

## Appendix A Verification Plots

### Appendix A.1 Verification Plots for Verification 2450 MHz

Date/Time: 2025-06-02 09:10:36

Test Laboratory : SGS Korea (Gunpo Laboratory)  
File Name: [Verification 2450MHz 2025-06-02.da53:0](#)

Input Power: 100 mW

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:892**

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.821$  S/m;  $\epsilon_r = 38.666$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN:7413; ConvF(7.73, 6.75, 6.39) @ 2450 MHz; Calibrated: 2024-10-16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1430; Calibrated: 2025-03-19
- Phantom: Twin-SAM V5.0 SN:1911; Type: SN:1911; Serial: SN:1911
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

**Verification/2450MHz Verification/Area Scan (81x101x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 8.67 W/kg

**Verification/2450MHz Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 50.24 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 10.4 W/kg

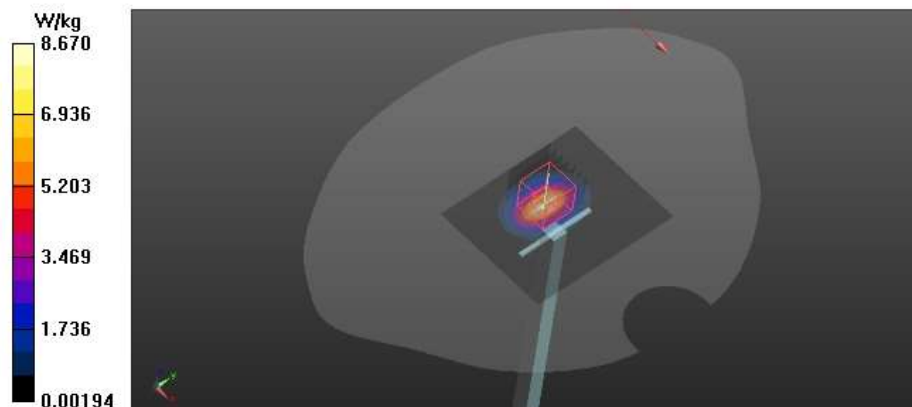
**SAR(1 g) = 5.12 W/kg; SAR(10 g) = 2.36 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 49%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 8.50 W/kg



## Appendix B Test Plots

### Appendix B.1 Test Plots for WLAN 2.4 GHz

Date/Time: 2025-06-02 13:04:08

Test Laboratory : SGS Korea (Gunpo Laboratory)  
File Name: [WLAN2.4GHz\\_802.11b\\_FCC\\_da53:0](#)

**DUT: A927KGMS; Type: Vacuum Cleaner; Serial: #1**

Communication System: UID 0, WLAN 2.4GHz (0); Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.807$  S/m;  $\epsilon_r = 38.582$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY52 Configuration:

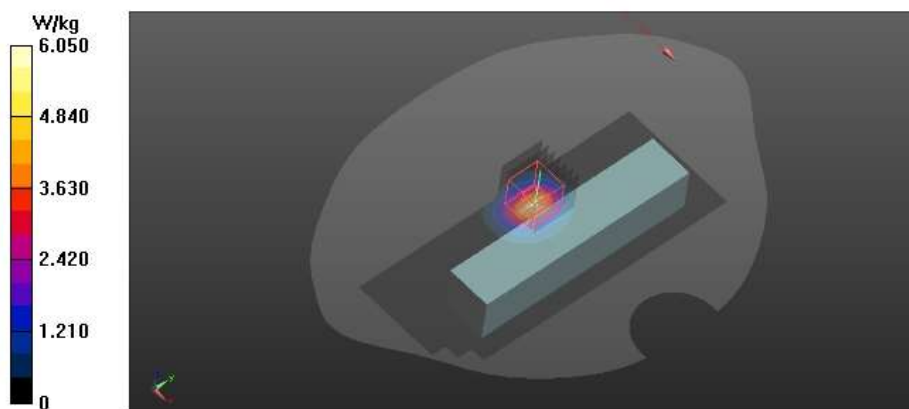
- Probe: EX3DV4 - SN7413; ConvF(7.73, 6.75, 6.39) @ 2437 MHz; Calibrated: 2024-10-16
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1430; Calibrated: 2025-03-19
- Phantom: Twin-SAM V5.0 SN:1911; Type: SN:1911; Serial: SN:1911
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

**Limb/WLAN2.4GHz\_Left Edge\_802.11b\_CH6/Area Scan (81x201x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)  
Maximum value of SAR (interpolated) = 6.05 W/kg

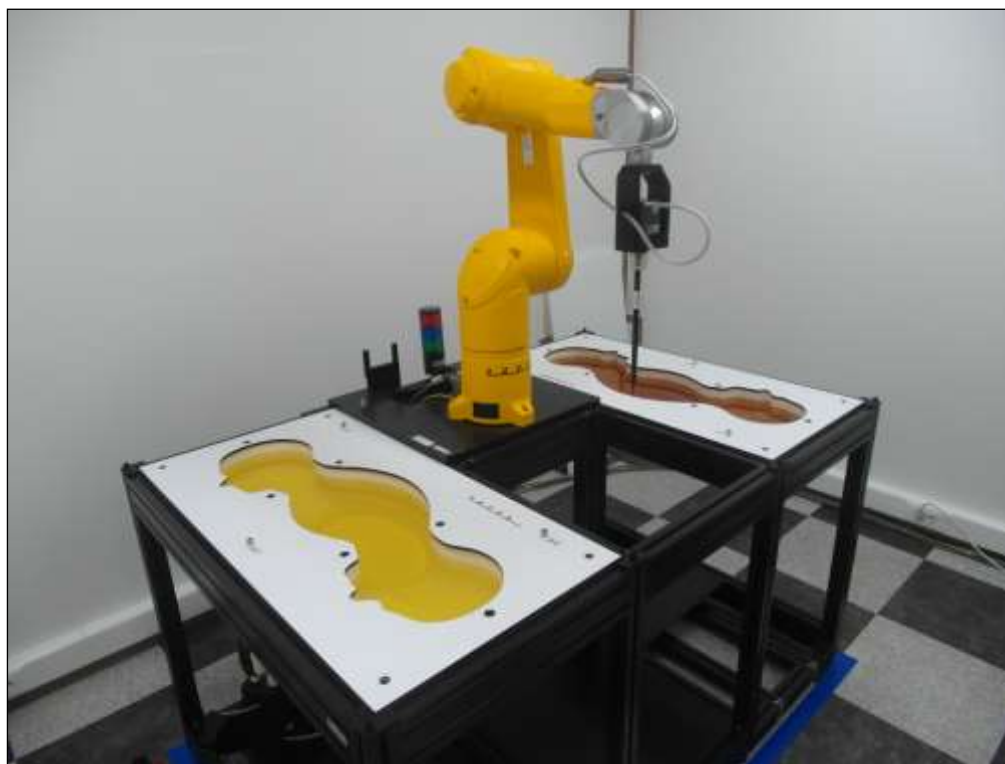
**Limb/WLAN2.4GHz\_Left Edge\_802.11b\_CH6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm  
Reference Value = 61.00 V/m; Power Drift = -0.00 dB  
Peak SAR (extrapolated) = 7.37 W/kg  
**SAR(1 g) = 3.56 W/kg; SAR(10 g) = 1.6 W/kg**  
Smallest distance from peaks to all points 3 dB below = 9 mm  
Ratio of SAR at M2 to SAR at M1 = 48.7%

Info: [Interpolated medium parameters used for SAR evaluation.](#)  
Maximum value of SAR (measured) = 6.02 W/kg



## Appendix C Photograph

### Appendix C.1 Photographs of the SAR measurement system



(a) Photograph of the SAR measurement System DASY6

## Appendix D Probe, DAE and Dipole Calibration Certificates

### Appendix D.1 Calibration certificate for Probe SN7413

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

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: **SGS**  
Gyeonggi-do, Republic of Korea

Certificate No.: **EX-7413\_Oct24**

### CALIBRATION CERTIFICATE

Object: **EX3DV4 - SN:7413**

Calibration procedure(s): **QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8**  
Calibration procedure for dosimetric E-field probes

Calibration date: **October 16, 2024**

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 ± 3) °C and humidity < 70%.  
Calibration Equipment used (MATE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration |
|----------------------------|------------------|-----------------------------------|-----------------------|
| Power meter NRP2           | SN: 104776       | 26-Mar-24 (No. E17-04036/04/07)   | Mar-25                |
| Power sensor NRP-291       | SN: 103244       | 26-Mar-24 (No. E17-04036)         | Mar-25                |
| CCP DAK-3.5 (weighted)     | SN: 1249         | 23-Sep-24 (CCP-DAK3.5-1249_Sep24) | Sep-25                |
| CCP DAK-12                 | SN: 1016         | 24-Sep-24 (CCP-DAK12-1016_Sep24)  | Sep-25                |
| Reference 20 dB Attenuator | SN: C52852 (20a) | 26-Mar-24 (No. E17-04048)         | Mar-25                |
| DAE4                       | SN: 690          | 23-Feb-24 (No. DAE4-690_Feb24)    | Feb-25                |
| Reference Probe EX3DV4     | SN: 7349         | 09-Jun-24 (No. EX3-7349_Jun24)    | Jun-25                |

| Secondary Standards     | ID               | Check Date (in house)             | Scheduled Check       |
|-------------------------|------------------|-----------------------------------|-----------------------|
| Power meter E4419B      | SN: GS41230874   | 06-Apr-16 (in house check Jun-24) | In house check Jun-26 |
| Power sensor E4412A     | SN: MY41488097   | 06-Apr-16 (in house check Jun-24) | In house check Jun-26 |
| Power sensor E4412A     | SN: 000110210    | 06-Apr-16 (in house check Jun-24) | In house check Jun-26 |
| RF generator HP 8648C   | SN: US3642051700 | 04-Aug-22 (in house check Jun-24) | In house check Jun-26 |
| Network Analyzer E8358A | SN: US41093477   | 31-Mar-14 (in house check Sep-24) | In house check Sep-26 |

Calibrated by: **Joanna Lischaj** (Laboratory Technician)

Approved by: **Sven Kühn** (Technical Manager)

Issued: October 16, 2024

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

Certificate No: EX-7413\_Oct24

Page 1 of 21

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



S Schweizerischer Kalibrierdienst  
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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                   | issue 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 $\psi$   | $\psi$ 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<sub>1</sub>(<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:7413

October 16, 2024

## Parameters of Probe: EX3DV4 - SN:7413

## Basic Calibration Parameters

|                                             | Sensor X | Sensor Y | Sensor Z | Unc (k = 2) |
|---------------------------------------------|----------|----------|----------|-------------|
| Norm ( $\mu V(\sqrt{V/m})^2$ ) <sup>A</sup> | 0.57     | 0.68     | 0.49     | ±10.1%      |
| DCP (mV) <sup>B</sup>                       | 108.1    | 104.5    | 107.1    | ±4.7%       |

## Calibration Results for Modulation Response

| UID   | Communication System Name   |   | A<br>dB | B<br>dB/√μV | C     | D<br>dB | VR<br>mV | Max<br>dev. | Max<br>Unc <sup>C</sup><br>k = 2 |
|-------|-----------------------------|---|---------|-------------|-------|---------|----------|-------------|----------------------------------|
| 0     | CW                          | X | 0.00    | 0.00        | 1.00  | 0.00    | 136.0    | ±0.9%       | ±4.7%                            |
|       |                             | Y | 0.00    | 0.00        | 1.00  |         | 127.8    |             |                                  |
|       |                             | Z | 0.00    | 0.00        | 1.00  |         | 126.2    |             |                                  |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 1.53    | 80.84       | 8.43  | 10.00   | 80.0     | ±2.8%       | ±9.6%                            |
|       |                             | Y | 1.83    | 81.09       | 8.73  |         | 80.0     |             |                                  |
|       |                             | Z | 1.35    | 82.85       | 7.96  |         | 80.0     |             |                                  |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 0.85    | 60.00       | 5.04  | 8.98    | 80.0     | ±2.2%       | ±9.6%                            |
|       |                             | Y | 0.78    | 60.00       | 5.00  |         | 80.0     |             |                                  |
|       |                             | Z | 0.90    | 60.57       | 5.80  |         | 80.0     |             |                                  |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 8.00    | 70.00       | 7.00  | 3.98    | 95.0     | ±2.5%       | ±9.6%                            |
|       |                             | Y | 0.13    | 135.43      | 0.59  |         | 95.0     |             |                                  |
|       |                             | Z | 24.00   | 76.00       | 9.00  |         | 95.0     |             |                                  |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 11.20   | 154.89      | 9.03  | 2.22    | 120.0    | ±1.7%       | ±9.6%                            |
|       |                             | Y | 8.17    | 159.56      | 27.27 |         | 120.0    |             |                                  |
|       |                             | Z | 11.91   | 153.14      | 7.07  |         | 120.0    |             |                                  |
| 10387 | QPSK Waveform, 1 MHz        | X | 0.53    | 63.20       | 11.95 | 1.00    | 150.0    | ±3.9%       | ±9.6%                            |
|       |                             | Y | 0.55    | 63.47       | 12.50 |         | 150.0    |             |                                  |
|       |                             | Z | 0.48    | 61.86       | 10.84 |         | 150.0    |             |                                  |
| 10388 | QPSK Waveform, 10 MHz       | X | 1.30    | 65.50       | 13.62 | 0.00    | 150.0    | ±1.2%       | ±9.6%                            |
|       |                             | Y | 1.34    | 65.78       | 13.88 |         | 150.0    |             |                                  |
|       |                             | Z | 1.21    | 64.36       | 12.75 |         | 150.0    |             |                                  |
| 10396 | 64-QAM Waveform, 100 kHz    | X | 1.72    | 64.69       | 15.70 | 3.01    | 150.0    | ±1.2%       | ±9.6%                            |
|       |                             | Y | 1.56    | 63.13       | 15.35 |         | 150.0    |             |                                  |
|       |                             | Z | 1.74    | 64.72       | 15.77 |         | 150.0    |             |                                  |
| 10399 | 64-QAM Waveform, 40 MHz     | X | 2.80    | 66.19       | 14.94 | 0.00    | 150.0    | ±1.7%       | ±9.6%                            |
|       |                             | Y | 2.82    | 66.19       | 15.06 |         | 150.0    |             |                                  |
|       |                             | Z | 2.73    | 65.72       | 14.61 |         | 150.0    |             |                                  |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz   | X | 3.77    | 65.87       | 15.11 | 0.00    | 150.0    | ±3.2%       | ±9.6%                            |
|       |                             | Y | 3.77    | 65.83       | 15.19 |         | 150.0    |             |                                  |
|       |                             | Z | 3.70    | 65.57       | 14.89 |         | 150.0    |             |                                  |

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<sub>RF</sub> field uncertainty inside TSL (see Page 5).<sup>B</sup> Linearization parameter uncertainty for maximum specified field strength.<sup>C</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:7413

October 16, 2024

**Parameters of Probe: EX3DV4 - SN:7413**

**Sensor Model Parameters**

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$V^{-1}$ | T1<br>$msV^{-2}$ | T2<br>$msV^{-1}$ | T3<br>ms | T4<br>$V^{-2}$ | T5<br>$V^{-1}$ | T6   |
|---|----------|----------|----------------------|------------------|------------------|----------|----------------|----------------|------|
| x | 9.7      | 68.78    | 32.12                | 4.67             | 0.00             | 4.91     | 0.89           | 0.00           | 1.00 |
| y | 9.4      | 68.28    | 33.45                | 1.16             | 0.00             | 4.90     | 0.00           | 0.02           | 1.00 |
| z | 9.3      | 67.36    | 33.12                | 4.02             | 0.00             | 4.97     | 0.82           | 0.00           | 1.00 |

**Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle                               | 75.3°      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 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:7413

October 16, 2024

**Parameters of Probe: EX3DV4 - SN:7413**

**Calibration Parameter Determined in Head Tissue Simulating Media**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | CorrF X | CorrF Y | CorrF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|------------------------|
| 750                  | 41.9                               | 0.89                            | 10.47   | 9.14    | 8.65    | 0.36               | 1.27                    | ±11.0%                 |
| 835                  | 41.5                               | 0.90                            | 10.20   | 8.90    | 8.42    | 0.36               | 1.27                    | ±11.0%                 |
| 900                  | 41.5                               | 0.97                            | 10.02   | 8.75    | 8.23    | 0.36               | 1.27                    | ±11.0%                 |
| 1750                 | 40.1                               | 1.37                            | 8.73    | 7.63    | 7.22    | 0.35               | 1.27                    | ±11.0%                 |
| 1900                 | 40.0                               | 1.40                            | 8.53    | 7.45    | 7.04    | 0.35               | 1.27                    | ±11.0%                 |
| 2300                 | 39.5                               | 1.67                            | 8.02    | 7.00    | 6.62    | 0.34               | 1.27                    | ±11.0%                 |
| 2450                 | 39.2                               | 1.80                            | 7.73    | 6.75    | 6.39    | 0.34               | 1.27                    | ±11.0%                 |
| 2600                 | 39.0                               | 1.96                            | 7.57    | 6.61    | 6.25    | 0.34               | 1.27                    | ±11.0%                 |

<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 CorrF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, ±5, ±2, 150 and 75 MHz for CorrF assessments at 30, 64, 126, 150 and 225 MHz respectively. Validity of CorrF assessed at 6 MHz is 4-8 MHz, and CorrF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

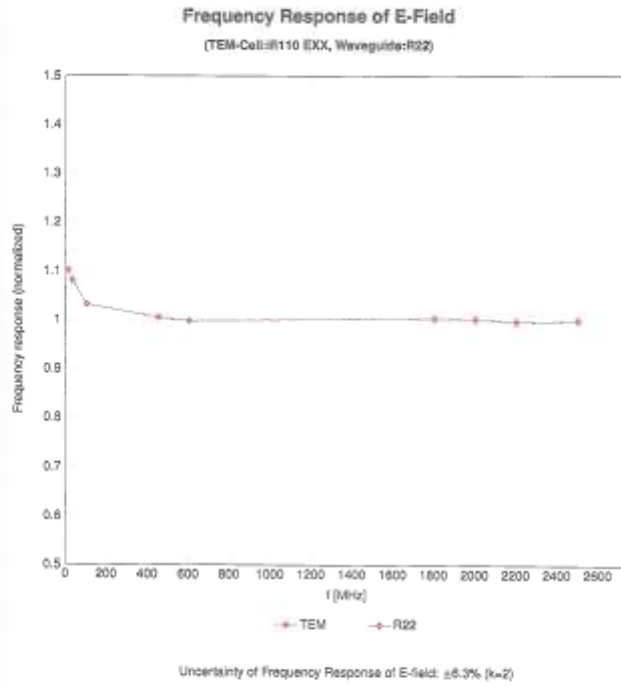
<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon'$  and  $\sigma$  by less than ±5% from the target values (typically better than ±2%) and are valid for TSL with deviations of up to ±10% if SNR correction is applied.

<sup>G</sup> Alpha/Depth are determined during calibration. SPREAD 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-CorrF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62939-1:2023.

EX3DV4 - SN:7413

October 16, 2024

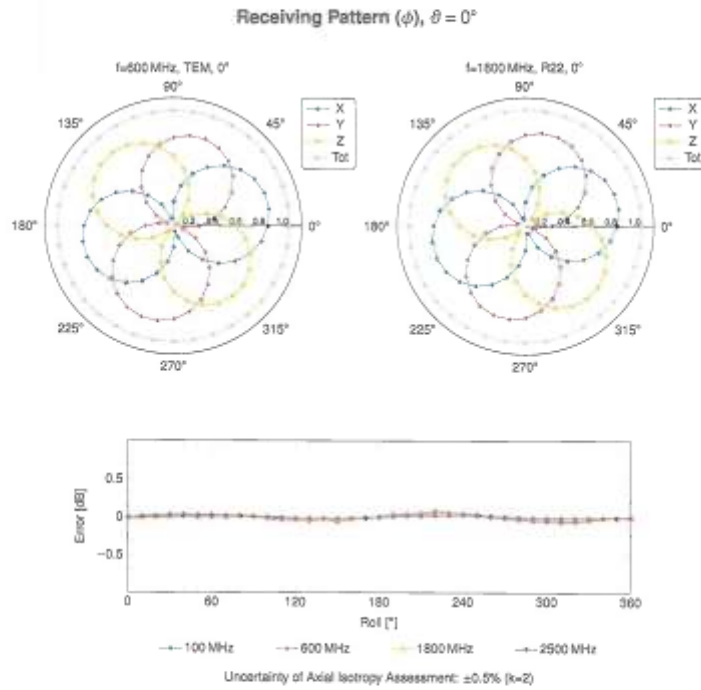


Certificate No: EX-7413\_Oct24

Page 6 of 21

EX30V4 - SN:7413

October 16, 2024

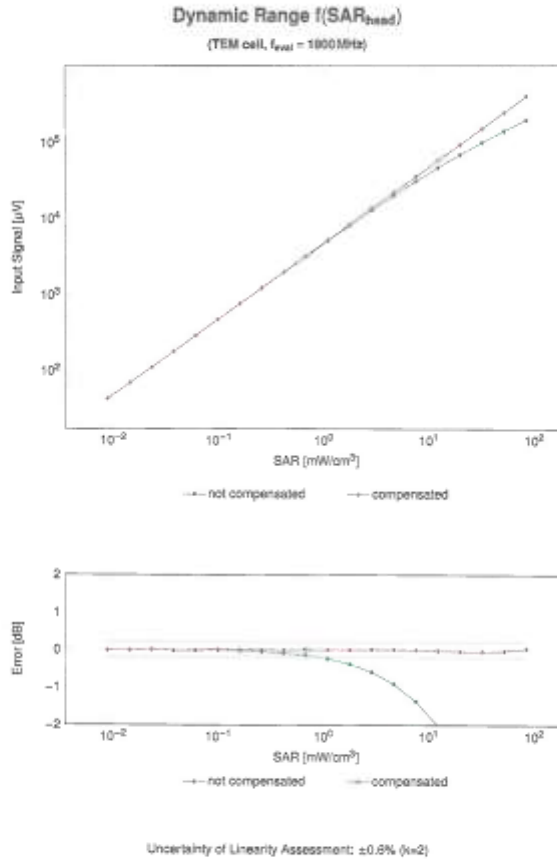


Certificate No: EX-7413\_Oct24

Page 7 of 21

EX3DV4 - SN:7413

October 16, 2024



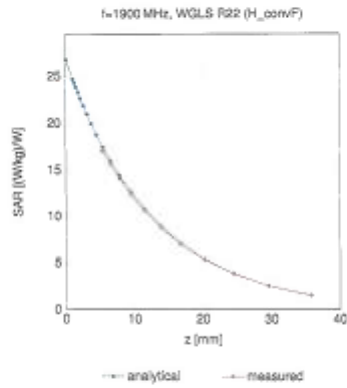
Certificate No: EX-7413\_Oct24

Page 8 of 21

EX3DV4 - SN:7413

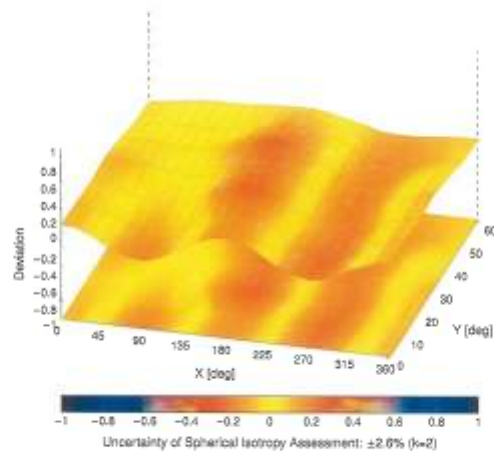
October 16, 2024

### Conversion Factor Assessment



### Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 800$  MHz



Certificate No: EX-7413\_Oct24

Page 9 of 21

EX30V4 - SN:7413

October 16, 2024

**Appendix: Modulation Calibration Parameters**

| UID   | Ref | Communication System Name                        | Group     | PAR (dB) | Unc <sup>o</sup> k=2 |
|-------|-----|--------------------------------------------------|-----------|----------|----------------------|
| 0     |     | CW                                               | CW        | 0.00     | ±4.7                 |
| 10010 | CAR | SAR Validation (Square, 100ms, 10ms)             | Test      | 10.00    | ±0.5                 |
| 10011 | CAC | UMTS-FDD (WCDMA)                                 | WCDMA     | 2.91     | ±0.6                 |
| 10012 | CAB | IEEE 802.11a WiFi 2.4 GHz (DSSS, 1 Mbps)         | WLAN      | 1.87     | ±0.5                 |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)    | WLAN      | 9.46     | ±0.5                 |
| 10021 | DAC | QPSM-FDD (TDMA, QPSK)                            | QSM       | 9.39     | ±0.6                 |
| 10023 | DAC | QPRS-FDD (TDMA, QPSK, TN 0)                      | QSM       | 9.57     | ±0.5                 |
| 10024 | DAC | QPRS-FDD (TDMA, QPSK, TN 0-1)                    | QSM       | 6.56     | ±0.5                 |
| 10025 | DAC | EDGE-FDD (TDMA, QPSK, TN 0)                      | QSM       | 12.60    | ±0.6                 |
| 10026 | DAC | EDGE-FDD (TDMA, QPSK, TN 0-1)                    | QSM       | 9.50     | ±0.5                 |
| 10027 | DAC | QPRS-FDD (TDMA, QPSK, TN 0-1-2)                  | QSM       | 4.80     | ±0.5                 |
| 10028 | DAC | QPRS-FDD (TDMA, QPSK, TN 0-1-2-3)                | QSM       | 3.55     | ±0.5                 |
| 10029 | DAC | EDGE-FDD (TDMA, QPSK, TN 0-1-2)                  | QSM       | 7.79     | ±0.6                 |
| 10030 | CAB | IEEE 802.15.1 Bluetooth (QPSK, DH1)              | Bluetooth | 5.30     | ±0.5                 |
| 10031 | CAB | IEEE 802.15.1 Bluetooth (QPSK, DH2)              | Bluetooth | 1.87     | ±0.5                 |
| 10032 | CAB | IEEE 802.15.1 Bluetooth (QPSK, DH3)              | Bluetooth | 1.19     | ±0.6                 |
| 10033 | CAB | IEEE 802.15.1 Bluetooth (P4+QPSK, DH1)           | Bluetooth | 7.74     | ±0.5                 |
| 10034 | CAB | IEEE 802.15.1 Bluetooth (P4+QPSK, DH2)           | Bluetooth | 4.53     | ±0.5                 |
| 10035 | CAB | IEEE 802.15.1 Bluetooth (P4+QPSK, DH3)           | Bluetooth | 3.83     | ±0.5                 |
| 10036 | CAB | IEEE 802.15.1 Bluetooth (B-QPSK, DH1)            | Bluetooth | 3.51     | ±0.6                 |
| 10037 | CAB | IEEE 802.15.1 Bluetooth (B-QPSK, DH2)            | Bluetooth | 4.77     | ±0.5                 |
| 10038 | CAB | IEEE 802.15.1 Bluetooth (B-QPSK, DH3)            | Bluetooth | 4.15     | ±0.5                 |
| 10039 | CAB | CDMA2000 (1xRTT, FDD)                            | CDMA2000  | 4.57     | ±0.6                 |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA-FDD, P4+QPSK, Fullrate) | AMPS      | 7.79     | ±0.6                 |
| 10044 | CAB | IS-97C/TIA-814 FDD (TDMA, FSK)                   | AMPS      | 0.00     | ±0.5                 |
| 10045 | CAB | DECT (TDD, TDMA-FDD, QPSK, Full Slot, 2x)        | DECT      | 13.85    | ±0.6                 |
| 10049 | CAB | DECT (TDD, TDMA-FDD, QPSK, Double Slot, 1x)      | DECT      | 10.79    | ±0.6                 |
| 10055 | CAB | UMTS-TDD (TD-SCDMA, 1.28 Mbps)                   | TD-SCDMA  | 11.01    | ±0.6                 |
| 10056 | DAC | EDGE-FDD (TDMA, QPSK, TN 0-1-2-3)                | QSM       | 6.56     | ±0.5                 |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)         | WLAN      | 3.13     | ±0.6                 |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)       | WLAN      | 2.83     | ±0.6                 |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)        | WLAN      | 3.60     | ±0.5                 |
| 10062 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 8 Mbps)          | WLAN      | 8.68     | ±0.6                 |
| 10063 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 12 Mbps)         | WLAN      | 8.63     | ±0.6                 |
| 10064 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 12 Mbps)         | WLAN      | 9.09     | ±0.6                 |
| 10065 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 18 Mbps)         | WLAN      | 9.00     | ±0.5                 |
| 10066 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 24 Mbps)         | WLAN      | 9.88     | ±0.6                 |
| 10067 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 30 Mbps)         | WLAN      | 10.12    | ±0.6                 |
| 10068 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 48 Mbps)         | WLAN      | 10.24    | ±0.6                 |
| 10069 | CAB | IEEE 802.11ah WiFi 6 GHz (OFDM, 54 Mbps)         | WLAN      | 10.56    | ±0.6                 |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)    | WLAN      | 9.69     | ±0.6                 |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps)   | WLAN      | 9.68     | ±0.6                 |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps)   | WLAN      | 9.94     | ±0.5                 |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps)   | WLAN      | 10.30    | ±0.5                 |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps)   | WLAN      | 10.77    | ±0.5                 |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps)   | WLAN      | 10.94    | ±0.6                 |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps)   | WLAN      | 11.00    | ±0.6                 |
| 10081 | CAB | CDMA2000 (1xRTT, FDD)                            | CDMA2000  | 3.67     | ±0.5                 |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA-FDD, P4+QPSK, Fullrate) | AMPS      | 4.77     | ±0.5                 |
| 10090 | DAC | QPRS-FDD (TDMA, QPSK, TN 0-4)                    | QSM       | 6.56     | ±0.5                 |
| 10097 | CAC | UMTS-FDD (WCDMA)                                 | WCDMA     | 3.56     | ±0.5                 |
| 10098 | CAC | UMTS-FDD (WCDMA, 3.1 MHz)                        | WCDMA     | 3.56     | ±0.5                 |
| 10099 | DAC | EDGE-FDD (TDMA, QPSK, TN 0-4)                    | QSM       | 9.55     | ±0.5                 |
| 10100 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         | LTE-FDD   | 5.67     | ±0.6                 |
| 10101 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)       | LTE-FDD   | 6.43     | ±0.6                 |
| 10102 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)       | LTE-FDD   | 6.60     | ±0.6                 |
| 10103 | CAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)         | LTE-TDD   | 9.29     | ±0.6                 |
| 10104 | CAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)       | LTE-TDD   | 9.07     | ±0.6                 |
| 10105 | CAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)       | LTE-TDD   | 10.01    | ±0.6                 |
| 10106 | CAB | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)         | LTE-FDD   | 5.80     | ±0.6                 |
| 10109 | CAB | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)       | LTE-FDD   | 6.43     | ±0.6                 |
| 10110 | CAB | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)          | LTE-FDD   | 5.78     | ±0.5                 |
| 10111 | CAB | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)        | LTE-FDD   | 6.44     | ±0.5                 |

Certificate No: EX-7413\_Oct24

Page 10 of 21

EX30V4 - SN:7413

October 16, 2024

| UID   | Rev | Communication System Name                     | Group   | Pass (dB) | Unit <sup>2</sup> k = 2 |
|-------|-----|-----------------------------------------------|---------|-----------|-------------------------|
| 10112 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10MHz, 64-QAM)     | LTE-FDD | 6.99      | ±0.6                    |
| 10113 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)      | LTE-FDD | 6.82      | ±0.6                    |
| 10114 | CAE | IEEE 802.11n (HT Greenfield, 13.5Mbps, BPSK)  | WLAN    | 6.10      | ±0.6                    |
| 10115 | CAE | IEEE 802.11n (HT Greenfield, 81Mbps, 16-QAM)  | WLAN    | 6.96      | ±0.6                    |
| 10116 | CAE | IEEE 802.11n (HT Greenfield, 135Mbps, 64-QAM) | WLAN    | 8.15      | ±0.6                    |
| 10117 | CAE | IEEE 802.11n (HT Mixed, 13.5Mbps, BPSK)       | WLAN    | 6.97      | ±0.6                    |
| 10118 | CAE | IEEE 802.11n (HT Mixed, 81Mbps, 16-QAM)       | WLAN    | 8.99      | ±0.6                    |
| 10119 | CAE | IEEE 802.11n (HT Mixed, 135Mbps, 64-QAM)      | WLAN    | 8.13      | ±0.6                    |
| 10143 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)     | LTE-FDD | 6.99      | ±0.6                    |
| 10141 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)     | LTE-FDD | 6.93      | ±0.6                    |
| 10142 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3MHz, QPSK)        | LTE-FDD | 5.73      | ±0.6                    |
| 10143 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3MHz, 16-QAM)      | LTE-FDD | 6.35      | ±0.6                    |
| 10144 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)      | LTE-FDD | 6.88      | ±0.6                    |
| 10145 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, QPSK)      | LTE-FDD | 5.78      | ±0.6                    |
| 10146 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM)    | LTE-FDD | 6.41      | ±0.6                    |
| 10147 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM)    | LTE-FDD | 6.72      | ±0.6                    |
| 10148 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20MHz, 16-QAM)      | LTE-FDD | 6.42      | ±0.6                    |
| 10150 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)      | LTE-FDD | 8.89      | ±0.6                    |
| 10151 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK)        | LTE-TDD | 9.28      | ±0.6                    |
| 10152 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM)      | LTE-TDD | 9.52      | ±0.6                    |
| 10153 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)      | LTE-TDD | 10.25     | ±0.6                    |
| 10154 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10MHz, QPSK)        | LTE-FDD | 5.75      | ±0.6                    |
| 10155 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10MHz, 16-QAM)      | LTE-FDD | 6.43      | ±0.6                    |
| 10156 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5MHz, QPSK)         | LTE-FDD | 5.76      | ±0.6                    |
| 10157 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)       | LTE-FDD | 6.48      | ±0.6                    |
| 10158 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10MHz, 64-QAM)      | LTE-FDD | 8.62      | ±0.6                    |
| 10159 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5MHz, 64-QAM)       | LTE-FDD | 6.56      | ±0.6                    |
| 10160 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15MHz, QPSK)        | LTE-FDD | 5.82      | ±0.6                    |
| 10161 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15MHz, 16-QAM)      | LTE-FDD | 6.49      | ±0.6                    |
| 10162 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15MHz, 64-QAM)      | LTE-FDD | 6.58      | ±0.6                    |
| 10166 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, QPSK)       | LTE-FDD | 5.49      | ±0.6                    |
| 10167 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM)     | LTE-FDD | 6.21      | ±0.6                    |
| 10168 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM)     | LTE-FDD | 6.70      | ±0.6                    |
| 10169 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20MHz, QPSK)          | LTE-FDD | 5.75      | ±0.6                    |
| 10170 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20MHz, 16-QAM)        | LTE-FDD | 6.93      | ±0.6                    |
| 10171 | AAF | LTE-FDD (SC-FDMA, 1 RB, 20MHz, 64-QAM)        | LTE-FDD | 6.49      | ±0.6                    |
| 10173 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20MHz, QPSK)          | LTE-TDD | 9.21      | ±0.6                    |
| 10173 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM)        | LTE-TDD | 9.40      | ±0.6                    |
| 10174 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM)        | LTE-TDD | 10.35     | ±0.6                    |
| 10175 | CAH | LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)          | LTE-FDD | 5.72      | ±0.6                    |
| 10176 | CAH | LTE-FDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)        | LTE-FDD | 6.50      | ±0.6                    |
| 10177 | CAJ | LTE-FDD (SC-FDMA, 1 RB, 5MHz, QPSK)           | LTE-FDD | 5.75      | ±0.6                    |
| 10178 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)         | LTE-FDD | 6.92      | ±0.6                    |
| 10179 | CAH | LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)        | LTE-FDD | 6.90      | ±0.6                    |
| 10180 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5MHz, 64-QAM)         | LTE-FDD | 6.50      | ±0.6                    |
| 10181 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)          | LTE-FDD | 5.75      | ±0.6                    |
| 10182 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)        | LTE-FDD | 6.92      | ±0.6                    |
| 10183 | AAE | LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)        | LTE-FDD | 6.50      | ±0.6                    |
| 10184 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3MHz, QPSK)           | LTE-FDD | 5.73      | ±0.6                    |
| 10185 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)         | LTE-FDD | 6.51      | ±0.6                    |
| 10186 | AAF | LTE-FDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)         | LTE-FDD | 6.50      | ±0.6                    |
| 10187 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, QPSK)         | LTE-FDD | 5.73      | ±0.6                    |
| 10188 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, 16-QAM)       | LTE-FDD | 6.52      | ±0.6                    |
| 10189 | AAJ | LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, 64-QAM)       | LTE-FDD | 6.50      | ±0.6                    |
| 10193 | CAE | IEEE 802.11n (HT Greenfield, 6.5Mbps, BPSK)   | WLAN    | 6.29      | ±0.6                    |
| 10194 | CAE | IEEE 802.11n (HT Greenfield, 39Mbps, 16-QAM)  | WLAN    | 8.13      | ±0.6                    |
| 10195 | CAE | IEEE 802.11n (HT Greenfield, 65Mbps, 64-QAM)  | WLAN    | 8.21      | ±0.6                    |
| 10196 | CAE | IEEE 802.11n (HT Mixed, 6.5Mbps, BPSK)        | WLAN    | 6.10      | ±0.6                    |
| 10197 | CAE | IEEE 802.11n (HT Mixed, 39Mbps, 16-QAM)       | WLAN    | 8.13      | ±0.6                    |
| 10198 | CAE | IEEE 802.11n (HT Mixed, 65Mbps, 64-QAM)       | WLAN    | 8.27      | ±0.6                    |
| 10200 | CAE | IEEE 802.11n (HT Mixed, 7.2Mbps, BPSK)        | WLAN    | 6.03      | ±0.6                    |
| 10201 | CAE | IEEE 802.11n (HT Mixed, 43.3Mbps, 16-QAM)     | WLAN    | 8.13      | ±0.6                    |
| 10202 | CAE | IEEE 802.11n (HT Mixed, 75.2Mbps, 64-QAM)     | WLAN    | 8.27      | ±0.6                    |
| 10202 | CAE | IEEE 802.11n (HT Mixed, 15Mbps, BPSK)         | WLAN    | 6.06      | ±0.6                    |
| 10203 | CAE | IEEE 802.11n (HT Mixed, 90Mbps, 16-QAM)       | WLAN    | 8.48      | ±0.6                    |
| 10204 | CAE | IEEE 802.11n (HT Mixed, 150Mbps, 64-QAM)      | WLAN    | 8.68      | ±0.6                    |

Certificate No: EX-7413\_Oct24

Page 11 of 21

EXG0V4 - SN-7413

October 16, 2024

| UID   | Rev | Communication System Name                                            | Group    | PAR (dB) | Unc <sup>off</sup> k = 2 |
|-------|-----|----------------------------------------------------------------------|----------|----------|--------------------------|
| 10225 | CAC | UMTS-FDD (HSRPA)                                                     | WCDMA    | 5.97     | ±0.5                     |
| 10226 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)                             | LTE-TDD  | 9.46     | ±0.5                     |
| 10227 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)                             | LTE-TDD  | 10.29    | ±0.5                     |
| 10228 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)                               | LTE-TDD  | 9.32     | ±0.5                     |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)                               | LTE-TDD  | 9.46     | ±0.5                     |
| 10230 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)                               | LTE-TDD  | 10.29    | ±0.5                     |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)                                 | LTE-TDD  | 9.19     | ±0.5                     |
| 10232 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)                               | LTE-TDD  | 9.26     | ±0.5                     |
| 10233 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)                               | LTE-TDD  | 10.29    | ±0.5                     |
| 10234 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)                                 | LTE-TDD  | 9.21     | ±0.5                     |
| 10235 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)                              | LTE-TDD  | 9.43     | ±0.5                     |
| 10236 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)                              | LTE-TDD  | 10.35    | ±0.5                     |
| 10237 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±0.5                     |
| 10238 | CAH | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)                              | LTE-TDD  | 9.48     | ±0.5                     |
| 10239 | CAH | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)                              | LTE-TDD  | 10.25    | ±0.5                     |
| 10240 | CAH | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±0.5                     |
| 10241 | CAH | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)                           | LTE-TDD  | 8.82     | ±0.5                     |
| 10242 | CAH | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)                           | LTE-TDD  | 9.55     | ±0.5                     |
| 10243 | CAH | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)                             | LTE-TDD  | 9.44     | ±0.5                     |
| 10244 | CAH | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-TDD  | 10.06    | ±0.5                     |
| 10245 | CAH | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-TDD  | 10.06    | ±0.5                     |
| 10246 | CAH | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-TDD  | 9.20     | ±0.5                     |
| 10247 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)                             | LTE-TDD  | 9.91     | ±0.5                     |
| 10248 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)                             | LTE-TDD  | 10.06    | ±0.5                     |
| 10249 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)                               | LTE-TDD  | 9.29     | ±0.5                     |
| 10250 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)                            | LTE-TDD  | 9.61     | ±0.5                     |
| 10251 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)                            | LTE-TDD  | 10.17    | ±0.5                     |
| 10252 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)                              | LTE-TDD  | 9.54     | ±0.5                     |
| 10253 | CAH | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)                            | LTE-TDD  | 9.90     | ±0.5                     |
| 10254 | CAH | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)                            | LTE-TDD  | 10.14    | ±0.5                     |
| 10255 | CAH | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)                              | LTE-TDD  | 9.90     | ±0.5                     |
| 10256 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)                          | LTE-TDD  | 9.95     | ±0.5                     |
| 10257 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)                          | LTE-TDD  | 10.09    | ±0.5                     |
| 10258 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)                            | LTE-TDD  | 9.34     | ±0.5                     |
| 10259 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)                            | LTE-TDD  | 9.89     | ±0.5                     |
| 10260 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)                            | LTE-TDD  | 9.87     | ±0.5                     |
| 10261 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)                              | LTE-TDD  | 9.34     | ±0.5                     |
| 10262 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)                            | LTE-TDD  | 9.83     | ±0.5                     |
| 10263 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)                            | LTE-TDD  | 10.19    | ±0.5                     |
| 10264 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)                              | LTE-TDD  | 9.23     | ±0.5                     |
| 10265 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)                           | LTE-TDD  | 9.83     | ±0.5                     |
| 10266 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)                           | LTE-TDD  | 10.27    | ±0.5                     |
| 10267 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)                             | LTE-TDD  | 9.33     | ±0.5                     |
| 10268 | CAH | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)                           | LTE-TDD  | 10.59    | ±0.5                     |
| 10269 | CAH | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)                           | LTE-TDD  | 10.13    | ±0.5                     |
| 10270 | CAH | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                             | LTE-TDD  | 9.58     | ±0.5                     |
| 10274 | CAC | UMTS-FDD (HSRPA, SSS=5, 3GPP R99.1)                                  | WCDMA    | 4.87     | ±0.5                     |
| 10275 | CAC | UMTS-FDD (HSRPA, SSS=5, 3GPP R99.4)                                  | WCDMA    | 3.95     | ±0.5                     |
| 10277 | CAA | PHS (QPSK)                                                           | PHS      | 11.81    | ±0.5                     |
| 10278 | CAA | PHS (QPSK, BW 304 MHz, Roll-off 0.5)                                 | PHS      | 11.81    | ±0.5                     |
| 10279 | CAA | PHS (QPSK, BW 304 MHz, Roll-off 0.36)                                | PHS      | 13.18    | ±0.5                     |
| 10280 | AAB | CDMA2000, RC1, SC8S, Full Rate                                       | CDMA2000 | 3.97     | ±0.5                     |
| 10281 | AAB | CDMA2000, RC3, SC8S, Full Rate                                       | CDMA2000 | 3.45     | ±0.5                     |
| 10282 | AAB | CDMA2000, RC3, SC8S, Full Rate                                       | CDMA2000 | 3.39     | ±0.5                     |
| 10283 | AAB | CDMA2000, RC3, SC8S, Full Rate                                       | CDMA2000 | 3.55     | ±0.5                     |
| 10285 | AAB | CDMA2000, RC1, SC8S, 1/8th Rate 25 ft                                | CDMA2000 | 12.48    | ±0.5                     |
| 10287 | AAB | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-FDD  | 5.61     | ±0.5                     |
| 10288 | AAB | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-FDD  | 5.72     | ±0.5                     |
| 10289 | AAB | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-FDD  | 6.36     | ±0.5                     |
| 10290 | AAB | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-FDD  | 6.60     | ±0.5                     |
| 10301 | AAA | IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, QPSK, PUSC)                 | WIMAX    | 12.05    | ±0.5                     |
| 10302 | AAA | IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | WIMAX    | 12.57    | ±0.5                     |
| 10303 | AAA | IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, 64QAM, PUSC)                | WIMAX    | 12.52    | ±0.5                     |
| 10304 | AAA | IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, 64QAM, PUSC)                | WIMAX    | 11.55    | ±0.5                     |
| 10305 | AAA | IEEE 802.15a WIMAX (20-18, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)   | WIMAX    | 15.34    | ±0.5                     |
| 10306 | AAA | IEEE 802.15a WIMAX (20-18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)   | WIMAX    | 14.67    | ±0.5                     |

Certificate No: EX-7413\_Oct24

Page 12 of 21

EXSDV4 - SN:7413

October 16, 2024

| UID   | Rev | Communication System Name                                                         | Group    | Power (dBm) | Usage # x = 2 |
|-------|-----|-----------------------------------------------------------------------------------|----------|-------------|---------------|
| 10307 | AAA | IEEE 802.11a WMAX (20MHz, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)                  | WMAX     | 14.40       | ±0.6          |
| 10308 | AAA | IEEE 802.11a WMAX (20MHz, 10 ms, 10 MHz, 16QAM, PUSC)                             | WMAX     | 14.40       | ±0.6          |
| 10309 | AAA | IEEE 802.11a WMAX (20MHz, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)              | WMAX     | 14.50       | ±0.6          |
| 10310 | AAA | IEEE 802.11a WMAX (20MHz, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)               | WMAX     | 14.57       | ±0.6          |
| 10311 | AAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                                          | LTE-FDD  | 6.06        | ±0.6          |
| 10313 | AAA | TDEN 1-3                                                                          | TDEN     | 10.51       | ±0.6          |
| 10314 | AAA | TDEN 1-6                                                                          | TDEN     | 13.48       | ±0.6          |
| 10315 | AAE | IEEE 802.11g WiFi 2.4 GHz (DSSS, 1 Mbps, 99% duty cycle)                          | WLAN     | 1.71        | ±0.6          |
| 10316 | AAE | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 5 Mbps, 99% duty cycle)                      | WLAN     | 3.38        | ±0.6          |
| 10317 | AAE | IEEE 802.11g WiFi 2.4 GHz (OFDM, 6 Mbps, 99% duty cycle)                          | WLAN     | 3.38        | ±0.6          |
| 10352 | AAA | Pulse Waveform (200Hz, 10%)                                                       | Generic  | 10.00       | ±0.6          |
| 10353 | AAA | Pulse Waveform (200Hz, 20%)                                                       | Generic  | 9.98        | ±0.6          |
| 10354 | AAA | Pulse Waveform (200Hz, 40%)                                                       | Generic  | 3.68        | ±0.6          |
| 10355 | AAA | Pulse Waveform (200Hz, 60%)                                                       | Generic  | 2.22        | ±0.6          |
| 10356 | AAA | Pulse Waveform (200Hz, 80%)                                                       | Generic  | 0.97        | ±0.6          |
| 10357 | AAA | QPSK Waveform, 1 MHz                                                              | Generic  | 5.10        | ±0.6          |
| 10358 | AAA | QPSK Waveform, 10 MHz                                                             | Generic  | 5.22        | ±0.6          |
| 10359 | AAA | 64-QAM Waveform, 100 kHz                                                          | Generic  | 8.27        | ±0.6          |
| 10360 | AAA | 64-QAM Waveform, 40 MHz                                                           | Generic  | 8.27        | ±0.6          |
| 10400 | AAE | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99% duty cycle)                                | WLAN     | 8.27        | ±0.6          |
| 10401 | AAE | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99% duty cycle)                                | WLAN     | 8.60        | ±0.6          |
| 10402 | AAE | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99% duty cycle)                                | WLAN     | 8.63        | ±0.6          |
| 10403 | AAE | CDMA2000 (1xEV-DO, Rev. 0)                                                        | CDMA2000 | 3.76        | ±0.6          |
| 10404 | AAE | CDMA2000 (1xEV-DO, Rev. A)                                                        | CDMA2000 | 3.77        | ±0.6          |
| 10405 | AAE | CDMA2000, RCS, SOSD, SCHD, Full Rate                                              | CDMA2000 | 5.22        | ±0.6          |
| 10410 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Config=1) | LTE-TDD  | 7.62        | ±0.6          |
| 10416 | AAA | WLAN DCOF, 64-QAM, 40 MHz                                                         | Generic  | 8.64        | ±0.6          |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99% duty cycle)                          | WLAN     | 1.54        | ±0.6          |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99% duty cycle)                      | WLAN     | 8.29        | ±0.6          |
| 10417 | AAE | IEEE 802.11g WiFi 2.4 GHz (OFDM, 6 Mbps, 99% duty cycle)                          | WLAN     | 8.29        | ±0.6          |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 9 Mbps, 99% duty cycle, Long preamble)      | WLAN     | 8.14        | ±0.6          |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 9 Mbps, 99% duty cycle, Short preamble)     | WLAN     | 8.19        | ±0.6          |
| 10422 | AAE | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                      | WLAN     | 0.30        | ±0.6          |
| 10423 | AAE | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                   | WLAN     | 8.47        | ±0.6          |
| 10424 | AAE | IEEE 802.11n (HT Greenfield, 72.5 Mbps, 64-QAM)                                   | WLAN     | 8.40        | ±0.6          |
| 10425 | AAE | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                       | WLAN     | 8.41        | ±0.6          |
| 10426 | AAE | IEEE 802.11n (HT Greenfield, 66 Mbps, 16-QAM)                                     | WLAN     | 8.45        | ±0.6          |
| 10427 | AAE | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                                    | WLAN     | 8.41        | ±0.6          |
| 10430 | AAE | LTE-FDD (OFDMA, 5 MHz, 6-TM 3.1)                                                  | LTE-FDD  | 8.38        | ±0.6          |
| 10431 | AAE | LTE-FDD (OFDMA, 10 MHz, 6-TM 3.1)                                                 | LTE-FDD  | 8.39        | ±0.6          |
| 10432 | AAE | LTE-FDD (OFDMA, 15 MHz, 6-TM 3.1)                                                 | LTE-FDD  | 8.34        | ±0.6          |
| 10433 | AAE | LTE-FDD (OFDMA, 20 MHz, 6-TM 3.1)                                                 | LTE-FDD  | 8.34        | ±0.6          |
| 10434 | AAE | W-CDMA (BS Test Model 1, 64 DPCCH)                                                | WCDMA    | 9.00        | ±0.6          |
| 10435 | AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                    | LTE-TDD  | 7.62        | ±0.6          |
| 10447 | AAE | LTE-FDD (OFDMA, 5 MHz, 6-TM 3.1, Clipping 44%)                                    | LTE-FDD  | 7.50        | ±0.6          |
| 10448 | AAE | LTE-FDD (OFDMA, 10 MHz, 6-TM 3.1, Clipping 44%)                                   | LTE-FDD  | 7.53        | ±0.6          |
| 10449 | AAE | LTE-FDD (OFDMA, 15 MHz, 6-TM 3.1, Clipping 44%)                                   | LTE-FDD  | 7.51        | ±0.6          |
| 10450 | AAE | LTE-FDD (OFDMA, 20 MHz, 6-TM 3.1, Clipping 44%)                                   | LTE-FDD  | 7.49        | ±0.6          |
| 10451 | AAE | W-CDMA (BS Test Model 1, 64 DPCCH, Clipping 44%)                                  | WCDMA    | 7.59        | ±0.6          |
| 10453 | AAE | Wokulien (Square, 10 ms, 1 ms)                                                    | Test     | 10.90       | ±0.6          |
| 10454 | AAE | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99% duty cycle)                               | WLAN     | 8.63        | ±0.6          |
| 10457 | AAE | UMTS-FDD (DC-HSDPA)                                                               | WCDMA    | 8.52        | ±0.6          |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. R, 8 carriers)                                            | CDMA2000 | 9.55        | ±0.6          |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. R, 8 carriers)                                            | CDMA2000 | 9.25        | ±0.6          |
| 10460 | AAE | UMTS-FDD (WCDMA, AMR)                                                             | WCDMA    | 3.39        | ±0.6          |
| 10461 | AAE | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 7.83        | ±0.6          |
| 10462 | AAE | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.33        | ±0.6          |
| 10463 | AAE | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.50        | ±0.6          |
| 10464 | AAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                     | LTE-TDD  | 7.82        | ±0.6          |
| 10465 | AAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 8.33        | ±0.6          |
| 10466 | AAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 8.57        | ±0.6          |
| 10467 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                     | LTE-TDD  | 7.82        | ±0.6          |
| 10468 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 8.32        | ±0.6          |
| 10469 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 8.56        | ±0.6          |
| 10470 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                    | LTE-TDD  | 7.83        | ±0.6          |
| 10471 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 8.32        | ±0.6          |

Certificate No: EX-7413\_Oct24

Page 13 of 21

EX03DV4 - SN:7413

October 16, 2024

| SRD   | Rev | Communication System Name                                            | Group   | Power (dBm) | Unc <sup>1</sup> k = 2 |
|-------|-----|----------------------------------------------------------------------|---------|-------------|------------------------|
| 10472 | AAG | LTE-TDD (SC-FDMA, 1 RB, 18 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57        | ±0.5                   |
| 10473 | AAF | LTE-TDD (SC-FDMA, 1 RB, 18 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       | LTE-TDD | 7.82        | ±0.5                   |
| 10474 | AAF | LTE-TDD (SC-FDMA, 1 RB, 18 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.32        | ±0.5                   |
| 10475 | AAF | LTE-TDD (SC-FDMA, 1 RB, 18 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57        | ±0.5                   |
| 10477 | AAG | LTE-TDD (SC-FDMA, 50% RB, 18 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.32        | ±0.5                   |
| 10478 | AAG | LTE-TDD (SC-FDMA, 1 RB, 18 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57        | ±0.5                   |
| 10479 | AAG | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74        | ±0.5                   |
| 10480 | AAG | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.18        | ±0.5                   |
| 10481 | AAG | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45        | ±0.5                   |
| 10482 | AAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.71        | ±0.5                   |
| 10483 | AAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.29        | ±0.5                   |
| 10484 | AAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.47        | ±0.5                   |
| 10485 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.89        | ±0.5                   |
| 10486 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.33        | ±0.5                   |
| 10487 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.60        | ±0.5                   |
| 10488 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.73        | ±0.5                   |
| 10489 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31        | ±0.5                   |
| 10490 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54        | ±0.5                   |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74        | ±0.5                   |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.41        | ±0.5                   |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.68        | ±0.5                   |
| 10494 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74        | ±0.5                   |
| 10495 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.37        | ±0.5                   |
| 10496 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54        | ±0.5                   |
| 10497 | AAG | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 7.67        | ±0.5                   |
| 10498 | AAG | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.45        | ±0.5                   |
| 10499 | AAG | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68        | ±0.5                   |
| 10500 | AAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.67        | ±0.5                   |
| 10501 | AAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.44        | ±0.5                   |
| 10502 | AAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.62        | ±0.5                   |
| 10503 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.72        | ±0.5                   |
| 10504 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31        | ±0.5                   |
| 10505 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54        | ±0.5                   |
| 10506 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74        | ±0.5                   |
| 10507 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.36        | ±0.5                   |
| 10508 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.55        | ±0.5                   |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.59        | ±0.5                   |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.46        | ±0.5                   |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.51        | ±0.5                   |
| 10512 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.76        | ±0.5                   |
| 10513 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.42        | ±0.5                   |
| 10514 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45        | ±0.5                   |
| 10515 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 5.5 Mbps, 90pc duty cycle)           | WLAN    | 1.58        | ±0.5                   |
| 10516 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.57        | ±0.5                   |
| 10517 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10518 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10519 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10520 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10521 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10522 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10523 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10524 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10525 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10526 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10527 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10528 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10529 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10530 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10531 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10532 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10533 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10534 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10535 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10536 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10537 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10538 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10539 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |
| 10540 | AAG | IEEE 802.11a WIF 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)            | WLAN    | 1.58        | ±0.5                   |

Certificate No: EX-7413\_Oct24

Page 14 of 21

EX3DV4 - SN:7413

October 16, 2024

| STD   | File | Communication System Name                               | Group | PAR (dB) | Uplink k = 2 |
|-------|------|---------------------------------------------------------|-------|----------|--------------|
| 10541 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS7, 56ps duty cycle)       | WLAN  | 8.46     | ±0.5         |
| 10542 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS8, 56ps duty cycle)       | WLAN  | 8.55     | ±0.5         |
| 10543 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS9, 56ps duty cycle)       | WLAN  | 8.65     | ±0.5         |
| 10544 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS10, 56ps duty cycle)      | WLAN  | 8.77     | ±0.5         |
| 10545 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS11, 56ps duty cycle)      | WLAN  | 8.85     | ±0.5         |
| 10546 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS12, 56ps duty cycle)      | WLAN  | 8.95     | ±0.5         |
| 10547 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS13, 56ps duty cycle)      | WLAN  | 9.09     | ±0.5         |
| 10548 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS14, 56ps duty cycle)      | WLAN  | 9.37     | ±0.5         |
| 10550 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS15, 56ps duty cycle)      | WLAN  | 9.35     | ±0.5         |
| 10551 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS16, 56ps duty cycle)      | WLAN  | 9.50     | ±0.5         |
| 10552 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS17, 56ps duty cycle)      | WLAN  | 9.43     | ±0.5         |
| 10553 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS18, 56ps duty cycle)      | WLAN  | 9.45     | ±0.5         |
| 10554 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS19, 56ps duty cycle)      | WLAN  | 9.48     | ±0.5         |
| 10555 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS20, 56ps duty cycle)      | WLAN  | 9.47     | ±0.5         |
| 10556 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS21, 56ps duty cycle)      | WLAN  | 9.53     | ±0.5         |
| 10557 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS22, 56ps duty cycle)      | WLAN  | 9.52     | ±0.5         |
| 10558 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS23, 56ps duty cycle)      | WLAN  | 9.51     | ±0.5         |
| 10559 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS24, 56ps duty cycle)      | WLAN  | 9.73     | ±0.5         |
| 10560 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS25, 56ps duty cycle)      | WLAN  | 9.56     | ±0.5         |
| 10561 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS26, 56ps duty cycle)      | WLAN  | 9.58     | ±0.5         |
| 10562 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS27, 56ps duty cycle)      | WLAN  | 9.77     | ±0.5         |
| 10563 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS28, 56ps duty cycle)      | WLAN  | 9.25     | ±0.5         |
| 10564 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS29, 56ps duty cycle)      | WLAN  | 9.45     | ±0.5         |
| 10565 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS30, 56ps duty cycle)      | WLAN  | 9.13     | ±0.5         |
| 10566 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS31, 56ps duty cycle)      | WLAN  | 9.00     | ±0.5         |
| 10567 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS32, 56ps duty cycle)      | WLAN  | 8.37     | ±0.5         |
| 10568 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS33, 56ps duty cycle)      | WLAN  | 8.10     | ±0.5         |
| 10569 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS34, 56ps duty cycle)      | WLAN  | 8.30     | ±0.5         |
| 10570 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS35, 56ps duty cycle)      | WLAN  | 1.99     | ±0.5         |
| 10571 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS36, 56ps duty cycle)      | WLAN  | 1.99     | ±0.5         |
| 10572 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS37, 56ps duty cycle)      | WLAN  | 1.95     | ±0.5         |
| 10573 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS38, 56ps duty cycle)      | WLAN  | 1.95     | ±0.5         |
| 10574 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS39, 56ps duty cycle)      | WLAN  | 0.50     | ±0.5         |
| 10575 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS40, 56ps duty cycle)      | WLAN  | 0.50     | ±0.5         |
| 10576 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS41, 56ps duty cycle)      | WLAN  | 0.60     | ±0.5         |
| 10577 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS42, 56ps duty cycle)      | WLAN  | 0.70     | ±0.5         |
| 10578 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS43, 56ps duty cycle)      | WLAN  | 0.49     | ±0.5         |
| 10579 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS44, 56ps duty cycle)      | WLAN  | 0.35     | ±0.5         |
| 10580 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS45, 56ps duty cycle)      | WLAN  | 0.70     | ±0.5         |
| 10581 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS46, 56ps duty cycle)      | WLAN  | 0.35     | ±0.5         |
| 10582 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS47, 56ps duty cycle)      | WLAN  | 0.47     | ±0.5         |
| 10583 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS48, 56ps duty cycle)      | WLAN  | 0.39     | ±0.5         |
| 10584 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS49, 56ps duty cycle)      | WLAN  | 0.60     | ±0.5         |
| 10585 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS50, 56ps duty cycle)      | WLAN  | 0.70     | ±0.5         |
| 10586 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS51, 56ps duty cycle)      | WLAN  | 0.44     | ±0.5         |
| 10587 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS52, 56ps duty cycle)      | WLAN  | 0.34     | ±0.5         |
| 10588 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS53, 56ps duty cycle)      | WLAN  | 0.75     | ±0.5         |
| 10589 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS54, 56ps duty cycle)      | WLAN  | 0.35     | ±0.5         |
| 10590 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS55, 56ps duty cycle)      | WLAN  | 0.67     | ±0.5         |
| 10591 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 56ps duty cycle)  | WLAN  | 8.63     | ±0.5         |
| 10592 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 56ps duty cycle)  | WLAN  | 8.75     | ±0.5         |
| 10593 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 56ps duty cycle)  | WLAN  | 8.54     | ±0.5         |
| 10594 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 56ps duty cycle)  | WLAN  | 8.74     | ±0.5         |
| 10595 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 56ps duty cycle)  | WLAN  | 8.74     | ±0.5         |
| 10596 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 56ps duty cycle)  | WLAN  | 8.71     | ±0.5         |
| 10597 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 56ps duty cycle)  | WLAN  | 8.72     | ±0.5         |
| 10598 | AAD  | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 56ps duty cycle)  | WLAN  | 8.55     | ±0.5         |
| 10599 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS8, 56ps duty cycle)  | WLAN  | 8.75     | ±0.5         |
| 10600 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS9, 56ps duty cycle)  | WLAN  | 8.66     | ±0.5         |
| 10601 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS10, 56ps duty cycle) | WLAN  | 8.69     | ±0.5         |
| 10602 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS11, 56ps duty cycle) | WLAN  | 8.94     | ±0.5         |
| 10603 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS12, 56ps duty cycle) | WLAN  | 9.05     | ±0.5         |
| 10604 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS13, 56ps duty cycle) | WLAN  | 8.76     | ±0.5         |
| 10605 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS14, 56ps duty cycle) | WLAN  | 8.97     | ±0.5         |
| 10606 | AAD  | IEEE 802.11n (HT Mixed, 40 MHz, MCS15, 56ps duty cycle) | WLAN  | 8.60     | ±0.5         |
| 10607 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS16, 56ps duty cycle)      | WLAN  | 8.64     | ±0.5         |
| 10608 | AAD  | IEEE 802.11ac WPI (40 MHz, MCS17, 56ps duty cycle)      | WLAN  | 8.77     | ±0.5         |

Certificate No: EX-7413\_Oct24

Page 15 of 21

EX3DV4 - SN:7413

October 16, 2024

| UID   | Rev | Communication System Name                         | Group | PAR (dB) | Unc <sup>a</sup> A = 2 |
|-------|-----|---------------------------------------------------|-------|----------|------------------------|
| 10008 | AAD | IEEE 802.11ac WFI (20MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.57     | ±0.6                   |
| 10010 | AAD | IEEE 802.11ac WFI (20MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.78     | ±0.6                   |
| 10011 | AAD | IEEE 802.11ac WFI (20MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.70     | ±0.6                   |
| 10013 | AAD | IEEE 802.11ac WFI (20MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.77     | ±0.6                   |
| 10015 | AAD | IEEE 802.11ac WFI (20MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.84     | ±0.6                   |
| 10014 | AAD | IEEE 802.11ac WFI (20MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.89     | ±0.6                   |
| 10015 | AAD | IEEE 802.11ac WFI (20MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.92     | ±0.6                   |
| 10016 | AAD | IEEE 802.11ac WFI (20MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.95     | ±0.6                   |
| 10017 | AAD | IEEE 802.11ac WFI (20MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.92     | ±0.6                   |
| 10018 | AAD | IEEE 802.11ac WFI (20MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.91     | ±0.6                   |
| 10019 | AAD | IEEE 802.11ac WFI (20MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.98     | ±0.6                   |
| 10020 | AAD | IEEE 802.11ac WFI (20MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.99     | ±0.6                   |
| 10021 | AAD | IEEE 802.11ac WFI (20MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.97     | ±0.6                   |
| 10022 | AAD | IEEE 802.11ac WFI (20MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.77     | ±0.6                   |
| 10023 | AAD | IEEE 802.11ac WFI (20MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.68     | ±0.6                   |
| 10024 | AAD | IEEE 802.11ac WFI (20MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.82     | ±0.6                   |
| 10024 | AAD | IEEE 802.11ac WFI (20MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.90     | ±0.6                   |
| 10025 | AAD | IEEE 802.11ac WFI (20MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.90     | ±0.6                   |
| 10026 | AAD | IEEE 802.11ac WFI (20MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.93     | ±0.6                   |
| 10027 | AAD | IEEE 802.11ac WFI (20MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.93     | ±0.6                   |
| 10028 | AAD | IEEE 802.11ac WFI (20MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.71     | ±0.6                   |
| 10029 | AAD | IEEE 802.11ac WFI (20MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.85     | ±0.6                   |
| 10030 | AAD | IEEE 802.11ac WFI (20MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.72     | ±0.6                   |
| 10031 | AAD | IEEE 802.11ac WFI (20MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.81     | ±0.6                   |
| 10032 | AAD | IEEE 802.11ac WFI (20MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.74     | ±0.6                   |
| 10033 | AAD | IEEE 802.11ac WFI (20MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.83     | ±0.6                   |
| 10034 | AAD | IEEE 802.11ac WFI (20MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.80     | ±0.6                   |
| 10035 | AAD | IEEE 802.11ac WFI (20MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.81     | ±0.6                   |
| 10036 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 8.83     | ±0.6                   |
| 10037 | AAD | IEEE 802.11ac WFI (160MHz, MCS1, 90pc duty cycle) | WLAN  | 8.79     | ±0.6                   |
| 10038 | AAD | IEEE 802.11ac WFI (160MHz, MCS2, 90pc duty cycle) | WLAN  | 8.66     | ±0.6                   |
| 10039 | AAD | IEEE 802.11ac WFI (160MHz, MCS3, 90pc duty cycle) | WLAN  | 8.85     | ±0.6                   |
| 10040 | AAD | IEEE 802.11ac WFI (160MHz, MCS4, 90pc duty cycle) | WLAN  | 8.96     | ±0.6                   |
| 10041 | AAD | IEEE 802.11ac WFI (160MHz, MCS5, 90pc duty cycle) | WLAN  | 9.06     | ±0.6                   |
| 10042 | AAD | IEEE 802.11ac WFI (160MHz, MCS6, 90pc duty cycle) | WLAN  | 9.06     | ±0.6                   |
| 10043 | AAD | IEEE 802.11ac WFI (160MHz, MCS7, 90pc duty cycle) | WLAN  | 8.89     | ±0.6                   |
| 10044 | AAD | IEEE 802.11ac WFI (160MHz, MCS8, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10045 | AAD | IEEE 802.11ac WFI (160MHz, MCS9, 90pc duty cycle) | WLAN  | 9.11     | ±0.6                   |
| 10046 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10047 | AAD | IEEE 802.11ac WFI (160MHz, MCS1, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10048 | AAD | IEEE 802.11ac WFI (160MHz, MCS2, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10049 | AAD | IEEE 802.11ac WFI (160MHz, MCS3, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10050 | AAD | IEEE 802.11ac WFI (160MHz, MCS4, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10051 | AAD | IEEE 802.11ac WFI (160MHz, MCS5, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10052 | AAD | IEEE 802.11ac WFI (160MHz, MCS6, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10053 | AAD | IEEE 802.11ac WFI (160MHz, MCS7, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10054 | AAD | IEEE 802.11ac WFI (160MHz, MCS8, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10055 | AAD | IEEE 802.11ac WFI (160MHz, MCS9, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10056 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10057 | AAD | IEEE 802.11ac WFI (160MHz, MCS1, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10058 | AAD | IEEE 802.11ac WFI (160MHz, MCS2, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10059 | AAD | IEEE 802.11ac WFI (160MHz, MCS3, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10060 | AAD | IEEE 802.11ac WFI (160MHz, MCS4, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10061 | AAD | IEEE 802.11ac WFI (160MHz, MCS5, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10062 | AAD | IEEE 802.11ac WFI (160MHz, MCS6, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10063 | AAD | IEEE 802.11ac WFI (160MHz, MCS7, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10064 | AAD | IEEE 802.11ac WFI (160MHz, MCS8, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10065 | AAD | IEEE 802.11ac WFI (160MHz, MCS9, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10066 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10067 | AAD | IEEE 802.11ac WFI (160MHz, MCS1, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10068 | AAD | IEEE 802.11ac WFI (160MHz, MCS2, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10069 | AAD | IEEE 802.11ac WFI (160MHz, MCS3, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10070 | AAD | IEEE 802.11ac WFI (160MHz, MCS4, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10071 | AAD | IEEE 802.11ac WFI (160MHz, MCS5, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10072 | AAD | IEEE 802.11ac WFI (160MHz, MCS6, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10073 | AAD | IEEE 802.11ac WFI (160MHz, MCS7, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10074 | AAD | IEEE 802.11ac WFI (160MHz, MCS8, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10075 | AAD | IEEE 802.11ac WFI (160MHz, MCS9, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10076 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10077 | AAD | IEEE 802.11ac WFI (160MHz, MCS1, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10078 | AAD | IEEE 802.11ac WFI (160MHz, MCS2, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10079 | AAD | IEEE 802.11ac WFI (160MHz, MCS3, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10080 | AAD | IEEE 802.11ac WFI (160MHz, MCS4, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10081 | AAD | IEEE 802.11ac WFI (160MHz, MCS5, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10082 | AAD | IEEE 802.11ac WFI (160MHz, MCS6, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10083 | AAD | IEEE 802.11ac WFI (160MHz, MCS7, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10084 | AAD | IEEE 802.11ac WFI (160MHz, MCS8, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10085 | AAD | IEEE 802.11ac WFI (160MHz, MCS9, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |
| 10086 | AAD | IEEE 802.11ac WFI (160MHz, MCS0, 90pc duty cycle) | WLAN  | 9.05     | ±0.6                   |

Certificate No: EX-7413\_Oct24

Page 16 of 21

EX30V4 - SN:7413

October 16, 2024

| UID   | Rev | Communication System Name                      | Group | PAR (dB) | Use <sup>1</sup> k = 2 |
|-------|-----|------------------------------------------------|-------|----------|------------------------|
| 10687 | AAC | IEEE 802.11ax (20 MHz, MCS4, 80pc duty cycle)  | WLAN  | 8.45     | ±0.5                   |
| 10688 | AAC | IEEE 802.11ax (20 MHz, MCS6, 80pc duty cycle)  | WLAN  | 8.29     | ±0.5                   |
| 10689 | AAC | IEEE 802.11ax (20 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.55     | ±0.5                   |
| 10690 | AAC | IEEE 802.11ax (20 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.39     | ±0.5                   |
| 10691 | AAC | IEEE 802.11ax (20 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.25     | ±0.5                   |
| 10692 | AAC | IEEE 802.11ax (20 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.29     | ±0.5                   |
| 10693 | AAC | IEEE 802.11ax (20 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.25     | ±0.5                   |
| 10694 | AAC | IEEE 802.11ax (20 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.57     | ±0.5                   |
| 10695 | AAC | IEEE 802.11ax (40 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.78     | ±0.5                   |
| 10696 | AAC | IEEE 802.11ax (40 MHz, MCS1, 80pc duty cycle)  | WLAN  | 8.51     | ±0.5                   |
| 10697 | AAC | IEEE 802.11ax (40 MHz, MCS2, 80pc duty cycle)  | WLAN  | 8.61     | ±0.5                   |
| 10698 | AAC | IEEE 802.11ax (40 MHz, MCS3, 80pc duty cycle)  | WLAN  | 8.88     | ±0.5                   |
| 10699 | AAC | IEEE 802.11ax (40 MHz, MCS4, 80pc duty cycle)  | WLAN  | 8.62     | ±0.5                   |
| 10700 | AAC | IEEE 802.11ax (40 MHz, MCS5, 80pc duty cycle)  | WLAN  | 8.73     | ±0.5                   |
| 10701 | AAC | IEEE 802.11ax (40 MHz, MCS6, 80pc duty cycle)  | WLAN  | 8.68     | ±0.5                   |
| 10702 | AAC | IEEE 802.11ax (40 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.70     | ±0.5                   |
| 10703 | AAC | IEEE 802.11ax (40 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.62     | ±0.5                   |
| 10704 | AAC | IEEE 802.11ax (40 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.56     | ±0.5                   |
| 10705 | AAC | IEEE 802.11ax (40 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.69     | ±0.5                   |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.66     | ±0.5                   |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS5, 80pc duty cycle)  | WLAN  | 8.30     | ±0.5                   |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS6, 80pc duty cycle)  | WLAN  | 8.55     | ±0.5                   |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.33     | ±0.5                   |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.39     | ±0.5                   |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.67     | ±0.5                   |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.33     | ±0.5                   |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.36     | ±0.5                   |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.26     | ±0.5                   |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.45     | ±0.5                   |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.30     | ±0.5                   |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.48     | ±0.5                   |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.34     | ±0.5                   |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS1, 80pc duty cycle)  | WLAN  | 8.81     | ±0.5                   |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS2, 80pc duty cycle)  | WLAN  | 8.87     | ±0.5                   |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS3, 80pc duty cycle)  | WLAN  | 8.78     | ±0.5                   |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS4, 80pc duty cycle)  | WLAN  | 8.55     | ±0.5                   |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS5, 80pc duty cycle)  | WLAN  | 8.75     | ±0.5                   |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS6, 80pc duty cycle)  | WLAN  | 8.80     | ±0.5                   |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.74     | ±0.5                   |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.79     | ±0.5                   |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.66     | ±0.5                   |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.65     | ±0.5                   |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.64     | ±0.5                   |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS1, 80pc duty cycle)  | WLAN  | 8.67     | ±0.5                   |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS2, 80pc duty cycle)  | WLAN  | 8.42     | ±0.5                   |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS3, 80pc duty cycle)  | WLAN  | 8.46     | ±0.5                   |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS4, 80pc duty cycle)  | WLAN  | 8.40     | ±0.5                   |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS5, 80pc duty cycle)  | WLAN  | 8.26     | ±0.5                   |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS6, 80pc duty cycle)  | WLAN  | 8.38     | ±0.5                   |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS7, 80pc duty cycle)  | WLAN  | 8.27     | ±0.5                   |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS8, 80pc duty cycle)  | WLAN  | 8.36     | ±0.5                   |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS9, 80pc duty cycle)  | WLAN  | 8.42     | ±0.5                   |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS10, 80pc duty cycle) | WLAN  | 8.20     | ±0.5                   |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS11, 80pc duty cycle) | WLAN  | 8.48     | ±0.5                   |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS1, 80pc duty cycle)  | WLAN  | 8.40     | ±0.5                   |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS2, 80pc duty cycle)  | WLAN  | 8.49     | ±0.5                   |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle) | WLAN  | 8.94     | ±0.5                   |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle) | WLAN  | 9.16     | ±0.5                   |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle) | WLAN  | 8.93     | ±0.5                   |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle) | WLAN  | 9.11     | ±0.5                   |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle) | WLAN  | 8.94     | ±0.5                   |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle) | WLAN  | 8.99     | ±0.5                   |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle) | WLAN  | 8.90     | ±0.5                   |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle) | WLAN  | 8.79     | ±0.5                   |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle) | WLAN  | 8.82     | ±0.5                   |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle) | WLAN  | 8.81     | ±0.5                   |

Certificate No: EX-7413\_Oct24

Page 17 of 21

EX3DV4 - SN:7413

October 16, 2024

| UID   | Rev | Communication System Name                       | Group         | PAR (dB) | Unc <sup>1</sup> k = 2 |
|-------|-----|-------------------------------------------------|---------------|----------|------------------------|
| 10763 | AAC | IEEE 802.11a (160 MHz, MCS10, 90pc duty cycle)  | WLAN          | 9.00     | ±0.0                   |
| 10764 | AAC | IEEE 802.11a (160 MHz, MCS11, 90pc duty cycle)  | WLAN          | 8.54     | ±0.0                   |
| 10765 | AAC | IEEE 802.11a (160 MHz, MCS0, 90pc duty cycle)   | WLAN          | 8.64     | ±0.0                   |
| 10766 | AAC | IEEE 802.11a (160 MHz, MCS1, 90pc duty cycle)   | WLAN          | 8.77     | ±0.0                   |
| 10767 | AAC | IEEE 802.11a (160 MHz, MCS2, 90pc duty cycle)   | WLAN          | 8.77     | ±0.0                   |
| 10768 | AAC | IEEE 802.11a (160 MHz, MCS3, 90pc duty cycle)   | WLAN          | 8.68     | ±0.0                   |
| 10769 | AAC | IEEE 802.11a (160 MHz, MCS4, 90pc duty cycle)   | WLAN          | 8.58     | ±0.0                   |
| 10760 | AAC | IEEE 802.11a (160 MHz, MCS5, 90pc duty cycle)   | WLAN          | 8.48     | ±0.0                   |
| 10761 | AAC | IEEE 802.11a (160 MHz, MCS6, 90pc duty cycle)   | WLAN          | 8.58     | ±0.0                   |
| 10762 | AAC | IEEE 802.11a (160 MHz, MCS7, 90pc duty cycle)   | WLAN          | 8.48     | ±0.0                   |
| 10763 | AAC | IEEE 802.11a (160 MHz, MCS8, 90pc duty cycle)   | WLAN          | 8.53     | ±0.0                   |
| 10764 | AAC | IEEE 802.11a (160 MHz, MCS9, 90pc duty cycle)   | WLAN          | 8.54     | ±0.0                   |
| 10765 | AAC | IEEE 802.11a (160 MHz, MCS10, 90pc duty cycle)  | WLAN          | 8.54     | ±0.0                   |
| 10766 | AAC | IEEE 802.11a (160 MHz, MCS11, 90pc duty cycle)  | WLAN          | 8.51     | ±0.0                   |
| 10767 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)      | 5G NR FR1 TDD | 7.56     | ±0.0                   |
| 10768 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)      | 5G NR FR1 TDD | 8.01     | ±0.0                   |
| 10769 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.01     | ±0.0                   |
| 10770 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.00     | ±0.0                   |
| 10771 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.06     | ±0.0                   |
| 10772 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.25     | ±0.0                   |
| 10773 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.00     | ±0.0                   |
| 10774 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 8.02     | ±0.0                   |
| 10775 | AAC | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.31     | ±0.0                   |
| 10776 | AAC | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.30     | ±0.0                   |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.30     | ±0.0                   |
| 10778 | AAC | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.42     | ±0.0                   |
| 10780 | AAC | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.38     | ±0.0                   |
| 10781 | AAC | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.30     | ±0.0                   |
| 10782 | AAC | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.43     | ±0.0                   |
| 10783 | AAC | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.31     | ±0.0                   |
| 10784 | AAC | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.29     | ±0.0                   |
| 10785 | AAC | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.40     | ±0.0                   |
| 10786 | AAC | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.35     | ±0.0                   |
| 10787 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.44     | ±0.0                   |
| 10788 | AAC | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.39     | ±0.0                   |
| 10789 | AAC | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.37     | ±0.0                   |
| 10790 | AAC | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.39     | ±0.0                   |
| 10791 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 7.83     | ±0.0                   |
| 10792 | AAC | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.92     | ±0.0                   |
| 10793 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.95     | ±0.0                   |
| 10794 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.90     | ±0.0                   |
| 10795 | AAC | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.94     | ±0.0                   |
| 10796 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.82     | ±0.0                   |
| 10797 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 8.01     | ±0.0                   |
| 10798 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.99     | ±0.0                   |
| 10799 | AAC | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.93     | ±0.0                   |
| 10800 | AAC | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.89     | ±0.0                   |
| 10801 | AAC | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.87     | ±0.0                   |
| 10802 | AAC | 5G NR (CP-OFDM, 1 RB, 120 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.90     | ±0.0                   |
| 10803 | AAC | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10804 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.37     | ±0.0                   |
| 10805 | AAC | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10806 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10807 | AAC | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10808 | AAC | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.35     | ±0.0                   |
| 10809 | AAC | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10810 | AAC | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.35     | ±0.0                   |
| 10811 | AAC | 5G NR (CP-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.35     | ±0.0                   |
| 10812 | AAC | 5G NR (CP-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.34     | ±0.0                   |
| 10813 | AAC | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.33     | ±0.0                   |
| 10814 | AAC | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.33     | ±0.0                   |
| 10815 | AAC | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.33     | ±0.0                   |
| 10816 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41     | ±0.0                   |
| 10817 | AAC | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41     | ±0.0                   |
| 10818 | AAC | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.35     | ±0.0                   |
| 10819 | AAC | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.33     | ±0.0                   |
| 10820 | AAC | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41     | ±0.0                   |
| 10821 | AAC | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.42     | ±0.0                   |
| 10822 | AAC | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43     | ±0.0                   |
| 10823 | AAC | 5G NR (CP-OFDM, 100% RB, 120 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43     | ±0.0                   |

Certificate No: EX-7413\_0024

Page 18 of 21

EX3DV4 - SN:7413

October 18, 2024

| UID   | Rev | Communication System Name                            | Group         | RAIR (dB) | Unc <sup>h</sup> k = 2 |
|-------|-----|------------------------------------------------------|---------------|-----------|------------------------|
| 10829 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)         | 5G NR FR1 TDD | 8.40      | ±0.6                   |
| 10830 | AAF | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.85      | ±0.6                   |
| 10831 | AAF | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.73      | ±0.6                   |
| 10832 | AAF | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.74      | ±0.6                   |
| 10833 | AAF | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.70      | ±0.6                   |
| 10834 | AAF | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.75      | ±0.6                   |
| 10835 | AAF | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.70      | ±0.6                   |
| 10836 | AAF | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.66      | ±0.6                   |
| 10837 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.66      | ±0.6                   |
| 10839 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.70      | ±0.6                   |
| 10840 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)          | 5G NR FR1 TDD | 7.67      | ±0.6                   |
| 10841 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)         | 5G NR FR1 TDD | 7.71      | ±0.6                   |
| 10843 | AAF | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.40      | ±0.6                   |
| 10844 | AAF | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.34      | ±0.6                   |
| 10845 | AAF | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.41      | ±0.6                   |
| 10854 | AAF | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34      | ±0.6                   |
| 10855 | AAF | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.35      | ±0.6                   |
| 10856 | AAF | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37      | ±0.6                   |
| 10857 | AAF | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.35      | ±0.6                   |
| 10858 | AAF | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.35      | ±0.6                   |
| 10859 | AAF | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34      | ±0.6                   |
| 10860 | AAF | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41      | ±0.6                   |
| 10861 | AAF | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.40      | ±0.6                   |
| 10863 | AAF | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41      | ±0.6                   |
| 10864 | AAF | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37      | ±0.6                   |
| 10865 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)      | 5G NR FR1 TDD | 8.41      | ±0.6                   |
| 10866 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)         | 5G NR FR1 TDD | 5.68      | ±0.6                   |
| 10868 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.69      | ±0.6                   |
| 10869 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 5.75      | ±0.6                   |
| 10870 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.86      | ±0.6                   |
| 10871 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 5.75      | ±0.6                   |
| 10872 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.69      | ±0.6                   |
| 10873 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 4.61      | ±0.6                   |
| 10874 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 5.68      | ±0.6                   |
| 10875 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)        | 5G NR FR2 TDD | 7.78      | ±0.6                   |
| 10876 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 8.36      | ±0.6                   |
| 10877 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)       | 5G NR FR2 TDD | 7.66      | ±0.6                   |
| 10878 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 8.41      | ±0.6                   |
| 10879 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)       | 5G NR FR2 TDD | 8.12      | ±0.6                   |
| 10880 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 8.36      | ±0.6                   |
| 10881 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 5.75      | ±0.6                   |
| 10882 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 5.66      | ±0.6                   |
| 10883 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 6.27      | ±0.6                   |
| 10884 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 6.55      | ±0.6                   |
| 10885 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 6.61      | ±0.6                   |
| 10886 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 6.65      | ±0.6                   |
| 10887 | AAF | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)         | 5G NR FR2 TDD | 7.78      | ±0.6                   |
| 10888 | AAF | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 8.38      | ±0.6                   |
| 10889 | AAF | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)        | 5G NR FR2 TDD | 8.02      | ±0.6                   |
| 10890 | AAF | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 8.40      | ±0.6                   |
| 10891 | AAF | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)        | 5G NR FR2 TDD | 8.13      | ±0.6                   |
| 10892 | AAF | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 8.41      | ±0.6                   |
| 10897 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)        | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10898 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67      | ±0.6                   |
| 10899 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67      | ±0.6                   |
| 10900 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10901 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10902 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10903 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10904 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10905 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.66      | ±0.6                   |
| 10906 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.76      | ±0.6                   |
| 10907 | AAF | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.93      | ±0.6                   |
| 10908 | AAF | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93      | ±0.6                   |
| 10909 | AAF | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.95      | ±0.6                   |
| 10910 | AAF | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93      | ±0.6                   |

Certificate No: EX-7413\_Oct24

Page 18 of 21

EX3DV4 - SN:7413

October 16, 2024

| QID   | Rev | Communication System Name                          | Group         | Power (dBm) | Unc <sup>1</sup> k=2 |
|-------|-----|----------------------------------------------------|---------------|-------------|----------------------|
| 10211 | AAB | SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.92        | ±0.8                 |
| 10212 | AAC | SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10213 | AAD | SG NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10214 | AAD | SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.85        | ±0.8                 |
| 10215 | AAD | SG NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.83        | ±0.8                 |
| 10216 | AAD | SG NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.87        | ±0.8                 |
| 10217 | AAD | SG NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.94        | ±0.8                 |
| 10218 | AAC | SG NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)   | SG NR FRI TDD | 5.85        | ±0.8                 |
| 10219 | AAC | SG NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.85        | ±0.8                 |
| 10220 | AAB | SG NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.87        | ±0.8                 |
| 10221 | AAC | SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10222 | AAB | SG NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.82        | ±0.8                 |
| 10223 | AAC | SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10224 | AAD | SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10225 | AAC | SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.85        | ±0.8                 |
| 10226 | AAD | SG NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10227 | AAD | SG NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)  | SG NR FRI TDD | 5.84        | ±0.8                 |
| 10228 | AAD | SG NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)      | SG NR FRI FDD | 5.52        | ±0.8                 |
| 10229 | AAD | SG NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.52        | ±0.8                 |
| 10230 | AAC | SG NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.52        | ±0.8                 |
| 10231 | AAD | SG NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.51        | ±0.8                 |
| 10232 | AAD | SG NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.51        | ±0.8                 |
| 10233 | AAC | SG NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.51        | ±0.8                 |
| 10234 | AAC | SG NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.51        | ±0.8                 |
| 10235 | AAD | SG NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)     | SG NR FRI FDD | 5.51        | ±0.8                 |
| 10236 | AAD | SG NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)    | SG NR FRI FDD | 5.90        | ±0.8                 |
| 10237 | AAD | SG NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.77        | ±0.8                 |
| 10238 | AAC | SG NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.90        | ±0.8                 |
| 10239 | AAC | SG NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.82        | ±0.8                 |
| 10240 | AAC | SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.85        | ±0.8                 |
| 10241 | AAC | SG NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.83        | ±0.8                 |
| 10242 | AAC | SG NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.85        | ±0.8                 |
| 10243 | AAD | SG NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.85        | ±0.8                 |
| 10244 | AAD | SG NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)   | SG NR FRI FDD | 5.81        | ±0.8                 |
| 10245 | AAD | SG NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.85        | ±0.8                 |
| 10246 | AAC | SG NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.83        | ±0.8                 |
| 10247 | AAC | SG NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.87        | ±0.8                 |
| 10248 | AAC | SG NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.84        | ±0.8                 |
| 10249 | AAC | SG NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.87        | ±0.8                 |
| 10250 | AAC | SG NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.84        | ±0.8                 |
| 10251 | AAD | SG NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)  | SG NR FRI FDD | 5.82        | ±0.8                 |
| 10252 | AAA | SG NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)  | SG NR FRI FDD | 8.25        | ±0.8                 |
| 10253 | AAA | SG NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.15        | ±0.8                 |
| 10254 | AAA | SG NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.23        | ±0.8                 |
| 10255 | AAA | SG NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.45        | ±0.8                 |
| 10256 | AAA | SG NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.14        | ±0.8                 |
| 10257 | AAA | SG NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.31        | ±0.8                 |
| 10258 | AAA | SG NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.61        | ±0.8                 |
| 10259 | AAA | SG NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.33        | ±0.8                 |
| 10260 | AAA | SG NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.32        | ±0.8                 |
| 10261 | AAC | SG NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.38        | ±0.8                 |
| 10262 | AAA | SG NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 8.40        | ±0.8                 |
| 10263 | AAC | SG NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.90        | ±0.8                 |
| 10264 | AAA | SG NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.20        | ±0.8                 |
| 10265 | AAC | SG NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.37        | ±0.8                 |
| 10266 | AAA | SG NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.95        | ±0.8                 |
| 10267 | AAC | SG NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.42        | ±0.8                 |
| 10268 | AAD | SG NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 15 kHz) | SG NR FRI FDD | 9.49        | ±0.8                 |
| 10269 | AAC | SG NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)        | SG NR FRI TDD | 11.59       | ±0.8                 |
| 10270 | AAC | SG NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)    | SG NR FRI TDD | 9.59        | ±0.8                 |
| 10271 | AAC | SG NR (DFT-s-OFDM, 1 RB, 100 MHz, 256-QAM, 30 kHz) | SG NR FRI TDD | 10.28       | ±0.8                 |
| 10272 | AAA | ULLA NRH                                           | ULLA          | 1.15        | ±0.8                 |
| 10273 | AAA | ULLA NRH                                           | ULLA          | 8.58        | ±0.8                 |
| 10274 | AAA | ULLA NRH                                           | ULLA          | 10.32       | ±0.8                 |
| 10275 | AAA | ULLA NRH                                           | ULLA          | 3.18        | ±0.8                 |
| 10276 | AAA | ULLA NRH                                           | ULLA          | 3.43        | ±0.8                 |

Certificate No: EX-7413\_Oct24

Page 20 of 21

EX3DV4 - SN:7413

October 16, 2024

| Mod   | Rev | Communication System Name                          | Group         | PAR (dB) | Unc <sup>a</sup> k=2 |
|-------|-----|----------------------------------------------------|---------------|----------|----------------------|
| 10983 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 43 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31     | ±0.6                 |
| 10984 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.42     | ±0.6                 |
| 10985 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 43 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.54     | ±0.6                 |
| 10986 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 43 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.50     | ±0.6                 |
| 10987 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53     | ±0.6                 |
| 10988 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.39     | ±0.6                 |
| 10989 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33     | ±0.6                 |
| 10990 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.30     | ±0.6                 |
| 11003 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 10.84    | ±0.6                 |
| 11004 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 10.79    | ±0.6                 |
| 11005 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 9.70     | ±0.6                 |
| 11006 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 9.55     | ±0.6                 |
| 11007 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 9.45     | ±0.6                 |
| 11008 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 9.51     | ±0.6                 |
| 11009 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 9.76     | ±0.6                 |
| 11010 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 9.55     | ±0.6                 |
| 11011 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 9.56     | ±0.6                 |
| 11012 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 9.68     | ±0.6                 |
| 11013 | AAB | IEEE 802.11ax (320 MHz, MCS1, 99pc duty cycle)     | WLAN          | 8.27     | ±0.6                 |
| 11014 | AAB | IEEE 802.11ax (320 MHz, MCS2, 99pc duty cycle)     | WLAN          | 8.45     | ±0.6                 |
| 11015 | AAB | IEEE 802.11ax (320 MHz, MCS3, 99pc duty cycle)     | WLAN          | 8.44     | ±0.6                 |
| 11016 | AAB | IEEE 802.11ax (320 MHz, MCS4, 99pc duty cycle)     | WLAN          | 8.44     | ±0.6                 |
| 11017 | AAB | IEEE 802.11ax (320 MHz, MCS5, 99pc duty cycle)     | WLAN          | 8.61     | ±0.6                 |
| 11018 | AAB | IEEE 802.11ax (320 MHz, MCS6, 99pc duty cycle)     | WLAN          | 8.40     | ±0.6                 |
| 11019 | AAB | IEEE 802.11ax (320 MHz, MCS7, 99pc duty cycle)     | WLAN          | 8.20     | ±0.6                 |
| 11020 | AAB | IEEE 802.11ax (320 MHz, MCS8, 99pc duty cycle)     | WLAN          | 8.27     | ±0.6                 |
| 11021 | AAB | IEEE 802.11ax (320 MHz, MCS9, 99pc duty cycle)     | WLAN          | 8.40     | ±0.6                 |
| 11022 | AAB | IEEE 802.11ax (320 MHz, MCS10, 99pc duty cycle)    | WLAN          | 8.30     | ±0.6                 |
| 11023 | AAB | IEEE 802.11ax (320 MHz, MCS11, 99pc duty cycle)    | WLAN          | 8.09     | ±0.6                 |
| 11024 | AAB | IEEE 802.11ax (320 MHz, MCS12, 99pc duty cycle)    | WLAN          | 8.03     | ±0.6                 |
| 11025 | AAB | IEEE 802.11ax (320 MHz, MCS13, 99pc duty cycle)    | WLAN          | 8.37     | ±0.6                 |
| 11026 | AAB | IEEE 802.11ax (320 MHz, MCS0, 99pc duty cycle)     | WLAN          | 8.39     | ±0.6                 |

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

## Appendix D.2 Calibration certificate for DAE SN1430

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

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: **SGS**  
 Gyeonggi-do - Republic of Korea

Certificate No: **DAE4-1430\_Mar25**

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**CALIBRATION CERTIFICATE**

Object: **DAE4 - SD 000 D04 BM - SN: 1430**

Calibration procedure(s): **QA.CAL-06.v30**  
 Calibration procedure for the data acquisition electronics (DAE)

Calibration date: **March 19, 2025**

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 ± 3)°C and humidity < 70%.

Calibration Equipment used (MSTE critical for calibration)

| Primary Standards            | ID #        | Cal Date (Certificate No.) | Scheduled Calibration |
|------------------------------|-------------|----------------------------|-----------------------|
| Kettley Multimeter Type 2001 | SN: 0510278 | 27-Aug-24 (No 40547)       | Aug-25                |

| Secondary Standards       | ID #               | Check Date (in house)      | Scheduled Check        |
|---------------------------|--------------------|----------------------------|------------------------|
| Auto DAE Calibration Unit | SE UWS 053 AA 1001 | 25-Jan-25 (in house check) | In house check: Jan-26 |
| Calibrator Box V2.1       | SE UMS 006 AA 1002 | 23-Jan-25 (in house check) | In house check: Jan-26 |

Calibrated by: **Adrian Gehring** (Name) **Laboratory Technician** (Function)  (Signature)

Approved by: **Sven Kühn** (Name) **Technical Manager** (Function)  (Signature)

Issued: March 19, 2025

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

Certificate No: DAE4-1430\_Mar25

Page 1 of 5

Calibration Laboratory of  
Schmid & Partner  
Engineering AG  
Zughausstrasse 43, 8604 Zurich, Switzerland



S Schweizerischer Kalibrierdienst  
S 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

DAE data acquisition electronics  
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

#### Methods Applied and Interpretation of Parameters

- **DC Voltage Measurement:** Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- **Connector angle:** The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
  - **DC Voltage Measurement Linearity:** Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
  - **Common mode sensitivity:** Influence of a positive or negative common mode voltage on the differential measurement.
  - **Channel separation:** Influence of a voltage on the neighbor channels not subject to an input voltage.
  - **AD Converter Values with inputs shorted:** Values on the internal AD converter corresponding to zero input voltage
  - **Input Offset Measurement:** Output voltage and statistical results over a large number of zero voltage measurements.
  - **Input Offset Current:** Typical value for information; Maximum channel input offset current, not considering the input resistance.
  - **Input resistance:** Typical value for information; DAE input resistance at the connector, during internal auto-zeroing and during measurement.
  - **Low Battery Alarm Voltage:** Typical value for information. Below this voltage, a battery alarm signal is generated.
  - **Power consumption:** Typical value for information. Supply currents in various operating modes.

#### DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 $\mu$ V , full range = -100...+300 mV  
 Low Range: 1LSB = 61nV , full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| Calibration Factors | X                         | Y                         | Z                         |
|---------------------|---------------------------|---------------------------|---------------------------|
| High Range          | 403.957 $\pm$ 0.02% (k=2) | 404.143 $\pm$ 0.02% (k=2) | 403.976 $\pm$ 0.02% (k=2) |
| Low Range           | 3.99867 $\pm$ 1.50% (k=2) | 3.98133 $\pm$ 1.50% (k=2) | 3.99964 $\pm$ 1.50% (k=2) |

#### Connector Angle

|                                           |                                     |
|-------------------------------------------|-------------------------------------|
| Connector Angle to be used in DASY system | 102.0 $^{\circ}$ $\pm$ 1 $^{\circ}$ |
|-------------------------------------------|-------------------------------------|

Appendix (Additional assessments outside the scope of SC50108)

1. DC Voltage Linearity

| High Range        | Reading (μV) | Difference (μV) | Error (%) |
|-------------------|--------------|-----------------|-----------|
| Channel X + Input | 19997.88     | -0.24           | -0.00     |
| Channel X + Input | 20009.89     | 4.20            | 0.02      |
| Channel X - Input | -19998.60    | 2.13            | -0.01     |
| Channel Y + Input | 19998.47     | -1.08           | -0.00     |
| Channel Y + Input | 20005.36     | -0.39           | -0.00     |
| Channel Y - Input | -19998.87    | -0.05           | 0.00      |
| Channel Z + Input | 19997.22     | -0.08           | -0.00     |
| Channel Z + Input | 20005.97     | 0.28            | 0.00      |
| Channel Z - Input | -20000.45    | -1.51           | 0.01      |

| Low Range         | Reading (μV) | Difference (μV) | Error (%) |
|-------------------|--------------|-----------------|-----------|
| Channel X + Input | 2008.24      | 1.72            | 0.08      |
| Channel X + Input | 205.34       | 0.82            | 0.30      |
| Channel X - Input | -194.36      | 0.82            | -0.32     |
| Channel Y + Input | 2005.58      | 1.16            | 0.06      |
| Channel Y + Input | 204.74       | 0.08            | 0.03      |
| Channel Y - Input | -195.31      | -0.29           | 0.15      |
| Channel Z + Input | 2004.85      | 0.37            | 0.02      |
| Channel Z + Input | 203.90       | -0.72           | -0.35     |
| Channel Z - Input | -196.31      | -1.20           | 0.62      |

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Common mode Input Voltage (mV) | High Range Average Reading (μV) | Low Range Average Reading (μV) |
|-----------|--------------------------------|---------------------------------|--------------------------------|
| Channel X | 200                            | 3.07                            | 1.50                           |
|           | - 200                          | -0.60                           | -2.00                          |
| Channel Y | 200                            | -20.01                          | -20.15                         |
|           | - 200                          | 19.84                           | 19.84                          |
| Channel Z | 200                            | -16.97                          | -17.81                         |
|           | - 200                          | 15.72                           | 15.63                          |

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Input Voltage (mV) | Channel X (μV) | Channel Y (μV) | Channel Z (μV) |
|-----------|--------------------|----------------|----------------|----------------|
| Channel X | 200                | -              | 1.67           | -4.05          |
| Channel Y | 200                | 7.76           | -              | 2.61           |
| Channel Z | 200                | 9.90           | 5.83           | -              |

**4. AD-Converter Values with inputs shorted**

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | High Range (LSB) | Low Range (LSB) |
|-----------|------------------|-----------------|
| Channel X | 15010            | 15157           |
| Channel Y | 15223            | 15821           |
| Channel Z | 15559            | 16862           |

**5. Input Offset Measurement**

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input 10MΩ

|           | Average (μV) | min. Offset (μV) | max. Offset (μV) | Std. Deviation (μV) |
|-----------|--------------|------------------|------------------|---------------------|
| Channel X | 0.52         | -0.20            | 1.41             | 0.31                |
| Channel Y | -0.19        | -1.05            | 0.37             | 0.29                |
| Channel Z | -0.96        | -1.80            | -0.32            | 0.29                |

**6. Input Offset Current**

Nominal Input circuitry offset current on all channels: <25fA

**7. Input Resistance (Typical values for information)**

|           | Zeroing (kΩ) | Measuring (MΩ) |
|-----------|--------------|----------------|
| Channel X | 200          | 200            |
| Channel Y | 200          | 200            |
| Channel Z | 200          | 200            |

**8. Low Battery Alarm Voltage (Typical values for information)**

| Typical values | Alarm Level (VDC) |
|----------------|-------------------|
| Supply (+ Vcc) | +7.9              |
| Supply (- Vcc) | -7.6              |

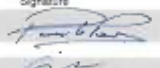
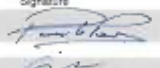
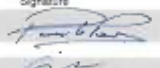
**9. Power Consumption (Typical values for information)**

| Typical values | Switched off (mA) | Stand by (mA) | Transmitting (mA) |
|----------------|-------------------|---------------|-------------------|
| Supply (+ Vcc) | +0.01             | +6            | +14               |
| Supply (- Vcc) | -0.01             | -8            | -9                |

### Appendix D.3 Calibration certificate for Dipole SN892

|                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                        |                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Calibration Laboratory of</b><br><b>Schmid &amp; Partner</b><br><b>Engineering AG</b><br>Zeughausstrasse 43, 8004 Zurich, Switzerland<br><br>Accredited by the Swiss Accreditation Service (SAS)<br>The Swiss Accreditation Service is one of the signatories to the EA<br>Multilateral Agreement for the recognition of calibration certificates | <br> | S Schweizerischer Kalibrierdienst<br>C Service suisse d'étalonnage<br>S Servizio svizzero di taratura<br>S Swiss Calibration Service |
|                                                                                                                                                                                                                                                                                                                                                      | Accreditation No.: <b>SCS 0108</b>                                                                                                                                     |                                                                                                                                      |
| Client: <b>SGS</b><br>Gyeonggi-do, Republic of Korea                                                                                                                                                                                                                                                                                                 | Certificate No.: <b>D2450V2-892_Jan25</b>                                                                                                                              |                                                                                                                                      |

| CALIBRATION CERTIFICATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |                                            |                                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------|-----------------|--------------------------|------------|--------------------------------------------|--------------------------------------------------------------------------------------|------------------------------|------------|----------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------|--------|--------------------------------------------|----------|---------------------------|--------|------------|----------|--------------------------------------|--------|-------------|----------|---------------------------------------|--------|------------------------|----------|--------------------------------|--------|-------|----------|----------------------------------|--------|--|
| Object                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | D2450V2 - SN: 892                                                                     |                                            |                                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Calibration procedure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | QA CAL-05.v12<br>Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz |                                            |                                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Calibration date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | January 14, 2025                                                                      |                                            |                                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).<br>The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.<br>All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.<br>Calibration Equipment used (MATE critical for calibration)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                       |                                            |                                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| <table border="1"> <thead> <tr> <th>Primary Standards</th> <th>ID</th> <th>Cal Date (Certificate No.)</th> <th>Scheduled Cal</th> </tr> </thead> <tbody> <tr> <td>Power Sensor R&amp;S NRP-33T</td> <td>SN: 100667</td> <td>28-Mar-24 (No. 217-04036)</td> <td>Mar-25</td> </tr> <tr> <td>Power Sensor R&amp;S NRP18A</td> <td>SN: 101869</td> <td>22-Jul-24 (No. 40300319036547)</td> <td>Jul-25</td> </tr> <tr> <td>Spectrum Analyzer R&amp;S FSU46</td> <td>SN: 101832</td> <td>25-Jan-24 (No. 4030-319037551)</td> <td>Jan-25</td> </tr> <tr> <td>Mismatch: Short [S4188] Attenuator [S4423]</td> <td>SN: 1152</td> <td>28-Mar-24 (No. 217-04060)</td> <td>Mar-25</td> </tr> <tr> <td>OCP DAK-12</td> <td>SN: 1016</td> <td>24-Sep-24 (No. OCP-DAK12-1016_Sep24)</td> <td>Sep-25</td> </tr> <tr> <td>OCP DAK-3.5</td> <td>SN: 1249</td> <td>23-Sep-24 (No. OCP-DAK3.5-1249_Sep24)</td> <td>Sep-25</td> </tr> <tr> <td>Reference Probe EX3DV4</td> <td>SN: 7349</td> <td>10-Jan-25 (No. EX3-7349_Jan25)</td> <td>Jan-26</td> </tr> <tr> <td>DAE4p</td> <td>SN: 1806</td> <td>28-Oct-24 (No. DAE4p-1806_Oct24)</td> <td>Oct-25</td> </tr> </tbody> </table> | Primary Standards                                                                     | ID                                         | Cal Date (Certificate No.)                                                           | Scheduled Cal   | Power Sensor R&S NRP-33T | SN: 100667 | 28-Mar-24 (No. 217-04036)                  | Mar-25                                                                               | Power Sensor R&S NRP18A      | SN: 101869 | 22-Jul-24 (No. 40300319036547)         | Jul-25                                                                               | Spectrum Analyzer R&S FSU46                                                                                                                     | SN: 101832 | 25-Jan-24 (No. 4030-319037551)          | Jan-25 | Mismatch: Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04060) | Mar-25 | OCP DAK-12 | SN: 1016 | 24-Sep-24 (No. OCP-DAK12-1016_Sep24) | Sep-25 | OCP DAK-3.5 | SN: 1249 | 23-Sep-24 (No. OCP-DAK3.5-1249_Sep24) | Sep-25 | Reference Probe EX3DV4 | SN: 7349 | 10-Jan-25 (No. EX3-7349_Jan25) | Jan-26 | DAE4p | SN: 1806 | 28-Oct-24 (No. DAE4p-1806_Oct24) | Oct-25 |  |
| Primary Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ID                                                                                    | Cal Date (Certificate No.)                 | Scheduled Cal                                                                        |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Power Sensor R&S NRP-33T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SN: 100667                                                                            | 28-Mar-24 (No. 217-04036)                  | Mar-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Power Sensor R&S NRP18A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SN: 101869                                                                            | 22-Jul-24 (No. 40300319036547)             | Jul-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Spectrum Analyzer R&S FSU46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SN: 101832                                                                            | 25-Jan-24 (No. 4030-319037551)             | Jan-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Mismatch: Short [S4188] Attenuator [S4423]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SN: 1152                                                                              | 28-Mar-24 (No. 217-04060)                  | Mar-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| OCP DAK-12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SN: 1016                                                                              | 24-Sep-24 (No. OCP-DAK12-1016_Sep24)       | Sep-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| OCP DAK-3.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SN: 1249                                                                              | 23-Sep-24 (No. OCP-DAK3.5-1249_Sep24)      | Sep-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Reference Probe EX3DV4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SN: 7349                                                                              | 10-Jan-25 (No. EX3-7349_Jan25)             | Jan-26                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| DAE4p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SN: 1806                                                                              | 28-Oct-24 (No. DAE4p-1806_Oct24)           | Oct-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
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| Secondary Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ID                                                                                    | Check Date (in house)                      | Scheduled Check                                                                      |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| ACAD Source Box                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SN: 1000                                                                              | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Signal Generator R&S SMR100A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SN: 182081                                                                            | 28-May-24 (No. 675-CAL18-S4588-240528)     | May-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Mismatch: SMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SN: 1102                                                                              | 22-May-24 (No. 675-Mismatch_SMA-240522)    | May-25                                                                               |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Name                                                                                  | Function                                   | Signature                                                                            |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Calibrated by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Paulo Pina                                                                            | Laboratory Technician                      |  |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |
| Approved by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sven Kohn                                                                             | Technical Manager                          |  |                 |                          |            |                                            |                                                                                      |                              |            |                                        |                                                                                      |                                                                                                                                                 |            |                                         |        |                                            |          |                           |        |            |          |                                      |        |             |          |                                       |        |                        |          |                                |        |       |          |                                  |        |  |

Certificate No: D2450V2-892\_Jan25

Page 1 of 6

**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  
 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  
 ComF: sensitivity in TSL / NORM x,y,z  
 N/A: not applicable or not measured

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

- IEC/IEEE 62209-1526, "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 1526: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 065664, "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: 892

January 14, 2025

#### Measurement Conditions

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

|                              |                          |                                     |
|------------------------------|--------------------------|-------------------------------------|
| DASY Version                 | DASY's Module SAR        | 15.4.0                              |
| Extrapolation                | Advanced Extrapolation   |                                     |
| Phantom                      | Modular Flat Phantom     |                                     |
| Distance Dipole Center - TSL | 10 mm                    | with spacer                         |
| Zoom Scan Resolution         | dx, dy = 5mm, dz = 1.5mm | Graded Ratio = 1.5 mm (Z direction) |
| Frequency                    | 2450MHz ±1MHz            |                                     |

#### Head TSL parameters at 2450 MHz

The following parameters and calculations were applied.

|                                         | Temperature   | Permittivity | Conductivity   |
|-----------------------------------------|---------------|--------------|----------------|
| Nominal Head TSL parameters             | 22.0 °C       | 39.2         | 1.00 mho/m     |
| Measured Head TSL parameters            | (22.0 ±0.2)°C | 37.9 ±5%     | 1.87 mho/m ±6% |
| Head TSL temperature change during test | < 0.5 °C      |              |                |

#### SAR result with Head TSL at 2450 MHz

| SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL | Condition          |                          |
|-------------------------------------------------------|--------------------|--------------------------|
| SAR for nominal Head TSL parameters                   | 24 dBm input power | 13.2 W/kg                |
| SAR for nominal Head TSL parameters                   | normalized to 1W   | 52.6 W/kg ±17.0% (k = 2) |

| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL | Condition          |                          |
|---------------------------------------------------------|--------------------|--------------------------|
| SAR for nominal Head TSL parameters                     | 24 dBm input power | 6.21 W/kg                |
| SAR for nominal Head TSL parameters                     | normalized to 1W   | 24.7 W/kg ±16.5% (k = 2) |

D2450V2 - SN: 892

January 14, 2025

**Appendix (Additional assessments outside the scope of SCS 0108)**

**Antenna Parameters with Head TSL at 2450 MHz**

|             |                                   |
|-------------|-----------------------------------|
| Impedance   | 53.2 $\Omega$ $\pm$ 2.7 $j\Omega$ |
| Return Loss | -27.9 dB                          |

**General Antenna Parameters and Design**

|                                  |          |
|----------------------------------|----------|
| Electrical Delay (one direction) | 1.162 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: 892

January 14, 2025

System Performance Check Report

Summary

| Device          | Frequency (MHz) | TSL | Power (dBm) |
|-----------------|-----------------|-----|-------------|
| D2450V2 - 1M892 | 2450            | FSL | 24          |

Exposure Conditions

| Hardware Section, TSL | Test Distance (mm) | Band    | Group, U/D | Frequency (MHz), Channel Number | Conversion Factor | TSL Conductivity (S/m) | TSL Power (W) |
|-----------------------|--------------------|---------|------------|---------------------------------|-------------------|------------------------|---------------|
| Flat                  | 18                 | CW, E-1 | 2450, 9    |                                 | 7.86              | 1.87                   | 37.9          |

Hardware Setup

| Platform        | TSL Measured Date | Probe, Calibration Date     | DMS, Calibration Date      |
|-----------------|-------------------|-----------------------------|----------------------------|
| MTP V5.0 Center | MSL, 2025-01-14   | DO30V4 - 107149, 2023-01-10 | DMS4P Set 1136, 2024-10-28 |

Scans Setup

|                     | Zoom Scan       |
|---------------------|-----------------|
| Grid Extents (mm)   | 30 x 30 x 30    |
| Q-M Map (mm)        | 3.0 x 3.0 x 1.3 |
| Sensor Surface (mm) | 1.4             |
| Coated Grid         | Yes             |
| Coating Ratio       | 1.3             |
| MMA                 | N/A             |
| Surface Detection   | VMS - Sp        |
| Scan Method         | Measured        |

Measurement Results

|                     | Zoom Scan           |
|---------------------|---------------------|
| Site                | 2025-01-14          |
| psdAR1 g (m/kg)     | 13.2                |
| psdAR1 kg (N/kg)    | 6.21                |
| Power Shift (dB)    | 0.80                |
| Power Scaling       | Disabled            |
| Scaling Factor (dB) |                     |
| TSL Correction      | Positive / Negative |



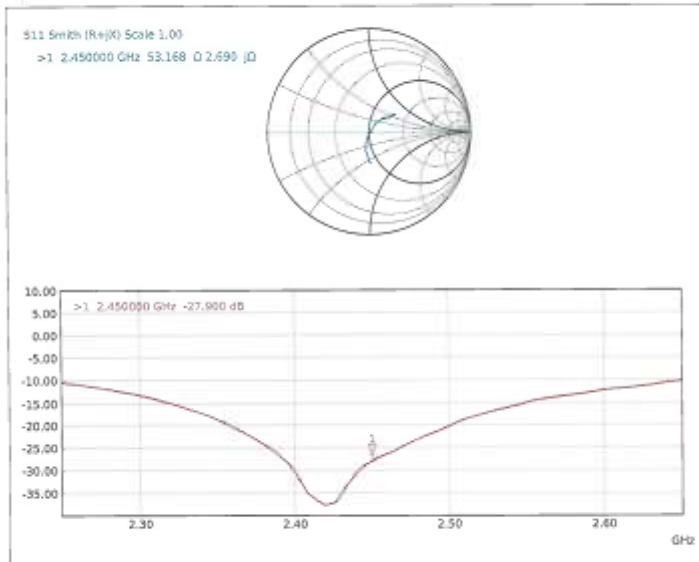
Certificate No: D2450V2-892\_Jan25

Page 5 of 6

D2450V2 - SN: 892

January 14, 2025

Impedance Measurement Plot for Head TSL



Certificate No: D2450V2-892\_jan25

Page 5 of 6

**-The End-**

Report File No: F690501-RF-SAR000582

Date of Issue : 2025-06-10

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SAR7081-04 (2020.12.15)(0)

A4 (210mm x 297mm)