

- Switching

LTE Band 38									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				37775 (2 572.5 MHz)		38000 (2 595.0 MHz)		38225 (2 617.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
5	QPSK	1	0	22.51	0.178	22.16	0.164	22.25	0.168
		1	12	22.48	0.177	22.06	0.161	22.25	0.168
		1	24	22.49	0.177	22.16	0.164	22.12	0.163
		12	0	21.53	0.142	21.32	0.136	21.29	0.135
		12	6	21.52	0.142	21.17	0.131	21.23	0.133
		12	13	21.39	0.138	21.17	0.131	21.12	0.129
	16QAM	25	0	21.47	0.140	21.29	0.135	21.25	0.133
		1	0	21.60	0.145	21.37	0.137	21.41	0.138
		1	12	21.46	0.140	21.27	0.134	21.33	0.136
		1	24	21.47	0.140	21.21	0.132	21.29	0.135
		12	0	20.77	0.119	20.53	0.113	20.50	0.112
		12	6	20.69	0.117	20.50	0.112	20.49	0.112
	64QAM	12	13	20.60	0.115	20.36	0.109	20.45	0.111
		25	0	20.66	0.116	20.56	0.114	20.50	0.112
		1	0	20.65	0.116	20.37	0.109	20.43	0.110
		1	12	20.47	0.111	20.35	0.108	20.42	0.110
		1	24	20.59	0.115	20.36	0.109	20.34	0.108
		12	0	19.81	0.096	19.42	0.087	19.51	0.089
	256QAM	12	6	19.80	0.095	19.34	0.086	19.30	0.085
		12	13	19.74	0.094	19.33	0.086	19.44	0.088
		25	0	19.75	0.094	19.35	0.086	19.47	0.089
		1	0	17.36	0.054	17.22	0.053	17.26	0.053
		1	12	17.45	0.056	17.34	0.054	17.22	0.053
		1	24	17.61	0.058	17.64	0.058	17.69	0.059
10	QPSK	12	0	17.42	0.055	17.26	0.053	17.45	0.056
		12	6	17.49	0.056	17.38	0.055	17.47	0.056
		12	13	17.16	0.052	17.26	0.053	17.17	0.052
		25	0	17.18	0.052	17.17	0.052	17.09	0.051
		1	0	22.56	0.180	22.37	0.173	22.36	0.172
		1	25	22.34	0.171	22.31	0.170	22.15	0.164
	16QAM	1	49	22.46	0.176	22.44	0.175	22.11	0.163
		25	0	21.61	0.145	21.48	0.141	21.43	0.139
		25	12	21.45	0.140	21.53	0.142	21.23	0.133
		25	25	21.59	0.144	21.49	0.141	21.19	0.132
		50	0	21.52	0.142	21.47	0.140	21.46	0.140
		1	0	21.67	0.147	21.65	0.146	21.51	0.142
	64QAM	1	25	21.68	0.147	21.48	0.141	21.37	0.137
		1	49	20.64	0.116	21.43	0.139	21.32	0.136
		25	0	20.95	0.124	20.68	0.117	20.66	0.116
		25	12	20.75	0.119	20.68	0.117	20.59	0.115
		25	25	20.88	0.122	20.60	0.115	20.60	0.115
		50	0	20.70	0.117	20.58	0.114	20.63	0.116
	256QAM	1	0	20.87	0.122	20.65	0.116	20.72	0.118
		1	25	20.54	0.113	20.56	0.114	20.46	0.111
		1	49	20.65	0.116	20.67	0.117	20.58	0.114
		25	0	19.94	0.099	19.64	0.092	19.57	0.091
		25	12	19.75	0.094	19.61	0.091	19.47	0.089
		25	25	19.79	0.095	19.71	0.094	19.44	0.088
		50	0	19.77	0.095	19.66	0.092	19.66	0.092
		1	0	17.39	0.055	17.34	0.054	17.27	0.053
		1	25	16.99	0.050	17.17	0.052	17.17	0.052
		1	49	17.53	0.057	17.41	0.055	17.37	0.055
		25	0	17.44	0.055	17.39	0.055	17.35	0.054
		25	12	17.51	0.056	17.42	0.055	17.42	0.055
		25	25	17.32	0.054	17.22	0.053	17.25	0.053
		50	0	17.36	0.054	17.31	0.054	17.36	0.054

LTE Band 38									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				37825 (2 577.5 MHz)		38000 (2 595.0 MHz)		38175 (2 612.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
15	QPSK	1	0	22.69	0.186	22.37	0.173	22.36	0.172
		1	36	22.45	0.176	22.53	0.179	22.36	0.172
		1	74	22.41	0.174	22.51	0.178	22.52	0.179
		36	0	21.74	0.149	21.51	0.142	21.41	0.138
		36	18	21.48	0.141	21.60	0.145	21.47	0.140
		36	37	21.43	0.139	21.50	0.141	21.51	0.142
		75	0	21.63	0.146	21.41	0.138	21.33	0.136
	16QAM	1	0	21.95	0.157	21.63	0.146	21.59	0.144
		1	36	21.66	0.147	21.59	0.144	21.49	0.141
		1	74	21.53	0.142	21.53	0.142	21.62	0.145
		36	0	20.91	0.123	20.65	0.116	20.62	0.115
		36	18	20.79	0.120	20.77	0.119	20.38	0.109
		36	37	20.76	0.119	20.86	0.122	20.89	0.123
		75	0	20.79	0.120	20.60	0.115	20.51	0.112
	64QAM	1	0	20.97	0.125	20.66	0.116	20.52	0.113
		1	36	20.73	0.118	20.71	0.118	20.81	0.121
		1	74	20.85	0.122	20.73	0.118	20.76	0.119
		36	0	19.93	0.098	19.71	0.094	19.65	0.092
		36	18	19.92	0.098	19.79	0.095	19.87	0.097
		36	37	19.88	0.097	19.75	0.094	19.91	0.098
		75	0	19.79	0.095	19.59	0.091	19.57	0.091
	256QAM	1	0	17.45	0.056	17.42	0.055	17.43	0.055
		1	36	17.39	0.055	17.20	0.052	17.20	0.052
		1	74	17.50	0.056	17.34	0.054	17.16	0.052
		36	0	17.54	0.057	17.51	0.056	17.59	0.057
		36	18	17.27	0.053	17.18	0.052	17.35	0.054
		36	37	17.44	0.055	17.34	0.054	17.16	0.052
		75	0	17.16	0.052	17.29	0.054	17.28	0.053
LTE Band 38									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				37850 (2 580.0 MHz)		38000 (2 595.0 MHz)		38150 (2 610.0 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
20	QPSK	1	0	22.68	0.185	22.79	0.190	22.54	0.179
		1	50	22.52	0.179	22.42	0.175	21.31	0.135
		1	99	22.49	0.177	22.41	0.174	22.36	0.172
		50	0	21.69	0.148	21.85	0.153	21.51	0.142
		50	25	21.58	0.144	21.52	0.142	21.59	0.144
		50	50	21.61	0.145	21.59	0.144	21.58	0.144
		100	0	21.61	0.145	21.51	0.142	21.52	0.142
	16QAM	1	0	21.94	0.156	21.84	0.153	21.52	0.142
		1	50	21.95	0.157	21.59	0.144	21.47	0.140
		1	99	21.88	0.154	21.57	0.144	21.48	0.141
		50	0	21.00	0.126	20.77	0.119	20.71	0.118
		50	25	20.91	0.123	20.75	0.119	20.63	0.116
		50	50	20.76	0.119	20.84	0.121	20.57	0.114
		100	0	20.82	0.121	20.58	0.114	20.67	0.117
	64QAM	1	0	20.82	0.121	20.81	0.121	20.60	0.115
		1	50	20.83	0.121	20.78	0.120	20.51	0.112
		1	99	20.78	0.120	20.85	0.122	20.57	0.114
		50	0	20.04	0.101	19.77	0.095	19.70	0.093
		50	25	19.99	0.100	19.85	0.097	19.51	0.089
		50	50	20.01	0.100	19.92	0.098	19.63	0.092
		100	0	19.84	0.096	19.68	0.093	19.69	0.093
	256QAM	1	0	17.33	0.054	17.50	0.056	17.61	0.058
		1	50	17.16	0.052	17.34	0.054	17.36	0.054
		1	99	17.57	0.057	17.39	0.055	17.40	0.055
		50	0	17.46	0.056	17.60	0.058	17.50	0.056
		50	25	17.72	0.059	17.62	0.058	17.69	0.059
		50	50	17.50	0.056	17.51	0.056	17.39	0.055
		100	0	17.20	0.052	17.39	0.055	17.39	0.055

LTE Band 42 IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				42115 (3 452.5 MHz)		42840 (3 525.0 MHz)		43565 (3 597.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
5	QPSK	1	0	21.87	0.154	22.52	0.179	22.64	0.184
		1	12	21.93	0.156	22.43	0.175	22.35	0.172
		1	24	21.87	0.154	22.67	0.185	22.28	0.169
		12	0	20.87	0.122	21.55	0.143	21.51	0.142
		12	6	20.64	0.116	21.45	0.140	21.29	0.135
		12	13	20.79	0.120	21.62	0.145	21.22	0.132
	16QAM	25	0	20.75	0.119	21.52	0.142	21.43	0.139
		1	0	21.21	0.132	21.78	0.151	21.67	0.147
		1	12	21.15	0.130	21.60	0.145	21.56	0.143
		1	24	21.27	0.134	21.85	0.153	21.58	0.144
		12	0	19.94	0.099	20.55	0.114	20.57	0.114
		12	6	19.76	0.095	20.56	0.114	20.45	0.111
	64QAM	12	13	19.85	0.097	20.61	0.115	20.49	0.112
		25	0	19.97	0.099	20.54	0.113	20.53	0.113
		1	0	20.23	0.105	20.76	0.119	20.84	0.121
		1	12	20.15	0.104	20.83	0.121	20.75	0.119
		1	24	20.17	0.104	20.66	0.116	20.57	0.114
		12	0	19.03	0.080	19.54	0.090	19.56	0.090
	256QAM	12	6	19.19	0.083	19.66	0.092	19.61	0.091
		12	13	19.17	0.083	19.63	0.092	19.43	0.088
		25	0	18.87	0.077	19.48	0.089	19.31	0.085
		1	0	17.12	0.052	17.54	0.057	17.39	0.055
		1	12	17.05	0.051	17.53	0.057	17.23	0.053
		1	24	17.07	0.051	17.47	0.056	17.26	0.053
		12	0	16.98	0.050	17.35	0.054	17.45	0.056
		12	6	16.89	0.049	17.54	0.057	17.33	0.054
		12	13	16.86	0.049	17.44	0.055	17.19	0.052
		25	0	16.88	0.049	17.53	0.057	17.37	0.055
LTE Band 42 IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				42140 (3 455.0 MHz)		42840 (3 525.0 MHz)		43540 (3 595.0 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
10	QPSK	1	0	22.28	0.169	22.57	0.181	22.54	0.179
		1	25	22.21	0.166	22.45	0.176	22.46	0.176
		1	49	22.25	0.168	22.55	0.180	22.39	0.173
		25	0	20.98	0.125	21.37	0.137	21.22	0.132
		25	12	20.75	0.119	21.23	0.133	21.31	0.135
		25	25	20.81	0.121	21.35	0.136	21.25	0.133
	16QAM	50	0	20.93	0.124	21.43	0.139	21.12	0.129
		1	0	21.31	0.135	21.76	0.150	21.67	0.147
		1	25	21.33	0.136	21.55	0.143	21.51	0.142
		1	49	21.15	0.130	21.58	0.144	21.26	0.134
		25	0	19.96	0.099	20.44	0.111	20.45	0.111
		25	12	19.88	0.097	20.37	0.109	20.34	0.108
	64QAM	25	25	19.71	0.094	20.35	0.108	20.29	0.107
		50	0	19.94	0.099	20.41	0.110	20.21	0.105
		1	0	20.24	0.106	20.81	0.121	20.78	0.120
		1	25	20.43	0.110	20.69	0.117	20.55	0.114
		1	49	20.25	0.106	20.72	0.118	20.41	0.110
		25	0	18.98	0.079	19.55	0.090	19.47	0.089
	256QAM	25	12	19.11	0.081	19.58	0.091	19.41	0.087
		25	25	19.05	0.080	19.31	0.085	19.48	0.089
		50	0	18.95	0.079	19.51	0.089	19.53	0.090
		1	0	17.21	0.053	17.68	0.059	17.61	0.058
		1	25	17.22	0.053	17.43	0.055	17.66	0.058
		1	49	17.19	0.052	17.51	0.056	17.51	0.056
		25	0	16.92	0.049	17.43	0.055	17.38	0.055
		25	12	16.98	0.050	17.33	0.054	17.45	0.056
		25	25	16.95	0.050	17.39	0.055	17.41	0.055
		50	0	16.98	0.050	17.45	0.056	17.54	0.057

LTE Band 42_IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				42165 (3 457.5 MHz)		42840 (3 525.0 MHz)		43515 (3 592.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
15	QPSK	1	0	22.35	0.172	22.53	0.179	22.47	0.177
		1	36	22.22	0.167	22.21	0.166	22.35	0.172
		1	74	22.19	0.166	22.35	0.172	22.41	0.174
		36	0	21.22	0.132	21.35	0.136	21.19	0.132
		36	18	21.15	0.130	21.31	0.135	21.15	0.130
		36	37	21.18	0.131	21.25	0.133	21.25	0.133
		75	0	21.09	0.129	21.41	0.138	21.29	0.135
	16QAM	1	0	21.33	0.136	21.67	0.147	21.51	0.142
		1	36	21.27	0.134	21.55	0.143	21.43	0.139
		1	74	21.22	0.132	21.45	0.140	21.34	0.136
		36	0	20.39	0.109	20.53	0.113	20.21	0.105
		36	18	20.44	0.111	20.41	0.110	20.37	0.109
		36	37	20.37	0.109	20.43	0.110	20.39	0.109
		75	0	20.35	0.108	20.49	0.112	20.44	0.111
	64QAM	1	0	20.31	0.107	20.53	0.113	20.49	0.112
		1	36	20.35	0.108	20.44	0.111	20.34	0.108
		1	74	20.33	0.108	20.41	0.110	20.39	0.109
		36	0	19.34	0.086	19.31	0.085	19.37	0.086
		36	18	19.43	0.088	19.35	0.086	19.41	0.087
		36	37	19.27	0.085	19.26	0.084	19.23	0.084
		75	0	19.39	0.087	19.45	0.088	19.44	0.088
	256QAM	1	0	17.39	0.055	17.62	0.058	17.57	0.057
		1	36	17.21	0.053	17.58	0.057	17.42	0.055
		1	74	17.35	0.054	17.59	0.057	17.45	0.056
		36	0	17.38	0.055	17.43	0.055	17.21	0.053
		36	18	17.33	0.054	17.44	0.055	17.35	0.054
		36	37	17.31	0.054	17.31	0.054	17.25	0.053
		75	0	17.45	0.056	17.41	0.055	17.34	0.054

LTE Band 42_IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				42190 (3 460.0 MHz)		42840 (3 525.0 MHz)		43490 (3 590.0 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
20	QPSK	1	0	22.26	0.168	22.69	0.186	22.55	0.180
		1	50	22.21	0.166	22.53	0.179	22.47	0.177
		1	99	22.15	0.164	22.59	0.182	22.53	0.179
		50	0	21.26	0.134	21.39	0.138	21.31	0.135
		50	25	21.31	0.135	21.33	0.136	21.44	0.139
		50	50	21.35	0.136	21.43	0.139	21.49	0.141
		100	0	21.42	0.139	21.45	0.140	21.57	0.144
	16QAM	1	0	21.39	0.138	21.58	0.144	21.45	0.140
		1	50	21.33	0.136	21.51	0.142	21.36	0.137
		1	99	21.37	0.137	21.42	0.139	21.33	0.136
		50	0	20.26	0.106	20.42	0.110	20.44	0.111
		50	25	20.38	0.109	20.45	0.111	20.41	0.110
		50	50	20.35	0.108	20.49	0.112	20.28	0.107
		100	0	20.17	0.104	20.48	0.112	20.46	0.111
	64QAM	1	0	20.44	0.111	20.45	0.111	20.51	0.112
		1	50	20.41	0.110	20.41	0.110	20.47	0.111
		1	99	20.35	0.108	20.27	0.106	20.38	0.109
		50	0	19.31	0.085	19.49	0.089	19.48	0.089
		50	25	19.29	0.085	19.45	0.088	19.47	0.089
		50	50	19.35	0.086	19.35	0.086	19.33	0.086
		100	0	19.29	0.085	19.43	0.088	19.35	0.086
	256QAM	1	0	17.22	0.053	17.41	0.055	17.37	0.055
		1	50	17.15	0.052	17.37	0.055	17.38	0.055
		1	99	17.29	0.054	17.31	0.054	17.42	0.055
		50	0	17.23	0.053	17.39	0.055	17.31	0.054
		50	25	17.37	0.055	17.29	0.054	17.25	0.053
		50	50	17.35	0.054	17.45	0.056	17.44	0.055
		100	0	17.48	0.056	17.53	0.057	17.45	0.056

LTE Band 48 IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				55265 (3 552.5 MHz)		55990 (3 625.0 MHz)		56715 (3 697.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
5	QPSK	1	0	22.28	0.169	22.58	0.181	22.45	0.176
		1	12	22.31	0.170	22.45	0.176	22.35	0.172
		1	24	22.25	0.168	22.49	0.177	22.33	0.171
		12	0	21.38	0.137	21.39	0.138	21.45	0.140
		12	6	21.35	0.136	21.44	0.139	21.42	0.139
		12	13	21.22	0.132	21.39	0.138	21.44	0.139
	16QAM	25	0	21.46	0.140	21.52	0.142	21.38	0.137
		1	0	21.22	0.132	21.55	0.143	21.39	0.138
		1	12	21.35	0.136	21.38	0.137	21.37	0.137
		1	24	21.48	0.141	21.46	0.140	21.33	0.136
		12	0	20.35	0.108	20.48	0.112	20.38	0.109
		12	6	20.25	0.106	20.35	0.108	20.29	0.107
	64QAM	12	13	20.29	0.107	20.41	0.110	20.38	0.109
		25	0	20.33	0.108	20.52	0.113	20.44	0.111
		1	0	20.55	0.114	20.68	0.117	20.61	0.115
		1	12	20.51	0.112	20.61	0.115	20.49	0.112
		1	24	20.48	0.112	20.63	0.116	20.58	0.114
		12	0	19.35	0.086	19.65	0.092	19.46	0.088
	256QAM	12	6	19.25	0.084	19.51	0.089	19.51	0.089
		12	13	19.38	0.087	19.58	0.091	19.48	0.089
		25	0	19.45	0.088	19.48	0.089	19.51	0.089
		1	0	17.58	0.057	17.61	0.058	17.51	0.056
		1	12	17.51	0.056	17.55	0.057	17.58	0.057
		1	24	17.41	0.055	17.32	0.054	17.44	0.055
	12	0	17.25	0.053	17.35	0.054	17.41	0.055	
	12	6	17.29	0.054	17.41	0.055	17.35	0.054	
	12	13	17.46	0.056	17.45	0.056	17.31	0.054	
	25	0	17.41	0.055	17.49	0.056	17.00	0.050	
LTE Band 48 IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				55290 (3 555.0 MHz)		55990 (3 625.0 MHz)		56690 (3 695.0 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
10	QPSK	1	0	22.48	0.177	22.65	0.184	22.52	0.179
		1	25	22.25	0.168	22.58	0.181	22.35	0.172
		1	49	22.31	0.170	22.61	0.182	22.48	0.177
		25	0	21.29	0.135	21.43	0.139	21.35	0.136
		25	12	21.35	0.136	21.31	0.135	21.33	0.136
		25	25	21.22	0.132	21.35	0.136	21.28	0.134
	16QAM	50	0	21.38	0.137	21.59	0.144	21.55	0.143
		1	0	21.41	0.138	21.65	0.146	21.59	0.144
		1	25	21.46	0.140	21.43	0.139	21.34	0.136
		1	49	21.35	0.136	21.49	0.141	21.48	0.141
		25	0	20.22	0.105	20.45	0.111	20.35	0.108
		25	12	20.31	0.107	20.41	0.110	20.31	0.107
	64QAM	25	25	20.29	0.107	20.53	0.113	20.38	0.109
		50	0	20.25	0.106	20.51	0.112	20.45	0.111
		1	0	20.53	0.113	20.61	0.115	20.55	0.114
		1	25	20.35	0.108	20.58	0.114	20.51	0.112
		1	49	20.39	0.109	20.49	0.112	20.53	0.113
		25	0	19.51	0.089	19.68	0.093	19.61	0.091
	256QAM	25	12	19.41	0.087	19.58	0.091	19.52	0.090
		25	25	19.55	0.090	19.61	0.091	19.58	0.091
		50	0	19.38	0.087	19.52	0.090	19.43	0.088
		1	0	17.29	0.054	17.58	0.057	17.48	0.056
		1	25	17.31	0.054	17.44	0.055	17.41	0.055
		1	49	17.32	0.054	17.41	0.055	17.45	0.056
	25	0	17.45	0.056	17.42	0.055	17.43	0.055	
	25	12	17.41	0.055	17.39	0.055	17.43	0.055	
	25	25	17.38	0.055	17.45	0.056	17.41	0.055	
	50	0	17.33	0.054	17.44	0.055	17.38	0.055	

LTE Band 48_IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				55315 (3 557.5 MHz)		55990 (3 625.0 MHz)		56665 (3 692.5 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
15	QPSK	1	0	22.43	0.175	22.67	0.185	22.52	0.179
		1	36	22.25	0.168	22.51	0.178	22.35	0.172
		1	74	22.31	0.170	22.55	0.180	22.42	0.175
		36	0	21.41	0.138	21.57	0.144	21.48	0.141
		36	18	21.52	0.142	21.49	0.141	21.29	0.135
		36	37	21.39	0.138	21.51	0.142	21.35	0.136
		75	0	21.59	0.144	21.54	0.143	21.52	0.142
	16QAM	1	0	21.38	0.137	21.68	0.147	21.46	0.140
		1	36	21.27	0.134	21.43	0.139	21.35	0.136
		1	74	21.35	0.136	21.56	0.143	21.39	0.138
		36	0	20.37	0.109	20.59	0.115	20.29	0.107
		36	18	20.31	0.107	20.51	0.112	20.33	0.108
		36	37	20.27	0.106	20.42	0.110	20.35	0.108
		75	0	20.41	0.110	20.62	0.115	20.58	0.114
	64QAM	1	0	20.35	0.108	20.78	0.120	20.51	0.112
		1	36	20.42	0.110	20.65	0.116	20.45	0.111
		1	74	20.43	0.110	20.59	0.115	20.55	0.114
		36	0	19.36	0.086	19.65	0.092	19.41	0.087
		36	18	19.26	0.084	19.43	0.088	19.45	0.088
		36	37	19.31	0.085	19.51	0.089	19.52	0.090
		75	0	19.53	0.090	19.59	0.091	19.43	0.088
	256QAM	1	0	17.29	0.054	17.55	0.057	17.49	0.056
		1	36	17.41	0.055	17.51	0.056	17.48	0.056
		1	74	17.45	0.056	17.47	0.056	17.44	0.055
		36	0	17.25	0.053	17.66	0.058	17.35	0.054
		36	18	17.39	0.055	17.53	0.057	17.38	0.055
		36	37	17.43	0.055	17.42	0.055	17.41	0.055
		75	0	17.55	0.057	17.64	0.058	17.52	0.056

LTE Band 48_IC									
Bandwidth (MHz)	Modulation	RB Size	RB Offset	Conducted Output Power					
				55340 (3 560.0 MHz)		55990 (3 625.0 MHz)		56640 (3 690.0 MHz)	
				(dB m)	(W)	(dB m)	(W)	(dB m)	(W)
20	QPSK	1	0	22.31	0.170	23.12	0.205	22.65	0.184
		1	50	22.29	0.169	22.68	0.185	22.58	0.181
		1	99	22.35	0.172	22.65	0.184	22.41	0.174
		50	0	21.34	0.136	21.69	0.148	21.51	0.142
		50	25	21.25	0.133	21.56	0.143	21.42	0.139
		50	50	21.39	0.138	21.65	0.146	21.33	0.136
		100	0	21.38	0.137	21.53	0.142	21.49	0.141
	16QAM	1	0	21.43	0.139	21.74	0.149	21.67	0.147
		1	50	21.31	0.135	21.65	0.146	21.55	0.143
		1	99	21.22	0.132	21.61	0.145	21.41	0.138
		50	0	20.43	0.110	20.63	0.116	20.55	0.114
		50	25	20.35	0.108	20.55	0.114	20.51	0.112
		50	50	20.38	0.109	20.59	0.115	20.48	0.112
		100	0	20.37	0.109	20.61	0.115	20.58	0.114
	64QAM	1	0	20.29	0.107	20.51	0.112	20.44	0.111
		1	50	20.39	0.109	20.43	0.110	20.25	0.106
		1	99	20.45	0.111	20.52	0.113	20.45	0.111
		50	0	19.41	0.087	19.71	0.094	19.55	0.090
		50	25	19.55	0.090	19.58	0.091	19.61	0.091
		50	50	19.42	0.087	19.61	0.091	19.47	0.089
		100	0	19.35	0.086	19.55	0.090	19.51	0.089
	256QAM	1	0	17.35	0.054	17.76	0.060	17.56	0.057
		1	50	17.25	0.053	17.75	0.060	17.43	0.055
		1	99	17.26	0.053	17.77	0.060	17.51	0.056
		50	0	17.43	0.055	17.68	0.059	17.47	0.056
		50	25	17.45	0.056	17.61	0.058	17.35	0.054
		50	50	17.39	0.055	17.56	0.057	17.51	0.056
		100	0	17.41	0.055	17.65	0.058	17.52	0.056

4. Occupied Bandwidth

4.1. Limit

CFR 47, Section FCC §2.1049 and IC RSS-Gen Issue 5 6.7.

4.2. Test Procedure

FCC

The test follows section 5.4.4 of ANSI C63.26-2015.

- a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation. products including the emission skirts (typically a span of $1.5 \times \text{OBW}$ is sufficient).
- b. The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1 % to 5 % of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- d. Set the detection mode to peak, and the trace mode to max-hold.
- e. If the instrument does not have a 99 % OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5 % of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5 % of the total is reached and record that frequency as the upper OBW frequency. The 99 % power OBW can be determined by computing the difference these two frequencies.
- f. The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

IC

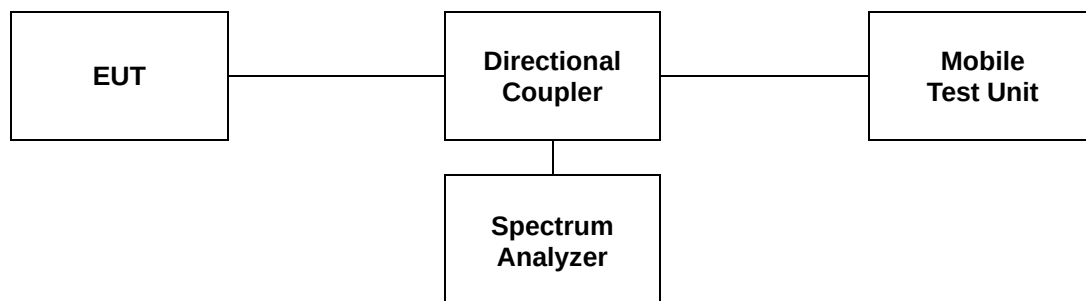
The test follows section 6.7 of RSS-Gen Issue 5.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1 % to 5 % of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99 % emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99 % emission bandwidth).



4.3 Test Results

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

- Ant. 2

Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
42 Only IC	5	3 452.5	4.515	4.525
		3 525.0	4.515	4.501
		3 597.5	4.545	4.545
	10	3 455.0	9.031	9.011
		3 525.0	8.973	8.944
		3 595.0	8.931	8.911
	15	3 457.5	13.457	13.487
		3 525.0	13.546	13.546
		3 592.5	13.546	13.516
	20	3 460.0	17.942	17.942
		3 525.0	18.003	18.003
		3 590.0	17.862	17.942
48 IC	5	3 552.5	4.456	4.466
		3 625.0	4.530	4.530
		3 697.5	4.505	4.505
	10	3 555.0	8.991	8.891
		3 625.0	8.973	8.973
		3 695.0	8.931	8.931
	15	3 557.5	13.487	13.516
		3 625.0	13.502	13.546
		3 692.5	13.546	13.487
	20	3 560.0	17.862	17.942
		3 625.0	18.003	17.945
		3 690.0	17.902	17.902

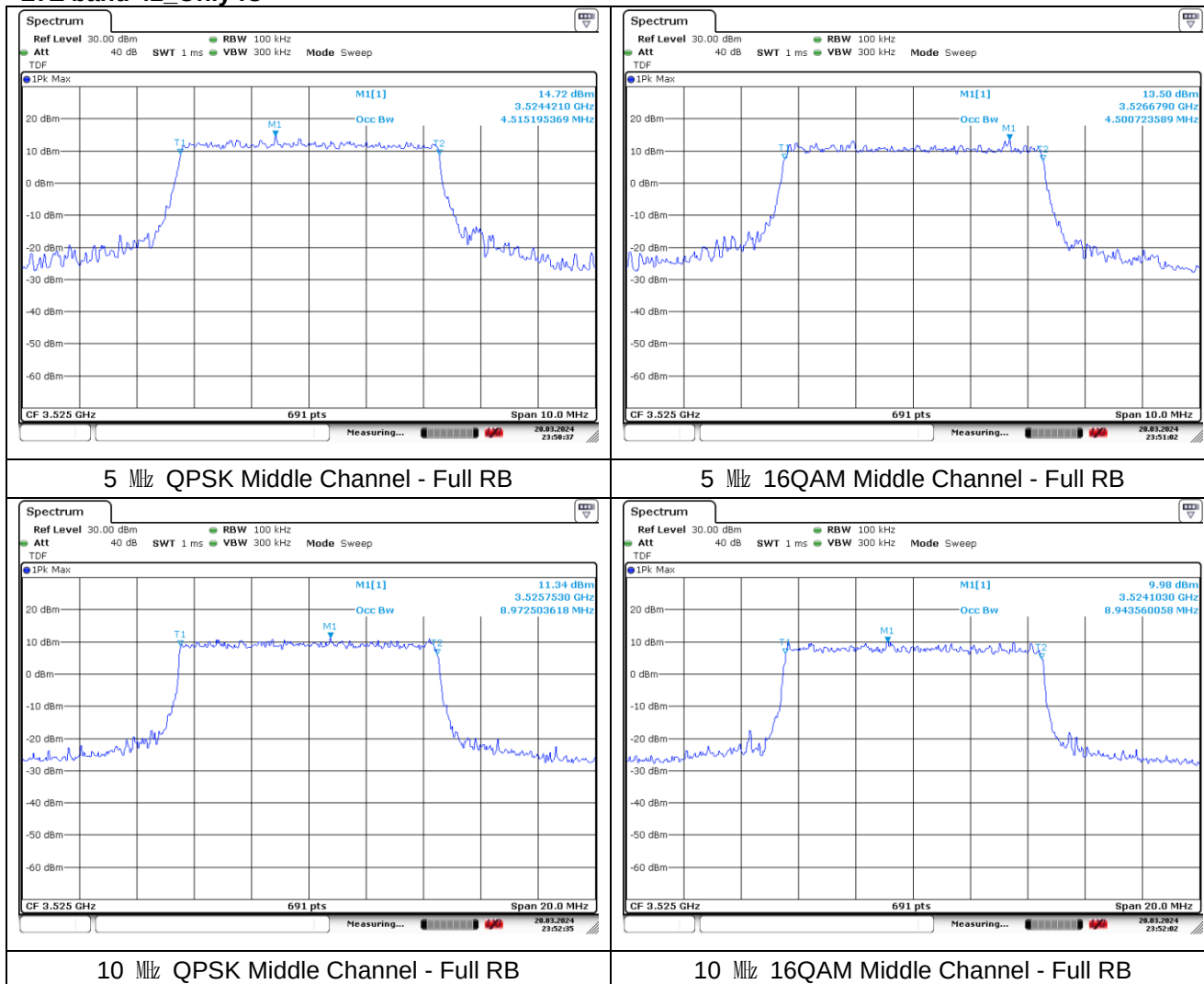
- Switching

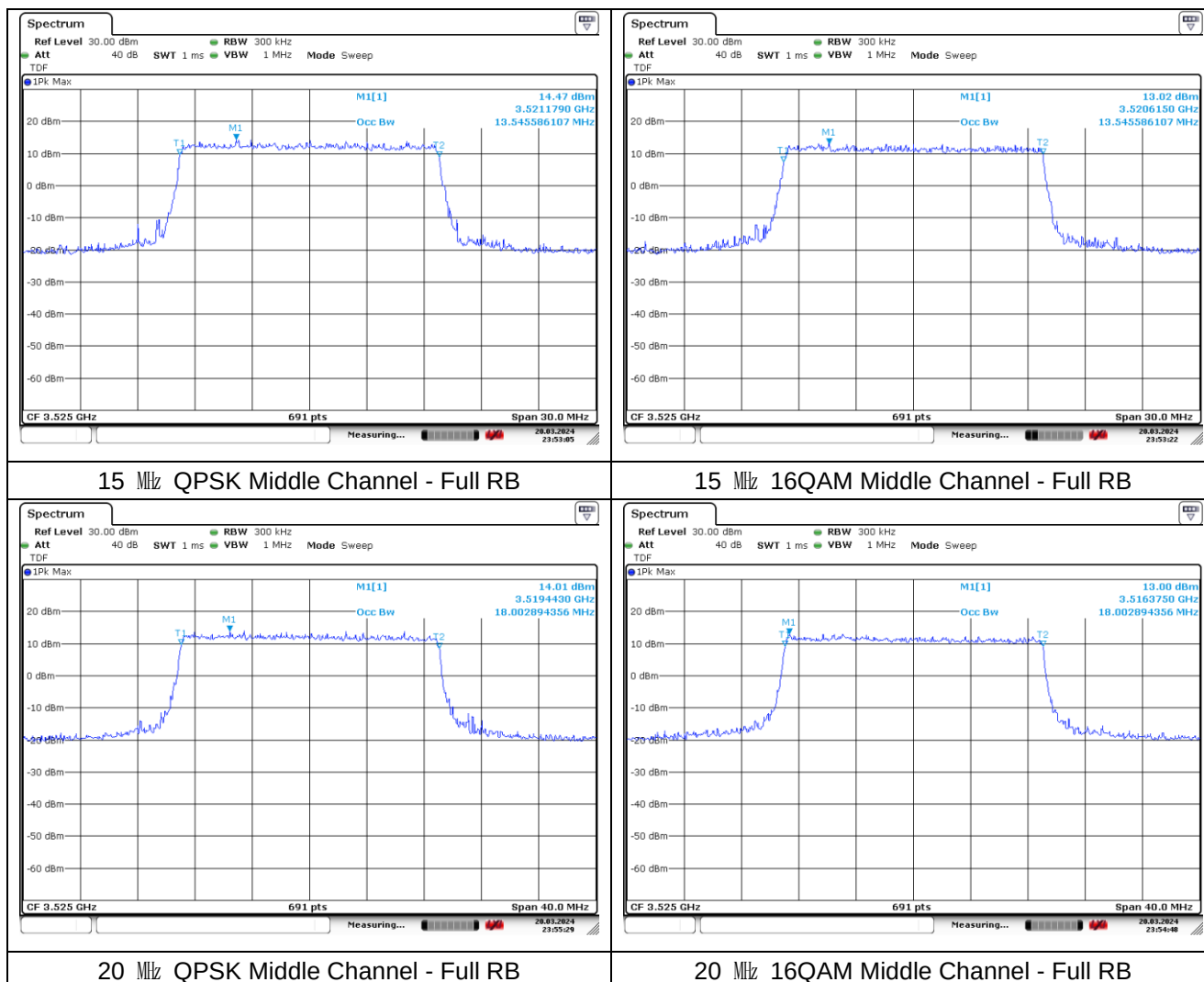
Band	Bandwidth (MHz)	Frequency (MHz)	Occupied Bandwidth (MHz)	
			QPSK	16QAM
38	5	2 595.0	4.530	4.501
	10		8.944	8.973
	15		13.502	13.502
	20		17.945	17.945
42 Only IC	5	3 452.5	4.486	4.497
		3 525.0	4.485	4.508
		3 597.5	4.495	4.486
	10	3 455.0	8.927	8.921
		3 525.0	8.909	8.963
		3 595.0	8.918	8.952
	15	3 457.5	13.486	13.462
		3 525.0	13.462	13.458
		3 592.5	13.458	13.464
	20	3 460.0	17.924	17.860
		3 525.0	17.904	17.931
		3 590.0	17.952	17.861
48 IC	5	3 552.5	4.521	4.515
		3 625.0	4.502	4.502
		3 697.5	4.528	4.510
	10	3 555.0	8.946	8.964
		3 625.0	8.934	8.956
		3 695.0	8.945	8.944
	15	3 557.5	13.492	13.490
		3 625.0	13.518	13.454
		3 692.5	13.536	13.531
	20	3 560.0	17.940	17.977
		3 625.0	17.931	17.945
		3 690.0	17.901	17.983

- Test plots

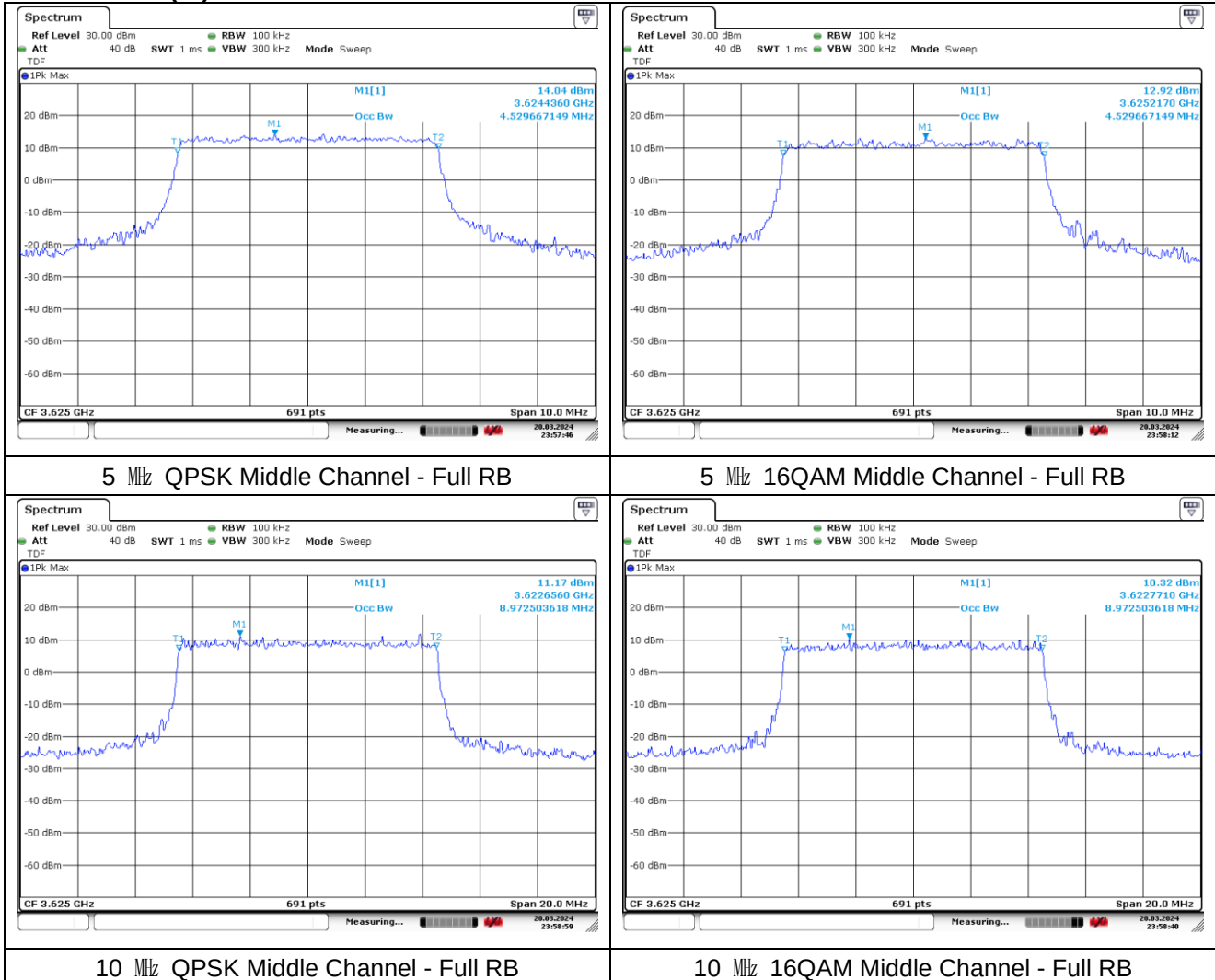
- Ant. 2

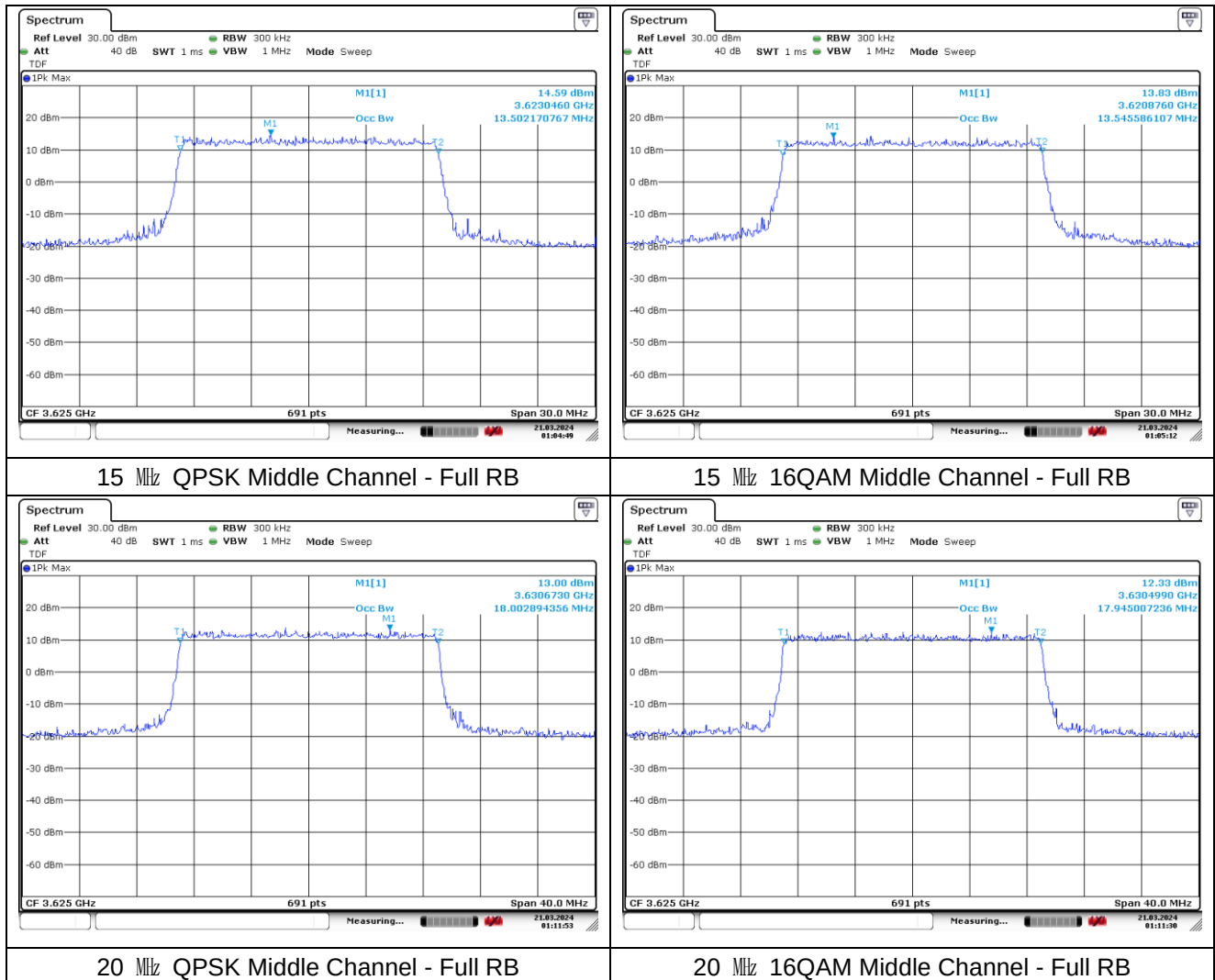
LTE band 42_Only IC





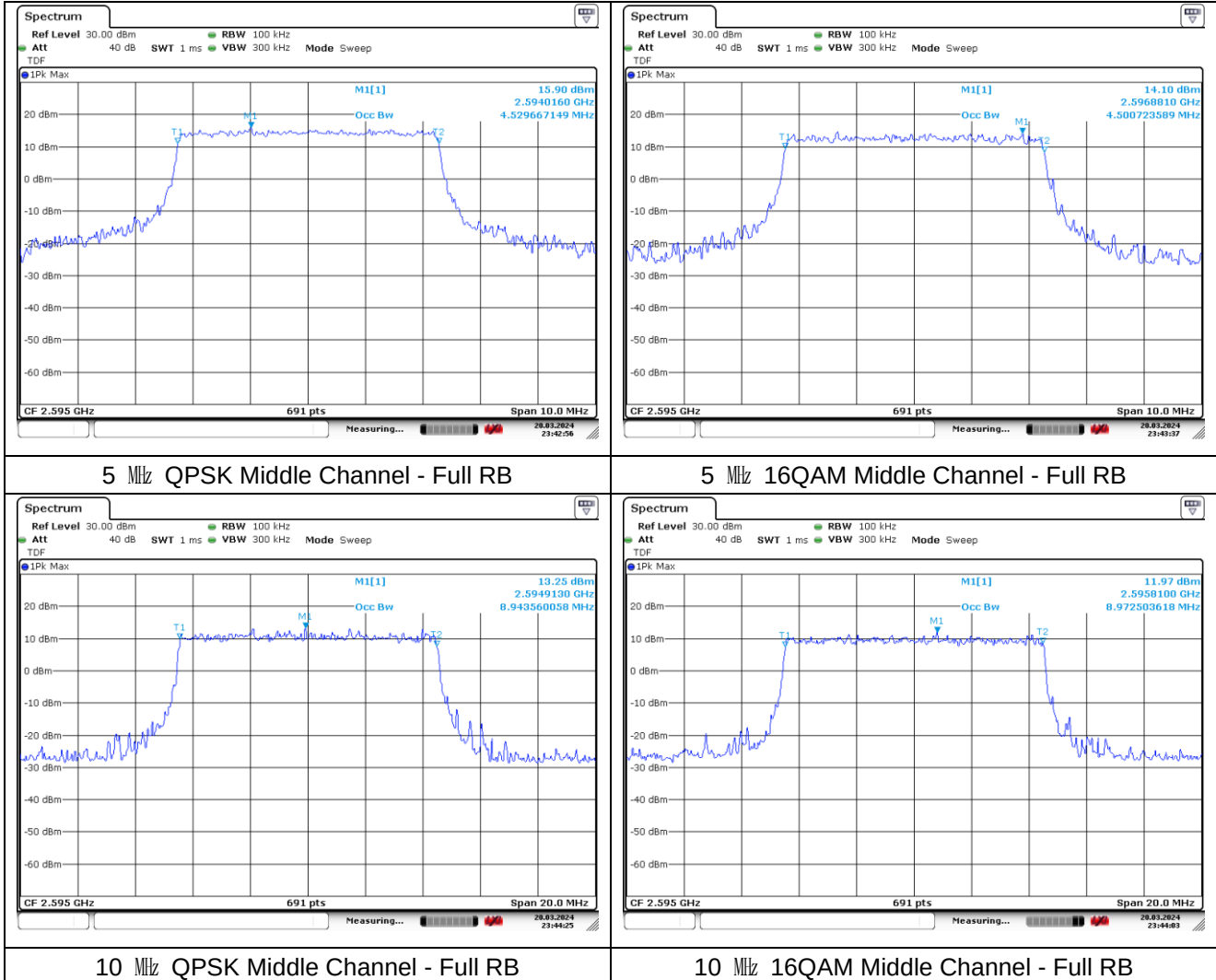
LTE band 48 (IC)

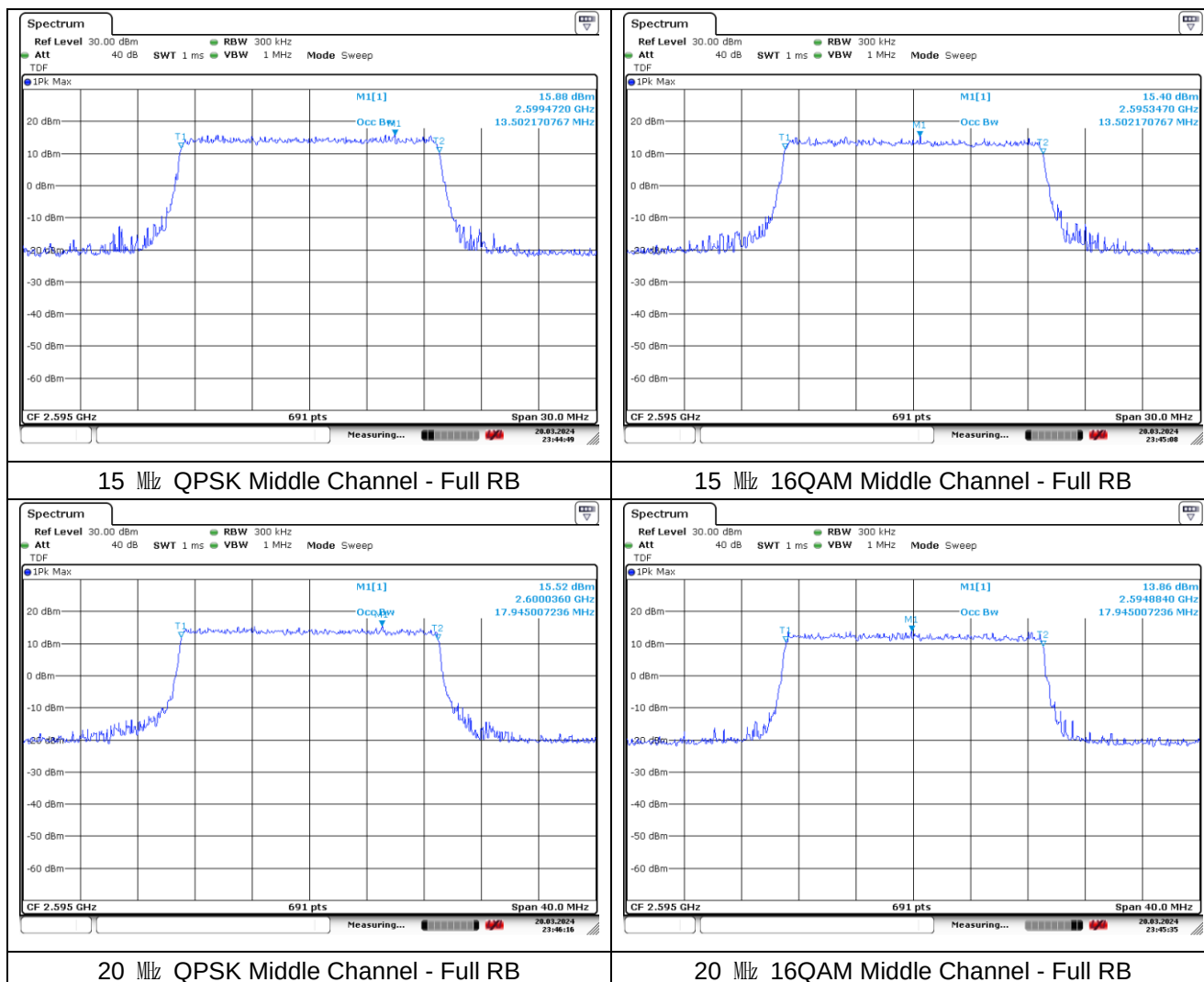




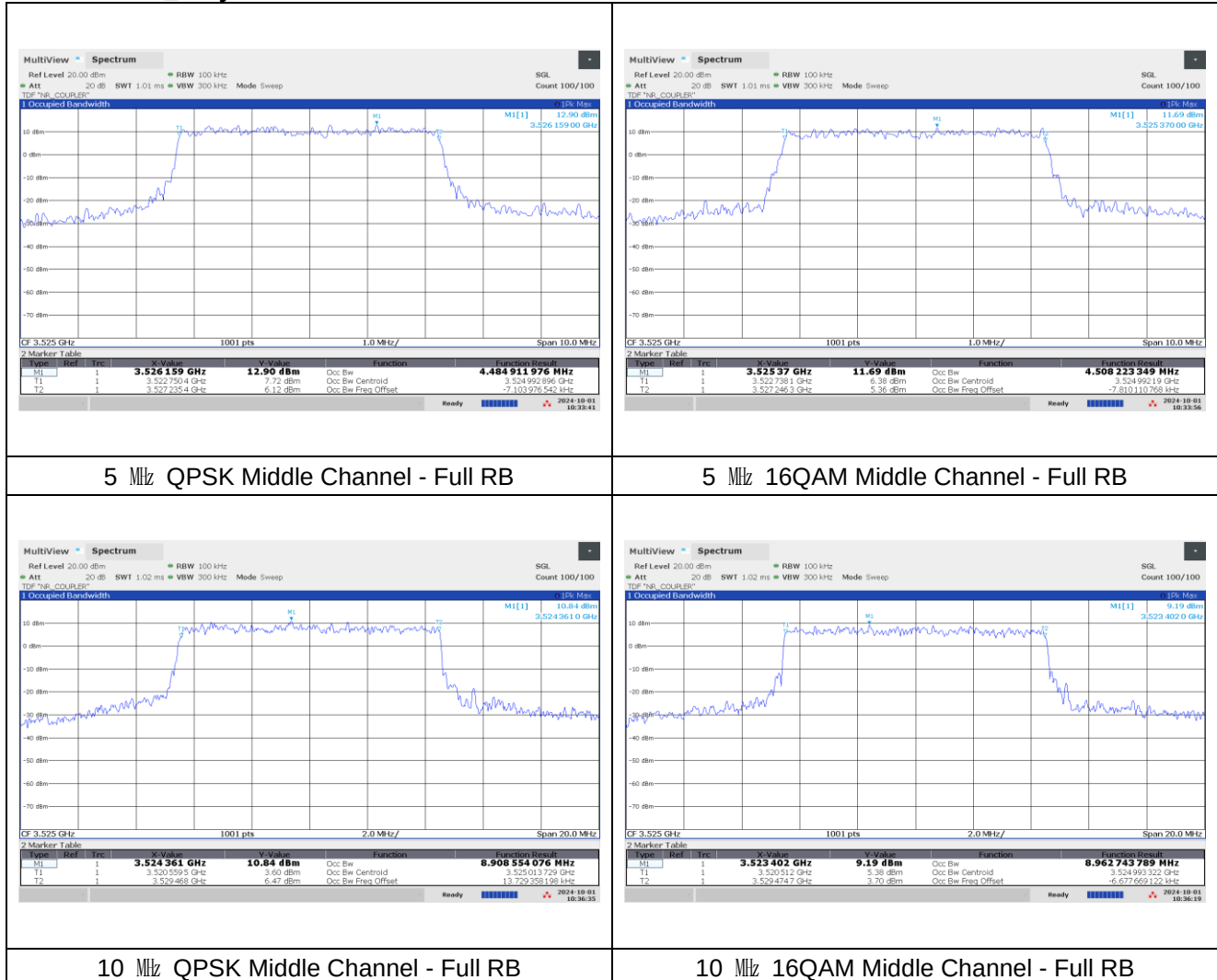
- Switching

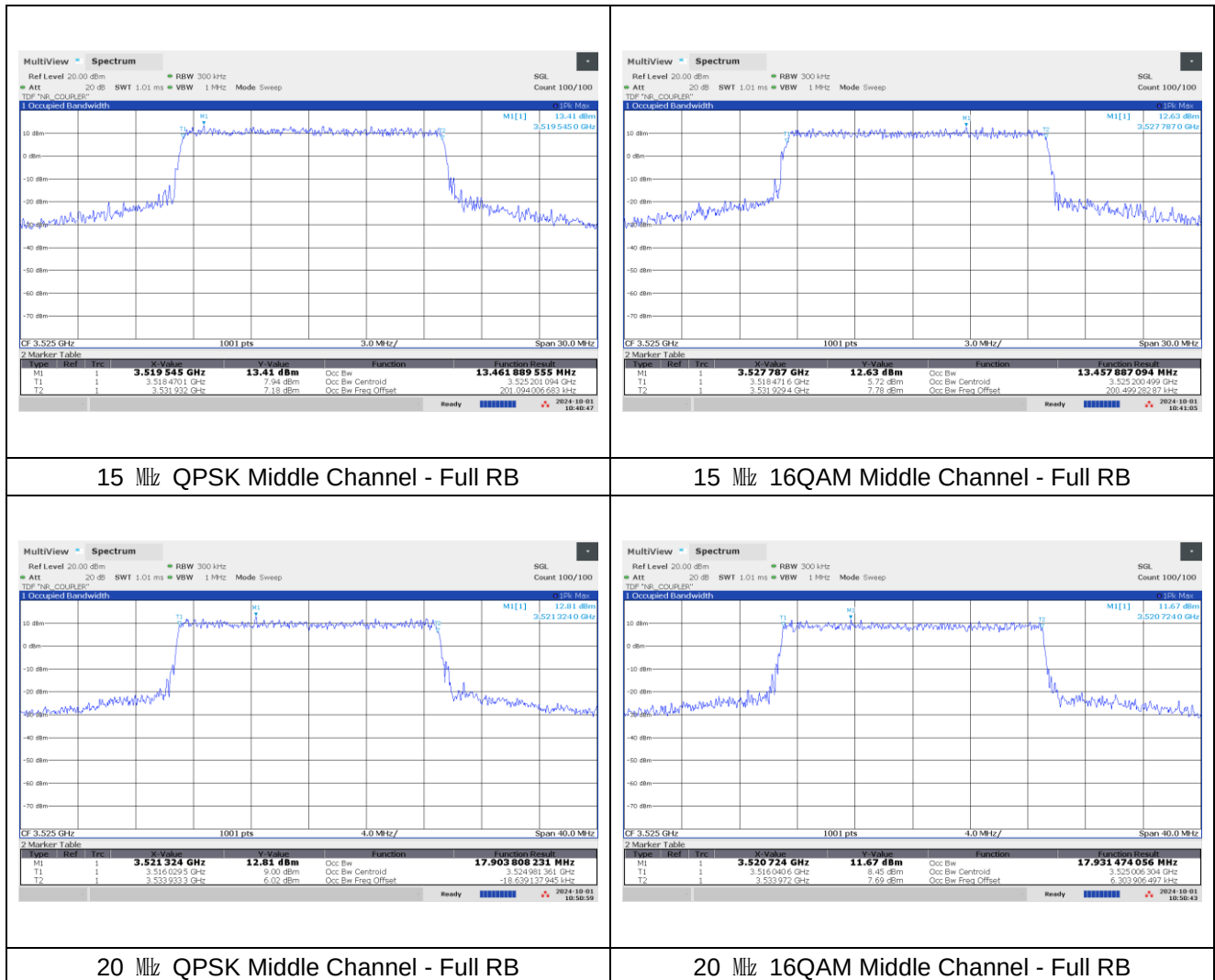
LTE band 38



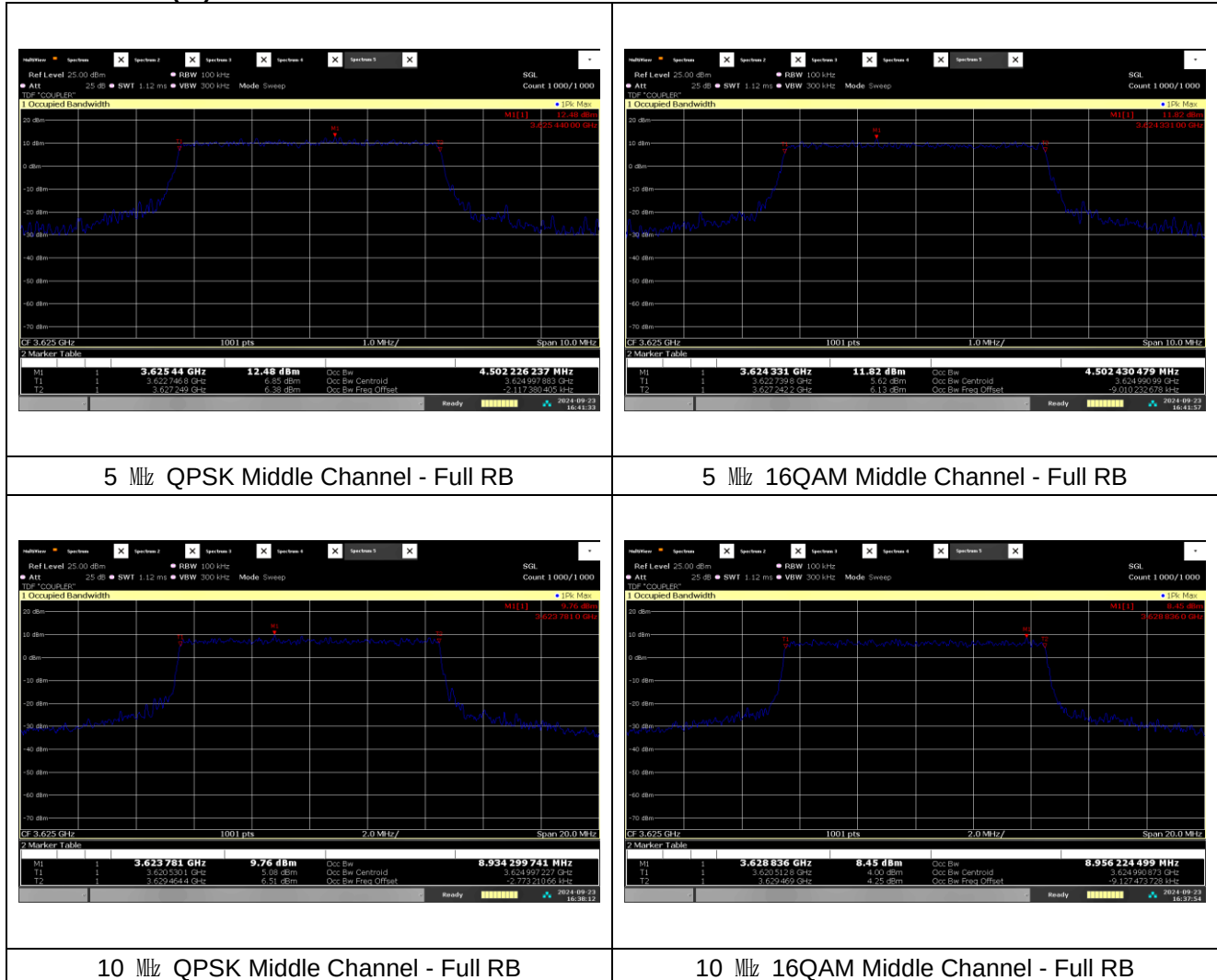


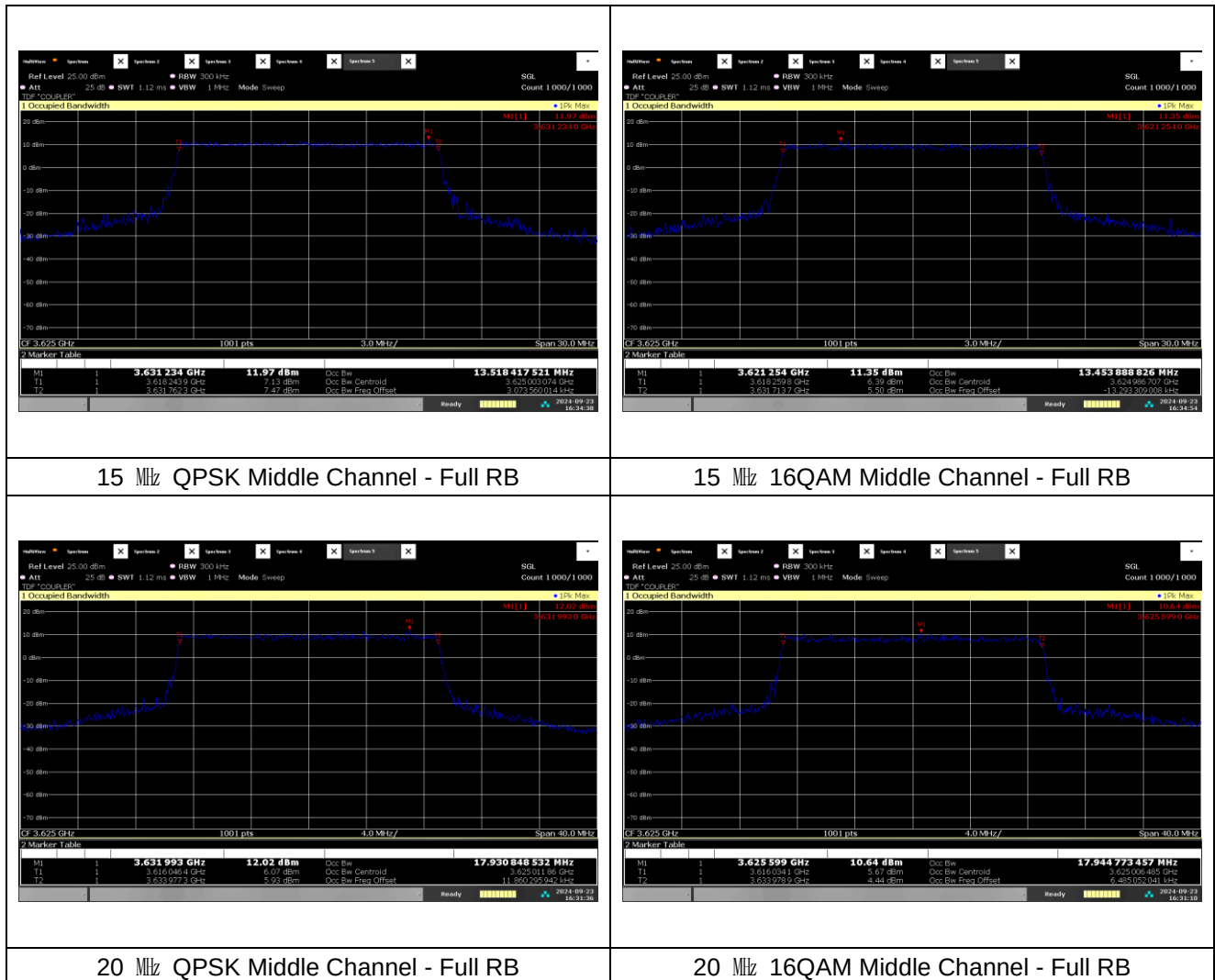
LTE band 42_Only IC





LTE band 48 (IC)





5. Peak-Average Ratio

5.1. Limit

IC

- RSS-192 Issue 5

5.5, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

- RSS-199 Issue 4

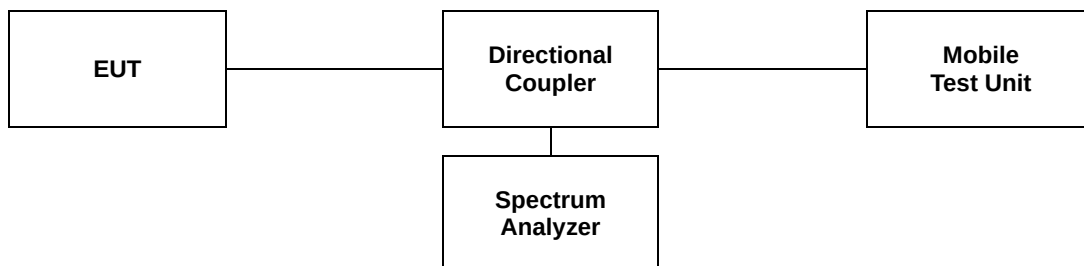
5.5, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

5.2. Test Procedure

The test follows section 5.2.3.4 of ANSI C63.26-2015.

See instrumentation-specific application literature for further guidance regarding use of the CCDF capability. The following guidelines are offered for performing a CCDF measurement.

- a. Set resolution/measurement bandwidth $\geq$ OBW or specified reference bandwidth.
- b. Set the number of counts to a value that stabilizes the measured CCDF curve.
- c. Set the measurement interval as follows:
 - 1) For continuous transmissions, set to greater of $[10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ or 1 ms.
 - 2) For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
 - 3) If there are several carriers in a single antenna port, the peak power shall be determined for each individual carrier (by disabling the other carriers while measuring the required carrier) and the total peak power calculated from the sum of the individual carrier peak powers.
- d. Record the maximum PAPR level associated with a probability of 0.1 %.
- e. The peak power level is calculated from the sum of the PAPR value from step d) to the measured average power.



5.3 Test Results

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

- Ant. 2

Band	Bandwidth (MHz)	Frequency (MHz)	PAR (dB)			
			QPSK	16QAM	64QAM	256QAM
42 Only IC	5	3 452.5	4.29	5.51	6.20	6.46
		3 525.0	4.23	5.42	6.38	6.52
		3 597.5	4.32	5.57	6.58	6.49
	10	3 455.0	4.26	5.48	6.32	6.52
		3 525.0	4.41	5.48	6.23	6.58
		3 595.0	4.43	5.54	6.55	6.67
	15	3 457.5	4.35	5.48	6.49	6.55
		3 525.0	4.26	5.45	6.43	6.58
		3 592.5	4.58	5.54	6.72	6.84
	20	3 460.0	4.32	5.51	6.99	6.29
		3 525.0	4.26	5.54	6.99	6.41
		3 590.0	4.81	5.88	6.46	6.64
48 IC	5	3 552.5	4.03	5.30	6.14	6.17
		3 625.0	4.23	5.39	6.35	6.38
		3 697.5	4.43	5.71	6.52	6.43
	10	3 555.0	4.03	5.39	5.33	6.20
		3 625.0	4.20	5.39	5.42	6.52
		3 695.0	4.43	5.77	5.71	6.70
	15	3 557.5	4.38	5.33	5.30	6.29
		3 625.0	4.38	5.45	5.48	6.67
		3 692.5	4.61	5.68	5.71	6.64
	20	3 560.0	4.26	5.57	5.36	6.23
		3 625.0	4.35	5.62	5.54	6.46
		3 690.0	4.52	5.74	5.77	6.41

- Switching

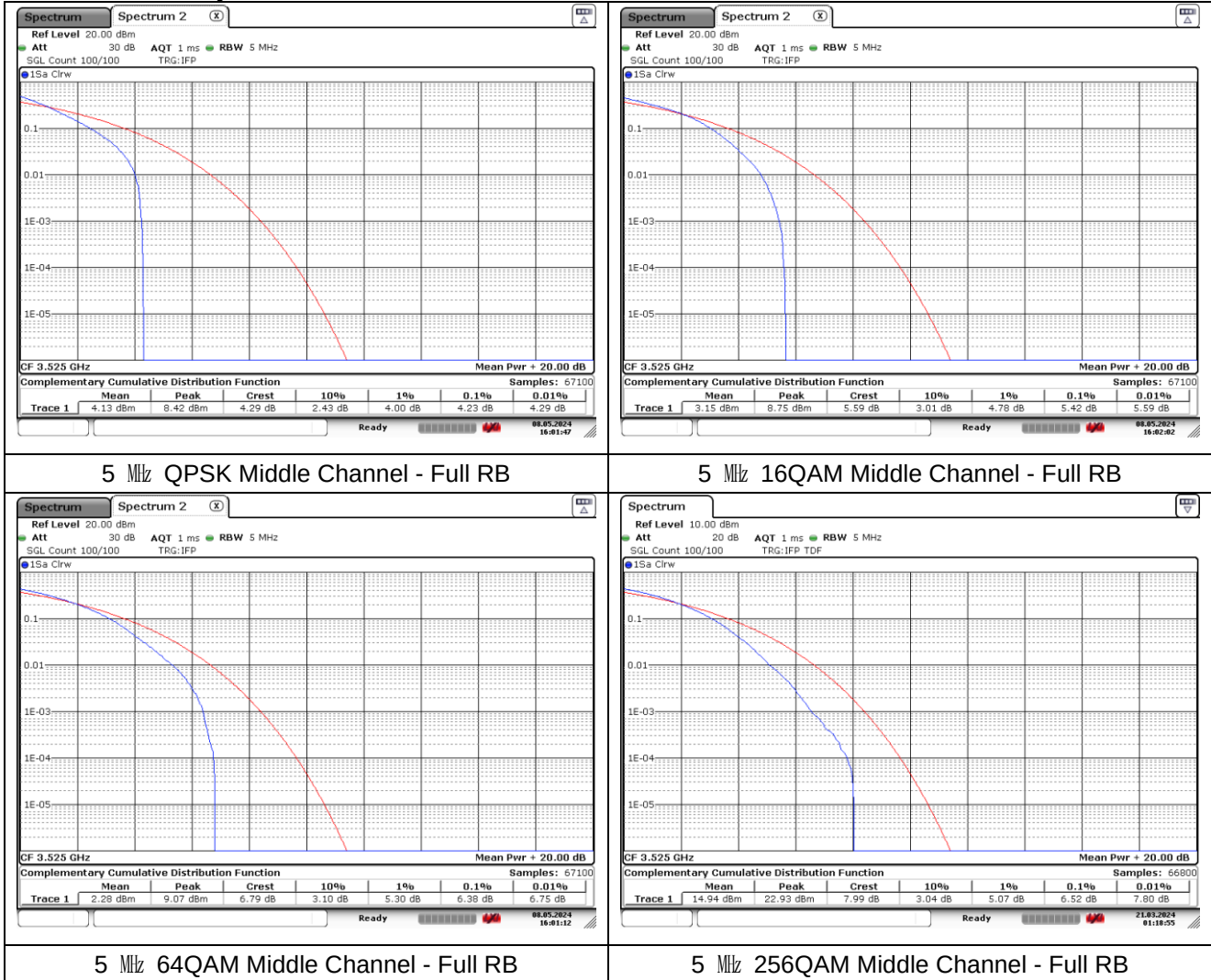
Band	Bandwidth (MHz)	Mode	Frequency (MHz)	PAR (dB)
38	5	256QAM	2 572.5	6.38
			2 595.0	6.38
			2 617.5	6.43
	10		2 575.0	6.41
			2 595.0	6.14
			2 615.0	6.12
	15		2 577.5	6.26
			2 595.0	6.29
			2 612.5	6.26
	20		2 580.0	6.23
			2 595.0	6.29
			2 610.0	6.32

Band	Bandwidth (MHz)	Frequency (MHz)	PAR (dB)			
			QPSK	16QAM	64QAM	256QAM
42 Only IC	5	3 452.5	4.36	5.42	6.22	6.54
		3 525.0	4.50	5.42	6.44	6.68
		3 597.5	4.60	5.70	6.50	6.90
	10	3 455.0	4.52	5.52	6.12	6.74
		3 525.0	4.60	5.54	6.38	6.66
		3 595.0	4.54	5.72	6.36	6.72
	15	3 457.5	4.28	5.24	6.20	6.52
		3 525.0	4.38	5.38	6.30	6.60
		3 592.5	4.58	5.52	6.52	6.68
	20	3 460.0	4.54	5.50	6.10	6.38
		3 525.0	4.56	5.60	6.36	6.60
		3 590.0	4.68	5.70	6.56	6.78
48 IC	5	3 552.5	4.42	5.46	6.02	6.32
		3 625.0	4.62	5.46	6.42	6.60
		3 697.5	4.54	5.62	6.34	6.34
	10	3 555.0	4.56	5.52	6.10	6.42
		3 625.0	4.46	5.54	6.28	6.58
		3 695.0	4.52	5.58	6.36	6.56
	15	3 557.5	4.28	5.22	5.92	6.24
		3 625.0	4.22	5.26	6.20	6.32
		3 692.5	4.38	5.38	5.94	6.60
	20	3 560.0	4.50	5.54	6.14	6.52
		3 625.0	4.56	5.54	6.24	6.40
		3 690.0	4.64	5.60	6.44	6.58

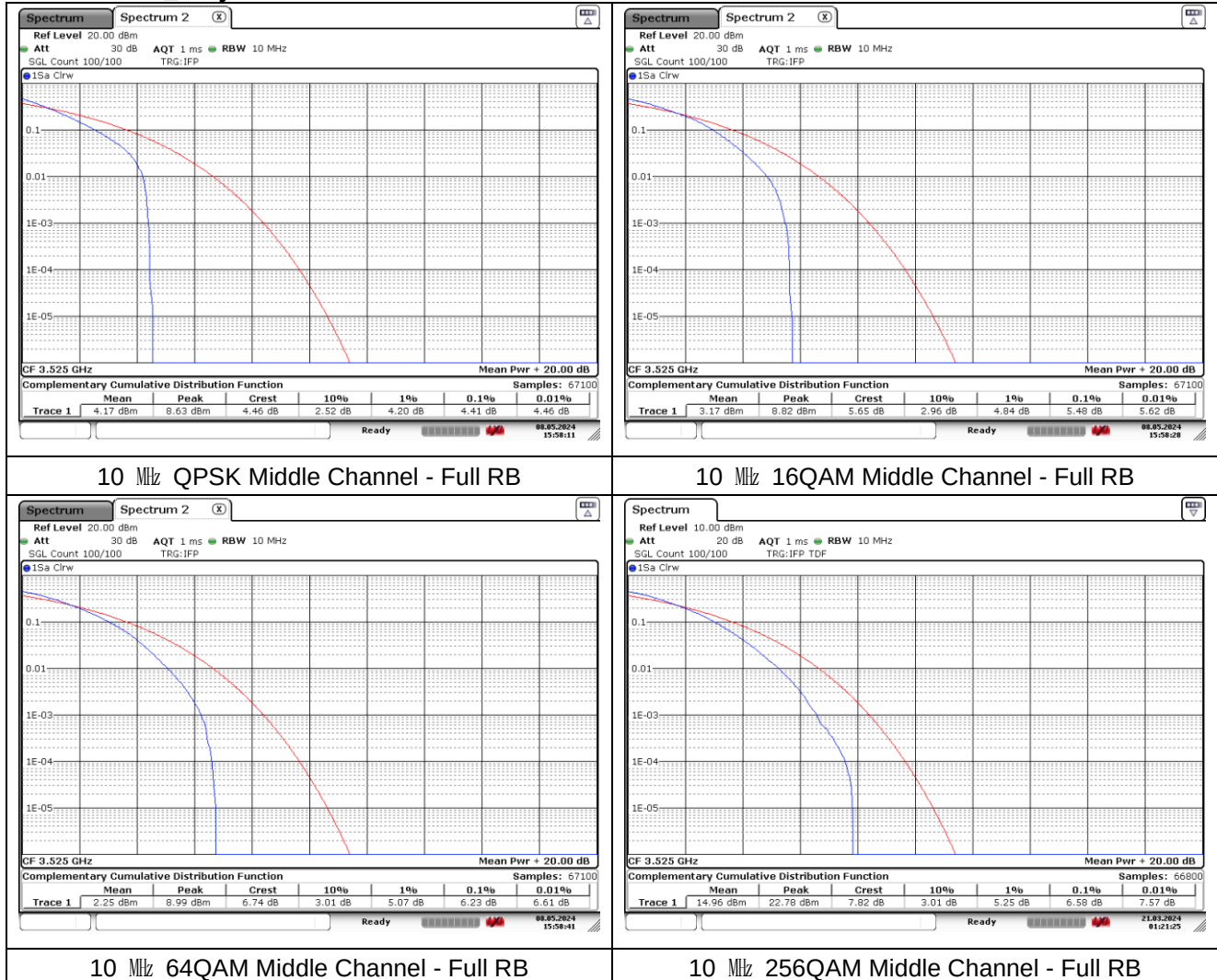
- Test plots

- Ant. 2

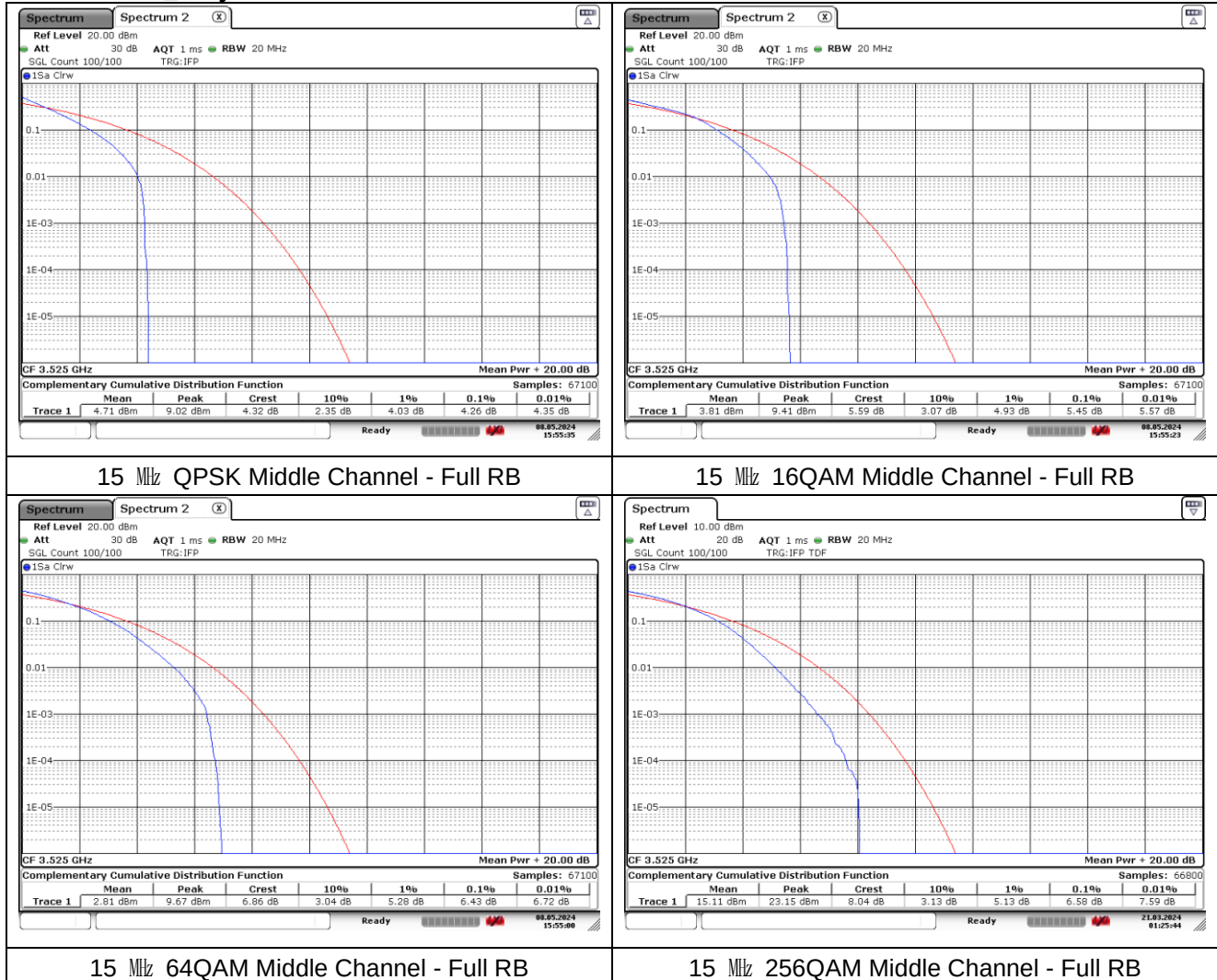
LTE band 42_Only IC



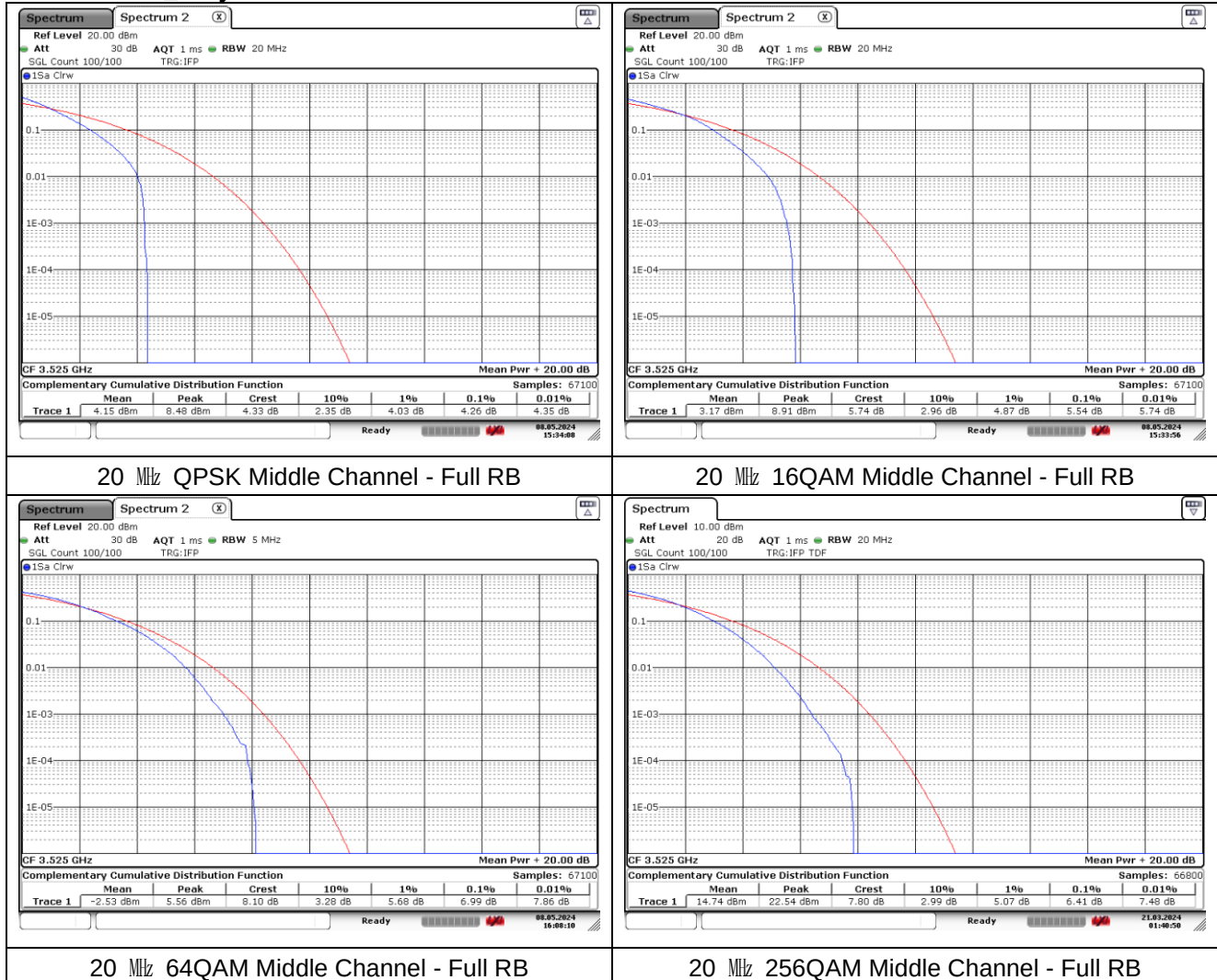
LTE band 42_Only IC



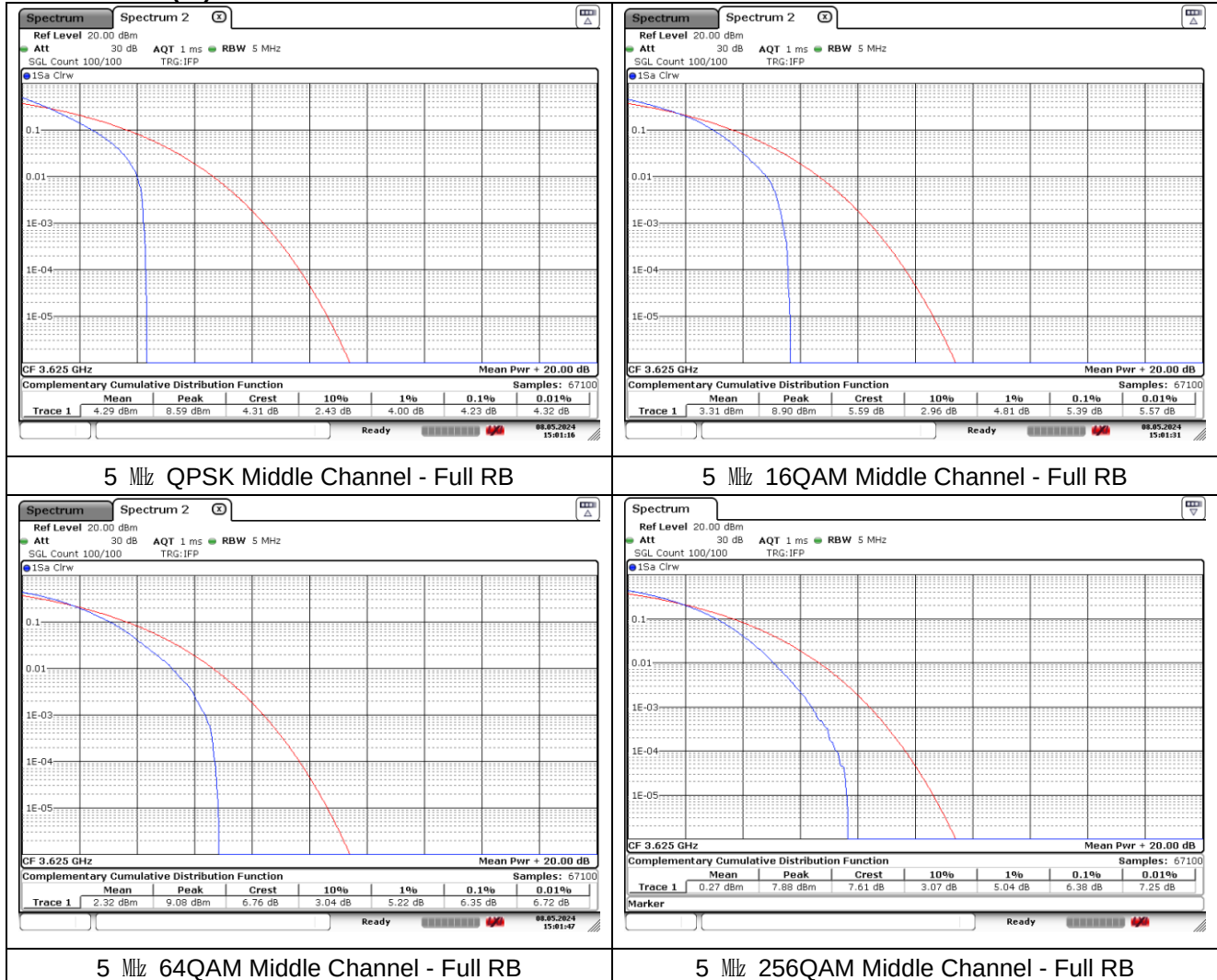
LTE band 42_Only IC



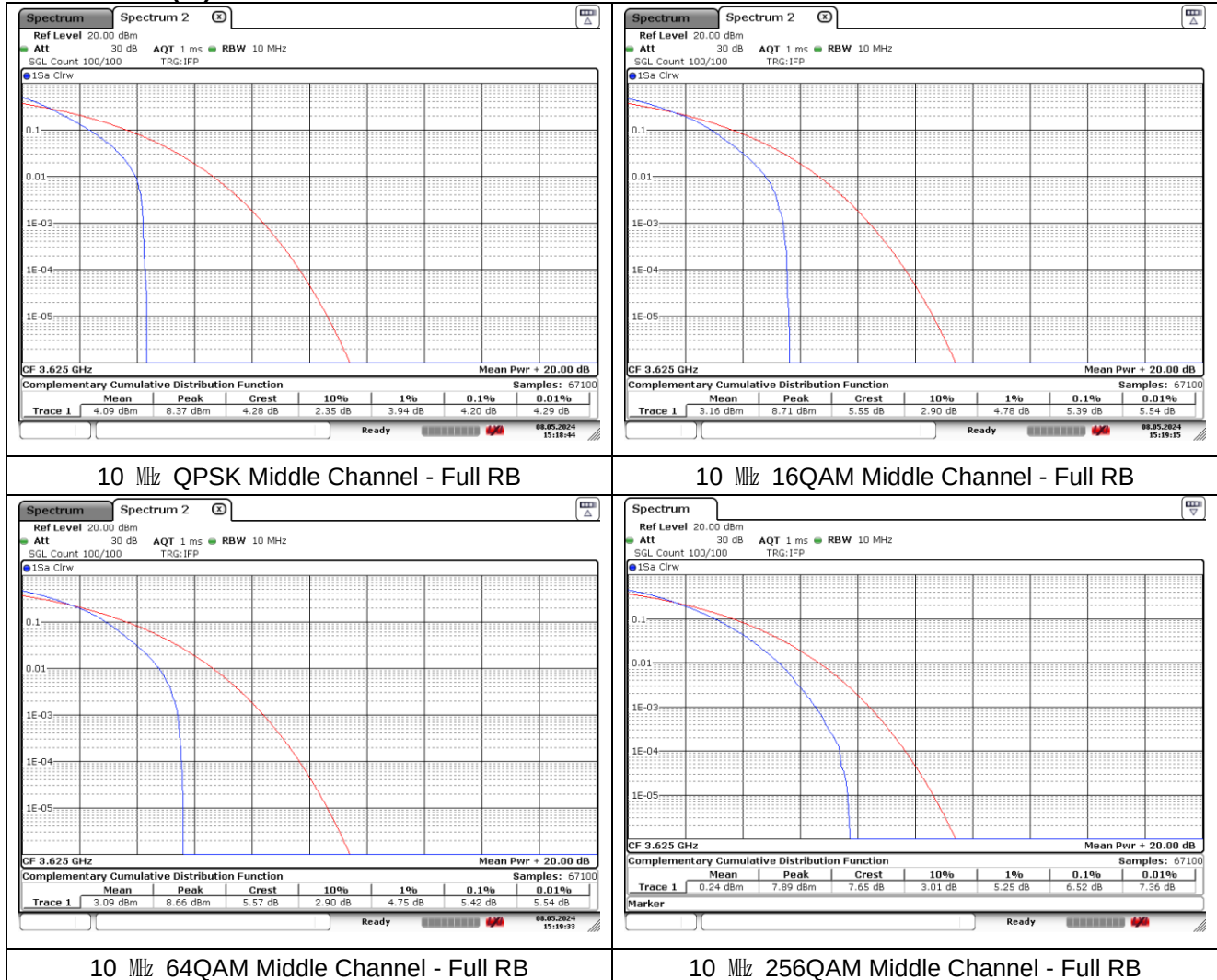
LTE band 42_Only IC



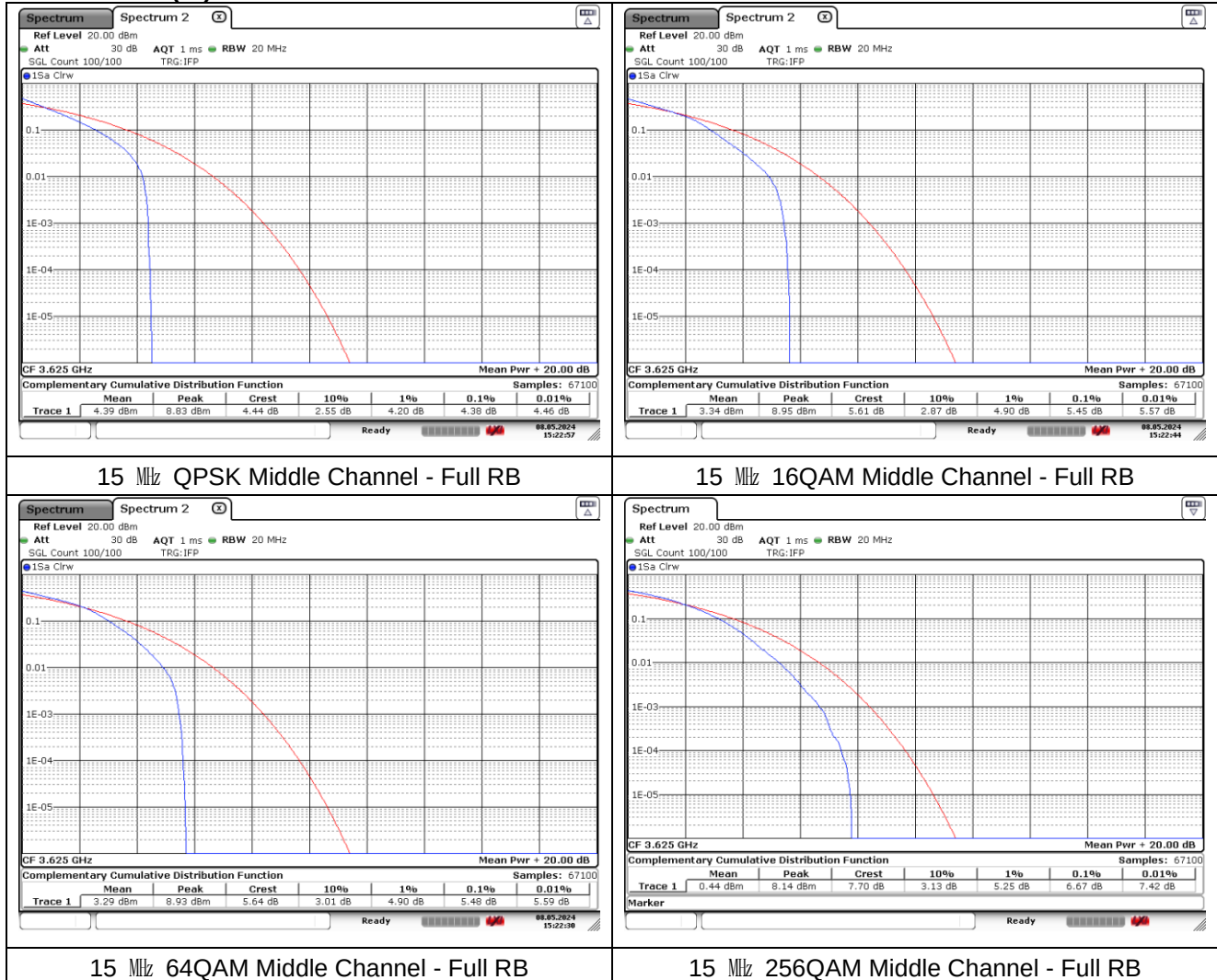
LTE band 48 (IC)



LTE band 48 (IC)



LTE band 48 (IC)



LTE band 48 (IC)

