

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.77	69.97	14.37	0.00	150.0	± 9.6 %
		Y	1.81	83.33	22.94		150.0	
		Z	0.70	66.15	13.99		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.10	74.88	17.91	3.29	80.0	± 9.6 %
		Y	100.00	130.63	32.41		80.0	
		Z	2.28	78.08	18.84		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.93	230.19	29.26	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.55		80.0	
		Z	0.64	60.00	7.06		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.96	233.23	22.29	3.23	80.0	± 9.6 %
		Y	23.26	230.85	21.52		80.0	
		Z	0.66	60.00	6.36		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.60	67.04	13.62	3.23	80.0	± 9.6 %
		Y	100.00	124.51	29.50		80.0	
		Z	1.46	72.00	15.83		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.88	228.32	21.10	3.23	80.0	± 9.6 %
		Y	0.24	55.14	2.95		80.0	
		Z	0.64	60.00	7.00		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.90	230.59	11.80	3.23	80.0	± 9.6 %
		Y	24.92	227.37	29.84		80.0	
		Z	0.66	60.00	6.32		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.17	14.23	3.23	80.0	± 9.6 %
		Y	100.00	125.25	29.82		80.0	
		Z	1.58	73.06	16.29		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	228.62	22.92	3.23	80.0	± 9.6 %
		Y	0.24	55.19	3.02		80.0	
		Z	0.64	60.00	7.02		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.89	230.67	12.36	3.23	80.0	± 9.6 %
		Y	24.62	227.52	30.16		80.0	
		Z	0.66	60.00	6.32		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.21	14.25	3.23	80.0	± 9.6 %
		Y	100.00	125.26	29.81		80.0	
		Z	1.58	73.08	16.29		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.71	228.68	22.79	3.23	80.0	± 9.6 %
		Y	0.24	55.16	2.98		80.0	
		Z	0.64	60.00	7.01		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.83	230.72	12.16	3.23	80.0	± 9.6 %
		Y	24.39	227.78	30.29		80.0	
		Z	0.66	60.00	6.30		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.12	14.21	3.23	80.0	± 9.6 %
		Y	100.00	125.20	29.78		80.0	
		Z	1.57	73.01	16.25		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.67	228.73	22.56	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.48		80.0	
		Z	0.64	60.00	7.01		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.82	230.67	11.80	3.23	80.0	± 9.6 %
		Y	24.34	227.67	30.21		80.0	
		Z	0.66	60.00	6.30		80.0	

10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.74	228.54	21.21	3.23	80.0	± 9.6 %
		Y	0.23	55.08	2.89		80.0	
		Z	0.64	60.00	6.98		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.84	230.57	11.22	3.23	80.0	± 9.6 %
		Y	24.37	227.68	30.04		80.0	
		Z	0.66	60.00	6.29		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.02	84.98	21.47	3.23	80.0	± 9.6 %
		Y	100.00	125.48	31.72		80.0	
		Z	5.02	83.00	20.76		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.47	60.00	6.63	3.23	80.0	± 9.6 %
		Y	1.92	67.54	11.86		80.0	
		Z	1.73	65.44	11.67		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.22	55.04	3.12	3.23	80.0	± 9.6 %
		Y	1.09	61.90	8.89		80.0	
		Z	1.31	62.31	9.77		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	53.67	208.87	10.65	2.23	80.0	± 9.6 %
		Y	1.05	62.14	9.95		80.0	
		Z	0.98	60.56	9.26		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	64.01	327.64	15.81	2.23	80.0	± 9.6 %
		Y	1.10	60.00	7.60		80.0	
		Z	1.21	60.00	8.23		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	72.15	316.72	7.23	2.23	80.0	± 9.6 %
		Y	1.13	60.00	7.59		80.0	
		Z	1.24	60.00	8.22		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.75	60.00	6.88	2.23	80.0	± 9.6 %
		Y	2.48	72.41	16.54		80.0	
		Z	1.64	65.93	13.71		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	5.53	2.23	80.0	± 9.6 %
		Y	1.68	63.79	11.57		80.0	
		Z	1.58	62.22	10.94		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.04	60.00	5.50	2.23	80.0	± 9.6 %
		Y	1.66	63.28	11.27		80.0	
		Z	1.59	61.98	10.79		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.44	64.72	13.06	2.23	80.0	± 9.6 %
		Y	2.82	72.60	18.56		80.0	
		Z	2.27	68.12	16.38		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.87	10.73	2.23	80.0	± 9.6 %
		Y	2.82	68.91	16.54		80.0	
		Z	2.48	66.05	15.16		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.55	10.50	2.23	80.0	± 9.6 %
		Y	2.86	68.61	16.37		80.0	
		Z	2.55	65.97	15.11		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.98	66.25	14.91	2.23	80.0	± 9.6 %
		Y	2.98	70.44	18.02		80.0	
		Z	2.64	67.54	16.51		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.19	64.63	13.64	2.23	80.0	± 9.6 %
		Y	3.11	67.88	16.76		80.0	
		Z	2.90	65.95	15.77		80.0	

10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.21	64.43	13.47	2.23	80.0	± 9.6 %
		Y	3.16	67.71	16.66		80.0	
		Z	2.96	65.87	15.72		80.0	
10494-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.11	67.23	15.74	2.23	80.0	± 9.6 %
		Y	3.21	71.79	18.57		80.0	
		Z	2.78	68.52	16.88		80.0	
10495-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.35	65.50	14.66	2.23	80.0	± 9.6 %
		Y	3.14	68.07	17.04		80.0	
		Z	2.93	66.16	16.02		80.0	
10496-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.42	65.39	14.61	2.23	80.0	± 9.6 %
		Y	3.21	67.85	16.95		80.0	
		Z	3.02	66.06	16.01		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.50	220.48	26.76	2.23	80.0	± 9.6 %
		Y	0.82	60.00	6.90		80.0	
		Z	0.88	60.00	7.23		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.00	60.00	0.00	2.23	80.0	± 9.6 %
		Y	1.06	60.00	5.49		80.0	
		Z	1.08	60.00	6.01		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.00	60.00	0.00	2.23	80.0	± 9.6 %
		Y	1.10	60.00	5.30		80.0	
		Z	1.11	60.00	5.84		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.83	60.00	8.23	2.23	80.0	± 9.6 %
		Y	2.68	72.91	17.52		80.0	
		Z	1.91	67.05	14.90		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.03	60.00	6.96	2.23	80.0	± 9.6 %
		Y	2.26	66.74	13.90		80.0	
		Z	1.97	64.14	12.76		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.05	60.00	6.86	2.23	80.0	± 9.6 %
		Y	2.24	66.31	13.60		80.0	
		Z	1.99	63.95	12.58		80.0	
10503-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.42	64.51	12.94	2.23	80.0	± 9.6 %
		Y	2.78	72.32	18.42		80.0	
		Z	2.24	67.93	16.27		80.0	
10504-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.45	61.75	10.65	2.23	80.0	± 9.6 %
		Y	2.79	68.76	16.45		80.0	
		Z	2.46	65.95	15.09		80.0	
10505-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.46	61.45	10.42	2.23	80.0	± 9.6 %
		Y	2.84	68.47	16.29		80.0	
		Z	2.53	65.87	15.05		80.0	
10506-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.09	67.08	15.65	2.23	80.0	± 9.6 %
		Y	3.18	71.61	18.48		80.0	
		Z	2.76	68.39	16.81		80.0	
10507-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.34	65.41	14.60	2.23	80.0	± 9.6 %
		Y	3.12	67.99	16.99		80.0	
		Z	2.92	66.10	15.98		80.0	

10508-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.40	65.29	14.54	2.23	80.0	± 9.6 %
		Y	3.20	67.76	16.90		80.0	
		Z	3.01	65.99	15.96		80.0	
10509-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.58	67.03	16.09	2.23	80.0	± 9.6 %
		Y	3.55	70.28	17.97		80.0	
		Z	3.24	67.94	16.71		80.0	
10510-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.84	65.59	15.48	2.23	80.0	± 9.6 %
		Y	3.55	67.42	17.00		80.0	
		Z	3.41	66.05	16.23		80.0	
10511-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.92	65.56	15.46	2.23	80.0	± 9.6 %
		Y	3.62	67.28	16.95		80.0	
		Z	3.49	65.96	16.22		80.0	
10512-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.57	67.43	16.22	2.23	80.0	± 9.6 %
		Y	3.65	71.51	18.37		80.0	
		Z	3.23	68.73	16.92		80.0	
10513-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.79	65.51	15.59	2.23	80.0	± 9.6 %
		Y	3.45	67.50	17.07		80.0	
		Z	3.30	66.08	16.26		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.87	65.41	15.56	2.23	80.0	± 9.6 %
		Y	3.50	67.18	16.96		80.0	
		Z	3.36	65.86	16.21		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.84	63.77	14.11	0.00	150.0	± 9.6 %
		Y	1.02	65.86	16.61		150.0	
		Z	0.85	62.40	13.77		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.62	73.89	17.55	0.00	150.0	± 9.6 %
		Y	4.44	111.45	33.24		150.0	
		Z	0.45	67.70	14.48		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.68	65.50	14.61	0.00	150.0	± 9.6 %
		Y	0.96	70.28	18.66		150.0	
		Z	0.68	63.72	13.93		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	3.70	67.39	15.82	0.00	150.0	± 9.6 %
		Y	4.26	67.62	16.61		150.0	
		Z	4.17	66.58	15.96		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	3.79	67.51	15.88	0.00	150.0	± 9.6 %
		Y	4.38	67.73	16.67		150.0	
		Z	4.31	66.74	16.05		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	3.65	67.31	15.75	0.00	150.0	± 9.6 %
		Y	4.25	67.68	16.61		150.0	
		Z	4.16	66.65	15.95		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	3.59	67.16	15.66	0.00	150.0	± 9.6 %
		Y	4.18	67.62	16.58		150.0	
		Z	4.10	66.58	15.92		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	3.61	67.21	15.68	0.00	150.0	± 9.6 %
		Y	4.20	67.65	16.61		150.0	
		Z	4.13	66.67	15.99		150.0	

10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	3.58	67.41	15.78	0.00	150.0	± 9.6 %
		Y	4.19	67.90	16.68		150.0	
		Z	4.09	66.77	15.97		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	3.55	67.17	15.73	0.00	150.0	± 9.6 %
		Y	4.18	67.74	16.69		150.0	
		Z	4.09	66.69	16.02		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	3.68	66.62	15.57	0.00	150.0	± 9.6 %
		Y	4.25	66.93	16.35		150.0	
		Z	4.15	65.82	15.66		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	3.72	66.70	15.62	0.00	150.0	± 9.6 %
		Y	4.34	67.14	16.44		150.0	
		Z	4.25	66.06	15.76		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	3.68	66.74	15.58	0.00	150.0	± 9.6 %
		Y	4.29	67.16	16.40		150.0	
		Z	4.18	66.03	15.70		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	3.67	66.65	15.55	0.00	150.0	± 9.6 %
		Y	4.30	67.15	16.42		150.0	
		Z	4.20	66.04	15.73		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	3.67	66.65	15.55	0.00	150.0	± 9.6 %
		Y	4.30	67.15	16.42		150.0	
		Z	4.20	66.04	15.73		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	3.64	66.66	15.53	0.00	150.0	± 9.6 %
		Y	4.25	67.14	16.38		150.0	
		Z	4.15	66.02	15.69		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	3.57	66.55	15.48	0.00	150.0	± 9.6 %
		Y	4.15	67.03	16.34		150.0	
		Z	4.04	65.89	15.62		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	3.68	66.88	15.62	0.00	150.0	± 9.6 %
		Y	4.30	67.28	16.44		150.0	
		Z	4.20	66.13	15.73		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.34	66.44	15.93	0.00	150.0	± 9.6 %
		Y	4.85	66.86	16.39		150.0	
		Z	4.79	66.06	15.87		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.34	66.46	15.95	0.00	150.0	± 9.6 %
		Y	4.87	66.95	16.44		150.0	
		Z	4.82	66.17	15.93		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.25	66.45	15.91	0.00	150.0	± 9.6 %
		Y	4.78	66.98	16.43		150.0	
		Z	4.71	66.14	15.89		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.35	66.61	16.01	0.00	150.0	± 9.6 %
		Y	4.86	67.05	16.47		150.0	
		Z	4.80	66.24	15.94		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.37	66.44	15.94	0.00	150.0	± 9.6 %
		Y	4.89	66.89	16.42		150.0	
		Z	4.84	66.13	15.93		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.31	66.35	15.93	0.00	150.0	± 9.6 %
		Y	4.83	66.86	16.43		150.0	
		Z	4.77	66.08	15.92		150.0	

10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.33	66.41	15.92	0.00	150.0	± 9.6 %
		Y	4.83	66.83	16.39		150.0	
		Z	4.77	66.02	15.87		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	4.45	66.54	16.01	0.00	150.0	± 9.6 %
		Y	4.97	66.88	16.43		150.0	
		Z	4.91	66.12	15.94		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	4.48	66.49	16.02	0.00	150.0	± 9.6 %
		Y	5.04	66.97	16.50		150.0	
		Z	5.01	66.28	16.06		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	4.77	66.20	15.88	0.00	150.0	± 9.6 %
		Y	5.21	66.81	16.32		150.0	
		Z	5.15	66.11	15.87		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	4.82	66.41	15.96	0.00	150.0	± 9.6 %
		Y	5.37	67.24	16.50		150.0	
		Z	5.34	66.63	16.10		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	4.77	66.27	15.89	0.00	150.0	± 9.6 %
		Y	5.24	66.91	16.35		150.0	
		Z	5.18	66.22	15.90		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	4.83	66.38	15.95	0.00	150.0	± 9.6 %
		Y	5.36	67.18	16.48		150.0	
		Z	5.31	66.51	16.04		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	4.82	66.54	16.01	0.00	150.0	± 9.6 %
		Y	5.39	67.48	16.61		150.0	
		Z	5.39	66.96	16.24		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	4.79	66.46	16.00	0.00	150.0	± 9.6 %
		Y	5.34	67.29	16.55		150.0	
		Z	5.30	66.62	16.12		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	4.75	66.25	15.87	0.00	150.0	± 9.6 %
		Y	5.21	66.84	16.29		150.0	
		Z	5.16	66.14	15.84		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	4.78	66.50	15.97	0.00	150.0	± 9.6 %
		Y	5.22	66.98	16.36		150.0	
		Z	5.16	66.23	15.88		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	4.79	66.33	15.90	0.00	150.0	± 9.6 %
		Y	5.26	66.86	16.32		150.0	
		Z	5.20	66.16	15.87		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.25	66.42	15.95	0.00	150.0	± 9.6 %
		Y	5.65	67.07	16.36		150.0	
		Z	5.60	66.46	15.97		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.31	66.63	16.05	0.00	150.0	± 9.6 %
		Y	5.71	67.24	16.43		150.0	
		Z	5.68	66.67	16.06		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.32	66.65	16.05	0.00	150.0	± 9.6 %
		Y	5.77	67.42	16.51		150.0	
		Z	5.74	66.86	16.15		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.28	66.55	16.01	0.00	150.0	± 9.6 %
		Y	5.72	67.25	16.45		150.0	
		Z	5.67	66.64	16.06		150.0	

10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.24	66.46	15.98	0.00	150.0	± 9.6 %
		Y	5.69	67.20	16.44		150.0	
		Z	5.65	66.61	16.06		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.28	66.44	16.00	0.00	150.0	± 9.6 %
		Y	5.72	67.18	16.47		150.0	
		Z	5.68	66.60	16.09		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.21	66.38	15.99	0.00	150.0	± 9.6 %
		Y	5.66	67.17	16.49		150.0	
		Z	5.63	66.59	16.12		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.30	66.67	16.13	0.00	150.0	± 9.6 %
		Y	5.70	67.29	16.55		150.0	
		Z	5.66	66.70	16.17		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.57	67.31	16.43	0.00	150.0	± 9.6 %
		Y	5.83	67.40	16.57		150.0	
		Z	5.78	66.77	16.18		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	3.98	67.19	15.91	0.46	150.0	± 9.6 %
		Y	4.54	67.45	16.63		150.0	
		Z	4.49	66.59	16.10		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	4.14	67.73	16.32	0.46	150.0	± 9.6 %
		Y	4.73	67.88	16.97		150.0	
		Z	4.67	67.02	16.44		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	3.97	67.32	16.02	0.46	150.0	± 9.6 %
		Y	4.56	67.66	16.76		150.0	
		Z	4.51	66.79	16.21		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.06	67.96	16.56	0.46	150.0	± 9.6 %
		Y	4.62	68.16	17.21		150.0	
		Z	4.55	67.23	16.63		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	3.80	66.64	15.45	0.46	150.0	± 9.6 %
		Y	4.41	67.18	16.36		150.0	
		Z	4.38	66.42	15.88		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.07	68.35	16.82	0.46	150.0	± 9.6 %
		Y	4.63	68.53	17.43		150.0	
		Z	4.55	67.52	16.81		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	3.99	67.81	16.52	0.46	150.0	± 9.6 %
		Y	4.60	68.17	17.24		150.0	
		Z	4.53	67.25	16.66		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	0.93	63.68	14.15	0.46	130.0	± 9.6 %
		Y	1.11	65.62	16.53		130.0	
		Z	0.97	62.81	14.25		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	0.94	64.27	14.56	0.46	130.0	± 9.6 %
		Y	1.13	66.40	17.03		130.0	
		Z	0.97	63.27	14.57		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.10	79.41	19.97	0.46	130.0	± 9.6 %
		Y	29.09	140.84	40.18		130.0	
		Z	0.81	73.52	17.65		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.00	70.10	17.80	0.46	130.0	± 9.6 %
		Y	1.40	75.63	21.83		130.0	
		Z	0.96	67.63	16.92		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	3.74	66.83	15.70	0.46	130.0	± 9.6 %
		Y	4.30	67.12	16.57		130.0	
		Z	4.26	66.31	16.08		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	3.78	67.20	15.91	0.46	130.0	± 9.6 %
		Y	4.34	67.41	16.71		130.0	
		Z	4.29	66.55	16.18		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	3.89	67.42	16.06	0.46	130.0	± 9.6 %
		Y	4.48	67.61	16.83		130.0	
		Z	4.44	66.77	16.33		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	3.83	67.60	16.23	0.46	130.0	± 9.6 %
		Y	4.40	67.82	17.00		130.0	
		Z	4.35	66.92	16.45		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	3.51	66.09	15.01	0.46	130.0	± 9.6 %
		Y	4.12	66.74	16.08		130.0	
		Z	4.09	65.97	15.60		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	3.49	65.97	14.89	0.46	130.0	± 9.6 %
		Y	4.12	66.69	16.03		130.0	
		Z	4.11	65.99	15.59		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	3.74	67.63	16.20	0.46	130.0	± 9.6 %
		Y	4.33	67.99	17.02		130.0	
		Z	4.26	67.01	16.43		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	3.37	65.61	14.64	0.46	130.0	± 9.6 %
		Y	4.03	66.45	15.82		130.0	
		Z	4.01	65.72	15.36		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	3.74	66.83	15.70	0.46	130.0	± 9.6 %
		Y	4.30	67.12	16.57		130.0	
		Z	4.26	66.31	16.08		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	3.78	67.20	15.91	0.46	130.0	± 9.6 %
		Y	4.34	67.41	16.71		130.0	
		Z	4.29	66.55	16.18		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	3.89	67.42	16.06	0.46	130.0	± 9.6 %
		Y	4.48	67.61	16.83		130.0	
		Z	4.44	66.77	16.33		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	3.83	67.60	16.23	0.46	130.0	± 9.6 %
		Y	4.40	67.82	17.00		130.0	
		Z	4.35	66.92	16.45		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	3.51	66.09	15.01	0.46	130.0	± 9.6 %
		Y	4.12	66.74	16.08		130.0	
		Z	4.09	65.97	15.60		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	3.49	65.97	14.89	0.46	130.0	± 9.6 %
		Y	4.12	66.69	16.03		130.0	
		Z	4.11	65.99	15.59		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	3.74	67.63	16.20	0.46	130.0	± 9.6 %
		Y	4.33	67.99	17.02		130.0	
		Z	4.26	67.01	16.43		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	3.37	65.61	14.64	0.46	130.0	± 9.6 %
		Y	4.03	66.45	15.82		130.0	
		Z	4.01	65.72	15.36		130.0	

10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	3.91	67.05	15.98	0.46	130.0	± 9.6 %
		Y	4.46	67.24	16.72		130.0	
		Z	4.42	66.45	16.24		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	3.96	67.20	16.07	0.46	130.0	± 9.6 %
		Y	4.56	67.49	16.83		130.0	
		Z	4.52	66.71	16.36		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	3.89	67.09	15.91	0.46	130.0	± 9.6 %
		Y	4.48	67.36	16.68		130.0	
		Z	4.44	66.57	16.20		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	3.93	67.20	16.06	0.46	130.0	± 9.6 %
		Y	4.53	67.56	16.87		130.0	
		Z	4.50	66.76	16.38		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	3.88	67.15	15.95	0.46	130.0	± 9.6 %
		Y	4.50	67.54	16.78		130.0	
		Z	4.46	66.73	16.29		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	3.78	66.88	15.82	0.46	130.0	± 9.6 %
		Y	4.41	67.44	16.74		130.0	
		Z	4.38	66.66	16.26		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	3.79	66.92	15.72	0.46	130.0	± 9.6 %
		Y	4.37	67.31	16.57		130.0	
		Z	4.34	66.51	16.09		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	3.85	67.45	16.19	0.46	130.0	± 9.6 %
		Y	4.40	67.66	16.93		130.0	
		Z	4.34	66.79	16.40		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	4.79	67.73	16.77	0.46	130.0	± 9.6 %
		Y	5.21	67.73	17.04		130.0	
		Z	5.16	67.02	16.62		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	4.68	67.39	16.57	0.46	130.0	± 9.6 %
		Y	5.21	67.78	17.04		130.0	
		Z	5.26	67.42	16.79		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	4.64	67.32	16.56	0.46	130.0	± 9.6 %
		Y	5.18	67.81	17.08		130.0	
		Z	5.18	67.25	16.73		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	4.63	67.06	16.35	0.46	130.0	± 9.6 %
		Y	5.19	67.55	16.86		130.0	
		Z	5.23	67.15	16.59		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	4.68	67.32	16.65	0.46	130.0	± 9.6 %
		Y	5.23	67.74	17.10		130.0	
		Z	5.27	67.35	16.84		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	4.64	67.04	16.46	0.46	130.0	± 9.6 %
		Y	5.12	67.34	16.87		130.0	
		Z	5.13	66.84	16.55		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	4.61	67.01	16.45	0.46	130.0	± 9.6 %
		Y	5.17	67.54	16.97		130.0	
		Z	5.21	67.15	16.70		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	4.52	66.73	16.13	0.46	130.0	± 9.6 %
		Y	5.04	67.22	16.65		130.0	
		Z	5.04	66.71	16.33		130.0	

10607-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	3.77	66.40	15.66	0.46	130.0	± 9.6 %
		Y	4.33	66.69	16.43		130.0	
		Z	4.27	65.78	15.88		130.0	
10608-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	3.82	66.54	15.73	0.46	130.0	± 9.6 %
		Y	4.44	66.96	16.55		130.0	
		Z	4.38	66.06	16.01		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	3.73	66.35	15.52	0.46	130.0	± 9.6 %
		Y	4.34	66.78	16.36		130.0	
		Z	4.28	65.87	15.81		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	3.78	66.52	15.70	0.46	130.0	± 9.6 %
		Y	4.40	66.99	16.56		130.0	
		Z	4.34	66.07	16.00		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	3.70	66.30	15.52	0.46	130.0	± 9.6 %
		Y	4.30	66.73	16.37		130.0	
		Z	4.25	65.83	15.82		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	3.61	66.09	15.37	0.46	130.0	± 9.6 %
		Y	4.27	66.79	16.38		130.0	
		Z	4.22	65.92	15.84		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	3.64	66.03	15.27	0.46	130.0	± 9.6 %
		Y	4.27	66.59	16.20		130.0	
		Z	4.22	65.72	15.67		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	3.70	66.56	15.73	0.46	130.0	± 9.6 %
		Y	4.27	66.95	16.54		130.0	
		Z	4.20	66.00	15.96		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	3.64	65.99	15.16	0.46	130.0	± 9.6 %
		Y	4.28	66.52	16.09		130.0	
		Z	4.23	65.64	15.56		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	4.45	66.34	16.08	0.46	130.0	± 9.6 %
		Y	4.95	66.71	16.53		130.0	
		Z	4.93	66.07	16.13		130.0	
10617-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	4.43	66.27	16.03	0.46	130.0	± 9.6 %
		Y	4.97	66.78	16.54		130.0	
		Z	4.96	66.18	16.16		130.0	
10618-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	4.37	66.39	16.11	0.46	130.0	± 9.6 %
		Y	4.90	66.88	16.61		130.0	
		Z	4.86	66.19	16.18		130.0	
10619-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	4.42	66.32	16.00	0.46	130.0	± 9.6 %
		Y	4.94	66.79	16.49		130.0	
		Z	4.93	66.18	16.10		130.0	
10620-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	4.43	66.13	15.93	0.46	130.0	± 9.6 %
		Y	4.96	66.62	16.45		130.0	
		Z	4.96	66.05	16.09		130.0	
10621-AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	4.50	66.48	16.27	0.46	130.0	± 9.6 %
		Y	5.00	66.84	16.69		130.0	
		Z	4.97	66.18	16.29		130.0	
10622-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	4.46	66.43	16.25	0.46	130.0	± 9.6 %
		Y	4.98	66.91	16.73		130.0	
		Z	4.96	66.27	16.33		130.0	

10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.39	66.10	15.89	0.46	130.0	± 9.6 %
		Y	4.89	66.49	16.36		130.0	
		Z	4.86	65.84	15.96		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	4.54	66.35	16.10	0.46	130.0	± 9.6 %
		Y	5.06	66.70	16.53		130.0	
		Z	5.05	66.11	16.17		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	4.65	66.63	16.32	0.46	130.0	± 9.6 %
		Y	5.15	66.88	16.69		130.0	
		Z	5.16	66.34	16.36		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	4.87	66.09	16.03	0.46	130.0	± 9.6 %
		Y	5.31	66.64	16.44		130.0	
		Z	5.28	66.07	16.09		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	4.96	66.39	16.17	0.46	130.0	± 9.6 %
		Y	5.52	67.25	16.73		130.0	
		Z	5.53	66.80	16.43		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	4.83	65.96	15.85	0.46	130.0	± 9.6 %
		Y	5.28	66.56	16.30		130.0	
		Z	5.27	66.03	15.96		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	4.89	66.11	15.93	0.46	130.0	± 9.6 %
		Y	5.45	66.99	16.52		130.0	
		Z	5.45	66.49	16.20		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	4.94	66.47	16.13	0.46	130.0	± 9.6 %
		Y	5.52	67.40	16.73		130.0	
		Z	5.58	67.09	16.50		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.04	67.01	16.63	0.46	130.0	± 9.6 %
		Y	5.56	67.66	17.07		130.0	
		Z	5.56	67.16	16.74		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.02	66.85	16.55	0.46	130.0	± 9.6 %
		Y	5.59	67.70	17.10		130.0	
		Z	5.59	67.18	16.77		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	4.86	66.17	16.01	0.46	130.0	± 9.6 %
		Y	5.30	66.64	16.39		130.0	
		Z	5.27	66.07	16.03		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	4.95	66.64	16.30	0.46	130.0	± 9.6 %
		Y	5.35	66.92	16.58		130.0	
		Z	5.32	66.32	16.21		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	4.70	65.44	15.34	0.46	130.0	± 9.6 %
		Y	5.17	66.01	15.82		130.0	
		Z	5.16	65.50	15.50		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.37	66.35	16.11	0.46	130.0	± 9.6 %
		Y	5.75	66.94	16.50		130.0	
		Z	5.74	66.45	16.20		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.47	66.68	16.28	0.46	130.0	± 9.6 %
		Y	5.84	67.17	16.61		130.0	
		Z	5.85	66.75	16.34		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.45	66.60	16.21	0.46	130.0	± 9.6 %
		Y	5.91	67.37	16.68		130.0	
		Z	5.90	66.89	16.39		130.0	

10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.40	66.48	16.20	0.46	130.0	± 9.6 %
		Y	5.83	67.15	16.61		130.0	
		Z	5.82	66.67	16.32		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.32	66.22	15.99	0.46	130.0	± 9.6 %
		Y	5.75	66.89	16.42		130.0	
		Z	5.75	66.45	16.15		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.45	66.45	16.13	0.46	130.0	± 9.6 %
		Y	5.88	67.07	16.54		130.0	
		Z	5.90	66.70	16.30		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.46	66.60	16.39	0.46	130.0	± 9.6 %
		Y	5.90	67.28	16.81		130.0	
		Z	5.89	66.80	16.53		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.28	66.13	16.00	0.46	130.0	± 9.6 %
		Y	5.73	66.91	16.51		130.0	
		Z	5.74	66.48	16.24		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.42	66.58	16.26	0.46	130.0	± 9.6 %
		Y	5.78	67.08	16.62		130.0	
		Z	5.78	66.62	16.33		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	5.81	67.58	16.73	0.46	130.0	± 9.6 %
		Y	5.91	67.16	16.62		130.0	
		Z	5.93	66.77	16.38		130.0	
10646-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	2.64	72.38	24.11	9.30	60.0	± 9.6 %
		Y	4.60	84.41	29.31		60.0	
		Z	4.84	83.41	28.63		60.0	
10647-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	2.46	71.01	23.55	9.30	60.0	± 9.6 %
		Y	4.04	81.81	28.38		60.0	
		Z	4.35	81.42	27.96		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	2.44	155.88	0.83	0.00	150.0	± 9.6 %
		Y	0.35	60.28	6.28		150.0	
		Z	0.35	60.00	5.54		150.0	
10652-AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	2.08	63.49	12.30	2.23	80.0	± 9.6 %
		Y	3.15	67.39	16.19		80.0	
		Z	2.91	65.29	15.14		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.02	65.17	14.89	2.23	80.0	± 9.6 %
		Y	3.64	66.22	16.46		80.0	
		Z	3.52	64.96	15.78		80.0	
10654-AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.20	64.95	15.39	2.23	80.0	± 9.6 %
		Y	3.67	65.70	16.49		80.0	
		Z	3.57	64.61	15.88		80.0	
10655-AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.35	64.77	15.59	2.23	80.0	± 9.6 %
		Y	3.76	65.50	16.51		80.0	
		Z	3.66	64.52	15.94		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	2.01	62.76	7.94	10.00	50.0	± 9.6 %
		Y	2.58	65.57	9.73		50.0	
		Z	3.05	67.26	11.01		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	0.84	60.00	5.36	6.99	60.0	± 9.6 %
		Y	1.33	63.54	7.82		60.0	
		Z	1.53	64.53	8.66		60.0	

10660-AAA	Pulse Waveform (200Hz, 40%)	X	0.39	60.00	3.98	3.98	80.0	± 9.6 %
		Y	0.54	61.57	5.88		80.0	
		Z	0.45	60.00	5.04		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	17.64	60.43	1.44	2.22	100.0	± 9.6 %
		Y	0.23	60.00	4.28		100.0	
		Z	0.25	60.00	3.48		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	0.00	84.91	40.93	0.97	120.0	± 9.6 %
		Y	49.30	1078.61	357.44		120.0	
		Z	0.03	139.18	4.12		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.



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7410_Jul18**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7410**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes**

BN ✓
07/26/2018

Calibration date: **July 20, 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: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-17)	In house check: Oct-18

Calibrated by:	Name Michael Weber	Function Laboratory Technician	Signature
Approved by:	Name Katja Pokovic	Technical Manager	

Issued: July 21, 2018

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



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

Glossary:

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

Calibration is Performed According to the Following Standards:

- a) 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"

Methods Applied and Interpretation of Parameters:

- **NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- **NORM(f)_{x,y,z}** = NORM_{x,y,z} * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- **DCP_{x,y,z}**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- **PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- **A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,y,z}**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- **ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- **Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- **Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- **Connector Angle**: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).

Probe EX3DV4

SN:7410

Manufactured: November 24, 2015
Calibrated: July 20, 2018

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.41	0.47	0.43	$\pm 10.1 \%$
DCP (mV) ^B	93.6	99.2	96.3	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	142.1	$\pm 2.5 \%$
		Y	0.0	0.0	1.0		157.1	
		Z	0.0	0.0	1.0		143.0	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $\text{ms}\cdot\text{V}^{-2}$	T2 $\text{ms}\cdot\text{V}^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	32.22	246.3	37.01	4.015	0.380	5.018	0.000	0.327	1.006
Y	34.20	252.5	34.94	7.011	0.000	5.034	0.846	0.193	1.003
Z	38.58	298.4	37.77	5.097	0.373	5.059	0.000	0.338	1.011

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

^A The uncertainties of Norm X,Y,Z do not affect the E^2 -field uncertainty inside TSL (see Pages 5 and 6).

^B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth (mm) ^G	Unc (k=2)
750	41.9	0.89	10.13	10.13	10.13	0.37	0.98	± 12.0 %
835	41.5	0.90	9.81	9.81	9.81	0.47	0.80	± 12.0 %
1750	40.1	1.37	8.40	8.40	8.40	0.60	0.80	± 12.0 %
1900	40.0	1.40	8.16	8.16	8.16	0.56	0.80	± 12.0 %
2300	39.5	1.67	7.78	7.78	7.78	0.32	0.85	± 12.0 %
2450	39.2	1.80	7.50	7.50	7.50	0.34	0.84	± 12.0 %
2600	39.0	1.96	7.24	7.24	7.24	0.32	0.89	± 12.0 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Calibration Parameter Determined in Body Tissue Simulating Media

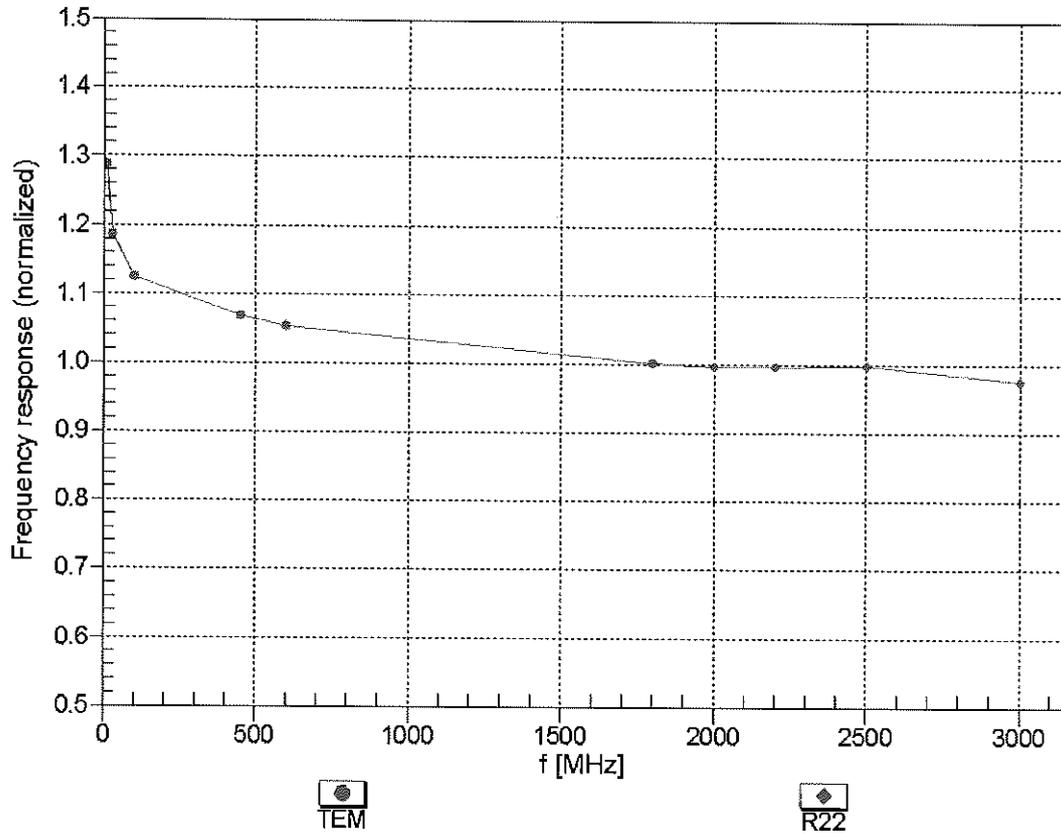
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth (mm) ^G	Unc (k=2)
750	55.5	0.96	9.87	9.87	9.87	0.33	1.02	± 12.0 %
835	55.2	0.97	9.63	9.63	9.63	0.42	0.86	± 12.0 %
1750	53.4	1.49	8.06	8.06	8.06	0.35	0.85	± 12.0 %
1900	53.3	1.52	7.78	7.78	7.78	0.39	0.80	± 12.0 %
2300	52.9	1.81	7.64	7.64	7.64	0.35	0.85	± 12.0 %
2450	52.7	1.95	7.45	7.45	7.45	0.32	0.86	± 12.0 %
2600	52.5	2.16	7.34	7.34	7.34	0.31	0.94	± 12.0 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

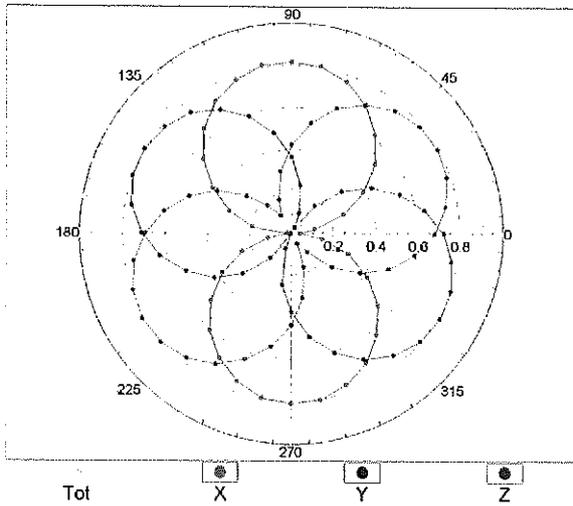
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



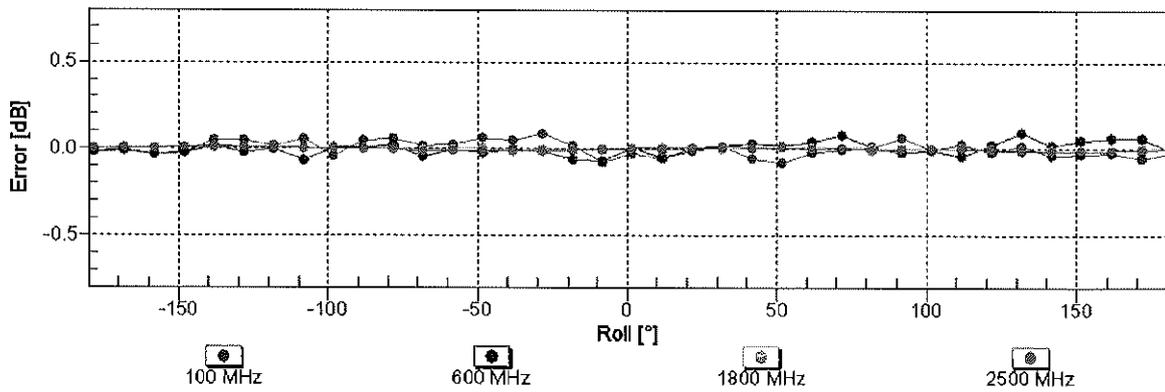
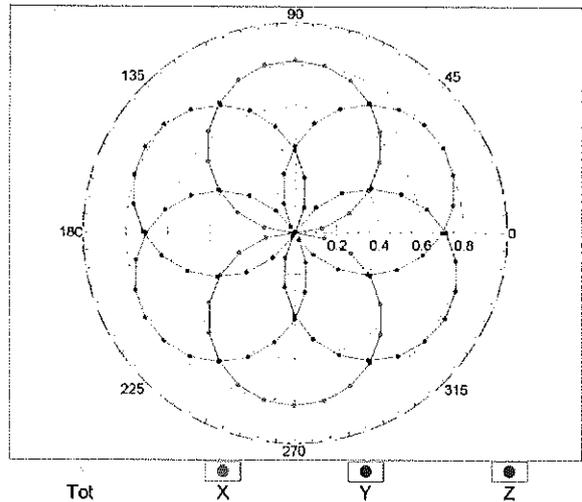
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

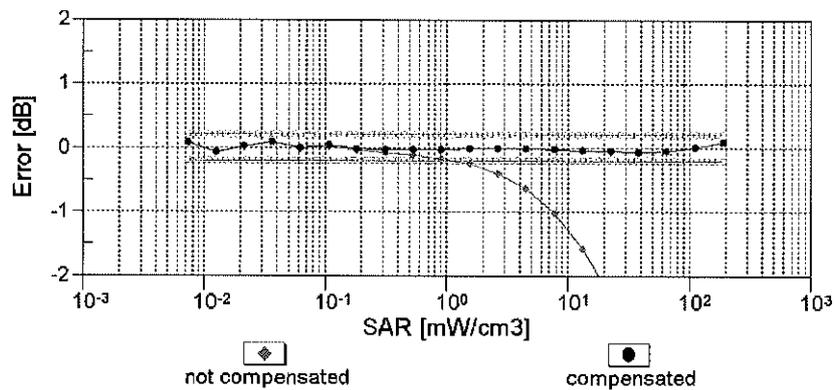
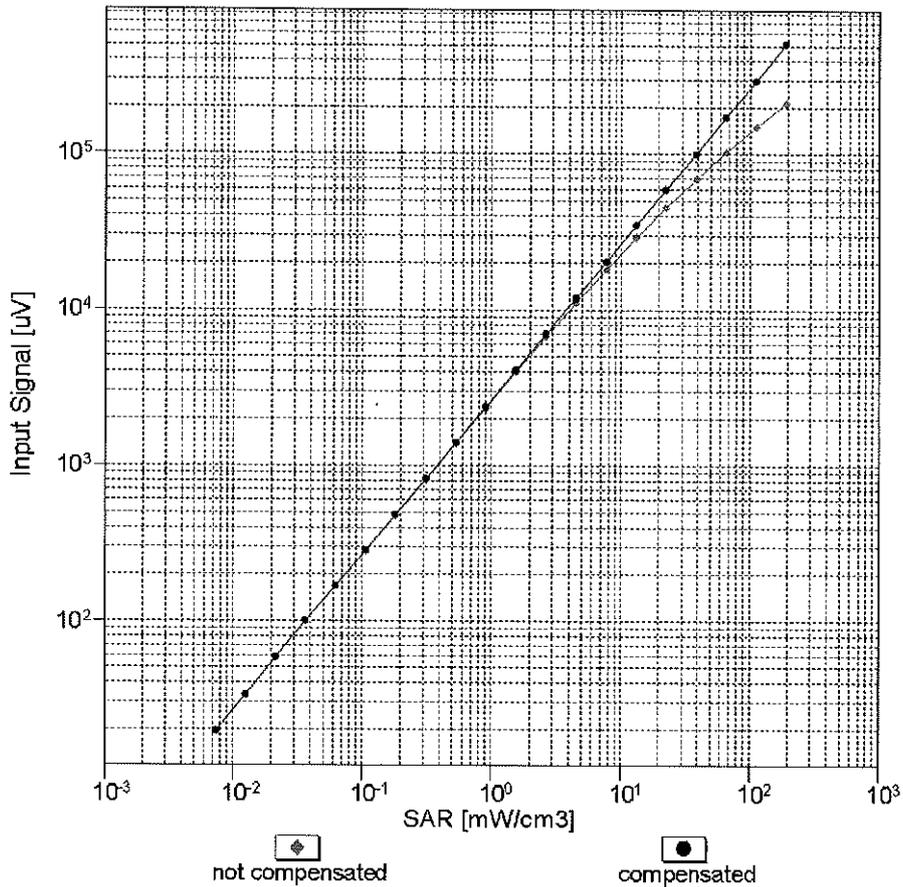


f=1800 MHz,R22



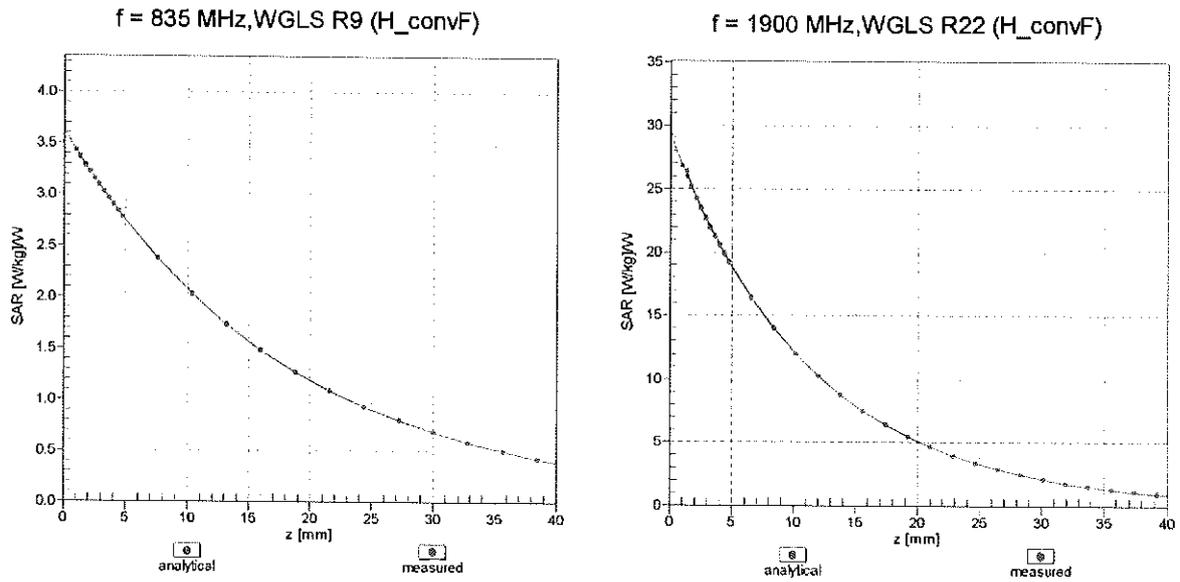
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range $f(SAR_{head})$ (TEM cell , $f_{eval} = 1900$ MHz)

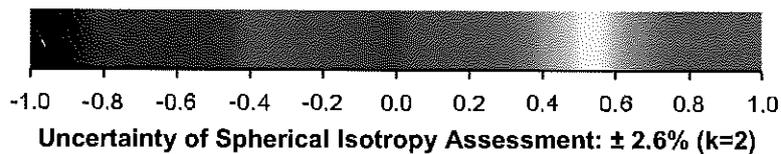
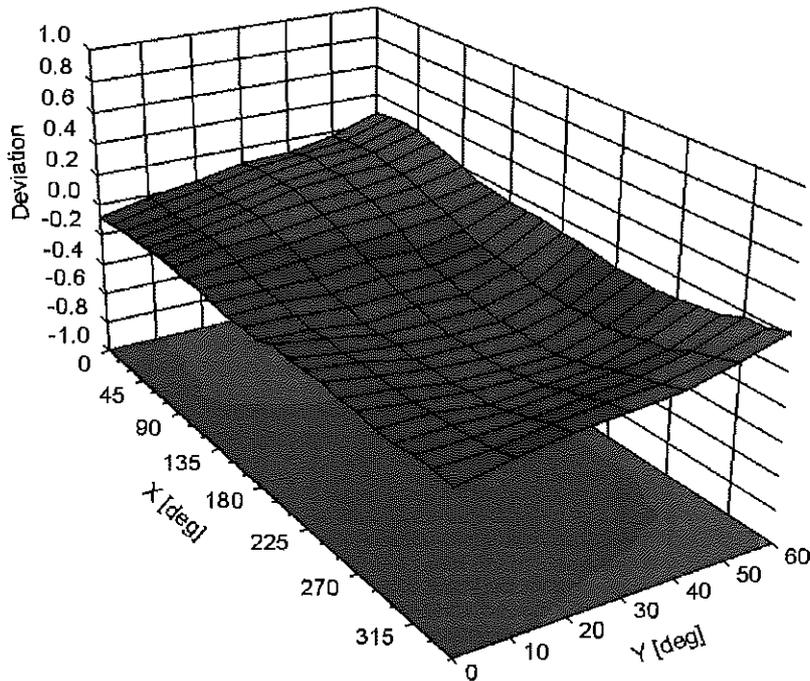


Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (ϕ, θ), f = 900 MHz



DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	1.8
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB μ V	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	142.1	$\pm 2.5\%$
		Y	0.00	0.00	1.00		157.1	
		Z	0.00	0.00	1.00		143.0	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	1.62	62.34	7.74	10.00	20.0	$\pm 9.6\%$
		Y	1.47	62.51	7.58		20.0	
		Z	1.74	63.23	8.42		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	0.82	65.36	13.43	0.00	150.0	$\pm 9.6\%$
		Y	1.01	68.19	15.53		150.0	
		Z	0.83	64.89	13.22		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.03	62.67	14.19	0.41	150.0	$\pm 9.6\%$
		Y	1.12	63.85	15.21		150.0	
		Z	1.03	62.50	14.16		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	4.54	66.46	16.76	1.46	150.0	$\pm 9.6\%$
		Y	4.63	66.78	17.00		150.0	
		Z	4.66	66.40	16.88		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	13.15	84.51	17.52	9.39	50.0	$\pm 9.6\%$
		Y	100.00	105.54	22.55		50.0	
		Z	100.00	109.08	24.59		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	7.05	77.63	15.35	9.57	50.0	$\pm 9.6\%$
		Y	100.00	104.89	22.31		50.0	
		Z	100.00	108.55	24.42		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	103.12	20.53	6.56	60.0	$\pm 9.6\%$
		Y	100.00	106.39	21.86		60.0	
		Z	100.00	108.56	23.07		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	3.34	64.62	22.65	12.57	50.0	$\pm 9.6\%$
		Y	5.12	80.55	32.48		50.0	
		Z	3.40	65.03	23.22		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	5.08	79.74	27.91	9.56	60.0	$\pm 9.6\%$
		Y	6.12	86.23	31.42		60.0	
		Z	5.62	82.16	29.24		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	101.64	19.06	4.80	80.0	$\pm 9.6\%$
		Y	100.00	109.60	22.50		80.0	
		Z	100.00	108.56	22.18		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	99.62	17.55	3.55	100.0	$\pm 9.6\%$
		Y	100.00	115.32	24.21		100.0	
		Z	100.00	107.61	21.03		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	3.55	72.28	23.51	7.80	80.0	$\pm 9.6\%$
		Y	3.97	75.71	25.59		80.0	
		Z	3.84	73.87	24.49		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	2.93	72.58	11.67	5.30	70.0	$\pm 9.6\%$
		Y	100.00	104.73	20.69		70.0	
		Z	100.00	105.98	21.40		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	0.19	60.00	3.86	1.88	100.0	$\pm 9.6\%$
		Y	100.00	108.46	20.17		100.0	
		Z	0.20	60.00	4.39		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	8.28	60.36	1.45	1.17	100.0	± 9.6 %
		Y	100.00	125.60	25.79		100.0	
		Z	9.15	64.10	3.12		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	3.18	74.95	16.76	5.30	70.0	± 9.6 %
		Y	16.17	99.83	25.75		70.0	
		Z	6.70	87.29	22.45		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	1.10	65.34	10.90	1.88	100.0	± 9.6 %
		Y	2.67	76.50	16.58		100.0	
		Z	1.54	69.44	13.90		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	0.87	63.89	9.87	1.17	100.0	± 9.6 %
		Y	1.73	72.02	14.58		100.0	
		Z	1.13	66.49	12.17		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	3.74	77.33	17.73	5.30	70.0	± 9.6 %
		Y	34.06	110.90	28.74		70.0	
		Z	9.80	93.25	24.40		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	1.04	64.82	10.64	1.88	100.0	± 9.6 %
		Y	2.27	74.65	15.89		100.0	
		Z	1.43	68.68	13.56		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	0.88	64.05	10.08	1.17	100.0	± 9.6 %
		Y	1.75	72.43	14.90		100.0	
		Z	1.13	66.71	12.40		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	0.74	62.99	8.94	0.00	150.0	± 9.6 %
		Y	1.38	69.75	13.20		150.0	
		Z	0.98	64.89	10.73		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	2.54	68.84	11.04	7.78	50.0	± 9.6 %
		Y	100.00	102.42	20.46		50.0	
		Z	100.00	104.71	21.76		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.06	120.88	5.44	0.00	150.0	± 9.6 %
		Y	0.00	104.37	4.38		150.0	
		Z	0.08	121.43	6.73		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	4.91	69.00	13.47	13.80	25.0	± 9.6 %
		Y	7.93	75.14	15.14		25.0	
		Z	10.77	79.26	17.66		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	4.71	71.69	13.37	10.79	40.0	± 9.6 %
		Y	12.12	82.16	16.51		40.0	
		Z	15.08	85.95	18.75		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	9.20	83.60	20.05	9.03	50.0	± 9.6 %
		Y	100.00	119.47	30.42		50.0	
		Z	26.92	101.32	26.50		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	2.97	69.27	21.35	6.55	100.0	± 9.6 %
		Y	3.27	71.77	22.91		100.0	
		Z	3.17	70.45	22.11		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.02	63.20	14.50	0.61	110.0	± 9.6 %
		Y	1.12	64.64	15.70		110.0	
		Z	1.03	63.16	14.59		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	1.55	78.45	19.20	1.30	110.0	± 9.6 %
		Y	11.63	111.29	30.45		110.0	
		Z	2.11	82.91	21.03		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.39	70.50	17.86	2.04	110.0	± 9.6 %
		Y	1.94	76.74	21.24		110.0	
		Z	1.58	72.59	19.16		110.0	
10062-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.34	66.44	16.20	0.49	100.0	± 9.6 %
		Y	4.45	66.80	16.45		100.0	
		Z	4.46	66.35	16.27		100.0	
10063-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.35	66.52	16.28	0.72	100.0	± 9.6 %
		Y	4.46	66.88	16.54		100.0	
		Z	4.47	66.44	16.36		100.0	
10064-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.58	66.71	16.48	0.86	100.0	± 9.6 %
		Y	4.69	67.07	16.73		100.0	
		Z	4.73	66.68	16.59		100.0	
10065-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.45	66.52	16.53	1.21	100.0	± 9.6 %
		Y	4.56	66.89	16.79		100.0	
		Z	4.60	66.53	16.67		100.0	
10066-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.45	66.48	16.65	1.46	100.0	± 9.6 %
		Y	4.56	66.86	16.93		100.0	
		Z	4.61	66.54	16.84		100.0	
10067-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	4.73	66.77	17.13	2.04	100.0	± 9.6 %
		Y	4.84	67.12	17.40		100.0	
		Z	4.90	66.81	17.33		100.0	
10068-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	4.76	66.66	17.29	2.55	100.0	± 9.6 %
		Y	4.86	67.00	17.55		100.0	
		Z	4.92	66.73	17.50		100.0	
10069-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	4.81	66.68	17.46	2.67	100.0	± 9.6 %
		Y	4.92	67.01	17.74		100.0	
		Z	5.00	66.78	17.71		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.62	66.50	17.03	1.99	100.0	± 9.6 %
		Y	4.72	66.82	17.28		100.0	
		Z	4.75	66.47	17.18		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.56	66.67	17.18	2.30	100.0	± 9.6 %
		Y	4.66	67.03	17.45		100.0	
		Z	4.70	66.70	17.36		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.61	66.83	17.49	2.83	100.0	± 9.6 %
		Y	4.71	67.17	17.77		100.0	
		Z	4.75	66.85	17.68		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.62	66.77	17.64	3.30	100.0	± 9.6 %
		Y	4.70	67.09	17.92		100.0	
		Z	4.74	66.75	17.83		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.63	66.75	17.86	3.82	90.0	± 9.6 %
		Y	4.71	67.06	18.15		90.0	
		Z	4.76	66.76	18.09		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.68	66.63	18.04	4.15	90.0	± 9.6 %
		Y	4.74	66.91	18.31		90.0	
		Z	4.79	66.61	18.24		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.71	66.72	18.15	4.30	90.0	± 9.6 %
		Y	4.77	66.99	18.42		90.0	
		Z	4.82	66.69	18.35		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	0.41	60.41	6.86	0.00	150.0	± 9.6 %
		Y	0.64	64.39	10.26		150.0	
		Z	0.51	61.51	8.28		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	6.37	60.67	1.90	4.77	80.0	± 9.6 %
		Y	0.58	60.00	3.05		80.0	
		Z	0.60	60.00	3.10		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	103.19	20.57	6.56	60.0	± 9.6 %
		Y	100.00	106.40	21.88		60.0	
		Z	100.00	108.67	23.14		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	1.61	66.98	14.45	0.00	150.0	± 9.6 %
		Y	1.83	68.94	15.87		150.0	
		Z	1.61	66.33	14.36		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.57	66.91	14.41	0.00	150.0	± 9.6 %
		Y	1.80	68.88	15.85		150.0	
		Z	1.57	66.26	14.32		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	5.11	79.85	27.95	9.56	60.0	± 9.6 %
		Y	6.18	86.42	31.49		60.0	
		Z	5.66	82.29	29.29		60.0	
10100-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	2.72	68.86	15.96	0.00	150.0	± 9.6 %
		Y	2.98	70.42	16.85		150.0	
		Z	2.77	68.66	15.78		150.0	
10101-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	2.94	66.71	15.42	0.00	150.0	± 9.6 %
		Y	3.09	67.54	15.94		150.0	
		Z	3.00	66.60	15.35		150.0	
10102-CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.05	66.78	15.55	0.00	150.0	± 9.6 %
		Y	3.19	67.54	16.04		150.0	
		Z	3.11	66.65	15.49		150.0	
10103-CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	4.63	72.33	19.10	3.98	65.0	± 9.6 %
		Y	5.31	74.95	20.40		65.0	
		Z	5.01	73.33	19.72		65.0	
10104-CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	4.71	70.15	18.78	3.98	65.0	± 9.6 %
		Y	5.12	71.87	19.74		65.0	
		Z	4.99	70.84	19.32		65.0	
10105-CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	4.62	69.52	18.79	3.98	65.0	± 9.6 %
		Y	4.98	71.08	19.67		65.0	
		Z	4.89	70.18	19.31		65.0	
10108-CAF	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.32	68.23	15.74	0.00	150.0	± 9.6 %
		Y	2.56	69.77	16.68		150.0	
		Z	2.39	67.99	15.57		150.0	
10109-CAF	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.57	66.62	15.17	0.00	150.0	± 9.6 %
		Y	2.73	67.56	15.82		150.0	
		Z	2.64	66.42	15.13		150.0	
10110-CAF	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	1.82	67.31	15.00	0.00	150.0	± 9.6 %
		Y	2.06	69.08	16.19		150.0	
		Z	1.89	67.03	14.94		150.0	
10111-CAF	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.27	67.56	15.11	0.00	150.0	± 9.6 %
		Y	2.50	68.95	16.11		150.0	
		Z	2.32	67.14	15.12		150.0	

10112-CAF	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.70	66.75	15.29	0.00	150.0	± 9.6 %
		Y	2.86	67.62	15.89		150.0	
		Z	2.77	66.52	15.24		150.0	
10113-CAF	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.41	67.80	15.29	0.00	150.0	± 9.6 %
		Y	2.64	69.12	16.24		150.0	
		Z	2.47	67.38	15.32		150.0	
10114-CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	4.85	66.91	16.28	0.00	150.0	± 9.6 %
		Y	4.92	67.20	16.42		150.0	
		Z	4.93	66.80	16.23		150.0	
10115-CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.08	66.97	16.31	0.00	150.0	± 9.6 %
		Y	5.16	67.24	16.44		150.0	
		Z	5.19	66.91	16.30		150.0	
10116-CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	4.91	67.06	16.28	0.00	150.0	± 9.6 %
		Y	5.00	67.37	16.44		150.0	
		Z	5.02	67.01	16.26		150.0	
10117-CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	4.82	66.80	16.24	0.00	150.0	± 9.6 %
		Y	4.91	67.14	16.41		150.0	
		Z	4.92	66.75	16.22		150.0	
10118-CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.15	67.18	16.42	0.00	150.0	± 9.6 %
		Y	5.23	67.42	16.54		150.0	
		Z	5.28	67.15	16.43		150.0	
10119-CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	4.92	67.09	16.30	0.00	150.0	± 9.6 %
		Y	5.00	67.37	16.45		150.0	
		Z	5.02	67.00	16.27		150.0	
10140-CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.06	66.79	15.45	0.00	150.0	± 9.6 %
		Y	3.21	67.57	15.95		150.0	
		Z	3.13	66.66	15.40		150.0	
10141-CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.19	67.01	15.68	0.00	150.0	± 9.6 %
		Y	3.34	67.73	16.14		150.0	
		Z	3.26	66.83	15.61		150.0	
10142-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.53	66.71	13.85	0.00	150.0	± 9.6 %
		Y	1.82	69.13	15.54		150.0	
		Z	1.62	66.60	14.09		150.0	
10143-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	1.93	66.97	13.55	0.00	150.0	± 9.6 %
		Y	2.31	69.49	15.29		150.0	
		Z	2.06	67.05	14.07		150.0	
10144-CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	1.68	64.38	11.67	0.00	150.0	± 9.6 %
		Y	1.94	66.13	13.09		150.0	
		Z	1.85	64.82	12.42		150.0	
10145-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	0.61	60.00	6.25	0.00	150.0	± 9.6 %
		Y	0.75	61.41	7.98		150.0	
		Z	0.75	60.75	7.63		150.0	
10146-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.82	60.00	5.83	0.00	150.0	± 9.6 %
		Y	0.92	60.25	6.35		150.0	
		Z	1.12	61.59	7.98		150.0	
10147-CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.84	60.00	5.89	0.00	150.0	± 9.6 %
		Y	0.96	60.55	6.61		150.0	
		Z	1.20	62.21	8.43		150.0	

10149-CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.58	66.69	15.22	0.00	150.0	± 9.6 %
		Y	2.74	67.63	15.87		150.0	
		Z	2.65	66.49	15.18		150.0	
10150-CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.71	66.82	15.33	0.00	150.0	± 9.6 %
		Y	2.87	67.69	15.94		150.0	
		Z	2.78	66.58	15.28		150.0	
10151-CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	4.58	74.10	19.83	3.98	65.0	± 9.6 %
		Y	5.45	77.40	21.46		65.0	
		Z	5.00	75.19	20.56		65.0	
10152-CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	4.21	69.89	18.16	3.98	65.0	± 9.6 %
		Y	4.65	71.84	19.30		65.0	
		Z	4.51	70.68	18.85		65.0	
10153-CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	4.55	71.06	19.09	3.98	65.0	± 9.6 %
		Y	5.01	72.96	20.18		65.0	
		Z	4.85	71.76	19.74		65.0	
10154-CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	1.85	67.65	15.22	0.00	150.0	± 9.6 %
		Y	2.10	69.48	16.44		150.0	
		Z	1.92	67.37	15.16		150.0	
10155-CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.27	67.61	15.14	0.00	150.0	± 9.6 %
		Y	2.50	69.00	16.15		150.0	
		Z	2.33	67.17	15.15		150.0	
10156-CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.31	65.90	12.85	0.00	150.0	± 9.6 %
		Y	1.64	68.88	14.94		150.0	
		Z	1.43	66.11	13.38		150.0	
10157-CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	1.43	63.96	10.91	0.00	150.0	± 9.6 %
		Y	1.74	66.31	12.74		150.0	
		Z	1.63	64.73	11.94		150.0	
10158-CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.42	67.89	15.35	0.00	150.0	± 9.6 %
		Y	2.65	69.22	16.31		150.0	
		Z	2.48	67.46	15.37		150.0	
10159-CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.49	64.13	11.04	0.00	150.0	± 9.6 %
		Y	1.82	66.66	12.95		150.0	
		Z	1.70	65.00	12.13		150.0	
10160-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.41	67.89	15.65	0.00	150.0	± 9.6 %
		Y	2.60	69.05	16.44		150.0	
		Z	2.48	67.64	15.56		150.0	
10161-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.59	66.74	15.14	0.00	150.0	± 9.6 %
		Y	2.76	67.68	15.82		150.0	
		Z	2.66	66.50	15.14		150.0	
10162-CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.70	67.00	15.31	0.00	150.0	± 9.6 %
		Y	2.87	67.91	15.97		150.0	
		Z	2.77	66.73	15.29		150.0	
10166-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	2.91	67.87	18.41	3.01	150.0	± 9.6 %
		Y	3.09	68.81	18.75		150.0	
		Z	3.17	68.75	19.02		150.0	
10167-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.24	69.92	18.52	3.01	150.0	± 9.6 %
		Y	3.65	71.74	19.22		150.0	
		Z	3.63	71.08	19.26		150.0	

10168-CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	3.66	72.66	20.22	3.01	150.0	± 9.6 %
		Y	4.14	74.51	20.83		150.0	
		Z	4.11	73.91	20.95		150.0	
10169-CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.32	65.83	17.44	3.01	150.0	± 9.6 %
		Y	2.49	67.28	18.07		150.0	
		Z	2.46	66.70	18.14		150.0	
10170-CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	2.74	70.01	19.35	3.01	150.0	± 9.6 %
		Y	3.21	72.95	20.48		150.0	
		Z	3.00	71.51	20.32		150.0	
10171-AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.31	66.53	16.58	3.01	150.0	± 9.6 %
		Y	2.63	68.93	17.60		150.0	
		Z	2.50	67.67	17.42		150.0	
10172-CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.90	74.23	22.35	6.02	65.0	± 9.6 %
		Y	3.68	79.90	24.98		65.0	
		Z	3.91	80.19	25.56		65.0	
10173-CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.92	78.79	22.40	6.02	65.0	± 9.6 %
		Y	6.85	89.50	26.38		65.0	
		Z	6.70	89.11	27.06		65.0	
10174-CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.90	73.28	19.67	6.02	65.0	± 9.6 %
		Y	5.51	84.77	24.11		65.0	
		Z	4.93	82.66	24.17		65.0	
10175-CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.30	65.58	17.20	3.01	150.0	± 9.6 %
		Y	2.47	67.02	17.83		150.0	
		Z	2.44	66.43	17.89		150.0	
10176-CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	2.74	70.03	19.36	3.01	150.0	± 9.6 %
		Y	3.21	72.97	20.49		150.0	
		Z	3.00	71.53	20.33		150.0	
10177-CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.31	65.68	17.27	3.01	150.0	± 9.6 %
		Y	2.48	67.13	17.91		150.0	
		Z	2.45	66.56	17.98		150.0	
10178-CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	2.73	69.91	19.28	3.01	150.0	± 9.6 %
		Y	3.19	72.83	20.41		150.0	
		Z	2.98	71.36	20.23		150.0	
10179-CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	2.50	68.14	17.82	3.01	150.0	± 9.6 %
		Y	2.89	70.84	18.91		150.0	
		Z	2.72	69.48	18.74		150.0	
10180-CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	2.31	66.50	16.56	3.01	150.0	± 9.6 %
		Y	2.63	68.90	17.57		150.0	
		Z	2.50	67.63	17.39		150.0	
10181-CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.31	65.67	17.27	3.01	150.0	± 9.6 %
		Y	2.48	67.11	17.90		150.0	
		Z	2.45	66.54	17.97		150.0	
10182-CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	2.73	69.88	19.27	3.01	150.0	± 9.6 %
		Y	3.19	72.81	20.40		150.0	
		Z	2.98	71.34	20.21		150.0	
10183-AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.31	66.48	16.55	3.01	150.0	± 9.6 %
		Y	2.63	68.87	17.56		150.0	
		Z	2.49	67.61	17.37		150.0	

10184-CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.32	65.70	17.29	3.01	150.0	± 9.6 %
		Y	2.49	67.15	17.92		150.0	
		Z	2.46	66.58	17.99		150.0	
10185-CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	2.74	69.95	19.31	3.01	150.0	± 9.6 %
		Y	3.20	72.88	20.43		150.0	
		Z	2.99	71.41	20.26		150.0	
10186-AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	2.32	66.53	16.58	3.01	150.0	± 9.6 %
		Y	2.64	68.94	17.60		150.0	
		Z	2.51	67.67	17.41		150.0	
10187-CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.33	65.78	17.37	3.01	150.0	± 9.6 %
		Y	2.50	67.22	18.00		150.0	
		Z	2.47	66.64	18.07		150.0	
10188-CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	2.80	70.47	19.65	3.01	150.0	± 9.6 %
		Y	3.29	73.46	20.79		150.0	
		Z	3.07	72.01	20.64		150.0	
10189-AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	2.35	66.85	16.82	3.01	150.0	± 9.6 %
		Y	2.69	69.31	17.86		150.0	
		Z	2.55	68.03	17.68		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.23	66.54	15.90	0.00	150.0	± 9.6 %
		Y	4.33	66.90	16.14		150.0	
		Z	4.32	66.32	15.87		150.0	
10194-CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.36	66.75	16.04	0.00	150.0	± 9.6 %
		Y	4.47	67.12	16.27		150.0	
		Z	4.47	66.58	16.01		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.39	66.76	16.05	0.00	150.0	± 9.6 %
		Y	4.50	67.13	16.28		150.0	
		Z	4.50	66.61	16.03		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.21	66.52	15.87	0.00	150.0	± 9.6 %
		Y	4.32	66.89	16.12		150.0	
		Z	4.31	66.33	15.87		150.0	
10197-CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.37	66.75	16.04	0.00	150.0	± 9.6 %
		Y	4.48	67.12	16.28		150.0	
		Z	4.48	66.59	16.02		150.0	
10198-CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.38	66.75	16.05	0.00	150.0	± 9.6 %
		Y	4.50	67.13	16.28		150.0	
		Z	4.50	66.62	16.04		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.16	66.56	15.85	0.00	150.0	± 9.6 %
		Y	4.27	66.93	16.10		150.0	
		Z	4.26	66.35	15.83		150.0	
10220-CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.36	66.72	16.03	0.00	150.0	± 9.6 %
		Y	4.47	67.08	16.26		150.0	
		Z	4.47	66.56	16.01		150.0	
10221-CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.40	66.71	16.04	0.00	150.0	± 9.6 %
		Y	4.51	67.07	16.27		150.0	
		Z	4.51	66.56	16.03		150.0	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	4.80	66.80	16.23	0.00	150.0	± 9.6 %
		Y	4.88	67.12	16.39		150.0	
		Z	4.89	66.72	16.20		150.0	

10223-CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.04	66.95	16.32	0.00	150.0	± 9.6 %
		Y	5.14	67.29	16.49		150.0	
		Z	5.18	66.99	16.36		150.0	
10224-CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	4.84	66.92	16.22	0.00	150.0	± 9.6 %
		Y	4.92	67.24	16.38		150.0	
		Z	4.93	66.82	16.18		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.46	65.56	14.20	0.00	150.0	± 9.6 %
		Y	2.62	66.44	14.96		150.0	
		Z	2.55	65.41	14.45		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	4.12	79.74	22.87	6.02	65.0	± 9.6 %
		Y	7.38	90.96	26.97		65.0	
		Z	7.19	90.56	27.66		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.10	78.95	21.90	6.02	65.0	± 9.6 %
		Y	7.43	89.71	25.78		65.0	
		Z	7.75	90.70	26.99		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.12	75.94	23.15	6.02	65.0	± 9.6 %
		Y	4.06	82.01	25.85		65.0	
		Z	4.25	82.24	26.47		65.0	
10229-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	3.94	78.88	22.44	6.02	65.0	± 9.6 %
		Y	6.91	89.62	26.42		65.0	
		Z	6.76	89.24	27.11		65.0	
10230-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	3.89	78.03	21.47	6.02	65.0	± 9.6 %
		Y	6.86	88.27	25.23		65.0	
		Z	7.16	89.19	26.40		65.0	
10231-CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.03	75.32	22.81	6.02	65.0	± 9.6 %
		Y	3.92	81.25	25.48		65.0	
		Z	4.10	81.44	26.07		65.0	
10232-CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	3.94	78.86	22.44	6.02	65.0	± 9.6 %
		Y	6.89	89.60	26.42		65.0	
		Z	6.74	89.21	27.10		65.0	
10233-CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	3.88	77.99	21.46	6.02	65.0	± 9.6 %
		Y	6.83	88.22	25.21		65.0	
		Z	7.13	89.13	26.38		65.0	
10234-CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.96	74.84	22.48	6.02	65.0	± 9.6 %
		Y	3.82	80.66	25.12		65.0	
		Z	4.00	80.82	25.70		65.0	
10235-CAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.94	78.87	22.44	6.02	65.0	± 9.6 %
		Y	6.90	89.63	26.43		65.0	
		Z	6.75	89.23	27.11		65.0	
10236-CAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.92	78.11	21.50	6.02	65.0	± 9.6 %
		Y	6.93	88.43	25.27		65.0	
		Z	7.23	89.34	26.44		65.0	
10237-CAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.03	75.32	22.81	6.02	65.0	± 9.6 %
		Y	3.92	81.27	25.49		65.0	
		Z	4.10	81.45	26.08		65.0	
10238-CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.93	78.83	22.43	6.02	65.0	± 9.6 %
		Y	6.87	89.57	26.41		65.0	
		Z	6.72	89.17	27.08		65.0	

10239-CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.87	77.95	21.45	6.02	65.0	± 9.6 %
		Y	6.80	88.17	25.20		65.0	
		Z	7.10	89.08	26.37		65.0	
10240-CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.02	75.30	22.81	6.02	65.0	± 9.6 %
		Y	3.91	81.25	25.48		65.0	
		Z	4.09	81.42	26.07		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.47	76.60	23.52	6.98	65.0	± 9.6 %
		Y	6.28	79.70	24.95		65.0	
		Z	6.08	77.98	24.56		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.17	75.55	22.99	6.98	65.0	± 9.6 %
		Y	5.96	78.71	24.47		65.0	
		Z	5.82	77.10	24.09		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.47	72.66	22.57	6.98	65.0	± 9.6 %
		Y	4.85	74.66	23.64		65.0	
		Z	4.89	73.70	23.43		65.0	
10244-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.59	65.60	11.95	3.98	65.0	± 9.6 %
		Y	3.16	68.30	13.59		65.0	
		Z	3.94	71.58	16.14		65.0	
10245-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.56	65.23	11.69	3.98	65.0	± 9.6 %
		Y	3.08	67.71	13.25		65.0	
		Z	3.80	70.75	15.70		65.0	
10246-CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.30	67.33	13.29	3.98	65.0	± 9.6 %
		Y	3.40	73.14	16.55		65.0	
		Z	3.20	71.92	16.41		65.0	
10247-CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.93	67.28	14.07	3.98	65.0	± 9.6 %
		Y	3.57	70.51	16.14		65.0	
		Z	3.50	69.72	16.15		65.0	
10248-CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.93	66.83	13.84	3.98	65.0	± 9.6 %
		Y	3.51	69.74	15.76		65.0	
		Z	3.49	69.17	15.87		65.0	
10249-CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	3.40	72.89	17.31	3.98	65.0	± 9.6 %
		Y	5.05	79.62	20.60		65.0	
		Z	4.35	76.73	19.72		65.0	
10250-CAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	4.07	71.77	18.68	3.98	65.0	± 9.6 %
		Y	4.65	74.35	20.17		65.0	
		Z	4.43	72.91	19.73		65.0	
10251-CAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.86	69.66	17.25	3.98	65.0	± 9.6 %
		Y	4.37	71.98	18.68		65.0	
		Z	4.24	70.85	18.35		65.0	
10252-CAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	4.28	75.56	20.13	3.98	65.0	± 9.6 %
		Y	5.50	80.28	22.41		65.0	
		Z	4.84	77.34	21.32		65.0	
10253-CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	4.17	69.62	17.88	3.98	65.0	± 9.6 %
		Y	4.59	71.50	19.03		65.0	
		Z	4.46	70.34	18.61		65.0	
10254-CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	4.46	70.60	18.66	3.98	65.0	± 9.6 %
		Y	4.90	72.45	19.77		65.0	
		Z	4.75	71.28	19.37		65.0	

10255-CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	4.40	73.51	19.69	3.98	65.0	± 9.6 %
		Y	5.16	76.59	21.27		65.0	
		Z	4.77	74.49	20.43		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.88	62.21	8.80	3.98	65.0	± 9.6 %
		Y	2.16	63.72	9.95		65.0	
		Z	2.68	66.18	12.27		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	1.87	61.92	8.53	3.98	65.0	± 9.6 %
		Y	2.13	63.28	9.61		65.0	
		Z	2.60	65.47	11.78		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.63	62.98	9.76	3.98	65.0	± 9.6 %
		Y	2.11	66.24	12.11		65.0	
		Z	2.20	66.42	12.68		65.0	
10259-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	3.37	69.09	15.81	3.98	65.0	± 9.6 %
		Y	4.03	72.21	17.73		65.0	
		Z	3.88	71.08	17.53		65.0	
10260-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	3.41	68.89	15.70	3.98	65.0	± 9.6 %
		Y	4.05	71.86	17.55		65.0	
		Z	3.92	70.83	17.40		65.0	
10261-CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	3.65	73.54	18.24	3.98	65.0	± 9.6 %
		Y	4.99	79.08	21.01		65.0	
		Z	4.36	76.25	20.08		65.0	
10262-CAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	4.05	71.68	18.62	3.98	65.0	± 9.6 %
		Y	4.63	74.27	20.11		65.0	
		Z	4.42	72.84	19.67		65.0	
10263-CAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	3.85	69.65	17.25	3.98	65.0	± 9.6 %
		Y	4.36	71.96	18.67		65.0	
		Z	4.23	70.83	18.35		65.0	
10264-CAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	4.23	75.35	20.01	3.98	65.0	± 9.6 %
		Y	5.43	80.04	22.29		65.0	
		Z	4.79	77.13	21.21		65.0	
10265-CAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	4.21	69.90	18.16	3.98	65.0	± 9.6 %
		Y	4.65	71.84	19.30		65.0	
		Z	4.51	70.68	18.86		65.0	
10266-CAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	4.55	71.05	19.08	3.98	65.0	± 9.6 %
		Y	5.00	72.95	20.16		65.0	
		Z	4.85	71.75	19.72		65.0	
10267-CAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	4.57	74.06	19.81	3.98	65.0	± 9.6 %
		Y	5.43	77.35	21.43		65.0	
		Z	4.99	75.14	20.54		65.0	
10268-CAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	4.89	70.28	18.92	3.98	65.0	± 9.6 %
		Y	5.29	71.90	19.82		65.0	
		Z	5.16	70.86	19.41		65.0	
10269-CAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	4.93	70.03	18.82	3.98	65.0	± 9.6 %
		Y	5.31	71.54	19.69		65.0	
		Z	5.18	70.53	19.29		65.0	
10270-CAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	4.82	72.26	19.25	3.98	65.0	± 9.6 %
		Y	5.40	74.50	20.39		65.0	
		Z	5.12	72.93	19.74		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.30	66.08	14.21	0.00	150.0	± 9.6 %
		Y	2.48	67.13	15.07		150.0	
		Z	2.37	65.78	14.35		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.33	66.42	14.09	0.00	150.0	± 9.6 %
		Y	1.55	68.66	15.67		150.0	
		Z	1.35	65.99	13.99		150.0	
10277-CAA	PHS (QPSK)	X	1.44	58.96	4.35	9.03	50.0	± 9.6 %
		Y	1.29	58.94	4.16		50.0	
		Z	1.60	59.77	5.29		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	2.42	63.55	9.32	9.03	50.0	± 9.6 %
		Y	2.50	65.00	10.23		50.0	
		Z	3.00	66.61	11.73		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	2.47	63.72	9.48	9.03	50.0	± 9.6 %
		Y	2.58	65.28	10.45		50.0	
		Z	3.09	66.89	11.94		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	0.64	61.56	7.87	0.00	150.0	± 9.6 %
		Y	0.98	65.79	11.09		150.0	
		Z	0.84	63.19	9.57		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.41	60.33	6.79	0.00	150.0	± 9.6 %
		Y	0.62	64.18	10.12		150.0	
		Z	0.50	61.40	8.20		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	0.46	61.89	7.99	0.00	150.0	± 9.6 %
		Y	1.01	70.37	13.40		150.0	
		Z	0.57	63.19	9.51		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	0.64	65.03	10.07	0.00	150.0	± 9.6 %
		Y	4.97	89.66	20.54		150.0	
		Z	0.76	66.38	11.57		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	14.73	88.54	22.30	9.03	50.0	± 9.6 %
		Y	21.95	97.75	26.07		50.0	
		Z	14.97	91.80	24.79		50.0	
10297-AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.34	68.34	15.82	0.00	150.0	± 9.6 %
		Y	2.58	69.89	16.76		150.0	
		Z	2.40	68.08	15.64		150.0	
10298-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	0.86	62.29	9.16	0.00	150.0	± 9.6 %
		Y	1.16	65.45	11.69		150.0	
		Z	1.05	63.56	10.60		150.0	
10299-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.14	61.76	8.21	0.00	150.0	± 9.6 %
		Y	1.41	63.51	9.50		150.0	
		Z	1.73	65.72	11.49		150.0	
10300-AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	0.97	60.07	6.55	0.00	150.0	± 9.6 %
		Y	1.14	61.11	7.49		150.0	
		Z	1.33	62.21	8.89		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.13	64.55	16.56	4.17	50.0	± 9.6 %
		Y	4.26	65.00	16.97		50.0	
		Z	4.39	64.86	16.90		50.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	4.66	65.38	17.39	4.96	50.0	± 9.6 %
		Y	4.76	65.70	17.72		50.0	
		Z	4.88	65.46	17.59		50.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.45	65.36	17.40	4.96	50.0	± 9.6 %
		Y	4.51	65.30	17.48		50.0	
		Z	4.62	65.06	17.37		50.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.25	64.98	16.73	4.17	50.0	± 9.6 %
		Y	4.36	65.33	17.07		50.0	
		Z	4.45	64.98	16.90		50.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	3.81	66.28	17.81	6.02	35.0	± 9.6 %
		Y	3.76	65.91	18.03		35.0	
		Z	4.04	66.66	18.48		35.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.18	65.73	17.92	6.02	35.0	± 9.6 %
		Y	4.17	65.55	18.11		35.0	
		Z	4.39	65.94	18.38		35.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.05	65.69	17.78	6.02	35.0	± 9.6 %
		Y	4.04	65.48	17.96		35.0	
		Z	4.27	65.96	18.27		35.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.03	65.87	17.91	6.02	35.0	± 9.6 %
		Y	4.01	65.64	18.09		35.0	
		Z	4.25	66.15	18.40		35.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.18	65.77	18.00	6.02	35.0	± 9.6 %
		Y	4.19	65.61	18.20		35.0	
		Z	4.42	66.06	18.49		35.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.13	65.78	17.90	6.02	35.0	± 9.6 %
		Y	4.12	65.57	18.08		35.0	
		Z	4.34	65.98	18.35		35.0	
10311-AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.69	67.62	15.56	0.00	150.0	± 9.6 %
		Y	2.94	69.08	16.39		150.0	
		Z	2.75	67.40	15.38		150.0	
10313-AAA	IDEN 1:3	X	1.80	67.21	13.40	6.99	70.0	± 9.6 %
		Y	2.78	73.35	16.36		70.0	
		Z	2.09	69.09	14.51		70.0	
10314-AAA	IDEN 1:6	X	3.26	75.39	19.57	10.00	30.0	± 9.6 %
		Y	5.56	85.97	24.05		30.0	
		Z	4.04	79.23	21.39		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.96	62.72	14.16	0.17	150.0	± 9.6 %
		Y	1.05	63.94	15.22		150.0	
		Z	0.96	62.45	14.04		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.24	66.42	15.96	0.17	150.0	± 9.6 %
		Y	4.35	66.80	16.22		150.0	
		Z	4.36	66.32	16.01		150.0	
10317-AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.24	66.42	15.96	0.17	150.0	± 9.6 %
		Y	4.35	66.80	16.22		150.0	
		Z	4.36	66.32	16.01		150.0	
10400-AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.31	66.71	15.99	0.00	150.0	± 9.6 %
		Y	4.43	67.11	16.24		150.0	
		Z	4.43	66.60	15.99		150.0	
10401-AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	4.98	66.52	16.05	0.00	150.0	± 9.6 %
		Y	5.08	66.87	16.24		150.0	
		Z	5.16	66.70	16.18		150.0	

10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.36	67.14	16.28	0.00	150.0	± 9.6 %
		Y	5.44	67.45	16.42		150.0	
		Z	5.45	67.07	16.25		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	0.64	61.56	7.87	0.00	115.0	± 9.6 %
		Y	0.98	65.79	11.09		115.0	
		Z	0.84	63.19	9.57		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	0.64	61.56	7.87	0.00	115.0	± 9.6 %
		Y	0.98	65.79	11.09		115.0	
		Z	0.84	63.19	9.57		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	119.53	28.08	0.00	100.0	± 9.6 %
		Y	100.00	115.68	26.57		100.0	
		Z	100.00	126.19	31.47		100.0	
10410-AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	2.86	79.80	18.70	3.23	80.0	± 9.6 %
		Y	25.09	107.33	26.44		80.0	
		Z	100.00	133.23	34.42		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.92	62.32	13.80	0.00	150.0	± 9.6 %
		Y	1.00	63.42	14.80		150.0	
		Z	0.91	61.96	13.60		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.22	66.50	15.96	0.00	150.0	± 9.6 %
		Y	4.32	66.87	16.21		150.0	
		Z	4.32	66.33	15.95		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.22	66.50	15.96	0.00	150.0	± 9.6 %
		Y	4.32	66.87	16.21		150.0	
		Z	4.32	66.33	15.95		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	X	4.21	66.71	16.02	0.00	150.0	± 9.6 %
		Y	4.32	67.09	16.27		150.0	
		Z	4.31	66.51	15.99		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	X	4.23	66.64	16.01	0.00	150.0	± 9.6 %
		Y	4.34	67.01	16.25		150.0	
		Z	4.33	66.45	15.98		150.0	
10422-AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.33	66.62	16.03	0.00	150.0	± 9.6 %
		Y	4.44	66.98	16.26		150.0	
		Z	4.44	66.45	16.00		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.45	66.86	16.11	0.00	150.0	± 9.6 %
		Y	4.56	67.23	16.34		150.0	
		Z	4.57	66.72	16.10		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.38	66.81	16.08	0.00	150.0	± 9.6 %
		Y	4.50	67.18	16.32		150.0	
		Z	4.50	66.66	16.07		150.0	
10425-AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.03	67.03	16.34	0.00	150.0	± 9.6 %
		Y	5.11	67.32	16.49		150.0	
		Z	5.14	66.98	16.33		150.0	
10426-AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.06	67.16	16.40	0.00	150.0	± 9.6 %
		Y	5.13	67.40	16.52		150.0	
		Z	5.17	67.10	16.39		150.0	

10427-AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.01	66.91	16.27	0.00	150.0	± 9.6 %
		Y	5.09	67.19	16.41		150.0	
		Z	5.13	66.90	16.28		150.0	
10430-AAC	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.07	72.07	17.91	0.00	150.0	± 9.6 %
		Y	4.24	72.56	18.40		150.0	
		Z	4.04	71.02	17.78		150.0	
10431-AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.79	66.99	15.69	0.00	150.0	± 9.6 %
		Y	3.94	67.49	16.09		150.0	
		Z	3.92	66.79	15.76		150.0	
10432-AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.13	66.89	15.96	0.00	150.0	± 9.6 %
		Y	4.26	67.30	16.25		150.0	
		Z	4.25	66.71	15.96		150.0	
10433-AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.40	66.85	16.11	0.00	150.0	± 9.6 %
		Y	4.51	67.22	16.34		150.0	
		Z	4.51	66.70	16.09		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.05	72.38	17.35	0.00	150.0	± 9.6 %
		Y	4.37	73.48	18.19		150.0	
		Z	4.07	71.60	17.46		150.0	
10435-AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.72	79.05	18.38	3.23	80.0	± 9.6 %
		Y	21.44	105.07	25.81		80.0	
		Z	100.00	132.91	34.27		80.0	
10447-AAC	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	2.96	66.34	14.12	0.00	150.0	± 9.6 %
		Y	3.18	67.31	14.92		150.0	
		Z	3.13	66.39	14.53		150.0	
10448-AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.67	66.79	15.57	0.00	150.0	± 9.6 %
		Y	3.81	67.30	15.97		150.0	
		Z	3.78	66.58	15.62		150.0	
10449-AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.98	66.71	15.86	0.00	150.0	± 9.6 %
		Y	4.10	67.14	16.16		150.0	
		Z	4.09	66.52	15.85		150.0	
10450-AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.21	66.62	15.96	0.00	150.0	± 9.6 %
		Y	4.32	67.01	16.21		150.0	
		Z	4.30	66.46	15.93		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	2.70	65.75	13.11	0.00	150.0	± 9.6 %
		Y	2.96	67.00	14.12		150.0	
		Z	2.94	66.14	13.79		150.0	
10456-AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	5.99	67.61	16.55	0.00	150.0	± 9.6 %
		Y	6.02	67.80	16.61		150.0	
		Z	6.11	67.72	16.61		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.61	65.32	15.70	0.00	150.0	± 9.6 %
		Y	3.69	65.64	15.94		150.0	
		Z	3.65	65.04	15.66		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.19	69.07	15.08	0.00	150.0	± 9.6 %
		Y	3.69	71.30	16.62		150.0	
		Z	3.53	69.92	16.16		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.69	69.03	17.48	0.00	150.0	± 9.6 %
		Y	4.79	69.11	17.75		150.0	
		Z	4.84	68.73	17.83		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.72	66.02	14.12	0.00	150.0	± 9.6 %
		Y	0.91	69.57	16.66		150.0	
		Z	0.71	65.26	13.72		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.93	75.92	18.31	3.29	80.0	± 9.6 %
		Y	6.83	93.43	24.06		80.0	
		Z	100.00	137.66	36.58		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.27	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.19		80.0	
		Z	1.15	65.31	10.99		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.55	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.45		80.0	
		Z	0.67	60.00	7.76		80.0	
10464-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.38	71.32	15.83	3.23	80.0	± 9.6 %
		Y	4.54	86.66	21.20		80.0	
		Z	100.00	134.26	34.80		80.0	
10465-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.20	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.11		80.0	
		Z	0.94	63.37	10.05		80.0	
10466-AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.50	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.41		80.0	
		Z	0.68	60.00	7.70		80.0	
10467-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.47	72.19	16.22	3.23	80.0	± 9.6 %
		Y	5.30	88.83	21.91		80.0	
		Z	100.00	134.76	35.02		80.0	
10468-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.22	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.14		80.0	
		Z	0.99	63.90	10.32		80.0	
10469-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.51	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.41		80.0	
		Z	0.68	60.00	7.70		80.0	
10470-AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.46	72.21	16.22	3.23	80.0	± 9.6 %
		Y	5.35	88.98	21.94		80.0	
		Z	100.00	134.82	35.03		80.0	
10471-AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.21	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.12		80.0	
		Z	0.98	63.79	10.26		80.0	
10472-AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.49	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.39		80.0	
		Z	0.67	60.00	7.68		80.0	
10473-AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.46	72.15	16.20	3.23	80.0	± 9.6 %
		Y	5.31	88.87	21.90		80.0	
		Z	100.00	134.77	35.01		80.0	
10474-AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.20	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.12		80.0	
		Z	0.97	63.74	10.23		80.0	
10475-AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.49	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.39		80.0	
		Z	0.67	60.00	7.69		80.0	

10477-AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.63	60.00	7.17	3.23	80.0	± 9.6 %
		Y	0.63	60.00	7.08		80.0	
		Z	0.93	63.31	10.01		80.0	
10478-AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	6.47	3.23	80.0	± 9.6 %
		Y	0.66	60.00	6.37		80.0	
		Z	0.67	60.00	7.67		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.26	80.69	20.19	3.23	80.0	± 9.6 %
		Y	7.01	87.70	22.71		80.0	
		Z	21.27	105.57	28.88		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.88	66.39	12.32	3.23	80.0	± 9.6 %
		Y	3.13	71.95	14.74		80.0	
		Z	13.52	90.52	21.87		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.43	63.16	10.40	3.23	80.0	± 9.6 %
		Y	2.06	66.80	12.23		80.0	
		Z	6.11	79.62	18.02		80.0	
10482-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.06	61.11	9.78	2.23	80.0	± 9.6 %
		Y	1.73	66.89	13.39		80.0	
		Z	1.53	64.78	12.61		80.0	
10483-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.23	60.00	8.50	2.23	80.0	± 9.6 %
		Y	1.57	62.45	10.22		80.0	
		Z	2.78	68.98	14.19		80.0	
10484-AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.26	60.00	8.49	2.23	80.0	± 9.6 %
		Y	1.54	61.98	9.97		80.0	
		Z	2.53	67.57	13.58		80.0	
10485-AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.66	65.74	13.74	2.23	80.0	± 9.6 %
		Y	2.52	71.78	17.06		80.0	
		Z	2.10	68.47	15.70		80.0	
10486-AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.66	62.56	11.27	2.23	80.0	± 9.6 %
		Y	2.26	66.58	13.85		80.0	
		Z	2.12	65.12	13.38		80.0	
10487-AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.67	62.33	11.12	2.23	80.0	± 9.6 %
		Y	2.24	66.10	13.59		80.0	
		Z	2.14	64.83	13.21		80.0	
10488-AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.26	67.65	16.13	2.23	80.0	± 9.6 %
		Y	2.82	71.24	18.12		80.0	
		Z	2.57	69.00	17.08		80.0	
10489-AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.49	65.85	15.07	2.23	80.0	± 9.6 %
		Y	2.90	68.21	16.54		80.0	
		Z	2.74	66.70	15.91		80.0	
10490-AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.57	65.79	15.03	2.23	80.0	± 9.6 %
		Y	2.97	68.04	16.46		80.0	
		Z	2.83	66.63	15.88		80.0	
10491-AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.64	67.24	16.30	2.23	80.0	± 9.6 %
		Y	3.09	69.79	17.74		80.0	
		Z	2.92	68.21	16.96		80.0	
10492-AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.93	65.80	15.66	2.23	80.0	± 9.6 %
		Y	3.24	67.45	16.69		80.0	
		Z	3.14	66.35	16.22		80.0	

10493-AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.99	65.74	15.62	2.23	80.0	± 9.6 %
		Y	3.29	67.32	16.63		80.0	
		Z	3.21	66.28	16.18		80.0	
10494-AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.77	68.16	16.65	2.23	80.0	± 9.6 %
		Y	3.31	71.10	18.21		80.0	
		Z	3.09	69.31	17.33		80.0	
10495-AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.95	66.01	15.89	2.23	80.0	± 9.6 %
		Y	3.25	67.67	16.91		80.0	
		Z	3.16	66.59	16.41		80.0	
10496-AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.04	65.92	15.89	2.23	80.0	± 9.6 %
		Y	3.34	67.48	16.84		80.0	
		Z	3.25	66.45	16.38		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.90	60.00	7.56	2.23	80.0	± 9.6 %
		Y	0.94	60.22	8.59		80.0	
		Z	0.98	60.00	8.77		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.09	60.00	6.33	2.23	80.0	± 9.6 %
		Y	1.09	60.00	7.12		80.0	
		Z	1.16	60.00	7.58		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.11	60.00	6.17	2.23	80.0	± 9.6 %
		Y	1.11	60.00	6.94		80.0	
		Z	1.17	60.00	7.42		80.0	
10500-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.91	66.68	14.78	2.23	80.0	± 9.6 %
		Y	2.64	71.54	17.49		80.0	
		Z	2.29	68.68	16.26		80.0	
10501-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.02	64.23	12.91	2.23	80.0	± 9.6 %
		Y	2.60	67.75	15.11		80.0	
		Z	2.42	66.09	14.51		80.0	
10502-AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.05	64.07	12.75	2.23	80.0	± 9.6 %
		Y	2.63	67.51	14.92		80.0	
		Z	2.46	65.95	14.37		80.0	
10503-AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.23	67.47	16.03	2.23	80.0	± 9.6 %
		Y	2.79	71.03	18.01		80.0	
		Z	2.54	68.82	16.98		80.0	
10504-AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.48	65.75	15.00	2.23	80.0	± 9.6 %
		Y	2.88	68.10	16.48		80.0	
		Z	2.73	66.60	15.85		80.0	
10505-AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.55	65.70	14.97	2.23	80.0	± 9.6 %
		Y	2.95	67.94	16.40		80.0	
		Z	2.81	66.54	15.82		80.0	
10506-AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.76	68.04	16.58	2.23	80.0	± 9.6 %
		Y	3.29	70.96	18.14		80.0	
		Z	3.07	69.18	17.26		80.0	
10507-AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.93	65.95	15.85	2.23	80.0	± 9.6 %
		Y	3.24	67.61	16.87		80.0	
		Z	3.14	66.53	16.37		80.0	

10508-AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.03	65.86	15.84	2.23	80.0	± 9.6 %
		Y	3.33	67.40	16.79		80.0	
		Z	3.24	66.38	16.33		80.0	
10509-AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.24	67.72	16.53	2.23	80.0	± 9.6 %
		Y	3.69	69.96	17.72		80.0	
		Z	3.51	68.56	17.03		80.0	
10510-AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.43	65.97	16.12	2.23	80.0	± 9.6 %
		Y	3.71	67.32	16.91		80.0	
		Z	3.64	66.47	16.52		80.0	
10511-AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.52	65.89	16.12	2.23	80.0	± 9.6 %
		Y	3.78	67.15	16.86		80.0	
		Z	3.71	66.32	16.49		80.0	
10512-AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.22	68.47	16.72	2.23	80.0	± 9.6 %
		Y	3.79	71.22	18.12		80.0	
		Z	3.54	69.57	17.32		80.0	
10513-AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.32	66.00	16.15	2.23	80.0	± 9.6 %
		Y	3.60	67.43	16.98		80.0	
		Z	3.52	66.56	16.56		80.0	
10514-AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.39	65.79	16.10	2.23	80.0	± 9.6 %
		Y	3.64	67.11	16.88		80.0	
		Z	3.57	66.28	16.49		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.88	62.44	13.81	0.00	150.0	± 9.6 %
		Y	0.96	63.62	14.88		150.0	
		Z	0.87	62.07	13.59		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.45	66.98	14.48	0.00	150.0	± 9.6 %
		Y	0.65	72.72	18.47		150.0	
		Z	0.42	65.95	13.66		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.70	63.68	13.97	0.00	150.0	± 9.6 %
		Y	0.81	65.65	15.62		150.0	
		Z	0.69	63.23	13.65		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.21	66.61	15.96	0.00	150.0	± 9.6 %
		Y	4.32	66.98	16.20		150.0	
		Z	4.31	66.42	15.93		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.34	66.77	16.04	0.00	150.0	± 9.6 %
		Y	4.46	67.14	16.28		150.0	
		Z	4.46	66.61	16.03		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.20	66.68	15.95	0.00	150.0	± 9.6 %
		Y	4.32	67.07	16.20		150.0	
		Z	4.31	66.53	15.94		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.13	66.63	15.92	0.00	150.0	± 9.6 %
		Y	4.25	67.04	16.18		150.0	
		Z	4.24	66.49	15.91		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.17	66.72	15.99	0.00	150.0	± 9.6 %
		Y	4.29	67.14	16.26		150.0	
		Z	4.30	66.63	16.02		150.0	

10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.12	66.80	15.96	0.00	150.0	± 9.6 %
		Y	4.24	67.19	16.22		150.0	
		Z	4.21	66.57	15.90		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.13	66.73	16.01	0.00	150.0	± 9.6 %
		Y	4.25	67.13	16.27		150.0	
		Z	4.25	66.57	15.99		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.18	65.86	15.65	0.00	150.0	± 9.6 %
		Y	4.29	66.26	15.91		150.0	
		Z	4.27	65.65	15.61		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.28	66.10	15.76	0.00	150.0	± 9.6 %
		Y	4.41	66.52	16.01		150.0	
		Z	4.40	65.94	15.73		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.22	66.07	15.69	0.00	150.0	± 9.6 %
		Y	4.34	66.49	15.96		150.0	
		Z	4.33	65.90	15.66		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.23	66.08	15.73	0.00	150.0	± 9.6 %
		Y	4.36	66.51	15.99		150.0	
		Z	4.34	65.91	15.70		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.23	66.08	15.73	0.00	150.0	± 9.6 %
		Y	4.36	66.51	15.99		150.0	
		Z	4.34	65.91	15.70		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.19	66.07	15.68	0.00	150.0	± 9.6 %
		Y	4.32	66.52	15.96		150.0	
		Z	4.31	65.94	15.68		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.08	65.93	15.61	0.00	150.0	± 9.6 %
		Y	4.20	66.39	15.90		150.0	
		Z	4.19	65.79	15.60		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.23	66.16	15.73	0.00	150.0	± 9.6 %
		Y	4.36	66.60	16.00		150.0	
		Z	4.35	65.98	15.69		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.82	66.10	15.85	0.00	150.0	± 9.6 %
		Y	4.91	66.46	16.04		150.0	
		Z	4.91	66.02	15.83		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.85	66.20	15.91	0.00	150.0	± 9.6 %
		Y	4.94	66.56	16.09		150.0	
		Z	4.97	66.17	15.90		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.74	66.19	15.87	0.00	150.0	± 9.6 %
		Y	4.84	66.58	16.08		150.0	
		Z	4.85	66.14	15.86		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.82	66.26	15.91	0.00	150.0	± 9.6 %
		Y	4.91	66.59	16.08		150.0	
		Z	4.91	66.13	15.86		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.87	66.17	15.91	0.00	150.0	± 9.6 %
		Y	4.97	66.52	16.09		150.0	
		Z	4.98	66.12	15.90		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.80	66.12	15.90	0.00	150.0	± 9.6 %
		Y	4.90	66.49	16.09		150.0	
		Z	4.91	66.07	15.89		150.0	

10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.79	66.06	15.85	0.00	150.0	± 9.6 %
		Y	4.89	66.43	16.04		150.0	
		Z	4.89	65.96	15.82		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	4.94	66.17	15.92	0.00	150.0	± 9.6 %
		Y	5.04	66.51	16.10		150.0	
		Z	5.05	66.09	15.90		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.03	66.31	16.03	0.00	150.0	± 9.6 %
		Y	5.11	66.60	16.17		150.0	
		Z	5.12	66.17	15.97		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.18	66.16	15.86	0.00	150.0	± 9.6 %
		Y	5.26	66.52	16.02		150.0	
		Z	5.26	66.12	15.84		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.36	66.65	16.06	0.00	150.0	± 9.6 %
		Y	5.42	66.93	16.19		150.0	
		Z	5.45	66.61	16.04		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.20	66.27	15.88	0.00	150.0	± 9.6 %
		Y	5.29	66.63	16.05		150.0	
		Z	5.29	66.25	15.87		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.31	66.50	15.99	0.00	150.0	± 9.6 %
		Y	5.37	66.75	16.11		150.0	
		Z	5.38	66.37	15.93		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.41	66.98	16.21	0.00	150.0	± 9.6 %
		Y	5.49	67.30	16.36		150.0	
		Z	5.57	67.13	16.28		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.30	66.60	16.06	0.00	150.0	± 9.6 %
		Y	5.35	66.83	16.16		150.0	
		Z	5.37	66.46	15.99		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.19	66.21	15.83	0.00	150.0	± 9.6 %
		Y	5.28	66.60	16.01		150.0	
		Z	5.30	66.24	15.84		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.18	66.29	15.86	0.00	150.0	± 9.6 %
		Y	5.27	66.65	16.04		150.0	
		Z	5.26	66.20	15.82		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.23	66.22	15.86	0.00	150.0	± 9.6 %
		Y	5.32	66.58	16.03		150.0	
		Z	5.32	66.18	15.85		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.62	66.51	15.95	0.00	150.0	± 9.6 %
		Y	5.68	66.84	16.09		150.0	
		Z	5.69	66.48	15.94		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.69	66.71	16.04	0.00	150.0	± 9.6 %
		Y	5.76	67.04	16.18		150.0	
		Z	5.79	66.75	16.05		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.75	66.88	16.11	0.00	150.0	± 9.6 %
		Y	5.80	67.16	16.23		150.0	
		Z	5.83	66.85	16.10		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.69	66.70	16.04	0.00	150.0	± 9.6 %
		Y	5.76	67.04	16.19		150.0	
		Z	5.77	66.69	16.03		150.0	

10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.67	66.68	16.05	0.00	150.0	± 9.6 %
		Y	5.76	67.07	16.22		150.0	
		Z	5.80	66.79	16.10		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.71	66.66	16.07	0.00	150.0	± 9.6 %
		Y	5.79	67.02	16.23		150.0	
		Z	5.81	66.69	16.09		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.65	66.65	16.10	0.00	150.0	± 9.6 %
		Y	5.72	67.00	16.25		150.0	
		Z	5.75	66.69	16.12		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.68	66.77	16.16	0.00	150.0	± 9.6 %
		Y	5.77	67.15	16.33		150.0	
		Z	5.80	66.87	16.21		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.80	66.82	16.15	0.00	150.0	± 9.6 %
		Y	5.88	67.15	16.29		150.0	
		Z	5.91	66.85	16.17		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.52	66.62	16.09	0.46	150.0	± 9.6 %
		Y	4.63	66.97	16.32		150.0	
		Z	4.63	66.48	16.09		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	4.71	67.05	16.42	0.46	150.0	± 9.6 %
		Y	4.82	67.38	16.63		150.0	
		Z	4.83	66.91	16.42		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.54	66.82	16.20	0.46	150.0	± 9.6 %
		Y	4.65	67.19	16.43		150.0	
		Z	4.66	66.71	16.22		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.58	67.25	16.61	0.46	150.0	± 9.6 %
		Y	4.69	67.60	16.82		150.0	
		Z	4.69	67.12	16.60		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.42	66.46	15.88	0.46	150.0	± 9.6 %
		Y	4.54	66.88	16.15		150.0	
		Z	4.56	66.45	15.95		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.58	67.53	16.78	0.46	150.0	± 9.6 %
		Y	4.68	67.86	16.97		150.0	
		Z	4.68	67.31	16.72		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.57	67.27	16.64	0.46	150.0	± 9.6 %
		Y	4.68	67.61	16.85		150.0	
		Z	4.69	67.12	16.62		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	0.99	62.81	14.23	0.46	130.0	± 9.6 %
		Y	1.09	64.12	15.35		130.0	
		Z	1.00	62.69	14.25		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.00	63.25	14.53	0.46	130.0	± 9.6 %
		Y	1.10	64.66	15.71		130.0	
		Z	1.00	63.12	14.54		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	0.77	71.94	17.18	0.46	130.0	± 9.6 %
		Y	1.53	83.79	23.08		130.0	
		Z	0.78	71.84	17.05		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	0.97	67.27	16.73	0.46	130.0	± 9.6 %
		Y	1.16	70.12	18.67		130.0	
		Z	0.98	67.08	16.66		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.29	66.33	16.06	0.46	130.0	± 9.6 %
		Y	4.40	66.70	16.31		130.0	
		Z	4.41	66.24	16.12		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.32	66.56	16.16	0.46	130.0	± 9.6 %
		Y	4.43	66.92	16.41		130.0	
		Z	4.43	66.43	16.20		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.47	66.78	16.31	0.46	130.0	± 9.6 %
		Y	4.58	67.14	16.55		130.0	
		Z	4.60	66.69	16.36		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.38	66.93	16.42	0.46	130.0	± 9.6 %
		Y	4.49	67.29	16.66		130.0	
		Z	4.50	66.83	16.46		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.12	66.01	15.59	0.46	130.0	± 9.6 %
		Y	4.24	66.44	15.89		130.0	
		Z	4.26	65.99	15.69		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.14	66.03	15.59	0.46	130.0	± 9.6 %
		Y	4.27	66.48	15.90		130.0	
		Z	4.30	66.06	15.72		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.29	67.01	16.39	0.46	130.0	± 9.6 %
		Y	4.41	67.39	16.65		130.0	
		Z	4.41	66.87	16.41		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.04	65.76	15.35	0.46	130.0	± 9.6 %
		Y	4.17	66.20	15.67		130.0	
		Z	4.19	65.76	15.46		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.29	66.33	16.06	0.46	130.0	± 9.6 %
		Y	4.40	66.70	16.31		130.0	
		Z	4.41	66.24	16.12		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.32	66.56	16.16	0.46	130.0	± 9.6 %
		Y	4.43	66.92	16.41		130.0	
		Z	4.43	66.43	16.20		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.47	66.78	16.31	0.46	130.0	± 9.6 %
		Y	4.58	67.14	16.55		130.0	
		Z	4.60	66.69	16.36		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.38	66.93	16.42	0.46	130.0	± 9.6 %
		Y	4.49	67.29	16.66		130.0	
		Z	4.50	66.83	16.46		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.12	66.01	15.59	0.46	130.0	± 9.6 %
		Y	4.24	66.44	15.89		130.0	
		Z	4.26	65.99	15.69		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.14	66.03	15.59	0.46	130.0	± 9.6 %
		Y	4.27	66.48	15.90		130.0	
		Z	4.30	66.06	15.72		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.29	67.01	16.39	0.46	130.0	± 9.6 %
		Y	4.41	67.39	16.65		130.0	
		Z	4.41	66.87	16.41		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.04	65.76	15.35	0.46	130.0	± 9.6 %
		Y	4.17	66.20	15.67		130.0	
		Z	4.19	65.76	15.46		130.0	

10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.45	66.46	16.22	0.46	130.0	± 9.6 %
		Y	4.56	66.80	16.44		130.0	
		Z	4.57	66.34	16.25		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.56	66.73	16.33	0.46	130.0	± 9.6 %
		Y	4.67	67.08	16.56		130.0	
		Z	4.69	66.64	16.38		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.47	66.59	16.17	0.46	130.0	± 9.6 %
		Y	4.59	66.95	16.42		130.0	
		Z	4.60	66.51	16.23		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.53	66.78	16.36	0.46	130.0	± 9.6 %
		Y	4.64	67.13	16.59		130.0	
		Z	4.66	66.69	16.40		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.49	66.75	16.26	0.46	130.0	± 9.6 %
		Y	4.61	67.12	16.50		130.0	
		Z	4.62	66.66	16.30		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.42	66.68	16.23	0.46	130.0	± 9.6 %
		Y	4.53	67.07	16.49		130.0	
		Z	4.55	66.62	16.29		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.37	66.54	16.07	0.46	130.0	± 9.6 %
		Y	4.49	66.93	16.34		130.0	
		Z	4.51	66.49	16.14		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.38	66.81	16.37	0.46	130.0	± 9.6 %
		Y	4.49	67.18	16.61		130.0	
		Z	4.50	66.72	16.41		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.17	67.00	16.56	0.46	130.0	± 9.6 %
		Y	5.23	67.23	16.68		130.0	
		Z	5.27	66.93	16.57		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.26	67.35	16.71	0.46	130.0	± 9.6 %
		Y	5.31	67.52	16.80		130.0	
		Z	5.40	67.37	16.76		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.19	67.20	16.65	0.46	130.0	± 9.6 %
		Y	5.24	67.37	16.74		130.0	
		Z	5.28	67.08	16.63		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.24	67.11	16.52	0.46	130.0	± 9.6 %
		Y	5.31	67.34	16.64		130.0	
		Z	5.41	67.24	16.63		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.29	67.35	16.79	0.46	130.0	± 9.6 %
		Y	5.38	67.63	16.93		130.0	
		Z	5.49	67.59	16.94		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.15	66.85	16.51	0.46	130.0	± 9.6 %
		Y	5.25	67.21	16.70		130.0	
		Z	5.37	67.21	16.74		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.23	67.14	16.65	0.46	130.0	± 9.6 %
		Y	5.30	67.39	16.79		130.0	
		Z	5.38	67.23	16.74		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.05	66.67	16.26	0.46	130.0	± 9.6 %
		Y	5.11	66.89	16.39		130.0	
		Z	5.14	66.57	16.26		130.0	

10607-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.30	65.79	15.85	0.46	130.0	± 9.6 %
		Y	4.41	66.18	16.11		130.0	
		Z	4.41	65.65	15.87		130.0	
10608-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.42	66.08	15.98	0.46	130.0	± 9.6 %
		Y	4.54	66.48	16.24		130.0	
		Z	4.55	65.99	16.03		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.32	65.89	15.79	0.46	130.0	± 9.6 %
		Y	4.44	66.32	16.07		130.0	
		Z	4.44	65.81	15.84		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.37	66.08	15.98	0.46	130.0	± 9.6 %
		Y	4.49	66.49	16.24		130.0	
		Z	4.49	65.99	16.01		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.28	65.85	15.80	0.46	130.0	± 9.6 %
		Y	4.40	66.28	16.08		130.0	
		Z	4.41	65.78	15.85		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.26	65.94	15.82	0.46	130.0	± 9.6 %
		Y	4.39	66.39	16.11		130.0	
		Z	4.40	65.90	15.88		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.25	65.75	15.65	0.46	130.0	± 9.6 %
		Y	4.38	66.20	15.95		130.0	
		Z	4.40	65.73	15.73		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.24	66.02	15.94	0.46	130.0	± 9.6 %
		Y	4.36	66.46	16.22		130.0	
		Z	4.36	65.95	15.99		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.26	65.66	15.54	0.46	130.0	± 9.6 %
		Y	4.39	66.11	15.84		130.0	
		Z	4.40	65.60	15.61		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	4.95	66.09	16.09	0.46	130.0	± 9.6 %
		Y	5.04	66.42	16.27		130.0	
		Z	5.06	66.06	16.12		130.0	
10617-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	4.98	66.18	16.11	0.46	130.0	± 9.6 %
		Y	5.07	66.52	16.29		130.0	
		Z	5.13	66.25	16.19		130.0	
10618-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	4.89	66.22	16.14	0.46	130.0	± 9.6 %
		Y	4.99	66.61	16.35		130.0	
		Z	5.02	66.28	16.21		130.0	
10619-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	4.94	66.16	16.04	0.46	130.0	± 9.6 %
		Y	5.01	66.45	16.21		130.0	
		Z	5.04	66.09	16.05		130.0	
10620-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	4.98	66.07	16.05	0.46	130.0	± 9.6 %
		Y	5.08	66.42	16.24		130.0	
		Z	5.12	66.10	16.11		130.0	
10621-AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.00	66.21	16.25	0.46	130.0	± 9.6 %
		Y	5.09	66.55	16.43		130.0	
		Z	5.12	66.22	16.29		130.0	
10622-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	4.98	66.29	16.29	0.46	130.0	± 9.6 %
		Y	5.08	66.63	16.46		130.0	
		Z	5.11	66.32	16.34		130.0	

10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.88	65.86	15.92	0.46	130.0	± 9.6 %
		Y	4.97	66.20	16.11		130.0	
		Z	4.99	65.82	15.95		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.07	66.13	16.12	0.46	130.0	± 9.6 %
		Y	5.16	66.45	16.30		130.0	
		Z	5.20	66.12	16.17		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.18	66.36	16.31	0.46	130.0	± 9.6 %
		Y	5.24	66.57	16.42		130.0	
		Z	5.32	66.38	16.36		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.30	66.10	16.05	0.46	130.0	± 9.6 %
		Y	5.38	66.44	16.22		130.0	
		Z	5.40	66.12	16.09		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.53	66.77	16.36	0.46	130.0	± 9.6 %
		Y	5.59	67.01	16.48		130.0	
		Z	5.65	66.81	16.41		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.29	66.06	15.93	0.46	130.0	± 9.6 %
		Y	5.37	66.41	16.10		130.0	
		Z	5.40	66.11	15.98		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.43	66.42	16.11	0.46	130.0	± 9.6 %
		Y	5.47	66.61	16.20		130.0	
		Z	5.50	66.31	16.08		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	5.59	67.09	16.45	0.46	130.0	± 9.6 %
		Y	5.66	67.38	16.59		130.0	
		Z	5.82	67.46	16.66		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.58	67.18	16.70	0.46	130.0	± 9.6 %
		Y	5.66	67.50	16.84		130.0	
		Z	5.74	67.33	16.79		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.57	67.09	16.67	0.46	130.0	± 9.6 %
		Y	5.60	67.22	16.72		130.0	
		Z	5.64	66.96	16.63		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.30	66.12	16.00	0.46	130.0	± 9.6 %
		Y	5.39	66.49	16.18		130.0	
		Z	5.45	66.28	16.11		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.34	66.35	16.17	0.46	130.0	± 9.6 %
		Y	5.43	66.70	16.34		130.0	
		Z	5.44	66.35	16.20		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.19	65.54	15.47	0.46	130.0	± 9.6 %
		Y	5.28	65.93	15.68		130.0	
		Z	5.31	65.62	15.55		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.75	66.48	16.16	0.46	130.0	± 9.6 %
		Y	5.81	66.78	16.30		130.0	
		Z	5.84	66.50	16.20		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.86	66.76	16.29	0.46	130.0	± 9.6 %
		Y	5.91	67.05	16.42		130.0	
		Z	5.98	66.87	16.37		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.90	66.89	16.33	0.46	130.0	± 9.6 %
		Y	5.95	67.16	16.45		130.0	
		Z	5.98	66.88	16.35		130.0	

10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.83	66.70	16.28	0.46	130.0	± 9.6 %
		Y	5.90	67.02	16.42		130.0	
		Z	5.94	66.76	16.33		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.77	66.49	16.12	0.46	130.0	± 9.6 %
		Y	5.85	66.88	16.30		130.0	
		Z	5.92	66.69	16.24		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.90	66.70	16.24	0.46	130.0	± 9.6 %
		Y	5.96	66.97	16.37		130.0	
		Z	6.02	66.77	16.30		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.91	66.85	16.49	0.46	130.0	± 9.6 %
		Y	5.98	67.18	16.64		130.0	
		Z	6.03	66.94	16.56		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.75	66.52	16.20	0.46	130.0	± 9.6 %
		Y	5.83	66.86	16.37		130.0	
		Z	5.88	66.65	16.30		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.80	66.66	16.30	0.46	130.0	± 9.6 %
		Y	5.88	67.03	16.47		130.0	
		Z	5.94	66.85	16.42		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	5.94	66.78	16.33	0.46	130.0	± 9.6 %
		Y	6.00	67.06	16.46		130.0	
		Z	6.15	67.15	16.54		130.0	
10646-AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	5.05	83.78	28.65	9.30	60.0	± 9.6 %
		Y	6.98	93.27	32.89		60.0	
		Z	7.15	91.85	32.42		60.0	
10647-AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	4.54	81.82	27.99	9.30	60.0	± 9.6 %
		Y	5.99	90.07	31.84		60.0	
		Z	6.33	89.46	31.67		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.37	60.00	6.05	0.00	150.0	± 9.6 %
		Y	0.48	61.63	8.16		150.0	
		Z	0.43	60.11	6.90		150.0	
10652-AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	2.93	65.21	15.11	2.23	80.0	± 9.6 %
		Y	3.20	66.58	16.05		80.0	
		Z	3.10	65.44	15.57		80.0	
10653-AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.55	64.93	15.73	2.23	80.0	± 9.6 %
		Y	3.74	65.80	16.31		80.0	
		Z	3.68	65.02	15.99		80.0	
10654-AAC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.60	64.60	15.83	2.23	80.0	± 9.6 %
		Y	3.76	65.39	16.34		80.0	
		Z	3.70	64.69	16.04		80.0	
10655-AAD	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.69	64.52	15.89	2.23	80.0	± 9.6 %
		Y	3.83	65.30	16.38		80.0	
		Z	3.78	64.64	16.09		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	3.48	68.63	11.85	10.00	50.0	± 9.6 %
		Y	5.65	74.45	13.80		50.0	
		Z	7.21	77.53	15.77		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	2.03	66.95	10.03	6.99	60.0	± 9.6 %
		Y	100.00	101.12	19.79		60.0	
		Z	100.00	104.10	21.38		60.0	

10660-AAA	Pulse Waveform (200Hz, 40%)	X	0.68	62.61	6.79	3.98	80.0	± 9.6 %
		Y	100.00	101.16	18.64		80.0	
		Z	100.00	99.78	18.10		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	0.25	60.00	4.25	2.22	100.0	± 9.6 %
		Y	100.00	102.31	18.13		100.0	
		Z	0.28	60.39	4.93		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	6.06	60.21	1.38	0.97	120.0	± 9.6 %
		Y	100.00	96.37	14.68		120.0	
		Z	9.95	60.38	1.42		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.



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7488_Jan19**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7488**

Calibration procedure(s) **DA CAL-01 v9, DA CAL-14 v5, DA CAL-23 v5, DA CAL-25 v7**
Calibration procedure for dielectric E-field probes

Handwritten: 11/06/2019

Calibration date: **January 24, 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: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	Signature
Approved by:	Name Katja Pokovic	Function Technical Manager	Signature

Issued: January 29, 2019

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



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Multilateral Agreement for the recognition of calibration certificates

Glossary:

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

Calibration is Performed According to the Following Standards:

- a) 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"

Methods Applied and Interpretation of Parameters:

- *NORM_{x,y,z}*: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). *NORM_{x,y,z}* are only intermediate values, i.e., the uncertainties of *NORM_{x,y,z}* does not affect the E^2 -field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)_{x,y,z}* = *NORM_{x,y,z}* * *frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCP_{x,y,z}*: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *A_{x,y,z}*; *B_{x,y,z}*; *C_{x,y,z}*; *D_{x,y,z}*; *VR_{x,y,z}*: *A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORM_{x,y,z}* * *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORM_x* (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.45	0.49	0.50	± 10.1 %
DCP (mV) ^B	98.9	102.3	99.6	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\cdot\mu\text{V}$	C	D dB	VR mV	Max dev.	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	149.5	± 2.7 %	± 4.7 %
		Y	0.00	0.00	1.00		140.8		
		Z	0.00	0.00	1.00		138.2		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	10.21	80.63	15.98	10.00	60.0	± 3.1 %	± 9.6 %
		Y	5.90	74.67	14.18		60.0		
		Z	15.00	89.30	20.53		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	15.00	85.88	16.55	6.99	80.0	± 2.1 %	± 9.6 %
		Y	15.00	84.35	15.79		80.0		
		Z	15.00	92.51	21.01		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	90.08	17.19	3.98	95.0	± 1.3 %	± 9.6 %
		Y	15.00	83.37	13.66		95.0		
		Z	15.00	104.27	25.33		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	97.36	19.30	2.22	120.0	± 1.2 %	± 9.6 %
		Y	0.26	60.00	4.43		120.0		
		Z	15.00	117.38	29.81		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.51	60.28	7.04	0.00	150.0	± 3.3 %	± 9.6 %
		Y	0.47	60.00	5.79		150.0		
		Z	0.61	61.09	8.42		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.29	69.54	16.64	0.00	150.0	± 1.1 %	± 9.6 %
		Y	1.90	66.64	14.97		150.0		
		Z	2.23	68.54	16.09		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	2.94	72.04	19.55	3.01	150.0	± 0.7 %	± 9.6 %
		Y	2.49	68.13	17.71		150.0		
		Z	3.35	73.33	20.07		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.54	67.80	16.20	0.00	150.0	± 2.2 %	± 9.6 %
		Y	3.42	67.12	15.74		150.0		
		Z	3.49	67.32	15.92		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.65	65.56	15.55	0.00	150.0	± 4.0 %	± 9.6 %
		Y	4.74	65.87	15.68		150.0		
		Z	4.80	65.75	15.62		150.0		

Note: For details on UID parameters see Appendix

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

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

^B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488**Sensor Model Parameters**

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ⁻²	T2 ms.V ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
X	35.2	259.64	34.83	7.55	0.00	5.04	1.52	0.11	1.01
Y	34.3	261.80	36.90	6.01	0.21	5.06	0.00	0.41	1.01
Z	40.7	301.53	35.10	11.37	0.14	5.09	1.94	0.15	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-129.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	10.77	10.77	10.77	0.56	0.80	± 12.0 %
835	41.5	0.90	10.37	10.37	10.37	0.40	0.93	± 12.0 %
1750	40.1	1.37	8.87	8.87	8.87	0.33	0.84	± 12.0 %
1900	40.0	1.40	8.53	8.53	8.53	0.27	0.84	± 12.0 %
2300	39.5	1.67	8.25	8.25	8.25	0.33	0.85	± 12.0 %
2450	39.2	1.80	7.86	7.86	7.86	0.34	0.90	± 12.0 %
2600	39.0	1.96	7.69	7.69	7.69	0.35	0.86	± 12.0 %
5250	35.9	4.71	5.35	5.35	5.35	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.70	4.70	4.70	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.03	5.03	5.03	0.40	1.80	± 13.1 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

Calibration Parameter Determined in Body Tissue Simulating Media

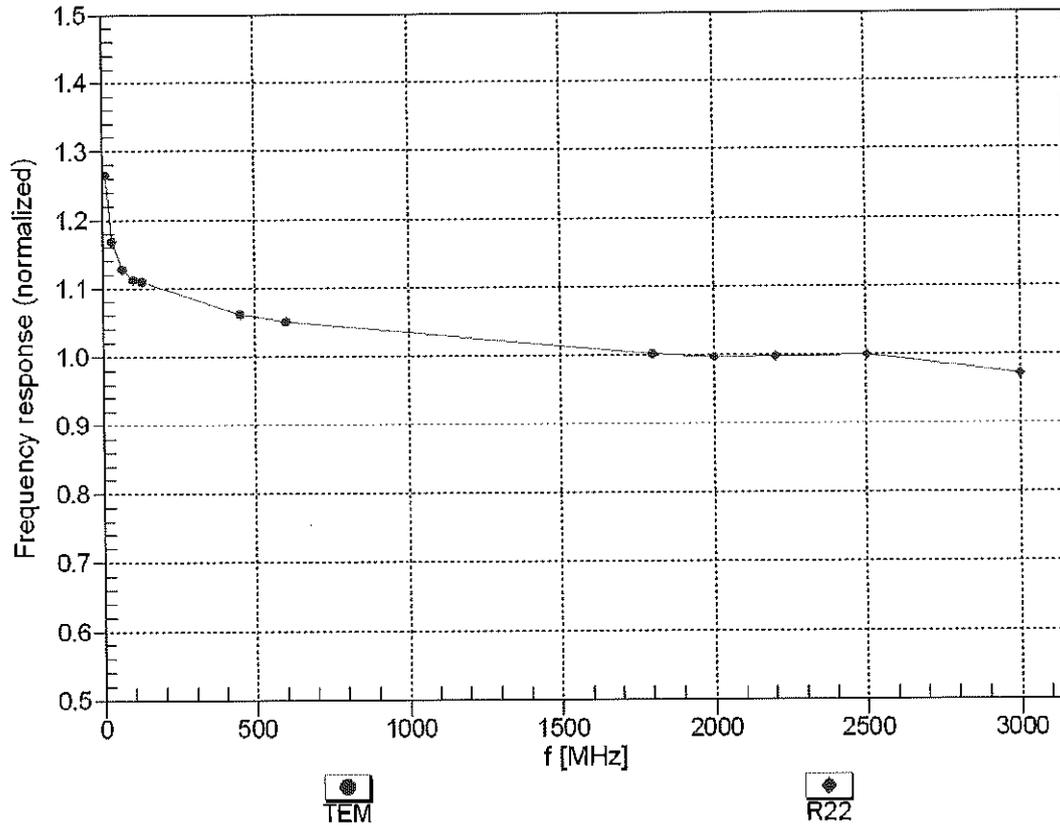
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	11.28	11.28	11.28	0.46	0.80	± 12.0 %
835	55.2	0.97	11.03	11.03	11.03	0.46	0.81	± 12.0 %
1750	53.4	1.49	8.68	8.68	8.68	0.38	0.88	± 12.0 %
1900	53.3	1.52	8.37	8.37	8.37	0.38	0.88	± 12.0 %
2300	52.9	1.81	8.21	8.21	8.21	0.42	0.84	± 12.0 %
2450	52.7	1.95	8.07	8.07	8.07	0.35	0.98	± 12.0 %
2600	52.5	2.16	7.94	7.94	7.94	0.25	0.95	± 12.0 %
5250	48.9	5.36	4.82	4.82	4.82	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.09	4.09	4.09	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.32	4.32	4.32	0.50	1.90	± 13.1 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

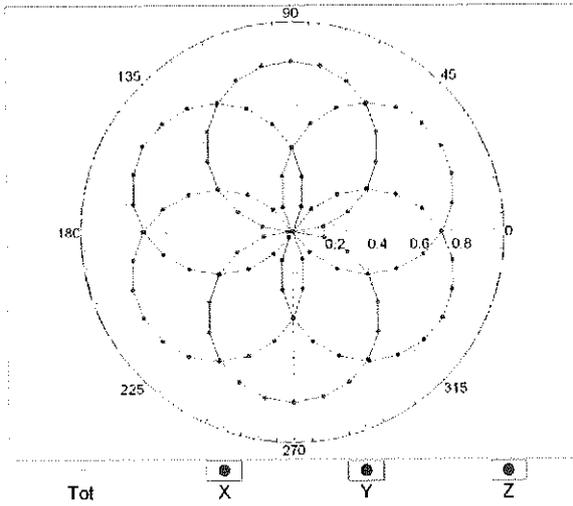
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



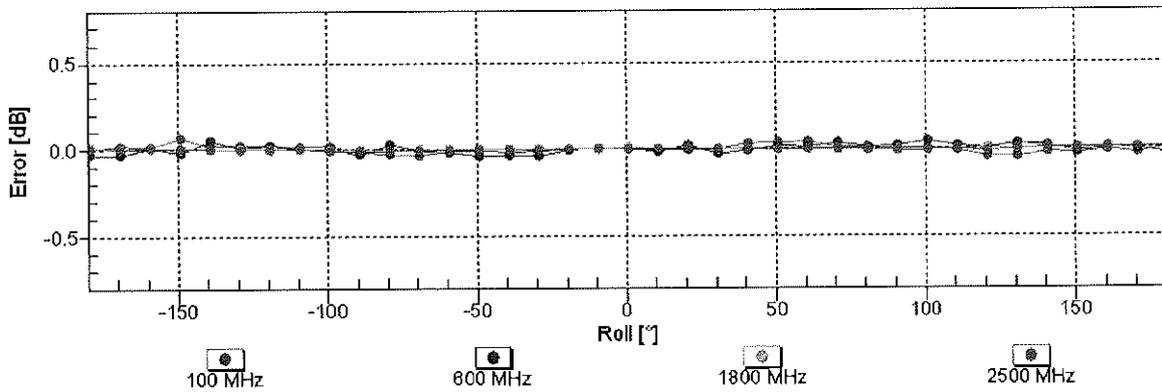
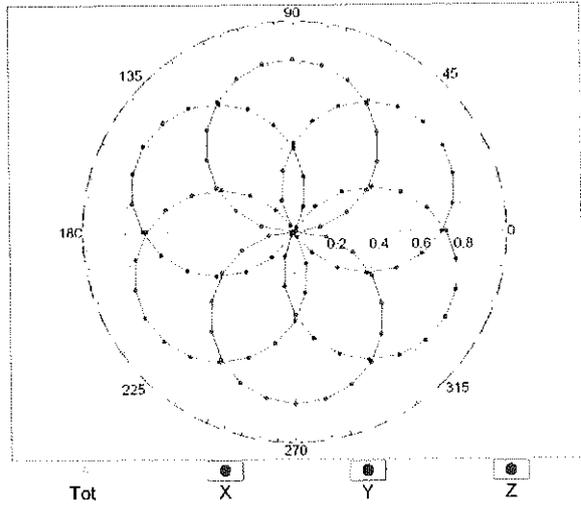
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz, TEM

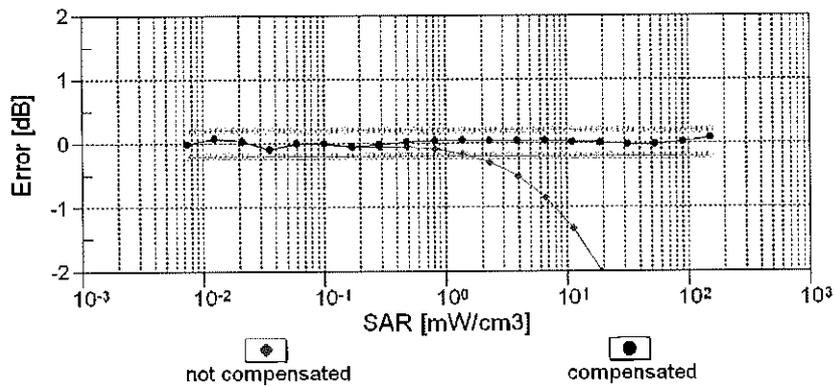
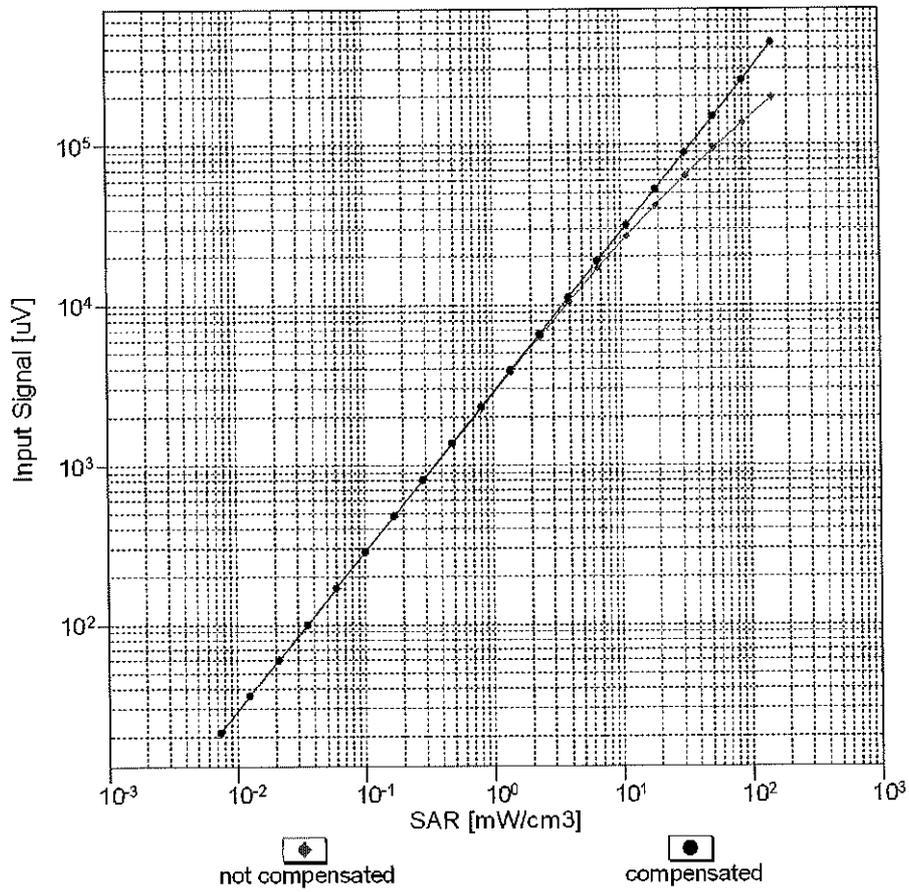


f=1800 MHz, R22



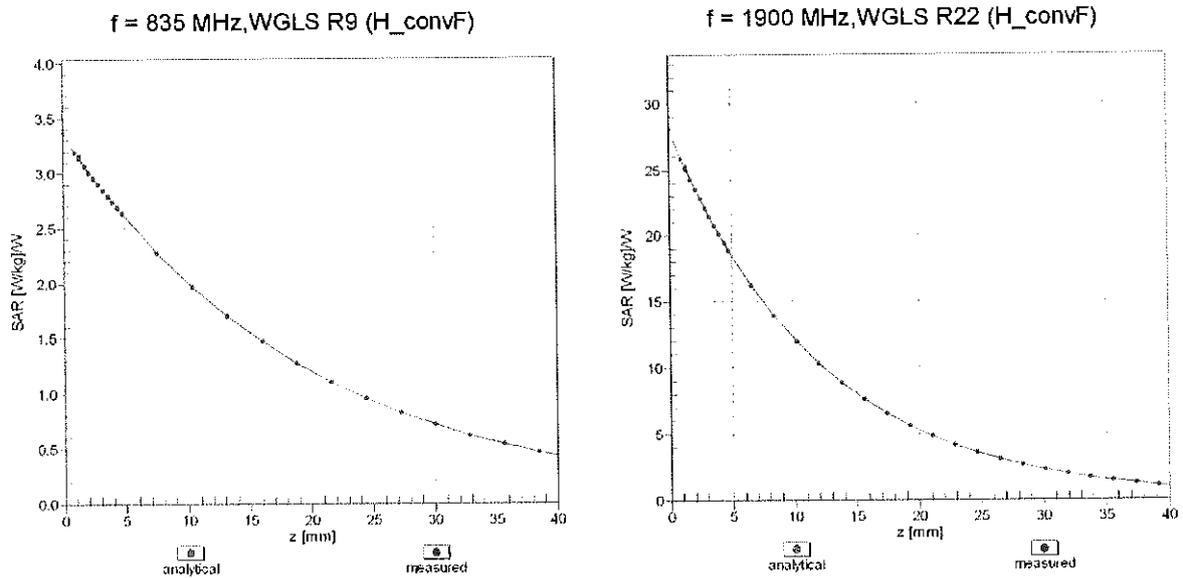
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)



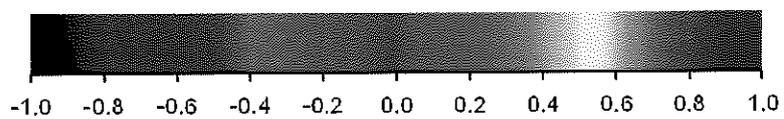
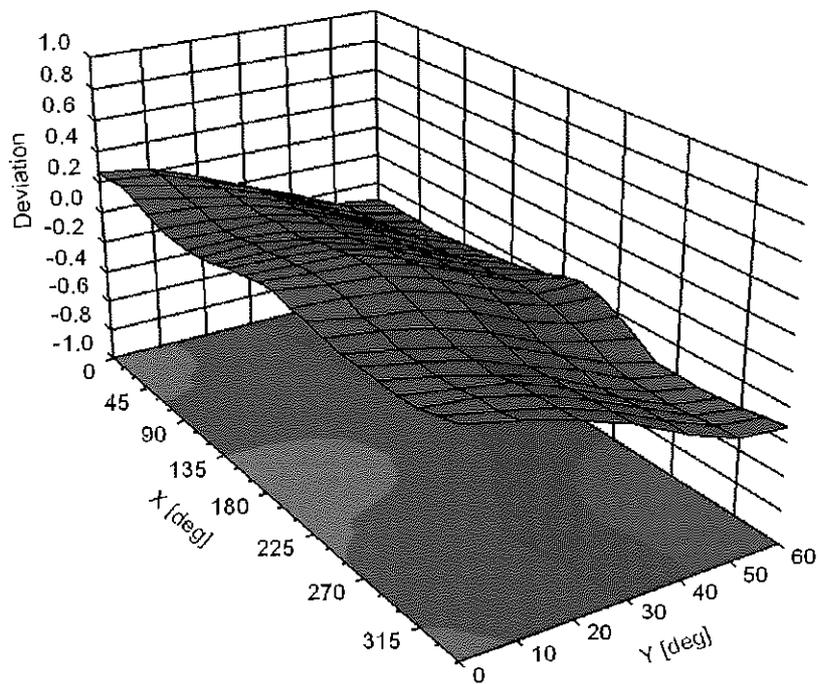
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^F (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	iDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	WLAN	8.19	± 9.6 %
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %

10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10462	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	± 9.6 %
10463	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10464	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10466	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10472	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10479	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	± 9.6 %
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10482	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	± 9.6 %
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	± 9.6 %
10485	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	± 9.6 %
10487	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	± 9.6 %
10488	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10490	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %

10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10497	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10498	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	± 9.6 %
10499	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	± 9.6 %
10500	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	± 9.6 %
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	± 9.6 %
10503	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10505	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10506	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	± 9.6 %
10508	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	± 9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	± 9.6 %
10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	WLAN	8.45	± 9.6 %

10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	± 9.6 %
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	± 9.6 %
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.35	± 9.6 %
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %

10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	± 9.6 %
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	WLAN	8.50	± 9.6 %
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN	9.03	± 9.6 %
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN	8.57	± 9.6 %
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8.58	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	± 9.6 %
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	± 9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10646	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %

10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %

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



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

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7417_Feb19**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7417**

Calibration procedure(s) **QA CAL-01-19 QA CAL-23-16 QA CAL-25-17
Calibration procedure for dielectric E-field probes**

Calibration date: **February 19, 2019**

HN
02-26-2019

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: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

Calibrated by:	Name Claudio Leubler	Function Laboratory Technician	Signature
Approved by:	Name Katja Pokovic	Function Technical Manager	Signature

Issued: February 20, 2019

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Glossary:

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

Calibration is Performed According to the Following Standards:

- a) 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"

Methods Applied and Interpretation of Parameters:

- *NORM_{x,y,z}*: Assessed for E-field polarization § = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). *NORM_{x,y,z}* are only intermediate values, i.e., the uncertainties of *NORM_{x,y,z}* does not affect the E²-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)_{x,y,z}* = *NORM_{x,y,z}* * *frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCP_{x,y,z}*: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *A_{x,y,z}*; *B_{x,y,z}*; *C_{x,y,z}*; *D_{x,y,z}*; *VR_{x,y,z}*: *A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORM_{x,y,z}* * *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORM_x* (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.54	0.43	0.53	± 10.1 %
DCP (mV) ^B	98.7	97.4	100.4	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Max dev.	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	144.6	± 3.3 %	± 4.7 %
		Y	0.00	0.00	1.00		149.7		
		Z	0.00	0.00	1.00		143.1		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	15.00	88.38	19.65	10.00	60.0	± 3.3 %	± 9.6 %
		Y	4.33	71.38	13.30		60.0		
		Z	7.40	77.44	14.95		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	15.00	92.19	20.43	6.99	80.0	± 2.2 %	± 9.6 %
		Y	5.53	76.01	13.64		80.0		
		Z	15.00	85.74	16.43		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	15.00	107.68	26.54	3.98	95.0	± 1.3 %	± 9.6 %
		Y	9.05	79.53	12.66		95.0		
		Z	15.00	90.71	17.41		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	15.00	127.17	33.83	2.22	120.0	± 1.2 %	± 9.6 %
		Y	0.26	60.00	4.45		120.0		
		Z	15.00	99.84	20.30		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.56	60.62	7.74	0.00	150.0	± 3.6 %	± 9.6 %
		Y	0.42	60.00	4.69		150.0		
		Z	0.44	60.00	5.48		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.27	69.09	16.46	0.00	150.0	± 1.3 %	± 9.6 %
		Y	1.94	67.43	15.43		150.0		
		Z	2.06	68.27	16.05		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	3.15	72.71	19.95	3.01	150.0	± 2.5 %	± 9.6 %
		Y	2.04	67.08	18.19		150.0		
		Z	2.07	66.03	16.88		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.52	67.53	16.10	0.00	150.0	± 2.4 %	± 9.6 %
		Y	3.32	66.83	15.68		150.0		
		Z	3.38	67.15	15.89		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.80	65.90	15.74	0.00	150.0	± 4.4 %	± 9.6 %
		Y	4.58	65.58	15.59		150.0		
		Z	4.60	65.76	15.65		150.0		

Note: For details on UID parameters see Appendix

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

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

^B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ⁻²	T2 ms.V ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
X	37.6	279.10	35.33	9.45	0.00	5.09	1.69	0.14	1.01
Y	29.6	227.60	37.50	5.19	0.43	5.04	0.00	0.16	1.01
Z	28.8	214.34	35.37	6.91	0.00	5.04	0.00	0.24	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	120.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	10.36	10.36	10.36	0.54	0.99	± 12.0 %
835	41.5	0.90	10.07	10.07	10.07	0.48	0.84	± 12.0 %
1750	40.1	1.37	8.39	8.39	8.39	0.38	0.85	± 12.0 %
1900	40.0	1.40	8.11	8.11	8.11	0.39	0.84	± 12.0 %
2300	39.5	1.67	7.73	7.73	7.73	0.30	0.93	± 12.0 %
2450	39.2	1.80	7.46	7.46	7.46	0.39	0.95	± 12.0 %
2600	39.0	1.96	7.17	7.17	7.17	0.31	1.05	± 12.0 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Calibration Parameter Determined in Body Tissue Simulating Media

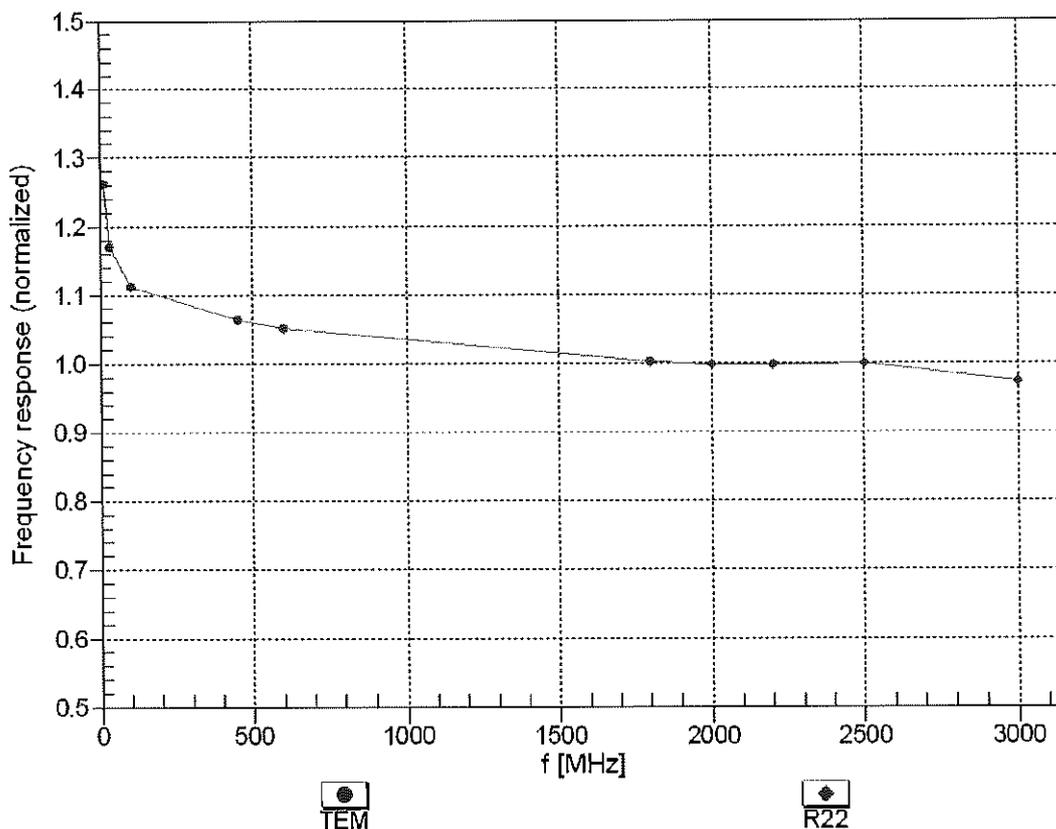
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	10.35	10.35	10.35	0.63	0.84	± 12.0 %
835	55.2	0.97	10.11	10.11	10.11	0.43	0.84	± 12.0 %
1750	53.4	1.49	8.21	8.21	8.21	0.43	0.88	± 12.0 %
1900	53.3	1.52	7.86	7.86	7.86	0.43	0.87	± 12.0 %
2300	52.9	1.81	7.64	7.64	7.64	0.41	0.93	± 12.0 %
2450	52.7	1.95	7.51	7.51	7.51	0.40	0.95	± 12.0 %
2600	52.5	2.16	7.37	7.37	7.37	0.33	1.05	± 12.0 %

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

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

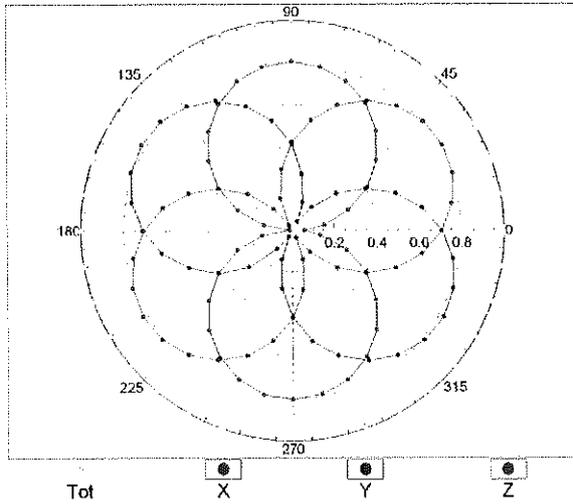
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



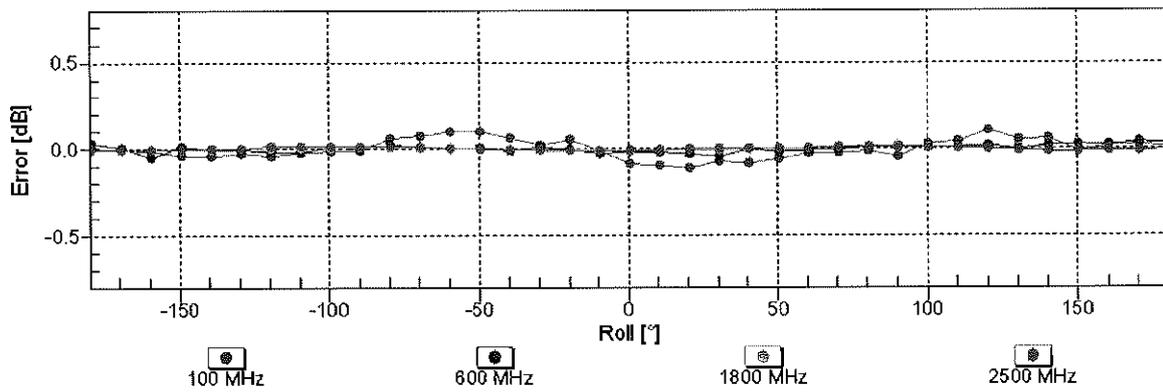
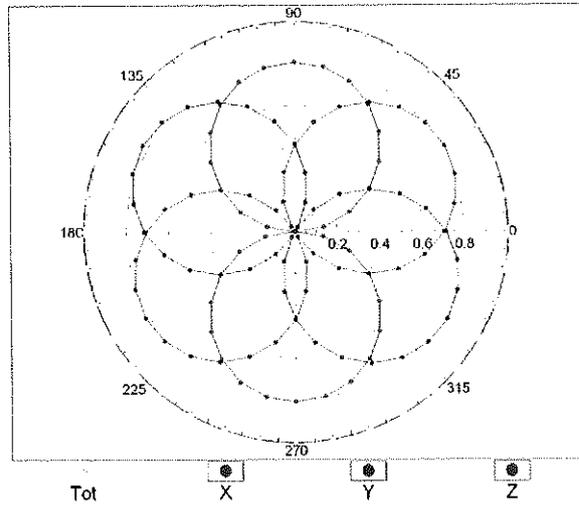
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz, TEM

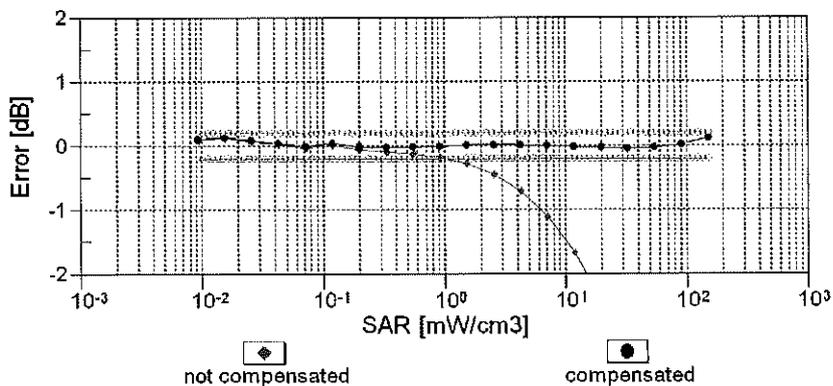
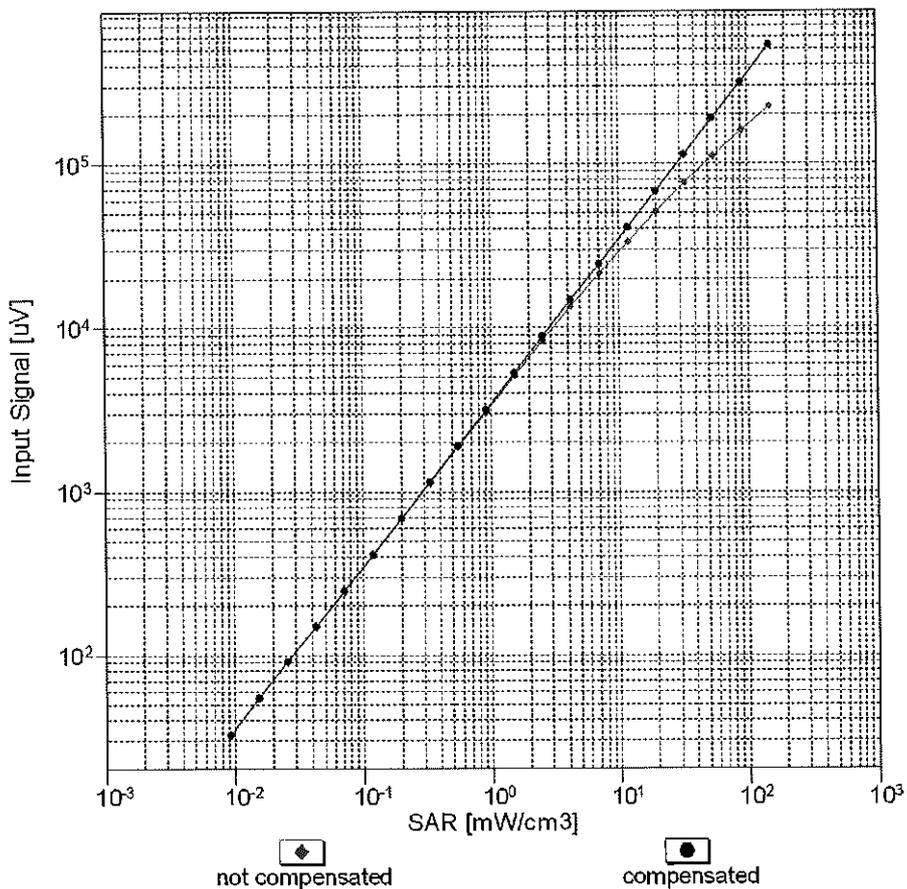


f=1800 MHz, R22



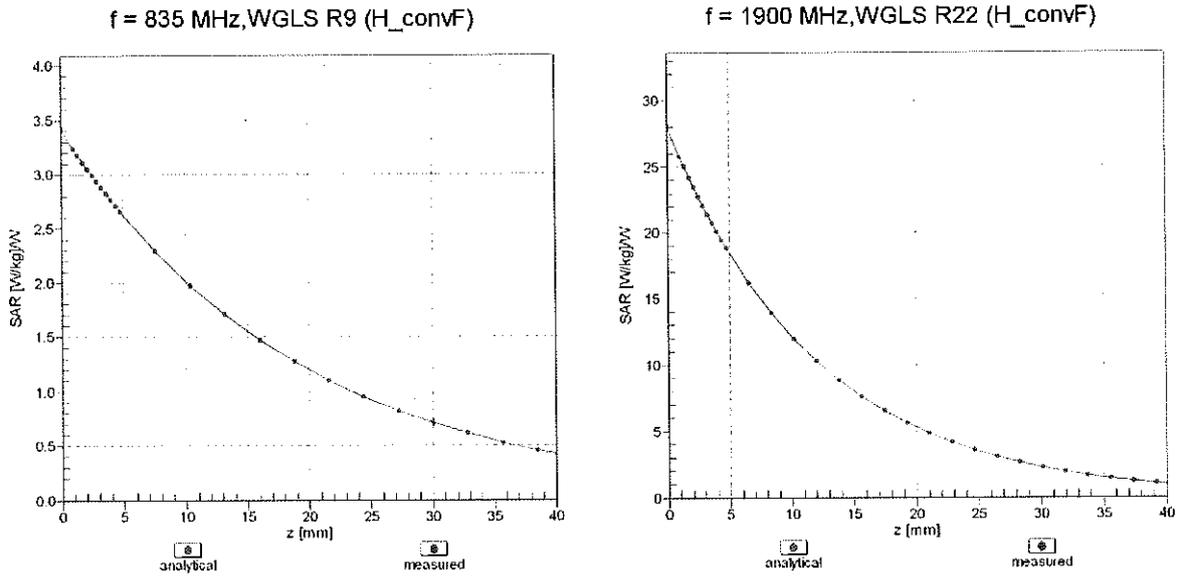
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)



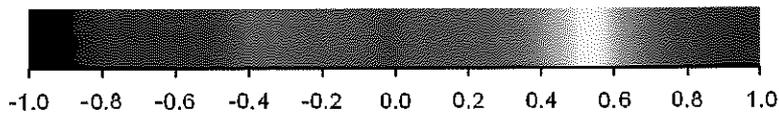
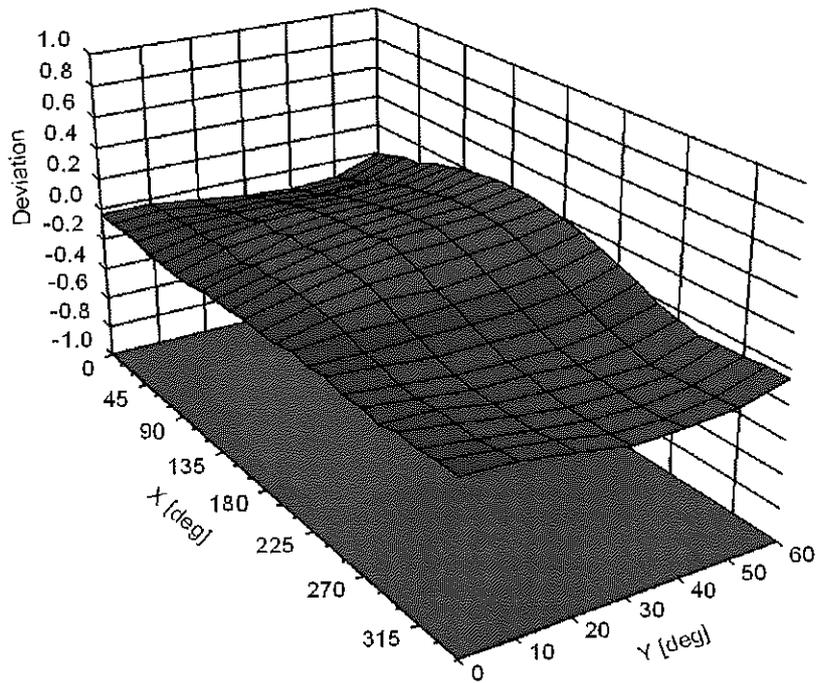
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^F (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6 %
10226	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10237	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6 %
10241	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6 %
10256	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6 %
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	±9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	±9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10302	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	± 9.6 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	iDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	WLAN	8.14	± 9.6 %
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	WLAN	8.19	± 9.6 %
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 9.6 %
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	± 9.6 %
10450	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	± 9.6 %

10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10462	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	± 9.6 %
10463	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10464	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10466	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10472	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10478	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10479	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	± 9.6 %
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10482	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	± 9.6 %
10483	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	± 9.6 %
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	± 9.6 %
10485	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	± 9.6 %
10486	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	± 9.6 %
10487	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	± 9.6 %
10488	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10489	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10490	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10491	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %

10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10494	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	± 9.6 %
10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10497	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10498	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	± 9.6 %
10499	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	± 9.6 %
10500	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	± 9.6 %
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	± 9.6 %
10503	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	± 9.6 %
10504	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	± 9.6 %
10505	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	± 9.6 %
10506	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10507	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	± 9.6 %
10508	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
10509	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	± 9.6 %
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	± 9.6 %
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	± 9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	± 9.6 %
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10527	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	± 9.6 %
10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10529	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	± 9.6 %
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	± 9.6 %
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10534	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	WLAN	8.45	± 9.6 %

10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	± 9.6 %
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	± 9.6 %
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.35	± 9.6 %
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10553	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	WLAN	8.48	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	± 9.6 %
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	± 9.6 %

10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	± 9.6 %
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	WLAN	8.50	± 9.6 %
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN	9.03	± 9.6 %
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN	8.57	± 9.6 %
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10617	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8.58	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	± 9.6 %
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	± 9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10646	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %

10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %

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

APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity ϵ' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos \phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

**Table D-I
Composition of the Tissue Equivalent Matter**

Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450	2450	5200 - 5800	5200 - 5800
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredients (% by weight)												
Bactericide			0.1	0.1								
DGBE					47	31	44.92	29.44		26.7		
HEC	See page 2-3	See page 2	1	1					See page 4		See page 5	See page 6
NaCl			1.45	0.94	0.4	0.2	0.18	0.39		0.1		
Sucrose			57	44.9								
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 1 of 6

2 Composition / Information on ingredients

The Item is composed of the following ingredients:

H ₂ O	Water, 35 – 58%
Sucrose	Sugar, white, refined, 40 – 60%
NaCl	Sodium Chloride, 0 – 6%
Hydroxyethyl-cellulose	Medium Viscosity (CAS# 9004-62-0), <0.3%
Preventol-D7	Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyl-3(2H)-isothiazolone, 0.1 – 0.7%

Relevant for safety; Refer to the respective Safety Data Sheet*.

Figure D-1
Composition of 750 MHz Head and Body Tissue Equivalent Matter

Note: 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

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Measurement Certificate / Material Test

Item Name	Body Tissue Simulating Liquid (MSL750V2)
Product No.	SL AAM 075 AA (Batch: 170608-1)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

Validation results were within $\pm 2.5\%$ towards the target values of Methanol.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

Ambient Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature 22°C
Test Date 20-Jun-17
Operator CL

Additional Information

TSL Density 1.212 g/cm³
TSL Heat-capacity 3.006 kJ/(kg*K)

f [MHz]	Measured			Target		Diff.to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	57.3	26.02	0.84	66.1	0.95	2.2	-12.2
625	57.1	24.67	0.86	56.0	0.95	1.9	-10.1
650	56.8	24.32	0.88	55.9	0.96	1.6	-8.0
675	56.6	24.02	0.90	55.8	0.96	1.3	-5.8
700	56.3	23.71	0.92	55.7	0.96	1.1	-3.8
725	56.1	23.48	0.95	55.6	0.96	0.8	-1.5
750	55.9	23.25	0.97	55.5	0.96	0.6	0.7
775	55.6	23.04	0.99	55.4	0.97	0.3	2.9
800	55.4	22.82	1.02	55.3	0.97	0.1	5.0
825	55.2	22.65	1.04	55.2	0.98	-0.1	6.3
838	55.1	22.56	1.05	55.2	0.98	-0.3	6.9
850	54.9	22.47	1.06	55.2	0.99	-0.4	7.5
875	54.7	22.34	1.09	55.1	1.02	-0.7	6.7
900	54.5	22.21	1.11	55.0	1.05	-0.9	5.9
925	54.3	22.08	1.14	55.0	1.06	-1.3	6.9
950	54.1	21.95	1.16	54.9	1.08	-1.6	7.9
975	53.8	21.86	1.19	54.9	1.09	-1.9	9.1
1000	53.6	21.76	1.21	54.8	1.10	-2.2	10.2

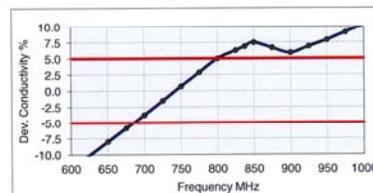
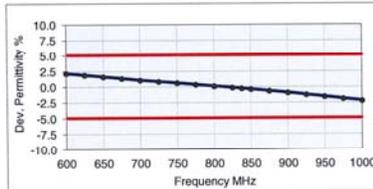


Figure D-2
750MHz Body Tissue Equivalent Matter

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 2 of 6

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HSL750V2)
Product No.	SL AAH 075 AA (Batch: 170612-4)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

Validation results were within $\pm 2.5\%$ towards the target values of Methanol.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	20-Jun-17
Operator	CL

Additional Information

TSL Density	1.284 g/cm ³
TSL Heat-capacity	2.701 kJ/(kg*K)

f [MHz]	Measured			Target		Diff. to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	45.6	22.97	0.77	42.7	0.88	6.7	-13.1
625	45.2	22.73	0.79	42.6	0.88	6.2	-10.6
650	44.9	22.49	0.81	42.5	0.89	5.6	-8.2
675	44.5	22.27	0.84	42.3	0.89	5.1	-5.8
700	44.2	22.05	0.86	42.2	0.89	4.6	-3.5
725	43.8	21.88	0.88	42.1	0.89	4.2	-1.0
750	43.5	21.72	0.91	41.9	0.89	3.8	1.4
775	43.2	21.55	0.93	41.8	0.90	3.4	3.7
800	42.9	21.38	0.95	41.7	0.90	2.9	6.0
825	42.6	21.24	0.97	41.6	0.91	2.4	7.5
838	42.5	21.17	0.99	41.5	0.91	2.2	8.2
850	42.3	21.09	1.00	41.5	0.92	2.0	8.9
875	42.0	20.98	1.02	41.5	0.94	1.2	8.3
900	41.7	20.87	1.05	41.5	0.97	0.5	7.7
925	41.5	20.76	1.07	41.5	0.98	0.0	8.7
950	41.2	20.64	1.09	41.4	0.99	-0.6	9.7
975	40.9	20.55	1.11	41.4	1.00	-1.1	10.9
1000	40.6	20.46	1.14	41.3	1.01	-1.7	12.1

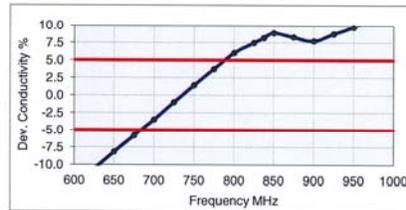
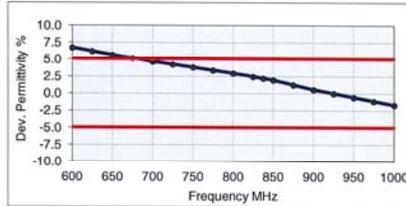


Figure D-3
750MHz Head Tissue Equivalent Matter

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 3 of 6

3 Composition / Information on ingredients

The Item is composed of the following ingredients:

Water	50 – 73 %	
Non-ionic detergents	25 – 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0 – 2 %	
Preservative	0.05 – 0.1 %	Preventol-D7

Safety relevant ingredients:

CAS-No. 55965-84-9	< 0.1 %	aqueous preparation, containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyl-3(2H)-isothiazolone
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CAS-No. 9005-64-5	<50 %	polyoxyethylenesorbitan monolaurate
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According to international guidelines, the product is not a dangerous mixture and therefore not required to be marked by symbols.

Figure D-4
Composition of 2.4 GHz Head Tissue Equivalent Matter

Note: 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

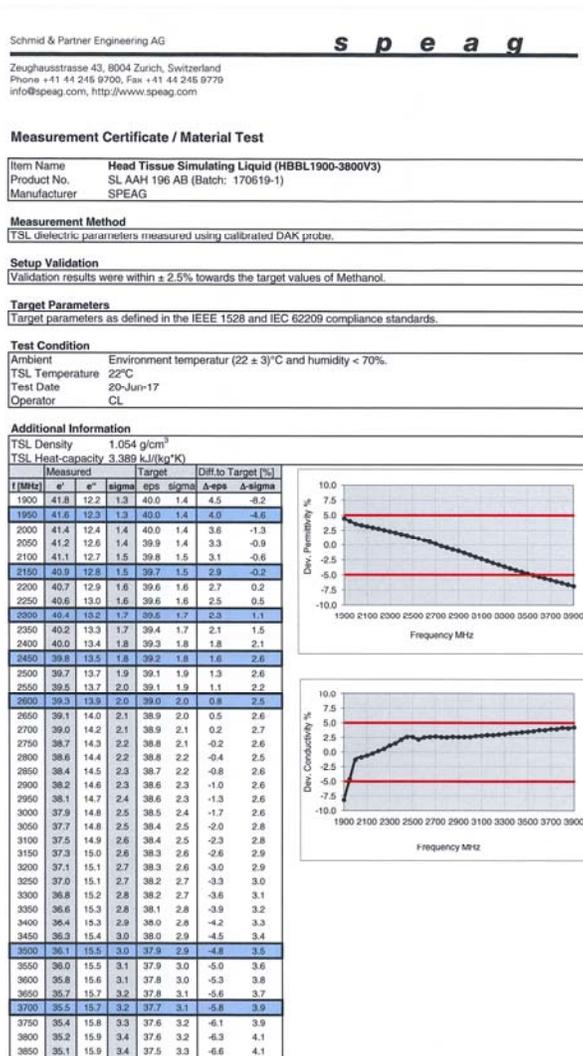


Figure D-5
2.4 GHz Head Tissue Equivalent Matter

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 4 of 6

2 Composition / Information on ingredients

The Item is composed of the following ingredients:

Water	50 – 65%
Mineral oil	10 – 30%
Emulsifiers	8 – 25%
Sodium salt	0 – 1.5%

Figure D-6

Composition of 5 GHz Head Tissue Equivalent Matter

Note: 5 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

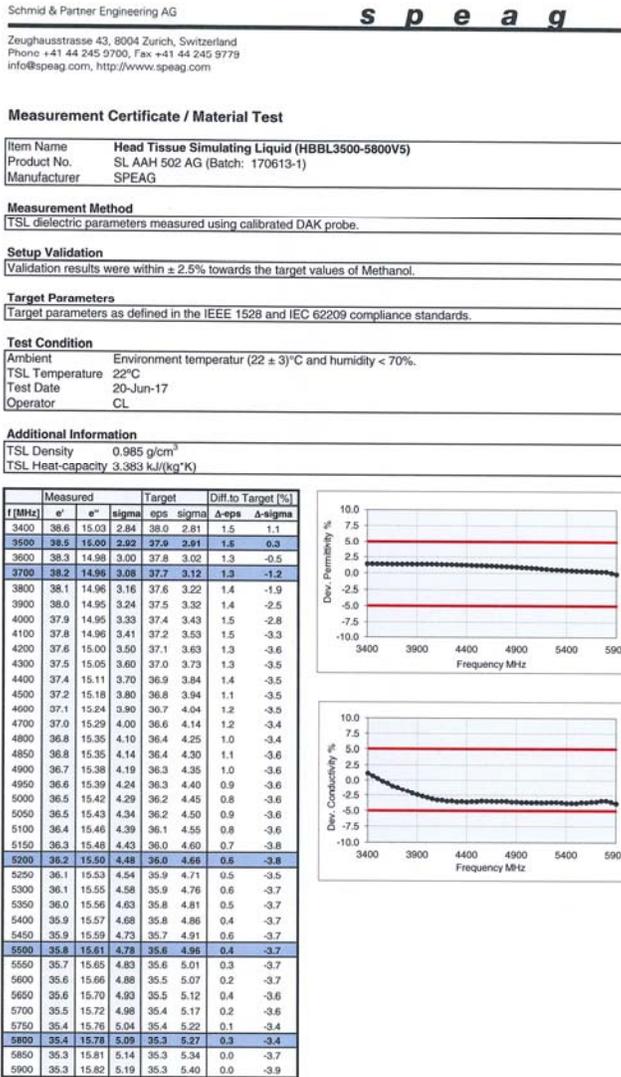


Figure D-7

5 GHz Head Tissue Equivalent Matter

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 5 of 6

3 Composition / Information on ingredients

The Item is composed of the following ingredients:

Water	60 – 80%
Esters, Emulsifiers, Inhibitors	20 – 40%
Sodium salt	0 – 1.5%

Figure D-8
Composition of 5 GHz Body Tissue Equivalent Matter

Note: 5 GHz Body liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

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Measurement Certificate / Material Test

Item Name	Body Tissue Simulating Liquid (MBBL3500-5800V5)
Product No.	SL AAM 501 EA (Batch: 180423-2)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters

Target parameters as defined in the KDB 865664 compliance standard.

Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	25-Apr-18
Operator	WM

Additional Information

TSL Density	0.996 g/cm ³
TSL Heat-capacity	3.765 kJ/(kg·K)

f [MHz]	Measured		Target		Diff.to Target [%]	
	e'	e''	eps	sigma	Δ-eps	Δ-sigma
3400	50.7	16.46	3.11	51.5	3.20	-1.5 -2.7
3500	50.5	16.50	3.21	51.3	3.31	-1.6 -3.1
3600	50.4	16.56	3.32	51.2	3.43	-1.5 -3.2
3700	50.3	16.62	3.42	51.1	3.55	-1.5 -3.6
3800	50.2	16.72	3.53	50.9	3.66	-1.4 -3.7
3900	50.1	16.81	3.65	50.8	3.78	-1.3 -3.5
4000	49.9	16.93	3.77	50.6	3.90	-1.5 -3.3
4100	49.8	17.05	3.89	50.5	4.01	-1.4 -3.1
4200	49.6	17.18	4.01	50.4	4.13	-1.5 -2.9
4300	49.5	17.32	4.14	50.2	4.25	-1.5 -2.5
4400	49.3	17.46	4.27	50.1	4.37	-1.6 -2.2
4500	49.2	17.59	4.40	50.0	4.48	-1.5 -1.8
4600	49.0	17.73	4.54	49.8	4.60	-1.7 -1.3
4700	48.8	17.86	4.67	49.7	4.72	-1.8 -1.0
4800	48.6	17.99	4.80	49.6	4.83	-1.9 -0.7
4850	48.5	18.05	4.87	49.5	4.89	-2.0 -0.4
4900	48.4	18.11	4.94	49.4	4.95	-2.1 -0.2
4950	48.3	18.17	5.00	49.4	5.01	-2.1 -0.1
5000	48.2	18.23	5.07	49.3	5.07	-2.2 0.1
5050	48.1	18.29	5.14	49.2	5.12	-2.3 0.3
5100	48.0	18.34	5.20	49.2	5.18	-2.3 0.3
5150	47.9	18.39	5.27	49.1	5.24	-2.4 0.6
5200	47.9	18.45	5.34	49.0	5.30	-2.3 0.8
5250	47.8	18.50	5.40	48.9	5.36	-2.3 0.8
5300	47.7	18.56	5.47	48.9	5.42	-2.4 1.0
5350	47.6	18.61	5.54	48.8	5.47	-2.5 1.2
5400	47.5	18.67	5.61	48.7	5.53	-2.5 1.4
5450	47.4	18.72	5.68	48.7	5.59	-2.6 1.6
5500	47.3	18.77	5.74	48.6	5.65	-2.7 1.8
5550	47.2	18.83	5.81	48.5	5.71	-2.8 1.8
5600	47.1	18.88	5.88	48.5	5.77	-2.8 2.0
5650	47.1	18.93	5.95	48.4	5.82	-2.7 2.1
5700	47.0	18.99	6.02	48.3	5.88	-2.8 2.3
5750	46.9	19.04	6.09	48.3	5.94	-2.8 2.5
5800	46.8	19.10	6.16	48.2	6.00	-2.9 2.7
5850	46.7	19.16	6.23	48.1	6.06	-3.0 2.8
5900	46.6	19.22	6.31	48.1	6.12	-3.0 3.2

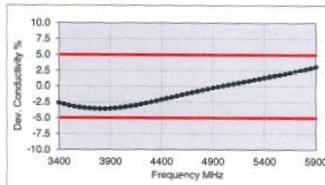
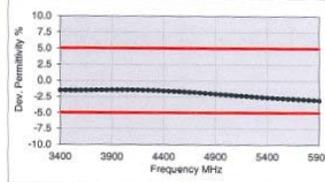


Figure D-9
5 GHz Body Tissue Equivalent Matter

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX D: Page 6 of 6

APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table E-1
SAR System Validation Summary – 1g

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ϵ_r)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
E	750	2/6/2019	3589	750	Head	0.891	43.677	PASS	PASS	PASS	N/A	N/A	N/A
D	835	10/26/2018	7357	835	Head	0.927	40.689	PASS	PASS	PASS	GMSK	PASS	N/A
D	835	4/12/2019	3914	835	Head	0.935	42.549	PASS	PASS	PASS	GMSK	PASS	N/A
L	1750	4/10/2019	7308	1750	Head	1.350	38.66	PASS	PASS	PASS	N/A	N/A	N/A
D	1900	10/25/2018	7357	1900	Head	1.433	39.444	PASS	PASS	PASS	GMSK	PASS	N/A
H	1900	7/16/2018	7409	1900	Head	1.425	40.935	PASS	PASS	PASS	GMSK	PASS	N/A
E	2450	2/5/2019	3589	2450	Head	1.825	39.836	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
E	2600	2/7/2019	3589	2600	Head	1.964	40.46	PASS	PASS	PASS	TDD	PASS	N/A
H	5250	7/5/2018	7409	5250	Head	4.492	34.994	PASS	PASS	PASS	OFDM	N/A	PASS
H	5600	7/5/2018	7409	5600	Head	4.839	34.496	PASS	PASS	PASS	OFDM	N/A	PASS
H	5750	7/5/2018	7409	5750	Head	4.995	34.288	PASS	PASS	PASS	OFDM	N/A	PASS
L	750	11/6/2018	7308	750	Body	0.962	53.923	PASS	PASS	PASS	N/A	N/A	N/A
J	835	3/10/2019	7488	835	Body	0.988	53.868	PASS	PASS	PASS	GMSK	PASS	N/A
J	1750	2/7/2019	7488	1750	Body	1.509	51.017	PASS	PASS	PASS	N/A	N/A	N/A
G	1900	8/10/2018	7410	1900	Body	1.567	52.239	PASS	PASS	PASS	GMSK	PASS	N/A
K	2450	3/6/2019	7417	2450	Body	2.039	50.67	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	3/6/2019	7417	2600	Body	2.224	50.17	PASS	PASS	PASS	TDD	PASS	N/A
L	5250	10/29/2018	7308	5250	Body	5.511	48.77	PASS	PASS	PASS	OFDM	N/A	PASS
L	5600	10/29/2018	7308	5600	Body	5.994	48.2	PASS	PASS	PASS	OFDM	N/A	PASS
L	5750	10/29/2018	7308	5750	Body	6.219	47.96	PASS	PASS	PASS	OFDM	N/A	PASS

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX E: Page 1 of 2

**Table E-2
SAR System Validation Summary – 10g**

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ϵ_r)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
G	1900	8/10/2018	7410	1900	Body	1.567	52.239	PASS	PASS	PASS	GMSK	PASS	N/A
K	2450	3/6/2019	7417	2450	Body	2.039	50.670	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
L	2450	11/6/2018	7308	2450	Body	2.022	51.315	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	3/6/2019	7417	2600	Body	2.224	50.170	PASS	PASS	PASS	TDD	PASS	N/A
L	5250	10/29/2018	7308	5250	Body	5.511	48.770	PASS	PASS	PASS	OFDM	N/A	PASS
L	5600	10/29/2018	7308	5600	Body	5.994	48.200	PASS	PASS	PASS	OFDM	N/A	PASS
L	5750	10/29/2018	7308	5750	Body	6.219	47.960	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

FCC ID: ZNFQ720TS		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/03/19 - 05/02/19	DUT Type: Portable Handset			APPENDIX E: Page 2 of 2

APPENDIX G POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

G.1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered.
2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.
3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

G.2 Distance Verification Procedure

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom.
2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 and FCC Guidance. Each applicable test position was evaluated. The distances were confirmed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.
3. Steps 1 and 2 were repeated for low, mid, and high bands, as appropriate (see note below Table G-2 for more details).
4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.

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G.3 Main Antenna Verification Summary

**Table G-1
Power Measurement Verification for Main Antenna**

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
1st		Un-triggered (Max)	Mechanism #1 (Reduced)
Grip	LTE TDD Band 41 (PC3)	24.11	23.65
Grip	LTE TDD Band 41 (PC2)	27.03	25.25

**Table G-2
Distance Measurement Verification for Main Antenna**

Mechanism(s)	Test Condition	Band	Distance Measurements (mm)		Minimum Distance per Manufacturer (mm)
			Moving Toward	Moving Away	
Grip	Body - Back Side	High	2	4	2
Grip	Body - Front Side	High	2	4	2
Grip	Body - Bottom Edge	High	4	6	4

*Note: High band refers to: LTE 41 PC3 and LTE Band 41 PC2

G.4 WIFI Verification Summary

**Table G-3
Power Measurement Verification WIFI**

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
1st		Un-triggered (Max)	Mechanism #1 (Reduced)
Held-to-Ear	802.11b	22.13	18.03
Held-to-Ear	802.11g	21.00	17.99
Held-to-Ear	802.11n (2.4GHz)	20.06	17.84
Held-to-Ear	802.11a	18.30	16.32
Held-to-Ear	802.11n (5GHz, 20MHz BW)	17.39	16.34

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APPENDIX H: DOWNLINK LTE CA RF CONDUCTED POWERS

1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.

Table 1 – Example of Exclusion Table for SISO Configurations

Index	CC	Supported Component Carriers (SCCs)					Restrictions	Component Carrier By Measurement Sequence
		CC1	CC2	CC3	CC4	CC5		
SCC01	CA_2A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC02	CA_2A-2A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC03	CA_2A-2A-4A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC04	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC05	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC06	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC07	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC08	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC09	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC10	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC11	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC12	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC13	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC14	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC15	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC16	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC17	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC18	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC19	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC20	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC21	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC22	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC23	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC24	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC25	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC26	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC27	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC28	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC29	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC30	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC31	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC32	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC33	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC34	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC35	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC36	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC37	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC38	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC39	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC40	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC41	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC42	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC43	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC44	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC45	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC46	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC47	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC48	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC49	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC50	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC51	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC52	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC53	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC54	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC55	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC56	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC57	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC58	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC59	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC60	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC61	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC62	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC63	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC64	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC65	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC66	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC67	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC68	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC69	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC70	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC71	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC72	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC73	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC74	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC75	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC76	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC77	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC78	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC79	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC80	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC81	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC82	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC83	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC84	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC85	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC86	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC87	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC88	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC89	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC90	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC91	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC92	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC93	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC94	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC95	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC96	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC97	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC98	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC99	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	
SCC100	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20				SCC01	

1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

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General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KBD 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

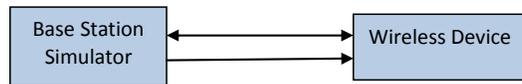


Figure 1
DL CA Power Measurement Setup

1.3 Downlink Carrier Aggregation RF Conducted Powers

1.3.1 LTE Band 71 as PCC

Table 1
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC				SCC 1			Power		
						PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_4A-71A	LTE B71	10	133172	668	QPSK	1	49	68636	622	LTE B4	20	2175	2132.5	25.10	25.18
CA_66A-71A	LTE B71	10	133172	668	QPSK	1	49	68636	622	LTE B66	20	66786	2145	25.38	25.18
CA_2A-71A	LTE B71	10	133172	668	QPSK	1	49	68636	622	LTE B2	20	900	1960	25.21	25.18

1.3.2 LTE Band 12 as PCC

Table 2
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC				SCC 1			Power		
						PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-12A (1)	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	25.14	25.41
CA_4A-12A (1)	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B4	20	2175	2132.5	24.82	25.41
CA_4A-12A (2)	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B4	20	2175	2132.5	24.82	25.41
CA_12A-66A (1)	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B66	20	66786	2145	25.46	25.41
CA_12A-66A (2)	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B66	20	66786	2145	25.46	25.41

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1.3.3 LTE Band 26 as PCC

Table 3
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-26A	LTE B26	10	26865	831.5	QPSK	1	25	8865	876.5	LTE B25	20	8365	1962.5	25.44	25.47

1.3.4 LTE Band 66 as PCC

Table 4
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B2	20	900	1960	23.90	23.89
CA_12A-66A (1)	LTE B66	1.4	132322	1745	QPSK	1	2	66786	2145	LTE B12	10	5095	737.5	23.88	23.95
CA_12A-66A (2)	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B12	10	5095	737.5	23.82	23.89
CA_66A-71A	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B71	20	68761	634.5	23.88	23.89
CA_66A-66A	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B66	20	66536	2120	23.89	23.89
CA_66B	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B66	5	66968	2163.2	23.87	23.89
CA_66C	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B66	20	66890	2155.4	23.83	23.89

1.3.5 LTE Band 25 as PCC

Table 5
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A (1)	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	LTE B25	20	8590	1985	24.00	23.87
CA_25A-26A	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	LTE B26	15	8865	876.5	23.95	23.87

1.3.6 LTE Band 41 as PCC

Table 6
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41	15	41490	2680	QPSK	1	74	41490	2680	LTE B41	20	39750	2506	24.35	24.19
CA_41C (1)	LTE B41	15	41490	2680	QPSK	1	74	41490	2680	LTE B41	20	41319	2662.9	24.40	24.19

1.3.7 LTE Band 41 Power Class 2 as PCC

Table 7
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41 PC2	15	40620	2593	QPSK	1	74	40620	2593	LTE B41 PC2	20	39750	2506	27.70	27.70
CA_41C (1)	LTE B41 PC2	15	40620	2593	QPSK	1	74	40620	2593	LTE B41 PC2	20	40791	2610.1	27.43	27.70

FCC ID: ZNFQ720TS	 PCTEST ENGINEERING LABORATORY, INC.	SAR EVALUATION REPORT		Reviewed by: Quality Manager
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