

EX3DV4 - SN:7322

May 22, 2026

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10620	AAD	VHT40, MCS4 (81.0 Mbps), 89.2% DC	WLAN	8.87	±9.6
10621	AAD	VHT40, MCS5 (108.0 Mbps), 88.9% DC	WLAN	8.77	±9.6
10622	AAD	VHT40, MCS6 (121.5 Mbps), 88.8% DC	WLAN	8.68	±9.6
10623	AAD	VHT40, MCS7 (135.0 Mbps), 88.6% DC	WLAN	8.82	±9.6
10624	AAD	VHT40, MCS8 (162.0 Mbps), 88.4% DC	WLAN	8.96	±9.6
10625	AAD	VHT40, MCS9 (180.0 Mbps), 88.2% DC	WLAN	8.96	±9.6
10626	AAD	VHT80, MCS0 (29.3 Mbps), 90.0% DC	WLAN	8.83	±9.6
10627	AAD	VHT80, MCS1 (58.5 Mbps), 90.0% DC	WLAN	8.88	±9.6
10628	AAD	VHT80, MCS2 (87.8 Mbps), 90.0% DC	WLAN	8.71	±9.6
10629	AAD	VHT80, MCS3 (117.0 Mbps), 90.0% DC	WLAN	8.85	±9.6
10630	AAD	VHT80, MCS4 (175.5 Mbps), 90.0% DC	WLAN	8.72	±9.6
10631	AAD	VHT80, MCS5 (234.0 Mbps), 90.0% DC	WLAN	8.81	±9.6
10632	AAD	VHT80, MCS6 (263.3 Mbps), 90.0% DC	WLAN	8.74	±9.6
10633	AAD	VHT80, MCS7 (292.5 Mbps), 90.0% DC	WLAN	8.83	±9.6
10634	AAD	VHT80, MCS8 (351.0 Mbps), 90.0% DC	WLAN	8.80	±9.6
10635	AAD	VHT80, MCS9 (390.0 Mbps), 90.0% DC	WLAN	8.81	±9.6
10636	AAE	VHT160, MCS0 (58.5 Mbps), 90.0% DC	WLAN	8.83	±9.6
10637	AAE	VHT160, MCS1 (117.0 Mbps), 90.0% DC	WLAN	8.79	±9.6
10638	AAE	VHT160, MCS2 (175.5 Mbps), 90.0% DC	WLAN	8.86	±9.6
10639	AAE	VHT160, MCS3 (234.0 Mbps), 90.0% DC	WLAN	8.85	±9.6
10640	AAE	VHT160, MCS4 (351.0 Mbps), 90.0% DC	WLAN	8.98	±9.6
10641	AAE	VHT160, MCS5 (468.0 Mbps), 90.0% DC	WLAN	9.06	±9.6
10642	AAE	VHT160, MCS6 (526.5 Mbps), 90.0% DC	WLAN	9.06	±9.6
10643	AAE	VHT160, MCS7 (585.0 Mbps), 90.0% DC	WLAN	8.89	±9.6
10644	AAE	VHT160, MCS8 (702.0 Mbps), 90.0% DC	WLAN	9.05	±9.6
10645	AAE	VHT160, MCS9 (780.0 Mbps), 90.0% DC	WLAN	9.11	±9.6
10646	AAH	5.0 MHz, QPSK, UL/DL CFG: 2, SSC: 4, 1 RB	LTE-TDD	11.96	±9.6
10647	AAG	20.0 MHz, QPSK, UL/DL CFG: 2, SSC: 7, 1 RB	LTE-TDD	11.96	±9.6
10648	AAA	RC8, SO75, 1xAdvanced	CDMA2000	3.45	±9.6
10670	AAA	LE, Test, GFSK	Bluetooth	2.19	±9.6
10671	AAC	ET20, MCS0 (8.6 Mbps), 90.0% DC	WLAN	9.09	±9.6
10672	AAC	ET20, MCS1 (17.0 Mbps), 90.0% DC	WLAN	8.57	±9.6
10673	AAC	ET20, MCS2 (26.0 Mbps), 90.0% DC	WLAN	8.78	±9.6
10674	AAC	ET20, MCS3 (34.0 Mbps), 90.0% DC	WLAN	8.74	±9.6
10675	AAC	ET20, MCS4 (52.0 Mbps), 90.0% DC	WLAN	8.90	±9.6
10676	AAC	ET20, MCS5 (69.0 Mbps), 90.0% DC	WLAN	8.77	±9.6
10677	AAC	ET20, MCS6 (77.0 Mbps), 90.0% DC	WLAN	8.73	±9.6
10678	AAC	ET20, MCS7 (86.0 Mbps), 90.0% DC	WLAN	8.78	±9.6
10679	AAC	ET20, MCS8 (103.0 Mbps), 90.0% DC	WLAN	8.89	±9.6
10680	AAC	ET20, MCS9 (115.0 Mbps), 90.0% DC	WLAN	8.80	±9.6
10681	AAC	ET20, MCS10 (122.0 Mbps), 90.0% DC	WLAN	8.62	±9.6
10682	AAC	ET20, MCS11 (135.0 Mbps), 90.0% DC	WLAN	8.83	±9.6
10683	AAC	ET20, MCS0 (8.6 Mbps), 100.0% DC	WLAN	8.42	±9.6
10684	AAC	ET20, MCS1 (17.0 Mbps), 100.0% DC	WLAN	8.26	±9.6
10685	AAC	ET20, MCS2 (26.0 Mbps), 100.0% DC	WLAN	8.33	±9.6
10686	AAC	ET20, MCS3 (34.0 Mbps), 100.0% DC	WLAN	8.28	±9.6
10687	AAC	ET20, MCS4 (52.0 Mbps), 100.0% DC	WLAN	8.45	±9.6
10688	AAC	ET20, MCS5 (69.0 Mbps), 100.0% DC	WLAN	8.29	±9.6
10689	AAC	ET20, MCS6 (77.0 Mbps), 100.0% DC	WLAN	8.55	±9.6
10690	AAC	ET20, MCS7 (86.0 Mbps), 100.0% DC	WLAN	8.29	±9.6
10691	AAC	ET20, MCS8 (103.0 Mbps), 100.0% DC	WLAN	8.25	±9.6
10692	AAC	ET20, MCS9 (115.0 Mbps), 100.0% DC	WLAN	8.29	±9.6
10693	AAC	ET20, MCS10 (122.0 Mbps), 100.0% DC	WLAN	8.25	±9.6
10694	AAC	ET20, MCS11 (135.0 Mbps), 100.0% DC	WLAN	8.57	±9.6
10695	AAC	ET40, MCS0 (17.2 Mbps), 89.8% DC	WLAN	8.78	±9.6
10696	AAC	ET40, MCS1 (34.0 Mbps), 89.8% DC	WLAN	8.91	±9.6
10697	AAC	ET40, MCS2 (52.0 Mbps), 89.7% DC	WLAN	8.61	±9.6
10698	AAC	ET40, MCS3 (69.0 Mbps), 89.7% DC	WLAN	8.89	±9.6
10699	AAC	ET40, MCS4 (103.0 Mbps), 89.9% DC	WLAN	8.82	±9.6
10700	AAC	ET40, MCS5 (138.0 Mbps), 89.8% DC	WLAN	8.73	±9.6
10701	AAC	ET40, MCS6 (155.0 Mbps), 89.8% DC	WLAN	8.86	±9.6
10702	AAC	ET40, MCS7 (172.0 Mbps), 89.8% DC	WLAN	8.70	±9.6
10703	AAC	ET40, MCS8 (207.0 Mbps), 89.8% DC	WLAN	8.82	±9.6
10704	AAC	ET40, MCS9 (229.0 Mbps), 89.8% DC	WLAN	8.56	±9.6
10705	AAC	ET40, MCS10 (258.0 Mbps), 89.8% DC	WLAN	8.69	±9.6
10706	AAC	ET40, MCS11 (267.0 Mbps), 89.8% DC	WLAN	8.66	±9.6

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10707	AAC	ET40, MCS0 (17.2 Mbps), 99.8% DC	WLAN	8.32	±9.6
10708	AAC	ET40, MCS1 (34.0 Mbps), 99.7% DC	WLAN	8.55	±9.6
10709	AAC	ET40, MCS2 (52.0 Mbps), 99.7% DC	WLAN	8.33	±9.6
10710	AAC	ET40, MCS3 (69.0 Mbps), 99.7% DC	WLAN	8.29	±9.6
10711	AAC	ET40, MCS4 (103.0 Mbps), 99.8% DC	WLAN	8.39	±9.6
10712	AAC	ET40, MCS5 (138.0 Mbps), 99.8% DC	WLAN	8.67	±9.6
10713	AAC	ET40, MCS6 (155.0 Mbps), 99.8% DC	WLAN	8.33	±9.6
10714	AAC	ET40, MCS7 (172.0 Mbps), 99.8% DC	WLAN	8.26	±9.6
10715	AAC	ET40, MCS8 (207.0 Mbps), 99.8% DC	WLAN	8.45	±9.6
10716	AAC	ET40, MCS9 (229.0 Mbps), 99.8% DC	WLAN	8.30	±9.6
10717	AAC	ET40, MCS10 (258.0 Mbps), 99.8% DC	WLAN	8.48	±9.6
10718	AAC	ET40, MCS11 (267.0 Mbps), 99.8% DC	WLAN	8.24	±9.6
10719	AAC	ET80, MCS0 (36.0 Mbps), 90.0% DC	WLAN	8.81	±9.6
10720	AAC	ET80, MCS1 (72.1 Mbps), 90.0% DC	WLAN	8.87	±9.6
10721	AAC	ET80, MCS2 (108.1 Mbps), 90.0% DC	WLAN	8.76	±9.6
10722	AAC	ET80, MCS3 (144.1 Mbps), 90.0% DC	WLAN	8.55	±9.6
10723	AAC	ET80, MCS4 (216.2 Mbps), 90.0% DC	WLAN	8.70	±9.6
10724	AAC	ET80, MCS5 (288.2 Mbps), 90.0% DC	WLAN	8.90	±9.6
10725	AAC	ET80, MCS6 (324.4 Mbps), 90.0% DC	WLAN	8.74	±9.6
10726	AAC	ET80, MCS7 (360.3 Mbps), 90.0% DC	WLAN	8.72	±9.6
10727	AAC	ET80, MCS8 (432.4 Mbps), 90.0% DC	WLAN	8.66	±9.6
10728	AAC	ET80, MCS9 (480.4 Mbps), 90.0% DC	WLAN	8.65	±9.6
10729	AAC	ET80, MCS10 (540.4 Mbps), 90.0% DC	WLAN	8.64	±9.6
10730	AAC	ET80, MCS11 (72.0 Mbps), 90.0% DC	WLAN	8.67	±9.6
10731	AAC	ET80, MCS0 (36.0 Mbps), 100.0% DC	WLAN	8.42	±9.6
10732	AAC	ET80, MCS1 (72.1 Mbps), 100.0% DC	WLAN	8.46	±9.6
10733	AAC	ET80, MCS2 (108.1 Mbps), 100.0% DC	WLAN	8.40	±9.6
10734	AAC	ET80, MCS3 (144.1 Mbps), 100.0% DC	WLAN	8.25	±9.6
10735	AAC	ET80, MCS4 (216.2 Mbps), 100.0% DC	WLAN	8.33	±9.6
10736	AAC	ET80, MCS5 (288.2 Mbps), 100.0% DC	WLAN	8.27	±9.6
10737	AAC	ET80, MCS6 (324.4 Mbps), 100.0% DC	WLAN	8.36	±9.6
10738	AAC	ET80, MCS7 (360.3 Mbps), 100.0% DC	WLAN	8.42	±9.6
10739	AAC	ET80, MCS8 (432.4 Mbps), 100.0% DC	WLAN	8.29	±9.6
10740	AAC	ET80, MCS9 (480.4 Mbps), 100.0% DC	WLAN	8.48	±9.6
10741	AAC	ET80, MCS10 (540.4 Mbps), 100.0% DC	WLAN	8.40	±9.6
10742	AAC	ET80, MCS11 (600.5 Mbps), 100.0% DC	WLAN	8.43	±9.6
10743	AAC	ET160, MCS0 (72.0 Mbps), 88.2% DC	WLAN	8.94	±9.6
10744	AAC	ET160, MCS1 (144.0 Mbps), 87.1% DC	WLAN	9.16	±9.6
10745	AAC	ET160, MCS2 (216.0 Mbps), 87.4% DC	WLAN	8.93	±9.6
10746	AAC	ET160, MCS3 (282.0 Mbps), 87.1% DC	WLAN	9.11	±9.6
10747	AAC	ET160, MCS4 (432.0 Mbps), 87.4% DC	WLAN	9.04	±9.6
10748	AAC	ET160, MCS5 (576.0 Mbps), 86.8% DC	WLAN	8.93	±9.6
10749	AAC	ET160, MCS6 (649.0 Mbps), 86.7% DC	WLAN	8.90	±9.6
10750	AAC	ET160, MCS7 (721.0 Mbps), 86.7% DC	WLAN	8.79	±9.6
10751	AAC	ET160, MCS8 (865.0 Mbps), 86.3% DC	WLAN	8.82	±9.6
10752	AAC	ET160, MCS9 (961.0 Mbps), 86.3% DC	WLAN	8.81	±9.6
10753	AAC	ET160, MCS10 (1081.0 Mbps), 86.7% DC	WLAN	9.00	±9.6
10754	AAC	ET160, MCS11 (1201.0 Mbps), 86.7% DC	WLAN	8.94	±9.6
10755	AAC	ET160, MCS0 (72.0 Mbps), 98.0% DC	WLAN	8.64	±9.6
10756	AAC	ET160, MCS1 (144.0 Mbps), 96.8% DC	WLAN	8.77	±9.6
10757	AAC	ET160, MCS2 (216.0 Mbps), 97.1% DC	WLAN	8.77	±9.6
10758	AAC	ET160, MCS3 (282.0 Mbps), 96.8% DC	WLAN	8.69	±9.6
10759	AAC	ET160, MCS4 (432.0 Mbps), 97.1% DC	WLAN	8.58	±9.6
10760	AAC	ET160, MCS5 (576.0 Mbps), 96.5% DC	WLAN	8.49	±9.6
10761	AAC	ET160, MCS6 (649.0 Mbps), 96.3% DC	WLAN	8.58	±9.6
10762	AAC	ET160, MCS7 (721.0 Mbps), 96.3% DC	WLAN	8.49	±9.6
10763	AAC	ET160, MCS8 (865.0 Mbps), 95.9% DC	WLAN	8.53	±9.6
10764	AAC	ET160, MCS9 (961.0 Mbps), 95.9% DC	WLAN	8.54	±9.6
10765	AAC	ET160, MCS10 (1081.0 Mbps), 96.3% DC	WLAN	8.54	±9.6
10766	AAC	ET160, MCS11 (1201.0 Mbps), 96.3% DC	WLAN	8.51	±9.6
10767	AAG	CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.99	±9.6
10768	AAE	CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.01	±9.6
10769	AAD	CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.01	±9.6
10770	AAE	CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.02	±9.6
10771	AAD	CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.02	±9.6
10772	AAE	CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.23	±9.6

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10773	AAF	CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.03	±9.6
10774	AAE	CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.02	±9.6
10775	AAF	CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.31	±9.6
10776	AAE	CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.30	±9.6
10777	AAC	CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.30	±9.6
10778	AAE	CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.34	±9.6
10779	AAC	CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.42	±9.6
10780	AAE	CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.38	±9.6
10781	AAF	CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.38	±9.6
10782	AAE	CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.43	±9.6
10783	AAG	CP-OFDM, 5.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.31	±9.6
10784	AAE	CP-OFDM, 10.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.29	±9.6
10785	AAD	CP-OFDM, 15.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.40	±9.6
10786	AAE	CP-OFDM, 20.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.35	±9.6
10787	AAD	CP-OFDM, 25.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.44	±9.6
10788	AAE	CP-OFDM, 30.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.39	±9.6
10789	AAF	CP-OFDM, 40.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.37	±9.6
10790	AAE	CP-OFDM, 50.0 MHz, QPSK, 15 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.39	±9.6
10791	AAG	CP-OFDM, 5.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.83	±9.6
10792	AAE	CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.92	±9.6
10793	AAD	CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.95	±9.6
10794	AAE	CP-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.82	±9.6
10795	AAD	CP-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.84	±9.6
10796	AAE	CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.82	±9.6
10797	AAF	CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	8.01	±9.6
10798	AAE	CP-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.89	±9.6
10799	AAF	CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.93	±9.6
10801	AAF	CP-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.89	±9.6
10802	AAE	CP-OFDM, 90.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.87	±9.6
10803	AAF	CP-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.93	±9.6
10805	AAE	CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.34	±9.6
10806	AAD	CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.37	±9.6
10809	AAE	CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.34	±9.6
10810	AAF	CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.34	±9.6
10812	AAF	CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.35	±9.6
10817	AAG	CP-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.35	±9.6
10818	AAE	CP-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.34	±9.6
10819	AAD	CP-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.33	±9.6
10820	AAE	CP-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.30	±9.6
10821	AAD	CP-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10822	AAE	CP-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10823	AAF	CP-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.36	±9.6
10824	AAE	CP-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.39	±9.6
10825	AAF	CP-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10827	AAF	CP-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.42	±9.6
10828	AAE	CP-OFDM, 90.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.43	±9.6
10829	AAF	CP-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.40	±9.6
10830	AAE	CP-OFDM, 10.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.63	±9.6
10831	AAD	CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.73	±9.6
10832	AAE	CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.74	±9.6
10833	AAD	CP-OFDM, 25.0 MHz, QPSK, 60 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	7.70	±9.6
10834	AAE	CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.75	±9.6
10835	AAF	CP-OFDM, 40.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.70	±9.6
10836	AAE	CP-OFDM, 50.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.66	±9.6
10837	AAF	CP-OFDM, 60.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.68	±9.6
10839	AAF	CP-OFDM, 80.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.70	±9.6
10840	AAE	CP-OFDM, 90.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.67	±9.6
10841	AAF	CP-OFDM, 100.0 MHz, QPSK, 60 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	7.71	±9.6
10843	AAD	CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.49	±9.6
10844	AAE	CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.34	±9.6
10846	AAE	CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	8.41	±9.6
10854	AAE	CP-OFDM, 10.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.34	±9.6
10855	AAD	CP-OFDM, 15.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.36	±9.6
10856	AAE	CP-OFDM, 20.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.37	±9.6
10857	AAD	CP-OFDM, 25.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.35	±9.6
10858	AAE	CP-OFDM, 30.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.36	±9.6

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10859	AAF	CP-OFDM, 40.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.34	±9.6
10860	AAE	CP-OFDM, 50.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10861	AAF	CP-OFDM, 60.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.40	±9.6
10863	AAF	CP-OFDM, 80.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10864	AAE	CP-OFDM, 90.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.37	±9.6
10865	AAF	CP-OFDM, 100.0 MHz, QPSK, 60 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	8.41	±9.6
10866	AAF	DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10868	AAF	DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.89	±9.6
10869	AAE	DFT-s-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	5.75	±9.6
10870	AAE	DFT-s-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	5.86	±9.6
10871	AAE	DFT-s-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	5.75	±9.6
10872	AAE	DFT-s-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	6.52	±9.6
10873	AAE	DFT-s-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	6.61	±9.6
10874	AAE	DFT-s-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	6.65	±9.6
10875	AAE	CP-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	7.78	±9.6
10876	AAE	CP-OFDM, 100.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.39	±9.6
10877	AAE	CP-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	7.95	±9.6
10878	AAE	CP-OFDM, 100.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.41	±9.6
10879	AAE	CP-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	8.12	±9.6
10880	AAE	CP-OFDM, 100.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.38	±9.6
10881	AAE	DFT-s-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	5.75	±9.6
10882	AAE	DFT-s-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	5.96	±9.6
10883	AAE	DFT-s-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	6.57	±9.6
10884	AAE	DFT-s-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	6.53	±9.6
10885	AAE	DFT-s-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	6.61	±9.6
10886	AAE	DFT-s-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	6.65	±9.6
10887	AAE	CP-OFDM, 50.0 MHz, QPSK, 120 kHz, 99.9% DC, 1 RB	5G NR FR2 TDD	7.78	±9.6
10888	AAE	CP-OFDM, 50.0 MHz, QPSK, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.35	±9.6
10889	AAE	CP-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	8.02	±9.6
10890	AAE	CP-OFDM, 50.0 MHz, 16QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.40	±9.6
10891	AAE	CP-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 1 RB	5G NR FR2 TDD	8.13	±9.6
10892	AAE	CP-OFDM, 50.0 MHz, 64QAM, 120 kHz, 100.0% DC, 100% RB	5G NR FR2 TDD	8.41	±9.6
10897	AAE	DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 99.9% DC, 1 RB	5G NR FR1 TDD	5.66	±9.6
10898	AAC	DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.67	±9.6
10899	AAB	DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.67	±9.6
10900	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10901	AAB	DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10902	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10903	AAD	DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10904	AAC	DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10905	AAD	DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10906	AAD	DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 1 RB	5G NR FR1 TDD	5.68	±9.6
10907	AAE	DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.78	±9.6
10908	AAC	DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.93	±9.6
10909	AAB	DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.96	±9.6
10910	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.83	±9.6
10911	AAB	DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.93	±9.6
10912	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.84	±9.6
10913	AAD	DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.84	±9.6
10914	AAC	DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.85	±9.6
10915	AAD	DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.83	±9.6
10916	AAD	DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.87	±9.6
10917	AAD	DFT-s-OFDM, 100.0 MHz, QPSK, 30 kHz, 100.0% DC, 50% RB	5G NR FR1 TDD	5.94	±9.6
10918	AAE	DFT-s-OFDM, 5.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.86	±9.6
10919	AAC	DFT-s-OFDM, 10.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.86	±9.6
10920	AAB	DFT-s-OFDM, 15.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.87	±9.6
10921	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.84	±9.6
10922	AAB	DFT-s-OFDM, 25.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.82	±9.6
10923	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.84	±9.6
10924	AAD	DFT-s-OFDM, 40.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.84	±9.6
10925	AAC	DFT-s-OFDM, 50.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.95	±9.6
10926	AAD	DFT-s-OFDM, 60.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.84	±9.6
10927	AAD	DFT-s-OFDM, 80.0 MHz, QPSK, 30 kHz, 100.0% DC, 100% RB	5G NR FR1 TDD	5.94	±9.6
10928	AAD	DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.52	±9.6
10929	AAD	DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.52	±9.6
10930	AAC	DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.52	±9.6

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May 22, 2026

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E $k = 2$
10931	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.51	±9.6
10932	AAC	DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.51	±9.6
10933	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.51	±9.6
10934	AAC	DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.51	±9.6
10935	AAD	DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 1 RB	5G NR FR1 FDD	5.51	±9.6
10936	AAD	DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.90	±9.6
10937	AAD	DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.77	±9.6
10938	AAC	DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.90	±9.6
10939	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.82	±9.6
10940	AAC	DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.89	±9.6
10941	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.83	±9.6
10942	AAC	DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.85	±9.6
10943	AAD	DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 50% RB	5G NR FR1 FDD	5.95	±9.6
10944	AAD	DFT-s-OFDM, 5.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.81	±9.6
10945	AAD	DFT-s-OFDM, 10.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.85	±9.6
10946	AAC	DFT-s-OFDM, 15.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.83	±9.6
10947	AAC	DFT-s-OFDM, 20.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.87	±9.6
10948	AAC	DFT-s-OFDM, 25.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.94	±9.6
10949	AAC	DFT-s-OFDM, 30.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.87	±9.6
10950	AAC	DFT-s-OFDM, 40.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.94	±9.6
10951	AAD	DFT-s-OFDM, 50.0 MHz, QPSK, 15 kHz, 100% RB	5G NR FR1 FDD	5.92	±9.6
10978	AAA	BDR, 1.0 MHz, 76.7% DC	ULLA	1.16	±9.6
10979	AAA	HDR4, 2.0 MHz, 25.1% DC	ULLA	8.58	±9.6
10980	AAA	HDR8, 4.0 MHz, 16.5% DC	ULLA	10.32	±9.6
10981	AAA	HDRp4, 2.0 MHz, 89.0% DC	ULLA	3.19	±9.6
10982	AAA	HDRp8, 4.0 MHz, 90.3% DC	ULLA	3.43	±9.6
11013	AAB	EHT320, MCS1 (272.0 Mbps), 100.0% DC	WLAN	8.47	±9.6
11014	AAB	EHT320, MCS2 (408.0 Mbps), 100.0% DC	WLAN	8.45	±9.6
11015	AAB	EHT320, MCS3 (544.0 Mbps), 100.0% DC	WLAN	8.44	±9.6
11016	AAB	EHT320, MCS4 (817.0 Mbps), 100.0% DC	WLAN	8.44	±9.6
11017	AAB	EHT320, MCS5 (1089.0 Mbps), 100.0% DC	WLAN	8.41	±9.6
11018	AAB	EHT320, MCS6 (1225.0 Mbps), 100.0% DC	WLAN	8.40	±9.6
11019	AAB	EHT320, MCS7 (1361.0 Mbps), 100.0% DC	WLAN	8.29	±9.6
11020	AAB	EHT320, MCS8 (1633.0 Mbps), 100.0% DC	WLAN	8.27	±9.6
11021	AAB	EHT320, MCS9 (1815.0 Mbps), 100.0% DC	WLAN	8.46	±9.6
11022	AAB	EHT320, MCS10 (2042.0 Mbps), 100.0% DC	WLAN	8.36	±9.6
11023	AAB	EHT320, MCS11 (2269.0 Mbps), 100.0% DC	WLAN	8.09	±9.6
11024	AAB	EHT320, MCS12 (2450.0 Mbps), 100.0% DC	WLAN	8.42	±9.6
11025	AAB	EHT320, MCS13 (2722.0 Mbps), 100.0% DC	WLAN	8.37	±9.6
11026	AAB	EHT320, MCS0 (136.0 Mbps), 100.0% DC	WLAN	8.39	±9.6

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

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

Client **Auden**
Taoyuan City

Certificate No: **DAE4-1356_Dec25**

CALIBRATION CERTIFICATE

Object **DAE4 - SD 000 D04 BJ - SN: 1356**

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

Calibration date: **December 09, 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&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	15-Aug-25 (No:43873)	Aug-26
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	23-Jan-25 (in house check)	In house check: Jan-26
Calibrator Box V2.1	SE UMS 006 AA 1002	23-Jan-25 (in house check)	In house check: Jan-26

Calibrated by:	Name Adrian Gehring	Function Laboratory Technician	Signature
Approved by:	Name Sven Kühn	Function Technical Manager	Signature

Issued: December 9, 2025

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

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



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 Multilateral Agreement for the recognition of calibration certificates

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	404.202 $\pm$ 0.02% (k=2)	404.017 $\pm$ 0.02% (k=2)	404.238 $\pm$ 0.02% (k=2)
Low Range	3.97724 $\pm$ 1.50% (k=2)	3.96383 $\pm$ 1.50% (k=2)	3.97887 $\pm$ 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	269.5 $^{\circ}$ $\pm$ 1 $^{\circ}$
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Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	200035.73	-1.41	-0.00
Channel X + Input	20004.00	-1.89	-0.01
Channel X - Input	-20006.42	1.06	-0.01
Channel Y + Input	200038.09	1.22	0.00
Channel Y + Input	20001.75	-3.96	-0.02
Channel Y - Input	-20008.34	-0.67	0.00
Channel Z + Input	200037.36	0.35	0.00
Channel Z + Input	20002.43	-3.16	-0.02
Channel Z - Input	-20007.78	0.01	-0.00

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2000.67	0.09	0.00
Channel X + Input	199.92	-0.58	-0.29
Channel X - Input	-199.37	0.12	-0.06
Channel Y + Input	2001.08	0.74	0.04
Channel Y + Input	199.91	-0.42	-0.21
Channel Y - Input	-201.40	-1.77	0.89
Channel Z + Input	2000.17	-0.28	-0.01
Channel Z + Input	199.46	-0.89	-0.45
Channel Z - Input	-200.27	-0.71	0.35

2. Common mode sensitivity

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

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-7.88	-9.39
	- 200	9.53	8.00
Channel Y	200	-10.15	-10.55
	- 200	7.94	7.73
Channel Z	200	-14.97	-15.83
	- 200	14.22	14.25

3. Channel separation

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

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	2.72	-4.08
Channel Y	200	8.14	-	3.57
Channel Z	200	9.77	5.83	-

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	16316	14502
Channel Y	16139	12381
Channel Z	15885	16604

5. Input Offset Measurement

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

Input 10M Ω

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	0.46	-0.22	1.26	0.29
Channel Y	-0.85	-2.66	1.09	0.58
Channel Z	-0.44	-0.97	0.17	0.24

6. Input Offset Current

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

7. Input Resistance (Typical values for information)

	Zeroing (k Ω m)	Measuring (M Ω m)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

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

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

9. Power Consumption (Typical values for information)

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



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CALIBRATION
CNAS L0570



Client

Intertek

Certificate No: 24J02Z000845

CALIBRATION CERTIFICATE

Object D835V2 - SN: 4d196

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

Calibration date: November 4, 2024

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

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

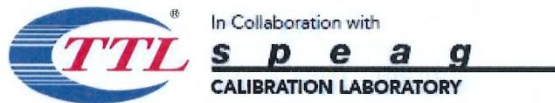
Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	17-May-24 (CTTL, No. J24X04107)	May-25
Power sensor NRP6A	101369	17-May-24 (CTTL, No. J24X04107)	May-25
Reference Probe EX3DV4	SN 7517	21-Feb-24(CTTL-SPEAG, No. 24J02Z80008)	Feb-25
DAE4	SN 1588	13-Sep-24(CTTL-SPEAG, No. 24J02Z000713)	Sep-25
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	25-Dec-23 (CTTL, No. J23X13426)	Dec-24
NetworkAnalyzer E5071C	MY46110673	25-Dec-23 (CTTL, No. J23X13425)	Dec-24
OCP DAK-3.5(weighted)	1040	22-Jan-24(SPEAG, No.OCP-DAK3.5-1040_Jan24)	Jan-25

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

Issued: November 15, 2024

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
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-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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



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Measurement Conditions

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	41.6 $\pm$ 6 %	0.92 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.42 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.56 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.59 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.29 W/kg $\pm$ 18.7 % (k=2)



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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.7Ω- 3.34jΩ
Return Loss	- 28.8dB

General Antenna Parameters and Design

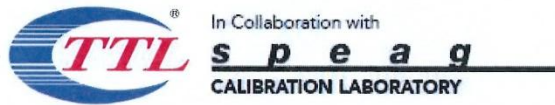
Electrical Delay (one direction)	1.299 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point can be measured.

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

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 2024-11-04

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d196

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 41.57$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7517; ConvF(9.85, 9.85, 9.85) @ 835 MHz; Calibrated: 2024-02-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1588; Calibrated: 2024-09-13
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.79 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.83 W/kg

SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.59 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 63.7%

Maximum value of SAR (measured) = 3.30 W/kg

