

**Appendix B**  
**Probe Calibration Certificates**

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

Zeughausstrasse 43, 8004 Zurich, Switzerland



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

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client **Motorola Solutions**  
Bayan Lepas, Malaysia

Certificate No. **EX-7511\_Jul24**

**CALIBRATION CERTIFICATE**

Object **EX3DV4 - SN:7511**

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 **July 23, 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  $(22 \pm 3)^\circ\text{C}$  and humidity  $< 70\%$ .  
Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration |
|----------------------------|------------------|-----------------------------------|-----------------------|
| Power meter NRP2           | SN: 104778       | 26-Mar-24 (No. 217-04036/04037)   | Mar-25                |
| Power sensor NRP-Z91       | SN: 103244       | 26-Mar-24 (No. 217-04036)         | Mar-25                |
| OCP DAK-3.5 (weighted)     | SN: 1249         | 05-Oct-23 (OCP-DAK3.5-1249_Oct23) | Oct-24                |
| OCP DAK-12                 | SN: 1016         | 05-Oct-23 (OCP-DAK12-1016_Oct23)  | Oct-24                |
| Reference 20 dB Attenuator | SN: CC2552 (20x) | 26-Mar-24 (No. 217-04046)         | Mar-25                |
| DAE4                       | SN: 660          | 23-Feb-24 (No. DAE4-660_Feb24)    | Feb-25                |
| Reference Probe EX3DV4     | SN: 7349         | 03-Jun-24 (No. EX3-7349_Jun24)    | Jun-25                |

| Secondary Standards     | ID               | Check Date (in house)             | Scheduled Check        |
|-------------------------|------------------|-----------------------------------|------------------------|
| Power meter E4419B      | SN: GB41293874   | 06-Apr-16 (in house check Jun-24) | In house check: Jun-26 |
| Power sensor E4412A     | SN: MY41499087   | 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: US3642U01700 | 04-Aug-99 (in house check Jun-24) | In house check: Jun-26 |
| Network Analyzer E8358A | SN: US41080477   | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

|               |                          |                                   |               |
|---------------|--------------------------|-----------------------------------|---------------|
| Calibrated by | Name<br>Krešimir Franjić | Function<br>Laboratory Technician | Signature<br> |
| Approved by   | Sven Kühn                | Technical Manager                 |               |

Issued: July 23, 2024

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

Certificate No: EX-7511\_Jul24

Page 1 of 22

**Calibration Laboratory of  
Schmid & Partner  
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Accreditation No.: **SCS 0108**

## Glossary

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

## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

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

EX3DV4 - SN:7511

July 23, 2024

**Parameters of Probe: EX3DV4 - SN:7511****Basic Calibration Parameters**

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k = 2)  |
|-----------------------------------------------------------|----------|----------|----------|--------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.46     | 0.37     | 0.44     | $\pm 10.1\%$ |
| DCP (mV) <sup>B</sup>                                     | 101.1    | 100.1    | 100.9    | $\pm 4.7\%$  |

**Calibration Results for Modulation Response**

| UID   | Communication System Name   |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C     | D<br>dB | VR<br>mV | Max<br>dev. | Max<br>Unc <sup>E</sup><br>k = 2 |
|-------|-----------------------------|---|---------|------------------------------|-------|---------|----------|-------------|----------------------------------|
| 0     | CW                          | X | 0.00    | 0.00                         | 1.00  | 0.00    | 156.7    | $\pm 3.0\%$ | $\pm 4.7\%$                      |
|       |                             | Y | 0.00    | 0.00                         | 1.00  |         | 158.9    |             |                                  |
|       |                             | Z | 0.00    | 0.00                         | 1.00  |         | 157.7    |             |                                  |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 1.76    | 62.39                        | 7.87  | 10.00   | 60.0     | $\pm 3.2\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 2.49    | 66.05                        | 10.35 |         | 60.0     |             |                                  |
|       |                             | Z | 1.92    | 63.18                        | 8.36  |         | 60.0     |             |                                  |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 0.93    | 60.84                        | 6.16  | 6.99    | 80.0     | $\pm 2.4\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.94    | 67.35                        | 9.84  |         | 80.0     |             |                                  |
|       |                             | Z | 1.05    | 61.71                        | 6.73  |         | 80.0     |             |                                  |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 0.44    | 60.00                        | 5.00  | 3.98    | 95.0     | $\pm 1.4\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 2.66    | 72.56                        | 10.47 |         | 95.0     |             |                                  |
|       |                             | Z | 0.50    | 60.66                        | 5.50  |         | 95.0     |             |                                  |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 0.26    | 60.08                        | 4.82  | 2.22    | 120.0    | $\pm 0.9\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 20.00   | 84.09                        | 12.19 |         | 120.0    |             |                                  |
|       |                             | Z | 0.44    | 63.06                        | 6.40  |         | 120.0    |             |                                  |
| 10387 | QPSK Waveform, 1 MHz        | X | 1.61    | 67.46                        | 15.20 | 1.00    | 150.0    | $\pm 2.7\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.49    | 66.80                        | 14.56 |         | 150.0    |             |                                  |
|       |                             | Z | 1.68    | 68.14                        | 15.61 |         | 150.0    |             |                                  |
| 10388 | QPSK Waveform, 10 MHz       | X | 2.11    | 67.81                        | 15.74 | 0.00    | 150.0    | $\pm 1.1\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.98    | 67.15                        | 15.28 |         | 150.0    |             |                                  |
|       |                             | Z | 2.18    | 68.42                        | 16.09 |         | 150.0    |             |                                  |
| 10396 | 64-QAM Waveform, 100 kHz    | X | 2.42    | 68.99                        | 18.18 | 3.01    | 150.0    | $\pm 0.8\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 2.31    | 68.22                        | 17.77 |         | 150.0    |             |                                  |
|       |                             | Z | 2.43    | 69.13                        | 18.37 |         | 150.0    |             |                                  |
| 10399 | 64-QAM Waveform, 40 MHz     | X | 3.45    | 67.16                        | 15.82 | 0.00    | 150.0    | $\pm 1.2\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 3.37    | 66.88                        | 15.62 |         | 150.0    |             |                                  |
|       |                             | Z | 3.36    | 66.77                        | 15.67 |         | 150.0    |             |                                  |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz   | X | 4.56    | 65.25                        | 15.33 | 0.00    | 150.0    | $\pm 2.6\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 4.66    | 65.74                        | 15.55 |         | 150.0    |             |                                  |
|       |                             | Z | 4.62    | 65.45                        | 15.45 |         | 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  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).<sup>B</sup> Linearization parameter uncertainty for maximum specified field strength.<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

EX3DV4 - SN:7511

July 23, 2024

**Parameters of Probe: EX3DV4 - SN:7511****Sensor Model Parameters**

|   | C1<br>fF | C2<br>fF | $\alpha$<br>V <sup>-1</sup> | T1<br>ms V <sup>-2</sup> | T2<br>ms V <sup>-1</sup> | T3<br>ms | T4<br>V <sup>-2</sup> | T5<br>V <sup>-1</sup> | T6   |
|---|----------|----------|-----------------------------|--------------------------|--------------------------|----------|-----------------------|-----------------------|------|
| x | 31.9     | 234.84   | 34.72                       | 5.60                     | 0.00                     | 4.93     | 1.41                  | 0.01                  | 1.00 |
| y | 30.4     | 226.10   | 35.32                       | 3.16                     | 0.00                     | 5.01     | 1.14                  | 0.06                  | 1.00 |
| z | 32.4     | 237.89   | 34.61                       | 5.70                     | 0.00                     | 4.94     | 1.17                  | 0.04                  | 1.00 |

**Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle                               | -3.5°      |
| 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:7511

July 23, 2024

**Parameters of Probe: EX3DV4 - SN:7511****Calibration Parameter Determined in Head Tissue Simulating Media**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|--------------------------|
| 150                  | 52.3                               | 0.76                            | 12.04   | 12.04   | 12.04   | 0.00               | 1.00                    | ±13.3%                   |
| 300                  | 45.3                               | 0.87                            | 10.92   | 10.92   | 10.92   | 0.09               | 1.00                    | ±13.3%                   |
| 450                  | 43.5                               | 0.87                            | 10.26   | 10.26   | 10.26   | 0.16               | 1.30                    | ±13.3%                   |
| 750                  | 41.9                               | 0.89                            | 9.39    | 9.39    | 9.39    | 0.43               | 0.84                    | ±11.0%                   |
| 835                  | 41.5                               | 0.90                            | 9.08    | 9.08    | 9.08    | 0.26               | 1.16                    | ±11.0%                   |
| 900                  | 41.5                               | 0.97                            | 8.92    | 8.92    | 8.92    | 0.46               | 0.82                    | ±11.0%                   |
| 1450                 | 40.5                               | 1.20                            | 8.35    | 8.35    | 8.35    | 0.43               | 0.80                    | ±11.0%                   |
| 1810                 | 40.0                               | 1.40                            | 7.97    | 7.97    | 7.97    | 0.26               | 0.86                    | ±11.0%                   |
| 1900                 | 40.0                               | 1.40                            | 7.71    | 7.71    | 7.71    | 0.29               | 0.86                    | ±11.0%                   |
| 2100                 | 39.8                               | 1.49                            | 7.58    | 7.58    | 7.58    | 0.20               | 0.86                    | ±11.0%                   |
| 2300                 | 39.5                               | 1.67                            | 7.22    | 7.22    | 7.22    | 0.32               | 0.90                    | ±11.0%                   |
| 2450                 | 39.2                               | 1.80                            | 7.03    | 7.03    | 7.03    | 0.33               | 0.90                    | ±11.0%                   |
| 2600                 | 39.0                               | 1.96                            | 6.79    | 6.79    | 6.79    | 0.30               | 0.90                    | ±11.0%                   |
| 3500                 | 37.9                               | 2.91                            | 6.55    | 6.55    | 6.55    | 0.35               | 1.30                    | ±13.1%                   |
| 3700                 | 37.7                               | 3.12                            | 6.51    | 6.51    | 6.51    | 0.35               | 1.30                    | ±13.1%                   |
| 5250                 | 35.9                               | 4.71                            | 5.10    | 5.10    | 5.10    | 0.40               | 1.80                    | ±13.1%                   |
| 5500                 | 35.6                               | 4.96                            | 4.56    | 4.56    | 4.56    | 0.40               | 1.80                    | ±13.1%                   |
| 5600                 | 35.5                               | 5.07                            | 4.44    | 4.44    | 4.44    | 0.40               | 1.80                    | ±13.1%                   |
| 5800                 | 35.3                               | 5.27                            | 4.51    | 4.51    | 4.51    | 0.40               | 1.80                    | ±13.1%                   |

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

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

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

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

EX3DV4 - SN:7511

July 23, 2024

**Parameters of Probe: EX3DV4 - SN:7511****Calibration Parameter Determined in Body Tissue Simulating Media**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc <sup>H</sup> (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|--------------------------|
| 150                  | 61.9                               | 0.80                            | 11.59   | 11.59   | 11.59   | 0.00               | 1.00                    | ±13.3%                   |
| 300                  | 58.2                               | 0.92                            | 10.97   | 10.97   | 10.97   | 0.02               | 1.35                    | ±13.3%                   |
| 450                  | 56.7                               | 0.94                            | 10.52   | 10.52   | 10.52   | 0.11               | 1.20                    | ±13.3%                   |
| 750                  | 55.5                               | 0.96                            | 9.34    | 9.34    | 9.34    | 0.46               | 0.83                    | ±11.0%                   |
| 835                  | 55.2                               | 0.97                            | 9.21    | 9.21    | 9.21    | 0.42               | 0.80                    | ±11.0%                   |
| 900                  | 55.0                               | 1.05                            | 9.04    | 9.04    | 9.04    | 0.44               | 0.80                    | ±11.0%                   |
| 1450                 | 54.0                               | 1.30                            | 8.09    | 8.09    | 8.09    | 0.31               | 0.80                    | ±11.0%                   |
| 1810                 | 53.3                               | 1.52                            | 7.68    | 7.68    | 7.68    | 0.33               | 0.86                    | ±11.0%                   |
| 1900                 | 53.3                               | 1.52                            | 7.45    | 7.45    | 7.45    | 0.40               | 0.86                    | ±11.0%                   |
| 2100                 | 53.2                               | 1.62                            | 7.22    | 7.22    | 7.22    | 0.46               | 0.86                    | ±11.0%                   |
| 2300                 | 52.9                               | 1.81                            | 7.06    | 7.06    | 7.06    | 0.38               | 0.90                    | ±11.0%                   |
| 2450                 | 52.7                               | 1.95                            | 6.96    | 6.96    | 6.96    | 0.32               | 0.90                    | ±11.0%                   |
| 2600                 | 52.5                               | 2.16                            | 6.83    | 6.83    | 6.83    | 0.29               | 0.90                    | ±11.0%                   |
| 3500                 | 51.3                               | 3.31                            | 6.08    | 6.08    | 6.08    | 0.40               | 1.35                    | ±13.1%                   |
| 3700                 | 51.0                               | 3.55                            | 5.88    | 5.88    | 5.88    | 0.40               | 1.35                    | ±13.1%                   |
| 5250                 | 48.9                               | 5.36                            | 4.44    | 4.44    | 4.44    | 0.50               | 1.90                    | ±13.1%                   |
| 5500                 | 48.6                               | 5.65                            | 3.98    | 3.98    | 3.98    | 0.50               | 1.90                    | ±13.1%                   |
| 5600                 | 48.5                               | 5.77                            | 3.86    | 3.86    | 3.86    | 0.50               | 1.90                    | ±13.1%                   |
| 5800                 | 48.2                               | 6.00                            | 3.93    | 3.93    | 3.93    | 0.50               | 1.90                    | ±13.1%                   |

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

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

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

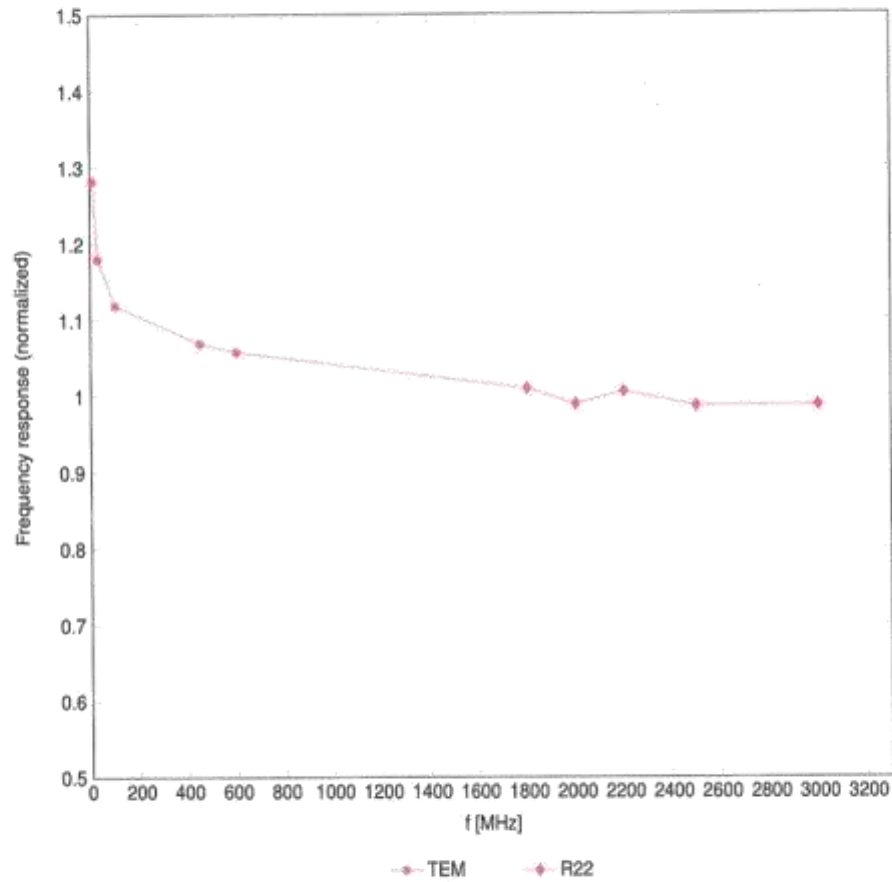
<sup>H</sup> The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7511

July 23, 2024

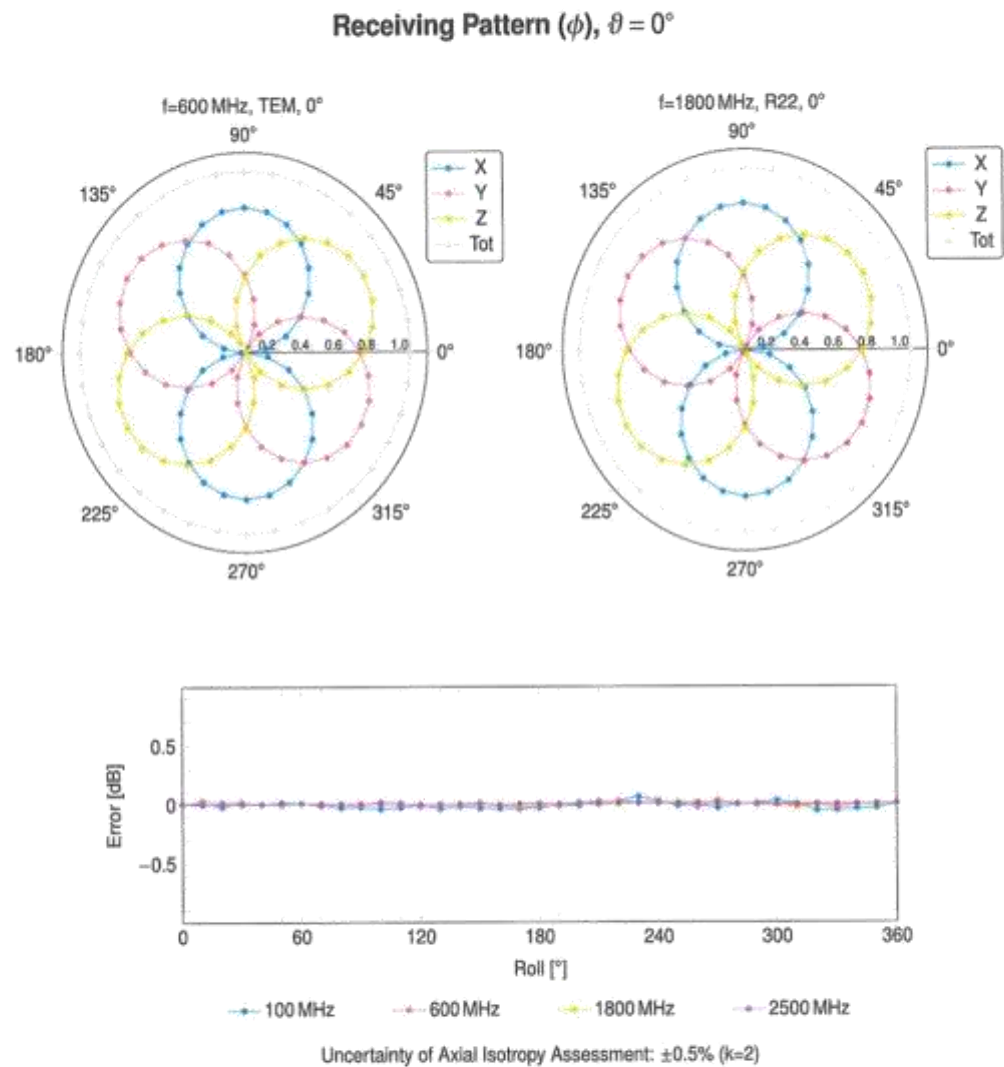
### Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide:R22)

Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

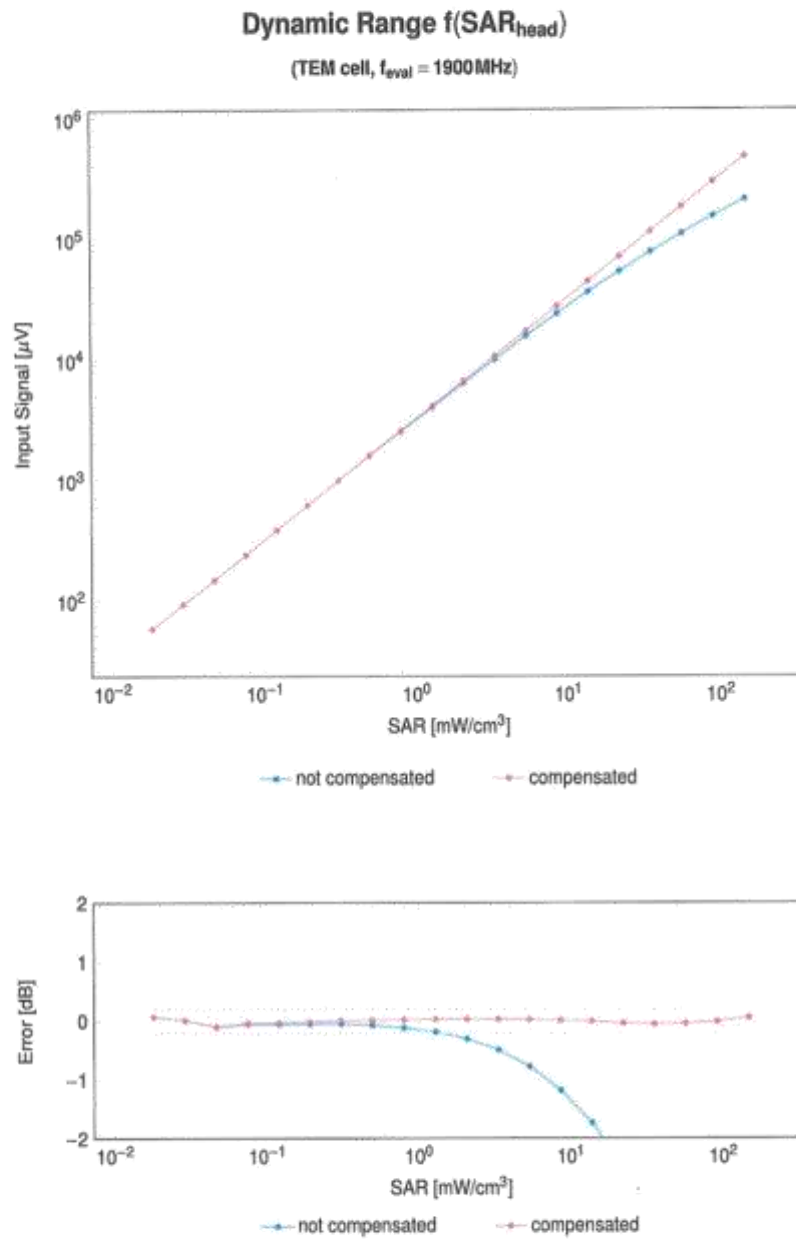
EX3DV4 - SN:7511

July 23, 2024



EX3DV4 - SN:7511

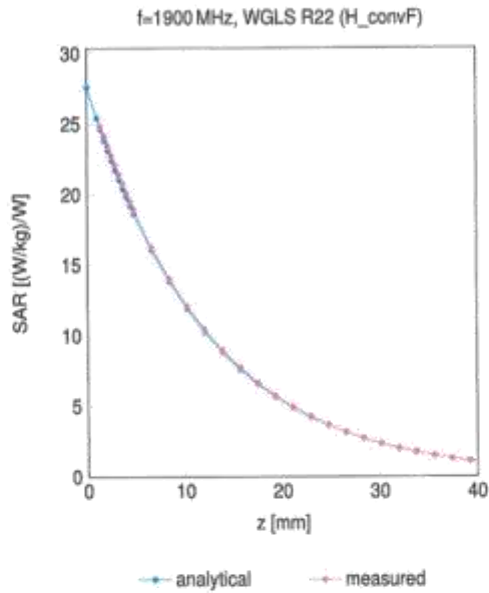
July 23, 2024



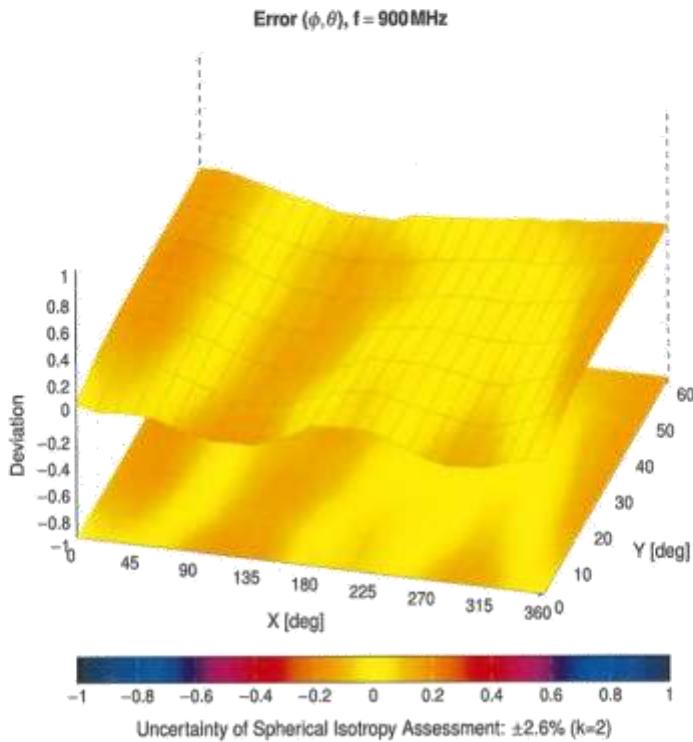
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July 23, 2024

Conversion Factor Assessment



Deviation from Isotropy in Liquid



EX3DV4 - SN:7511

July 23, 2024

## Appendix: Modulation Calibration Parameters

| UID   | Rev | Communication System Name                          | Group     | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|----------------------------------------------------|-----------|----------|------------------------|
| 0     |     | CW                                                 | CW        | 0.00     | ±4.7                   |
| 10010 | CAB | SAR Validation (Square, 100ms, 10ms)               | Test      | 10.00    | ±9.6                   |
| 10011 | CAC | UMTS-FDD (WCDMA)                                   | WCDMA     | 2.91     | ±9.6                   |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)           | WLAN      | 1.87     | ±9.6                   |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)      | WLAN      | 9.46     | ±9.6                   |
| 10021 | DAC | GSM-FDD (TDMA, GMSK)                               | GSM       | 9.39     | ±9.6                   |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0)                        | GSM       | 9.57     | ±9.6                   |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                      | GSM       | 6.56     | ±9.6                   |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                        | GSM       | 12.62    | ±9.6                   |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                      | GSM       | 9.55     | ±9.6                   |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)                    | GSM       | 4.80     | ±9.6                   |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)                  | GSM       | 3.55     | ±9.6                   |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)                    | GSM       | 7.78     | ±9.6                   |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)                | Bluetooth | 5.30     | ±9.6                   |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)                | Bluetooth | 1.87     | ±9.6                   |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                | Bluetooth | 1.16     | ±9.6                   |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH1)           | Bluetooth | 7.74     | ±9.6                   |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH3)           | Bluetooth | 4.53     | ±9.6                   |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH5)           | Bluetooth | 3.83     | ±9.6                   |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, DH1)               | Bluetooth | 8.01     | ±9.6                   |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, DH3)               | Bluetooth | 4.77     | ±9.6                   |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, DH5)               | Bluetooth | 4.10     | ±9.6                   |
| 10039 | CAB | CDMA2000 (1xRTT, RC1)                              | CDMA2000  | 4.57     | ±9.6                   |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI4-DQPSK, Halfrate) | AMPS      | 7.78     | ±9.6                   |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                   | AMPS      | 0.00     | ±9.6                   |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)          | DECT      | 13.80    | ±9.6                   |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)        | DECT      | 10.79    | ±9.6                   |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                     | TD-SCDMA  | 11.01    | ±9.6                   |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                  | GSM       | 6.52     | ±9.6                   |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)           | WLAN      | 2.12     | ±9.6                   |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)         | WLAN      | 2.83     | ±9.6                   |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)          | WLAN      | 3.60     | ±9.6                   |
| 10062 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)           | WLAN      | 8.68     | ±9.6                   |
| 10063 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)           | WLAN      | 8.63     | ±9.6                   |
| 10064 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)          | WLAN      | 9.09     | ±9.6                   |
| 10065 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)          | WLAN      | 9.00     | ±9.6                   |
| 10066 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)          | WLAN      | 9.38     | ±9.6                   |
| 10067 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)          | WLAN      | 10.12    | ±9.6                   |
| 10068 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)          | WLAN      | 10.24    | ±9.6                   |
| 10069 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)          | WLAN      | 10.56    | ±9.6                   |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)      | WLAN      | 9.83     | ±9.6                   |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)     | WLAN      | 9.62     | ±9.6                   |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)     | WLAN      | 9.94     | ±9.6                   |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)     | WLAN      | 10.30    | ±9.6                   |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)     | WLAN      | 10.77    | ±9.6                   |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)     | WLAN      | 10.94    | ±9.6                   |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)     | WLAN      | 11.00    | ±9.6                   |
| 10081 | CAB | CDMA2000 (1xRTT, RC3)                              | CDMA2000  | 3.97     | ±9.6                   |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI4-DQPSK, Fullrate) | AMPS      | 4.77     | ±9.6                   |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                      | GSM       | 6.58     | ±9.6                   |
| 10097 | CAC | UMTS-FDD (HSDPA)                                   | WCDMA     | 3.98     | ±9.6                   |
| 10098 | CAC | UMTS-FDD (HSUPA, Subtest 2)                        | WCDMA     | 3.98     | ±9.6                   |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                      | GSM       | 9.55     | ±9.6                   |
| 10100 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)           | LTE-FDD   | 5.67     | ±9.6                   |
| 10101 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         | LTE-FDD   | 6.42     | ±9.6                   |
| 10102 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         | LTE-FDD   | 6.60     | ±9.6                   |
| 10103 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)           | LTE-TDD   | 9.29     | ±9.6                   |
| 10104 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         | LTE-TDD   | 9.97     | ±9.6                   |
| 10105 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         | LTE-TDD   | 10.01    | ±9.6                   |
| 10108 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)           | LTE-FDD   | 5.80     | ±9.6                   |
| 10109 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         | LTE-FDD   | 6.43     | ±9.6                   |
| 10110 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)            | LTE-FDD   | 5.75     | ±9.6                   |
| 10111 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)          | LTE-FDD   | 6.44     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 11 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                      | Group   | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------|---------|----------|------------------------|
| 10112 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | LTE-FDD | 6.59     | ±9.6                   |
| 10113 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | LTE-FDD | 6.62     | ±9.6                   |
| 10114 | CAE | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | WLAN    | 8.10     | ±9.6                   |
| 10115 | CAE | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | WLAN    | 8.46     | ±9.6                   |
| 10116 | CAE | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN    | 8.15     | ±9.6                   |
| 10117 | CAE | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | WLAN    | 8.07     | ±9.6                   |
| 10118 | CAE | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | WLAN    | 8.59     | ±9.6                   |
| 10119 | CAE | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | WLAN    | 8.13     | ±9.6                   |
| 10140 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | LTE-FDD | 6.49     | ±9.6                   |
| 10141 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | LTE-FDD | 6.53     | ±9.6                   |
| 10142 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | LTE-FDD | 5.73     | ±9.6                   |
| 10143 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | LTE-FDD | 6.35     | ±9.6                   |
| 10144 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | LTE-FDD | 6.65     | ±9.6                   |
| 10145 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | LTE-FDD | 5.76     | ±9.6                   |
| 10146 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | LTE-FDD | 6.41     | ±9.6                   |
| 10147 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | LTE-FDD | 6.72     | ±9.6                   |
| 10149 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-FDD | 6.42     | ±9.6                   |
| 10150 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-FDD | 6.60     | ±9.6                   |
| 10151 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)        | LTE-TDD | 9.26     | ±9.6                   |
| 10152 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-TDD | 9.92     | ±9.6                   |
| 10153 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-TDD | 10.05    | ±9.6                   |
| 10154 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)        | LTE-FDD | 5.75     | ±9.6                   |
| 10155 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)      | LTE-FDD | 6.43     | ±9.6                   |
| 10156 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         | LTE-FDD | 5.79     | ±9.6                   |
| 10157 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)       | LTE-FDD | 6.49     | ±9.6                   |
| 10158 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)      | LTE-FDD | 6.62     | ±9.6                   |
| 10159 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)       | LTE-FDD | 6.56     | ±9.6                   |
| 10160 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)        | LTE-FDD | 5.82     | ±9.6                   |
| 10161 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)      | LTE-FDD | 6.43     | ±9.6                   |
| 10162 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)      | LTE-FDD | 6.58     | ±9.6                   |
| 10166 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)       | LTE-FDD | 5.46     | ±9.6                   |
| 10167 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)     | LTE-FDD | 6.21     | ±9.6                   |
| 10168 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)     | LTE-FDD | 6.79     | ±9.6                   |
| 10169 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-FDD | 5.73     | ±9.6                   |
| 10170 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10171 | AAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-FDD | 6.49     | ±9.6                   |
| 10172 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-TDD | 9.21     | ±9.6                   |
| 10173 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-TDD | 9.48     | ±9.6                   |
| 10174 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-TDD | 10.25    | ±9.6                   |
| 10175 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)          | LTE-FDD | 5.72     | ±9.6                   |
| 10176 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10177 | CAJ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)           | LTE-FDD | 5.73     | ±9.6                   |
| 10178 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)         | LTE-FDD | 6.52     | ±9.6                   |
| 10179 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)        | LTE-FDD | 6.50     | ±9.6                   |
| 10180 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)         | LTE-FDD | 6.50     | ±9.6                   |
| 10181 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)          | LTE-FDD | 5.72     | ±9.6                   |
| 10182 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10183 | AAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)        | LTE-FDD | 6.50     | ±9.6                   |
| 10184 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)           | LTE-FDD | 5.73     | ±9.6                   |
| 10185 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)         | LTE-FDD | 6.51     | ±9.6                   |
| 10186 | AAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)         | LTE-FDD | 6.50     | ±9.6                   |
| 10187 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         | LTE-FDD | 5.73     | ±9.6                   |
| 10188 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)       | LTE-FDD | 6.52     | ±9.6                   |
| 10189 | AAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)       | LTE-FDD | 6.50     | ±9.6                   |
| 10193 | CAE | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)   | WLAN    | 8.09     | ±9.6                   |
| 10194 | CAE | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)  | WLAN    | 8.12     | ±9.6                   |
| 10195 | CAE | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)  | WLAN    | 8.21     | ±9.6                   |
| 10196 | CAE | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)        | WLAN    | 8.10     | ±9.6                   |
| 10197 | CAE | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)       | WLAN    | 8.13     | ±9.6                   |
| 10198 | CAE | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)       | WLAN    | 8.27     | ±9.6                   |
| 10219 | CAE | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)        | WLAN    | 8.03     | ±9.6                   |
| 10220 | CAE | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)     | WLAN    | 8.13     | ±9.6                   |
| 10221 | CAE | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)     | WLAN    | 8.27     | ±9.6                   |
| 10222 | CAE | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)         | WLAN    | 8.06     | ±9.6                   |
| 10223 | CAE | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)       | WLAN    | 8.46     | ±9.6                   |
| 10224 | CAE | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)      | WLAN    | 8.08     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 12 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                                            | Group    | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|----------------------------------------------------------------------|----------|----------|------------------------|
| 10225 | CAC | UMTS-FDD (HSPA+)                                                     | WCDMA    | 5.97     | ±9.6                   |
| 10226 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)                             | LTE-TDD  | 9.49     | ±9.6                   |
| 10227 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)                             | LTE-TDD  | 10.26    | ±9.6                   |
| 10228 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)                               | LTE-TDD  | 9.22     | ±9.6                   |
| 10229 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)                               | LTE-TDD  | 9.48     | ±9.6                   |
| 10230 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)                               | LTE-TDD  | 10.25    | ±9.6                   |
| 10231 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)                                 | LTE-TDD  | 9.19     | ±9.6                   |
| 10232 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)                               | LTE-TDD  | 9.48     | ±9.6                   |
| 10233 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)                               | LTE-TDD  | 10.25    | ±9.6                   |
| 10234 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)                                 | LTE-TDD  | 9.21     | ±9.6                   |
| 10235 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)                              | LTE-TDD  | 9.48     | ±9.6                   |
| 10236 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)                              | LTE-TDD  | 10.25    | ±9.6                   |
| 10237 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±9.6                   |
| 10238 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)                              | LTE-TDD  | 9.48     | ±9.6                   |
| 10239 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)                              | LTE-TDD  | 10.25    | ±9.6                   |
| 10240 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±9.6                   |
| 10241 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)                           | LTE-TDD  | 9.82     | ±9.6                   |
| 10242 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)                           | LTE-TDD  | 9.86     | ±9.6                   |
| 10243 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)                             | LTE-TDD  | 9.46     | ±9.6                   |
| 10244 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-TDD  | 10.06    | ±9.6                   |
| 10245 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-TDD  | 10.06    | ±9.6                   |
| 10246 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-TDD  | 9.30     | ±9.6                   |
| 10247 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)                             | LTE-TDD  | 9.91     | ±9.6                   |
| 10248 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)                             | LTE-TDD  | 10.09    | ±9.6                   |
| 10249 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)                               | LTE-TDD  | 9.29     | ±9.6                   |
| 10250 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)                            | LTE-TDD  | 9.81     | ±9.6                   |
| 10251 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)                            | LTE-TDD  | 10.17    | ±9.6                   |
| 10252 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)                              | LTE-TDD  | 9.24     | ±9.6                   |
| 10253 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)                            | LTE-TDD  | 9.90     | ±9.6                   |
| 10254 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)                            | LTE-TDD  | 10.14    | ±9.6                   |
| 10255 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)                              | LTE-TDD  | 9.20     | ±9.6                   |
| 10256 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)                          | LTE-TDD  | 9.96     | ±9.6                   |
| 10257 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)                          | LTE-TDD  | 10.08    | ±9.6                   |
| 10258 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)                            | LTE-TDD  | 9.34     | ±9.6                   |
| 10259 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)                            | LTE-TDD  | 9.96     | ±9.6                   |
| 10260 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)                            | LTE-TDD  | 9.97     | ±9.6                   |
| 10261 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)                              | LTE-TDD  | 9.24     | ±9.6                   |
| 10262 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)                            | LTE-TDD  | 9.83     | ±9.6                   |
| 10263 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)                            | LTE-TDD  | 10.16    | ±9.6                   |
| 10264 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)                              | LTE-TDD  | 9.23     | ±9.6                   |
| 10265 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)                           | LTE-TDD  | 9.82     | ±9.6                   |
| 10266 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)                           | LTE-TDD  | 10.07    | ±9.6                   |
| 10267 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)                             | LTE-TDD  | 9.30     | ±9.6                   |
| 10268 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)                           | LTE-TDD  | 10.06    | ±9.6                   |
| 10269 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)                           | LTE-TDD  | 10.13    | ±9.6                   |
| 10270 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                             | LTE-TDD  | 9.58     | ±9.6                   |
| 10274 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP RelB.10)                            | WCDMA    | 4.87     | ±9.6                   |
| 10275 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP RelB.4)                             | WCDMA    | 3.96     | ±9.6                   |
| 10277 | CAA | PHS (QPSK)                                                           | PHS      | 11.81    | ±9.6                   |
| 10278 | CAA | PHS (QPSK, BW 884 MHz, Roll-off 0.5)                                 | PHS      | 11.81    | ±9.6                   |
| 10279 | CAA | PHS (QPSK, BW 884 MHz, Roll-off 0.38)                                | PHS      | 12.18    | ±9.6                   |
| 10290 | AAB | CDMA2000, RC1, SO55, Full Rate                                       | CDMA2000 | 3.91     | ±9.6                   |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate                                       | CDMA2000 | 3.46     | ±9.6                   |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate                                       | CDMA2000 | 3.39     | ±9.6                   |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate                                        | CDMA2000 | 3.50     | ±9.6                   |
| 10295 | AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 k                                  | CDMA2000 | 12.49    | ±9.6                   |
| 10297 | AAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                              | LTE-FDD  | 5.81     | ±9.6                   |
| 10298 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-FDD  | 5.72     | ±9.6                   |
| 10299 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-FDD  | 6.39     | ±9.6                   |
| 10300 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-FDD  | 6.60     | ±9.6                   |
| 10301 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)                 | WiMAX    | 12.03    | ±9.6                   |
| 10302 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | WiMAX    | 12.57    | ±9.6                   |
| 10303 | AAA | IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)                | WiMAX    | 12.52    | ±9.6                   |
| 10304 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)                | WiMAX    | 11.86    | ±9.6                   |
| 10305 | AAA | IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)   | WiMAX    | 15.24    | ±9.6                   |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)   | WiMAX    | 14.67    | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 13 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                                                       | Group    | PAR (dB) | Unc <sup>k</sup> k=2 |
|-------|-----|---------------------------------------------------------------------------------|----------|----------|----------------------|
| 10307 | AAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)               | WIMAX    | 14.49    | ±9.6                 |
| 10308 | AAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)                          | WIMAX    | 14.46    | ±9.6                 |
| 10309 | AAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)           | WIMAX    | 14.58    | ±9.6                 |
| 10310 | AAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)            | WIMAX    | 14.57    | ±9.6                 |
| 10311 | AAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                                        | LTE-FDD  | 6.06     | ±9.6                 |
| 10313 | AAA | IDEN 1:3                                                                        | IDEN     | 10.51    | ±9.6                 |
| 10314 | AAA | IDEN 1:6                                                                        | IDEN     | 13.48    | ±9.6                 |
| 10315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)                       | WLAN     | 1.71     | ±9.6                 |
| 10316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)                   | WLAN     | 8.36     | ±9.6                 |
| 10317 | AAE | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)                         | WLAN     | 8.36     | ±9.6                 |
| 10352 | AAA | Pulse Waveform (200Hz, 10%)                                                     | Generic  | 10.00    | ±9.6                 |
| 10353 | AAA | Pulse Waveform (200Hz, 20%)                                                     | Generic  | 6.99     | ±9.6                 |
| 10354 | AAA | Pulse Waveform (200Hz, 40%)                                                     | Generic  | 3.98     | ±9.6                 |
| 10355 | AAA | Pulse Waveform (200Hz, 60%)                                                     | Generic  | 2.22     | ±9.6                 |
| 10356 | AAA | Pulse Waveform (200Hz, 80%)                                                     | Generic  | 0.97     | ±9.6                 |
| 10387 | AAA | QPSK Waveform, 1 MHz                                                            | Generic  | 5.10     | ±9.6                 |
| 10388 | AAA | QPSK Waveform, 10 MHz                                                           | Generic  | 5.22     | ±9.6                 |
| 10396 | AAA | 64-QAM Waveform, 100 kHz                                                        | Generic  | 6.27     | ±9.6                 |
| 10399 | AAA | 64-QAM Waveform, 40 MHz                                                         | Generic  | 6.27     | ±9.6                 |
| 10400 | AAF | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)                            | WLAN     | 8.37     | ±9.6                 |
| 10401 | AAF | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)                            | WLAN     | 8.60     | ±9.6                 |
| 10402 | AAF | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)                            | WLAN     | 8.53     | ±9.6                 |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | CDMA2000 | 3.76     | ±9.6                 |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | CDMA2000 | 3.77     | ±9.6                 |
| 10406 | AAB | CDMA2000, RC3, SC32, SCH0, Full Rate                                            | CDMA2000 | 5.22     | ±9.6                 |
| 10410 | AAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | LTE-TDD  | 7.82     | ±9.6                 |
| 10414 | AAA | WLAN CDD, 64-QAM, 40 MHz                                                        | Generic  | 8.54     | ±9.6                 |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | WLAN     | 1.54     | ±9.6                 |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | WLAN     | 8.23     | ±9.6                 |
| 10417 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | WLAN     | 8.23     | ±9.6                 |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | WLAN     | 8.14     | ±9.6                 |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | WLAN     | 8.19     | ±9.6                 |
| 10422 | AAD | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | WLAN     | 8.32     | ±9.6                 |
| 10423 | AAD | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | WLAN     | 8.47     | ±9.6                 |
| 10424 | AAD | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | WLAN     | 8.40     | ±9.6                 |
| 10425 | AAD | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | WLAN     | 8.41     | ±9.6                 |
| 10426 | AAD | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | WLAN     | 8.45     | ±9.6                 |
| 10427 | AAD | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                                  | WLAN     | 8.41     | ±9.6                 |
| 10430 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                                                | LTE-FDD  | 8.28     | ±9.6                 |
| 10431 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.38     | ±9.6                 |
| 10432 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34     | ±9.6                 |
| 10433 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34     | ±9.6                 |
| 10434 | AAB | W-CDMA (BS Test Model 1, 64 DPCH)                                               | WCDMA    | 8.60     | ±9.6                 |
| 10435 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82     | ±9.6                 |
| 10447 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                                  | LTE-FDD  | 7.56     | ±9.6                 |
| 10448 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.53     | ±9.6                 |
| 10449 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.51     | ±9.6                 |
| 10450 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.48     | ±9.6                 |
| 10451 | AAB | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                                 | WCDMA    | 7.59     | ±9.6                 |
| 10453 | AAE | Validation (Square, 10 ms, 1 ms)                                                | Test     | 10.00    | ±9.6                 |
| 10456 | AAD | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)                           | WLAN     | 8.63     | ±9.6                 |
| 10457 | AAB | UMTS-FDD (DC-HSPA)                                                              | WCDMA    | 6.62     | ±9.6                 |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                                          | CDMA2000 | 6.55     | ±9.6                 |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                                          | CDMA2000 | 8.25     | ±9.6                 |
| 10460 | AAB | UMTS-FDD (WCDMA, AMR)                                                           | WCDMA    | 2.39     | ±9.6                 |
| 10461 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 7.82     | ±9.6                 |
| 10462 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)               | LTE-TDD  | 8.30     | ±9.6                 |
| 10463 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)               | LTE-TDD  | 8.56     | ±9.6                 |
| 10464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 7.82     | ±9.6                 |
| 10465 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.32     | ±9.6                 |
| 10466 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.57     | ±9.6                 |
| 10467 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 7.82     | ±9.6                 |
| 10468 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.32     | ±9.6                 |
| 10469 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.56     | ±9.6                 |
| 10470 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82     | ±9.6                 |
| 10471 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                | LTE-TDD  | 8.32     | ±9.6                 |

Certificate No: EX-7511\_Jul24

Page 14 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                                           | Group   | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|---------------------------------------------------------------------|---------|----------|------------------------|
| 10472 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10473 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)       | LTE-TDD | 7.82     | ±9.6                   |
| 10474 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.32     | ±9.6                   |
| 10475 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10477 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.32     | ±9.6                   |
| 10478 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10479 | AAG | LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10480 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.18     | ±9.6                   |
| 10481 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45     | ±9.6                   |
| 10482 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.71     | ±9.6                   |
| 10483 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.39     | ±9.6                   |
| 10484 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.47     | ±9.6                   |
| 10485 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.59     | ±9.6                   |
| 10486 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.38     | ±9.6                   |
| 10487 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.60     | ±9.6                   |
| 10488 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.70     | ±9.6                   |
| 10489 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31     | ±9.6                   |
| 10490 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74     | ±9.6                   |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.41     | ±9.6                   |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.55     | ±9.6                   |
| 10494 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74     | ±9.6                   |
| 10495 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.37     | ±9.6                   |
| 10496 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10497 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 7.67     | ±9.6                   |
| 10498 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.40     | ±9.6                   |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68     | ±9.6                   |
| 10500 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.67     | ±9.6                   |
| 10501 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.44     | ±9.6                   |
| 10502 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.52     | ±9.6                   |
| 10503 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.72     | ±9.6                   |
| 10504 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31     | ±9.6                   |
| 10505 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10506 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10507 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.36     | ±9.6                   |
| 10508 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.55     | ±9.6                   |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.99     | ±9.6                   |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.49     | ±9.6                   |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.51     | ±9.6                   |
| 10512 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10513 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.42     | ±9.6                   |
| 10514 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45     | ±9.6                   |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | WLAN    | 1.58     | ±9.6                   |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | WLAN    | 1.57     | ±9.6                   |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | WLAN    | 1.58     | ±9.6                   |
| 10518 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | WLAN    | 8.23     | ±9.6                   |
| 10519 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | WLAN    | 8.39     | ±9.6                   |
| 10520 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | WLAN    | 8.12     | ±9.6                   |
| 10521 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | WLAN    | 7.97     | ±9.6                   |
| 10522 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | WLAN    | 8.45     | ±9.6                   |
| 10523 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)          | WLAN    | 8.08     | ±9.6                   |
| 10524 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)          | WLAN    | 8.27     | ±9.6                   |
| 10525 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)                  | WLAN    | 8.36     | ±9.6                   |
| 10526 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)                  | WLAN    | 8.42     | ±9.6                   |
| 10527 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)                  | WLAN    | 8.21     | ±9.6                   |
| 10528 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)                  | WLAN    | 8.36     | ±9.6                   |
| 10529 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)                  | WLAN    | 8.36     | ±9.6                   |
| 10531 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)                  | WLAN    | 8.43     | ±9.6                   |
| 10532 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)                  | WLAN    | 8.29     | ±9.6                   |
| 10533 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)                  | WLAN    | 8.38     | ±9.6                   |
| 10534 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)                  | WLAN    | 8.45     | ±9.6                   |
| 10535 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)                  | WLAN    | 8.45     | ±9.6                   |
| 10536 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)                  | WLAN    | 8.32     | ±9.6                   |
| 10537 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)                  | WLAN    | 8.44     | ±9.6                   |
| 10538 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)                  | WLAN    | 8.54     | ±9.6                   |
| 10540 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)                  | WLAN    | 8.39     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 15 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                                       | Group | PAR (dB) | Unc <sup>k</sup> k = 2 |
|-------|-----|-----------------------------------------------------------------|-------|----------|------------------------|
| 10541 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)              | WLAN  | 8.46     | ±9.6                   |
| 10542 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)              | WLAN  | 8.65     | ±9.6                   |
| 10543 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)              | WLAN  | 8.65     | ±9.6                   |
| 10544 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)              | WLAN  | 8.47     | ±9.6                   |
| 10545 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)              | WLAN  | 8.55     | ±9.6                   |
| 10546 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)              | WLAN  | 8.35     | ±9.6                   |
| 10547 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)              | WLAN  | 8.49     | ±9.6                   |
| 10548 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)              | WLAN  | 8.37     | ±9.6                   |
| 10550 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)              | WLAN  | 8.38     | ±9.6                   |
| 10551 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle)              | WLAN  | 8.50     | ±9.6                   |
| 10552 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)              | WLAN  | 8.42     | ±9.6                   |
| 10553 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)              | WLAN  | 8.45     | ±9.6                   |
| 10554 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle)             | WLAN  | 8.48     | ±9.6                   |
| 10555 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)             | WLAN  | 8.47     | ±9.6                   |
| 10556 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)             | WLAN  | 8.50     | ±9.6                   |
| 10557 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)             | WLAN  | 8.52     | ±9.6                   |
| 10558 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)             | WLAN  | 8.61     | ±9.6                   |
| 10560 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)             | WLAN  | 8.73     | ±9.6                   |
| 10561 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)             | WLAN  | 8.56     | ±9.6                   |
| 10562 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)             | WLAN  | 8.69     | ±9.6                   |
| 10563 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)             | WLAN  | 8.77     | ±9.6                   |
| 10564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | WLAN  | 8.45     | ±9.6                   |
| 10566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | WLAN  | 8.13     | ±9.6                   |
| 10567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | WLAN  | 8.00     | ±9.6                   |
| 10568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | WLAN  | 8.37     | ±9.6                   |
| 10569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | WLAN  | 8.10     | ±9.6                   |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | WLAN  | 8.30     | ±9.6                   |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | WLAN  | 1.99     | ±9.6                   |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | WLAN  | 1.99     | ±9.6                   |
| 10573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | WLAN  | 1.98     | ±9.6                   |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | WLAN  | 1.98     | ±9.6                   |
| 10575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | WLAN  | 8.59     | ±9.6                   |
| 10576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | WLAN  | 8.60     | ±9.6                   |
| 10577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | WLAN  | 8.70     | ±9.6                   |
| 10578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | WLAN  | 8.49     | ±9.6                   |
| 10579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | WLAN  | 8.98     | ±9.6                   |
| 10580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | WLAN  | 8.76     | ±9.6                   |
| 10581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | WLAN  | 8.35     | ±9.6                   |
| 10582 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | WLAN  | 8.67     | ±9.6                   |
| 10583 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | WLAN  | 8.59     | ±9.6                   |
| 10584 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | WLAN  | 8.60     | ±9.6                   |
| 10585 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | WLAN  | 8.70     | ±9.6                   |
| 10586 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | WLAN  | 8.49     | ±9.6                   |
| 10587 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | WLAN  | 8.36     | ±9.6                   |
| 10588 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | WLAN  | 8.76     | ±9.6                   |
| 10589 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | WLAN  | 8.35     | ±9.6                   |
| 10590 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | WLAN  | 8.67     | ±9.6                   |
| 10591 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)          | WLAN  | 8.63     | ±9.6                   |
| 10592 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)          | WLAN  | 8.79     | ±9.6                   |
| 10593 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)          | WLAN  | 8.64     | ±9.6                   |
| 10594 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)          | WLAN  | 8.74     | ±9.6                   |
| 10595 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)          | WLAN  | 8.74     | ±9.6                   |
| 10596 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)          | WLAN  | 8.71     | ±9.6                   |
| 10597 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)          | WLAN  | 8.72     | ±9.6                   |
| 10598 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)          | WLAN  | 8.50     | ±9.6                   |
| 10599 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)          | WLAN  | 8.79     | ±9.6                   |
| 10600 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)          | WLAN  | 8.88     | ±9.6                   |
| 10601 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)          | WLAN  | 8.82     | ±9.6                   |
| 10602 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)          | WLAN  | 8.94     | ±9.6                   |
| 10603 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)          | WLAN  | 9.03     | ±9.6                   |
| 10604 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)          | WLAN  | 8.76     | ±9.6                   |
| 10605 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)          | WLAN  | 8.97     | ±9.6                   |
| 10606 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)          | WLAN  | 8.82     | ±9.6                   |
| 10607 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)              | WLAN  | 8.64     | ±9.6                   |
| 10608 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)              | WLAN  | 8.77     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 16 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                              | Group     | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|--------------------------------------------------------|-----------|----------|------------------------|
| 10609 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.57     | ±9.6                   |
| 10610 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.78     | ±9.6                   |
| 10611 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.70     | ±9.6                   |
| 10612 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.77     | ±9.6                   |
| 10613 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.94     | ±9.6                   |
| 10614 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.59     | ±9.6                   |
| 10615 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10616 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10617 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10618 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.58     | ±9.6                   |
| 10619 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.86     | ±9.6                   |
| 10620 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.87     | ±9.6                   |
| 10621 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.77     | ±9.6                   |
| 10622 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.68     | ±9.6                   |
| 10623 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10624 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.96     | ±9.6                   |
| 10625 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)     | WLAN      | 8.96     | ±9.6                   |
| 10626 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)     | WLAN      | 8.83     | ±9.6                   |
| 10627 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)     | WLAN      | 8.88     | ±9.6                   |
| 10628 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.71     | ±9.6                   |
| 10629 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.85     | ±9.6                   |
| 10630 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.72     | ±9.6                   |
| 10631 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10632 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.74     | ±9.6                   |
| 10633 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.83     | ±9.6                   |
| 10634 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.80     | ±9.6                   |
| 10635 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10636 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)    | WLAN      | 8.83     | ±9.6                   |
| 10637 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)    | WLAN      | 8.79     | ±9.6                   |
| 10638 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)    | WLAN      | 8.86     | ±9.6                   |
| 10639 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)    | WLAN      | 8.85     | ±9.6                   |
| 10640 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)    | WLAN      | 8.98     | ±9.6                   |
| 10641 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)    | WLAN      | 9.06     | ±9.6                   |
| 10642 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)    | WLAN      | 9.06     | ±9.6                   |
| 10643 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)    | WLAN      | 8.89     | ±9.6                   |
| 10644 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)    | WLAN      | 9.05     | ±9.6                   |
| 10645 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)    | WLAN      | 9.11     | ±9.6                   |
| 10646 | AAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | LTE-TDD   | 11.96    | ±9.6                   |
| 10647 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | LTE-TDD   | 11.96    | ±9.6                   |
| 10648 | AAA | CDMA2000 (1x Advanced)                                 | CDMA2000  | 3.45     | ±9.6                   |
| 10652 | AAF | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | LTE-TDD   | 6.91     | ±9.6                   |
| 10653 | AAF | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 7.42     | ±9.6                   |
| 10654 | AAE | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 6.96     | ±9.6                   |
| 10655 | AAF | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 7.21     | ±9.6                   |
| 10658 | AAB | Pulse Waveform (200Hz, 10%)                            | Test      | 10.00    | ±9.6                   |
| 10659 | AAB | Pulse Waveform (200Hz, 20%)                            | Test      | 6.99     | ±9.6                   |
| 10660 | AAB | Pulse Waveform (200Hz, 40%)                            | Test      | 3.98     | ±9.6                   |
| 10661 | AAB | Pulse Waveform (200Hz, 60%)                            | Test      | 2.22     | ±9.6                   |
| 10662 | AAB | Pulse Waveform (200Hz, 80%)                            | Test      | 0.97     | ±9.6                   |
| 10670 | AAA | Bluetooth Low Energy                                   | Bluetooth | 2.19     | ±9.6                   |
| 10671 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)          | WLAN      | 9.09     | ±9.6                   |
| 10672 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)          | WLAN      | 8.57     | ±9.6                   |
| 10673 | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)          | WLAN      | 8.78     | ±9.6                   |
| 10674 | AAC | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)          | WLAN      | 8.74     | ±9.6                   |
| 10675 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)          | WLAN      | 8.90     | ±9.6                   |
| 10676 | AAC | IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)          | WLAN      | 8.77     | ±9.6                   |
| 10677 | AAC | IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)          | WLAN      | 8.73     | ±9.6                   |
| 10678 | AAC | IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)          | WLAN      | 8.78     | ±9.6                   |
| 10679 | AAC | IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)          | WLAN      | 8.89     | ±9.6                   |
| 10680 | AAC | IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)          | WLAN      | 8.80     | ±9.6                   |
| 10681 | AAC | IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)         | WLAN      | 8.62     | ±9.6                   |
| 10682 | AAC | IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)         | WLAN      | 8.83     | ±9.6                   |
| 10683 | AAC | IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)          | WLAN      | 8.42     | ±9.6                   |
| 10684 | AAC | IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle)          | WLAN      | 8.26     | ±9.6                   |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle)          | WLAN      | 8.33     | ±9.6                   |
| 10686 | AAC | IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle)          | WLAN      | 8.28     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 17 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                      | Group | PAR (dB) | Unc <sup>k</sup> k = 2 |
|-------|-----|------------------------------------------------|-------|----------|------------------------|
| 10687 | AAC | IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.45     | ±9.6                   |
| 10688 | AAC | IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10689 | AAC | IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10690 | AAC | IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10691 | AAC | IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10692 | AAC | IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10693 | AAC | IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.25     | ±9.6                   |
| 10694 | AAC | IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle) | WLAN  | 8.57     | ±9.6                   |
| 10695 | AAC | IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.78     | ±9.6                   |
| 10696 | AAC | IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.91     | ±9.6                   |
| 10697 | AAC | IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.61     | ±9.6                   |
| 10698 | AAC | IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.89     | ±9.6                   |
| 10699 | AAC | IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.82     | ±9.6                   |
| 10700 | AAC | IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.73     | ±9.6                   |
| 10701 | AAC | IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.86     | ±9.6                   |
| 10702 | AAC | IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.70     | ±9.6                   |
| 10703 | AAC | IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.82     | ±9.6                   |
| 10704 | AAC | IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.56     | ±9.6                   |
| 10705 | AAC | IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle) | WLAN  | 8.69     | ±9.6                   |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle) | WLAN  | 8.66     | ±9.6                   |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)  | WLAN  | 8.32     | ±9.6                   |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.39     | ±9.6                   |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.67     | ±9.6                   |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.26     | ±9.6                   |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.45     | ±9.6                   |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.30     | ±9.6                   |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.48     | ±9.6                   |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle) | WLAN  | 8.24     | ±9.6                   |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.81     | ±9.6                   |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.87     | ±9.6                   |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.76     | ±9.6                   |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.70     | ±9.6                   |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.90     | ±9.6                   |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.74     | ±9.6                   |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.72     | ±9.6                   |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.66     | ±9.6                   |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.65     | ±9.6                   |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle) | WLAN  | 8.64     | ±9.6                   |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle) | WLAN  | 8.67     | ±9.6                   |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)  | WLAN  | 8.42     | ±9.6                   |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)  | WLAN  | 8.46     | ±9.6                   |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)  | WLAN  | 8.40     | ±9.6                   |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.27     | ±9.6                   |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.36     | ±9.6                   |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.42     | ±9.6                   |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.48     | ±9.6                   |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.40     | ±9.6                   |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle) | WLAN  | 8.43     | ±9.6                   |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle) | WLAN  | 8.94     | ±9.6                   |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle) | WLAN  | 9.16     | ±9.6                   |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle) | WLAN  | 8.93     | ±9.6                   |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle) | WLAN  | 9.11     | ±9.6                   |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle) | WLAN  | 9.04     | ±9.6                   |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle) | WLAN  | 8.93     | ±9.6                   |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle) | WLAN  | 8.90     | ±9.6                   |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle) | WLAN  | 8.79     | ±9.6                   |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle) | WLAN  | 8.82     | ±9.6                   |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle) | WLAN  | 8.81     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 18 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                      | Group         | PAR (dB) | Unc <sup>k</sup> k = 2 |
|-------|-----|------------------------------------------------|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle) | WLAN          | 9.00     | ±9.6                   |
| 10754 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle) | WLAN          | 8.94     | ±9.6                   |
| 10755 | AAC | IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle)  | WLAN          | 8.64     | ±9.6                   |
| 10756 | AAC | IEEE 802.11ax (160MHz, MCS1, 99pc duty cycle)  | WLAN          | 8.77     | ±9.6                   |
| 10757 | AAC | IEEE 802.11ax (160MHz, MCS2, 99pc duty cycle)  | WLAN          | 8.77     | ±9.6                   |
| 10758 | AAC | IEEE 802.11ax (160MHz, MCS3, 99pc duty cycle)  | WLAN          | 8.69     | ±9.6                   |
| 10759 | AAC | IEEE 802.11ax (160MHz, MCS4, 99pc duty cycle)  | WLAN          | 8.58     | ±9.6                   |
| 10760 | AAC | IEEE 802.11ax (160MHz, MCS5, 99pc duty cycle)  | WLAN          | 8.49     | ±9.6                   |
| 10761 | AAC | IEEE 802.11ax (160MHz, MCS6, 99pc duty cycle)  | WLAN          | 8.58     | ±9.6                   |
| 10762 | AAC | IEEE 802.11ax (160MHz, MCS7, 99pc duty cycle)  | WLAN          | 8.49     | ±9.6                   |
| 10763 | AAC | IEEE 802.11ax (160MHz, MCS8, 99pc duty cycle)  | WLAN          | 8.53     | ±9.6                   |
| 10764 | AAC | IEEE 802.11ax (160MHz, MCS9, 99pc duty cycle)  | WLAN          | 8.54     | ±9.6                   |
| 10765 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle) | WLAN          | 8.54     | ±9.6                   |
| 10766 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle) | WLAN          | 8.51     | ±9.6                   |
| 10767 | AAG | 5G NR (CP-OFDM, 1 RB, 5MHz, QPSK, 15kHz)       | 5G NR FR1 TDD | 7.99     | ±9.6                   |
| 10768 | AAE | 5G NR (CP-OFDM, 1 RB, 10MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10769 | AAD | 5G NR (CP-OFDM, 1 RB, 15MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10770 | AAE | 5G NR (CP-OFDM, 1 RB, 20MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10771 | AAD | 5G NR (CP-OFDM, 1 RB, 25MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10772 | AAE | 5G NR (CP-OFDM, 1 RB, 30MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.23     | ±9.6                   |
| 10773 | AAF | 5G NR (CP-OFDM, 1 RB, 40MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.03     | ±9.6                   |
| 10774 | AAE | 5G NR (CP-OFDM, 1 RB, 50MHz, QPSK, 15kHz)      | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10775 | AAF | 5G NR (CP-OFDM, 50% RB, 5MHz, QPSK, 15kHz)     | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10776 | AAE | 5G NR (CP-OFDM, 50% RB, 10MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10778 | AAE | 5G NR (CP-OFDM, 50% RB, 20MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10780 | AAE | 5G NR (CP-OFDM, 50% RB, 30MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10781 | AAF | 5G NR (CP-OFDM, 50% RB, 40MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10782 | AAE | 5G NR (CP-OFDM, 50% RB, 50MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.43     | ±9.6                   |
| 10783 | AAG | 5G NR (CP-OFDM, 100% RB, 5MHz, QPSK, 15kHz)    | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10784 | AAE | 5G NR (CP-OFDM, 100% RB, 10MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.29     | ±9.6                   |
| 10785 | AAD | 5G NR (CP-OFDM, 100% RB, 15MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10786 | AAE | 5G NR (CP-OFDM, 100% RB, 20MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10787 | AAD | 5G NR (CP-OFDM, 100% RB, 25MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.44     | ±9.6                   |
| 10788 | AAE | 5G NR (CP-OFDM, 100% RB, 30MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10789 | AAF | 5G NR (CP-OFDM, 100% RB, 40MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10790 | AAE | 5G NR (CP-OFDM, 100% RB, 50MHz, QPSK, 15kHz)   | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10791 | AAG | 5G NR (CP-OFDM, 1 RB, 5MHz, QPSK, 30kHz)       | 5G NR FR1 TDD | 7.83     | ±9.6                   |
| 10792 | AAE | 5G NR (CP-OFDM, 1 RB, 10MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.92     | ±9.6                   |
| 10793 | AAD | 5G NR (CP-OFDM, 1 RB, 15MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.95     | ±9.6                   |
| 10794 | AAE | 5G NR (CP-OFDM, 1 RB, 20MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.82     | ±9.6                   |
| 10795 | AAD | 5G NR (CP-OFDM, 1 RB, 25MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.84     | ±9.6                   |
| 10796 | AAE | 5G NR (CP-OFDM, 1 RB, 30MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.82     | ±9.6                   |
| 10797 | AAF | 5G NR (CP-OFDM, 1 RB, 40MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10798 | AAE | 5G NR (CP-OFDM, 1 RB, 50MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10799 | AAF | 5G NR (CP-OFDM, 1 RB, 60MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10801 | AAF | 5G NR (CP-OFDM, 1 RB, 80MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10802 | AAE | 5G NR (CP-OFDM, 1 RB, 90MHz, QPSK, 30kHz)      | 5G NR FR1 TDD | 7.87     | ±9.6                   |
| 10803 | AAF | 5G NR (CP-OFDM, 1 RB, 100MHz, QPSK, 30kHz)     | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10805 | AAE | 5G NR (CP-OFDM, 50% RB, 10MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10806 | AAD | 5G NR (CP-OFDM, 50% RB, 15MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10809 | AAE | 5G NR (CP-OFDM, 50% RB, 30MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10810 | AAE | 5G NR (CP-OFDM, 50% RB, 40MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10812 | AAF | 5G NR (CP-OFDM, 50% RB, 60MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10817 | AAG | 5G NR (CP-OFDM, 100% RB, 5MHz, QPSK, 30kHz)    | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10818 | AAE | 5G NR (CP-OFDM, 100% RB, 10MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10819 | AAD | 5G NR (CP-OFDM, 100% RB, 15MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.33     | ±9.6                   |
| 10820 | AAE | 5G NR (CP-OFDM, 100% RB, 20MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10821 | AAD | 5G NR (CP-OFDM, 100% RB, 25MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10822 | AAE | 5G NR (CP-OFDM, 100% RB, 30MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10823 | AAF | 5G NR (CP-OFDM, 100% RB, 40MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10824 | AAE | 5G NR (CP-OFDM, 100% RB, 50MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10825 | AAF | 5G NR (CP-OFDM, 100% RB, 60MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10827 | AAF | 5G NR (CP-OFDM, 100% RB, 80MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10828 | AAE | 5G NR (CP-OFDM, 100% RB, 90MHz, QPSK, 30kHz)   | 5G NR FR1 TDD | 8.43     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 19 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                            | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------------|---------------|----------|------------------------|
| 10829 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10830 | AAE | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.63     | ±9.6                   |
| 10831 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.73     | ±9.6                   |
| 10832 | AAE | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.74     | ±9.6                   |
| 10833 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10834 | AAE | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.75     | ±9.6                   |
| 10835 | AAF | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10836 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.66     | ±9.6                   |
| 10837 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.68     | ±9.6                   |
| 10839 | AAF | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10840 | AAE | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.67     | ±9.6                   |
| 10841 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)         | 5G NR FR1 TDD | 7.71     | ±9.6                   |
| 10843 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.49     | ±9.6                   |
| 10844 | AAE | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10846 | AAE | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10854 | AAE | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10855 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10856 | AAE | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10857 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10858 | AAE | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10859 | AAF | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10860 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10861 | AAF | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10863 | AAF | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10864 | AAE | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10865 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)      | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10866 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.88     | ±9.6                   |
| 10868 | AAF | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.89     | ±9.6                   |
| 10869 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10870 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.86     | ±9.6                   |
| 10871 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10872 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52     | ±9.6                   |
| 10873 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10874 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10875 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)        | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10876 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 8.39     | ±9.6                   |
| 10877 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)       | 5G NR FR2 TDD | 7.95     | ±9.6                   |
| 10878 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10879 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)       | 5G NR FR2 TDD | 8.12     | ±9.6                   |
| 10880 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 8.38     | ±9.6                   |
| 10881 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10882 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 5.96     | ±9.6                   |
| 10883 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 6.57     | ±9.6                   |
| 10884 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 6.53     | ±9.6                   |
| 10885 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10886 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10887 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)         | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10888 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 8.35     | ±9.6                   |
| 10889 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)        | 5G NR FR2 TDD | 8.02     | ±9.6                   |
| 10890 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 8.40     | ±9.6                   |
| 10891 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)        | 5G NR FR2 TDD | 8.13     | ±9.6                   |
| 10892 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10897 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)        | 5G NR FR1 TDD | 5.66     | ±9.6                   |
| 10898 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10899 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10900 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10901 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10902 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10903 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10904 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10905 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10906 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10907 | AAE | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.78     | ±9.6                   |
| 10908 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10909 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.96     | ±9.6                   |
| 10910 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.83     | ±9.6                   |

Certificate No: EX-7511\_Jul24

Page 20 of 22

EX3DV4 - SN:7511

July 23, 2024

| UID   | Rev | Communication System Name                           | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|-----------------------------------------------------|---------------|----------|------------------------|
| 10911 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10912 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10913 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10914 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.85     | ±9.6                   |
| 10915 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.83     | ±9.6                   |
| 10916 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10917 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10918 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.86     | ±9.6                   |
| 10919 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10920 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10921 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.82     | ±9.6                   |
| 10922 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10923 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10924 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.95     | ±9.6                   |
| 10925 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.52     | ±9.6                   |
| 10928 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)       | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10929 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10930 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10931 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10933 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10934 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10935 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.90     | ±9.6                   |
| 10936 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)     | 5G NR FR1 FDD | 5.77     | ±9.6                   |
| 10937 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.90     | ±9.6                   |
| 10938 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.82     | ±9.6                   |
| 10939 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.89     | ±9.6                   |
| 10940 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10941 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10942 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.95     | ±9.6                   |
| 10943 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.81     | ±9.6                   |
| 10944 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10945 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10947 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10948 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10949 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10950 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.92     | ±9.6                   |
| 10951 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 8.25     | ±9.6                   |
| 10952 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 FDD | 8.15     | ±9.6                   |
| 10953 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.23     | ±9.6                   |
| 10954 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.42     | ±9.6                   |
| 10955 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.14     | ±9.6                   |
| 10956 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 FDD | 8.31     | ±9.6                   |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.61     | ±9.6                   |
| 10958 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.33     | ±9.6                   |
| 10959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 9.32     | ±9.6                   |
| 10960 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 TDD | 9.36     | ±9.6                   |
| 10961 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.40     | ±9.6                   |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.55     | ±9.6                   |
| 10963 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.29     | ±9.6                   |
| 10964 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 TDD | 9.37     | ±9.6                   |
| 10965 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.55     | ±9.6                   |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.42     | ±9.6                   |
| 10967 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.49     | ±9.6                   |
| 10968 | AAD | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 11.59    | ±9.6                   |
| 10972 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)         | 5G NR FR1 TDD | 9.06     | ±9.6                   |
| 10973 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 10.28    | ±9.6                   |
| 10974 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)  | 5G NR FR1 TDD | 1.16     | ±9.6                   |
| 10978 | AAA | ULLA BDR                                            | ULLA          | 8.58     | ±9.6                   |
| 10979 | AAA | ULLA HDR4                                           | ULLA          | 10.32    | ±9.6                   |
| 10980 | AAA | ULLA HDR8                                           | ULLA          | 3.19     | ±9.6                   |
| 10981 | AAA | ULLA HDRp4                                          | ULLA          | 3.43     | ±9.6                   |
| 10982 | AAA | ULLA HDRp8                                          | ULLA          |          |                        |

Certificate No: EX-7511\_Jul24

Page 21 of 22

## **Appendix C**

### **Dipole Calibration Certificates**

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



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

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

Accreditation No.: **SCS 0108**

Client **Motorola Solutions MY**

Certificate No: **CLA150-4016\_Jan23**

## CALIBRATION CERTIFICATE

Object **CLA150 - SN: 4016**

Calibration procedure(s) **QA CAL-15.v10**  
**Calibration Procedure for SAR Validation Sources below 700 MHz**

Calibration date: **January 06, 2023**

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards               | ID #               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|---------------------------------|--------------------|-----------------------------------|------------------------|
| Power meter NRP                 | SN: 104778         | 04-Apr-22 (No. 217-03525/03524)   | Apr-23                 |
| Power sensor NRP-Z91            | SN: 103244         | 04-Apr-22 (No. 217-03524)         | Apr-23                 |
| Power sensor NRP-Z91            | SN: 103245         | 04-Apr-22 (No. 217-03525)         | Apr-23                 |
| Reference 20 dB Attenuator      | SN: CC2552 (20x)   | 04-Apr-22 (No. 217-03527)         | Apr-23                 |
| Type-N mismatch combination     | SN: 310982 / 06327 | 04-Apr-22 (No. 217-03528)         | Apr-23                 |
| Reference Probe EX3DV4          | SN: 3877           | 06-Jan-23 (No. EX3-3877_Jan23)    | Jan-24                 |
| DAE4                            | SN: 654            | 26-Jan-22 (No. DAE4-654_Jan22)    | Jan-23                 |
| Secondary Standards             | ID #               | Check Date (in house)             | Scheduled Check        |
| Power meter NRP2                | SN: 107183         | 08-Nov-21 (in house check Dec-22) | In house check: Dec-24 |
| Power sensor NRP-Z91            | SN: 100922         | 15-Dec-09 (in house check Dec-22) | In house check: Dec-24 |
| Power sensor NRP-Z91            | SN: 100418         | 01-Jan-04 (in house check Dec-22) | In house check: Dec-24 |
| RF generator HP 8648C           | SN: US3642U01700   | 04-Aug-99 (in house check Jun-22) | In house check: Jun-24 |
| Network Analyzer Agilent E8358A | SN: US41080477     | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

|                |                            |                                   |               |
|----------------|----------------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br>Aidonia Georgiadou | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Sven Kühn                  | Technical Manager                 |               |

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

Issued: January 18, 2023

Certificate No: CLA150-4016\_Jan23

Page 1 of 8

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



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

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

Accreditation No.: **SCS 0108**

#### Glossary:

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

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

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

#### Additional Documentation:

- DASY System Handbook

#### Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss:** This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured:** SAR 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%.

**Measurement Conditions**

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

|                      |                                  |                                  |
|----------------------|----------------------------------|----------------------------------|
| DASY Version         | DASY5                            | V52.10.4                         |
| Extrapolation        | Advanced Extrapolation           |                                  |
| Phantom              | ELI4 Flat Phantom                | Shell thickness: $2 \pm 0.2$ mm  |
| EUT Positioning      | Touch Position                   |                                  |
| Zoom Scan Resolution | $dx, dy = 4.0$ mm, $dz = 1.4$ mm | Graded Ratio = 1.4 (Z direction) |
| Frequency            | 150 MHz $\pm$ 1 MHz              |                                  |

**Head TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity    | Conductivity                  |
|-----------------------------------------|---------------------|-----------------|-------------------------------|
| Nominal Head TSL parameters             | 22.0 °C             | 52.3            | 0.76 mho/m                    |
| Measured Head TSL parameters            | $(22.0 \pm 0.2)$ °C | $51.2 \pm 6 \%$ | $0.76 \text{ mho/m} \pm 6 \%$ |
| Head TSL temperature change during test | $< 0.5$ °C          | ----            | ----                          |

**SAR result with Head TSL**

|                                                       |                  |                                                |
|-------------------------------------------------------|------------------|------------------------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL | Condition        |                                                |
| SAR measured                                          | 1 W input power  | 3.79 W/kg                                      |
| SAR for nominal Head TSL parameters                   | normalized to 1W | <b>3.77 W/kg <math>\pm</math> 18.4 % (k=2)</b> |

|                                                         |                  |                                                |
|---------------------------------------------------------|------------------|------------------------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL | condition        |                                                |
| SAR measured                                            | 1 W input power  | 2.50 W/kg                                      |
| SAR for nominal Head TSL parameters                     | normalized to 1W | <b>2.49 W/kg <math>\pm</math> 18.0 % (k=2)</b> |

**Body TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity    | Conductivity                  |
|-----------------------------------------|---------------------|-----------------|-------------------------------|
| Nominal Body TSL parameters             | 22.0 °C             | 61.9            | 0.80 mho/m                    |
| Measured Body TSL parameters            | $(22.0 \pm 0.2)$ °C | $61.6 \pm 6 \%$ | $0.81 \text{ mho/m} \pm 6 \%$ |
| Body TSL temperature change during test | $< 0.5$ °C          | ----            | ----                          |

**SAR result with Body TSL**

|                                                       |                  |                                                |
|-------------------------------------------------------|------------------|------------------------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL | Condition        |                                                |
| SAR measured                                          | 1 W input power  | 3.90 W/kg                                      |
| SAR for nominal Body TSL parameters                   | normalized to 1W | <b>3.86 W/kg <math>\pm</math> 18.4 % (k=2)</b> |

|                                                         |                  |                                                |
|---------------------------------------------------------|------------------|------------------------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL | condition        |                                                |
| SAR measured                                            | 1 W input power  | 2.58 W/kg                                      |
| SAR for nominal Body TSL parameters                     | normalized to 1W | <b>2.55 W/kg <math>\pm</math> 18.0 % (k=2)</b> |

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

|                                      |                             |
|--------------------------------------|-----------------------------|
| Impedance, transformed to feed point | $47.9 \Omega + 3.6 j\Omega$ |
| Return Loss                          | - 27.4 dB                   |

**Antenna Parameters with Body TSL**

|                                      |                             |
|--------------------------------------|-----------------------------|
| Impedance, transformed to feed point | $50.1 \Omega - 2.5 j\Omega$ |
| Return Loss                          | - 32.1 dB                   |

**Additional EUT Data**

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

**DASY5 Validation Report for Head TSL**

Date: 06.01.2023

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: CLA150; Type: CLA150; Serial: CLA150 - SN: 4016**

Communication System: UID 0 - CW; Frequency: 150 MHz

Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.76$  S/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3877; ConvF(12.51, 12.51, 12.51) @ 150 MHz; Calibrated: 06.01.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 26.01.2022
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

**CLA Calibration for HSL-LF Tissue/CLA150, touch configuration, Pin=1W/Zoom Scan, dist=1.4mm (8x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 78.38 V/m; Power Drift = -0.08 dB

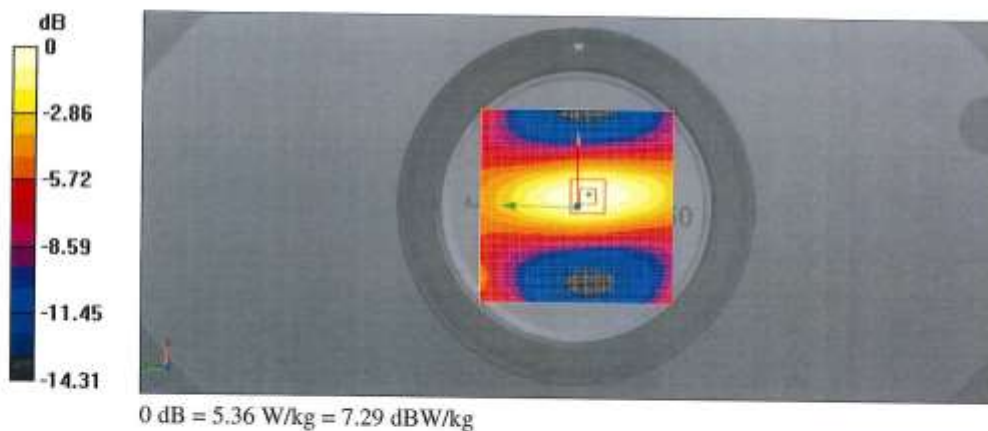
Peak SAR (extrapolated) = 7.08 W/kg

**SAR(1 g) = 3.79 W/kg; SAR(10 g) = 2.5 W/kg**

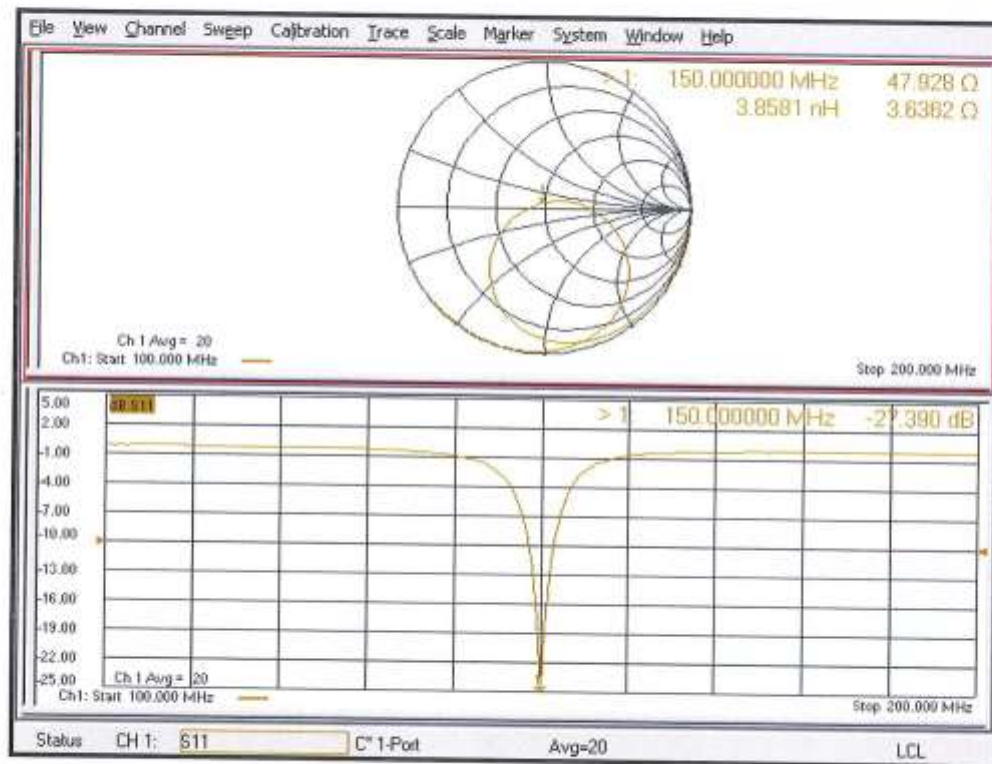
Smallest distance from peaks to all points 3 dB below = 19.4 mm

Ratio of SAR at M2 to SAR at M1 = 80.9%

Maximum value of SAR (measured) = 5.36 W/kg



## Impedance Measurement Plot for Head TSL



**DASY5 Validation Report for Body TSL**

Date: 06.01.2023

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: CLA150; Type: CLA150; Serial: CLA150 - SN: 4016**

Communication System: UID 0 - CW; Frequency: 150 MHz

Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.81$  S/m;  $\epsilon_r = 61.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3877; ConvF(11.56, 11.56, 11.56) @ 150 MHz; Calibrated: 06.01.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 26.01.2022
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

**CLA Calibration for MSL-LF Tissue/CLA150, touch configuration, Pin=1W/Zoom Scan, dist=1.4mm (8x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 81.76 V/m; Power Drift = -0.05 dB

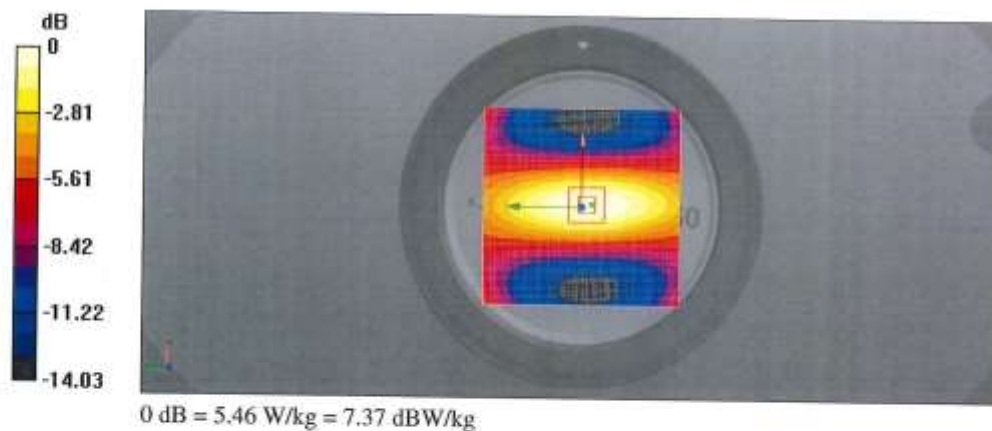
Peak SAR (extrapolated) = 7.26 W/kg

**SAR(1 g) = 3.9 W/kg; SAR(10 g) = 2.58 W/kg**

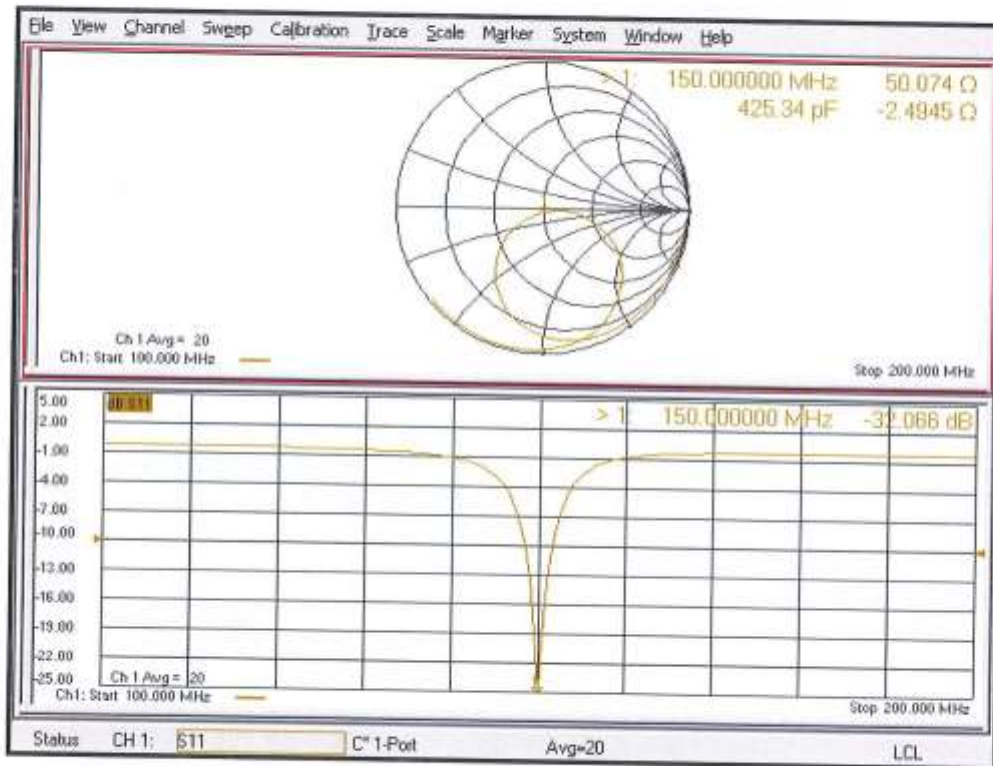
Smallest distance from peaks to all points 3 dB below = 22.9 mm

Ratio of SAR at M2 to SAR at M1 = 81.2%

Maximum value of SAR (measured) = 5.46 W/kg



## Impedance Measurement Plot for Body TSL



### Dipole Data

The table below includes dipole impedance and return loss measurement data measured by Motorola Solutions' EME lab. The results meet the requirements stated in KDB 865664.

| Dipole CLA150-4016 | Head          |                |             | Body          |                |             |
|--------------------|---------------|----------------|-------------|---------------|----------------|-------------|
|                    | Impedance     |                | Return Loss | Impedance     |                | Return Loss |
| Date Measured      | real $\Omega$ | imag $j\Omega$ | dB          | real $\Omega$ | imag $j\Omega$ | dB          |
| 03/01/2023         | 44.17         | 5.93           | -26.92      | 47.73         | 2.44           | -30.43      |
| 12/15/2023         | 48.78         | 4.39           | -26.17      | 49.23         | 2.72           | -30.17      |
| 12/11/2024         | 45.54         | 3.36           | -26.17      | 46.23         | 2.05           | -30.09      |

## **Appendix D**

### **System Verification Check Scans**

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2024 12:29:22 AM

Robot#: DASY5-PG-2 | Run#: BL-SYSP-150H-241209-01  
Dipole Model#: CLA150  
Phantom#: ELI4 1028  
Tissue Temp: 20.8 (C)  
Serial#: 4016  
Test Freq: 150 (MHz)  
Start Power: 1000 (mW)  
Rotation (1D): 0.15 dB  
Adjusted SAR (1W): 3.68 mW/g (1g)

Comments:

Communication System Band: CLA150, Communication System UID: 0, Duty Cycle: 1:1,  
Medium parameters used: f = 150 MHz;  $\sigma = 0.795 \text{ S/m}$ ;  $\epsilon_r = 49.82$ ;  $\rho = 1000 \text{ kg/m}^3$   
Probe: EX3DV4 - SN7511, Calibrated: 7/23/2024, Frequency: 150 MHz, ConvF(12.04, 12.04, 12.04) @ 150 MHz  
Electronics: DAE4 Sn1294, Calibrated: 2/22/2022

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

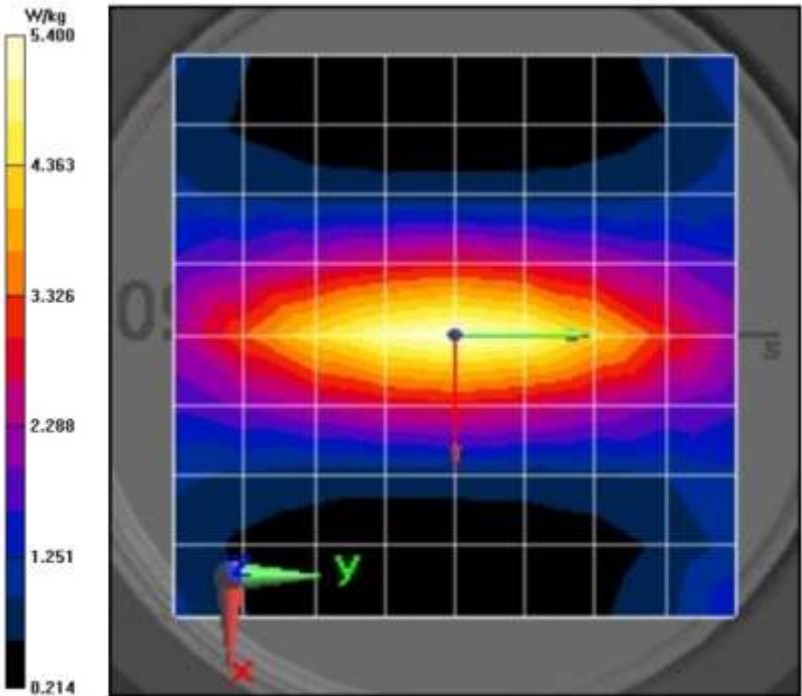
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 86.09 V/m; Power Drift = -0.08 dB  
Fast SAR: SAR(1 g) = 4.31 W/kg; SAR(10 g) = 3.1 W/kg (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 5.47 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
Reference Value = 86.09 V/m; Power Drift = -0.08 dB  
Peak SAR (extrapolated) = 6.83 W/kg  
SAR(1 g) = 3.68 W/kg; SAR(10 g) = 2.4 W/kg (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below = 16.5 mm  
Ratio of SAR at M2 to SAR at M1 = 57.4%  
Maximum value of SAR (measured) = 5.55 W/kg

Below 2 GHz-Rev.3/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

grid: dx=20mm, dy=20mm, dz=10mm  
Maximum value of SAR (measured) = 5.90 W/kg



## **Appendix E**

### **DUT Scans**

# FCC Body Assessments at LMR VHF

## Table 18

### Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2024 10:55:38 AM

Robot#: DASY5-PG-2 | Run#: EMR-AB-241209-03  
 Model#: PMUD3256C  
 Phantom#: ELI4 1028  
 Tissue Temp: 21.5 (C)  
 Serial#: 0245AX4522  
 Antenna: Fixed Antenna  
 Test Freq: 151.9400 (MHz)  
 Battery: PMNN4434A  
 Carry Acc: PMLN6455A  
 Audio Acc: HKLN4606A  
 Start Power: 1.74 (W)

#### Comments:

Communication System Band: Solomon VHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 151.94$  MHz;  $\sigma = 0.796$  S/m;  $\epsilon_r = 49.739$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7511, Calibrated: 7/23/2024, Frequency: 151.94 MHz, ConvF(12.04, 12.04, 12.04) @ 151.94 MHz  
 Electronics: DAE4 Sn1294, Calibrated: 2/22/2022

#### **Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (51x151x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 26.64 V/m; Power Drift = -0.68 dB

**Fast SAR: SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.595 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.21 W/kg

#### **Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 26.64 V/m; Power Drift = -0.85 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 0.643 W/kg; SAR(10 g) = 0.364 W/kg** (SAR corrected for target medium)

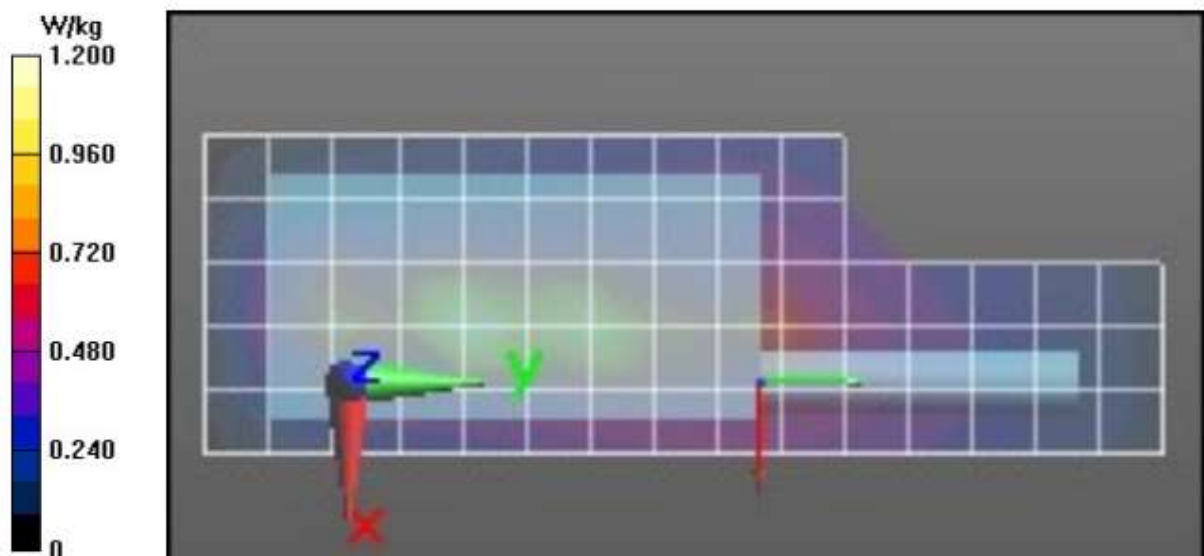
Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 36.9%

Maximum value of SAR (measured) = 1.14 W/kg

#### **Below 2 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.21 W/kg



FCC Face Assessments at LMR VHF

Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2024 6:56:13 PM

Robot#: DASY5-PG-2 | Run#: BL-FACE-241209-10  
Model#: PMUD3256C  
Phantom#: ELI4 1028  
Tissue Temp: 21.6 (C)  
Serial#: 0245AX4522  
Antenna: Fixed Antenna  
Test Freq: 151.9400 (MHz)  
Battery: PMNN4453A  
Carry Acc: @ front  
Audio Acc: N/A  
Start Power: 1.75 (W)

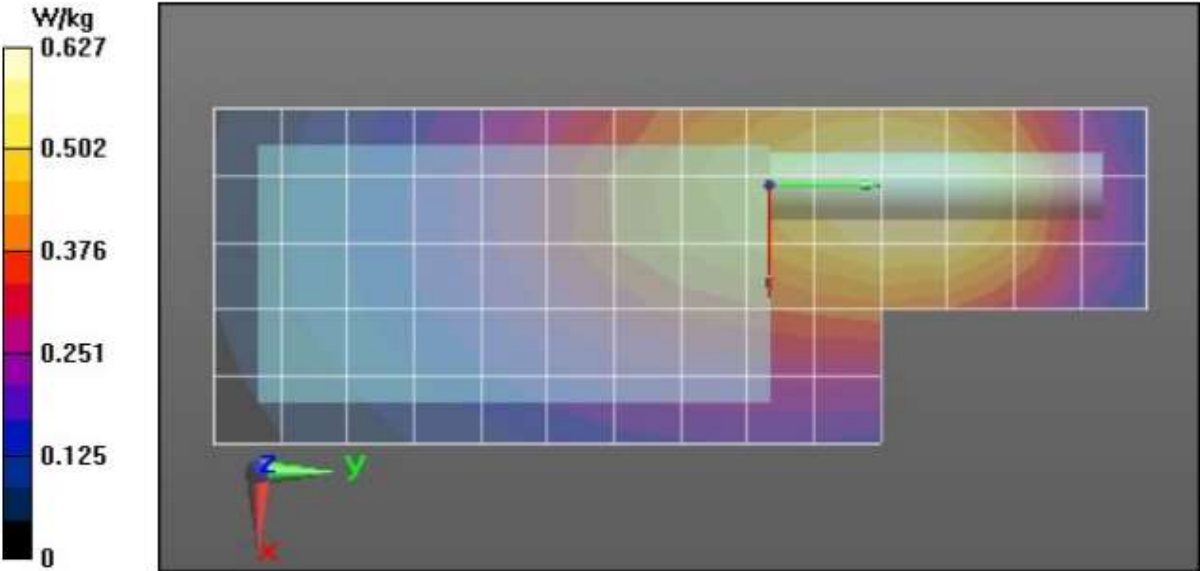
Comments:

Communication System Band: Solomon VHF, Communication System UID: 0, Duty Cycle: 1:1,  
Medium parameters used: f = 151.94 MHz;  $\sigma = 0.796$  S/m;  $\epsilon_r = 49.739$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Probe: EX3DV4 - SN7511, Calibrated: 7/23/2024, Frequency: 151.94 MHz, ConvF(12.04, 12.04, 12.04) @ 151.94 MHz  
Electronics: DAE4 Sn1294, Calibrated: 2/22/2022

**Below 2 GHz-Rev.3/Face Scan/1-Area Scan (51x141x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 27.71 V/m; Power Drift = -0.26 dB  
**Fast SAR: SAR(1 g) = 0.538 W/kg; SAR(10 g) = 0.406 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 0.643 W/kg

**Below 2 GHz-Rev.3/Face Scan/3-Zoom Scan (6x7x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
Reference Value = 27.71 V/m; Power Drift = -0.44 dB  
Peak SAR (extrapolated) = 0.802 W/kg  
**SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.306 W/kg** (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
Ratio of SAR at M2 to SAR at M1 = 54.3%  
Maximum value of SAR (measured) = 0.609 W/kg

**Below 2 GHz-Rev.3/Face Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm  
Maximum value of SAR (measured) = 0.557 W/kg



## **Appendix F**

### **Shorten Scan of Highest SAR Configuration**

## Shortened Scan

Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2024 8:37:45 PM

Robot#: DASY5-PG-2 | Run#: BL-AB-241209-13  
 Model#: PMUD3256C  
 Phantom#: ELI4 1028  
 Tissue Temp: 21.6 (C)  
 Serial#: 0245AX4522  
 Antenna: Fixed Antenna  
 Test Freq: 151.9400 (MHz)  
 Battery: PMNN4434A  
 Carry Acc: PMLN6455A  
 Audio Acc: HKLN4606A  
 Start Power: 1.74 (W)

Comments: Shorten Scan

Communication System Band: Solomon VHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 151.94$  MHz;  $\sigma = 0.796$  S/m;  $\epsilon_r = 49.739$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7511, Calibrated: 7/23/2024, Frequency: 151.94 MHz, ConvF(12.04, 12.04, 12.04) @ 151.94 MHz  
 Electronics: DAE4 Sn1294, Calibrated: 2/22/2022

**Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (51x141x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 27.72 V/m; Power Drift = -0.49 dB

**Fast SAR: SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.570 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.980 W/kg

**Below 2 GHz-Rev.3/Ab Scan/2-Volume 2D Scan (41x41x1):** Interpolated grid: dx=0.7500 mm,

dy=0.7500 mm, dz=1.000 mm

Reference Value = 27.72 V/m; Power Drift = -0.62 dB

**Fast SAR: SAR(1 g) = 0.867 W/kg; SAR(10 g) = 0.581 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.09 W/kg

**Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm,

dy=7.5mm, dz=5mm

Reference Value = 28.54 V/m; Power Drift = -0.30 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 0.754 W/kg; SAR(10 g) = 0.482 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 16.2 mm

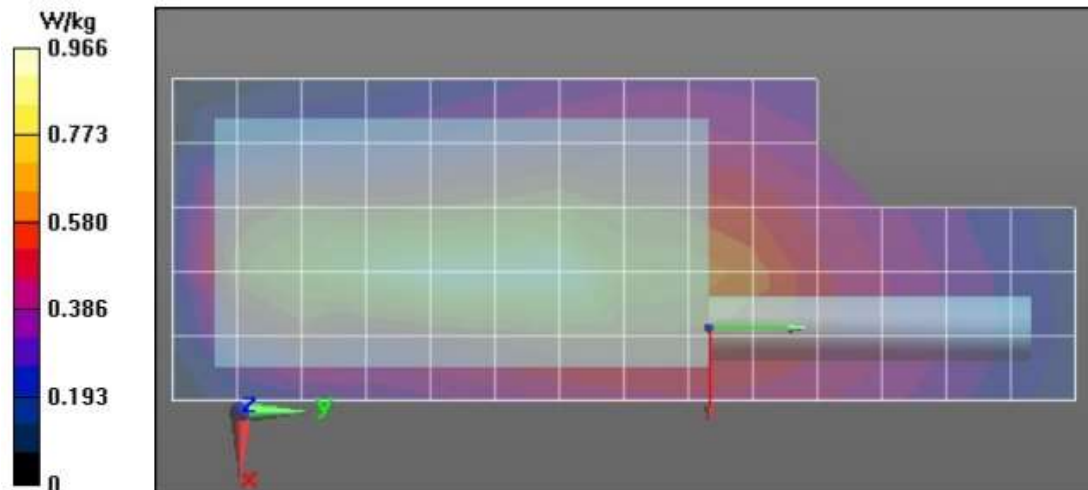
Ratio of SAR at M2 to SAR at M1 = 47.8%

Maximum value of SAR (measured) = 1.19 W/kg

**Below 2 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm,

dz=10mm

Maximum value of SAR (measured) = 1.02 W/kg



**Shortened scan reflect highest SAR producing configurations and is compared to full scan**

| Scan Description        | Referenced Table | Test Time (min.) | SAR 1g (W/kg) |
|-------------------------|------------------|------------------|---------------|
| Shorten scan (zoom)     | 21               | 9                | 0.46          |
| Full scan (area & zoom) | 18               | 22               | 0.45          |

## **Appendix G**

### **DUT Test Position Photos**

**Photos available in Exhibit 7B**

## **Appendix H**

### **DUT, Body worn and audio accessories Photos**

**Photos available in Exhibit 7B**