



## SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZSAR-TRF-01-A01 Rev. A/0 May15,2023

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### Appendix C for SZCR230700241006

## Calibration certificate

1. Dipole
D2450V2 - SN 733(2022/11/02)
D5GHzV2 - SN 1165(2022/11/01)
2. DAE
DAE4 - SN 1663(2023/03/27)
3. Probe
EX3DV4 - SN 7636 (2023/06/05)



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Shenzhen Branch Testing Laboratory

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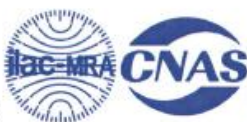
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### 1. Dipole

D2450V2 - SN 733



In Collaboration with  
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 CALIBRATION  
 CNAS L0570



Client **SGS**

Certificate No: **Z22-60489**

#### CALIBRATION CERTIFICATE

Object **D2450V2 - SN: 733**

Calibration Procedure(s) **FF-Z11-003-01**  
 Calibration Procedures for dipole validation kits

Calibration date: **November 2, 2022**

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	106276	10-May-22 (CTTL, No.J22X03103)	May-23
Power sensor NRP6A	101369	10-May-22 (CTTL, No.J22X03103)	May-23
Reference Probe EX3DV4	SN 7464	26-Jan-22(SPEAG,No.EX3-7464_Jan22)	Jan-23
DAE4	SN 1556	12-Jan-22(CTTL-SPEAG,No.Z22-60007)	Jan-23
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	13-Jan-22 (CTTL, No. J22X00409)	Jan-23
Network Analyzer E5071C	MY46110673	14-Jan-22 (CTTL, No.J22X00406)	Jan-23

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: November 7, 2022

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Certificate No: Z22-60489

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### Glossary:

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

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

- IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Additional Documentation:

- 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.

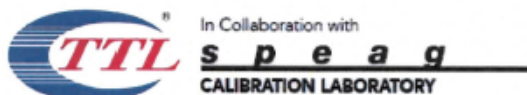
The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution Corresponds to a coverage probability of approximately 95%.



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### Measurement Conditions

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

DASY Version	DASY52	52.10.4
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 $\pm$ 1 MHz	

### Head TSL parameters

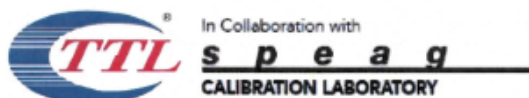
The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 $^{\circ}\text{C}$	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) $^{\circ}\text{C}$	39.4 $\pm$ 6 %	1.79 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 $^{\circ}\text{C}$	—	—

### SAR result with Head TSL

SAR averaged over 1 $\text{cm}^3$ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.0 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.2 W/kg $\pm$ 18.8 % ( $k=2$ )
SAR averaged over 10 $\text{cm}^3$ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.3 W/kg $\pm$ 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	50.2Ω+ 3.67jΩ
Return Loss	- 28.7dB

#### General Antenna Parameters and Design

Electrical Delay (one direction)	1.066 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point can be measured.

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

#### Additional EUT Data

Manufactured by	SPEAG
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### DASY5 Validation Report for Head TSL

Date: 2022-11-02

Test Laboratory: CTTL, Beijing, China

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 733**

Communication System: UID 0, CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.793$  S/m;  $\epsilon_r = 39.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

### DASY5 Configuration:

- Probe: EX3DV4 - SN7464; ConvF(7.77, 7.77, 7.77) @ 2450 MHz; Calibrated: 2022-01-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2022-01-12
- Phantom: MFP\_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

**Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm**

Reference Value = 104.2 V/m; Power Drift = -0.07 dB

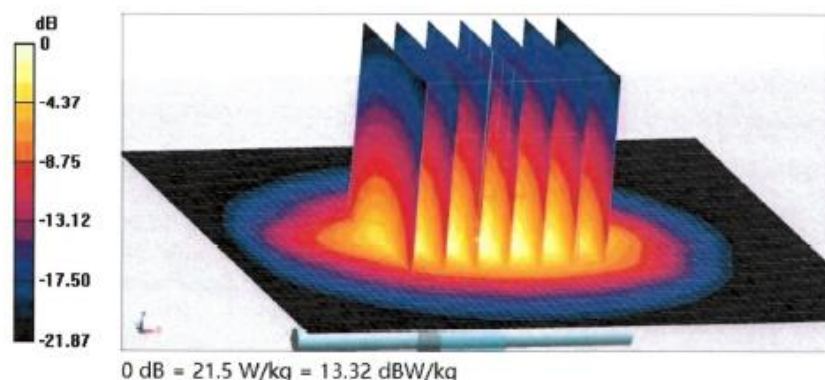
Peak SAR (extrapolated) = 26.6 W/kg

**SAR(1 g) = 13 W/kg; SAR(10 g) = 6.07 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 21.5 W/kg



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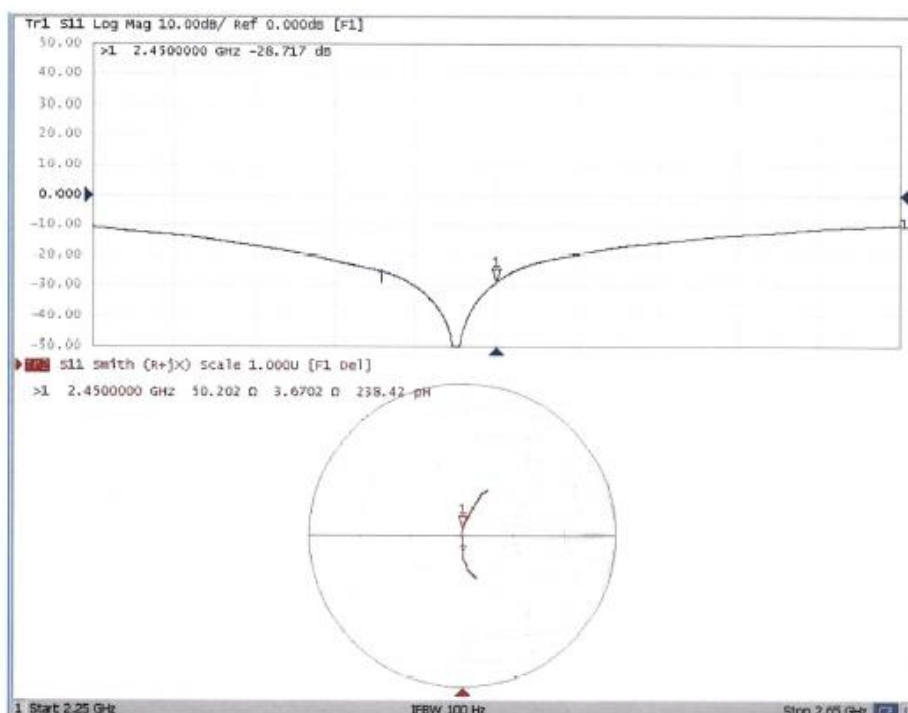
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### Impedance Measurement Plot for Head TSL



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D5GHzV2 - SN 1165



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Client **SGS**

Certificate No: **Z22-60490**

### CALIBRATION CERTIFICATE

Object **D5GHzV2 - SN: 1165**

Calibration Procedure(s) **FF-Z11-003-01**  
**Calibration Procedures for dipole validation kits**

Calibration date: **November 1, 2022**

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	106276	10-May-22 (CTTL, No.J22X03103)	May-23
Power sensor NRP6A	101369	10-May-22 (CTTL, No.J22X03103)	May-23
Reference Probe EX3DV4	SN 7464	26-Jan-22(SPEAG,No.EX3-7464_Jan22)	Jan-23
DAE4	SN 1556	12-Jan-22(CTTL-SPEAG,No.Z22-60007)	Jan-23
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	13-Jan-22 (CTTL, No. J22X00409)	Jan-23
Network Analyzer E5071C	MY46110673	14-Jan-22 (CTTL, No.J22X00406)	Jan-23

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: November 7, 2022

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Certificate No: Z22-60490

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### Glossary:

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

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

- IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Additional Documentation:

- 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	52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5250 MHz $\pm$ 1 MHz 5600 MHz $\pm$ 1 MHz 5750 MHz $\pm$ 1 MHz	

### Head TSL parameters at 5250MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.71 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	35.2 $\pm$ 6 %	4.68 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	---	---

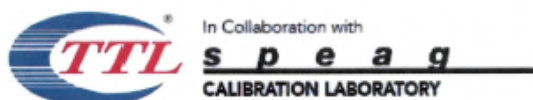
### SAR result with Head TSL at 5250MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.76 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	77.3 W/kg $\pm$ 24.4 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.21 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.1 W/kg $\pm$ 24.2 % (k=2)



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### Head TSL parameters at 5600MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.6 ± 6 %	5.05 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	—	—

### SAR result with Head TSL at 5600MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.17 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.3 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.1 W/kg ± 24.2 % (k=2)

### Head TSL parameters at 5750MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.4	5.22 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.4 ± 6 %	5.21 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	—	—

### SAR result with Head TSL at 5750MHz

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.76 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	77.1 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.3 W/kg ± 24.2 % (k=2)



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

#### Antenna Parameters with Head TSL at 5250MHz

Impedance, transformed to feed point	49.0Ω- 4.73jΩ
Return Loss	- 26.3dB

#### Antenna Parameters with Head TSL at 5600MHz

Impedance, transformed to feed point	53.5Ω+ 1.12jΩ
Return Loss	- 28.9dB

#### Antenna Parameters with Head TSL at 5750MHz

Impedance, transformed to feed point	54.8Ω- 1.85jΩ
Return Loss	- 26.5dB

#### General Antenna Parameters and Design

Electrical Delay (one direction)	1.114 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point can be measured.

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

#### Additional EUT Data

Manufactured by	SPEAG
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### DASY5 Validation Report for Head TSL

Date: 2022-11-01

Test Laboratory: CTTL, Beijing, China

**DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1165**

Communication System: CW; Frequency: 5250 MHz, Frequency: 5600 MHz,  
Frequency: 5750 MHz

Medium parameters used:  $f = 5250 \text{ MHz}$ ;  $\sigma = 4.677 \text{ S/m}$ ;  $\epsilon_r = 35.15$ ;  $\rho = 1000 \text{ kg/m}^3$

Medium parameters used:  $f = 5600 \text{ MHz}$ ;  $\sigma = 5.047 \text{ S/m}$ ;  $\epsilon_r = 34.56$ ;  $\rho = 1000 \text{ kg/m}^3$

Medium parameters used:  $f = 5750 \text{ MHz}$ ;  $\sigma = 5.211 \text{ S/m}$ ;  $\epsilon_r = 34.35$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN7464; ConvF(5.43, 5.43, 5.43) @ 5250 MHz; ConvF(4.91, 4.91, 4.91) @ 5600 MHz; ConvF(4.85, 4.85, 4.85) @ 5750 MHz; Calibrated: 2022-01-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2022-01-12
- Phantom: MFP\_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

**Dipole Calibration /Pin=100mW, d=10mm, f=5250 MHz/Zoom Scan,**

**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.46 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 31.1 W/kg

**SAR(1 g) = 7.76 W/kg; SAR(10 g) = 2.22 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 65.3%

Maximum value of SAR (measured) = 18.3 W/kg

**Dipole Calibration /Pin=100mW, d=10mm, f=5600 MHz/Zoom Scan,**

**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.78 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.17 W/kg; SAR(10 g) = 2.33 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 62.3%

Maximum value of SAR (measured) = 20.0 W/kg

Certificate No: Z22-60490

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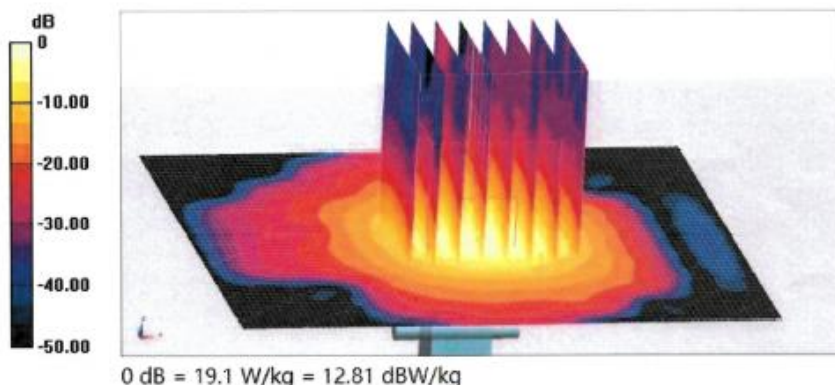
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**Dipole Calibration /Pin=100mW, d=10mm, f=5750 MHz/Zoom Scan,**  
**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 64.99 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 35.9 W/kg  
**SAR(1 g) = 7.76 W/kg; SAR(10 g) = 2.15 W/kg**  
Smallest distance from peaks to all points 3 dB below = 6.8 mm  
Ratio of SAR at M2 to SAR at M1 = 61.4%  
Maximum value of SAR (measured) = 19.1 W/kg

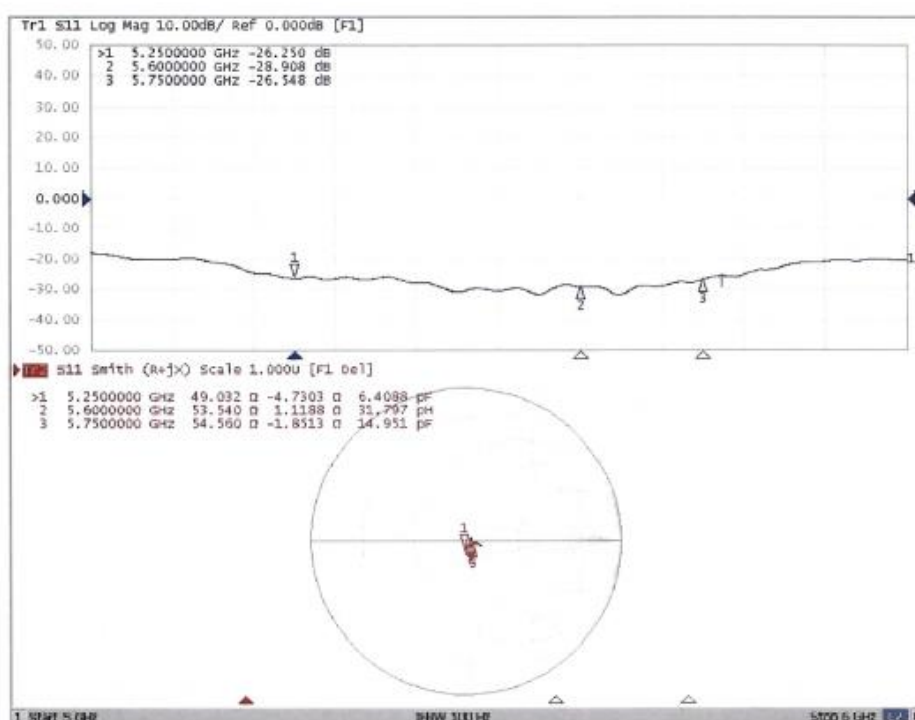






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### Impedance Measurement Plot for Head TSL



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### 2. DAE4 - SN 1663



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#### CALIBRATION CERTIFICATE

Object DAE4 - SN: 1663

Calibration Procedure(s) FF-Z11-002-01  
Calibration Procedure for the Data Acquisition Electronics (DAEx)

Calibration date: March 27, 2023

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Process Calibrator 753	1971018	14-Jun-22 (CTTL, No.J22X04180)	Jun-23

Calibrated by:	Name	Function	Signature
	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: March 28, 2023

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### Glossary:

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

### Methods Applied and Interpretation of Parameters:

- **DC Voltage Measurement:** Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- **Connector angle:** The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The report provide only calibration results for DAE, it does not contain other performance test results.







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### DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1μV, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

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

Calibration Factors	X	Y	Z
High Range	405.048 ± 0.15% (k=2)	405.004 ± 0.15% (k=2)	404.684 ± 0.15% (k=2)
Low Range	4.00278 ± 0.7% (k=2)	3.98104 ± 0.7% (k=2)	4.00564 ± 0.7% (k=2)

### Connector Angle

Connector Angle to be used in DASY system	53.5° ± 1 °
-------------------------------------------	-------------





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## 3. EX3DV4 - SN 7636

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<b>CALIBRATION CERTIFICATE</b>			
Object	EX3DV4 - SN : 7636		
Calibration Procedure(s)	FF-Z11-004-02 Calibration Procedures for Dosimetric E-field Probes		
Calibration date:	June 05, 2023		
This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.			
All calibrations have been conducted in the closed laboratory facility: environment temperature(22.3°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	101919	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101547	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101548	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Reference 10dBAttenuator	18N50W-10dB	19-Jan-23(CTTL, No.J23X00212)	Jan-25
Reference 20dBAttenuator	18N50W-20dB	19-Jan-23(CTTL, No.J23X00211)	Jan-25
OCP DAK-3.5	SN 1040	18-Jan-23(SPEAG, No.OCP-DAK3.5-1040_Jan23)	Jan-24
Reference Probe EX3DV4	SN 7517	27-Jan-23(SPEAG, No.EX-7517_Jan23)	Jan-24
DAE4	SN 1555	25-Aug-22(SPEAG, No.DAE4-1555_Aug22)	Aug-23
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MC3700A	6201052605	14-Jun-22(CTTL, No.J22X04182)	Jun-23
Network Analyzer E5071C	MY46110673	10-Jan-23(CTTL, No.J23X00104)	Jan-24
Reference 10dBAttenuator	BT0520	11-May-23(CTTL, No.J23X04061)	May-25
Reference 20dBAttenuator	BT0267	11-May-23(CTTL, No.J23X04062)	May-25
Calibrated by:	Name: Yu Zongying	Function: SAR Test Engineer	Signature: [Signature]
Reviewed by:	Name: Lin Hao	Function: SAR Test Engineer	Signature: [Signature]
Approved by:	Name: Qi Dianyuan	Function: SAR Project Leader	Signature: [Signature]
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<b>Glossary:</b>			
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 $\Phi$	$\Phi$ rotation around probe axis		
Polarization $\theta$	$\theta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i		
	$\theta=0$ is normal to probe axis		
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system		
<b>Calibration is Performed According to the Following Standards:</b>			
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 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"			
<b>Methods Applied and Interpretation of Parameters:</b>			
• NORMx,y,z: Assessed for E-field polarization $\theta=0$ (fs900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the $E^2$ 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 (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; Vx,y,z; A,B,C 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 fs800MHz) and inside waveguide using analytical field distributions based on power measurements for f>800MHz. 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 50MHz to 100MHz.			
• 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).			
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## DASY/EASY – Parameters of Probe: EX3DV4 – SN: 7636

### Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $\mu$ V/(V/m) <sup>A</sup>	0.65	0.70	0.68	±10.0%
DCP(mV) <sup>B</sup>	114.5	112.0	108.9	

### Calibration Results for Modulation Response

UID	Communication System Name	A dB	B dB $\mu$ V	C	D dB	VR mV	Max Dev.	Max Unc <sup>E</sup> (k=2)
0	CW	X 0.0 Y 0.0 Z 0.0	0.0 0.0 0.0	1.0 1.0 1.0	0.00	214.1 221.3 215.8	±2.1%	±4.7%
10352-AAA	Pulse Waveform (200Hz, 10%)	X 1.52 Y 1.63 Z 1.60	60.00 60.61 60.62	5.73 6.04 6.14	10.00	60 60 60	±2.3%	±9.6%
10353-AAA	Pulse Waveform (200Hz, 20%)	X 0.81 Y 6.00 Z 6.00	60.00 64.00 64.00	4.43 5.00 5.00	6.90	80 80 80	±3.0%	±9.6%
10354-AAA	Pulse Waveform (200Hz, 40%)	X 0.30 Y 0.05 Z 0.05	149.17 135.86 133.83	1.27 1.29 1.40	3.98	95 95 95	±2.6%	±9.6%
10355-AAA	Pulse Waveform (200Hz, 60%)	X 0.10 Y 0.00 Z 0.00	158.70 155.61 155.38	18.91 44.53 41.51	2.22	120 120 120	±1.4%	±9.6%
10367-AAA	QPSK Waveform, 1 MHz	X 0.43 Y 0.35 Z 0.43	60.40 60.00 60.00	8.64 8.64 8.68	1.00	150 150 150	±4.3%	±9.6%
10368-AAA	QPSK Waveform, 10 MHz	X 0.91 Y 1.12 Z 1.08	61.68 63.17 62.30	10.31 11.45 11.24	0.00	150 150 150	±1.4%	±9.6%
10396-AAA	64-QAM Waveform, 100 KHz	X 1.96 Y 1.73 Z 1.67	66.12 64.63 63.90	16.95 16.42 16.12	3.01	150 150 150	±1.0%	±9.6%
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X 3.79 Y 3.67 Z 3.81	65.94 66.28 65.78	14.76 14.82 14.83	0.00	150 150 150	±5.0%	±9.6%

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 Page 5).

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

<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.

## DASY/EASY – Parameters of Probe: EX3DV4 – SN: 7636

### Sensor Model Parameters

	C1 ff	C2 ff	$\alpha$ V <sup>-1</sup>	T1 ms.V <sup>-2</sup>	T2 ms.V <sup>-1</sup>	T3 ms	T4 V <sup>-2</sup>	T5 V <sup>-1</sup>	T6
X	9.81	68.74	31.29	0.92	0.00	4.90	0.45	0.00	1.02
Y	7.71	54.90	32.15	0.92	0.00	4.90	0.31	0.00	1.02
Z	9.96	72.07	33.11	0.92	0.00	4.90	0.00	0.02	1.02

### Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	127.8
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

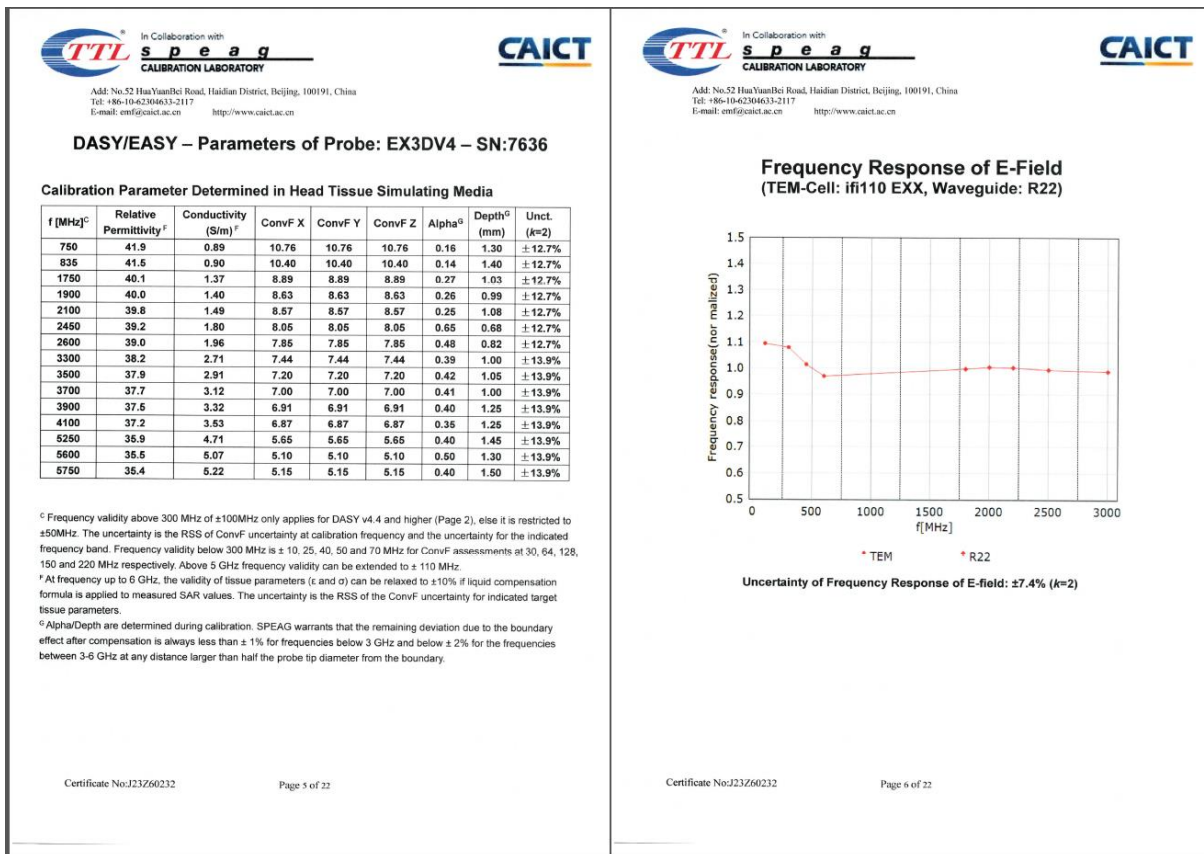
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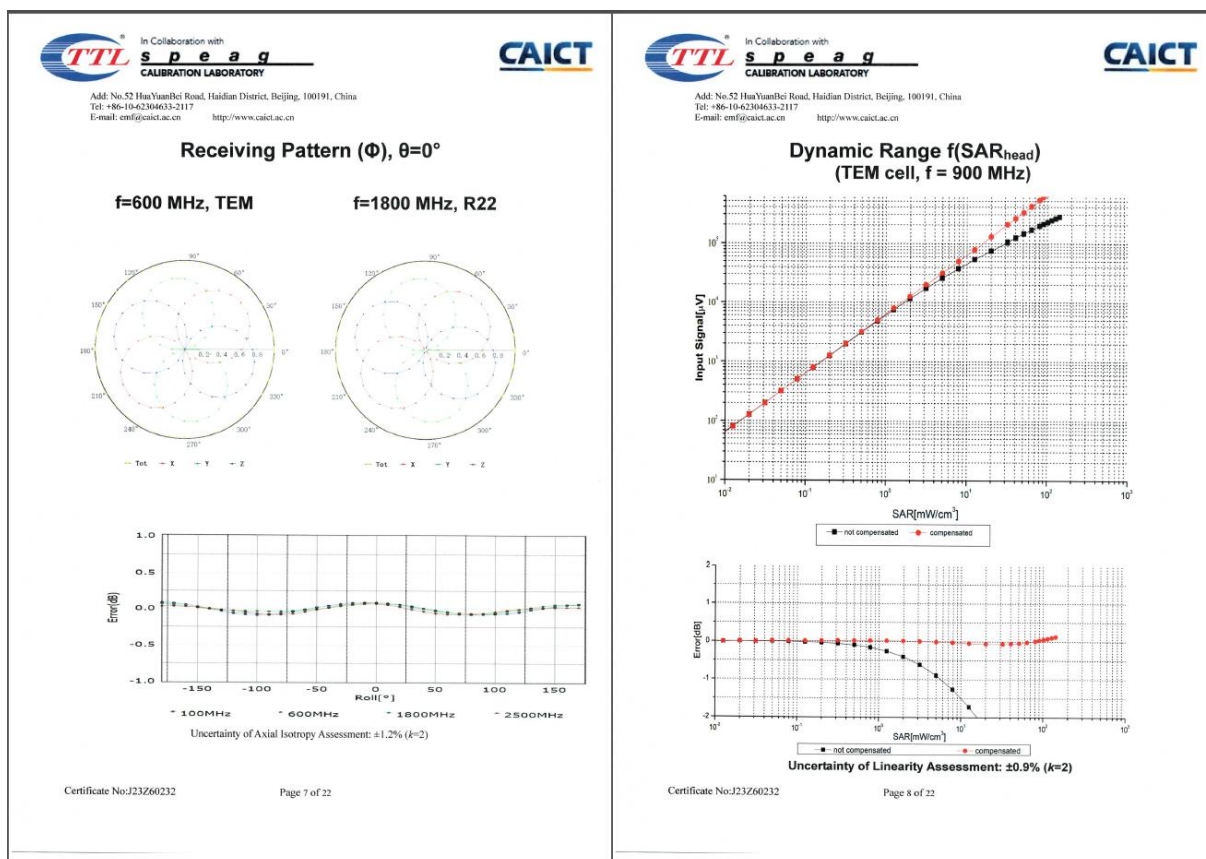


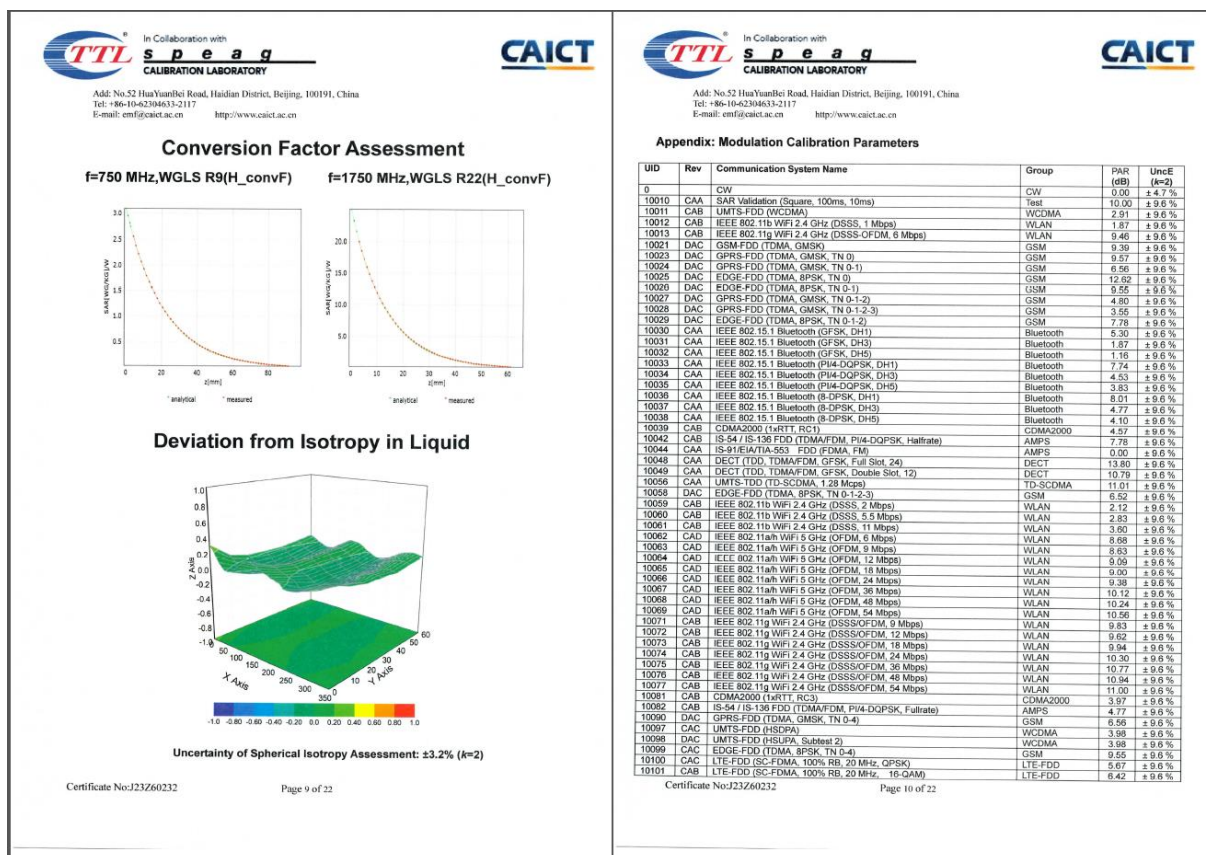
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http://www.caict.ac.cn			http://www.caict.ac.cn		
10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.80	± 0.6 %
10103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 0.6 %
10104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 0.6 %
10105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 0.6 %
10106	CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 0.6 %
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 0.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 0.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 0.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 0.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 0.6 %
10114	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	5.10	± 0.6 %
10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 0.6 %
10116	CAG	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 0.6 %
10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 0.6 %
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 0.6 %
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 0.6 %
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.40	± 0.6 %
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 0.6 %
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 0.6 %
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 0.6 %
10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 0.6 %
10145	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 0.6 %
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 0.6 %
10147	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 0.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 0.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 0.6 %
10151	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.08	± 0.6 %
10152	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 0.6 %
10153	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 0.6 %
10154	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 0.6 %
10155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 0.6 %
10156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 0.6 %
10157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 0.6 %
10158	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 0.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	6.56	± 0.6 %
10160	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.62	± 0.6 %
10161	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.43	± 0.6 %
10162	CAG	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.82	± 0.6 %
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 0.6 %
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 0.6 %
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 0.6 %
10169	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 0.6 %
10170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 0.6 %
10171	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 0.6 %
10172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 0.6 %
10173	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 0.6 %
10174	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 0.6 %
10175	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 0.6 %
10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 0.6 %
10177	CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 0.6 %
10178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.62	± 0.6 %
10179	AAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 0.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.72	± 0.6 %
10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.50	± 0.6 %
10182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 0.6 %
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 0.6 %
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 0.6 %
10185	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 0.6 %
10186	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 0.6 %

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10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 0.6 %
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 0.6 %
10189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 0.6 %
10190	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 0.6 %
10194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 0.6 %
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 0.6 %
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 0.6 %
10197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 0.6 %
10198	CAF	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 0.6 %
10219	CAF	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 0.6 %
10220	AAE	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 0.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 0.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 0.6 %
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 0.6 %
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 0.6 %
10225	CAD	UMTS-FDD (HS-PA+)	WCDMA	5.97	± 0.6 %
10226	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.40	± 0.6 %
10227	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 0.6 %
10228	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 0.6 %
10229	DIC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 0.6 %
10230	CAG	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 0.6 %
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 0.6 %
10232	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 0.6 %
10233	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 0.6 %
10234	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 0.6 %
10235	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 0.6 %
10236	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 0.6 %
10237	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 0.6 %
10238	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 0.6 %
10239	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 0.6 %
10240	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 0.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 0.6 %
10242	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 0.6 %
10243	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 0.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 0.6 %
10245	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 0.6 %
10246	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 0.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 0.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 0.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 0.6 %
10250	CAQ	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 0.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 0.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 0.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 0.6 %
10254	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 0.6 %
10255	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 0.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 0.6 %
10257	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 0.6 %
10258	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 0.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 0.6 %
10260	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 0.6 %
10261	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 0.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 0.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 0.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 0.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 0.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 0.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 0.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 0.6 %

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E-mail: emf@caict.ac.cn			E-mail: emf@caict.ac.cn		
http://www.caict.ac.cn			http://www.caict.ac.cn		
10269	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	+0.6%
10270	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	+0.6%
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP R8e.10)	WCDMA	4.87	+0.6%
10275	CAD	UMTS-FDD (HSUPA, Subtest 5, 3GPP R8e.4)	WCDMA	3.96	+0.6%
10277	CAD	PHS (QPSK)	PHS	11.81	+0.6%
10278	CAD	PHS (QPSK, BW 84MHz, Roll-off 0.5)	PHS	11.81	+0.6%
10279	CAD	PHS (QPSK, BW 84MHz, Roll-off 0.38)	PHS	12.18	+0.6%
10290	CAG	CDMA2000, RC1, SC35, Full Rate	CDMA2000	3.51	+0.6%
10291	CAG	CDMA2000, RC3, SC35, Full Rate	CDMA2000	3.46	+0.6%
10292	CAG	CDMA2000, RC3, SC32, Full Rate	CDMA2000	3.39	+0.6%
10293	CAG	CDMA2000, RC3, SC3, Full Rate	CDMA2000	3.50	+0.6%
10295	CAG	CDMA2000, RC1, SC3, 1/8th Rate 25 fr	CDMA2000	12.49	+0.6%
10297	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	+0.6%
10298	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	+0.6%
10299	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	+0.6%
10300	CAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	+0.6%
10301	CAC	IEEE 802.16e WiMAX (20.18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	+0.6%
10302	CAB	IEEE 802.16e WiMAX (20.18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	+0.6%
10303	CAB	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	+0.6%
10304	CAB	IEEE 802.16e WiMAX (20.18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	+0.6%
10305	CAB	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	+0.6%
10306	CAB	IEEE 802.16e WiMAX (20.18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	+0.6%
10307	AAB	IEEE 802.16e WiMAX (20.18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	+0.6%
10308	AAB	IEEE 802.16e WiMAX (20.18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	+0.6%
10309	AAB	IEEE 802.16e WiMAX (20.18, 10ms, 10MHz, 16QAM, AMC 2x3)	WiMAX	14.56	+0.6%
10310	AAB	IEEE 802.16e WiMAX (20.18, 10ms, 10MHz, QPSK, AMC 2x3)	WiMAX	14.57	+0.6%
10311	AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	+0.6%
10313	AAD	IDEN 1.3	IDEN	10.51	+0.6%
10314	AAD	IDEN 1.6	IDEN	13.48	+0.6%
10315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	+0.6%
10316	AAD	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	+0.6%
10317	AAA	IEEE 802.11g WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	10.00	+0.6%
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	6.99	+0.6%
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	3.98	+0.6%
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	2.22	+0.6%
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	0.97	+0.6%
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	5.10	+0.6%
10357	AAA	QPSK Waveform, 1 MHz	Generic	6.32	+0.6%
10358	AAA	QPSK Waveform, 10 MHz	Generic	6.27	+0.6%
10359	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	+0.6%
10399	AAA	64-QAM Waveform, 40 MHz	WLAN	8.37	+0.6%
10400	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 96pc dc)	WLAN	8.60	+0.6%
10401	AAA	IEEE 802.11ac WiFi (40MHz, 64-QAM, 96pc dc)	WLAN	8.53	+0.6%
10402	AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 96pc dc)	WLAN	3.76	+0.6%
10403	AAB	CDMA2000 (1xEV-DO, Rev A)	CDMA2000	3.77	+0.6%
10404	AAB	CDMA2000 (1xEV-DO, Rev A)	CDMA2000	5.22	+0.6%
10406	AAD	CDMA2000, RC3, SC32, SCH0, Full Rate	LTE-TDD	7.62	+0.6%
10410	AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub#2,3,4,7,8,9)	Generic	8.54	+0.6%
10414	AAA	WLAN CDF, 64-QAM, 40MHz	WLAN	1.54	+0.6%
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	8.23	+0.6%
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.14	+0.6%
10418	AAA	IEEE 802.11a WiFi 5 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.19	+0.6%
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 96pc, Long)	WLAN	8.32	+0.6%
10422	AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.47	+0.6%
10423	AAA	IEEE 802.11n (HT Greenfield, 4.3 Mbps, 16-QAM)	WLAN	8.40	+0.6%
10424	AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, 64-QAM)	WLAN	8.41	+0.6%
10425	AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	+0.6%
10426	AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	+0.6%
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10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	+0.6%
10430	AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	+0.6%
10431	AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	+0.6%
10432	AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	+0.6%
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.36	+0.6%
10434	AAG	W-CDMA (BS Test Model 1, 64 DPCCH)	WCDMA	8.60	+0.6%
10435	AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10447	AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	+0.6%
10448	AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	+0.6%
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	+0.6%
10450	AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	+0.6%
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCCH, Clipping 44%)	WCDMA	7.59	+0.6%
10453	AAC	Validation (Square, 10ms, 1ms)	Test	10.00	+0.6%
10456	AAC	IEEE 802.11ac WiFi (160MHz, 64-QAM, 96pc dc)	WLAN	8.63	+0.6%
10457	AAC	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	+0.6%
10458	AAC	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	+0.6%
10459	AAC	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	6.25	+0.6%
10460	AAC	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	+0.6%
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	+0.6%
10463	AAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	+0.6%
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	+0.6%
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	+0.6%
10467	AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10468	AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	+0.6%
10469	AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	+0.6%
10470	AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10471	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	+0.6%
10472	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	+0.6%
10473	AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	+0.6%
10474	AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	+0.6%
10475	AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	+0.6%
10477	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	+0.6%
10478	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	+0.6%
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	+0.6%
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	+0.6%
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	+0.6%
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	+0.6%
10485	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	+0.6%
10486	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	+0.6%
10487	AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.59	+0.6%
10488	AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.38	+0.6%
10489	AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.60	+0.6%
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.70	+0.6%
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	+0.6%
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	+0.6%
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.74	+0.6%
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.55	+0.6%
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	7.74	+0.6%
10496	AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	8.37	+0.6%
10497	AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.54	+0.6%
10498	AAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	+0.6%
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	+0.6%
10500	AAF	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	+0.6%
10501	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.67	+0.6%
10502	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	+0.6%
10503	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	+0.6%
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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	8.30	± 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 WFI 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.58	± 9.6 %
10516	AAE	IEEE 802.11b WFI 2.4 GHz (DSSS, 4.5 Mbps, 90pc dc)	WLAN	1.67	± 9.6 %
10517	AAF	IEEE 802.11b WFI 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.58	± 9.6 %
10518	AAF	IEEE 802.11ah WFI 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.23	± 9.6 %
10519	AAF	IEEE 802.11ah WFI 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	9.39	± 9.6 %
10520	AAB	IEEE 802.11ah WFI 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11ah WFI 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11ah WFI 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.45	± 9.6 %
10523	AAC	IEEE 802.11ah WFI 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.08	± 9.6 %
10524	AAC	IEEE 802.11ah WFI 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.27	± 9.6 %
10525	AAC	IEEE 802.11ac WFI (20MHz, MCS0, 90pc dc)	WLAN	8.36	± 9.6 %
10526	AAF	IEEE 802.11ac WFI (20MHz, MCS1, 90pc dc)	WLAN	8.42	± 9.6 %
10527	AAF	IEEE 802.11ac WFI (20MHz, MCS2, 90pc dc)	WLAN	8.21	± 9.6 %
10528	AAF	IEEE 802.11ac WFI (20MHz, MCS3, 90pc dc)	WLAN	8.36	± 9.6 %
10529	AAF	IEEE 802.11ac WFI (20MHz, MCS4, 90pc dc)	WLAN	8.30	± 9.6 %
10531	AAF	IEEE 802.11ac WFI (20MHz, MCS6, 90pc dc)	WLAN	8.43	± 9.6 %
10532	AAF	IEEE 802.11ac WFI (20MHz, MCS7, 90pc dc)	WLAN	8.29	± 9.6 %
10533	AAE	IEEE 802.11ac WFI (20MHz, MCS8, 90pc dc)	WLAN	8.38	± 9.6 %
10534	AAE	IEEE 802.11ac WFI (40MHz, MCS0, 90pc dc)	WLAN	8.45	± 9.6 %
10535	AAE	IEEE 802.11ac WFI (40MHz, MCS1, 90pc dc)	WLAN	8.45	± 9.6 %
10536	AAE	IEEE 802.11ac WFI (40MHz, MCS2, 90pc dc)	WLAN	8.52	± 9.6 %
10537	AAF	IEEE 802.11ac WFI (40MHz, MCS3, 90pc dc)	WLAN	8.44	± 9.6 %
10538	AAF	IEEE 802.11ac WFI (40MHz, MCS4, 90pc dc)	WLAN	8.54	± 9.6 %
10540	AAA	IEEE 802.11ac WFI (40MHz, MCS6, 90pc dc)	WLAN	8.39	± 9.6 %
10541	AAA	IEEE 802.11ac WFI (40MHz, MCS7, 90pc dc)	WLAN	8.46	± 9.6 %
10542	AAA	IEEE 802.11ac WFI (40MHz, MCS8, 90pc dc)	WLAN	8.65	± 9.6 %
10543	AAC	IEEE 802.11ac WFI (80MHz, MCS0, 90pc dc)	WLAN	8.65	± 9.6 %
10544	AAC	IEEE 802.11ac WFI (80MHz, MCS1, 90pc dc)	WLAN	8.47	± 9.6 %
10545	AAC	IEEE 802.11ac WFI (80MHz, MCS2, 90pc dc)	WLAN	8.55	± 9.6 %
10546	AAC	IEEE 802.11ac WFI (80MHz, MCS3, 90pc dc)	WLAN	8.35	± 9.6 %
10547	AAC	IEEE 802.11ac WFI (80MHz, MCS4, 90pc dc)	WLAN	8.49	± 9.6 %
10548	AAC	IEEE 802.11ac WFI (80MHz, MCS6, 90pc dc)	WLAN	8.37	± 9.6 %
10550	AAC	IEEE 802.11ac WFI (80MHz, MCS7, 90pc dc)	WLAN	8.38	± 9.6 %
10551	AAC	IEEE 802.11ac WFI (80MHz, MCS8, 90pc dc)	WLAN	8.50	± 9.6 %
10552	AAC	IEEE 802.11ac WFI (160MHz, MCS0, 90pc dc)	WLAN	8.42	± 9.6 %
10553	AAC	IEEE 802.11ac WFI (160MHz, MCS1, 90pc dc)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WFI (160MHz, MCS2, 90pc dc)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WFI (160MHz, MCS3, 90pc dc)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WFI (160MHz, MCS4, 90pc dc)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WFI (160MHz, MCS5, 90pc dc)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WFI (160MHz, MCS6, 90pc dc)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WFI (160MHz, MCS8, 90pc dc)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WFI (160MHz, MCS9, 90pc dc)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WFI (160MHz, MCS10, 90pc dc)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WFI (160MHz, MCS19, 90pc dc)	WLAN	8.77	± 9.6 %
10564	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.25	± 9.6 %
10565	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.45	± 9.6 %
10566	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.13	± 9.6 %
10567	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.00	± 9.6 %
10568	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.37	± 9.6 %
10569	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.10	± 9.6 %
10570	AAC	IEEE 802.11b WFI 2.4 GHz (DSSS-OFDM, 11 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10571	AAC	IEEE 802.11b WFI 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10572	AAC	IEEE 802.11b WFI 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	± 9.6 %
10573	AAC	IEEE 802.11b WFI 2.4 GHz (DSSS, 4.5 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10574	AAC	IEEE 802.11b WFI 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	± 9.6 %
10575	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10576	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10577	AAC	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10578	AAD	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10579	AAD	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10580	AAD	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10581	AAD	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10582	AAD	IEEE 802.11g WFI 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	± 9.6 %
10583	AAD	IEEE 802.11ah WFI 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	± 9.6 %
10584	AAD	IEEE 802.11ah WFI 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	± 9.6 %
10585	AAD	IEEE 802.11ah WFI 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	± 9.6 %
10586	AAD	IEEE 802.11ah WFI 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	± 9.6 %
10587	AAA	IEEE 802.11ah WFI 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	± 9.6 %
10588	AAA	IEEE 802.11ah WFI 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	± 9.6 %
10589	AAA	IEEE 802.11ah WFI 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	± 9.6 %
10590	AAA	IEEE 802.11ah WFI 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	8.60	± 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 %
10604	AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)	WLAN	8.79	± 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 WFI (20MHz, MCS0, 90pc dc)	WLAN	8.64	± 9.6 %
10608	AAC	IEEE 802.11ac WFI (20MHz, MCS1, 90pc dc)	WLAN	8.77	± 9.6 %
10609	AAC	IEEE 802.11ac WFI (20MHz, MCS2, 90pc dc)	WLAN	8.57	± 9.6 %
10610	AAC	IEEE 802.11ac WFI (20MHz, MCS3, 90pc dc)	WLAN	8.78	± 9.6 %
10611	AAC	IEEE 802.11ac WFI (20MHz, MCS4, 90pc dc)	WLAN	8.70	± 9.6 %
10612	AAC	IEEE 802.11ac WFI (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10613	AAC	IEEE 802.11ac WFI (20MHz, MCS6, 90pc dc)	WLAN	8.94	± 9.6 %
10614	AAC	IEEE 802.11ac WFI (20MHz, MCS7, 90pc dc)	WLAN	8.69	± 9.6 %
10615	AAC	IEEE 802.11ac WFI (20MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10616	AAC	IEEE 802.11ac WFI (40MHz, MCS0, 90pc dc)	WLAN	8.62	± 9.6 %
10617	AAC	IEEE 802.11ac WFI (40MHz, MCS1, 90pc dc)	WLAN	8.81	± 9.6 %
10618	AAC	IEEE 802.11ac WFI (40MHz, MCS2, 90pc dc)	WLAN	8.58	± 9.6 %
10619	AAC	IEEE 802.11ac WFI (40MHz, MCS3, 90pc dc)	WLAN	8.86	± 9.6 %
10620	AAC	IEEE 802.11ac WFI (40MHz, MCS4, 90pc dc)	WLAN	8.87	± 9.6 %
10621	AAC	IEEE 802.11ac WFI (40MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %
10622	AAC	IEEE 802.11ac WFI (40MHz, MCS6, 90pc dc)	WLAN	8.68	± 9.6 %
10623	AAC	IEEE 802.11ac WFI (40MHz, MCS7, 90pc dc)	WLAN	8.82	± 9.6 %
10624	AAC	IEEE 802.11ac WFI (40MHz, MCS8, 90pc dc)	WLAN	8.96	± 9.6 %

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Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2117 E-mail: emf@caict.ac.cn http://www.caict.ac.cn			Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2117 E-mail: emf@caict.ac.cn http://www.caict.ac.cn		
10025 AAC	IEEE 802.11ac WiFi (60MHz, MCS9, 90pc dc)	WLAN	8.96	± 9.6 %	
10026 AAC	IEEE 802.11ac WiFi (60MHz, MCS9, 90pc dc)	WLAN	8.83	± 9.6 %	
10027 AAC	IEEE 802.11ac WiFi (60MHz, MCS1, 90pc dc)	WLAN	8.88	± 9.6 %	
10028 AAC	IEEE 802.11ac WiFi (60MHz, MCS2, 90pc dc)	WLAN	8.71	± 9.6 %	
10029 AAC	IEEE 802.11ac WiFi (60MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %	
10030 AAC	IEEE 802.11ac WiFi (60MHz, MCS4, 90pc dc)	WLAN	8.72	± 9.6 %	
10031 AAC	IEEE 802.11ac WiFi (60MHz, MCS5, 90pc dc)	WLAN	8.81	± 9.6 %	
10032 AAC	IEEE 802.11ac WiFi (60MHz, MCS6, 90pc dc)	WLAN	8.74	± 9.6 %	
10033 AAC	IEEE 802.11ac WiFi (60MHz, MCS7, 90pc dc)	WLAN	8.83	± 9.6 %	
10034 AAC	IEEE 802.11ac WiFi (60MHz, MCS8, 90pc dc)	WLAN	8.80	± 9.6 %	
10035 AAC	IEEE 802.11ac WiFi (60MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %	
10036 AAC	IEEE 802.11ac WiFi (100MHz, MCS0, 90pc dc)	WLAN	8.83	± 9.6 %	
10037 AAC	IEEE 802.11ac WiFi (100MHz, MCS1, 90pc dc)	WLAN	8.79	± 9.6 %	
10038 AAC	IEEE 802.11ac WiFi (100MHz, MCS2, 90pc dc)	WLAN	8.96	± 9.6 %	
10039 AAC	IEEE 802.11ac WiFi (100MHz, MCS3, 90pc dc)	WLAN	8.85	± 9.6 %	
10040 AAC	IEEE 802.11ac WiFi (100MHz, MCS4, 90pc dc)	WLAN	8.98	± 9.6 %	
10041 AAC	IEEE 802.11ac WiFi (100MHz, MCS5, 90pc dc)	WLAN	9.06	± 9.6 %	
10042 AAC	IEEE 802.11ac WiFi (100MHz, MCS6, 90pc dc)	WLAN	9.06	± 9.6 %	
10043 AAC	IEEE 802.11ac WiFi (100MHz, MCS7, 90pc dc)	WLAN	8.89	± 9.6 %	
10044 AAC	IEEE 802.11ac WiFi (100MHz, MCS8, 90pc dc)	WLAN	9.05	± 9.6 %	
10045 AAC	IEEE 802.11ac WiFi (100MHz, MCS9, 90pc dc)	WLAN	9.11	± 9.6 %	
10046 AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	± 9.6 %	
10047 AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	± 9.6 %	
10048 AAC	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %	
10052 AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %	
10053 AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %	
10054 AAC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %	
10055 AAC	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %	
10058 AAC	Pulse Waveform (200Hz, 10%)	Test	10.90	± 9.6 %	
10059 AAC	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %	
10060 AAC	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %	
10061 AAC	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %	
10062 AAC	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %	
10070 AAC	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %	
10071 AAD	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	9.09	± 9.6 %	
10072 AAD	IEEE 802.11ax (20MHz, MCS1, 90pc dc)	WLAN	8.67	± 9.6 %	
10073 AAD	IEEE 802.11ax (20MHz, MCS2, 90pc dc)	WLAN	8.78	± 9.6 %	
10074 AAD	IEEE 802.11ax (20MHz, MCS3, 90pc dc)	WLAN	8.74	± 9.6 %	
10075 AAD	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.90	± 9.6 %	
10076 AAD	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.77	± 9.6 %	
10077 AAD	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.73	± 9.6 %	
10078 AAD	IEEE 802.11ax (20MHz, MCS7, 90pc dc)	WLAN	8.78	± 9.6 %	
10079 AAD	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.89	± 9.6 %	
10080 AAD	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.80	± 9.6 %	
10081 AAG	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.62	± 9.6 %	
10082 AAF	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.83	± 9.6 %	
10083 AAA	IEEE 802.11ax (20MHz, MCS0, 90pc dc)	WLAN	8.42	± 9.6 %	
10084 AAC	IEEE 802.11ax (20MHz, MCS1, 90pc dc)	WLAN	8.39	± 9.6 %	
10085 AAC	IEEE 802.11ax (20MHz, MCS2, 90pc dc)	WLAN	8.33	± 9.6 %	
10086 AAC	IEEE 802.11ax (20MHz, MCS3, 90pc dc)	WLAN	8.28	± 9.6 %	
10087 AAE	IEEE 802.11ax (20MHz, MCS4, 90pc dc)	WLAN	8.45	± 9.6 %	
10088 AAE	IEEE 802.11ax (20MHz, MCS5, 90pc dc)	WLAN	8.29	± 9.6 %	
10089 AAD	IEEE 802.11ax (20MHz, MCS6, 90pc dc)	WLAN	8.55	± 9.6 %	
10090 AAD	IEEE 802.11ax (20MHz, MCS7, 90pc dc)	WLAN	8.29	± 9.6 %	
10091 AAB	IEEE 802.11ax (20MHz, MCS8, 90pc dc)	WLAN	8.25	± 9.6 %	
10092 AAA	IEEE 802.11ax (20MHz, MCS9, 90pc dc)	WLAN	8.29	± 9.6 %	
10093 AAA	IEEE 802.11ax (20MHz, MCS10, 90pc dc)	WLAN	8.25	± 9.6 %	
10094 AAA	IEEE 802.11ax (20MHz, MCS11, 90pc dc)	WLAN	8.57	± 9.6 %	
10095 AAA	IEEE 802.11ax (40MHz, MCS0, 90pc dc)	WLAN	8.78	± 9.6 %	

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Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2117 E-mail: emf@caict.ac.cn http://www.caict.ac.cn			Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China Tel: +86-10-62304633-2117 E-mail: emf@caict.ac.cn http://www.caict.ac.cn		
10899 AAD 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67 ± 0.6 %	10958 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61 ± 0.6 %
10900 AAD 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10959 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	8.33 ± 0.6 %
10901 AAD 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10960 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32 ± 0.6 %
10902 AAD 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10961 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36 ± 0.6 %
10903 AAD 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10962 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40 ± 0.6 %
10904 AAD 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10963 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55 ± 0.6 %
10905 AAD 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10964 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29 ± 0.6 %
10906 AAD 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68 ± 0.6 %	10965 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37 ± 0.6 %
10907 AAD 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78 ± 0.6 %	10966 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55 ± 0.6 %
10908 AAD 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93 ± 0.6 %	10967 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42 ± 0.6 %
10909 AAD 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96 ± 0.6 %	10968 AAB 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49 ± 0.6 %
10910 AAD 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83 ± 0.6 %	10972 AAB 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59 ± 0.6 %
10911 AAD 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93 ± 0.6 %	10973 AAB 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06 ± 0.6 %
10912 AAD 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	10974 AAB 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	10.28 ± 0.6 %
10913 AAD 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	10978 AAA ULLA BDR	ULLA	1.16 ± 0.6 %
10914 AAD 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85 ± 0.6 %	10979 AAA ULLA HDR4	ULLA	8.58 ± 0.6 %
10915 AAD 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83 ± 0.6 %	10980 AAA ULLA HDR8	ULLA	10.32 ± 0.6 %
10916 AAD 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87 ± 0.6 %	10981 AAA ULLA HDRp4	ULLA	3.19 ± 0.6 %
10917 AAD 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94 ± 0.6 %	10982 AAA ULLA HDRp8	ULLA	3.43 ± 0.6 %
10918 AAD 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86 ± 0.6 %	10983 AAC 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.31 ± 0.6 %
10919 AAD 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86 ± 0.6 %	10984 AAB 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.42 ± 0.6 %
10920 AAD 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87 ± 0.6 %	10985 AAC 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.54 ± 0.6 %
10921 AAD 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	10986 AAB 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.50 ± 0.6 %
10922 AAD 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82 ± 0.6 %	10987 AAC 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.53 ± 0.6 %
10923 AAD 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	10988 AAB 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.38 ± 0.6 %
10924 AAD 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	10989 AAC 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.23 ± 0.6 %
10925 AAD 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95 ± 0.6 %	10990 AAB 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.52 ± 0.6 %
10926 AAD 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84 ± 0.6 %	11003 AAA 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	10.24 ± 0.6 %
10927 AAD 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94 ± 0.6 %	11004 AAA 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	10.73 ± 0.6 %
10928 AAD 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52 ± 0.6 %	11005 AAA 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.70 ± 0.6 %
10929 AAD 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52 ± 0.6 %	11006 AAA 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.55 ± 0.6 %
10930 AAD 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52 ± 0.6 %	11010 AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.46 ± 0.6 %
10931 AAD 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51 ± 0.6 %	11008 AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.51 ± 0.6 %
10932 AAB 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51 ± 0.6 %	11009 AAA 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.76 ± 0.6 %
10933 AAA 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51 ± 0.6 %	11010 AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.65 ± 0.6 %
10934 AAA 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51 ± 0.6 %	11011 AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.96 ± 0.6 %
10935 AAA 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51 ± 0.6 %	11012 AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.68 ± 0.6 %
10936 AAC 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90 ± 0.6 %	11013 AAA IEEE 802.11be (320MHz, MCS11, 99pc duty cycle)	WLAN	8.47 ± 0.6 %
10937 AAB 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77 ± 0.6 %	11014 AAA IEEE 802.11be (320MHz, MCS12, 99pc duty cycle)	WLAN	8.46 ± 0.6 %
10938 AAB 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90 ± 0.6 %	11015 AAA IEEE 802.11be (320MHz, MCS13, 99pc duty cycle)	WLAN	8.44 ± 0.6 %
10939 AAB 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82 ± 0.6 %	11016 AAA IEEE 802.11be (320MHz, MCS14, 99pc duty cycle)	WLAN	8.44 ± 0.6 %
10940 AAB 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89 ± 0.6 %	11017 AAA IEEE 802.11be (320MHz, MCS15, 99pc duty cycle)	WLAN	8.41 ± 0.6 %
10941 AAB 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83 ± 0.6 %	11018 AAA IEEE 802.11be (320MHz, MCS16, 99pc duty cycle)	WLAN	8.40 ± 0.6 %
10942 AAB 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85 ± 0.6 %	11019 AAA IEEE 802.11be (320MHz, MCS17, 99pc duty cycle)	WLAN	8.29 ± 0.6 %
10943 AAB 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85 ± 0.6 %	11020 AAA IEEE 802.11be (320MHz, MCS18, 99pc duty cycle)	WLAN	8.27 ± 0.6 %
10944 AAB 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81 ± 0.6 %	11021 AAA IEEE 802.11be (320MHz, MCS19, 99pc duty cycle)	WLAN	8.46 ± 0.6 %
10945 AAB 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.88 ± 0.6 %	11022 AAA IEEE 802.11be (320MHz, MCS10, 99pc duty cycle)	WLAN	8.26 ± 0.6 %
10946 AAC 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83 ± 0.6 %	11023 AAA IEEE 802.11be (320MHz, MCS11, 99pc duty cycle)	WLAN	8.09 ± 0.6 %
10947 AAB 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87 ± 0.6 %	11024 AAA IEEE 802.11be (320MHz, MCS12, 99pc duty cycle)	WLAN	8.42 ± 0.6 %
10948 AAB 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94 ± 0.6 %	11025 AAA IEEE 802.11be (320MHz, MCS13, 99pc duty cycle)	WLAN	8.37 ± 0.6 %
10949 AAB 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87 ± 0.6 %	11026 AAA IEEE 802.11be (320MHz, MCS14, 99pc duty cycle)	WLAN	8.39 ± 0.6 %
10950 AAB 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94 ± 0.6 %			
10951 AAB 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92 ± 0.6 %			
10952 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25 ± 0.6 %			
10953 AAB 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15 ± 0.6 %			
10954 AAB 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23 ± 0.6 %			
10955 AAB 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42 ± 0.6 %			
10956 AAB 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14 ± 0.6 %			
10957 AAC 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31 ± 0.6 %			

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



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