EX3DV4- SN:7494 February 26, 2018

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	2.75	67.40	15.78	0.00	150.0	±9.6 %
		Y	2.58	66.55	15.14		150.0	
		Z	2.64	67.28	15.59		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.88	67.47	15.86	0.00	150.0	± 9.6 %
		Y	2.71	66.66	15.25		150.0	
		Z	2.77	67.39	15.69		150.0	8
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	4.99	75.67	20.72	3.98	65.0	± 9.6 %
		Y	4.54	74.14	19.94		65.0	
		Z	4.82	75.77	20.80		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	×	4.45	70.90	18.86	3.98	65.0	± 9.6 %
		Y	4.17	69.87	18.26		65.0	
		Z	4.26	70.67	18.66		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	4.79	71.97	19.73	3.98	65.0	±9.6 %
	77. 2-1-14	Y	4.50	70.99	19.17		65.0	
		Z	4.61	71.85	19.59		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.08	69.01	16.23	0.00	150.0	± 9.6 %
		Y	1.85	67.42	15.08		150.0	
		Z	1,95	68.66	15.88		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.49	68.62	16.01	0.00	150.0	± 9.6 %
		Y	2.26	67.33	15.03		150.0	
		Z	2.38	68.57	15.67		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.62	68.33	14.75	0.00	150.0	±9.6 %
7		Y	1.32	65.72	12.82		150.0	
		Z	1.42	67.19	13.63		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	×	1.76	66.14	12.77	0.00	150.0	± 9.6 %
		Y	1.47	64.00	11.06		150.0	
		Z	1.47	64.54	11.21	100	150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.64	68.86	16.18	0.00	150.0	± 9.6 %
		Y	2.41	67.62	15.24		150.0	
		Z	2.52	68.81	15.83		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	1.84	66.49	12.98	0.00	150.0	± 9.6 %
7,117		Y	1.52	64.19	11.20		150.0	
		Z	1.52	64.73	11.33		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2,60	68.75	16.31	0.00	150.0	± 9.6 %
		Y	2.41	67.74	15.55		150.0	
		Z	2.47	68.55	16.10		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.76	67.44	15.73	0.00	150.0	± 9.6 %
	Comment and the	Y	2.59	66.58	15.07		150.0	
		Z	2.65	67.35	15.50		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	2.88	67.68	15.88	0.00	150.0	± 9.6 %
		Y	2.70	66.83	15.23		150.0	
		Z	2.76	67.62	15.66		150.0	C 20 11E
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	×	3.02	67.96	18.28	3.01	150.0	± 9.6 %
	1000000	Y	3.03	68.30	18.53		150.0	
		Z	2.86	67.79	18.34		150.0	
	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	3,42	70.11	18.44	3.01	150.0	± 9.6 %
10167- CAE		1000	(49)	13055511				
10167- CAE	16-QAM)	Y	3.50	70.73	18.75		150.0	

EX3DV4- SN:7494

February 26, 2018

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	3.80	72,47	19.91	3.01	150.0	± 9.6 %
		Y	3.97	73.52	20.42		150.0	
		Z	3.59	72.78	20.23		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	2.40	66.10	17.40	3.01	150.0	± 9.6 %
		Y	2.46	66.60	17.71		150.0	
		Z	2.33	66.05	17.51		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	2.86	70.22	19.21	3.01	150.0	± 9.6 %
		Y	3.07	71.47	19.80		150.0	
		Z	2.76	70.55	19.53		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.43	67.02	16.67	3.01	150.0	± 9.6 %
Craw Craw		Y	2.55	67.67	16.96		150.0	
		Z	2.33	67.12	16.84		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	3.22	76.35	23.22	6.02	65.0	± 9.6 %
No.	200 State Control of the Control of	Y	2.88	74.18	22.38		65.0	
		Z	2.74	74.43	22.80		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.36	80.46	22.94	6.02	65.0	± 9.6 %
		Y	4.63	81.45	23.36		65.0	
		Z	3.93	80.61	23.43		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.95	78.13	21.47	6.02	65.0	± 9.6 %
T CONTROL OF THE PARTY OF THE P	- somowest	Y	3.58	76.48	20.90		65.0	
		Z	3.41	77.60	21,68		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.38	65.87	17.19	3.01	150.0	± 9.6 %
	110000000000000000000000000000000000000	Y	2.43	66.33	17.47		150.0	
		Z	2.30	65.82	17.28		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	2.86	70.24	19.22	3.01	150.0	± 9.6 %
	V-50001000	Y	3.08	71.50	19.81		150.0	
		Z	2.76	70.57	19.54		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.39	65.97	17.26	3.01	150.0	± 9.6 %
TA CALON INC.		Y	2.45	66.44	17.54		150.0	
		Z	2.32	65.91	17.35		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	2.85	70.12	19.14	3.01	150.0	±9.6 %
***************************************		Y	3.06	71.36	19.72		150.0	
		Ż	2.75	70.47	19.48		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	2.62	68.53	17.82	3.01	150.0	± 9.6 %
		Y	2.78	69.42	18.23		150.0	
CONTRACT.		Z	2.52	68.74	18.07	118-72	150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	2.43	66.99	16.64	3.01	150.0	±9.6 %
		Y	2.55	67.64	16.93		150.0	
Mark 2000		Z	2.33	67.10	16.82		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.39	65.96	17.25	3.01	150.0	± 9.6 %
		Υ	2.44	66.43	17.54	0	150.0	
	A CONTRACTOR OF THE PROPERTY O	Z	2.31	65.90	17.34	- www.	150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	2.84	70.10	19.13	3.01	150.0	± 9.6 %
		Y	3.05	71.33	19.71		150.0	
Octobros -		Z	2.75	70.45	19.47	and the same of	150.0	-
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.43	66.97	16.63	3.01	150.0	± 9.6 %
AC.		W	2.55	07.00	10.00		150.0	
		Y	2.55	67.62	16.92		150.0	

Certificate No: EX3-7494_Feb18

Page 18 of 39

EX3DV4- SN:7494 February 26, 2018

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.39	65.99	17.27	3.01	150.0	± 9.6 %
		Y	2.45	66.47	17.56		150.0	
		Z	2.32	65.93	17.36		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	2.85	70.16	19.17	3.01	150.0	± 9.6 %
		Y	3.07	71.40	19.75		150.0	
		Z	2.76	70.51	19.50		150.0	
10186-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	2.44	67.02	16.66	3.01	150.0	±9.6 %
AAD	QAM)	72000	2000	2011/16/25	100000000000000000000000000000000000000	3.01	100000000000000000000000000000000000000	I 5.0 %
		Y	2,56	67.67	16.95		150.0	
		Z	2.33	67.13	16.84		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.40	66.06	17.35	3.01	150.0	±9.6 %
		Y	2.46	66.54	17.64		150.0	
		Z	2.33	66.01	17.45		150.0	- 116
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	2.92	70.63	19.48	3.01	150.0	± 9.6 %
Orto	10 strain)	Y	3.15	71.97	20.11		150.0	7
		Z	2.82	70.99	- Contract C		The second section is a second second	
10100	LTE EDD (CO EDMA 4 DD 4 4 M		i accomitant programme in the company of the compan		19.83	2.04	150.0	1000
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	×	2.48	67.32	16.90	3.01	150.0	± 9.6 %
		Y	2.60	68.01	17.21		150.0	
		Z	2.37	67.44	17.08		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.36	66.79	16.12	0.00	150.0	± 9.6 %
		Y	4.24	66.43	15.86		150.0	
		Z	4.25	66.88	16.06		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.50	67.02	16.25	0.00	150.0	± 9.6 %
ono	10 spring	Y	4.38	66.66	16.00		150.0	
		Z	4.38	67.06	16.19		150.0	
10195-	IEEE 802.11n (HT Greenfield, 65 Mbps.	X	4.53	67.04		0.00		1000
CAC	64-QAM)	50%	10,000,00	C593/460_	16.27	0.00	150.0	±9.6 %
		Y	4.41	66.68	16.02		150.0	
		Z	4.40	67.05	16.19		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.34	66.79	16.11	0.00	150.0	± 9.6 %
		Y	4.22	66.42	15.84		150.0	0
		Z	4.23	66.84	16.03		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.51	67.03	16.26	0.00	150.0	± 9.6 %
ONO	GD 1111)	Y	4.38	66.66	16.01		150.0	
		Z	4.38					
10198-	IEEE 802.11n (HT Mixed, 65 Mbps, 64-	X	4.53	67.05 67.04	16.19 16.27	0.00	150.0 150.0	± 9.6 %
CAC	QAM)	V	4.40	00.07	10.00		450.0	
		Y	4.40	66.67	16.02		150.0	
10219-	IEEE 802.11n (HT Mixed, 7.2 Mbps,	X	4.39	67.04 66.83	16.19	0.00	150.0	± 9.6 %
CAC	BPSK)	- 120	771702	200 100	4.80		197.5	
		Y	4.17	66.45	15.81		150.0	
		Z	4.19	66.90	16.01		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.50	66.99	16.24	0.00	150.0	± 9.6 %
-777		Y	4.38	66.63	16.00		150.0	
		Z	4.37	67.02	16.18		150.0	7
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	Х	4.54	66.98	16.26	0.00	150.0	± 9.6 %
		Y	4.42	66.63	16.01		150.0	
		Z	4.41	67.00	16.19		150.0	2
10222-	IEEE 802.11n (HT Mixed, 15 Mbps,	X	4.91	67.06		0.00		+069/
CAC	BPSK)	10000	I SCHOOL V	1112/111111	16.39	0.00	150.0	± 9.6 %
		Y	4.81	66.75	16.20		150.0	
		Z	4.81	67.01	16.35		150.0	

EX3DV4-SN:7494

February 26, 2018

CAC QAM) 10225- CAB UMTS-F 10226- CAA LTE-TD 10227- CAA LTE-TD CAA QPSK) 10228- CAB LTE-TD CAB LTE-TD 10230- CAB LTE-TD CAB QAM) 10231- CAD LTE-TD CAD QAM) 10232- CAD LTE-TD CAD QAM) 10234- CAD LTE-TD CAD LTE-TD 10235- CAD LTE-TD CAD LTE-TD	EE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.18	67.25	16.50	0.00	150.0	± 9.6 %
CAC QAM) 10225- CAB UMTS-F CAB 10226- CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10232- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10234- CAD QAM) 10236- CAD LTE-TD CAD QAM) 10236- CAD LTE-TD CAD LTE-TD CAD QAM)		Y	5.07	66.94	16.31		150.0	
10225- CAB 10225- CAB 10226- CAA 16-QAM 10227- CAA 10227- CAA 10228- CAA 10228- CAA 10229- CAB 10229- CAB 10230- CAB 10231- CAB 10231- CAB 10231- CAD 10232- CAD 10233- CAD 10233- CAD 10234- CAD 10234- CAD 10235- CAD 10236- CAD 10236- CAD 10237- LTE-TDI CAD 10237- LTE-TDI CAD 10237		Z	5.03	67,10	16.40		150.0	
10226- CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10231- CAD QAM) 10232- CAD QAM) 10233- CAD QAM)	EE 802.11n (HT Mixed, 150 Mbps, 64-M)	X	4.95	67.17	16.38	0.00	150.0	± 9.6 %
10226- CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10231- CAD QAM) 10232- CAD QAM) 10233- CAD QAM)		Y	4.85	66.86	16.19		150.0	
10226- CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10231- CAD QAM) 10232- CAD QAM) 10233- CAD QAM)		Z	4.85	67.15	16.34		150.0	
10226- CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10231- CAD QAM) 10232- CAD QAM) 10233- CAD QAM)	MTS-FDD (HSPA+)	X	2.64	66.25	14.92	0.00	150.0	1000
CAA 16-QAM 10227- CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QPSK) 10232- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10234- CAD QAM) 10235- CAD QAM) 10236- CAD LTE-TD CAD 10236- CAD 16-QAM	(HOPAT)	-				0.00		±9.6 %
CAA 16-QAM 10227- LTE-TD CAA G4-QAM 10228- LTE-TD CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10236- LTE-TD CAD 16-QAM 10236- LTE-TD CAD G4-QAM		Y	2.47	65.44	14.20		150.0	
CAA 16-QAM 10227- LTE-TD CAA 64-QAM 10228- LTE-TD CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10236- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM	TOD (00 FD) (1 1 00 1 1 1 1 1	Z	2.51	66.11	14.44		150.0	
CAA 64-QAM 10228- LTE-TD CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM	E-TDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM)	X	4.57	81.37	23.38	6.02	65.0	± 9.6 %
CAA 64-QAM 10228- LTE-TD CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM		Y	4.90	82.52	23.85		65.0	
CAA 64-QAM 10228- CAA QPSK) 10229- CAB QAM) 10230- CAB QAM) 10231- CAB QAM) 10231- CAD QAM) 10232- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10234- CAD QAM) 10235- CAD LTE-TD CAD QAM) 10236- CAD LTE-TD CAD LTE-TD CAD LTE-TD CAD QAM)		Z	4.15	81.66	23.92	-	65.0	
CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM	E-TDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM)	X	4.60	80.57	22.40	6.02	65.0	± 9.6 %
CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QAM) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM		Y	4.89	81.58	22.82		65.0	
CAA QPSK) 10229- LTE-TD CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10233- LTE-TD CAD QPSK) 10234- LTE-TD CAD L		Z	4.14	80.85	22.92		65.0	
10229- LTE-TDI CAB QAM) 10230- LTE-TDI CAB QAM) 10231- LTE-TDI CAB QPSK) 10232- LTE-TDI CAD QAM) 10233- LTE-TDI CAD QAM) 10234- LTE-TDI CAD QPSK) 10235- LTE-TDI CAD 16-QAM 10236- LTE-TDI CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	3.35	77.29	23.65	6.02	65.0	± 9.6 %
CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QAM) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM		Y	3.36	77.54	23.87		65.0	
CAB QAM) 10230- LTE-TD CAB QAM) 10231- LTE-TD CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QAM) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 16-QAM	10.1 °	Z	2.92	75.79	23.43		65.0	
10230- CAB QAM) 10231- CAB QPSK) 10232- CAD QAM) 10233- CAD QAM) 10233- CAD QAM) 10234- CAD QPSK) 10235- CAD 16-QAM 10236- CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	4.39	80.55	22.98	6.02	65.0	± 9.6 %
CAB QAM) 10231- LTE-TD QPSK) 10232- LTE-TD QAM) 10233- LTE-TD QAM) 10234- LTE-TD QPSK) 10235- LTE-TD QAM 10236- LTE-TD GAD 16-QAM 10236- LTE-TD 64-QAM	3004/	Y	4.67	81.55	23.40		65.0	
CAB QAM) 10231- LTE-TD QPSK) 10232- LTE-TD QAM) 10233- LTE-TD QAM) 10234- LTE-TD QPSK) 10235- LTE-TD QAM 10236- LTE-TD GAD 16-QAM 10236- LTE-TD 64-QAM		Z	3.96	80.71	23.47		65.0	
10231- LTE-TD CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	4.37	79.68	21.99	6.02	65.0	± 9.6 %
CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QPSK) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM		Y	4.61	80.55	22.37		65.0	
CAB QPSK) 10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QPSK) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM		Z	3.91	79.81	22.46		65.0	
10232- LTE-TD CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 3 MHz,	X	3.26	76.70	23.33	6.02	65.0	± 9.6 %
CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM	514	Y	3.26	76.88	23.51		65.0	
CAD QAM) 10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM		Z	2.84	75.20	23.10		65.0	
10233- LTE-TD CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 5 MHz, 16-	X	4.39	80.53	22.98	6.02	65.0	± 9.6 %
CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM		Y	4.66	81.53	23.40		65.0	
CAD QAM) 10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM		Z	3.96	80.69	23.47		65.0	
10234- LTE-TD CAD QPSK) 10235- LTE-TD CAD 16-QAM 10236- LTE-TD CAD 64-QAM	E-TDD (SC-FDMA, 1 RB, 5 MHz, 64-	X	4.36	79.65	21.99	6.02	65.0	± 9.6 %
CAD QPSK) 10235- LTE-TDI CAD 16-QAM 10236- LTE-TDI CAD 64-QAM 10237- LTE-TDI		Y	4.60	80.51	22.36		65.0	
CAD QPSK) 10235- LTE-TDI CAD 16-QAM 10236- LTE-TDI CAD 64-QAM 10237- LTE-TDI		Z	3.89	79.77	22.44		65.0	
10235- LTE-TDI CAD 16-QAM 10236- LTE-TDI CAD 64-QAM 10237- LTE-TDI	E-TDD (SC-FDMA, 1 RB, 5 MHz,	X	3.19	76.23	23.02	6.02	65.0	± 9.6 %
10236- LTE-TDI 64-QAM		Y	3.18	76.36	23.17		65.0	
10236- LTE-TDI 64-QAM		Z	2.78	74.77	22.80		65.0	
10236- LTE-TDI CAD 64-QAM 10237- LTE-TDI	E-TDD (SC-FDMA, 1 RB, 10 MHz,	X	4.38	80.55	22.98	6.02	65.0	± 9.6 %
10237- LTE-TD	Sec. Mary	Y	4.66	81.55	23.41		65.0	
10237- LTE-TD		Z	3.96	80.70	23.48		65.0	
10237- LTE-TD	E-TDD (SC-FDMA, 1 RB, 10 MHz,	X	4.40	79.78	22.03	6.02	65.0	± 9.6 %
		Y	4.64	80.65	22.40		65.0	
		Z	3.94	79.92	22.49		65.0	
- (d) (d)	E-TDD (SC-FDMA, 1 RB, 10 MHz,	X	3.25	76.71	23.34	6.02	65.0	± 9.6 %
	MIM.	Y	3.26	76.89	23.52		65.0	
		Z	2.83	75.20	23.10		65.0	
10238- LTE-TD	E-TDD (SC-FDMA, 1 RB, 15 MHz.	X	4.37	80.51	22.96	6.02	65.0	± 9.6 %
CAD 16-QAM		Y	4.65	81.50	23.39		65.0	_ 3.0 70
		Z	3.95	80.66	23.46		65.0	

Page 20 of 39

EX3DV4-SN:7494

February 26, 2018

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.34	79.61	21.97	6.02	65.0	± 9.6 %
	The state of the s	Y	4.58	80.47	22.35		65.0	
		Z	3.88	79.72	22.43		65.0	
10240-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	3.25	76.69	23.33	6.02	65.0	± 9.6 %
CAD	QPSK)	- 77	2.05	70.07	00.54		00.0	
		Y	3.25	76.87	23.51		65.0	
40044	LEE TOO YOU FOLLS	Z	2.83	75.19	23.10	0.00	65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	5.67	76.94	23.64	6.98	65.0	± 9.6 %
		Y	5.73	77.33	23.85		65.0	100
		Z	5.41	77.63	24.19		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.51	76.48	23.38	6.98	65.0	± 9.6 %
		Y	5.15	75.22	22.87		65.0	
		Z	5.17	76.81	23.79		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	4.66	73.35	22.88	6.98	65.0	± 9.6 %
		Y	4.37	72.03	22,31		65.0	
		Z	4.40	73.35	23.12		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.90	67.06	13.06	3.98	65.0	± 9.6 %
		Y	2.71	66.26	12.47		65.0	
		Z	2.39	65.15	11.38		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.85	66.61	12.78	3.98	65.0	± 9.6 %
0.10	0.7 (2.11)	Y	2.68	65.84	12.20		65.0	
		Z	2.36	64.77	11.12		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	3.01	71.40	15.89	3.98	65.0	± 9.6 %
0,10		Y	2.36	67.99	13.82		65.0	
		Z	2.41	68.64	13.94		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	3.36	69.51	15.75	3.98	65.0	± 9.6 %
		Y	2.95	67.61	14.45		65.0	
		Z	2.97	68.07	14.42	11 - 1	65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	3.34	68.90	15.44	3.98	65.0	± 9.6 %
		Y	2.95	67.15	14.22		65.0	
		Z	2.92	67.38	14.07		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	4.26	76.83	19.56	3.98	65.0	± 9.6 %
UND	GI OIL	Y	3.47	73.55	17.79		65.0	
		Z	3.81	75.50	18.55		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	4.36	73.05	19.62	3.98	65.0	± 9.6 %
		Y	4.02	71.77	18.85		65.0	
		Z	4.18	72.90	19.29		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	4.16	70.97	18.24	3.98	65.0	± 9.6 %
J. I.D	Total as Section	Y	3.84	69.74	17.45		65.0	
		Z	3.91	70.51	17.72		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	4.83	77.80	21.42	3.98	65.0	± 9.6 %
		Y	4.26	75.76	20.36		65.0	
		Z	4.64	77.86	21.33		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	4.40	70.58	18.61	3.98	65.0	± 9.6 %
UND	TO SOME	Y	4.13	69.58	18.00		65.0	
		Z	4.22	70.40	18,37		65.0	
10254-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz.	X	4.70	71.50	19.34	3.98	65.0	± 9.6 %
CAD	64-QAM)	Y	7.04.00			0.00	TO A COUNTY	2 3.0 70
			4.41	70.53	18.77		65.0	
		Z	4.01	71.38	19.13		65.0	

EX3DV4-SN:7494

February 26, 2018

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	4.76	74.95	20.56	3.98	65.0	± 9.6 %
CAD	QF3K)	Y	4.35	73.52	19.81		er o	
		Z	4.59	75.06	20.58		65.0	
10256-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	2.08	63.27	9.80	3.98	65.0	± 9.6 %
CAA	MHz, 16-QAM)	^	2.00	03.27	5.00	3.30	00.0	I 9.0 76
	10 34 117	Y	1.95	62.60	9.21		65.0	
		Z	1.70	61.73	8.15		65.0	
10257-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	2.07	62.91	9.50	3.98	65.0	± 9.6 %
CAA	MHz, 64-QAM)				0.00	0.00	00.0	20,070
mmedit et i		Y	1.94	62.29	8.92		65.0	
		Z	1.69	61.46	7.88		65.0	
10258-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	2.01	65.63	11.91	3.98	65.0	±9.6 %
CAA	MHz, QPSK)							
		Y	1.65	63.35	10.17		65.0	
		Z	1.59	63.25	9.83		65.0	
10259-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	3.78	71.05	17.26	3.98	65.0	±9.6 %
CAB	16-QAM)							
		Y	3.37	69.33	16.13		65.0	
		Z	3.46	70.13	16.31		65.0	
10260-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	3.81	70.78	17.12	3.98	65.0	± 9.6 %
CAB	64-QAM)	1.0		00.15	40.00		0.5.5	
		Y	3.41	69.12	16.02		65.0	
40004	LTE TOD /CO FOUL 4000 FO A 111	Z	3.48	69.84	16.15	2.00	65.0	1000
10261-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	4.32	76.55	20.03	3.98	65.0	± 9.6 %
CAB	QPSK)	· ·	2.00	70.07	10.01		00.0	
		Y	3.68	73.97	18.61		65.0	
10000	LTE TOO (SC FOMA 4009) DR FAILE	Z	4.03	75.96	19.43	2.00	65.0	+000
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	4.35	72.98	19.56	3.98	65.0	± 9.6 %
		Y	4.00	71.69	18.79		65.0	
		Z	4.16	72.81	19.23	1000000	65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	4.15	70.95	18.23	3.98	65.0	± 9.6 %
		Y	3.83	69.72	17.45		65.0	
		Z	3.90	70.49	17.72		65.0	20000
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	4.78	77.59	21.30	3.98	65.0	±9.6 %
- F. C. A. T. L.		Y	4.21	75.55	20.24		65.0	
		Z	4.59	77.63	21.21		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	4.45	70.90	18.87	3.98	65.0	±9.6 %
OI IO	10 10 10 10 10 10 10 10 10 10 10 10 10 1	Y	4.17	69.87	18.27		65.0	17
		Z	4.26	70.67	18.67		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	4.79	71.96	19.72	3.98	65.0	± 9.6 %
		Y	4.50	70.98	19.16		65.0	
		Z	4.60	71.84	19.58		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	4.98	75.63	20.70	3.98	65.0	±9.6 %
Urill	1711 (MA) (ME) (ME) (ME)	Y	4.53	74.10	19.92		65.0	
		Z	4.81	75.72	20.78		65.0	
10268-	LTE-TDD (SC-FDMA, 100% RB, 15	X	5.11	71.08	19.43	3.98	65.0	± 9.6 %
CAD	MHz, 16-QAM)	(2.0)	=397.00	VA.2324	E520000	2,00	10000	23.0 70
		Z	4.84	70.20	18.97		65.0 65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	X	5.13	70.76	19.32	3.98	65.0	± 9.6 %
CAD	MHz, 64-QAM)	Y	4.87	69.92	18.86		65.0	
		Z	4.96	70.66	19.25		65.0	
10270-	LTE-TDD (SC-FDMA, 100% RB, 15	X	5.11	73.33	19.25	3.98	65.0	±9.6%
CAD	MHz, QPSK)	3500	BREALON	Western's	- CONTRACTOR	3.80	1300000	2 3.0 %
		Y	4.76	72.19	19.29		65.0	
		2	4.96	73.43	19.98		65.0	

Page 22 of 39

EX3DV4-SN:7494

February 26, 2018

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2,48	66.86	14.99	0.00	150.0	± 9.6 %
		Y	2.30	65.90	14.17		150.0	
		Z	2.37	66.79	14.57		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	×	1.53	68.05	15.40	0.00	150.0	± 9.6 %
		Y	1.32	66.12	13.91		150.0	
		Z	1.45	67.75	14.99		150.0	
10277-	PHS (QPSK)	X	1.30	58.93	4.20	9.03	50.0	±9.6 %
CAA	77.5 (3. 5.7)	Y	1.32	58.56	3.87	130000	50.0	20.0 //
		Z	1.18	58.32	3.49			
10278-	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	2.49	64.91		0.02	50.0	1000
CAA	PHS (QFSK, BW 604MHZ, ROHOH U.5)	1000	11 1570 501 111	95000000	10.26	9.03	50.0	±9.6 %
		Y	2.32	63.55	9.26		50.0	
TERMEN		Z	2.17	63.27	8.86		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	×	2.57	65.18	10.47	9.03	50.0	± 9.6 %
		Y	2.38	63.76	9.44		50.0	
		Z	2.22	63.44	9.03		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	×	1.01	65.74	11.23	0.00	150.0	± 9.6 %
SPECIFIC		Y	0.67	61.70	8.06		150.0	
		Z	0.69	62.65	8.67		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	×	0.64	64.08	10.26	0.00	150.0	±9.6 %
10000		Y	0.41	60.32	6.85		150.0	
		Z	0.48	61.84	8.06		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.93	69.17	13.09	0.00	150.0	± 9.6 %
		Y	0.46	61.72	7.96		150.0	
		Z	0.63	65.19	10.18		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	2.58	81.84	18.38	0.00	150.0	±9.6 %
		Y	0.61	64.42	9.84		150.0	
		Z	1.45	74.16	14.40		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	×	16.38	93.11	24.71	9.03	50.0	± 9.6 %
		Y	16.06	90.60	23.14		50.0	
		Z	41.75	104.48	26.91		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.56	69.49	16.58	0.00	150.0	± 9.6 %
		Y	2.33	68.15	15.68		150.0	
		z	2.43	69.17	16.39		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.18	65.35	11.77	0.00	150.0	± 9.6 %
		Y	0.89	62.40	9.35		150.0	
		Z	0.90	63.00	9.64		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.36	63.05	9.42	0.00	150.0	± 9.6 %
, , , ,	100	Y	1.26	62.26	8.62		150.0	
		Z	1.05	61.24	7.54		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.15	60.99	7.59	0.00	150.0	± 9.6 %
rviv	O'T WOMIN)	Y	1.07	60.46	6.94		150.0	
		Z	0.89	59.75	5.99		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.25	64.73	16.86	4.17	50.0	±9.6 %
AAA	TOWN L. GEON, FOOD)	Υ	4.21	64.78	16.74		50.0	
		Z	4.10	64.79	THE RESERVE AND ADDRESS OF THE PARTY OF THE		The state of the last of the l	
10302-	IEEE 802.16e WiMAX (29:18, 5ms,	X	4.74		16.69	4.00	50.0	4000
AAA	10MHz, QPSK, PUSC, 3 CTRL symbols)		20-1-20	65.43	17.63	4.96	50.0	± 9.6 %
		Y	4.66	65.24	17,38		50.0	
		Z	4.60	65.49	17.44		50.0	

EX3DV4- SN:7494

February 26, 2018

10303- AAA	Linear control with the later to the later t	1 22 1		1 17200000	-			
	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	×	4.49	65.00	17.39	4.96	50.0	± 9.6 %
		Y	4.44	65.13	17.34		50.0	
		Z	4.36	65.13	17.21		50.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.34	65.04	16.98	4.17	50.0	± 9.6 %
7///	TOWITZ, 04QAW, FOSC)	Y	4.25	64.81	16.70		50.0	
		Z	4.21	65.16	16.81		50.0	
10305-	IEEE 802.16e WiMAX (31:15, 10ms,	X	3.71	65.40	17.85	6.02		+069
AAA	10MHz, 64QAM, PUSC, 15 symbols)					6.02	35.0	± 9.6 %
		Y	3.72	65.71	17.67		35.0	
		Z	3,59	65.50	17.36		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	×	4.14	65.15	17.96	6.02	35.0	± 9.6 %
		Y	4.12	65.33	17.82		35.0	
		Z	4.02	65.33	17.66		35.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.01	65.07	17.81	6.02	35.0	± 9.6 %
		Y	3.99	65.26	17.66		35.0	
LT IN CASE OF STREET		Z	3.89	65.22	17.49		35.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	3.97	65.21	17.93	6.02	35.0	± 9.6 %
	17.111.124.117.78.7111.117.78.79.11	Y	3.96	65.42	17.79		35.0	
		Z	3.86	65.37	17.62		35.0	
10309-	IEEE 802.16e WiMAX (29:18, 10ms,	X	4.16	65.22	18.05	6.02	35.0	±9.6 %
AAA	10MHz, 16QAM, AMC 2x3, 18 symbols)	(0.00)	New Year	222012	53300	0.02	13355	1 9.0 %
		Y	4.14	65.39	17.90		35.0	
	1000 000 100 100 100 100 100 100 100 10	Z	4.03	65.36	17,74	0.00	35.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.09	65.15	17.92	6.02	35.0	± 9.6 %
		Y	4.07	65.35	17.79		35.0	
	Wales and the second second second	Z	3.97	65.35	17.65		35.0	- West-
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.92	68.73	16.23	0.00	150.0	± 9.6 %
		Y	2.68	67.45	15.43		150.0	
		Z	2.78	68.38	16.08		150.0	
10313- AAA	IDEN 1:3	X	2.23	70.71	15.35	6.99	70.0	±9.6 %
7001		Y	1.69	66.90	13.17		70.0	
		Z	2.30	71.64	15.93		70.0	
10314- AAA	IDEN 1:6	X	4.08	80.89	22.31	10.00	30.0	± 9.6 %
rivit		Y	3.04	75.07	19.42		30.0	
		Z	4.65	83.62	23.48		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.04	63.55	14.98	0.17	150.0	± 9.6 %
, , ,	mops, sope daily elone)	Y	0.94	62.52	14.02		150.0	
		Z	1.03	63.50	14.81		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.37	66.68	16.19	0.17	150.0	±9.6 %
PARIO	Or Divi, o Wobs, sope duty cycle)	Y	4.26	66.34	15.95		150.0	
		Z	4.26	66.72	16.11		150.0	
10317-	IEEE 802.11a WiFi 5 GHz (OFDM, 6	X	4.20	66.68	16.11	0.17	150.0	±9.6 %
10317-	Mbps, 96pc duty cycle)	250			1225222	0.17	ENG-300	£ 9.6 %
AAC		Y	4.26	66.34	15.95		150.0	
AAC		Z	4.26	66.72	16.11		150.0	
			4 40	67.02	16.23	0.00	150.0	±9.6 %
10400-	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.46	25/1820/1944	National Control	IL N. ACADOM.		
10400-		X	4.46	66.64	15.97	II for acceptant	150.0	10000000
10400-		Y	12000000	NAMES OF A	111-05/00	11.0000	150.0 150.0	
10400- AAD	99pc duty cycle) IEEE 802.11ac WiFi (40MHz, 64-QAM,	152-08	4.33	66,64	15.97	0.00		± 9.6 %
10400- AAD	99pc duty cycle)	Y	4.33 4.31	66.64 66.98	15.97 16.13	0.00	150.0	± 9.6 %

Certificate No: EX3-7494_Feb18

Page 24 of 39

EX3DV4- SN:7494

February 26, 2018

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	Х	5.47	67.39	16.42	0.00	150.0	±9.6 %
MAD	99pc daty cycle)	Y	5.37	67.08	16.25		150.0	
		Z	5.37	67.35	16.23		150.0	
10403-	CDMA2000 (1xEV-DO, Rev. 0)	X	1.01	65.74	11.23	0.00	115.0	± 9.6 %
AAB	ODM/2000 (TACY-DO, Nev. 0)		1.00	00.74	11.60	0.00	110.0	2 0.0 70
7.0.102		Y	0.67	61.70	8.06		115.0	
		Z	0.69	62.65	8.67		115.0	
10404-	CDMA2000 (1xEV-DO, Rev. A)	X	1.01	65.74	11.23	0.00	115.0	±9.6 %
AAB	SOMPLESSO (TALT DO, TICKTY)	30	1.01	00.77	21,000	0.00	110.0	20.0 /0
		Y	0.67	61.70	8.06		115.0	
		Z	0.69	62.65	8.67		115.0	
10406-	CDMA2000, RC3, SO32, SCH0, Full	X	13.40	94.87	22.42	0.00	100.0	± 9.6 %
AAB	Rate	2062	23-28%	153415250	ATTACAS (116525	-3-E3EM3
0-0-11		Y	37.24	104.89	24.38		100.0	
		Z	100.00	114.79	25.79		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	×	2.95	79.35	18.40	3.23	80.0	± 9.6 %
	- Continue Contract	Y	3.69	82.30	19.32		80.0	
		Z	3.87	84.90	20.56		80.0	
10415-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	X	1.00	63.14	14.62	0.00	150.0	±9.6 %
AAA	Mbps, 99pc duty cycle)	25.5	111111111111111111111111111111111111111	2000	1000000	1000	1	
		Y	0.91	62.12	13.65		150.0	
		Z	0.99	63.08	14.44		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	X	4.35	66.77	16.19	0.00	150.0	± 9.6 %
AAA	OFDM, 6 Mbps, 99pc duty cycle)	1000	THORESON	(CEN)	1969866 U		25922922	SSECTION
2000		Y	4.23	66.41	15.93		150.0	
		Z	4.24	66.81	16.11		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	×	4,35	66.77	16.19	0.00	150.0	±9.6 %
		Y	4.23	66.41	15.93		150.0	
		Z	4.24	66.81	16.11		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.35	66.98	16.25	0.00	150.0	± 9.6 %
		Y	4.23	66.61	15.99		150.0	
47403410034	THE SECTION OF THE SE	Z	4.23	67.03	16.19	1. University	150.0	- Was Sugar
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.36	66.91	16.23	0.00	150.0	±9.6 %
	- International Control of the Contr	Y	4.24	66.55	15.97		150.0	
		Z	4.25	66.96	16.17		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.47	66.89	16.24	0.00	150.0	± 9.6 %
		Y	4,35	66.53	15.99		150.0	
		Z	4.35	66.92	16.18		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	×	4.59	67.14	16.33	0.00	150.0	± 9.6 %
		Y	4.47	66.78	16.08		150.0	
		Z	4.46	67.16	16.25		150.0	
10424-	IEEE 802.11n (HT Greenfield, 72.2	X	4.52	67.09	16,31	0.00	150.0	± 9.6 %
AAB	Mbps, 64-QAM)				0			
		Y	4.40	66.73	16.05		150.0	
NAME OF TAXABLE PARTY.		Z	4.39	67.09	16.23	-	150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	×	5,15	67.27	16.49	0.00	150.0	± 9.6 %
		Y	5.05	66.98	16.31		150.0	
		Z	5.01	67.17	16.41		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	×	5.17	67.36	16,53	0.00	150.0	± 9.6 %
		Y	5.08	67.12	16.38		150.0	
		Z	5.05	67.33	16.49		150.0	

EX3DV4-SN:7494

February 26, 2018

70100								
10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.13	67.15	16.42	0.00	150.0	± 9.6 %
		Y	5.03	66.85	16.24		150.0	
VANCOUNT I	VALUE AND THE PARTY OF THE PART	Z	5.01	67.11	16.38		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.23	72.27	18.34	0.00	150.0	± 9.6 %
2.3.98		Y	3.99	71.49	17.71		150.0	
		Z	4.17	72.80	18.15		150.0	
10431-	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.96	67.36	16.06	0.00	150.0	±9.6 %
AAB	ETE-1 DD (OT DMA, 10 MF12, E-1M 3.1)	Ŷ	D88535	220000000000000000000000000000000000000	0.790.00	0.00	AVESSOCS	1 9.0 %
			3.81	66.88	15.67		150.0	
10100	175 500 (050)11 45101 5 7146 0	Z	3.81	67.37	15.87		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.29	67.19	16.23	0.00	150.0	± 9.6 %
		Y	4.15	66.79	15.93		150.0	
24244		Z	4.15	67.22	16.13		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.54	67.13	16.33	0.00	150.0	± 9.6 %
		Y	4.42	66.76	16.08		150.0	
		Z	4.41	67.14	16.25		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.34	73.15	18.13	0.00	150.0	± 9.6 %
		Y	3.97	71.83	17.20		150.0	
		Z	4.17	73.19	17.60		150.0	
10435-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	X	2.84	78.74	18.13	3.23	80.0	±9.6 %
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	Y	- Contract			3.23		I 9.0 %
			3.48	81.45	18.98		80.0	
40447	LTE FOR OFFILE FALL FALLS	Z	3.64	83.98	20.20		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.20	67.15	14.91	0.00	150.0	± 9.6 %
		Y	2.99	66.28	14.17		150.0	
		Z	2.97	66.77	14.26		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	3.83	67.16	15.94	0.00	150.0	±9.6 %
		Y	3.68	66.67	15.55		150.0	
		Z	3.69	67.18	15.75		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.13	67.03	16.13	0.00	150.0	± 9.6 %
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Y	4.00	66.61	15.83		150.0	
		Z	4.00	67.05	16.03		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.34	66.91	16.19	0.00	150.0	±9.6 %
-		Y	4.22	66.53	15.92		150.0	
		Z	4.23	66.92	16.11		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	2,99	66.88	14.14	0.00	150.0	± 9.6 %
	- Control of the Cont	Y	2.74	65.78	13.23		150.0	
		Z	2.69	66.07	13.18		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.06	67.78	16.63	0.00	150.0	± 9.6 %
7.4.00		Y	6.00	67.55	16.51		150.0	
		Z	6.07	68.05	16.78		150.0	
10457-	UMTS-FDD (DC-HSDPA)	X	3.71	65,53	15.92	0.00	150.0	±9.6 %
AAA	Since of the last internal	Y	3.61	65.20	15.66	7.4.44	150.0	3.0.00
		Z	3.65	65.68	15.87		150.0	
10458-	CDMA2000 (1xEV-DO, Rev. B, 2	X	3.70	71.13	16.64	0.00	150.0	± 9.6 %
AAA	carriers)						100.0	
		Y	3.25	69.16	15.28		150.0	
		Z	3.15	69.17	14.95	12722	150.0	
0459-	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.84	69,11	17.84	0.00	150.0	± 9.6 %
AAA								
AAA		Y	4.69	68.77	17.48		150.0	

Certificate No: EX3-7494_Feb18

Page 26 of 39

EX3DV4- SN:7494

February 26, 2018

10460-	UMTS-FDD (WCDMA, AMR)	Х	0.88	68.39	16.07	0.00	150.0	±9.6 %
AAA		W	0.70	05.50	40.77		450.0	
		Y	0.70	65.56	13.77		150.0	
10101	1 TE TOD (00 FD11) 1 CO 1 1 1 1 1	Z	0.84	67.99	15.62	0.00	150.0	1500
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	1.57	72.49	16.91	3.29	80.0	± 9.6 %
1 P. Ser Call		Y	2.31	77.86	18.85		80.0	
		Z	1.89	76.90	18.97		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.65	60.00	7.36	3.23	80.0	± 9.6 %
-		Y	0.67	60.00	7.26		80.0	
		Z	0.57	60.00	7.02		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.67	60.00	6.67	3.23	80.0	± 9.6 %
	01 20 1111 02 300113110 210111110101	Y	0.68	60.00	6.58		80.0	
		Z	0.60	60.00	6.22		80.0	
10464-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz,	X	1.23	69.24	14.93	3.23	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		11000000	101/2/01/27	CV-Dolese L	0.20		1 3.0 /0
		Y	1.59	72.66	16.19		80.0	
4040=	175 700 000 50111 1 50 5111	Z	1.42	72.83	16.69	0.00	80.0	1 2 2 2 2
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	0.65	60.00	7.28	3.23	80.0	± 9.6 %
		Y	0.67	60.00	7.19		80.0	
		Z	0.57	60.00	6.95	-	80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.67	60.00	6.62	3.23	80.0	± 9.6 %
	The state of the s	Y	0.69	60.00	6.54		80.0	
		Z	0.60	60.00	6.18		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.28	69.83	15.22	3.23	80.0	± 9.6 %
		Y	1.71	73.64	16.62		80.0	
		Z	1.51	73.74	17.10		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	7.31	3.23	80.0	± 9.6 %
1110		Y	0.66	60.00	7.22		80.0	
		Z	0.57	60.00	6.98		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.67	60.00	6.62	3.23	80.0	± 9.6 %
1010	as an or chordina alatinialay	Y	0.68	60.00	6.54		80.0	
		Z	0.60	60.00	6.18		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.27	69.83	15.21	3.23	80.0	± 9.6 %
AAC	Q/ O(, OC Oubitatio=2,0,4,7,0,0)	Y	1.71	73.66	16.62		80.0	
		Z	1.50	73.77	17.11		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	7.29	3.23	80.0	± 9.6 %
. 510	Se 111/1 OE SOUNGING - E,O,T,1,O,O)	Y	0.66	60.00	7.20		80.0	
		Z	0.57	60.00	6.96		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.67	60.00	6.60	3.23	80.0	± 9.6 %
rino	Se iiii, Oc Gustamo-2,5,4,7,6,5)	Y	0.68	60.00	6.52		80.0	
		Z	0.31	55.91	4.03		80.0	
10473-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz.	X	1.27	69.80	15.19	3.23	80.0	± 9.6 %
AAC	QPSK, UL Subframe=2,3,4,7,8,9)		2000	ATS00505	111271001	3.23	GPS-HES-TI	19.0 %
		Y	1.70	73.59	16.59		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	X	1.50 0.65	73.71 60.00	17.08 7.29	3.23	80.0	± 9.6 %
AAC	QAM, UL Subframe=2,3,4,7,8,9)	34	0.00	00.00	7.00		00.0	
		Y	0.66	60.00	7.20		80.0	
10.177	1 TE TOO 100 FOUR 1 CO 101 II	Z	0.57	60.00	6.96		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	0.67	60.00	6.60	3.23	80.0	± 9.6 %
		Y	0.68	60.00	6.52		80.0	
		Z	0.31	55.90	4.03		80.0	

EX3DV4-SN:7494

February 26, 2018

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	0.65	60.00	7.26	3.23	80.0	± 9.6 %
		Y	0.66	60.00	7.17		80.0	
		Z	0.57	60.00	6.93		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	0.67	60.00	6.59	3.23	80.0	± 9.6 %
177		Y	0.68	60.00	6.51		80.0	
0000000		Z	0.31	55.89	4.01		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.24	76.16	18.67	3.23	80.0	± 9.6 %
		Y	4.42	80.82	20.23		80.0	
		Z	4.39	82.21	20.82		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.03	66.76	12.73	3.23	80.0	± 9.6 %
	100000000000000000000000000000000000000	Y	2.05	66.92	12.60		80.0	
		Z	1.85	67.01	12.43		80.0	-
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.62	63.96	11.04	3.23	80.0	± 9.6 %
		Y	1.57	63.66	10.70		80.0	
		Z	1.32	63.18	10.24		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.53	65.20	12.69	2.23	80.0	±9.6 %
MINE O		Y	1.10	61.56	10.21		80.0	
		Z	1.14	62.42	10.54		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.45	61.38	9.71	2.23	80.0	±9.6 %
20201012		Y	1.32	60.52	8.97		80.0	
		Z	1.16	60.00	8.17		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.44	61.07	9,53	2.23	80.0	± 9.6 %
		Y	1.32	60.25	8.82		80.0	
		Z	1.19	60.00	8.15		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.16	69.31	16.02	2.23	80.0	± 9.6 %
		Y	1.69	66.06	14.04		80.0	
		Z	1.93	68.38	15.12		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.10	65.45	13.37	2.23	80.0	± 9.6 %
CANADA.		Y	1.71	62.92	11.64		80.0	
		Z	1.73	63.60	11.80		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.11	65.08	13,16	2.23	80.0	± 9.6 %
		Y	1.73	62.69	11.49		80.0	
		Z	1.73	63.23	11.57		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.58	69.55	17.35	2.23	80.0	± 9.6 %
		Υ	2.27	67.73	16.25		80.0	
		Z	2.45	69.44	17.18		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.75	67.17	16.06	2.23	80.0	± 9.6 %
		Υ	2.49	65.86	15.18		80.0	
		Z	2.63	67.13	15.78		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.83	67.06	16.01	2.23	80.0	± 9.6 %
		Y	2.57	65.81	15.15		80.0	
		Z	2.69	66.99	15.69		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.92	68.61	17.17	2.23	80.0	± 9.6 %
		Y	2.65	67.28	16.37		80.0	
		Z	2.77	68.48	17.08		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.13	66.69	16.33	2.23	80.0	± 9.6 %
AC		Y	2.92	65.77	15.72		80.0	
		2012	6.34	03.77	10.72		00.0	

Certificate No: EX3-7494_Feb18

Page 28 of 39

EX3DV4- SN:7494

February 26, 2018

10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz.	-	3.19	66.60	16.28	2.23	80.0	+000
AAC	64-QAM, UL Subframe=2,3,4,7,8,9)	×	3.19	00.00	10.26	2.23	80.0	±9.6 %
	The state of the s	Y	2.99	65.70	15.69		80.0	
		Z	3.07	66.59	16.12		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	3.09	69.75	17.58	2.23	80.0	± 9.6 %
T. P. L. P.	Decree of the control	Y	2.78	68.23	16.72		80.0	
		Z	2.93	69.54	17.51		80.0	
10495-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	X	3.15	66.91	16.53	2.23	80.0	±9.6 %
AAC	16-QAM, UL Subframe=2,3,4,7,8,9)	Y	2.94	65.97	15.94	10000000	80.0	LESCON, MIL
		Z	3.03	66.87	16.43		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.24	66.76	16.49	2.23	80.0	± 9.6 %
		Y	3.04	65.88	15.93		80.0	
		Z	3.12	66.74	16.39		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	0.93	60.00	8.57	2.23	80.0	± 9.6 %
	mining an only of ordering allowing	Y	0.90	60.00	7.78		80.0	
		Z	0.86	60.00	7.53		80.0	
10498-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	1.10	60.00	7.25	2.23	80.0	±9.6 %
AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		1.10	00.00	7.25	2.23	50.0	13.0 %
		Y	1.08	60.00	6.57		80.0	
		2	1.05	60.00	6.14		80.0	-12
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL	X	1.12	60.00	7.08	2.23	80.0	± 9.6 %
	Subframe=2,3,4,7,8,9)	Y	1.11	60.00	6.40		80.0	
		Z	1.08	60.00	5.96		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.33	69.42	16.57	2.23	80.0	± 9.6 %
		Y	1.93	66.88	15.00		80.0	
		Z	2.16	69.02	16.03		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.42	66.55	14.60	2.23	80.0	± 9.6 %
		Y	2.06	64.46	13.19		80.0	
		Z	2.16	65.57	13.59		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.46	66.38	14.43	2.23	80.0	± 9.6 %
Laura de la constante de la co		Y	2.09	64.32	13.03		80.0	
		Z	2.17	65.33	13.38		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.55	69.37	17.25	2.23	80.0	± 9.6 %
		Y	2.24	67.56	16.15		80.0	
		Z	2.42	69.25	17.08		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.73	67.07	16.00	2.23	80.0	± 9.6 %
		Y	2.48	65.76	15.11		80.0	
		Z	2.61	67.02	15.71		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.82	66.97	15.95	2.23	80.0	± 9.6 %
		Y	2.56	65.72	15.09		80.0	
		Z	2.68	66.89	15.62		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.07	69.63	17.51	2.23	80.0	± 9.6 %
		Y	2.76	68.11	16.65		80.0	
F0300000	CONTROL TO SECURE A SECURITION OF THE SECURITION	Z	2.91	69.41	17.44	- Lander	80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.14	66.85	16.49	2.23	80.0	±9.6 %
	Southern Electrical	Y	2.93	65.91	15.90		80.0	

EX3DV4-SN:7494

February 26, 2018

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.23	66.69	16.44	2.23	80.0	± 9.6 %
		Y	3.03	65.82	15.89		80.0	
		Z	3.11	66.67	16.35		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.52	68.96	17.25	2.23	80.0	± 9.6 %
	We make the second of the seco	Y	3.24	67.75	16.57		80.0	
		Z	3.37	68.79	17.22		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.62	66.72	16.61	2.23	80.0	± 9.6 %
	A CONTRACTOR OF THE PROPERTY O	Y	3.43	65.94	16.15		80.0	
		Z	3.50	66.61	16.55		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.70	66.58	16.58	2.23	80.0	± 9.6 %
		Y	3.51	65.85	16.14		80.0	
41 TV		Z	3.58	66.51	16.52		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.56	70.02	17.57	2.23	80.0	± 9.6 %
		Y	3.23	68.54	16.78		80.0	
		Z	3.39	69.70	17.50		80.0	
10513- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.50	66.80	16.66	2.23	80.0	±9.6 %
		Y	3.31	65.98	16.18		80.0	
	A MANAGEMENT AND A STATE OF THE	Z	3.39	66.65	16.59		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	3.56	66.53	16.58	2.23	80.0	± 9.6 %
		Y	3.38	65.75	16.13		80.0	
		Z	3.45	66.40	16.52		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.96	63.31	14.68	0.00	150.0	± 9.6 %
		Y	0.87	62.23	13.64		150.0	
		Z	0.95	63.24	14.49	-	150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.59	70.32	17.28	0.00	150.0	± 9.6 %
		Y	0.43	66.45	13.92		150.0	
-		Z	0.56	69.40	16.67	-	150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.81	65.09	15.27	0.00	150.0	±9.6 %
		Y	0.69	63.42	13.73		150.0	
		Z	0.79	64.83	14.98		150.0	-
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.34	66.88	16.18	0.00	150.0	± 9.6 %
		Y	4.22	66.51	15.92		150.0	
10519-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	Z X	4.23	66.93 67.04	16.12 16.27	0.00	150.0	±9.6 %
AAB	Mbps, 99pc duty cycle)		4.55		40.00		400.0	
		Y	4.36	66.68	16.01		150.0	
		Z	4.35	67.07	16.19		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.34	66.97	16.18	0.00	150.0	± 9.6 %
		Y	4.22	66.59	15.92		150.0	
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.22	66.99 66.94	16.11	0.00	150.0 150.0	±9.6 %
AAB	Mbps, 99pc duty cycle)	Y	AAE	66 E4	15.00		450.0	
		Z	4.15	66.54 66.93	15.89		150.0	
10522-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	4.13	67.05	16.25	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)	Y	4.19	66.65	15.97	0.00	150.0	1 5.0 %
		Z	4.18	66.98	16.13		150.0	
		4	4.10	00.00	10.10		100.0	

Certificate No: EX3-7494_Feb18

Page 30 of 39

EX3DV4-SN:7494

February 26, 2018

10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.26	67.08	16.19	0.00	150.0	± 9.6 %
and the		Y	4.13	66.69	15.91		150.0	
		Z	4.15	67.15	16.14		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.28	67.03	16.25	0.00	150.0	±9.6 %
	2-2-3-3-V	Y	4.15	66.64	15.98		150.0	
		Z	4.14	67.03	16.17		150.0	
10525- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.31	66.15	15.88	0.00	150.0	± 9.6 %
		Y	4.19	65.75	15.61		150.0	
		Z	4.20	66.20	15.83		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.43	66.41	15.99	0.00	150.0	± 9.6 %
		Y	4.30	66.01	15.72		150.0	
		Z	4.30	66.42	15.92		150.0	V
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.36	66.39	15.93	0.00	150.0	± 9.6 %
		Y	4.23	65.97	15.65		150.0	
		Z	4.24	66.40	15.86		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.38	66.40	15.96	0.00	150.0	± 9.6 %
		Y	4.25	65.99	15.69		150.0	
		Z	4.25	66.41	15.89		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	×	4.38	66.40	15.96	0.00	150.0	± 9.6 %
	1 11 M = 51 - 51 - M	Y	4.25	65.99	15.69		150.0	
		Z	4.25	66.41	15.89		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	Х	4.34	66.42	15.94	0.00	150.0	± 9.6 %
		Y	4.21	65.99	15.65		150.0	
		Z	4.20	66.38	15.85		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.23	66.28	15.87	0.00	150.0	± 9.6 %
	- A	Y	4.09	65.84	15.58		150.0	
		Z	4.10	66.26	15.79		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.38	66.48	15.97	0.00	150.0	± 9.6 %
	1	Y	4.25	66.07	15.69		150.0	
		Z	4.25	66.50	15.90		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.94	66.38	16.03	0.00	150.0	± 9.6 %
		Y	4.83	66.04	15.82		150.0	
		Z	4.83	66.34	15.98		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.98	66.50	16.09	0.00	150.0	± 9.6 %
me or	The Account Committee of the Committee o	Y	4.87	66,15	15.88		150.0	
		Z	4.85	66.43	16.03		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.87	66.51	16.07	0.00	150.0	± 9.6 %
Transition		Y	4.76	66.13	15.84		150.0	
		Z	4.75	66.43	16.01		150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.94	66.51	16.07	0.00	150.0	± 9.6 %
	1370,25 E300011 E3000000	Y	4.83	66.19	15.88		150.0	
		Z	4.83	66.50	16.04		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.00	66.46	16.08	0.00	150.0	± 9.6 %
	2-015.05000000000000000000000000000000000	Y	4.89	66.12	15.88		150.0	
		Z	4.87	66.39	16.02		150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.93	66.42	16.08	0.00	150.0	± 9.6 %
	100000000000000000000000000000000000000	Y	4.82	66.06	15.87		150.0	

EX3DV4- SN:7494

February 26, 2018

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	4.92	66.35	16.03	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)	Y	4.81	65.99	15.82		150.0	
		Z	4.81	66.31	15.98		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	×	5.07	66.45	16.09	0.00	150.0	± 9.6 %
20.10	oope daily dydicy	Y	4.96	66.11	15.90		150.0	
		Z	4.95	66.40	16.04		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5,15	66.53	16.16	0.00	150.0	± 9.6 %
	ospo dalij ojunoj	Y	5.05	66.25	16.00		150.0	
		Z	5.03	66.51	16.13		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	×	5.29	66.46	16.02	0.00	150.0	± 9.6 %
CONTROL STATE	- CONTROL OF CONTROL O	Y	5.19	66.11	15.83		150.0	
		Z	5.19	66.38	15.97		150.0	
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	×	5.46	66.89	16.19	0.00	150.0	± 9.6 %
and the second		Y	5.37	66.61	16.04		150.0	
		Z	5.35	66.81	16.15		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	×	5.32	66.57	16.05	0.00	150.0	± 9.6 %
	West of the second seco	Y	5.22	66.23	15.86		150.0	
		Z	5.22	66.48	15.99		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	×	5.40	66.70	16.10	0.00	150.0	± 9.6 %
		Y	5.32	66.42	15.95		150.0	
		Z	5.33	66.71	16.11		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.53	67.27	16.37	0.00	150.0	±9.6 %
		Y	5.44	66.98	16.21		150.0	
		Z	5.38	67.07	16.27		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	×	5.38	66.78	16.16	0.00	150.0	± 9.6 %
		Y	5.31	66.53	16.02		150.0	
***************************************		Z	5.31	66.81	16.17		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	×	5.31	66,54	16.01	0.00	150.0	± 9.6 %
		Y	5.20	66.17	15.81		150.0	
-		Z	5.19	66.41	15.94	-	150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	×	5.30	66.58	16.03	0.00	150.0	± 9.6 %
		Y	5.19	66,23	15.83		150.0	
		Z	5.20	66.53	15.99		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.35	66.52	16.03	0.00	150.0	± 9.6 %
		Y	5.24	66.17	15.83		150.0	
7000		Z	5.24	66.44	15.97		150.0	1676
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.71	66.79	16.10	0.00	150.0	± 9.6 %
		Y	5.62	66.47	15.93		150.0	
		Z	5.63	66.70	16.05	0.00	150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.80	67.00	16.19	0.00	150.0	±9.6 %
		Y	5.71	66.69	16.02		150.0	
10556-	IEEE 802.11ac WiFi (160MHz, MCS2,	X	5.70 5.84	66.87 67.12	16.12	0.00	150.0 150.0	± 9.6 %
AAC	99pc duty cycle)		E 70	00 OF	40.00		150.0	
		Y	5.76	66.85	16.09		150.0	
10557	IEEE 902 44 oo WIEI /400 H II - 1400 C	Z	5.75	67.04	16.20	0.00	150.0	+000
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.79	66.99	16.19	0.00	150.0	± 9.6 %
		Y	5.70	66.66	16.02		150.0	
		Z	5.70	66.88	16.14		150.0	

Page 32 of 39

February 26, 2018

EX3DV4- SN:7494

10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.80	67.03	16.23	0.00	150.0	± 9.6 %
		Y	5.69	66.67	16.04		150.0	
		Z	5.67	66.84	16.13		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.82	66.97	16.24	0.00	150.0	± 9.6 %
	L.V.	Y	5.72	66.63	16.06		150.0	
		Z	5.71	66.83	16.16		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	Х	5.76	66.95	16.26	0.00	150.0	± 9.6 %
		Y	5.66	66.63	16.09		150.0	
		Z	5.65	66.81	16.18		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	Х	5.80	67.11	16.34	0.00	150.0	± 9.6 %
		Y	5.70	66.75	16.15		150.0	
		Z	5.68	66.93	16.24		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	Х	5.91	67.11	16.30	0.00	150.0	± 9.6 %
	1001 - 0018 - 31	Y	5,83	66.82	16.15		150.0	
		Z	5.80	66.98	16.24		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	×	4.65	66.88	16.30	0.46	150.0	± 9.6 %
		Y	4.54	66.54	16.07		150.0	
		Z	4.53	66.91	16.24		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	4.85	67.29	16.62	0.46	150.0	± 9.6 %
		Y	4.73	66.97	16.40		150.0	
		Z	4.71	67.32	16.56		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	Х	4.68	67.10	16.42	0.46	150.0	± 9.6 %
71-1		Y	4.56	66.75	16.18		150.0	
		Z	4.55	67.11	16.35		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	х	4.72	67.51	16.80	0.46	150.0	± 9.6 %
	9 // 1 - 2 / Mark	Y	4.60	67.16	16.57		150.0	
		Z	4.59	67.52	16.75		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.57	66.80	16.14	0.46	150.0	± 9.6 %
		Y	4.45	66.43	15.88		150.0	
		Z	4.42	66.71	16.01		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.71	67.75	16.95	0.46	150.0	± 9.6 %
		Y	4.59	67.42	16.73		150.0	
		Z	4.60	67.83	16.93		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.71	67.51	16.83	0.46	150.0	± 9.6 %
100	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Y	4.59	67.18	16.60		150.0	
		Z	4.57	67.54	16.78		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.08	63.64	15.05	0.46	130.0	± 9.6 %
		Y	0.98	62.63	14.12		130.0	
		Z	1.06	63.58	14.89		130.0	
10572- AAA	IEEE 802,11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.08	64.13	15.38	0.46	130.0	± 9.6 %
		Y	0.98	63.05	14.41		130.0	
		Z	1.07	64.06	15.22	-	130.0	i gu
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.08	77.41	20.56	0.46	130.0	± 9.6 %
		Y	0.73	71.46	16.79		130.0	
		Z	0.99	75.97	19.89		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.10	68.88	18.01	0.46	130.0	± 9.6 %
		Y	0.95	66.93	16.52		130.0	
		T.	0.00	00.33	10.02		130.0	

EX3DV4-SN:7494

February 26, 2018

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.42	66.59	16.28	0.46	130.0	± 9.6 %
interior .		Y	4.31	66.26	16.05		130.0	
		Z	4.30	66.63	16.21		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.45	66.80	16.37	0.46	130.0	± 9.6 %
		Y	4.34	66.48	16.14		130.0	
		Z	4.33	66.87	16.32		130.0	
10577-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.61	67.03	16.52	0.46	130.0	± 9.6 %
AAA	OFDM, 12 Mbps, 90pc duty cycle)	Y	4.49	66.71	16.29	0.40	130.0	1 3.0 %
		Z	4.48	67.07				
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X			16.45	0.40	130.0	2000
AAA	OFDM, 18 Mbps, 90pc duty cycle)	1255	4.51	67.18	16.63	0.46	130.0	±9.6 %
		Y	4.40	66.85	16.40		130.0	
		Z	4.39	67.23	16.57		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	Х	4.26	66.33	15.85	0.46	130.0	±9.6 %
		Y	4.14	65.96	15.59		130.0	
		Z	4.13	66.29	15.75		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.29	66.37	15.87	0.46	130.0	± 9.6 %
		Y	4.17	66.01	15.60		130.0	1
	CONTRACTOR OF THE STATE OF THE	Z	4.14	66.28	15.72		130.0	d synason
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.43	67.26	16.60	0.46	130.0	± 9.6 %
		Y	4.31	66.92	16.36		130.0	
III W	Large sall and the sale in the	Z	4.31	67.34	16.57		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	Х	4.19	66.09	15.63	0.46	130.0	±9.6 %
		Y	4.07	65.73	15.36		130.0	
		Z	4.05	66.04	15.51		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.42	66.59	16.28	0.46	130.0	± 9.6 %
		Y	4.31	66.26	16.05		130.0	
		Z	4.30	66.63	16.21		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	х	4.45	66.80	16.37	0.46	130.0	± 9.6 %
		Y	4.34	66.48	16,14		130.0	-
		Z	4.33	66.87	16.32		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.61	67.03	16.52	0.46	130.0	± 9.6 %
9 112	111010100000000000000000000000000000000	Y	4.49	66.71	16.29		130.0	
		Z	4.48	67.07	16.45		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.51	67.18	16.63	0.46	130.0	± 9.6 %
	1	Y	4.40	66.85	16.40		130.0	
		Z	4.39	67.23	16.57		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.26	66.33	15.85	0.46	130.0	± 9.6 %
	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Y	4.14	65.96	15.59		130.0	
		Z	4.13	66.29	15.75		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.29	66.37	15.87	0.46	130.0	± 9.6 %
		Y	4.17	66.01	15.60		130.0	
		Z	4.14	66.28	15.72		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.43	67.26	16.60	0.46	130.0	± 9.6 %
7712	mopo, oopo dati ojatoj	Y	4.31	66.92	16.36		130.0	
		Z	4.31	67.34	16.57		130.0	
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.19	66.09	15.63	0.46	130.0	±9.6 %
AAB	Mbps, 90pc duty cycle)	111550	0.00000	5005000	7055078051	V.40	0.00000	1 3.0 76
		Y	4.07	65.73	15.36		130.0	
		Z	4.05	66.04	15.51		130.0	

Certificate No: EX3-7494_Feb18

Page 34 of 39

EX3DV4-SN:7494

February 26, 2018

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.58	66.69	16.41	0.46	130.0	± 9.6 %
		Y	4.47	66.39	16.20		130.0	
		Z	4.47	66.76	16.36		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.69	66.97	16.53	0.46	130.0	± 9.6 %
	moon, sopo and of sion	Y	4.58	66.66	16.32		130.0	
		Z	4.56	67.00	16.47		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.61	66.84	16.38	0.46	130.0	± 9.6 %
AAB	MCS2, 90pc duty cycle)	7500	1100517	120250	1000000	0.40	FRANCE.	1 9.0 %
		Y	4.49	66.52	16.16		130.0	
		Z	4.48	66.87	16.32		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.66	67.02	16.56	0.46	130.0	± 9.6 %
	The state of the s	Y	4.55	66.71	16.34		130.0	
		Z	4.54	67.06	16.50		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.63	67.00	16.46	0.46	130.0	± 9.6 %
NATIONAL PROPERTY.		Y	4.51	66.68	16.25		130.0	
		Z	4.50	67.04	16.41	41	130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.56	66.95	16.45	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)	72747	Means	10130330	135563611.	TREMESE:	23174362	10/70/560900
77920	STATE OF THE STATE	Y	4.44	66.62	16.22		130.0	
		Z	4.42	66.95	16.38		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	×	4.51	66.82	16.30	0.46	130.0	± 9.6 %
0.10	mood, dopo daty dyddy	Y	4.39	66.48	16.06		130.0	
		Z	4.38	66.82	16.22		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	×	4,51	67.06	16.58	0.46	130.0	± 9.6 %
70.0	moor, supe daty cycley	Y	4.39	66.73	16.35		130.0	
		Z	4.39	67.10	16.52		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	×	5.26	67,16	16.67	0.46	130.0	± 9.6 %
MAD	Wicoo, sope duty cycle)	Y	5.19	66.95	16.55		130.0	
		Z	5.18	67.23	16.69		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.35	67.49	16.81	0.46	130.0	± 9.6 %
MD	MCS1, Sope daty cycle)	Y	5.29	67.35	16.72		130.0	
		Z	5.23	67.44	16.76		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.26	67.29	16.73	0.46	130.0	± 9.6 %
MMD	MC32, Supe duty cycle)	Y	5.19	67.12	16.62		130.0	
			5.20	67.45	16.79		130.0	
10602-	IEEE 802.11n (HT Mixed, 40MHz,	Z X	5.35	67.45	16.64	0.46	130.0	± 9.6 %
AAB	MCS3, 90pc duty cycle)	Y	5,27	67.40	16.52		120.0	-
				67.10	16.53		130.0	
10000	IEEE 900 11a /UT March 40M/	Z	5.22	67.23	16.59	0.40	130.0	1000
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.42	67.60	16.94	0.46	130.0	± 9.6 %
		Y	5,33	67,37	16.81		130.0	
		Z	5.26	67.44	16.84		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	×	5.29	67.20	16.71	0.46	130.0	± 9.6 %
~~~	ALTONO DE LA COMPONIDADA	Y	5.19	66.89	16.54		130.0	
		Z	5.14	67.01	16.59		130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	×	5.34	67.34	16.78	0.46	130.0	± 9.6 %
		Y	5.26	67.13	16.66		130.0	
		Z	5.20	67.25	16.72		130.0	
			5.14	66.81	16.37	0.46	130.0	± 9.6 %
	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90nc duty cycle)	X	200	3000	DESCRIBE OF	- Construction	- Williams	X412003000
10606- AAB	MCS7, 90pc duty cycle)	Y	5.06	66.62	16.25	1000000	130.0	201202100

EX3DV4- SN:7494

February 26, 2018

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10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	×	4.43	66.05	16.06	0.46	130.0	± 9.6 %
1.7		Y	4.31	65.70	15.83		130.0	
		Z	4.32	66.12	16.02		130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.56	66.36	16.20	0.46	130.0	± 9.6 %
	- I - I - I - I - I - I - I - I - I - I	Y	4.44	66.01	15.97		130.0	
		Z	4.43	66.38	16.15		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	×	4.46	66.19	16.02	0.46	130.0	± 9.6 %
ride collection		Y	4.34	65.83	15.77		130.0	
		Z	4.33	66.21	15.96		130.0	
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	×	4.51	66.37	16.19	0.46	130.0	± 9.6 %
		Y	4.39	66.01	15.96		130.0	
		Z	4.38	66.40	16.14		130.0	
10611- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	×	4.42	66.15	16.03	0.46	130.0	± 9.6 %
		Y	4.30	65.79	15.79		130.0	
		Z	4.29	66.16	15.97	40,000	130.0	- Inches
10612- AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.41	66.27	16.06	0.46	130.0	± 9.6 %
		Y	4.28	65.89	15.81		130.0	
	Commence of the Commence of th	Z	4.26	66.23	15.98	harantifen.	130.0	
10613- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.40	66.08	15.90	0.46	130.0	± 9.6 %
		Y	4.28	65.70	15.65		130.0	
(C		Z	4.26	66.05	15.81	00000	130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.38	66.33	16.17	0.46	130.0	± 9.6 %
		Y	4.25	65.95	15.92		130.0	
	A WAR I STATE TO THE A THE WAR I THE THE THE THE	Z	4.25	66.33	16.10	A. S. C.	130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4,41	65.98	15.79	0.46	130.0	± 9.6 %
		Y	4.29	65.61	15.54		130.0	
macues.	AND HERE THE PERSON AND DESIGNATION OF THE PERSON	Z	4.27	65.99	15.72		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	×	5.07	66.34	16.25	0.46	130.0	± 9.6 %
		Y	4.97	66.04	16.07		130.0	
		Z	4.96	66.31	16.21		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	×	5.10	66.45	16.28	0.46	130.0	± 9.6 %
		Y	5.00	66.15	16.11		130.0	
		Z	4.98	66.39	16.23		130.0	- 18/8-90
10618- AAB	IEEE 802.11ac WiFI (40MHz, MCS2, 90pc duty cycle)	×	5.02	66.53	16.33	0.46	130.0	± 9.6 %
		Y	4.91	66.19	16.14		130.0	
		Z	4.89	66.45	16.27		130.0	- 000
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	×	5.04	66.36	16.18	0.46	130.0	± 9.6 %
		Y	4.96	66.11	16.03		130.0	
	Haraman Marie and Haraman and All and	Z	4.94	66.38	16.17	1000	130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	×	5.11	66.35	16.22	0.46	130.0	± 9.6 %
		Y	5.01	66.06	16.05		130.0	
		Z	4.98	66.26	16.16		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	×	5.12	66.47	16.41	0.46	130.0	±9.6 %
		Y	5.02	66,16	16.23		130.0	
		Z	5.00	66.43	16.37		130.0	No. II
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	×	5.10	66.55	16.44	0.46	130.0	±9.6 %
	* * * * * * * * * * * * * * * * * * *	Y	5.00	66.25	16.27		130.0	
		Z		66.50				

Page 36 of 39

EX3DV4-SN:7494

February 26, 2018

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	Х	5.00	66.11	16.08	0.46	130.0	± 9.6 %
		Y	4.90	65.81	15.90		130.0	
		Z	4.89	66.10	16.05		130.0	1 50
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.19	66.37	16.28	0.46	130.0	± 9.6 %
		Y	5.10	66.09	16.12		130.0	
		2	5.07	66.34	16.24		130.0	
10625-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	5.27	66.50	16.40	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)	Y	5.19	66.27	16.28	3,30	130.0	20.0.0
		Z	5.16	66.52	16.40		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.40	66.37	16.20	0.46	130.0	± 9.6 %
7410	Sope daty cycle)	Y	5.31	66.07	16,04		130.0	
		Z	5.31	66.31	16.17		130.0	
10627-	IEEE 802.11ac WiFi (80MHz, MCS1,	X	5.62	66.96	16.47	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)	Y	7003850	DESERVER III	(1999) Tal	0.40	377755	£ 9.0 %
			5.56	66.76	16.37		130.0	
10000	IEEE 000 44 MIEI 1004 H III 14000	Z	5.52	66.91	16.44	0.40	130.0	1500
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	×	5.39	66.34	16.09	0.46	130.0	± 9.6 %
		Y	5.30	66.04	15.92		130.0	
		Z	5.29	66.26	16.04		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	×	5.50	66.54	16.19	0.46	130.0	± 9.6 %
		Y	5,44	66.36	16.08		130.0	
		Z	5.44	66.63	16.23		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	×	5.71	67.39	16.62	0.46	130.0	± 9.6 %
7.5		Y	5.64	67.17	16.50		130.0	
		Z	5.54	67.11	16.48	-	130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	×	5.70	67.46	16.84	0.46	130.0	± 9.6 %
	Contract to the state of the st	Y	5.61	67.18	16.70		130.0	
		Z	5.56	67.29	16.76		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	×	5.63	67.17	16.72	0.46	130.0	± 9.6 %
10-11	Total Section 1	Y	5.58	67.02	16.64		130.0	
	CLEU LA	Z	5.57	67.27	16.77		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	×	5.42	66.43	16.17	0.46	130.0	± 9.6 %
		Y	5.32	66.10	15.99		130.0	
		Z	5.30	66.32	16.11		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.45	66.63	16.32	0.46	130.0	± 9.6 %
HILLS.		Y	5.35	66.31	16.16		130.0	
		Z	5.35	66.57	16.29		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.30	65.85	15.65	0.46	130.0	± 9.6 %
-		Y	5.21	65.54	15.48		130.0	
		Ż	5.19	65.76	15.60		130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	×	5.84	66.72	16.29	0.46	130.0	± 9.6 %
70200E-		Y	5.76	66.45	16.15		130.0	
		Z	5.76	66.66	16.26		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	×	5.95	67.01	16.43	0.46	130.0	± 9.6 %
		Y	5.88	66.76	16.30		130.0	
		Z	5.85	66.89	16.37		130.0	
10638-	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	5.98	67.09	16.44	0.46	130.0	± 9.6 %
AAC								
AAC	sope daty cycle)	Y	5.91	66.84	16.31		130.0	

EX3DV4-SN:7494

February 26, 2018

10639-	IEEE 802.11ac WiFI (160MHz, MCS3,	X	5.93	66.96	16.42	0.46	130.0	± 9.6 %
AAC	90pc duty cycle)	1					100.0	20.070
		Y	5.85	66.68	16.27		130.0	
10010	IEEE 000 44 - 11/15 (40014) - 1400	Z	5.84	66.87	16.37		130.0	
10640- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.89	66.83	16.30	0.46	130.0	± 9.6 %
		Y	5.79	66.50	16.13		130.0	
10011		Z	5.76	66.65	16.20		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.99	66.93	16.36	0.46	130.0	± 9.6 %
		Y	5.93	66.70	16.25		130.0	
10010	1555 000 44 1455 7150 E	Z	5.89	66.83	16.32		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.01	67.13	16.63	0.46	130.0	± 9.6 %
		Y	5.93	66.84	16.49		130.0	
10643-	UFFF 000 44 - 140FF (4004 H) 440 FF	Z	5.91	67.00	16.57		130.0	-
AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.86	66.81	16.36	0.46	130.0	± 9.6 %
		Y	5.78	66.52	16.22		130.0	
10011	IEEE OOG 11 110E	Z	5.75	66.66	16.29		130.0	
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.91	66.99	16,47	0.46	130.0	± 9.6 %
		Y	5.82	66.67	16.31		130.0	
1001-		Z	5.80	66.82	16.38		130.0	
10645- AAC	IEEE 802.11ac WIFI (160MHz, MCS9, 90pc duty cycle)	X	6.04	67.04	16.47	0.46	130.0	± 9.6 %
		Y	5.97	66.82	16.36		130.0	
		Z	5.92	66.90	16.40		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	5.85	87.94	30.48	9.30	60.0	± 9.6 %
		Y	5.37	85.81	29.63		60.0	
		Z	4,49	83.14	29.09		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	5.17	85.51	29.66	9.30	60.0	± 9.6 %
		Y	4.78	83.60	28.89		60.0	
		Z	4.02	80.87	28.26		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.51	61.76	8.43	0.00	150.0	±9.6 %
		Y	0.38	60.00	6.13		150.0	
		Z	0.38	60.10	6.48		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	×	3.13	65.98	15.78	2.23	80.0	±9.6 %
	1 - 30/A - 7/2 31 <del>4</del>	Y	2.93	65.12	15.15		80.0	
		Z	3.02	66.07	15.57		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.69	65.40	16.13	2.23	80.0	± 9.6 %
	- 22(19)1-3(1) - 39(1)	Y	3.54	64.83	15.74		80.0	
		Z	3.60	65.47	16.04		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.72	65.03	16.17	2.23	80.0	± 9.6 %
INCOM.	TO THE STATE OF TH	Y	3.58	64.50	15.83		80.0	
		Z	3.65	65.07	16.11		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.80	64.95	16.21	2.23	80.0	± 9.6 %
tree from the	1 m x 1 m m x 1 200 m 2 m 1 m 1 m / 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	Y	3.67	64.43	15.88		80.0	
		Z	3.74	64.95	16.16	124	80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	×	4.43	71.88	12.89	10.00	50.0	±9.6 %
THE TRANSPORT		Y	2.96	67.08	10.79		50.0	
		Z	4.92	73.02	13.29		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	×	21.85	87.99	16.66	6.99	60.0	± 9.6 %
A-14-14EF7		Y	1.49	64.48	8.54		60.0	

Page 38 of 39

#### EX3DV4-SN:7494

February 26, 2018

10660- AAA	Pulse Waveform (200Hz, 40%)	×	100.00	100.24	18.17	3.98	80.0	± 9.6 %
		Y	0.44	60.00	5.03		80.0	
	ALLOW THE THE PROPERTY OF THE PARTY OF THE P	Z	100.00	101.16	18.48		80.0	CONTRACTOR
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	101.13	17.57	2.22	100.0	± 9.6 %
		Y	0.24	60.00	3.65		100.0	
V=2.50.7.4		Z	100.00	102.26	17.94		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	100.00	99.08	15.66	0.97	120.0	± 9.6 %
		Y	3.24	108.92	7.51		120.0	
		Z	100.00	98.42	15.34		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.

# 1.1. D450V3 Dipole Calibration Certificate

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Client

CCIC-HTW (Auden)

Certificate No: D450V3-1102_Feb18

bject	D450V3 - SN:110	2	
alibration procedure(s)	QA CAL-15.v8 Calibration proces	dure for dipole validation kits belo	w 700 MHz
calibration date:	February 23, 2018	В	
	sted in the closed laborator	obability are given on the following pages are $y$ facility: environment temperature (22 $\pm$ 3) $^{\circ}$ C	and humidity < 70%.
Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
ower sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02522)	Apr-18
Reference 20 dB Attenuator	SN: 5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
ype-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18
Reference Probe EX3DV4	SN: 3877	30-Dec-17 (No. EX3-3877_Dec17)	Dec-18
DAE4	SN: 654	24-Jul-17 (No. DAE4-654_Jul17)	Jul-18
	ID#	Check Date (in house)	Scheduled Check
Connections Standards	14.7	06-Apr-16 (No. 217-02285/02284)	In house check: Jun-18
Secondary Standards	SN: GB41293874		
Power meter E4419B		06-Apr-16 (No. 217-02285)	In house check: Jun-18
Power meter E4419B Power sensor E4412A	SN: GB41293874 SN: MY41498087 SN: 000110210	06-Apr-16 (No. 217-02285) 06-Apr-16 (No. 217-02284	In house check: Jun-18 In house check: Jun-18
Power meter E4419B Power sensor E4412A Power sensor E4412A	SN: MY41498087	1.7 (M ' ' )가득하는 이상이라고 하는 것이 있다면 하는 것이 있다.	In house check: Jun-18 In house check: Jun-18 In house check: Jun-18
Power meter E4419B Power sensor E4412A	SN: MY41498087 SN: 000110210	06-Apr-16 (No. 217-02284	In house check: Jun-18 In house check: Jun-18
Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C	SN: MY41498087 SN: 000110210 SN: US3642U01700	06-Apr-16 (No. 217-02284 04-Aug-99 (in house check Jun-16)	In house check: Jun-18 In house check: Jun-18 In house check: Jun-18
Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C	SN: MY41498087 SN: 000110210 SN: US3642U01700 SN: US37390585	06-Apr-16 (No. 217-02284 04-Aug-99 (In house check Jun-16) 18-Oct-01 (in house check Oct-17)	In house check: Jun-18 In house check: Jun-18 In house check: Jun-18 In house check: Oct-18

Certificate No: D450V3-1102_Feb18

Page 1 of 8

# Calibration Laboratory of





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

Accreditation No.: SCS 0108

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

Accredited by the Swiss Accreditation Service (SAS)

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

#### Glossary:

TSL

tissue simulating liquid

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

## Calibration is Performed According to the Following Standards:

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

#### **Additional Documentation:**

e) DASY4/5 System Handbook

# Methods Applied and Interpretation of Parameters:

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

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

Certificate No: D450V3-1102_Feb18

Page 2 of 8

#### Measurement Conditions

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

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	ELI4 Flat Phantom	Shell thickness: 2 ± 0.2 mm
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	450 MHz ± 1 MHz	

Head TSL parameters
The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	43.5	0.87 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	43.7 ± 6 %	0.87 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	avenu	****

### SAR result with Head TSL.

SAR averaged over 1 cm3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.12 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	4.48 W/kg ± 18.1 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	0.749 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	3.00 W/kg ± 17.6 % (k=2)

Body TSL parameters
The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	56.7	0.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	56.0 ± 6 %	0.93 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		****

# SAR result with Body TSL

SAR averaged over 1 cm3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	1.11 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	4.47 W/kg ± 18.1 % (k=2)

SAR averaged over 10 cm3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	0.749 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	3.01 W/kg ± 17.6 % (k=2)

Certificate No: D450V3-1102_Feb18

# Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

Impedance, transformed to feed point	59.6 Ω - 0.2 jΩ	
Return Loss	- 21.1 dB	

#### Antenna Parameters with Body TSL

Impedance, transformed to feed point	55,1 Ω - 6,9 jΩ	
Return Loss	- 21.8 dB	

### General Antenna Parameters and Design

Electrical Delay (one direction)	1,348 ns
	110.10.10

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

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### **Additional EUT Data**

Manufactured by	SPEAG
Manufactured on	October 05, 2017

Certificate No: D450V3-1102_Feb18

### **DASY5 Validation Report for Head TSL**

Date: 23.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 450 MHz D450V3; Type: D450V3; Serial: D450V3 - SN:1102

Communication System: UID 0 - CW; Frequency: 450 MHz

Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ S/m}$ ;  $\varepsilon_r = 43.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

Probe: EX3DV4 - SN3877; ConvF(10.5, 10.5, 10.5); Calibrated: 30.12.2017;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn654; Calibrated: 24.07.2017

Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003

DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

# Dipole Calibration for Head Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

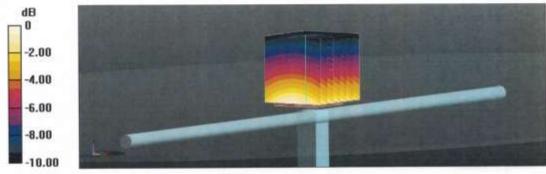
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 43.13 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.73 W/kg

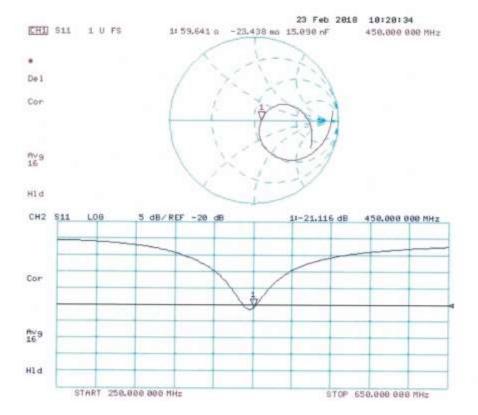
SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.749 W/kg

Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

# Impedance Measurement Plot for Head TSL



# **DASY5 Validation Report for Body TSL**

Date: 23.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 450 MHz D450V3; Type: D450V3; Serial: D450V3 - SN:1102

Communication System: UID 0 - CW; Frequency: 450 MHz

Medium parameters used: f = 450 MHz;  $\sigma = 0.93$  S/m;  $\varepsilon_r = 56$ ;  $\rho = 1000$  kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

Probe: EX3DV4 - SN3877; ConvF(10.8, 10.8, 10.8); Calibrated: 30.12.2017;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn654; Calibrated: 24.07.2017

Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003

DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

#### Dipole Calibration for Body Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

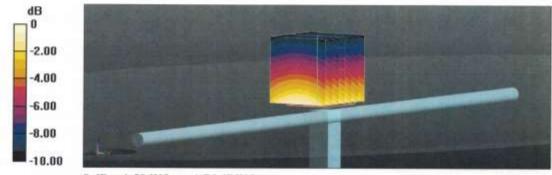
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 41.23 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.749 W/kg

Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

Certificate No: D450V3-1102_Feb18

# Impedance Measurement Plot for Body TSL

