



EX3DV4- SN:3898

June 27, 2017

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.47	66.92	14.90	0.00	150.0	± 9.6 %
		Y	2.52	67.22	15.16		150.0	
		Z	2.46	66.92	14.87		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.51	67.86	15.29	0.00	150.0	± 9.6 %
		Y	1.59	68.65	15.81		150.0	
		Z	1.51	67.83	15.27		150.0	
10277-CAA	PHS (QPSK)	X	1.93	60.30	5.80	9.03	50.0	± 9.6 %
		Y	1.90	60.39	5.82		50.0	
		Z	1.85	60.15	5.70		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	2.95	64.62	10.30	9.03	50.0	± 9.6 %
		Y	2.95	64.90	10.48		50.0	
		Z	2.89	64.62	10.32		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	3.00	64.77	10.42	9.03	50.0	± 9.6 %
		Y	3.00	65.06	10.62		50.0	
		Z	2.93	64.75	10.45		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	0.97	65.51	10.99	0.00	150.0	± 9.6 %
		Y	1.07	66.68	11.73		150.0	
		Z	0.93	65.15	10.70		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.65	64.31	10.33	0.00	150.0	± 9.6 %
		Y	0.71	65.39	11.08		150.0	
		Z	0.64	64.16	10.15		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	0.98	69.87	13.37	0.00	150.0	± 9.6 %
		Y	1.27	73.08	14.92		150.0	
		Z	0.97	69.74	13.20		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	3.47	85.51	19.51	0.00	150.0	± 9.6 %
		Y	8.72	97.43	23.23		150.0	
		Z	3.75	86.24	19.59		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	9.05	80.79	19.88	9.03	50.0	± 9.6 %
		Y	10.39	83.34	20.97		50.0	
		Z	10.43	83.10	20.75		50.0	
10297-AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.52	69.33	16.53	0.00	150.0	± 9.6 %
		Y	2.60	69.81	16.85		150.0	
		Z	2.51	69.27	16.53		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.13	65.04	11.44	0.00	150.0	± 9.6 %
		Y	1.21	65.84	12.00		150.0	
		Z	1.10	64.74	11.18		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.48	63.88	9.66	0.00	150.0	± 9.6 %
		Y	1.56	64.58	10.18		150.0	
		Z	1.37	63.27	9.22		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.17	61.20	7.51	0.00	150.0	± 9.6 %
		Y	1.21	61.53	7.83		150.0	
		Z	1.11	60.84	7.18		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.17	64.58	16.68	4.17	50.0	± 9.6 %
		Y	4.21	64.70	16.82		50.0	
		Z	4.18	64.69	16.72		50.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	4.78	65.73	17.66	4.96	50.0	± 9.6 %
		Y	4.81	65.86	17.81		50.0	
		Z	4.78	65.91	17.76		50.0	

Certificate No: EX3-3898_Jun17

Page 23 of 38



EX3DV4-- SN:3898

June 27, 2017

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.55	65.41	17.46	4.96	50.0	± 9.6 %
		Y	4.58	65.52	17.61		50.0	
		Z	4.56	65.64	17.60		50.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.38	65.40	17.04	4.17	50.0	± 9.6 %
		Y	4.41	65.50	17.18		50.0	
		Z	4.35	65.34	16.99		50.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.06	67.11	18.40	6.02	35.0	± 9.6 %
		Y	4.05	67.17	18.58		35.0	
		Z	4.03	67.01	18.26		35.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.35	66.21	18.28	6.02	35.0	± 9.6 %
		Y	4.35	66.28	18.44		35.0	
		Z	4.33	66.18	18.21		35.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.24	66.25	18.19	6.02	35.0	± 9.6 %
		Y	4.24	66.31	18.35		35.0	
		Z	4.22	66.21	18.11		35.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.22	66.45	18.33	6.02	35.0	± 9.6 %
		Y	4.22	66.51	18.50		35.0	
		Z	4.20	66.39	18.25		35.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.35	66.23	18.34	6.02	35.0	± 9.6 %
		Y	4.36	66.31	18.52		35.0	
		Z	4.33	66.20	18.27		35.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.30	66.28	18.28	6.02	35.0	± 9.6 %
		Y	4.31	66.35	18.44		35.0	
		Z	4.29	66.25	18.21		35.0	
10311-AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.88	68.59	16.20	0.00	150.0	± 9.6 %
		Y	2.96	69.02	16.48		150.0	
		Z	2.87	68.53	16.21		150.0	
10313-AAA	iDEN 1:3	X	2.75	69.55	14.37	6.99	70.0	± 9.6 %
		Y	2.79	70.41	14.91		70.0	
		Z	2.48	69.40	14.66		70.0	
10314-AAA	iDEN 1:6	X	3.88	75.45	19.52	10.00	30.0	± 9.6 %
		Y	4.05	76.79	20.24		30.0	
		Z	4.02	76.95	20.46		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.08	63.66	14.90	0.17	150.0	± 9.6 %
		Y	1.10	63.98	15.23		150.0	
		Z	1.08	63.57	14.89		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.34	66.68	16.09	0.17	150.0	± 9.6 %
		Y	4.37	66.78	16.20		150.0	
		Z	4.33	66.69	16.11		150.0	
10317-AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.34	66.68	16.09	0.17	150.0	± 9.6 %
		Y	4.37	66.78	16.20		150.0	
		Z	4.33	66.69	16.11		150.0	
10400-AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.42	67.04	16.19	0.00	150.0	± 9.6 %
		Y	4.45	67.14	16.30		150.0	
		Z	4.40	67.03	16.20		150.0	
10401-AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.09	66.82	16.20	0.00	150.0	± 9.6 %
		Y	5.11	66.90	16.30		150.0	
		Z	5.07	66.79	16.21		150.0	

Certificate No: EX3-3898_Jun17

Page 24 of 38



EX3DV4- SN:3898

June 27, 2017

10402-AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.45	67.43	16.42	0.00	150.0	± 9.6 %
		Y	5.48	67.49	16.50		150.0	
		Z	5.45	67.42	16.44		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	0.97	65.51	10.99	0.00	115.0	± 9.6 %
		Y	1.07	66.68	11.73		115.0	
		Z	0.93	65.15	10.70		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	0.97	65.51	10.99	0.00	115.0	± 9.6 %
		Y	1.07	66.68	11.73		115.0	
		Z	0.93	65.15	10.70		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	114.78	26.32	0.00	100.0	± 9.6 %
		Y	100.00	116.57	27.06		100.0	
		Z	100.00	115.47	26.53		100.0	
10410-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.10	80.03	17.90	3.23	80.0	± 9.6 %
		Y	6.73	87.51	20.67		80.0	
		Z	3.49	79.61	18.20		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.03	63.15	14.59	0.00	150.0	± 9.6 %
		Y	1.05	63.48	14.92		150.0	
		Z	1.03	63.15	14.60		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.33	66.85	16.18	0.00	150.0	± 9.6 %
		Y	4.36	66.92	16.27		150.0	
		Z	4.32	66.85	16.19		150.0	
10417-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.33	66.85	16.18	0.00	150.0	± 9.6 %
		Y	4.36	66.92	16.27		150.0	
		Z	4.32	66.85	16.19		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	X	4.33	67.06	16.24	0.00	150.0	± 9.6 %
		Y	4.35	67.14	16.34		150.0	
		Z	4.32	67.07	16.26		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	X	4.34	66.99	16.22	0.00	150.0	± 9.6 %
		Y	4.37	67.06	16.32		150.0	
		Z	4.33	67.00	16.24		150.0	
10422-AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.44	66.96	16.23	0.00	150.0	± 9.6 %
		Y	4.47	67.03	16.33		150.0	
		Z	4.44	66.97	16.25		150.0	
10423-AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.56	67.20	16.31	0.00	150.0	± 9.6 %
		Y	4.59	67.28	16.41		150.0	
		Z	4.55	67.20	16.33		150.0	
10424-AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.49	67.15	16.29	0.00	150.0	± 9.6 %
		Y	4.52	67.23	16.39		150.0	
		Z	4.48	67.15	16.30		150.0	
10425-AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.12	67.29	16.47	0.00	150.0	± 9.6 %
		Y	5.15	67.38	16.57		150.0	
		Z	5.11	67.27	16.48		150.0	
10426-AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.14	67.37	16.51	0.00	150.0	± 9.6 %
		Y	5.17	67.45	16.59		150.0	
		Z	5.13	67.38	16.53		150.0	



EX3DV4- SN:3898

June 27, 2017

10427-AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.10	67.17	16.41	0.00	150.0	± 9.6 %
		Y	5.13	67.24	16.49		150.0	
		Z	5.10	67.18	16.43		150.0	
10430-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.45	73.55	18.83	0.00	150.0	± 9.6 %
		Y	4.36	73.07	18.66		150.0	
		Z	4.51	73.93	18.97		150.0	
10431-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.93	67.43	16.02	0.00	150.0	± 9.6 %
		Y	3.96	67.55	16.14		150.0	
		Z	3.91	67.44	16.01		150.0	
10432-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.25	67.26	16.21	0.00	150.0	± 9.6 %
		Y	4.29	67.35	16.32		150.0	
		Z	4.24	67.26	16.22		150.0	
10433-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.51	67.19	16.32	0.00	150.0	± 9.6 %
		Y	4.54	67.26	16.41		150.0	
		Z	4.50	67.19	16.33		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.61	74.53	18.61	0.00	150.0	± 9.6 %
		Y	4.51	74.05	18.47		150.0	
		Z	4.68	74.88	18.71		150.0	
10435-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.91	79.35	17.61	3.23	80.0	± 9.6 %
		Y	6.25	86.43	20.28		80.0	
		Z	3.34	78.94	17.91		80.0	
10447-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.14	67.14	14.75	0.00	150.0	± 9.6 %
		Y	3.20	67.36	14.95		150.0	
		Z	3.12	67.09	14.67		150.0	
10448-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.80	67.24	15.90	0.00	150.0	± 9.6 %
		Y	3.84	67.36	16.03		150.0	
		Z	3.79	67.24	15.90		150.0	
10449-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.10	67.10	16.12	0.00	150.0	± 9.6 %
		Y	4.13	67.19	16.22		150.0	
		Z	4.09	67.10	16.13		150.0	
10450-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.32	66.97	16.18	0.00	150.0	± 9.6 %
		Y	4.35	67.05	16.27		150.0	
		Z	4.31	66.97	16.19		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	2.91	66.74	13.90	0.00	150.0	± 9.6 %
		Y	2.97	67.02	14.13		150.0	
		Z	2.87	66.63	13.77		150.0	
10456-AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.05	67.79	16.62	0.00	150.0	± 9.6 %
		Y	6.07	67.84	16.68		150.0	
		Z	6.06	67.83	16.67		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.72	65.65	15.92	0.00	150.0	± 9.6 %
		Y	3.74	65.71	16.01		150.0	
		Z	3.72	65.68	15.93		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	2.56	65.08	12.43	0.00	150.0	± 9.6 %
		Y	2.62	65.37	12.69		150.0	
		Z	2.50	64.84	12.20		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	3.65	64.11	14.09	0.00	150.0	± 9.6 %
		Y	3.72	64.38	14.32		150.0	
		Z	3.61	64.01	13.94		150.0	

Certificate No: EX3-3898_Jun17

Page 26 of 38



EX3DV4- SN:3898

June 27, 2017

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.87	67.88	15.88	0.00	150.0	± 9.6 %
		Y	0.94	69.24	16.74		150.0	
		Z	0.87	67.84	15.86		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.73	71.22	15.78	3.29	80.0	± 9.6 %
		Y	2.48	76.95	18.34		80.0	
		Z	1.60	71.21	16.16		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.08	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.19		80.0	
		Z	0.71	60.00	7.22		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.47	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.54		80.0	
		Z	0.73	60.00	6.57		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.37	68.23	13.96	3.23	80.0	± 9.6 %
		Y	1.86	72.93	16.20		80.0	
		Z	1.28	68.36	14.37		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.02	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.12		80.0	
		Z	0.71	60.00	7.16		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.44	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.50		80.0	
		Z	0.73	60.00	6.53		80.0	
10467-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.41	68.72	14.20	3.23	80.0	± 9.6 %
		Y	1.97	73.73	16.55		80.0	
		Z	1.32	68.86	14.63		80.0	
10468-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.04	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.14		80.0	
		Z	0.71	60.00	7.18		80.0	
10469-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.44	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.50		80.0	
		Z	0.73	60.00	6.54		80.0	
10470-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.41	68.72	14.19	3.23	80.0	± 9.6 %
		Y	1.97	73.75	16.55		80.0	
		Z	1.32	68.86	14.63		80.0	
10471-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.02	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.13		80.0	
		Z	0.71	60.00	7.17		80.0	
10472-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.42	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.48		80.0	
		Z	0.73	60.00	6.52		80.0	
10473-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.41	68.68	14.18	3.23	80.0	± 9.6 %
		Y	1.96	73.71	16.53		80.0	
		Z	1.31	68.82	14.61		80.0	
10474-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.02	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.13		80.0	
		Z	0.71	60.00	7.17		80.0	
10475-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.42	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.48		80.0	
		Z	0.73	60.00	6.52		80.0	

Certificate No: EX3-3898_Jun17

Page 27 of 38



EX3DV4- SN:3898

June 27, 2017

10477-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.00	3.23	80.0	± 9.6 %
		Y	0.72	60.00	7.10		80.0	
		Z	0.71	60.00	7.14		80.0	
10478-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.41	3.23	80.0	± 9.6 %
		Y	0.74	60.00	6.47		80.0	
		Z	0.73	60.00	6.51		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.51	75.91	18.12	3.23	80.0	± 9.6 %
		Y	4.65	80.42	20.02		80.0	
		Z	3.35	76.12	18.41		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.06	66.11	12.01	3.23	80.0	± 9.6 %
		Y	2.44	68.39	13.17		80.0	
		Z	2.00	66.36	12.23		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.64	63.45	10.41	3.23	80.0	± 9.6 %
		Y	1.83	64.88	11.25		80.0	
		Z	1.57	63.52	10.52		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.34	62.39	10.63	2.23	80.0	± 9.6 %
		Y	1.43	63.31	11.29		80.0	
		Z	1.27	62.21	10.58		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.46	60.79	8.98	2.23	80.0	± 9.6 %
		Y	1.54	61.54	9.56		80.0	
		Z	1.36	60.41	8.74		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.45	60.53	8.83	2.23	80.0	± 9.6 %
		Y	1.53	61.21	9.38		80.0	
		Z	1.36	60.16	8.59		80.0	
10485-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.93	66.25	13.91	2.23	80.0	± 9.6 %
		Y	2.08	67.57	14.73		80.0	
		Z	1.84	66.09	13.95		80.0	
10486-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.94	63.48	11.80	2.23	80.0	± 9.6 %
		Y	2.04	64.22	12.34		80.0	
		Z	1.86	63.28	11.73		80.0	
10487-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.96	63.26	11.66	2.23	80.0	± 9.6 %
		Y	2.04	63.94	12.17		80.0	
		Z	1.87	63.04	11.57		80.0	
10488-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.53	67.95	16.02	2.23	80.0	± 9.6 %
		Y	2.66	68.95	16.66		80.0	
		Z	2.42	67.64	16.03		80.0	
10489-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.77	66.35	15.13	2.23	80.0	± 9.6 %
		Y	2.84	66.94	15.57		80.0	
		Z	2.67	66.13	15.12		80.0	
10490-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.85	66.30	15.10	2.23	80.0	± 9.6 %
		Y	2.92	66.85	15.53		80.0	
		Z	2.75	66.08	15.09		80.0	
10491-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.93	67.67	16.24	2.23	80.0	± 9.6 %
		Y	3.03	68.38	16.73		80.0	
		Z	2.81	67.35	16.23		80.0	
10492-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.21	66.36	15.71	2.23	80.0	± 9.6 %
		Y	3.26	66.76	16.05		80.0	
		Z	3.11	66.10	15.68		80.0	

Certificate No: EX3-3898_Jun17

Page 28 of 38



EX3DV4- SN:3898

June 27, 2017

10493-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.27	66.30	15.68	2.23	80.0	± 9.6 %
		Y	3.32	66.68	16.01		80.0	
		Z	3.17	66.04	15.65		80.0	
10494-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.07	68.52	16.54	2.23	80.0	± 9.6 %
		Y	3.18	69.34	17.07		80.0	
		Z	2.94	68.19	16.54		80.0	
10495-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.24	66.58	15.93	2.23	80.0	± 9.6 %
		Y	3.29	66.98	16.26		80.0	
		Z	3.13	66.30	15.90		80.0	
10496-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.33	66.50	15.93	2.23	80.0	± 9.6 %
		Y	3.38	66.87	16.25		80.0	
		Z	3.23	66.23	15.91		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.02	60.00	7.99	2.23	80.0	± 9.6 %
		Y	1.01	60.00	8.17		80.0	
		Z	0.98	60.00	7.95		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.18	60.00	6.81	2.23	80.0	± 9.6 %
		Y	1.17	60.00	6.95		80.0	
		Z	1.14	60.00	6.72		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.20	60.00	6.66	2.23	80.0	± 9.6 %
		Y	1.19	60.00	6.79		80.0	
		Z	1.16	60.00	6.55		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.18	67.02	14.79	2.23	80.0	± 9.6 %
		Y	2.32	68.22	15.55		80.0	
		Z	2.08	66.80	14.82		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.31	64.90	13.20	2.23	80.0	± 9.6 %
		Y	2.41	65.65	13.74		80.0	
		Z	2.22	64.72	13.17		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.34	64.77	13.06	2.23	80.0	± 9.6 %
		Y	2.43	65.49	13.58		80.0	
		Z	2.25	64.59	13.02		80.0	
10503-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.51	67.79	15.92	2.23	80.0	± 9.6 %
		Y	2.63	68.78	16.57		80.0	
		Z	2.39	67.48	15.93		80.0	
10504-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.75	66.25	15.06	2.23	80.0	± 9.6 %
		Y	2.83	66.84	15.51		80.0	
		Z	2.66	66.03	15.05		80.0	
10505-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.83	66.21	15.04	2.23	80.0	± 9.6 %
		Y	2.91	66.76	15.47		80.0	
		Z	2.73	65.99	15.02		80.0	
10506-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.05	68.40	16.47	2.23	80.0	± 9.6 %
		Y	3.16	69.22	17.00		80.0	
		Z	2.92	68.07	16.47		80.0	
10507-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.22	66.51	15.89	2.23	80.0	± 9.6 %
		Y	3.27	66.92	16.22		80.0	
		Z	3.12	66.24	15.86		80.0	

Certificate No: EX3-3898_Jun17

Page 29 of 38



EX3DV4- SN:3898

June 27, 2017

10508-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.32	66.43	15.89	2.23	80.0	± 9.6 %
		Y	3.37	66.80	16.20		80.0	
		Z	3.21	66.16	15.86		80.0	
10509-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.55	68.19	16.49	2.23	80.0	± 9.6 %
		Y	3.64	68.78	16.90		80.0	
		Z	3.42	67.89	16.49		80.0	
10510-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.74	66.59	16.18	2.23	80.0	± 9.6 %
		Y	3.77	66.88	16.45		80.0	
		Z	3.63	66.30	16.15		80.0	
10511-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.82	66.51	16.18	2.23	80.0	± 9.6 %
		Y	3.85	66.78	16.44		80.0	
		Z	3.71	66.23	16.15		80.0	
10512-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.53	68.87	16.64	2.23	80.0	± 9.6 %
		Y	3.65	69.60	17.11		80.0	
		Z	3.39	68.55	16.65		80.0	
10513-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.62	66.62	16.20	2.23	80.0	± 9.6 %
		Y	3.66	66.94	16.48		80.0	
		Z	3.51	66.32	16.17		80.0	
10514-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.68	66.43	16.16	2.23	80.0	± 9.6 %
		Y	3.72	66.71	16.42		80.0	
		Z	3.58	66.13	16.13		80.0	
10515-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	63.31	14.64	0.00	150.0	± 9.6 %
		Y	1.01	63.68	14.99		150.0	
		Z	0.99	63.31	14.65		150.0	
10516-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.57	68.71	16.68	0.00	150.0	± 9.6 %
		Y	0.65	71.13	18.13		150.0	
		Z	0.57	68.55	16.63		150.0	
10517-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.82	64.86	15.16	0.00	150.0	± 9.6 %
		Y	0.85	65.57	15.72		150.0	
		Z	0.83	64.83	15.16		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.32	66.96	16.17	0.00	150.0	± 9.6 %
		Y	4.35	67.04	16.27		150.0	
		Z	4.31	66.97	16.19		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.46	67.11	16.26	0.00	150.0	± 9.6 %
		Y	4.49	67.19	16.35		150.0	
		Z	4.45	67.12	16.27		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.32	67.04	16.17	0.00	150.0	± 9.6 %
		Y	4.35	67.12	16.27		150.0	
		Z	4.31	67.04	16.19		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.25	66.99	16.15	0.00	150.0	± 9.6 %
		Y	4.28	67.08	16.25		150.0	
		Z	4.24	66.99	16.16		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.29	67.08	16.22	0.00	150.0	± 9.6 %
		Y	4.32	67.17	16.32		150.0	
		Z	4.27	67.07	16.22		150.0	

Certificate No: EX3-3898_Jun17

Page 30 of 38



EX3DV4- SN:3898

June 27, 2017

10523-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.24	67.16	16.19	0.00	150.0	± 9.6 %
		Y	4.27	67.25	16.30		150.0	
		Z	4.23	67.18	16.21		150.0	
10524-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.25	67.08	16.24	0.00	150.0	± 9.6 %
		Y	4.28	67.17	16.34		150.0	
		Z	4.24	67.08	16.25		150.0	
10525-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.30	66.23	15.88	0.00	150.0	± 9.6 %
		Y	4.32	66.32	15.98		150.0	
		Z	4.29	66.24	15.90		150.0	
10526-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.40	66.47	15.98	0.00	150.0	± 9.6 %
		Y	4.43	66.56	16.08		150.0	
		Z	4.39	66.47	15.99		150.0	
10527-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.34	66.45	15.93	0.00	150.0	± 9.6 %
		Y	4.37	66.54	16.03		150.0	
		Z	4.33	66.45	15.94		150.0	
10528-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.35	66.46	15.96	0.00	150.0	± 9.6 %
		Y	4.38	66.56	16.06		150.0	
		Z	4.34	66.46	15.97		150.0	
10529-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.35	66.46	15.96	0.00	150.0	± 9.6 %
		Y	4.38	66.56	16.06		150.0	
		Z	4.34	66.46	15.97		150.0	
10531-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.31	66.46	15.92	0.00	150.0	± 9.6 %
		Y	4.34	66.56	16.03		150.0	
		Z	4.30	66.45	15.93		150.0	
10532-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.20	66.33	15.86	0.00	150.0	± 9.6 %
		Y	4.23	66.43	15.96		150.0	
		Z	4.19	66.33	15.87		150.0	
10533-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.35	66.55	15.96	0.00	150.0	± 9.6 %
		Y	4.39	66.64	16.06		150.0	
		Z	4.34	66.55	15.98		150.0	
10534-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.92	66.42	16.02	0.00	150.0	± 9.6 %
		Y	4.95	66.49	16.11		150.0	
		Z	4.91	66.42	16.04		150.0	
10535-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.95	66.52	16.07	0.00	150.0	± 9.6 %
		Y	4.98	66.59	16.16		150.0	
		Z	4.94	66.51	16.09		150.0	
10536-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.85	66.53	16.05	0.00	150.0	± 9.6 %
		Y	4.87	66.61	16.14		150.0	
		Z	4.84	66.52	16.07		150.0	
10537-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.92	66.56	16.07	0.00	150.0	± 9.6 %
		Y	4.95	66.63	16.16		150.0	
		Z	4.92	66.56	16.10		150.0	
10538-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	4.97	66.48	16.07	0.00	150.0	± 9.6 %
		Y	5.00	66.56	16.15		150.0	
		Z	4.96	66.47	16.09		150.0	
10540-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.90	66.44	16.07	0.00	150.0	± 9.6 %
		Y	4.93	66.52	16.16		150.0	
		Z	4.90	66.43	16.09		150.0	

Certificate No: EX3-3898_Jun17

Page 31 of 38