Calibration Laboratory of

Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst

C Service suisse d'étalonnage Servizio svizzero di taratura

Accreditation No.: SCS 0108

Issued: March 28, 2022

S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

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Client

Sporton

Certificate No: D750V3-1117 Mar22

CALIBRATION CERTIFICATE

Object

D750V3 - SN:1117

Calibration procedure(s)

QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

March 24, 2022

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (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	31-Dec-21 (No. EX3-7349_Dec21)	Dec-22
DAE4	SN: 601	01-Nov-21 (No. DAE4-601_Nov21)	Nov-22
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: MY41093315	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-22
	Name	Function	Signature
Calibrated by:	Aldonia Georgiadou	Laboratory Technician	Mc 0-
#Hersence do w. f. stern	ESONO PARTICIPATION	X	H
Approved by:	Niels Kuster	Quality Manager	1

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Certificate No: D750V3-1117_Mar22

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Accreditation No.: SCS 0108

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The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

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) 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"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Certificate No: D750V3-1117_Mar22 Page 2 of 6

Measurement Conditions

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	V32.10.4
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	with Spacer
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	42.0 ± 6 %	0.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		0.05 11110/111 2 0 %

SAR result with Head TSL

Condition	
250 mW input power	2.13 W/kg
	8.52 W/kg ± 17.0 % (k=2)
	Condition 250 mW input power normalized to 1W

condition	
250 mW input power	1.40 W/kg
	5.60 W/kg ± 16.5 % (k=2)
	condition 250 mW input power normalized to 1W

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.2 Ω - 1.7 jΩ	
Return Loss		
	- 27.2 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	
- Color Color (one direction)	1.035 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	Mandactured by
SPEAG	Waltdractured by

DASY5 Validation Report for Head TSL

Date: 24.03.2022

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1117

Communication System: UID 0 - CW; Frequency: 750 MHz

Medium parameters used: f = 750 MHz; $\sigma = 0.89$ S/m; $\varepsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(10.11, 10.11, 10.11) @ 750 MHz; Calibrated: 31.12.2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 01.11.2021

Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 59.85 V/m; Power Drift = 0.04 dB

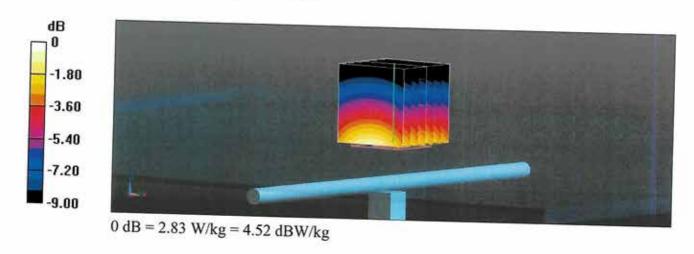
Peak SAR (extrapolated) = 3.18 W/kg

SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.4 W/kg

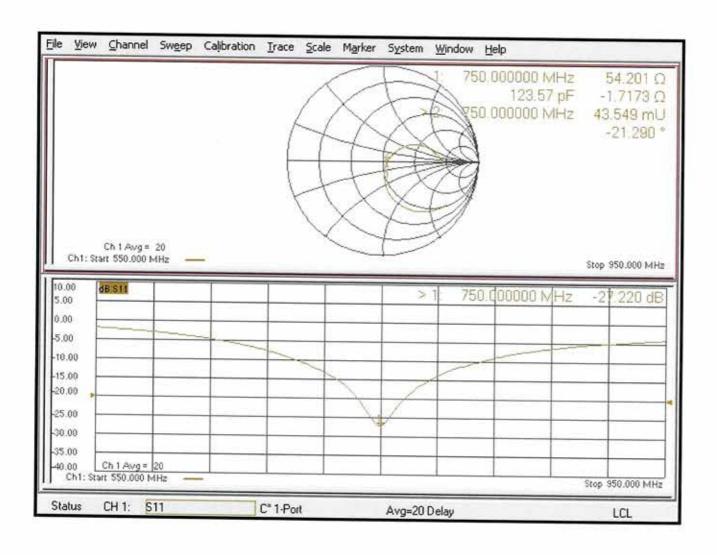
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 2.83 W/kg



Impedance Measurement Plot for Head TSL





D750V3, serial no. 1117 Extended Dipole Calibrations

Referring to KDB 865664, if dipoles are verified in return loss (<-20dB, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

<Justification of the extended calibration>

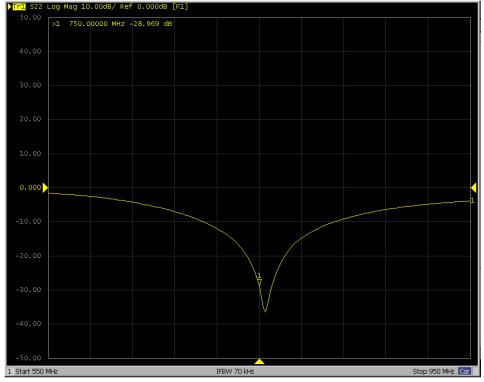
D 750 V3 – serial no. 1117						
	750MHZ					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
03.24.2022	-27.22	22 54.201	-1.7173	1 7172		
(Cal. Report)			34.201		-1.7173	
03.23.2023	-28.969	6.43	49.808	-4.393	-3.4653	-1.748
(extended)	-20.909	0.43	49.000	-4.393	-3.4033	-1.740

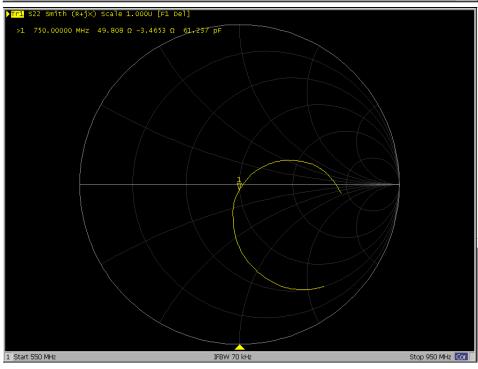
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

TEL: 886-3-327-3456 FAX: 886-3-328-4978



<Dipole Verification Data> - D750 V3, serial no. 1117 (Data of Measurement : 03.23.2023) 750 MHz - Head





TEL: 886-3-327-3456 FAX: 886-3-328-4978

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Client

Sporton

Accreditation No.: SCS 0108

Certificate No: D835V2-499_Aug21

CALIBRATION CERTIFICATE

Object

D835V2 - SN:499

Calibration procedure(s)

QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

August 18, 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.)	Schodulad Callbertine
Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Reference Probe EX3DV4 DAE4	SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 7349 SN: 601	09-Apr-21 (No. 217-03291/03292) 09-Apr-21 (No. 217-03291) 09-Apr-21 (No. 217-03292) 09-Apr-21 (No. 217-03343) 09-Apr-21 (No. 217-03344) 28-Dec-20 (No. EX3-7349_Dec20) 02-Nov-20 (No. DAE4-601_Nov20)	Scheduled Calibration Apr-22 Apr-22 Apr-22 Apr-22 Apr-22 Dec-21 Nov-21
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06 Network Analyzer Agilent E8358A	SN: GB39512475 SN: US37292783 SN: MY41092317 SN: 100972 SN: US41080477	30-Oct-14 (in house check Oct-20) 07-Oct-15 (in house check Oct-20) 07-Oct-15 (in house check Oct-20) 15-Jun-15 (in house check Oct-20) 31-Mar-14 (in house check Oct-20)	In house check: Oct-22
Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	Signature
approved by:	Katja Pokovic	Technical Manager	eec

Issued: August 18, 2021

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Accreditation No.: SCS 0108

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Glossary:

TSL

N/A

tissue simulating liquid

ConvF

sensitivity in TSL / NORM x,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-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"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Measurement Conditions

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.6 ± 6 %	0.92 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	(200	

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.68 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.59 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.28 W/kg ± 16.5 % (k=2)

Certificate No: D835V2-499_Aug21 Page 3 of 6

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.6 Ω - 4.7 jΩ	
Return Loss	- 26.6 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	1.391 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: D835V2-499_Aug21 Page 4 of 6

DASY5 Validation Report for Head TSL

Date: 18.08.2021

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:499

Communication System: UID 0 - CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.92 \text{ S/m}$; $\varepsilon_r = 41.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(9.69, 9.69, 9.69) @ 835 MHz; Calibrated: 28.12.2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 63.97 V/m; Power Drift = -0.08 dB

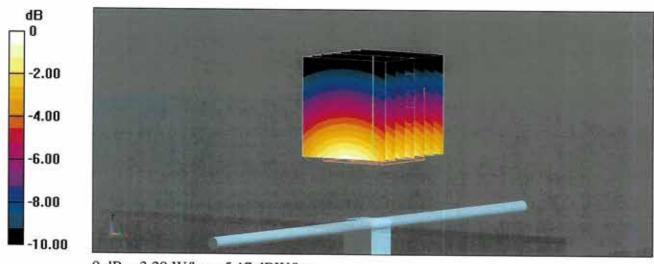
Peak SAR (extrapolated) = 3.71 W/kg

SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.59 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 66%

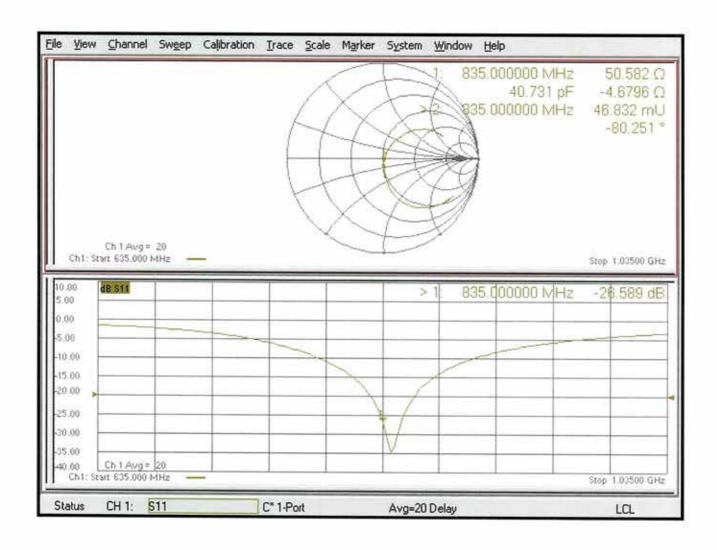
Maximum value of SAR (measured) = 3.29 W/kg



0 dB = 3.29 W/kg = 5.17 dBW/kg

Certificate No: D835V2-499_Aug21 Page 5 of 6

Impedance Measurement Plot for Head TSL





D835V2, serial no. 499 Extended Dipole Calibrations

Referring to KDB 865664, if dipoles are verified in return loss (<-20dB, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

<Justification of the extended calibration>

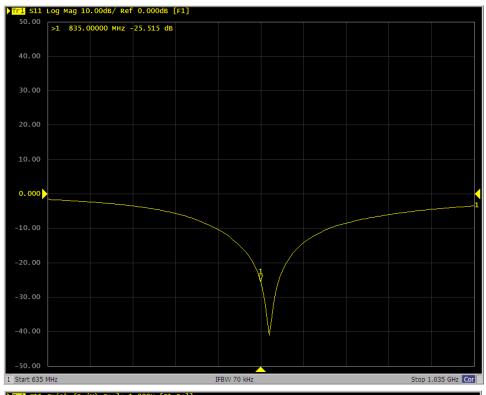
	D 835 V2 – serial no. 499					
		835MHZ				
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
08.18.2021	-26.589		50.582		-4.6796	
(Cal. Report)	-20.309		30.302		-4.0730	
08.17.2022	-25.515	-4.04	49.077	-1.505	-4.9045	-0.2249
(extended)	-25.515	-4.04	49.077	-1.505	-4.9045	-0.2249

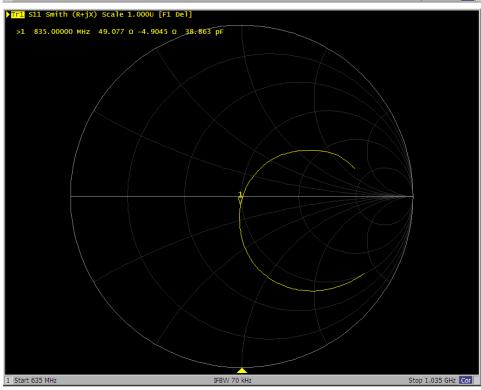
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

TEL: 886-3-327-3456 FAX: 886-3-328-4978



<Dipole Verification Data> - D835 V2, serial no. 499 (Data of Measurement : 08.17.2022) 835 MHz - Head





TEL: 886-3-327-3456 FAX: 886-3-328-4978

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Client

Sporton

Certificate No: D1750V2-1120_Mar22

CALIBRATION CERTIFICATE

Object D1750V2 - SN:1120

Calibration procedure(s) QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

March 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)

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	31-Dec-21 (No. EX3-7349_Dec21)	Dec-22
DAE4	SN: 601	01-Nov-21 (No. DAE4-601_Nov21)	Nov-22
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: MY41093315	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-22
	Name	Function	Signature
Calibrated by:	Aldonia Georgiadou	Laboratory Technician	. How
N COSCOPPINATOR VICE VI		10-00-00-00-00-00-00-00-00-00-00-00-00-0	X
Approved by:	Niels Kuster	Quality Manager	1/100

Issued: March 28, 2022

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Certificate No: D1750V2-1120 Mar22

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Glossary:

TSL

tissue simulating liquid

ConvF N/A sensitivity in TSL / NORM x,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-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"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Measurement Conditions

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

DASY Version	DASY52	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	1750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.1	1.37 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.0 ± 6 %	1.35 mha/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	9.02 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	36.4 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	4.76 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	19.1 W/kg ± 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, Iransformed to feed point	51.2 Ω + 0.1 jΩ
Return Loss	- 38.6 dB

General Antenna Parameters and Design

<u> </u>	
Electrical Delay (one direction)	1 217 ne
	7.217 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		İ	\$PEAC	3	
	·	!			

DASY5 Validation Report for Head TSL

Date: 25.03.2022

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1120

Communication System: UID 0 - CW; Frequency: 1750 MHz

Medium parameters used: f = 1750 MHz; $\sigma = 1.35$ S/m; $\epsilon_r = 40$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(8.67, 8.67, 8.67) @ 1750 MHz; Calibrated: 31.12.2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 01.11.2021

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

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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 = 105.7 V/m; Power Drift = 0.05 dB

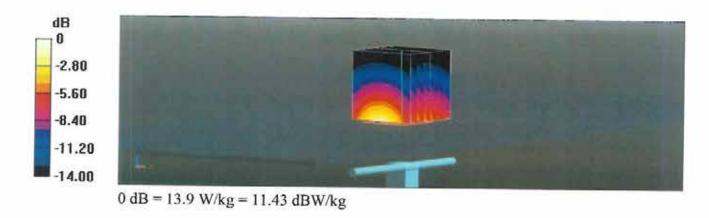
Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 9.02 W/kg; SAR(10 g) = 4.76 W/kg

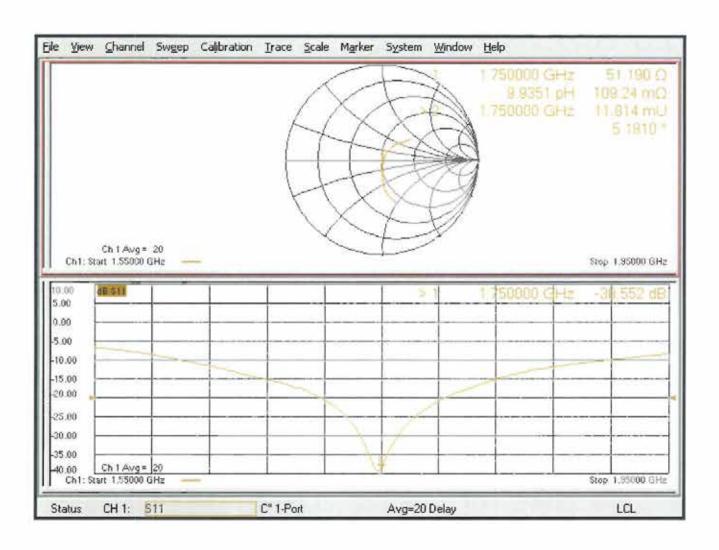
Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 13.9 W/kg



Impedance Measurement Plot for Head TSL





D1750V2, serial no. 1120 Extended Dipole Calibrations

Referring to KDB 865664, if dipoles are verified in return loss (<-20dB, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

<Justification of the extended calibration>

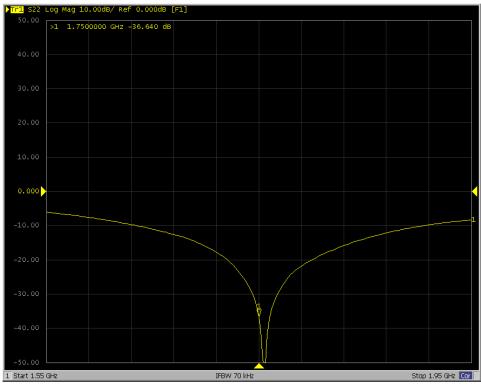
D 1750 V2 − serial no. 1120						
		1750MHZ				
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
03.25.2022	-38.552		51.19		0.10924	
(Cal. Report)	-30.332		01.10		0.10024	
03.24.2023	-36.64	-4.96	49.829	-1.361	-1.6279	-1.73714
(extended)	-30.04	-4.90	49.029	-1.301	-1.0279	-1./3/14

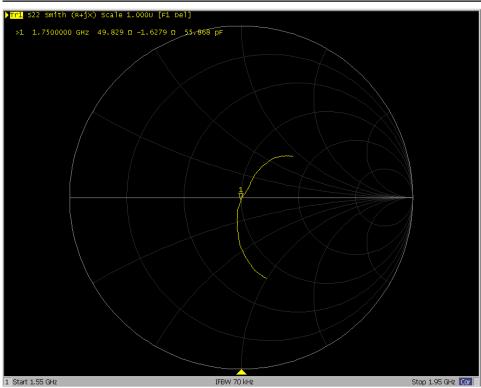
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

TEL: 886-3-327-3456 FAX: 886-3-328-4978



<Dipole Verification Data> - D1750 V2, serial no. 1120 (Data of Measurement : 03.24.2023) 1750 MHz - Head





TEL: 886-3-327-3456 FAX: 886-3-328-4978

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Accreditation No.: SCS 0108

Client

Sporton

Certificate No: D1900V2-5d185_Jun22

CALIBRATION CERTIFICATE

Object

D1900V2 - SN:5d185

Calibration procedure(s)

QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

June 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)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-22 (No. 217-03525/03524)	Apr-23
Power sensor NRP-Z91	SN: 103244	04-Apr-22 (No. 217-03524)	Apr-23
Power sensor NRP-Z91	SN: 103245	04-Apr-22 (No. 217-03525)	
Reference 20 dB Attenuator	SN: BH9394 (20k)	04-Apr-22 (No. 217-03527)	Apr-23
Type-N mismatch combination	SN: 310982 / 06327	04-Apr-22 (No. 217-03528)	Apr-23
Reference Probe EX3DV4	SN: 7349		Apr-23
DAE4	SN: 601	31-Dec-21 (No. EX3-7349_Dec21)	Dec-22
	[514. 001	02-May-22 (No. DAE4-601_May22)	May-23
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41093315	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972		In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
The state of the s	1 314. 0341080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-22
	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	MA
2000007-5457			(Wy
Approved by:	Sven Kühn	Technical Manager	81

Issued: June 20, 2022

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Swiss Calibration Service

Accreditation No.: SCS 0108

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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) 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"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Measurement Conditions

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

DASY Version	DASY52	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	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.6 ± 6 %	1.40 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	33.5	

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.82 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	39.0 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.12 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	20.4 W/kg ± 16.5 % (k=2)

Certificate No: D1900V2-5d185_Jun22

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

mpedance, transformed to feed point	52.7 Ω + 3.9 jΩ		
Return Loss	- 26.7 dB		

General Antenna Parameters and Design

Fig. 15 (Fig. 1)	
Electrical Delay (one direction)	1.203 ns
	1.205 113

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 to	
Manufactured by	SPEAG
	SPEAG

Certificate No: D1900V2-5d185_Jun22 Page 4 of 6

DASY5 Validation Report for Head TSL

Date: 17.06.2022

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d185

Communication System: UID 0 - CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(8.43, 8.43, 8.43) @ 1900 MHz; Calibrated: 31.12.2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.05.2022

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

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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 = 108.9 V/m; Power Drift = 0.08 dB

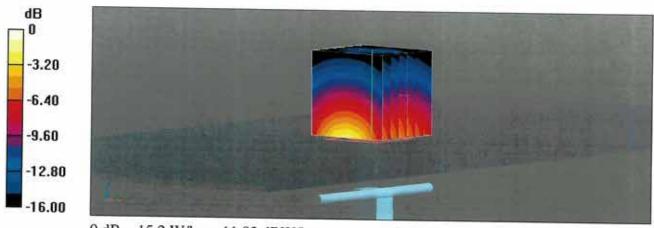
Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.82 W/kg; SAR(10 g) = 5.12 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

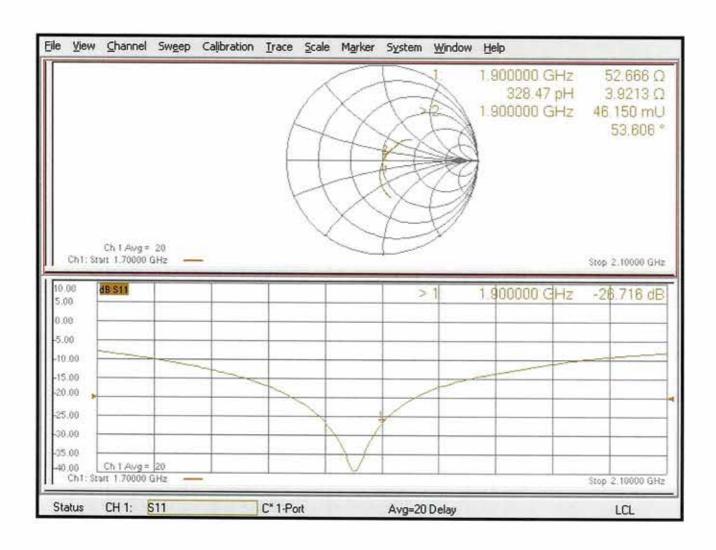
Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

Impedance Measurement Plot for Head TSL



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





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Accreditation No.: SCS 0108

Client

Sporton

Certificate No: D2600V2-1078 Jun22

CALIBRATION CERTIFICATE

Object D2600V2 - SN:1078

Calibration procedure(s) QA CAL-05.v11

Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date:

June 23, 2022

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-22 (No. 217-03525/03524)	Apr-23
Power sensor NRP-Z91	SN: 103244	04-Apr-22 (No. 217-03524)	Apr-23
Power sensor NRP-Z91	SN: 103245	04-Apr-22 (No. 217-03525)	Apr-23
Reference 20 dB Attenuator	SN: BH9394 (20k)	04-Apr-22 (No. 217-03527)	Apr-23
Type-N mismatch combination	SN: 310982 / 06327	04-Apr-22 (No. 217-03528)	Apr-23
Reference Probe EX3DV4	SN: 7349	31-Dec-21 (No. EX3-7349_Dec21)	Dec-22
DAE4	SN: 601	02-May-22 (No. DAE4-601_May22)	May-23
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: MY41093315	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-22
	Name	Function	Signature
Calibrated by:	Joanna Lleshaj	Laboratory Technician	Aplany
Approved by:	Sven Kühn	Technical Manager	

Issued: June 24, 2022

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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) 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"

Additional Documentation:

c) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Certificate No: D2600V2-1078_Jun22 Page 2 of 6

Measurement Conditions

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

DASY52	V52.10.4
Advanced Extrapolation	
Modular Flat Phantom	
10 mm	with Spacer
dx, dy, dz = 5 mm	
2600 MHz ± 1 MHz	
	Advanced Extrapolation Modular Flat Phantom 10 mm dx, dy, dz = 5 mm

Head TSL parameters

The following parameters and calculations were applied.

	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	37.8 ± 6 %	2.01 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	14.1 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	55.4 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.29 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.9 W/kg ± 16.5 % (k=2)

Certificate No: D2600V2-1078_Jun22

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.2 Ω - 7.3 jΩ	
Return Loss	- 22.6 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	1.153 ns
	11177.113

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
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Certificate No: D2600V2-1078_Jun22 Page 4 of 6

DASY5 Validation Report for Head TSL

Date: 23.06.2022

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1078

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

Medium parameters used: f = 2600 MHz; $\sigma = 2.01$ S/m; $\varepsilon_r = 37.8$; $\rho = 1000$ kg/m³

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: 31.12.2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 02.05.2022

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

DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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 = 117.7 V/m; Power Drift = 0.07 dB

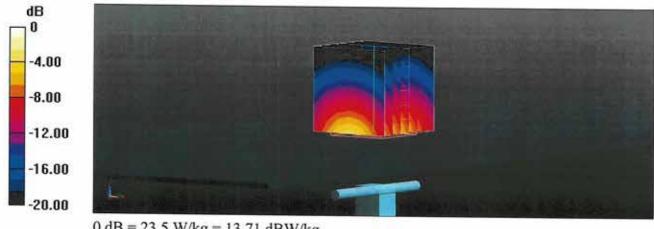
Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.29 W/kg

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

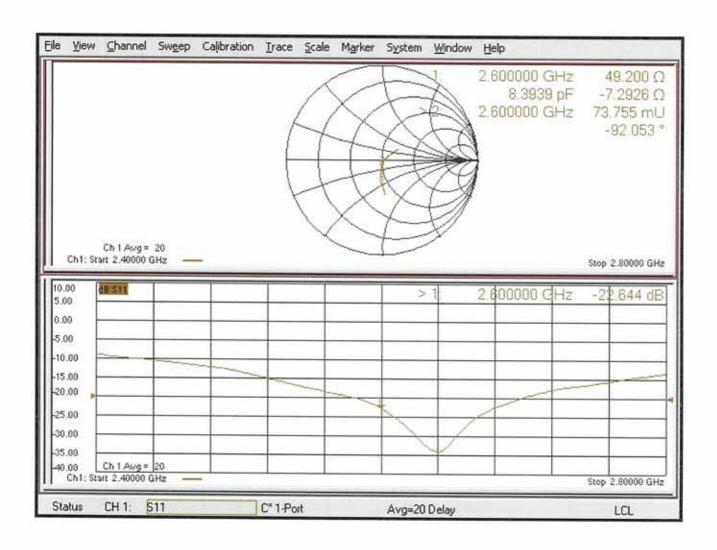
Ratio of SAR at M2 to SAR at M1 = 50.5%

Maximum value of SAR (measured) = 23.5 W/kg



0 dB = 23.5 W/kg = 13.71 dBW/kg

Impedance Measurement Plot for Head TSL



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





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Client

Sporton

Accreditation No.: SCS 0108

Certificate No: DAE4-1399_Feb23

CALIBRATION CERTIFICATE

Object DAE4 - SD 000 D04 BM - SN: 1399

Calibration procedure(s) QA CAL-06.v30

Calibration procedure for the data acquisition electronics (DAE)

Calibration date:

February 21, 2023

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	29-Aug-22 (No:34389)	Aug-23
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	27-Jan-23 (in house check)	In house check: Jan-24
Calibrator Box V2.1	SE UMS 006 AA 1002	27-Jan-23 (in house check)	In house check: Jan-24

Calibrated by:

Name

Function

Adrian Gehring

Laboratory Technician

Approved by:

Sven Kühn

Technical Manager

Issued: February 21, 2023

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Certificate No: DAE4-1399_Feb23

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Accreditation No.: SCS 0108

Glossary

DAE data acquisition electronics

Connector angle information used in DASY system to align probe sensor X to the robot

coordinate system.

Methods Applied and Interpretation of Parameters

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

Certificate No: DAE4-1399_Feb23 Page 2 of 5

DC Voltage Measurement

A/D - Converter Resolution nominal

Calibration Factors	X	Y	z
High Range	403.622 ± 0.02% (k=2)	403.881 ± 0.02% (k=2)	403.735 ± 0.02% (k=2)
Low Range	3.98246 ± 1.50% (k=2)	3.99160 ± 1.50% (k=2)	3.98090 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	302.5 ° ± 1 °
---	---------------

Certificate No: DAE4-1399_Feb23 Page 3 of 5

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range		Reading (μV)	Difference (μV)	Error (%)
Channel X	+ Input	199992.42	-1.17	-0.00
Channel X	+ Input	20002.95	0.85	0.00
Channel X	- Input	-19999.65	2.01	-0.01
Channel Y	+ Input	199991.96	-1.74	-0.00
Channel Y	+ Input	20000.54	-1.41	-0.01
Channel Y	- Input	-20002.19	-0.43	0.00
Channel Z	+ Input	199992.69	-0.80	-0.00
Channel Z	+ Input	19999.92	-1.90	-0.01
Channel Z	- Input	-20002.51	-0.65	0.00

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2000.94	-0.18	-0.01
Channel X + Input	201.82	0.30	0.15
Channel X - Input	-198.14	0.31	-0.16
Channel Y + Input	2000.92	-0.01	-0.00
Channel Y + Input	201.06	-0.31	-0.15
Channel Y - Input	-199.01	-0.46	0.23
Channel Z + Input	2000.63	-0.24	-0.01
Channel Z + Input	200.20	-1.04	-0.51
Channel Z - Input	-199.67	-1.03	0.52

2. Common mode sensitivity

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

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-4.96	-6.92
	- 200	8.28	6.15
Channel Y	200	-5.63	-5.74
	- 200	5.09	4.50
Channel Z	200	-6.81	-7.06
	- 200	4.30	4.78

3. Channel separation

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

	Input Voltage (mV)	Channel X (μV)	Channel Y (µV)	Channel Z (μV)
Channel X	200	F	5.30	-2.24
Channel Y	200	9.23		5.47
Channel Z	200	8.40	7.21	

Certificate No: DAE4-1399_Feb23

4. AD-Converter Values with inputs shorted

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

	High Range (LSB)	Low Range (LSB)
Channel X	15809	14353
Channel Y	16128	17531
Channel Z	15878	15052

5. Input Offset Measurement

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

Input 10MΩ

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	0.63	-0.15	1.58	0.32
Channel Y	0.11	-1.36	1.12	0.37
Channel Z	-0.36	-1.29	0.61	0.39

6. Input Offset Current

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

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

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

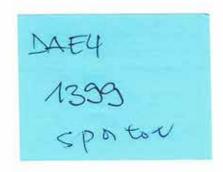
Typical values	Alarm Level (VDC)	
Supply (+ Vcc)	+7.9	
Supply (- Vcc)	-7.6	

9. Power Consumption (Typical values for information)

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

Zeughausstrasse 43, 8004 Zurich, Switzerland Phone +41 44 245 9700, Fax +41 44 245 9779 www.speag.swiss, info@speag.swiss

IMPORTANT NOTICE



USAGE OF THE DAE4

The DAE unit is a delicate, high precision instrument and requires careful treatment by the user. There are no serviceable parts inside the DAE. Special attention shall be given to the following points:

Battery Exchange: The battery cover of the DAE4 unit is fixed using a screw, over tightening the screw may cause the threads inside the DAE to wear out.

Shipping of the DAE: Before shipping the DAE to SPEAG for calibration, remove the batteries and pack the DAE in an antistatic bag. This antistatic bag shall then be packed into a larger box or container which protects the DAE from impacts during transportation. The package shall be marked to indicate that a fragile instrument is inside.

E-Stop Failures: Touch detection may be malfunctioning due to broken magnets in the E-stop. Rough handling of the E-stop may lead to damage of these magnets. Touch and collision errors are often caused by dust and dirt accumulated in the E-stop. To prevent E-stop failure, the customer shall always mount the probe to the DAE carefully and keep the DAE unit in a non-dusty environment if not used for measurements.

Repair: Minor repairs are performed at no extra cost during the annual calibration. However, SPEAG reserves the right to charge for any repair especially if rough unprofessional handling caused the defect.

DASY Configuration Files: Since the exact values of the DAE input resistances, as measured during the calibration procedure of a DAE unit, are not used by the DASY software, a nominal value of 200 MOhm is given in the corresponding configuration file.

Important Note:

Warranty and calibration is void if the DAE unit is disassembled partly or fully by the Customer.

Important Note:

Never attempt to grease or oil the E-stop assembly. Cleaning and readjusting of the Estop assembly is allowed by certified SPEAG personnel only and is part of the annual calibration procedure.

Important Note:

To prevent damage of the DAE probe connector pins, use great care when installing the probe to the DAE. Carefully connect the probe with the connector notch oriented in the mating position. Avoid any rotational movement of the probe body versus the DAE while turning the locking nut of the connector. The same care shall be used when disconnecting the probe from the DAE.

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S Swiss Calibration Service

Accreditation No.: SCS 0108

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Client

Sporton

Certificate No

EX-7694_Nov22

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7694

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

November 15, 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-22 (OCP-DAK3.5-1249_Oct22)	Oct-23
OCP DAK-12	SN: 1016	20-Oct-22 (OCP-DAK12-1016_Oct22)	Oct-23
Reference 20 dB Attenuator	SN: CC2552 (20x)	04-Apr-22 (No. 217-03527)	Apr-23
DAE4	SN: 660	10-Oct-22 (No. DAE4-660_Oct22)	Oct-23
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-22)	In house check: Oct-24

Name Function Signature
Calibrated by Leif Klysner Laboratory Technician Sep May
Approved by Sven Kühn Technical Manager

Issued: November 15, 2022

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

Calibration Laboratory of

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Swiss Calibration Service

Accreditation No.: SCS 0108

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Glossary

TSL tissue simulating liquid NORMx,y,z sensitivity in free space ConvF sensitivity in TSL / NORMx,y,z DCP diode compression point

CF crest factor (1/duty_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters

Polarization φ φ rotation around probe axis

 θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is Polarization ∂

normal to probe axis

information used in DASY system to align probe sensor X to the robot coordinate system Connector Angle

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
- 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 $f \le 800\,\mathrm{MHz}$) and inside waveguide using analytical field distributions based on power measurements for $f > 800\,\mathrm{MHz}$. 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).

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Parameters of Probe: EX3DV4 - SN:7694

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm (μV/(V/m) ²) ^A	0.67	0.72	0.56	±10.1%
DCP (mV) B	103.6	106.0	109.0	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Max dev.	Max Unc ^E k = 2
0	cw	X	0.00	0.00	1.00	0.00	145.5	±3.3%	±4.7%
		Y	0.00	0.00	1.00		155.4	CELESTICS.	- ESPECIAL SE
10050		Z	0.00	0.00	1.00		157.2	1	
10352	Pulse Waveform (200Hz, 10%)	X	1.44	60.03	5.70	10.00	60.0	±3.4%	±9.6%
		Y	1.38	60.00	5.91		60.0		
		Z	1.65	61.28	6.68		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	0.78	60.00	4.32	6.99	80.0	±2.5%	±9.6%
		Y	54.00	76.00	9.00		80.0		200
1100-1		Z	0.83	60.00	4.97		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	4.98	114.22	0.05	3.98	95.0	±2.8%	±9.6%
	The state of the formation of the state of t	Y	0.55	159.90	20.49		95.0		
		Z	0.02	124.52	0.11		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	6.55	158.79	1.15	2.22	120.0	±1.9%	±9.6%
	and the second of the control of the	Y	8.62	130.00	11.24		120.0		
manage.		Z	9.57	158.41	10.95		120.0		
10387	QPSK Waveform, 1 MHz	X	0.52	62.22	10.75	1.00	150.0	±4.5%	±9.6%
		Y	0.82	66.53	13.42	1110000	150.0		
		Z	0.53	62.89	11.05		150.0		
10388	QPSK Waveform, 10 MHz	X	1.25	64.37	13.04	0.00	150.0	±1.2%	±9.6%
	The state of the s	Y	1.53	66.55	14.54	2000 mm (C)	150.0		20,0,0
	Andrew Service Control of the Contro	Z	1.27	64.86	13.13		150.0		
10396	64-QAM Waveform, 100 kHz	X	1.50	63.04	15.40	3.01	150.0	±1.3%	±9.6%
	V Company	Y	1.74	65.24	16.50	(i	150.0		20.070
		Z	1.79	65.55	16.35	1	150.0		
10399	64-QAM Waveform, 40 MHz	X	2.74	65.47	14.61	0.00	150.0	±2.6%	±9.6%
		Y	2.98	66.50	15.28	10 E3557	150.0		_0.070
		Z	2.77	65.84	14.71	-	150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.96	66.00	15.29	0.00	150.0	±4.5%	±9.6%
		Y	4.06	65.97	15.42	2,000	150.0		
		Z	3.79	65.60	14.99		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%.

Certificate No: EX-7694_Nov22

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:7694

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms V ⁻²	T2 msV ⁻¹	T3 ms	T4 V-2	T5 v-1	Т6
X	11.5	84.41	34.49	0.92	0.00	4.90	0.00		
у	13.0	95.33	34.19	2.80	0.00			0.01	1.01
z	10.6	76.81	33.47		The Section of the Se	4.90	0.44	0.00	1.00
-	10.0	70.01	33.47	4.73	0.00	4.94	0.64	0.00	1.00

Other Probe Parameters

Sensor Arrangement	T-1
Connector Angle	Triangular
Mechanical Surface Detection Mode	-95.9°
Optical Surface Detection Mode	enabled
Probe Overall Length	disabled
	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
	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.

Certificate No: EX-7694_Nov22

Parameters of Probe: EX3DV4 - SN:7694

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)
750	41.9	0.89	9.82	9.82	9.82	0.43	0.80	±12.0%
835	41.5	0.90	9.57	9.57	9.57	0.47	0.80	±12.0%
1750	40.1	1.37	8.86	8.86	8.86	0.33	0.86	±12.0%
1900	40.0	1.40	8.42	8.42	8.42	0.32	0.86	±12.0%
2300	39.5	1.67	8.00	8.00	8.00	0.30	0.90	±12.0%
2450	39.2	1.80	7.74	7.74	7.74	0.30	0.90	±12.0%
2600	39.0	1.96	7.47	7.47	7.47	0.41	0.90	±12.0%
3300	38.2	2.71	7.05	7.05	7.05	0.30	1.35	±14.0%
3500	37.9	2.91	6.95	6.95	6.95	0.30	1.35	±14.0%
3700	37.7	3.12	6.94	6.94	6.94	0.40	1.45	±14.0%
3900	37.5	3.32	6.87	6.87	6.87	0.40	1.65	±14.0%
4100	37.2	3.53	6.65	6.65	6.65	0.40	1.65	±14.0%
4200	37.1	3.63	6.21	6.21	6.21	0.40	1.60	±14.0%
4400	36.9	3.84	6.18	6.18	6.18	0.40	1.60	±14.0%
4600	36.7	4.04	6.12	6.12	6.12	0.40	1.60	±14.0%
4800	36.4	4.25	6.02	6.02	6.02	0.40	1.80	±14.0%
4950	36.3	4.40	5.84	5.84	5.84	0.40	1.80	±14.0%
5250	35.9	4.71	5.28	5.28	5.28	0.40	1.80	±14.0%
5600	35.5	5.07	4.66	4.66	4.66	0.40	1.80	±14.0%
5750	35.4	5.22	4.86	4.86	4.86	0.40	1.80	±14.0%

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.

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assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

At frequencies up to 6 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±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 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:7694

Calibration Parameter Determined in Head Tissue Simulating Media

(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	5.25	5.25	5.25	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

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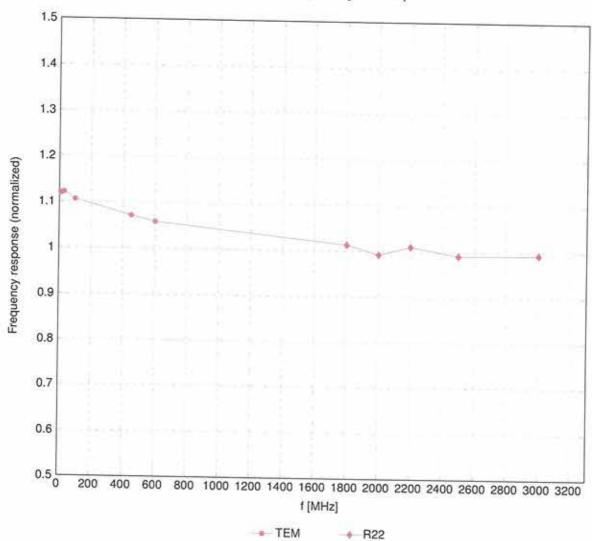
frequency and the uncertainty for the indicated frequency band.

At frequencies 6–10 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±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.

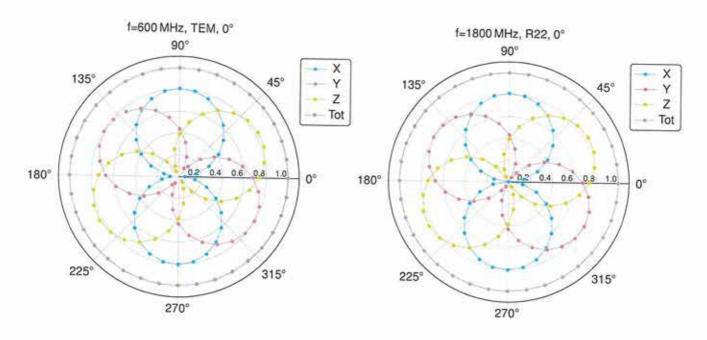
Frequency Response of E-Field

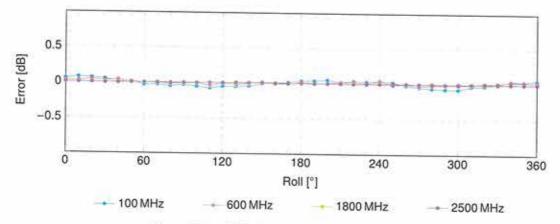
(TEM-Cell:ifi110 EXX, Waveguide:R22)



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

Receiving Pattern (ϕ), ϑ = 0°

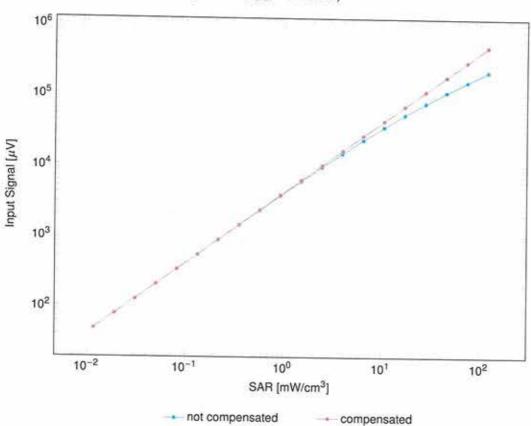


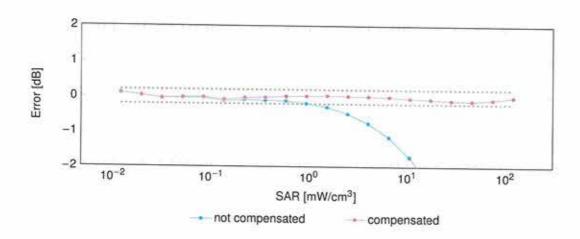


Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range f(SAR_{head})

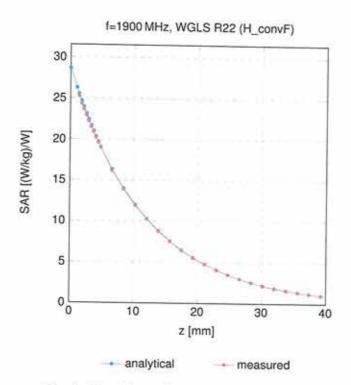
(TEM cell, f_{eval} = 1900 MHz)



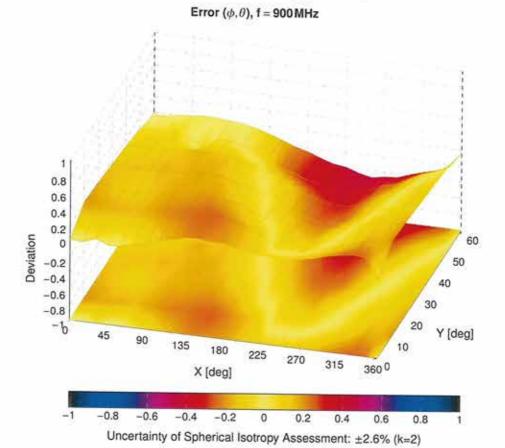


Uncertainty of Linearity Assessment: ±0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid



Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = :
0		CW	CW	0.00	The second secon
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±4.7
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1000000	±9.6
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	1.87	±9.6
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.46	±9.6
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.39	±9.6
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	9.57	±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)	GSM	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)	GSM	3.55	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	7.78	±9.6
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)		5.30	±9.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.87	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	1.16	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	7.74	±9.6
10035	CAA	IEEE 802:15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	4.53	±9.6
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	3.83	±9.6
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	8.01	±9.6
10038	CAA	IEEE 802.15,1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.77	±9.6
10039	CAB	CDMA2000 (1xRTT, RC1)	Bluetooth	4.10	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	CDMA2000	4.57	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	7.78	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	AMPS	0.00	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	13.80	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	DECT	10.79	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	TD-SCDMA	11.01	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	GSM	6.52	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.12	±9.6
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	3.60	±9.6
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.68	±9.6
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mops)	WLAN	8.63	±9.6
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
10066	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10068	CAD	IEEE 803 11a/h WIELE CULL (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.24	±9.6
-	CAB	IEEE 902.11a M/FI 3.4 CU (DDM, 54 Mbps)	WLAN	10.56	±9.6
-	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
A committee of the comm	2000	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12Mbps)	WLAN	9.62	±9.6
-	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
-	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
and the same of	N 21 NOT 1	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
-	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
-	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
	-	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
-	DAC	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
-		GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
-		UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
-		UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
-	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
-	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
-	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
-	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
-	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
-	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
-	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
-	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
-	CAH	LTE-FDD (SC-FDMA, 100% RB, 5MHz, QPSK)	LTE-FDD	5.75	±9.6
0111 1	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

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UID	Rev	Communication System Name	Group	PAR (dB)	$Unc^{E} k = 2$
10112	CAH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LTE-FDD	6.59	±9.6
10113	72.5	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	LTE-FDD	6.62	±9.6
10114	-	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAD	The state of the s	WLAN	8.46	±9.6
10117	CAD	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10118	CAD	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
10119	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10110	CAF	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.35	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.41	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10152	CAH		LTE-TDD	9.28	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM) LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)	LTE-TDD	9.92	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	5.75	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-FDD	6.43	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-FDD	5.79	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	6.56	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	5.82	±9.6
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.43	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	6.58	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	5.46	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.21	±9.6
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	6.79	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	5.73	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.52	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	6.49	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.21	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TOD	9.48	±9.6
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TOD LTE-FDD	10.25	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	5.72	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, OPSK)	LTE-FDD	6.52 5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-FDD	-	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.52	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FOD		±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10193	CAD	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	CAD	IEEE 802,11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	CAD	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAD	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	CAD	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198	CAD	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	CAD	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	CAD	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	CAD	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	CAD	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10225	-	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10232	CAE	The state of the s	LTE-TDD	9.19	±9.6
10232	CAH	The test to the te	LTE-TDD	9.48	±9.6
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 5MHz, QPSK)	LTE-TDD	9.21	±9.6
10236	CAH	The test to the te	LTE-TDD	9.48	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-TDD	9.21	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK)	LTE-TDD	9.30	±9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-TDD	9.91	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM) LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-TDD	10.09	±9.6
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.29	±9.6
10251	CAH	LTE-TDD (SC-PDMA, 50% RB, 10 MHz, 16-QAM) LTE-TDD (SC-PDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	9.81	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	10.17	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.24	±9.6
10254	CAG	LTE-TOD (SC-FDMA, 50% MB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.96	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 84-QAM)	LTE-TDD	10.08	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.34	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.98	±9.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK)	LTE-TOD	9.97	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM)	LTE-TDD	9.24	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	9.83	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	10.16	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.23	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	9.92	±9.6
10267		LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TOD	10.07	±9.6
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)	LTE-TDD	9.30	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-TDD	10.13	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	LTE-TDD	9.58	±9.6
10275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10277	CAA	PHS (QPSK)	WCDMA	3.96	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
10279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	11.81	±9.6
10290	AAB	CDMA2000, RC1, SO55, Full Rate	PHS	12.18	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.91	±9.6
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.46	±9.6
0293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.39	±9.6
0295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	3.50	±9.6
0297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	CDMA2000	12.49	±9.6
0298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.81	±9.6
0299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	5.72	±9.6
0300	15,50,50	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.39	±9.6
0301	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	LTE-FDD	6.60	±9.6
0302	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.03	±9.6
0303	AAA	IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	12.57	±9.6
0304		IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6
0305	AAA	IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	11.86	±9.6
0306	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	±9.6
120000000000000000000000000000000000000	3583	Times, Ionia, Ionia, Ionia, Posc, 18 sympols)	WiMAX	14.67	±9.6

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10307	-	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	±9.6
10308		IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
10309	-	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	±9.6
10310	1,000	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-FDD	6.06	±9.6
10313	-	IDEN 1:3	iDEN	10.51	±9.6
10314	2000	IDEN 1:6	IDEN	13.48	±9.6
10315		IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	-	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10317	AAD	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	-	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	±9.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	±9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	±9.6
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
10400	AAE	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
10401	AAE	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
10402	AAE	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	±9.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	±9.6
10422	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAC	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAC	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAC	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAC	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
440000000000000000000000000000000000000	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FOD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.82	±9.6
-	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
10450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAC	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAB	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAC	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10465	AAD	LTE-TOD (SC-FDMA, 1 RB, 3 MHz, OPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10466	AAG	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10468	-	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10469	AAG AAG	LTE-TDD (SC-FDMA, 1 RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10470	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
17992	MAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10472		LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10473	V	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.82	±9.6
10474		LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2 3 4 7 8 9)	LTE-TDD	8.32	±9.6
10475	7.0	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10477	1000	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10478	1.0.10	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2 3 4 7 8 9)	LTE-TDD	8.57	±9.6
10479	1 11 110	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.74	±9.6
10480		LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.18	±9.6
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2.3 4.7.8.9)	LTE-TDD	8.45	±9.6
10482	10.10	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7,71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.38	±9.6
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±9.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.70	±9.6
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.31	±9.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2.3,4.7.8.9)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-OAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.37	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.54	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.67	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe = 2.3.4.7.8.9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.52	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2.3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TOD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2.3,4.7,8.9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.45	±9.6
10515	-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1,58	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10519	AAC	IEEE 802.11a/n WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
10520	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10521	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	±9.6
10522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
10525	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
10526	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
10528	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
10531	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.6
10532	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.6
10534	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6
10535	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
10536	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6
10537	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10541		IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	
10542		IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
10543		IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6
10544		IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
10545	11.00	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10546		IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
10547		IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6
10548		IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)	WLAN		±9.6
10550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.37 8.38	±9.6
10551	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6
10552	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6
10553	-	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6
10554	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.48	±9.6
10555	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
10556	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.50	±9.6
10557	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.52	±9.6
10558	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.61	±9.6
10560	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.73	
10561	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
10562	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6
10563	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.6
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6 ±9.6
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	±9.6
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	±9.6
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	±9.6
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10583	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10584	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10585	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10587	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10589	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10590	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10591	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±9.6
10592	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10593	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
10594	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10595	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
10596	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
10597	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6
10598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6
10599	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
10600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10601	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6
10602	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6
10603	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
10604	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6
10605	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6
10606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10607	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6
	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6

10609	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10610	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
10612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10613	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.77	±9.6
10614	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.94	±9.6
10615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.59	±9.6
10616	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
10617	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.82	±9.6
10618	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.81	±9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.58	±9.6
10620	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.86	±9.6
10621	AAC	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.87	±9.6
10622	AAC	IEEE 802.11ac WiFi (40 MHz, MCSS, Supe duty cycle)	WLAN	8.77	±9.6
10623	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.68	±9.6
10624	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10625	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6
10626	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.96	±9.6
10627	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.83	±9.6
10628	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.88	±9.6
10629	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.71	±9.6
10630	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.85	±9.6
10631	AAC	IEEE 802:11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.72	±9.6
10632	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.81	±9.6
10633	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duly cycle)	WLAN	8.74	±9.6
10634	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.83	±9.6
10635	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.6
10636	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6
10637	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.83	±9.6
10638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.79	±9.6
10639	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6
10640	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.85	±9.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.98	±9.6
10642	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	9.06	±9.6
10644	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	±9.6
10645	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.05	±9.6
10646	AAH	LTE-TDD (SC-FDMA, 1 R8, 5 MHz, QPSK, UL Subframe=2,7)	WLAN	9.11	±9.6
10647	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TOD	11.96	±9.6
10648	AAA	CDMA2000 (1x Advanced)	LTE-TDD	11.96	±9.6
10652	AAF	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	CDMA2000 LTE-TDD	3.45	±9.6
10653	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	6.91	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)		7.42	±9.6
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	6.96	±9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	7.21	±9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	10.00	±9.6
10660	AAB	Pulse Waveform (200Hz, 40%)	Test	6.99	±9.6
10661	AAB	Pulse Waveform (200Hz, 60%)	Test	3.98	±9.6
10662	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	±9.6
10670	AAA	Bluetooth Low Energy	Bluetooth		±9.6
10671	AAC	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	2.19	±9.6
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	9.09	±9.6
10673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN		±9.6
10674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
10675	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
10676	AAC	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6
10677	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.77	±9.6
10678	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.73	±9.6
	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	±9.6
10679	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN		±9.6
10680	-	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.80	±9.6
10680	AAC		YYLAN	8.62	±9.6
10680 10681	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	MUAN	0.00	100
10680 10681 10682	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6
10680 10681 10682 10683	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10680 10681 10682 10683 10684	AAC AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)			The state of the s

UID 10687	AAC	Communication System Name	Group	PAR (dB)	UncE k = 2
	-	IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6
10688		IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6
		IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.55	±9.6
10690	-	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10691	AAC	IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6
10692		IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.29	±9.6
10693		IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	8.57	±9.6
10695		IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.6
10696	AAC	IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.91	±9.6
10697	AAC	IEEE 802.11ax (40 MHz, MCS2, 90pc duly cycle)	WLAN	8.61	±9.6
10698	AAC	IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.6
10699	AAC	IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.82	±9.6
10701	AAC	IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6
-	AAC	IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.86	±9.6
0702	AAC	IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.70	±9.6
0703	AAC	IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
0704	AAC	IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.56	±9.6
0705	AAC	IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle)	WLAN	8.69	±9.6
0706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle)	WLAN	8.66	±9.6
0707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.32	±9.6
0708	AAC	IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
0709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
0710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6
0711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
0712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	±9.6
0713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6
0714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.26	±9.6
0715	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.45	±9.6
0716	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6
0717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6
0718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	8.24	±9.6
0719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6
0720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.87	±9.6
0721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6
0722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6
0723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
0724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6
0725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
0726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6
0727	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.66	±9.6
0728	AAC	IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.65	±9.6
0729	-	IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle)	WLAN	8.64	±9.6
0730	AAC	IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle)	WLAN	8.67	±9.6
0731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
0732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.46	±9.6
0733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	±9.6
0734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
0735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.33	±9.6
0736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	8.27	±9.6
737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	±9.6
0738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	±9.6
0739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	±9.6
740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
0741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	8.40	±9.6
0742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	8.43	±9.6
0743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.94	±9.6
0744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle)	WLAN	9.16	±9.6
745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.93	±9.6
746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle)	WLAN	9.11	±9.6
747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle)	WLAN	9.04	±9.6
0748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.93	±9.6
749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle)	WLAN	8.90	±9.6
750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.79	±9.6
751	AAC	IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
752	AAC	IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle)	1.00000000	WINE.	10.0

UID 10753	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10754		IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.00	±9.6
10755	2.00	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	8.94	±9.6
10756		IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle) IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.64	±9.6
10757		IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.77	±9.6
10758	7.0.70	IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.77	±9.6
10759		IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.69	±9.6
10760		IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle)	WLAN	8.58	±9.6
10761		IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.49	±9.6
10762	-117	IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.58	±9.6
10763		IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.49	±9.6
10764		IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.53	±9.6
10765	17.11.34	IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle)	WLAN	8.54	±9.6
10766		IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle)	WLAN	8.54	±9.6
10767		SG NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	WLAN	8.51	±9.6
10768		5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	±9.6
10769		5G NR (CP-OFDM, 1 RB, 15MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10770		5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10771		5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10772		5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	±9.6
10774		5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±9.6
10775		5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10776	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8,31	±9.6
10777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
10778	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
10779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±9.6
10780	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6
10781	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10783	AAE	5G NR (CP-OFDM, 100% RB, 5MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6
10784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
10785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6
10786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	±9.6
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	±9.6
10788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6
10789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±9.6
10790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	±9.6
10791	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	±9.6
10792	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±9.6
10793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±9.6
10794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±9.6
10795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±9.6
10797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±9.6
10799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10802	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	-	±9.6
10805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34 8.37	±9.6
10809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		±9.6
10810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34 8.34	±9.6
10812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10817	AAE	5G NR (CP-OFDM, 100% RB, 5MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6 ±9.6
10819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
10820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±9.6
10821	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	-
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10823	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±9.6
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		±9.6
10825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	±9.6
	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10827	1 0 100				

UID 10829	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10830		5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	±9.6
10831	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	±9.6
10832		5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	±9.6
10833	0.000	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	±9.6
10834	15,000	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10835		5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±9.6
10836	7.57.00	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10837	0.00	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	±9.6
10839	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	±9.6
10840	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz) 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10841	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	±9.6
10843	AAD	5G NR (CP-OFDM, 1 HB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	±9.6
10844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±9.6
10846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10854	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10855	AAD	5G NR (CP-OFDM, 100% RB, 15MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10856	AAD	5G NP (CP OFDM, 100% PB, 15MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
10857	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
10858	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	±9.6
10859	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
10860	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10861	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10863	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	±9.6
10864	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10865	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
10866	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10868	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10869	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	±9.6
10870	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10871	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
10872	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10873	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	±9.6
10874	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10875	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10876	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
10878	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	±9.6
10879	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
10880	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
10881	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.38	±9.6
10882	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10883		5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.96	±9.6
10884	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	±9.6
10885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
10886	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10888	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
10890	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	±9.6
10891	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
10892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	±9.6
10897	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR2 TDD	8.41	±9.6
10898	AAB	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±9.6
10899	AAB	5G NR (DFT-s-OFDM, 1 RB, 15MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10900	AAB	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10901	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10902	AAB	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10904	AAB	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0905	AAB	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0906	AAB	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0907	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0908	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	±9.6
0909	2.72	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
0910	AAB	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	±9.6
A-15-W	100	TO OT OTTO, SO MINZ, QPSN, 30 KHZ)	5G NR FR1 TDD	5.83	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10911	2,37,340	THE TOTAL TIES, ESTIMAZ, CITSK, 30 KHZ)	5G NR FR1 TDD	5.93	±9.6
10912		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	5G NR FR1 TDD	5.84	±9.6
10913		The state of the s	5G NR FR1 TDD	5.84	±9.6
10914		5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	-
10915		5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
10916		5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10917	-	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	0.00000	±9.6
10918	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
10919	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, OPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10920	AAB	5G NR (DFT-s-OFDM, 100% RB, 15MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10921	-	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10922		5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10923		5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	±9.6
10924	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10925	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10926	AAB	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	±9.6
10927	AAB	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)		5.84	±9.6
10928	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	5,94	±9.6
10929	AAC	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10930	AAC	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10931	AAC	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
0932	AAC	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10933	AAC	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
0934	AAC	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10935	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10937	AAC	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10938	AAC	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	±9.6
0939	AAC	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10940	AAC	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
0941	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
0942	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
10943	AAD	SG NP (DET a OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
0944	AAC	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	±9.6
0945	AAC	5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
0946	AAC	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
0947	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
0948	AAC	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
0949	AAC	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
0950	AAC	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
0951	AAD	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
0952	AAA	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	±9.6
0954	Complete Service Company	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	±9.6
2.00	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
0955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	±9.6
0956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	±9.6
0957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	±9.6
0958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
0959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	±9.6
0960	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
0961	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	±9.6
0962	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	±9.6
0963	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	±9.6
0964	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	±9.6
0965	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
0966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
0967	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	±9.6
968	AAB	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	±9.6
0972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59	±9.6
0973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06	
0974	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	-	±9.6
0978	AAA	ULLA BDR	ULLA	10.28	±9.6
979	AAA	ULLA HDR4	100000000000000000000000000000000000000	1.16	±9.6
980	AAA	ULLA HDR8	ULLA	8.58	±9.6
981	AAA	ULLA HDRp4	ULLA	10.32	±9.6
0982	AAA	ULLA HDRp8	ULLA	3.19	±9.6
_			ULLA	3.43	±9.6

Rev	Communication System Name			
AAA	5G NR DL /CP-OEDM TM 2.1 40MU- C4 CAM 45 111			UncE k = 2
	Land Control of the C	5G NR FR1 TDD	9.31	±9.6
- C - C - C - C - C - C - C - C - C - C	The state of the s	5G NR FR1 TDD	9.42	±9.6
AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)		- 1000 P. 100	±9.6
AAA	5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-OAM, 30 kHz)		17005091	±9.6
AAA	5G NR DL (CP-OEDM TM 2.1. 70 MHz 04 OAM 00 MHz)		9.53	±9.6
ΔΔΔ	SC NP DL (CP OFON TWO 4 COMM, 30 KHZ)	5G NR FR1 TDD	9.38	±9.6
AAA	3G NR DL (CP-OFDM, 1M 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	±9.6
AAA	5G NH DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)			±9.6
	AAA AAA AAA AAA	AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-OAM, 15 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-OAM, 15 kHz) 5G NR FR1 TDD AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-OAM, 30 kHz) 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-OAM, 30 kHz) 5G NR FR1 TDD 5G NR FR1 TDD	AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) 5G NR FR1 TDD 9.31 AAA 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.54 AAA 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.50 AAA 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.53 AAA 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.38 AAA 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) 5G NR FR1 TDD 9.38

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