

EX3DV4- SN:3866

May 31, 2018

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3866

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	61.8
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Certificate No: EX3-3866_May18

Page 11 of 39



Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	129.5	± 3.3 %
		Y	0.00	0.00	1.00		142.9	
		Z	0.00	0.00	1.00		132.3	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	4.96	74.03	14.55	10.00	20.0	± 9.6 %
		Υ	1.96	62.67	8.25		20.0	
		Z	1.98	63.61	8.75		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.46	74.36	19.19	0.00	150.0	± 9.6 %
		Y	0.84	66.93	14.18		150.0	
10010		Z	1.06	69.91	16.41		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.27	66.19	17.07	0.41	150.0	± 9.6 %
		Y	1.01	63.39	14.61		150.0	
100/-		Z	1.12	64.44	15.48		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	×	5.02	66.95	17.37	1.46	150.0	± 9.6 %
		Y	4.56	66.54	16.75		150.0	
		Z	4.61	66.83	16.87		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	×	100.00	116.34	28.99	9.39	50.0	± 9.6 %
		Y	4.35	71.51	13.58		50.0	
		Z	10.49	82.17	17.30		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	116.24	28.99	9.57	50.0	± 9.6 %
		Υ	4.08	70.51	13.19		50.0	
		Z	7.34	77.92	15.91		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Х	100.00	114.37	27.13	6.56	60.0	± 9.6 %
		Υ	2.47	68.27	11.00		60.0	
		Z	99.64	104.22	21.52		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	7.29	85.63	33.51	12.57	50.0	± 9.6 %
		Y	3.34	62.89	20.63		50.0	
		Z	4.59	72.89	26.66		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	19.51	108.37	37.98	9.56	60.0	± 9.6 %
		Y	6.99	84.48	28.68		60.0	
		Z	7.40	87.18	30.26		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	114.69	26.54	4.80	80.0	± 9.6 %
		Y	1.47	65.78	9.10		80.0	
		Z	100.00	103.55	20.47		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	116.57	26.68	3.55	100.0	± 9.6 %
		Y	0.75	62.53	6.91		100.0	
		Z	100.00	103.86	19.98		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Х	10.84	94.12	31.96	7.80	80.0	± 9.6 %
		Υ	4.68	76.74	24.63		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	4.76 100.00	77.76 113.28	25.40 26.21	5.30	70.0	± 9.6 %
CAA		Y	1.50	64.07	8.87		70.0	
			1.50	64.87				
10024	IEEE 903 15 1 Plustooth (CECK DUS)	Z	14.61	85.51	16.17	1 00	70.0	+060/
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	120.46	26.88	1.88	100.0	± 9.6 %
		Y	0.28	60.00	3.77		100.0	
	1	Z	100.00	97.01	16.04	I	100.0	



10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	134.94	31.61	1.17	100.0	± 9.6 %
		Y	2.98	214.36	19.03		100.0	
		Z	100.00	96.12	15.00		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	100.00	129.71	35.52	5.30	70.0	± 9.6 %
		Y	3.37	73.07	15.63		70.0	
		Z	5.18	79.83	18.59		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	38.25	116.38	31.11	1.88	100.0	± 9.6 %
		Y	1.32	66.13	11.17		100.0	
		Z	2.19	72.52	14.56		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	10.07	97.58	26.00	1.17	100.0	± 9.6 %
		Y	1.02	64.74	10.26		100.0	
		Z	1.68	70.82	13.73		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	×	100.00	130.10	35.71	5.30	70.0	± 9.6 %
		Y	3.79	74.73	16.33		70.0	
1005-	1555 000 15 1 51	Z	6.44	82.95	19.72		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	33.36	114.28	30.54	1.88	100.0	± 9.6 %
		Υ	1.25	65.67	10.94		100.0	
		Z	1.95	71.33	14.08		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	11.00	99.37	26.64	1.17	100.0	± 9.6 %
		Y	1.03	65.03	10.52		100.0	
		Z	1.72	71.30	14.06		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	×	4.41	85.41	21.99	0.00	150.0	± 9.6 %
		Υ	0.86	64.63	9.97		150.0	
		Z	1.99	74.44	15.11		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	112.07	26.26	7.78	50.0	± 9.6 %
		Υ	2.24	65.83	9.99		50.0	
		Z	4.60	73.72	13.31		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.01	122.05	4.07	0.00	150.0	± 9.6 %
		Y	0.35	142.03	0.00		150.0	
		Z	0.02	123.73	10.80		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	Х	100.00	117.95	31.07	13.80	25.0	± 9.6 %
		Υ	4.50	67.37	13.41		25.0	
		Z	5.19	70.06	14.31		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	Х	100.00	116.36	29.33	10.79	40.0	± 9.6 %
		Υ	4.23	69.49	13.02		40.0	
		Z	5.27	72.87	14.27		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	77.81	121.32	33.78	9.03	50.0	± 9.6 %
		Y	6.03	75.76	17.19		50.0	
		Z	9.07	82.59	19.86		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	7.57	86.51	28.41	6.55	100.0	± 9.6 %
		Y	3.72	73.02	22.40		100.0	
							1000	
		Z	3.78	73.63	22.92		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Z X	1.41	68.44	18.21	0.61	110.0	± 9.6 %
		Z X Y	1.41	68.44 64.26	18.21 15.02	0.61		± 9.6 %
CAB	Mbps)	Z X Y Z	1.41 1.03 1.14	68.44 64.26 65.37	18.21	0.61	110.0	± 9.6 %
		Z X Y	1.41	68.44 64.26	18.21 15.02	1.30	110.0	± 9.6 %
10060-	Mbps) IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	Z X Y Z	1.41 1.03 1.14	68.44 64.26 65.37	18.21 15.02 15.93		110.0 110.0 110.0	



10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	Х	32.15	121.96	35.02	2.04	110.0	± 9.6 %
		Υ	2.04	75.39	19.12		110.0	
		Z	2.36	78.14	20.85		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.83	66.99	16.83	0.49	100.0	± 9.6 %
		Y	4.37	66.55	16.24		100.0	
		Z	4.43	66.90	16.40		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.85	67.11	16.95	0.72	100.0	± 9.6 %
		Y	4.38	66.62	16.31		100.0	
10064-	IEEE 000 44 / WIE E OU (OFFICE	Z	4.44	66.97	16.47		100.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.19	67.41	17.17	0.86	100.0	± 9.6 %
		Y	4.62	66.81	16.50		100.0	
10065-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18	Z	4.67	67.13	16.63	4.04	100.0	
CAC	Mbps)		5.05	67.34	17.29	1.21	100.0	± 9.6 %
		Y	4.49	66.66	16.55		100.0	
10066-	IEEE 902 11a/h WIE: 5 OLI- (OFD)	Z	4.54	66.96	16.68	4.10	100.0	1000
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.08	67.39	17.47	1.46	100.0	± 9.6 %
	 	Y	4.50	66.65	16.68		100.0	
10067-	IEEE 900 44a/b WiF: F OL I- (OED): 90	Z	4.54	66.92	16.80	0.01	100.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.35	67.39	17.83	2.04	100.0	± 9.6 %
		Y	4.79	66.90	17.13		100.0	
10000	JEEE 900 44 - /h WIEI E OU - /OEDM 40	Z	4.82	67.14	17.23	0.55	100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.44	67.63	18.14	2.55	100.0	± 9.6 %
		Y	4.82	66.81	17.26		100.0	
40000	1555 000 11 # WEST 5 011 (0551)	Z	4.85	67.03	17.35		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.51	67.49	18.27	2.67	100.0	± 9.6 %
		Y	4.89	66.85	17.46		100.0	
40074	JEEE 000 44 - W.E. 0 4 011	Z	4.91	67.04	17.53		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.12	67.05	17.68	1.99	100.0	± 9.6 %
		Y	4.66	66.59	17.01		100.0	
10000		Z	4.70	66.85	17.11		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.14	67.52	17.95	2.30	100.0	± 9.6 %
		Y	4.62	66.83	17.17		100.0	
10070	IEEE 000 44- WEE 0 4 OU	Z	4.65	67.08	17.27	0.55	100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.21	67.69	18.29	2.83	100.0	± 9.6 %
		Y	4.68	67.01	17.47		100.0	
10071	IEEE 000 44 - NATE C + OU	Z	4.71	67.23	17.56		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.18	67.59	18.46	3.30	100.0	± 9.6 %
		Y	4.69	66.95	17.60		100.0	
10075	IEEE 000 44- WEEE C 4 OU	Z	4.71	67.17	17.70	0.00	100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.26	67.87	18.86	3.82	90.0	± 9.6 %
		Y	4.73	66.99	17.83		90.0	
10070	IEEE 000 44 - WEEE C + CH	Z	4.74	67.18	17.92		90.0	. 0:
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.23	67.53	18.89	4.15	90.0	± 9.6 %
		Y	4.77	66.89	18.00		90.0	
		Z	4.78	67.06	18.08		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.25	67.58	18.98	4.30	90.0	± 9.6 %
		Υ	4.81	66.98	18.11		90.0	
		Z	4.81	67.15	18.19		90.0	



10081- CAB	CDMA2000 (1xRTT, RC3)	Х	1.61	75.86	18.26	0.00	150.0	± 9.6 %
		Y	0.40	60.59	6.95		150.0	
		Z	0.70	65.91	10.99		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	0.97	60.00	5.20	4.77	80.0	± 9.6 %
		Y	6.26	66.77	5.69		80.0	
		Z	1.47	63.08	5.04		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	114.42	27.18	6.56	60.0	± 9.6 %
		Y	2.51	68.39	11.07		60.0	
		Z	91.59	103.46	21.38		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.10	70.41	17.58	0.00	150.0	± 9.6 %
		Y	1.66	67.98	15.08		150.0	
10000		Z	1.92	70.17	16.49		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.06	70.42	17.57	0.00	150.0	± 9.6 %
		Y	1.62	67.91	15.04		150.0	
		Z	1.88	70.12	16.47		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	19.63	108.47	38.01	9.56	60.0	± 9.6 %
		Y	7.02	84.55	28.70		60.0	
		Z	7.45	87.29	30.29		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.76	73.52	18.27	0.00	150.0	± 9.6 %
		Y	2.83	69.91	16.35		150.0	
		Z	3.08	71.35	17.24		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.49	68.90	16.77	0.00	150.0	± 9.6 %
		Y	2.97	67.19	15.62		150.0	
		Z	3.10	67.97	16.12		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.59	68.75	16.81	0.00	150.0	± 9.6 %
		Υ	3.08	67.24	15.76		150.0	
		Z	3.21	67.97	16.22		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.41	79.82	22.06	3.98	65.0	± 9.6 %
		Y	4.84	71.96	18.48		65.0	
		Z	5.42	74.19	19.53		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	7.70	76.73	21.71	3.98	65.0	± 9.6 %
		Y	5.32	71.47	19.01		65.0	
		Z	5.48	72.25	19.42		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.04	74.96	21.27	3.98	65.0	± 9.6 %
		Y	4.70	68.99	18.19		65.0	
		Z	5.14	70.85	19.09		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	3.28	72.58	18.09	0.00	150.0	± 9.6 %
		Y	2.43	69.27	16.18		150.0	
		Z	2.65	70.70	17.10		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	Х	3.17	68.85	16.81	0.00	150.0	± 9.6 %
		Υ	2.61	67.16	15.46		150.0	
		Z	2.76	68.08	16.06		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	2.68	71.66	17.86	0.00	150.0	± 9.6 %
		Υ	1.91	68.41	15.56		150.0	
		Z	2.13	70.09	16.68		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	Х	2.94	70.01	17.44	0.00	150.0	± 9.6 %
		Υ	2.36	68.46	15.69		150.0	
		Z	2.60	69.97	16.63		150.0	
		_	00	00101	. 0.00		100.0	



CAE MHz, 64-Q. 10113- LTE-FDD (S 64-QAM) 10114- IEEE 802.11 Mbps, BPSH 10115- IEEE 802.11 16-QAM) 10116- GAC 64-QAM) 10117- IEEE 802.11 64-QAM) 10118- IEEE 802.11 QAM) 10119- IEEE 802.11 QAM) 10140- LTE-FDD (S CAD MHz, 16-QAM) 10141- LTE-FDD (S CAD MHz, 64-QAM) 10142- LTE-FDD (S QPSK) 10143- LTE-FDD (S QPSK)	(SC-FDMA, 100% RB, 10 QAM)	X	3.28	68.68	16.79	0.00	150.0	± 9.6 %
CAE 64-QAM) 10114- IEEE 802.11 CAC Mbps, BPSi 10115- IEEE 802.11 16-QAM) 10116- GAC BPSK) 10117- GAC BPSK) 10118- GAC GAM) 10119- GAC GAM) 10140- LTE-FDD (SCAD MHz, 64-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- CAD QPSK) 10143- LTE-FDD (SCAD GAM) 10143- CAD GAM)						5.00		2 3.0 70
CAE 64-QAM) 10114- IEEE 802.11 CAC Mbps, BPSi 10115- IEEE 802.11 16-QAM) 10116- GAC BPSK) 10117- GAC BPSK) 10118- GAC GAM) 10119- GAC GAM) 10140- LTE-FDD (SCAD MHz, 64-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- CAD QPSK) 10143- LTE-FDD (SCAD GAM) 10143- CAD GAM)		Υ	2.74	67.25	15.57		150.0	
CAE 64-QAM) 10114- IEEE 802.11 CAC Mbps, BPSi 10115- IEEE 802.11 16-QAM) 10116- GAC BPSK) 10117- GAC BPSK) 10118- GAC BPSK) 10118- GAC GAM) 10119- GAC GAM) 10140- LTE-FDD (SCAD MHz, 64-QAM) 10141- LTE-FDD (SCAD GAM) 10142- LTE-FDD (SCAD GAM) 10143- LTE-FDD (SCAD GAM) 10143- LTE-FDD (SCAD GAM)		Z	2.89	68.13	16.13		150.0	
10115- IEEE 802.11 16-QAM) 10116- IEEE 802.11 64-QAM) 10117- IEEE 802.11 64-QAM) 10118- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-QAM) 10141- LTE-FDD (S CAD QPSK) 10142- LTE-FDD (S CAD QPSK)	(SC-FDMA, 100% RB, 5 MHz,	X	3.09	69.94	17.46	0.00	150.0	± 9.6 %
10115- IEEE 802.11 16-QAM) 10116- IEEE 802.11 64-QAM) 10117- IEEE 802.11 64-QAM) 10118- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-QAM) 10141- LTE-FDD (S CAD QPSK) 10142- LTE-FDD (S CAD QPSK)		Y	2.52	68.70	15.88		150.0	
10115- IEEE 802.11 16-QAM) 10116- IEEE 802.11 64-QAM) 10117- IEEE 802.11 64-QAM) 10118- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-QAM) 10141- LTE-FDD (S CAD QPSK) 10142- LTE-FDD (S CAD QPSK)		Z	2.75	70.13	16.75		150.0	
10116- IEEE 802.11 CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD QPSK)	11n (HT Greenfield, 13.5 SK)	X	5.23	67.48	16.65	0.00	150.0	± 9.6 %
10116- IEEE 802.11 CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD QPSK)		Y	4.84	67.00	16.28		150.0	
10116- IEEE 802.11 CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD QPSK)		Z	4.90	67.34	16.43		150.0	
CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD MHz, 64-QAM)	11n (HT Greenfield, 81 Mbps,	Х	5.59	67.72	16.77	0.00	150.0	± 9.6 %
CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD QPSK)		Υ	5.08	67.08	16.32		150.0	
CAC 64-QAM) 10117- IEEE 802.11 CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (SCAD MHz, 16-QAM) 10141- LTE-FDD (SCAD MHz, 64-QAM) 10142- LTE-FDD (SCAD QPSK) 10143- LTE-FDD (SCAD QPSK)		Z	5.13	67.37	16.44		150.0	
CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)	11n (HT Greenfield, 135 Mbps,	Х	5.36	67.74	16.70	0.00	150.0	± 9.6 %
CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Y	4.92	67.20	16.31		150.0	
CAC BPSK) 10118- IEEE 802.11 CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Z	4.98	67.52	16.45		150.0	
CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)	11n (HT Mixed, 13.5 Mbps,	Х	5.24	67.49	16.68	0.00	150.0	± 9.6 %
CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Υ	4.83	66.95	16.28		150.0	
CAC QAM) 10119- IEEE 802.11 CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Z	4.89	67.29	16.43		150.0	
CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S QPSK) 10143- LTE-FDD (S CAD 16-QAM)	11n (HT Mixed, 81 Mbps, 16-	Х	5.66	67.87	16.85	0.00	150.0	± 9.6 %
CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Υ	5.16	67.27	16.43		150.0	
CAC QAM) 10140- LTE-FDD (S CAD MHz, 16-Q/ 10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Z	5.20	67.52	16.53		150.0	
10141- LTE-FDD (S CAD MHz, 64-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)	11n (HT Mixed, 135 Mbps, 64-	Х	5.33	67.68	16.69	0.00	150.0	± 9.6 %
10141- LTE-FDD (S CAD MHz, 64-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Υ	4.92	67.19	16.31		150.0	
10141- LTE-FDD (S CAD MHz, 64-Q/ MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)		Z	4.97	67.51	16.46		150.0	
10141- LTE-FDD (S CAD MHz, 64-Q/ 10142- LTE-FDD (S CAD QPSK) 10143- LTE-FDD (S CAD 16-QAM)	SC-FDMA, 100% RB, 15 DAM)	Х	3.64	68.73	16.72	0.00	150.0	± 9.6 %
10142- CAD LTE-FDD (S CAD QPSK) 10143- CAD 16-QAM)		Y	3.10	67.23	15.65		150.0	
10142- CAD LTE-FDD (S CAD QPSK) 10143- CAD 16-QAM)		Z	3.23	67.98	16.12		150.0	
10143- LTE-FDD (S CAD 16-QAM)	SC-FDMA, 100% RB, 15 QAM)	Х	3.75	68.73	16.84	0.00	150.0	± 9.6 %
10143- LTE-FDD (S CAD 16-QAM)		Y	3.23	67.43	15.88		150.0	
10143- LTE-FDD (S CAD 16-QAM)		Z	3.36	68.16	16.32		150.0	
CAD 16-QAM)	SC-FDMA, 100% RB, 3 MHz,	Х	2.50	72.12	17.94	0.00	150.0	± 9.6 %
CAD 16-QAM)		Y	1.65	68.10	14.67		150.0	
CAD 16-QAM)		Z	1.94	70.53	16.23		150.0	
10444	SC-FDMA, 100% RB, 3 MHz,	X	2.95	71.49	17.71	0.00	150.0	± 9.6 %
40444 LTE EDS 10		Y	2.12	68.46	14.53		150.0	
10111		Z	2.52	71.14	16.09		150.0	
10144- LTE-FDD (S CAD 64-QAM)	SC-FDMA, 100% RB, 3 MHz,	X	2.62	68.66	15.91	0.00	150.0	± 9.6 %
		Υ	1.78	65.25	12.38		150.0	
		Z	2.00	66.87	13.49		150.0	
10145- LTE-FDD (S CAE MHz, QPSK	SC-FDMA, 100% RB, 1.4 K)	X	2.08	72.58	16.71	0.00	150.0	± 9.6 %
		Υ	0.62	60.00	6.54		150.0	
		Z	0.76	61.85	8.27		150.0	
10146- LTE-FDD (S CAE MHz, 16-QA	SC-FDMA, 100% RB, 1.4 (AM)	Х	4.74	77.79	17.95	0.00	150.0	± 9.6 %
		Υ	0.91	59.91	6.14		150.0	
		Z	1.03	60.93	6.75		150.0	
10147- LTE-FDD (S CAE MHz, 64-QA	SC-FDMA, 100% RB, 1.4 (AM)	Х	8.02	85.30	20.79	0.00	150.0	± 9.6 %
		Υ	0.95	60.19	6.39		150.0	
		Ż	1.09	61.38	7.09		150.0	

Certificate No: EX3-3866_May18

Page 16 of 39



10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	3.18	68.92	16.86	0.00	150.0	± 9.6 %
		Υ	2.63	67.24	15.52		150.0	
		Z	2.78	68.16	16.12		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.29	68.74	16.83	0.00	150.0	± 9.6 %
		Υ	2.75	67.32	15.62		150.0	
		Z	2.90	68.21	16.19		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.25	82.93	23.38	3.98	65.0	± 9.6 %
0,10	W. 0.10	Υ	5.36	75.32	19.83		65.0	
		ż	5.77	76.93	20.64		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.33	77.04	21.65	3.98	65.0	± 9.6 %
		Y	4.81	71.16	18.40		65.0	
		Z	4.98	72.05	18.88		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	7.72	77.89	22.37	3.98	65.0	± 9.6 %
		Y	5.21	72.44	19.38		65.0	
		Z	5.39	73.30	19.82		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	2.79	72.40	18.27	0.00	150.0	± 9.6 %
		Υ	1.96	68.90	15.86		150.0	
		Z	2.20	70.63	16.99		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.94	70.00	17.44	0.00	150.0	± 9.6 %
		Y	2.37	68.50	15.72		150.0	
		Z	2.60	70.02	16.66		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	2.45	73.08	18.25	0.00	150.0	± 9.6 %
		Y	1.44	67.52	13.85		150.0	
		Z	1.79	70.64	15.81		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.55	70.02	16.44	0.00	150.0	± 9.6 %
		Y	1.56	65.08	11.79		150.0	
		Z	1.83	67.35	13.31		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	3.10	70.01	17.51	0.00	150.0	± 9.6 %
	,	Y	2.53	68.81	15.95		150.0	
		Z	2.76	70.25	16.83		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	2.72	70.68	16.81	0.00	150.0	± 9.6 %
		Y	1.63	65.40	12.01		150.0	
		Z	1.94	67.86	13.59		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.08	70.55	17.46	0.00	150.0	± 9.6 %
		Υ	2.48	68.64	16.02		150.0	27 1027
		Z	2.64	69.71	16.74		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	3.19	68.68	16.82	0.00	150.0	± 9.6 %
		Υ	2.64	67.29	15.48		150.0	
		Z	2.80	68.24	16.09		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.29	68.68	16.85	0.00	150.0	± 9.6 %
		Y	2.76	67.53	15.64		150.0	
		Z	2.91	68.48	16.24		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.04	71.00	19.90	3.01	150.0	± 9.6 %
		Υ	3.16	69.13	18.77		150.0	
		Z	3.39	70.78	19.66		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.36	74.73	20.65	3.01	150.0	± 9.6 %
		Υ	3.79	71.67	18.97		150.0	
		_ ' '	0.10	/ 1.0/	10.57		150.0	



10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	6.03	77.24	22.03	3.01	150.0	± 9.6 %
		Y	4.43	75.05	20.89		150.0	
		Z	5.62	80.10	23.00		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	3.82	73.12	20.79	3.01	150.0	± 9.6 %
		Y	2.61	67.68	18.06		150.0	
		Z	2.91	70.50	19.54		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	6.54	82.37	24.08	3.01	150.0	± 9.6 %
		Y	3.53	73.51	20.46		150.0	
		Z	5.29	82.18	24.01		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	4.84	75.97	20.60	3.01	150.0	± 9.6 %
		Y	2.80	68.67	17.18		150.0	
		Z	3.59	74.12	19.63		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	30.51	113.43	34.95	6.02	65.0	± 9.6 %
		Y	3.52	75.21	21.66		65.0	
		Z	4.81	82.95	25.11		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	81.01	124.21	35.55	6.02	65.0	± 9.6 %
		Y	6.10	82.01	22.32		65.0	
		Z	15.21	99.20	28.02		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	42.22	110.92	31.54	6.02	65.0	± 9.6 %
		Y	3.34	72.20	18.19		65.0	
		Z	7.70	87.16	23.71		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	3.75	72.64	20.47	3.01	150.0	± 9.6 %
		Y	2.57	67.33	17.78		150.0	
		Z	2.86	70.07	19.23		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	6.55	82.40	24.09	3.01	150.0	± 9.6 %
		Y	3.54	73.53	20.47		150.0	
		Z	5.31	82.22	24.03		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.79	72.88	20.60	3.01	150.0	± 9.6 %
		Y	2.59	67.48	17.87		150.0	
		Z	2.89	70.25	19.33		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	Х	6.40	81.92	23.88	3.01	150.0	± 9.6 %
		Υ	3.51	73.32	20.36		150.0	
		Z	5.22	81.88	23.87		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	5.57	78.86	22.14	3.01	150.0	± 9.6 %
		Υ	3.10	70.80	18.61		150.0	
		Z	4.30	77.75	21.59		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	Х	4.81	75.81	20.51	3.01	150.0	± 9.6 %
		Υ	2.79	68.61	17.14		150.0	
		Z	3.58	74.03	19.58		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	3.79	72.85	20.59	3.01	150.0	± 9.6 %
		Υ	2.59	67.46	17.86		150.0	
		Z	2.88	70.23	19.32		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	Х	6.39	81.89	23.87	3.01	150.0	± 9.6 %
		Υ	3.50	73.29	20.34		150.0	
		Z	5.21	81.83	23.85		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	4.80	75.78	20.50	3.01	150.0	± 9.6 %
		Υ	2.79	68.59	17.13		150.0	



10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	3.80	72.91	20.62	3.01	150.0	± 9.6 %
CAD	QPSK)					0.01		2 0.0 70
		Υ	2.59	67.50	17.89		150.0	
		Z	2.90	70.28	19.35		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	6.43	81.99	23.91	3.01	150.0	± 9.6 %
		Y	3.52	73.38	20.39		150.0	
		Z	5.25	81.97	23.91		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.82	75.87	20.54	3.01	150.0	± 9.6 %
		Υ	2.80	68.65	17.16		150.0	
		Z	3.60	74.09	19.61		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.81	72.95	20.67	3.01	150.0	± 9.6 %
		Y	2.61	67.59	17.98		150.0	
		Z	2.91	70.39	19.45		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	6.79	83.15	24.45	3.01	150.0	± 9.6 %
		Y	3.65	74.15	20.83		150.0	
		Z	5.58	83.26	24.51		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.99	76.54	20.90	3.01	150.0	± 9.6 %
		Y	2.86	69.07	17.45		150.0	
		Ż	3.73	74.78	20.00		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.67	66.95	16.48	0.00	150.0	± 9.6 %
0/10	5. 5.0	Y	4.24	66.64	15.97		150.0	
		Z	4.33	67.09	16.19		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.87	67.32	16.59	0.00	150.0	± 9.6 %
	10 4.11/	Υ	4.38	66.89	16.11		150.0	
		Z	4.47	67.32	16.32		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.91	67.33	16.59	0.00	150.0	± 9.6 %
	0. 4,	Υ	4.42	66.91	16.13		150.0	
		Z	4.50	67.33	16.33		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.69	67.05	16.52	0.00	150.0	± 9.6 %
		Υ	4.23	66.65	15.96		150.0	
		Z	4.31	67.09	16.18		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.89	67.34	16.60	0.00	150.0	± 9.6 %
		Y	4.39	66.89	16.12		150.0	
		z	4.47	67.32	16.32		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.92	67.34	16.60	0.00	150.0	± 9.6 %
		Y	4.41	66.91	16.13		150.0	
		Z	4.49	67.32	16.33		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.64	67.08	16.49	0.00	150.0	± 9.6 %
		Υ	4.18	66.68	15.93		150.0	
		Z	4.27	67.14	16.16		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.89	67.33	16.60	0.00	150.0	± 9.6 %
		Υ	4.38	66.85	16.10		150.0	
		Z	4.46	67.28	16.31		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	Х	4.92	67.27	16.59	0.00	150.0	± 9.6 %
	,	Υ	4.43	66.85	16.12		150.0	
		Z	4.51	67.26	16.32		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	×	5.22	67.52	16.68	0.00	150.0	± 9.6 %
	1	Y	4.00	66.02	16.26		450.0	
		Y 1	4.80	66.93	1b /b	ı	150.0	ı



EX3DV4-SN:3866

May 31, 2018

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.58	67.78	16.82	0.00	150.0	± 9.6 %
		Y	5.07	67.14	16.38		150.0	
		Z	5.11	67.42	16.49		150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.27	67.64	16.67	0.00	150.0	± 9.6 %
		Υ	4.84	67.05	16.24		150.0	
		Z	4.90	67.40	16.40		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.99	67.00	16.21	0.00	150.0	± 9.6 %
		Y	2.51	66.01	14.64		150.0	
		Z	2.65	66.91	15.22		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	94.43	127.20	36.39	6.02	65.0	± 9.6 %
		Y	6.49	83.12	22.81		65.0	
		Z	17.53	101.76	28.87		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	56.88	116.18	33.01	6.02	65.0	± 9.6 %
		Υ	6.10	81.13	21.49		65.0	
		Z	15.05	97.36	26.79		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	50.96	124.04	37.91	6.02	65.0	± 9.6 %
		Υ	5.07	82.24	24.43		65.0	
		Z	6.53	88.87	27.26		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	Х	81.41	124.30	35.58	6.02	65.0	± 9.6 %
		Y	6.15	82.11	22.37		65.0	
		Z	15.40	99.39	28.08		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	Х	50.84	114.07	32.38	6.02	65.0	± 9.6 %
		Υ	5.76	80.19	21.07		65.0	
		Z	13.24	95.20	26.08		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	45.88	121.77	37.23	6.02	65.0	± 9.6 %
		Υ	4.86	81.34	24.01		65.0	Marine Bay III
		Z	6.18	87.70	26.77		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	81.49	124.32	35.58	6.02	65.0	± 9.6 %
		Υ	6.14	82.09	22.36		65.0	
		Z	15.37	99.37	28.07		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	50.87	114.09	32.39	6.02	65.0	± 9.6 %
		Y	5.75	80.17	21.07		65.0	
		Z	13.19	95.16	26.07		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	41.40	119.46	36.49	6.02	65.0	± 9.6 %
		Υ	4.68	80.55	23.58		65.0	
		Z	5.91	86.70	26.29		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	81.97	124.44	35.62	6.02	65.0	± 9.6 %
		Υ	6.14	82.11	22.37		65.0	
		Z	15.40	99.42	28.09		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	51.73	114.35	32.45	6.02	65.0	± 9.6 %
		Υ	5.79	80.26	21.09		65.0	
		Z	13.39	95.36	26.12		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	46.54	122.08	37.31	6.02	65.0	± 9.6 %
		Υ	4.85	81.36	24.02		65.0	
		Z	6.18	87.73	26.78		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	Х	81.61	124.36	35.59	6.02	65.0	± 9.6 %
		Υ	6.12	82.06	22.35		65.0	

Certificate No: EX3-3866_May18

Page 20 of 39



10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	50.88	114.12	32.39	6.02	65.0	± 9.6 %
		Y	5.73	80.13	21.06		65.0	
		Z	13.13	95.10	26.05		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	×	46.30	121.99	37.28	6.02	65.0	± 9.6 %
		Υ	4.84	81.34	24.01		65.0	
		Z	6.16	87.71	26.77		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	10.63	85.06	26.98	6.98	65.0	± 9.6 %
	,	Y	6.79	78.66	23.63		65.0	
		Z	7.73	82.62	25.43		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	9.25	82.02	25.70	6.98	65.0	± 9.6 %
		Υ	5.51	74.61	21.86		65.0	
		Z	6.55	79.39	24.09		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	7.26	78.53	25.18	6.98	65.0	± 9.6 %
		Υ	4.68	72.01	21.59		65.0	
		Z	5.18	75.09	23.22		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.28	84.05	22.54	3.98	65.0	± 9.6 %
		Υ	3.24	66.97	12.70		65.0	
		Z	3.56	68.61	13.44		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	Х	9.95	83.22	22.19	3.98	65.0	± 9.6 %
		Y	3.20	66.61	12.48		65.0	
		Z	3.47	68.07	13.14		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	12.46	90.83	24.94	3.98	65.0	± 9.6 %
		Y	2.86	68.70	13.86		65.0	
		Z	3.30	71.03	15.15		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	7.34	79.50	21.57	3.98	65.0	± 9.6 %
		Υ	3.48	68.53	14.66		65.0	
		Z	3.73	69.89	15.43		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	7.19	78.56	21.18	3.98	65.0	± 9.6 %
		Υ	3.48	68.14	14.48		65.0	
		Z	3.69	69.30	15.15		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	13.15	92.09	26.04	3.98	65.0	± 9.6 %
		Υ	4.18	74.23	17.58		65.0	
		Z	4.89	77.09	18.97		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	7.92	80.63	23.26	3.98	65.0	± 9.6 %
		Υ	4.78	73.26	19.06		65.0	
		Z	5.03	74.43	19.66		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	7.25	77.64	21.72	3.98	65.0	± 9.6 %
		Υ	4.47	70.96	17.63	· ·	65.0	
		Z	4.67	71.97	18.18		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	10.93	88.12	25.36	3.98	65.0	± 9.6 %
		Υ	5.21	77.08	20.25		65.0	
		Z	5.77	79.24	21.29		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.05	76.20	21.36	3.98	65.0	± 9.6 %
		Υ	4.75	70.81	18.15		65.0	
	3.30.00.00.00	Z	4.92	71.70	18.62		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	7.44	77.05	22.03	3.98	65.0	± 9.6 %
		Υ	5.10	71.90	18.98		65.0	

Page 21 of 39



10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.60	81.93	23.28	3.98	65.0	± 9.6 %
		Y	5.15	74.81	19.78		65.0	
		Z	5.50	76.30	20.53		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.04	81.52	20.74	3.98	65.0	± 9.6 %
		Y	2.39	63.43	9.70		65.0	
		Z	2.46	64.13	10.00		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.57	80.28	20.20	3.98	65.0	± 9.6 %
		Y	2.38	63.12	9.45		65.0	
		Z	2.43	63.72	9.69		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	10.31	87.20	23.08	3.98	65.0	± 9.6 %
		Y	2.04	64.20	10.55		65.0	
		Z	2.21	65.50	11.41		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	7.54	79.76	22.11	3.98	65.0	± 9.6 %
		Y	3.97	70.35	16.29		65.0	
		Z	4.24	71.71	17.03		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.50	79.33	21.95	3.98	65.0	± 9.6 %
		Y	4.01	70.15	16.20		65.0	
		Z	4.26	71.44	16.90		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	11.09	88.93	25.31	3.98	65.0	± 9.6 %
		Y	4.44	74.87	18.45		65.0	
		Z	5.05	77.34	19.66		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	Х	7.90	80.58	23.22	3.98	65.0	± 9.6 %
		Y	4.76	73.17	18.99		65.0	
		Z	5.00	74.34	19.60		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	7.24	77.63	21.72	3.98	65.0	± 9.6 %
		Y	4.47	70.94	17.62		65.0	
		Z	4.66	71.95	18.17		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	10.81	87.88	25.25	3.98	65.0	± 9.6 %
		Y	5.15	76.85	20.13		65.0	
		Z	5.70	78.99	21.17		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.33	77.04	21.65	3.98	65.0	± 9.6 %
		Y	4.81	71.17	18.41		65.0	
		Z	4.98	72.06	18.89		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	7.71	77.88	22.36	3.98	65.0	± 9.6 %
		Υ	5.21	72.42	19.37		65.0	
		Z	5.39	73.29	19.81		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	9.22	82.87	23.36	3.98	65.0	± 9.6 %
		Υ	5.35	75.27	19.81		65.0	
		Z	5.75	76.88	20.62		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	7.74	76.26	21.65	3.98	65.0	± 9.6 %
		Υ	5.50	71.54	19.15		65.0	
		Z	5.66	72.29	19.52		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	Х	7.63	75.68	21.48	3.98	65.0	± 9.6 %
		Υ	5.52	71.23	19.05		65.0	
		Z	5.67	71.96	19.42		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	8.19	78.75	21.89	3.98	65.0	± 9.6 %
		Υ	5.47	73.33	19.26		65.0	
		Z	5.74	74.49	19.85		65.0	



10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	Х	2.75	67.48	16.19	0.00	150.0	± 9.6 %
	1100.10)	Υ	2.34	66.54	14.62		150.0	
		Z	2.51	67.66	15.36		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	2.00	71.96	17.96	0.00	150.0	± 9.6 %
		Υ	1.38	67.61	14.72		150.0	
		Z	1.63	69.95	16.31		150.0	
10277- CAA	PHS (QPSK)	X	3.04	64.39	9.80	9.03	50.0	± 9.6 %
		Y	1.99	60.23	5.80		50.0	
		Ζ	1.82	60.13	5.55		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	Х	14.05	89.45	23.17	9.03	50.0	± 9.6 %
		Υ	2.97	64.46	10.26		50.0	
		Z	2.89	64.90	10.43		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	14.28	89.60	23.26	9.03	50.0	± 9.6 %
		Υ	3.03	64.63	10.40		50.0	
		Z	2.96	65.09	10.58		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.75	78.00	19.03	0.00	150.0	± 9.6 %
		Υ	0.70	62.51	8.57		150.0	
		Z	1.12	67.63	11.97		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.53	75.18	17.97	0.00	150.0	± 9.6 %
		Υ	0.39	60.48	6.87		150.0	
		Z	0.68	65.59	10.81		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	Х	4.08	91.57	24.34	0.00	150.0	± 9.6 %
		Y	0.46	62.41	8.25		150.0	
		Z	1.88	78.02	16.27		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	23.75	120.75	33.02	0.00	150.0	± 9.6 %
		Υ	0.79	67.74	11.33	-	150.0	
		Z	100.00	126.63	29.48		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	9.88	86.90	25.50	9.03	50.0	± 9.6 %
		Υ	7.81	78.34	18.95		50.0	
		Z	8.66	81.12	20.25		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.30	72.72	18.17	0.00	150.0	± 9.6 %
		Y	2.45	69.40	16.26		150.0	
		Z	2.67	70.85	17.18		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	2.36	73.70	17.87	0.00	150.0	± 9.6 %
		Υ	0.95	63.49	10.09		150.0	
		Z	1.26	66.91	12.45		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	4.97	78.35	18.95	0.00	150.0	± 9.6 %
		Υ	1.38	63.08	9.25		150.0	
		Z	1.78	65.74	10.59		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.02	70.07	14.79	0.00	150.0	± 9.6 %
		Υ	1.14	60.87	7.34		150.0	
		Z	1.29	61.96	7.95		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.15	66.43	18.16	4.17	50.0	± 9.6 %
		Υ	4.26	65.03	16.87		50.0	
		Z	4.39	65.68	17.23		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.54	66.66	18.64	4.96	50.0	± 9.6 %
		Y	4.84	65.92	17.68		50.0	
		Z	4.82	66.06	17.81	1	50.0	