# Annex C. Calibration Certificate for Probe and Dipole

The SPEAG calibration certificates are shown as follows.



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**Certificate No:** 

Z21-60241

**CNAS L0570** 

# **CALIBRATION CERTIFICATE**

AUDEN

Object

D2450V2 - SN: 835

June 22, 2021

Calibration Procedure(s)

Client

FF-Z11-003-01 Calibration Procedures for dipole validation kits

Calibration date:

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

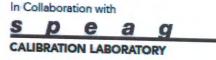
All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards  | ID #   | Cal Date (Calibrated by, Certificate No.)  | Scheduled Calibration                          |  |
|--|--|--|--|--|
| Power Meter NRP2<br>Power sensor NRP8S<br>Reference Probe EX3DV4<br>DAE4 | SN 549   | 23-Sep-20 (CTTL, No.J20X08336)<br>23-Sep-20 (CTTL, No.J20X08336)<br>26-Apr-21(CTTL-SPEAG,No.Z21-60084)<br>08-Jan-21(CTTL-SPEAG,No.Z21-60002) | Sep-21<br>Sep-21<br>Sep-21<br>Apr-22<br>Jan-22 |  |
| Secondary Standards  | ID #   | Cal Date (Calibrated by, Certificate No.)  | Scheduled Calibration                          |  |
| Signal Generator E4438C<br>NetworkAnalyzer E5071C                        | MY49071430 01-Feb-21 (CTTL, No.J21X00593)<br>MY46110673 14-Jan-21 (CTTL, No.J21X00232) |  | Jan-22<br>Jan-22                               |  |
|  | Name   | Function   | Signature                                      |  |
| Calibrated by:   | Zhao Jing  | SAR Test Engineer  | 12th D   |  |
| Reviewed by:   | Lin Hao  | SAR Test Engineer  | AF-35  |  |
| approved by:   | Qi Dianyuan  | SAR Project Leader   | 36   |  |
| his calibration certificate sh   | all not be reprodu   | Issued: June<br>uced except in full without written approval o   | 26, 2021<br>f the laboratory                   |  |

Certificate No: Z21-60241





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### Glossary:

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

# Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

### Additional Documentation:

e) DASY4/5 System Handbook

## Methods Applied and Interpretation of Parameters:

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

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## **Measurement Conditions**

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

| DASY Version                 | DASY52                   | V52.10.4    |  |
|------------------------------|--------------------------|-------------|--|
| Extrapolation                | Advanced Extrapolation   |             |  |
| Phantom                      | Triple Flat Phantom 5.1C |             |  |
| Distance Dipole Center - TSL | 10 mm                    | with Spacer |  |
| Zoom Scan Resolution         | dx, dy, dz = 5 mm        |             |  |
| Frequency                    | 2450 MHz ± 1 MHz         |             |  |

## Head TSL parameters

The following parameters and calculations were applied.

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Head TSL parameters             | 22.0 °C         | 39.2         | 1.80 mho/m       |
| Measured Head TSL parameters            | (22.0 ± 0.2) °C | 39.3 ± 6 %   | 1.78 mho/m ± 6 % |
| Head TSL temperature change during test | <1.0 °C         |              |                  |

## SAR result with Head TSL

| SAR averaged over 1 $cm^3$ (1 g) of Head TSL   | Condition          |                                   |
|--|--------------------|-----------------------------------|
| SAR measured                                   | 250 mW input power | 13.1 W/kg                         |
| SAR for nominal Head TSL parameters            | normalized to 1W   | 52.7 W/kg ± 18.8 % ( <i>k</i> =2) |
| SAR averaged over 10 $cm^3$ (10 g) of Head TSL | Condition          |                                   |
| SAR measured                                   | 250 mW input power | 5.96 W/kg                         |
| SAR for nominal Head TSL parameters            | normalized to 1W   | 23.9 W/kg ± 18.7 % (k=2)          |





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# Appendix (Additional assessments outside the scope of CNAS L0570)

### Antenna Parameters with Head TSL

| Impedance, transformed to feed point | 54.7Ω+ 3.65jΩ |  |  |
|--------------------------------------|---------------|--|--|
| Return Loss                          | - 24.9dB      |  |  |

## General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.072 ns |  |
|----------------------------------|----------|--|
|----------------------------------|----------|--|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can

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

### Additional EUT Data

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| Monufactured hu |       |
|-----------------|-------|
| Manufactured by | SPEAG |
|                 |       |





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**DASY5 Validation Report for Head TSL** 

Test Laboratory: CTTL, Beijing, China

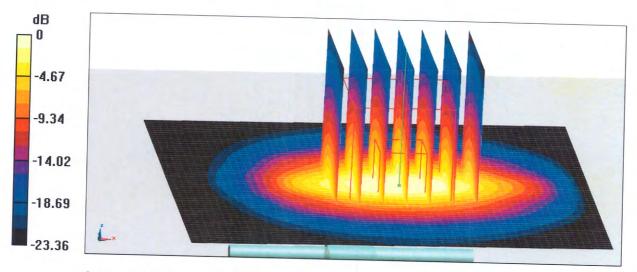
Date: 06.22.2021

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 835 Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz;  $\sigma$  = 1.784 S/m;  $\epsilon_r$  = 39.31;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 SN3846; ConvF(7.45, 7.45, 7.45) @ 2450 MHz; Calibrated: 2021-04-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2021-01-08
- Phantom: MFP\_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Dipole Calibration**/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 98.68 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 28.5 W/kgSAR(1 g) = 13.1 W/kg; SAR(10 g) = 5.96 W/kg Smallest distance from peaks to all points 3 dB below = 9 mmRatio of SAR at M2 to SAR at M1 = 45.4%Maximum value of SAR (measured) = 22.7 W/kg



0 dB = 22.7 W/kg = 13.56 dBW/kg

Certificate No: Z21-60241

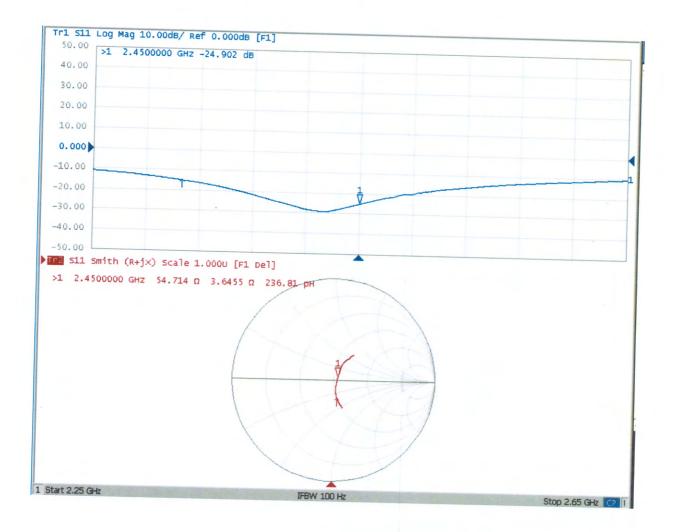
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In Collaboration with S D C A G CALIBRATION LABORATORY

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# Impedance Measurement Plot for Head TSL



Certificate No: Z21-60241

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

Zeughausstrasse 43, 8004 Zurich, Switzerland

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

**B.V. ADT (Auden)** Client



S

С

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- S Swiss Calibration Service

Accreditation No.: SCS 0108

In house check: Oct-21

Certificate No: EX3-7537\_Apr21

**CALIBRATION CERTIFICATE** EX3DV4 - SN:7537 Object QA CAL-01.v9, QA CAL-14.v6, QA CAL-23.v5, QA CAL-25.v7 Calibration procedure(s) Calibration procedure for dosimetric E-field probes April 26, 2021 Calibration date: This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%. Calibration Equipment used (M&TE critical for calibration) Scheduled Calibration Primary Standards ID Cal Date (Certificate No.) Power meter NRP SN: 104778 09-Apr-21 (No. 217-03291/03292) Apr-22 SN: 103244 09-Apr-21 (No. 217-03291) Apr-22 Power sensor NRP-Z91 09-Apr-21 (No. 217-03292) Apr-22 Power sensor NRP-Z91 SN: 103245 Apr-22 SN: CC2552 (20x) 09-Apr-21 (No. 217-03343) Reference 20 dB Attenuator Dec-21 SN: 660 23-Dec-20 (No. DAE4-660\_Dec20) DAE4 Dec-21 Reference Probe ES3DV2 SN: 3013 30-Dec-20 (No. ES3-3013\_Dec20) Scheduled Check Check Date (in house) ID Secondary Standards 06-Apr-16 (in house check Jun-20) In house check: Jun-22 Power meter E4419B SN: GB41293874 In house check: Jun-22 Power sensor E4412A SN: MY41498087 06-Apr-16 (in house check Jun-20) SN: 000110210 06-Apr-16 (in house check Jun-20) In house check: Jun-22 Power sensor E4412A 04-Aug-99 (in house check Jun-20) In house check: Jun-22 RF generator HP 8648C SN: US3642U01700

|                | Name           | Function              | Signature            |
|----------------|----------------|-----------------------|----------------------|
| Calibrated by: | Jeton Kastrati | Laboratory Technician | delle                |
| Approved by:   | Katja Pokovic  | Technical Manager     | Allet                |
|                |                |                       | Issued: May 13, 2021 |

31-Mar-14 (in house check Oct-20)

SN: US41080477

Certificate No: EX3-7537\_Apr21

Network Analyzer E8358A

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



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### Glossary:

| TSL            | tissue simulating liquid   |
|----------------|--|
| NORMx,y,z      | sensitivity in free space  |
| ConvF          | sensitivity in TSL / NORMx,y,z   |
| DCP            | diode compression point  |
| CF             | crest factor (1/duty_cycle) of the RF signal   |
| A, B, C, D     | modulation dependent linearization parameters  |
| Polarization φ | φ rotation around probe axis   |
| Polarization 9 | 9 rotation around an axis that is in the plane normal to probe axis (at measurement center),   |
|                | i.e., $\vartheta = 0$ is normal to probe axis  |
| <b>•</b> • • • | to find the product of the DAOV support to allow make senses V to the relation of the product of the sense of the the sense of the sens |

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:**

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- Techniques", June 2013
  b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x,y,z = NORMx,y,z \* 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*.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). 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
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: 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 ≤ 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 NORMx, y, z \* 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 ± 50 MHz to ± 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 NORMx (no uncertainty required).

Certificate No: EX3-7537\_Apr21

Accreditation No.: SCS 0108

### **Basic Calibration Parameters**

|                          | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|--------------------------|----------|----------|----------|-----------|
| Norm $(\mu V/(V/m)^2)^A$ | 0.61     | 0.67     | 0.59     | ± 10.1 %  |
| DCP (mV) <sup>B</sup>    | 96.4     | 99.2     | 99.9     |           |

### **Calibration Results for Modulation Response**

| UID                                | Communication System Name   |   | A<br>dB | B<br>dBõV | С     | 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           | 154.5    | ± 3.0 %     | ± 4.7 %                          |
| -                                  |                             | Y | 0.00    | 0.00      | 1.00  |                | 154.3    |             |                                  |
|                                    |                             | Z | 0.00    | 0.00      | 1.00  |                | 154.2    |             |                                  |
| 10352-                             |                             | X | 20.00   | 93.30     | 21.58 | 10.00          | 60.0     | ± 4.6 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 14.15   | 84.50     | 17.35 |                | 60.0     |             |                                  |
|                                    |                             | Z | 20.00   | 96.13     | 23.37 |                | 60.0     |             |                                  |
| 10353-                             | Pulse Waveform (200Hz, 20%) | X | 20.00   | 97.98     | 22.80 | 6.99           | 80.0     | ± 2.9 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 20.00   | 88.18     | 17.54 |                | 80.0     | ]           |                                  |
|                                    |                             | Z | 20.00   | 105.45    | 26.99 |                | 80.0     |             |                                  |
| 10354-                             | Pulse Waveform (200Hz, 40%) | X | 20.00   | 107.47    | 25.98 | 3.98           | 95.0     | ± 1.5 %     | ± 9.6 %                          |
| AAA                                | ,                           | Y | 20.00   | 91.97     | 18.33 | 95.0<br>95.0   | 95.0     |             |                                  |
|                                    |                             | Z | 20.00   | 126.38    | 35.48 |                |          |             |                                  |
| 10355- Pulse Waveform (200Hz, 60%) | Pulse Waveform (200Hz, 60%) | X | 20.00   | 117.89    | 29.43 | 2.22           | 120.0    | ± 1.4 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 20.00   | 101.00    | 21.50 |                | 120.0    |             |                                  |
|                                    |                             | Z | 20.00   | 135.53    | 38.09 |                | 120.0    |             |                                  |
| 10387-                             | QPSK Waveform, 1 MHz        | X | 1.69    | 65.20     | 14.74 | 1.00           | 150.0    | ± 1.8 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 1.93    | 67.84     | 16.30 |                | 150.0    |             |                                  |
|                                    |                             | Z | 2.00    | 68.99     | 17.00 |                | 150.0    | 14 Mar 14   |                                  |
| 10388-                             | QPSK Waveform, 10 MHz       | X | 2.19    | 67.08     | 15.37 | 0.00           | 150.0    | ± 1.5 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 2.62    | 70.33     | 17.08 |                | 150.0    |             |                                  |
|                                    |                             | Z | 2.72    | 71.33     | 17.72 |                | 150.0    |             |                                  |
| 10396-                             | 64-QAM Waveform, 100 kHz    | X | 3.03    | 70.86     | 19.17 | 3.01           | 150.0    | ± 1.2 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 2.65    | 68.87     | 18.52 | 150.0<br>150.0 | 150.0    |             |                                  |
|                                    |                             | Z | 3.05    | 71.77     | 20.05 |                | 1        |             |                                  |
| 10399-                             | 64-QAM Waveform, 40 MHz     | X | 3.51    | 66.71     | 15.62 | 0.00           | 150.0    | ± 1.6 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 3.65    | 67.62     | 16.22 |                | 150.0    |             |                                  |
|                                    |                             | Ζ | 3.69    | 68.01     | 16.52 |                | 150.0    |             |                                  |
| 10414-                             | WLAN CCDF, 64-QAM, 40MHz    | X | 4.91    | 65.43     | 15.45 | 0.00           | 150.0    | ± 2.1 %     | ± 9.6 %                          |
| AAA                                |                             | Y | 4.98    | 65.80     | 15.76 |                | 150.0    |             |                                  |
|                                    |                             | Z | 4.98    | 65.94     | 15.91 |                | 150.0    | 1.1         |                                  |

Note: For details on UID parameters see Appendix

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

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6)

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

<sup>&</sup>lt;sup>B</sup> Numerical linearization parameter: uncertainty not required.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | α<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> | Т6   |
|---|----------|----------|----------------------|--------------------------|--------------------------|----------|-----------------------|-----------------------|------|
| X | 49.3     | 369.84   | 35.81                | 10.58                    | 0.00                     | 5.06     | 1.72                  | 0.16                  | 1.01 |
| Y | 50.6     | 380.77   | 36.10                | 15.79                    | 0.00                     | 5.02     | 0.27                  | 0.34                  | 1.01 |
| Z | 48.4     | 362.55   | 35.99                | 11.96                    | 0.01                     | 5.10     | 0.58                  | 0.30                  | 1.01 |

### **Other Probe Parameters**

| Sensor Arrangement                            | Triangular |
|---|------------|
| Connector Angle (°)                           | 177.4      |
| 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.

| <b>Calibration Parameter</b> | Determined in | Head Tissue | Simulating Media |
|------------------------------|---------------|-------------|------------------|
|------------------------------|---------------|-------------|------------------|

| f (MHz) <sup>C</sup> | Relative<br>Permittivity <sup>F</sup> | Conductivity<br>(S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup><br>(mm) | Unc<br>(k=2) |
|----------------------|---------------------------------------|------------------------------------|---------|---------|---------|--------------------|----------------------------|--------------|
| 750                  | 41.9                                  | 0.89                               | 10.69   | 10.69   | 10.69   | 0.51               | 0.91                       | ± 12.0 %     |
| 835                  | 41.5                                  | 0.90                               | 10.50   | 10.50   | 10.50   | 0.51               | 0.80                       | ± 12.0 %     |
| 900                  | 41.5                                  | 0.97                               | 10.18   | 10.18   | 10.18   | 0.47               | 0.85                       | ± 12.0 %     |
| 1450                 | 40.5                                  | 1.20                               | 8.87    | 8.87    | 8.87    | 0.53               | 0.80                       | ± 12.0 %     |
| 1640                 | 40.2                                  | 1.31                               | 8.66    | 8.66    | 8.66    | 0.34               | 0.80                       | ± 12.0 %     |
| 1750                 | 40.1                                  | 1.37                               | 8.55    | 8.55    | 8.55    | 0.32               | 0.86                       | ± 12.0 %     |
| 1900                 | 40.0                                  | 1.40                               | 8.27    | 8.27    | 8.27    | 0.36               | 0.86                       | ± 12.0 %     |
| 2000                 | 40.0                                  | 1.40                               | 8.20    | 8.20    | 8.20    | 0.30               | 0.86                       | ± 12.0 %     |
| 2300                 | 39.5                                  | 1.67                               | 7.89    | 7.89    | 7.89    | 0.33               | 0.90                       | ± 12.0 %     |
| 2450                 | 39.2                                  | 1.80                               | 7.61    | 7.61    | 7.61    | 0.38               | 0.90                       | ± 12.0 %     |
| 2600                 | 39.0                                  | 1.96                               | 7.41    | 7.41    | 7.41    | 0.36               | 0.90                       | ± 12.0 %     |
| 3300                 | 38.2                                  | 2.71                               | 6.67    | 6.67    | 6.67    | 0.35               | 1.30                       | ± 13.1 %     |
| 3500                 | 37.9                                  | 2.91                               | 6.70    | 6.70    | 6.70    | 0.35               | 1.30                       | ± 13.1 %     |
| 3700                 | 37.7                                  | 3.12                               | 6.55    | 6.55    | 6.55    | 0.35               | 1.30                       | ± 13.1 %     |
| 3900                 | 37.5                                  | 3.32                               | 6.52    | 6.52    | 6.52    | 0.45               | 1.50                       | ± 13.1 %     |
| 4100                 | 37.2                                  | 3.53                               | 6.34    | 6.34    | 6.34    | 0.40               | 1.50                       | ± 13.1 %     |
| 4200                 | 37.1                                  | 3.63                               | 6.10    | 6.10    | 6.10    | 0.40               | 1.50                       | ± 13.1 %     |
| 4400                 | 36.9                                  | 3.84                               | 6.04    | 6.04    | 6.04    | 0.40               | 1.70                       | ± 13.1 %     |
| 4600                 | 36.7                                  | 4.04                               | 5.96    | 5.96    | 5.96    | 0.45               | 1.70                       | ± 13.1 %     |
| 4800                 | 36.4                                  | 4.25                               | 5.76    | 5.76    | 5.76    | 0.40               | 1.80                       | ± 13.1 %     |
| 4950                 | 36.3                                  | 4.40                               | 5.72    | 5.72    | 5.72    | 0.40               | 1.80                       | ± 13.1 %     |
| 5250                 | 35.9                                  | 4.71                               | 5.50    | 5.50    | 5.50    | 0.40               | 1.80                       | ± 13.1 %     |
| 5600                 | 35.5                                  | 5.07                               | 4.80    | 4.80    | 4.80    | 0.40               | 1.80                       | ± 13.1 %     |
| 5750                 | 35.4                                  | 5.22                               | 4.95    | 4.95    | 4.95    | 0.40               | 1.80                       | ± 13.1 %     |
| 5850                 | 35.2                                  | 5.32                               | 4.80    | 4.80    | 4.80    | 0.40               | 1.80                       | ± 13.1 %     |

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  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  $\pm$  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  $\pm$  110 MHz. F At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>6</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.

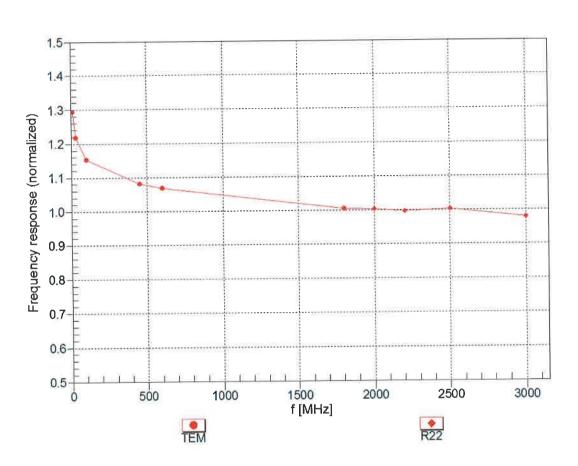
| f (MHz) <sup>c</sup> | Relative<br>Permittivity <sup>F</sup> | Conductivity<br>(S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup><br>(mm) | Unc<br>(k=2) |
|----------------------|---------------------------------------|------------------------------------|---------|---------|---------|--------------------|----------------------------|--------------|
| 6500                 | 34.5                                  | 6.07                               | 5.50    | 5.50    | 5.50    | 0.20               | 2.50                       | ± 18.6 %     |

### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 6GHz is ± 700 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for

the indicated frequency band. F At frequencies 6-10 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured

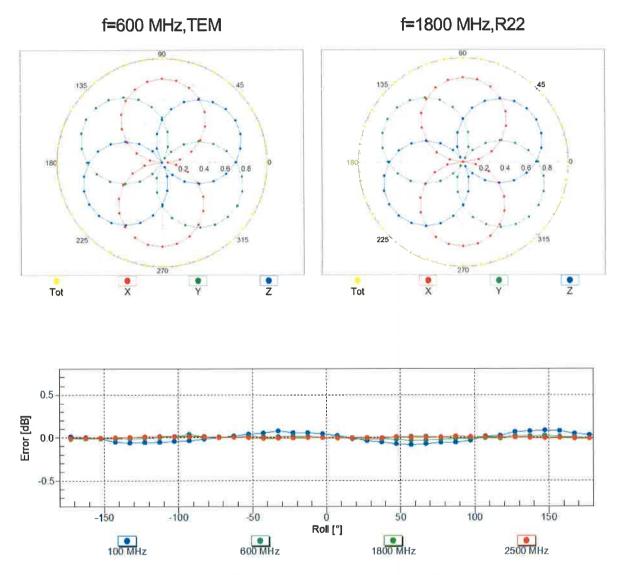
<sup>6</sup> At frequencies 6-10 GHz, the validity of tissue parameters (s and 6) can be relaxed to ± 10% iniquid compensation formula is applied to measure SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz; below ± 2% for frequencies between 3-6 GHz; and below ± 4% for frequencies between 6-10 GHz at any distance larger than half the probe tip diameter from the boundary.



## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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

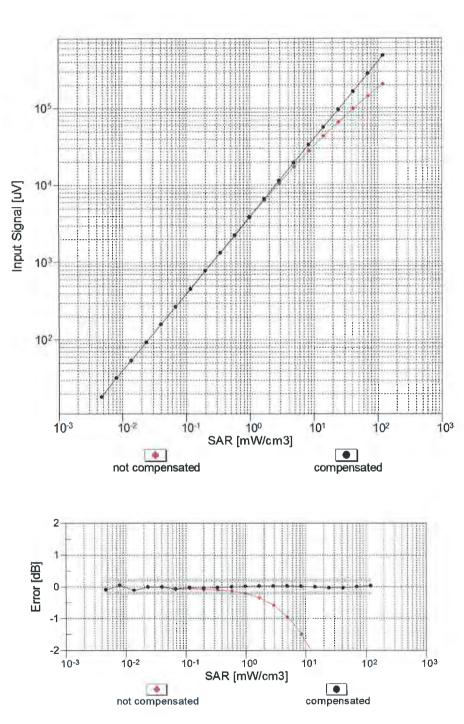
April 26, 2021



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

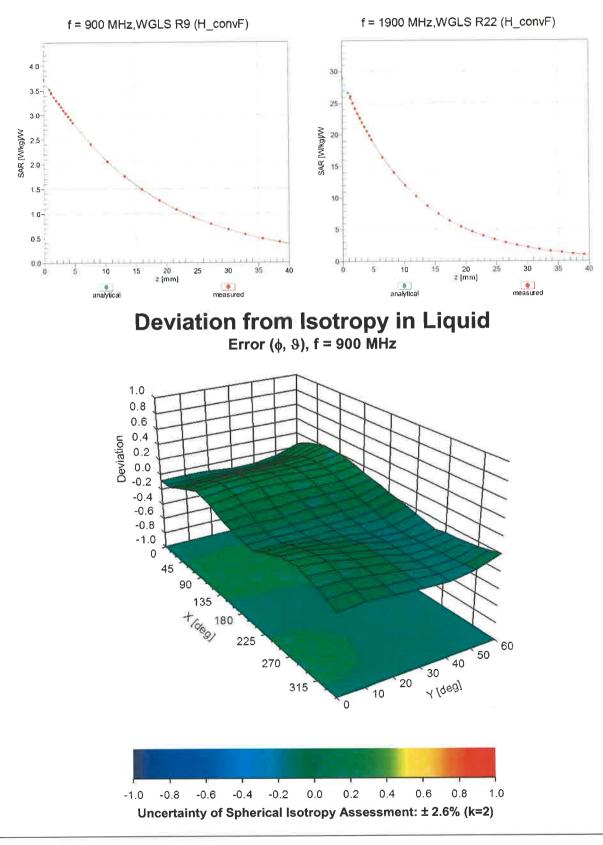
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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## Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

Uncertainty of Linearity Assessment: ± 0.6% (k=2)



## **Conversion Factor Assessment**

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## **Appendix: Modulation Calibration Parameters**

| UID   | Rev | Communication System Name  | Group        | PAR<br>(dB) | Unc <sup>≞</sup><br>(k=2) |
|-------|-----|--|--------------|-------------|---------------------------|
| 0     |     | CW   | CW           | 0.00        | ± 4.7 %                   |
| 10010 | CAA | SAR Validation (Square, 100ms, 10ms)   | Test         | 10.00       | ± 9.6 %                   |
| 10011 | CAB | 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 %                   |
| 10020 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)  | GSM          | 7.78        | ± 9.6 %                   |
| 10020 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)  | Bluetooth    | 5.30        | ± 9.6 %                   |
| 10030 | -   | 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 %                   |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)  | Bluetooth    | 7.74        | ± 9.6 %                   |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)  | Bluetooth    | 4.53        | ± 9.6 %                   |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)  | Bluetooth    | 3.83        | ± 9.6 %                   |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)  | Bluetooth    | 8.01        | ± 9.6 %                   |
|       | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)  | Bluetooth    | 4.77        | ± 9.6 %                   |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)  | Bluetooth    | 4.10        | ± 9.6 %                   |
| 10038 | CAA | CDMA2000 (1xRTT, RC1)  | CDMA2000     | 4.57        | ± 9.6 %                   |
| 10039 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)                                      | AMPS         | 7.78        | ± 9.6 %                   |
| 10042 | CAB | IS-91/EIA/TIA-553 FDD (FDMA, FM)   | AMPS         | 0.00        | ± 9.6 %                   |
| 10044 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)  | DECT         | 13.80       | ± 9.6 %                   |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Pull Slot, 24)<br>DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | DECT         | 10.79       | ± 9.6 %                   |
| 10049 | CAA |  | TD-SCDMA     | 11.01       | ± 9.6 %                   |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)   | GSM          | 6.52        | ± 9.6 %                   |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)  | WLAN         | 2.12        | ± 9.6 %                   |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)   | WLAN         | 2.83        | ± 9.6 %                   |
| 10060 | CAB | IEEE 802.11b WIFI 2.4 GHz (DSSS, 5.5 Mbps)   | WLAN         | 3.60        | ± 9.6 %                   |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)  | WLAN         | 8.68        | ± 9.6 %                   |
| 10062 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)   | WLAN         | 8.63        | ± 9.6 %                   |
| 10063 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)   | WLAN         | 9.09        | ± 9.6 %                   |
| 10064 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)  |              |             | ± 9.6 %                   |
| 10065 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)  | WLAN<br>WLAN | 9.00        | ± 9.6 %                   |
| 10066 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)  |              | 9.38        | ± 9.6 %                   |
| 10067 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)  | WLAN         |             |                           |
| 10068 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)  | WLAN         | 10.24       | ± 9.6 9                   |
| 10069 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)  | WLAN         | 10.56       | ± 9.6 9                   |
| 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        |                           |
| 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, PI/4-DQPSK, Fullrate)                                      | AMPS         | 4.77        | ± 9.6                     |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)  | GSM          | 6.56        | ± 9.6                     |
| 10097 | CAC | UMTS-FDD (HSDPA)   | WCDMA        | 3.98        | ± 9.6                     |
| 10098 | DAC | UMTS-FDD (HSUPA, Subtest 2)  | WCDMA        | 3.98        | ± 9.6                     |

| 10099 | CAC        | EDGE-FDD (TDMA, 8PSK, TN 0-4)                  | GSM     | 9.55  | ± 9.6 % |
|-------|------------|--|---------|-------|---------|
| 0100  | CAC        | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)       | LTE-FDD | 5.67  | ± 9.6 % |
| 0101  | CAB        | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)     | LTE-FDD | 6.42  | ±9.6 %  |
| 10102 | CAB        | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)     | LTE-FDD | 6.60  | ± 9.6 % |
| 10103 | DAC        | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)       | LTE-TDD | 9.29  | ± 9.6 % |
| 10104 | CAE        | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)     | LTE-TDD | 9.97  | ± 9.6 % |
| 10105 | CAE        | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)     | LTE-TDD | 10.01 | ±9.6 %  |
| 10108 | CAE        | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)       | LTE-FDD | 5.80  | ± 9.6 % |
| 10109 | CAG        | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)     | LTE-FDD | 6.43  | ± 9.6 % |
| 10110 | CAG        | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10111 | CAG        | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)      | LTE-FDD | 6.44  | ± 9.6 % |
| 10112 | CAG        | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | LTE-FDD | 6.59  | ± 9.6 % |
| 10113 | CAG        | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10114 | CAG        | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | WLAN    | 8.10  | ± 9.6 % |
| 10115 | CAG        | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | WLAN    | 8.46  | ± 9.6 % |
| 10116 | CAG        | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN    | 8.15  | ± 9.6 % |
| 10117 | CAG        | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | WLAN    | 8.07  | ± 9.6 % |
| 10118 | CAG        | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | WLAN    | 8.59  | ± 9.6 % |
| 10119 | CAD        | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | WLAN    | 8.13  | ± 9.6 % |
| 10140 | CAD        | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | LTE-FDD | 6.49  | ± 9.6 % |
| 10140 | CAD        | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | LTE-FDD | 6.53  | ± 9.6 % |
| 10141 | CAD        | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | LTE-FDD | 5.73  | ± 9.6 % |
| 10142 |            | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | LTE-FDD | 6.35  | ± 9.6 % |
| 10144 | CAD        | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | LTE-FDD | 6.65  | ± 9.6 % |
| 10145 | CAC        | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | LTE-FDD | 5.76  | ± 9.6 % |
| 10145 | CAC        | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | LTE-FDD | 6.41  | ± 9.6 % |
| 10140 | CAC        | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | LTE-FDD | 6.72  | ± 9.6 % |
| 10149 | CAE        | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-FDD | 6.42  | ± 9.6 % |
| 10150 | CAE        | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-FDD | 6.60  | ± 9.6 % |
| 10150 | CAE        | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)        | LTE-TDD | 9.28  | ± 9.6 % |
| 10152 | CAE        | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-TDD | 9.92  | ± 9.6 % |
| 10152 | CAE        | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-TDD | 10.05 | ± 9.6 % |
| 10154 | CAE        | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10155 | CAF        | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10156 | CAF        | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         | LTE-FDD | 5.79  | ± 9.6 % |
| 10157 | CAF        | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)       | LTE-FDD | 6.49  | ± 9.6 % |
| 10158 | CAE        | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10159 | CAE        | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)       | LTE-FDD | 6.56  | ± 9.6 % |
| 10160 | CAG        | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)        | LTE-FDD | 5.82  | ± 9.6 % |
| 10161 | CAG        | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10162 | CAG        | 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 | -          | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)     | LTE-FDD | 6.79  | ± 9.6 % |
| 10169 | CAG        | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-FDD | 5.73  | ± 9.6 % |
| 10100 | CAG<br>CAG | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10170 | -          | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-FDD | 6.49  | ± 9.6 % |
| 10171 | CAE<br>CAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-TDD | 9.21  | ± 9.6 % |
| 10172 | CAE        | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-TDD | 9.48  | ± 9.6 % |
| 10173 | _          | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-TDD | 10.25 | ± 9.6 % |
| 10174 | CAF<br>CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)          | LTE-FDD | 5.72  | ± 9.6 % |
| 10175 |            | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10170 | CAF        | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)           | LTE-FDD | 5.73  | ± 9.6 % |
| 10177 | CAE        | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)         | LTE-FDD | 6.52  | ± 9.6 % |
| 10178 | CAE        | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)        | LTE-FDD | 6.50  | ± 9.6 % |
| 10179 | AAE<br>CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)         | LTE-FDD | 6.50  | ± 9.6 % |

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| 10181  | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)         | LTE-FDD | 5.72  | ± 9.6 % |
|--------|-----|---|---------|-------|---------|
| 10182  | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       | LTE-FDD | 6.52  | ± 9.6 % |
| 10183  | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)       | LTE-FDD | 6.50  | ± 9.6 % |
| 10184  | CAG | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | LTE-FDD | 5.73  | ± 9.6 % |
| 10185  | CAI | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | LTE-FDD | 6.51  | ± 9.6 % |
| 10186  | CAG | 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  | CAG | 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  | AAD | 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  | -   | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | WLAN    | 8.13  | ± 9.6 % |
| 10198  | AAE | IEEE 802.11n (HT Mixed, 55 Mbps, 10-QAM)      | WLAN    | 8.27  | ± 9.6 % |
| 10219  | CAF | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | WLAN    | 8.03  | ± 9.6 % |
| 10210  | CAF | IEEE 802.11n (HT Mixed, 43.3 Mbps, bi Sik)    | WLAN    | -     |         |
| 10220  | AAF | IEEE 802.11n (HT Mixed, 43.3 Mbps, 10-QAM)    |         | 8.13  | ± 9.6 % |
|        | CAC |   | WLAN    | 8.27  | ± 9.6 % |
| 10222  | CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | WLAN    | 8.06  | ± 9.6 % |
| 10223  | CAD | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)      | WLAN    | 8.48  | ± 9.6 % |
| 10224  | CAD | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)     | WLAN    | 8.08  | ± 9.6 9 |
| 10225  | CAD | UMTS-FDD (HSPA+)                              |         | 5.97  | ± 9.6 9 |
| 10226  | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | LTE-TDD | 9.49  | ± 9.6 % |
| 10227  | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | LTE-TDD | 10.26 | ± 9.6 9 |
| 10228  | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | LTE-TDD | 9.22  | ± 9.6 ° |
| 10229  | DAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | LTE-TDD | 9.48  | ± 9.6 ° |
| 10230  | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | LTE-TDD | 10.25 | ± 9.6 9 |
| 10231  | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | LTE-TDD | 9.19  | ± 9.6 9 |
| 10232  | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)        | LTE-TDD | 9.48  | ± 9.6 9 |
| 10233  | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)        | LTE-TDD | 10.25 | ± 9.6 % |
| 10234  | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)          | LTE-TDD | 9.21  | ± 9.6 % |
| 10235  | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)       | LTE-TDD | 9.48  | ± 9.6 % |
| 10236  | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)       | LTE-TDD | 10.25 | ± 9.6 % |
| 10237  | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)         | LTE-TDD | 9.21  | ± 9.6 % |
| 10238  | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)       | LTE-TDD | 9.48  | ± 9.6 9 |
| 10239  | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)       | LTE-TDD | 10.25 | ± 9.6 % |
| 10240  | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)         | LTE-TDD | 9.21  | ± 9.6 9 |
| 10241  | CAB | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)    | LTE-TDD | 9.82  | ± 9.6 9 |
| 10242  | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)    | LTE-TDD | 9.86  | ± 9.6 % |
| 10243  | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)      | LTE-TDD | 9.46  | ± 9.6 9 |
| 10244  | CAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)      | LTE-TDD | 10.06 | ± 9.6 9 |
| 10245  | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)      | LTE-TDD | 10.06 | ± 9.6 9 |
| 10246  | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)        | LTE-TDD | 9.30  | ± 9.6 ° |
| 10247  | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)      | LTE-TDD | 9.91  | ± 9.6 ° |
| 10248  | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)      | LTE-TDD | 10.09 | ± 9.6 ° |
| 10249  | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)        | LTE-TDD | 9.29  | ± 9.6 ° |
| 10250  | CAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)     | LTE-TDD | 9.81  | ± 9.6 9 |
| 10251  | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)     | LTE-TDD | 10.17 | ± 9.6 9 |
| 10252  | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)       | LTE-TDD | 9.24  | ± 9.6 9 |
| 10253  | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)     | LTE-TDD | 9.90  | ± 9.6 % |
| 10254  | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)     | LTE-TDD | 10.14 | ± 9.6 9 |
| 10255  | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)       | LTE-TDD | 9.20  | ± 9.6 % |
| 10256  | CAB | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)   | LTE-TDD | 9.96  | ± 9.6 ° |
| 10257  | -   | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)   | LTE-TDD | 10.08 | ± 9.6 9 |
| 10258  | CAD | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)     | LTE-TDD | 9.34  | -       |
| 11/200 | CAD |   |         | 9.34  | ± 9.6 % |

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| 10260 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)                 | LTE-TDD  | 9.97  | ± 9.6 %     |
|-------|-----|---|----------|-------|-------------|
| 10261 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)                   | LTE-TDD  | 9.24  | ± 9.6 %     |
| 10262 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)                 | LTE-TDD  | 9.83  | ± 9.6 %     |
| 10263 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)                 | LTE-TDD  | 10.16 | ± 9.6 %     |
| 10264 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)                   | LTE-TDD  | 9.23  | ± 9.6 %     |
| 10265 | CAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)                | LTE-TDD  | 9.92  | ± 9.6 %     |
| 10266 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)                | LTE-TDD  | 10.07 | ± 9.6 %     |
| 10267 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)                  | LTE-TDD  | 9.30  | ± 9.6 %     |
| 10268 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)                | LTE-TDD  | 10.06 | ± 9.6 %     |
| 10269 | -   | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)                | LTE-TDD  | 10.00 | ± 9.6 %     |
| 10203 | CAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                  | LTE-TDD  | 9.58  | ± 9.6 %     |
| 10270 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                 | WCDMA    | 4.87  | ± 9.6 %     |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                  | WCDMA    | 3.96  | ± 9.6 %     |
|       | CAD |   | PHS      |       |             |
| 10277 | CAD | PHS (QPSK)  | PHS      | 11.81 | ± 9.6 %     |
| 10278 | CAD | PHS (QPSK, BW 884MHz, Rolloff 0.5)                        |          | 11.81 | ± 9.6 %     |
| 10279 | CAG | PHS (QPSK, BW 884MHz, Rolloff 0.38)                       | PHS      | 12.18 | ± 9.6 %     |
| 10290 | CAG | CDMA2000, RC1, SO55, Full Rate                            | CDMA2000 | 3.91  | ± 9.6 %     |
| 10291 | CAG | CDMA2000, RC3, SO55, Full Rate                            | CDMA2000 | 3.46  | ± 9.6 %     |
| 10292 | CAG | CDMA2000, RC3, SO32, Full Rate                            | CDMA2000 | 3.39  | ± 9.6 %     |
| 10293 | CAG | CDMA2000, RC3, SO3, Full Rate                             | CDMA2000 | 3.50  | ± 9.6 %     |
| 10295 | CAG | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                     | CDMA2000 | 12.49 | ± 9.6 %     |
| 10297 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                   | LTE-FDD  | 5.81  | ± 9.6 %     |
| 10298 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                    | LTE-FDD  | 5.72  | ± 9.6 %     |
| 10299 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                  | LTE-FDD  | 6.39  | ± 9.6 %     |
| 10300 | CAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                  | LTE-FDD  | 6.60  | ± 9.6 %     |
| 10301 | CAC | IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)        | WIMAX    | 12.03 | ± 9.6 %     |
| 10302 | CAB | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL) | WIMAX    | 12.57 | ± 9.6 %     |
| 10303 | CAB | IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)       | WIMAX    | 12.52 | ± 9.6 %     |
| 10304 | CAA | IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)       | WiMAX    | 11.86 | ± 9.6 %     |
| 10305 | CAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)      | WiMAX    | 15.24 | ± 9.6 %     |
| 10306 | CAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)      | WIMAX    | 14.67 | ± 9.6 %     |
| 10307 | AAB | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)       | WIMAX    | 14.49 | ± 9.6 %     |
| 10308 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)      | WIMAX    | 14.46 | ± 9.6 %     |
| 10309 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)    | WIMAX    | 14.58 | ± 9.6 %     |
| 10310 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3     | WIMAX    | 14.57 | ± 9.6 %     |
| 10311 | AAB | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                  | LTE-FDD  | 6.06  | ± 9.6 %     |
| 10313 | AAD | iDEN 1:3  | IDEN     | 10.51 | ± 9.6 %     |
| 10314 | -   | iDEN 1:6  | IDEN     | 13.48 | ± 9.6 %     |
| 10314 | AAD | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)         | WLAN     | 1.71  | ± 9.6 %     |
| 10315 | AAD | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)     | WLAN     | 8.36  | ± 9.6 %     |
| 10317 | AAD | IEEE 802.11g Will 2.4 GHz (ERI OF DM, 6 Mbps, 96pc dc)    | WLAN     |       | $\pm 9.6\%$ |
|       | AAA |   |          | 8.36  | -           |
| 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 | AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)               | WLAN     | 8.37  | ± 9.6 %     |
| 10401 | AAA | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)               | WLAN     | 8.60  | ± 9.6 %     |
| 10402 | AAA | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)               | 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 | AAD | CDMA2000, RC3, SO32, SCH0, Full Rate                      | CDMA2000 | 5.22  | ± 9.6 %     |

| 10410          | AAA | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)  | LTE-TDD  | 7.82  | ± 9.6 %   |
|----------------|-----|--|----------|-------|-----------|
| 10414          | AAA | WLAN CCDF, 64-QAM, 40MHz   | Generic  | 8.54  | ± 9.6 %   |
| 10415          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)  | WLAN     | 1.54  | ± 9.6 %   |
| 10416          | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)  | WLAN     | 8.23  | ± 9.6 %   |
| 10417          | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)  | WLAN     | 8.23  | ± 9.6 %   |
| 0418           | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)  | WLAN     | 8.14  | ± 9.6 %   |
| 0419           | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)                                       | WLAN     | 8.19  | ± 9.6 %   |
| 0422           | AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)   | WLAN     | 8.32  | ± 9.6 %   |
| 0423           | AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)  | WLAN     | 8.47  | ± 9.6 %   |
| 0424           | AAE | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)  | WLAN     | 8.40  | ± 9.6 %   |
| 10425          | AAE | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)  | WLAN     | 8.41  | ± 9.6 %   |
| 10426          | AAE | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)  | WLAN     | 8.45  | ± 9.6 9   |
| 10427          | AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)   | WLAN     | 8.41  | ± 9.6 %   |
| 10430          | AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)   | LTE-FDD  | 8.28  | ± 9.6 9   |
| 10431          | AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)  | LTE-FDD  | 8.38  | ± 9.6 9   |
| 10432          | AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)  | LTE-FDD  | 8.34  | ± 9.6 9   |
| 10433          | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)  | LTE-FDD  | 8.34  | ± 9.6 9   |
| 10434          | AAG | W-CDMA (BS Test Model 1, 64 DPCH)  | WCDMA    | 8.60  | ± 9.6 °   |
| 10435          | AAA | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)  | LTE-TDD  | 7.82  | ± 9.6 °   |
| 10447          | AAA | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)   | LTE-FDD  | 7.56  | ± 9.6 °   |
| 10448          | AAA | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)   | LTE-FDD  | 7.53  | ± 9.6 °   |
| 10449          | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)   | LTE-FDD  | 7.51  | ± 9.6 °   |
| 10450          | AAA | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)  | LTE-FDD  | 7.48  | ± 9.6 °   |
| 10451          | AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)  | WCDMA    | 7.59  | ± 9.6 °   |
| 10453          | AAC | Validation (Square, 10ms, 1ms)   | Test     | 10.00 | ± 9.6     |
| 10456          | AAC | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc dc)   | WLAN     | 8.63  | ± 9.6     |
| 10457          | AAC | UMTS-FDD (DC-HSDPA)  | WCDMA    | 6.62  | ± 9.6     |
| 10458          | AAC | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)   | CDMA2000 | 6.55  | ± 9.6     |
| 10459          |     | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)   | CDMA2000 | 8.25  | ± 9.6     |
| 10460          | AAC | UMTS-FDD (WCDMA, AMR)  | WCDMA    | 2.39  | ± 9.6     |
| 10461          | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)   | LTE-TDD  | 7.82  | ± 9.6     |
| 10462          | -   | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)   | LTE-TDD  | 8.30  | ± 9.6 °   |
| 10463          | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)   | LTE-TDD  | 8.56  | ± 9.6 °   |
| 10464          | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)   | LTE-TDD  | 7.82  | ± 9.6 °   |
| 10465          | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 4 6R, 02 500)   | LTE-TDD  | 8.32  | ± 9.6 °   |
| 10466          | AAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 10-QAM, 0L Sub)   | LTE-TDD  | 8.57  | ± 9.6     |
| 10467          | AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)   | LTE-TDD  | 7.82  | ± 9.6 °   |
| 10468          | AAA | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 61 GK, 62 Gbb)  | LTE-TDD  | 8.32  | ± 9.6 °   |
| 10469          | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 10 QAM, 0L Sub)   | LTE-TDD  | 8.56  | ± 9.6     |
| 10409          | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 04-QAM, 0L SUD)   | LTE-TDD  | 7.82  | ± 9.6 °   |
| 10470          | AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)  | LTE-TDD  |       | $\pm 9.6$ |
| 10471          | AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 10-QAM, 0E Sub)  | LTE-TDD  | 8.32  | ± 9.6     |
|                | AAC |  | LTE-TDD  |       |           |
| 10473          | AAA | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)<br>LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub) | LTE-TDD  | 7.82  | $\pm 9.6$ |
| 10474<br>10475 | AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, 0L Sub)  | LTE-TDD  | 8.32  | ± 9.6 °   |
| 10475          | AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHZ, 64-QAM, 0L Sub)  | LTE-TDD  | 8.32  | ± 9.6     |
|                | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 18-QAM, 0L Sub)  | LTE-TDD  |       |           |
| 10478          | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHZ, 64-QAM, 0L Sub)  | LTE-TDD  | 8.57  | ± 9.6     |
| 10479          | AAC |  | -        | 7.74  | ± 9.6     |
| 10480          | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)   | LTE-TDD  | 8.18  | ± 9.6     |
| 10481          | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)   | LTE-TDD  | 8.45  | ± 9.6     |
| 10482          | AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)   | LTE-TDD  | 7.71  | ± 9.6     |
| 10483          | AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub)  | LTE-TDD  | 8.39  | ± 9.6     |
| 10484          | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)   | LTE-TDD  | 8.47  | ± 9.6     |
| 10485<br>10486 | AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)   | LTE-TDD  | 7.59  | ± 9.6     |
|                | AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub)   | LTE-TDD  | 8.38  | ± 9.6     |

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| 10488 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)     | LTE-TDD | 7.70 | ± 9.6 % |
|-------|-----|---|---------|------|---------|
| 10489 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.31 | ± 9.6 % |
| 10490 | AAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)     | LTE-TDD | 7.74 | ± 9.6 % |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.41 | ± 9.6 % |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.55 | ± 9.6 % |
| 10494 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)     | LTE-TDD | 7.74 | ± 9.6 % |
| 10495 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.37 | ±9.6 %  |
| 10496 | AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10497 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)   | LTE-TDD | 7.67 | ± 9.6 % |
| 10498 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.40 | ± 9.6 % |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.68 | ± 9.6 % |
| 10500 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)     | LTE-TDD | 7.67 | ± 9.6 % |
| 10501 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.44 | ± 9.6 % |
| 10502 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.52 | ±9.6 %  |
| 10503 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)     | LTE-TDD | 7.72 | ± 9.6 % |
| 10504 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.31 | ± 9.6 % |
| 10505 | AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10506 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10507 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.36 | ± 9.6 % |
| 10508 | AAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.55 | ± 9.6 % |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)    | LTE-TDD | 7.99 | ± 9.6 % |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.49 | ± 9.6 % |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.51 | ± 9.6 % |
| 10512 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10513 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.42 | ± 9.6 % |
| 10514 | AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.45 | ± 9.6 % |
| 10515 | AAE | IEEE 802.11b WIFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)   | WLAN    | 1.58 | ± 9.6 % |
| 10516 | AAE | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc) | WLAN    | 1.57 | ± 9.6 % |
| 10517 | AAF | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)  | WLAN    | 1.58 | ± 9.6 % |
| 10518 | AAF | IEEE 802.11a/h WiFI 5 GHz (OFDM, 9 Mbps, 99pc dc)   | WLAN    | 8.23 | ± 9.6 % |
| 10519 | AAF | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)  | WLAN    | 8.39 | ± 9.6 % |
| 10520 | AAB | IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps, 99pc dc)  | WLAN    | 8.12 | ± 9.6 % |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)  | WLAN    | 7.97 | ± 9.6 % |
| 10522 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)  | WLAN    | 8.45 | ± 9.6 % |
| 10523 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)  | WLAN    | 8.08 | ± 9.6 % |
| 10524 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)  | WLAN    | 8.27 | ± 9.6 % |
| 10525 | AAC | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)           | WLAN    | 8.36 | ± 9.6 % |
| 10526 | AAF | IEEE 802.11ac WIFI (20MHz, MCS1, 99pc dc)           | WLAN    | 8.42 | ± 9.6 % |
| 10527 | AAF | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)           | WLAN    | 8.21 | ± 9.6 % |
| 10528 | AAF | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)           | WLAN    | 8.36 | ± 9.6 % |
| 10529 | AAF | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)           | WLAN    | 8.36 | ± 9.6 % |
| 10531 | AAF | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)           | WLAN    | 8.43 | ± 9.6 % |
| 10532 | AAF | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)           | WLAN    | 8.29 | ± 9.6 % |
| 10533 | AAE | IEEE 802,11ac WiFi (20MHz, MCS8, 99pc dc)           | WLAN    | 8.38 | ± 9.6 ° |
| 10534 | AAE | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)           | WLAN    | 8.45 | ± 9.6 ° |
| 10535 | AAE | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc dc)           | WLAN    | 8.45 | ± 9.6 ° |
| 10536 | AAF | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc)           | WLAN    | 8.32 | ± 9.6 ° |
| 10537 | AAF | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)           | WLAN    | 8.44 | ± 9.6 ° |
| 10538 | AAF | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)           | WLAN    | 8.54 | ± 9.6   |
| 10540 | AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc)           | WLAN    | 8.39 | ± 9.6   |
| 10541 | AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc dc)           | WLAN    | 8,46 | ± 9.6   |
| 10542 | AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc dc)           | WLAN    | 8.65 | ± 9.6   |
| 10543 | AAC | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)           | WLAN    | 8.65 | ± 9.6   |
| 10544 | AAC | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)           | WLAN    | 8.47 | ± 9.6   |
| 10545 | AAC |   | WLAN    | 8.55 | ± 9.6   |

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

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| 10604 | AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)     | WLAN         | 8.76  | ± 9.6 % |
|-------|-----|---|--------------|-------|---------|
| 10605 | AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)     | WLAN         | 8.97  | ± 9.6 % |
| 10606 | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc dc)     | WLAN         | 8.82  | ± 9.6 % |
| 10607 | AAC | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)         | WLAN         | 8.64  | ± 9.6 % |
| 10608 | AAC | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc)         | WLAN         | 8.77  | ± 9.6 % |
| 10609 | AAC | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)         | WLAN         | 8.57  | ± 9.6 % |
| 10610 | AAC | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)         | WLAN         | 8.78  | ± 9.6 % |
| 10611 | AAC | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc dc)         | WLAN         | 8.70  | ± 9.6 % |
| 10612 | AAC | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)         | WLAN         | 8.77  | ± 9.6 % |
| 10613 | AAC | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)         | WLAN         | 8.94  | ± 9.6 % |
| 10614 | AAC | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)         | WLAN         | 8.59  | ± 9.6 % |
| 10615 | AAC | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc dc)         | WLAN         | 8.82  | ± 9.6 % |
| 10616 | AAC | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc dc)         | WLAN         | 8.82  | ± 9.6 % |
| 10617 | AAC | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)         | WLAN         | 8.81  | ± 9.6 % |
| 10618 | AAC | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)         | WLAN         | 8.58  | ± 9.6 % |
| 10619 | AAC | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)         | WLAN         | 8.86  | ± 9.6 % |
| 10620 | AAC | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)         | WLAN         | 8.87  | ± 9.6 % |
| 10621 | -   | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)         | WLAN         | 8.77  | ± 9.6 % |
| 10622 | AAC | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc dc)         | WLAN         | 8.68  | ± 9.6 % |
| 10622 | AAC | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc dc)         | WLAN         | 8.82  | ± 9.6 % |
| 10623 | AAC | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)         | WLAN         | 8.96  | ± 9.6 % |
| 10625 | AAC | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)         | WLAN         | 8.96  | ± 9.6 % |
| 10625 | AAC | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)         | WLAN         | 8.83  | ± 9.6 % |
| 10620 | AAC | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)         | WLAN         | 8.88  | ± 9.6 % |
| 10628 | AAC | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)         | WLAN         | 8.71  | ± 9.6 % |
| 10629 | AAC | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)         | WLAN         | 8.85  | ± 9.6 % |
| 10630 | AAC | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)         | WLAN         | 8.72  | ± 9.6 % |
|       | AAC | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)         | WLAN         | 8.81  | ± 9.6 % |
| 10631 | AAC | IEEE 802.11ac WiFI (80MHz, MCS6, 90pc dc)         | WLAN         | 8.74  | ± 9.6 % |
| 10632 | AAC | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc dc)         | WLAN         | 8.83  | ± 9.6 % |
| 10633 | AAC |   | WLAN         | 8.80  | ± 9.6 % |
| 10634 | AAC | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc dc)         | WLAN         |       | ± 9.0 % |
| 10635 | AAC | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)         | WLAN         | 8.81  | ± 9.6 % |
| 10636 | AAC |   |              | 8.79  | ± 9.6 % |
| 10637 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)        | WLAN         |       |         |
| 10638 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)        | WLAN         | 8.86  | ± 9.6 % |
| 10639 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)        | WLAN         | 8.85  | ± 9.6 % |
| 10640 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)        | WLAN<br>WLAN | 8.98  | ± 9.6 % |
| 10641 | AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)        |              | 9.06  | ± 9.6 % |
| 10642 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc dc)        | WLAN         | 9.06  | ± 9.6 % |
| 10643 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)        | WLAN         | 8.89  | ± 9.6 % |
| 10644 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)        | WLAN         | 9.05  | ± 9.6 % |
| 10645 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)        | WLAN         | 9.11  | ± 9.6 % |
| 10646 | AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)  | LTE-TDD      | 11.96 | ± 9.6 % |
| 10647 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7) | LTE-TDD      | 11.96 | ± 9.6 % |
| 10648 | AAC | CDMA2000 (1x Advanced)                            | CDMA2000     | 3.45  | ± 9.6 % |
| 10652 | AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)    | LTE-TDD      | 6.91  | ± 9.6 % |
| 10653 | AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD      | 7.42  | ± 9.6 % |
| 10654 | AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD      | 6.96  | ± 9.6 % |
| 10655 | AAC | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD      | 7.21  | ± 9.6 % |
| 10658 | AAC | Pulse Waveform (200Hz, 10%)                       | Test         | 10.00 | ± 9.6 % |
| 10659 | AAC | Pulse Waveform (200Hz, 20%)                       | Test         | 6.99  | ± 9.6 % |
| 10660 | AAC | Pulse Waveform (200Hz, 40%)                       | Test         | 3.98  | ± 9.6 % |
| 10661 | AAC | Pulse Waveform (200Hz, 60%)                       | Test         | 2.22  | ± 9.6 % |
| 10662 | AAC | Pulse Waveform (200Hz, 80%)                       | Test         | 0.97  | ± 9.6 % |
| 10670 | AAC | Bluetooth Low Energy                              | Bluetooth    | 2.19  | ± 9.6 % |
| 10671 | AAD | IEEE 802.11ax (20MHz, MCS0, 90pc dc)              | WLAN         | 9.09  | ± 9.6 % |

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| 10672          | AAD | IEEE 802.11ax (20MHz, MCS1, 90pc dc)  | WLAN         | 8.57 | ± 9.6 % |
|----------------|-----|---------------------------------------|--------------|------|---------|
| 10673          | AAD | IEEE 802.11ax (20MHz, MCS2, 90pc dc)  | WLAN         | 8.78 | ± 9.6 % |
| 10674          | AAD | IEEE 802.11ax (20MHz, MCS3, 90pc dc)  | WLAN         | 8.74 | ± 9.6 % |
| 0675           | AAD | IEEE 802.11ax (20MHz, MCS4, 90pc dc)  | WLAN         | 8.90 | ± 9.6 % |
| 0676           | AAD | IEEE 802.11ax (20MHz, MCS5, 90pc dc)  | WLAN         | 8.77 | ± 9.6 % |
| 0677           | AAD | IEEE 802.11ax (20MHz, MCS6, 90pc dc)  | WLAN         | 8.73 | ± 9.6 % |
| 0678           | AAD | IEEE 802.11ax (20MHz, MCS7, 90pc dc)  | WLAN         | 8.78 | ± 9.6 % |
| 0679           | AAD | IEEE 802.11ax (20MHz, MCS8, 90pc dc)  | WLAN         | 8.89 | ± 9.6 % |
| 0680           | AAD | IEEE 802.11ax (20MHz, MCS9, 90pc dc)  | WLAN         | 8.80 | ± 9.6 % |
| 0681           | AAG | IEEE 802.11ax (20MHz, MCS10, 90pc dc) | WLAN         | 8.62 | ± 9.6 % |
| 0682           | AAF | IEEE 802.11ax (20MHz, MCS11, 90pc dc) | WLAN         | 8.83 | ± 9.6 ° |
| 0683           | AAA | IEEE 802.11ax (20MHz, MCS0, 99pc dc)  | WLAN         | 8.42 | ± 9.6 9 |
| 0684           | AAC | IEEE 802.11ax (20MHz, MCS1, 99pc dc)  | WLAN         | 8.26 | ± 9.6 9 |
| 10685          | AAC | IEEE 802.11ax (20MHz, MCS2, 99pc dc)  | WLAN         | 8.33 | ± 9.6 ° |
| 10686          | AAC | IEEE 802.11ax (20MHz, MCS3, 99pc dc)  | WLAN         | 8.28 | ± 9.6 9 |
| 10687          | AAE | IEEE 802.11ax (20MHz, MCS4, 99pc dc)  | WLAN         | 8.45 | ± 9.6 ° |
| 10688          | AAE | IEEE 802.11ax (20MHz, MCS5, 99pc dc)  | WLAN         | 8.29 | ± 9.6 ° |
| 10689          | AAD | IEEE 802.11ax (20MHz, MCS6, 99pc dc)  | WLAN         | 8.55 | ± 9.6 ° |
| 10690          | AAE | IEEE 802.11ax (20MHz, MCS7, 99pc dc)  | WLAN         | 8.29 | ± 9.6 9 |
| 10691          | AAB | IEEE 802.11ax (20MHz, MCS8, 99pc dc)  | WLAN         | 8.25 | ± 9.6 ° |
| 10692          | AAA | IEEE 802.11ax (20MHz, MCS9, 99pc dc)  | WLAN         | 8.29 | ± 9.6   |
| 10693          | AAA | IEEE 802.11ax (20MHz, MCS10, 99pc dc) | WLAN         | 8.25 | ± 9.6   |
| 10694          | AAA | IEEE 802.11ax (20MHz, MCS11, 99pc dc) | WLAN         | 8.57 | ± 9.6   |
| 10695          | AAA | IEEE 802.11ax (40MHz, MCS0, 90pc dc)  | WLAN         | 8.78 | ± 9.6 ° |
| 10696          | AAA | IEEE 802.11ax (40MHz, MCS1, 90pc dc)  | WLAN         | 8.91 | ± 9.6 ° |
| 10697          | AAA | IEEE 802.11ax (40MHz, MCS2, 90pc dc)  | WLAN         | 8.61 | ± 9.6 ° |
| 10698          | AAA | IEEE 802.11ax (40MHz, MCS3, 90pc dc)  | WLAN         | 8.89 | ± 9.6   |
| 10699          | AAA | IEEE 802.11ax (40MHz, MCS4, 90pc dc)  | WLAN         | 8.82 | ± 9.6   |
| 10700          |     | IEEE 802.11ax (40MHz, MCS5, 90pc dc)  | WLAN         | 8.73 | ± 9.6 ° |
| 10701          | AAA | IEEE 802.11ax (40MHz, MCS6, 90pc dc)  | WLAN         | 8.86 | ± 9.6   |
| 10702          | AAA | IEEE 802.11ax (40MHz, MCS7, 90pc dc)  | WLAN         | 8.70 | ± 9.6 ° |
| 10702          | AAA | IEEE 802.11ax (40MHz, MCS8, 90pc dc)  | WLAN         | 8.82 | ± 9.6   |
| 10704          | AAA | IEEE 802.11ax (40MHz, MCS9, 90pc dc)  | WLAN         | 8.56 | ± 9.6 ° |
| 10705          | AAA | IEEE 802.11ax (40MHz, MCS3, 90pc dc)  | WLAN         | 8.69 | -       |
| 10705          | AAA | IEEE 802.11ax (40MHz, MCS10, 90pc dc) | WLAN         |      | ± 9.6 ° |
| 10700          | AAC | IEEE 802.11ax (40MHz, MCS11, 90pc dc) |              | 8.66 | ± 9.6 ° |
| 10707          | AAC | IEEE 802.11ax (40MHz, MCS0, 99pc dc)  | WLAN         | 8.32 | ± 9.6 ° |
|                | AAC |                                       | WLAN         | 8.55 | ± 9.6 ° |
| 10709<br>10710 | AAC | IEEE 802.11ax (40MHz, MCS2, 99pc dc)  | WLAN         | 8.33 | ± 9.6 ° |
| 10710          | AAC | IEEE 802.11ax (40MHz, MCS3, 99pc dc)  | WLAN<br>WLAN | 8.29 | ± 9.6 ° |
|                | AAC | IEEE 802.11ax (40MHz, MCS4, 99pc dc)  |              | 8.39 | ± 9.6 ° |
| 10712          | AAC | IEEE 802.11ax (40MHz, MCS5, 99pc dc)  | WLAN         | 8.67 | ± 9.6 ° |
| 10713          | AAC | IEEE 802.11ax (40MHz, MCS6, 99pc dc)  | WLAN         | 8.33 | ± 9.6 ° |
| 10714          | AAC | IEEE 802.11ax (40MHz, MCS7, 99pc dc)  | WLAN         | 8.26 | ± 9.6 ° |
| 10715          | AAC | IEEE 802.11ax (40MHz, MCS8, 99pc dc)  | WLAN         | 8.45 | ± 9.6 ° |
| 10716          | AAC | IEEE 802.11ax (40MHz, MCS9, 99pc dc)  | WLAN         | 8.30 | ± 9.6   |
| 10717          | AAC | IEEE 802.11ax (40MHz, MCS10, 99pc dc) | WLAN         | 8.48 | ± 9.6   |
| 10718          | AAC | IEEE 802.11ax (40MHz, MCS11, 99pc dc) | WLAN         | 8.24 | ± 9.6   |
| 10719          | AAC | IEEE 802.11ax (80MHz, MCS0, 90pc dc)  | WLAN         | 8.81 | ± 9.6   |
| 10720          | AAC | IEEE 802.11ax (80MHz, MCS1, 90pc dc)  | WLAN         | 8.87 | ± 9.6   |
| 10721          | AAC | IEEE 802.11ax (80MHz, MCS2, 90pc dc)  | WLAN         | 8.76 | ± 9.6   |
| 10722          | AAC | IEEE 802.11ax (80MHz, MCS3, 90pc dc)  | WLAN         | 8.55 | ± 9.6   |
| 10723          | AAC | IEEE 802.11ax (80MHz, MCS4, 90pc dc)  | WLAN         | 8.70 | ± 9.6   |
| 10724          | AAC | IEEE 802.11ax (80MHz, MCS5, 90pc dc)  | WLAN         | 8.90 | ± 9.6   |
| 10725          | AAC | IEEE 802.11ax (80MHz, MCS6, 90pc dc)  | WLAN         | 8.74 | ± 9.6   |
| 10726          | AAC | IEEE 802.11ax (80MHz, MCS7, 90pc dc)  | WLAN         | 8.72 | ± 9.6 ° |
| 10727          | AAC | IEEE 802.11ax (80MHz, MCS8, 90pc dc)  | WLAN         | 8.66 | ± 9.6   |

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| 10728 | AAC        | IEEE 802.11ax (80MHz, MCS9, 90pc dc)          | WLAN          | 8.65 | ± 9.6 % |
|-------|------------|---|---------------|------|---------|
| 10729 | AAC        | IEEE 802.11ax (80MHz, MCS10, 90pc dc)         | WLAN          | 8.64 | ± 9.6 % |
| 10730 | AAC        | IEEE 802.11ax (80MHz, MCS11, 90pc dc)         | WLAN          | 8.67 | ± 9.6 % |
| 10731 | AAC        | IEEE 802.11ax (80MHz, MCS0, 99pc dc)          | WLAN          | 8.42 | ± 9.6 % |
| 10732 | AAC        | IEEE 802.11ax (80MHz, MCS1, 99pc dc)          | WLAN          | 8.46 | ±9.6 %  |
| 10733 | AAC        | IEEE 802.11ax (80MHz, MCS2, 99pc dc)          | WLAN          | 8.40 | ± 9.6 % |
| 10734 | AAC        | IEEE 802.11ax (80MHz, MCS3, 99pc dc)          | WLAN          | 8.25 | ± 9.6 % |
| 10735 | AAC        | IEEE 802.11ax (80MHz, MCS4, 99pc dc)          | WLAN          | 8.33 | ± 9.6 % |
| 10736 | AAC        | IEEE 802.11ax (80MHz, MCS5, 99pc dc)          | WLAN          | 8.27 | ± 9.6 % |
| 10737 | AAC        | IEEE 802.11ax (80MHz, MCS6, 99pc dc)          | WLAN          | 8.36 | ± 9.6 % |
| 10738 | AAC        | IEEE 802.11ax (80MHz, MCS7, 99pc dc)          | WLAN          | 8.42 | ± 9.6 % |
| 10739 | AAC        | IEEE 802.11ax (80MHz, MCS8, 99pc dc)          | WLAN          | 8.29 | ± 9.6 % |
| 10740 | AAC        | IEEE 802.11ax (80MHz, MCS9, 99pc dc)          | WLAN          | 8.48 | ± 9.6 % |
| 10741 | AAC        | IEEE 802.11ax (80MHz, MCS10, 99pc dc)         | WLAN          | 8.40 | ± 9.6 % |
| 10742 | AAC        | IEEE 802.11ax (80MHz, MCS11, 99pc dc)         | WLAN          | 8.43 | ± 9.6 % |
| 10743 | AAC        | IEEE 802.11ax (160MHz, MCS0, 90pc dc)         | WLAN          | 8.94 | ± 9.6 % |
| 10744 | AAC        | IEEE 802.11ax (160MHz, MCS1, 90pc dc)         | WLAN          | 9.16 | ± 9.6 % |
| 10745 | AAC        | IEEE 802.11ax (160MHz, MCS2, 90pc dc)         | WLAN          | 8.93 | ± 9.6 % |
| 10746 | AAC        | IEEE 802.11ax (160MHz, MCS3, 90pc dc)         | WLAN          | 9.11 | ± 9.6 % |
| 10747 | AAC        | IEEE 802.11ax (160MHz, MCS4, 90pc dc)         | WLAN          | 9.04 | ± 9.6 % |
| 10748 | AAC        | IEEE 802.11ax (160MHz, MCS5, 90pc dc)         | WLAN          | 8.93 | ± 9.6 % |
| 10749 | AAC        | IEEE 802.11ax (160MHz, MCS6, 90pc dc)         | WLAN          | 8.90 | ± 9.6 % |
| 10750 | AAC        | IEEE 802.11ax (160MHz, MCS7, 90pc dc)         | WLAN          | 8.79 | ± 9.6 % |
| 10751 | AAC        | IEEE 802.11ax (160MHz, MCS8, 90pc dc)         | WLAN          | 8.82 | ± 9.6 % |
| 10752 | AAC        | IEEE 802.11ax (160MHz, MCS9, 90pc dc)         | WLAN          | 8.81 | ± 9.6 % |
| 10753 | AAC        | IEEE 802.11ax (160MHz, MCS10, 90pc dc)        | WLAN          | 9.00 | ± 9.6 % |
| 10754 | AAC        | IEEE 802.11ax (160MHz, MCS11, 90pc dc)        | WLAN          | 8.94 | ± 9.6 % |
| 10755 | AAC        | IEEE 802.11ax (160MHz, MCS0, 99pc dc)         | WLAN          | 8.64 | ± 9.6 % |
| 10756 | AAC        | IEEE 802.11ax (160MHz, MCS1, 99pc dc)         | WLAN          | 8.77 | ± 9.6 % |
| 10757 | AAC        | IEEE 802.11ax (160MHz, MCS2, 99pc dc)         | WLAN          | 8.77 | ± 9.6 % |
| 10758 | AAC        | IEEE 802.11ax (160MHz, MCS3, 99pc dc)         | WLAN          | 8.69 | ± 9.6 % |
| 10759 | AAC        | IEEE 802.11ax (160MHz, MCS4, 99pc dc)         | WLAN          | 8.58 | ± 9.6 % |
| 10760 | AAC        | IEEE 802.11ax (160MHz, MCS5, 99pc dc)         | WLAN          | 8.49 | ± 9.6 % |
| 10761 | AAC        | IEEE 802.11ax (160MHz, MCS6, 99pc dc)         | WLAN          | 8.58 | ± 9.6 % |
| 10762 | AAC        | IEEE 802.11ax (160MHz, MCS7, 99pc dc)         | WLAN          | 8.49 | ± 9.6 % |
| 10763 | AAC        | IEEE 802.11ax (160MHz, MCS8, 99pc dc)         | WLAN          | 8.53 | ± 9.6 % |
| 10764 | AAC        | IEEE 802.11ax (160MHz, MCS9, 99pc dc)         | WLAN          | 8.54 | ± 9.6 % |
| 10765 | AAC        | IEEE 802.11ax (160MHz, MCS10, 99pc dc)        | WLAN          | 8.54 | ± 9.6 % |
| 10766 | AAC        | IEEE 802.11ax (160MHz, MCS11, 99pc dc)        | WLAN          | 8.51 | ± 9.6 % |
| 10767 | AAC        | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 7.99 | ± 9.6 % |
| 10768 | AAC        | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.01 | ± 9.6 % |
| 10769 | AAC        | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.01 | ± 9.6 % |
| 10770 | AAC        | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.02 | ± 9.6 % |
| 10770 | AAC        | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.02 | ± 9.6 % |
| 10772 | AAC        | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.23 | ± 9.6 % |
| 10773 | AAC        | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.03 | ± 9.6 % |
| 10774 | AAC        | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.02 | ± 9.6 % |
| 10775 | AAC        | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 KHz)  | 5G NR FR1 TDD | 8.31 | ± 9.6 % |
| 10776 | AAC        | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ± 9.6 % |
| 10777 | AAC        | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ± 9.6 % |
| 10778 | AAC        | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.34 | ± 9.6 % |
| 10779 | AAC        | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.42 | ± 9.6 % |
| 10779 | -          | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ± 9.6 % |
| 10780 | AAC        | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ± 9.6 % |
| 10781 | AAC        | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ± 9.6 % |
| 10782 | AAC<br>AAC | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ± 9.6 % |

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| 10784 | AAC        | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.29 | ± 9.6 % |
|-------|------------|---|--------------------------------|------|---------|
| 10785 | AAC        | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.40 | ± 9.6 % |
| 10786 | AAC        | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.35 | ± 9.6 % |
| 10787 | AAC        | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.44 | ± 9.6 % |
| 10788 | AAC        | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.39 | ± 9.6 % |
| 10789 | AAC        | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.37 | ± 9.6 % |
| 10790 | AAC        | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD                  | 8.39 | ± 9.6 % |
| 10791 | AAC        | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD                  | 7.83 | ± 9.6 % |
| 10792 |            | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.92 | ± 9.6 % |
| 10792 | AAC        | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.95 | ± 9.6 % |
| 10793 | AAC        | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.82 | ± 9.6 % |
| 10795 | AAC        | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.84 | ± 9.6 % |
| 10795 | AAC        | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.82 | ± 9.6 % |
| 10790 | AAC        | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 8.01 | ± 9.6 % |
|       | AAC        | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.89 | ± 9.6 % |
| 10798 | AAC        | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 KHz)     | 5G NR FR1 TDD                  | 7.93 | ± 9.6 % |
| 10799 | AAC        |   | 5G NR FR1 TDD                  | 7.89 | ± 9.6 % |
| 10801 | AAC        | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.87 | ± 9.6 % |
| 10802 | AAC        | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD                  | 7.93 | ± 9.6 % |
| 10803 | AAE        | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)    |                                | 8.34 | ± 9.6 % |
| 10805 | AAD        | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD<br>5G NR FR1 TDD | 8.37 | ± 9.6 % |
| 10806 | AAD        | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)   |                                |      | -       |
| 10809 | AAD        | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD                  | 8.34 | ± 9.6 % |
| 10810 | AAD        | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD                  | 8.34 | ± 9.6 % |
| 10812 | AAD        | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD                  | 8.35 | ± 9.6 % |
| 10817 | AAD        | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD                  | 8.35 | ± 9.6 % |
| 10818 | AAD        | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.34 | ± 9.6 % |
| 10819 | AAD        | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.33 | ± 9.6 % |
| 10820 | AAD        | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.30 | ± 9.6 % |
| 10821 | AAC        | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.41 | ± 9.6 % |
| 10822 | AAD        | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.41 | ± 9.6 % |
| 10823 | AAC        | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.36 | ± 9.6 % |
| 10824 | AAD        | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.39 | ± 9.6 % |
| 10825 | AAD        | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.41 | ± 9.6 % |
| 10827 | AAD        | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.42 | ± 9.6 % |
| 10828 | AAE        | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD                  | 8.43 | ± 9.6 % |
| 10829 | AAD        | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD                  | 8.40 | ± 9.6 % |
| 10830 | AAD        | 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 | AAD        | 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 | AAD        | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD                  | 7.75 | ± 9.6 % |
| 10835 | AAD        | 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 | AAD        | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD                  | 7.68 | ± 9.6 % |
| 10839 | AAD        | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD                  | 7.70 | ± 9.6 % |
| 10840 | AAD        | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD                  | 7.67 | ± 9.6 % |
| 10841 | AAD        | 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 | AAD        | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD                  | 8.34 | ± 9.6 % |
| 10846 | AAD        | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD                  | 8.41 | ± 9.6 % |
| 10854 | AAD        | 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 | AAD        | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD                  | 8.37 | ± 9.6 % |
| 10850 | -          | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD                  | 8.35 | ± 9.6 % |
| 10857 | AAD        | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD                  | 8.36 | ± 9.6 % |
| 10858 | AAD<br>AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD                  | 8.34 | ± 9.6 % |

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| 10860 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41 | ± 9.6 % |
|-------|-----|--|---------------|------|---------|
| 10861 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.40 | ± 9.6 % |
| 10863 | AAD | 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 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)      | 5G NR FR1 TDD | 8.41 | ± 9.6 % |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.68 | ± 9.6 % |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.89 | ± 9.6 % |
| 10869 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 5.75 | ± 9.6 % |
| 10870 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.86 | ± 9.6 % |
| 10871 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 5.75 | ± 9.6 % |
| 10872 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52 | ± 9.6 % |
| 10873 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 6.61 | ±9.6 %  |
| 10874 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ± 9.6 % |
| 10875 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)        | 5G NR FR2 TDD | 7.78 | ± 9.6 % |
| 10876 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 8.39 | ± 9.6 % |
| 10877 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)       | 5G NR FR2 TDD | 7.95 | ± 9.6 % |
| 10878 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 8.41 | ± 9.6 % |
| 10879 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)       | 5G NR FR2 TDD | 8.12 | ± 9.6 % |
| 10880 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 8.38 | ± 9.6 % |
| 10881 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 5.75 | ± 9.6 % |
| 10882 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 5.96 | ± 9.6 % |
| 10883 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 6.57 | ± 9.6 % |
| 10884 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 6.53 | ± 9.6 % |
| 10885 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 6.61 | ± 9.6 % |
| 10886 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 6.65 | ± 9.6 % |
| 10887 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)         | 5G NR FR2 TDD | 7.78 | ± 9.6 % |
| 10888 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 8.35 | ± 9.6 % |
| 10889 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)        | 5G NR FR2 TDD | 8.02 | ± 9.6 % |
| 10890 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 8.40 | ± 9.6 % |
| 10891 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)        | 5G NR FR2 TDD | 8.13 | ± 9.6 % |
| 10892 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 8.41 | ± 9.6 % |
| 10897 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)        | 5G NR FR1 TDD | 5.66 | ± 9.6 % |
| 10898 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67 | ± 9.6 % |
| 10899 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67 | ± 9.6 % |
| 10900 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68 | ± 9.6 % |
| 10901 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68 | ± 9.6 % |
| 10902 | AAD | 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 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68 | ± 9.6 % |
| 10905 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 60 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 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.78 | ± 9.6 % |
| 10908 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93 | ± 9.6 % |
| 10909 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.96 | ± 9.6 % |
| 10910 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.83 | ± 9.6 % |
| 10911 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93 | ± 9.6 % |
| 10912 | AAD | 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 | AAD | 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 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.86 | ± 9.6 % |
| 10919 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.86 | ± 9.6 % |
| 10920 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.87 | ± 9.6 % |
| 10921 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.84 | ± 9.6 % |

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| 10922 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.82  | ± 9.6 % |
|-------|-----|---|---------------|-------|---------|
| 10923 | AAD | 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 | 5.84  | ± 9.6 % |
| 10925 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.95  | ± 9.6 % |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84  | ± 9.6 % |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94  | ± 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 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52  | ± 9.6 % |
| 10931 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10932 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10933 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10934 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10935 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10936 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)     | 5G NR FR1 FDD | 5.90  | ± 9.6 % |
| 10937 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.77  | ± 9.6 % |
| 10938 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.90  | ± 9.6 % |
| 10939 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.82  | ± 9.6 % |
| 10940 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.89  | ± 9.6 % |
| 10941 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.83  | ± 9.6 % |
| 10942 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.85  | ± 9.6 % |
| 10943 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.95  | ± 9.6 % |
| 10944 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.81  | ± 9.6 % |
| 10945 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.85  | ± 9.6 % |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.83  | ± 9.6 % |
| 10947 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87  | ± 9.6 % |
| 10948 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94  | ± 9.6 % |
| 10949 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87  | ± 9.6 % |
| 10950 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94  | ± 9.6 % |
| 10951 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.92  | ± 9.6 % |
| 10952 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 FDD | 8.25  | ± 9.6 % |
| 10953 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.15  | ± 9.6 % |
| 10954 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.23  | ± 9.6 % |
| 10955 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.42  | ± 9.6 % |
| 10956 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 FDD | 8.14  | ± 9.6 % |
| 10957 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.31  | ± 9.6 % |
| 10958 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.61  | ± 9.6 % |
| 10959 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.33  | ± 9.6 % |
| 10960 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 TDD | 9.32  | ± 9.6 % |
| 10961 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.36  | ± 9.6 % |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.40  | ± 9.6 % |
| 10963 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.55  | ± 9.6 % |
| 10964 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 TDD | 9.29  | ± 9.6 % |
| 10965 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.37  | ± 9.6 % |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.55  | ± 9.6 % |
| 10967 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.42  | ± 9.6 % |
| 10968 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.49  | ± 9.6 % |
| 10972 | AAB | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)         | 5G NR FR1 TDD | 11.59 | ± 9.6 % |
| 10972 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 9.06  | ± 9.6 % |
| 10973 | AAB | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)  | 5G NR FR1 TDD | 10.28 | ± 9.6 % |

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