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 preambule)	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 preambule)	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, Clippin 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, Cliping 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.

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_r' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_r\varepsilon_0}{[\ln(b/a)]^2}\int_a^b\int_a^b\int_0^\pi \cos\phi' \frac{\exp\left[-j\omega r(\mu_0\varepsilon_r'\varepsilon_0)^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

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	See page 2-3	See page 2	0.1	0.1					See page 4		See page 5	
DGBE					47	31	44.92	29.44		26.7		
HEC			1	1								
NaCl			1.45	0.94	0.4	0.2	0.18	0.39		0.1		
Sucrose			57	44.9								
Polysorbate (Tween) 80												20
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		80

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2 Composition / Information on ingredients

The Item is composed of the following ingredients:

H_2O	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-methyyl-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 ± 2.5% towards the target values of Methanol.

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

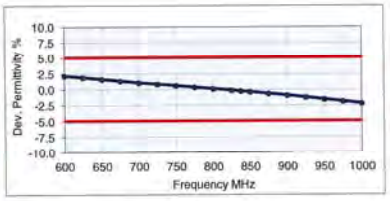
Test Condition

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)

	Measured			Target		Diff.to Target [%]	
f [MHz]	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	57.3	25.02	0.84	56.1	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



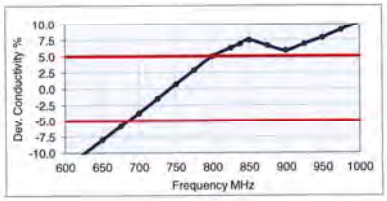


Figure D-2
750MHz Body Tissue Equivalent Matter

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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 ± 2.5% towards the target values of Methanol.

Target Parameters

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

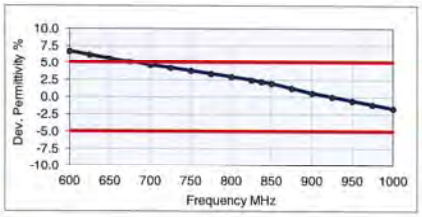
Test Condition

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)

	Measured			Target		Diff.to Target [%]	
f [MHz]	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



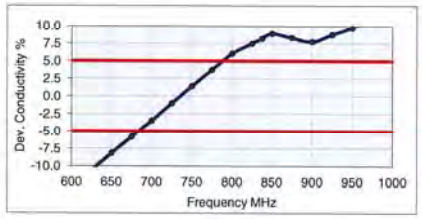


Figure D-3
750MHz Head Tissue Equivalent Matter

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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

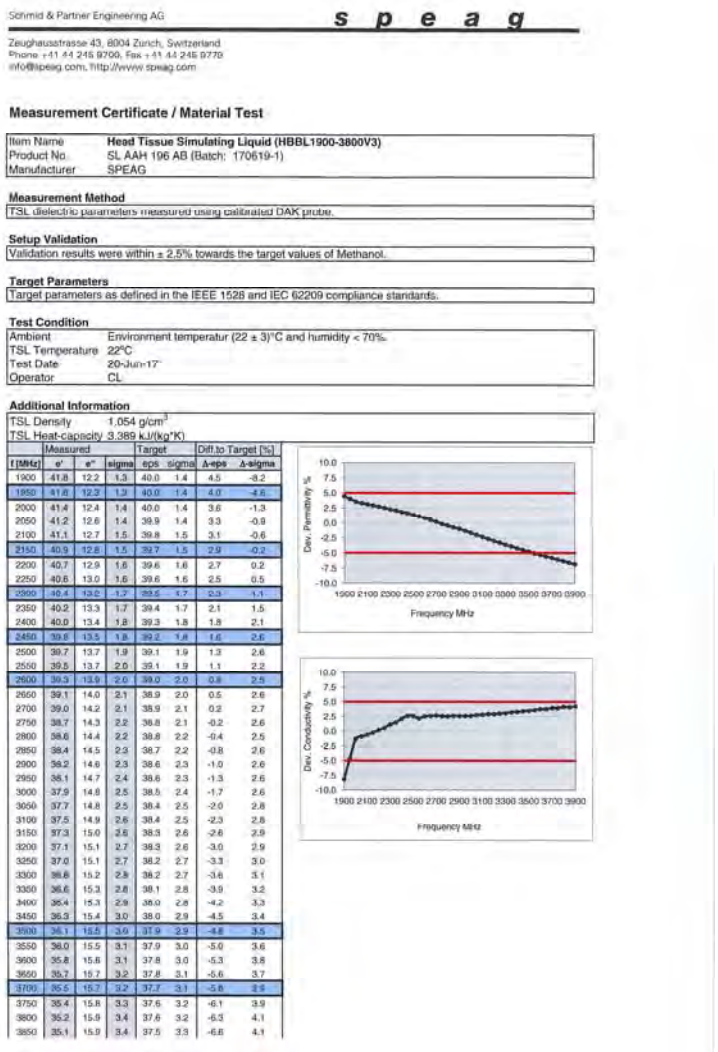
Safety relevant ingredients:

CAS-No. 55965-84-9	< 0.1 %	aqueous preparation, containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone
CAS-No. 9005-64-5	<50 %	polyoxyethylenesorbitan monolaurate

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.



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Measurement Certificate / Material Test

Item Name	**Head Tissue Simulating Liquid (HBBL1900-3800V3)**
Product No.	SL AAH 196 AB (Batch: 170619-1)
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 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	1.054 g/cm³
TSL Heat-capacity	3.389 kJ/(kg*K)

	Measured			Target		Diff.to Target [%]	
f [MHz]	ε'	ε''	sigma	eps	sigma	Δ-eps	Δ-sigma
1900	41.8	12.2	1.3	40.0	1.4	4.5	-8.2
1950	41.8	12.3	1.3	40.0	1.4	4.6	-8.6
2000	41.4	12.4	1.4	40.0	1.4	3.6	-1.3
2050	41.2	12.6	1.4	39.9	1.4	3.3	-0.9
2100	41.1	12.7	1.5	39.8	1.5	3.1	-0.6
2150	40.9	12.8	1.5	39.7	1.5	2.9	-0.2
2200	40.7	12.9	1.6	39.6	1.6	2.7	0.2
2250	40.6	13.0	1.6	39.6	1.6	2.5	0.5
2300	40.4	13.2	1.7	39.5	1.7	2.3	1.1
2350	40.2	13.3	1.7	39.4	1.7	2.1	1.5
2400	40.0	13.4	1.8	39.3	1.8	1.8	2.1
2450	39.8	13.5	1.8	39.2	1.8	1.6	2.6
2500	39.7	13.7	1.9	39.1	1.9	1.3	2.6
2550	39.5	13.7	2.0	39.1	1.9	1.1	2.2
2600	39.3	13.9	2.0	39.0	2.0	0.8	2.5
2650	39.1	14.0	2.1	38.9	2.0	0.5	2.6
2700	39.0	14.2	2.1	38.9	2.1	0.2	2.7
2750	38.7	14.3	2.2	38.8	2.1	-0.2	2.6
2800	38.6	14.4	2.2	38.8	2.2	-0.4	2.5
2850	38.4	14.5	2.3	38.7	2.2	-0.8	2.6
2900	38.2	14.6	2.3	38.6	2.3	-1.0	2.6
2950	38.1	14.7	2.4	38.6	2.3	-1.3	2.6
3000	37.9	14.8	2.5	38.5	2.4	-1.7	2.6
3050	37.7	14.8	2.5	38.4	2.5	-2.0	2.8
3100	37.5	14.9	2.6	38.4	2.5	-2.3	2.8
3150	37.3	15.0	2.6	38.3	2.6	-2.6	2.9
3200	37.1	15.1	2.7	38.3	2.6	-3.0	2.9
3250	37.0	15.1	2.7	38.2	2.7	-3.3	3.0
3300	36.8	15.2	2.8	38.2	2.7	-3.6	3.1
3350	36.6	15.3	2.8	38.1	2.8	-3.9	3.2
3400	36.4	15.3	2.9	38.0	2.8	-4.2	3.3
3450	36.3	15.4	3.0	38.0	2.9	-4.5	3.4
3500	36.1	15.5	3.0	37.9	2.9	-4.8	3.5
3550	36.0	15.5	3.1	37.9	3.0	-5.0	3.6
3600	35.8	15.6	3.1	37.8	3.0	-5.3	3.8
3650	35.7	15.7	3.2	37.8	3.1	-5.6	3.7
3700	35.5	15.7	3.2	37.7	3.1	-5.8	3.9
3750	35.4	15.8	3.3	37.6	3.2	-6.1	3.9
3800	35.2	15.9	3.4	37.6	3.2	-6.3	4.1
3850	35.1	15.9	3.4	37.5	3.3	-6.6	4.1

Figure D-5
2.4 GHz Head Tissue Equivalent Matter

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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: 5GHz 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.

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Measurement Certificate / Material Test

Item Name	**Head Tissue Simulating Liquid (HBBL3500-5800V5)**
Product No.	SL AAH 502 AG (Batch: 170613-1)
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 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	0.985 g/cm³
TSL Heat-capacity	3.383 kJ/(kg*K)

	Measured			Target		Diff.to Target [%]	
f [MHz]	ε'	ε''	sigma	eps	sigma	Δ-eps	Δ-sigma
3400	38.6	15.03	2.84	38.0	2.81	1.5	1.1
3500	38.5	15.00	2.92	37.9	2.81	1.6	0.3
3600	38.3	14.98	3.00	37.8	3.02	1.3	-0.5
3700	38.2	14.96	3.08	37.7	3.12	1.3	-1.2
3800	38.1	14.96	3.16	37.6	3.22	1.4	-1.9
3900	38.0	14.95	3.24	37.5	3.32	1.4	-2.5
4000	37.9	14.95	3.33	37.4	3.43	1.5	-2.8
4100	37.8	14.96	3.41	37.2	3.53	1.5	-3.3
4200	37.6	15.00	3.50	37.1	3.63	1.3	-3.6
4300	37.5	15.05	3.60	37.0	3.73	1.3	-3.5
4400	37.4	15.11	3.70	36.9	3.84	1.4	-3.5
4500	37.2	15.18	3.80	36.8	3.94	1.1	-3.5
4600	37.1	15.24	3.90	36.7	4.04	1.2	-3.5
4700	37.0	15.29	4.00	36.6	4.14	1.2	-3.4
4800	36.8	15.35	4.10	36.4	4.25	1.0	-3.4
4850	36.8	15.35	4.14	36.4	4.30	1.1	-3.6
4900	36.7	15.38	4.19	36.3	4.35	1.0	-3.6
4950	36.6	15.39	4.24	36.3	4.40	0.9	-3.6
5000	36.5	15.42	4.29	36.2	4.45	0.8	-3.6
5050	36.5	15.43	4.34	36.2	4.50	0.9	-3.6
5100	36.4	15.46	4.39	36.1	4.55	0.8	-3.6
5150	36.3	15.48	4.43	36.0	4.60	0.7	-3.8
5200	36.2	15.50	4.48	36.0	4.66	0.6	-3.8
5250	36.1	15.53	4.54	35.9	4.71	0.5	-3.5
5300	36.1	15.55	4.58	35.9	4.76	0.6	-3.7
5350	36.0	15.56	4.63	35.8	4.81	0.5	-3.7
5400	35.9	15.57	4.68	35.8	4.86	0.4	-3.7
5450	35.9	15.59	4.73	35.7	4.91	0.6	-3.7
5500	35.8	15.61	4.78	35.6	4.96	0.4	-3.7
5550	35.7	15.65	4.83	35.6	5.01	0.3	-3.7
5600	35.6	15.66	4.88	35.5	5.07	0.2	-3.7
5650	35.6	15.70	4.93	35.5	5.12	0.4	-3.8
5700	35.5	15.72	4.98	35.4	5.17	0.2	-3.8
5750	35.4	15.76	5.04	35.4	5.22	0.1	-3.4
5800	35.4	15.78	5.09	35.3	5.27	0.3	-3.4
5850	35.3	15.81	5.14	35.3	5.34	0.0	-3.7
5900	35.3	15.82	5.19	35.3	5.40	0.0	-3.9

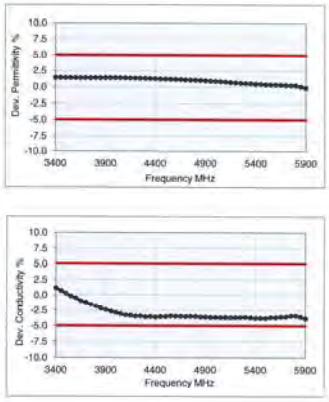

Figure D-7
5GHz Head Tissue Equivalent Matter

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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

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE TYPE	PROBE CAL. POINT		COND.	PERM.	CW VALIDATION			MOD. VALIDATION		
							(σ)	(εr)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
E	750	3/11/2018	3213	ES3DV3	750	Head	0.890	40.788	PASS	PASS	PASS	N/A	N/A	N/A
E	835	3/5/2018	3213	ES3DV3	835	Head	0.925	43.335	PASS	PASS	PASS	GMSK	PASS	N/A
H	1750	7/16/2018	7409	EX3DV4	1750	Head	1.331	41.186	PASS	PASS	PASS	N/A	N/A	N/A
H	1900	7/16/2018	7409	EX3DV4	1900	Head	1.425	40.935	PASS	PASS	PASS	GMSK	PASS	N/A
G	2450	8/7/2018	7410	EX3DV4	2450	Head	1.839	39.586	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
E	2600	8/7/2018	3213	ES3DV3	2600	Head	1.955	38.813	PASS	PASS	PASS	TDD	PASS	N/A
H	5250	7/5/2018	7409	EX3DV4	5250	Head	4.492	34.994	PASS	PASS	PASS	OFDM	N/A	PASS
H	5600	7/5/2018	7409	EX3DV4	5600	Head	4.839	34.496	PASS	PASS	PASS	OFDM	N/A	PASS
H	5750	7/5/2018	7409	EX3DV4	5750	Head	4.995	34.288	PASS	PASS	PASS	OFDM	N/A	PASS
H	750	7/11/2018	7409	EX3DV4	750	Body	0.965	54.140	PASS	PASS	PASS	N/A	N/A	N/A
I	835	8/8/2018	7406	EX3DV4	835	Body	0.980	53.497	PASS	PASS	PASS	GMSK	PASS	N/A
K	1750	4/20/2018	3319	ES3DV3	1750	Body	1.500	51.450	PASS	PASS	PASS	N/A	N/A	N/A
E	1750	7/24/2018	3213	ES3DV3	1750	Body	1.488	50.923	PASS	PASS	PASS	N/A	N/A	N/A
I	1750	7/30/2018	7406	EX3DV4	1750	Body	1.518	52.691	PASS	PASS	PASS	N/A	N/A	N/A
I	1900	6/18/2018	7406	EX3DV4	1900	Body	1.575	51.579	PASS	PASS	PASS	GMSK	PASS	N/A
E	1900	8/9/2018	3213	ES3DV3	1900	Body	1.570	51.136	PASS	PASS	PASS	GMSK	PASS	N/A
K	2450	4/3/2018	3319	ES3DV3	2450	Body	2.043	51.130	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	4/3/2018	3319	ES3DV3	2600	Body	2.225	50.665	PASS	PASS	PASS	TDD	PASS	N/A
D	5250	6/11/2018	7357	EX3DV4	5250	Body	5.529	48.096	PASS	PASS	PASS	OFDM	N/A	PASS
D	5600	6/11/2018	7357	EX3DV4	5600	Body	6.007	47.521	PASS	PASS	PASS	OFDM	N/A	PASS
D	5750	6/11/2018	7357	EX3DV4	5750	Body	6.214	47.275	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.

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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)	
		Un-triggered (Max)	Mechanism #1 (Reduced)
Hotspot On	UMTS 1750	23.59	19.69
Hotspot On	UMTS 1900	22.37	18.34
Hotspot On	LTE FDD Band 66	23.89	20.09
Hotspot On	LTE FDD Band 4	23.96	19.81
Hotspot On	LTE FDD Band 2	22.67	19.16
Hotspot On	LTE FDD Band 7	22.93	19.82

G.4 WIFI Verification Summary

Table G-2
Power Measurement Verification WIFI

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
		Un-triggered (Max)	Mechanism #1 (Reduced)
Held-to-Ear	802.11b	20.95	15.70
Held-to-Ear	802.11g	19.79	15.98
Held-to-Ear	802.11n (2.4GHz)	19.94	15.87
Held-to-Ear	802.11a	17.82	13.55
Held-to-Ear	802.11n (5GHz, 20MHz BW)	16.54	13.12
Held-to-Ear	802.11ac (20MHz BW)	18.49	11.98
Held-to-Ear	802.11n (5GHz, 40MHz BW)	15.35	12.97
Held-to-Ear	802.11ac (40MHz BW)	14.65	11.64

Table G-3
Distance Measurement Verification for WIFI

Mechanism(s)	Test Condition	Band	Distance Measurements (mm)		Minimum Distance per Manufacturer (mm)
			Moving Toward	Moving Away	
Held-to-Ear	Head - Right Cheek	2.4GHz	51	71	50
Held-to-Ear	Head - Right Cheek	5GHz	52	71	50
Held-to-Ear	Head - Left Cheek	2.4GHz	52	73	50
Held-to-Ear	Head - Left Cheek	5GHz	51	73	50

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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	2CC	Supported Channel Bandwidth [MHz]		Restriction	Completely Covered by Measurement Superset
		CC1	CC2		
DCC #1	CA_2C	5, 10, 15, 20	5, 10, 15, 20		DCC #4
DCC #2	CA_2A-5A	5, 10, 15, 20	5, 10		DCC #1
DCC #3	CA_2A-12A	5, 10, 15, 20	5, 10		DCC #3
DCC #4	CA_2A-13A	5, 10, 15, 20	10		DCC #9
DCC #5	CA_2A-17A	5, 10	5, 10		No
DCC #6	CA_2A-30A	5, 10, 15, 20	5, 10		DCC #14
DCC #8	CA_2A-66A (2)	5, 10, 15, 20	5, 10, 15, 10		DCC #1
DCC #9	CA_2A-71A	5, 10, 15, 20	5, 10, 15, 20		DCC #10
DCC #10	CA_4A-4A	5, 10, 15, 20	5, 10, 15, 20		DCC #6
DCC #11	CA_4A-5A (1)	5, 10, 15, 20	5, 10		DCC #3
DCC #12	CA_4A-12A (4)	5, 10, 15, 20	5, 10		DCC #3
DCC #13	CA_4A-13A	5, 10, 15, 20	10		DCC #9
DCC #14	CA_4A-17A	5, 10	5, 10	B17 SCC Only	No
DCC #15	CA_5B	5, 10	5, 10		DCC #1
DCC #16	CA_5A-25A	5, 10	5, 10, 15, 20		No
DCC #17	CA_7C	15, 20	15, 20		No
DCC #18	CA_7A-7A (1)	5, 10, 15, 20	5, 10, 15, 20		No
DCC #19	CA_7A-12A	5, 10, 15, 20	5, 10		DCC #12
DCC #20	CA_12B	5	5, 10		DCC #13
DCC #21	CA_12A-25A	5, 10	5, 10, 15, 20		No
DCC #22	CA_12A-30A	5, 10	5, 10		DCC #14
DCC #23	CA_41A-41A (1)	5, 10, 15, 20	5, 10, 15, 20		No

Index	3CC	Supported Channel Bandwidth [MHz]			Restriction	Completely Covered by Measurement Superset
		CC1	CC2	CC3		
CCC #1	CA_2A-2A-4A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		DCC #3
CCC #2	CA_2A-2A-5A	5, 10, 15, 20	5, 10, 15, 20	5, 10		DCC #1
CCC #3	CA_2A-2A-12A	5, 10, 15, 20	5, 10, 15, 20	5, 10		No
CCC #6	CA_2C-66A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #5	CA_2A-2A-71A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #6	CA_2A-4A-4A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #7	CA_2A-4A-5A	5, 10, 15, 20	5, 10, 15, 20	5, 10		DCC #1
CCC #8	CA_2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20	5, 10		No
CCC #9	CA_2A-4A-13A	5, 10, 15, 20	5, 10, 15, 20	10		No
CCC #10	CA_2A-4A-71A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #11	CA_2A-5B	5, 10, 15, 20	5, 10	5, 10		DCC #5
CCC #12	CA_2A-7A-12A	5, 10, 15, 20	5, 10, 15, 20	5, 10		No
CCC #13	CA_2A-12B	5, 10, 15, 20	5	5, 10		No
CCC #14	CA_2A-12A-30A	5, 10, 15, 20	5, 10	5, 10		No
CCC #15	CA_4A-4A-5A	5, 10, 15, 20	5, 10, 15, 20	5, 10		No
CCC #16	CA_5B-30A	5, 10	5, 10	5, 10		DCC #1
CCC #17	CA_5B-66A	5, 10	5, 10	5, 10, 15, 20		DCC #1
CCC #18	CA_5A-30A-66A	5, 10	5, 10	5, 10, 15, 20		DCC #1
CCC #19	CA_12A-66C	5, 10	5, 10, 15, 20	5, 10, 15, 20		No
CCC #20	CA_66A-66A-66A	5, 10	5, 10, 15, 20	5, 10, 15, 20		DCC #9
CCC #21	CA_41D	10, 15, 20	10, 15, 20	10, 15, 20		No
CCC #22	CA_41A-41C	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #23	CA_66D	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No
CCC #24	CA_66A-66C	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		No

Index	4CC	Supported Channel Bandwidth [MHz]				Restriction	Completely Covered by Measurement Superset
		CC1	CC2	CC3	CC4		
DCC #1	CA_2A-2A-4A-5A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10		No
DCC #2	CA_2A-2A-4A-12A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10	B12 SCC Only	No
DCC #3	CA_2A-2A-5A-30A	5, 10, 15, 20	5, 10, 15, 20	5, 10	5, 10		No
DCC #4	CA_2A-2A-5A-66A	5, 10, 15, 20	5, 10, 15, 20	5, 10	5, 10, 15, 20		No
DCC #5	CA_2A-5B-30A	5, 10, 15, 20	5, 10	5, 10	5, 10		DCC #1
DCC #6	CA_2A-5B-66A	5, 10, 15, 20	5, 10	5, 10	5, 10, 15, 20		DCC #1
DCC #7	CA_5B-30A-66A	5, 10	5, 10	5, 10	5, 10		DCC #1
DCC #8	CA_5B-66A-66A	5, 10	5, 10	5, 10, 15, 20	5, 10, 15, 20		DCC #2
DCC #9	CA_5A-30A-66A-66A	5, 10	5, 10	5, 10, 15, 20	5, 10, 15, 20		No
DCC #10	CA_41E	15, 20	15, 20	15, 20	20		No

Index	SCC	Supported Channel Bandwidth [MHz]					Restriction	Completely Covered by Measurement Superset
		CC1	CC2	CC3	CC4	CC5		
SCC #1	CA_2A-5B-30A-66A	5, 10, 15, 20	5, 10	5, 10	5, 10, 15, 20			No
SCC #2	CA_2A-5B-66A-66A	5, 10, 15, 20	5, 10	5, 10	5, 10, 15, 20	5, 10, 15, 20		No

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 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.

General PCC and SCC configuration selection procedure

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- 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.
- When a device supports LTE capabilities with overlapping transmission frequency ranges, the standalone powers from the band with a larger transmission frequency range can be used to select measurement configurations for the band with the fully covered transmission frequency range.

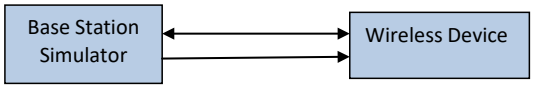

Figure 1
DL CA Power Measurement Setup

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) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B2	20	900	1960	24.45	24.40
CA_4A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B4	20	2175	2132.5	24.47	24.40
CA_66A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B66	20	66786	2145	24.43	24.40

1.3.2 LTE Band 12 as PCC

Table 2
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-12A (1)	LTE B12	5	23095	707.5	QPSK	1	0	5095	737.5	LTE B2	20	900	1960	24.73	24.69
CA_4A-12A (1)	LTE B12	5	23095	707.5	QPSK	1	0	5095	737.5	LTE B4	20	2175	2132.5	24.71	24.69
CA_4A-12A (2)	LTE B12	5	23095	707.5	QPSK	1	0	5095	737.5	LTE B4	20	2175	2132.5	24.74	24.69
CA_12A-66A (1)	LTE B12	5	23095	707.5	QPSK	1	0	5095	737.5	LTE B66	20	66786	2145	24.66	24.69
CA_12A-66A (2)	LTE B12	5	23095	707.5	QPSK	1	0	5095	737.5	LTE B66	20	66786	2145	24.67	24.69

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1.3.3 LTE Band 5 as PCC

Table 3
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-5A	LTE B5	5	20525	836.5	QPSK	1	12	2525	881.5	LTE B2	20	900	1960	24.41	24.44
CA_4A-5A (1)	LTE B5	5	20525	836.5	QPSK	1	12	2525	881.5	LTE B4	20	2175	2132.5	24.39	24.44

1.3.4 LTE Band 4 as PCC

Table 4
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B2	20	900	1960	23.92	23.96
CA_4A-4A	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B4	20	2050	2120	23.95	23.96
CA_4A-5A (1)	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B5	10	2525	881.5	23.93	23.96
CA_4A-12A (1)	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B12	10	5095	737.5	23.98	23.96
CA_4A-12A (2)	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B12	10	5095	737.5	23.98	23.96
CA_4A-71A	LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B71	20	68761	634.5	23.93	23.96

Table 5
Reduced Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B2	20	900	1960	20.24	20.23
CA_4A-4A	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B4	20	2050	2120	20.22	20.23
CA_4A-5A (1)	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B5	10	2525	881.5	20.23	20.23
CA_4A-12A (1)	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B12	10	5095	737.5	20.21	20.23
CA_4A-12A (2)	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B12	10	5095	737.5	20.21	20.23
CA_4A-71A	LTE B4	10	20300	1745	16QAM	25	25	2300	2145	LTE B71	20	68761	634.5	20.20	20.23

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1.3.5 LTE Band 66 as PCC

Table 6
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B2	20	900	1960	23.93	23.96
CA_12A-66A (1)	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B12	10	5095	737.5	23.90	23.96
CA_12A-66A (2)	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B12	10	5095	737.5	23.90	23.96
CA_66A-66A	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B66	20	66536	2120	23.93	23.96
CA_66A-71A	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B71	20	68761	634.5	23.90	23.96
CA_66B	LTE B66	15	132597	1772.5	QPSK	1	36	67061	2172.5	LTE B66	5	66968	2163.2	23.80	23.82
CA_66C	LTE B66	20	132572	1770	QPSK	1	99	67036	2170	LTE B66	20	66838	2150.2	23.92	23.96

Table 7
Reduced Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B2	20	900	1960	20.24	20.23
CA_12A-66A (1)	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B12	10	5095	737.5	20.27	20.23
CA_12A-66A (2)	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B12	10	5095	737.5	20.27	20.23
CA_66A-66A	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B66	20	67236	2190	20.22	20.23
CA_66A-71A	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B71	20	68761	634.5	20.26	20.23
CA_66B	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B66	10	66687	2135.1	20.21	20.23
CA_66C	LTE B66	10	132322	1745	16QAM	25	25	66786	2145	LTE B66	20	66642	2130.6	20.23	20.23

1.3.6 LTE Band 2 as PCC

Table 8
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	10	19150	1905	QPSK	1	0	1150	1985	LTE B2	20	700	1940	22.76	22.80
CA_2A-4A	LTE B2	1.4	19193	1909.3	QPSK	1	0	1193	1989.3	LTE B4	20	2175	2132.5	22.77	22.84
CA_2A-5A	LTE B2	10	19150	1905	QPSK	1	0	1150	1985	LTE B5	10	2525	881.5	22.80	22.80
CA_2A-12A (1)	LTE B2	10	19150	1905	QPSK	1	0	1150	1985	LTE B12	10	5095	737.5	22.82	22.80
CA_2A-66A	LTE B2	1.4	19193	1909.3	QPSK	1	0	1193	1989.3	LTE B66	20	66786	2145	22.72	22.84
CA_2A-71A	LTE B2	10	19150	1905	QPSK	1	0	1150	1985	LTE B71	20	68761	634.5	22.75	22.80

Table 9
Reduced Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B2	20	700	1940	19.43	19.42
CA_2A-4A	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B4	20	2175	2132.5	19.39	19.42
CA_2A-5A	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B5	10	2525	881.5	19.28	19.42
CA_2A-12A (1)	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B12	10	5095	737.5	19.37	19.42
CA_2A-66A	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B66	20	66786	2145	19.34	19.42
CA_2A-71A	LTE B2	20	19100	1900	16QAM	1	50	1100	1980	LTE B71	20	68761	634.5	19.33	19.42

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