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10149-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.71	67.32	15.67	0.00	150.0	± 9.6 %
		Y	2.64	68.79	16.31		150.0	
		Z	2.67	66.51	15.16		150.0	
10150-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.84	67.40	15.76	0.00	150.0	± 9.6 %
		Y	2.77	68.91	16.39		150.0	
		Z	2.80	66.59	15.26		150.0	
10151-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	7.05	79.01	21.24	3.98	65.0	± 9.6 %
		Y	5.45	78.07	21.33		65.0	
		Z	5.61	76.01	20.56		65.0	
10152-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.87	73.86	19.52	3.98	65.0	± 9.6 %
		Y	4.45	71.66	18.62		65.0	
		Z	5.02	71.71	19.09		65.0	
10153-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	6.39	75.31	20.54	3.98	65.0	± 9.6 %
		Y	4.89	73.20	19.71		65.0	
		Z	5.39	72.79	19.96		65.0	
10154-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.04	68.90	16.07	0.00	150.0	± 9.6 %
		Y	2.13	72.17	17.39		150.0	
		Z	1.95	67.39	15.15		150.0	
10155-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.46	68.61	15.94	0.00	150.0	± 9.6 %
		Y	2.59	71.66	16.74		150.0	
		Z	2.35	67.14	15.18		150.0	
10156-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.56	68.06	14.48	0.00	150.0	± 9.6 %
		Y	1.39	68.73	13.43		150.0	
		Z	1.48	66.30	13.62		150.0	
10157-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	1.70	65.86	12.52	0.00	150.0	± 9.6 %
		Y	1.07	62.55	8.97		150.0	
		Z	1.71	65.08	12.35		150.0	
10158-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.62	68.90	16.14	0.00	150.0	± 9.6 %
		Y	2.73	71.76	16.82		150.0	
		Z	2.51	67.43	15.40		150.0	
10159-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.78	66.23	12.74	0.00	150.0	± 9.6 %
		Y	1.10	62.56	8.97		150.0	
		Z	1.78	65.42	12.58		150.0	
10160-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.55	68.64	16.16	0.00	150.0	± 9.6 %
		Y	2.51	70.60	17.09		150.0	
		Z	2.49	67.55	15.47		150.0	
10161-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.73	67.38	15.64	0.00	150.0	± 9.6 %
		Y	2.66	68.98	16.16		150.0	
		Z	2.69	66.51	15.14		150.0	
10162-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.84	67.62	15.79	0.00	150.0	± 9.6 %
		Y	2.77	69.32	16.34		150.0	
		Z	2.80	66.72	15.29		150.0	
10166-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.17	68.43	18.19	3.01	150.0	± 9.6 %
		Y	2.74	68.67	18.97		150.0	
		Z	3.37	69.16	18.82		150.0	
10167-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.80	70.92	18.39	3.01	150.0	± 9.6 %
		Y	3.27	72.46	19.76		150.0	
		Z	4.11	71.94	19.16		150.0	

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10168-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.33	73.72	20.04	3.01	150.0	± 9.6 %
		Y	3.93	76.52	22.01		150.0	
		Z	4.68	74.75	20.78		150.0	
10169-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.69	67.32	17.58	3.01	150.0	± 9.6 %
		Y	2.43	68.05	18.61		150.0	
		Z	2.79	68.16	18.34		150.0	
10170-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.59	72.54	19.67	3.01	150.0	± 9.6 %
		Y	3.51	76.45	22.16		150.0	
		Z	3.83	74.10	20.71		150.0	
10171-AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.93	68.40	16.78	3.01	150.0	± 9.6 %
		Y	2.63	70.44	18.33		150.0	
		Z	3.08	69.59	17.69		150.0	
10172-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.62	78.65	22.60	6.02	65.0	± 9.6 %
		Y	2.94	76.24	23.12		65.0	
		Z	6.04	85.62	26.43		65.0	
10173-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	7.73	84.08	22.65	6.02	65.0	± 9.6 %
		Y	6.63	89.25	25.64		65.0	
		Z	9.82	91.06	26.34		65.0	
10174-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.91	73.33	18.34	6.02	65.0	± 9.6 %
		Y	5.35	84.73	23.41		65.0	
		Z	6.55	83.31	23.20		65.0	
10175-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.66	67.02	17.32	3.01	150.0	± 9.6 %
		Y	2.39	67.72	18.33		150.0	
		Z	2.76	67.84	18.07		150.0	
10176-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.60	72.56	19.68	3.01	150.0	± 9.6 %
		Y	3.51	76.46	22.17		150.0	
		Z	3.84	74.12	20.72		150.0	
10177-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.67	67.15	17.41	3.01	150.0	± 9.6 %
		Y	2.41	67.82	18.40		150.0	
		Z	2.78	67.99	18.17		150.0	
10178-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	3.57	72.39	19.58	3.01	150.0	± 9.6 %
		Y	3.49	76.32	22.09		150.0	
		Z	3.80	73.91	20.61		150.0	
10179-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.21	70.22	18.03	3.01	150.0	± 9.6 %
		Y	3.01	73.21	20.07		150.0	
		Z	3.41	71.63	19.02		150.0	
10180-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	2.92	68.36	16.75	3.01	150.0	± 9.6 %
		Y	2.63	70.42	18.31		150.0	
		Z	3.08	69.53	17.64		150.0	
10181-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.67	67.13	17.40	3.01	150.0	± 9.6 %
		Y	2.40	67.81	18.39		150.0	
		Z	2.78	67.97	18.16		150.0	
10182-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.57	72.37	19.57	3.01	150.0	± 9.6 %
		Y	3.48	76.29	22.07		150.0	
		Z	3.79	73.88	20.60		150.0	
10183-AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.92	68.34	16.74	3.01	150.0	± 9.6 %
		Y	2.63	70.39	18.30		150.0	
		Z	3.07	69.51	17.63		150.0	

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10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.68	67.17	17.42	3.01	150.0	± 9.6 %
		Y	2.41	67.84	18.41		150.0	
		Z	2.79	68.01	18.18		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	3.58	72.44	19.61	3.01	150.0	± 9.6 %
		Y	3.50	76.39	22.12		150.0	
		Z	3.81	73.96	20.64		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	2.93	68.39	16.77	3.01	150.0	± 9.6 %
		Y	2.64	70.46	18.34		150.0	
		Z	3.09	69.57	17.67		150.0	
10187-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.69	67.25	17.51	3.01	150.0	± 9.6 %
		Y	2.43	67.98	18.53		150.0	
		Z	2.80	68.08	18.26		150.0	
10188-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.69	73.08	19.99	3.01	150.0	± 9.6 %
		Y	3.64	77.24	22.59		150.0	
		Z	3.94	74.67	21.05		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	2.99	68.75	17.02	3.01	150.0	± 9.6 %
		Y	2.71	70.95	18.66		150.0	
		Z	3.15	69.99	17.95		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.32	66.74	16.06	0.00	150.0	± 9.6 %
		Y	4.14	67.59	16.37		150.0	
		Z	4.34	66.29	15.83		150.0	
10194-CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.46	66.98	16.19	0.00	150.0	± 9.6 %
		Y	4.24	67.67	16.48		150.0	
		Z	4.50	66.57	15.96		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.50	66.99	16.21	0.00	150.0	± 9.6 %
		Y	4.25	67.61	16.46		150.0	
		Z	4.54	66.61	15.99		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.31	66.74	16.05	0.00	150.0	± 9.6 %
		Y	4.11	67.51	16.32		150.0	
		Z	4.34	66.32	15.83		150.0	
10197-CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.47	66.98	16.20	0.00	150.0	± 9.6 %
		Y	4.24	67.66	16.48		150.0	
		Z	4.51	66.59	15.97		150.0	
10198-CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.49	66.99	16.21	0.00	150.0	± 9.6 %
		Y	4.24	67.60	16.45		150.0	
		Z	4.53	66.62	15.99		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.26	66.77	16.02	0.00	150.0	± 9.6 %
		Y	4.07	67.62	16.34		150.0	
		Z	4.28	66.34	15.79		150.0	
10220-CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.47	66.94	16.18	0.00	150.0	± 9.6 %
		Y	4.23	67.62	16.46		150.0	
		Z	4.50	66.55	15.96		150.0	
10221-CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.51	66.94	16.20	0.00	150.0	± 9.6 %
		Y	4.26	67.58	16.45		150.0	
		Z	4.55	66.56	15.98		150.0	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	4.88	67.02	16.33	0.00	150.0	± 9.6 %
		Y	4.67	67.32	16.57		150.0	
		Z	4.90	66.72	16.13		150.0	

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10223-CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.15	67.21	16.44	0.00	150.0	± 9.6 %
		Y	4.85	67.37	16.57		150.0	
		Z	5.20	66.97	16.28		150.0	
10224-CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	4.92	67.13	16.32	0.00	150.0	± 9.6 %
		Y	4.70	67.49	16.58		150.0	
		Z	4.94	66.83	16.11		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.60	66.16	14.83	0.00	150.0	± 9.6 %
		Y	2.41	67.00	14.35		150.0	
		Z	2.59	65.42	14.54		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	8.23	85.19	23.12	6.02	65.0	± 9.6 %
		Y	7.42	91.37	26.44		65.0	
		Z	10.58	92.51	26.91		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	7.55	82.84	21.72	6.02	65.0	± 9.6 %
		Y	6.51	87.87	24.49		65.0	
		Z	10.25	90.62	25.65		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	6.67	85.48	25.12	6.02	65.0	± 9.6 %
		Y	3.69	80.81	24.99		65.0	
		Z	6.44	87.27	27.13		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	7.78	84.18	22.69	6.02	65.0	± 9.6 %
		Y	6.69	89.39	25.70		65.0	
		Z	9.90	91.18	26.39		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	7.14	81.92	21.34	6.02	65.0	± 9.6 %
		Y	5.85	86.04	23.80		65.0	
		Z	9.54	89.32	25.15		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	6.36	84.50	24.69	6.02	65.0	± 9.6 %
		Y	3.53	79.82	24.51		65.0	
		Z	6.16	86.30	26.70		65.0	
10232-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	7.77	84.16	22.68	6.02	65.0	± 9.6 %
		Y	6.68	89.37	25.69		65.0	
		Z	9.88	91.16	26.38		65.0	
10233-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	7.13	81.90	21.33	6.02	65.0	± 9.6 %
		Y	5.83	85.99	23.79		65.0	
		Z	9.51	89.29	25.14		65.0	
10234-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	6.09	83.61	24.25	6.02	65.0	± 9.6 %
		Y	3.42	79.13	24.11		65.0	
		Z	5.93	85.47	26.28		65.0	
10235-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	7.78	84.19	22.69	6.02	65.0	± 9.6 %
		Y	6.68	89.41	25.71		65.0	
		Z	9.89	91.19	26.39		65.0	
10236-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.18	81.98	21.35	6.02	65.0	± 9.6 %
		Y	5.91	86.16	23.84		65.0	
		Z	9.62	89.44	25.18		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	6.36	84.53	24.70	6.02	65.0	± 9.6 %
		Y	3.52	79.81	24.52		65.0	
		Z	6.16	86.34	26.72		65.0	
10238-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	7.75	84.14	22.67	6.02	65.0	± 9.6 %
		Y	6.66	89.35	25.68		65.0	
		Z	9.86	91.13	26.37		65.0	

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10239-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	7.11	81.87	21.32	6.02	65.0	± 9.6 %
		Y	5.81	85.95	23.78		65.0	
		Z	9.48	89.25	25.13		65.0	
10240-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	6.34	84.51	24.69	6.02	65.0	± 9.6 %
		Y	3.52	79.81	24.52		65.0	
		Z	6.14	86.30	26.70		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	7.98	81.00	24.33	6.98	65.0	± 9.6 %
		Y	6.14	81.54	25.53		65.0	
		Z	7.26	79.71	24.64		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.47	76.99	22.66	6.98	65.0	± 9.6 %
		Y	4.99	77.45	23.83		65.0	
		Z	6.91	78.72	24.15		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.40	74.34	22.44	6.98	65.0	± 9.6 %
		Y	4.21	73.63	23.07		65.0	
		Z	5.61	75.34	23.62		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	3.76	67.79	12.85	3.98	65.0	± 9.6 %
		Y	1.87	62.25	8.40		65.0	
		Z	4.41	71.62	16.01		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.71	67.43	12.64	3.98	65.0	± 9.6 %
		Y	1.87	62.05	8.24		65.0	
		Z	4.30	70.99	15.67		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	4.05	72.21	15.44	3.98	65.0	± 9.6 %
		Y	1.80	64.42	10.44		65.0	
		Z	3.80	73.10	16.90		65.0	
10247-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.44	71.15	15.84	3.98	65.0	± 9.6 %
		Y	2.54	65.63	11.89		65.0	
		Z	4.00	70.77	16.63		65.0	
10248-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	4.38	70.57	15.58	3.98	65.0	± 9.6 %
		Y	2.50	65.09	11.62		65.0	
		Z	4.00	70.27	16.39		65.0	
10249-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	6.22	78.94	19.39	3.98	65.0	± 9.6 %
		Y	3.43	72.93	16.18		65.0	
		Z	5.02	77.51	19.84		65.0	
10250-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	6.14	76.63	20.38	3.98	65.0	± 9.6 %
		Y	4.51	74.09	18.97		65.0	
		Z	5.00	73.95	19.97		65.0	
10251-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.56	73.72	18.77	3.98	65.0	± 9.6 %
		Y	3.95	70.70	16.95		65.0	
		Z	4.76	71.87	18.65		65.0	
10252-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	7.45	81.83	21.98	3.98	65.0	± 9.6 %
		Y	5.54	80.55	21.60		65.0	
		Z	5.55	78.23	21.33		65.0	
10253-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	5.77	73.44	19.25	3.98	65.0	± 9.6 %
		Y	4.37	71.25	18.16		65.0	
		Z	4.94	71.30	18.85		65.0	
10254-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.22	74.67	20.11	3.98	65.0	± 9.6 %
		Y	4.73	72.48	19.03		65.0	
		Z	5.27	72.27	19.61		65.0	

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10255-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.76	78.48	21.18	3.98	65.0	± 9.6 %
		Y	5.16	77.25	20.99		65.0	
		Z	5.37	75.38	20.49		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.78	64.16	9.93	3.98	65.0	± 9.6 %
		Y	1.36	60.00	5.83		65.0	
		Z	3.18	67.02	12.70		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.75	63.84	9.69	3.98	65.0	± 9.6 %
		Y	1.38	60.00	5.75		65.0	
		Z	3.11	66.43	12.31		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	2.69	66.45	11.77	3.98	65.0	± 9.6 %
		Y	1.25	60.72	7.00		65.0	
		Z	2.70	67.95	13.57		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	5.09	73.24	17.52	3.98	65.0	± 9.6 %
		Y	3.20	68.61	14.39		65.0	
		Z	4.40	72.05	17.89		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	5.09	72.94	17.39	3.98	65.0	± 9.6 %
		Y	3.20	68.30	14.22		65.0	
		Z	4.44	71.81	17.78		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	6.43	79.43	20.17	3.98	65.0	± 9.6 %
		Y	4.14	75.58	18.12		65.0	
		Z	5.00	77.05	20.16		65.0	
10262-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	6.11	76.51	20.31	3.98	65.0	± 9.6 %
		Y	4.48	73.95	18.88		65.0	
		Z	4.98	73.88	19.92		65.0	
10263-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	5.55	73.70	18.77	3.98	65.0	± 9.6 %
		Y	3.94	70.69	16.95		65.0	
		Z	4.76	71.84	18.64		65.0	
10264-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	7.33	81.55	21.85	3.98	65.0	± 9.6 %
		Y	5.45	80.22	21.44		65.0	
		Z	5.49	78.02	21.23		65.0	
10265-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.87	73.86	19.53	3.98	65.0	± 9.6 %
		Y	4.46	71.68	18.63		65.0	
		Z	5.02	71.71	19.09		65.0	
10266-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	6.39	75.29	20.53	3.98	65.0	± 9.6 %
		Y	4.89	73.18	19.70		65.0	
		Z	5.38	72.78	19.95		65.0	
10267-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	7.04	78.96	21.22	3.98	65.0	± 9.6 %
		Y	5.43	77.99	21.30		65.0	
		Z	5.60	75.97	20.54		65.0	
10268-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.56	74.07	20.20	3.98	65.0	± 9.6 %
		Y	5.15	72.08	19.58		65.0	
		Z	5.68	71.86	19.63		65.0	
10269-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.55	73.70	20.08	3.98	65.0	± 9.6 %
		Y	5.19	71.84	19.47		65.0	
		Z	5.68	71.51	19.52		65.0	
10270-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	6.77	76.24	20.42	3.98	65.0	± 9.6 %
		Y	5.40	75.25	20.50		65.0	
		Z	5.66	73.75	19.79		65.0	

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10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.43	66.71	14.85	0.00	150.0	± 9.6 %
		Y	2.33	68.15	14.74		150.0	
		Z	2.38	65.72	14.40		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.47	67.75	15.10	0.00	150.0	± 9.6 %
		Y	1.72	72.43	16.90		150.0	
		Z	1.36	65.94	13.97		150.0	
10277-CAA	PHS (QPSK)	X	1.92	60.08	5.51	9.03	50.0	± 9.6 %
		Y	1.38	58.77	3.99		50.0	
		Z	1.98	60.78	6.41		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	3.08	65.19	10.55	9.03	50.0	± 9.6 %
		Y	2.17	61.96	7.67		50.0	
		Z	3.52	67.85	12.76		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	3.15	65.40	10.71	9.03	50.0	± 9.6 %
		Y	2.20	62.03	7.77		50.0	
		Z	3.61	68.12	12.94		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	0.92	64.86	10.52	0.00	150.0	± 9.6 %
		Y	0.39	60.00	5.42		150.0	
		Z	0.92	63.92	10.28		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.56	63.07	9.34	0.00	150.0	± 9.6 %
		Y	0.29	60.00	5.06		150.0	
		Z	0.54	61.87	8.78		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	0.78	67.26	11.80	0.00	150.0	± 9.6 %
		Y	0.28	60.00	5.38		150.0	
		Z	0.61	63.79	10.15		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	2.07	78.82	16.86	0.00	150.0	± 9.6 %
		Y	0.39	62.28	7.09		150.0	
		Z	0.82	67.12	12.27		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	10.77	83.93	21.20	9.03	50.0	± 9.6 %
		Y	21.51	90.17	21.22		50.0	
		Z	9.58	84.17	22.47		50.0	
10297-AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.52	69.39	16.43	0.00	150.0	± 9.6 %
		Y	2.55	71.75	17.73		150.0	
		Z	2.42	68.12	15.58		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.11	64.88	11.35	0.00	150.0	± 9.6 %
		Y	0.56	60.19	6.52		150.0	
		Z	1.13	64.17	11.22		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.42	62.80	9.08	0.00	150.0	± 9.6 %
		Y	0.76	60.00	5.28		150.0	
		Z	1.91	65.84	11.56		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.21	60.93	7.40	0.00	150.0	± 9.6 %
		Y	0.73	60.00	4.72		150.0	
		Z	1.52	62.72	9.26		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.38	65.24	17.03	4.17	50.0	± 9.6 %
		Y	4.10	66.08	16.99		50.0	
		Z	4.53	65.17	17.06		50.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	4.87	65.87	17.74	4.96	50.0	± 9.6 %
		Y	4.52	66.36	17.57		50.0	
		Z	5.00	65.70	17.71		50.0	

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10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.64	65.56	17.55	4.96	50.0	± 9.6 %
		Y	4.40	66.71	17.70		50.0	
		Z	4.76	65.34	17.52		50.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.47	65.53	17.12	4.17	50.0	± 9.6 %
		Y	4.17	66.24	17.01		50.0	
		Z	4.56	65.19	17.01		50.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.18	67.59	18.77	6.02	35.0	± 9.6 %
		Y	3.89	67.96	17.61		35.0	
		Z	4.33	67.73	19.13		35.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.44	66.50	18.52	6.02	35.0	± 9.6 %
		Y	4.16	67.24	17.98		35.0	
		Z	4.60	66.59	18.78		35.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.34	66.59	18.45	6.02	35.0	± 9.6 %
		Y	4.05	67.23	17.84		35.0	
		Z	4.50	66.72	18.72		35.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.32	66.82	18.60	6.02	35.0	± 9.6 %
		Y	4.06	67.54	18.06		35.0	
		Z	4.48	66.95	18.87		35.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.46	66.56	18.61	6.02	35.0	± 9.6 %
		Y	4.17	67.31	18.10		35.0	
		Z	4.64	66.74	18.90		35.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.40	66.58	18.52	6.02	35.0	± 9.6 %
		Y	4.14	67.40	18.05		35.0	
		Z	4.55	66.67	18.76		35.0	
10311-AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.88	68.63	16.10	0.00	150.0	± 9.6 %
		Y	2.88	70.38	17.20		150.0	
		Z	2.77	67.46	15.32		150.0	
10313-AAA	iDEN 1:3	X	3.55	71.03	14.37	6.99	70.0	± 9.6 %
		Y	2.76	72.05	15.47		70.0	
		Z	2.49	69.17	14.17		70.0	
10314-AAA	iDEN 1:6	X	6.09	81.23	20.99	10.00	30.0	± 9.6 %
		Y	7.74	88.37	24.07		30.0	
		Z	3.89	76.29	19.81		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.04	63.85	14.96	0.17	150.0	± 9.6 %
		Y	1.05	65.58	16.18		150.0	
		Z	0.96	62.52	14.00		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.35	66.66	16.11	0.17	150.0	± 9.6 %
		Y	4.12	67.27	16.33		150.0	
		Z	4.39	66.31	15.96		150.0	
10317-AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.35	66.66	16.11	0.17	150.0	± 9.6 %
		Y	4.12	67.27	16.33		150.0	
		Z	4.39	66.31	15.96		150.0	
10400-AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.42	66.96	16.15	0.00	150.0	± 9.6 %
		Y	4.13	67.43	16.34		150.0	
		Z	4.47	66.60	15.95		150.0	
10401-AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.08	66.77	16.17	0.00	150.0	± 9.6 %
		Y	5.02	67.75	16.71		150.0	
		Z	5.22	66.85	16.19		150.0	

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10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.43	67.35	16.36	0.00	150.0	± 9.6 %
		Y	5.23	67.61	16.59		150.0	
		Z	5.46	67.09	16.19		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	0.92	64.86	10.52	0.00	115.0	± 9.6 %
		Y	0.39	60.00	5.42		115.0	
		Z	0.92	63.92	10.28		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	0.92	64.86	10.52	0.00	115.0	± 9.6 %
		Y	0.39	60.00	5.42		115.0	
		Z	0.92	63.92	10.28		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	6.61	82.29	18.19	0.00	100.0	± 9.6 %
		Y	100.00	99.95	18.83		100.0	
		Z	45.79	108.43	26.26		100.0	
10410-AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	3.30	74.41	15.15	3.23	80.0	± 9.6 %
		Y	16.11	98.20	22.53		80.0	
		Z	23.08	102.83	25.32		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.96	62.96	14.43	0.00	150.0	± 9.6 %
		Y	0.99	64.96	15.77		150.0	
		Z	0.90	61.91	13.52		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.32	66.73	16.13	0.00	150.0	± 9.6 %
		Y	4.11	67.43	16.39		150.0	
		Z	4.34	66.32	15.91		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.32	66.73	16.13	0.00	150.0	± 9.6 %
		Y	4.11	67.43	16.39		150.0	
		Z	4.34	66.32	15.91		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.31	66.93	16.18	0.00	150.0	± 9.6 %
		Y	4.10	67.68	16.50		150.0	
		Z	4.33	66.49	15.93		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.33	66.86	16.17	0.00	150.0	± 9.6 %
		Y	4.11	67.59	16.46		150.0	
		Z	4.35	66.43	15.93		150.0	
10422-AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.43	66.84	16.18	0.00	150.0	± 9.6 %
		Y	4.21	67.51	16.45		150.0	
		Z	4.46	66.43	15.95		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.56	67.09	16.27	0.00	150.0	± 9.6 %
		Y	4.30	67.73	16.52		150.0	
		Z	4.61	66.71	16.06		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.49	67.05	16.24	0.00	150.0	± 9.6 %
		Y	4.23	67.65	16.49		150.0	
		Z	4.53	66.66	16.03		150.0	
10425-AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.11	67.24	16.43	0.00	150.0	± 9.6 %
		Y	4.85	67.48	16.62		150.0	
		Z	5.16	66.98	16.26		150.0	
10426-AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.13	67.32	16.47	0.00	150.0	± 9.6 %
		Y	4.90	67.67	16.71		150.0	
		Z	5.18	67.07	16.30		150.0	

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10427-AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.10	67.11	16.36	0.00	150.0	± 9.6 %
		Y	4.87	67.47	16.61		150.0	
		Z	5.17	66.96	16.24		150.0	
10430-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.40	73.18	18.78	0.00	150.0	± 9.6 %
		Y	5.18	77.79	19.68		150.0	
		Z	4.07	70.86	17.81		150.0	
10431-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.93	67.31	16.00	0.00	150.0	± 9.6 %
		Y	3.67	68.21	16.08		150.0	
		Z	3.97	66.78	15.76		150.0	
10432-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.25	67.14	16.17	0.00	150.0	± 9.6 %
		Y	4.00	67.91	16.40		150.0	
		Z	4.29	66.70	15.93		150.0	
10433-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.51	67.08	16.27	0.00	150.0	± 9.6 %
		Y	4.26	67.71	16.52		150.0	
		Z	4.55	66.70	16.05		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.57	74.23	18.62	0.00	150.0	± 9.6 %
		Y	4.96	77.01	18.39		150.0	
		Z	4.13	71.55	17.59		150.0	
10435-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.22	74.05	14.97	3.23	80.0	± 9.6 %
		Y	12.58	95.13	21.66		80.0	
		Z	20.50	101.13	24.83		80.0	
10447-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.16	67.07	14.83	0.00	150.0	± 9.6 %
		Y	2.72	66.94	13.70		150.0	
		Z	3.20	66.46	14.68		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	3.80	67.10	15.87	0.00	150.0	± 9.6 %
		Y	3.57	68.05	15.99		150.0	
		Z	3.82	66.56	15.62		150.0	
10449-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.09	66.98	16.07	0.00	150.0	± 9.6 %
		Y	3.88	67.77	16.33		150.0	
		Z	4.12	66.51	15.82		150.0	
10450-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.31	66.86	16.12	0.00	150.0	± 9.6 %
		Y	4.10	67.50	16.40		150.0	
		Z	4.33	66.45	15.89		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	2.96	66.79	14.05	0.00	150.0	± 9.6 %
		Y	2.28	65.25	11.94		150.0	
		Z	3.03	66.33	14.05		150.0	
10456-AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.03	67.73	16.57	0.00	150.0	± 9.6 %
		Y	6.14	68.84	17.23		150.0	
		Z	6.09	67.66	16.51		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.67	65.47	15.85	0.00	150.0	± 9.6 %
		Y	3.57	66.44	16.21		150.0	
		Z	3.66	65.00	15.61		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.82	71.77	16.94	0.00	150.0	± 9.6 %
		Y	2.33	66.01	12.18		150.0	
		Z	3.66	70.24	16.55		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.04	70.06	18.38	0.00	150.0	± 9.6 %
		Y	4.33	69.08	16.37		150.0	
		Z	4.93	68.74	17.97		150.0	

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10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.82	68.06	15.67	0.00	150.0	± 9.6 %
		Y	1.52	80.43	21.00		150.0	
		Z	0.70	65.12	13.61		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.71	68.46	13.76	3.29	80.0	± 9.6 %
		Y	18.73	104.14	25.37		80.0	
		Z	16.72	101.23	25.84		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.95	60.00	7.25	3.23	80.0	± 9.6 %
		Y	0.26	55.18	3.00		80.0	
		Z	1.02	61.47	8.87		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.96	60.00	6.79	3.23	80.0	± 9.6 %
		Y	3.83	65.07	6.10		80.0	
		Z	0.88	60.00	7.59		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.35	65.72	12.06	3.23	80.0	± 9.6 %
		Y	3.75	82.77	18.52		80.0	
		Z	9.51	92.26	22.65		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.95	60.00	7.20	3.23	80.0	± 9.6 %
		Y	0.25	55.06	2.87		80.0	
		Z	0.96	60.91	8.53		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.97	60.00	6.75	3.23	80.0	± 9.6 %
		Y	3.08	64.36	5.91		80.0	
		Z	0.88	60.00	7.54		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.38	66.05	12.23	3.23	80.0	± 9.6 %
		Y	4.97	86.13	19.58		80.0	
		Z	11.48	94.80	23.39		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.95	60.00	7.22	3.23	80.0	± 9.6 %
		Y	0.26	55.12	2.95		80.0	
		Z	0.97	61.07	8.63		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.96	60.00	6.75	3.23	80.0	± 9.6 %
		Y	3.73	65.04	6.11		80.0	
		Z	0.88	60.00	7.54		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.38	66.03	12.21	3.23	80.0	± 9.6 %
		Y	5.04	86.32	19.63		80.0	
		Z	11.56	94.91	23.42		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.95	60.00	7.21	3.23	80.0	± 9.6 %
		Y	0.25	55.11	2.92		80.0	
		Z	0.97	61.03	8.59		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.96	60.00	6.74	3.23	80.0	± 9.6 %
		Y	8.84	67.69	6.73		80.0	
		Z	0.88	60.00	7.53		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.37	66.01	12.20	3.23	80.0	± 9.6 %
		Y	4.94	86.08	19.55		80.0	
		Z	11.45	94.77	23.37		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.21	3.23	80.0	± 9.6 %
		Y	0.25	55.09	2.91		80.0	
		Z	0.96	61.01	8.58		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.96	60.00	6.74	3.23	80.0	± 9.6 %
		Y	5.48	65.71	6.11		80.0	
		Z	0.88	60.00	7.53		80.0	

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10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.19	3.23	80.0	± 9.6 %
		Y	0.25	55.02	2.82		80.0	
		Z	0.95	60.87	8.49		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.96	60.00	6.73	3.23	80.0	± 9.6 %
		Y	0.28	53.97	1.35		80.0	
		Z	0.88	60.00	7.52		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.21	72.74	16.33	3.23	80.0	± 9.6 %
		Y	39.60	110.75	27.52		80.0	
		Z	6.66	84.68	21.96		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.08	64.62	11.24	3.23	80.0	± 9.6 %
		Y	1.03	61.93	8.80		80.0	
		Z	4.36	74.13	16.27		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.78	62.75	10.02	3.23	80.0	± 9.6 %
		Y	0.84	60.00	7.33		80.0	
		Z	3.24	70.04	14.31		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.73	64.95	12.00	2.23	80.0	± 9.6 %
		Y	0.84	60.00	7.70		80.0	
		Z	1.75	65.57	13.09		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.61	61.02	9.13	2.23	80.0	± 9.6 %
		Y	1.09	60.00	6.49		80.0	
		Z	2.56	66.79	13.19		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.61	60.82	9.02	2.23	80.0	± 9.6 %
		Y	1.11	60.00	6.48		80.0	
		Z	2.45	66.04	12.85		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.62	70.06	15.66	2.23	80.0	± 9.6 %
		Y	1.92	68.50	13.94		80.0	
		Z	2.29	68.71	15.73		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.37	65.68	13.03	2.23	80.0	± 9.6 %
		Y	1.24	60.58	8.96		80.0	
		Z	2.33	65.68	13.73		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.37	65.34	12.86	2.23	80.0	± 9.6 %
		Y	1.24	60.28	8.75		80.0	
		Z	2.35	65.41	13.59		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.19	71.23	17.45	2.23	80.0	± 9.6 %
		Y	2.91	73.05	18.24		80.0	
		Z	2.77	69.32	17.00		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.21	68.38	16.16	2.23	80.0	± 9.6 %
		Y	2.80	68.89	15.94		80.0	
		Z	2.91	66.98	15.94		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.28	68.24	16.11	2.23	80.0	± 9.6 %
		Y	2.81	68.47	15.72		80.0	
		Z	3.00	66.92	15.92		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.47	70.14	17.34	2.23	80.0	± 9.6 %
		Y	3.03	70.90	17.92		80.0	
		Z	3.12	68.57	16.90		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.59	67.96	16.53	2.23	80.0	± 9.6 %
		Y	3.13	68.26	16.56		80.0	
		Z	3.32	66.68	16.23		80.0	

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10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.65	67.84	16.48	2.23	80.0	± 9.6 %
		Y	3.17	68.05	16.43		80.0	
		Z	3.39	66.61	16.21		80.0	
10494-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.72	71.32	17.72	2.23	80.0	± 9.6 %
		Y	3.26	72.17	18.50		80.0	
		Z	3.30	69.67	17.25		80.0	
10495-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.62	68.25	16.75	2.23	80.0	± 9.6 %
		Y	3.18	68.50	16.94		80.0	
		Z	3.33	66.95	16.42		80.0	
10496-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.71	68.07	16.72	2.23	80.0	± 9.6 %
		Y	3.25	68.28	16.85		80.0	
		Z	3.43	66.81	16.39		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.07	60.00	8.19	2.23	80.0	± 9.6 %
		Y	0.87	60.00	5.66		80.0	
		Z	1.16	61.09	9.64		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.24	60.00	7.11	2.23	80.0	± 9.6 %
		Y	1.51	60.00	4.12		80.0	
		Z	1.24	60.00	7.97		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.26	60.00	6.97	2.23	80.0	± 9.6 %
		Y	1.84	60.00	3.85		80.0	
		Z	1.26	60.00	7.82		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.86	70.59	16.41	2.23	80.0	± 9.6 %
		Y	2.47	71.37	16.06		80.0	
		Z	2.47	68.90	16.23		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.77	67.13	14.41	2.23	80.0	± 9.6 %
		Y	1.82	64.08	11.77		80.0	
		Z	2.61	66.45	14.70		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.80	66.92	14.24	2.23	80.0	± 9.6 %
		Y	1.80	63.62	11.44		80.0	
		Z	2.65	66.33	14.58		80.0	
10503-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.15	71.01	17.34	2.23	80.0	± 9.6 %
		Y	2.85	72.73	18.09		80.0	
		Z	2.74	69.14	16.90		80.0	
10504-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.18	68.25	16.09	2.23	80.0	± 9.6 %
		Y	2.77	68.71	15.84		80.0	
		Z	2.89	66.89	15.87		80.0	
10505-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.26	68.13	16.04	2.23	80.0	± 9.6 %
		Y	2.78	68.31	15.63		80.0	
		Z	2.99	66.83	15.86		80.0	
10506-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.68	71.16	17.64	2.23	80.0	± 9.6 %
		Y	3.23	71.98	18.40		80.0	
		Z	3.28	69.54	17.18		80.0	
10507-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.60	68.17	16.71	2.23	80.0	± 9.6 %
		Y	3.16	68.41	16.88		80.0	
		Z	3.32	66.89	16.38		80.0	

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10508-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.69	67.98	16.67	2.23	80.0	± 9.6 %
		Y	3.23	68.18	16.79		80.0	
		Z	3.42	66.74	16.35		80.0	
10509-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.09	70.27	17.38	2.23	80.0	± 9.6 %
		Y	3.57	70.54	17.94		80.0	
		Z	3.72	68.92	16.97		80.0	
10510-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.09	67.97	16.86	2.23	80.0	± 9.6 %
		Y	3.56	67.74	16.96		80.0	
		Z	3.82	66.86	16.53		80.0	
10511-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.17	67.81	16.83	2.23	80.0	± 9.6 %
		Y	3.64	67.61	16.92		80.0	
		Z	3.90	66.70	16.51		80.0	
10512-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.18	71.35	17.66	2.23	80.0	± 9.6 %
		Y	3.66	71.62	18.28		80.0	
		Z	3.77	69.95	17.25		80.0	
10513-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.98	68.10	16.91	2.23	80.0	± 9.6 %
		Y	3.47	67.78	17.03		80.0	
		Z	3.70	66.98	16.58		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.02	67.80	16.84	2.23	80.0	± 9.6 %
		Y	3.52	67.49	16.93		80.0	
		Z	3.75	66.69	16.51		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.92	63.12	14.48	0.00	150.0	± 9.6 %
		Y	0.96	65.32	15.94		150.0	
		Z	0.86	62.01	13.50		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.54	70.00	16.71	0.00	150.0	± 9.6 %
		Y	2.46	99.33	28.61		150.0	
		Z	0.41	65.69	13.40		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.76	64.84	14.98	0.00	150.0	± 9.6 %
		Y	0.86	68.98	17.56		150.0	
		Z	0.68	63.15	13.53		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.31	66.83	16.12	0.00	150.0	± 9.6 %
		Y	4.10	67.60	16.42		150.0	
		Z	4.33	66.40	15.88		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.45	66.99	16.21	0.00	150.0	± 9.6 %
		Y	4.21	67.71	16.48		150.0	
		Z	4.49	66.60	15.99		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.31	66.93	16.12	0.00	150.0	± 9.6 %
		Y	4.08	67.63	16.41		150.0	
		Z	4.35	66.53	15.90		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.24	66.89	16.10	0.00	150.0	± 9.6 %
		Y	4.01	67.52	16.35		150.0	
		Z	4.28	66.50	15.87		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.29	67.01	16.19	0.00	150.0	± 9.6 %
		Y	4.02	67.52	16.36		150.0	
		Z	4.34	66.64	15.98		150.0	

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10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.22	67.02	16.12	0.00	150.0	± 9.6 %
		Y	4.02	67.85	16.48		150.0	
		Z	4.24	66.53	15.84		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.25	66.98	16.19	0.00	150.0	± 9.6 %
		Y	4.00	67.65	16.47		150.0	
		Z	4.28	66.56	15.95		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.28	66.09	15.82	0.00	150.0	± 9.6 %
		Y	4.09	66.89	16.17		150.0	
		Z	4.29	65.63	15.56		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.40	66.37	15.93	0.00	150.0	± 9.6 %
		Y	4.16	67.06	16.24		150.0	
		Z	4.43	65.94	15.69		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.33	66.34	15.87	0.00	150.0	± 9.6 %
		Y	4.12	67.09	16.20		150.0	
		Z	4.36	65.89	15.62		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.35	66.35	15.90	0.00	150.0	± 9.6 %
		Y	4.12	67.05	16.21		150.0	
		Z	4.37	65.91	15.65		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.35	66.35	15.90	0.00	150.0	± 9.6 %
		Y	4.12	67.05	16.21		150.0	
		Z	4.37	65.91	15.65		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.31	66.37	15.88	0.00	150.0	± 9.6 %
		Y	4.07	67.03	16.17		150.0	
		Z	4.35	65.96	15.64		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.19	66.23	15.81	0.00	150.0	± 9.6 %
		Y	3.98	66.94	16.12		150.0	
		Z	4.22	65.81	15.56		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.35	66.43	15.91	0.00	150.0	± 9.6 %
		Y	4.13	67.21	16.24		150.0	
		Z	4.38	65.98	15.65		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.91	66.34	15.97	0.00	150.0	± 9.6 %
		Y	4.69	66.74	16.24		150.0	
		Z	4.94	66.04	15.77		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.95	66.47	16.03	0.00	150.0	± 9.6 %
		Y	4.71	66.81	16.28		150.0	
		Z	4.99	66.21	15.85		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.84	66.47	16.01	0.00	150.0	± 9.6 %
		Y	4.62	66.84	16.27		150.0	
		Z	4.87	66.16	15.80		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.90	66.47	16.01	0.00	150.0	± 9.6 %
		Y	4.71	66.93	16.32		150.0	
		Z	4.93	66.13	15.79		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.97	66.42	16.03	0.00	150.0	± 9.6 %
		Y	4.73	66.75	16.26		150.0	
		Z	5.00	66.13	15.84		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.90	66.38	16.03	0.00	150.0	± 9.6 %
		Y	4.67	66.70	16.26		150.0	
		Z	4.93	66.11	15.84		150.0	

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10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.88	66.31	15.97	0.00	150.0	± 9.6 %
		Y	4.67	66.70	16.23		150.0	
		Z	4.91	66.01	15.77		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.04	66.41	16.04	0.00	150.0	± 9.6 %
		Y	4.80	66.76	16.28		150.0	
		Z	5.07	66.11	15.85		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.11	66.49	16.11	0.00	150.0	± 9.6 %
		Y	4.85	66.80	16.33		150.0	
		Z	5.14	66.14	15.89		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.25	66.42	15.96	0.00	150.0	± 9.6 %
		Y	5.07	66.65	16.18		150.0	
		Z	5.27	66.15	15.78		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.42	66.84	16.13	0.00	150.0	± 9.6 %
		Y	5.21	67.04	16.34		150.0	
		Z	5.45	66.60	15.96		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.28	66.54	15.99	0.00	150.0	± 9.6 %
		Y	5.09	66.74	16.19		150.0	
		Z	5.31	66.30	15.82		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.36	66.65	16.04	0.00	150.0	± 9.6 %
		Y	5.22	67.07	16.36		150.0	
		Z	5.39	66.38	15.86		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.50	67.24	16.31	0.00	150.0	± 9.6 %
		Y	5.18	67.11	16.36		150.0	
		Z	5.58	67.16	16.22		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.34	66.72	16.10	0.00	150.0	± 9.6 %
		Y	5.22	67.23	16.45		150.0	
		Z	5.36	66.42	15.90		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.28	66.50	15.95	0.00	150.0	± 9.6 %
		Y	5.06	66.66	16.14		150.0	
		Z	5.33	66.34	15.82		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.26	66.54	15.97	0.00	150.0	± 9.6 %
		Y	5.07	66.82	16.21		150.0	
		Z	5.27	66.23	15.76		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.31	66.48	15.97	0.00	150.0	± 9.6 %
		Y	5.11	66.71	16.17		150.0	
		Z	5.34	66.23	15.80		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.67	66.75	16.04	0.00	150.0	± 9.6 %
		Y	5.52	66.90	16.21		150.0	
		Z	5.69	66.52	15.88		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.76	66.97	16.13	0.00	150.0	± 9.6 %
		Y	5.58	67.06	16.29		150.0	
		Z	5.80	66.79	16.00		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.80	67.08	16.18	0.00	150.0	± 9.6 %
		Y	5.63	67.23	16.36		150.0	
		Z	5.83	66.86	16.03		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.76	66.95	16.13	0.00	150.0	± 9.6 %
		Y	5.57	67.06	16.29		150.0	
		Z	5.78	66.73	15.98		150.0	

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10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.77	67.00	16.18	0.00	150.0	± 9.6 %
		Y	5.54	66.98	16.27		150.0	
		Z	5.82	66.87	16.07		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.79	66.93	16.18	0.00	150.0	± 9.6 %
		Y	5.57	66.97	16.30		150.0	
		Z	5.82	66.74	16.04		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.72	66.92	16.20	0.00	150.0	± 9.6 %
		Y	5.51	66.95	16.32		150.0	
		Z	5.75	66.73	16.07		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.77	67.08	16.28	0.00	150.0	± 9.6 %
		Y	5.56	67.09	16.39		150.0	
		Z	5.83	66.98	16.19		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.87	67.06	16.24	0.00	150.0	± 9.6 %
		Y	5.77	67.47	16.55		150.0	
		Z	5.92	66.90	16.12		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.62	66.82	16.22	0.46	150.0	± 9.6 %
		Y	4.39	67.43	16.46		150.0	
		Z	4.66	66.47	16.04		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	4.82	67.25	16.56	0.46	150.0	± 9.6 %
		Y	4.56	67.87	16.81		150.0	
		Z	4.86	66.91	16.38		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.65	67.05	16.34	0.46	150.0	± 9.6 %
		Y	4.40	67.63	16.58		150.0	
		Z	4.70	66.72	16.17		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.70	67.52	16.78	0.46	150.0	± 9.6 %
		Y	4.46	68.13	17.04		150.0	
		Z	4.73	67.13	16.55		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.54	66.72	16.04	0.46	150.0	± 9.6 %
		Y	4.23	67.04	16.12		150.0	
		Z	4.60	66.47	15.91		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.69	67.76	16.91	0.46	150.0	± 9.6 %
		Y	4.48	68.53	17.28		150.0	
		Z	4.70	67.29	16.65		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.68	67.52	16.79	0.46	150.0	± 9.6 %
		Y	4.43	68.13	17.07		150.0	
		Z	4.72	67.10	16.55		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.13	64.43	15.18	0.46	130.0	± 9.6 %
		Y	1.09	65.61	16.13		130.0	
		Z	1.02	62.91	14.24		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.14	65.04	15.56	0.46	130.0	± 9.6 %
		Y	1.11	66.40	16.63		130.0	
		Z	1.02	63.36	14.54		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.01	84.38	21.80	0.46	130.0	± 9.6 %
		Y	35.15	138.74	38.20		130.0	
		Z	0.86	72.57	16.97		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.29	71.29	18.68	0.46	130.0	± 9.6 %
		Y	1.41	75.83	21.40		130.0	
		Z	1.02	67.46	16.65		130.0	

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10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.40	66.56	16.20	0.46	130.0	± 9.6 %
		Y	4.16	67.14	16.39		130.0	
		Z	4.44	66.24	16.07		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.43	66.78	16.30	0.46	130.0	± 9.6 %
		Y	4.20	67.45	16.55		130.0	
		Z	4.46	66.42	16.14		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.59	67.02	16.46	0.46	130.0	± 9.6 %
		Y	4.33	67.64	16.68		130.0	
		Z	4.64	66.69	16.31		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.50	67.20	16.59	0.46	130.0	± 9.6 %
		Y	4.26	67.87	16.85		130.0	
		Z	4.54	66.83	16.41		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.24	66.27	15.75	0.46	130.0	± 9.6 %
		Y	3.96	66.67	15.85		130.0	
		Z	4.30	66.02	15.65		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.27	66.31	15.76	0.46	130.0	± 9.6 %
		Y	3.95	66.55	15.77		130.0	
		Z	4.34	66.08	15.68		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.41	67.27	16.55	0.46	130.0	± 9.6 %
		Y	4.19	68.04	16.88		130.0	
		Z	4.44	66.86	16.35		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.16	66.00	15.50	0.46	130.0	± 9.6 %
		Y	3.86	66.35	15.58		130.0	
		Z	4.23	65.78	15.42		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.40	66.56	16.20	0.46	130.0	± 9.6 %
		Y	4.16	67.14	16.39		130.0	
		Z	4.44	66.24	16.07		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.43	66.78	16.30	0.46	130.0	± 9.6 %
		Y	4.20	67.45	16.55		130.0	
		Z	4.46	66.42	16.14		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.59	67.02	16.46	0.46	130.0	± 9.6 %
		Y	4.33	67.64	16.68		130.0	
		Z	4.64	66.69	16.31		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.50	67.20	16.59	0.46	130.0	± 9.6 %
		Y	4.26	67.87	16.85		130.0	
		Z	4.54	66.83	16.41		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.24	66.27	15.75	0.46	130.0	± 9.6 %
		Y	3.96	66.67	15.85		130.0	
		Z	4.30	66.02	15.65		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.27	66.31	15.76	0.46	130.0	± 9.6 %
		Y	3.95	66.55	15.77		130.0	
		Z	4.34	66.08	15.68		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.41	67.27	16.55	0.46	130.0	± 9.6 %
		Y	4.19	68.04	16.88		130.0	
		Z	4.44	66.86	16.35		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.16	66.00	15.50	0.46	130.0	± 9.6 %
		Y	3.86	66.35	15.58		130.0	
		Z	4.23	65.78	15.42		130.0	

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10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.56	66.67	16.34	0.46	130.0	± 9.6 %
		Y	4.32	67.28	16.57		130.0	
		Z	4.59	66.33	16.20		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.67	66.95	16.47	0.46	130.0	± 9.6 %
		Y	4.40	67.50	16.68		130.0	
		Z	4.73	66.64	16.33		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.59	66.81	16.31	0.46	130.0	± 9.6 %
		Y	4.33	67.38	16.52		130.0	
		Z	4.64	66.52	16.18		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.65	67.01	16.49	0.46	130.0	± 9.6 %
		Y	4.38	67.56	16.71		130.0	
		Z	4.70	66.70	16.35		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.61	66.98	16.39	0.46	130.0	± 9.6 %
		Y	4.34	67.53	16.61		130.0	
		Z	4.66	66.65	16.24		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.54	66.93	16.37	0.46	130.0	± 9.6 %
		Y	4.25	67.39	16.55		130.0	
		Z	4.60	66.62	16.23		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.49	66.79	16.22	0.46	130.0	± 9.6 %
		Y	4.22	67.27	16.39		130.0	
		Z	4.55	66.50	16.09		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.49	67.08	16.53	0.46	130.0	± 9.6 %
		Y	4.26	67.70	16.78		130.0	
		Z	4.53	66.74	16.37		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.23	67.11	16.59	0.46	130.0	± 9.6 %
		Y	5.12	67.88	17.03		130.0	
		Z	5.27	66.86	16.46		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.32	67.43	16.72	0.46	130.0	± 9.6 %
		Y	5.06	67.70	16.91		130.0	
		Z	5.40	67.28	16.64		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.23	67.24	16.64	0.46	130.0	± 9.6 %
		Y	5.01	67.64	16.90		130.0	
		Z	5.29	67.02	16.53		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.32	67.24	16.55	0.46	130.0	± 9.6 %
		Y	5.04	67.46	16.72		130.0	
		Z	5.42	67.18	16.53		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.39	67.57	16.87	0.46	130.0	± 9.6 %
		Y	5.05	67.60	16.95		130.0	
		Z	5.48	67.46	16.80		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.28	67.19	16.65	0.46	130.0	± 9.6 %
		Y	5.00	67.36	16.79		130.0	
		Z	5.37	67.14	16.62		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.31	67.30	16.70	0.46	130.0	± 9.6 %
		Y	5.01	67.43	16.83		130.0	
		Z	5.39	67.19	16.65		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.10	66.73	16.26	0.46	130.0	± 9.6 %
		Y	4.93	67.27	16.59		130.0	
		Z	5.13	66.48	16.14		130.0	

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10607-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.40	66.00	15.99	0.46	130.0	± 9.6 %
		Y	4.19	66.71	16.28		130.0	
		Z	4.43	65.63	15.81		130.0	
10608-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.54	66.32	16.13	0.46	130.0	± 9.6 %
		Y	4.28	66.94	16.39		130.0	
		Z	4.59	65.99	15.97		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.43	66.14	15.93	0.46	130.0	± 9.6 %
		Y	4.18	66.77	16.19		130.0	
		Z	4.48	65.81	15.78		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.48	66.33	16.12	0.46	130.0	± 9.6 %
		Y	4.24	66.96	16.39		130.0	
		Z	4.53	65.98	15.95		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.40	66.11	15.95	0.46	130.0	± 9.6 %
		Y	4.14	66.70	16.20		130.0	
		Z	4.44	65.77	15.79		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.38	66.21	15.97	0.46	130.0	± 9.6 %
		Y	4.09	66.68	16.16		130.0	
		Z	4.44	65.90	15.83		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.37	66.02	15.81	0.46	130.0	± 9.6 %
		Y	4.10	66.52	16.00		130.0	
		Z	4.44	65.75	15.68		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.36	66.31	16.11	0.46	130.0	± 9.6 %
		Y	4.12	66.94	16.38		130.0	
		Z	4.40	65.96	15.94		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.38	65.89	15.68	0.46	130.0	± 9.6 %
		Y	4.11	66.48	15.90		130.0	
		Z	4.44	65.60	15.55		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.04	66.30	16.17	0.46	130.0	± 9.6 %
		Y	4.81	66.63	16.40		130.0	
		Z	5.08	66.07	16.04		130.0	
10617-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.07	66.41	16.20	0.46	130.0	± 9.6 %
		Y	4.82	66.67	16.40		130.0	
		Z	5.15	66.26	16.12		130.0	
10618-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	4.99	66.49	16.26	0.46	130.0	± 9.6 %
		Y	4.75	66.78	16.48		130.0	
		Z	5.04	66.28	16.14		130.0	
10619-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.01	66.29	16.09	0.46	130.0	± 9.6 %
		Y	4.79	66.70	16.36		130.0	
		Z	5.05	66.06	15.96		130.0	
10620-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.07	66.29	16.14	0.46	130.0	± 9.6 %
		Y	4.80	66.49	16.29		130.0	
		Z	5.13	66.09	16.03		130.0	
10621-AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.09	66.45	16.35	0.46	130.0	± 9.6 %
		Y	4.85	66.75	16.57		130.0	
		Z	5.15	66.25	16.23		130.0	
10622-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.08	66.53	16.39	0.46	130.0	± 9.6 %
		Y	4.83	66.78	16.59		130.0	
		Z	5.14	66.36	16.28		130.0	

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10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.96	66.05	15.99	0.46	130.0	± 9.6 %
		Y	4.74	66.39	16.22		130.0	
		Z	5.02	65.88	15.90		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.16	66.32	16.20	0.46	130.0	± 9.6 %
		Y	4.91	66.60	16.40		130.0	
		Z	5.22	66.13	16.10		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.25	66.46	16.34	0.46	130.0	± 9.6 %
		Y	5.01	66.87	16.61		130.0	
		Z	5.43	66.66	16.42		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.37	66.32	16.13	0.46	130.0	± 9.6 %
		Y	5.18	66.52	16.32		130.0	
		Z	5.41	66.14	16.02		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.59	66.90	16.39	0.46	130.0	± 9.6 %
		Y	5.36	67.08	16.58		130.0	
		Z	5.64	66.75	16.30		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.36	66.27	16.00	0.46	130.0	± 9.6 %
		Y	5.15	66.43	16.17		130.0	
		Z	5.41	66.15	15.92		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.46	66.45	16.08	0.46	130.0	± 9.6 %
		Y	5.33	66.94	16.43		130.0	
		Z	5.50	66.26	15.98		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	5.68	67.33	16.53	0.46	130.0	± 9.6 %
		Y	5.30	67.01	16.48		130.0	
		Z	5.83	67.48	16.58		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.68	67.46	16.80	0.46	130.0	± 9.6 %
		Y	5.39	67.46	16.91		130.0	
		Z	5.77	67.39	16.74		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.60	67.13	16.65	0.46	130.0	± 9.6 %
		Y	5.50	67.73	17.05		130.0	
		Z	5.63	66.87	16.50		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.39	66.38	16.10	0.46	130.0	± 9.6 %
		Y	5.16	66.54	16.27		130.0	
		Z	5.48	66.37	16.07		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.42	66.59	16.25	0.46	130.0	± 9.6 %
		Y	5.22	66.83	16.48		130.0	
		Z	5.46	66.38	16.13		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.26	65.75	15.53	0.46	130.0	± 9.6 %
		Y	5.03	65.88	15.68		130.0	
		Z	5.33	65.66	15.49		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.80	66.66	16.21	0.46	130.0	± 9.6 %
		Y	5.64	66.80	16.37		130.0	
		Z	5.84	66.53	16.13		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.91	66.96	16.34	0.46	130.0	± 9.6 %
		Y	5.72	67.05	16.49		130.0	
		Z	5.98	66.89	16.30		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.94	67.02	16.35	0.46	130.0	± 9.6 %
		Y	5.77	67.21	16.55		130.0	
		Z	5.98	66.86	16.26		130.0	

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10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.90	66.90	16.34	0.46	130.0	± 9.6 %
		Y	5.70	66.99	16.48		130.0	
		Z	5.95	66.78	16.26		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.85	66.77	16.21	0.46	130.0	± 9.6 %
		Y	5.60	66.70	16.28		130.0	
		Z	5.94	66.77	16.19		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.95	66.85	16.27	0.46	130.0	± 9.6 %
		Y	5.73	66.88	16.38		130.0	
		Z	6.01	66.77	16.22		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.98	67.10	16.57	0.46	130.0	± 9.6 %
		Y	5.76	67.11	16.68		130.0	
		Z	6.04	66.98	16.50		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.82	66.74	16.27	0.46	130.0	± 9.6 %
		Y	5.59	66.71	16.35		130.0	
		Z	5.88	66.67	16.23		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.88	66.93	16.39	0.46	130.0	± 9.6 %
		Y	5.65	66.92	16.48		130.0	
		Z	5.97	66.96	16.39		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.00	66.98	16.38	0.46	130.0	± 9.6 %
		Y	5.89	67.36	16.67		130.0	
		Z	6.11	67.04	16.40		130.0	
10646-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	10.64	95.54	31.22	9.30	60.0	± 9.6 %
		Y	4.79	84.10	28.76		60.0	
		Z	10.44	97.20	33.10		60.0	
10647-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	9.38	93.52	30.68	9.30	60.0	± 9.6 %
		Y	4.24	81.79	27.97		60.0	
		Z	9.23	95.05	32.51		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.45	60.96	7.58	0.00	150.0	± 9.6 %
		Y	0.27	60.00	4.46		150.0	
		Z	0.46	60.51	7.45		150.0	
10652-AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.44	66.86	15.90	2.23	80.0	± 9.6 %
		Y	3.11	67.55	15.78		80.0	
		Z	3.23	65.63	15.61		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.00	66.30	16.33	2.23	80.0	± 9.6 %
		Y	3.63	66.57	16.36		80.0	
		Z	3.80	65.27	16.02		80.0	
10654-AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.02	65.95	16.40	2.23	80.0	± 9.6 %
		Y	3.68	66.02	16.44		80.0	
		Z	3.82	64.96	16.07		80.0	
10655-AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.10	65.87	16.44	2.23	80.0	± 9.6 %
		Y	3.77	65.78	16.47		80.0	
		Z	3.89	64.93	16.12		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	3.96	69.40	12.41	10.00	50.0	± 9.6 %
		Y	3.54	68.64	11.84		50.0	
		Z	6.60	76.50	15.95		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	3.35	69.24	11.38	6.99	60.0	± 9.6 %
		Y	2.54	68.41	10.67		60.0	
		Z	15.62	86.85	17.81		60.0	

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10660-AAA	Pulse Waveform (200Hz, 40%)	X	3.13	70.75	10.92	3.98	80.0	± 9.6 %
		Y	2.65	71.33	10.38		80.0	
		Z	100.00	100.70	18.97		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	3.01	72.21	10.50	2.22	100.0	± 9.6 %
		Y	0.47	62.70	6.02		100.0	
		Z	0.86	65.62	7.78		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	0.23	60.01	4.55	0.97	120.0	± 9.6 %
		Y	0.53	60.44	2.25		120.0	
		Z	0.27	60.00	2.59		120.0	

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

Attachment 6. – Dipole Calibration Data

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

ilac-MRA

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

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 **HCT (Dymstec)**

Certificate No: D750V3-1014_Aug18

CALIBRATION CERTIFICATE

Object: D750V3 - SN:1014

Calibration procedure(s): QA CAL-05.v10
Calibration procedure for dipole validation kits above 700 MHz

결재	담당자	확인자
직위/성명	GW / 강태구	[illegible]
일자	2018 / 08.23	2018 / 08.23

Calibration date: August 14, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02683)	Apr-19
Reference Probe EX3DV4	SN: 7349	30-Dec-17 (No. EX3-7349_Dec17)	Dec-18
DAE4	SN: 601	26-Oct-17 (No. DAE4-601_Oct17)	Oct-18

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Manu Seitz	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 14, 2018

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

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

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**

Glossary:

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

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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

Measurement Conditions

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

DASY Version	DASY5	V52.10.1
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.9 ± 6 %	0.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.05 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**8.15 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**5.30 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	55.0 ± 6 %	0.96 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.15 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**8.58 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.41 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**5.63 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	56.4 Ω + 6.4 jΩ
Return Loss	- 21.4 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	50.3 Ω + 1.0 jΩ
Return Loss	- 39.6 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.035 ns

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

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

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	March 22, 2010

DASY5 Validation Report for Head TSL

Date: 14.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

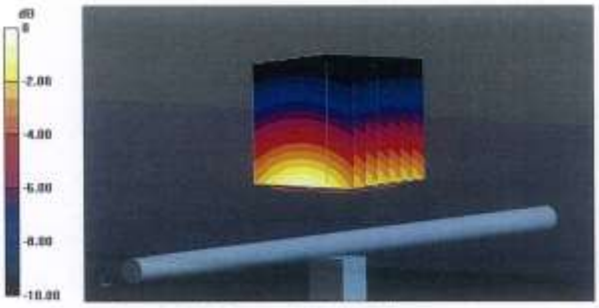
DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1014

Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

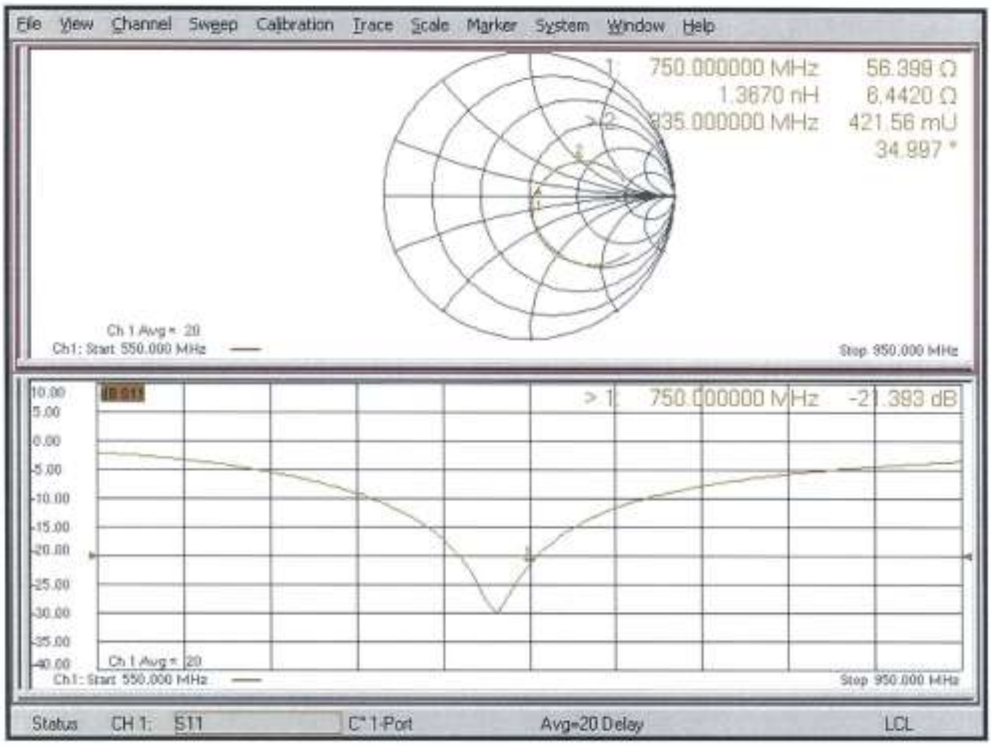
- Probe: EX3DV4 - SN7349; ConvF(10.22, 10.22, 10.22) @ 750 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 59.30 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.10 W/kg
SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.33 W/kg
Maximum value of SAR (measured) = 2.76 W/kg



0 dB = 2.76 W/kg = 4.41 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 14.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

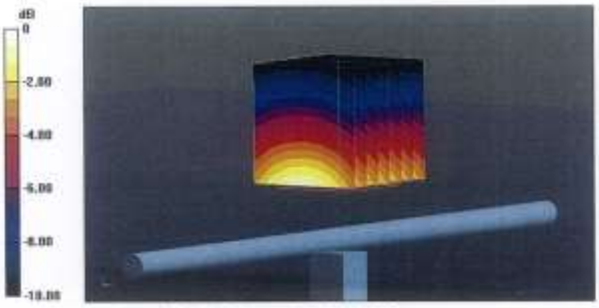
DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1014

Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; $\sigma = 0.96$ S/m; $\varepsilon_r = 55$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(10.19, 10.19, 10.19) @ 750 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 4.9 (Back); Type: QD 00R P49 AA; Serial: 1005
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

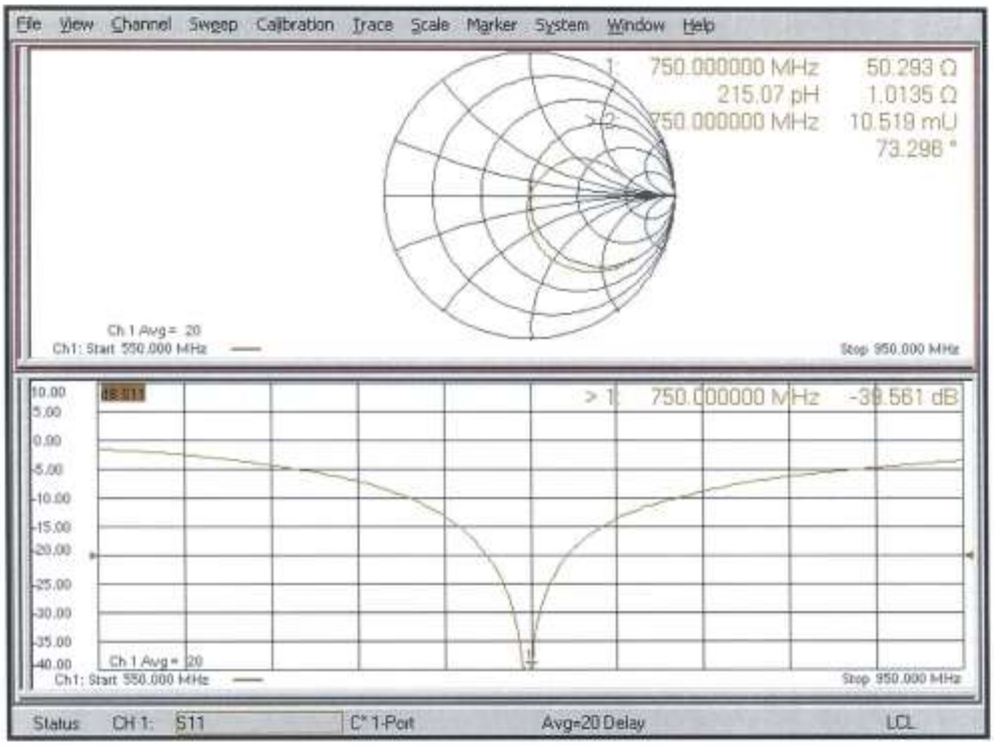
Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.92 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.20 W/kg
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.41 W/kg
Maximum value of SAR (measured) = 2.85 W/kg



0 dB = 2.85 W/kg = 4.55 dBW/kg

Certificate No: D750V3-1014_Aug18 Page 7 of 8

Impedance Measurement Plot for Body TSL



Certificate No: D750V3-1014_Aug18 Page 8 of 8

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Accreditation No.: SCS 0108

Client **HCT (Dymstec)**   Certificate No: **D1800V2-2d007_Nov18**

CALIBRATION CERTIFICATE

결재	담 당 자	확 인 자
직위/성명	SW / [illegible]	GJ / [illegible]
일 자	2018 / 12.03	2018 / 12.03

Object	D1800V2 - SN:2d007
Calibration procedure(s)	QA CAL-05.v10 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	November 19, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02683)	Apr-19
Reference Probe EX3DV4	SN: 7349	30-Dec-17 (No. EX3-7349_Dec17)	Dec-18
DAE4	SN: 601	04-Oct-18 (No. DAE4-601_Oct18)	Oct-19

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-18)	In house check: Oct-20
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Manu Seitz	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 20, 2018

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

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S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
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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:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1800 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.5 ± 6 %	1.37 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.67 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**39.1 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.05 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**20.3 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.0 ± 6 %	1.49 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.45 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**38.4 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	4.96 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**20.0 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	47.3 Ω - 7.3 jΩ
Return Loss	- 22.0 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	43.0 Ω - 6.0 jΩ
Return Loss	- 20.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.205 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
Manufactured on	July 23, 2001

DASY5 Validation Report for Head TSL

Date: 19.11.2018

Test Laboratory: SPEAG, Zurich, Switzerland

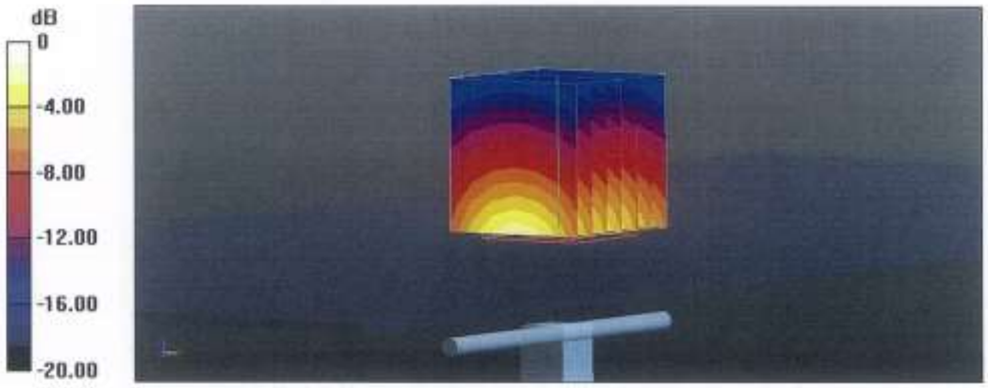
DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d007

Communication System: UID 0 - CW; Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.37 S/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

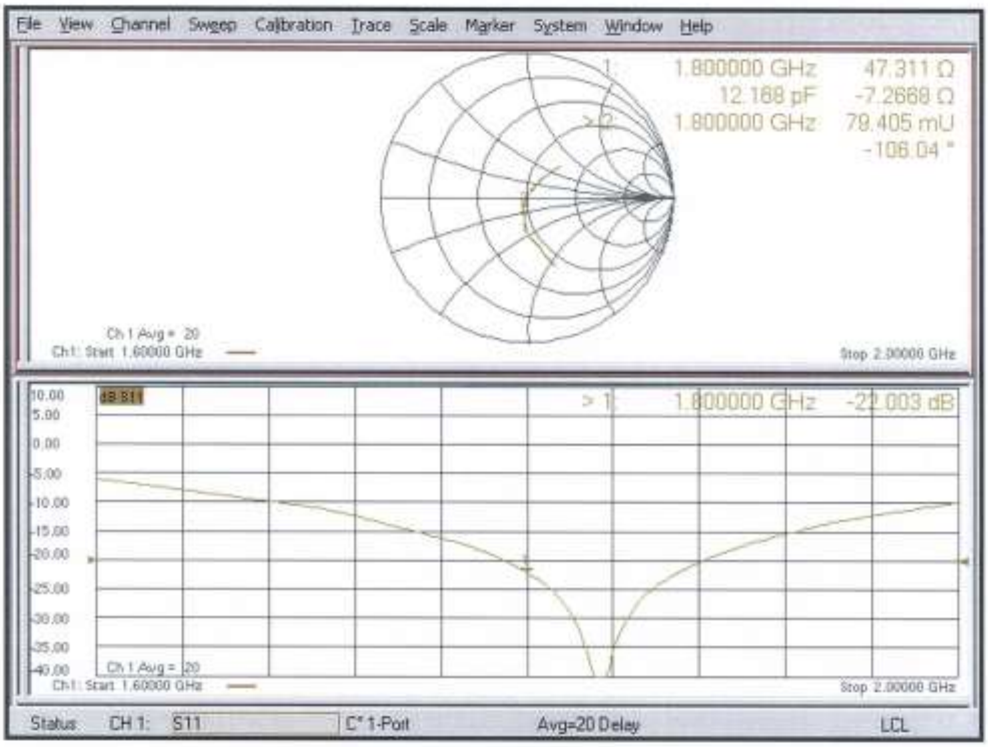
- Probe: EX3DV4 - SN7349; ConvF(8.3, 8.3, 8.3) @ 1800 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 110.2 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 18.0 W/kg
SAR(1 g) = 9.67 W/kg; SAR(10 g) = 5.05 W/kg
Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg = 11.76 dBW/kg

Impedance Measurement Plot for Head TSL



Certificate No: D1800V2-2d007_Nov18 Page 6 of 8

DASY5 Validation Report for Body TSL

Date: 19.11.2018

Test Laboratory: SPEAG, Zurich, Switzerland

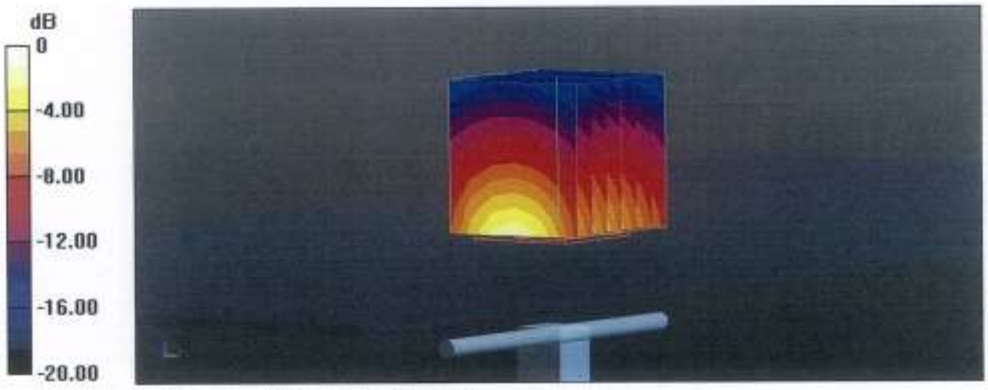
DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d007

Communication System: UID 0 - CW; Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.49 S/m; ε_r = 54; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

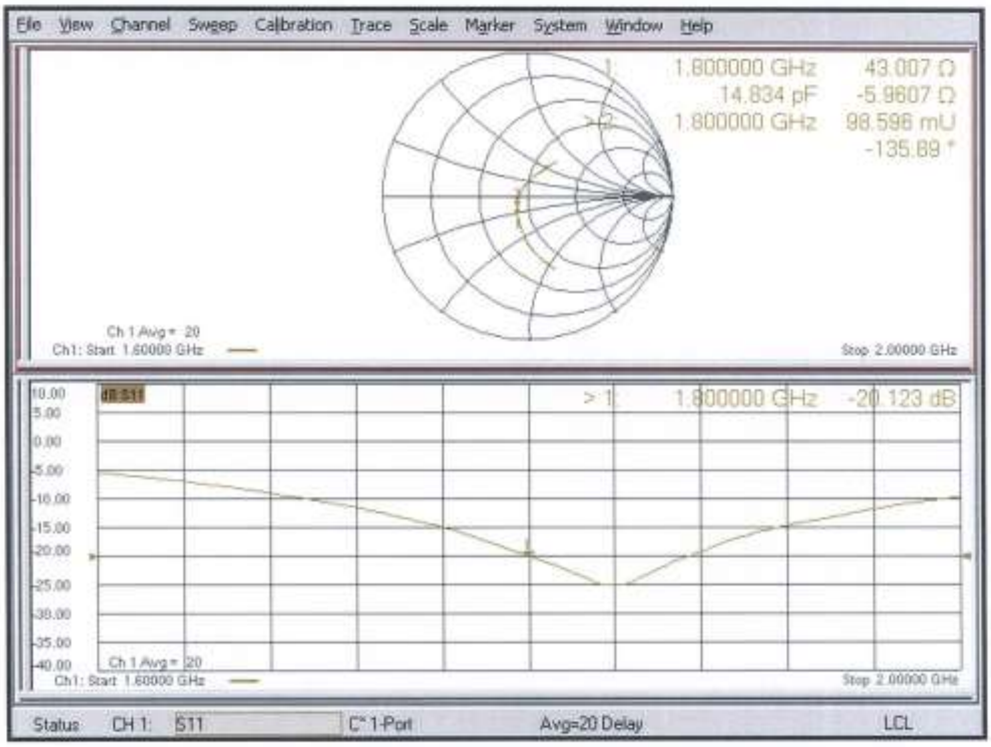
- Probe: EX3DV4 - SN7349; ConvF(8.25, 8.25, 8.25) @ 1800 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 103.8 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 9.45 W/kg; SAR(10 g) = 4.96 W/kg
Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 14.4 W/kg = 11.58 dBW/kg

Impedance Measurement Plot for Body TSL



Certificate No: D1800V2-2d007_Nov18 Page 8 of 8

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Accreditation No.: **SCS 0108**

Client **HCT (Dymstec)**

Certificate No: **D1900V2-5d032_Feb19**

CALIBRATION CERTIFICATE

결재	담당자	확인자
책임성명	4W / 가스인	41 / 1장력
일자	2019 / 03. 13	2019 / 03. 13

Object	D1900V2 - SN:5d032
Calibration procedure(s)	QA CAL-05.v11 Calibration Procedure for SAR Validation Sources between 0.7-3 GHz
Calibration date:	February 21, 2019

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02683)	Apr-19
Reference Probe EX3DV4	SN: 7349	31-Dec-18 (No. EX3-7349_Dec18)	Dec-19
DAE4	SN: 601	04-Oct-18 (No. DAE4-601_Oct18)	Oct-19

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	07-Oct-15 (in house check Feb-19)	In house check: Oct-20
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-18)	In house check: Oct-20
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Manu Seitz	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 21, 2019

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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:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.9 ± 6 %	1.38 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.87 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**40.0 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.17 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**20.9 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.6 ± 6 %	1.47 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.71 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**39.7 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.13 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**20.8 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.8 Ω + 6.6 jΩ
Return Loss	- 23.6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.6 Ω + 6.7 jΩ
Return Loss	- 22.2 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.198 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

DASY5 Validation Report for Head TSL

Date: 21.02.2019

Test Laboratory: SPEAG, Zurich, Switzerland

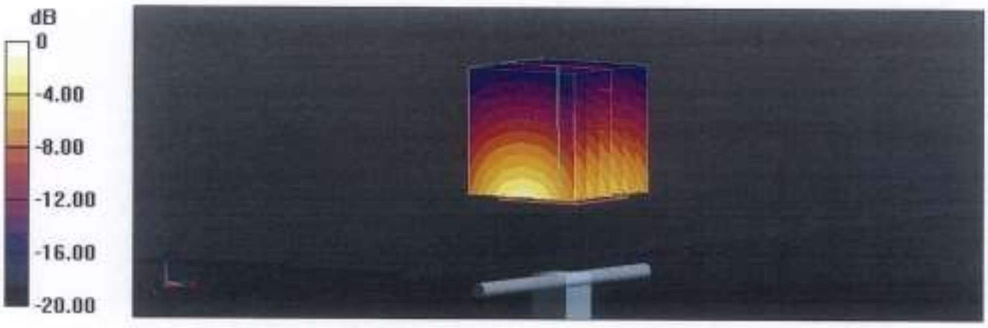
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d032

Communication System: UID 0 - CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.38 S/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 31.12.2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

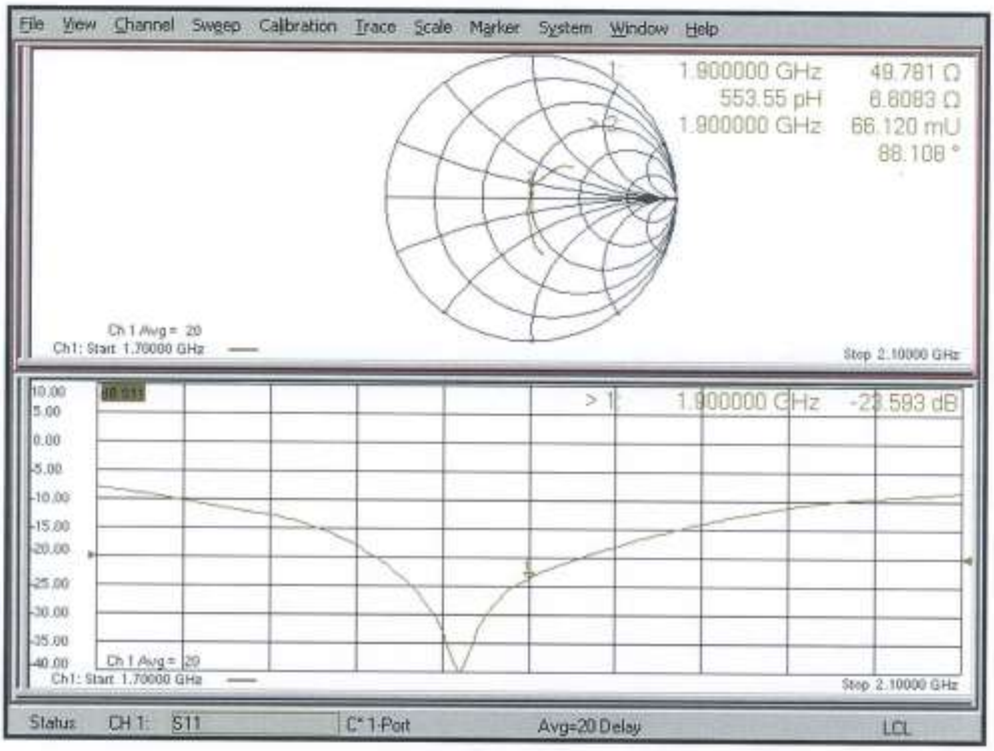
Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 109.8 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 18.2 W/kg
SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.17 W/kg
Maximum value of SAR (measured) = 15.3 W/kg



0 dB = 15.3 W/kg = 11.85 dBW/kg

Certificate No: D1900V2-5d032_Feb19 Page 5 of 8

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 21.02.2019

Test Laboratory: SPEAG, Zurich, Switzerland

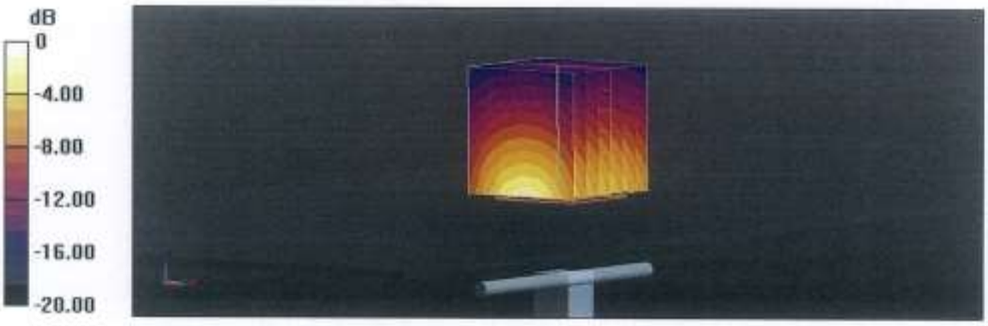
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d032

Communication System: UID 0 - CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.47 S/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

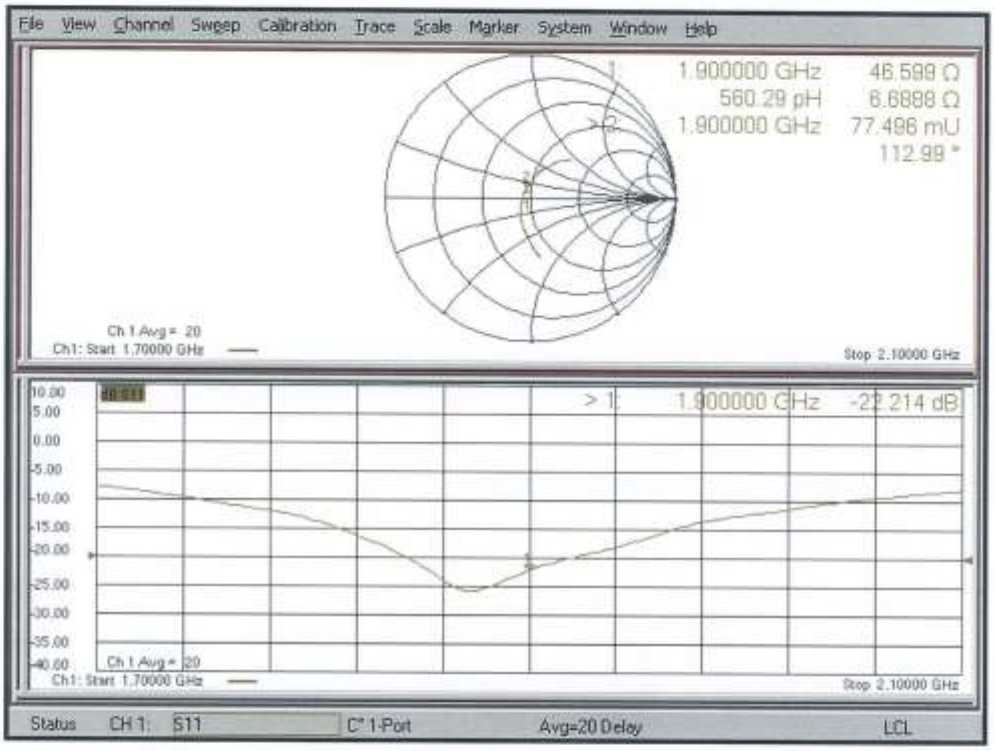
- Probe: EX3DV4 - SN7349; ConvF(8.23, 8.23, 8.23) @ 1900 MHz; Calibrated: 31.12.2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 104.5 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 17.3 W/kg
SAR(1 g) = 9.71 W/kg; SAR(10 g) = 5.13 W/kg
Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 dBW/kg

Impedance Measurement Plot for Body TSL



Certificate No: D1900V2-5d032_Feb19 Page 8 of 8

Calibration Laboratory of
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Accreditation No.: **SCS 0108**

Client **HCT (Dymstec)**

Certificate No: **D2450V2-743_Jan19**

CALIBRATION CERTIFICATE

결재	담당자	확인자
직위/성명	SW / 강재우	GT / [illegible]
일자	2019 / 2.15	2019 / 2.15

Object	D2450V2 - SN:743
Calibration procedure(s)	QA CAL-05.v11 Calibration Procedure for SAR Validation Sources between 0.7-3 GHz
Calibration date:	January 28, 2019

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02683)	Apr-19
Reference Probe EX3DV4	SN: 7349	31-Dec-18 (No. EX3-7349_Dec18)	Dec-19
DAE4	SN: 601	04-Oct-18 (No. DAE4-601_Oct18)	Oct-19

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-18)	In house check: Oct-20
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

	Name	Function	Signature
Calibrated by:	Manu Seitz	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: January 28, 2019

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

Certificate No: D2450V2-743_Jan19 Page 1 of 8

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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:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

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

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

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.8 ± 6 %	1.87 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**51.8 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.14 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**24.2 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.1 ± 6 %	2.03 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.8 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**49.9 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.94 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**23.4 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.6 Ω + 5.5 jΩ
Return Loss	- 24.0 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	50.2 Ω + 7.9 jΩ
Return Loss	- 22.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.161 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

DASY5 Validation Report for Head TSL

Date: 28.01.2019

Test Laboratory: SPEAG, Zurich, Switzerland

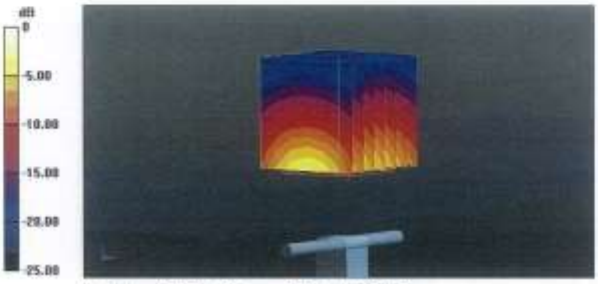
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:743

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.87 S/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

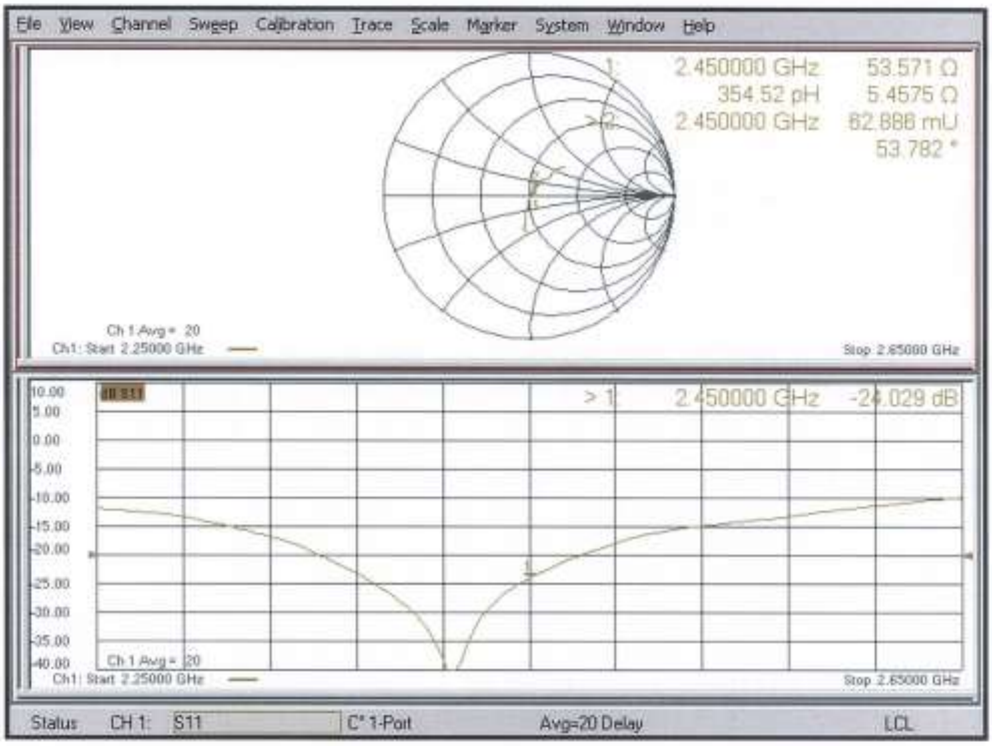
- Probe: EX3DV4 - SN7349; ConvF(7.96, 7.96, 7.96) @ 2450 MHz; Calibrated: 31.12.2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 116.5 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 26.6 W/kg
SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.14 W/kg
Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

Impedance Measurement Plot for Head TSL



Certificate No: D2450V2-743_Jan19 Page 6 of 8

DASY5 Validation Report for Body TSL

Date: 28.01.2019

Test Laboratory: SPEAG, Zurich, Switzerland

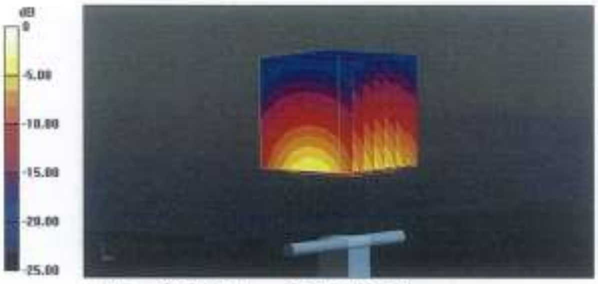
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:743

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 2.03 S/m; ε_r = 51.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

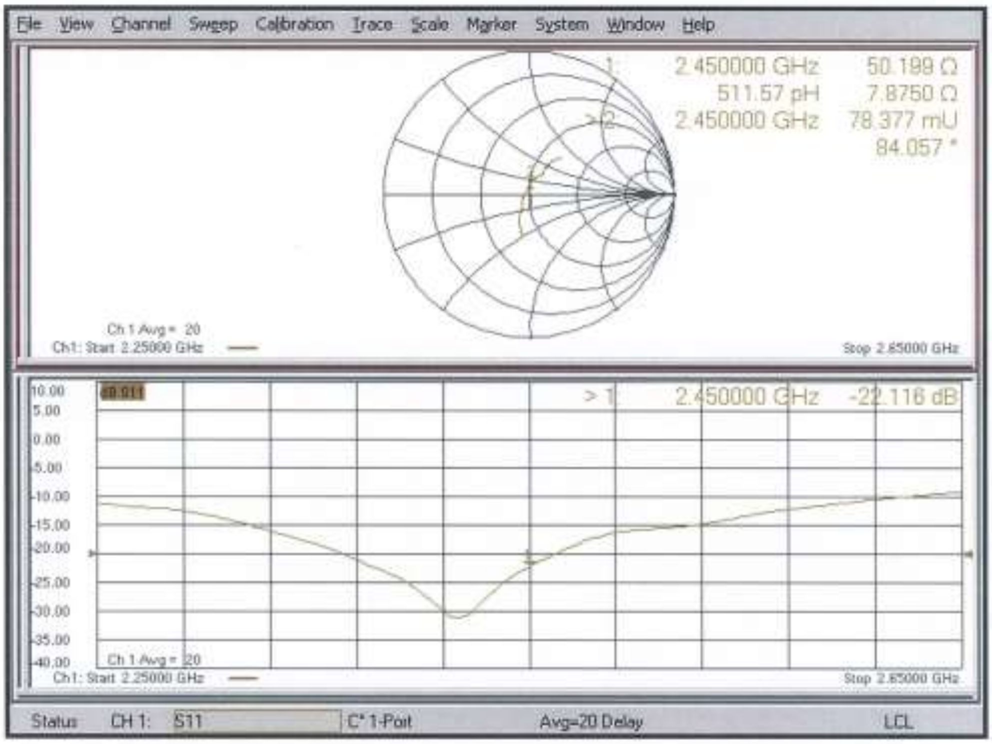
- Probe: EX3DV4 - SN7349; ConvF(8.09, 8.09, 8.09) @ 2450 MHz; Calibrated: 31.12.2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 107.2 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 25.5 W/kg
SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.94 W/kg
Maximum value of SAR (measured) = 20.7 W/kg



0 dB = 20.7 W/kg = 13.16 dBW/kg

Impedance Measurement Plot for Body TSL



Certificate No: D2450V2-743_Jan19 Page 8 of 8

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Certificate of conformity / First Article Inspection

Item	Triple Modular Flat Phantom V5.1
Type No	QD 000 P51 C
Series No	1100 and higher
Manufacturer / Origin	Untersee Composites Knebelstrasse 8, CH-8268 Mannenbach, Switzerland

Tests

The sub-units of item 1100 are identified with the designation 1100/1, 1100/2 and 1100/3. Tests were conducted on all 3 sub-units of this phantom.

Test	Requirement	Details	Units tested
Material thickness	Compliant with the standard requirements.	2 mm +/- 0.2 mm 30 points over the bottom area	all
Material parameters	Dielectric parameters for required frequencies	200 MHz – 6 GHz - Relative permittivity 3 - 5 Loss tangent < 0.05.	Material sample
Material resistivity	The material is compatible with the liquids defined in the standards if handled and cleaned according to the instructions.	DGBE based simulating liquids. Observe Technical Note for material compatibility.	Material Samples
Shape	Internal dimensions	Internal height: > 175 mm Bottom internal length: 280 mm Bottom internal width: 175 mm Nominal filling height: 155 mm Nominal volume: 9.2 l	Pre-series, design
Sagging	Depending on standard	No initial sagging (negative preshaped, change < 0.5 mm)	1100/2

Standards

[1] IEEE 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
[2] IEC 62209 – 1, "Specific Absorption Rate (SAR) in the frequency range of 300 MHz to 3 GHz – Measurement Procedure, Part 1: Hand-held mobile wireless communication devices", February 2005
[3] IEC 62209 – 2, "Evaluation of Human Exposure to Radio Frequency Fields from Handheld and Body-Mounted Wireless Communication Devices in the Frequency Range of 30 MHz to 6 GHz: Human models, Instrumentation and Procedures, Part 2: Procedure to determine the Specific Absorption Rate (SAR) for ... including accessories and multiple transmitters", March 2010
[4] KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Conformity

Based on the dimensions and sample tests above, we certify that this item is in compliance with the standards [1] to [4] for frequencies > 700 MHz, if operated according to the specific requirements.

Date 16.07.2015

Signature / Stamp

s p e a g
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