



LTE Band19				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				24050		24075		24100	
Frequency (MHz)				835		837.5		840	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	22.47	0.177	22.46	0.176	22.40	0.174
10	QPSK	1	25	22.72	0.187	22.71	0.187	22.65	0.184
10	QPSK	1	49	22.36	0.172	22.35	0.172	22.29	0.169
10	QPSK	25	0	21.47	0.140	21.46	0.140	21.40	0.138
10	QPSK	25	12	21.85	0.153	21.84	0.153	21.78	0.151
10	QPSK	25	25	21.84	0.153	21.83	0.152	21.77	0.150
10	QPSK	50	0	21.64	0.146	21.63	0.145	21.57	0.144
10	16QAM	1	0	21.77	0.150	21.76	0.150	21.70	0.148
10	16QAM	1	25	21.75	0.150	21.74	0.149	21.68	0.147
10	16QAM	1	49	21.67	0.147	21.66	0.146	21.60	0.145
10	16QAM	25	0	20.45	0.111	20.44	0.111	20.38	0.109
10	16QAM	25	12	20.78	0.120	20.77	0.119	20.71	0.118
10	16QAM	25	25	20.72	0.118	20.71	0.118	20.65	0.116
10	16QAM	50	0	20.69	0.117	20.68	0.117	20.62	0.115
10	64QAM	1	0	21.72	0.149	21.71	0.148	21.65	0.146
10	64QAM	1	25	21.61	0.145	21.60	0.144	21.54	0.143
10	64QAM	1	49	21.50	0.141	21.49	0.141	21.43	0.139
10	64QAM	25	0	20.50	0.112	20.49	0.112	20.43	0.110
10	64QAM	25	12	20.65	0.116	20.64	0.116	20.58	0.114
10	64QAM	25	25	20.92	0.124	20.91	0.123	20.85	0.122
10	64QAM	50	0	20.68	0.117	20.67	0.117	20.61	0.115



LTE Band19				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				24025		24075		24125	
Frequency (MHz)				832.5		837.5		842.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	22.36	0.172	22.44	0.176	22.40	0.174
5	QPSK	1	12	22.61	0.182	22.69	0.186	22.55	0.180
5	QPSK	1	24	22.41	0.174	22.43	0.175	22.29	0.169
5	QPSK	12	0	21.36	0.137	21.44	0.139	21.40	0.138
5	QPSK	12	7	21.74	0.149	21.82	0.152	21.68	0.147
5	QPSK	12	13	21.73	0.149	21.81	0.152	21.67	0.147
5	QPSK	25	0	21.53	0.142	21.61	0.145	21.47	0.140
5	16QAM	1	0	21.66	0.147	21.74	0.149	21.60	0.145
5	16QAM	1	12	21.64	0.146	21.72	0.149	21.58	0.144
5	16QAM	1	24	21.56	0.143	21.64	0.146	21.50	0.141
5	16QAM	12	0	20.34	0.108	20.42	0.110	20.28	0.107
5	16QAM	12	7	20.67	0.117	20.75	0.119	20.61	0.115
5	16QAM	12	13	20.61	0.115	20.69	0.117	20.55	0.114
5	16QAM	25	0	20.58	0.114	20.66	0.117	20.52	0.113
5	64QAM	1	0	21.61	0.145	21.69	0.148	21.55	0.143
5	64QAM	1	12	21.50	0.141	21.58	0.144	21.44	0.139
5	64QAM	1	24	21.39	0.138	21.47	0.140	21.33	0.136
5	64QAM	12	0	20.39	0.109	20.47	0.112	20.33	0.108
5	64QAM	12	7	20.54	0.113	20.62	0.115	20.48	0.112
5	64QAM	12	13	20.81	0.121	20.79	0.120	20.75	0.119
5	64QAM	25	0	20.57	0.114	20.65	0.116	20.51	0.112



LTE Band26				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				26865		26915		26965	
Frequency (MHz)				831.5		836.5		841.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	22.78	0.190	22.69	0.186	22.63	0.183
15	QPSK	1	37	22.58	0.181	22.63	0.183	22.57	0.181
15	QPSK	1	74	22.58	0.181	22.55	0.180	22.45	0.176
15	QPSK	36	0	21.84	0.153	21.79	0.151	21.73	0.149
15	QPSK	36	20	21.72	0.149	21.76	0.150	21.77	0.150
15	QPSK	36	39	21.77	0.150	21.80	0.151	21.63	0.146
15	QPSK	75	0	21.70	0.148	21.73	0.149	21.72	0.149
15	16QAM	1	0	21.99	0.158	22.02	0.159	22.07	0.161
15	16QAM	1	37	21.98	0.158	21.94	0.156	21.85	0.153
15	16QAM	1	74	21.94	0.156	22.11	0.163	22.13	0.163
15	16QAM	36	0	20.75	0.119	20.85	0.122	20.73	0.118
15	16QAM	36	20	20.79	0.120	20.71	0.118	20.81	0.121
15	16QAM	36	39	20.78	0.120	20.74	0.119	20.81	0.121
15	16QAM	75	0	20.82	0.121	20.76	0.119	20.68	0.117
15	64QAM	1	0	21.96	0.157	22.07	0.161	22.10	0.162
15	64QAM	1	37	22.04	0.160	21.88	0.154	21.70	0.148
15	64QAM	1	74	21.78	0.151	22.00	0.158	21.64	0.146
15	64QAM	36	0	20.73	0.118	20.81	0.121	20.70	0.117
15	64QAM	36	20	20.79	0.120	20.76	0.119	20.74	0.119
15	64QAM	36	39	20.72	0.118	20.80	0.120	20.75	0.119
15	64QAM	75	0	20.77	0.119	20.78	0.120	20.70	0.117



LTE Band26				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				26840		26915		26990	
Frequency (MHz)				829.0		836.5		844.0	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	22.67	0.185	22.68	0.185	22.53	0.179
10	QPSK	1	25	22.47	0.177	22.62	0.183	22.47	0.177
10	QPSK	1	49	22.47	0.177	22.54	0.179	22.35	0.172
10	QPSK	25	0	21.67	0.147	21.78	0.151	21.63	0.146
10	QPSK	25	12	21.61	0.145	21.75	0.150	21.67	0.147
10	QPSK	25	25	21.67	0.147	21.83	0.152	21.53	0.142
10	QPSK	50	0	21.59	0.144	21.72	0.148	21.62	0.145
10	16QAM	1	0	21.88	0.154	22.01	0.159	21.97	0.157
10	16QAM	1	25	21.87	0.154	21.93	0.156	21.75	0.150
10	16QAM	1	49	21.83	0.152	22.10	0.162	22.03	0.160
10	16QAM	25	0	20.64	0.116	20.84	0.121	20.63	0.116
10	16QAM	25	12	20.68	0.117	20.70	0.117	20.71	0.118
10	16QAM	25	25	20.67	0.117	20.73	0.118	20.71	0.118
10	16QAM	50	0	20.71	0.118	20.75	0.119	20.58	0.114
10	64QAM	1	0	21.85	0.153	22.06	0.161	22.00	0.158
10	64QAM	1	25	21.93	0.156	21.87	0.154	21.60	0.145
10	64QAM	1	49	21.67	0.147	21.99	0.158	21.64	0.146
10	64QAM	25	0	20.62	0.115	20.80	0.120	20.60	0.115
10	64QAM	25	12	20.68	0.117	20.75	0.119	20.64	0.116
10	64QAM	25	25	20.61	0.115	20.79	0.120	20.65	0.116
10	64QAM	50	0	20.66	0.116	20.77	0.119	20.60	0.115



LTE Band26				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				26815		26915		27015	
Frequency (MHz)				826.5		836.5		846.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	22.73	0.187	22.76	0.189	22.53	0.179
5	QPSK	1	12	22.53	0.179	22.70	0.186	22.47	0.177
5	QPSK	1	24	22.53	0.179	22.62	0.183	22.35	0.172
5	QPSK	12	0	21.73	0.149	21.86	0.154	21.63	0.146
5	QPSK	12	7	21.67	0.147	21.83	0.153	21.67	0.147
5	QPSK	12	13	21.73	0.149	21.91	0.155	21.53	0.142
5	QPSK	25	0	21.65	0.146	21.80	0.151	21.62	0.145
5	16QAM	1	0	21.94	0.156	22.09	0.162	21.97	0.157
5	16QAM	1	12	21.93	0.156	22.01	0.159	21.75	0.150
5	16QAM	1	24	21.89	0.155	22.18	0.165	22.03	0.160
5	16QAM	12	0	20.70	0.117	20.92	0.124	20.63	0.116
5	16QAM	12	7	20.74	0.119	20.78	0.120	20.71	0.118
5	16QAM	12	13	20.73	0.118	20.81	0.121	20.71	0.118
5	16QAM	25	0	20.77	0.119	20.83	0.121	20.58	0.114
5	64QAM	1	0	21.91	0.155	22.14	0.164	22.00	0.158
5	64QAM	1	12	21.99	0.158	21.95	0.157	21.70	0.148
5	64QAM	1	24	21.73	0.149	22.07	0.161	21.84	0.153
5	64QAM	12	0	20.68	0.117	20.88	0.123	20.60	0.115
5	64QAM	12	7	20.74	0.119	20.83	0.121	20.64	0.116
5	64QAM	12	13	20.67	0.117	20.87	0.122	20.65	0.116
5	64QAM	25	0	20.72	0.118	20.85	0.122	20.60	0.115



LTE Band26				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				26805		26915		27025	
Frequency (MHz)				825.5		836.5		847.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	22.65	0.184	22.68	0.186	22.45	0.176
3	QPSK	1	8	22.45	0.176	22.62	0.183	22.39	0.173
3	QPSK	1	14	22.45	0.176	22.54	0.180	22.27	0.169
3	QPSK	8	0	21.65	0.146	21.78	0.151	21.55	0.143
3	QPSK	8	4	21.59	0.144	21.75	0.150	21.59	0.144
3	QPSK	8	7	21.65	0.146	21.83	0.153	21.45	0.140
3	QPSK	15	0	21.57	0.144	21.72	0.149	21.54	0.143
3	16QAM	1	0	21.86	0.153	22.01	0.159	21.89	0.155
3	16QAM	1	8	21.85	0.153	21.93	0.156	21.67	0.147
3	16QAM	1	14	21.81	0.152	22.10	0.162	21.95	0.157
3	16QAM	8	0	20.62	0.115	20.84	0.121	20.55	0.114
3	16QAM	8	4	20.66	0.116	20.70	0.118	20.63	0.116
3	16QAM	8	7	20.65	0.116	20.73	0.118	20.63	0.116
3	16QAM	15	0	20.69	0.117	20.75	0.119	20.50	0.112
3	64QAM	1	0	21.83	0.152	22.06	0.161	21.92	0.156
3	64QAM	1	8	21.91	0.155	21.87	0.154	21.62	0.145
3	64QAM	1	14	21.65	0.146	21.99	0.158	21.86	0.153
3	64QAM	8	0	20.60	0.115	20.80	0.120	20.52	0.113
3	64QAM	8	4	20.66	0.116	20.75	0.119	20.56	0.114
3	64QAM	8	7	20.59	0.115	20.79	0.120	20.57	0.114
3	64QAM	15	0	20.64	0.116	20.77	0.120	20.52	0.113



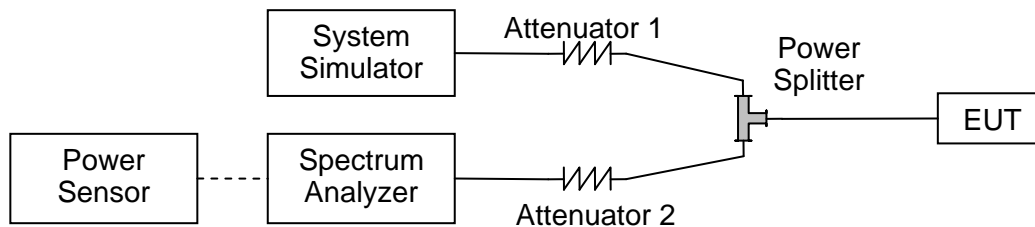
LTE Band26				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				26797		26915		27033	
Frequency (MHz)				824.7		836.5		848.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	22.73	0.187	22.64	0.183	22.58	0.181
1.4	QPSK	1	3	22.53	0.179	22.58	0.181	22.52	0.178
1.4	QPSK	1	5	22.53	0.179	22.50	0.178	22.40	0.174
1.4	QPSK	3	0	21.73	0.149	21.74	0.149	21.68	0.147
1.4	QPSK	3	1	21.67	0.147	21.71	0.148	21.72	0.148
1.4	QPSK	3	3	21.73	0.149	21.79	0.151	21.58	0.144
1.4	QPSK	6	0	21.65	0.146	21.68	0.147	21.67	0.147
1.4	16QAM	1	0	21.94	0.156	21.97	0.157	22.02	0.159
1.4	16QAM	1	3	21.93	0.156	21.89	0.154	21.80	0.151
1.4	16QAM	1	5	21.89	0.154	22.06	0.161	22.08	0.161
1.4	16QAM	3	0	20.70	0.117	20.80	0.120	20.68	0.117
1.4	16QAM	3	1	20.74	0.118	20.66	0.116	20.76	0.119
1.4	16QAM	3	3	20.73	0.118	20.69	0.117	20.76	0.119
1.4	16QAM	6	0	20.77	0.119	20.71	0.118	20.63	0.116
1.4	64QAM	1	0	21.91	0.155	22.02	0.159	22.05	0.160
1.4	64QAM	1	3	21.99	0.158	21.83	0.152	21.65	0.146
1.4	64QAM	1	5	21.73	0.149	21.95	0.157	21.59	0.144
1.4	64QAM	3	0	20.68	0.117	20.76	0.119	20.65	0.116
1.4	64QAM	3	1	20.74	0.118	20.71	0.118	20.69	0.117
1.4	64QAM	3	3	20.67	0.117	20.75	0.119	20.70	0.117
1.4	64QAM	6	0	20.72	0.118	20.73	0.118	20.65	0.116

## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.





2.2.4. Test Result

LTE Band 2				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.23
	Low	16QAM	1.10	1.24
	Low	64QAM	1.09	1.24
	Mid	QPSK	1.09	1.22
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.09	1.24
	High	QPSK	1.09	1.24
	High	16QAM	1.10	1.23
	High	64QAM	1.09	1.24
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.70	3.01
	Low	64QAM	2.70	2.99
	Mid	QPSK	2.70	2.99
	Mid	16QAM	2.70	3.00
	Mid	64QAM	2.70	3.02
	High	QPSK	2.70	3.00
	High	16QAM	2.70	2.99
	High	64QAM	2.71	2.98
5	Low	QPSK	4.50	4.99
	Low	16QAM	4.50	4.96
	Low	64QAM	4.50	4.93
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	4.98
	Mid	64QAM	4.50	4.95
	High	QPSK	4.50	4.99
	High	16QAM	4.50	4.98
	High	64QAM	4.50	4.96



10	Low	QPSK	8.97	9.75
	Low	16QAM	8.95	9.79
	Low	64QAM	8.97	9.80
	Mid	QPSK	8.97	9.81
	Mid	16QAM	8.97	9.75
	Mid	64QAM	8.97	9.80
	High	QPSK	9.00	9.81
	High	16QAM	8.95	9.73
	High	64QAM	8.95	9.84
15	Low	QPSK	13.47	14.68
	Low	16QAM	13.45	14.78
	Low	64QAM	13.46	14.73
	Mid	QPSK	13.45	14.67
	Mid	16QAM	13.45	14.80
	Mid	64QAM	13.46	14.73
	High	QPSK	13.45	14.71
	High	16QAM	13.44	14.62
	High	64QAM	13.46	14.59
20	Low	QPSK	17.92	19.45
	Low	16QAM	17.91	19.35
	Low	64QAM	17.95	19.39
	Mid	QPSK	17.94	19.44
	Mid	16QAM	17.95	19.51
	Mid	64QAM	17.96	19.60
	High	QPSK	17.89	19.44
	High	16QAM	17.90	19.43
	High	64QAM	17.91	19.49



LTE Band 4				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.24
	Low	16QAM	1.10	1.23
	Low	64QAM	1.10	1.23
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.09	1.24
	High	QPSK	1.09	1.23
	High	16QAM	1.10	1.23
	High	64QAM	1.09	1.24
3	Low	QPSK	2.70	2.99
	Low	16QAM	2.71	3.01
	Low	64QAM	2.71	3.00
	Mid	QPSK	2.69	3.01
	Mid	16QAM	2.70	3.01
	Mid	64QAM	2.70	3.00
	High	QPSK	2.70	2.99
	High	16QAM	2.71	2.99
	High	64QAM	2.71	3.02
5	Low	QPSK	4.50	4.98
	Low	16QAM	4.50	4.96
	Low	64QAM	4.50	4.98
	Mid	QPSK	4.49	4.98
	Mid	16QAM	4.51	4.95
	Mid	64QAM	4.49	4.94
	High	QPSK	4.50	4.99
	High	16QAM	4.50	4.97
	High	64QAM	4.50	4.96



10	Low	QPSK	9.00	9.71
	Low	16QAM	8.96	9.65
	Low	64QAM	8.97	9.84
	Mid	QPSK	8.98	9.80
	Mid	16QAM	8.95	9.73
	Mid	64QAM	8.96	9.69
	High	QPSK	8.97	9.82
	High	16QAM	8.95	9.73
	High	64QAM	8.96	9.89
15	Low	QPSK	13.50	14.61
	Low	16QAM	13.46	14.59
	Low	64QAM	13.48	14.53
	Mid	QPSK	13.48	14.62
	Mid	16QAM	13.46	14.74
	Mid	64QAM	13.45	14.73
	High	QPSK	13.49	14.63
	High	16QAM	13.47	14.67
	High	64QAM	13.48	14.57
20	Low	QPSK	17.90	19.45
	Low	16QAM	17.92	19.37
	Low	64QAM	17.93	19.56
	Mid	QPSK	17.93	19.54
	Mid	16QAM	17.94	19.51
	Mid	64QAM	17.92	19.55
	High	QPSK	17.96	19.41
	High	16QAM	17.94	19.45
	High	64QAM	17.95	19.60



LTE Band 5				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.23
	Low	16QAM	1.09	1.23
	Low	64QAM	1.09	1.25
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.23
	Mid	64QAM	1.09	1.24
	High	QPSK	1.09	1.24
	High	16QAM	1.10	1.24
	High	64QAM	1.10	1.24
3	Low	QPSK	2.70	2.97
	Low	16QAM	2.70	2.99
	Low	64QAM	2.71	3.01
	Mid	QPSK	2.70	2.99
	Mid	16QAM	2.70	3.02
	Mid	64QAM	2.71	3.02
	High	QPSK	2.70	2.98
	High	16QAM	2.70	2.99
	High	64QAM	2.71	3.03
5	Low	QPSK	4.49	4.97
	Low	16QAM	4.50	4.94
	Low	64QAM	4.48	4.95
	Mid	QPSK	4.50	4.99
	Mid	16QAM	4.51	4.93
	Mid	64QAM	4.50	4.93
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.96
	High	64QAM	4.50	4.95
10	Low	QPSK	8.98	9.76
	Low	16QAM	8.94	9.71
	Low	64QAM	8.96	9.77
	Mid	QPSK	8.99	9.77
	Mid	16QAM	8.96	9.74
	Mid	64QAM	8.98	9.81
	High	QPSK	8.97	9.78
	High	16QAM	8.95	9.75
	High	64QAM	8.97	9.77



LTE Band 7				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.50	4.97
	Low	64QAM	4.50	4.96
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.96
	Mid	64QAM	4.50	4.95
	High	QPSK	4.50	4.97
	High	16QAM	4.50	4.94
	High	64QAM	4.49	4.95
10	Low	QPSK	8.99	9.81
	Low	16QAM	8.95	9.73
	Low	64QAM	8.96	9.73
	Mid	QPSK	8.99	9.75
	Mid	16QAM	8.96	9.74
	Mid	64QAM	8.97	9.76
	High	QPSK	8.97	9.83
	High	16QAM	8.96	9.63
	High	64QAM	8.96	9.83
15	Low	QPSK	13.48	14.59
	Low	16QAM	13.45	14.62
	Low	64QAM	13.45	14.67
	Mid	QPSK	13.48	14.74
	Mid	16QAM	13.47	14.64
	Mid	64QAM	13.47	14.62
	High	QPSK	13.48	14.62
	High	16QAM	13.46	14.69
	High	64QAM	13.46	14.60
20	Low	QPSK	17.91	19.40
	Low	16QAM	17.95	19.48
	Low	64QAM	17.95	19.55
	Mid	QPSK	17.93	19.54
	Mid	16QAM	17.96	19.48
	Mid	64QAM	17.93	19.42
	High	QPSK	17.94	19.45
	High	16QAM	17.98	19.46
	High	64QAM	17.93	19.33



LTE Band 12				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.08	1.21
	Low	16QAM	1.10	1.24
	Low	64QAM	1.09	1.24
	Mid	QPSK	1.09	1.23
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.10	1.24
	High	QPSK	1.09	1.23
	High	16QAM	1.10	1.23
	High	64QAM	1.09	1.24
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.69	2.98
	Low	64QAM	2.70	3.01
	Mid	QPSK	2.70	2.99
	Mid	16QAM	2.70	3.00
	Mid	64QAM	2.71	3.00
	High	QPSK	2.70	2.99
	High	16QAM	2.70	3.00
	High	64QAM	2.71	3.00
5	Low	QPSK	4.51	5.01
	Low	16QAM	4.50	4.97
	Low	64QAM	4.50	4.94
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	4.95
	Mid	64QAM	4.49	4.96
	High	QPSK	4.50	4.98
	High	16QAM	4.50	4.98
	High	64QAM	4.49	4.93
10	Low	QPSK	8.99	9.80
	Low	16QAM	8.96	9.71
	Low	64QAM	8.99	9.76
	Mid	QPSK	8.97	9.77
	Mid	16QAM	8.94	9.76
	Mid	64QAM	8.96	9.76
	High	QPSK	8.96	9.72
	High	16QAM	8.94	9.73
	High	64QAM	8.97	9.80



LTE Band 17				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	4.98
	Low	16QAM	4.50	4.99
	Low	64QAM	4.50	4.95
	Mid	QPSK	4.50	4.98
	Mid	16QAM	4.50	4.93
	Mid	64QAM	4.49	4.94
	High	QPSK	4.50	4.98
	High	16QAM	4.50	4.97
	High	64QAM	4.50	4.95
10	Low	QPSK	8.97	9.74
	Low	16QAM	8.94	9.72
	Low	64QAM	8.96	9.86
	Mid	QPSK	8.97	9.76
	Mid	16QAM	8.94	9.76
	Mid	64QAM	8.94	9.78
	High	QPSK	8.99	9.79
	High	16QAM	8.94	9.70
	High	64QAM	8.97	9.79





LTE Band 19				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	4.96
	Low	16QAM	4.51	4.96
	Low	64QAM	4.50	4.96
	Mid	QPSK	4.50	4.97
	Mid	16QAM	4.50	4.95
	Mid	64QAM	4.49	4.97
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.95
	High	64QAM	4.50	4.94
10	Low	QPSK	9.01	9.83
	Low	16QAM	8.96	9.73
	Low	64QAM	9.00	9.84
	Mid	QPSK	8.99	9.84
	Mid	16QAM	8.98	9.65
	Mid	64QAM	8.98	9.84
	High	QPSK	8.96	9.76
	High	16QAM	8.94	9.76
	High	64QAM	8.96	9.81
15	Low	QPSK	13.49	14.72
	Low	16QAM	13.45	14.76
	Low	64QAM	13.46	14.70
	Mid	QPSK	13.46	14.65
	Mid	16QAM	13.47	14.64
	Mid	64QAM	13.48	14.72
	High	QPSK	13.47	14.81
	High	16QAM	13.46	14.70
	High	64QAM	13.46	14.63



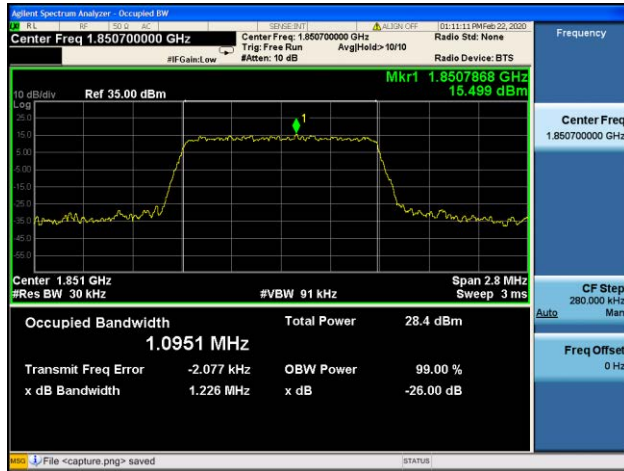
LTE Band 26				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.23	1.24
	Low	16QAM	1.09	1.24
	Low	64QAM	1.09	1.24
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.10	1.24
	Mid	64QAM	1.09	1.25
	High	QPSK	1.09	1.24
	High	16QAM	1.10	1.24
	High	64QAM	1.09	1.25
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.70	3.00
	Low	64QAM	2.71	3.00
	Mid	QPSK	2.70	3.00
	Mid	16QAM	2.70	3.01
	Mid	64QAM	2.71	3.02
	High	QPSK	2.70	3.00
	High	16QAM	2.70	3.01
	High	64QAM	2.71	3.01
5	Low	QPSK	4.49	4.98
	Low	16QAM	4.49	4.96
	Low	64QAM	4.49	4.96
	Mid	QPSK	4.49	4.98
	Mid	16QAM	4.50	4.96
	Mid	64QAM	4.48	4.92
	High	QPSK	4.50	4.98
	High	16QAM	4.50	4.97
	High	64QAM	4.49	4.97



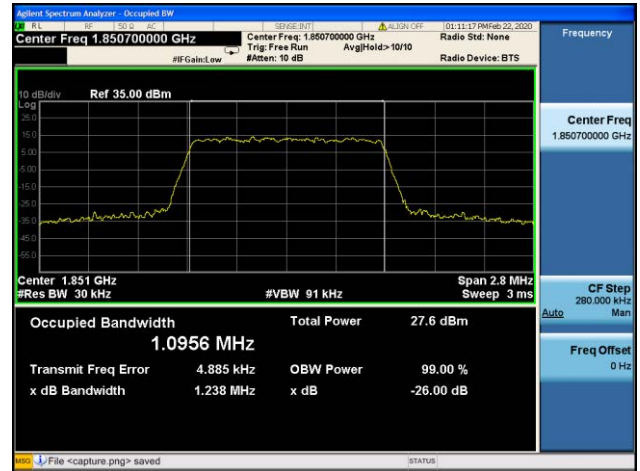
10	Low	QPSK	8.96	9.78
	Low	16QAM	8.93	9.77
	Low	64QAM	8.97	9.78
	Mid	QPSK	9.00	9.79
	Mid	16QAM	8.94	9.75
	Mid	64QAM	8.97	9.78
	High	QPSK	9.00	9.79
	High	16QAM	8.95	9.73
	High	64QAM	8.95	9.82
15	Low	QPSK	13.47	14.69
	Low	16QAM	13.47	14.73
	Low	64QAM	13.47	14.57
	Mid	QPSK	13.48	14.66
	Mid	16QAM	13.46	14.71
	Mid	64QAM	13.47	14.70
	High	QPSK	13.48	14.65
	High	16QAM	13.46	14.62
	High	64QAM	13.44	14.72



**Band2 / 1.4MHz / Low CH / QPSK**



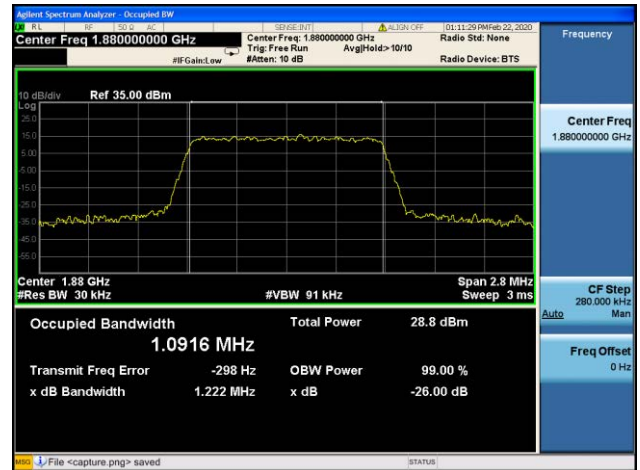
**Band2 / 1.4MHz / Low CH / 16QAM**



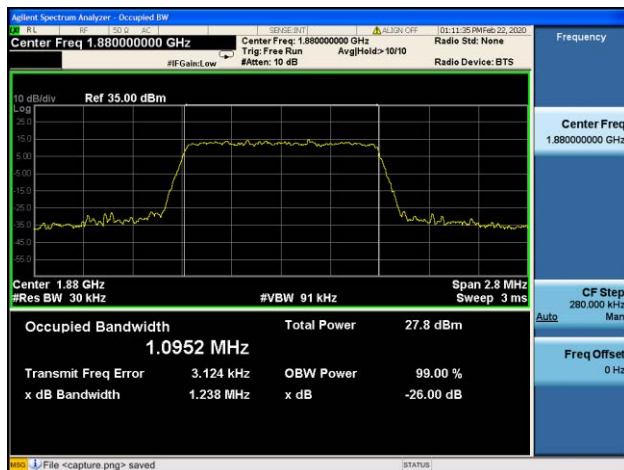
**Band2 / 1.4MHz / Low CH / 64QAM**



**Band2 / 1.4MHz / Mid CH / QPSK**



**Band2 / 1.4MHz / Mid CH / 16QAM**



**Band2 / 1.4MHz / Mid CH / 64QAM**

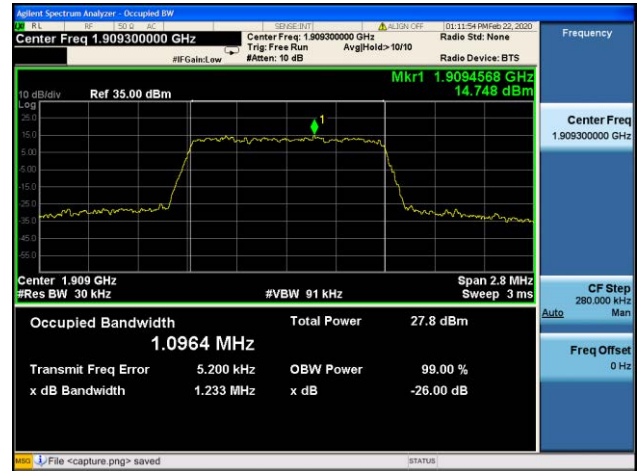




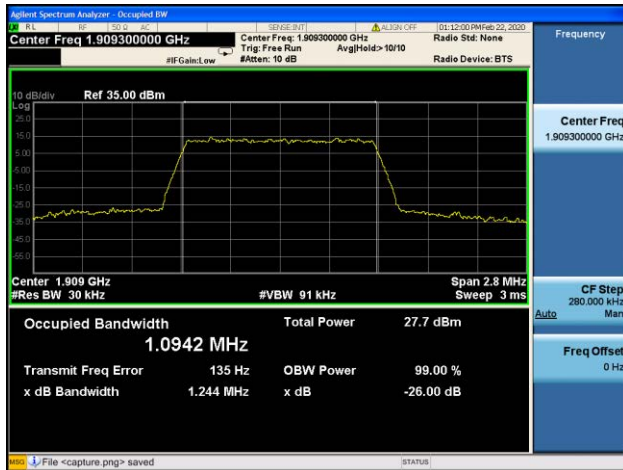
**Band2 / 1.4MHz / High CH / QPSK**



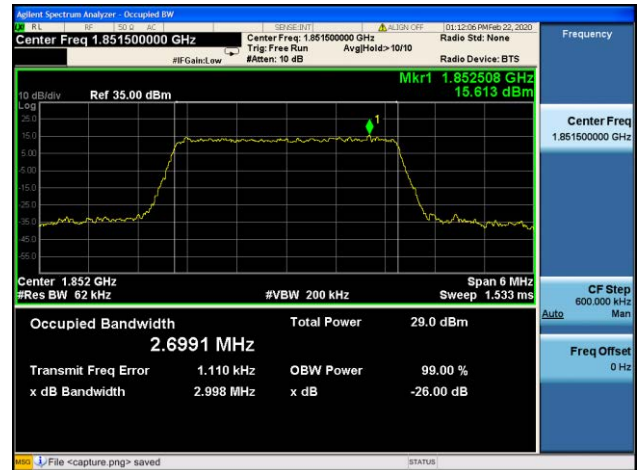
**Band2 / 1.4MHz / High CH / 16QAM**



**Band2 / 1.4MHz / High CH / 64QAM**



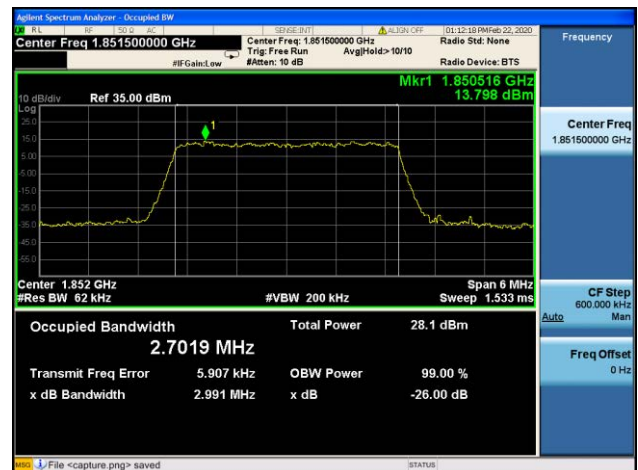
**Band2 / 3MHz / Low CH / QPSK**



**Band2 / 3MHz / Low CH / 16QAM**



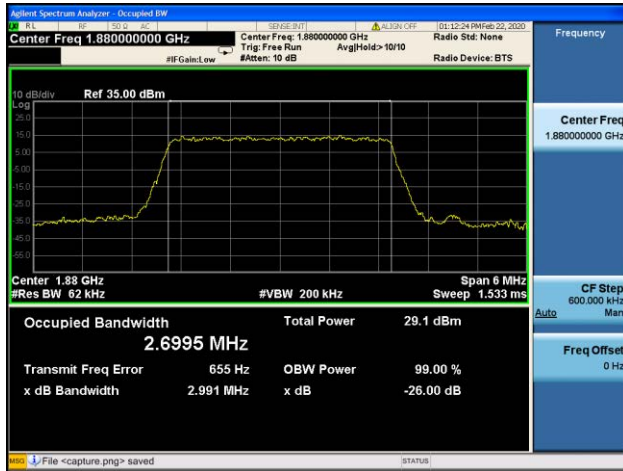
**Band2 / 3MHz / Low CH / 64QAM**



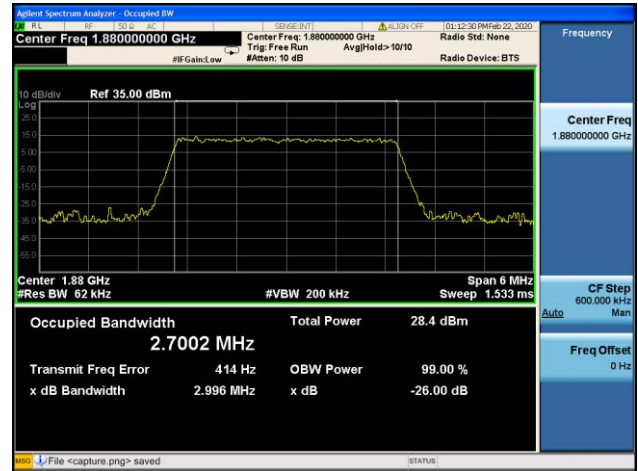




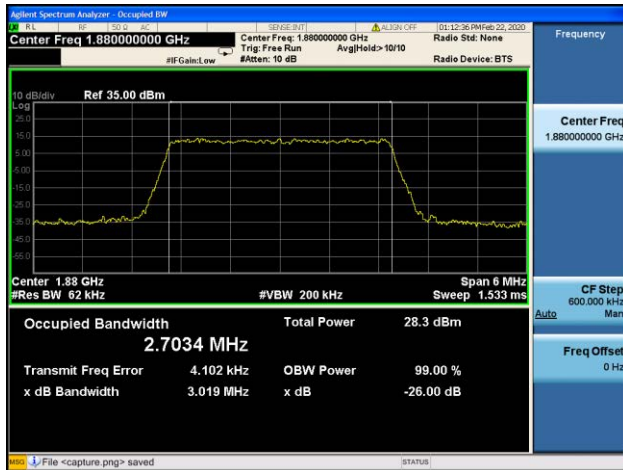
**Band2 / 3MHz / Mid CH / QPSK**



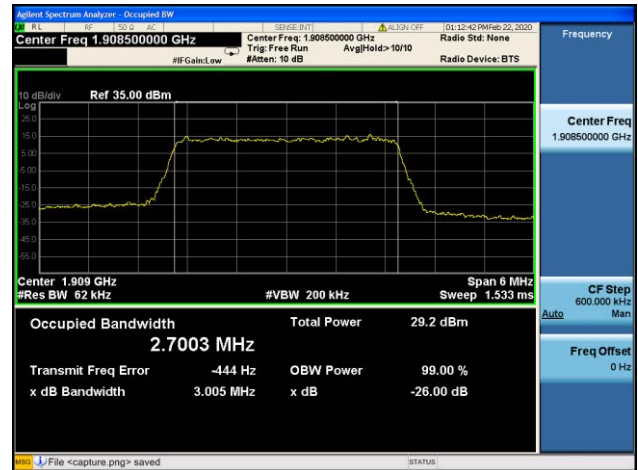
**Band2 / 3MHz / Mid CH / 16QAM**



**Band2 / 3MHz / Mid CH / 64QAM**



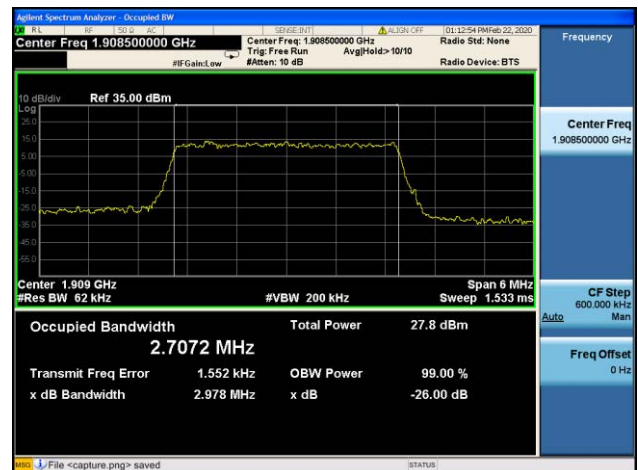
**Band2 / 3MHz / High CH / QPSK**



**Band2 / 3MHz / High CH / 16QAM**

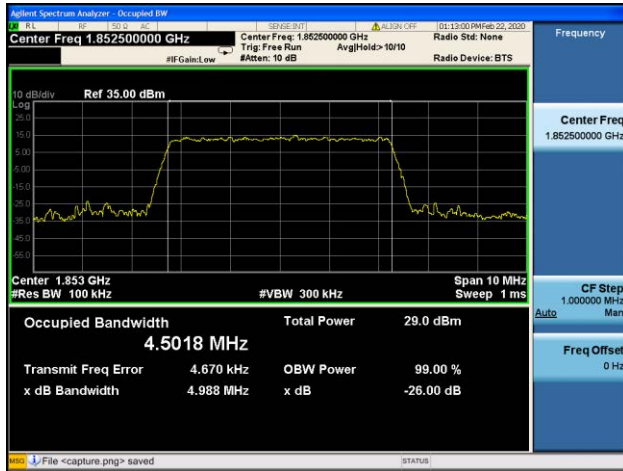


**Band2 / 3MHz / High CH / 64QAM**

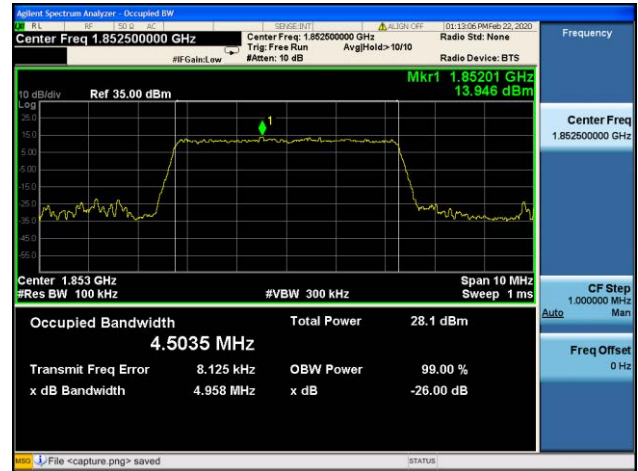




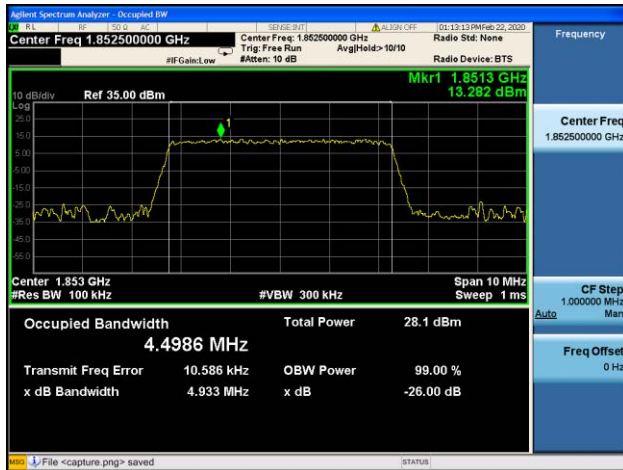
**Band2 / 5MHz / Low CH / QPSK**



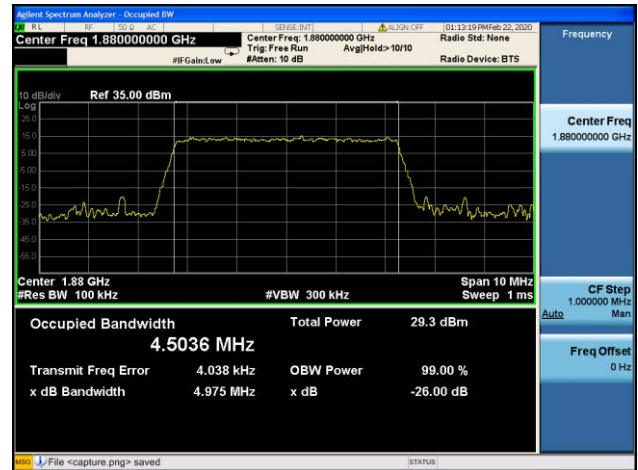
**Band2 / 5MHz / Low CH / 16QAM**



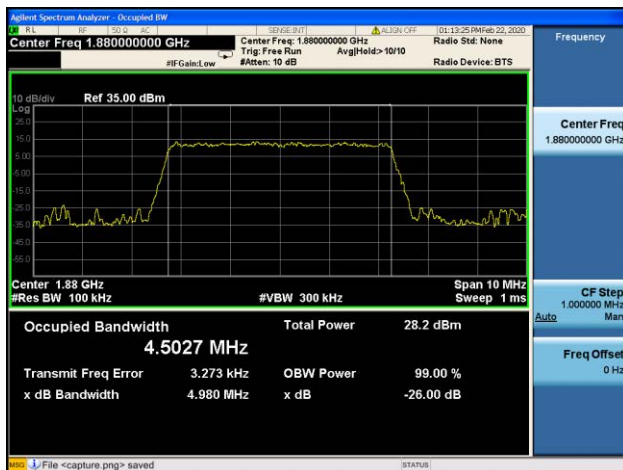
**Band2 / 5MHz / Low CH / 64QAM**



**Band2 / 5MHz / Mid CH / QPSK**



**Band2 / 5MHz / Mid CH / 16QAM**



**Band2 / 5MHz / Mid CH / 64QAM**

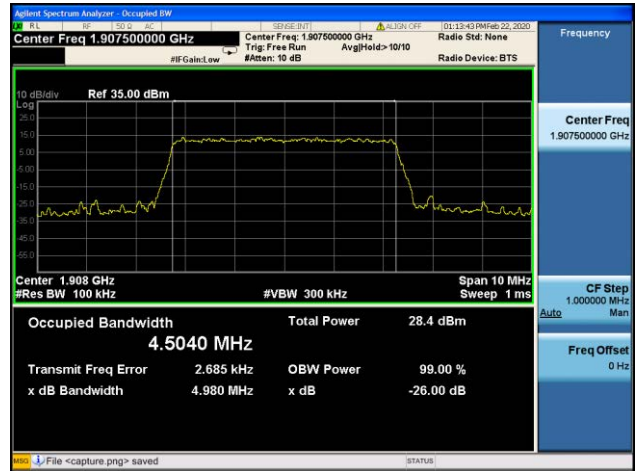




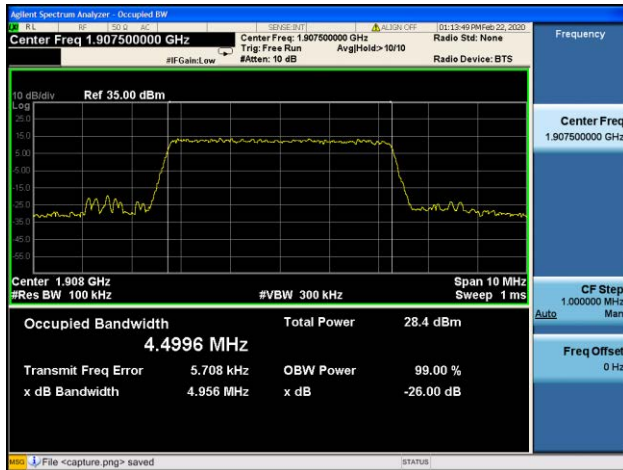
**Band2 / 5MHz / High CH / QPSK**



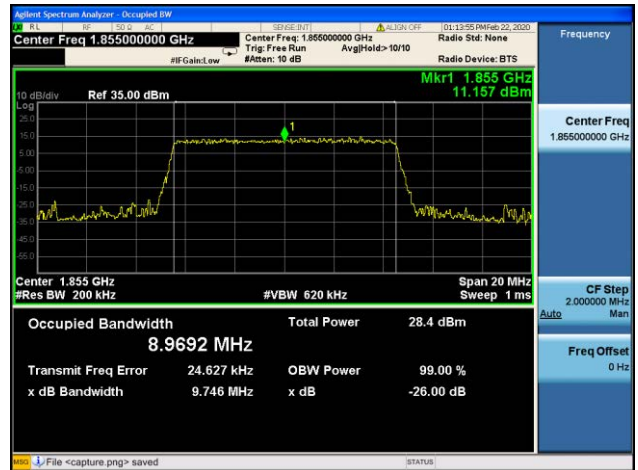
**Band2 / 5MHz / High CH / 16QAM**



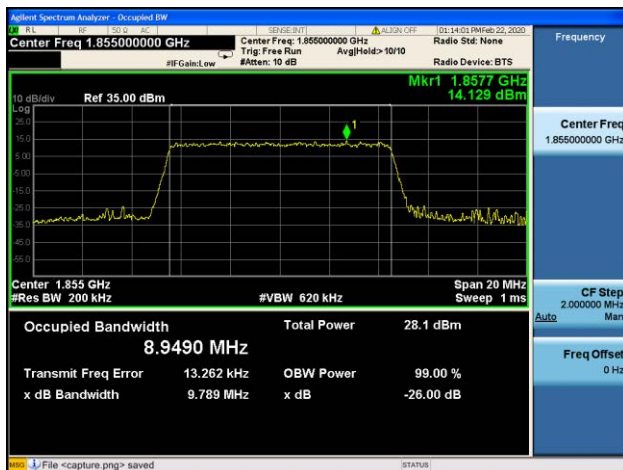
**Band2 / 5MHz / High CH / 64QAM**



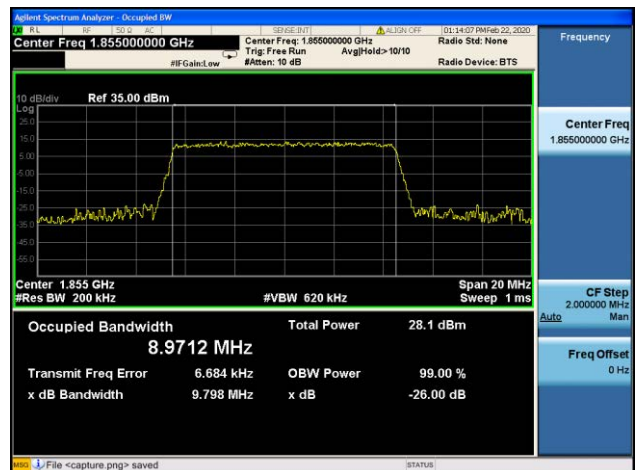
**Band2 / 10MHz / Low CH / QPSK**



**Band2 / 10MHz / Low CH / 16QAM**



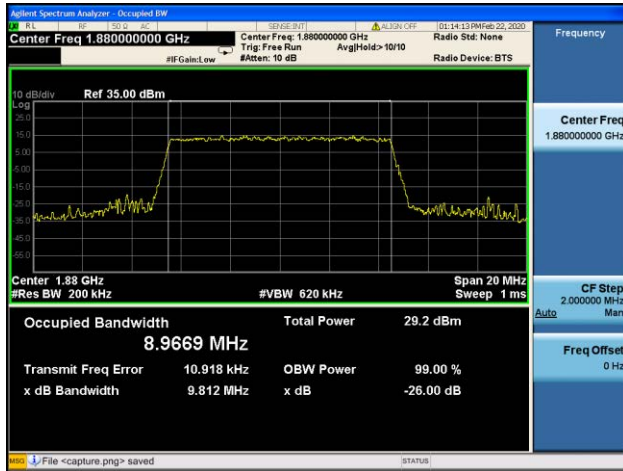
**Band2 / 10MHz / Low CH / 64QAM**



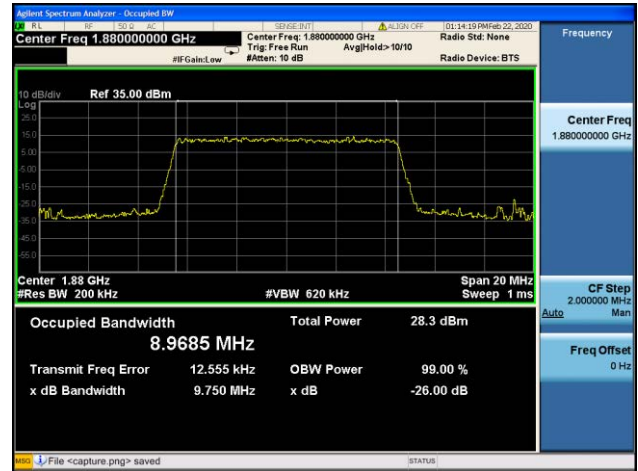




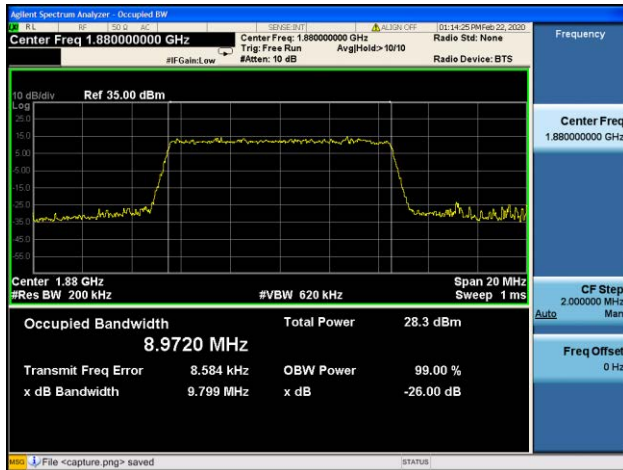
**Band2 / 10MHz / Mid CH / QPSK**



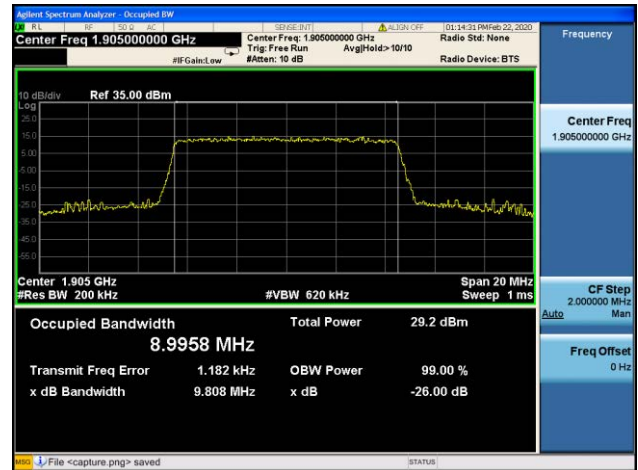
**Band2 / 10MHz / Mid CH / 16QAM**



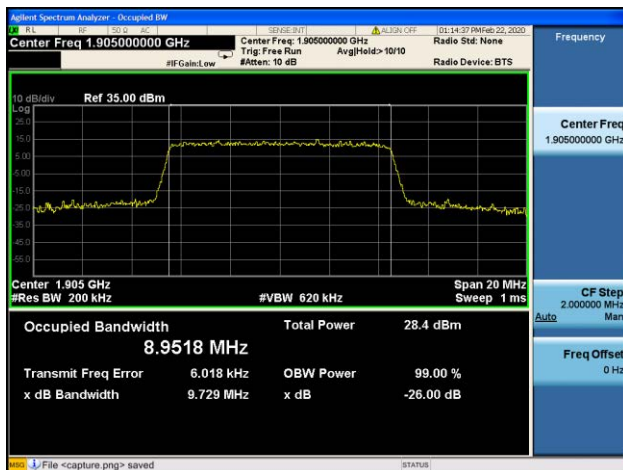
**Band2 / 10MHz / Mid CH / 64QAM**



**Band2 / 10MHz / High CH / QPSK**



**Band2 / 10MHz / High CH / 16QAM**

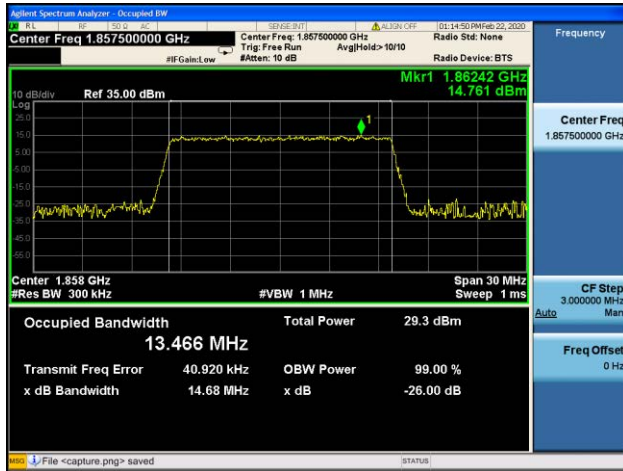


**Band2 / 10MHz / High CH / 64QAM**

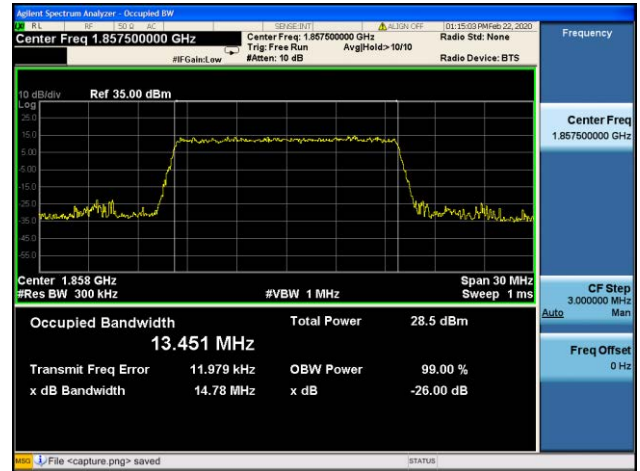




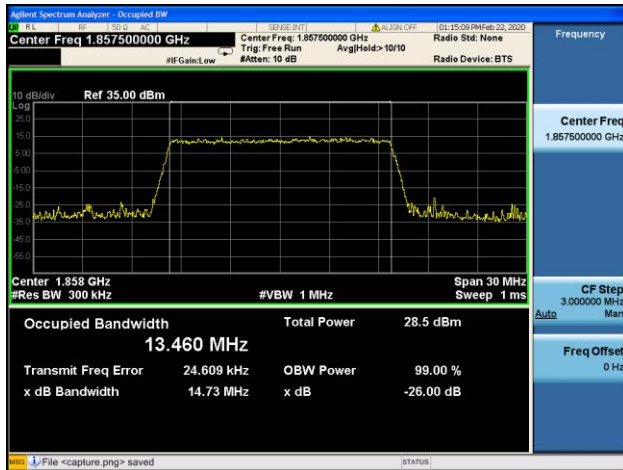
**Band2 / 15MHz / Low CH / QPSK**



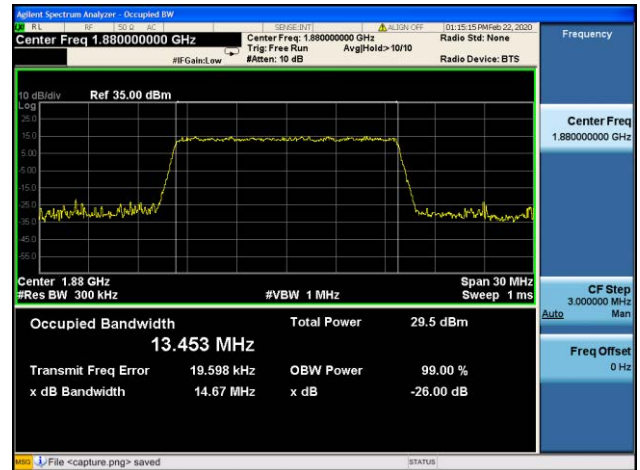
**Band2 / 15MHz / Low CH / 16QAM**



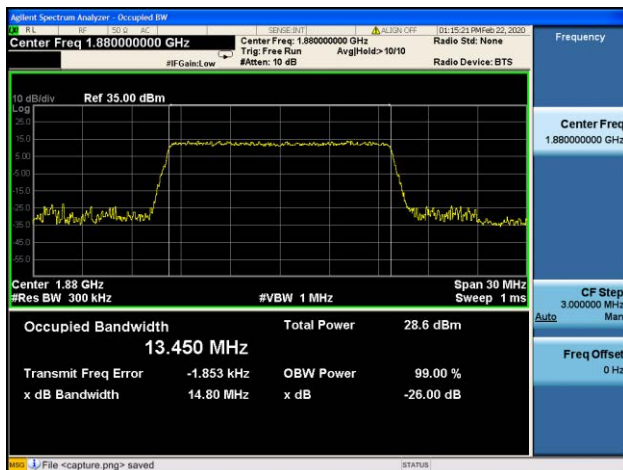
**Band2 / 15MHz / Low CH / 64QAM**



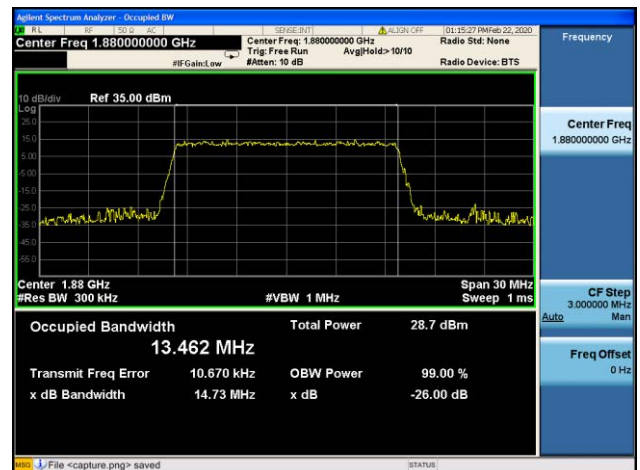
**Band2 / 15MHz / Mid CH / QPSK**



**Band2 / 15MHz / Mid CH / 16QAM**

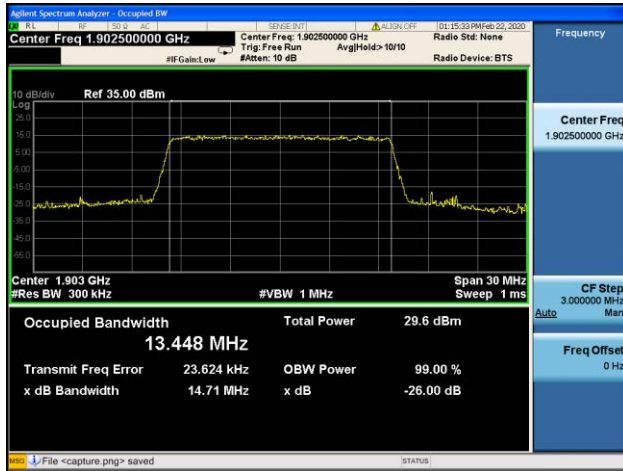


**Band2 / 15MHz / Mid CH / 64QAM**

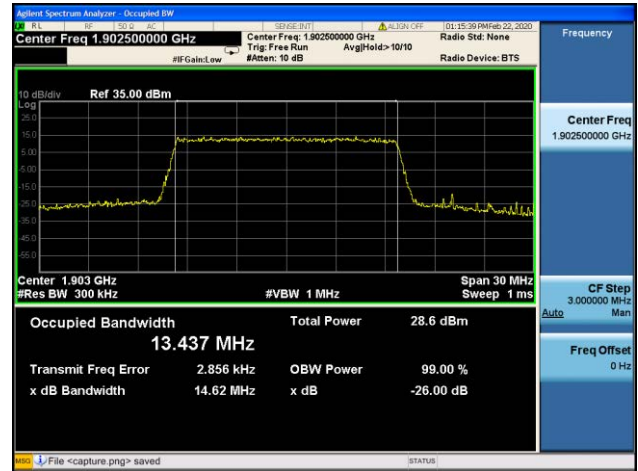




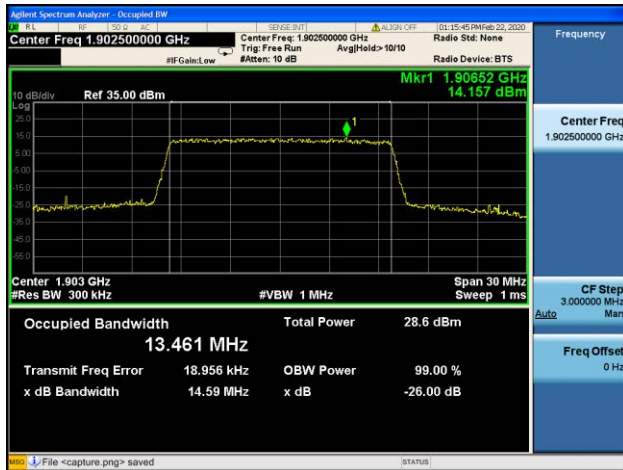
**Band2 / 15MHz / High CH / QPSK**



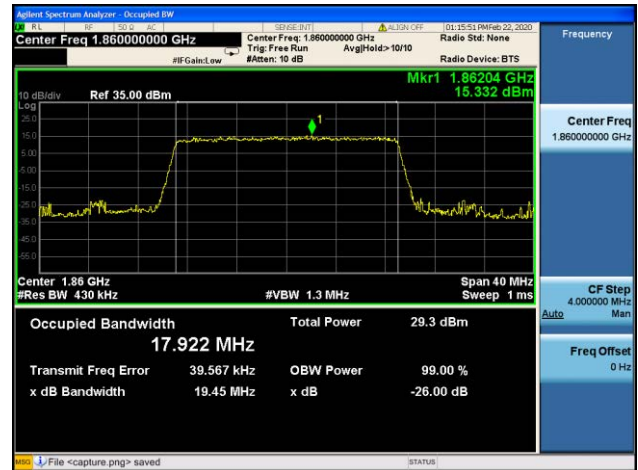
**Band2 / 15MHz / High CH / 16QAM**



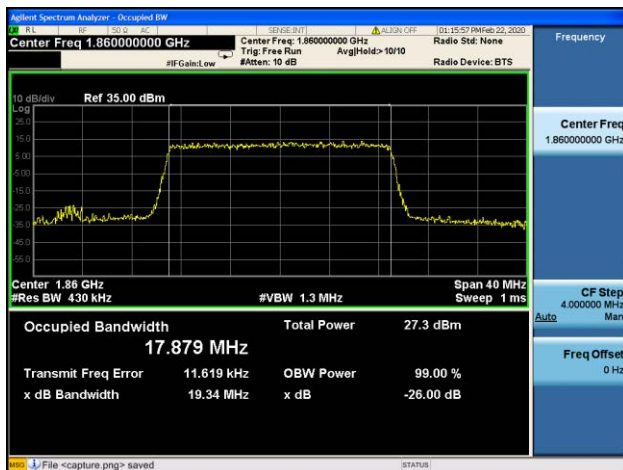
**Band2 / 15MHz / High CH / 64QAM**



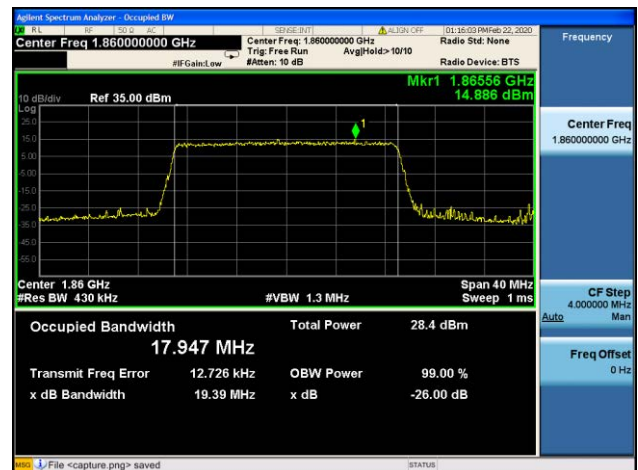
**Band2 / 20MHz / Low CH / QPSK**



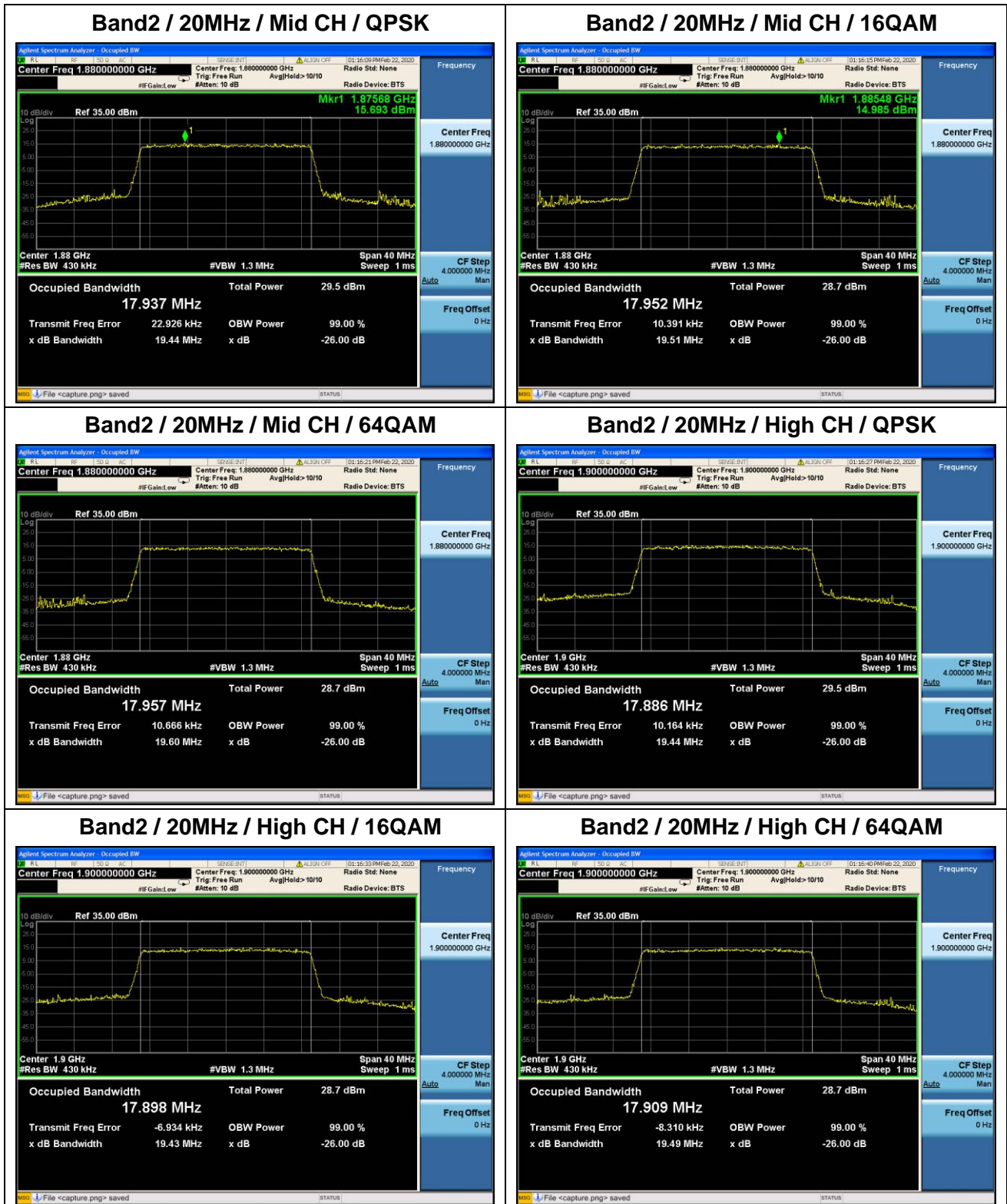
**Band2 / 20MHz / Low CH / 16QAM**



**Band2 / 20MHz / Low CH / 64QAM**





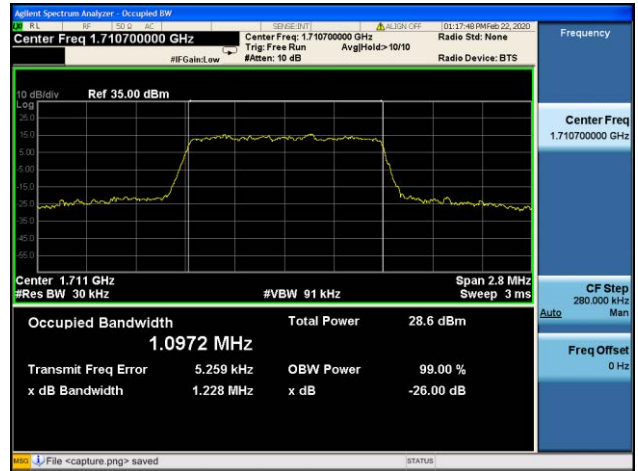




**Band4 / 1.4MHz / Low CH / QPSK**



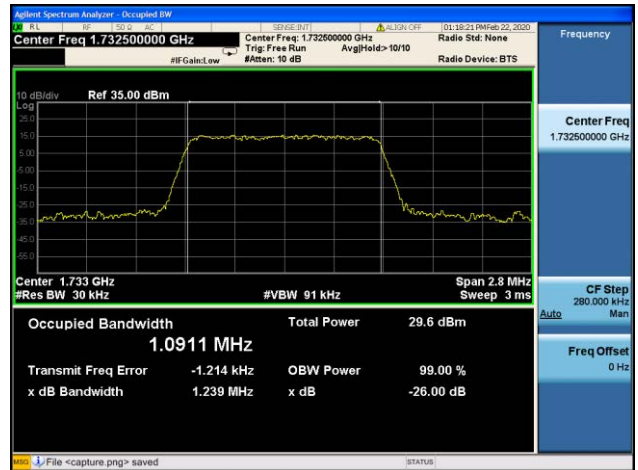
**Band4 / 1.4MHz / Low CH / 16QAM**



**Band4 / 1.4MHz / Low CH / 64QAM**



**Band4 / 1.4MHz / Mid CH / QPSK**

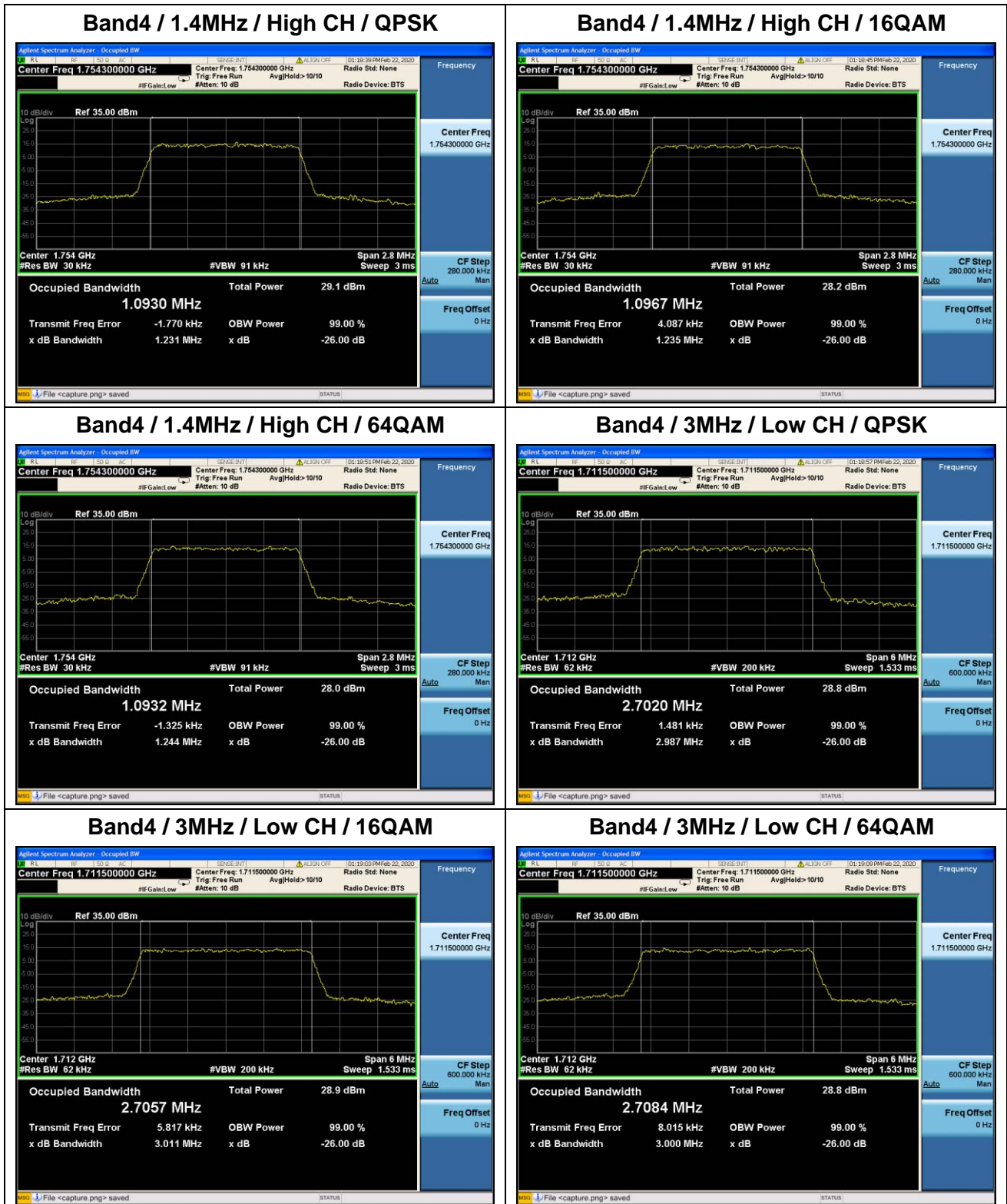


**Band4 / 1.4MHz / Mid CH / 16QAM**



**Band4 / 1.4MHz / Mid CH / 64QAM**

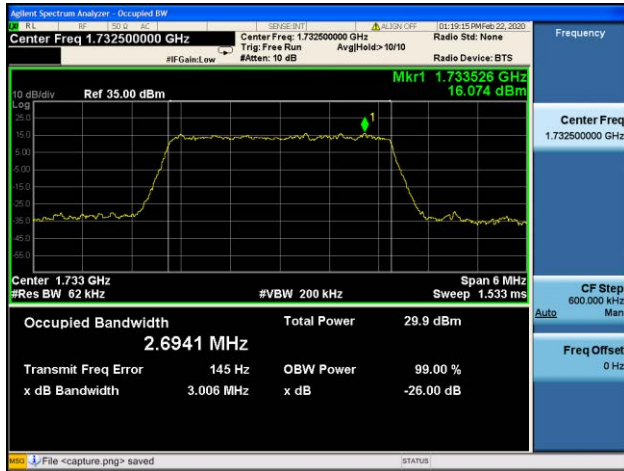




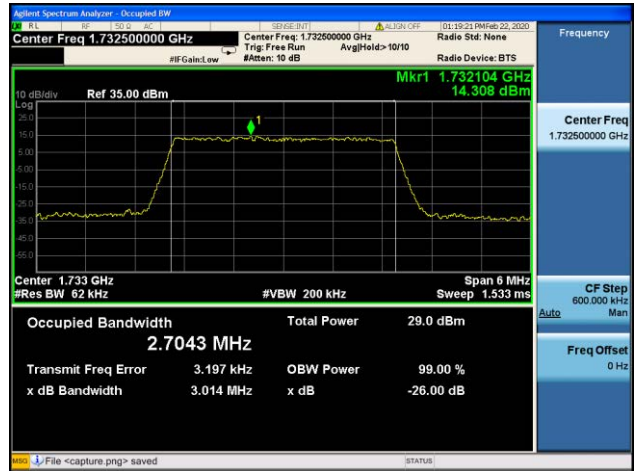




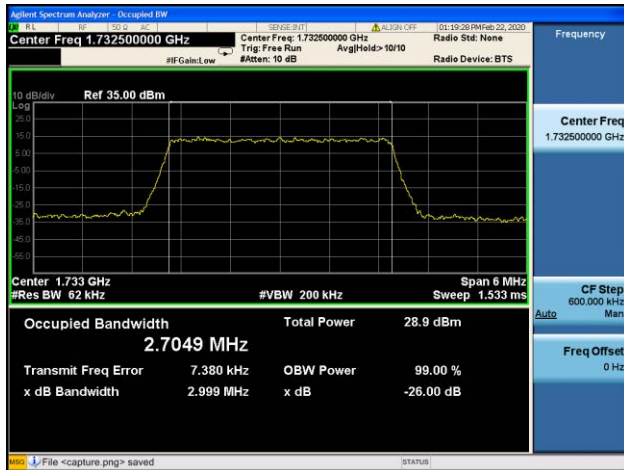
**Band4 / 3MHz / Mid CH / QPSK**



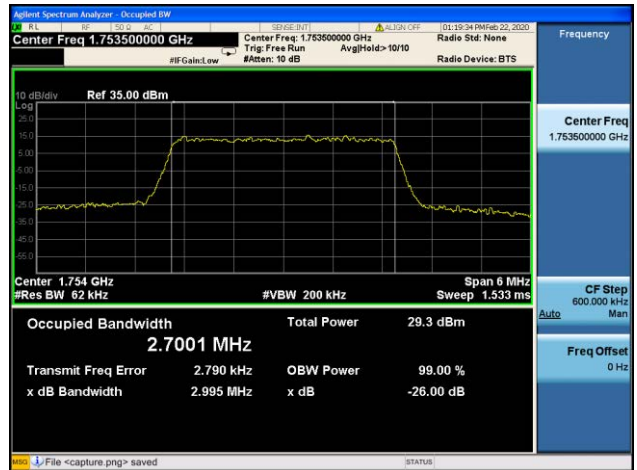
**Band4 / 3MHz / Mid CH / 16QAM**



**Band4 / 3MHz / Mid CH / 64QAM**



**Band4 / 3MHz / High CH / QPSK**



**Band4 / 3MHz / High CH / 16QAM**

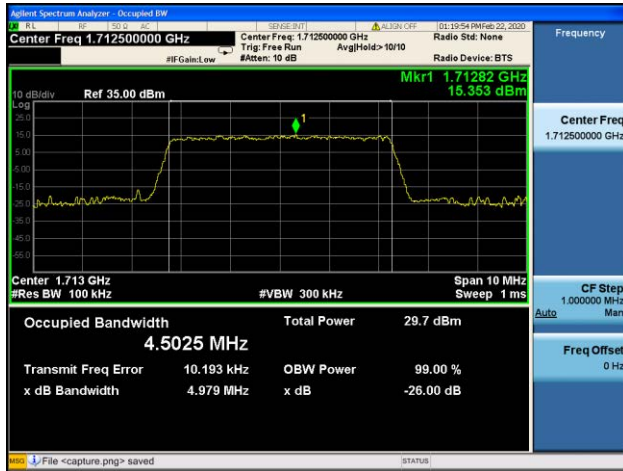


**Band4 / 3MHz / High CH / 64QAM**

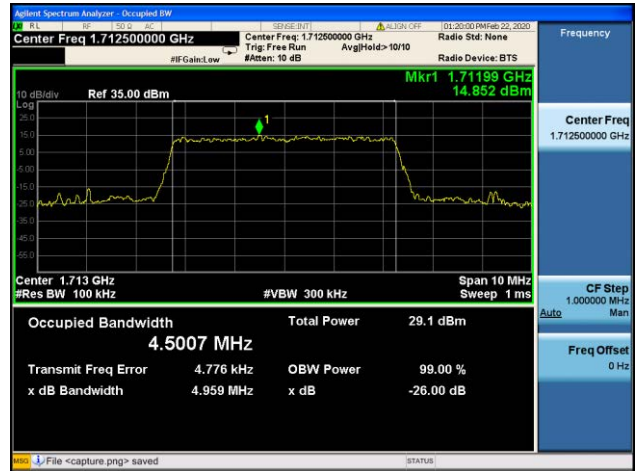




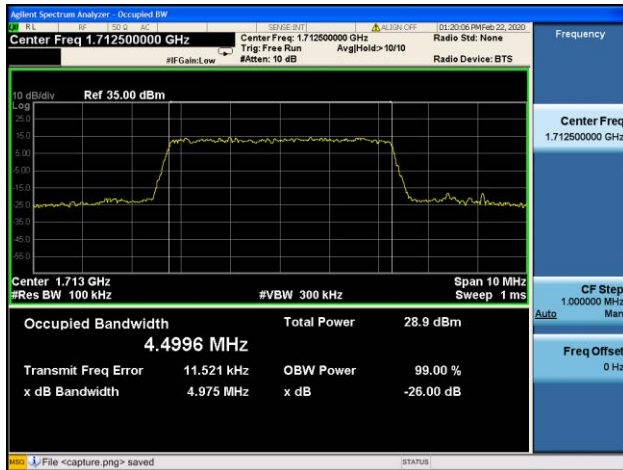
**Band4 / 5MHz / Low CH / QPSK**



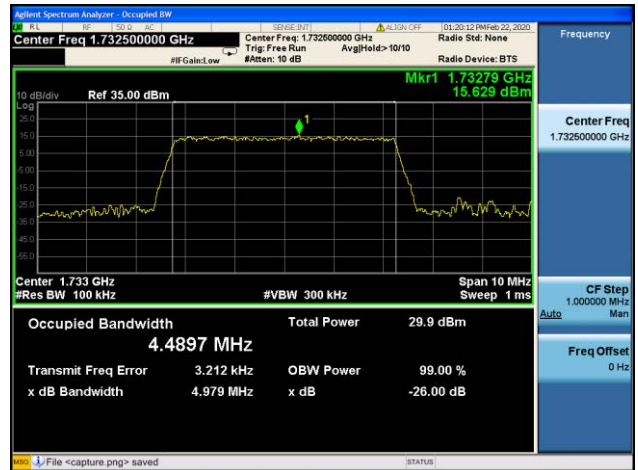
**Band4 / 5MHz / Low CH / 16QAM**



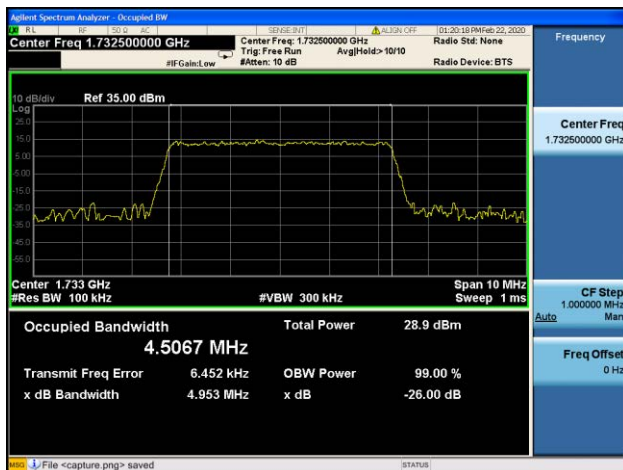
**Band4 / 5MHz / Low CH / 64QAM**



**Band4 / 5MHz / Mid CH / QPSK**



**Band4 / 5MHz / Mid CH / 16QAM**



**Band4 / 5MHz / Mid CH / 64QAM**

