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DASY5 Validation Report for Head TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 922

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

Medium parameters used: f = 2450 MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 39.53$; $\rho = 1000$ kg/m³

Phantom section: Center Section

DASY5 Configuration:

Probe: EX3DV4 - SN3617; ConvF(7.65, 7.65, 7.65) @ 2450 MHz; Calibrated:
 2020-01-30

Date: 08.27.2020

- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn771; Calibrated: 2020-02-10
- 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 = 103.7 V/m; Power Drift = -0.04 dB

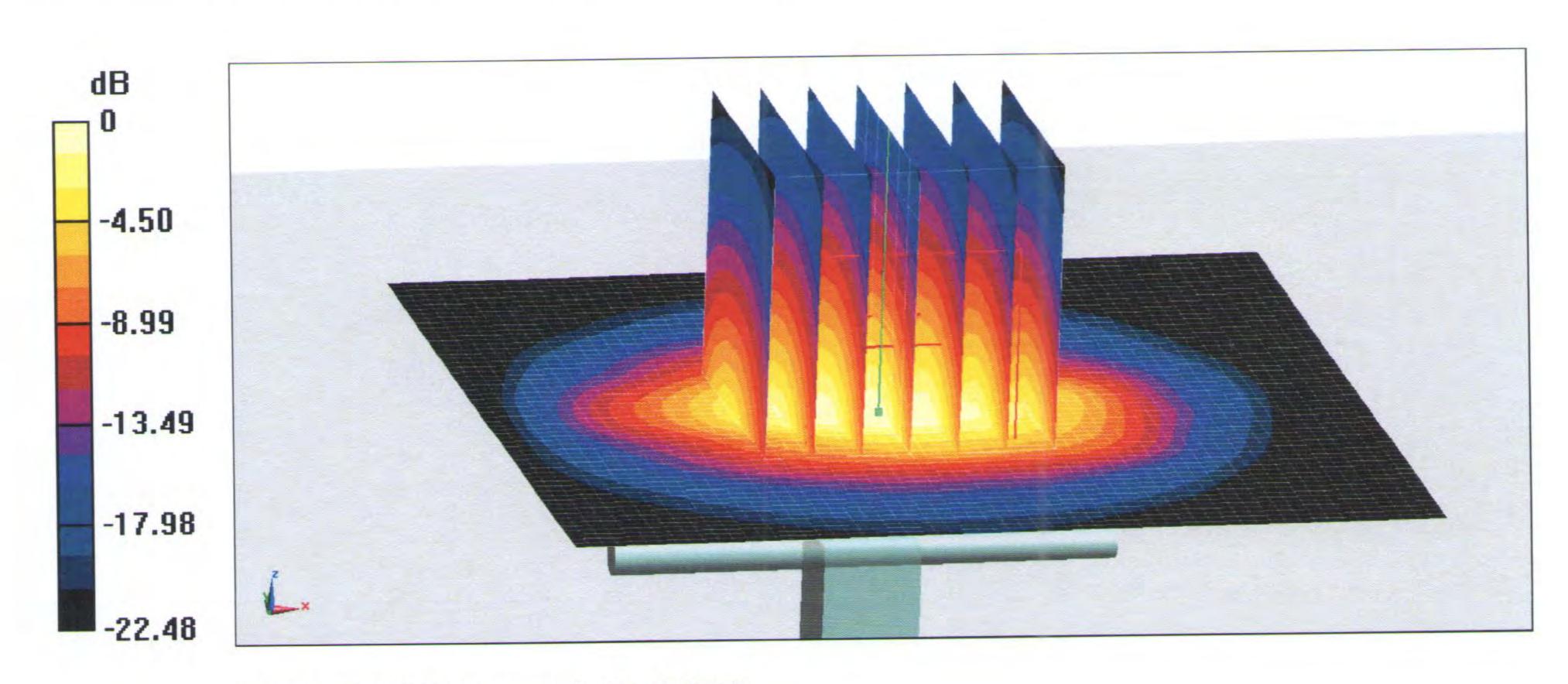
Peak SAR (extrapolated) = 27.4 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.91 W/kg

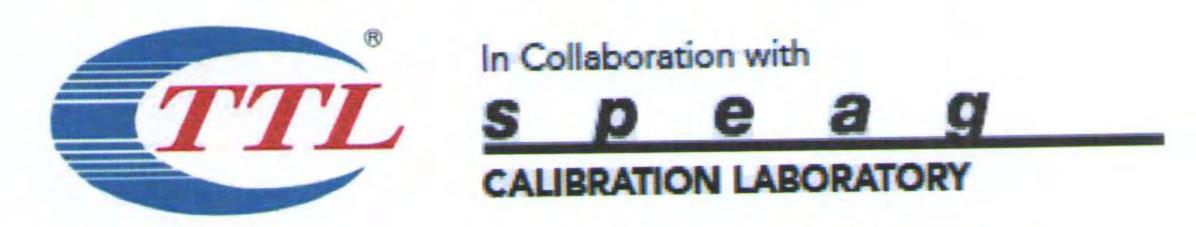
Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46.9%

Maximum value of SAR (measured) = 22.0 W/kg

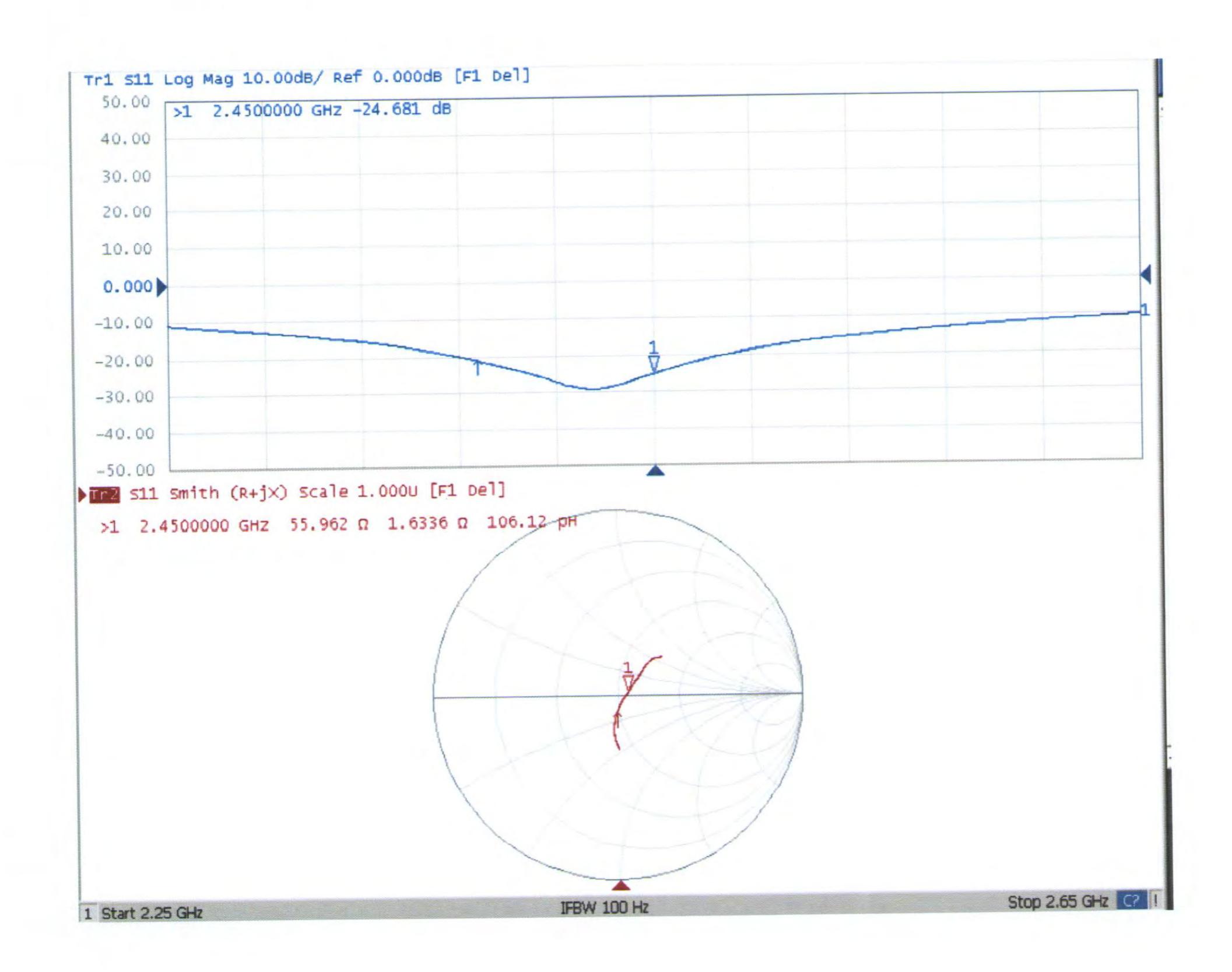


0 dB = 22.0 W/kg = 13.42 dBW/kg



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Impedance Measurement Plot for Head TSL



Calibration Laboratory of Schmid & Partner

Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland





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

Accreditation No.: SCS 0108

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

Client

SGS (Auden)

Certificate No: D2600V2-1180_May21

CALIBRATION CERTIFICATE

Object D2600V2 - SN:1180

Calibration procedure(s) QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date: May 12, 2021

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 (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	09-Apr-21 (No. 217-03291/03292)	Apr-22
Power sensor NRP-Z91	SN: 103244	09-Apr-21 (No. 217-03291)	Apr-22
Power sensor NRP-Z91	SN: 103245	09-Apr-21 (No. 217-03292)	Apr-22
Reference 20 dB Attenuator	SN: BH9394 (20k)	09-Apr-21 (No. 217-03343)	Apr-22
Type-N mismatch combination	SN: 310982 / 06327	09-Apr-21 (No. 217-03344)	Apr-22
Reference Probe EX3DV4	SN: 7349	28-Dec-20 (No. EX3-7349_Dec20)	Dec-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21
	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	J. Light
Approved by:	Katja Pokovic	Technical Manager	May_

Issued: May 21, 2021

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Certificate No: D2600V2-1180_May21

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





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

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Glossary:

TSL

tissue simulating liquid

ConvF

sensitivity in TSL / NORM x,y,z

N/A

not applicable or not measured

Calibration is Performed According to the Following Standards:

- 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"

Additional Documentation:

Certificate No: D2600V2-1180_May21

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%.

Measurement Conditions

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

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy , $dz = 5 mm$	
Frequency	2600 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

The following parameters and calculations were appropriate	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.2 ± 6 %	2.04 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.7 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.1 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.45 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.4 W/kg ± 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	47.2 Ω - 1.5 jΩ
Return Loss	- 29.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.155 ns

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

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG

Certificate No: D2600V2-1180_May21 Page 4 of 6

DASY5 Validation Report for Head TSL

Date: 12.05.2021

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1180

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; $\sigma = 2.04 \text{ S/m}$; $\varepsilon_r = 37.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(7.84, 7.84, 7.84) @ 2600 MHz; Calibrated: 28.12.2020

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn601; Calibrated: 02.11.2020

• Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

• DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 120.5 V/m; Power Drift = -0.02 dB

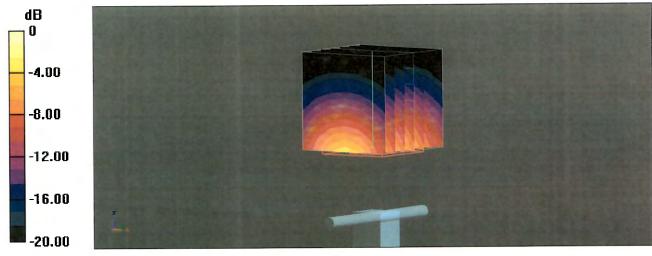
Peak SAR (extrapolated) = 29.7 W/kg

SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.45 W/kg

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

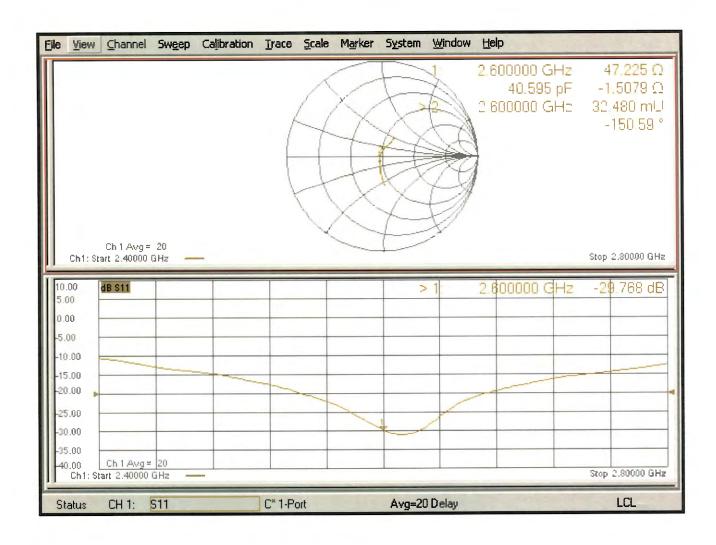
Ratio of SAR at M2 to SAR at M1 = 49%

Maximum value of SAR (measured) = 24.8 W/kg



0 dB = 24.8 W/kg = 13.94 dBW/kg

Impedance Measurement Plot for Head TSL









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Client

SGS

Certificate No:

Z22-60016

CALIBRATION CERTIFICATE

Object

D5GHzV2 - SN: 1313

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

January 25, 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)

24-Sep-21 (CTTL, No.J21X08326) 24-Sep-21 (CTTL, No.J21X08326) 27-Jan-21(SPEAG,No.EX3-3617_Jan21)	Sep-22 Sep-22 Jan-22
7-Jan-21(\$PEAG,No.EX3-3617 Jan21)	lan 22
	Jan-22
2-Jan-22(CTTL-SPEAG,No.Z22-60007)	Jan- <mark>23</mark>
Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
2 Jan 22 (CTT) No. (22V00400)	Jan-23
3-Jan-22 (CTTL, No. J22X00409)	Jan-23
١	1-Jan-22 (CTTL, No.J22X00406)

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: January 31, 2022

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Certificate No: Z22-60016

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Glossary:

TSL ConvF

N/A

tissue simulating liquid

sensitivity in TSL / NORMx,y,z

not applicable or not measured

Calibration is Performed According to the Following Standards:

a) 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

b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

c) 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	1
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 ± 1 MHz 5600 MHz ± 1 MHz 5750 MHz ± 1 MHz	2

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 ± 0.2) °C	36.2 ± 6 %	4.71 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	WOWN	

SAR result with Head TSL at 5250MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	7.79 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	78.0 W/kg ± 24.4 % (<i>k</i> =2)
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.18 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.8 W/kg ± 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	35.5 ± 6 %	5.09 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		

SAR result with Head TSL at 5600MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	7.99 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.9 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.25 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.5 W/kg ± 24.2 % (<i>k</i> =2)

Head TSL parameters at 5750MHz

The following parameters and calculations were applied.

e tellewing 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	35.3 ± 6 %	5.25 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		

SAR result with Head TSL at 5750MHz

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	7.64 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	76.4 W/kg ± 24.4 % (<i>k</i> =2)
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.12 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.2 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	47.0Ω- 1.42jΩ
Return Loss	- 29.2dB

Antenna Parameters with Head TSL at 5600MHz

Impedance, transformed to feed point	53.5Ω+ 1.70jΩ	
Return Loss	- 28.5dB	

Antenna Parameters with Head TSL at 5750MHz

Impedance, transformed to feed point	50.2Ω+ 1.97jΩ
Return Loss	- 34.1dB

General Antenna Parameters and Design

		_
Electrical Delay (one direction)	1.104 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	





Date: 2022-01-25

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DASY5 Validation Report for Head TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1313

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

Frequency: 5750 MHz Duty Cycle: 1:1

Medium parameters used: f = 5250 MHz; σ = 4.708 S/m; ϵ_r = 36.15; ρ = 1000 kg/m³ Medium parameters used: f = 5600 MHz; σ = 5.088 S/m; ϵ_r = 35.54; ρ = 1000 kg/m³ Medium parameters used: f = 5750 MHz; σ = 5.252 S/m; ϵ_r = 35.32; ρ = 1000 kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 SN3617; ConvF(5.4, 5.4, 5.4) @ 5250 MHz; ConvF(5, 5, 5) @ 5600 MHz; ConvF(5.12, 5.12, 5.12) @ 5750 MHz; Calibrated: 2021-01-27
- 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 = 68.82 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 32.5 W/kg

SAR(1 g) = 7.79 W/kg; SAR(10 g) = 2.18 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 64%

Maximum value of SAR (measured) = 18.5 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 = 70.59 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 37.5 W/kg

SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.25 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 60.4%

Maximum value of SAR (measured) = 19.7 W/kg

Certificate No: Z22-60016

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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 = 66.01 V/m; Power Drift = 0.06 dB

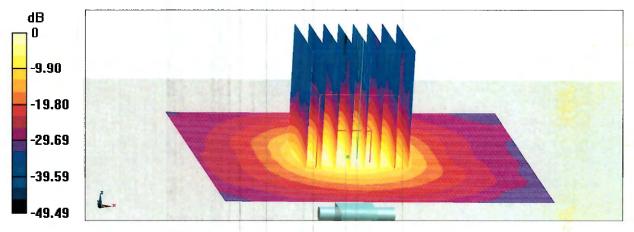
Peak SAR (extrapolated) = 37.8 W/kg

SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.12 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 58.8%

Maximum value of SAR (measured) = 19.2 W/kg



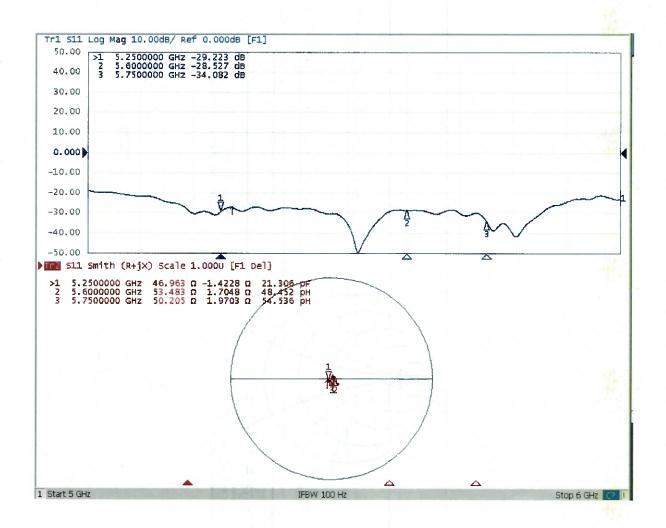
0 dB = 19.2 W/kg = 12.83 dBW/kg





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Impedance Measurement Plot for Head TSL





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http://www.caict.ac.cn

Client:

SGS



Certificate No: Z22-60472

CALIBRATION CERTIFICATE

Object DAE4 - SN: 1324

Calibration Procedure(s)

FF-Z11-002-01

Calibration Procedure for the Data Acquisition Electronics

(DAEx)

Calibration date:

October 17, 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)℃ 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

Name

Function

Signature

Calibrated by:

Yu Zongying

SAR Test Engineer

Reviewed by:

Lin Hao

SAR Test Engineer

Approved by:

Certificate No: Z22-60472

Qi Dianyuan

SAR Project Leader

Issued: October 19, 2022

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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.

Certificate No: Z22-60472 Page 2 of 3





Tel: +86-10-62304633-2117

E-mail: emf@caict.ac.cn http://www.caict.ac.cn

DC Voltage Measurement

A/D - Converter Resolution nominal

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

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

Calibration Factors	X	Y	Z
High Range	404.147 ± 0.15% (k=2)	404.421 ± 0.15% (k=2)	403.891 ± 0.15% (k=2)
Low Range	3.98791 ± 0.7% (k=2)	3.95134 ± 0.7% (k=2)	3.96641 ± 0.7% (k=2)

Connector Angle

Connector Angle to be used in DASY system	175.5° ± 1 °
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Page 3 of 3 Certificate No: Z22-60472

Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst Service suisse d'étalonnage

Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: SCS 0108

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

Client

SGS-CN (Auden)

Certificate No

EX-3793 Sep22

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:3793

Calibration procedure(s)

QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v6, QA CAL-23.v5,

QA CAL-25.v7

Calibration procedure for dosimetric E-field probes

Calibration date

September 30, 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) ℃ and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-22 (No. 217-03525/03524)	Apr-23
Power sensor NRP-Z91	SN: 103244	04-Apr-22 (No. 217-03524)	Apr-23
OCP DAK-3.5 (weighted)	SN: 1249	20-Oct-21 (OCP-DAK3.5-1249_Oct21)	Oct-22
OCP DAK-12	SN: 1016	20-Oct-21 (OCP-DAK12-1016 Oct21)	Oct-22
Reference 20 dB Attenuator	SN: CC2552 (20x)	04-Apr-22 (No. 217-03527)	Apr-23
DAE4	SN: 660	13-Oct-21 (No. DAE4-660_Oct21)	Oct-22
Reference Probe ES3DV2	SN: 3013	27-Dec-21 (No. ES3-3013 Dec21)	Dec-22

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-22

Name

Function

Signature

Calibrated by

Leif Klysner

Laboratory Technician

CM

Approved by

Sven Kühn

Technical Manager

Issued: October 6, 2022

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

Certificate No: EX-3793_Sep22

Page 1 of 22

Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst

Service suisse d'étalonnage Servizio svizzero di taratura

S Swiss Calibration Service

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Multilateral Agreement for the recognition of calibration certificates

Glossary

TSL NORMx,y,z tissue simulating liquid

ConvF

sensitivity in free space sensitivity in TSL / NORMx,y,z.

DCP

diode compression point

CF A, B, C, D

crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters

Polarization φ

 φ rotation around probe axis

Polarization ∂

 ϑ 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

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) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) 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 θ = 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 E²-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. 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: EX-3793 Sep22

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EX3DV4 - SN:3793

Parameters of Probe: EX3DV4 - SN:3793

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm $(\mu V/(V/m)^2)^A$	0.49	0.43	0.45	±10.1%
DCP (mV) B	104.6	105.0	102.0	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	С	dB	VR mV	Max dev.	Max Unc ^E k = 2
0	CW	X	0.00	0.00	1.00	0.00	157.5	±2.7%	±4.7%
	*	Y	0.00	0.00	1.00		154.0		
		Z	0.00	0.00	1.00		154.7		
10352	Pulse Waveform (200Hz, 10%)	X	20.00	92.04	21.70	10.00	60.0	±2.8%	±9.6%
		Y	20.00	90.58	20.59	11000	60.0	0.00	
		Z	20.00	91.76	21.42		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	20.00	92.75	20.82	6.99	80.0	±1.5%	±9.6%
		Y	20.00	91.68	20.18		80.0	77	1227202
		Z	20.00	92.45	20.46		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	20.00	94.45	20.08	3.98	95.0	±1.1%	±9.6%
		Y	20.00	95.52	20.82	067	95.0	T WE	1200
		Z	20.00	93.39	19.31		95.0	/	
10355	Pulse Waveform (200Hz, 60%)	X	20.00	94.19	18.45	2.22	120.0	±1.1%	±9.6%
		Y	20.00	101.60	22.41	1	120.0	=3.1(4)	20.070
		Z	20.00	91.94	17.15	1	120.0		1
10387	QPSK Waveform, 1 MHz	X	1.56	65.43	14.21	1.00	150.0	±3.1%	±9.6%
		Y	1.72	67.95	15.70	95.23	150.0	TO: 1 /8	20.0.0
		Z	1.46	65.22	13.85		150.0		
10388	QPSK Waveform, 10 MHz	X	2.10	67.29	15.07	0.00	150.0	±1.0%	±9.6%
	and the second second	Y	2.27	69.14	16.35	107/22	150.0	27.076	20.0.0
		Z	1.98	66.73	14.79		150.0		
10396	64-QAM Waveform, 100 kHz	X	2.75	68.96	18.00	3.01	150.0	±0.8%	±9.6%
		Y	2.99	71.80	19.50	2.27	150.0	20.07.0	20.070
		Z	2.67	69.09	18.02		150.0		
10399	64-QAM Waveform, 40 MHz	X	3.44	66.91	15.50	0.00	150.0	±2.3%	±9.6%
	STATE STATE OF THE STATE OF	Y	3.52	67.64	16.05	0.00	150.0	12.070	±3.0%
		Z	3.35	66.63	15.34		150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	4.84	65.69	15.47	0.00	150.0	±4.2%	±9.6%
-20 K 0	2014-1-2016-21-21-2016-2016-2016-2016-2016-2	Y	4.82	66.01	15.72	0.00	150.0	T.T.E /0	13.076
		Z	4.71	65.49	15.34	(- C	150.0		

Note: For details on UID parameters see Appendix

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

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

B Linearization parameter uncertainty for maximum specified field strength.

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

Parameters of Probe: EX3DV4 - SN:3793

Sensor Model Parameters

	C1 fF	C2 fF	ν-1	T1 msV ⁻²	T2 ms V ⁻¹	T3 ms	T4 V-2	T5 V ⁻¹	T6
X	44.8	335.80	35.66	15.84	0.56	5.10	0.00	0.49	1.01
У	38.8	283.89	34.35	19.36	0.09	5.10	1.15	0.20	1.01
Z	39.6	296.04	35.48	12.96	0.50	5.10	0.44	0.37	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-61.1°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1,4 mm

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

EX3DV4 - SN:3793

Parameters of Probe: EX3DV4 - SN:3793

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
13	55.0	0.75	15.30	15.30	15.30	0.00	1.00	±13.3%
750	41.9	0.89	9.58	9.58	9.58	0.57	0.80	±12.0%
835	41.5	0.90	9.30	9.30	9.30	0.46	0.89	±12.0%
1450	40.5	1.20	8.26	8.26	8.26	0.45	0.80	±12.0%
1750	40.1	1.37	8.17	8.17	8.17	0.30	0.86	±12.0%
1900	40.0	1.40	7.97	7.97	7.97	0.30	0.86	±12.0%
2100	39.8	1.49	7.77	7.77	7.77	0.31	0.86	±12.0%
2300	39.5	1.67	7.58	7.58	7.58	0.32	0.90	±12.0%
2450	39.2	1.80	7.26	7.26	7.26	0.36	0.90	±12.0%
2600	39.0	1.96	7.07	7.07	7.07	0.33	0.90	±12.0%
3300	38.2	2.71	6.84	6.84	6.84	0.30	1.35	±13.1%
3500	37.9	2.91	6.77	6.77	6.77	0.30	1.35	±13.1%
3700	37.7	3.12	6.48	6.48	6.48	0.30	1.35	±13.1%
3900	37.5	3.32	6.19	6.19	6.19	0.40	1.60	±13.1%
4100	37.2	3.53	6.13	6.13	6.13	0.40	1.60	±13.1%
4400	36.9	3.84	6.07	6.07	6.07	0.40	1.70	±13.1%
4600	36.7	4.04	5.84	5.84	5.84	0.40	1.70	±13.1%
4800	36.4	4.25	5.62	5.62	5.62	0.40	1.80	±13.1%
4950	36.3	4.40	5.51	5.51	5.51	0.40	1.80	±13.1%
5250	35.9	4.71	5.20	5.20	5.20	0.40	1.80	±13.1%
5600	35.5	5.07	4.56	4.56	4.56	0.40	1.80	±13.1%
5800	35.3	5.27	4.64	4.64	4.64	0.40	1.80	±13.1%

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

assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz. F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to $\pm 10\%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to $\pm 5\%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

G 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.

Parameters of Probe: EX3DV4 - SN:3793

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
6500	34.5	6.07	5.05	5.05	5.05	0.20	2.50	±18.6%

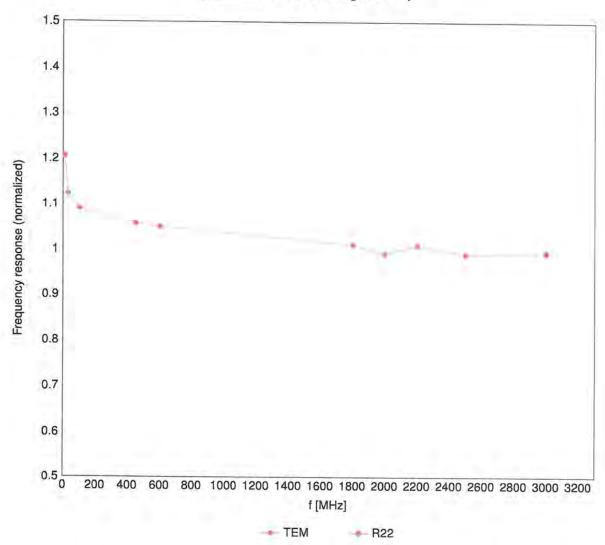
C Frequency validity at 6.5 GHz is -600/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. F At frequencies 6–10 GHz, the validity of tissue parameters (ε and σ) can be relaxed to $\pm 10\%$ if liquid compensation formula is applied to measured SAR

values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

G 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

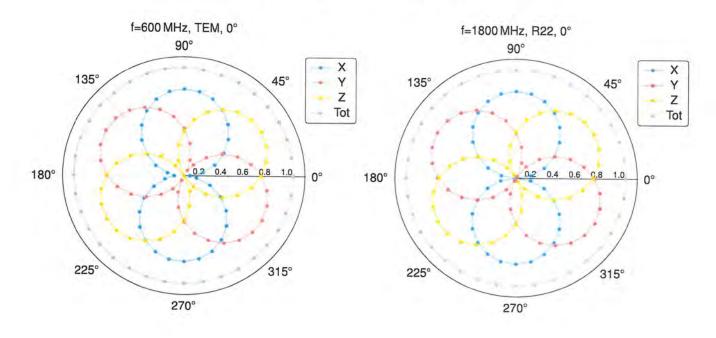
(TEM-Cell:ifi110 EXX, Waveguide:R22)

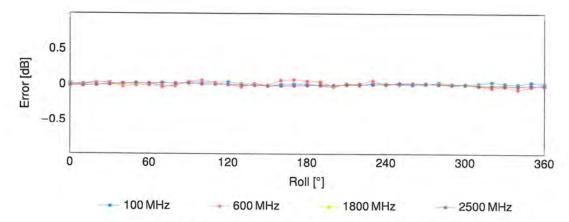


Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

EX3DV4 - SN:3793 September 30, 2022

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

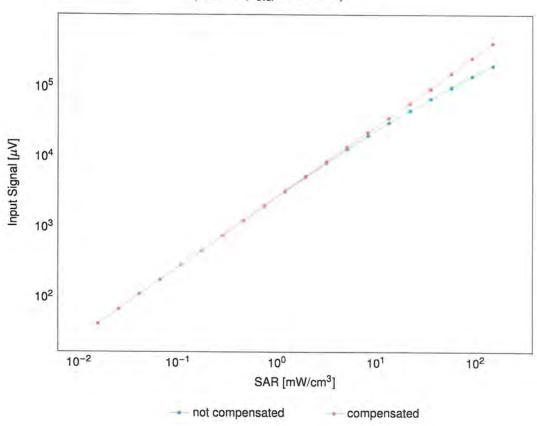


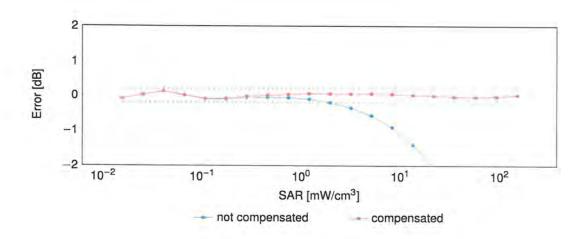


Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell, f_{eval} = 1900 MHz)

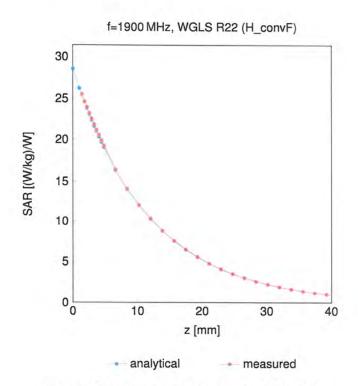




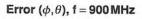
Uncertainty of Linearity Assessment: ±0.6% (k=2)

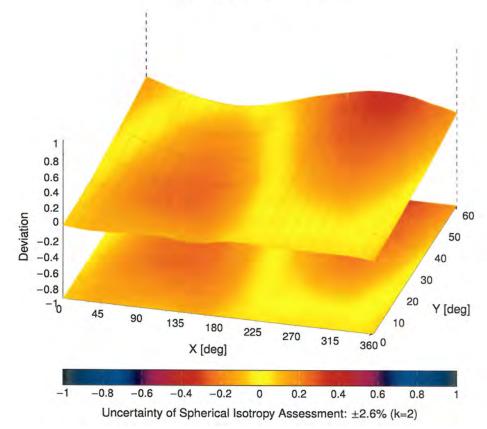
EX3DV4 - SN:3793

Conversion Factor Assessment



Deviation from Isotropy in Liquid





Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0	1.1	CW	CW	0.00	±4.7
10010	CAA	SAR Validation (Square, 100 ms, 10 ms)	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	
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM		±9.6
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	6.56	±9.6
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	12.62	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)		9.55	±9.6
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	4.80	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	3.55	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	GSM	7.78	±9.6
0031	CAA		Bluetooth	5.30	±9.6
0032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3) IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.87	±9,6
0032	CAA		Bluetooth	1.16	±9.6
		IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
0034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
0035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
0036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
0037	CAA	IEEE 802,15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
0038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
0039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
0042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
0044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
0048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
0049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
0056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
0058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
0059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
0060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
0061	CAB	IEEE 802,11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
0062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
0063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
0064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
0065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
0066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	
0067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN		±9.6
0068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)		10.12	±9.6
0069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
0003	CAB		WLAN	10.56	±9.6
0071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
0074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
0075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
0076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
0077	CAB	IEEE 802,11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
0081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
0082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
0090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
0097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
0098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
0099	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
0102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
0103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
0104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
0105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
0108	CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
0109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
0110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5MHz, QPSK)	LTE-FDD	5.75	±9.6
0111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
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	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN		±9.6
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)		8.13	±9.6
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	6.53	±9.6
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	5.73	±9.6
10144	CAC		LTE-FDD	6.35	±9.6
10145		LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
-	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
0149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
0150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
0151	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
0152	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
0153	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
0154	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
0155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6,43	±9.6
0156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-FDD	5.79	±9.6
0157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	
0158	CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)			±9.6
0159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5MHz, 64-QAM)	LTE-FDD	6.62	±9.6
0160	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)		6,56	±9.6
0161	CAG		LTE-FDD	5.82	±9.6
0162	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
		LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
0166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
0167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
0168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9,6
0169	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
0170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0171	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
0172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
0173	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
0174	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0175	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
0176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0177	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD		
0178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	Transfer Land Co.	5.73	±9.6
0179	-		LTE-FDD	6.52	±9.6
	AAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9,6
0182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
0185	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
0186	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
0188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
0194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
0195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
0196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	
0197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN		±9.6
0198	CAF	IEEE 802.11n (HT Mixed, 55 Mbps, 64-QAM)		8.13	±9.6
0219	CAF		WLAN	8.27	±9.6
-		IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
0220	AAF	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
0221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
0222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
0223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
0224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

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10225	CAD	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
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
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
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6
10232	CAD	LTE-TDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10233	CAD	LTE-TDD (SC-FDMA, 1 RB, 5MHz, 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
10239	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0240	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6
0241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
0242	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
0243	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
0244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM)	LTE-TDD	10.06	±9.6
0245	CAG	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM)	LTE-TDD	10.06	±9.6
0246	CAG	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK)	LTE-TDD	9.30	±9.6
0247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-TDD	9.91	±9.6
0248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM)	LTE-TDD	10.09	±9.6
0249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-TDD	9.29	±9.6
0250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6
0251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6
0252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6
0253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
0254	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
0255	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
0256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
0257	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
0258	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6
0259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
0260	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6
0261	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
0262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6
0263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
0264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
0265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
0266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6
0267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6
0268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
0269	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6
0270	CAB	LTE-TDD (SG-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6
0274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
0275	CAD	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
0277	CAD	PHS (QPSK)	PHS	11.81	±9.6
0278	CAD	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
0279	CAG	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
0290	CAG	CDMA2000, RC1, SO55, Full Rate	GDMA2000	3.91	±9.6
0291	CAG	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
0292	CAG	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
0293	CAG	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6
0295	CAG	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6
0297	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
0298	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
0299	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
0300	CAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
0301	CAC	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WiMAX	12.03	±9.6
0302	CAB	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	±9.6
0303	CAB	IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6
0304	CAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	11.86	±9.6
0305	CAA	IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC)	WiMAX	15.24	±9.6
0306	CAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC)	WiMAX	14.67	±9.6

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10307	AAB	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC)	WiMAX	14.49	±9.6
10308	AAB	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
10309	AAB	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM,AMC 2x3)	WiMAX	14.58	±9.6
10310	AAB	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 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	AAD	IDEN 1:6	IDEN	13.48	±9.6
10315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	±9.6
10316	AAD	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	
10317	AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN		±9.6
10352	AAA	Pulse Waveform (200 Hz, 10%)		8.36	±9.6
10353	AAA	Pulse Waveform (200 Hz, 20%)	Generic	10.00	±9.6
10354	AAA	Pulse Waveform (200 Hz, 40%)	Generic	6.99	±9.6
10355	AAA	Pulse Waveform (200 Hz, 60%)	Generic	3.98	±9.6
10356	AAA		Generic	2.22	±9.6
-		Pulse Waveform (200 Hz, 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 (20 MHz, 64-QAM, 99pc dc)	WLAN	8.37	±9.6
10401	AAA	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc dc)	WLAN	8.60	±9.6
0402	AAA	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc dc)	WLAN	8.53	±9.6
0403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
0404	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	
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic		±9.6
0415	AAA	IEEE 802.11b WiFi 2,4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	8,54	±9.6
0416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)		1.54	±9.6
10417	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	±9.6
0418	AAA		WLAN	8.23	±9.6
	-	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	±9.6
10422	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
10424	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
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
10431	AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10432	AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
0434	AAG	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	
0435	AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)			±9.6
10447	AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.82	±9.6
0448	AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
0449	AAC		LTE-FDD	7.53	±9.6
0449	AAA	LTE-FDD (OFDMA, 15MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
	-	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
0451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
0453	AAC	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
0456	AAC	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc dc)	WLAN	8.63	±9.6
0457	AAC	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
0458	AAC	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
0459	AAC	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
0460	AAC	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
0461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
0462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	±9.6
0463	AAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	±9.6
0464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
0465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TOD	8.32	±9.6
0466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD		
0467	AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)		8.57	±9.6
0468	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	7.82	±9.6
0469	AAD		LTE-TDD	8.32	±9.6
0470		LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	±9.6
-	AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
0471	AAC	LTE-TDD (SC-FDMA, † RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10472	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10473	AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
10474	AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6
10475	AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10477	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6
10478	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD		±9.6
10482	AAA	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Sub)		8.45	±9.6
10483	AAA	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, Sub)	LTE-TDD	7.71	±9.6
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Sub)	LTE-TDD	8.39	±9.6
10485	AAB	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Sub)	LTE-TDD	8.47	±9.6
10486	AAB	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Sub)	LTE-TOD	7.59	±9.6
10487	AAC	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Sub)	LTE-TDD	8.38	±9.6
10488	AAC	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Sub)	LTE-TDD	8.60	±9.6
10489	AAC		LTE-TDD	7.70	±9.6
10490	AAF	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
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10492	15.74.00	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.41	±9.6
-	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-TOD	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	
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)			±9.6
10519	AAF	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.23	±9.6
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	±9.6
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	8.12	±9.6
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	7.97	±9.6
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)		8.45	±9.6
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 46 Mbps, 99pc dc)	WLAN	8.08	±9.6
10525	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc dc)	WLAN	8.27	±9.6
10526	AAF	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc dc)	WLAN	8.36	±9.6
10527	AAF	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc dc)	WLAN	8.42	±9.6
0528	AAF	IEEE 802.11ac WIFI (20 MHz, MCS2, 99pc dc)	WLAN	8.21	±9.6
0529	AAF	IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc dc)	WLAN	8.36	±9.6
0531	AAF	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc dc)	WLAN	8.36	±9.6
0532	AAF		WLAN	8.43	±9.6
	-	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc dc)	WLAN	8.29	±9.6
10533	AAE	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc dc)	WLAN	8.38	±9.6
10534	AAE	IEEE 802,11ac WiFi (40 MHz, MCS0, 99pc dc)	WLAN	8.45	±9,6
10535	AAE	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc dc)	WLAN	8.45	±9.6
10536	AAF	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc dc)	WLAN	8.32	±9.6
10537	AAF	IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc dc)	WLAN	8.44	±9.6
10538	AAF	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc dc)	WLAN	8.54	±9.6
10540	AAA	IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc dc)	WLAN	8.39	±9.6

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10541	AAA	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc dc)	WLAN	8.46	±9.6
10542	AAA	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc dc)	WLAN	8.65	±9.6
10543	AAC	IEEE 802,11ac WiFi (40 MHz, MCS9, 99pc dc)	WLAN	8.65	±9.6
10544	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc dc)	WLAN	8.47	±9.6
10545	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc dc)	WLAN	8.55	±9.6
10546	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc dc)	WLAN	8.35	±9.6
10547	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc dc)	WLAN	8.49	±9.6
10548	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc dc)	WLAN	8.37	±9.6
10550	AAC	IEEE 802,11ac WiFi (80 MHz, MCS6, 99pc dc)	WLAN	8.38	±9.6
10551	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc dc)	WLAN	8.50	±9.6
10552	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc dc)	WLAN	8.42	±9.6
10553	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc dc)	WLAN	8.45	±9.6
10554	AAC	IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc do)	WLAN	8.48	±9.6
10555	AAC	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc dc)	WLAN	8.47	±9.6
10556	AAC	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc dc)	WLAN		
10557	AAC	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc dc)	WLAN	8.50 8.52	±9.6
10558	AAC	IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc dc)	WLAN		±9.6
10560	AAC	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc dc)	WLAN	8.61	±9.6
10561	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc dc)		8.73	±9.6
10562	AAC	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc dc)	WLAN	8.56	±9.6
10563	AAC	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc dc)	WLAN	8.69	±9.6
10564	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)	WLAN	8.77	±9.6
10565	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mops, 99pc dc)	WLAN	8.25	±9.6
10566	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)	WLAN	8.45	±9.6
10567	AAC		WLAN	8.13	±9.6
10568	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	±9.6
10569	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLAN	8.37	±9.6
10570	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	±9,6
10570		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)	WLAN	8.30	±9.6
1 (17)	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
0590	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, 20 MHz, MCS0, 90pc dc)	WLAN	8.63	±9.6
10592	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc dc)	WLAN	8.79	±9.6
0593	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc dc)	WLAN	8,64	±9.6
0594	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc dc)	WLAN	8.74	±9.6
0595	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc dc)	WLAN	8.74	±9.6
0596	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc dc)	WLAN	8.71	±9.6
0597	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc dc)	WLAN	8.72	±9.6
0598	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc dc)	WLAN	8.50	±9.6
0599	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc dc)	WLAN	8.79	±9.6
0600	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc dc)	WLAN	8.88	±9.6
0601	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc dc)	WLAN	8.82	
0602	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc dc)	WLAN		±9.6
0603	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc dc)		8.94	±9.6
0604	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc dc)	WLAN	9.03	±9.6
0605	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc dc)	WLAN	8.76	±9.6
0606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc dc)	WLAN	8.97	±9.6
0607	AAC		WLAN	8.82	±9.6
0608	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc dc)	WLAN	8.64	±9.6
2000	MAG	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc dc)	WLAN	8.77	±9.6

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	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc dc)	WLAN	8.57	±9.6
	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc dc)	WLAN	8.78	±9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc dc)	WLAN	8.70	±9.6
10612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc dc)	WLAN	8.94	±9.6
10614	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc dc)	WLAN	8.59	±9.6
	AAC	IEEE 802,11ac WiFi (20 MHz, MCS8, 90pc dc)	WLAN	8.82	±9.6
	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc dc)	WLAN	8.82	±9.6
	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc dc)	WLAN	8.81	±9.6
10618	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc dc)	WLAN	8.58	±9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc dc)	WLAN	8.86	±9.6
10620	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc dc)	WLAN	8.87	±9.6
10621	AAC	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
10622	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc dc)	WLAN	8.68	±9.6
10623	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc dc)	WLAN	8.82	±9.6
10624	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc dc)	WLAN	8.96	±9.6
0625	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc dc)	WLAN	8.96	±9.6
0626	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc dc)	WLAN	8.83	±9.6
10627	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc dc)	WLAN	8.88	±9.6
0628	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc dc)	WLAN	8.71	±9.6
0629	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc dc)	WLAN	8.85	±9.6
	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc dc)	WLAN	8.72	±9.6
0631	AAC	IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc dc)	WLAN	8.81	±9.6
0632	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc dc)	WLAN	8.74	±9.6
0633	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc dc)	WLAN	8.83	±9.6
0634	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc dc)	WLAN	8.80	±9.6
0635	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc dc)	WLAN	8.81	±9.6
0636	AAC	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc dc)	WLAN	8.83	±9.6
0637	AAC	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc dc)	WLAN	8.79	±9.6
0638	AAC	IEEE 802,11ac WiFi (160 MHz, MCS2, 90pc dc)	WLAN	8.86	±9.6
0639	AAC	IEEE 802,11ac WiFi (160 MHz, MCS3, 90pc dc)	WLAN	8.85	±9.6
0640	AAC	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc dc)	WLAN	8.98	±9.6
0641	AAC	IEEE 802,11ac WiFi (160 MHz, MCS5, 90pc dc)	WLAN	9.06	±9.6
0642	AAC	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc dc)	WLAN	9.06	±9.6
0643	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc dc)	WLAN	8.89	±9.6
	AAC	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc dc)	WLAN	9.05	±9.6
0645	AAC	IEEE 802,11ac WiFi (160 MHz, MCS9, 90pc dc)	WLAN	9.11	±9.6
	AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	±9.6
	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	±9.6
	AAC	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
0652	AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
The second second second	AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6
0654	AAC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6
	AAC	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
-	AAC	Pulse Waveform (200 Hz, 10%)	Test	10.00	±9.6
0659	AAC	Pulse Waveform (200 Hz, 20%)	Test	6.99	±9.6
	AAC	Pulse Waveform (200 Hz, 40%)	Test	3.98	±9.6
	AAC	Pulse Waveform (200 Hz, 60%)	Test	2.22	±9.6
	AAC	Pulse Waveform (200 Hz, 80%)	Test	0.97	±9.6
	AAC	Bluetooth Low Energy	Bluetooth	2.19	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS0, 90pc dc)	WLAN	9.09	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS1, 90pc dc)	WLAN	8.57	±9.6
1.5 41 5 7	AAD	IEEE 802.11ax (20 MHz, MCS2, 90pc dc)	WLAN	8.78	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS3, 90pc dc)	WLAN	8.74	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS4, 90pc dc)	WLAN	8.90	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS6, 90pc dc)	WLAN	8.73	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS7, 90pc dc)	WLAN	8.78	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS8, 90pc dc)	WLAN	8.89	±9.6
	AAD	IEEE 802.11ax (20 MHz, MCS9, 90pc dc)	WLAN	8.80	±9.6
-	AAG	IEEE 802.11ax (20 MHz, MCS10, 90pc dc)	WLAN	8.62	±9.6
	AAF	IEEE 802.11ax (20 MHz, MCS11, 90pc dc)	WLAN	8.83	±9.6
	AAA	IEEE 802.11ax (20 MHz, MCS0, 99pc dc)	WLAN	8.42	±9.6
	AAC	IEEE 802.11ax (20 MHz, MCS1, 99pc dc)	WLAN	8.26	±9.6
	AAC	IEEE 802.11ax (20 MHz, MCS2, 99pc dc)	WLAN	8.33	±9.6
0686	AAC	IEEE 802.11ax (20 MHz, MCS3, 99pc dc)	WLAN	8.28	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10687	AAE	IEEE 802.11ax (20 MHz, MCS4, 99pc dc)	WLAN	8.45	±9.6
10688	AAE	IEEE 802.11ax (20 MHz, MCS5, 99pc dc)	WLAN	8.29	±9.6
10689	AAD	IEEE 802.11ax (20 MHz, MCS6, 99pc dc)	WLAN	8.55	±9.6
10690	AAE	IEEE 802.11ax (20 MHz, MCS7, 99pc dc)	WLAN	8.29	±9.6
0691	AAB	IEEE 802.11ax (20 MHz, MCS8, 99pc dc)	WLAN	8.25	±9.6
10692	AAA	IEEE 802.11ax (20 MHz, MCS9, 99pc dc)	WLAN	8.29	
10693	AAA	IEEE 802.11ax (20 MHz, MCS10, 99pc dc)	WLAN		±9,6
10694	AAA	IEEE 802.11ax (20 MHz, MCS11, 99pc dc)		8.25	±9.6
10695	AAA	IEEE 802.11ax (40 MHz, MCS0, 90pc dc)	WLAN	8.57	±9.6
10696	AAA	IEEE 802.11ax (40 MHz, MCS1, 90pc dc)	WLAN	8.78	±9.6
10697	AAA		WLAN	8.91	±9.6
10698	AAA	IEEE 802.11ax (40 MHz, MCS2, 90pc dc)	WLAN	8.61	±9.6
10699		IEEE 802.11ax (40 MHz, MCS3, 90pc dc)	WLAN	8.89	±9.6
	AAA	IEEE 802.11ax (40 MHz, MCS4, 90pc dc)	WLAN	8.82	±9.6
10700	AAA	IEEE 802.11ax (40 MHz, MCS5, 90pc dc)	WLAN	8.73	±9.6
10701	AAA	IEEE 802.11ax (40 MHz, MCS6, 90pc dc)	WLAN	8.86	±9.6
0702	AAA	IEEE 802.11ax (40 MHz, MCS7, 90pc dc)	WLAN	8.70	±9.6
0703	AAA	IEEE 802.11ax (40 MHz, MCS8, 90pc dc)	WLAN	8.82	±9.6
10704	AAA	IEEE 802.11ax (40 MHz, MCS9, 90pc dc)	WLAN	8.56	±9.6
10705	AAA	IEEE 802.11ax (40 MHz, MCS10, 90pc dc)	WLAN	8.69	±9.6
0706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc dc)	WLAN	8.66	±9.6
10707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pc dc)	WLAN	8.32	±9.6
0708	AAC	IEEE 802,11ax (40 MHz, MCS1, 99pc dc)	WLAN	8.55	±9.6
10709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc dc)	WLAN	8.33	±9.6
10710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc dc)	WLAN	8.29	
0711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc dc)	WLAN		±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc dc)		8.39	±9.6
10713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc dc)	WLAN	8.67	±9.6
10714	AAC		WLAN	8.33	±9,6
0715	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc dc)	WLAN	8.26	±9.6
10716		IEEE 802.11ax (40 MHz, MCS8, 99pc dc)	WLAN	8.45	±9.6
	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc dc)	WLAN	8.30	±9.6
0717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc dc)	WLAN	8.48	±9.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc dc)	WLAN	8.24	±9.6
10719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc dc)	WLAN	8.81	±9.6
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc dc)	WLAN	8.87	±9.6
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc dc)	WLAN	8.76	±9.6
0722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc dc)	WLAN	8.55	±9.6
0723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc dc)	WLAN	8.70	±9.6
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc dc)	WLAN	8.90	±9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc dc)	WLAN	8.74	±9.6
0726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc dc)	WLAN	8.72	±9.6
0727	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc dc)	WLAN	8.66	±9.6
10728	AAC	IEEE 802.11ax (80 MHz, MCS9, 90pc dc)	WLAN	8.65	±9.6
0729	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc dc)	WLAN	8.64	
0730	AAC	IEEE 802.11ax (80 MHz, MCS11, 90pc dc)	WLAN		±9.6
10731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc dc)		8.67	±9.6
10732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc dc)	WLAN	8.42	±9.6
10732	AAC		WLAN	8.46	±9.6
10734	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc dc)	WLAN	8.40	±9.6
0735	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc dc)	WLAN	8.25	±9.6
-	100000	IEEE 802.11ax (80 MHz, MCS4, 99pc dc)	WLAN	8.33	±9.6
0736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc dc)	WLAN	8.27	±9,6
0737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc dc)	WLAN	8.36	±9.6
0738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc dc)	WLAN	8.42	±9.6
0739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc dc)	WLAN	8.29	±9.6
0740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc dc)	WLAN	8.48	±9.6
0741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc dc)	WLAN	8.40	±9.6
0742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc dc)	WLAN	8.43	±9.6
0743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc dc)	WLAN	8.94	±9.6
0744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc dc)	WLAN	9.16	±9.6
0745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc dc)	WLAN	8.93	±9.6
0746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc dc)	WLAN	9.11	±9.6
0747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc dc)	WLAN	9.04	±9.6
0748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc dc)	WLAN	8.93	±9.6
0749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc dc)	WLAN		
0750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc dc)	WLAN	8.90 8.70	±9.6
0751	AAC	IEEE 802.11ax (160 MHz, MCS8, 90pc dc)		8.79	±9.6
		IEEE 802.11ax (160 MHz, MCS9, 90pc dc)	WLAN	8.82	±9.6

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10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc dc)	WLAN	9.00	±9.6
10754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc dc)	WLAN	8.94	±9.6
10755	AAC	IEEE 802.11ax (160 MHz, MCS0, 99pc dc)	WLAN	8.64	±9.6
10756	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc dc)	WLAN	8.77	±9.6
10757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc dc)	WLAN	8.77	±9.6
10758	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc dc)	WLAN	8.69	±9.6
10759	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc dc)	WLAN	8.58	±9.6
10760	AAC	IEEE 802.11ax (160 MHz, MCS5, 99pc dc)	WLAN	8.49	±9.6
10761	AAC	IEEE 802.11ax (160 MHz, MCS6, 99pc dc)	WLAN	8.58	±9.6
10762	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc dc)	WLAN	8.49	±9.6
10763	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc dc)	WLAN	8.53	±9.6
10764	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc dc)	WLAN	8.54	±9.6
10765	AAC	IEEE 802.11ax (160 MHz, MCS10, 99pc dc)	WLAN	8.54	±9.6
10766	AAC	IEEE 802.11ax (160 MHz, 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
10771	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
10780	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10781	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10782	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6
10783	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
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	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±9.6
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±9.6
10794	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
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10797	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±9.6
10798	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10799	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10801	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10802	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±9.6
10803	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
0805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6
0809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
0810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
0812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
0817	AAD	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
0818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
0819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
0820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±9.6
0821	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
0822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9,6
0823	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±9.6
0824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	±9.6
0825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
0827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±9.6
0828	AAE	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±9.6

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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	
10836	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)		10.00	±9.6
10837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	±9.6
10839	AAD		5G NR FR1 TDD	7.68	±9.6
10840	-	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
	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	
10856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD		±9,6
10857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)		8.37	±9.6
10858	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8,35	±9.6
10859	AAD	5G NR (CP-OFDM, 100% RB, 40MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
10860	AAD		5G NR FR1 TDD	8.34	±9.6
		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	
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD		±9.6
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	The second secon	6.52	±9.6
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6,61	±9.6
10875	AAD		5G NR FR2 TDD	6.65	±9.6
10876	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
-	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
10877	-	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		
10886	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10887	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10888	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	100000000000000000000000000000000000000	7.78	±9.6
10889	AAD	5G NR (CP-OFDM, 18B, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
10890	AAD		5G NR FR2 TDD	8.02	±9.6
10891	AAD	5G NR (CP-OFDM, 100% RB, 50MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
		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
0901	AAD	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0902	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	
10906	AAD	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)			±9.6
10907	AAD	5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10908	AAD		5G NR FR1 TDD	5.78	±9.6
10909		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
11429111	AAD	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0911	AAD	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
0912	AAD	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
0913	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
0915	AAD	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
0916	AAD	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
0917	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, 5MHz, 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
0920	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
0922	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
0925	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	±9.6
0926	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
0928	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
0930	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
0933	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
0935	AAA	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
0936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
0937	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	±9.6
0938	AAB	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
0939	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
0940	AAB	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
0941	AAB	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
0942	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
0943	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	±9.6
0944	AAB	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
0945	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
0946	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
0947	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
	AAB	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
0949	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
0950	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
0951	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
0952	AAB	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	±9.6
0953	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	±9,6
0954	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
0955	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	±9.6
0956	AAB	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	±9.6
0957 0958	AAC	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	±9.6
0959	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
0960	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 54-QAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.33	±9.6
0961	AAB	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
0962	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	±9.6
0963	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 KHz)	5G NR FR1 TDD	9.40	±9.6
0964	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 KHz)	5G NR FR1 TDD	9,55	±9.6
0965	AAB	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	±9.6
0966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
0967	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 KHz)	5G NR FR1 TDD	9.55	±9.6
0968	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD 5G NR FR1 TDD	9.42	±9.6
0972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)		9.49	±9.6
0973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	11.59	±9.6
0974	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, QFSK, 30 kHz)	5G NR FR1 TDD	9.06	±9.6
0978	AAA	ULLA BDR	5G NR FR1 TDD	10.28	±9.6
	AAA	ULLA HDR4	ULLA	2.23	±9.6
			ULLA	7.02	±9.6
0979		IIII A HDRS	1.11.1 A	0.00	
0979 0980 0981	AAA	ULLA HDRp4	ULLA	8.82 1.50	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10983	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.31	±9.6
10984	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.42	±9.6
10985	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.54	±9.6
10986	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.50	±9.6
10987	AAA	5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.53	±9.6
10988	AAA	5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.38	±9.6
10989	AAA	5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	±9.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.52	±9.6

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

Dipole D750V3 SN 1210							
Head Liquid							
Date of Measurement	Return Loss(dB)	Δ%	Impedance (Ω)	ΔΩ			
2021-09-08	-28.3	1	52.8	1			
2022-09-07	-27.9	1.4%	52.3	0.5Ω			

Dipole D835V2 SN 4d161							
Head Liquid							
Date of Measurement	Return Loss(dB)	Δ%	Impedance (Ω)	ΔΩ			
2020-08-28	-27.1	/	52.8	1			
2022-08-27	-27.6	1.85%	52.1	0.7Ω			

Dipole D1750V2 SN 1038								
	Head Liquid							
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ				
2021-12-16	-36.6	/	51.0	/				
2022-12-15	-36.8	0.55%	50.6	0.4Ω				

Dipole D1900V2 SN 5d114								
	Head Liquid							
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ				
2020-08-27	-23.2	1	51.9	/				
2021-08-26	-24.3	4.74%	52.6	0.7Ω				
2022-08-25	-23.8	-2.59%	52.3	0.4Ω				

Dipole D2450V2 SN 922							
Head Liquid							
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ			
2020-08-27	-24.7	/	56.0	/			
2022-08-27	-25.2	2.02%	55.2	Ω8.0			

Dipole D2600V2 SN 1180								
Head Liquid								
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ				
2021/5/12	-29.77	1	47.2	1				
2022/5/11	-28.6		48.1	-0.9Ω				
2023/5/10	-29.37	1.34%	47.8	-0.6Ω				

D5GHzV2 – serial no. 1313 5GHzV2 Head								
SGIZVZ Head								
Date of Measurement	Freq.	Return-Loss (dB)	Δ%	Real Impedance (ohm)	ΔΩ			
	5250	-29.9	1	47.0	1			
2022-01-25	5600	-28.5	1	53.5	1			
	5750	-34.1	1	50.2	1			
2023-01-24	5250	-29.6	1.2%	47.1	-0.1			
	5600	-28.2	1.1%	53.1	0.4			
	5750	-33.9	0.6%	51.3	-1.1			