------|---------------------|------|--------------|---------------------|----------------------|------------|
|              |             |               |                            |                          |                           |                              | (dBm)               | (mW) | rounded (mW) |                     |                      |            |
| Bluetooth LE | 2450        | Front         | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Back          | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Left          | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Right         | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |
|              | 2450        | Top           | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | Yes                  | Yes        |
|              | 2450        | Bottom        | 0                          | *1                       | *1                        | *1                           | 18.0                | 63.1 | 63           | *1                  | No                   | Yes *2     |

\*1 Please refer to Appendix D.

\*2 Tested because its maximum possible power is close to the exemption limit, or for the simultaneous transmission analysis

## 1.8. Test Specification, Methods and Procedures

Test Specification

☒ FCC 47 CFR 2.1093      Radiofrequency radiation exposure evaluation: portable devices

Test Methods

- ☒ IEEE Std 1528-2013      IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- ☒ IEC/IEEE 62209-1528: 2020      Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices –Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)
- ☐ KDB 248227 D01      v02r02      SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters
- ☒ KDB 447498 D01      v06      Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies
- ☐ KDB 447498 D02      v02r01      SAR Measurement Procedures for USB Dongle Transmitters
- ☐ KDB 447498 D04      v01      RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
- ☐ KDB 615223 D01      v01r01      802.16e/WiMax SAR Measurement Guidance
- ☐ KDB 616217 D04      v01r02      SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers
- ☐ KDB 648474 D03      v01r04      Evaluation and Approval Considerations for Handsets with Specific Wireless Charging Battery Covers
- ☐ KDB 648474 D04      v01r03      SAR Evaluation Considerations for Wireless Handsets
- ☒ KDB 865664 D01      v01r04      SAR Measurement Requirements for 100 MHz to 6 GHz
- ☐ KDB 941225 D01      v03r01      3G SAR Measurement Procedures
- ☐ KDB 941225 D05      v02r05      SAR Evaluation Considerations for LTE Devices
- ☐ KDB 941225 D06      v02r01      SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
- ☐ KDB 941225 D07      v01r02      SAR Evaluation Procedures for UMPC Mini-Tablet Devices
- ☒ TCB Workshop (Oct. 2016)      RF Exposure Procedures; Bluetooth Duty Factor

Test Procedures

The SAR tests were performed according to the procedures of Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, the Document No. NV3-2 and NV3-16, available upon request.

- ☒ No deviation from the procedures
- ☐ Deviation from the procedures
- ☐ \_\_\_\_\_

## References

- [1] ICNIRP. Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz). Health Physics 74(4): 494-522, 1998.
- [2] ICNIRP. Guidelines for limiting exposure to electromagnetic fields (100 kHz to 300 GHz). Health Physics 118(5): 483-524, 2020.
- [3] American National Standards Institute (ANSI), "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1-1992.
- [4] Health Canada, "Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz," Safety Code 6 (2015).
- [5] Health Canada, "Notice: Localized human exposure limits for radiofrequency fields in the range of 6 GHz to 300 GHz," January 2021.
- [6] European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) (Official Journal L 199 of 30 July 1999).
- [7] REDCA Technical Guidance Note 20 (TGN 20), SAR Testing and Assessment Guidance, Version 6.5, October 2020.
- [8] Australian Communications and Media Authority (ACMA), Radiocommunications Equipment (General) Rules 2021.
- [9] Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), "Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz, Radiation Protection Series S-1 (Rev. 1)," February 2021.
- [10] Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), RPS S-1 Advisory Note: Compliance of mobile or portable transmitting equipment (100 kHz to 300 GHz).
- [11] Schmid & Partner Engineering AG (SPEAG), DASY52 System Handbook, April 2014.
- [12] Schmid & Partner Engineering AG (SPEAG), DASY8 Module SAR System Handbook, September 2025.
- [13] Schmid & Partner Engineering AG (SPEAG), DASY8 Module mmWave System Handbook, December 2022.
- [14] Schmid & Partner Engineering AG (SPEAG), Safety Data Sheet, Doc No 772-SLAAX0yy-J, June 14, 2013.
- [15] Schmid & Partner Engineering AG (SPEAG), Safety Data Sheet, Doc No 772-SLAAX1yy-I, October 18, 2013.
- [16] Schmid & Partner Engineering AG (SPEAG), Safety Data Sheet, Doc No 772-SLAAX6yy-H, September 26, 2013.
- [17] Schmid & Partner Engineering AG (SPEAG), Material Safety Data Sheet, Doc No 772-SLAAXH502A-D, August 9, 2013.
- [18] Schmid & Partner Engineering AG (SPEAG), Material Safety Data Sheet, Doc No 772-SLAAX4yy-J, August 9, 2013.
- [19] Schmid & Partner Engineering AG (SPEAG), Material Safety Data Sheet, Doc No 772-SLAAXU16B-C, June 9, 2015.

## 1.9. Test Facilities and Accreditation

### Test Facilities

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Test Facility Name | : Sony Global Manufacturing & Operations Corporation<br>EMC/ RF Test Laboratory Main Lab. |
| Address            | : 8-4 Shiomi Kisarazu-shi Chiba-ken, 292-0834, Japan                                      |
| Shielded Room Used | : 4th Site Shielded Room 3                                                                |

### A2LA Accreditation

|                 |                    |
|-----------------|--------------------|
| Certificate No. | : 3203.01          |
| Expiration      | : October 31, 2027 |

## 2. Test Set-up

### 2.1. Test Equipment and Measurement Software Lists

Table 2-1      Test Equipment List

| Used                                                                                                                                  | Control No. | Equipment Description        | Model No.                      | Serial No.         | Manufacturer                 | Cal. Int. | Last Cal.  |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------|--------------------------------|--------------------|------------------------------|-----------|------------|
| <input checked="" type="checkbox"/>                                                                                                   | M5583       | Robot                        | TX2-60L spe                    | F/24/0057614/A/002 | Staubli                      | N/A       | N/A *1     |
| <input type="checkbox"/>                                                                                                              | W0082       | Twin SAM Phantom             | Twin SAM                       | TP-1325            | SPEAG                        | N/A       | N/A *1     |
| <input type="checkbox"/>                                                                                                              | W0127       | Twin SAM Phantom             | Twin SAM                       | TP-1852            | SPEAG                        | N/A       | N/A *1     |
| <input checked="" type="checkbox"/>                                                                                                   | W0119       | ELI Phantom                  | ELI V5.0                       | 1259               | SPEAG                        | N/A       | N/A *1     |
| <input checked="" type="checkbox"/>                                                                                                   | WA0052      | E-Field Probe                | EX3DV4                         | 7452               | SPEAG                        | 1Y        | 2026.03.20 |
| <input checked="" type="checkbox"/>                                                                                                   | W0095       | Data Acquisition Electronics | DAE4                           | 482                | SPEAG                        | 1Y        | 2025.07.31 |
| <input type="checkbox"/>                                                                                                              | WA0026      | System Validation Dipole     | D2450V2                        | 936                | SPEAG                        | 1Y        | Under Cal. |
| <input checked="" type="checkbox"/>                                                                                                   | WA0064      | System Validation Dipole     | D2450V2                        | 894                | SPEAG                        | 1Y        | 2026.04.14 |
| <input checked="" type="checkbox"/>                                                                                                   | W0121       | Vector Reflectometer         | DAKS_VNAR140                   | 0111013            | Copper Mountain Technologies | 1Y        | 2025.10.03 |
| <input checked="" type="checkbox"/>                                                                                                   | WA0029      | Dielectric Probe             | DAKS-3.5                       | 1034               | SPEAG                        | 1Y        | 2025.08.11 |
| <input checked="" type="checkbox"/>                                                                                                   | M1037       | Signal Generator             | N5173B                         | MY53270166         | Agilent                      | 1Y        | 2025.11.06 |
| <input checked="" type="checkbox"/>                                                                                                   | M5582       | Power Amp                    | RAMP01M22GA                    | 00652106320        | RF Lambda                    | N/A       | N/A *1     |
| <input checked="" type="checkbox"/>                                                                                                   | W0104       | Power Sensor                 | U2021XA                        | MY54040006         | Agilent                      | 1Y        | 2025.11.06 |
| <input checked="" type="checkbox"/>                                                                                                   | W0105       | Power Sensor                 | U2021XA                        | MY54080005         | Agilent                      | 1Y        | 2025.11.06 |
| <input checked="" type="checkbox"/>                                                                                                   | W0120       | Directional Coupler          | 4226-20                        | -                  | narda                        | 1Y        | 2025.10.10 |
| <input checked="" type="checkbox"/>                                                                                                   | W0117       | Attenuator                   | 8493B 3 dB                     | MY39260857         | Agilent                      | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | M5692       | Attenuator                   | Coaxial Fixed 10 dB Attenuator | 6610.19.AA         | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | W0148       | Attenuator                   | AT-103 3 dB                    | 980711             | Hirose                       | 1Y        | 2025.10.05 |
| <input type="checkbox"/>                                                                                                              | WC0022      | RF Cable                     | SUCOFLEX 106                   | 503094/6           | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | WC0017      | RF Cable                     | SUCOFLEX 104                   | 253269/4           | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | WC0024      | RF Cable                     | SUCOFLEX 126E                  | MY1150/26E         | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | CA5069      | RF Cable                     | SUCOFLEX 104                   | 35533/4            | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input checked="" type="checkbox"/>                                                                                                   | CA5071      | RF Cable                     | SUCOFLEX 104                   | 37196/4            | HUBER+SUHNER                 | 1Y        | 2025.10.05 |
| <input type="checkbox"/>                                                                                                              | M5313       | Thermometer                  | 608-H2                         | 83132796           | testo                        | 2Y        | 2025.10.10 |
| <input checked="" type="checkbox"/>                                                                                                   | M5062       | Thermometer                  | 0560 6220                      | 39515563/802       | testo                        | 1Y        | 2025.10.09 |
| <input checked="" type="checkbox"/>                                                                                                   | W0113       | Water Thermometer            | 735-1                          | 02788580           | testo                        | 1Y        | 2025.11.19 |
| <input type="checkbox"/>                                                                                                              | W0116       | Water Thermometer            | 735-1                          | 02788596           | testo                        | 1Y        | Under Cal. |
| Note(s):<br>* The calibration is valid until the end of the expiration month.<br>* 1 In-house verification is conducted periodically. |             |                              |                                |                    |                              |           |            |

Table 2-2      Measurement Software List

| Used                                | Control No. | Software Description            | Model No.         | Ver.         | Manufacturer |
|-------------------------------------|-------------|---------------------------------|-------------------|--------------|--------------|
| <input checked="" type="checkbox"/> | SW-5033     | SAR measurement software        | DASY8 Module SAR  | V17.0.4.7034 | SPEAG        |
| <input checked="" type="checkbox"/> | SW-0403     | Dielectric measurement software | DAK               | 2.6.0.5      | SPEAG        |
| <input checked="" type="checkbox"/> | SW-0406     | SAR measurement spreadsheet     | -                 | 2.00         | Main Lab.    |
| <input checked="" type="checkbox"/> | SW-5035     | Power measurement software      | Keysight BenchVue | 2024         | Keysight     |

## 2.2. Measurement System Description

The DASY8 system for SAR measurements consists of the following items:

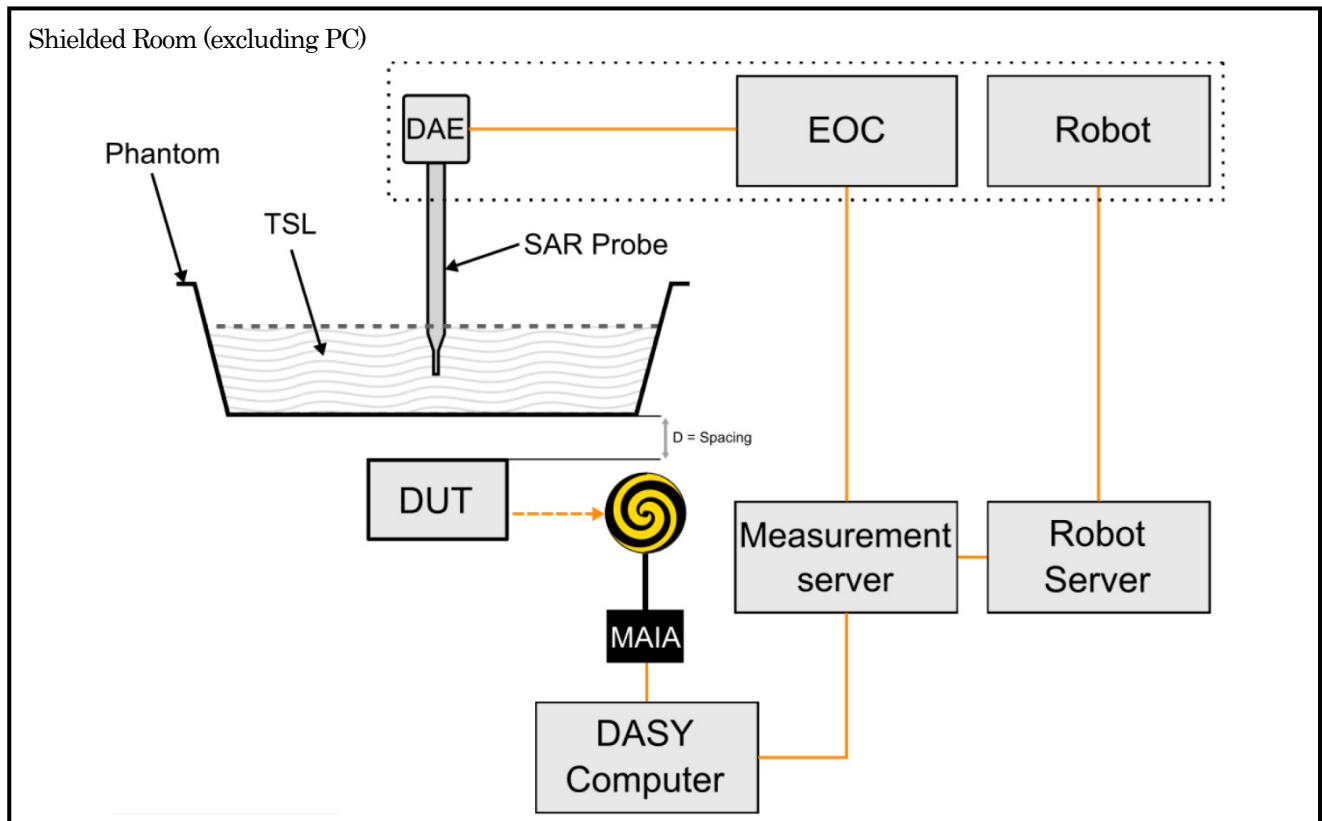


Figure 2-1 SAR Measurement System Description

- 6-axis robotic arm (Stäubli TX2-60L) for positioning the probe.
- Mounting Platform for keeping the phantoms at a fixed location relative to the robot.
- Measurement Server for handling all time-critical tasks, such as measurement data acquisition and supervision of safety features.
- EOC (Electrical to Optical Converter) for converting the optical signal from the DAE to electrical before being transmitted to the measurement server.
- LB (Light-Beam unit) for probe alignment (measurement of the exact probe length and eccentricity).
- SAR probe (EX3DV4 probes) for measuring the E-field distribution in the phantom. The SAR distribution and the psSAR (peak spatial averaged SAR) are derived from the E-field measurement.
- SAR phantom that represents a physical model with an equivalent human anatomy. A Specific Anthropomorphic Mannequin (SAM) head is usually used for handheld devices, and a Flat phantom is used for body-worn devices.
- TSL (Tissue Simulating Liquid) representing the dielectric properties of used tissue, e.g. Head Simulating Liquid, HSL.
- DAE (Data Acquisition Electronics) for reading the probe voltages and transmitting it to the DASY8 PC.
- Device Holder for positioning the DUT beneath the phantom.
- MAIA (Modulation and Interference Analyzer) for confirming the accuracy of the probe linearization parameters.
- Control PC for running the DASY8 software to define/execute the measurements.
- System validation kits for system check/validation purposes.

## 2.3. Measurement System Main Components

### Robot (Positioner)

|                       |             |
|-----------------------|-------------|
| Manufacturer          | Staubli SA  |
| Model No.             | TX2-60L     |
| Number of Axis        | 6           |
| Reach at Wrist        | 920 mm      |
| Repeatability         | +/- 0.03 mm |
| Nominal Load Capacity | 2 kg        |
| Maximum Load Capacity | 3.7 kg      |
| Control Unit          | CS9c        |
| Weight                | 52.9 kg     |

### E-Field Probe

|               |                                                                                                                                                             |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer  | Schmid & Partner Engineering AG (SPEAG)                                                                                                                     |
| Model No.     | EX3DV4                                                                                                                                                      |
| Construction  | Symmetrical design with triangular core<br>Built-in shielding against static charges<br>PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| Frequency     | 4 MHz to 10 GHz<br>Linearity: $\pm 0.2$ dB (30 MHz to 10 GHz)                                                                                               |
| Directivity   | $\pm 0.1$ dB in TSL (rotation around probe axis)<br>$\pm 0.3$ dB in TSL (rotation normal to probe axis)                                                     |
| Dynamic Range | 10 $\mu$ W/g to > 100 mW/g<br>Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)                                                                      |
| Dimensions    | Overall length: 337 mm (Tip length: 20 mm)<br>Tip diameter: 2.5 mm (Body diameter: 12 mm)<br>Typical distance from probe tip to dipole centers: 1 mm        |

### Data Acquisition Electronics (DAE)

|                        |                                                                                                                                                                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer           | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                                                                                                         |
| Model No.              | DAE4                                                                                                                                                                                                                                                            |
| Construction           | High precision 3-channel differential voltmeter for use with SPEAG's field, SAR probes.<br>Serial optical link for communication with the DASY8 measurement server.<br>Two-step probe touch detector for mechanical surface detection and emergency robot stop. |
| Measurement Range      | -100 to +300 mV (16-bit resolution and two range settings: 4 mV, 400 mV)                                                                                                                                                                                        |
| Input Offset Voltage   | < 5 $\mu$ V (with auto zero)                                                                                                                                                                                                                                    |
| Input Resistance       | 200 M $\Omega$                                                                                                                                                                                                                                                  |
| Input Bias Current     | < 50 fA                                                                                                                                                                                                                                                         |
| Battery Power          | > 10 hours of operation (with two 9.6 V NiMH batteries)                                                                                                                                                                                                         |
| Dimensions (L x W x H) | 60 x 60 x 68 mm                                                                                                                                                                                                                                                 |

### DASY8 Measurement Server

|              |                                                                                             |
|--------------|---------------------------------------------------------------------------------------------|
| Manufacturer | Schmid & Partner Engineering AG (SPEAG)                                                     |
| Model No.    | DASY8 Measurement Server                                                                    |
| Description  | The DASY8 measurement server establishes the connection between the DASY8 PC and the robot. |

Phantoms (Twin SAM Phantom)

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer         | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Model No.            | Twin SAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Description          | <p>The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEC/IEEE 62209-1528. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.</p> <p>Twin SAM V5.0 has the same shell geometry and is manufactured from the same material as Twin SAM V4.0, but has reinforced top structure.</p> |
| Material             | Vinylester, glass fiber reinforced (VE-GF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Liquid Compatibility | Compatible with all SPEAG tissue simulating liquids (sugar and oil based)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Shell Thickness      | $2 \pm 0.2$ mm ( $6 \pm 0.2$ mm at ear point)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Dimensions           | Length: 1000 mm<br>Width: 500 mm<br>Height: adjustable feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Filling Volume       | Approx. 25 liters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Support              | SPEAG standard-size platform slot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

Phantoms (ELI Phantom)

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer         | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Model No.            | ELI V5.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Description          | <p>Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 4 MHz to 10 GHz. ELI is fully compatible with the IEC/IEC 62209-1528 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables.</p> <p>A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.</p> <p>ELI V5.0 has the same shell geometry and is manufactured from the same material as ELI4, but has reinforced top structure.</p> |
| Material             | Vinylester, glass fiber reinforced (VE-GF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Liquid Compatibility | Compatible with all SPEAG tissue simulating liquids (sugar and oil based)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Shell Thickness      | $2.0 \pm 0.2$ mm (bottom plate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dimensions           | Major axis: 600 mm<br>Minor axis: 400 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Filling Volume       | Approx. 30 liters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Support              | SPEAG standard-size platform slot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

Device Holder (Mounting Device for Hand-Held Transmitters)

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Model No.    | MD4HHTV5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Description  | In combination with the Twin SAM or ELI Phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). |
| Material     | Polyoxymethylene (POM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

Device Holder (Mounting Device Adaptor for Ultra Wide Transmitters)

|              |                                                                                                                                                                         |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                 |
| Model No.    | MDA4WTV5                                                                                                                                                                |
| Description  | An upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140mm. |
| Material     | Polyoxymethylene (POM)                                                                                                                                                  |

Device Holder (Mounting Device Adaptor for Laptops)

|              |                                                                                                                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                                                                                                                                                                                            |
| Model No.    | MDA4LAP                                                                                                                                                                                                                                                                                                                                            |
| Description  | A simple but effective and easy-to-use extension for the Mounting Device; facilitates testing of larger devices according to IEC 62209-2 (e.g., laptops, cameras, etc.); lightweight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM, ELI Phantoms. |
| Material     | Polyoxymethylene (POM), PET-G, Foam                                                                                                                                                                                                                                                                                                                |

System Validation Dipole Kits

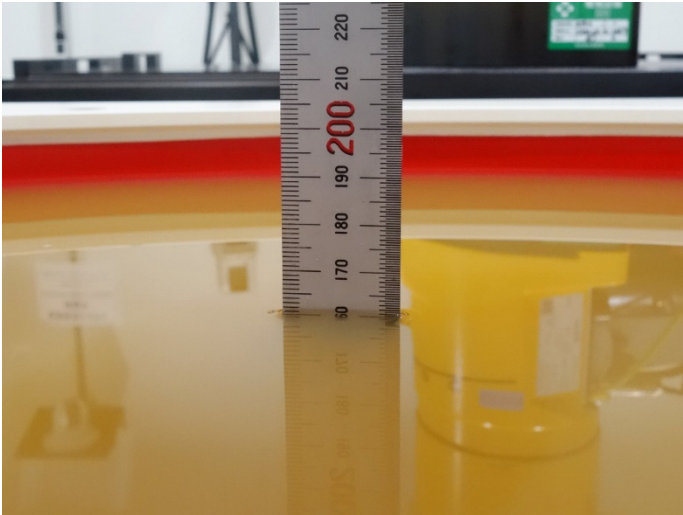
| Manufacturer     | Schmid & Partner Engineering AG (SPEAG)                                                                                                                                |               |                |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
| Model No.        | D-Series                                                                                                                                                               |               |                |
| Construction     | Symmetrical dipole with 1/4 balun<br>Enables measurement of feedpoint impedance with NWA<br>Matched for use near flat phantoms filled with tissue simulating solutions |               |                |
| Frequency        | 2450 MHz, 5100 to 5800 MHz, and 6500 MHz                                                                                                                               |               |                |
| Return Loss      | > 20 dB at specified validation position                                                                                                                               |               |                |
| Power Capability | > 100 W (f < 1 GHz); > 40 W (f > 1 GHz)                                                                                                                                |               |                |
| Accessories      | Distance holder, tripod adaptor, tripod                                                                                                                                |               |                |
| Dimensions       | Product                                                                                                                                                                | Dipole length | Overall height |
|                  | D2450V2                                                                                                                                                                | 52.0 mm       | 290.0 mm       |
|                  | D5GHzV2                                                                                                                                                                | 20.6 mm       | 300.0 mm       |
|                  | D6.5GHzV2                                                                                                                                                              | 15.5 mm       | 296.0 mm       |

2.4. Tissue Simulating Liquids

Recipes for tissue simulating liquids manufactured by SPEAG

| Ingredients<br>(% by weight) | Frequency (MHz)             |                             |                             |                             |                                     |                            |
|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------------|----------------------------|
|                              | 1900 to 3800                |                             | 3500 to 5800                |                             | 600 to 6000 / 10000                 |                            |
| Used                         | <input type="checkbox"/>    | <input type="checkbox"/>    | <input type="checkbox"/>    | <input type="checkbox"/>    | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |
| Tissue Simulating Liquids    | HBBL<br>1900-<br>3800<br>V3 | MBBL<br>1900-<br>3800<br>V3 | HBBL<br>3500-<br>5800<br>V5 | MBBL<br>3500-<br>5800<br>V5 | HBBL<br>600-<br>10000<br>V6         | MBBL<br>600-<br>6000<br>V6 |
| Tissue Type                  | Head                        | Body                        | Head                        | Body                        | Head                                | Body                       |
| H <sub>2</sub> O             | 50 – 73 %                   |                             | 50 – 65 %                   |                             | –                                   |                            |
| Non-ionic detergents         | 25 – 50 %                   |                             | –                           |                             | –                                   |                            |
| NaCl                         | 0 – 2 %                     |                             | 0 – 1.5 %                   |                             | –                                   |                            |
| Preventol-D7                 | 0.05 – 0.1 %                |                             | –                           |                             | –                                   |                            |
| Ethanediol                   | –                           |                             | –                           |                             | < 5.2 %                             |                            |
| Sodium Petroleum Sulfonate   | –                           |                             | –                           |                             | < 2.9 %                             |                            |
| Hexylene Glycol              | –                           |                             | –                           |                             | < 2.9 %                             |                            |
| Alkoxylated Alcohol          | –                           |                             | –                           |                             | < 2.0 %                             |                            |
| Mineral Oil                  | –                           |                             | 10 – 30 %                   |                             | < 20 %                              |                            |
| Emulsifiers                  | –                           |                             | 8 – 25 %                    |                             | 20 – 40 %                           |                            |

For the SAR measurement, the phantom must be filled with tissue simulating liquid to a depth of at least 15 cm.



HBBL600-10000 V6

Figure 2-2      Photos: Liquid Depth (at the center of the flat phantom)

## 2.5. SAR Measurement

### Step 1: Power Reference Measurement

Before an area scan and after the zoom scan, single point SAR measurements are performed at defined locations to estimate the SAR measurement drift due to device output power variations.

### Step 2: Area Scan

An area scan is performed according to the requirements in Table 2-3.

### Step 3: Zoom Scan

A zoom scan is performed according to the requirements in Table 2-3.

### Step 4: Power Drift Measurement

Before an area scan and after the zoom scan, single point SAR measurements are performed at defined locations to estimate the SAR measurement drift due to device output power variations.

Table 2-3                      Area Scan and Zoom Scan Parameters

|                                                                                                        |                                           |                                                                                    | DUT Transmit Frequency being Tested                                                                                                                                                                                                                                    |                                                                                                                               |                                                                                                |
|--------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|                                                                                                        |                                           |                                                                                    | $f \leq 3 \text{ GHz}$                                                                                                                                                                                                                                                 | $3 \text{ GHz} < f \leq 6 \text{ GHz}$                                                                                        | $6 \text{ GHz} < f \leq 8.5 \text{ GHz}$                                                       |
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface |                                           |                                                                                    | $5 \pm 1 \text{ mm}$                                                                                                                                                                                                                                                   | $\frac{1}{2} \delta \ln(2) \pm 0.5 \text{ mm}$                                                                                | $\frac{1}{2} \delta \ln(2) \pm 0.5 \text{ mm}$                                                 |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location              |                                           |                                                                                    | $30^\circ \pm 1^\circ$                                                                                                                                                                                                                                                 | $20^\circ \pm 1^\circ$                                                                                                        | $5^\circ \pm 1^\circ$ (flat phantoms only)<br>$20^\circ \pm 1^\circ$ (other phantoms)          |
| Maximum area scan spatial resolution:<br>$\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$              |                                           |                                                                                    | $\leq 2 \text{ GHz}: \leq 15 \text{ mm}$<br>$2 - 3 \text{ GHz}: \leq 12 \text{ mm}$                                                                                                                                                                                    | $3 - 4 \text{ GHz}: \leq 12 \text{ mm}$<br>$4 - 6 \text{ GHz}: \leq 10 \text{ mm}$                                            | $\leq 60 / f \text{ mm}$ , or half of the corresponding zoom scan length, whichever is smaller |
|                                                                                                        |                                           |                                                                                    | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device. |                                                                                                                               |                                                                                                |
| Maximum zoom scan spatial resolution:<br>$\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$              |                                           |                                                                                    | $\leq 2 \text{ GHz}: \leq 8 \text{ mm}$<br>$2 - 3 \text{ GHz}: \leq 5 \text{ mm}$                                                                                                                                                                                      | $3 - 4 \text{ GHz}: \leq 5 \text{ mm}$<br>$4 - 6 \text{ GHz}: \leq 4 \text{ mm}$                                              | $\leq 24 / f \text{ mm}$                                                                       |
| Maximum zoom scan spatial resolution, normal to phantom surface                                        | uniform grid: $\Delta z_{\text{Zoom}}(n)$ |                                                                                    | $\leq 5 \text{ mm}$                                                                                                                                                                                                                                                    | $3 - 4 \text{ GHz}: \leq 4 \text{ mm}$<br>$4 - 5 \text{ GHz}: \leq 3 \text{ mm}$<br>$5 - 6 \text{ GHz}: \leq 2 \text{ mm}$    | $\leq 10 / (f \cdot 1) \text{ mm}$                                                             |
|                                                                                                        | graded grid                               | $\Delta z_{\text{Zoom}}(1)$ :<br>between 1st two points closest to phantom surface | $\leq 4 \text{ mm}$                                                                                                                                                                                                                                                    | $3 - 4 \text{ GHz}: \leq 3 \text{ mm}$<br>$4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$<br>$5 - 6 \text{ GHz}: \leq 2 \text{ mm}$  | $\leq 12 / f \text{ mm}$                                                                       |
|                                                                                                        |                                           | $\Delta z_{\text{Zoom}}(n>1)$ :<br>between subsequent points                       | $\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$                                                                                                                                                                                                                           |                                                                                                                               |                                                                                                |
| Minimum zoom scan volume                                                                               | x, y, z                                   |                                                                                    | $\geq 30 \text{ mm}$                                                                                                                                                                                                                                                   | $3 - 4 \text{ GHz}: \geq 28 \text{ mm}$<br>$4 - 5 \text{ GHz}: \geq 25 \text{ mm}$<br>$5 - 6 \text{ GHz}: \geq 22 \text{ mm}$ | $\geq 22 \text{ mm}$                                                                           |
| Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium.      |                                           |                                                                                    |                                                                                                                                                                                                                                                                        |                                                                                                                               |                                                                                                |

## 2.6. Measurement Uncertainty

☑ Table 2-4    DASY8 Uncertainty Budget for SAR Tests

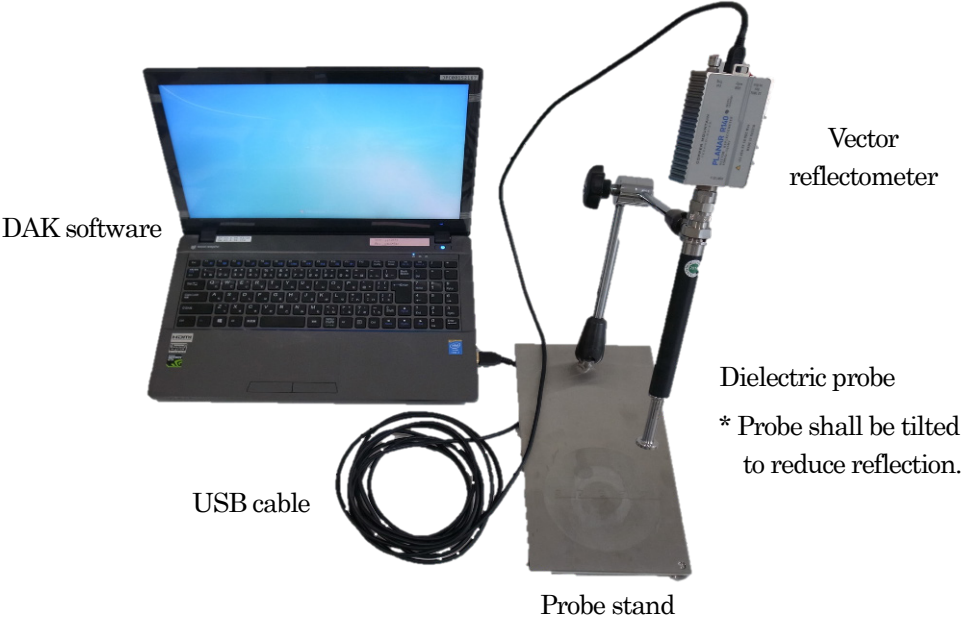
| For SAR Testing ( IEC/IEEE 62209-1528:2020; SR3; DASY8, 0.3 GHz to 3 GHz ) |                                                       |                   |                  |      |       |      |      |         |        |            |
|----------------------------------------------------------------------------|-------------------------------------------------------|-------------------|------------------|------|-------|------|------|---------|--------|------------|
| Symbol                                                                     | Source of Uncertainty                                 | Uncertainty of Xi |                  |      | u(Xi) | Ci   |      | Ciu(Xi) |        | Vi<br>Veff |
|                                                                            |                                                       | Xi                | Prob.<br>Dist.   | Div. |       | 1g   | 10g  | 1g      | 10g    |            |
| Measurement System Errors                                                  |                                                       |                   |                  |      |       |      |      |         |        |            |
| CF                                                                         | Probe Calibration                                     | ±11.0%            | N ( <i>k</i> =2) | 2    | ±5.5% | 1    | 1    | ±5.5%   | ±5.5%  | ∞          |
| CF <sub>drift</sub>                                                        | Probe Calibration Drift                               | ±1.7%             | R                | 1.73 | ±1.0% | 1    | 1    | ±1.0%   | ±1.0%  | ∞          |
| LIN                                                                        | Probe Linearity                                       | ±4.7%             | R                | 1.73 | ±2.7% | 1    | 1    | ±2.7%   | ±2.7%  | ∞          |
| BBS                                                                        | Broadband Signal                                      | ±2.8%             | R                | 1.73 | ±1.6% | 1    | 1    | ±1.6%   | ±1.6%  | ∞          |
| ISO                                                                        | Probe Isotropy                                        | ±7.6%             | R                | 1.73 | ±4.4% | 1    | 1    | ±4.4%   | ±4.4%  | ∞          |
| DAE                                                                        | Other Probe + Electronic                              | ±0.8%             | N                | 1    | ±0.8% | 1    | 1    | ±0.8%   | ±0.8%  | ∞          |
| AMB                                                                        | RF Ambient                                            | ±1.8%             | N                | 1    | ±1.8% | 1    | 1    | ±1.8%   | ±1.8%  | ∞          |
| Δ <sub>xyz</sub>                                                           | Probe Positioning                                     | ±0.006mm          | N                | 1    | ±0.6% | 0.14 | 0.14 | ±0.1%   | ±0.1%  | ∞          |
| DAT                                                                        | Data Processing                                       | ±1.2%             | N                | 1    | ±1.2% | 1    | 1    | ±1.2%   | ±1.2%  | ∞          |
| Phantom and DUT Errors                                                     |                                                       |                   |                  |      |       |      |      |         |        |            |
| LIQ (o)                                                                    | Conductivity (meas.)                                  | ±2.5%             | N                | 1    | ±2.5% | 0.78 | 0.71 | ±2.0%   | ±1.8%  | ∞          |
| LIQ (T <sub>o</sub> )                                                      | Conductivity (temp.)                                  | ±3.3%             | R                | 1.73 | ±1.9% | 0.78 | 0.71 | ±1.5%   | ±1.4%  | ∞          |
| EPS                                                                        | Phantom Permittivity                                  | ±14.0%            | R                | 1.73 | ±8.1% | 0    | 0    | ±0.0%   | ±0.0%  | ∞          |
| DIS                                                                        | Distance DUT - TSL                                    | ±2.0%             | N                | 1    | ±2.0% | 2    | 2    | ±4.0%   | ±4.0%  | ∞          |
| D <sub>xyz</sub>                                                           | Positioning Repeatability                             | ±1.0%             | N                | 1    | ±1.0% | 1    | 1    | ±1.0%   | ±1.0%  | ∞          |
| H                                                                          | Device Holder                                         | ±3.6%             | N                | 1    | ±3.6% | 1    | 1    | ±3.6%   | ±3.6%  | 7          |
| MOD                                                                        | DUT Modulation                                        | ±2.4%             | R                | 1.73 | ±1.4% | 1    | 1    | ±1.4%   | ±1.4%  | ∞          |
| TAS                                                                        | Time-averaged SAR                                     | ±1.7%             | R                | 1.73 | ±1.0% | 1    | 1    | ±1.0%   | ±1.0%  | ∞          |
| RF <sub>drift</sub>                                                        | DUT Drift                                             | ±2.9%             | N                | 1    | ±2.9% | 1    | 1    | ±2.9%   | ±2.9%  | ∞          |
| Corrections to the SAR result                                              |                                                       |                   |                  |      |       |      |      |         |        |            |
| C(ε', o)                                                                   | Deviation to Target                                   | ±1.9%             | N                | 1    | ±1.9% | 1    | 0.84 | ±1.9%   | ±1.6%  | ∞          |
| C(R)                                                                       | SAR Scaling                                           | ±0.0%             | R                | 1.73 | ±0.0% | 1    | 1    | ±0.0%   | ±0.0%  | ∞          |
| u(ΔSAR)                                                                    | Combined Standard Uncertainty RSS                     |                   |                  |      |       |      |      | ±10.8%  | ±10.7% | 567        |
| U                                                                          | Expanded Uncertainty (95% conf. interval) <i>k</i> =2 |                   |                  |      |       |      |      | ±21.6%  | ±21.4% | -          |

☒ Table 2-5      DASY8 Uncertainty Budget for SAR System Check

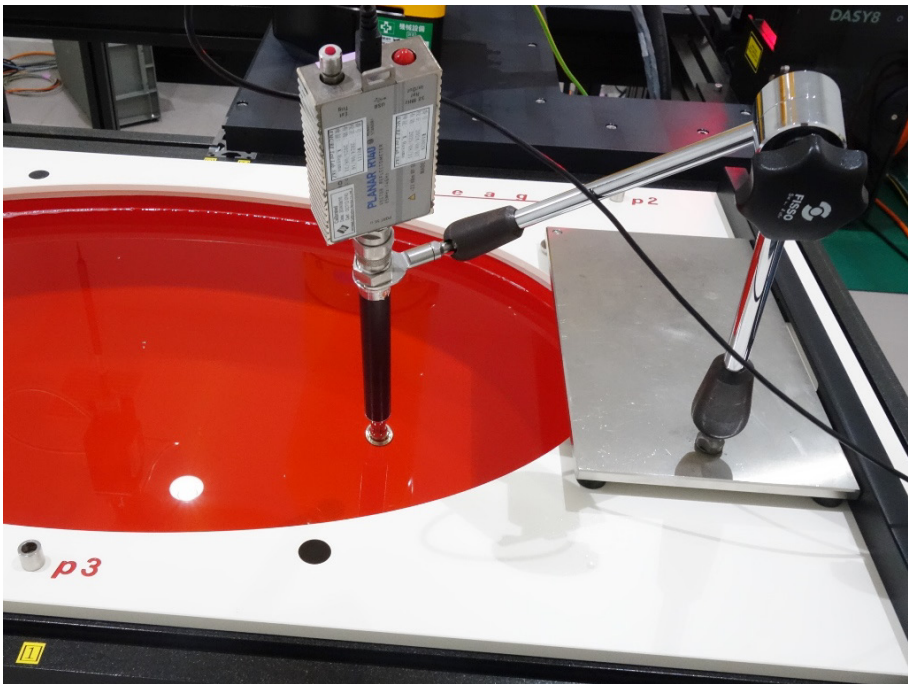
| For SAR System Check ( IEC/IEEE 62209-1528:2020; SR3; DASY8, 0.3 GHz to 6 GHz ) |                               |                   |                |      |       |      |      |         |       |            |
|---------------------------------------------------------------------------------|-------------------------------|-------------------|----------------|------|-------|------|------|---------|-------|------------|
| Symbol                                                                          | Source of Uncertainty         | Uncertainty of Xi |                |      | u(Xi) | Ci   |      | Ciu(Xi) |       | Vi<br>Veff |
|                                                                                 |                               | Xi                | Prob.<br>Dist. | Div. |       | 1g   | 10g  | 1g      | 10g   |            |
| Measurement System Errors                                                       |                               |                   |                |      |       |      |      |         |       |            |
| CF                                                                              | Probe Calibration             | ±13.1%            | N (k=2)        | 2    | ±6.6% | 1    | 1    | ±6.6%   | ±6.6% | ∞          |
| CF <sub>drift</sub>                                                             | Probe Calibration Drift       | ±1.7%             | R              | 1.73 | ±1.0% | 1    | 1    | ±1.0%   | ±1.0% | ∞          |
| LIN                                                                             | Probe Linearity               | ±4.7%             | R              | 1.73 | ±2.7% | 1    | 1    | ±2.7%   | ±2.7% | ∞          |
| BBS                                                                             | Broadband Signal              | ±0.0%             | N (k=2)        | 2    | ±0.0% | 1    | 1    | ±0.0%   | ±0.0% | ∞          |
| ISO                                                                             | Probe Isotropy (axial)        | ±4.7%             | R              | 1.73 | ±2.7% | 1    | 1    | ±2.7%   | ±2.7% | ∞          |
| DAE                                                                             | Other Probe + Electronic      | ±1.2%             | N              | 1    | ±1.2% | 1    | 1    | ±1.2%   | ±1.2% | ∞          |
| AMB                                                                             | RF Ambient                    | ±0.6%             | N              | 1    | ±0.6% | 1    | 1    | ±0.6%   | ±0.6% | ∞          |
| Δ <sub>xyz</sub>                                                                | Probe Positioning             | ±0.005mm          | N              | 1    | ±0.5% | 0.29 | 0.29 | ±0.2%   | ±0.2% | ∞          |
| DAT                                                                             | Data Processing               | ±0.6%             | N              | 1    | ±0.6% | 1    | 1    | ±0.6%   | ±0.6% | ∞          |
| Phantom and DUT Errors                                                          |                               |                   |                |      |       |      |      |         |       |            |
| LIQ (o)                                                                         | Conductivity (meas.)          | ±2.5%             | N              | 1    | ±2.5% | 0.78 | 0.71 | ±2.0%   | ±1.8% | ∞          |
| LIQ (T <sub>o</sub> )                                                           | Conductivity (temp.)          | ±3.4%             | R              | 1.73 | ±1.9% | 0.78 | 0.71 | ±1.5%   | ±1.4% | ∞          |
| EPS                                                                             | Phantom Permittivity          | ±14.0%            | R              | 1.73 | ±8.1% | 0.25 | 0.25 | ±2.0%   | ±2.0% | ∞          |
| DIS                                                                             | Distance DUT - TSL            | ±1.3%             | N              | 1    | ±1.3% | 2    | 2    | ±2.6%   | ±2.6% | ∞          |
| D <sub>xyz</sub>                                                                | Positioning Repeatability     | ±1.2%             | N              | 1    | ±1.2% | 1    | 1    | ±1.2%   | ±1.2% | ∞          |
| MOD                                                                             | DUT Modulation                | ±0.0%             | R              | 1.73 | ±0.0% | 1    | 1    | ±0.0%   | ±0.0% | ∞          |
| TAS                                                                             | Time-averaged SAR             | ±0.0%             | R              | 1.73 | ±0.0% | 1    | 1    | ±0.0%   | ±0.0% | ∞          |
| VAL                                                                             | Validation Antenna            | ±3.2%             | N              | 1    | ±3.2% | 1    | 1    | ±3.2%   | ±3.2% | ∞          |
| P <sub>in</sub>                                                                 | Accepted Power                | ±2.0%             | N              | 1    | ±2.0% | 1    | 1    | ±2.0%   | ±2.0% | ∞          |
| Corrections to the SAR result                                                   |                               |                   |                |      |       |      |      |         |       |            |
| C(ε', o)                                                                        | Deviation to Target           | ±1.9%             | N              | 1    | ±1.9% | 1    | 0.84 | ±1.9%   | ±1.6% | ∞          |
| u(ASAR)                                                                         | Combined Standard Uncertainty |                   |                |      |       |      |      |         |       |            |

2.7. Dielectric Parameter Measurement of Tissue Simulating Liquids

The dielectric properties of the tissue simulating liquids used were verified within 24 hours before the SAR measurement.



(a) Dielectric Parameter Measurement System



(b) Example Photo: Dielectric Parameter Measurement

Figure 2-3      Dielectric Parameter Measurement Set-up

## 4th Site Shielded Room 3

| TSL                     | Freq.<br>(MHz) | Param.         | Target<br>*1 | Meas. | Dev.<br>(%)<br>*2 | Date       | Amb.<br>Temp.<br>(deg. C) | Rel. Hum.<br>(%RH) | Liquid<br>Temp.<br>(deg. C) |
|-------------------------|----------------|----------------|--------------|-------|-------------------|------------|---------------------------|--------------------|-----------------------------|
| HBBL<br>600-10000<br>V6 | 2402           | $\epsilon_r$   | 39.29        | 39.90 | 1.55              | 2026/06/05 | 23.8                      | 59.8               | 21.9                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.70  | -3.41             |            |                           |                    |                             |
|                         | 2402           | $\epsilon_r$   | 39.29        | 39.85 | 1.43              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.71  | -2.84             |            |                           |                    |                             |
|                         | 2404           | $\epsilon_r$   | 39.28        | 39.94 | 1.68              | 2026/06/08 | 23.1                      | 58.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.75  | -0.57             |            |                           |                    |                             |
|                         | 2404           | $\epsilon_r$   | 39.28        | 39.85 | 1.45              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.71  | -2.84             |            |                           |                    |                             |
|                         | 2404           | $\epsilon_r$   | 39.28        | 39.96 | 1.73              | 2026/06/10 | 23.4                      | 61.3               | 22.0                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.69  | -3.98             |            |                           |                    |                             |
|                         | 2404           | $\epsilon_r$   | 39.28        | 39.71 | 1.09              | 2026/06/11 | 23.5                      | 58.2               | 23.0                        |
|                         |                | $\sigma$ (S/m) | 1.76         | 1.70  | -3.41             |            |                           |                    |                             |
|                         | 2441           | $\epsilon_r$   | 39.22        | 39.82 | 1.53              | 2026/06/05 | 23.8                      | 59.8               | 21.9                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.74  | -2.79             |            |                           |                    |                             |
|                         | 2441           | $\epsilon_r$   | 39.22        | 39.78 | 1.43              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.74  | -2.79             |            |                           |                    |                             |
|                         | 2442           | $\epsilon_r$   | 39.21        | 39.89 | 1.73              | 2026/06/08 | 23.1                      | 58.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.78  | -0.56             |            |                           |                    |                             |
|                         | 2442           | $\epsilon_r$   | 39.21        | 39.78 | 1.45              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.74  | -2.79             |            |                           |                    |                             |
|                         | 2442           | $\epsilon_r$   | 39.21        | 39.90 | 1.76              | 2026/06/10 | 23.4                      | 61.3               | 22.0                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.72  | -3.91             |            |                           |                    |                             |
|                         | 2442           | $\epsilon_r$   | 39.21        | 39.65 | 1.12              | 2026/06/11 | 23.5                      | 58.2               | 23.0                        |
|                         |                | $\sigma$ (S/m) | 1.79         | 1.73  | -3.35             |            |                           |                    |                             |
|                         | 2478           | $\epsilon_r$   | 39.16        | 39.85 | 1.76              | 2026/06/08 | 23.1                      | 58.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.81  | -1.09             |            |                           |                    |                             |
|                         | 2478           | $\epsilon_r$   | 39.16        | 39.75 | 1.51              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.78  | -2.73             |            |                           |                    |                             |
|                         | 2478           | $\epsilon_r$   | 39.16        | 39.85 | 1.76              | 2026/06/10 | 23.4                      | 61.3               | 22.0                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.75  | -4.37             |            |                           |                    |                             |
|                         | 2478           | $\epsilon_r$   | 39.16        | 39.60 | 1.12              | 2026/06/11 | 23.5                      | 58.2               | 23.0                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.76  | -3.83             |            |                           |                    |                             |
|                         | 2480           | $\epsilon_r$   | 39.16        | 39.76 | 1.53              | 2026/06/05 | 23.8                      | 59.8               | 21.9                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.77  | -3.28             |            |                           |                    |                             |
|                         | 2480           | $\epsilon_r$   | 39.16        | 39.74 | 1.48              | 2026/06/09 | 23.0                      | 59.9               | 21.8                        |
|                         |                | $\sigma$ (S/m) | 1.83         | 1.78  | -2.73             |            |                           |                    |                             |

\*1 Target values are linearly interpolated between the values defined in IEEE Std 1528, when necessary.

\*2 The deviation of measured values from target values must be within +/-5 %.

## 2.8. System Check Measurement

The system check was performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium.

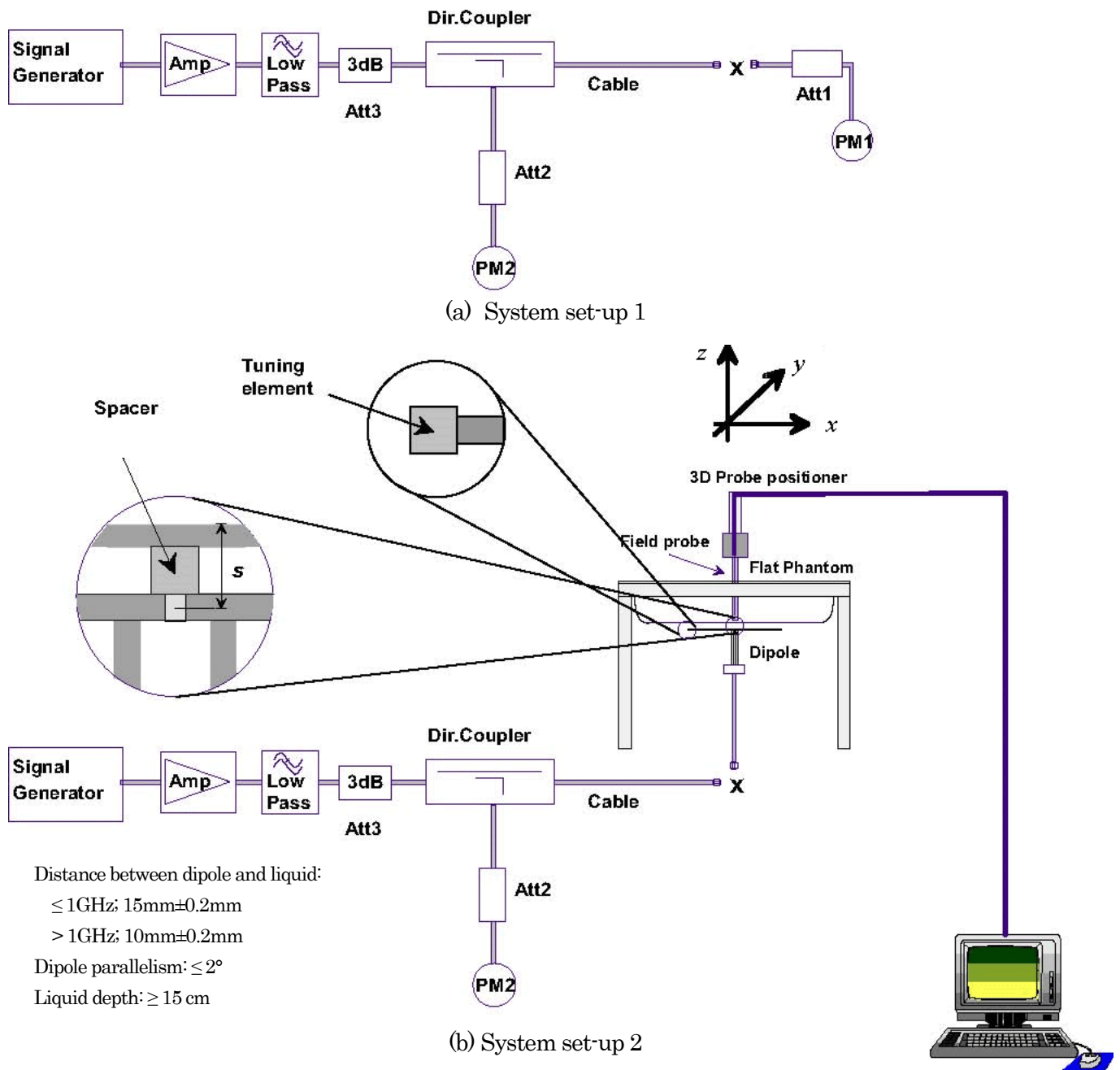
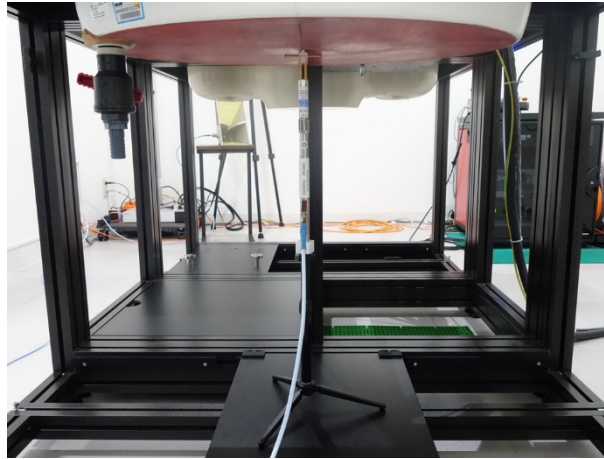


Figure 2-4 SAR System Check Measurement Set-up



D2450V2

(c) Photo: System Validation Dipole Placement

Figure 2-4      SAR System Check Measurement Set-up (continued)

4th Site Shielded Room 3

| System Validation Dipole | Freq. (MHz) | Param.   | 250 mW- Meas. (W/kg) | 1 W- Norm. (W/kg) *1 | 1 W- Target (W/kg) *2 | Dev. (%) *3 | Date       | Amb. Temp. (deg. C) | Rel. Hum. (%RH) | Liquid Temp. (deg. C) |
|--------------------------|-------------|----------|----------------------|----------------------|-----------------------|-------------|------------|---------------------|-----------------|-----------------------|
| D2450V2                  | 2450        | 1-g SAR  | 13.90                | 55.60                | 52.90                 | 5.10        | 2026/06/05 | 23.6                | 56.9            | 21.8                  |
|                          |             | 10-g SAR | 6.55                 | 26.20                | 24.80                 | 5.65        |            |                     |                 |                       |
| D2450V2                  | 2450        | 1-g SAR  | 13.90                | 55.60                | 52.90                 | 5.10        | 2026/06/08 | 23.0                | 61.1            | 21.8                  |
|                          |             | 10-g SAR | 6.59                 | 26.36                | 24.80                 | 6.29        |            |                     |                 |                       |
| D2450V2                  | 2450        | 1-g SAR  | 13.90                | 55.60                | 52.90                 | 5.10        | 2026/06/09 | 23.1                | 61.2            | 21.8                  |
|                          |             | 10-g SAR | 6.55                 | 26.20                | 24.80                 | 5.65        |            |                     |                 |                       |
| D2450V2                  | 2450        | 1-g SAR  | 13.70                | 54.80                | 52.90                 | 3.59        | 2026/06/10 | 24.0                | 59.8            | 22.1                  |
|                          |             | 10-g SAR | 6.47                 | 25.88                | 24.80                 | 4.35        |            |                     |                 |                       |
| D2450V2                  | 2450        | 1-g SAR  | 13.90                | 55.60                | 52.90                 | 5.10        | 2026/06/11 | 23.5                | 59.8            | 23.0                  |
|                          |             | 10-g SAR | 6.55                 | 26.20                | 24.80                 | 5.65        |            |                     |                 |                       |

\*1 The normalized values (1 W) were calculated by normalizing the measured values to 1-W forward input power.

\*2 The target values (1 W) are defined in IEEE Std 1528 and/or the calibration certificate of system validation dipoles used.

\*3 The deviation of normalized values from target values must be within +/-10 %.

### 3. Conducted Power Measurements

#### 3.1. Conducted Power Measurement Results

##### Bluetooth

| Date of measurement | Ambient temperature (deg.C) | Relative humidity (%RH) | Measured by     |
|---------------------|-----------------------------|-------------------------|-----------------|
| 2026/5/22           | 21.6                        | 64.2                    | Yohei Yamaguchi |
| 2026/5/26           | 23.2                        | 62.3                    | Yohei Yamaguchi |
| 2026/5/27           | 23.1                        | 58.9                    | Yohei Yamaguchi |

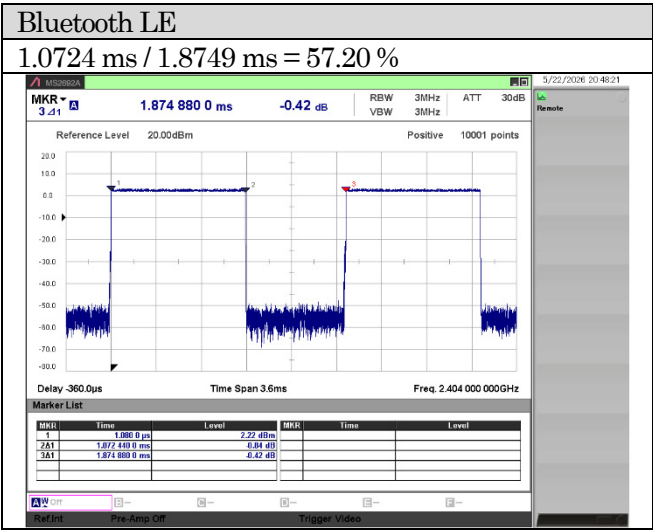
| ANT     | Mode    | Ch. | Freq. (MHz) | Packet Type | Meas. Frame Averaged Power (dBm) | Meas. Burst Averaged Power (dBm) *1 | Max. Poss. Power (dBm) | Within 2 dB of Max Poss. Power | SAR Tested | Note(s)  |
|---------|---------|-----|-------------|-------------|----------------------------------|-------------------------------------|------------------------|--------------------------------|------------|----------|
| Chain 1 | Classic | 0   | 2402        | DH5         | 11.35                            | 13.74                               | 14.50                  | Yes                            | Yes        | -        |
|         |         | 39  | 2441        | DH5         | <b>11.37</b>                     | 13.77                               | 14.50                  | Yes                            | Yes        | Worst Ch |
|         |         | 78  | 2480        | DH5         | 10.56                            | 12.96                               | 14.50                  | Yes                            | Yes        | -        |
|         | LE      | 1   | 2404        | 2 Mbps      | <b>15.23</b>                     | 17.66                               | 18.00                  | Yes                            | Yes        | Worst Ch |
|         |         | 20  | 2442        | 2 Mbps      | 15.01                            | 17.44                               | 18.00                  | Yes                            | Yes        | -        |
|         |         | 38  | 2478        | 2 Mbps      | 14.53                            | 16.96                               | 18.00                  | Yes                            | Yes        | -        |
| Chain 2 | LE      | 1   | 2404        | 2 Mbps      | 14.66                            | 17.09                               | 18.00                  | Yes                            | Yes        | -        |
|         |         | 20  | 2442        | 2 Mbps      | <b>14.84</b>                     | 17.27                               | 18.00                  | Yes                            | Yes        | Worst Ch |
|         |         | 38  | 2478        | 2 Mbps      | 14.65                            | 17.08                               | 18.00                  | Yes                            | Yes        | -        |

\*1 Used for confirmation that the DUT's output power is within  $\pm 0.2$  dB of the maximum tune-up tolerance limits (max. poss. power), since the maximum tune-up tolerance limits are defined as burst averaged values.

Duty Cycle Plot(s) for Bluetooth for Chain 1



Duty Cycle Plot(s) for Bluetooth for Chain 2



## 4. SAR Measurements

### ☒ <SAR Correction/Scaling>

According to KDB 447498 D01, KDB 248227 D01, and/or KDB 865664 D01, the maximum SAR values are determined by taking account of the following correction or scaling factors.

The maximum 1-g SAR and/or 10-g SAR values (reported SAR) are calculated by applying the  $\Delta$ SAR positive correction for deviations of the tissue-equivalent liquid and the power scaling for the maximum duty factor and maximum possible power levels (maximum tune-up tolerance limit) to each measured 1-g SAR and/or 10-g SAR value:

$$\begin{aligned} \text{Reported SAR (W/kg)} &= \text{Measured SAR (W/kg)} * \Delta\text{SAR positive correction factor} \\ &\quad * \text{Duty cycle scaling factor} * \text{Tune-up scaling factor} \end{aligned}$$

where;

$$\Delta\text{SAR positive correction factor} = (100 - \Delta\text{SAR}^{*1}) / 100$$

$$\text{Duty cycle scaling factor} = \text{Max. possible duty cycle} / \text{Measured duty cycle used for the SAR measurement}$$

$$\text{Tune-up scaling factor} = \text{Max. possible power (mW)} / \text{Measured power used for the SAR measurement (mW)}$$

$$*1 \quad \Delta\text{SAR} (\%) = c_e * \Delta\epsilon_r + c_o * \Delta\sigma$$

<For 1-g SAR>

$$c_e = -7.854 * 10^{-4} f^3 + 9.402 * 10^{-3} f^2 - 2.742 * 10^{-2} f - 0.2026$$

$$c_o = 9.804 * 10^{-3} f^3 - 8.661 * 10^{-2} f^2 + 2.981 * 10^{-2} f + 0.7829$$

<For 10-g SAR>

$$c_e = 3.456 * 10^{-3} f^3 - 3.531 * 10^{-2} f^2 + 7.675 * 10^{-2} f - 0.1860$$

$$c_o = 4.479 * 10^{-3} f^3 - 1.586 * 10^{-2} f^2 - 0.1972 f + 0.7717$$

where;

$c_e$     coefficient representing the sensitivity of SAR to permittivity

$\Delta\epsilon_r$     percent change in permittivity

$c_o$     coefficient representing the sensitivity of SAR to conductivity

$\Delta\sigma$     percent change in conductivity

$f$     frequency in GHz

A negative  $\Delta$ SAR would translate to a lower measured SAR value than what would be measured if using dielectric properties equal to the target values.

A positive  $\Delta$ SAR would translate to a higher measured SAR value than what would be measured if using dielectric properties equal to the target values.

SAR correction shall not be made when the  $\Delta$ SAR has a positive sign to provide a conservative SAR value.

The SAR is only corrected when  $\Delta$ SAR has a negative sign.

## 4.1. SAR Measurement Results

## &lt;Body-Worn SAR&gt;

## &lt;Bluetooth&gt;

## Chain 1

| Date of measurement | Ambient temperature (deg.C) | Relative humidity (%RH) | Measured by   |
|---------------------|-----------------------------|-------------------------|---------------|
| 2026/6/9            | 23.8                        | 63.4                    | Sho Fukushima |

| Mode                                     | Ch. | Freq.<br>(MHz) | Packet<br>Type | Pos.   | Dis.<br>(mm) | Max.<br>Poss.<br>Power<br>(dBm)<br>*1 | Meas.<br>Power<br>(dBm) | Max.<br>Duty<br>Cycle<br>(%)<br>*3 | Meas.<br>Duty<br>Cycle<br>(%) | Meas.<br>1-g SAR<br>(W/kg) | Reported<br>1-g SAR<br>(W/kg)<br>*2 | Liquid<br>Temp.<br>(deg. C) | Plot<br>No. |
|------------------------------------------|-----|----------------|----------------|--------|--------------|---------------------------------------|-------------------------|------------------------------------|-------------------------------|----------------------------|-------------------------------------|-----------------------------|-------------|
| Step 1: Worst Position Check             |     |                |                |        |              |                                       |                         |                                    |                               |                            |                                     |                             |             |
| LE                                       | 1   | 2404           | 2 Mbps         | Front  | 5            | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.190                      | 0.220                               | 21.7                        | -           |
|                                          |     |                |                | Back   |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.189                      | 0.219                               | 21.8                        | -           |
|                                          |     |                |                | Left   |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.027                      | 0.031                               | 21.6                        | -           |
|                                          |     |                |                | Right  |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.289                      | 0.334                               | 21.5                        | -           |
|                                          |     |                |                | Top    |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.379                      | 0.439                               | 21.6                        | 1           |
|                                          |     |                |                | Bottom |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.164                      | 0.190                               | 21.7                        | -           |
| Step 2: Worst Channel Check (for Step 1) |     |                |                |        |              |                                       |                         |                                    |                               |                            |                                     |                             |             |
| LE                                       | 20  | 2442           | 2 Mbps         | Top    | 5            | 18.00                                 | 17.44                   | 61.09                              | 57.15                         | 0.342                      | 0.416                               | 21.7                        | -           |
|                                          | 38  | 2478           |                |        |              | 18.00                                 | 16.96                   | 61.09                              | 57.15                         | 0.266                      | 0.361                               | 21.7                        | -           |
| Step 3: Worst Mode Check                 |     |                |                |        |              |                                       |                         |                                    |                               |                            |                                     |                             |             |
| Classic                                  | 0   | 2402           | DH5            | Top    | 5            | 14.50                                 | 13.74                   | 83.30                              | 57.58                         | 0.156                      | 0.269                               | 21.7                        | -           |
|                                          | 39  | 2441           |                |        |              | 14.50                                 | 13.77                   | 83.30                              | 57.58                         | 0.149                      | 0.255                               | 21.8                        | -           |
|                                          | 78  | 2480           |                |        |              | 14.50                                 | 12.96                   | 83.30                              | 57.58                         | 0.104                      | 0.215                               | 21.9                        | -           |

\*1 The burst averaged power values are used for power scaling since the maximum tune-up tolerance limits are defined as burst averaged values.

\*2 Reported SAR (W/kg) = Measured SAR (W/kg) \* Duty cycle scaling factor \* Tune-up scaling factor

where;

Duty cycle scaling factor = Max. possible duty cycle (%) / Measured duty cycle used for the SAR measurement (%)

Tune-up scaling factor = Max. possible power (mW) (\* equal to 100% duty cycle) / Measured power used for the SAR measurement (mW)

\*3 Duty-cycle scaling is based on the client-declared maximum possible duty cycle of 61.09% for Bluetooth LE.

## Chain 2

| Date of measurement | Ambient temperature (deg.C) | Relative humidity (%RH) | Measured by   |
|---------------------|-----------------------------|-------------------------|---------------|
| 2026/6/10           | 22.4                        | 62.3                    | Sho Fukushima |

| Mode                                     | Ch. | Freq.<br>(MHz) | Packet<br>Type | Pos.   | Dis.<br>(mm) | Max.<br>Poss.<br>Power<br>(dBm)<br>*1 | Meas.<br>Power<br>(dBm) | Max.<br>Duty<br>Cycle<br>(%)<br>*3 | Meas.<br>Duty<br>Cycle<br>(%) | Meas.<br>1-g SAR<br>(W/kg) | Reported<br>1-g SAR<br>(W/kg)<br>*2 | Liquid<br>Temp.<br>(deg. C) | Plot<br>No. |
|------------------------------------------|-----|----------------|----------------|--------|--------------|---------------------------------------|-------------------------|------------------------------------|-------------------------------|----------------------------|-------------------------------------|-----------------------------|-------------|
| Step 1: Worst Position Check             |     |                |                |        |              |                                       |                         |                                    |                               |                            |                                     |                             |             |
| LE                                       | 20  | 2442           | 2 Mbps         | Front  | 5            | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.295                      | 0.373                               | 22.1                        | -           |
|                                          |     |                |                | Back   |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.117                      | 0.148                               | 22.1                        | -           |
|                                          |     |                |                | Left   |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.128                      | 0.162                               | 22.0                        | -           |
|                                          |     |                |                | Right  |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.068                      | 0.086                               | 21.9                        | -           |
|                                          |     |                |                | Top    |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.483                      | <b>0.611</b>                        | 21.8                        | 2           |
|                                          |     |                |                | Bottom |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.320                      | 0.405                               | 21.8                        | -           |
| Step 2: Worst Channel Check (for Step 1) |     |                |                |        |              |                                       |                         |                                    |                               |                            |                                     |                             |             |
| LE                                       | 1   | 2404           | 2 Mbps         | Top    | 5            | 18.00                                 | 17.09                   | 61.09                              | 57.20                         | 0.450                      | 0.593                               | 21.7                        | -           |
|                                          | 38  | 2478           |                |        |              | 18.00                                 | 17.08                   | 61.09                              | 57.20                         | 0.393                      | 0.519                               | 21.7                        | -           |

\*1 The burst averaged power values are used for power scaling since the maximum tune-up tolerance limits are defined as burst averaged values.

\*2 Reported SAR (W/kg) = Measured SAR (W/kg) \* Duty cycle scaling factor \* Tune-up scaling factor

where;

Duty cycle scaling factor = Max. possible duty cycle (%) / Measured duty cycle used for the SAR measurement (%)

Tune-up scaling factor = Max. possible power (mW) (\* equal to 100% duty cycle) / Measured power used for the SAR measurement (mW)

\*3 Duty-cycle scaling is based on the client-declared maximum possible duty cycle of 61.09% for Bluetooth LE.

## &lt;Extremity SAR&gt;

## Chain 1

| Date of measurement | Ambient temperature (deg.C) | Relative humidity (%RH) | Measured by   |
|---------------------|-----------------------------|-------------------------|---------------|
| 2026/6/5            | 21.7                        | 60.3                    | Sho Fukushima |
| 2026/6/11           | 24.3                        | 60.2                    | Sho Fukushima |

| Mode                                     | Ch. | Freq.<br>(MHz) | Packet<br>Type | Pos.   | Dis.<br>(mm) | Max.<br>Poss.<br>Power<br>(dBm)<br>*1 | Meas.<br>Power<br>(dBm) | Max.<br>Duty<br>Cycle<br>(%)<br>*3 | Meas.<br>Duty<br>Cycle<br>(%) | Meas.<br>10-g<br>SAR<br>(W/kg) | Reported<br>10-g SAR<br>(W/kg)<br>*2 | Liquid<br>Temp.<br>(deg. C) | Plot<br>No. |
|------------------------------------------|-----|----------------|----------------|--------|--------------|---------------------------------------|-------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------------|-----------------------------|-------------|
| Step 1: Worst Position Check             |     |                |                |        |              |                                       |                         |                                    |                               |                                |                                      |                             |             |
| LE                                       | 1   | 2404           | 2 Mbps         | Front  | 0            | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.150                          | 0.174                                | 23.2                        | -           |
|                                          |     |                |                | Back   |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.231                          | 0.267                                | 23.3                        | -           |
|                                          |     |                |                | Left   |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.024                          | 0.028                                | 23.3                        | -           |
|                                          |     |                |                | Right  |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.420                          | 0.486                                | 23.4                        | 3           |
|                                          |     |                |                | Top    |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.176                          | 0.204                                | 23.1                        | -           |
|                                          |     |                |                | Bottom |              | 18.00                                 | 17.66                   | 61.09                              | 57.15                         | 0.178                          | 0.206                                | 23.2                        | -           |
| Step 2: Worst Channel Check (for Step 1) |     |                |                |        |              |                                       |                         |                                    |                               |                                |                                      |                             |             |
| LE                                       | 20  | 2442           | 2 Mbps         | Right  | 0            | 18.00                                 | 17.44                   | 61.09                              | 57.15                         | 0.372                          | 0.453                                | 23.4                        | -           |
|                                          | 38  | 2478           |                |        |              | 18.00                                 | 16.96                   | 61.09                              | 57.15                         | 0.250                          | 0.339                                | 23.5                        | -           |
| Step 3: Worst Mode Check                 |     |                |                |        |              |                                       |                         |                                    |                               |                                |                                      |                             |             |
| Classic                                  | 0   | 2402           | DH5            | Right  | 0            | 14.50                                 | 13.74                   | 83.30                              | 57.58                         | 0.170                          | 0.293                                | 21.4                        | -           |
|                                          | 39  | 2441           |                |        |              | 14.50                                 | 13.77                   | 83.30                              | 57.58                         | 0.165                          | 0.283                                | 21.5                        | -           |
|                                          | 78  | 2480           |                |        |              | 14.50                                 | 12.96                   | 83.30                              | 57.58                         | 0.101                          | 0.209                                | 21.5                        | -           |

## Chain 2

| Date of measurement | Ambient temperature (deg.C) | Relative humidity (%RH) | Measured by   |
|---------------------|-----------------------------|-------------------------|---------------|
| 2026/6/8            | 21.3                        | 60.3                    | Sho Fukushima |

| Mode                                     | Ch. | Freq.<br>(MHz) | Packet<br>Type | Pos.   | Dis.<br>(mm) | Max.<br>Poss.<br>Power<br>(dBm)<br>*1 | Meas.<br>Power<br>(dBm) | Max.<br>Duty<br>Cycle<br>(%)<br>*3 | Meas.<br>Duty<br>Cycle<br>(%) | Meas.<br>10-g<br>SAR<br>(W/kg) | Reported<br>10-g SAR<br>(W/kg)<br>*2 | Liquid<br>Temp.<br>(deg. C) | Plot<br>No. |
|------------------------------------------|-----|----------------|----------------|--------|--------------|---------------------------------------|-------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------------|-----------------------------|-------------|
| Step 1: Worst Position Check             |     |                |                |        |              |                                       |                         |                                    |                               |                                |                                      |                             |             |
| LE                                       | 20  | 2442           | 2 Mbps         | Front  | 0            | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.374                          | 0.473                                | 21.4                        | -           |
|                                          |     |                |                | Back   |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.079                          | 0.100                                | 21.5                        | -           |
|                                          |     |                |                | Left   |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.165                          | 0.209                                | 21.6                        | -           |
|                                          |     |                |                | Right  |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.085                          | 0.107                                | 21.6                        | -           |
|                                          |     |                |                | Top    |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.502                          | 0.635                                | 21.7                        | -           |
|                                          |     |                |                | Bottom |              | 18.00                                 | 17.27                   | 61.09                              | 57.20                         | 0.323                          | 0.408                                | 21.7                        | -           |
| Step 2: Worst Channel Check (for Step 1) |     |                |                |        |              |                                       |                         |                                    |                               |                                |                                      |                             |             |
| LE                                       | 1   | 2404           | 2 Mbps         | Top    | 0            | 18.00                                 | 17.09                   | 61.09                              | 57.20                         | 0.518                          | 0.682                                | 21.4                        | 4           |
|                                          | 38  | 2478           |                |        |              | 18.00                                 | 17.08                   | 61.09                              | 57.20                         | 0.420                          | 0.554                                | 21.3                        | -           |

\*1 The burst averaged power values are used for power scaling since the maximum tune-up tolerance limits are defined as burst averaged values.

\*2 Reported SAR (W/kg) = Measured SAR (W/kg) \* Duty cycle scaling factor \* Tune-up scaling factor

where;

Duty cycle scaling factor = Max. possible duty cycle (%) / Measured duty cycle used for the SAR measurement (%)

Tune-up scaling factor = Max. possible power (mW) (\* equal to 100% duty cycle) / Measured power used for the SAR measurement (mW)

\*3 Duty-cycle scaling is based on the client-declared maximum possible duty cycle of 61.09% for Bluetooth LE.

## 5. Simultaneous Transmission SAR evaluation

### ☒ <SAR Summation Analysis>

Simultaneous transmission SAR evaluation is determined according to KDB 447498 D01, Evaluation by summation of Reported SAR values, as the reference method.

- 1) If Reported SAR summation > 1.6 W/kg for 1-g SAR or > 4.0 W/kg for 10-g SAR, SAR test exclusion is determined by the SPLSR.
- 2)  $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{minimum separation distance})$ , and the peak separation distance is determined from the square root of  $[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$  where  $(x_1, y_1, z_1)$  and  $(x_2, y_2, z_2)$  are the coordinates of the extrapolated peak SAR location in the zoom scan.
- 3) If  $SPLSR \leq 0.04$  for 1-g SAR or  $\leq 0.10$  for 10-g SAR, simultaneously transmission SAR measurement is not necessary.

| RF Exposure Conditions | Test Position | Highest Reported 1g-SAR (W/kg) |                              | $\Sigma$ 1-g SAR (W/kg) |
|------------------------|---------------|--------------------------------|------------------------------|-------------------------|
|                        |               | (1)<br>Chain 1<br>(Measured)   | (2)<br>Chain 2<br>(Measured) | (1) + (2)               |
| Body-Worn              | Front         | 0.220                          | 0.373                        | 0.593                   |
|                        | Back          | 0.219                          | 0.148                        | 0.367                   |
|                        | Left          | 0.031                          | 0.162                        | 0.193                   |
|                        | Right         | 0.334                          | 0.086                        | 0.420                   |
|                        | Top           | 0.439                          | 0.611                        | <b>1.050</b>            |
|                        | Bottom        | 0.190                          | 0.405                        | 0.595                   |

| RF Exposure Conditions | Test Position | Highest Reported 10g-SAR (W/kg) |                              | $\Sigma$ 10-g SAR (W/kg) |
|------------------------|---------------|---------------------------------|------------------------------|--------------------------|
|                        |               | (1)<br>Chain 1<br>(Measured)    | (2)<br>Chain 2<br>(Measured) | (1) + (2)                |
| Extremity              | Front         | 0.174                           | 0.473                        | 0.647                    |
|                        | Back          | 0.267                           | 0.100                        | 0.367                    |
|                        | Left          | 0.028                           | 0.209                        | 0.237                    |
|                        | Right         | 0.486                           | 0.107                        | 0.593                    |
|                        | Top           | 0.204                           | 0.682                        | <b>0.886</b>             |
|                        | Bottom        | 0.206                           | 0.408                        | 0.614                    |

## Appendix A. Plots of SAR Measurement

Please see the following pages.

Plot No. 1

Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for WW81782\_Bluetooth LE (Chain 1\_2Mbps\_1ch)\_Tbp\_5mm

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]    | Serial Number |
|---------------------|--------------------|---------------|
| WW81782             | 53.0 x 37.1 x 17.6 | 1003          |

Exposure Conditions

| Phantom Section  | TSL                    | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|------------------|------------------------|-----------------|---------------------|------------------------|------------------|
| Flat             | Head Simulating Liquid | Top             | 5.00                | 1.71                   | 39.9             |
| Band             | Group                  | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
| ISM 2.4 GHz Band | Bluetooth LE           | 2404.000        | 1                   | 6.75                   |                  |

Hardware Setup

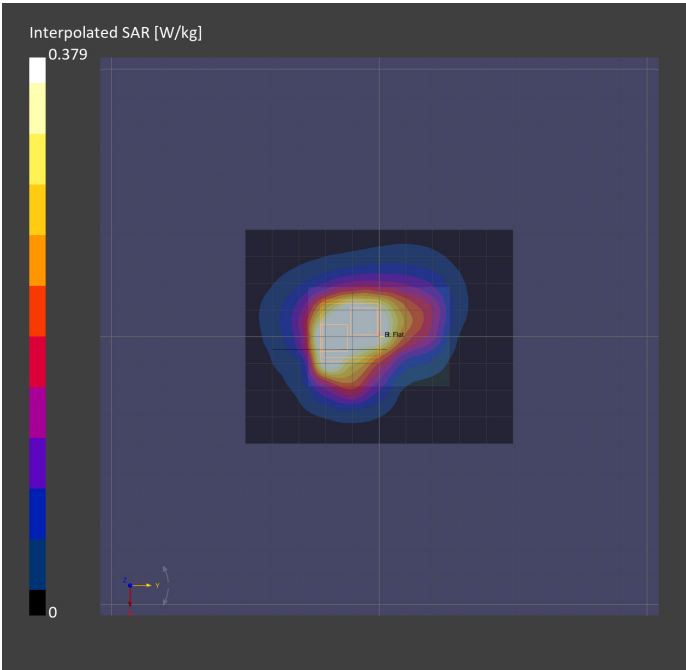
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-09) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 80.0 x 100.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0  | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                |              | N/A                |
| Surface Detection   |              | VMS + 6p           |
| Scan Method         |              | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-09    |
| psSAR1g [W/kg]     | 0.384     | 0.379         |
| psSAR10g [W/kg]    | 0.203     | 0.192         |
| Power Drift [dB]   |           | -0.06         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 73.0          |
| Dist 3dB Peak [mm] | N/A       | 5.5           |



Plot No. 2

Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for WW81782\_Bluetooth LE (Chain 2\_2Mbps\_20ch)\_Top\_5mm

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]    | Serial Number |
|---------------------|--------------------|---------------|
| WW81782             | 53.0 x 37.1 x 17.6 | 1003          |

Exposure Conditions

| Phantom Section  | TSL                    | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|------------------|------------------------|-----------------|---------------------|------------------------|------------------|
| Flat             | Head Simulating Liquid | Top             | 5.00                | 1.72                   | 39.9             |
| Band             | Group                  | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
| ISM 2.4 GHz Band | Bluetooth LE           | 2442.000        | 20                  | 6.75                   |                  |

Hardware Setup

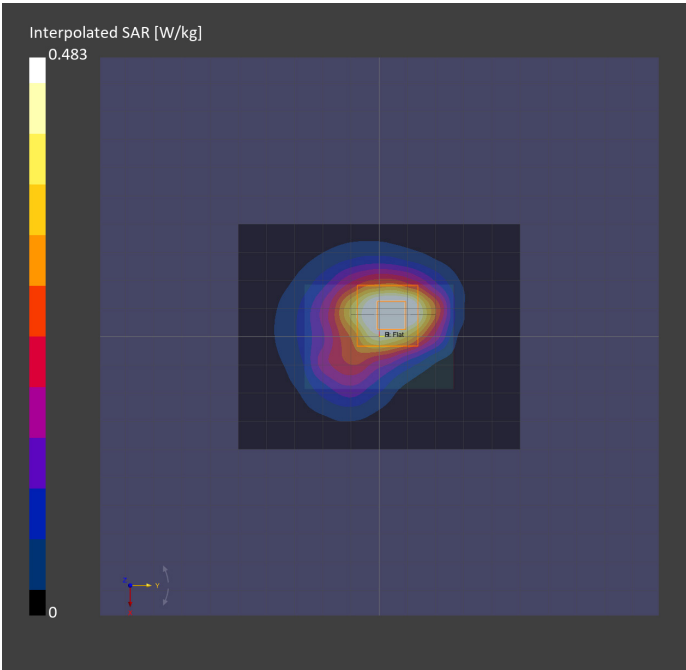
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-10) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 80.0 x 100.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0  | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                |              | N/A                |
| Surface Detection   |              | VMS + 6p           |
| Scan Method         |              | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-10    |
| psSAR1g [W/kg]     | 0.469     | 0.483         |
| psSAR10g [W/kg]    | 0.228     | 0.238         |
| Power Drift [dB]   |           | -0.02         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 85.5          |
| Dist 3dB Peak [mm] | N/A       | 11.0          |



Plot No. 3  
Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for WW81782\_Bluetooth LE (Chain 1\_2Mbps\_1ch)\_Right\_0mm

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]    | Serial Number |
|---------------------|--------------------|---------------|
| WW81782             | 37.1 x 17.6 x 53.0 | 1003          |

Exposure Conditions

| Phantom Section  | TSL                    | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|------------------|------------------------|-----------------|---------------------|------------------------|------------------|
| Flat             | Head Simulating Liquid | Right           | 0.00                | 1.70                   | 39.7             |
| Band             | Group                  | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
| ISM 2.4 GHz Band | Bluetooth LE           | 2404.000        | 1                   | 6.75                   |                  |

Hardware Setup

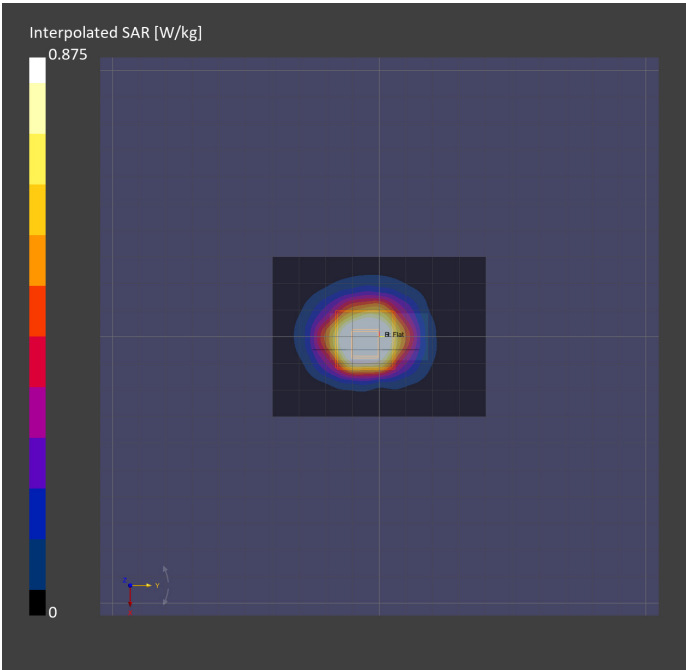
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-11) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 60.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-11    |
| psSAR1g [W/kg]     | 0.902     | 0.875         |
| psSAR10g [W/kg]    | 0.441     | 0.420         |
| Power Drift [dB]   |           | 0.03          |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 73.6          |
| Dist 3dB Peak [mm] | N/A       | 7.3           |



Plot No. 4

Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for WW81782\_Bluetooth LE (Chain 2\_2Mbps\_1ch)\_Tbp\_0mm

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]    | Serial Number |
|---------------------|--------------------|---------------|
| WW81782             | 53.0 x 37.1 x 17.6 | 1003          |

Exposure Conditions

| Phantom Section  | TSL                    | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|------------------|------------------------|-----------------|---------------------|------------------------|------------------|
| Flat             | Head Simulating Liquid | Top             | 0.00                | 1.75                   | 39.9             |
| Band             | Group                  | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
| ISM 2.4 GHz Band | Bluetooth LE           | 2404.000        | 1                   | 6.75                   |                  |

Hardware Setup

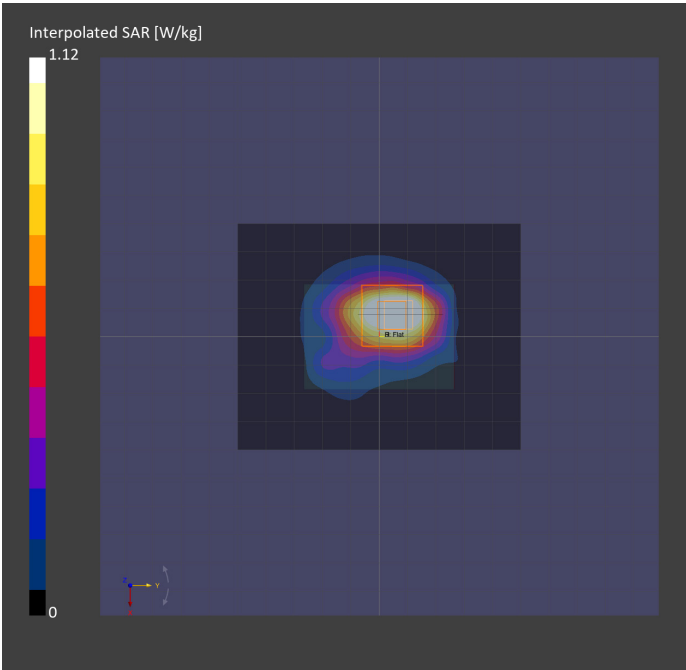
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-08) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 80.0 x 100.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0  | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                |              | N/A                |
| Surface Detection   |              | VMS + 6p           |
| Scan Method         |              | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-08    |
| psSAR1g [W/kg]     | 1.12      | 1.12          |
| psSAR10g [W/kg]    | 0.516     | 0.518         |
| Power Drift [dB]   |           | -0.02         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 86.5          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



## Appendix B. Plots of System Check

Please see the following pages.

Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for System Check\_D2450\_HSL (1)

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]     | Serial Number |
|---------------------|---------------------|---------------|
| D2450V2 - SN894     | 50.0 x 10.0 x 290.0 | -             |

Exposure Conditions

| Phantom Section | TSL             | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|-----------------|-----------------|-----------------|---------------------|------------------------|------------------|
| Flat            | Head Simulating | -               | -                   | 1.74                   | 39.8             |
| Band            | Liquid          | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
| -               | CW              | 2450.000        | 0                   | 6.75                   |                  |

Hardware Setup

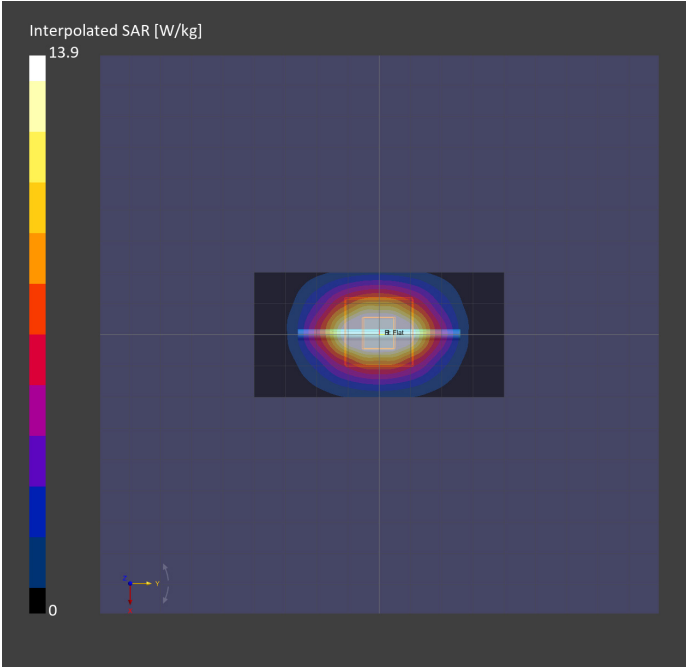
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-05) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 40.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-05    |
| psSAR1g [W/kg]     | 14.1      | 13.9          |
| psSAR10g [W/kg]    | 6.51      | 6.55          |
| Power Drift [dB]   |           | 0.00          |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 82.5          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for System Check\_D2450\_HSL (2)

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]     | Serial Number |
|---------------------|---------------------|---------------|
| D2450V2 - SN894     | 50.0 x 10.0 x 290.0 | -             |

Exposure Conditions

| Phantom Section | TSL             | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|-----------------|-----------------|-----------------|---------------------|------------------------|------------------|
| Flat            | Head Simulating | -               | -                   | 1.79                   | 39.9             |
| Band            | Liquid          |                 |                     |                        |                  |
| -               | CW              | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
|                 |                 | 2450.000        | 0                   | 6.75                   |                  |

Hardware Setup

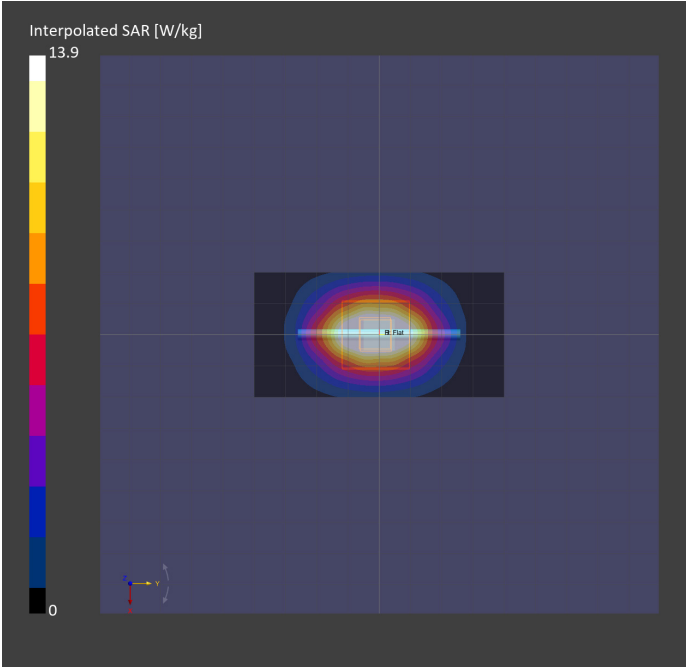
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-08) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 40.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-08    |
| psSAR1g [W/kg]     | 14.1      | 13.9          |
| psSAR10g [W/kg]    | 6.52      | 6.59          |
| Power Drift [dB]   |           | -0.02         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 82.7          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for System Check\_D2450\_HSL (3)

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]     | Serial Number |
|---------------------|---------------------|---------------|
| D2450V2 - SN894     | 50.0 x 10.0 x 290.0 | -             |

Exposure Conditions

| Phantom Section | TSL             | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|-----------------|-----------------|-----------------|---------------------|------------------------|------------------|
| Flat            | Head Simulating | -               | -                   | 1.75                   | 39.8             |
| Band            | Liquid          |                 |                     |                        |                  |
| -               | CW              | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
|                 |                 | 2450.000        | 0                   | 6.75                   |                  |

Hardware Setup

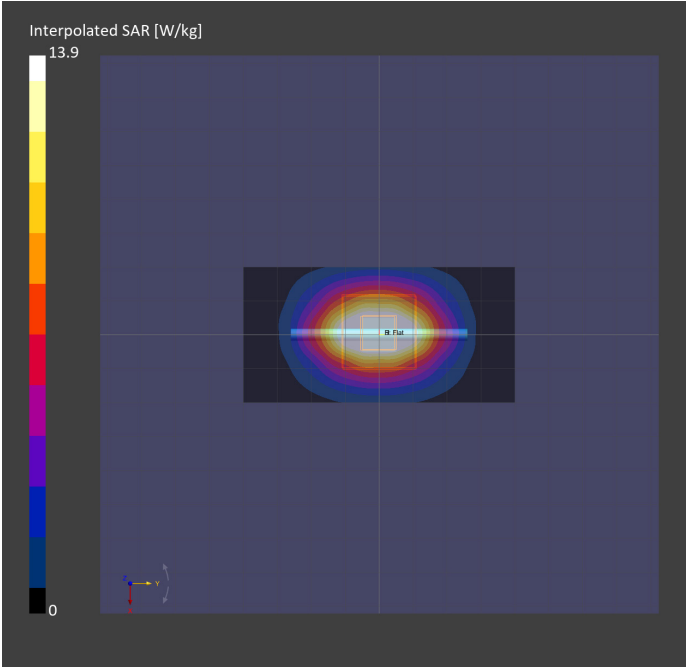
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-09) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 40.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-09    |
| psSAR1g [W/kg]     | 14.0      | 13.9          |
| psSAR10g [W/kg]    | 6.48      | 6.55          |
| Power Drift [dB]   |           | -0.01         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 82.7          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for System Check\_D2450\_HSL (4)

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]     | Serial Number |
|---------------------|---------------------|---------------|
| D2450V2 - SN894     | 50.0 x 10.0 x 290.0 | -             |

Exposure Conditions

| Phantom Section | TSL             | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|-----------------|-----------------|-----------------|---------------------|------------------------|------------------|
| Flat            | Head Simulating | -               | -                   | 1.72                   | 39.9             |
| Band            | Liquid          |                 |                     |                        |                  |
| -               | CW              | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
|                 |                 | 2450.000        | 0                   | 6.75                   |                  |

Hardware Setup

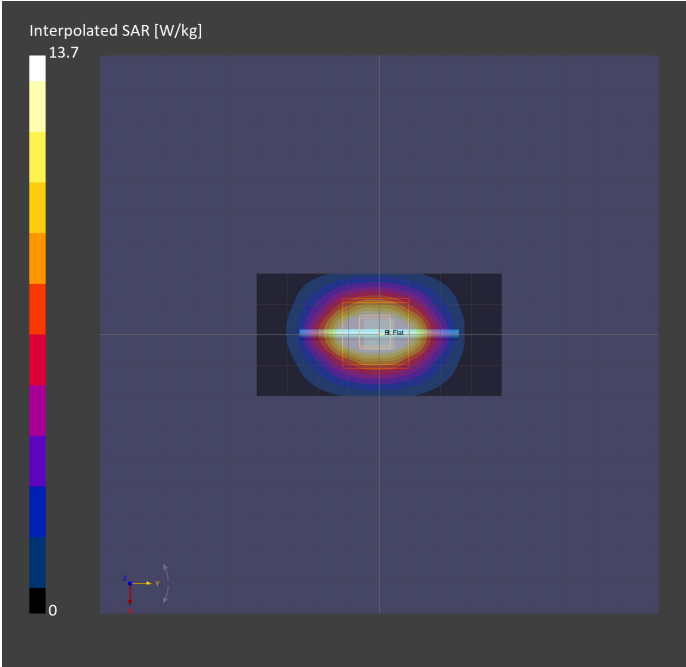
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-10) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 40.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-10    |
| psSAR1g [W/kg]     | 14.0      | 13.7          |
| psSAR10g [W/kg]    | 6.42      | 6.47          |
| Power Drift [dB]   |           | -0.01         |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 82.6          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



Test Laboratory: Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory Main Lab. 4th Site Shielded Room 3

Measurement Report for System Check\_D2450\_HSL (5)

Device under Test Properties

| Model, Manufacturer | Dimensions [mm]     | Serial Number |
|---------------------|---------------------|---------------|
| D2450V2 - SN894     | 50.0 x 10.0 x 290.0 | -             |

Exposure Conditions

| Phantom Section | TSL             | Position        | Test Distance [mm]  | TSL Conductivity [S/m] | TSL Permittivity |
|-----------------|-----------------|-----------------|---------------------|------------------------|------------------|
| Flat            | Head Simulating | -               | -                   | 1.74                   | 39.6             |
| Band            | Liquid          |                 |                     |                        |                  |
| -               | CW              | Frequency [MHz] | Channel Number [Ch] | Conversion Factor      |                  |
|                 |                 | 2450.000        | 0                   | 6.75                   |                  |

Hardware Setup

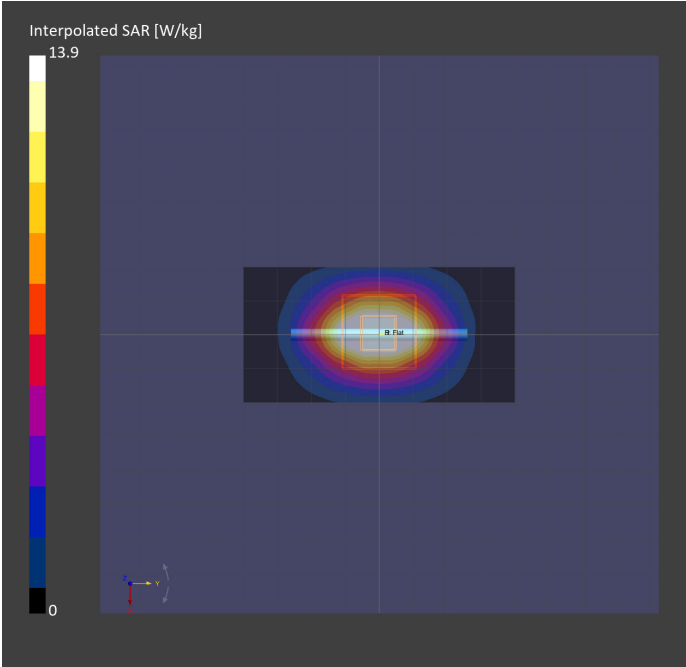
| DASY8 Software Version  | Phantom                           | TSL (Measured Date)        | Probe (Calibration Date)     |
|-------------------------|-----------------------------------|----------------------------|------------------------------|
| 17.0.4.7034             | ELI V5.0 (20deg probe tilt)- 1259 | HBBL600-10000 (2026-06-11) | EX3DV4 - SN7452 (2026-03-20) |
| DAE (Calibration Date)  |                                   |                            |                              |
| DAE4 Sn482 (2025-07-31) |                                   |                            |                              |

Scan Setup

|                     | Area Scan   | Zoom Scan          |
|---------------------|-------------|--------------------|
| Grid Extents [mm]   | 40.0 x 80.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 10.0 | 5.0 x 5.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                |             | N/A                |
| Surface Detection   |             | VMS + 6p           |
| Scan Method         |             | Measured           |

Measurement Results

|                    | Area Scan | Zoom Scan     |
|--------------------|-----------|---------------|
| Date               |           | 2026-06-11    |
| psSAR1g [W/kg]     | 14.0      | 13.9          |
| psSAR10g [W/kg]    | 6.43      | 6.55          |
| Power Drift [dB]   |           | 0.02          |
| Power Scaling      |           | Disabled      |
| TSL Correction     |           | Positive only |
| M2/M1 [%]          | N/A       | 82.5          |
| Dist 3dB Peak [mm] | N/A       | 9.0           |



## Appendix C. Calibration Certificate

C.1. E-Field Probe EX3DV4 (Serial No. 7452 / Control No. WA0052)

Please see the following pages.

**Calibration Laboratory of  
Schmid & Partner  
Engineering AG**

Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst  
C Service suisse d'étalonnage  
S Servizio svizzero di taratura  
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client

**SONY Global M&O**  
Chiba, Japan

Certificate No.

**EX-7452\_Mar26****CALIBRATION CERTIFICATE**

Object

EX3DV4 - SN:7452

Calibration procedure(s)

QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6,  
QA CAL-25.v8, QA CAL-48.v2  
Calibration procedure for dosimetric E-field probes

Calibration date

March 20, 2026

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature  $(22 \pm 3)^\circ\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards           | ID         | Calibration Date (Certificate No.)     | Sched. Cal. |
|-----------------------------|------------|----------------------------------------|-------------|
| Power Sensor R&S NRP40T     | SN: 101861 | 29-Apr-25 (No. 2025-001450)            | Apr-26      |
| N-type mismatch combination | SN: L1119  | 26-Mar-25 (No. 217-04292)              | Mar-26      |
| OCP DAK-12                  | SN: 1016   | 16-Sept-25 (No. OCP-DAK12-1016_Sep25)  | Sep-26      |
| OCP DAK-3.5                 | SN: 1249   | 16-Sept-25 (No. OCP-DAK3.5-1249_Sep25) | Sep-26      |
| Reference Probe EX3DV4      | SN: 7349   | 29-Jan-26 (No. EX3-7349_Jan26)         | Jan-27      |
| DAE4                        | SN: 1301   | 22-Jan-26 (No. DAE4-1301_Jan26)        | Jan-27      |

| Secondary Standards | ID        | Check Date (in house)                 | Sched. Check |
|---------------------|-----------|---------------------------------------|--------------|
| ACAP 2020 Setup 1   | SN: L1404 | 01-Oct-25 (No. IHCK_ACAP2020-1_Oct25) | Oct-26       |
| OCP DAK-12          | SN: 1029  | 24-Feb-26 (No. OCP-DAK12-1029_Feb26)  | Feb-27       |
| OCP DAK-3.5         | SN: 1336  | 10-Dec-25 (No. OCP-DAK3.5-1336_Dec25) | Dec-26       |

|               | Name           | Function              | Signature |
|---------------|----------------|-----------------------|-----------|
| Calibrated by | Joanna Lleshaj | Laboratory Technician |           |
| Approved by   | Sven Kühn      | Technical Manager     |           |

Issued: March 23, 2026

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: EX-7452\_Mar26

Page 1 of 22

### Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst  
C Service suisse d'étalonnage  
S Servizio svizzero di taratura  
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

### Glossary

|                        |                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                    | tissue simulating liquid                                                                                                                       |
| NORM <sub>x,y,z</sub>  | sensitivity in free space                                                                                                                      |
| ConvF                  | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                     |
| DCP                    | diode compression point                                                                                                                        |
| CF                     | crest factor (1/duty_cycle) of the RF signal                                                                                                   |
| A, B, C, D             | modulation dependent linearization parameters                                                                                                  |
| Polarization $\varphi$ | $\varphi$ rotation around probe axis                                                                                                           |
| Polarization $\theta$  | $\theta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is normal to probe axis |
| Connector Angle        | information used in DASY system to align probe sensor X to the robot coordinate system                                                         |

### Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\theta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

EX3DV4 - SN:7452

March 20, 2026

**Parameters of Probe: EX3DV4 - SN:7452****Basic Calibration Parameters**

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k = 2) |
|-----------------------------------------------------------|----------|----------|----------|-------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.59     | 0.57     | 0.65     | ±10.1%      |
| DCP (mV) <sup>B</sup>                                     | 103.8    | 103.2    | 104.5    | ±4.7%       |

**Calibration Results for Modulation Response**

| UID   | Communication System Name      |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C     | D<br>dB | VR<br>mV | Max<br>dev. | Max<br>Unc <sup>E</sup><br>k = 2 |
|-------|--------------------------------|---|---------|------------------------------|-------|---------|----------|-------------|----------------------------------|
| 0     | Continuous Wave                | X | 0.00    | 0.00                         | 1.00  | 0.00    | 128.7    | ±2.1%       | ±4.7%                            |
|       |                                | Y | 0.00    | 0.00                         | 1.00  |         | 124.0    |             |                                  |
|       |                                | Z | 0.00    | 0.00                         | 1.00  |         | 140.7    |             |                                  |
| 10352 | Pulse (D=10%, T=5 ms)          | X | 0.74    | 69.98                        | 17.76 | 10.00   | 23.0     | ±1.7%       | ±9.6%                            |
|       |                                | Y | 0.31    | 60.34                        | 15.14 |         | 24.0     |             |                                  |
|       |                                | Z | 0.28    | 61.43                        | 15.40 |         | 24.0     |             |                                  |
| 10353 | Pulse (D=20%, T=5 ms)          | X | 0.70    | 72.99                        | 17.81 | 6.99    | 46.0     | ±1.5%       | ±9.6%                            |
|       |                                | Y | 0.29    | 63.35                        | 15.20 |         | 48.0     |             |                                  |
|       |                                | Z | 0.26    | 64.44                        | 15.44 |         | 47.0     |             |                                  |
| 10354 | Pulse (D=40%, T=5 ms)          | X | 0.65    | 76.00                        | 17.85 | 3.98    | 93.0     | ±1.3%       | ±9.6%                            |
|       |                                | Y | 0.27    | 66.36                        | 15.26 |         | 95.0     |             |                                  |
|       |                                | Z | 0.24    | 67.45                        | 15.48 |         | 94.0     |             |                                  |
| 10355 | Pulse (D=60%, T=5 ms)          | X | 0.62    | 77.77                        | 17.88 | 2.22    | 139.0    | ±1.2%       | ±9.6%                            |
|       |                                | Y | 0.25    | 68.12                        | 15.30 |         | 143.0    |             |                                  |
|       |                                | Z | 0.23    | 69.21                        | 15.50 |         | 141.0    |             |                                  |
| 10387 | Random (BW=1 MHz, MOD=QPSK)    | X | 0.00    | 50.49                        | 19.31 | 0.19    | 107.0    | ±1.6%       | ±9.6%                            |
|       |                                | Y | 0.00    | 65.24                        | 16.83 |         | 111.0    |             |                                  |
|       |                                | Z | 0.01    | 66.33                        | 16.64 |         | 109.0    |             |                                  |
| 10388 | Random (BW=10 MHz, MOD=QPSK)   | X | 1.69    | 74.77                        | 17.27 | 0.00    | 114.0    | ±2.5%       | ±9.6%                            |
|       |                                | Y | 0.65    | 65.13                        | 14.31 |         | 117.0    |             |                                  |
|       |                                | Z | 0.69    | 66.21                        | 14.69 |         | 115.0    |             |                                  |
| 10396 | Random (BW=100 kHz, MOD=64QAM) | X | 0.00    | 81.72                        | 20.37 | 1.60    | 80.0     | ±3.5%       | ±9.6%                            |
|       |                                | Y | 0.00    | 64.07                        | 18.44 |         | 82.0     |             |                                  |
|       |                                | Z | 0.00    | 65.15                        | 17.84 |         | 81.0     |             |                                  |
| 10399 | Random (BW=40 MHz, MOD=64QAM)  | X | 3.95    | 73.71                        | 17.16 | 0.00    | 105.0    | ±3.6%       | ±9.6%                            |
|       |                                | Y | 1.76    | 64.07                        | 13.18 |         | 109.0    |             |                                  |
|       |                                | Z | 1.85    | 65.15                        | 13.93 |         | 107.0    |             |                                  |
| 10414 | Random (BW=40 MHz, HIGH PAR)   | X | 4.80    | 71.45                        | 17.16 | 0.00    | 77.0     | ±1.7%       | ±9.6%                            |
|       |                                | Y | 2.09    | 61.81                        | 13.10 |         | 80.0     |             |                                  |
|       |                                | Z | 2.23    | 62.89                        | 13.88 |         | 78.0     |             |                                  |

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 to 7).<sup>B</sup> Linearization parameter uncertainty for maximum specified field strength.<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

EX3DV4 - SN:7452

March 20, 2026

**Parameters of Probe: EX3DV4 - SN:7452****Sensor Model Parameters**

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$V^{-1}$ | T1<br>$ms V^{-2}$ | T2<br>$ms V^{-1}$ | T3<br>ms | T4<br>$V^{-2}$ | T5<br>$V^{-1}$ | T6   |
|---|----------|----------|----------------------|-------------------|-------------------|----------|----------------|----------------|------|
| x | 9.7      | 71.40    | 34.56                | 2.49              | 0.00              | 4.90     | 0.32           | 0.00           | 1.00 |
| y | 8.5      | 63.10    | 34.74                | 2.98              | 0.00              | 4.90     | 0.37           | 0.00           | 1.00 |
| z | 8.6      | 63.36    | 34.52                | 3.68              | 0.00              | 4.90     | 0.19           | 0.00           | 1.00 |

**Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle                               | -1.9°      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 12 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Note:** Measurement distance from surface can be increased to 3–4 mm for an *Area Scan* job.

EX3DV4 - SN:7452

March 20, 2026

**Parameters of Probe: EX3DV4 - SN:7452****Calibration Parameter Determined in HSL**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|--------------------------|
| 835                  | 41.5                               | 0.90                            | 9.24    | 9.28    | 9.00    | 0.36               | 1.27                    | ±11.0%                   |
| 1450                 | 40.5                               | 1.20                            | 7.97    | 8.01    | 7.76    | 0.35               | 1.27                    | ±11.0%                   |
| 1950                 | 40.0                               | 1.40                            | 7.37    | 7.40    | 7.18    | 0.35               | 1.27                    | ±11.0%                   |
| 2450                 | 39.2                               | 1.80                            | 6.75    | 6.78    | 6.57    | 0.34               | 1.27                    | ±11.0%                   |
| 5200                 | 36.0                               | 4.66                            | 5.26    | 5.28    | 5.13    | 0.31               | 1.27                    | ±13.1%                   |
| 5300                 | 35.9                               | 4.76                            | 5.09    | 5.11    | 4.96    | 0.30               | 1.27                    | ±13.1%                   |
| 5500                 | 35.6                               | 4.96                            | 4.78    | 4.80    | 4.65    | 0.28               | 1.27                    | ±13.1%                   |
| 5600                 | 35.5                               | 5.07                            | 4.75    | 4.78    | 4.63    | 0.28               | 1.27                    | ±13.1%                   |
| 5800                 | 35.3                               | 5.27                            | 4.67    | 4.69    | 4.55    | 0.26               | 1.27                    | ±13.1%                   |

<sup>C</sup> Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to +50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon$  and  $\sigma$  by less than +5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

<sup>H</sup> The stated uncertainty is the total calibration uncertainty (k = 2) of Norm.ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7452

March 20, 2026

**Parameters of Probe: EX3DV4 - SN:7452****Calibration Parameter Determined in MSL**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|--------------------------|
| 2450                 | 52.7                               | 1.95                            | 6.76    | 6.79    | 6.63    | 0.32               | 1.27                    | ±11.0%                   |
| 5200                 | 49.0                               | 5.30                            | 4.56    | 4.58    | 4.47    | 0.31               | 1.70                    | ±13.1%                   |
| 5300                 | 48.9                               | 5.42                            | 4.41    | 4.42    | 4.32    | 0.32               | 1.74                    | ±13.1%                   |
| 5500                 | 48.6                               | 5.65                            | 3.96    | 3.98    | 3.88    | 0.37               | 1.70                    | ±13.1%                   |
| 5600                 | 48.5                               | 5.77                            | 4.04    | 4.05    | 3.96    | 0.35               | 1.75                    | ±13.1%                   |
| 5800                 | 48.2                               | 6.00                            | 3.88    | 3.90    | 3.80    | 0.37               | 1.78                    | ±13.1%                   |

<sup>C</sup> Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon$  and  $\sigma$  by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

<sup>H</sup> The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7452
March 20, 2026

Parameters of Probe: EX3DV4 - SN:7452

Calibration Parameter Determined in HSL

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|--------------------------|
| 6500                 | 34.5                               | 6.07                            | 5.03    | 5.06    | 4.91    | 0.20               | 1.27                    | ±18.6%                   |

<sup>C</sup> Frequency validity is -600/+700 MHz at 6.5 GHz, ±700 MHz at or above 7 GHz, and ±150 MHz at 9.85 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

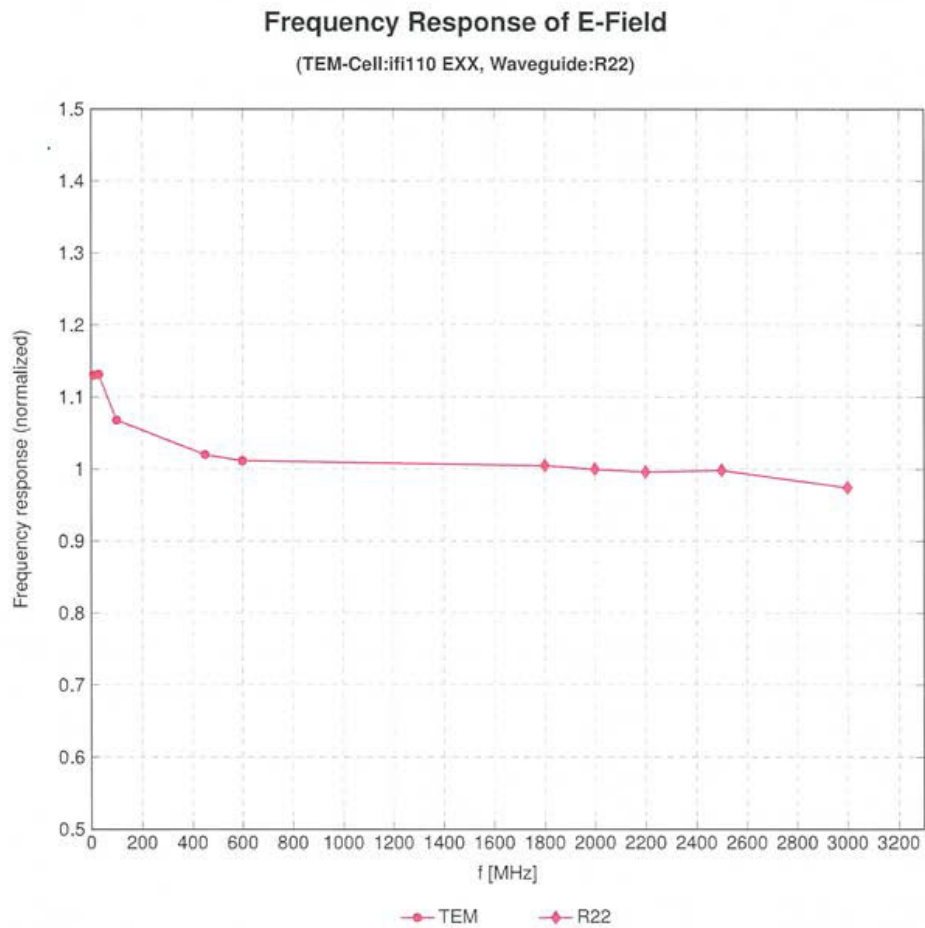
<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon$  and  $\sigma$  by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–8 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.

<sup>H</sup> The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7452

March 20, 2026

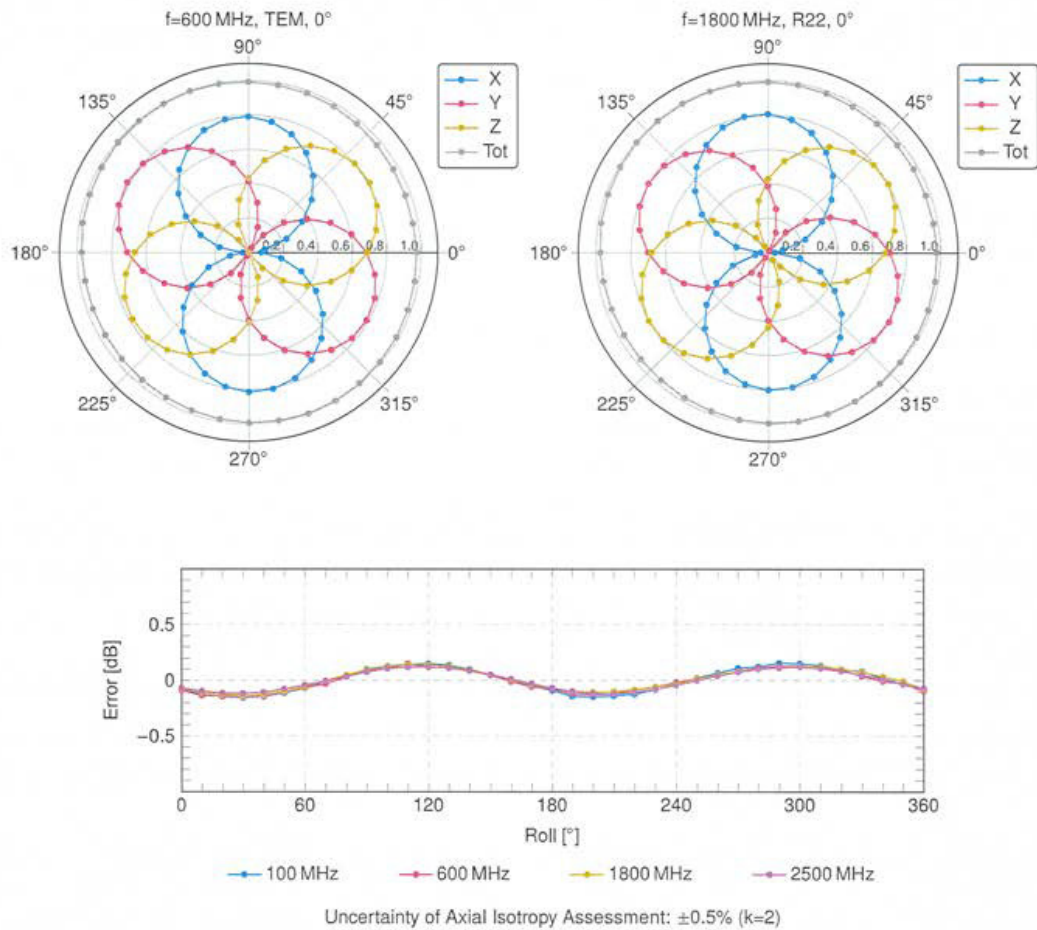


Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

EX3DV4 - SN:7452

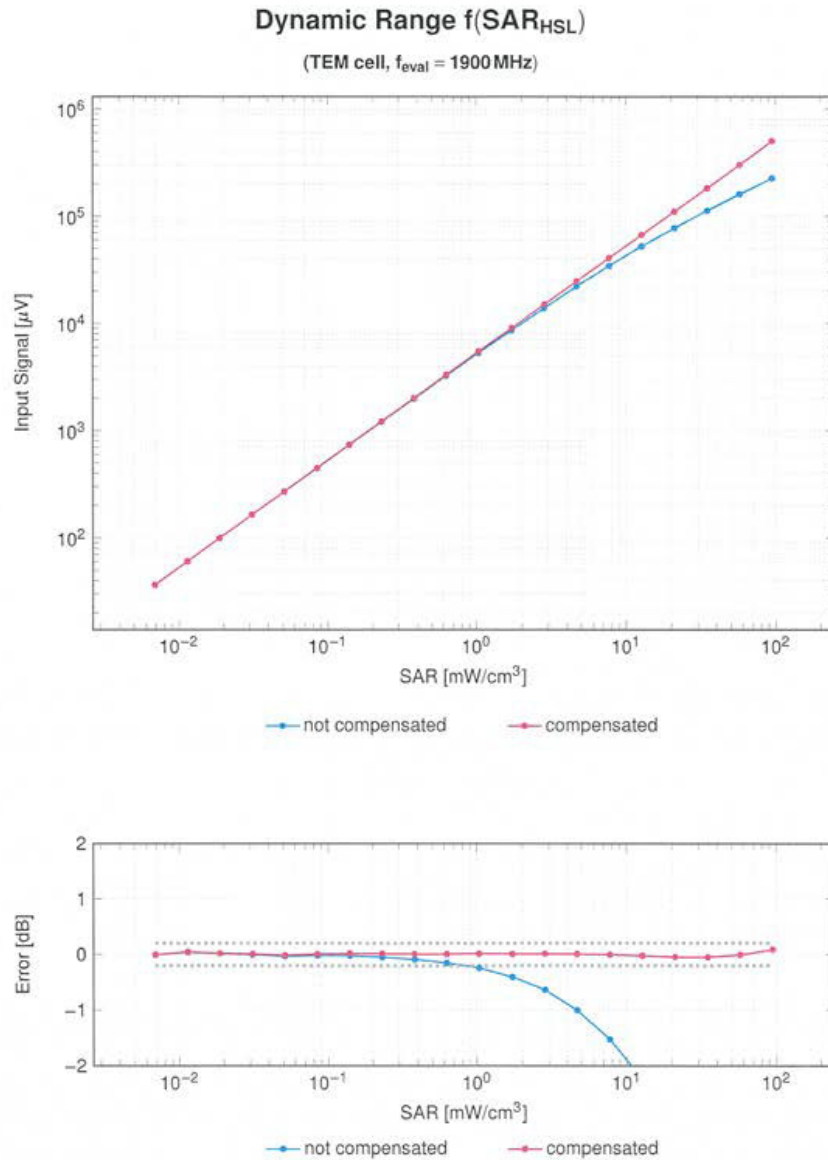
March 20, 2026

Receiving Pattern ( $\phi$ ),  $\vartheta = 0^\circ$



EX3DV4 - SN:7452

March 20, 2026

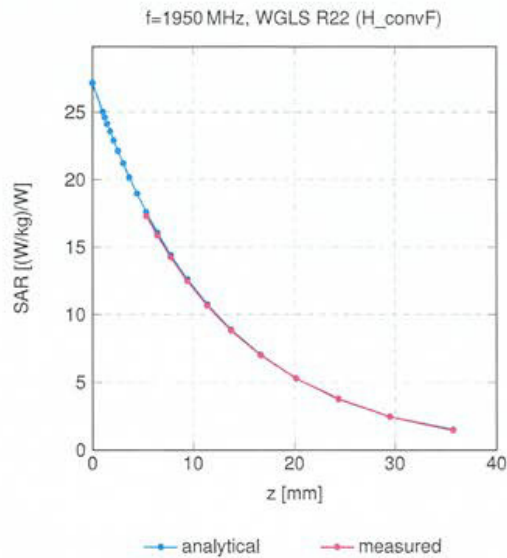


Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

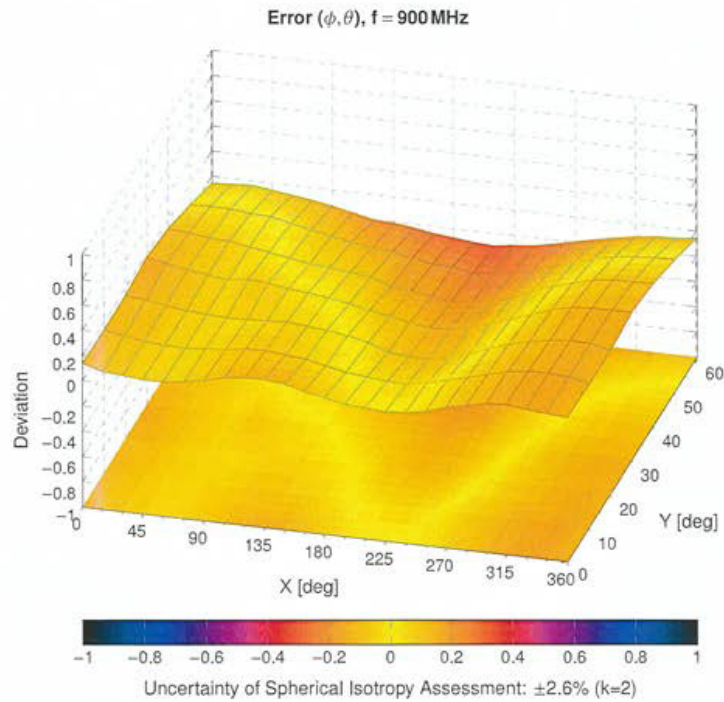
EX3DV4 - SN:7452

March 20, 2026

### Conversion Factor Assessment



### Deviation from Isotropy in Liquid



Certificate No: EX-7452\_Mar26

Page 11 of 22

EX3DV4 - SN:7452

March 20, 2026

**Appendix: Modulation Calibration Parameters**

| UID   | Rev | Communication System Name                      | Group     | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------|-----------|----------|------------------------|
| 0     |     | Continuous Wave                                | CW        | 0.00     | ±4.7                   |
| 10010 | CAB | Pulse (D=10%, T=100ms)                         | Test      | 10.00    | ±9.6                   |
| 10011 | CAC | Ref. 99, RMC, QPSK, 5.0 MHz                    | WCDMA     | 2.91     | ±9.6                   |
| 10012 | CAB | DSSS, DBPSK, 1.0 Mbps, 92.5% DC                | WLAN      | 1.87     | ±9.6                   |
| 10013 | CAB | OFDM, BPSK, 6.0 Mbps, 72.1% DC                 | WLAN      | 9.46     | ±9.6                   |
| 10021 | DAC | Voice, GMSK, 1 slot(s)                         | GSM       | 9.39     | ±9.6                   |
| 10023 | DAC | Data, GSMK, 1 slot(s)                          | GSM       | 9.57     | ±9.6                   |
| 10024 | DAC | Data, GSMK, 2 slot(s)                          | GSM       | 6.56     | ±9.6                   |
| 10025 | DAC | Data, 8PSK, 1 slot(s)                          | GSM       | 12.62    | ±9.6                   |
| 10026 | DAC | Data, 8PSK, 2 slot(s)                          | GSM       | 9.55     | ±9.6                   |
| 10027 | DAC | Data, GSMK, 3 slot(s)                          | GSM       | 4.80     | ±9.6                   |
| 10028 | DAC | Data, GSMK, 4 slot(s)                          | GSM       | 3.55     | ±9.6                   |
| 10029 | DAC | Data, 8PSK, 3 slot(s)                          | GSM       | 7.78     | ±9.6                   |
| 10030 | CAA | BR, DH1, GFSK                                  | Bluetooth | 5.30     | ±9.6                   |
| 10031 | CAA | BR, DH3, GFSK                                  | Bluetooth | 1.87     | ±9.6                   |
| 10032 | CAA | BR, DH5, GFSK                                  | Bluetooth | 1.16     | ±9.6                   |
| 10033 | CAA | EDR, DH1, pi/4-DQPSK                           | Bluetooth | 7.74     | ±9.6                   |
| 10034 | CAA | EDR, DH3, pi/4-DQPSK                           | Bluetooth | 4.53     | ±9.6                   |
| 10035 | CAA | EDR, DH5, pi/4-DQPSK                           | Bluetooth | 3.83     | ±9.6                   |
| 10036 | CAA | EDR, DH1, 8-DPSK                               | Bluetooth | 8.01     | ±9.6                   |
| 10037 | CAA | EDR, DH3, 8-DPSK                               | Bluetooth | 4.77     | ±9.6                   |
| 10038 | CAA | EDR, DH5, 8-DPSK                               | Bluetooth | 4.10     | ±9.6                   |
| 10039 | CAB | RC1, 1xRTT                                     | CDMA2000  | 4.57     | ±9.6                   |
| 10048 | CAA | Full Slot, GFSK, 1 slot(s)                     | DECT      | 13.80    | ±9.6                   |
| 10049 | CAA | Double Slot, GFSK, 2 slot(s)                   | DECT      | 10.79    | ±9.6                   |
| 10056 | CAA | TD-SCDMA, QPSK, 1.6 MHz                        | TD-SCDMA  | 11.01    | ±9.6                   |
| 10058 | DAC | Data, 8PSK, 4 slot(s)                          | GSM       | 6.52     | ±9.6                   |
| 10059 | CAB | DSSS, DQPSK, 2.0 Mbps, 87.4% DC                | WLAN      | 2.12     | ±9.6                   |
| 10060 | CAB | HR-DSSS, DQPSK, 5.5 Mbps, 72.7% DC             | WLAN      | 2.83     | ±9.6                   |
| 10061 | CAB | HR-DSSS, DQPSK, 11.0 Mbps, 57.5% DC            | WLAN      | 3.60     | ±9.6                   |
| 10062 | CAE | OFDM, BPSK, 6.0 Mbps, 89.1% DC                 | WLAN      | 8.68     | ±9.6                   |
| 10063 | CAE | OFDM, BPSK, 9.0 Mbps, 85.3% DC                 | WLAN      | 8.63     | ±9.6                   |
| 10064 | CAE | OFDM, QPSK, 12.0 Mbps, 82.0% DC                | WLAN      | 9.09     | ±9.6                   |
| 10065 | CAE | OFDM, QPSK, 18.0 Mbps, 76.0% DC                | WLAN      | 9.00     | ±9.6                   |
| 10066 | CAE | OFDM, 16QAM, 24.0 Mbps, 70.6% DC               | WLAN      | 9.38     | ±9.6                   |
| 10067 | CAE | OFDM, 16QAM, 36.0 Mbps, 62.9% DC               | WLAN      | 10.12    | ±9.6                   |
| 10068 | CAE | OFDM, 64QAM, 48.0 Mbps, 56.6% DC               | WLAN      | 10.24    | ±9.6                   |
| 10069 | CAE | OFDM, 64QAM, 54.0 Mbps, 54.4% DC               | WLAN      | 10.56    | ±9.6                   |
| 10071 | CAB | OFDM, BPSK, 9.0 Mbps, 65.1% DC                 | WLAN      | 9.83     | ±9.6                   |
| 10072 | CAB | OFDM, QPSK, 12.0 Mbps, 60.1% DC                | WLAN      | 9.82     | ±9.6                   |
| 10073 | CAB | OFDM, QPSK, 18.0 Mbps, 53.1% DC                | WLAN      | 9.94     | ±9.6                   |
| 10074 | CAB | OFDM, 16QAM, 24.0 Mbps, 48.5% DC               | WLAN      | 10.30    | ±9.6                   |
| 10075 | CAB | OFDM, 16QAM, 36.0 Mbps, 42.9% DC               | WLAN      | 10.77    | ±9.6                   |
| 10076 | CAB | OFDM, 64QAM, 48.0 Mbps, 39.5% DC               | WLAN      | 10.94    | ±9.6                   |
| 10077 | CAB | OFDM, 64QAM, 54.0 Mbps, 38.5% DC               | WLAN      | 11.00    | ±9.6                   |
| 10081 | CAB | RC3, 1xRTT                                     | CDMA2000  | 3.97     | ±9.6                   |
| 10097 | CAC | Ref. 5 HSDPA, QPSK, 5.0 MHz                    | WCDMA     | 3.98     | ±9.6                   |
| 10098 | CAC | Ref. 6 HSUPA, Subset 2, QPSK, 5.0 MHz          | WCDMA     | 3.98     | ±9.6                   |
| 10100 | CAF | 20.0 MHz, QPSK, 100% RB                        | LTE-FDD   | 5.67     | ±9.6                   |
| 10101 | CAF | 20.0 MHz, 16QAM, 100% RB                       | LTE-FDD   | 6.42     | ±9.6                   |
| 10102 | CAF | 20.0 MHz, 64QAM, 100% RB                       | LTE-FDD   | 6.60     | ±9.6                   |
| 10103 | CAH | 20.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB  | LTE-TDD   | 9.29     | ±9.6                   |
| 10104 | CAH | 20.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB | LTE-TDD   | 9.97     | ±9.6                   |
| 10105 | CAH | 20.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB | LTE-TDD   | 10.01    | ±9.6                   |
| 10108 | CAH | 10.0 MHz, QPSK, 100% RB                        | LTE-FDD   | 5.80     | ±9.6                   |
| 10109 | CAH | 10.0 MHz, 16QAM, 100% RB                       | LTE-FDD   | 6.43     | ±9.6                   |
| 10110 | CAH | 5.0 MHz, QPSK, 100% RB                         | LTE-FDD   | 5.75     | ±9.6                   |
| 10111 | CAH | 5.0 MHz, 16QAM, 100% RB                        | LTE-FDD   | 6.44     | ±9.6                   |
| 10112 | CAH | 10.0 MHz, 64QAM, 100% RB                       | LTE-FDD   | 6.59     | ±9.6                   |
| 10113 | CAH | 5.0 MHz, 64QAM, 100% RB                        | LTE-FDD   | 6.62     | ±9.6                   |
| 10114 | CAE | HT40 Greenfield, MCS0 (13.5 Mbps), 99.7% DC    | WLAN      | 8.10     | ±9.6                   |
| 10115 | CAE | HT40 Greenfield, MCS4 (81.0 Mbps), 99.7% DC    | WLAN      | 8.46     | ±9.6                   |
| 10116 | CAE | HT40 Greenfield, MCS7 (135.0 Mbps), 99.7% DC   | WLAN      | 8.15     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 12 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                     | Group   | PAR (dB) | Unc <sup>E</sup> $k = 2$ |
|-------|-----|-----------------------------------------------|---------|----------|--------------------------|
| 10117 | CAE | HT40 Mixed, MCS0 (13.5 Mbps), 99.7% DC        | WLAN    | 8.07     | ±9.6                     |
| 10118 | CAE | HT40 Mixed, MCS4 (81.0 Mbps), 99.7% DC        | WLAN    | 8.59     | ±9.6                     |
| 10119 | CAE | HT40 Mixed, MCS7 (135.0 Mbps), 99.7% DC       | WLAN    | 8.13     | ±9.6                     |
| 10140 | CAF | 15.0 MHz, 16QAM, 100% RB                      | LTE-FDD | 6.49     | ±9.6                     |
| 10141 | CAF | 15.0 MHz, 64QAM, 100% RB                      | LTE-FDD | 6.53     | ±9.6                     |
| 10142 | CAF | 3.0 MHz, QPSK, 100% RB                        | LTE-FDD | 5.73     | ±9.6                     |
| 10143 | CAF | 3.0 MHz, 16QAM, 100% RB                       | LTE-FDD | 6.35     | ±9.6                     |
| 10144 | CAF | 3.0 MHz, 64QAM, 100% RB                       | LTE-FDD | 6.65     | ±9.6                     |
| 10145 | CAG | 1.4 MHz, QPSK, 100% RB                        | LTE-FDD | 5.76     | ±9.6                     |
| 10146 | CAG | 1.4 MHz, 16QAM, 100% RB                       | LTE-FDD | 6.41     | ±9.6                     |
| 10147 | CAG | 1.4 MHz, 64QAM, 100% RB                       | LTE-FDD | 6.72     | ±9.6                     |
| 10149 | CAF | 20.0 MHz, 16QAM, 50% RB                       | LTE-FDD | 6.42     | ±9.6                     |
| 10150 | CAF | 20.0 MHz, 64QAM, 50% RB                       | LTE-FDD | 6.60     | ±9.6                     |
| 10151 | CAH | 20.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB  | LTE-TDD | 9.28     | ±9.6                     |
| 10152 | CAH | 20.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB | LTE-TDD | 9.92     | ±9.6                     |
| 10153 | CAH | 20.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB | LTE-TDD | 10.05    | ±9.6                     |
| 10154 | CAH | 10.0 MHz, QPSK, 50% RB                        | LTE-FDD | 5.75     | ±9.6                     |
| 10155 | CAH | 10.0 MHz, 16QAM, 50% RB                       | LTE-FDD | 6.43     | ±9.6                     |
| 10156 | CAH | 5.0 MHz, QPSK, 50% RB                         | LTE-FDD | 5.79     | ±9.6                     |
| 10157 | CAH | 5.0 MHz, 16QAM, 50% RB                        | LTE-FDD | 6.49     | ±9.6                     |
| 10158 | CAH | 10.0 MHz, 64QAM, 50% RB                       | LTE-FDD | 6.62     | ±9.6                     |
| 10159 | CAH | 5.0 MHz, 64QAM, 50% RB                        | LTE-FDD | 6.56     | ±9.6                     |
| 10160 | CAF | 15.0 MHz, QPSK, 50% RB                        | LTE-FDD | 5.82     | ±9.6                     |
| 10161 | CAF | 15.0 MHz, 16QAM, 50% RB                       | LTE-FDD | 6.43     | ±9.6                     |
| 10162 | CAF | 15.0 MHz, 64QAM, 50% RB                       | LTE-FDD | 6.58     | ±9.6                     |
| 10166 | CAG | 1.4 MHz, QPSK, 50% RB                         | LTE-FDD | 5.46     | ±9.6                     |
| 10167 | CAG | 1.4 MHz, 16QAM, 50% RB                        | LTE-FDD | 6.21     | ±9.6                     |
| 10168 | CAG | 1.4 MHz, 64QAM, 50% RB                        | LTE-FDD | 6.79     | ±9.6                     |
| 10169 | CAF | 20.0 MHz, QPSK, 1 RB                          | LTE-FDD | 5.73     | ±9.6                     |
| 10170 | CAF | 20.0 MHz, 16QAM, 1 RB                         | LTE-FDD | 6.52     | ±9.6                     |
| 10171 | AAF | 20.0 MHz, 64QAM, 1 RB                         | LTE-FDD | 6.49     | ±9.6                     |
| 10172 | CAH | 20.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB    | LTE-TDD | 9.21     | ±9.6                     |
| 10173 | CAH | 20.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB   | LTE-TDD | 9.48     | ±9.6                     |
| 10174 | CAH | 20.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB   | LTE-TDD | 10.25    | ±9.6                     |
| 10175 | CAH | 10.0 MHz, QPSK, 1 RB                          | LTE-FDD | 5.72     | ±9.6                     |
| 10176 | CAH | 10.0 MHz, 16QAM, 1 RB                         | LTE-FDD | 6.52     | ±9.6                     |
| 10177 | CAJ | 5.0 MHz, QPSK, 1 RB                           | LTE-FDD | 5.73     | ±9.6                     |
| 10178 | CAH | 5.0 MHz, 16QAM, 1 RB                          | LTE-FDD | 6.52     | ±9.6                     |
| 10179 | CAH | 10.0 MHz, 64QAM, 1 RB                         | LTE-FDD | 6.50     | ±9.6                     |
| 10180 | CAH | 5.0 MHz, 64QAM, 1 RB                          | LTE-FDD | 6.50     | ±9.6                     |
| 10181 | CAF | 15.0 MHz, QPSK, 1 RB                          | LTE-FDD | 5.72     | ±9.6                     |
| 10182 | CAF | 15.0 MHz, 16QAM, 1 RB                         | LTE-FDD | 6.52     | ±9.6                     |
| 10183 | AAE | 15.0 MHz, 64QAM, 1 RB                         | LTE-FDD | 6.50     | ±9.6                     |
| 10184 | CAF | 3.0 MHz, QPSK, 1 RB                           | LTE-FDD | 5.73     | ±9.6                     |
| 10185 | CAF | 3.0 MHz, 16QAM, 1 RB                          | LTE-FDD | 6.51     | ±9.6                     |
| 10186 | AAF | 3.0 MHz, 64QAM, 1 RB                          | LTE-FDD | 6.50     | ±9.6                     |
| 10187 | CAG | 1.4 MHz, QPSK, 1 RB                           | LTE-FDD | 5.73     | ±9.6                     |
| 10188 | CAG | 1.4 MHz, 16QAM, 1 RB                          | LTE-FDD | 6.52     | ±9.6                     |
| 10189 | AAG | 1.4 MHz, 64QAM, 1 RB                          | LTE-FDD | 6.50     | ±9.6                     |
| 10193 | CAE | HT20 Greenfield, MCS0 (6.5 Mbps), 99.4% DC    | WLAN    | 8.09     | ±9.6                     |
| 10194 | CAE | HT20 Greenfield, MCS4 (39.0 Mbps), 99.5% DC   | WLAN    | 8.12     | ±9.6                     |
| 10195 | CAE | HT20 Greenfield, MCS7 (65.0 Mbps), 99.5% DC   | WLAN    | 8.21     | ±9.6                     |
| 10196 | CAE | HT20 Mixed, MCS0 (6.5 Mbps), 99.4% DC         | WLAN    | 8.10     | ±9.6                     |
| 10197 | CAE | HT20 Mixed, MCS4 (39.0 Mbps), 99.5% DC        | WLAN    | 8.13     | ±9.6                     |
| 10198 | CAE | HT20 Mixed, MCS7 (65.0 Mbps), 99.5% DC        | WLAN    | 8.27     | ±9.6                     |
| 10219 | CAE | HT20 Mixed, MCS0 (7.2 Mbps), 99.3% DC         | WLAN    | 8.03     | ±9.6                     |
| 10220 | CAE | HT20 Mixed, MCS4 (43.3 Mbps), 99.4% DC        | WLAN    | 8.13     | ±9.6                     |
| 10221 | CAE | HT20 Mixed, MCS7 (72.2 Mbps), 99.4% DC        | WLAN    | 8.27     | ±9.6                     |
| 10222 | CAE | HT40 Mixed, MCS0 (15.0 Mbps), 99.7% DC        | WLAN    | 8.06     | ±9.6                     |
| 10223 | CAE | HT40 Mixed, MCS4 (90.0 Mbps), 99.7% DC        | WLAN    | 8.48     | ±9.6                     |
| 10224 | CAE | HT40 Mixed, MCS7 (150.0 Mbps), 99.7% DC       | WLAN    | 8.08     | ±9.6                     |
| 10225 | CAC | Rel. 7 HSPA+, 16QAM, 5.0 MHz                  | WCDMA   | 5.97     | ±9.6                     |
| 10226 | CAC | 1.4 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB    | LTE-TDD | 9.49     | ±9.6                     |
| 10227 | CAC | 1.4 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB    | LTE-TDD | 10.26    | ±9.6                     |
| 10228 | CAC | 1.4 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB     | LTE-TDD | 9.22     | ±9.6                     |
| 10229 | CAE | 3.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB    | LTE-TDD | 9.48     | ±9.6                     |

Certificate No: EX-7452\_Mar26

Page 13 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                        | Group    | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|--------------------------------------------------|----------|----------|------------------------|
| 10230 | CAE | 3.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB       | LTE-TDD  | 10.25    | ±9.6                   |
| 10231 | CAE | 3.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB        | LTE-TDD  | 9.19     | ±9.6                   |
| 10232 | CAH | 5.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB       | LTE-TDD  | 9.48     | ±9.6                   |
| 10233 | CAH | 5.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB       | LTE-TDD  | 10.25    | ±9.6                   |
| 10234 | CAH | 5.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB        | LTE-TDD  | 9.21     | ±9.6                   |
| 10235 | CAH | 10.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB      | LTE-TDD  | 9.48     | ±9.6                   |
| 10236 | CAH | 10.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB      | LTE-TDD  | 10.25    | ±9.6                   |
| 10237 | CAH | 10.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB       | LTE-TDD  | 9.21     | ±9.6                   |
| 10238 | CAG | 15.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 1 RB      | LTE-TDD  | 9.48     | ±9.6                   |
| 10239 | CAG | 15.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 1 RB      | LTE-TDD  | 10.25    | ±9.6                   |
| 10240 | CAG | 15.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 1 RB       | LTE-TDD  | 9.21     | ±9.6                   |
| 10241 | CAC | 1.4 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 9.82     | ±9.6                   |
| 10242 | CAC | 1.4 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 9.86     | ±9.6                   |
| 10243 | CAC | 1.4 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB      | LTE-TDD  | 9.46     | ±9.6                   |
| 10244 | CAE | 3.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 10.06    | ±9.6                   |
| 10245 | CAE | 3.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 10.06    | ±9.6                   |
| 10246 | CAE | 3.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB      | LTE-TDD  | 9.30     | ±9.6                   |
| 10247 | CAH | 5.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 9.91     | ±9.6                   |
| 10248 | CAH | 5.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 10.09    | ±9.6                   |
| 10249 | CAH | 5.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB      | LTE-TDD  | 9.29     | ±9.6                   |
| 10250 | CAH | 10.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB    | LTE-TDD  | 9.81     | ±9.6                   |
| 10251 | CAH | 10.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB    | LTE-TDD  | 10.17    | ±9.6                   |
| 10252 | CAH | 10.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 9.24     | ±9.6                   |
| 10253 | CAG | 15.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 50% RB    | LTE-TDD  | 9.90     | ±9.6                   |
| 10254 | CAG | 15.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 50% RB    | LTE-TDD  | 10.14    | ±9.6                   |
| 10255 | CAG | 15.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 50% RB     | LTE-TDD  | 9.20     | ±9.6                   |
| 10256 | CAC | 1.4 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.96     | ±9.6                   |
| 10257 | CAC | 1.4 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 10.08    | ±9.6                   |
| 10258 | CAC | 1.4 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB     | LTE-TDD  | 9.34     | ±9.6                   |
| 10259 | CAE | 3.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.98     | ±9.6                   |
| 10260 | CAE | 3.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.97     | ±9.6                   |
| 10261 | CAE | 3.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB     | LTE-TDD  | 9.24     | ±9.6                   |
| 10262 | CAH | 5.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.83     | ±9.6                   |
| 10263 | CAH | 5.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 10.16    | ±9.6                   |
| 10264 | CAH | 5.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB     | LTE-TDD  | 9.23     | ±9.6                   |
| 10265 | CAH | 10.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB   | LTE-TDD  | 9.92     | ±9.6                   |
| 10266 | CAH | 10.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB   | LTE-TDD  | 10.07    | ±9.6                   |
| 10267 | CAH | 10.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.30     | ±9.6                   |
| 10268 | CAG | 15.0 MHz, 16QAM, UL/DL CFG: 1, SSC: 4, 100% RB   | LTE-TDD  | 10.08    | ±9.6                   |
| 10269 | CAG | 15.0 MHz, 64QAM, UL/DL CFG: 1, SSC: 4, 100% RB   | LTE-TDD  | 10.13    | ±9.6                   |
| 10270 | CAG | 15.0 MHz, QPSK, UL/DL CFG: 1, SSC: 4, 100% RB    | LTE-TDD  | 9.58     | ±9.6                   |
| 10274 | CAC | Rel. 6 HSUPA Subset 2, beta_d 0, QPSK, 5.0 MHz   | WCDMA    | 4.87     | ±9.6                   |
| 10275 | CAC | Rel. 6 HSUPA Subset 2, beta_d 15, QPSK, 5.0 MHz  | WCDMA    | 3.96     | ±9.6                   |
| 10290 | AAB | RC1, SO55, Full frame rate, 1xRTT                | CDMA2000 | 3.91     | ±9.6                   |
| 10291 | AAB | RC3, SO55, Full frame rate, 1xRTT                | CDMA2000 | 3.46     | ±9.6                   |
| 10292 | AAB | RC3, SO32, Full frame rate, SCH0 disabled, 1xRTT | CDMA2000 | 3.39     | ±9.6                   |
| 10293 | AAB | RC3, SO3, Full frame rate, 1xRTT                 | CDMA2000 | 3.50     | ±9.6                   |
| 10295 | AAB | RC3, SO3, 1/8 frame rate, 1xRTT                  | CDMA2000 | 12.49    | ±9.6                   |
| 10297 | AAE | 20.0 MHz, QPSK, 50% RB                           | LTE-FDD  | 5.81     | ±9.6                   |
| 10298 | AAE | 3.0 MHz, QPSK, 50% RB                            | LTE-FDD  | 5.72     | ±9.6                   |
| 10299 | AAE | 3.0 MHz, 16QAM, 50% RB                           | LTE-FDD  | 6.39     | ±9.6                   |
| 10300 | AAE | 3.0 MHz, 64QAM, 50% RB                           | LTE-FDD  | 6.60     | ±9.6                   |
| 10301 | AAA | PUSC, 29:18, QPSK, 5.0 ms, 18 TRAF SYM           | WiMAX    | 12.03    | ±9.6                   |
| 10302 | AAA | PUSC, 29:18, QPSK, 5.0 ms, 15 TRAF SYM           | WiMAX    | 12.57    | ±9.6                   |
| 10303 | AAA | PUSC, 31:15, 64QAM, 5.0 ms, 15 TRAF SYM          | WiMAX    | 12.52    | ±9.6                   |
| 10304 | AAA | PUSC, 29:18, 64QAM, 5.0 ms, 18 TRAF SYM          | WiMAX    | 11.86    | ±9.6                   |
| 10305 | AAA | PUSC, 31:15, 64QAM, 10.0 ms, 15 TRAF SYM         | WiMAX    | 15.24    | ±9.6                   |
| 10306 | AAA | PUSC, 29:18, 64QAM, 10.0 ms, 18 TRAF SYM         | WiMAX    | 14.67    | ±9.6                   |
| 10307 | AAA | PUSC, 29:18, QPSK, 10.0 ms, 18 TRAF SYM          | WiMAX    | 14.49    | ±9.6                   |
| 10308 | AAA | PUSC, 29:18, 16QAM, 10.0 ms, 18 TRAF SYM         | WiMAX    | 14.46    | ±9.6                   |
| 10309 | AAA | AMC 2x3, 29:18, 16QAM, 10.0 ms, 18 TRAF SYM      | WiMAX    | 14.58    | ±9.6                   |
| 10310 | AAA | AMC 2x3, 29:18, QPSK, 10.0 ms, 18 TRAF SYM       | WiMAX    | 14.57    | ±9.6                   |
| 10311 | AAE | 15.0 MHz, QPSK, 100% RB                          | LTE-FDD  | 6.06     | ±9.6                   |
| 10315 | AAB | DSSS, DBPSK, 1.0 Mbps, 96.0% DC                  | WLAN     | 1.71     | ±9.6                   |
| 10316 | AAB | OFDM, BPSK, 6.0 Mbps, 95.9% DC                   | WLAN     | 8.36     | ±9.6                   |
| 10317 | AAE | OFDM, BPSK, 6.0 Mbps, 95.9% DC                   | WLAN     | 8.36     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 14 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                                   | Group    | PAR (dB) | Unc <sup>k</sup> k = 2 |
|-------|-----|-------------------------------------------------------------|----------|----------|------------------------|
| 10352 | AAA | Pulse (D=10%, T=5 ms)                                       | Generic  | 10.00    | ±9.6                   |
| 10353 | AAA | Pulse (D=20%, T=5 ms)                                       | Generic  | 6.99     | ±9.6                   |
| 10354 | AAA | Pulse (D=40%, T=5 ms)                                       | Generic  | 3.98     | ±9.6                   |
| 10355 | AAA | Pulse (D=60%, T=5 ms)                                       | Generic  | 2.22     | ±9.6                   |
| 10356 | AAA | Pulse (D=80%, T=5 ms)                                       | Generic  | 0.97     | ±9.6                   |
| 10387 | AAA | Random (BW=1 MHz, MOD=QPSK)                                 | Generic  | 5.10     | ±9.6                   |
| 10388 | AAA | Random (BW=10 MHz, MOD=QPSK)                                | Generic  | 5.22     | ±9.6                   |
| 10396 | AAA | Random (BW=100 kHz, MOD=64QAM)                              | Generic  | 6.27     | ±9.6                   |
| 10399 | AAA | Random (BW=40 MHz, MOD=64QAM)                               | Generic  | 6.27     | ±9.6                   |
| 10400 | AAF | VHT20, MCS5 (52.0 Mbps), 99.0% DC                           | WLAN     | 8.37     | ±9.6                   |
| 10401 | AAF | VHT40, MCS5 (108.0 Mbps), 96.7% DC                          | WLAN     | 8.60     | ±9.6                   |
| 10402 | AAF | VHT80, MCS5 (234.0 Mbps), 99.0% DC                          | WLAN     | 8.53     | ±9.6                   |
| 10403 | AAB | Rev. 0, 1xEV-DO                                             | CDMA2000 | 3.76     | ±9.6                   |
| 10404 | AAB | Rev. A, 1xEV-DO                                             | CDMA2000 | 3.77     | ±9.6                   |
| 10406 | AAB | RC3, SC32, Full frame rate, SCH0 enabled, 1xRTT             | CDMA2000 | 5.22     | ±9.6                   |
| 10410 | AAH | 10.0 MHz, QPSK, UL/DL CFG: 0, SSC: 4, 1 RB                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10414 | AAA | Random (BW=40 MHz, HIGH PAR)                                | Generic  | 8.54     | ±9.6                   |
| 10415 | AAA | DSSS, DBPSK, 1.0 Mbps, 99.9% DC                             | WLAN     | 1.54     | ±9.6                   |
| 10416 | AAA | OFDM, BPSK, 6.0 Mbps, 99.9% DC                              | WLAN     | 8.23     | ±9.6                   |
| 10417 | AAD | OFDM, BPSK, 6.0 Mbps, 99.9% DC                              | WLAN     | 8.23     | ±9.6                   |
| 10418 | AAA | OFDM (LTF), BPSK, 6.0 Mbps, 99.8% DC                        | WLAN     | 8.14     | ±9.6                   |
| 10419 | AAA | OFDM (STF), BPSK, 6.0 Mbps, 99.8% DC                        | WLAN     | 8.19     | ±9.6                   |
| 10422 | AAD | HT20 Greenfield, MCS0 (7.2 Mbps), 99.3% DC                  | WLAN     | 8.32     | ±9.6                   |
| 10423 | AAD | HT20 Greenfield, MCS4 (43.3 Mbps), 99.3% DC                 | WLAN     | 8.47     | ±9.6                   |
| 10424 | AAD | HT20 Greenfield, MCS7 (72.2 Mbps), 99.3% DC                 | WLAN     | 8.40     | ±9.6                   |
| 10425 | AAD | HT40 Greenfield, MCS0 (15.0 Mbps), 99.2% DC                 | WLAN     | 8.41     | ±9.6                   |
| 10426 | AAD | HT40 Greenfield, MCS4 (60.0 Mbps), 99.2% DC                 | WLAN     | 8.45     | ±9.6                   |
| 10427 | AAD | HT40 Greenfield, MCS7 (150.0 Mbps), 99.2% DC                | WLAN     | 8.41     | ±9.6                   |
| 10430 | AAE | 5.0 MHz, 64-QAM, 100% RB                                    | LTE-FDD  | 8.28     | ±9.6                   |
| 10431 | AAE | 10.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 8.38     | ±9.6                   |
| 10432 | AAD | 15.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 8.34     | ±9.6                   |
| 10433 | AAD | 20.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 8.34     | ±9.6                   |
| 10434 | AAB | BS Test Model 1, 64 DPCH, 64QAM, 5.0 MHz (DL)               | WCDMA    | 8.60     | ±9.6                   |
| 10435 | AAG | 20.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10447 | AAE | 5.0 MHz, 64-QAM, 100% RB                                    | LTE-FDD  | 7.56     | ±9.6                   |
| 10448 | AAE | 10.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 7.53     | ±9.6                   |
| 10449 | AAD | 15.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 7.51     | ±9.6                   |
| 10450 | AAD | 20.0 MHz, 64-QAM, 100% RB                                   | LTE-FDD  | 7.48     | ±9.6                   |
| 10451 | AAB | BS Test Model 1, 64 DPCH, Clipping 44%, 64QAM, 5.0 MHz (DL) | WCDMA    | 7.59     | ±9.6                   |
| 10456 | AAD | VHT160, MCS5 (58.5 Mbps), 99.0% DC                          | WLAN     | 8.63     | ±9.6                   |
| 10457 | AAB | Rel. 5 DC-HSDPA, QPSK, 10.0 MHz                             | WCDMA    | 6.62     | ±9.6                   |
| 10458 | AAA | Rev. B, 2 carriers, 1xEV-DO                                 | CDMA2000 | 6.55     | ±9.6                   |
| 10459 | AAA | Rev. B, 3 carriers, 1xEV-DO                                 | CDMA2000 | 8.25     | ±9.6                   |
| 10460 | AAB | Rel. 99, AMR, QPSK, 5.0 MHz                                 | WCDMA    | 2.39     | ±9.6                   |
| 10461 | AAC | 1.4 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                   | LTE-TDD  | 7.82     | ±9.6                   |
| 10462 | AAC | 1.4 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.30     | ±9.6                   |
| 10463 | AAC | 1.4 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.56     | ±9.6                   |
| 10464 | AAD | 3.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                   | LTE-TDD  | 7.82     | ±9.6                   |
| 10465 | AAD | 3.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.32     | ±9.6                   |
| 10466 | AAD | 3.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.57     | ±9.6                   |
| 10467 | AAG | 5.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                   | LTE-TDD  | 7.82     | ±9.6                   |
| 10468 | AAG | 5.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.32     | ±9.6                   |
| 10469 | AAG | 5.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 8.56     | ±9.6                   |
| 10470 | AAG | 10.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10471 | AAG | 10.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.32     | ±9.6                   |
| 10472 | AAG | 10.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.57     | ±9.6                   |
| 10473 | AAF | 15.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 1 RB                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10474 | AAF | 15.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.32     | ±9.6                   |
| 10475 | AAF | 15.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.57     | ±9.6                   |
| 10477 | AAG | 20.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.32     | ±9.6                   |
| 10478 | AAG | 20.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 1 RB                 | LTE-TDD  | 8.57     | ±9.6                   |
| 10479 | AAC | 1.4 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB                 | LTE-TDD  | 7.74     | ±9.6                   |
| 10480 | AAC | 1.4 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB                | LTE-TDD  | 8.18     | ±9.6                   |
| 10481 | AAC | 1.4 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB                | LTE-TDD  | 8.45     | ±9.6                   |
| 10482 | AAD | 3.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB                 | LTE-TDD  | 7.71     | ±9.6                   |
| 10483 | AAD | 3.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB                | LTE-TDD  | 8.39     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 15 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                      | Group   | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------|---------|----------|------------------------|
| 10484 | AAD | 3.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 8.47     | ±9.6                   |
| 10485 | AAG | 5.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB    | LTE-TDD | 7.59     | ±9.6                   |
| 10486 | AAG | 5.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 8.38     | ±9.6                   |
| 10487 | AAG | 5.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 8.60     | ±9.6                   |
| 10488 | AAG | 10.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 7.70     | ±9.6                   |
| 10489 | AAG | 10.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.31     | ±9.6                   |
| 10490 | AAG | 10.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.54     | ±9.6                   |
| 10491 | AAF | 15.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 7.74     | ±9.6                   |
| 10492 | AAF | 15.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.41     | ±9.6                   |
| 10493 | AAF | 15.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.55     | ±9.6                   |
| 10494 | AAG | 20.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 50% RB   | LTE-TDD | 7.74     | ±9.6                   |
| 10495 | AAG | 20.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.37     | ±9.6                   |
| 10496 | AAG | 20.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 50% RB  | LTE-TDD | 8.54     | ±9.6                   |
| 10497 | AAC | 1.4 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB   | LTE-TDD | 7.67     | ±9.6                   |
| 10498 | AAC | 1.4 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.40     | ±9.6                   |
| 10499 | AAC | 1.4 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.68     | ±9.6                   |
| 10500 | AAD | 3.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB   | LTE-TDD | 7.67     | ±9.6                   |
| 10501 | AAD | 3.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.44     | ±9.6                   |
| 10502 | AAD | 3.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.52     | ±9.6                   |
| 10503 | AAG | 5.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB   | LTE-TDD | 7.72     | ±9.6                   |
| 10504 | AAG | 5.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.31     | ±9.6                   |
| 10505 | AAG | 5.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 8.54     | ±9.6                   |
| 10506 | AAG | 10.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 7.74     | ±9.6                   |
| 10507 | AAG | 10.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.36     | ±9.6                   |
| 10508 | AAG | 10.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.55     | ±9.6                   |
| 10509 | AAF | 15.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 7.99     | ±9.6                   |
| 10510 | AAF | 15.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.49     | ±9.6                   |
| 10511 | AAF | 15.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.51     | ±9.6                   |
| 10512 | AAG | 20.0 MHz, QPSK, UL/DL CFG: 0, SSC: 7, 100% RB  | LTE-TDD | 7.74     | ±9.6                   |
| 10513 | AAG | 20.0 MHz, 16QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.42     | ±9.6                   |
| 10514 | AAG | 20.0 MHz, 64QAM, UL/DL CFG: 0, SSC: 7, 100% RB | LTE-TDD | 8.45     | ±9.6                   |
| 10515 | AAA | DSSS, DQPSK, 2.0 Mbps, 99.0% DC                | WLAN    | 1.58     | ±9.6                   |
| 10516 | AAA | HR-DSSS, DQPSK, 5.5 Mbps, 99.2% DC             | WLAN    | 1.57     | ±9.6                   |
| 10517 | AAA | HR-DSSS, DQPSK, 11.0 Mbps, 99.0% DC            | WLAN    | 1.58     | ±9.6                   |
| 10518 | AAD | OFDM, BPSK, 9.0 Mbps, 98.9% DC                 | WLAN    | 8.23     | ±9.6                   |
| 10519 | AAD | OFDM, QPSK, 12.0 Mbps, 99.0% DC                | WLAN    | 8.39     | ±9.6                   |
| 10520 | AAD | OFDM, QPSK, 18.0 Mbps, 99.0% DC                | WLAN    | 8.12     | ±9.6                   |
| 10521 | AAD | OFDM, 16QAM, 24.0 Mbps, 99.0% DC               | WLAN    | 7.97     | ±9.6                   |
| 10522 | AAD | OFDM, 16QAM, 36.0 Mbps, 99.0% DC               | WLAN    | 8.45     | ±9.6                   |
| 10523 | AAD | OFDM, 64QAM, 48.0 Mbps, 99.0% DC               | WLAN    | 8.08     | ±9.6                   |
| 10524 | AAD | OFDM, 64QAM, 54.0 Mbps, 99.0% DC               | WLAN    | 8.27     | ±9.6                   |
| 10525 | AAD | VHT20, MCS0 (6.5 Mbps), 98.9% DC               | WLAN    | 8.36     | ±9.6                   |
| 10526 | AAD | VHT20, MCS1 (13.0 Mbps), 99.0% DC              | WLAN    | 8.42     | ±9.6                   |
| 10527 | AAD | VHT20, MCS2 (19.5 Mbps), 99.0% DC              | WLAN    | 8.21     | ±9.6                   |
| 10528 | AAD | VHT20, MCS3 (26.0 Mbps), 99.0% DC              | WLAN    | 8.36     | ±9.6                   |
| 10529 | AAD | VHT20, MCS4 (39.0 Mbps), 99.0% DC              | WLAN    | 8.36     | ±9.6                   |
| 10531 | AAD | VHT20, MCS6 (58.5 Mbps), 99.0% DC              | WLAN    | 8.43     | ±9.6                   |
| 10532 | AAD | VHT20, MCS7 (65.0 Mbps), 99.0% DC              | WLAN    | 8.29     | ±9.6                   |
| 10533 | AAD | VHT20, MCS8 (78.0 Mbps), 99.0% DC              | WLAN    | 8.38     | ±9.6                   |
| 10534 | AAD | VHT40, MCS0 (13.5 Mbps), 98.9% DC              | WLAN    | 8.45     | ±9.6                   |
| 10535 | AAD | VHT40, MCS1 (27.0 Mbps), 98.8% DC              | WLAN    | 8.45     | ±9.6                   |
| 10536 | AAD | VHT40, MCS2 (40.5 Mbps), 98.8% DC              | WLAN    | 8.32     | ±9.6                   |
| 10537 | AAD | VHT40, MCS3 (54.0 Mbps), 98.7% DC              | WLAN    | 8.44     | ±9.6                   |
| 10538 | AAD | VHT40, MCS4 (81.0 Mbps), 98.5% DC              | WLAN    | 8.54     | ±9.6                   |
| 10540 | AAD | VHT40, MCS6 (121.5 Mbps), 98.3% DC             | WLAN    | 8.39     | ±9.6                   |
| 10541 | AAD | VHT40, MCS7 (135.0 Mbps), 98.3% DC             | WLAN    | 8.46     | ±9.6                   |
| 10542 | AAD | VHT40, MCS8 (182.0 Mbps), 98.1% DC             | WLAN    | 8.65     | ±9.6                   |
| 10543 | AAD | VHT40, MCS9 (180.0 Mbps), 98.0% DC             | WLAN    | 8.65     | ±9.6                   |
| 10544 | AAD | VHT80, MCS0 (29.3 Mbps), 99.0% DC              | WLAN    | 8.47     | ±9.6                   |
| 10545 | AAD | VHT80, MCS1 (58.5 Mbps), 99.0% DC              | WLAN    | 8.55     | ±9.6                   |
| 10546 | AAD | VHT80, MCS2 (87.8 Mbps), 99.0% DC              | WLAN    | 8.35     | ±9.6                   |
| 10547 | AAD | VHT80, MCS3 (117.0 Mbps), 99.0% DC             | WLAN    | 8.49     | ±9.6                   |
| 10548 | AAD | VHT80, MCS4 (175.5 Mbps), 99.0% DC             | WLAN    | 8.37     | ±9.6                   |
| 10550 | AAD | VHT80, MCS6 (263.3 Mbps), 99.0% DC             | WLAN    | 8.38     | ±9.6                   |
| 10551 | AAD | VHT80, MCS7 (292.5 Mbps), 99.0% DC             | WLAN    | 8.50     | ±9.6                   |
| 10552 | AAD | VHT80, MCS8 (351.0 Mbps), 99.0% DC             | WLAN    | 8.42     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 16 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name               | Group | PAR (dB) | Unc <sup>E</sup> $k = 2$ |
|-------|-----|-----------------------------------------|-------|----------|--------------------------|
| 10553 | AAD | VHT80, MCS9 (390.0 Mbps), 99.0% DC      | WLAN  | 8.45     | ±9.6                     |
| 10554 | AAE | VHT160, MCS0 (58.5 Mbps), 99.0% DC      | WLAN  | 8.48     | ±9.6                     |
| 10555 | AAE | VHT160, MCS1 (117.0 Mbps), 99.0% DC     | WLAN  | 8.47     | ±9.6                     |
| 10556 | AAE | VHT160, MCS2 (175.5 Mbps), 99.0% DC     | WLAN  | 8.50     | ±9.6                     |
| 10557 | AAE | VHT160, MCS3 (234.0 Mbps), 99.0% DC     | WLAN  | 8.52     | ±9.6                     |
| 10558 | AAE | VHT160, MCS4 (351.0 Mbps), 99.0% DC     | WLAN  | 8.61     | ±9.6                     |
| 10560 | AAE | VHT160, MCS6 (526.5 Mbps), 99.0% DC     | WLAN  | 8.73     | ±9.6                     |
| 10561 | AAE | VHT160, MCS7 (585.0 Mbps), 99.0% DC     | WLAN  | 8.56     | ±9.6                     |
| 10562 | AAE | VHT160, MCS8 (702.0 Mbps), 99.0% DC     | WLAN  | 8.69     | ±9.6                     |
| 10563 | AAE | VHT160, MCS9 (760.0 Mbps), 99.0% DC     | WLAN  | 8.77     | ±9.6                     |
| 10564 | AAA | OFDM, BPSK, 9.0 Mbps, 98.9% DC          | WLAN  | 8.25     | ±9.6                     |
| 10565 | AAA | OFDM, QPSK, 12.0 Mbps, 99.0% DC         | WLAN  | 8.45     | ±9.6                     |
| 10566 | AAA | OFDM, QPSK, 18.0 Mbps, 99.0% DC         | WLAN  | 8.13     | ±9.6                     |
| 10567 | AAA | OFDM, 16QAM, 24.0 Mbps, 99.0% DC        | WLAN  | 8.00     | ±9.6                     |
| 10568 | AAA | OFDM, 16QAM, 36.0 Mbps, 99.0% DC        | WLAN  | 8.37     | ±9.6                     |
| 10569 | AAA | OFDM, 64QAM, 48.0 Mbps, 99.0% DC        | WLAN  | 8.10     | ±9.6                     |
| 10570 | AAA | OFDM, 64QAM, 54.0 Mbps, 99.0% DC        | WLAN  | 8.30     | ±9.6                     |
| 10571 | AAA | DSSS, DQPSK, 1.0 Mbps, 90.0% DC         | WLAN  | 1.99     | ±9.6                     |
| 10572 | AAA | DSSS, DQPSK, 2.0 Mbps, 90.0% DC         | WLAN  | 1.99     | ±9.6                     |
| 10573 | AAA | HR-DSSS, DQPSK, 5.5 Mbps, 90.1% DC      | WLAN  | 1.98     | ±9.6                     |
| 10574 | AAA | HR-DSSS, DQPSK, 11.0 Mbps, 90.3% DC     | WLAN  | 1.98     | ±9.6                     |
| 10575 | AAA | OFDM, BPSK, 6.0 Mbps, 89.9% DC          | WLAN  | 8.59     | ±9.6                     |
| 10576 | AAA | OFDM, BPSK, 9.0 Mbps, 89.9% DC          | WLAN  | 8.60     | ±9.6                     |
| 10577 | AAA | OFDM, QPSK, 12.0 Mbps, 90.0% DC         | WLAN  | 8.70     | ±9.6                     |
| 10578 | AAA | OFDM, QPSK, 18.0 Mbps, 90.0% DC         | WLAN  | 8.49     | ±9.6                     |
| 10579 | AAA | OFDM, 16QAM, 24.0 Mbps, 90.0% DC        | WLAN  | 8.36     | ±9.6                     |
| 10580 | AAA | OFDM, 16QAM, 36.0 Mbps, 90.0% DC        | WLAN  | 8.76     | ±9.6                     |
| 10581 | AAA | OFDM, 64QAM, 48.0 Mbps, 90.0% DC        | WLAN  | 8.35     | ±9.6                     |
| 10582 | AAA | OFDM, 64QAM, 54.0 Mbps, 90.0% DC        | WLAN  | 8.67     | ±9.6                     |
| 10583 | AAD | OFDM, BPSK, 6.0 Mbps, 89.9% DC          | WLAN  | 8.59     | ±9.6                     |
| 10584 | AAD | OFDM, BPSK, 9.0 Mbps, 89.9% DC          | WLAN  | 8.60     | ±9.6                     |
| 10585 | AAD | OFDM, QPSK, 12.0 Mbps, 90.0% DC         | WLAN  | 8.70     | ±9.6                     |
| 10586 | AAD | OFDM, QPSK, 18.0 Mbps, 90.0% DC         | WLAN  | 8.49     | ±9.6                     |
| 10587 | AAD | OFDM, 16QAM, 24.0 Mbps, 90.0% DC        | WLAN  | 8.36     | ±9.6                     |
| 10588 | AAD | OFDM, 16QAM, 36.0 Mbps, 90.0% DC        | WLAN  | 8.76     | ±9.6                     |
| 10589 | AAD | OFDM, 64QAM, 48.0 Mbps, 90.0% DC        | WLAN  | 8.35     | ±9.6                     |
| 10590 | AAD | OFDM, 64QAM, 54.0 Mbps, 90.0% DC        | WLAN  | 8.67     | ±9.6                     |
| 10591 | AAD | HT20 Mixed, MCS0 (6.5 Mbps), 89.9% DC   | WLAN  | 8.63     | ±9.6                     |
| 10592 | AAD | HT20 Mixed, MCS1 (13.0 Mbps), 90.0% DC  | WLAN  | 8.79     | ±9.6                     |
| 10593 | AAD | HT20 Mixed, MCS2 (19.5 Mbps), 90.0% DC  | WLAN  | 8.64     | ±9.6                     |
| 10594 | AAD | HT20 Mixed, MCS3 (26.0 Mbps), 90.0% DC  | WLAN  | 8.74     | ±9.6                     |
| 10595 | AAD | HT20 Mixed, MCS4 (39.0 Mbps), 90.0% DC  | WLAN  | 8.74     | ±9.6                     |
| 10596 | AAD | HT20 Mixed, MCS5 (52.0 Mbps), 90.0% DC  | WLAN  | 8.71     | ±9.6                     |
| 10597 | AAD | HT20 Mixed, MCS6 (58.5 Mbps), 90.0% DC  | WLAN  | 8.72     | ±9.6                     |
| 10598 | AAD | HT20 Mixed, MCS7 (65.0 Mbps), 90.0% DC  | WLAN  | 8.50     | ±9.6                     |
| 10599 | AAD | HT40 Mixed, MCS0 (13.5 Mbps), 89.9% DC  | WLAN  | 8.79     | ±9.6                     |
| 10600 | AAD | HT40 Mixed, MCS1 (27.0 Mbps), 89.7% DC  | WLAN  | 8.88     | ±9.6                     |
| 10601 | AAD | HT40 Mixed, MCS2 (40.5 Mbps), 89.6% DC  | WLAN  | 8.82     | ±9.6                     |
| 10602 | AAD | HT40 Mixed, MCS3 (54.0 Mbps), 89.4% DC  | WLAN  | 8.94     | ±9.6                     |
| 10603 | AAD | HT40 Mixed, MCS4 (81.0 Mbps), 89.2% DC  | WLAN  | 9.03     | ±9.6                     |
| 10604 | AAD | HT40 Mixed, MCS5 (108.0 Mbps), 88.9% DC | WLAN  | 8.76     | ±9.6                     |
| 10605 | AAD | HT40 Mixed, MCS6 (121.5 Mbps), 88.8% DC | WLAN  | 8.97     | ±9.6                     |
| 10606 | AAD | HT40 Mixed, MCS7 (135.0 Mbps), 88.7% DC | WLAN  | 8.82     | ±9.6                     |
| 10607 | AAD | VHT20, MCS0 (6.5 Mbps), 89.9% DC        | WLAN  | 8.64     | ±9.6                     |
| 10608 | AAD | VHT20, MCS1 (13.0 Mbps), 90.0% DC       | WLAN  | 8.77     | ±9.6                     |
| 10609 | AAD | VHT20, MCS2 (19.5 Mbps), 90.0% DC       | WLAN  | 8.57     | ±9.6                     |
| 10610 | AAD | VHT20, MCS3 (26.0 Mbps), 90.0% DC       | WLAN  | 8.78     | ±9.6                     |
| 10611 | AAD | VHT20, MCS4 (39.0 Mbps), 90.0% DC       | WLAN  | 8.70     | ±9.6                     |
| 10612 | AAD | VHT20, MCS5 (52.0 Mbps), 90.0% DC       | WLAN  | 8.77     | ±9.6                     |
| 10613 | AAD | VHT20, MCS6 (58.5 Mbps), 90.0% DC       | WLAN  | 8.94     | ±9.6                     |
| 10614 | AAD | VHT20, MCS7 (65.0 Mbps), 90.0% DC       | WLAN  | 8.59     | ±9.6                     |
| 10615 | AAD | VHT20, MCS8 (78.0 Mbps), 90.0% DC       | WLAN  | 8.82     | ±9.6                     |
| 10616 | AAD | VHT40, MCS0 (13.5 Mbps), 89.9% DC       | WLAN  | 8.82     | ±9.6                     |
| 10617 | AAD | VHT40, MCS1 (27.0 Mbps), 89.7% DC       | WLAN  | 8.81     | ±9.6                     |
| 10618 | AAD | VHT40, MCS2 (40.5 Mbps), 89.6% DC       | WLAN  | 8.58     | ±9.6                     |
| 10619 | AAD | VHT40, MCS3 (54.0 Mbps), 89.4% DC       | WLAN  | 8.86     | ±9.6                     |

Certificate No: EX-7452\_Mar26

Page 17 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                  | Group     | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|--------------------------------------------|-----------|----------|------------------------|
| 10620 | AAD | VHT40, MCS4 (81.0 Mbps), 89.2% DC          | WLAN      | 8.87     | ±9.6                   |
| 10621 | AAD | VHT40, MCS5 (108.0 Mbps), 88.9% DC         | WLAN      | 8.77     | ±9.6                   |
| 10622 | AAD | VHT40, MCS6 (121.5 Mbps), 88.8% DC         | WLAN      | 8.68     | ±9.6                   |
| 10623 | AAD | VHT40, MCS7 (135.0 Mbps), 88.6% DC         | WLAN      | 8.82     | ±9.6                   |
| 10624 | AAD | VHT40, MCS8 (162.0 Mbps), 88.4% DC         | WLAN      | 8.96     | ±9.6                   |
| 10625 | AAD | VHT40, MCS9 (180.0 Mbps), 88.2% DC         | WLAN      | 8.96     | ±9.6                   |
| 10626 | AAD | VHT80, MCS0 (29.3 Mbps), 90.0% DC          | WLAN      | 8.83     | ±9.6                   |
| 10627 | AAD | VHT80, MCS1 (58.5 Mbps), 90.0% DC          | WLAN      | 8.88     | ±9.6                   |
| 10628 | AAD | VHT80, MCS2 (87.8 Mbps), 90.0% DC          | WLAN      | 8.71     | ±9.6                   |
| 10629 | AAD | VHT80, MCS3 (117.0 Mbps), 90.0% DC         | WLAN      | 8.85     | ±9.6                   |
| 10630 | AAD | VHT80, MCS4 (175.5 Mbps), 90.0% DC         | WLAN      | 8.72     | ±9.6                   |
| 10631 | AAD | VHT80, MCS5 (234.0 Mbps), 90.0% DC         | WLAN      | 8.81     | ±9.6                   |
| 10632 | AAD | VHT80, MCS6 (263.3 Mbps), 90.0% DC         | WLAN      | 8.74     | ±9.6                   |
| 10633 | AAD | VHT80, MCS7 (292.5 Mbps), 90.0% DC         | WLAN      | 8.83     | ±9.6                   |
| 10634 | AAD | VHT80, MCS8 (351.0 Mbps), 90.0% DC         | WLAN      | 8.80     | ±9.6                   |
| 10635 | AAD | VHT80, MCS9 (390.0 Mbps), 90.0% DC         | WLAN      | 8.81     | ±9.6                   |
| 10636 | AAE | VHT160, MCS0 (58.5 Mbps), 90.0% DC         | WLAN      | 8.83     | ±9.6                   |
| 10637 | AAE | VHT160, MCS1 (117.0 Mbps), 90.0% DC        | WLAN      | 8.79     | ±9.6                   |
| 10638 | AAE | VHT160, MCS2 (175.5 Mbps), 90.0% DC        | WLAN      | 8.86     | ±9.6                   |
| 10639 | AAE | VHT160, MCS3 (234.0 Mbps), 90.0% DC        | WLAN      | 8.85     | ±9.6                   |
| 10640 | AAE | VHT160, MCS4 (351.0 Mbps), 90.0% DC        | WLAN      | 8.98     | ±9.6                   |
| 10641 | AAE | VHT160, MCS5 (468.0 Mbps), 90.0% DC        | WLAN      | 9.06     | ±9.6                   |
| 10642 | AAE | VHT160, MCS6 (526.5 Mbps), 90.0% DC        | WLAN      | 9.06     | ±9.6                   |
| 10643 | AAE | VHT160, MCS7 (585.0 Mbps), 90.0% DC        | WLAN      | 8.89     | ±9.6                   |
| 10644 | AAE | VHT160, MCS8 (702.0 Mbps), 90.0% DC        | WLAN      | 9.05     | ±9.6                   |
| 10645 | AAE | VHT160, MCS9 (780.0 Mbps), 90.0% DC        | WLAN      | 9.11     | ±9.6                   |
| 10646 | AAH | 5.0 MHz, QPSK, UL/DL CFG: 2, SSC: 4, 1 RB  | LTE-TDD   | 11.96    | ±9.6                   |
| 10647 | AAG | 20.0 MHz, QPSK, UL/DL CFG: 2, SSC: 7, 1 RB | LTE-TDD   | 11.96    | ±9.6                   |
| 10648 | AAA | RC8, SC75, 1xAdvanced                      | CDMA2000  | 3.45     | ±9.6                   |
| 10670 | AAA | LE, Test, GFSK                             | Bluetooth | 2.19     | ±9.6                   |
| 10671 | AAC | ET20, MCS0 (8.6 Mbps), 90.0% DC            | WLAN      | 8.09     | ±9.6                   |
| 10672 | AAC | ET20, MCS1 (17.0 Mbps), 90.0% DC           | WLAN      | 8.57     | ±9.6                   |
| 10673 | AAC | ET20, MCS2 (26.0 Mbps), 90.0% DC           | WLAN      | 8.78     | ±9.6                   |
| 10674 | AAC | ET20, MCS3 (34.0 Mbps), 90.0% DC           | WLAN      | 8.74     | ±9.6                   |
| 10675 | AAC | ET20, MCS4 (52.0 Mbps), 90.0% DC           | WLAN      | 8.90     | ±9.6                   |
| 10676 | AAC | ET20, MCS5 (69.0 Mbps), 90.0% DC           | WLAN      | 8.77     | ±9.6                   |
| 10677 | AAC | ET20, MCS6 (77.0 Mbps), 90.0% DC           | WLAN      | 8.73     | ±9.6                   |
| 10678 | AAC | ET20, MCS7 (86.0 Mbps), 90.0% DC           | WLAN      | 8.78     | ±9.6                   |
| 10679 | AAC | ET20, MCS8 (103.0 Mbps), 90.0% DC          | WLAN      | 8.89     | ±9.6                   |
| 10680 | AAC | ET20, MCS9 (115.0 Mbps), 90.0% DC          | WLAN      | 8.80     | ±9.6                   |
| 10681 | AAC | ET20, MCS10 (122.0 Mbps), 90.0% DC         | WLAN      | 8.62     | ±9.6                   |
| 10682 | AAC | ET20, MCS11 (135.0 Mbps), 90.0% DC         | WLAN      | 8.83     | ±9.6                   |
| 10683 | AAC | ET20, MCS0 (8.6 Mbps), 100.0% DC           | WLAN      | 8.42     | ±9.6                   |
| 10684 | AAC | ET20, MCS1 (17.0 Mbps), 100.0% DC          | WLAN      | 8.26     | ±9.6                   |
| 10685 | AAC | ET20, MCS2 (26.0 Mbps), 100.0% DC          | WLAN      | 8.33     | ±9.6                   |
| 10686 | AAC | ET20, MCS3 (34.0 Mbps), 100.0% DC          | WLAN      | 8.28     | ±9.6                   |
| 10687 | AAC | ET20, MCS4 (52.0 Mbps), 100.0% DC          | WLAN      | 8.45     | ±9.6                   |
| 10688 | AAC | ET20, MCS5 (69.0 Mbps), 100.0% DC          | WLAN      | 8.29     | ±9.6                   |
| 10689 | AAC | ET20, MCS6 (77.0 Mbps), 100.0% DC          | WLAN      | 8.55     | ±9.6                   |
| 10690 | AAC | ET20, MCS7 (86.0 Mbps), 100.0% DC          | WLAN      | 8.29     | ±9.6                   |
| 10691 | AAC | ET20, MCS8 (103.0 Mbps), 100.0% DC         | WLAN      | 8.25     | ±9.6                   |
| 10692 | AAC | ET20, MCS9 (115.0 Mbps), 100.0% DC         | WLAN      | 8.29     | ±9.6                   |
| 10693 | AAC | ET20, MCS10 (122.0 Mbps), 100.0% DC        | WLAN      | 8.25     | ±9.6                   |
| 10694 | AAC | ET20, MCS11 (135.0 Mbps), 100.0% DC        | WLAN      | 8.57     | ±9.6                   |
| 10695 | AAC | ET40, MCS0 (17.2 Mbps), 89.8% DC           | WLAN      | 8.78     | ±9.6                   |
| 10696 | AAC | ET40, MCS1 (34.0 Mbps), 89.8% DC           | WLAN      | 8.91     | ±9.6                   |
| 10697 | AAC | ET40, MCS2 (52.0 Mbps), 89.7% DC           | WLAN      | 8.61     | ±9.6                   |
| 10698 | AAC | ET40, MCS3 (69.0 Mbps), 89.7% DC           | WLAN      | 8.89     | ±9.6                   |
| 10699 | AAC | ET40, MCS4 (103.0 Mbps), 89.9% DC          | WLAN      | 8.82     | ±9.6                   |
| 10700 | AAC | ET40, MCS5 (138.0 Mbps), 89.8% DC          | WLAN      | 8.73     | ±9.6                   |
| 10701 | AAC | ET40, MCS6 (155.0 Mbps), 89.8% DC          | WLAN      | 8.86     | ±9.6                   |
| 10702 | AAC | ET40, MCS7 (172.0 Mbps), 89.8% DC          | WLAN      | 8.70     | ±9.6                   |
| 10703 | AAC | ET40, MCS8 (207.0 Mbps), 89.8% DC          | WLAN      | 8.82     | ±9.6                   |
| 10704 | AAC | ET40, MCS9 (229.0 Mbps), 89.8% DC          | WLAN      | 8.56     | ±9.6                   |
| 10705 | AAC | ET40, MCS10 (258.0 Mbps), 89.8% DC         | WLAN      | 8.69     | ±9.6                   |
| 10706 | AAC | ET40, MCS11 (267.0 Mbps), 89.8% DC         | WLAN      | 8.66     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 18 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                        | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|--------------------------------------------------|---------------|----------|------------------------|
| 10707 | AAC | ET40, MCS0 (17.2 Mbps), 99.8% DC                 | WLAN          | 8.32     | ±9.6                   |
| 10708 | AAC | ET40, MCS1 (34.0 Mbps), 99.7% DC                 | WLAN          | 8.55     | ±9.6                   |
| 10709 | AAC | ET40, MCS2 (52.0 Mbps), 99.7% DC                 | WLAN          | 8.33     | ±9.6                   |
| 10710 | AAC | ET40, MCS3 (69.0 Mbps), 99.7% DC                 | WLAN          | 8.29     | ±9.6                   |
| 10711 | AAC | ET40, MCS4 (103.0 Mbps), 99.8% DC                | WLAN          | 8.39     | ±9.6                   |
| 10712 | AAC | ET40, MCS5 (138.0 Mbps), 99.8% DC                | WLAN          | 8.67     | ±9.6                   |
| 10713 | AAC | ET40, MCS6 (155.0 Mbps), 99.8% DC                | WLAN          | 8.33     | ±9.6                   |
| 10714 | AAC | ET40, MCS7 (172.0 Mbps), 99.8% DC                | WLAN          | 8.26     | ±9.6                   |
| 10715 | AAC | ET40, MCS8 (207.0 Mbps), 99.8% DC                | WLAN          | 8.45     | ±9.6                   |
| 10716 | AAC | ET40, MCS9 (229.0 Mbps), 99.8% DC                | WLAN          | 8.30     | ±9.6                   |
| 10717 | AAC | ET40, MCS10 (258.0 Mbps), 99.8% DC               | WLAN          | 8.48     | ±9.6                   |
| 10718 | AAC | ET40, MCS11 (267.0 Mbps), 99.8% DC               | WLAN          | 8.24     | ±9.6                   |
| 10719 | AAC | ET80, MCS0 (36.0 Mbps), 90.0% DC                 | WLAN          | 8.81     | ±9.6                   |
| 10720 | AAC | ET80, MCS1 (72.1 Mbps), 90.0% DC                 | WLAN          | 8.87     | ±9.6                   |
| 10721 | AAC | ET80, MCS2 (108.1 Mbps), 90.0% DC                | WLAN          | 8.76     | ±9.6                   |
| 10722 | AAC | ET80, MCS3 (144.1 Mbps), 90.0% DC                | WLAN          | 8.55     | ±9.6                   |
| 10723 | AAC | ET80, MCS4 (216.2 Mbps), 90.0% DC                | WLAN          | 8.70     | ±9.6                   |
| 10724 | AAC | ET80, MCS5 (288.2 Mbps), 90.0% DC                | WLAN          | 8.90     | ±9.6                   |
| 10725 | AAC | ET80, MCS6 (324.4 Mbps), 90.0% DC                | WLAN          | 8.74     | ±9.6                   |
| 10726 | AAC | ET80, MCS7 (360.3 Mbps), 90.0% DC                | WLAN          | 8.72     | ±9.6                   |
| 10727 | AAC | ET80, MCS8 (432.4 Mbps), 90.0% DC                | WLAN          | 8.66     | ±9.6                   |
| 10728 | AAC | ET80, MCS9 (480.4 Mbps), 90.0% DC                | WLAN          | 8.65     | ±9.6                   |
| 10729 | AAC | ET80, MCS10 (540.4 Mbps), 90.0% DC               | WLAN          | 8.64     | ±9.6                   |
| 10730 | AAC | ET80, MCS11 (72.0 Mbps), 90.0% DC                | WLAN          | 8.67     | ±9.6                   |
| 10731 | AAC | ET80, MCS0 (36.0 Mbps), 100.0% DC                | WLAN          | 8.42     | ±9.6                   |
| 10732 | AAC | ET80, MCS1 (72.1 Mbps), 100.0% DC                | WLAN          | 8.46     | ±9.6                   |
| 10733 | AAC | ET80, MCS2 (108.1 Mbps), 100.0% DC               | WLAN          | 8.40     | ±9.6                   |
| 10734 | AAC | ET80, MCS3 (144.1 Mbps), 100.0% DC               | WLAN          | 8.25     | ±9.6                   |
| 10735 | AAC | ET80, MCS4 (216.2 Mbps), 100.0% DC               | WLAN          | 8.33     | ±9.6                   |
| 10736 | AAC | ET80, MCS5 (288.2 Mbps), 100.0% DC               | WLAN          | 8.27     | ±9.6                   |
| 10737 | AAC | ET80, MCS6 (324.4 Mbps), 100.0% DC               | WLAN          | 8.36     | ±9.6                   |
| 10738 | AAC | ET80, MCS7 (360.3 Mbps), 100.0% DC               | WLAN          | 8.42     | ±9.6                   |
| 10739 | AAC | ET80, MCS8 (432.4 Mbps), 100.0% DC               | WLAN          | 8.29     | ±9.6                   |
| 10740 | AAC | ET80, MCS9 (480.4 Mbps), 100.0% DC               | WLAN          | 8.48     | ±9.6                   |
| 10741 | AAC | ET80, MCS10 (540.4 Mbps), 100.0% DC              | WLAN          | 8.40     | ±9.6                   |
| 10742 | AAC | ET80, MCS11 (600.5 Mbps), 100.0% DC              | WLAN          | 8.43     | ±9.6                   |
| 10743 | AAC | ET160, MCS0 (72.0 Mbps), 88.2% DC                | WLAN          | 8.94     | ±9.6                   |
| 10744 | AAC | ET160, MCS1 (144.0 Mbps), 87.1% DC               | WLAN          | 9.16     | ±9.6                   |
| 10745 | AAC | ET160, MCS2 (216.0 Mbps), 87.4% DC               | WLAN          | 8.93     | ±9.6                   |
| 10746 | AAC | ET160, MCS3 (288.0 Mbps), 87.1% DC               | WLAN          | 9.11     | ±9.6                   |
| 10747 | AAC | ET160, MCS4 (432.0 Mbps), 87.4% DC               | WLAN          | 9.04     | ±9.6                   |
| 10748 | AAC | ET160, MCS5 (576.0 Mbps), 86.8% DC               | WLAN          | 8.93     | ±9.6                   |
| 10749 | AAC | ET160, MCS6 (649.0 Mbps), 86.7% DC               | WLAN          | 8.90     | ±9.6                   |
| 10750 | AAC | ET160, MCS7 (721.0 Mbps), 86.7% DC               | WLAN          | 8.79     | ±9.6                   |
| 10751 | AAC | ET160, MCS8 (865.0 Mbps), 86.3% DC               | WLAN          | 8.82     | ±9.6                   |
| 10752 | AAC | ET160, MCS9 (961.0 Mbps), 86.3% DC               | WLAN          | 8.81     | ±9.6                   |
| 10753 | AAC | ET160, MCS10 (1081.0 Mbps), 86.7% DC             | WLAN          | 9.00     | ±9.6                   |
| 10754 | AAC | ET160, MCS11 (1201.0 Mbps), 86.7% DC             | WLAN          | 8.94     | ±9.6                   |
| 10755 | AAC | ET160, MCS0 (72.0 Mbps), 98.0% DC                | WLAN          | 8.64     | ±9.6                   |
| 10756 | AAC | ET160, MCS1 (144.0 Mbps), 96.8% DC               | WLAN          | 8.77     | ±9.6                   |
| 10757 | AAC | ET160, MCS2 (216.0 Mbps), 97.1% DC               | WLAN          | 8.77     | ±9.6                   |
| 10758 | AAC | ET160, MCS3 (288.0 Mbps), 96.8% DC               | WLAN          | 8.69     | ±9.6                   |
| 10759 | AAC | ET160, MCS4 (432.0 Mbps), 97.1% DC               | WLAN          | 8.58     | ±9.6                   |
| 10760 | AAC | ET160, MCS5 (576.0 Mbps), 96.5% DC               | WLAN          | 8.49     | ±9.6                   |
| 10761 | AAC | ET160, MCS6 (649.0 Mbps), 96.3% DC               | WLAN          | 8.58     | ±9.6                   |
| 10762 | AAC | ET160, MCS7 (721.0 Mbps), 96.3% DC               | WLAN          | 8.49     | ±9.6                   |
| 10763 | AAC | ET160, MCS8 (865.0 Mbps), 95.9% DC               | WLAN          | 8.53     | ±9.6                   |
| 10764 | AAC | ET160, MCS9 (961.0 Mbps), 95.9% DC               | WLAN          | 8.54     | ±9.6                   |
| 10765 | AAC | ET160, MCS10 (1081.0 Mbps), 96.3% DC             | WLAN          | 8.54     | ±9.6                   |
| 10766 | AAC | ET160, MCS11 (1201.0 Mbps), 96.3% DC             | WLAN          | 8.51     | ±9.6                   |
| 10767 | AAG | CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 99.9% DC, 1 RB   | 5G NR FR1 TDD | 7.99     | ±9.6                   |
| 10768 | AAE | CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10769 | AAD | CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10770 | AAE | CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10771 | AAD | CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10772 | AAE | CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB | 5G NR FR1 TDD | 8.23     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 19 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                            | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------------|---------------|----------|------------------------|
| 10773 | AAF | CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 8.03     | ±9.6                   |
| 10774 | AAE | CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10775 | AAF | CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB    | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10776 | AAE | CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10777 | AAC | CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10778 | AAE | CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10779 | AAC | CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10780 | AAE | CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10781 | AAF | CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10782 | AAE | CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.43     | ±9.6                   |
| 10783 | AAG | CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB   | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10784 | AAE | CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.29     | ±9.6                   |
| 10785 | AAD | CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10786 | AAE | CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10787 | AAD | CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.44     | ±9.6                   |
| 10788 | AAE | CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10789 | AAF | CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10790 | AAE | CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10791 | AAG | CP-OFDM, 5.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB       | 5G NR FR1 TDD | 7.83     | ±9.6                   |
| 10792 | AAE | CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB      | 5G NR FR1 TDD | 7.92     | ±9.6                   |
| 10793 | AAD | CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.95     | ±9.6                   |
| 10794 | AAE | CP-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.82     | ±9.6                   |
| 10795 | AAD | CP-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.84     | ±9.6                   |
| 10796 | AAE | CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.82     | ±9.6                   |
| 10797 | AAF | CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10798 | AAE | CP-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10799 | AAF | CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10801 | AAF | CP-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10802 | AAE | CP-OFDM, 90.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.87     | ±9.6                   |
| 10803 | AAF | CP-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB    | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10805 | AAE | CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10806 | AAD | CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10809 | AAE | CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10810 | AAF | CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10812 | AAF | CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10817 | AAG | CP-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB   | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10818 | AAE | CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10819 | AAD | CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.33     | ±9.6                   |
| 10820 | AAE | CP-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10821 | AAD | CP-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10822 | AAE | CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10823 | AAF | CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10824 | AAE | CP-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10825 | AAF | CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10827 | AAF | CP-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10828 | AAE | CP-OFDM, 90.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.43     | ±9.6                   |
| 10829 | AAF | CP-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10830 | AAE | CP-OFDM, 10.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB      | 5G NR FR1 TDD | 7.63     | ±9.6                   |
| 10831 | AAD | CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB      | 5G NR FR1 TDD | 7.73     | ±9.6                   |
| 10832 | AAE | CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB      | 5G NR FR1 TDD | 7.74     | ±9.6                   |
| 10833 | AAD | CP-OFDM, 25.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB      | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10834 | AAE | CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.75     | ±9.6                   |
| 10835 | AAF | CP-OFDM, 40.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10836 | AAE | CP-OFDM, 50.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.66     | ±9.6                   |
| 10837 | AAF | CP-OFDM, 60.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.68     | ±9.6                   |
| 10839 | AAF | CP-OFDM, 80.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10840 | AAE | CP-OFDM, 90.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB     | 5G NR FR1 TDD | 7.67     | ±9.6                   |
| 10841 | AAF | CP-OFDM, 100.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB    | 5G NR FR1 TDD | 7.71     | ±9.6                   |
| 10843 | AAD | CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.49     | ±9.6                   |
| 10844 | AAE | CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10846 | AAE | CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB   | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10854 | AAE | CP-OFDM, 10.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10855 | AAD | CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10856 | AAE | CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10857 | AAD | CP-OFDM, 25.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10858 | AAE | CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB  | 5G NR FR1 TDD | 8.36     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 20 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                                 | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|-----------------------------------------------------------|---------------|----------|------------------------|
| 10859 | AAF | CP-OFDM, 40.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB       | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10860 | AAE | CP-OFDM, 50.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10861 | AAF | CP-OFDM, 60.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB       | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10863 | AAF | CP-OFDM, 80.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10864 | AAE | CP-OFDM, 90.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB       | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10865 | AAF | CP-OFDM, 100.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB      | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10866 | AAF | DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB      | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10868 | AAF | DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB   | 5G NR FR1 TDD | 5.89     | ±9.6                   |
| 10869 | AAE | DFT-s-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB     | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10870 | AAE | DFT-s-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB  | 5G NR FR2 TDD | 5.86     | ±9.6                   |
| 10871 | AAE | DFT-s-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB    | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10872 | AAE | DFT-s-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB | 5G NR FR2 TDD | 6.52     | ±9.6                   |
| 10873 | AAE | DFT-s-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB    | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10874 | AAE | DFT-s-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10875 | AAE | CP-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB        | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10876 | AAE | CP-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB     | 5G NR FR2 TDD | 8.39     | ±9.6                   |
| 10877 | AAE | CP-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB       | 5G NR FR2 TDD | 7.95     | ±9.6                   |
| 10878 | AAE | DFT-s-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10879 | AAE | CP-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB       | 5G NR FR2 TDD | 8.12     | ±9.6                   |
| 10880 | AAE | CP-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB    | 5G NR FR2 TDD | 8.38     | ±9.6                   |
| 10881 | AAE | DFT-s-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB      | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10882 | AAE | DFT-s-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB   | 5G NR FR2 TDD | 5.96     | ±9.6                   |
| 10883 | AAE | DFT-s-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB     | 5G NR FR2 TDD | 6.57     | ±9.6                   |
| 10884 | AAE | DFT-s-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB  | 5G NR FR2 TDD | 6.53     | ±9.6                   |
| 10885 | AAE | DFT-s-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB     | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10886 | AAE | DFT-s-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB  | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10887 | AAE | CP-OFDM, 50.0 MHz, QPSK, 120 kHz, 99.9% DC, 1 RB          | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10888 | AAE | CP-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB      | 5G NR FR2 TDD | 8.35     | ±9.6                   |
| 10889 | AAE | CP-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB        | 5G NR FR2 TDD | 8.02     | ±9.6                   |
| 10890 | AAE | CP-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB     | 5G NR FR2 TDD | 8.40     | ±9.6                   |
| 10891 | AAE | CP-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB        | 5G NR FR2 TDD | 8.13     | ±9.6                   |
| 10892 | AAE | CP-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB     | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10897 | AAE | DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB         | 5G NR FR1 TDD | 5.66     | ±9.6                   |
| 10898 | AAC | DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10899 | AAB | DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10900 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10901 | AAB | DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10902 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10903 | AAD | DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10904 | AAC | DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10905 | AAD | DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10906 | AAD | DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10907 | AAE | DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB      | 5G NR FR1 TDD | 5.78     | ±9.6                   |
| 10908 | AAC | DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10909 | AAB | DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.96     | ±9.6                   |
| 10910 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.83     | ±9.6                   |
| 10911 | AAB | DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10912 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10913 | AAD | DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10914 | AAC | DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.85     | ±9.6                   |
| 10915 | AAD | DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.83     | ±9.6                   |
| 10916 | AAD | DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB     | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10917 | AAD | DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB    | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10918 | AAE | DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB     | 5G NR FR1 TDD | 5.86     | ±9.6                   |
| 10919 | AAC | DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.86     | ±9.6                   |
| 10920 | AAB | DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10921 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10922 | AAB | DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.82     | ±9.6                   |
| 10923 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10924 | AAD | DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10925 | AAC | DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.95     | ±9.6                   |
| 10926 | AAD | DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10927 | AAD | DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB    | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10928 | AAD | DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 1 RB                   | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10929 | AAD | DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 1 RB                  | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10930 | AAC | DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 1 RB                  | 5G NR FR1 FDD | 5.52     | ±9.6                   |

Certificate No: EX-7452\_Mar26

Page 21 of 22

EX3DV4 - SN:7452

March 20, 2026

| UID   | Rev | Communication System Name                   | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|---------------------------------------------|---------------|----------|------------------------|
| 10931 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 1 RB    | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10932 | AAC | DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 1 RB    | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10933 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 1 RB    | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10934 | AAC | DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 1 RB    | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10935 | AAD | DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 1 RB    | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10936 | AAD | DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 50% RB   | 5G NR FR1 FDD | 5.90     | ±9.6                   |
| 10937 | AAD | DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.77     | ±9.6                   |
| 10938 | AAC | DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.90     | ±9.6                   |
| 10939 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.82     | ±9.6                   |
| 10940 | AAC | DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.89     | ±9.6                   |
| 10941 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10942 | AAC | DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10943 | AAD | DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 50% RB  | 5G NR FR1 FDD | 5.95     | ±9.6                   |
| 10944 | AAD | DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 100% RB  | 5G NR FR1 FDD | 5.81     | ±9.6                   |
| 10945 | AAD | DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10946 | AAC | DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10947 | AAC | DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10948 | AAC | DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10949 | AAC | DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10950 | AAC | DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10951 | AAD | DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 100% RB | 5G NR FR1 FDD | 5.92     | ±9.6                   |
| 10978 | AAA | BDR, 1.0 MHz, 76.7% DC                      | ULLA          | 1.16     | ±9.6                   |
| 10979 | AAA | HDR4, 2.0 MHz, 25.1% DC                     | ULLA          | 8.58     | ±9.6                   |
| 10980 | AAA | HDR8, 4.0 MHz, 16.5% DC                     | ULLA          | 10.32    | ±9.6                   |
| 10981 | AAA | HDRp4, 2.0 MHz, 89.0% DC                    | ULLA          | 3.19     | ±9.6                   |
| 10982 | AAA | HDRp8, 4.0 MHz, 90.3% DC                    | ULLA          | 3.43     | ±9.6                   |
| 11013 | AAB | EHT320, MCS1 (272.0 Mbps), 100.0% DC        | WLAN          | 8.47     | ±9.6                   |
| 11014 | AAB | EHT320, MCS2 (408.0 Mbps), 100.0% DC        | WLAN          | 8.45     | ±9.6                   |
| 11015 | AAB | EHT320, MCS3 (544.0 Mbps), 100.0% DC        | WLAN          | 8.44     | ±9.6                   |
| 11016 | AAB | EHT320, MCS4 (817.0 Mbps), 100.0% DC        | WLAN          | 8.44     | ±9.6                   |
| 11017 | AAB | EHT320, MCS5 (1089.0 Mbps), 100.0% DC       | WLAN          | 8.41     | ±9.6                   |
| 11018 | AAB | EHT320, MCS6 (1225.0 Mbps), 100.0% DC       | WLAN          | 8.40     | ±9.6                   |
| 11019 | AAB | EHT320, MCS7 (1361.0 Mbps), 100.0% DC       | WLAN          | 8.29     | ±9.6                   |
| 11020 | AAB | EHT320, MCS8 (1633.0 Mbps), 100.0% DC       | WLAN          | 8.27     | ±9.6                   |
| 11021 | AAB | EHT320, MCS9 (1815.0 Mbps), 100.0% DC       | WLAN          | 8.46     | ±9.6                   |
| 11022 | AAB | EHT320, MCS10 (2042.0 Mbps), 100.0% DC      | WLAN          | 8.36     | ±9.6                   |
| 11023 | AAB | EHT320, MCS11 (2269.0 Mbps), 100.0% DC      | WLAN          | 8.09     | ±9.6                   |
| 11024 | AAB | EHT320, MCS12 (2450.0 Mbps), 100.0% DC      | WLAN          | 8.42     | ±9.6                   |
| 11025 | AAB | EHT320, MCS13 (2722.0 Mbps), 100.0% DC      | WLAN          | 8.37     | ±9.6                   |
| 11026 | AAB | EHT320, MCS0 (136.0 Mbps), 100.0% DC        | WLAN          | 8.39     | ±9.6                   |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## C.2. System Validation Dipole D2450V2 (Serial No. 894 / Control No. WA0064)

Please see the following pages.

**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
 Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)  
 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **MWF**  
 Yokohama, Japan

Certificate No. **D2450V2-894\_Apr26**

## CALIBRATION CERTIFICATE

Object **D2450V2 - SN: 894**

Calibration procedure(s) **QA CAL-05.v13**  
**Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz**

Calibration date **April 14, 2026**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature  $(22 \pm 3)^\circ\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards           | ID         | Cal Date (Certificate No.)             | Scheduled Cal |
|-----------------------------|------------|----------------------------------------|---------------|
| Power Sensor R&S NRP40T     | SN: 101861 | 29-Apr-25 (No. 2025-001450)            | Apr-26        |
| Power Sensor R&S NRP18AN    | SN: 100961 | 22-Aug-25 (No. 4030A315010971)         | Aug-26        |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 23-Jan-26 (No. 4030A315011865)         | Jan-27        |
| 3.5mm mismatch combination  | SN: 1152   | 24-Mar-26 (No. 2026-005594)            | Mar-27        |
| OCP DAK-12                  | SN: 1016   | 16-Sept-25 (No. OCP-DAK12-1016_Sep25)  | Sep-26        |
| OCP DAK-3.5                 | SN: 1249   | 16-Sept-25 (No. OCP-DAK3.5-1249_Sep25) | Sep-26        |
| Reference Probe EX3DV4      | SN: 7349   | 29-Jan-26 (No. EX3-7349_Jan26)         | Jan-27        |
| DAE4ip                      | SN: 1836   | 18-Feb-26 (No. DAE4ip-1836_Feb26)      | Feb-27        |

| Secondary Standards          | ID         | Check Date (in house)                      | Scheduled Check |
|------------------------------|------------|--------------------------------------------|-----------------|
| ACAD Setup 1                 | SN: 1000   | 27-May-25 (No. 675-ACAD_Source_Box-250527) | May-26          |
| Signal Generator R&S SMB100A | SN: 182081 | 27-May-25 (No. 675-CAL16-S4588-250527)     | May-26          |
| Mismatch; SMA                | SN: 1102   | 24-Apr-25 (No. 675-Mismatch_SMA-250424)    | Apr-26          |
| OCP DAK-12                   | SN: 1029   | 24-Feb-26 (No. OCP-DAK12-1029_Feb26)       | Feb-27          |
| OCP DAK-3.5                  | SN: 1336   | 10-Dec-25 (No. OCP-DAK3.5-1336_Dec25)      | Dec-26          |

|                                                                                                                                                      | Name       | Function              | Signature |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------|-----------|
| Calibrated by                                                                                                                                        | Paulo Pina | Laboratory Technician |           |
| Approved by                                                                                                                                          | Sven Kühn  | Technical Manager     |           |
| <p>Issued: April 15, 2026</p> <p>This calibration certificate shall not be reproduced except in full without written approval of the laboratory.</p> |            |                       |           |

Certificate No: D2450V2-894\_Apr26

Page 1 of 9

**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)  
The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

#### Glossary

TSL    tissue simulating liquid  
ConvF    sensitivity in TSL / NORM x,y,z  
N/A    not applicable or not measured

#### Calibration Is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation

- DASY System Handbook

#### Methods Applied and Interpretation of Parameters

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR as measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

D2450V2 - SN: 894

April 14, 2026

**Measurement Conditions**

DASY system configuration, as far as not given on page 1.

|                                     |                        |             |
|-------------------------------------|------------------------|-------------|
| <b>DASY Version</b>                 | DASY8 Module SAR       | 17.0.4      |
| <b>Extrapolation</b>                | Advanced Extrapolation |             |
| <b>Phantom</b>                      | Modular Flat Phantom   |             |
| <b>Distance Dipole Center - TSL</b> | 10 mm                  | with spacer |
| <b>Frequency</b>                    | 2450MHz $\pm$ 1MHz     |             |

**HSL parameters at 2450 MHz**

The following parameters and calculations were applied.

|                                           | Temperature        | Permittivity  | Conductivity        |
|-------------------------------------------|--------------------|---------------|---------------------|
| <b>Nominal HSL parameters</b>             | 22.0 °C            | 39.2          | 1.80 mho/m          |
| <b>Measured HSL parameters</b>            | (22.0 $\pm$ 0.2)°C | 37.8 $\pm$ 6% | 1.88 mho/m $\pm$ 6% |
| <b>HSL temperature change during test</b> | < 0.5 °C           |               |                     |

**SAR result with HSL at 2450 MHz**

| <b>SAR averaged over 1 cm<sup>3</sup> (1 g) of HSL</b> | Condition          |                               |
|--------------------------------------------------------|--------------------|-------------------------------|
| SAR for nominal HSL parameters                         | 24 dBm input power | 13.3 W/kg                     |
| SAR for nominal HSL parameters                         | normalized to 1W   | 52.9 W/kg $\pm$ 17.0% (k = 2) |

| <b>SAR averaged over 10 cm<sup>3</sup> (10 g) of HSL</b> | Condition          |                               |
|----------------------------------------------------------|--------------------|-------------------------------|
| SAR for nominal HSL parameters                           | 24 dBm input power | 6.24 W/kg                     |
| SAR for nominal HSL parameters                           | normalized to 1W   | 24.8 W/kg $\pm$ 16.5% (k = 2) |

D2450V2 - SN: 894

April 14, 2026

**MSL parameters at 2450 MHz**

The following parameters and calculations were applied.

|                                           | Temperature   | Permittivity | Conductivity   |
|-------------------------------------------|---------------|--------------|----------------|
| <b>Nominal MSL parameters</b>             | 22.0 °C       | 52.7         | 1.95 mho/m     |
| <b>Measured MSL parameters</b>            | (22.0 ±0.2)°C | 51.8 ±6%     | 2.04 mho/m ±6% |
| <b>MSL temperature change during test</b> | < 0.5 °C      |              |                |

**SAR result with MSL at 2450 MHz**

| <b>SAR averaged over 1 cm<sup>3</sup> (1 g) of MSL</b> | Condition          |                          |
|--------------------------------------------------------|--------------------|--------------------------|
| SAR for nominal MSL parameters                         | 24 dBm input power | 13.4 W/kg                |
| SAR for nominal MSL parameters                         | normalized to 1W   | 53.3 W/kg ±17.0% (k = 2) |

| <b>SAR averaged over 10 cm<sup>3</sup> (10 g) of MSL</b> | Condition          |                          |
|----------------------------------------------------------|--------------------|--------------------------|
| SAR for nominal MSL parameters                           | 24 dBm input power | 6.36 W/kg                |
| SAR for nominal MSL parameters                           | normalized to 1W   | 25.3 W/kg ±16.5% (k = 2) |

D2450V2 - SN: 894

April 14, 2026

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with HSL at 2450 MHz**

|             |                                |
|-------------|--------------------------------|
| Impedance   | 54.0 $\Omega$ + 1.6 j $\Omega$ |
| Return Loss | -27.7 dB                       |

**Antenna Parameters with MSL at 2450 MHz**

|             |                                |
|-------------|--------------------------------|
| Impedance   | 50.3 $\Omega$ + 3.8 j $\Omega$ |
| Return Loss | -28.5 dB                       |

**General Antenna Parameters and Design**

|                                  |          |
|----------------------------------|----------|
| Electrical Delay (one direction) | 1.159 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

**Additional EUT Data**

|                 |       |
|-----------------|-------|
| Manufactured by | SPEAG |
|-----------------|-------|

D2450V2 - SN: 894 April 14, 2026

System Performance Check Report

Summary

|                 |                 |     |             |
|-----------------|-----------------|-----|-------------|
| Dipole          | Frequency [MHz] | TSL | Power [dBm] |
| D2450V2 – SN894 | 2450            | HSL | 24          |

Exposure Conditions

|                      |                    |      |            |                                 |                   |                        |                  |
|----------------------|--------------------|------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat                 | 10                 |      | CW, 0--    | 2450, 0                         | 7.34              | 1.88                   | 37.8             |

Hardware Setup

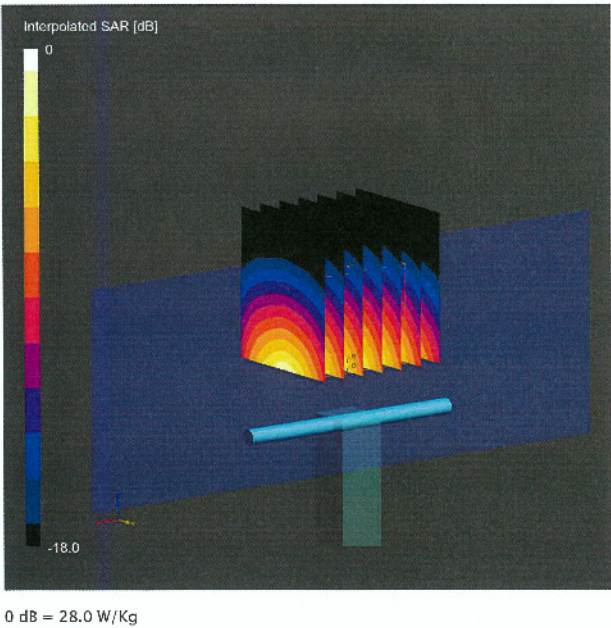
|                 |                    |                             |                            |
|-----------------|--------------------|-----------------------------|----------------------------|
| Phantom         | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date      |
| MFP V8.0 Center | HSL, 2026–04–13    | EX3DV4 – SN7349, 2026–01–29 | DAE4lp Sn1 836, 2026–02–18 |

Scans Setup

|                     |                 |
|---------------------|-----------------|
|                     | Zoom Scan       |
| Grid Extents [mm]   | 30 × 30 × 30    |
| Grid Steps [mm]     | 5.0 × 5.0 × 1.5 |
| Sensor Surface [mm] | 1.4             |
| Graded Grid         | Yes             |
| Grading Ratio       | 1.5             |
| MAIA                | N/A             |
| Surface Detection   | VMS – 6p        |
| Scan Method         | Measured        |

Measurement Results

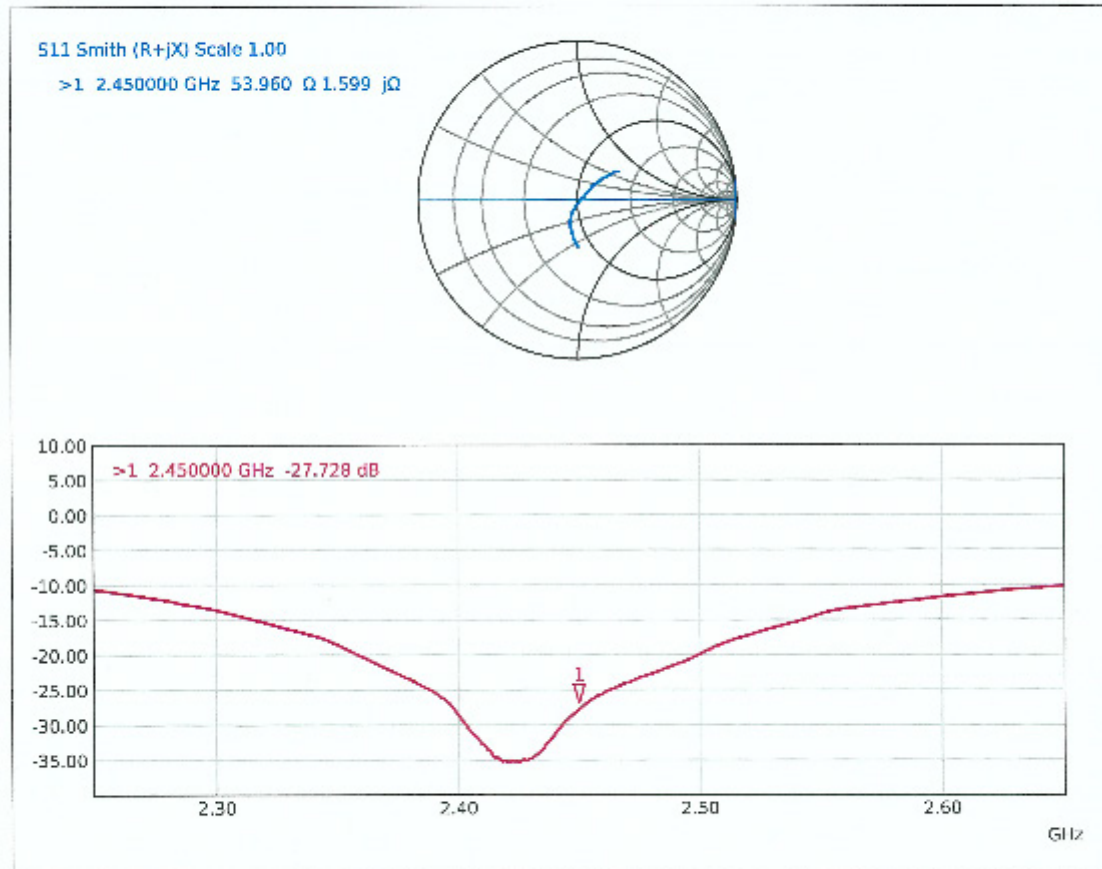
|                     |                     |
|---------------------|---------------------|
|                     | Zoom Scan           |
| Date                | 2026–04–13          |
| psSAR1g [W/Kg]      | 13.3                |
| psSAR10g [W/Kg]     | 6.24                |
| Power Drift [dB]    | 0.00                |
| Power Scaling       | Disabled            |
| Scaling Factor [dB] |                     |
| TSL Correction      | Positive / Negative |



D2450V2 - SN: 894

April 14, 2026

Impedance Measurement Plot for HSL



D2450V2 - SN: 894

April 14, 2026

System Performance Check Report

Summary

|                 |                 |     |             |
|-----------------|-----------------|-----|-------------|
| Dipole          | Frequency [MHz] | TSL | Power [dBm] |
| D2450V2 – SN894 | 2450            | MSL | 24          |

Exposure Conditions

|                      |                    |      |            |                                 |                   |                        |                  |
|----------------------|--------------------|------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL | Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat                 | 10                 |      | CW, 0---   | 2450, 0                         | 6.99              | 2.04                   | 51.8             |

Hardware Setup

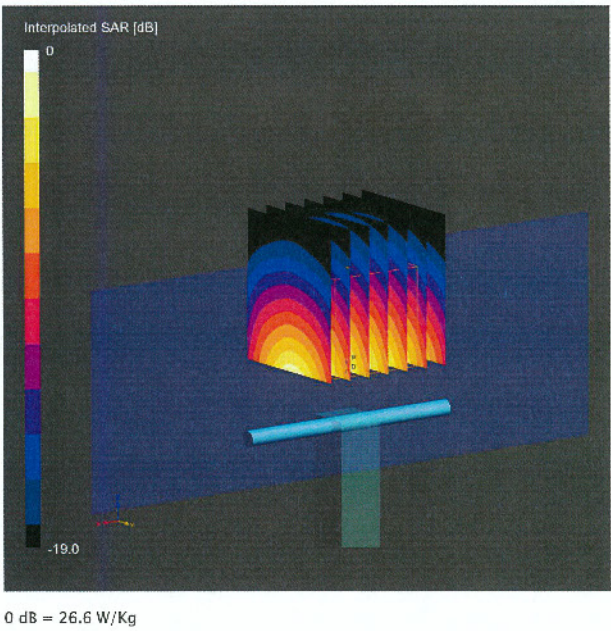
|                 |                    |                             |                           |
|-----------------|--------------------|-----------------------------|---------------------------|
| Phantom         | TSL, Measured Date | Probe, Calibration Date     | DAE, Calibration Date     |
| MFP V8.0 Center | MSL, 2026–04–14    | EX3DV4 – SN7349, 2026–01–29 | DAE4ip Sn1836, 2026–02–18 |

Scans Setup

|                     |                 |
|---------------------|-----------------|
|                     | Zoom Scan       |
| Grid Extents [mm]   | 30 x 30 x 30    |
| Grid Steps [mm]     | 5.0 x 5.0 x 1.5 |
| Sensor Surface [mm] | 1.4             |
| Graded Grid         | Yes             |
| Grading Ratio       | 1.5             |
| MAIA                | N/A             |
| Surface Detection   | VMS + 6p        |
| Scan Method         | Measured        |

Measurement Results

|                     |                     |
|---------------------|---------------------|
|                     | Zoom Scan           |
| Date                | 2026–04–14          |
| psSAR1g [W/Kg]      | 13.4                |
| psSAR10g [W/Kg]     | 6.36                |
| Power Drift [dB]    | –0.01               |
| Power Scaling       | Disabled            |
| Scaling Factor [dB] |                     |
| TSL Correction      | Positive / Negative |



D2450V2 - SN: 894

April 14, 2026

**Impedance Measurement Plot for MSL**

