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10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.87	68.57	16.07	0.00	150.0	± 9.6 %
		Y	0.68	65.20	13.52		150.0	
		Z	0.87	67.82	15.83		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	131.24	33.42	3.29	80.0	± 9.6 %
		Y	35.87	117.39	30.79		80.0	
		Z	100.00	130.05	33.95		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.66	60.00	7.14	3.23	80.0	± 9.6 %
		Y	0.79	61.10	8.71		80.0	
		Z	8.69	83.27	17.68		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.68	60.00	6.41	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.47		80.0	
		Z	2.00	67.52	11.81		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	127.01	31.31	3.23	80.0	± 9.6 %
		Y	22.40	108.37	27.69		80.0	
		Z	100.00	127.29	32.50		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.66	60.00	7.05	3.23	80.0	± 9.6 %
		Y	0.73	60.44	8.30		80.0	
		Z	4.63	76.72	15.62		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.69	60.00	6.36	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.41		80.0	
		Z	1.67	65.70	11.02		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	127.52	31.53	3.23	80.0	± 9.6 %
		Y	31.48	113.23	28.92		80.0	
		Z	100.00	127.61	32.64		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	7.08	3.23	80.0	± 9.6 %
		Y	0.75	60.65	8.44		80.0	
		Z	5.35	78.25	16.12		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.69	60.00	6.36	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.41		80.0	
		Z	1.67	65.74	11.03		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	127.55	31.53	3.23	80.0	± 9.6 %
		Y	32.51	113.69	29.02		80.0	
		Z	100.00	127.65	32.64		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	7.06	3.23	80.0	± 9.6 %
		Y	0.74	60.60	8.40		80.0	
		Z	5.27	78.07	16.05		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.69	60.00	6.34	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.40		80.0	
		Z	1.66	65.66	10.98		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	127.50	31.51	3.23	80.0	± 9.6 %
		Y	31.93	113.42	28.95		80.0	
		Z	100.00	127.61	32.62		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	7.06	3.23	80.0	± 9.6 %
		Y	0.74	60.58	8.38		80.0	
		Z	5.19	77.93	16.01		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.69	60.00	6.34	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.40		80.0	
		Z	1.65	65.61	10.97		80.0	



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10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	7.03	3.23	80.0	± 9.6 %
		Y	0.73	60.41	8.27		80.0	
		Z	4.63	76.73	15.60		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.69	60.00	6.32	3.23	80.0	± 9.6 %
		Y	0.71	60.00	7.39		80.0	
		Z	1.63	65.53	10.92		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	16.00	99.74	26.44	3.23	80.0	± 9.6 %
		Y	11.93	95.50	25.33		80.0	
		Z	7.94	87.98	23.97		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.79	80.48	17.75	3.23	80.0	± 9.6 %
		Y	4.94	77.21	17.06		80.0	
		Z	8.84	84.07	20.72		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.30	71.66	14.25	3.23	80.0	± 9.6 %
		Y	2.92	70.45	14.14		80.0	
		Z	6.89	79.97	18.98		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.71	66.57	13.32	2.23	80.0	± 9.6 %
		Y	1.47	64.69	12.19		80.0	
		Z	3.77	76.31	18.90		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.97	64.83	11.62	2.23	80.0	± 9.6 %
		Y	1.80	63.81	11.12		80.0	
		Z	4.65	74.88	17.60		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.88	64.05	11.24	2.23	80.0	± 9.6 %
		Y	1.74	63.14	10.78		80.0	
		Z	4.29	73.52	17.08		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.42	70.99	16.75	2.23	80.0	± 9.6 %
		Y	2.20	69.63	15.96		80.0	
		Z	3.80	76.41	19.93		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.25	66.38	13.82	2.23	80.0	± 9.6 %
		Y	2.07	65.25	13.10		80.0	
		Z	3.45	71.18	17.22		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.24	65.94	13.58	2.23	80.0	± 9.6 %
		Y	2.07	64.88	12.89		80.0	
		Z	3.42	70.64	16.97		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.77	70.73	17.86	2.23	80.0	± 9.6 %
		Y	2.65	70.03	17.45		80.0	
		Z	3.79	74.17	19.68		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.87	67.90	16.40	2.23	80.0	± 9.6 %
		Y	2.78	67.42	16.09		80.0	
		Z	3.52	69.75	17.81		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.95	67.76	16.33	2.23	80.0	± 9.6 %
		Y	2.86	67.30	16.03		80.0	
		Z	3.60	69.51	17.71		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.06	69.47	17.55	2.23	80.0	± 9.6 %
		Y	2.96	68.94	17.24		80.0	
		Z	3.91	72.06	18.89		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.23	67.24	16.58	2.23	80.0	± 9.6 %
		Y	3.15	66.90	16.36		80.0	
		Z	3.81	68.69	17.61		80.0	



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10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.29	67.13	16.53	2.23	80.0	± 9.6 %
		Y	3.21	66.80	16.31		80.0	
		Z	3.87	68.53	17.55		80.0	
10494-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.27	70.74	18.00	2.23	80.0	± 9.6 %
		Y	3.15	70.13	17.67		80.0	
		Z	4.33	73.95	19.50		80.0	
10495-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.24	67.47	16.79	2.23	80.0	± 9.6 %
		Y	3.17	67.13	16.58		80.0	
		Z	3.85	69.12	17.83		80.0	
10496-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.33	67.29	16.73	2.23	80.0	± 9.6 %
		Y	3.26	66.97	16.53		80.0	
		Z	3.92	68.78	17.71		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.97	60.40	8.81	2.23	80.0	± 9.6 %
		Y	0.92	60.00	8.28		80.0	
		Z	2.78	71.82	16.09		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.11	60.00	7.28	2.23	80.0	± 9.6 %
		Y	1.10	60.00	7.02		80.0	
		Z	1.82	63.65	11.31		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.13	60.00	7.10	2.23	80.0	± 9.6 %
		Y	1.12	60.00	6.85		80.0	
		Z	1.74	62.87	10.77		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.56	70.86	17.19	2.23	80.0	± 9.6 %
		Y	2.39	69.84	16.59		80.0	
		Z	3.69	74.97	19.64		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.57	67.44	15.02	2.23	80.0	± 9.6 %
		Y	2.42	66.58	14.46		80.0	
		Z	3.48	70.59	17.44		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.61	67.24	14.84	2.23	80.0	± 9.6 %
		Y	2.45	66.39	14.29		80.0	
		Z	3.53	70.40	17.29		80.0	
10503-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.74	70.53	17.76	2.23	80.0	± 9.6 %
		Y	2.61	69.82	17.34		80.0	
		Z	3.74	73.96	19.58		80.0	
10504-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.85	67.79	16.34	2.23	80.0	± 9.6 %
		Y	2.76	67.31	16.02		80.0	
		Z	3.50	69.66	17.75		80.0	
10505-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.93	67.66	16.27	2.23	80.0	± 9.6 %
		Y	2.84	67.20	15.96		80.0	
		Z	3.58	69.42	17.66		80.0	
10506-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.25	70.60	17.92	2.23	80.0	± 9.6 %
		Y	3.13	69.98	17.59		80.0	
		Z	4.29	73.80	19.43		80.0	
10507-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.23	67.41	16.75	2.23	80.0	± 9.6 %
		Y	3.16	67.06	16.53		80.0	
		Z	3.84	69.06	17.79		80.0	



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10508-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.32	67.22	16.68	2.23	80.0	± 9.6 %
		Y	3.25	66.89	16.48		80.0	
		Z	3.91	68.71	17.66		80.0	
10509-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.67	69.70	17.56	2.23	80.0	± 9.6 %
		Y	3.56	69.21	17.30		80.0	
		Z	4.55	72.10	18.70		80.0	
10510-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.71	67.18	16.82	2.23	80.0	± 9.6 %
		Y	3.64	66.88	16.65		80.0	
		Z	4.30	68.66	17.68		80.0	
10511-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.78	67.02	16.78	2.23	80.0	± 9.6 %
		Y	3.71	66.74	16.61		80.0	
		Z	4.34	68.36	17.58		80.0	
10512-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.75	70.91	17.94	2.23	80.0	± 9.6 %
		Y	3.61	70.30	17.63		80.0	
		Z	4.87	74.09	19.36		80.0	
10513-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.59	67.30	16.88	2.23	80.0	± 9.6 %
		Y	3.52	66.98	16.70		80.0	
		Z	4.20	68.99	17.82		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.64	66.98	16.78	2.23	80.0	± 9.6 %
		Y	3.58	66.69	16.62		80.0	
		Z	4.20	68.49	17.65		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.95	63.34	14.65	0.00	150.0	± 9.6 %
		Y	0.86	62.15	13.49		150.0	
		Z	0.95	63.02	14.53		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.59	70.82	17.39	0.00	150.0	± 9.6 %
		Y	0.41	65.72	13.46		150.0	
		Z	0.57	69.76	16.78		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.79	65.16	15.25	0.00	150.0	± 9.6 %
		Y	0.68	63.22	13.51		150.0	
		Z	0.80	64.83	15.08		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.32	66.89	16.15	0.00	150.0	± 9.6 %
		Y	4.22	66.51	15.84		150.0	
		Z	4.51	66.68	16.14		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.47	67.05	16.23	0.00	150.0	± 9.6 %
		Y	4.36	66.68	15.93		150.0	
		Z	4.69	66.91	16.26		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.33	66.99	16.15	0.00	150.0	± 9.6 %
		Y	4.22	66.59	15.83		150.0	
		Z	4.54	66.87	16.18		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.26	66.96	16.13	0.00	150.0	± 9.6 %
		Y	4.15	66.55	15.81		150.0	
		Z	4.48	66.86	16.16		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.31	67.07	16.22	0.00	150.0	± 9.6 %
		Y	4.20	66.66	15.89		150.0	
		Z	4.54	66.96	16.25		150.0	

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10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.24	67.09	16.15	0.00	150.0	± 9.6 %
		Y	4.13	66.68	15.83		150.0	
		Z	4.42	66.83	16.10		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.26	67.04	16.22	0.00	150.0	± 9.6 %
		Y	4.15	66.64	15.89		150.0	
		Z	4.48	66.87	16.21		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.30	66.16	15.85	0.00	150.0	± 9.6 %
		Y	4.19	65.75	15.53		150.0	
		Z	4.47	65.93	15.81		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.41	66.43	15.96	0.00	150.0	± 9.6 %
		Y	4.30	66.01	15.64		150.0	
		Z	4.63	66.29	15.95		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.35	66.40	15.90	0.00	150.0	± 9.6 %
		Y	4.23	65.98	15.57		150.0	
		Z	4.56	66.25	15.89		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.36	66.42	15.93	0.00	150.0	± 9.6 %
		Y	4.25	65.99	15.61		150.0	
		Z	4.57	66.27	15.93		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.36	66.42	15.93	0.00	150.0	± 9.6 %
		Y	4.25	65.99	15.61		150.0	
		Z	4.57	66.27	15.93		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.32	66.43	15.91	0.00	150.0	± 9.6 %
		Y	4.21	66.00	15.57		150.0	
		Z	4.56	66.37	15.94		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.21	66.30	15.84	0.00	150.0	± 9.6 %
		Y	4.09	65.86	15.50		150.0	
		Z	4.42	66.22	15.87		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.37	66.50	15.94	0.00	150.0	± 9.6 %
		Y	4.25	66.07	15.60		150.0	
		Z	4.58	66.32	15.92		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.92	66.39	15.99	0.00	150.0	± 9.6 %
		Y	4.82	66.05	15.73		150.0	
		Z	5.10	66.37	15.98		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.96	66.51	16.05	0.00	150.0	± 9.6 %
		Y	4.86	66.16	15.78		150.0	
		Z	5.17	66.54	16.06		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.85	66.52	16.03	0.00	150.0	± 9.6 %
		Y	4.75	66.15	15.75		150.0	
		Z	5.04	66.49	16.02		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.91	66.52	16.03	0.00	150.0	± 9.6 %
		Y	4.82	66.17	15.77		150.0	
		Z	5.10	66.46	16.01		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.98	66.47	16.05	0.00	150.0	± 9.6 %
		Y	4.88	66.13	15.79		150.0	
		Z	5.19	66.48	16.06		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.91	66.43	16.04	0.00	150.0	± 9.6 %
		Y	4.81	66.08	15.78		150.0	
		Z	5.12	66.49	16.08		150.0	

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10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.90	66.36	15.99	0.00	150.0	± 9.6 %
		Y	4.80	66.01	15.73		150.0	
		Z	5.09	66.37	16.01		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.05	66.46	16.06	0.00	150.0	± 9.6 %
		Y	4.95	66.12	15.80		150.0	
		Z	5.24	66.44	16.06		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.12	66.53	16.12	0.00	150.0	± 9.6 %
		Y	5.03	66.22	15.89		150.0	
		Z	5.32	66.47	16.09		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.27	66.47	15.98	0.00	150.0	± 9.6 %
		Y	5.17	66.14	15.74		150.0	
		Z	5.41	66.49	15.98		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.43	66.88	16.14	0.00	150.0	± 9.6 %
		Y	5.34	66.58	15.92		150.0	
		Z	5.60	66.88	16.13		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.29	66.59	16.01	0.00	150.0	± 9.6 %
		Y	5.20	66.26	15.77		150.0	
		Z	5.48	66.69	16.05		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.37	66.69	16.06	0.00	150.0	± 9.6 %
		Y	5.29	66.39	15.83		150.0	
		Z	5.54	66.73	16.06		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.50	67.26	16.32	0.00	150.0	± 9.6 %
		Y	5.41	66.94	16.08		150.0	
		Z	5.76	67.57	16.45		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.35	66.76	16.11	0.00	150.0	± 9.6 %
		Y	5.27	66.47	15.89		150.0	
		Z	5.50	66.70	16.07		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.29	66.55	15.97	0.00	150.0	± 9.6 %
		Y	5.19	66.22	15.73		150.0	
		Z	5.51	66.75	16.05		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.28	66.60	15.99	0.00	150.0	± 9.6 %
		Y	5.18	66.26	15.74		150.0	
		Z	5.43	66.56	15.97		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.33	66.54	15.99	0.00	150.0	± 9.6 %
		Y	5.23	66.21	15.75		150.0	
		Z	5.51	66.59	16.01		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.68	66.80	16.06	0.00	150.0	± 9.6 %
		Y	5.60	66.49	15.83		150.0	
		Z	5.82	66.85	16.07		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.77	67.01	16.15	0.00	150.0	± 9.6 %
		Y	5.68	66.70	15.92		150.0	
		Z	5.94	67.13	16.19		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.81	67.11	16.19	0.00	150.0	± 9.6 %
		Y	5.73	66.82	15.98		150.0	
		Z	5.96	67.18	16.21		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.77	67.00	16.15	0.00	150.0	± 9.6 %
		Y	5.68	66.69	15.93		150.0	
		Z	5.93	67.09	16.19		150.0	

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10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.78	67.05	16.19	0.00	150.0	± 9.6 %
		Y	5.68	66.72	15.96		150.0	
		Z	5.98	67.25	16.28		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.80	66.98	16.20	0.00	150.0	± 9.6 %
		Y	5.70	66.67	15.98		150.0	
		Z	5.97	67.11	16.25		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.73	66.96	16.22	0.00	150.0	± 9.6 %
		Y	5.64	66.66	16.00		150.0	
		Z	5.90	67.07	16.26		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.78	67.12	16.30	0.00	150.0	± 9.6 %
		Y	5.68	66.80	16.07		150.0	
		Z	6.01	67.43	16.44		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.88	67.11	16.26	0.00	150.0	± 9.6 %
		Y	5.80	66.82	16.05		150.0	
		Z	6.21	67.65	16.51		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.63	66.89	16.27	0.46	150.0	± 9.6 %
		Y	4.54	66.57	16.00		150.0	
		Z	4.83	66.77	16.31		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	4.83	67.31	16.59	0.46	150.0	± 9.6 %
		Y	4.73	66.98	16.33		150.0	
		Z	5.06	67.21	16.62		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.66	67.11	16.39	0.46	150.0	± 9.6 %
		Y	4.57	66.78	16.12		150.0	
		Z	4.90	67.06	16.44		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.70	67.53	16.77	0.46	150.0	± 9.6 %
		Y	4.60	67.20	16.51		150.0	
		Z	4.92	67.44	16.79		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.55	66.82	16.11	0.46	150.0	± 9.6 %
		Y	4.45	66.47	15.82		150.0	
		Z	4.81	66.84	16.23		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.69	67.77	16.92	0.46	150.0	± 9.6 %
		Y	4.59	67.44	16.66		150.0	
		Z	4.88	67.54	16.86		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.69	67.54	16.80	0.46	150.0	± 9.6 %
		Y	4.59	67.20	16.53		150.0	
		Z	4.91	67.38	16.78		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.08	63.88	15.15	0.46	130.0	± 9.6 %
		Y	1.00	62.92	14.25		130.0	
		Z	1.14	64.25	15.52		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.08	64.40	15.50	0.46	130.0	± 9.6 %
		Y	1.00	63.37	14.56		130.0	
		Z	1.15	64.80	15.87		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.29	80.57	21.65	0.46	130.0	± 9.6 %
		Y	0.81	72.73	17.38		130.0	
		Z	1.91	85.72	23.49		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.13	69.56	18.30	0.46	130.0	± 9.6 %
		Y	0.99	67.49	16.76		130.0	
		Z	1.24	70.37	18.75		130.0	



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10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.40	66.63	16.27	0.46	130.0	± 9.6 %
		Y	4.32	66.34	16.03		130.0	
		Z	4.62	66.57	16.38		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.44	66.84	16.36	0.46	130.0	± 9.6 %
		Y	4.35	66.55	16.13		130.0	
		Z	4.65	66.73	16.45		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.60	67.07	16.50	0.46	130.0	± 9.6 %
		Y	4.51	66.79	16.28		130.0	
		Z	4.85	67.02	16.61		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.50	67.22	16.62	0.46	130.0	± 9.6 %
		Y	4.42	66.93	16.38		130.0	
		Z	4.75	67.17	16.71		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.25	66.37	15.84	0.46	130.0	± 9.6 %
		Y	4.17	66.06	15.59		130.0	
		Z	4.51	66.47	16.03		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.28	66.41	15.86	0.46	130.0	± 9.6 %
		Y	4.20	66.10	15.60		130.0	
		Z	4.56	66.52	16.06		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.41	67.30	16.59	0.46	130.0	± 9.6 %
		Y	4.33	67.01	16.36		130.0	
		Z	4.64	67.21	16.66		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.18	66.12	15.61	0.46	130.0	± 9.6 %
		Y	4.09	65.81	15.35		130.0	
		Z	4.45	66.23	15.83		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.40	66.63	16.27	0.46	130.0	± 9.6 %
		Y	4.32	66.34	16.03		130.0	
		Z	4.62	66.57	16.38		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.44	66.84	16.36	0.46	130.0	± 9.6 %
		Y	4.35	66.55	16.13		130.0	
		Z	4.65	66.73	16.45		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.60	67.07	16.50	0.46	130.0	± 9.6 %
		Y	4.51	66.79	16.28		130.0	
		Z	4.85	67.02	16.61		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.50	67.22	16.62	0.46	130.0	± 9.6 %
		Y	4.42	66.93	16.38		130.0	
		Z	4.75	67.17	16.71		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.25	66.37	15.84	0.46	130.0	± 9.6 %
		Y	4.17	66.06	15.59		130.0	
		Z	4.51	66.47	16.03		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.28	66.41	15.86	0.46	130.0	± 9.6 %
		Y	4.20	66.10	15.60		130.0	
		Z	4.56	66.52	16.06		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.41	67.30	16.59	0.46	130.0	± 9.6 %
		Y	4.33	67.01	16.36		130.0	
		Z	4.64	67.21	16.66		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.18	66.12	15.61	0.46	130.0	± 9.6 %
		Y	4.09	65.81	15.35		130.0	
		Z	4.45	66.23	15.83		130.0	





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10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.56	66.73	16.40	0.46	130.0	± 9.6 %
		Y	4.49	66.46	16.18		130.0	
		Z	4.77	66.63	16.48		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.68	67.01	16.52	0.46	130.0	± 9.6 %
		Y	4.60	66.74	16.30		130.0	
		Z	4.93	66.97	16.61		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.60	66.88	16.37	0.46	130.0	± 9.6 %
		Y	4.51	66.60	16.15		130.0	
		Z	4.85	66.88	16.49		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.65	67.06	16.54	0.46	130.0	± 9.6 %
		Y	4.57	66.79	16.33		130.0	
		Z	4.90	67.04	16.65		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.62	67.04	16.45	0.46	130.0	± 9.6 %
		Y	4.53	66.76	16.23		130.0	
		Z	4.87	66.99	16.54		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.55	66.99	16.44	0.46	130.0	± 9.6 %
		Y	4.46	66.71	16.21		130.0	
		Z	4.80	66.99	16.55		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.50	66.86	16.29	0.46	130.0	± 9.6 %
		Y	4.41	66.57	16.05		130.0	
		Z	4.75	66.89	16.43		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.49	67.11	16.57	0.46	130.0	± 9.6 %
		Y	4.41	66.82	16.34		130.0	
		Z	4.74	67.12	16.69		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.24	67.17	16.64	0.46	130.0	± 9.6 %
		Y	5.18	66.96	16.48		130.0	
		Z	5.44	67.18	16.69		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.32	67.47	16.76	0.46	130.0	± 9.6 %
		Y	5.27	67.29	16.61		130.0	
		Z	5.56	67.53	16.84		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.24	67.29	16.69	0.46	130.0	± 9.6 %
		Y	5.18	67.09	16.53		130.0	
		Z	5.46	67.32	16.75		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.32	67.29	16.61	0.46	130.0	± 9.6 %
		Y	5.26	67.08	16.44		130.0	
		Z	5.55	67.35	16.68		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.39	67.60	16.90	0.46	130.0	± 9.6 %
		Y	5.33	67.39	16.74		130.0	
		Z	5.63	67.64	16.96		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.27	67.22	16.69	0.46	130.0	± 9.6 %
		Y	5.20	66.98	16.50		130.0	
		Z	5.45	67.16	16.70		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.32	67.35	16.75	0.46	130.0	± 9.6 %
		Y	5.25	67.14	16.59		130.0	
		Z	5.55	67.45	16.85		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.11	66.82	16.34	0.46	130.0	± 9.6 %
		Y	5.05	66.61	16.17		130.0	
		Z	5.31	66.83	16.40		130.0	



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10607-AAB	IIEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.41	66.09	16.05	0.46	130.0	± 9.6 %
		Y	4.33	65.79	15.81		130.0	
		Z	4.61	65.96	16.11		130.0	
10608-AAB	IIEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.55	66.40	16.19	0.46	130.0	± 9.6 %
		Y	4.46	66.10	15.95		130.0	
		Z	4.80	66.36	16.28		130.0	
10609-AAB	IIEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.45	66.24	16.01	0.46	130.0	± 9.6 %
		Y	4.36	65.92	15.76		130.0	
		Z	4.69	66.21	16.12		130.0	
10610-AAB	IIEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.50	66.41	16.19	0.46	130.0	± 9.6 %
		Y	4.41	66.10	15.95		130.0	
		Z	4.74	66.37	16.28		130.0	
10611-AAB	IIEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.41	66.20	16.02	0.46	130.0	± 9.6 %
		Y	4.32	65.88	15.78		130.0	
		Z	4.65	66.17	16.12		130.0	
10612-AAB	IIEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.40	66.31	16.06	0.46	130.0	± 9.6 %
		Y	4.30	65.98	15.80		130.0	
		Z	4.66	66.33	16.17		130.0	
10613-AAB	IIEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.39	66.13	15.90	0.46	130.0	± 9.6 %
		Y	4.30	65.80	15.64		130.0	
		Z	4.67	66.21	16.05		130.0	
10614-AAB	IIEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.37	66.38	16.16	0.46	130.0	± 9.6 %
		Y	4.27	66.05	15.91		130.0	
		Z	4.61	66.39	16.28		130.0	
10615-AAB	IIEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.40	66.02	15.78	0.46	130.0	± 9.6 %
		Y	4.31	65.70	15.53		130.0	
		Z	4.66	66.02	15.91		130.0	
10616-AAB	IIEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.05	66.37	16.23	0.46	130.0	± 9.6 %
		Y	4.97	66.11	16.03		130.0	
		Z	5.26	66.43	16.30		130.0	
10617-AAB	IIEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.09	66.48	16.26	0.46	130.0	± 9.6 %
		Y	5.01	66.22	16.06		130.0	
		Z	5.33	66.60	16.36		130.0	
10618-AAB	IIEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.00	66.56	16.31	0.46	130.0	± 9.6 %
		Y	4.92	66.28	16.11		130.0	
		Z	5.21	66.61	16.38		130.0	
10619-AAB	IIEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.02	66.38	16.16	0.46	130.0	± 9.6 %
		Y	4.95	66.13	15.97		130.0	
		Z	5.23	66.42	16.22		130.0	
10620-AAB	IIEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.09	66.37	16.20	0.46	130.0	± 9.6 %
		Y	5.01	66.12	16.01		130.0	
		Z	5.32	66.46	16.29		130.0	
10621-AAB	IIEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.10	66.50	16.39	0.46	130.0	± 9.6 %
		Y	5.02	66.25	16.20		130.0	
		Z	5.32	66.59	16.47		130.0	
10622-AAB	IIEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.09	66.58	16.42	0.46	130.0	± 9.6 %
		Y	5.01	66.32	16.23		130.0	
		Z	5.33	66.74	16.54		130.0	



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10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.98	66.14	16.06	0.46	130.0	± 9.6 %
		Y	4.90	65.88	15.86		130.0	
		Z	5.21	66.29	16.19		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.17	66.40	16.26	0.46	130.0	± 9.6 %
		Y	5.10	66.15	16.07		130.0	
		Z	5.40	66.48	16.34		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.26	66.52	16.38	0.46	130.0	± 9.6 %
		Y	5.18	66.28	16.20		130.0	
		Z	5.75	67.39	16.85		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.38	66.40	16.18	0.46	130.0	± 9.6 %
		Y	5.31	66.15	16.00		130.0	
		Z	5.56	66.50	16.26		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.60	66.96	16.44	0.46	130.0	± 9.6 %
		Y	5.53	66.75	16.28		130.0	
		Z	5.79	67.03	16.48		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.37	66.37	16.07	0.46	130.0	± 9.6 %
		Y	5.30	66.11	15.88		130.0	
		Z	5.59	66.59	16.20		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.47	66.54	16.15	0.46	130.0	± 9.6 %
		Y	5.41	66.33	15.99		130.0	
		Z	5.66	66.63	16.22		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	5.68	67.37	16.57	0.46	130.0	± 9.6 %
		Y	5.61	67.15	16.41		130.0	
		Z	6.05	68.00	16.90		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.68	67.48	16.82	0.46	130.0	± 9.6 %
		Y	5.60	67.24	16.65		130.0	
		Z	5.98	67.87	17.02		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.60	67.16	16.68	0.46	130.0	± 9.6 %
		Y	5.54	66.97	16.53		130.0	
		Z	5.76	67.09	16.65		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.40	66.46	16.15	0.46	130.0	± 9.6 %
		Y	5.32	66.20	15.96		130.0	
		Z	5.66	66.76	16.32		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.43	66.66	16.30	0.46	130.0	± 9.6 %
		Y	5.36	66.40	16.12		130.0	
		Z	5.64	66.78	16.39		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.29	65.89	15.64	0.46	130.0	± 9.6 %
		Y	5.21	65.62	15.45		130.0	
		Z	5.52	66.14	15.81		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.81	66.74	16.26	0.46	130.0	± 9.6 %
		Y	5.75	66.51	16.10		130.0	
		Z	5.97	66.86	16.34		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.92	67.03	16.39	0.46	130.0	± 9.6 %
		Y	5.86	66.80	16.23		130.0	
		Z	6.12	67.23	16.51		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.96	67.11	16.41	0.46	130.0	± 9.6 %
		Y	5.89	66.88	16.25		130.0	
		Z	6.12	67.21	16.48		130.0	



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10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.91	66.98	16.39	0.46	130.0	± 9.6 %
		Y	5.84	66.75	16.23		130.0	
		Z	6.10	67.16	16.50		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.87	66.86	16.27	0.46	130.0	± 9.6 %
		Y	5.79	66.60	16.09		130.0	
		Z	6.10	67.18	16.45		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.96	66.94	16.33	0.46	130.0	± 9.6 %
		Y	5.90	66.72	16.18		130.0	
		Z	6.15	67.08	16.42		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.99	67.15	16.61	0.46	130.0	± 9.6 %
		Y	5.92	66.92	16.45		130.0	
		Z	6.19	67.33	16.71		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.84	66.83	16.34	0.46	130.0	± 9.6 %
		Y	5.77	66.59	16.17		130.0	
		Z	6.03	67.02	16.45		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.89	67.02	16.45	0.46	130.0	± 9.6 %
		Y	5.82	66.76	16.27		130.0	
		Z	6.18	67.50	16.71		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.01	67.04	16.43	0.46	130.0	± 9.6 %
		Y	5.95	66.83	16.28		130.0	
		Z	6.48	67.98	16.92		130.0	
10646-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	7.70	95.53	33.78	9.30	60.0	± 9.6 %
		Y	6.86	91.23	32.03		60.0	
		Z	21.92	116.52	40.27		60.0	
10647-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	6.53	92.04	32.66	9.30	60.0	± 9.6 %
		Y	6.02	88.67	31.21		60.0	
		Z	18.18	112.72	39.29		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.49	61.53	8.17	0.00	150.0	± 9.6 %
		Y	0.39	60.00	6.31		150.0	
		Z	0.66	63.15	10.45		150.0	
10652-AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.19	66.37	15.95	2.23	80.0	± 9.6 %
		Y	3.09	65.90	15.62		80.0	
		Z	3.59	66.99	16.74		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.74	65.68	16.24	2.23	80.0	± 9.6 %
		Y	3.66	65.37	16.03		80.0	
		Z	4.09	66.23	16.79		80.0	
10654-AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.76	65.29	16.28	2.23	80.0	± 9.6 %
		Y	3.69	65.01	16.09		80.0	
		Z	4.06	65.86	16.78		80.0	
10655-AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.83	65.21	16.31	2.23	80.0	± 9.6 %
		Y	3.77	64.93	16.13		80.0	
		Z	4.12	65.84	16.81		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	5.18	73.54	13.48	10.00	50.0	± 9.6 %
		Y	12.90	83.93	17.73		50.0	
		Z	100.00	112.89	26.88		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	100.00	100.82	19.67	6.99	60.0	± 9.6 %
		Y	100.00	104.30	21.46		60.0	
		Z	100.00	113.27	26.00		60.0	

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10660-AAA	Pulse Waveform (200Hz, 40%)	X	100.00	100.08	18.20	3.98	80.0	± 9.6 %
		Y	100.00	101.00	18.65		80.0	
		Z	100.00	116.39	26.02		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	100.00	99.50	17.02	2.22	100.0	± 9.6 %
		Y	100.00	91.55	13.76		100.0	
		Z	100.00	121.08	26.66		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	100.00	89.20	12.01	0.97	120.0	± 9.6 %
		Y	12.37	204.34	5.78		120.0	
		Z	100.00	125.71	26.63		120.0	

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

**Calibration Laboratory of  
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Engineering AG**  
Zeughausstrasse 43, 8004 Zurich, Switzerland



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Cient **Auden**

Certificate No: **DAE4-916\_Dec17**

## CALIBRATION CERTIFICATE

Object **DAE4 - SD 000 D04 BK - SN: 916**

Calibration procedure(s) **QA CAL-06.v29  
Calibration procedure for the data acquisition electronics (DAE)**



Calibration date: **December 14, 2017**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	31-Aug-17 (No:21092)	Aug-18
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	05-Jan-17 (in house check)	In house check: Jan-18
Calibrator Box V2.1	SE UMS 006 AA 1002	05-Jan-17 (in house check)	In house check: Jan-18

Calibrated by:	Name <b>Adrian Gehring</b>	Function <b>Laboratory Technician</b>	Signature 
Approved by:	Name <b>Sven Kühn</b>	Function <b>Deputy Manager</b>	Signature 

Issued: December 14, 2017

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

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

### Glossary

DAE data acquisition electronics  
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

### Methods Applied and Interpretation of Parameters

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle:* The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
  - *DC Voltage Measurement Linearity:* Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
  - *Common mode sensitivity:* Influence of a positive or negative common mode voltage on the differential measurement.
  - *Channel separation:* Influence of a voltage on the neighbor channels not subject to an input voltage.
  - *AD Converter Values with inputs shorted:* Values on the internal AD converter corresponding to zero input voltage
  - *Input Offset Measurement:* Output voltage and statistical results over a large number of zero voltage measurements.
  - *Input Offset Current:* Typical value for information; Maximum channel input offset current, not considering the input resistance.
  - *Input resistance:* Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
  - *Low Battery Alarm Voltage:* Typical value for information. Below this voltage, a battery alarm signal is generated.
  - *Power consumption:* Typical value for information. Supply currents in various operating modes.



### DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 $\mu$ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

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

Calibration Factors	X	Y	Z
High Range	403.884 $\pm$ 0.02% (k=2)	403.669 $\pm$ 0.02% (k=2)	403.797 $\pm$ 0.02% (k=2)
Low Range	3.97333 $\pm$ 1.50% (k=2)	3.98680 $\pm$ 1.50% (k=2)	3.98020 $\pm$ 1.50% (k=2)

### Connector Angle

Connector Angle to be used in DASY system	238.5 $\pm$ 1 $^{\circ}$
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**Appendix (Additional assessments outside the scope of SCS0108)**

**1. DC Voltage Linearity**

High Range	Reading ( $\mu\text{V}$ )	Difference ( $\mu\text{V}$ )	Error (%)
Channel X + Input	199996.23	0.63	0.00
Channel X + Input	20003.65	2.14	0.01
Channel X - Input	-19998.76	2.37	-0.01
Channel Y + Input	199994.60	-1.16	-0.00
Channel Y + Input	20004.68	3.16	0.02
Channel Y - Input	-20000.71	0.39	-0.00
Channel Z + Input	199994.84	-0.41	-0.00
Channel Z + Input	20002.82	1.45	0.01
Channel Z - Input	-20000.52	0.78	-0.00

Low Range	Reading ( $\mu\text{V}$ )	Difference ( $\mu\text{V}$ )	Error (%)
Channel X + Input	2001.04	-0.12	-0.01
Channel X + Input	201.39	-0.17	-0.08
Channel X - Input	-198.41	-0.09	0.05
Channel Y + Input	2001.24	0.16	0.01
Channel Y + Input	201.23	-0.21	-0.10
Channel Y - Input	-199.20	-0.70	0.35
Channel Z + Input	2001.24	0.34	0.02
Channel Z + Input	200.33	-1.01	-0.50
Channel Z - Input	-199.76	-1.29	0.65

**2. Common mode sensitivity**

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

	Common mode Input Voltage (mV)	High Range Average Reading ( $\mu\text{V}$ )	Low Range Average Reading ( $\mu\text{V}$ )
Channel X	200	3.69	2.10
	- 200	-2.84	-3.91
Channel Y	200	-16.51	-16.72
	- 200	15.71	15.34
Channel Z	200	-22.90	-22.96
	- 200	21.15	21.04

**3. Channel separation**

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

	Input Voltage (mV)	Channel X ( $\mu\text{V}$ )	Channel Y ( $\mu\text{V}$ )	Channel Z ( $\mu\text{V}$ )
Channel X	200	-	-0.80	-2.10
Channel Y	200	5.15	-	1.24
Channel Z	200	8.26	3.19	-



**4. AD-Converter Values with inputs shorted**

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

	High Range (LSB)	Low Range (LSB)
Channel X	15874	13962
Channel Y	16116	17456
Channel Z	15959	15134

**5. Input Offset Measurement**

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec  
Input 10MΩ

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (μV)
Channel X	0.18	-0.52	0.90	0.28
Channel Y	-0.21	-1.32	0.38	0.33
Channel Z	-0.24	-1.75	0.97	0.41

**6. Input Offset Current**

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

**7. Input Resistance** (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

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

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

**9. Power Consumption** (Typical values for information)

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