

Appendix D Probe, DAE and Dipole Calibration Certificates

Appendix D.1 Calibration certificate for Probe SN7412

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

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

S Schweizerischer Kalibrierdienst
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S Swiss Calibration Service

Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do, Republic of Korea

Certificate No.: **EX-7412_Mar25**

CALIBRATION CERTIFICATE

Object: **EX3DV4 - SN:7412**

Calibration procedure(s): **QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8**
Calibration procedure for dosimetric E-field probes

Calibration date: **March 18, 2025**

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&E critical for calibration)

Primary Standards	ID	Calibration Date (Certificate No.)	Sched. Cal.
Power Sensor R&S NRP-33T	SN: 10087	28-Mar-24 (No. 217-24033)	Mar-25
Short [S6010] + Attenuator [S60200]	SN: L1119	28-Mar-24 (No. 217-24043)	Mar-25
OCP DAK-12	SN: 1016	24-Sept-24 (No. OCP-DAK12-1016_Sep24)	Sep-25
OCP DAK-3.5	SN: 1249	23-Sept-24 (No. OCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX3DV4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE4	SN: 1301	07-Nov-24 (No. DAE4-1301_Nov24)	Nov-25

Secondary Standards	ID	Check Date (In house)	Sched. Check
ACAP 2020 Calibration Box	SN: L1404	30-Sept-24 (No. Report_ACAP2020E-Cave_30240930)	Sep-25

Calibrated by: **Kretimir Franjo** (Name) **Laboratory Technician** (Function) 

Approved by: **Sven Kühn** (Name) **Technical Manager** (Function) 

Issued: March 19, 2025

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

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Glossary

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

Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KD8 865654, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}: Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM_{x,y,z} = NORM_{x,y,z} * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,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 NORM_x (no uncertainty required).

EX3DV4 - SN:7412

March 19, 2025

Parameters of Probe: EX3DV4 - SN:7412

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm ($\mu V/(V/m)^2$) ^A	0.42	0.38	0.44	±10.1%
DCP (mV) ^B	100.6	101.6	101.6	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB/√μV	C	D dB	VR mV	Max dev.	Max Unc ^E k = 2
0	CW	X	0.00	0.00	1.00	0.00	139.1	±1.7%	±4.7%
		Y	0.00	0.00	1.00		137.5		
		Z	0.00	0.00	1.00		142.6		
10352	Pulse Waveform (200Hz, 10%)	X	13.82	83.49	17.10	10.00	60.0	±2.7%	±9.6%
		Y	12.22	82.68	17.23		60.0		
		Z	20.00	90.88	20.48		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	20.00	88.45	17.64	6.99	80.0	±1.6%	±9.6%
		Y	20.00	89.83	18.19		80.0		
		Z	20.00	90.56	20.70		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	20.00	90.01	18.61	3.98	95.0	±1.2%	±9.6%
		Y	20.00	90.76	18.43		95.0		
		Z	20.00	100.37	22.68		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	20.00	102.53	22.06	2.22	120.0	±1.1%	±9.6%
		Y	20.00	101.81	20.72		120.0		
		Z	20.00	109.91	25.80		120.0		
10387	QPSK Waveform, 1 MHz	X	1.72	67.48	15.66	1.00	150.0	±2.0%	±9.6%
		Y	1.70	68.75	15.69		150.0		
		Z	1.70	66.43	15.20		150.0		
10388	QPSK Waveform, 10 MHz	X	2.25	68.55	16.21	0.00	150.0	±1.0%	±9.6%
		Y	2.19	68.81	16.32		150.0		
		Z	2.26	68.15	15.90		150.0		
10395	64-QAM Waveform, 100 kHz	X	2.64	69.94	16.76	3.01	150.0	±0.7%	±9.6%
		Y	2.14	66.58	17.07		150.0		
		Z	2.67	69.24	16.29		150.0		
10399	64-QAM Waveform, 40 MHz	X	3.54	67.39	16.01	0.00	150.0	±0.8%	±9.6%
		Y	3.37	66.32	15.81		150.0		
		Z	3.58	67.27	15.90		150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	4.84	66.69	15.71	0.00	160.0	±2.0%	±9.6%
		Y	4.61	65.49	15.54		160.0		
		Z	4.73	65.14	15.32		160.0		

Note: For details on UID parameters see Appendix

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

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

^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.



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Parameters of Probe: EX3DV4 - SN:7412

Sensor Model Parameters

	C1 IF	C2 IF	α V ⁻¹	T1 msV ⁻²	T2 msV ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
x	38.8	286.86	34.93	10.98	0.00	5.02	1.37	0.09	1.01
y	32.3	240.49	35.37	4.22	0.28	5.02	0.20	0.21	1.00
z	44.0	328.84	35.55	12.86	0.00	5.07	1.01	0.21	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-61.6°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

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

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Parameters of Probe: EX3DV4 - SN:7412

Calibration Parameter Determined in HSL

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc ^H (k = 2)
350	45.3	0.87	11.47	11.47	11.47	0.09	1.50	±13.3%
450	43.5	0.87	10.72	10.72	10.72	0.15	1.30	±13.3%
600	42.7	0.88	10.11	10.11	10.11	0.10	1.25	±13.3%
750	41.9	0.89	10.35	9.68	9.86	0.39	1.27	±11.0%
835	41.5	0.90	9.63	9.00	9.17	0.39	1.27	±11.0%
900	41.5	0.97	9.72	9.09	9.26	0.39	1.27	±11.0%
1450	40.5	1.20	8.55	7.99	8.14	0.38	1.27	±11.0%
1640	40.2	1.31	8.24	7.70	7.84	0.38	1.27	±11.0%
1750	40.1	1.37	8.39	7.84	7.99	0.38	1.27	±11.0%
1900	40.0	1.40	8.28	7.74	7.88	0.38	1.27	±11.0%
2300	39.5	1.67	7.97	7.45	7.59	0.37	1.27	±11.0%
2450	39.2	1.80	7.76	7.25	7.39	0.37	1.27	±11.0%
2500	39.0	1.96	7.77	7.26	7.39	0.37	1.27	±11.0%
3300	38.2	2.71	7.17	6.70	6.82	0.36	1.27	±13.1%
3500	37.9	2.91	7.19	6.72	6.85	0.36	1.27	±13.1%
3700	37.7	3.12	7.00	6.54	6.66	0.35	1.27	±13.1%
3900	37.5	3.32	7.05	6.59	6.72	0.35	1.27	±13.1%
4100	37.2	3.53	6.99	6.54	6.66	0.35	1.27	±13.1%
5200	36.0	4.66	6.05	5.65	5.76	0.31	1.27	±13.1%
5300	35.9	4.79	5.86	5.47	5.58	0.30	1.27	±13.1%
5500	35.6	4.96	5.16	4.82	4.91	0.29	1.27	±13.1%
5600	35.5	5.07	5.20	4.86	4.95	0.28	1.27	±13.1%
5800	35.3	5.27	5.28	4.93	5.03	0.26	1.27	±13.1%

^C Frequency validity above 350 MHz of ±100 MHz only applies for DASV 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 75 MHz for ConvF assessments at 30, 64, 128, 150 and 250 MHz respectively. Validity of ConvF assessed at 8 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 8-19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

^F The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ' and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if BART correction is applied.

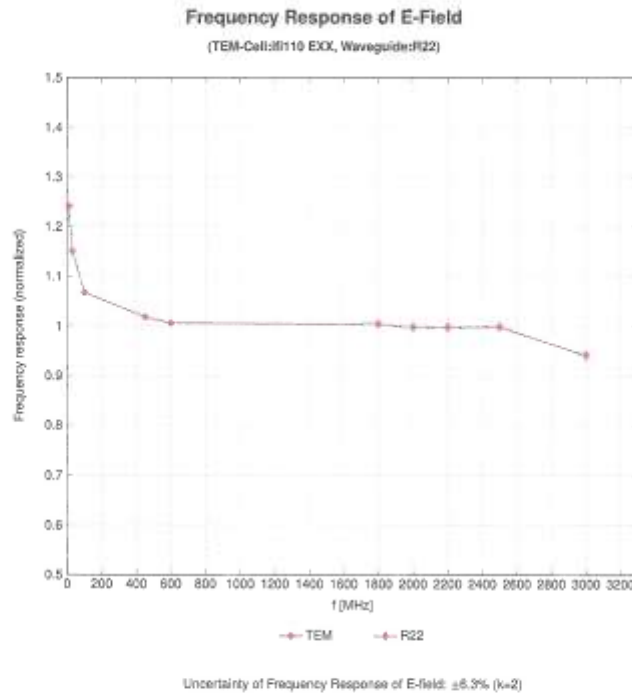
^G Alpha/Depth are determined during calibration. SP2AG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

^H The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC 60730-1:2019-1528:2020.



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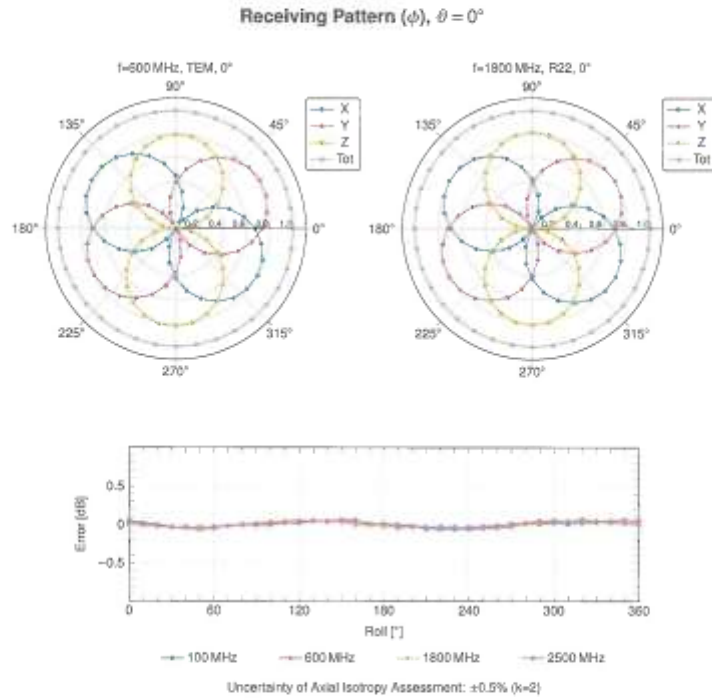


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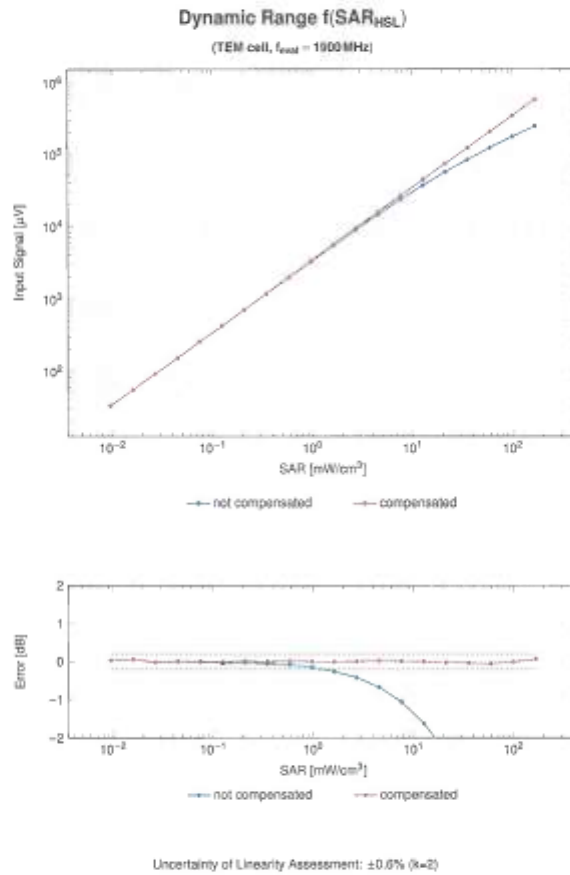


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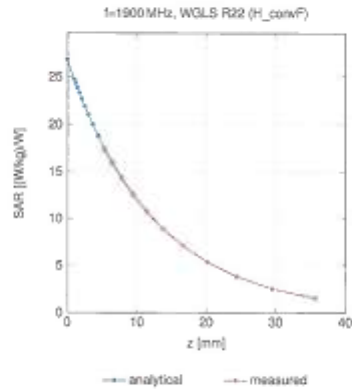
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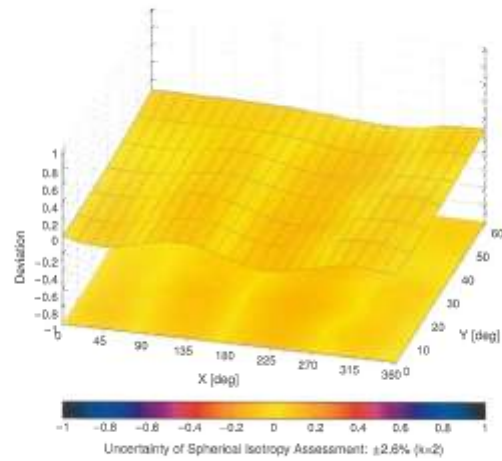
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Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900\text{MHz}$



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SGS Korea Co., Ltd.

4, LS-ro 182beon-gil, Gunpo-si Gyeonggi-do, Korea, 15807

Tel. 031-428-5700 / Fax. 031-427-2371

<http://www.sgsgroup.kr>

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Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^k k=2
0		CW	CW	5.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	13.00	±9.8
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.51	±9.5
10012	CAB	IEEE 802.11b WIF 2.4 GHz (QSSS, 1 Mbps)	WLAN	1.87	±9.6
10013	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 6 Mbps)	WLAN	3.46	±9.8
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	3.29	±9.8
10023	CAC	GPRS-FDD (TDMA, GMSK, TN 8)	GSM	3.57	±9.8
10034	DAC	GPRS-FDD (TDMA, GMSK, TN 8-1)	GSM	5.56	±9.5
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 8)	GSM	12.62	±9.6
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 8-1)	GSM	5.55	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 8-2)	GSM	4.80	±9.5
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 8-1-2-3)	GSM	3.25	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 8-1-2-3)	GSM	7.76	±9.6
10030	CAB	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.5
10031	CAB	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	1.87	±9.5
10032	CAB	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.5
10033	CAB	IEEE 802.15.1 Bluetooth (P4-DQPSK, DH1)	Bluetooth	7.74	±9.5
10034	CAB	IEEE 802.15.1 Bluetooth (P4-DQPSK, DH5)	Bluetooth	4.53	±9.6
10035	CAB	IEEE 802.15.1 Bluetooth (P4-DQPSK, DH5)	Bluetooth	3.83	±9.5
10036	CAB	IEEE 802.15.1 Bluetooth (B-DPSK, DH1)	Bluetooth	8.01	±9.5
10037	CAB	IEEE 802.15.1 Bluetooth (B-DPSK, DH5)	Bluetooth	4.77	±9.6
10038	CAB	IEEE 802.15.1 Bluetooth (B-DPSK, DH5)	Bluetooth	4.10	±9.5
10039	CAB	CDMA2000 (1xRTT, RCT)	CDMA2000	4.57	±9.5
10042	CAB	IS-54 / IS-136 FDD (TDMA-FDM, P4-DQPSK, Fullrate)	AMPS	7.76	±9.5
10044	CAB	IS-95/IS-136 FDD (TDMA-FDM, P4-DQPSK, Fullrate)	AMPS	0.00	±9.5
10048	CAB	DECT (TDD, TDMA-FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAB	DECT (TDD, TDMA-FDM, GFSK, Double Slot, 12)	DECT	10.70	±9.5
10056	CAB	UMTS-TDD (TD-SCDMA, 1.28 Mbps)	TD-SCDMA	11.01	±9.5
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 8-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11a WIF 5 GHz (QSSS, 2 Mbps)	WLAN	2.12	±9.5
10060	CAB	IEEE 802.11a WIF 5 GHz (QSSS, 5.5 Mbps)	WLAN	2.83	±9.5
10061	CAB	IEEE 802.11a WIF 5 GHz (QSSS, 11 Mbps)	WLAN	2.90	±9.5
10062	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 6 Mbps)	WLAN	8.89	±9.5
10063	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 9 Mbps)	WLAN	8.03	±9.5
10064	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 12 Mbps)	WLAN	9.89	±9.5
10065	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.5
10066	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.5
10067	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.5
10068	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 48 Mbps)	WLAN	10.34	±9.5
10069	CAB	IEEE 802.11a WIF 5 GHz (OFDM, 54 Mbps)	WLAN	10.55	±9.5
10071	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 9 Mbps)	WLAN	9.83	±9.5
10072	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 12 Mbps)	WLAN	9.82	±9.5
10073	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 18 Mbps)	WLAN	9.94	±9.5
10074	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 24 Mbps)	WLAN	10.33	±9.5
10075	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 36 Mbps)	WLAN	10.77	±9.5
10076	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 48 Mbps)	WLAN	10.84	±9.5
10077	CAB	IEEE 802.11g WIF 2.4 GHz (QSSS-OFDM, 54 Mbps)	WLAN	11.00	±9.5
10081	CAB	CDMA2000 (1xRTT, RCT)	CDMA2000	3.97	±9.8
10082	CAB	IS-54 / IS-136 FDD (TDMA-FDM, P4-DQPSK, Fullrate)	AMPS	4.77	±9.8
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 8-4)	GSM	5.56	±9.5
10097	CAC	UMTS-FDD (HSPA, Subslot 2)	WCDMA	3.88	±9.8
10098	CAC	UMTS-FDD (HSPA, Subslot 2)	WCDMA	3.88	±9.8
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 8-4)	GSM	5.55	±9.5
10100	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.87	±9.8
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.8
10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.50	±9.8
10103	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	5.29	±9.8
10104	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	5.97	±9.8
10105	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.8
10106	CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.8
10109	CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.8
10110	CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.8
10111	CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.8

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Report File No : F690501-RF-SAR000617

Date of Issue : 2025-09-03

(All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.)

SAR7081-04 (2020.12.15)(0)

A4 (210mm x 297mm)



SGS Korea Co., Ltd.

4, LS-ro 182beon-gil, Gunpo-si Gyeonggi-do, Korea, 15807

Tel. 031-428-5700 / Fax. 031-427-2371

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ² k = 2
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-FDD	5.59	±0.8
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)	LTE-FDD	5.62	±0.5
10114	CAB	IEEE 802.11n (HT Greenfield, 13.5Mbps, BPSK)	WLAN	8.75	±0.5
10115	CAB	IEEE 802.11n (HT Greenfield, 31Mbps, 16-QAM)	WLAN	8.44	±0.8
10116	CAB	IEEE 802.11n (HT Greenfield, 135Mbps, 64-QAM)	WLAN	8.15	±0.5
10117	CAB	IEEE 802.11n (HT Mixed, 13.5Mbps, BPSK)	WLAN	8.57	±0.8
10118	CAB	IEEE 802.11n (HT Mixed, 31Mbps, 16-QAM)	WLAN	8.24	±0.5
10119	CAB	IEEE 802.11n (HT Mixed, 135Mbps, 64-QAM)	WLAN	8.13	±0.8
10140	CAP	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)	LTE-FDD	5.48	±0.5
10141	CAP	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-FDD	5.53	±0.8
10142	CAP	LTE-FDD (SC-FDMA, 100% RB, 3MHz, QPSK)	LTE-FDD	5.73	±0.8
10143	CAP	LTE-FDD (SC-FDMA, 100% RB, 3MHz, 16-QAM)	LTE-FDD	5.35	±0.5
10144	CAP	LTE-FDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)	LTE-FDD	5.65	±0.8
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, QPSK)	LTE-FDD	5.75	±0.5
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM)	LTE-FDD	5.41	±0.5
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM)	LTE-FDD	5.72	±0.8
10148	CAP	LTE-FDD (SC-FDMA, 50% RB, 20MHz, 16-QAM)	LTE-FDD	5.42	±0.5
10150	CAP	LTE-FDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)	LTE-FDD	5.60	±0.5
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK)	LTE-TDD	9.28	±0.5
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM)	LTE-TDD	9.92	±0.5
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)	LTE-TDD	10.05	±0.8
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10MHz, QPSK)	LTE-FDD	5.75	±0.8
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10MHz, 16-QAM)	LTE-FDD	5.43	±0.5
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-FDD	5.79	±0.8
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-FDD	5.49	±0.5
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10MHz, 64-QAM)	LTE-FDD	5.62	±0.5
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5MHz, 64-QAM)	LTE-FDD	5.66	±0.5
10160	CAP	LTE-FDD (SC-FDMA, 50% RB, 15MHz, QPSK)	LTE-FDD	5.82	±0.5
10161	CAP	LTE-FDD (SC-FDMA, 50% RB, 15MHz, 16-QAM)	LTE-FDD	5.43	±0.5
10162	CAP	LTE-FDD (SC-FDMA, 50% RB, 15MHz, 64-QAM)	LTE-FDD	5.35	±0.5
10165	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, QPSK)	LTE-FDD	5.49	±0.5
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM)	LTE-FDD	5.21	±0.5
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM)	LTE-FDD	5.79	±0.5
10169	CAP	LTE-FDD (SC-FDMA, 1 RB, 20MHz, QPSK)	LTE-FDD	5.73	±0.5
10170	CAP	LTE-FDD (SC-FDMA, 1 RB, 20MHz, 16-QAM)	LTE-FDD	6.02	±0.8
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20MHz, 64-QAM)	LTE-FDD	5.49	±0.5
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20MHz, QPSK)	LTE-TDD	9.21	±0.5
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM)	LTE-TDD	9.98	±0.5
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10MHz, QPSK)	LTE-FDD	5.72	±0.8
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 10MHz, 16-QAM)	LTE-FDD	5.52	±0.5
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5MHz, QPSK)	LTE-FDD	5.73	±0.8
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-FDD	5.52	±0.5
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10MHz, 64-QAM)	LTE-FDD	5.50	±0.5
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 64-QAM)	LTE-FDD	5.50	±0.5
10181	CAP	LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-FDD	5.72	±0.5
10182	CAP	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-FDD	5.52	±0.5
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-FDD	5.50	±0.5
10184	CAP	LTE-FDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-FDD	5.73	±0.5
10185	CAP	LTE-FDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)	LTE-FDD	5.51	±0.5
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)	LTE-FDD	5.50	±0.8
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, QPSK)	LTE-FDD	5.73	±0.5
10188	CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, 16-QAM)	LTE-FDD	5.52	±0.5
10189	AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, 64-QAM)	LTE-FDD	5.50	±0.8
10190	CAB	IEEE 802.11n (HT Greenfield, 3.3Mbps, BPSK)	WLAN	8.39	±0.5
10194	CAB	IEEE 802.11n (HT Greenfield, 39Mbps, 16-QAM)	WLAN	8.13	±0.5
10195	CAB	IEEE 802.11n (HT Greenfield, 65Mbps, 64-QAM)	WLAN	8.21	±0.8
10196	CAB	IEEE 802.11n (HT Mixed, 6.5Mbps, BPSK)	WLAN	8.10	±0.5
10197	CAB	IEEE 802.11n (HT Mixed, 39Mbps, 16-QAM)	WLAN	8.13	±0.5
10198	CAB	IEEE 802.11n (HT Mixed, 65Mbps, 64-QAM)	WLAN	8.27	±0.8
10210	CAB	IEEE 802.11n (HT Mixed, 7.2Mbps, BPSK)	WLAN	8.33	±0.5
10220	CAJ	IEEE 802.11n (HT Mixed, 43.3Mbps, 16-QAM)	WLAN	8.13	±0.8
10221	CAB	IEEE 802.11n (HT Mixed, 72.2Mbps, 64-QAM)	WLAN	8.27	±0.8
10222	CAB	IEEE 802.11n (HT Mixed, 15Mbps, BPSK)	WLAN	8.36	±0.5
10223	CAB	IEEE 802.11n (HT Mixed, 90Mbps, 16-QAM)	WLAN	8.48	±0.5
10224	CAB	IEEE 802.11n (HT Mixed, 150Mbps, 64-QAM)	WLAN	8.59	±0.8

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SAR7081-04 (2020.12.15)(0)

A4 (210mm x 297mm)

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ² K = 2
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±0.5
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±0.5
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.32	±0.5
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.49	±0.5
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±0.5
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±0.5
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±0.5
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±0.5
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±0.5
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±0.5
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±0.5
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±0.5
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.32	±0.5
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.30	±0.5
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.39	±0.5
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±0.5
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±0.5
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±0.5
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.31	±0.5
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±0.5
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±0.5
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.31	±0.5
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±0.5
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±0.5
10253	CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.30	±0.5
10254	CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±0.5
10255	CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.30	±0.5
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.39	±0.5
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±0.5
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±0.5
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±0.5
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±0.5
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±0.5
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±0.5
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±0.5
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±0.5
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±0.5
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±0.5
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±0.5
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±0.5
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±0.5
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.98	±0.5
10274	CAC	UMTS-FDD (HSPA, Subnet 6, 30PPH Rate 16)	WCDMA	4.87	±0.5
10275	CAC	UMTS-FDD (HSPA, Subnet 5, 30PPH Rate 8.4)	WCDMA	3.99	±0.5
10277	CAA	PHS (QPSK)	PHS	11.81	±0.5
10278	CAA	PHS (QPSK, BTR 884MHz, Roll-off 0.5)	PHS	11.81	±0.5
10279	CAA	PHS (QPSK, BTR 884MHz, Roll-off 0.26)	PHS	12.18	±0.5
10280	AAS	CDMA2000, RC1, SCSS, Full Rate	CDMA2000	3.91	±0.5
10281	AAS	CDMA2000, RC2, SCSS, Full Rate	CDMA2000	3.46	±0.5
10282	AAS	CDMA2000, RC2, SCSS, Full Rate	CDMA2000	3.39	±0.5
10283	AAS	CDMA2000, RC3, SCSS, Full Rate	CDMA2000	3.30	±0.5
10285	AAS	CDMA2000, RC1, SC2, 1/8th Rate 25.6	CDMA2000	12.49	±0.5
10287	AAS	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.91	±0.5
10288	AAS	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±0.5
10289	AAS	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±0.5
10290	AAS	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±0.5
10301	AAA	IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, QPSK, PUSC)	WIMAX	12.03	±0.5
10302	AAA	IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, QPSK, PUSC, 3-CTH symbols)	WIMAX	12.57	±0.5
10303	AAA	IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	12.52	±0.5
10304	AAA	IEEE 802.15a WIMAX (20-18, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	11.86	±0.5
10305	AAA	IEEE 802.15a WIMAX (20-18, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WIMAX	15.24	±0.5
10306	AAA	IEEE 802.15a WIMAX (20-18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WIMAX	14.87	±0.5

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10307	AAA	IEEE 802.16e WIMAX (20-18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WIMAX	14.40	±9.5
10308	AAA	IEEE 802.16e WIMAX (20-18, 10 ms, 10 MHz, 16QAM, PUSC)	WIMAX	14.46	±9.5
10309	AAA	IEEE 802.16e WIMAX (20-18, 10 ms, 10 MHz, 16QAM, AAC 2/3, 18 symbols)	WIMAX	14.56	±9.5
10310	AAA	IEEE 802.16e WIMAX (20-18, 10 ms, 10 MHz, QPSK, AAC 2/3, 18 symbols)	WIMAX	14.57	±9.5
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.5
10313	AAA	1DEN 1.5	DEN	10.61	±9.5
10314	AAA	1DEN 1.6	DEN	13.46	±9.5
10315	AAB	IEEE 802.11b WiFi 2.4GHz (DSSS, 1 Mbps, 90% duty cycle)	WLAN	1.71	±9.5
10316	AAB	IEEE 802.11g WiFi 2.4GHz (ERP-OFDM, 6 Mbps, 90% duty cycle)	WLAN	8.36	±9.5
10317	AAE	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 90% duty cycle)	WLAN	8.36	±9.5
10353	AAA	Pulse Waveform (250Hz, 10%)	Generic	10.00	±9.5
10353	AAA	Pulse Waveform (250Hz, 20%)	Generic	6.09	±9.5
10354	AAA	Pulse Waveform (250Hz, 40%)	Generic	2.96	±9.5
10355	AAA	Pulse Waveform (250Hz, 90%)	Generic	2.32	±9.5
10356	AAA	Pulse Waveform (250Hz, 90%)	Generic	0.97	±9.5
10357	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.5
10358	AAA	QPSK Waveform, 15 MHz	Generic	8.32	±9.5
10359	AAA	64-QAM Waveform, 100 MHz	Generic	6.27	±9.5
10359	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.5
10405	AAE	IEEE 802.11ac WPI (80 MHz, 64-QAM, 90% duty cycle)	WLAN	8.37	±9.5
10401	AAE	IEEE 802.11ac WPI (40 MHz, 64-QAM, 90% duty cycle)	WLAN	6.60	±9.5
10402	AAE	IEEE 802.11ac WPI (80 MHz, 64-QAM, 90% duty cycle)	WLAN	8.63	±9.5
10403	AAE	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.5
10404	AAE	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.5
10406	AAE	CDMA2000, R3, G3, G3.2, SCHE, Full Rate	CDMA2000	5.23	±9.5
10415	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10414	AAA	WLAN CDDP, 64-QAM, 40 MHz	Generic	6.54	±9.5
10415	AAA	IEEE 802.11n WiFi 2.4GHz (DSSS, 1 Mbps, 90% duty cycle)	WLAN	1.54	±9.5
10416	AAA	IEEE 802.11g WiFi 2.4GHz (ERP-OFDM, 6 Mbps, 90% duty cycle)	WLAN	8.23	±9.5
10417	AAE	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 90% duty cycle)	WLAN	8.33	±9.5
10418	AAA	IEEE 802.11g WiFi 2.4GHz (DSSS-OFDM, 6 Mbps, 90% duty cycle, Long preamble)	WLAN	6.14	±9.5
10418	AAA	IEEE 802.11g WiFi 2.4GHz (DSSS-OFDM, 6 Mbps, 90% duty cycle, Short preamble)	WLAN	6.19	±9.5
10422	AAE	IEEE 802.11n (HT Greenfield, 7.3 Mbps, 80% duty cycle)	WLAN	8.32	±9.5
10423	AAE	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 15-QAM)	WLAN	6.47	±9.5
10424	AAE	IEEE 802.11n (HT Greenfield, 72.3 Mbps, 64-QAM)	WLAN	6.40	±9.5
10425	AAE	IEEE 802.11n (HT Greenfield, 15 Mbps, 80% duty cycle)	WLAN	8.41	±9.5
10426	AAE	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.5
10427	AAE	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.5
10428	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.29	±9.5
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.39	±9.5
10432	AAE	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.5
10433	AAE	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.5
10434	AAE	W-CDMA (HS Test Model 1, 64 DPCCH)	WCDMA	8.90	±9.5
10435	AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10437	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.55	±9.5
10446	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	±9.5
10446	AAE	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	±9.5
10450	AAE	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.5
10451	AAE	W-CDMA (HS Test Model 1, 64 DPCCH, Clipping 44%)	WCDMA	7.59	±9.5
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.30	±9.5
10456	AAE	IEEE 802.11ac WPI (160 MHz, 64-QAM, 90% duty cycle)	WLAN	8.53	±9.5
10457	AAE	WVTS-FDD (DC-HSDPA)	WCDMA	6.83	±9.5
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	6.55	±9.5
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.5
10460	AAE	WVTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.5
10461	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10462	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.33	±9.5
10463	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.58	±9.5
10464	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10465	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.5
10466	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.5
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.5
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.58	±9.5
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.5
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.5

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10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.57	±0.5
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.23	±0.5
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	6.32	±0.5
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.57	±0.5
10477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.32	±0.5
10478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.57	±0.5
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.5
10480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.59	±0.5
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.45	±0.5
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±0.5
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.39	±0.5
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.47	±0.5
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±0.5
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.33	±0.5
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.40	±0.5
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±0.5
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.31	±0.5
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.54	±0.5
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.5
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.41	±0.5
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.65	±0.5
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.5
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.37	±0.5
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.84	±0.5
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±0.5
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.40	±0.5
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.58	±0.5
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±0.5
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.44	±0.5
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.52	±0.5
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±0.5
10504	AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.31	±0.5
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.54	±0.5
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.5
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.38	±0.5
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.55	±0.5
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±0.5
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.49	±0.5
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.51	±0.5
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.5
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.42	±0.5
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	0.45	±0.5
10515	AAA	IEEE 802.11b WFI 2.4 GHz (DSSS, 2 Mbps, 90% duty cycle)	WLAN	1.58	±0.5
10516	AAA	IEEE 802.11b WFI 2.4 GHz (DSSS, 5.5 Mbps, 90% duty cycle)	WLAN	1.57	±0.5
10517	AAA	IEEE 802.11b WFI 2.4 GHz (DSSS, 11 Mbps, 90% duty cycle)	WLAN	1.58	±0.5
10518	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 6 Mbps, 90% duty cycle)	WLAN	0.23	±0.5
10519	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 12 Mbps, 90% duty cycle)	WLAN	0.39	±0.5
10520	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 18 Mbps, 90% duty cycle)	WLAN	0.12	±0.5
10521	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 24 Mbps, 90% duty cycle)	WLAN	7.97	±0.5
10522	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 36 Mbps, 90% duty cycle)	WLAN	0.45	±0.5
10523	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 48 Mbps, 90% duty cycle)	WLAN	0.08	±0.5
10524	AAD	IEEE 802.11a WFI 5 GHz (OFDM, 54 Mbps, 90% duty cycle)	WLAN	0.27	±0.5
10525	AAD	IEEE 802.11ac WFI 20 MHz, MCS0, 90% duty cycle)	WLAN	0.36	±0.5
10526	AAD	IEEE 802.11ac WFI 20 MHz, MCS1, 90% duty cycle)	WLAN	0.43	±0.5
10527	AAD	IEEE 802.11ac WFI 20 MHz, MCS2, 90% duty cycle)	WLAN	0.21	±0.5
10528	AAD	IEEE 802.11ac WFI 20 MHz, MCS3, 90% duty cycle)	WLAN	0.36	±0.5
10529	AAD	IEEE 802.11ac WFI 20 MHz, MCS4, 90% duty cycle)	WLAN	0.36	±0.5
10530	AAD	IEEE 802.11ac WFI 20 MHz, MCS5, 90% duty cycle)	WLAN	0.43	±0.5
10531	AAD	IEEE 802.11ac WFI 20 MHz, MCS6, 90% duty cycle)	WLAN	0.29	±0.5
10532	AAD	IEEE 802.11ac WFI 20 MHz, MCS7, 90% duty cycle)	WLAN	0.29	±0.5
10533	AAD	IEEE 802.11ac WFI 20 MHz, MCS8, 90% duty cycle)	WLAN	0.38	±0.5
10534	AAD	IEEE 802.11ac WFI 20 MHz, MCS9, 90% duty cycle)	WLAN	0.45	±0.5
10535	AAD	IEEE 802.11ac WFI 40 MHz, MCS0, 90% duty cycle)	WLAN	0.45	±0.5
10536	AAD	IEEE 802.11ac WFI 40 MHz, MCS1, 90% duty cycle)	WLAN	0.32	±0.5
10537	AAD	IEEE 802.11ac WFI 40 MHz, MCS2, 90% duty cycle)	WLAN	0.44	±0.5
10538	AAD	IEEE 802.11ac WFI 40 MHz, MCS3, 90% duty cycle)	WLAN	0.54	±0.5
10540	AAD	IEEE 802.11ac WFI 40 MHz, MCS4, 90% duty cycle)	WLAN	0.39	±0.5

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10541	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.46	±0.5
10542	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.85	±0.5
10543	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	9.89	±0.5
10544	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.47	±0.5
10545	AAD	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.55	±0.5
10546	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.35	±0.5
10547	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.48	±0.5
10548	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.37	±0.5
10550	AAD	IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.38	±0.5
10551	AAD	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.50	±0.5
10552	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.42	±0.5
10553	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.45	±0.5
10554	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.48	±0.5
10555	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.47	±0.5
10556	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.50	±0.5
10557	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.52	±0.5
10558	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.61	±0.5
10559	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±0.5
10561	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.58	±0.5
10562	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.66	±0.5
10563	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	8.77	±0.5
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.25	±0.5
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.45	±0.5
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.73	±0.5
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.00	±0.5
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.30	±0.5
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.10	±0.5
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.30	±0.5
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (OFDM, 1 Mbps, 90pc duty cycle)	WLAN	7.99	±0.5
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (OFDM, 2 Mbps, 90pc duty cycle)	WLAN	7.90	±0.5
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (OFDM, 5.5 Mbps, 90pc duty cycle)	WLAN	7.96	±0.5
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (OFDM, 11 Mbps, 90pc duty cycle)	WLAN	7.98	±0.5
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.50	±0.5
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±0.5
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±0.5
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.40	±0.5
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.38	±0.5
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±0.5
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±0.5
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±0.5
10583	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.69	±0.5
10584	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±0.5
10585	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±0.5
10586	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.48	±0.5
10587	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.38	±0.5
10588	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±0.5
10589	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±0.5
10590	AAD	IEEE 802.11ah WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±0.5
10591	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±0.5
10592	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±0.5
10593	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±0.5
10594	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±0.5
10595	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±0.5
10596	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.72	±0.5
10597	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±0.5
10598	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.60	±0.5
10599	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS8, 90pc duty cycle)	WLAN	8.79	±0.5
10600	AAD	IEEE 802.11n (HT Mixed, 20 MHz, MCS9, 90pc duty cycle)	WLAN	8.88	±0.5
10601	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.62	±0.5
10602	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.94	±0.5
10603	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	9.03	±0.5
10604	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.76	±0.5
10605	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	8.97	±0.5
10606	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.62	±0.5
10607	AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±0.5
10608	AAD	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±0.5

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10609	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	6.57	±0.6
10610	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	6.76	±0.6
10611	AAD	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	6.70	±0.6
10612	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	6.77	±0.6
10613	AAD	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	6.94	±0.6
10614	AAD	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)	WLAN	6.99	±0.6
10615	AAD	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	6.92	±0.6
10616	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	6.82	±0.6
10617	AAD	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	6.81	±0.6
10618	AAD	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	6.58	±0.6
10619	AAD	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	6.86	±0.6
10620	AAD	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	6.87	±0.6
10621	AAD	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)	WLAN	6.77	±0.6
10622	AAD	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)	WLAN	6.55	±0.6
10623	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	6.82	±0.6
10624	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	6.99	±0.6
10625	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	6.95	±0.6
10626	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	6.83	±0.6
10627	AAD	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	6.88	±0.6
10628	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	6.71	±0.6
10629	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	6.85	±0.6
10630	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	6.72	±0.6
10631	AAD	IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	6.81	±0.6
10632	AAD	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	6.74	±0.6
10633	AAD	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	6.83	±0.6
10634	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	6.80	±0.6
10635	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	6.81	±0.6
10636	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	6.83	±0.6
10637	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	6.79	±0.6
10638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	6.95	±0.6
10639	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	6.85	±0.6
10640	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	6.99	±0.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	6.95	±0.6
10642	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	6.95	±0.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	6.89	±0.6
10644	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	6.95	±0.6
10645	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	6.91	±0.6
10646	AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL, Subframe=2,3)	LTE-TDD	11.96	±0.6
10647	AAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL, Subframe=2,3)	LTE-TDD	11.96	±0.6
10648	AAD	CDMA2000 1X Advanced	CDMA2000	3.45	±0.6
10649	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±0.6
10650	AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±0.6
10651	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.95	±0.6
10652	AAD	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±0.6
10653	AAD	Pulse Waveform (200Hz, 10%)	Test	10.00	±0.6
10654	AAD	Pulse Waveform (200Hz, 20%)	Test	6.99	±0.6
10655	AAD	Pulse Waveform (200Hz, 40%)	Test	3.98	±0.6
10656	AAD	Pulse Waveform (200Hz, 60%)	Test	2.22	±0.6
10657	AAD	Pulse Waveform (200Hz, 80%)	Test	0.97	±0.6
10658	AAD	Bluetooth Low Energy	Bluetooth	2.19	±0.6
10659	AAD	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	6.09	±0.6
10660	AAD	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	6.57	±0.6
10661	AAD	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	6.76	±0.6
10662	AAD	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	6.74	±0.6
10663	AAD	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	6.90	±0.6
10664	AAD	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	6.77	±0.6
10665	AAD	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	6.73	±0.6
10666	AAD	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	6.76	±0.6
10667	AAD	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	6.89	±0.6
10668	AAD	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	6.90	±0.6
10669	AAD	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	6.82	±0.6
10670	AAD	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	6.83	±0.6
10671	AAD	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	6.42	±0.6
10672	AAD	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	6.26	±0.6
10673	AAD	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	6.30	±0.6
10674	AAD	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	6.28	±0.6

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10667	AAC	IEEE 802.11ax (20 MHz, MCS4, 90ps duty cycle)	WLAN	8.45	±0.5
10668	AAC	IEEE 802.11ax (20 MHz, MCS5, 90ps duty cycle)	WLAN	8.29	±0.5
10669	AAC	IEEE 802.11ax (20 MHz, MCS6, 90ps duty cycle)	WLAN	8.25	±0.5
10670	AAC	IEEE 802.11ax (20 MHz, MCS7, 90ps duty cycle)	WLAN	8.29	±0.5
10671	AAC	IEEE 802.11ax (20 MHz, MCS8, 90ps duty cycle)	WLAN	8.25	±0.5
10672	AAC	IEEE 802.11ax (20 MHz, MCS9, 90ps duty cycle)	WLAN	8.29	±0.5
10673	AAC	IEEE 802.11ax (20 MHz, MCS10, 90ps duty cycle)	WLAN	8.25	±0.5
10674	AAC	IEEE 802.11ax (20 MHz, MCS11, 90ps duty cycle)	WLAN	8.57	±0.5
10675	AAC	IEEE 802.11ax (40 MHz, MCS2, 90ps duty cycle)	WLAN	8.79	±0.5
10676	AAC	IEEE 802.11ax (40 MHz, MCS3, 90ps duty cycle)	WLAN	8.81	±0.5
10677	AAC	IEEE 802.11ax (40 MHz, MCS4, 90ps duty cycle)	WLAN	8.81	±0.5
10678	AAC	IEEE 802.11ax (40 MHz, MCS5, 90ps duty cycle)	WLAN	8.82	±0.5
10679	AAC	IEEE 802.11ax (40 MHz, MCS6, 90ps duty cycle)	WLAN	8.73	±0.5
10680	AAC	IEEE 802.11ax (40 MHz, MCS7, 90ps duty cycle)	WLAN	8.86	±0.5
10681	AAC	IEEE 802.11ax (40 MHz, MCS8, 90ps duty cycle)	WLAN	8.79	±0.5
10682	AAC	IEEE 802.11ax (40 MHz, MCS9, 90ps duty cycle)	WLAN	8.82	±0.5
10683	AAC	IEEE 802.11ax (40 MHz, MCS10, 90ps duty cycle)	WLAN	8.56	±0.5
10684	AAC	IEEE 802.11ax (40 MHz, MCS11, 90ps duty cycle)	WLAN	8.59	±0.5
10685	AAC	IEEE 802.11ax (40 MHz, MCS2, 90ps duty cycle)	WLAN	8.66	±0.5
10686	AAC	IEEE 802.11ax (40 MHz, MCS3, 90ps duty cycle)	WLAN	8.32	±0.5
10687	AAC	IEEE 802.11ax (40 MHz, MCS4, 90ps duty cycle)	WLAN	8.55	±0.5
10688	AAC	IEEE 802.11ax (40 MHz, MCS5, 90ps duty cycle)	WLAN	8.33	±0.5
10689	AAC	IEEE 802.11ax (40 MHz, MCS6, 90ps duty cycle)	WLAN	8.29	±0.5
10690	AAC	IEEE 802.11ax (40 MHz, MCS7, 90ps duty cycle)	WLAN	8.35	±0.5
10691	AAC	IEEE 802.11ax (40 MHz, MCS8, 90ps duty cycle)	WLAN	8.67	±0.5
10692	AAC	IEEE 802.11ax (40 MHz, MCS9, 90ps duty cycle)	WLAN	8.33	±0.5
10693	AAC	IEEE 802.11ax (40 MHz, MCS10, 90ps duty cycle)	WLAN	8.25	±0.5
10694	AAC	IEEE 802.11ax (40 MHz, MCS11, 90ps duty cycle)	WLAN	8.45	±0.5
10695	AAC	IEEE 802.11ax (40 MHz, MCS2, 90ps duty cycle)	WLAN	8.30	±0.5
10696	AAC	IEEE 802.11ax (40 MHz, MCS3, 90ps duty cycle)	WLAN	8.46	±0.5
10697	AAC	IEEE 802.11ax (40 MHz, MCS4, 90ps duty cycle)	WLAN	8.24	±0.5
10698	AAC	IEEE 802.11ax (80 MHz, MCS2, 90ps duty cycle)	WLAN	8.61	±0.5
10699	AAC	IEEE 802.11ax (80 MHz, MCS3, 90ps duty cycle)	WLAN	8.67	±0.5
10700	AAC	IEEE 802.11ax (80 MHz, MCS4, 90ps duty cycle)	WLAN	8.76	±0.5
10701	AAC	IEEE 802.11ax (80 MHz, MCS5, 90ps duty cycle)	WLAN	8.55	±0.5
10702	AAC	IEEE 802.11ax (80 MHz, MCS6, 90ps duty cycle)	WLAN	8.70	±0.5
10703	AAC	IEEE 802.11ax (80 MHz, MCS7, 90ps duty cycle)	WLAN	8.90	±0.5
10704	AAC	IEEE 802.11ax (80 MHz, MCS8, 90ps duty cycle)	WLAN	8.74	±0.5
10705	AAC	IEEE 802.11ax (80 MHz, MCS9, 90ps duty cycle)	WLAN	8.72	±0.5
10706	AAC	IEEE 802.11ax (80 MHz, MCS10, 90ps duty cycle)	WLAN	8.66	±0.5
10707	AAC	IEEE 802.11ax (80 MHz, MCS11, 90ps duty cycle)	WLAN	8.65	±0.5
10708	AAC	IEEE 802.11ax (80 MHz, MCS2, 90ps duty cycle)	WLAN	8.64	±0.5
10709	AAC	IEEE 802.11ax (80 MHz, MCS3, 90ps duty cycle)	WLAN	8.64	±0.5
10710	AAC	IEEE 802.11ax (80 MHz, MCS4, 90ps duty cycle)	WLAN	8.67	±0.5
10711	AAC	IEEE 802.11ax (80 MHz, MCS5, 90ps duty cycle)	WLAN	8.62	±0.5
10712	AAC	IEEE 802.11ax (80 MHz, MCS6, 90ps duty cycle)	WLAN	8.62	±0.5
10713	AAC	IEEE 802.11ax (80 MHz, MCS7, 90ps duty cycle)	WLAN	8.46	±0.5
10714	AAC	IEEE 802.11ax (80 MHz, MCS8, 90ps duty cycle)	WLAN	8.25	±0.5
10715	AAC	IEEE 802.11ax (80 MHz, MCS9, 90ps duty cycle)	WLAN	8.25	±0.5
10716	AAC	IEEE 802.11ax (80 MHz, MCS10, 90ps duty cycle)	WLAN	8.54	±0.5
10717	AAC	IEEE 802.11ax (80 MHz, MCS11, 90ps duty cycle)	WLAN	8.67	±0.5
10718	AAC	IEEE 802.11ax (80 MHz, MCS2, 90ps duty cycle)	WLAN	8.62	±0.5
10719	AAC	IEEE 802.11ax (80 MHz, MCS3, 90ps duty cycle)	WLAN	8.46	±0.5
10720	AAC	IEEE 802.11ax (80 MHz, MCS4, 90ps duty cycle)	WLAN	8.40	±0.5
10721	AAC	IEEE 802.11ax (80 MHz, MCS5, 90ps duty cycle)	WLAN	8.25	±0.5
10722	AAC	IEEE 802.11ax (80 MHz, MCS6, 90ps duty cycle)	WLAN	8.35	±0.5
10723	AAC	IEEE 802.11ax (80 MHz, MCS7, 90ps duty cycle)	WLAN	8.35	±0.5
10724	AAC	IEEE 802.11ax (80 MHz, MCS8, 90ps duty cycle)	WLAN	8.27	±0.5
10725	AAC	IEEE 802.11ax (80 MHz, MCS9, 90ps duty cycle)	WLAN	8.26	±0.5
10726	AAC	IEEE 802.11ax (80 MHz, MCS10, 90ps duty cycle)	WLAN	8.42	±0.5
10727	AAC	IEEE 802.11ax (80 MHz, MCS11, 90ps duty cycle)	WLAN	8.20	±0.5
10728	AAC	IEEE 802.11ax (160 MHz, MCS4, 90ps duty cycle)	WLAN	8.20	±0.5
10729	AAC	IEEE 802.11ax (160 MHz, MCS5, 90ps duty cycle)	WLAN	8.40	±0.5
10730	AAC	IEEE 802.11ax (160 MHz, MCS6, 90ps duty cycle)	WLAN	8.43	±0.5
10731	AAC	IEEE 802.11ax (160 MHz, MCS7, 90ps duty cycle)	WLAN	8.94	±0.5
10732	AAC	IEEE 802.11ax (160 MHz, MCS8, 90ps duty cycle)	WLAN	9.16	±0.5
10733	AAC	IEEE 802.11ax (160 MHz, MCS9, 90ps duty cycle)	WLAN	8.90	±0.5
10734	AAC	IEEE 802.11ax (160 MHz, MCS10, 90ps duty cycle)	WLAN	9.11	±0.5
10735	AAC	IEEE 802.11ax (160 MHz, MCS11, 90ps duty cycle)	WLAN	9.04	±0.5
10736	AAC	IEEE 802.11ax (160 MHz, MCS2, 90ps duty cycle)	WLAN	8.93	±0.5
10737	AAC	IEEE 802.11ax (160 MHz, MCS3, 90ps duty cycle)	WLAN	8.90	±0.5
10738	AAC	IEEE 802.11ax (160 MHz, MCS4, 90ps duty cycle)	WLAN	8.80	±0.5
10739	AAC	IEEE 802.11ax (160 MHz, MCS5, 90ps duty cycle)	WLAN	8.79	±0.5
10740	AAC	IEEE 802.11ax (160 MHz, MCS6, 90ps duty cycle)	WLAN	8.82	±0.5
10741	AAC	IEEE 802.11ax (160 MHz, MCS7, 90ps duty cycle)	WLAN	8.81	±0.5

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10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.50	±0.8
10754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.54	±0.8
10755	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.54	±0.8
10756	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.77	±0.8
10757	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.77	±0.8
10758	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.69	±0.8
10759	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.68	±0.8
10760	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.48	±0.8
10761	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.58	±0.8
10762	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.48	±0.8
10763	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.53	±0.8
10764	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.54	±0.8
10765	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.54	±0.8
10766	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	9.51	±0.8
10767	AAG	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.59	±0.6
10768	AAG	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±0.6
10769	AAG	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±0.6
10770	AAG	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10771	AAG	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10772	AAG	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	±0.6
10773	AAG	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.00	±0.6
10774	AAG	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10775	AAG	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±0.6
10776	AAG	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10777	AAG	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10778	AAG	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±0.6
10779	AAG	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±0.6
10780	AAG	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10781	AAG	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10782	AAG	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±0.6
10783	AAG	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±0.6
10784	AAG	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10785	AAG	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	±0.6
10786	AAG	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10787	AAG	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±0.6
10788	AAG	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10789	AAG	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	±0.6
10790	AAG	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10791	AAG	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±0.6
10792	AAG	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±0.6
10793	AAG	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±0.6
10794	AAG	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.80	±0.6
10795	AAG	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±0.6
10796	AAG	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±0.6
10797	AAG	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±0.6
10798	AAG	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±0.6
10799	AAG	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±0.6
10800	AAG	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±0.6
10801	AAG	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±0.6
10802	AAG	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±0.6
10803	AAG	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±0.6
10804	AAG	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10805	AAG	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±0.6
10806	AAG	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10807	AAG	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10808	AAG	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10809	AAG	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10810	AAG	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10811	AAG	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10812	AAG	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10813	AAG	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±0.6
10814	AAG	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.38	±0.6
10815	AAG	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10816	AAG	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10817	AAG	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±0.6
10818	AAG	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±0.6
10819	AAG	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10820	AAG	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±0.6
10821	AAG	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±0.6
10822	AAG	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±0.6

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10829	AAF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 2048Q)	5G NR FR1 TDD	8.40	±0.6
10830	AAE	5G NR (CP-OFDM, 1 RB, 18 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.83	±0.6
10831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.75	±0.6
10832	AAE	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.74	±0.6
10833	AAE	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.70	±0.6
10834	AAE	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.75	±0.6
10835	AAF	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.70	±0.6
10836	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.66	±0.6
10837	AAF	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.68	±0.6
10839	AAF	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.70	±0.6
10840	AAE	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.67	±0.6
10841	AAF	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 6048Q)	5G NR FR1 TDD	7.71	±0.6
10843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.69	±0.6
10844	AAE	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.34	±0.6
10846	AAE	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.41	±0.6
10854	AAE	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.34	±0.6
10855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.36	±0.6
10856	AAE	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.37	±0.6
10857	AAD	5G NR (CP-OFDM, 100% RB, 35 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.35	±0.6
10858	AAE	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.36	±0.6
10859	AAF	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.34	±0.6
10860	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.41	±0.6
10861	AAF	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.40	±0.6
10863	AAF	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.41	±0.6
10864	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.37	±0.6
10865	AAF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 8048Q)	5G NR FR1 TDD	8.41	±0.6
10866	AAF	5G NR (DFT-s-OFDM, 1 RB, 180 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.89	±0.6
10868	AAF	5G NR (DFT-s-OFDM, 100% RB, 120 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.59	±0.6
10869	AAE	5G NR (DFT-s-OFDM, 1 RB, 180 MHz, QPSK, 18048Q)	5G NR FR2 TDD	6.75	±0.6
10870	AAE	5G NR (DFT-s-OFDM, 100% RB, 120 MHz, QPSK, 12048Q)	5G NR FR2 TDD	5.86	±0.6
10871	AAE	5G NR (DFT-s-OFDM, 1 RB, 180 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	5.75	±0.6
10872	AAE	5G NR (DFT-s-OFDM, 100% RB, 120 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	6.52	±0.6
10873	AAE	5G NR (DFT-s-OFDM, 1 RB, 180 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	6.81	±0.6
10874	AAE	5G NR (DFT-s-OFDM, 100% RB, 120 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	6.95	±0.6
10875	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 12048Q)	5G NR FR2 TDD	7.70	±0.6
10876	AAE	5G NR (CP-OFDM, 100% RB, 180 MHz, QPSK, 12048Q)	5G NR FR2 TDD	8.39	±0.6
10877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	7.95	±0.6
10878	AAE	5G NR (CP-OFDM, 100% RB, 180 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	8.41	±0.6
10879	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	8.12	±0.6
10880	AAE	5G NR (CP-OFDM, 100% RB, 180 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	8.38	±0.6
10881	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 12048Q)	5G NR FR2 TDD	5.75	±0.6
10882	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 12048Q)	5G NR FR2 TDD	5.96	±0.6
10883	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	6.57	±0.6
10884	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	6.53	±0.6
10885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	6.51	±0.6
10886	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	6.85	±0.6
10887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 12048Q)	5G NR FR2 TDD	7.78	±0.6
10888	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 12048Q)	5G NR FR2 TDD	8.35	±0.6
10889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	8.92	±0.6
10890	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 18048Q, 12048Q)	5G NR FR2 TDD	8.40	±0.6
10891	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	8.13	±0.6
10892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 84048Q, 12048Q)	5G NR FR2 TDD	8.41	±0.6
10897	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10898	AAE	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.87	±0.6
10899	AAE	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10900	AAE	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10901	AAE	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10902	AAE	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10903	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10904	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10905	AAE	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10906	AAE	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.88	±0.6
10907	AAE	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.78	±0.6
10908	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.83	±0.6
10909	AAE	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.86	±0.6
10910	AAE	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 3048Q)	5G NR FR1 TDD	5.83	±0.6

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ² k = 2
10011	AAB	SG NR (DFTs-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.83	±0.5
10012	AAC	SG NR (DFTs-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10013	AAD	SG NR (DFTs-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10014	AUE	SG NR (DFTs-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.85	±0.5
10015	AAD	SG NR (DFTs-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.83	±0.5
10016	AAD	SG NR (DFTs-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.87	±0.5
10017	AAD	SG NR (DFTs-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10018	AAC	SG NR (DFTs-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.86	±0.5
10019	AAC	SG NR (DFTs-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.86	±0.5
10020	AAB	SG NR (DFTs-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.87	±0.5
10021	AAC	SG NR (DFTs-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10022	AAB	SG NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.82	±0.5
10023	AAC	SG NR (DFTs-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10024	AAD	SG NR (DFTs-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10025	AAC	SG NR (DFTs-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.85	±0.5
10026	AAD	SG NR (DFTs-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10027	AAD	SG NR (DFTs-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	±0.5
10028	AAD	SG NR (DFTs-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.82	±0.5
10029	AAD	SG NR (DFTs-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.82	±0.5
10030	AAC	SG NR (DFTs-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.82	±0.5
10031	AAC	SG NR (DFTs-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10032	AAC	SG NR (DFTs-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10033	AAC	SG NR (DFTs-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10034	AAC	SG NR (DFTs-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10035	AAD	SG NR (DFTs-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10036	AAD	SG NR (DFTs-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.80	±0.5
10037	AAD	SG NR (DFTs-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.77	±0.5
10038	AAC	SG NR (DFTs-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.80	±0.5
10039	AAC	SG NR (DFTs-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.82	±0.5
10040	AAC	SG NR (DFTs-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.80	±0.5
10041	AAC	SG NR (DFTs-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.83	±0.5
10042	AAC	SG NR (DFTs-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.85	±0.5
10043	AAD	SG NR (DFTs-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.85	±0.5
10044	AAD	SG NR (DFTs-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.81	±0.5
10045	AAD	SG NR (DFTs-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.85	±0.5
10046	AAC	SG NR (DFTs-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.83	±0.5
10047	AAC	SG NR (DFTs-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.87	±0.5
10048	AAC	SG NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.84	±0.5
10049	AAC	SG NR (DFTs-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.87	±0.5
10050	AAC	SG NR (DFTs-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.84	±0.5
10051	AAD	SG NR (DFTs-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.82	±0.5
10052	AAA	SG NR DL CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz	SG NR FR1 FDD	8.25	±0.0
10053	AAA	SG NR DL CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz	SG NR FR1 FDD	8.15	±0.0
10054	AAA	SG NR DL CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz	SG NR FR1 FDD	8.29	±0.0
10055	AAA	SG NR DL CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz	SG NR FR1 FDD	8.42	±0.0
10056	AAA	SG NR DL CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz	SG NR FR1 FDD	8.14	±0.0
10057	AAA	SG NR DL CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz	SG NR FR1 FDD	8.31	±0.0
10058	AAA	SG NR DL CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz	SG NR FR1 FDD	8.61	±0.0
10059	AAA	SG NR DL CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz	SG NR FR1 FDD	8.30	±0.0
10060	AAB	SG NR DL CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz	SG NR FR1 TDD	9.32	±0.0
10061	AAC	SG NR DL CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz	SG NR FR1 TDD	9.36	±0.0
10062	AAB	SG NR DL CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz	SG NR FR1 TDD	9.40	±0.0
10063	AAC	SG NR DL CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz	SG NR FR1 TDD	9.35	±0.0
10064	AAB	SG NR DL CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz	SG NR FR1 TDD	9.29	±0.0
10065	AAC	SG NR DL CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz	SG NR FR1 TDD	9.37	±0.0
10066	AAB	SG NR DL CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz	SG NR FR1 TDD	9.55	±0.0
10067	AAC	SG NR DL CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz	SG NR FR1 TDD	9.42	±0.0
10068	AAD	SG NR DL CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz	SG NR FR1 TDD	9.49	±0.0
10072	AAC	SG NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	SG NR FR1 TDD	11.53	±0.0
10073	AAD	SG NR (DFTs-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	9.88	±0.0
10074	AAD	SG NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	SG NR FR1 TDD	10.28	±0.0
10076	AAA	ULLA BDR	ULLA	1.15	±0.0
10079	AAA	ULLA HDRs	ULLA	8.58	±0.0
10080	AAA	ULLA HDRs	ULLA	10.32	±0.0
10081	AAA	ULLA HDRp	ULLA	3.19	±0.0
10082	AAA	ULLA HDRp	ULLA	3.43	±0.0

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^g k=2
10883	AAC	5G NR DL (CP-OFDM, TM 3.1, 40MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	9.31	±0.5
10884	AAB	5G NR DL (CP-OFDM, TM 3.1, 55MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	9.42	±0.5
10885	AAC	5G NR DL (CP-OFDM, TM 3.1, 40MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.54	±0.5
10886	AAB	5G NR DL (CP-OFDM, TM 3.1, 55MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.50	±0.5
10887	AAC	5G NR DL (CP-OFDM, TM 3.1, 65MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.53	±0.5
10888	AAB	5G NR DL (CP-OFDM, TM 3.1, 75MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.38	±0.5
10889	AAC	5G NR DL (CP-OFDM, TM 3.1, 60MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.30	±0.5
10890	AAB	5G NR DL (CP-OFDM, TM 3.1, 60MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.52	±0.5
11000	AAA	5G NR DL (CP-OFDM, TM 3.1, 30MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	10.24	±0.5
11004	AAA	5G NR DL (CP-OFDM, TM 3.1, 30MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	10.73	±0.5
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 25MHz, 64-QAM, 15kHz)	5G NR FR1 PDD	8.70	±0.5
11006	AAA	5G NR DL (CP-OFDM, TM 3.1, 30MHz, 64-QAM, 15kHz)	5G NR FR1 PDD	8.95	±0.5
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 40MHz, 64-QAM, 15kHz)	5G NR FR1 PDD	8.46	±0.5
11008	AAA	5G NR DL (CP-OFDM, TM 3.1, 50MHz, 64-QAM, 15kHz)	5G NR FR1 PDD	8.51	±0.5
11009	AAA	5G NR DL (CP-OFDM, TM 3.1, 25MHz, 64-QAM, 30kHz)	5G NR FR1 PDD	8.76	±0.5
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 30MHz, 64-QAM, 30kHz)	5G NR FR1 PDD	8.95	±0.5
11011	AAA	5G NR DL (CP-OFDM, TM 3.1, 40MHz, 64-QAM, 30kHz)	5G NR FR1 PDD	8.95	±0.5
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 50MHz, 64-QAM, 30kHz)	5G NR FR1 PDD	8.69	±0.5
11013	AAB	IEEE 802.11ba (320MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±0.5
11014	AAB	IEEE 802.11ba (320MHz, MCS2, 99pc duty cycle)	WLAN	8.45	±0.5
11015	AAB	IEEE 802.11ba (320MHz, MCS3, 99pc duty cycle)	WLAN	8.54	±0.5
11016	AAB	IEEE 802.11ba (320MHz, MCS4, 99pc duty cycle)	WLAN	8.44	±0.5
11017	AAB	IEEE 802.11ba (320MHz, MCS5, 99pc duty cycle)	WLAN	8.41	±0.5
11018	AAB	IEEE 802.11ba (320MHz, MCS6, 99pc duty cycle)	WLAN	8.40	±0.5
11019	AAB	IEEE 802.11ba (320MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±0.5
11020	AAB	IEEE 802.11ba (320MHz, MCS8, 99pc duty cycle)	WLAN	8.27	±0.5
11021	AAB	IEEE 802.11ba (320MHz, MCS9, 99pc duty cycle)	WLAN	8.46	±0.5
11022	AAB	IEEE 802.11ba (320MHz, MCS10, 99pc duty cycle)	WLAN	8.36	±0.5
11023	AAB	IEEE 802.11ba (320MHz, MCS11, 99pc duty cycle)	WLAN	8.39	±0.5
11024	AAB	IEEE 802.11ba (320MHz, MCS12, 99pc duty cycle)	WLAN	8.42	±0.5
11025	AAB	IEEE 802.11ba (320MHz, MCS13, 99pc duty cycle)	WLAN	8.37	±0.5
11026	AAB	IEEE 802.11ba (320MHz, MCS9, 99pc duty cycle)	WLAN	8.39	±0.5

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

Appendix D.2 Calibration certificate for DAE SN1595

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

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

Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do - Republic of Korea

Certificate No: **DAE4-1595_Jan25**

CALIBRATION CERTIFICATE

Object: **DAE4 - SD 000 D04 BN - SN: 1595**

Calibration procedure(s): **QA CAL-06.v30**
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: **January 21, 2025**

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 (MATE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Kettley Multimeter Type 2001	SN: 0810270	27-Aug-24 (No: 40547)	Aug-25

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	25-Jan-24 (in house check)	In house check: Jan-25
Calibrator Box V2.1	SE UMS 006 AA 1002	25-Jan-24 (in house check)	In house check: Jan-25

Calibrated by: **Adrian Gehring** (Name), **Laboratory Technician** (Function), *[Signature]* (Signature)

Approved by: **Sven Kühn** (Name), **Technical Manager** (Function), *[Signature]* (Signature)

Issued: January 22, 2025

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Certificate No: DAE4-1595_Jan25 Page 1 of 5

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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.

DC Voltage Measurement

A/D - Converter Resolution nominal

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

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

Calibration Factors	X	Y	Z
High Range	404.812 $\pm$ 0.02% (k=2)	405.448 $\pm$ 0.02% (k=2)	406.496 $\pm$ 0.02% (k=2)
Low Range	3.96657 $\pm$ 1.50% (k=2)	3.99617 $\pm$ 1.50% (k=2)	3.98813 $\pm$ 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	14.0° $\pm$ 1°
---	----------------

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μ V)	Difference (μ V)	Error (%)
Channel X + Input	19997.28	1.17	0.00
Channel X + Input	20006.38	3.08	0.02
Channel X - Input	-19999.06	2.16	-0.01
Channel Y + Input	19998.42	0.25	0.00
Channel Y + Input	20004.22	1.07	0.01
Channel Y - Input	-20001.52	-0.12	0.00
Channel Z + Input	19998.23	1.50	0.00
Channel Z + Input	20002.05	-1.11	-0.01
Channel Z - Input	-20002.10	-0.65	0.00

Low Range	Reading (μ V)	Difference (μ V)	Error (%)
Channel X + Input	2002.64	0.58	0.03
Channel X + Input	202.81	0.53	0.26
Channel X - Input	-197.50	-0.13	0.06
Channel Y + Input	2002.53	0.50	0.03
Channel Y + Input	201.81	-0.42	-0.21
Channel Y - Input	-197.88	-0.33	0.17
Channel Z + Input	2002.37	0.43	0.02
Channel Z + Input	200.95	-1.21	-0.60
Channel Z - Input	-199.03	-1.47	0.74

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 (μ V)	Low Range Average Reading (μ V)
Channel X	200	-3.13	-4.30
	-200	6.05	4.04
Channel Y	200	16.01	15.80
	-200	-16.67	-17.24
Channel Z	200	14.28	13.98
	-200	-16.46	-16.67

3. Channel separation

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

	Input Voltage (mV)	Channel X (μ V)	Channel Y (μ V)	Channel Z (μ V)
Channel X	200	-	1.44	2.10
Channel Y	200	1.04	-	2.21
Channel Z	200	9.18	-1.96	-

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	16050	13406
Channel Y	15985	16708
Channel Z	15922	17139

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	-0.94	-2.52	0.61	0.34
Channel Y	-1.50	-3.72	-0.73	0.41
Channel Z	-2.31	-3.37	-0.97	0.44

6. Input Offset Current

Nominal input circuitry offset current on all channels: <25nA

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	+8	+14
Supply (- Vcc)	-0.01	-8	-9

Appendix D.3 Calibration certificate for Dipole SN1085

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Accreditation No.: SCS 0106

Client: **SGS**
 Gyeonggi-do, Republic of Korea

Certificate No.: **D750V3-1085_Mar25**

CALIBRATION CERTIFICATE

Object: **D750V3 - SN: 1085**

Calibration procedure(s): **QA CAL-05.v12**
 Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: **March 12, 2025**



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 (MATE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100967	28-Mar-24 (No. 217-04556)	Mar-25
Power Sensor R&S NRP13A	SN: 101859	06-Feb-25 (No. 4030A31920641)	Feb-26
Spectrum Analyzer R&S FSV40	SN: 101802	29-Jan-25 (No. 4030A3150099556)	Jan-26
Mismatch: Bortl [S4166] Attenuator [S4423]	SN: 1152	28-Mar-24 (No. 217-04556)	Mar-25
OCP DAK-12	SN: 1015	24-Sep-24 (No. OCP-DAK12-1015_Sep24)	Sep-25
OCP DAK-3.5	SN: 1245	25-Sep-24 (No. OCP-DAK3.5-1245_Sep24)	Sep-25
Reference Probe EX30V4	SN: 7345	10-Jan-25 (No. EX3-7345_Jan25)	Jan-26
DAE4p	SN: 1836	28-Oct-24 (No. DAE4p-1836_Oct24)	Oct-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1000	28-May-24 (No. 675-ACAD_Source_Box-245528)	May-25
Signal Generator R&B SMB100A	SN: 182061	28-May-24 (No. 675-CAL16-S4509-240528)	May-25
Mismatch: SMA	SN: 1152	22-May-24 (No. 675-Mismatch_SMA-240522)	May-25

Calibrated by: **Kreimir Franjc**

Approved by: **Sven Kuhn**

Name: **Kreimir Franjc** Function: **Laboratory Technician**

Name: **Sven Kuhn** Function: **Technical Manager**

Signature: 

Signature: 

Issued: March 12, 2025

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Certificate No: D750V3-1085_Mar25

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Accreditation No.: SCS 0108

Glossary

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

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 069664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the fat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- **Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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

D750V3 - SN: 1085

March 12, 2025

Measurement Conditions

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

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	750MHz ±1MHz	

HSL parameters at 750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	41.9	0.890 mho/m
Measured HSL parameters	(22.0 ±0.2)°C	42.7 ±6%	0.890 mho/m ±6%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 750 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	2.20 W/kg
SAR for nominal HSL parameters	normalized to 1W	8.76 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	1.43 W/kg
SAR for nominal HSL parameters	normalized to 1W	5.69 W/kg ±16.5% (k = 2)

D750V3 - SN: 1085

March 12, 2025

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with HSL at 750 MHz

Impedance	51.9 Ω - 3.4 jΩ
Return Loss	-28.3 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.032 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
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D750V3 - SN: 1085

March 12, 2025

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]
D750V3 - SN1085	750	W1	24

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, U/D	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permeability
Flu	15	CW, D--		750, 0	9.35	0.80	42.7

Hardware Setup

Hardware	TSL Measurement Date	Probe Calibration Date	SAR Calibration Date
Flu V4.0 mod	MSL 2025-03-12	EX300A - SN7945, 2025-01-19	EM61P SN1836, 2024-10-28

Scans Setup

	Zoom Scan
Grid Extents [mm]	10 x 10 x 10
Grid Steps [mm]	5.0 x 5.0 x 1.5
Source Surface [mm]	1.4
Grated Grid	Yes
Grating Rate	1.5
NAK	N/A
Surface Detection	VMS + Sp
Scan Method	Waveform

Measurement Results

	Zoom Scan
Date	2025-03-12
ptSAR1 g [W/Kg]	2.38
ptSAR10 g [W/Kg]	1.43
Power Shift [dB]	0.00
Power Scaling	Disabled
Scaling Factor [dB]	
TSL Correction	Positive / Negative



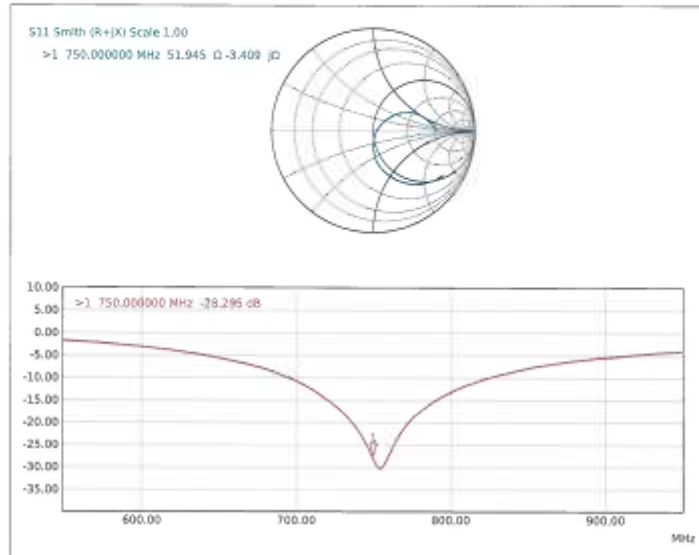
Certificate No: D750V3-1085_Max25

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D750V3 - SN: 1085

March 12, 2025

Impedance Measurement Plot for HSL



Certificate No: D750V3-1085_Mar25

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Appendix D.4 Calibration certificate for Dipole SN5d158

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client: SGS
Gyeonggi-do, Republic of Korea

Certificate No.: D1900V2-5d158_Apr25

CALIBRATION CERTIFICATE

Object: D1900V2 - SN: 5d158

Calibration procedure(s): QA CAL-05.v12
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: April 16, 2025

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 (N&TE critical for calibration):

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100967	26-Mar-25 (No. 217-04250)	Mar-26
Power Sensor R&S NRP18A	SN: 101869	06-Feb-25 (No. 4030A315009541)	Feb-26
Spectrum Analyzer R&S FSV40	SN: 101832	29-Jan-25 (No. 4030A315006058)	Jan-26
3.5mm mismatch combination	SN: 1152	24-Mar-25 (No. 217-04252)	Mar-26
CCP DAK-12	SN: 1016	24-Sept-24 (No. CCP-DAK12-1216_Sep24)	Sep-25
CCP DAK-3.5	SN: 1249	23-Sept-24 (No. CCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX3DN4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE4ip	SN: 1836	28-Oct-24 (No. DAE4ip-1836_Oct24)	Oct-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1006	28-May-24 (No. 679-ACAD_Source_Box-240528)	May-25
Signal Generator R&S SMH100A	SN: 182061	28-May-24 (No. 679-CAL18-S4583-240528)	May-25
Mismatch: SMA	SN: 1152	22-May-24 (No. 679-Mismatch_SMA-240522)	May-25

Calibrated by: Lef Kysner, Laboratory Technician, Signature: 

Approved by: Sven Kühn, Technical Manager, Signature: 

Issued: April 17, 2025

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Certificate No: D1900V2-5d158_Apr25

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Accreditation No.: SCS 0108

Glossary

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

Calibration is Performed According to the Following Standards

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

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- **Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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

D1900V2 - SN: 5d158

April 16, 2025

Measurement Conditions

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

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with spacer
Zoom Scan Resolution	dx, dy = 8mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	1900MHz ±1MHz	

HSL parameters at 1900 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	40.0	1.40 mho/m
Measured HSL parameters	(22.0 ±0.2)°C	39.9 ±5%	1.40 mho/m ±5%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 1900 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	9.97 W/kg
SAR for nominal HSL parameters	normalized to 1W	99.7 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	5.26 W/kg
SAR for nominal HSL parameters	normalized to 1W	20.9 W/kg ±16.5% (k = 2)



D1900V2 - SN: 5d158

April 16, 2025

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with HSL at 1900 MHz

Impedance	52.9 Ω + 5.3 j Ω
Return Loss	-24.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.199 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	SPIEAG
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D1900V2 - SN: 5d158

April 16, 2025

System Performance Check Report

Summary

Dipole	Frequency (MHz)	TSL	Power (dBm)
D1900V2 - 5d158158	1908	108	24

Exposure Conditions

Phantom Section, TSL	Test Distance (cm)	Band	Group, ERP	Frequency (MHz)	Channel Number	Conversion Factor	TSL Conductivity (S/m)	TSL Permittivity
Hal	19	CW, E-1	1980, 0	1908	0	7.68	1.46	33.9

Hardware Setup

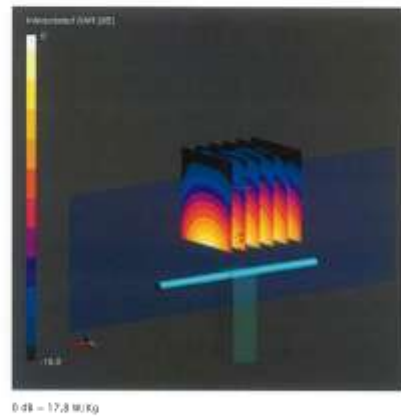
Phantom:	TSL, Measurement Data	Probe, Calibration Date	DAL, Calibration Date
MPX-0.3 Right	MSL, 2021-04-16	EX304 - 547348, 2025-01-10	DM4ip S-1835, 2024-10-28

Scans Setup

	Zoom Scan
Grid Extends (mm)	50 x 50 x 50
Grid Steps (mm)	8.0 x 8.0 x 1.5
Sensor Surface (mm)	1.4
Coated Grid	Yes
Coating Ratio	1.5
MMR	N/A
Surface Detection	All points
Scan Method	Measured

Measurement Results

	Zoom Scan
Date	2021-04-16
psSAR1g (W/Kg)	8.57
psSAR10g (W/Kg)	1.28
Power Drift (dB)	-0.68
Power Scaling	Divided
Scaling Factor (dB)	
TSL Correction	Positive / Negative



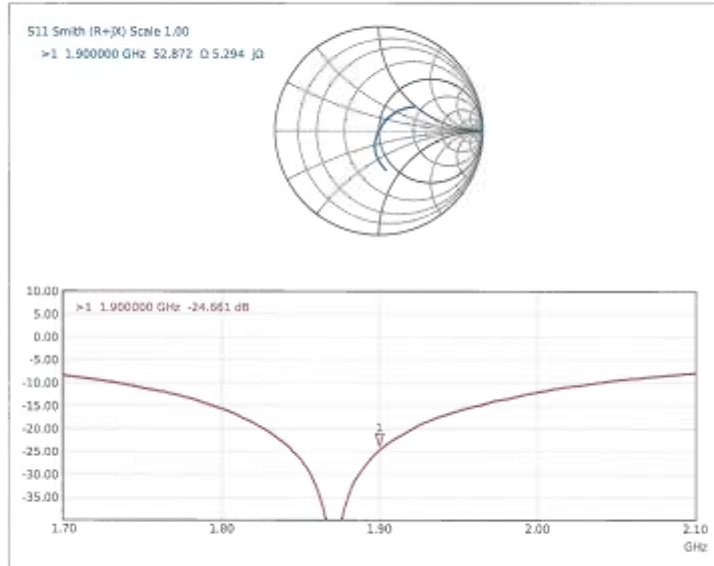
Certificate No: D1900V2-5d158_Apr25

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D1900V2 - SN: 5d158

April 16, 2025

Impedance Measurement Plot for HSL



Certificate No: D1900V2-5d158_Apr25

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Appendix D.5 Calibration certificate for Dipole SN1038

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Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do, Republic of Korea

Certificate No.: **D2600V2-1038_May25**

CALIBRATION CERTIFICATE

Object: **D2600V2 - SN: 1038**

Calibration procedure(s): **QA CAL-05.v12**
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: **May 19, 2025**

This calibration certificate documents the traceability to national standards, which realizes 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 Cal
Power Sensor R&S NRP-33T	SN: 100697	26-Mar-25 (No. 217-04290)	Mar-26
Power Sensor R&S NRP18A	SN: 101809	16-Feb-25 (No. 4030A315009541)	Feb-26
Spectrum Analyzer R&S PSV40	SN: 101832	29-Jan-25 (No. 4030A315009560)	Jan-26
3.5mm mismatch combination	SN: 1152	24-Mar-25 (No. 217-04290)	Mar-26
CCP DAK-12	SN: 1016	24-Sept-24 (No. CCP-DAK12-1016_Sep24)	Sep-25
CCP DAK-3.5	SN: 1249	23-Sept-24 (No. CCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX3DW4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE4ip	SN: 1836	17-Apr-25 (No. DAE4ip-1836_Apr25)	Apr-26

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Setup 1	SN: 1000	28-May-24 (No. 675-ACAD_Source_Box-340528)	May-25
Signal Generator R&S SMB100A	SN: 182081	28-May-24 (No. 675-CAL16-64588-340628)	May-25
Mismatch: SMA	SN: 1102	22-May-24 (No. 675-Mismatch_SMA-240522)	May-25

Calibrated by: **Paulo Pina** (Name), **Laboratory Technician** (Function),  (Signature)

Approved by: **Sven Kohn** (Name), **Technical Manager** (Function),  (Signature)

Issued: May 19, 2025

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

Certificate No: D2600V2-1038_May25

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



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 The Swiss Accreditation Service is one of the signatories to the EA
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Glossary

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

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 885984, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- **Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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

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Measurement Conditions

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

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with spacer
Zoom Scan Resolution	dx, dy = 5mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	2600MHz ±1MHz	

HSL parameters at 2600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	39.0	1.95 mho/m
Measured HSL parameters	(22.0 ±0.2)°C	37.1 ±6%	2.01 mho/m ±6%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 2600 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	13.8 W/kg
SAR for nominal HSL parameters	normalized to 1W	54.9 W/kg ±17.0% (k=2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	6.20 W/kg
SAR for nominal HSL parameters	normalized to 1W	24.7 W/kg ±16.5% (k=2)

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Appendix (Additional assessments outside the scope of SGS 0108)

Antenna Parameters with HSL at 2600 MHz

Impedance	47.7 Ω - 1.3 j Ω
Return Loss	-31.2 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.141 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
-----------------	-------



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System Performance Check Report

Summary

Device	Frequency [MHz]	TSL	Power [dBm]
D2600V2 - SN1038	2600	TSL	24

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UIC	Frequency [MHz]	Channel Number	Carrier Wave Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	10		CPL 8---	2600, C		7.20	2.01	97.1

Hardware Setup

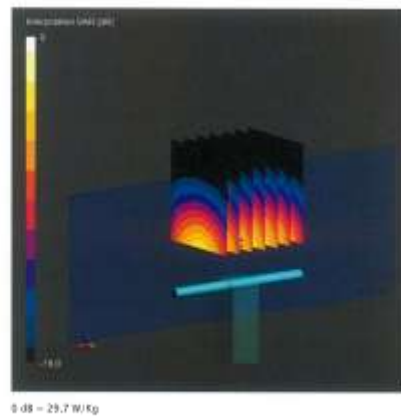
Phantom	TSL Exposure Date	Probe, Calibration Date	DMC, Calibration Date
HPF V8.0 Cardiac	HGL, 2021-08-18	D260V4 - SN7548, 2025-01-19	QAC4g Set1836, 2021-04-17

Scene Setup

	Scene Scan
Grid (sensors [mm])	32 x 32 x 32
Grid Size [mm]	5.0 x 5.0 x 1.5
Sensor Surface [mm]	1.4
Graded Grid	Yes
Grading Ratio	1.5
WNA	N/A
Surface Detection	VMS - dip
Scan Method	Measured

Measurement Results

	Scene Scan
Date	2021-05-19
ptSAR1g [W/kg]	13.8
ptSAR10g [W/kg]	6.39
Power DFB [dB]	0.01
Power Scaling	Disabled
Scaling Factor [dB]	
TSL Correction	Positive / Negative



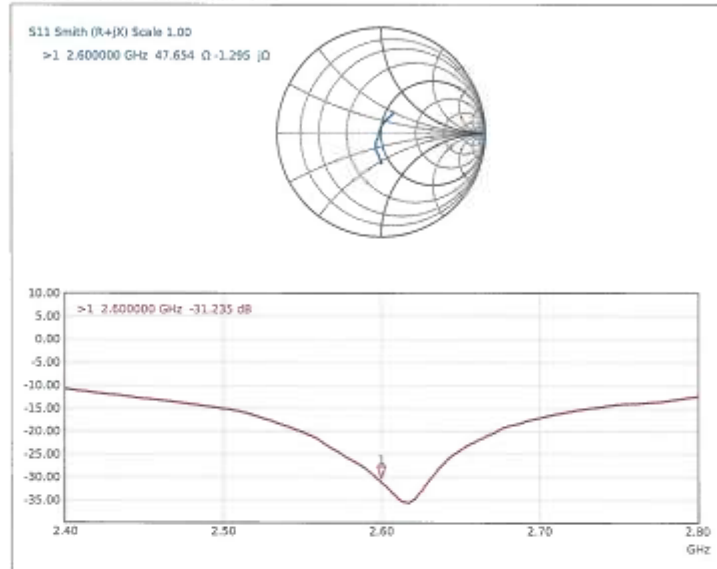
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Impedance Measurement Plot for HSL



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Appendix E RF Conducted Powers

Appendix E.1 LTE Conducted power

LTE 25

LTE Band 25 1.4MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26047	26365	26683
			(1850.7 MHz)	(1882.5 MHz)	(1914.3 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.64	23.76	22.58
	1	2	23.74	23.79	22.54
	1	5	23.78	23.75	22.46
	3	0	23.80	23.63	22.35
	3	2	23.88	23.93	22.36
	3	3	23.79	23.96	22.43
	6	0	22.88	23.46	22.42
16QAM	1	0	22.92	23.41	21.81
	1	2	23.08	23.26	21.71
	1	5	23.10	22.99	21.35
	3	0	22.75	22.95	21.62
	3	2	22.89	23.50	21.93
	3	3	22.83	22.96	21.75
	6	0	21.87	22.67	21.77
64QAM	1	0	22.04	21.88	20.19
	1	2	22.06	21.21	20.10
	1	5	21.91	21.35	20.08
	3	0	21.94	22.10	20.03
	3	2	22.08	21.58	20.45
	3	3	21.87	22.00	20.23
	6	0	20.96	21.72	20.03

LTE Band 25 3MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26055	26365	26675
			(1851.5 MHz)	(1882.5 MHz)	(1913.5 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.83	23.81	23.36
	1	7	23.97	23.96	22.59
	1	14	23.92	24.00	22.42
	8	0	23.83	22.87	21.98
	8	4	23.92	23.04	21.89
	8	7	23.91	23.02	22.02
	15	0	23.02	22.88	21.96
16QAM	1	0	23.02	22.97	22.19
	1	7	23.02	22.93	21.69
	1	14	23.19	23.12	21.94
	8	0	22.86	21.99	21.22
	8	4	23.09	22.08	21.28
	8	7	22.91	21.98	21.27
	15	0	21.92	21.99	21.33
64QAM	1	0	22.20	22.00	20.73
	1	7	22.38	22.36	20.32
	1	14	21.98	22.26	20.23
	8	0	21.97	20.98	19.38
	8	4	21.98	21.18	19.63
	8	7	21.98	20.97	19.63
	15	0	21.13	20.88	19.58

LTE Band 25 5MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26065	26365	26665
			(1852.5 MHz)	(1882.5 MHz)	(1912.5 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.74	23.79	23.70
	1	12	23.87	23.70	22.82
	1	24	23.85	23.94	22.48
	12	0	23.87	23.76	22.45
	12	6	23.88	23.83	22.14
	12	13	23.85	23.89	21.83
	25	0	23.76	22.91	22.15
16QAM	1	0	22.73	23.18	22.79
	1	12	22.85	23.01	22.20
	1	24	22.99	23.09	21.48
	12	0	22.86	22.98	21.66
	12	6	22.77	22.92	21.35
	12	13	22.81	22.85	21.09
	25	0	22.68	21.97	21.28
64QAM	1	0	21.90	22.38	21.21
	1	12	21.88	22.15	20.32
	1	24	22.12	21.95	20.18
	12	0	21.96	21.97	20.05
	12	6	21.84	21.95	19.75
	12	13	21.89	21.79	19.35
	25	0	21.87	21.05	19.60

LTE Band 25 10MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26090	26365	26640
			(1855.0 MHz)	(1882.5 MHz)	(1910.0 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.81	23.77	23.60
	1	25	24.11	23.79	23.44
	1	49	24.06	23.85	23.22
	25	0	23.95	23.98	23.63
	25	12	23.96	23.96	23.72
	25	25	23.92	23.93	23.71
	50	0	23.95	22.95	22.63
16QAM	1	0	23.62	23.03	22.65
	1	25	22.89	22.95	22.78
	1	49	22.98	23.32	22.52
	25	0	22.98	22.97	22.81
	25	12	22.96	22.93	22.92
	25	25	22.93	22.90	22.86
	50	0	22.89	22.04	21.71
64QAM	1	0	21.98	21.94	21.16
	1	25	21.53	21.87	21.17
	1	49	21.88	22.18	20.37
	25	0	21.96	21.97	20.99
	25	12	21.81	21.98	21.15
	25	25	21.99	21.95	21.20
	50	0	21.85	21.08	20.10

LTE Band 25 15MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26115	26365	26615
			(1857.5 MHz)	(1882.5 MHz)	(1907.5 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.90	23.84	23.50
	1	36	24.06	23.98	23.11
	1	74	23.74	23.97	23.29
	36	0	23.90	23.88	23.33
	36	18	23.96	23.99	23.48
	36	37	23.88	23.88	23.45
	75	0	23.83	23.93	22.52
16QAM	1	0	23.85	23.11	22.80
	1	36	23.05	23.20	22.39
	1	74	23.35	22.94	22.76
	36	0	22.93	22.96	22.39
	36	18	22.85	22.91	22.61
	36	37	22.81	22.86	22.64
	75	0	22.78	22.85	21.62
64QAM	1	0	21.97	22.28	20.94
	1	36	22.08	21.56	20.29
	1	74	22.18	22.42	20.41
	36	0	21.85	21.77	20.72
	36	18	21.88	21.98	20.83
	36	37	21.83	21.98	20.82
	75	0	21.93	21.95	19.75

LTE Band 25 20MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			26140	26365	26590
			(1860.0 MHz)	(1882.5 MHz)	(1905.0 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	24.12	24.13	23.80
	1	50	24.07	23.97	23.56
	1	99	23.96	23.91	23.29
	50	0	23.94	23.94	23.55
	50	25	23.85	23.97	23.58
	50	13	23.92	23.91	23.46
	100	0	23.98	23.92	22.62
16QAM	1	0	23.72	23.05	23.01
	1	50	23.76	23.52	22.68
	1	99	23.42	23.27	22.73
	50	0	22.76	22.80	22.73
	50	25	22.85	22.84	22.72
	50	50	22.91	22.81	22.62
	100	0	22.86	22.67	21.82
64QAM	1	0	22.21	21.54	20.90
	1	50	22.27	21.84	20.85
	1	99	22.32	21.59	20.64
	50	0	21.90	21.93	20.93
	50	25	21.86	21.90	20.84
	50	50	21.73	21.71	20.80
	100	0	21.93	21.91	19.98

LTE 71

LTE Band 71 5MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			133147	133297	133447
			(665.5 MHz)	(680.5 MHz)	(695.5 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	24.12	24.07	23.93
	1	12	23.90	23.98	23.88
	1	24	23.96	24.03	23.81
	12	0	23.18	22.97	23.89
	12	6	23.12	23.00	23.72
	12	13	23.04	23.02	23.83
	25	0	23.09	23.01	23.85
16QAM	1	0	23.30	23.26	23.35
	1	12	23.07	23.16	22.98
	1	24	23.27	23.49	22.85
	12	0	22.22	22.13	22.91
	12	6	22.16	22.11	23.25
	12	13	22.01	22.03	23.13
	25	0	22.04	22.06	23.55
64QAM	1	0	21.62	22.31	22.11
	1	12	22.14	22.36	22.53
	1	24	22.30	22.45	21.97
	12	0	21.09	20.97	21.18
	12	6	21.25	20.95	21.11
	12	13	21.07	21.09	21.15
	25	0	21.06	21.03	21.09

LTE Band 71 10MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			133172	133297	133422
			(668.0 MHz)	(680.5 MHz)	(693.0 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	23.95	24.00	23.89
	1	25	24.05	23.84	23.98
	1	49	24.06	23.67	23.95
	25	0	23.93	23.06	22.96
	25	12	23.96	23.09	23.02
	25	25	23.90	23.07	22.91
	50	0	23.24	23.09	23.00
16QAM	1	0	23.07	22.95	22.94
	1	25	23.67	23.66	23.29
	1	49	23.08	23.11	23.20
	25	0	22.89	21.99	22.08
	25	12	22.84	22.11	22.02
	25	25	22.87	22.09	22.08
	50	0	22.19	22.08	21.91
64QAM	1	0	21.87	22.38	22.02
	1	25	22.66	22.45	21.99
	1	49	22.51	22.42	22.52
	25	0	21.91	21.04	20.99
	25	12	21.98	21.04	21.01
	25	25	21.94	21.03	20.97
	50	0	21.16	20.97	21.00

LTE Band 71 15MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			133197	133297	133397
			(670.5 MHz)	(680.5 MHz)	(690.5 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	24.12	24.10	24.10
	1	36	24.11	24.13	23.90
	1	74	24.02	24.12	23.69
	36	0	23.73	23.06	23.13
	36	18	23.56	23.11	22.97
	36	37	23.49	23.03	23.04
	75	0	23.17	23.05	22.90
16QAM	1	0	23.28	23.44	23.15
	1	36	23.41	23.58	23.23
	1	74	23.34	23.36	22.95
	36	0	22.18	22.03	22.11
	36	18	22.23	22.12	21.97
	36	37	22.19	22.03	21.96
	75	0	22.14	22.13	21.94
64QAM	1	0	22.36	22.53	22.46
	1	36	21.96	21.88	21.86
	1	74	22.62	22.22	22.07
	36	0	21.31	21.13	21.11
	36	18	21.11	21.10	20.89
	36	37	21.20	21.18	20.94
	75	0	21.13	21.10	20.99

LTE Band 71 20MHz Bandwidth					
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel
			133222	133297	133372
			(673.0 MHz)	(680.5 MHz)	(688.0 MHz)
			Conducted Output Power		
			(dB m)	(dB m)	(dB m)
QPSK	1	0	24.13	24.14	24.12
	1	50	24.11	23.98	24.06
	1	99	24.09	23.91	23.87
	50	0	23.41	23.39	23.02
	50	25	23.40	23.43	23.06
	50	13	23.32	23.35	23.05
	100	0	23.11	23.33	23.08
16QAM	1	0	23.61	23.56	23.38
	1	50	23.50	22.99	23.48
	1	99	23.39	23.05	22.87
	50	0	22.56	22.17	21.95
	50	25	22.53	22.15	22.12
	50	50	22.49	22.18	22.19
	100	0	22.07	22.17	21.92
64QAM	1	0	22.59	22.22	22.21
	1	50	22.53	22.31	22.27
	1	99	22.21	22.51	22.50
	50	0	21.59	21.14	21.07
	50	25	21.56	21.27	21.01
	50	50	21.63	21.21	21.11
	100	0	21.15	21.24	21.04



Appendix E.11 5G NR Conducted power

n7

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	Low Channel 502500 (2512.5 MHz)	Mid Channel 507000 (2535 MHz)	High Channel 511500 (2557.5 MHz)
n7	15	25	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	23.47	23.70	23.80
				QPSK		1	1	23.42	23.52	23.96
				16QAM		1	1	22.89	23.06	23.15
				64QAM		1	1	21.93	21.83	21.83
				256QAM		1	1	19.89	19.97	19.82
				Pi/2 BPSK	Inner_1RB Right	1	131	23.86	24.02	23.02
				QPSK		1	131	23.79	23.78	23.01
				Pi/2 BPSK	Inner_Full	64	32	24.36	23.81	24.35
				QPSK		64	32	24.35	23.96	24.35
				Pi/2 BPSK	Outer_Full	128	0	23.47	23.33	23.36
				QPSK		128	0	23.48	23.35	23.34
				Pi/2 BPSK	Edge_1RB Left	1	0	23.24	23.24	23.05
				QPSK		1	0	23.28	23.24	23.16
				Pi/2 BPSK	Edge_Full Left	2	0	23.35	23.42	23.37
				QPSK		2	0	23.43	23.30	23.32
				Pi/2 BPSK	Edge_1RB Right	1	132	23.37	23.26	23.08
				QPSK		1	132	23.39	23.09	22.91
				Pi/2 BPSK	Edge_Full Right	2	131	23.54	23.36	23.19
				QPSK		2	131	23.52	23.19	22.99
			CP-OFDM	QPSK	Inner_1RB Left	1	1	22.58	22.56	22.55

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	Low Channel 503000 (2515 MHz)	Mid Channel 507000 (2535 MHz)	High Channel 511000 (2555 MHz)
n7	15	30	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	23.30	23.64	23.60
				QPSK		1	1	23.27	23.54	23.45
				16QAM		1	1	22.79	22.83	22.92
				64QAM		1	1	21.69	21.88	21.56
				256QAM		1	1	19.94	20.00	19.98
				Pi/2 BPSK	Inner_1RB Right	1	158	23.34	24.03	23.24
				QPSK		1	158	23.31	24.01	23.23
				Pi/2 BPSK	Inner_Full	80	40	24.26	23.76	24.31
				QPSK		80	40	24.23	23.79	24.32
				Pi/2 BPSK	Outer_Full	160	0	23.34	23.26	23.39
				QPSK		160	0	23.35	23.25	23.37
				Pi/2 BPSK	Edge_1RB Left	1	0	23.09	23.16	23.11
				QPSK		1	0	23.24	23.30	23.14
				Pi/2 BPSK	Edge_Full Left	2	0	23.18	23.27	23.25
				QPSK		2	0	23.35	23.39	23.28
				Pi/2 BPSK	Edge_1RB Right	1	159	23.11	23.06	22.81
				QPSK		1	159	23.17	23.07	23.14
				Pi/2 BPSK	Edge_Full Right	2	158	23.21	23.29	22.89
				QPSK		2	158	23.26	23.23	23.21
			CP-OFDM	QPSK	Inner_1RB Left	1	1	22.46	22.39	22.16

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	Low Channel 504000 (2520 MHz)	Mid Channel 507000 (2535 MHz)	High Channel 510000 (2550 MHz)
n7	15	40	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	24.49	24.51	24.43
				QPSK		1	1	24.38	24.45	24.20
				16QAM		1	1	23.14	23.12	23.15
				64QAM		1	1	21.67	21.79	21.77
				256QAM		1	1	20.18	20.10	19.92
				Pi/2 BPSK	Inner_1RB Right	1	214	23.53	24.21	23.43
				QPSK		1	214	23.68	24.20	23.43
				Pi/2 BPSK	Inner_Full	108	54	24.17	24.22	24.21
				QPSK		108	54	24.09	24.13	24.11
				Pi/2 BPSK	Outer_Full	216	0	23.42	23.41	23.47
				QPSK		216	0	23.45	23.30	23.38
				Pi/2 BPSK	Edge_1RB Left	1	0	23.24	23.28	23.22
				QPSK		1	0	23.30	23.32	23.23
				Pi/2 BPSK	Edge_Full Left	2	0	23.31	23.47	23.34
				QPSK		2	0	23.40	23.43	23.36
				Pi/2 BPSK	Edge_1RB Right	1	215	23.14	23.19	23.24
				QPSK		1	215	23.17	23.16	23.21
				Pi/2 BPSK	Edge_Full Right	2	214	23.32	23.31	23.35
				QPSK		2	214	23.30	23.36	23.29
			CP-OFDM	QPSK	Inner_1RB Left	1	1	22.63	22.49	22.73

n25

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	low Channel 372500 (1862.5 MHz)	Mid Channel 376500 (1882.5 MHz)	High Channel 380500 (1902.5 MHz)	
n25	15	25	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	23.39	23.72	23.17	
						1	1	23.49	23.70	23.26	
						16QAM	1	1	22.67	23.31	22.67
						64QAM	1	1	21.92	21.84	21.78
						256QAM	1	1	19.99	19.93	20.06
				Pi/2 BPSK	Inner_1RB Right	1	131	22.90	23.44	22.70	
				1		131	22.95	23.41	22.97		
				Pi/2 BPSK	Inner_Full	64	32	24.43	24.31	24.06	
				64		32	24.42	24.31	23.99		
				Pi/2 BPSK	Outer_Full	128	0	23.41	23.33	22.93	
				128		0	23.40	23.32	22.91		
				Pi/2 BPSK	Edge_1RB Left	1	0	23.35	23.33	23.03	
				1		0	22.97	23.34	23.11		
				Pi/2 BPSK	Edge_Full Left	2	0	23.60	23.60	23.13	
				2		0	23.08	23.46	23.24		
				Pi/2 BPSK	Edge_1RB Right	1	132	23.37	23.10	22.83	
				1		132	22.85	23.18	22.24		
				Pi/2 BPSK	Edge_Full Right	2	131	23.50	23.27	22.97	
				2		131	22.96	23.30	22.87		
				CP-OFDM	QPSK	Inner_1RB Left	1	1	21.61	21.22	21.98

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	low Channel 373000 (1865 MHz)	Mid Channel 376500 (1882.5 MHz)	High Channel 380000 (1900 MHz)			
n25	15	30	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	23.22	24.10	23.59			
				QPSK		1	1	23.18	24.01	23.54			
				16QAM		1	1	22.83	23.33	22.71			
				64QAM		1	1	21.92	21.95	21.93			
				256QAM		1	1	20.07	20.04	19.99			
				Pi/2 BPSK	Inner_1RB Right	1	158	23.26	23.11	22.63			
				QPSK		1	158	23.22	23.08	22.61			
				Pi/2 BPSK	Inner_Full	80	40	24.46	24.31	24.02			
				QPSK		80	40	24.47	24.34	24.09			
				Pi/2 BPSK	Outer_Full	160	0	23.50	23.35	23.08			
				QPSK		160	0	23.48	23.33	23.03			
				Pi/2 BPSK	Edge_1RB Left	1	0	23.33	23.39	23.24			
				QPSK		1	0	23.20	23.37	23.24			
				Pi/2 BPSK	Edge_Full Left	2	0	23.50	23.52	23.43			
				QPSK		2	0	23.30	23.40	23.41			
				Pi/2 BPSK	Edge_1RB Right	1	159	23.34	22.98	22.95			
				QPSK		1	159	23.26	23.05	22.85			
				Pi/2 BPSK	Edge_Full Right	2	158	23.51	23.10	22.83			
				QPSK		2	158	23.36	23.17	22.75			
							CP-OFDM	QPSK	Inner_1RB Left	1	1	21.86	22.69

Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	low Channel 374000 (1870 MHz)	Mid Channel 376500 (1882.5 MHz)	High Channel 379000 (1895 MHz)			
n25	15	40	DFT-s-OFDM	Pi/2 BPSK	Inner_1RB Left	1	1	24.48	24.50	24.41			
				QPSK		1	1	24.31	24.33	24.32			
				16QAM		1	1	23.17	23.30	23.32			
				64QAM		1	1	22.21	22.11	22.09			
				256QAM		1	1	20.25	20.04	20.10			
				Pi/2 BPSK	Inner_1RB Right	1	214	24.32	24.14	24.21			
				QPSK		1	214	24.32	24.15	24.20			
				Pi/2 BPSK	Inner_Full	108	54	24.22	24.42	23.72			
				QPSK		108	54	24.19	24.41	23.71			
				Pi/2 BPSK	Outer_Full	216	0	23.48	23.32	23.09			
				QPSK		216	0	23.45	23.31	22.92			
				Pi/2 BPSK	Edge_1RB Left	1	0	23.45	23.44	23.52			
				QPSK		1	0	23.44	23.42	23.47			
				Pi/2 BPSK	Edge_Full Left	2	0	23.56	23.60	23.60			
				QPSK		2	0	23.51	23.59	23.58			
				Pi/2 BPSK	Edge_1RB Right	1	215	23.36	22.14	21.64			
				QPSK		1	215	23.42	22.44	21.60			
				Pi/2 BPSK	Edge_Full Right	2	214	23.45	22.27	21.79			
				QPSK		2	214	23.44	22.54	21.71			
							CP-OFDM	QPSK	Inner_1RB Left	1	1	22.40	23.03

n41

Band	SCS (KHz)	Bandwidth (MHz)	Modulation	RB allocation	RB Size	RB Offset	Low Channel 506202 (2531.01 MHz)	Mid Channel 518598 (2592.99 MHz)	High Channel 531000 (2655 MHz)
n41	30	70	DFT-s-OFDM	Pi/2 BPSK	1	1	24.78	25.08	25.29
				QPSK	1	1	24.71	25.07	25.13
				16QAM	1	1	23.83	24.07	24.38
				64QAM	1	1	22.86	23.18	23.50
				256QAM	1	1	21.67	21.71	22.05
				Pi/2 BPSK	1	187	24.64	25.30	24.40
				QPSK	1	187	24.53	25.28	24.39
				Pi/2 BPSK	90	45	25.18	25.31	25.60
				QPSK	90	45	25.15	24.77	25.56
				Pi/2 BPSK	180	0	23.86	24.26	24.65
				QPSK	180	0	23.99	24.28	24.47
				Pi/2 BPSK	1	0	23.03	23.00	23.01
				QPSK	1	0	22.56	22.70	23.01
				Pi/2 BPSK	2	0	23.12	23.07	23.09
				QPSK	2	0	22.62	22.77	23.07
				Pi/2 BPSK	1	188	23.02	23.05	23.01
				QPSK	1	188	22.53	23.03	22.73
				Pi/2 BPSK	2	187	23.11	23.13	23.14
				QPSK	2	187	22.56	23.08	22.79
			CP-OFDM	QPSK	1	1	22.99	23.64	24.06

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Band	SCS (KHz)	Bandwidth (MHz)	Modulation		RB allocation	RB Size	RB Offset	Low Channel 506202 (2531.01 MHz)	Mid Channel 518598 (2592.99 MHz)	High Channel 531000 (2655 MHz)
n41	30	70	CP-OFDM	QPSK	Inner 1RB Left	1	1	24.77	24.78	24.76
				16QAM		1	1	24.26	24.30	24.27
				64QAM		1	1	22.83	22.77	22.77
				256QAM		1	1	19.85	19.86	19.84
				QPSK	Inner 1RB Right	1	187	24.45	24.46	24.46
				QPSK	Inner Full	95	47	24.73	24.70	24.70
				QPSK	Outer Full	189	0	23.23	23.21	23.21
				QPSK	Edge 1RB Left	1	0	22.74	22.74	22.75
				QPSK	Edge Full Left	2	0	22.80	22.79	22.77
				QPSK	Edge 1RB Right	1	188	22.51	22.50	22.52
				QPSK	Edge Full Right	2	187	22.52	22.53	22.51