



LTE Band7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.39	0.138	21.38	0.137	21.19	0.132
5	QPSK	1	12	21.33	0.136	21.36	0.137	21.16	0.131
5	QPSK	1	24	21.35	0.136	21.31	0.135	20.93	0.124
5	QPSK	12	0	20.36	0.109	20.31	0.107	20.46	0.111
5	QPSK	12	7	20.36	0.109	20.55	0.114	20.50	0.112
5	QPSK	12	13	20.37	0.109	20.46	0.111	20.52	0.113
5	QPSK	25	0	20.24	0.106	20.48	0.112	20.56	0.114
5	16QAM	1	0	20.06	0.101	20.09	0.102	20.10	0.102
5	16QAM	1	12	20.41	0.110	20.49	0.112	20.51	0.112
5	16QAM	1	24	20.45	0.111	20.23	0.105	20.08	0.102
5	16QAM	12	0	19.07	0.081	19.23	0.084	19.20	0.083
5	16QAM	12	7	19.21	0.083	19.35	0.086	19.31	0.085
5	16QAM	12	13	19.19	0.083	19.36	0.086	19.32	0.086
5	16QAM	25	0	19.21	0.083	19.49	0.089	19.26	0.084



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37850		38000		38150	
Frequency (MHz)				2580		2595		2610	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.85	0.193	22.46	0.176	22.45	0.176
20	QPSK	1	49	22.76	0.189	22.72	0.187	22.76	0.189
20	QPSK	1	99	22.37	0.173	22.38	0.173	22.38	0.173
20	QPSK	50	0	21.95	0.157	21.86	0.153	21.79	0.151
20	QPSK	50	24	21.83	0.152	21.88	0.154	21.80	0.151
20	QPSK	50	50	21.68	0.147	21.78	0.151	21.80	0.151
20	QPSK	100	0	21.86	0.153	21.83	0.152	21.87	0.154
20	16QAM	1	0	21.83	0.152	21.71	0.148	21.75	0.150
20	16QAM	1	49	22.03	0.160	22.00	0.158	21.89	0.155
20	16QAM	1	99	21.61	0.145	21.60	0.145	21.58	0.144
20	16QAM	50	0	20.99	0.126	20.94	0.124	20.90	0.123
20	16QAM	50	24	20.97	0.125	20.98	0.125	20.84	0.121
20	16QAM	50	50	20.85	0.122	20.81	0.121	20.83	0.121
20	16QAM	100	0	20.94	0.124	20.88	0.122	20.93	0.124



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37825		38000		38175	
Frequency (MHz)				2577.5		2595		2612.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.76	0.189	22.67	0.185	22.73	0.187
15	QPSK	1	37	22.75	0.188	22.84	0.192	22.72	0.187
15	QPSK	1	74	22.64	0.184	22.60	0.182	22.49	0.177
15	QPSK	36	0	21.87	0.154	21.82	0.152	21.81	0.152
15	QPSK	36	20	21.84	0.153	21.79	0.151	21.80	0.151
15	QPSK	36	39	21.75	0.150	21.81	0.152	21.79	0.151
15	QPSK	75	0	21.89	0.155	21.82	0.152	21.76	0.150
15	16QAM	1	0	22.08	0.161	21.84	0.153	21.83	0.152
15	16QAM	1	37	22.08	0.161	21.88	0.154	21.84	0.153
15	16QAM	1	74	21.89	0.155	21.77	0.150	21.63	0.146
15	16QAM	36	0	20.95	0.124	20.91	0.123	20.84	0.121
15	16QAM	36	20	21.01	0.126	20.91	0.123	20.81	0.121
15	16QAM	36	39	20.82	0.121	20.87	0.122	20.79	0.120
15	16QAM	75	0	20.90	0.123	20.85	0.122	20.80	0.120



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37800		38000		38200	
Frequency (MHz)				2575		2595		2615	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.81	0.191	22.82	0.191	22.79	0.190
10	QPSK	1	25	22.83	0.192	22.84	0.192	22.80	0.191
10	QPSK	1	49	22.81	0.191	22.78	0.190	22.71	0.187
10	QPSK	25	0	22.14	0.164	21.99	0.158	21.88	0.154
10	QPSK	25	12	22.04	0.160	21.98	0.158	21.87	0.154
10	QPSK	25	25	22.04	0.160	21.95	0.157	21.88	0.154
10	QPSK	50	0	22.08	0.161	21.97	0.157	21.97	0.157
10	16QAM	1	0	22.18	0.165	22.02	0.159	21.95	0.157
10	16QAM	1	25	22.31	0.170	22.17	0.165	22.00	0.158
10	16QAM	1	49	22.03	0.160	21.98	0.158	21.93	0.156
10	16QAM	25	0	21.21	0.132	21.12	0.129	20.94	0.124
10	16QAM	25	12	21.17	0.131	21.09	0.129	21.02	0.126
10	16QAM	25	25	21.11	0.129	21.07	0.128	20.94	0.124
10	16QAM	50	0	21.19	0.132	21.09	0.129	21.03	0.127



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37775		38000		38225	
Frequency (MHz)				2572.5		2595		2617.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.80	0.191	22.66	0.185	22.63	0.183
5	QPSK	1	12	22.84	0.192	22.83	0.192	22.74	0.188
5	QPSK	1	24	22.78	0.190	22.67	0.185	22.56	0.180
5	QPSK	12	0	22.05	0.160	21.89	0.155	21.81	0.152
5	QPSK	12	7	21.99	0.158	21.94	0.156	21.88	0.154
5	QPSK	12	13	21.93	0.156	21.87	0.154	21.80	0.151
5	QPSK	25	0	22.00	0.158	21.93	0.156	21.82	0.152
5	16QAM	1	0	22.10	0.162	21.91	0.155	21.75	0.150
5	16QAM	1	12	22.18	0.165	22.11	0.163	21.99	0.158
5	16QAM	1	24	22.10	0.162	21.89	0.155	21.82	0.152
5	16QAM	12	0	21.17	0.131	21.07	0.128	20.90	0.123
5	16QAM	12	7	21.18	0.131	21.02	0.126	20.88	0.122
5	16QAM	12	13	21.09	0.129	20.99	0.126	20.92	0.124
5	16QAM	25	0	21.15	0.130	21.08	0.128	20.91	0.123



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		38750		/	
Frequency (MHz)				/		2310		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	21.99	0.158	/	/
10	QPSK	1	25	/	/	22.07	0.161	/	/
10	QPSK	1	49	/	/	21.89	0.155	/	/
10	QPSK	25	0	/	/	21.23	0.133	/	/
10	QPSK	25	12	/	/	21.15	0.130	/	/
10	QPSK	25	25	/	/	21.13	0.130	/	/
10	QPSK	50	0	/	/	21.11	0.129	/	/
10	16QAM	1	0	/	/	21.39	0.138	/	/
10	16QAM	1	25	/	/	21.39	0.138	/	/
10	16QAM	1	49	/	/	21.14	0.130	/	/
10	16QAM	25	0	/	/	20.07	0.102	/	/
10	16QAM	25	12	/	/	20.21	0.105	/	/
10	16QAM	25	25	/	/	20.17	0.104	/	/
10	16QAM	50	0	/	/	20.22	0.105	/	/



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				38725		38750		38775	
Frequency (MHz)				2307.5		2310		2312.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.85	0.153	21.87	0.154	21.87	0.154
5	QPSK	1	12	22.00	0.158	21.96	0.157	21.97	0.157
5	QPSK	1	24	21.78	0.151	21.80	0.151	21.80	0.151
5	QPSK	12	0	21.04	0.127	21.08	0.128	21.06	0.128
5	QPSK	12	7	21.11	0.129	21.01	0.126	21.06	0.128
5	QPSK	12	13	21.01	0.126	21.02	0.126	21.14	0.130
5	QPSK	25	0	21.02	0.126	21.10	0.129	21.25	0.133
5	16QAM	1	0	21.15	0.130	21.13	0.130	21.24	0.133
5	16QAM	1	12	21.23	0.133	21.24	0.133	21.22	0.132
5	16QAM	1	24	21.06	0.128	21.09	0.129	21.09	0.129
5	16QAM	12	0	20.18	0.104	20.16	0.104	20.08	0.102
5	16QAM	12	7	20.10	0.102	20.16	0.104	20.13	0.103
5	16QAM	12	13	19.98	0.100	20.15	0.104	20.07	0.102
5	16QAM	25	0	20.12	0.103	20.13	0.103	20.20	0.105



LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		39200		/	
Frequency (MHz)				/		2355		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	21.90	0.155	/	/
10	QPSK	1	25	/	/	21.94	0.156	/	/
10	QPSK	1	49	/	/	21.80	0.151	/	/
10	QPSK	25	0	/	/	21.15	0.130	/	/
10	QPSK	25	12	/	/	21.06	0.128	/	/
10	QPSK	25	25	/	/	21.06	0.128	/	/
10	QPSK	50	0	/	/	21.09	0.129	/	/
10	16QAM	1	0	/	/	21.26	0.134	/	/
10	16QAM	1	25	/	/	21.28	0.134	/	/
10	16QAM	1	49	/	/	21.17	0.131	/	/
10	16QAM	25	0	/	/	20.11	0.103	/	/
10	16QAM	25	12	/	/	20.04	0.101	/	/
10	16QAM	25	25	/	/	20.10	0.102	/	/
10	16QAM	50	0	/	/	20.15	0.104	/	/





LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39175		39200		39225	
Frequency (MHz)				2352.5		2355		2357.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.82	0.152	21.76	0.150	21.76	0.150
5	QPSK	1	12	21.87	0.154	21.87	0.154	21.94	0.156
5	QPSK	1	24	21.69	0.148	21.73	0.149	21.74	0.149
5	QPSK	12	0	20.98	0.125	21.04	0.127	21.01	0.126
5	QPSK	12	7	20.99	0.126	21.08	0.128	21.03	0.127
5	QPSK	12	13	20.99	0.126	21.04	0.127	21.03	0.127
5	QPSK	25	0	20.98	0.125	21.05	0.127	21.08	0.128
5	16QAM	1	0	21.11	0.129	21.09	0.129	21.07	0.128
5	16QAM	1	12	21.19	0.132	21.14	0.130	21.23	0.133
5	16QAM	1	24	21.01	0.126	21.10	0.129	21.01	0.126
5	16QAM	12	0	19.97	0.099	20.03	0.101	20.09	0.102
5	16QAM	12	7	20.08	0.102	20.11	0.103	20.12	0.103
5	16QAM	12	13	19.96	0.099	20.02	0.100	20.06	0.101
5	16QAM	25	0	20.03	0.101	20.05	0.101	20.02	0.100



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39750		40620		41490	
Frequency (MHz)				2506		2593		2680	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.58	0.181	22.51	0.178	22.61	0.182
20	QPSK	1	49	22.72	0.187	22.61	0.182	22.92	0.196
20	QPSK	1	99	22.46	0.176	22.45	0.176	22.55	0.180
20	QPSK	50	0	21.84	0.153	21.76	0.150	22.05	0.160
20	QPSK	50	24	21.89	0.155	21.75	0.150	22.16	0.164
20	QPSK	50	50	21.91	0.155	21.78	0.151	22.02	0.159
20	QPSK	100	0	21.93	0.156	21.85	0.153	22.13	0.163
20	16QAM	1	0	21.74	0.149	21.70	0.148	21.79	0.151
20	16QAM	1	49	21.80	0.151	21.81	0.152	21.95	0.157
20	16QAM	1	99	21.66	0.147	21.71	0.148	21.77	0.150
20	16QAM	50	0	20.79	0.120	20.85	0.122	20.91	0.123
20	16QAM	50	24	20.83	0.121	20.84	0.121	21.00	0.126
20	16QAM	50	50	20.83	0.121	20.83	0.121	20.80	0.120
20	16QAM	100	0	20.87	0.122	20.86	0.122	21.12	0.129



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39725		40620		41515	
Frequency (MHz)				2503.5		2593		2682.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.55	0.180	22.78	0.190	22.86	0.193
15	QPSK	1	37	22.63	0.183	22.83	0.192	22.93	0.196
15	QPSK	1	74	22.56	0.180	22.60	0.182	22.75	0.188
15	QPSK	36	0	21.65	0.146	21.51	0.142	21.70	0.148
15	QPSK	36	20	21.60	0.145	21.50	0.141	21.78	0.151
15	QPSK	36	39	21.53	0.142	21.44	0.139	21.81	0.152
15	QPSK	75	0	21.60	0.145	21.67	0.147	21.89	0.155
15	16QAM	1	0	21.70	0.148	21.64	0.146	21.62	0.145
15	16QAM	1	37	21.67	0.147	21.74	0.149	21.75	0.150
15	16QAM	1	74	21.60	0.145	21.75	0.150	21.50	0.141
15	16QAM	36	0	20.63	0.116	20.56	0.114	20.70	0.117
15	16QAM	36	20	20.70	0.117	20.45	0.111	20.81	0.121
15	16QAM	36	39	20.56	0.114	20.47	0.111	20.61	0.115
15	16QAM	75	0	20.61	0.115	20.43	0.110	20.89	0.123



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39700		40620		41540	
Frequency (MHz)				2501		2593		2685	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.61	0.182	22.38	0.173	22.70	0.186
10	QPSK	1	25	22.67	0.185	22.38	0.173	22.83	0.192
10	QPSK	1	49	22.51	0.178	22.33	0.171	22.64	0.184
10	QPSK	25	0	21.70	0.148	21.56	0.143	21.90	0.155
10	QPSK	25	12	21.81	0.152	21.63	0.146	22.01	0.159
10	QPSK	25	25	21.69	0.148	21.59	0.144	21.85	0.153
10	QPSK	50	0	21.76	0.150	21.61	0.145	21.90	0.155
10	16QAM	1	0	21.70	0.148	21.69	0.148	21.80	0.151
10	16QAM	1	25	21.84	0.153	21.65	0.146	21.91	0.155
10	16QAM	1	49	21.78	0.151	21.58	0.144	21.79	0.151
10	16QAM	25	0	20.80	0.120	20.74	0.119	20.84	0.121
10	16QAM	25	12	20.82	0.121	20.75	0.119	20.90	0.123
10	16QAM	25	25	20.79	0.120	20.67	0.117	20.86	0.122
10	16QAM	50	0	20.78	0.120	20.71	0.118	20.90	0.123



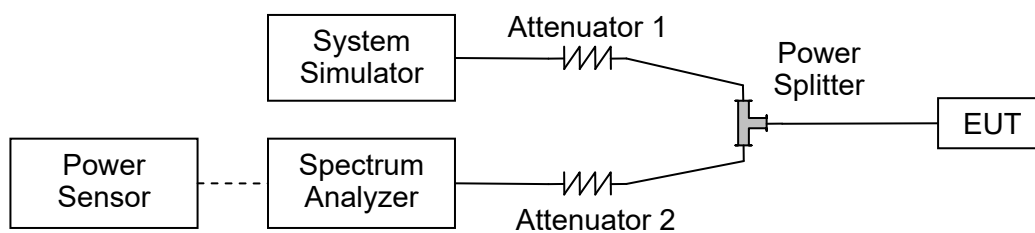
LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39675		40620		41565	
Frequency (MHz)				2498.5		2593		2687.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.68	0.185	22.54	0.179	22.90	0.195
5	QPSK	1	12	22.63	0.183	22.56	0.180	22.98	0.199
5	QPSK	1	24	22.83	0.192	22.50	0.178	22.88	0.194
5	QPSK	12	0	21.96	0.157	21.83	0.152	22.10	0.162
5	QPSK	12	7	22.05	0.160	21.93	0.156	22.20	0.166
5	QPSK	12	13	21.93	0.156	21.83	0.152	21.91	0.155
5	QPSK	25	0	21.91	0.155	21.80	0.151	22.25	0.168
5	16QAM	1	0	21.82	0.152	21.71	0.148	22.10	0.162
5	16QAM	1	12	21.97	0.157	21.79	0.151	22.15	0.164
5	16QAM	1	24	21.83	0.152	21.75	0.150	22.03	0.160
5	16QAM	12	0	20.99	0.126	20.93	0.124	21.14	0.130
5	16QAM	12	7	20.98	0.125	20.97	0.125	21.26	0.134
5	16QAM	12	13	21.04	0.127	20.86	0.122	21.10	0.129
5	16QAM	25	0	21.02	0.126	20.94	0.124	21.10	0.129

## 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 50Ohm; 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)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.29
	Low	16QAM	1.10	1.29
	Mid	QPSK	1.10	1.28
	Mid	16QAM	1.10	1.29
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.29
3	Low	QPSK	2.69	2.91
	Low	16QAM	2.69	2.93
	Mid	QPSK	2.69	2.93
	Mid	16QAM	2.69	2.93
	High	QPSK	2.69	2.92
	High	16QAM	2.69	2.93
5	Low	QPSK	4.51	5.19
	Low	16QAM	4.51	5.11
	Mid	QPSK	4.52	5.23
	Mid	16QAM	4.52	5.14
	High	QPSK	4.51	5.18
	High	16QAM	4.51	5.14
10	Low	QPSK	9.02	10.06
	Low	16QAM	8.97	9.94
	Mid	QPSK	9.03	10.67
	Mid	16QAM	8.99	10.01
	High	QPSK	9.01	10.07
	High	16QAM	8.97	9.97
15	Low	QPSK	13.50	15.09
	Low	16QAM	13.49	15.09
	Mid	QPSK	13.52	15.27
	Mid	16QAM	13.49	15.13
	High	QPSK	13.50	14.95
	High	16QAM	13.48	14.92
20	Low	QPSK	17.98	19.72
	Low	16QAM	17.98	19.78
	Mid	QPSK	18.00	19.75
	Mid	16QAM	18.01	19.89
	High	QPSK	17.94	19.71
	High	16QAM	17.94	19.73



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.30
	Low	16QAM	1.10	1.29
	Mid	QPSK	1.10	1.28
	Mid	16QAM	1.10	1.28
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.30
3	Low	QPSK	2.69	3.07
	Low	16QAM	2.69	2.92
	Mid	QPSK	2.69	2.91
	Mid	16QAM	2.69	2.94
	High	QPSK	2.69	2.91
	High	16QAM	2.69	2.94
5	Low	QPSK	4.52	5.59
	Low	16QAM	4.51	5.46
	Mid	QPSK	4.52	5.16
	Mid	16QAM	4.51	5.15
	High	QPSK	4.52	5.15
	High	16QAM	4.53	5.67
10	Low	QPSK	9.04	10.08
	Low	16QAM	9.00	10.44
	Mid	QPSK	9.04	9.95
	Mid	16QAM	8.98	9.93
	High	QPSK	9.00	10.05
	High	16QAM	8.98	10.00
15	Low	QPSK	13.50	17.22
	Low	16QAM	13.51	16.58
	Mid	QPSK	13.50	15.04
	Mid	16QAM	13.49	15.00
	High	QPSK	13.54	17.15
	High	16QAM	13.50	15.02
20	Low	QPSK	17.99	19.73
	Low	16QAM	18.00	19.92
	Mid	QPSK	17.97	19.73
	Mid	16QAM	17.98	19.72
	High	QPSK	17.95	19.71
	High	16QAM	18.01	19.75





LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.27
	Low	16QAM	1.10	1.29
	Mid	QPSK	1.10	1.27
	Mid	16QAM	1.11	1.45
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.29
3	Low	QPSK	2.69	2.91
	Low	16QAM	2.69	2.93
	Mid	QPSK	2.69	2.93
	Mid	16QAM	2.70	3.19
	High	QPSK	2.69	2.91
	High	16QAM	2.69	2.93
5	Low	QPSK	4.52	5.19
	Low	16QAM	4.51	5.18
	Mid	QPSK	4.52	5.29
	Mid	16QAM	4.53	5.51
	High	QPSK	4.51	5.20
	High	16QAM	4.51	5.09
10	Low	QPSK	9.01	10.08
	Low	16QAM	8.97	9.96
	Mid	QPSK	9.03	10.13
	Mid	16QAM	8.99	9.98
	High	QPSK	9.02	10.05
	High	16QAM	8.96	9.98



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.53	5.31
	Low	16QAM	4.52	5.29
	Mid	QPSK	4.52	5.26
	Mid	16QAM	4.52	5.26
	High	QPSK	4.53	5.31
	High	16QAM	4.52	5.22
10	Low	QPSK	9.02	10.09
	Low	16QAM	8.99	9.9
	Mid	QPSK	9.02	10.25
	Mid	16QAM	9.00	10.04
	High	QPSK	9.03	10.32
	High	16QAM	9.00	10.04
15	Low	QPSK	13.55	15.03
	Low	16QAM	13.51	15.14
	Mid	QPSK	13.52	15.11
	Mid	16QAM	13.51	15.17
	High	QPSK	13.52	15.21
	High	16QAM	13.54	15.15
20	Low	QPSK	18.02	31.70
	Low	16QAM	18.04	21.16
	Mid	QPSK	17.99	23.35
	Mid	16QAM	18.04	28.94
	High	QPSK	18.02	20.1
	High	16QAM	18.05	19.78



LTE Band 38				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.37
	Low	16QAM	4.51	5.24
	Mid	QPSK	4.52	5.38
	Mid	16QAM	4.52	5.22
	High	QPSK	4.53	5.26
	High	16QAM	4.53	5.20
10	Low	QPSK	9.01	10.26
	Low	16QAM	8.99	10.22
	Mid	QPSK	9.01	10.06
	Mid	16QAM	8.99	10.48
	High	QPSK	9.02	10.09
	High	16QAM	8.99	10.08
15	Low	QPSK	13.53	17.29
	Low	16QAM	13.52	16.16
	Mid	QPSK	13.49	15.32
	Mid	16QAM	13.53	15.31
	High	QPSK	13.51	15.02
	High	16QAM	13.49	15.13
20	Low	QPSK	17.98	20.54
	Low	16QAM	18.00	19.87
	Mid	QPSK	17.98	20.71
	Mid	16QAM	17.97	19.96
	High	QPSK	17.98	20.49
	High	16QAM	17.98	19.82



LTE Band 40, Block A				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	5.24
	Low	16QAM	4.52	5.24
	Mid	QPSK	4.51	5.23
	Mid	16QAM	4.50	5.07
	High	QPSK	4.51	5.86
	High	16QAM	4.51	6.03
10	Mid	QPSK	8.92	9.79
	Mid	16QAM	8.92	9.57

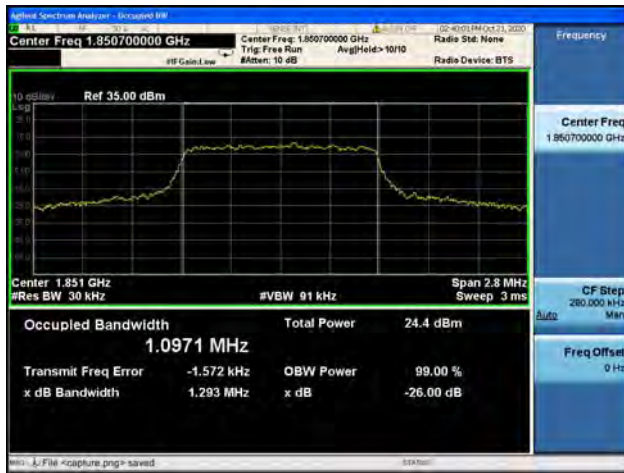
LTE Band 40, Block B				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.22
	Low	16QAM	4.50	5.17
	Mid	QPSK	4.52	5.21
	Mid	16QAM	4.51	5.16
	High	QPSK	4.52	5.36
	High	16QAM	4.53	4.99
10	Mid	QPSK	8.93	9.87
	Mid	16QAM	8.93	9.78



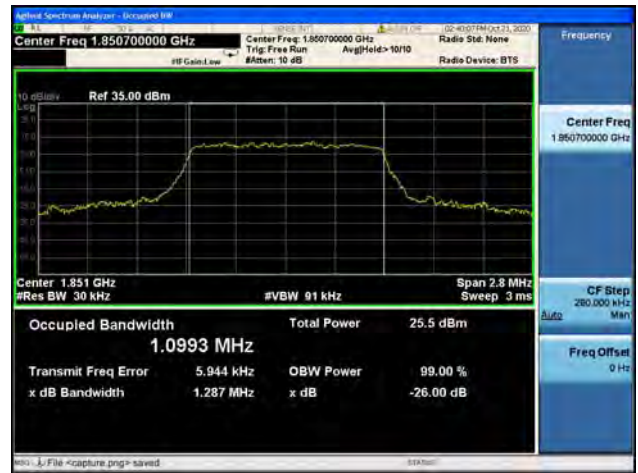
LTE Band 41				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.33
	Low	16QAM	4.51	5.25
	Mid	QPSK	4.52	5.33
	Mid	16QAM	4.52	5.23
	High	QPSK	4.52	5.21
	High	16QAM	4.52	5.28
10	Low	QPSK	8.98	10.07
	Low	16QAM	8.97	10.19
	Mid	QPSK	9.02	10.20
	Mid	16QAM	8.99	10.87
	High	QPSK	9.02	10.36
	High	16QAM	8.99	10.20
15	Low	QPSK	13.49	14.93
	Low	16QAM	13.49	15.25
	Mid	QPSK	13.48	14.86
	Mid	16QAM	13.50	15.44
	High	QPSK	13.50	15.94
	High	16QAM	13.51	15.10
20	Low	QPSK	17.97	19.58
	Low	16QAM	17.96	19.67
	Mid	QPSK	18.02	23.20
	Mid	16QAM	17.98	20.66
	High	QPSK	18.00	20.29
	High	16QAM	17.96	20.66



Band2 / 1.4MHz / Low CH / QPSK



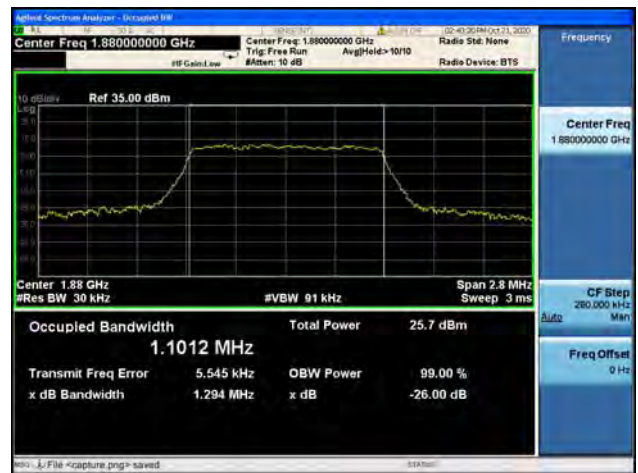
Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



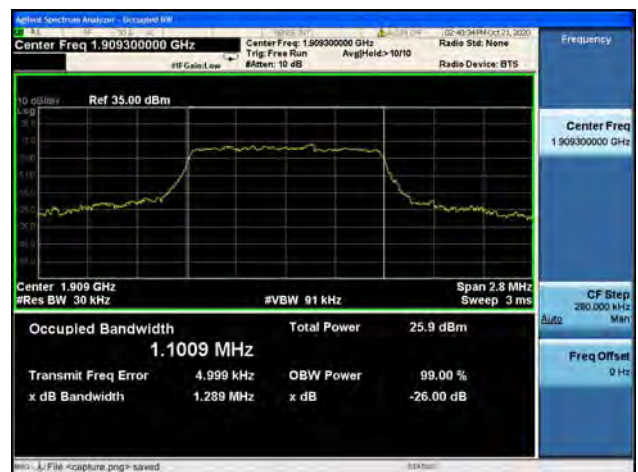
Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK

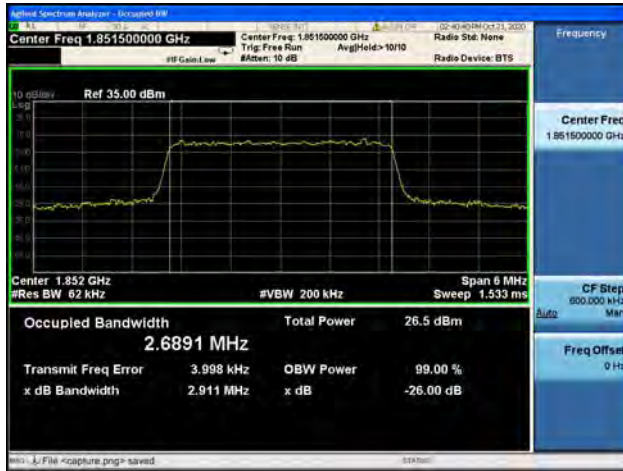


Band2 / 1.4MHz / High CH / 16QAM

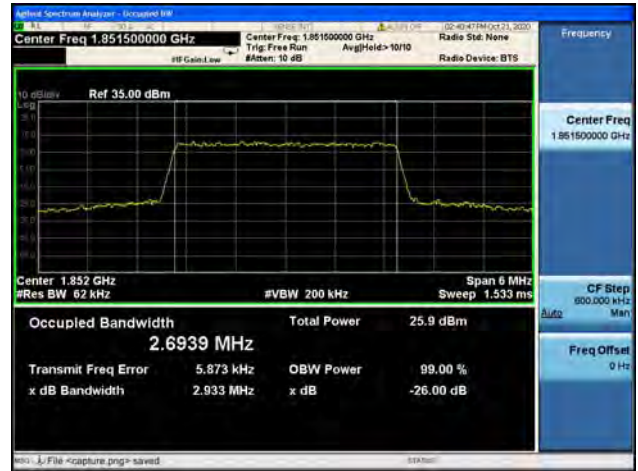




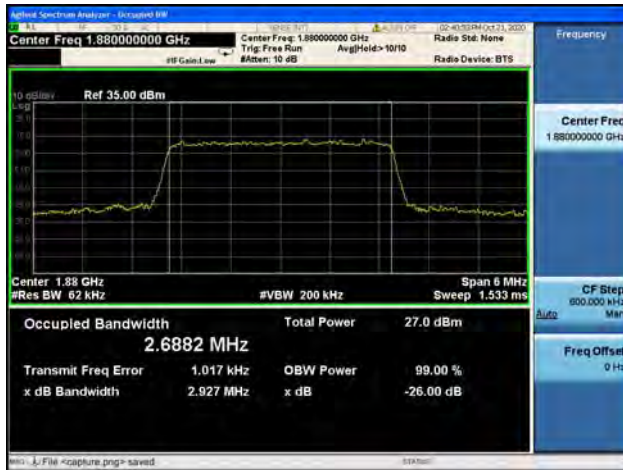
Band2 / 3MHz / Low CH / QPSK



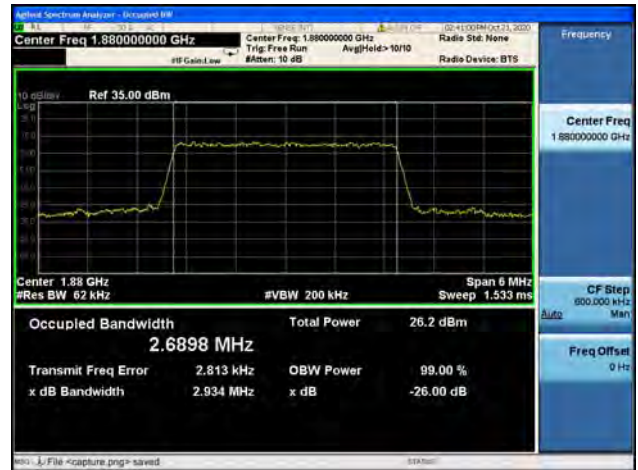
Band2 / 3MHz / Low CH / 16QAM



Band2 / 3MHz / Mid CH / QPSK



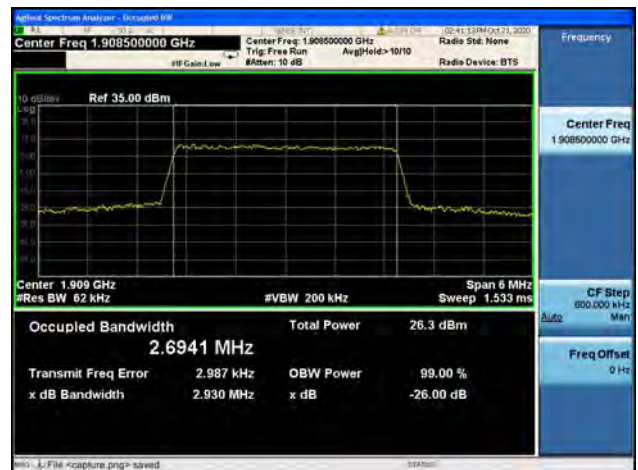
Band2 / 3MHz / Mid CH / 16QAM



Band2 / 3MHz / High CH / QPSK

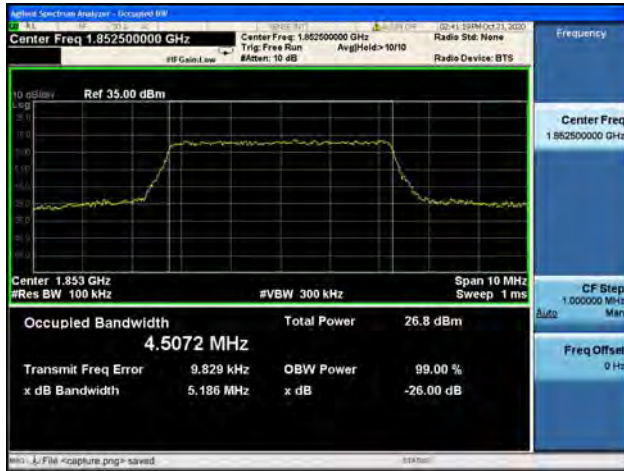


Band2 / 3MHz / High CH / 16QAM

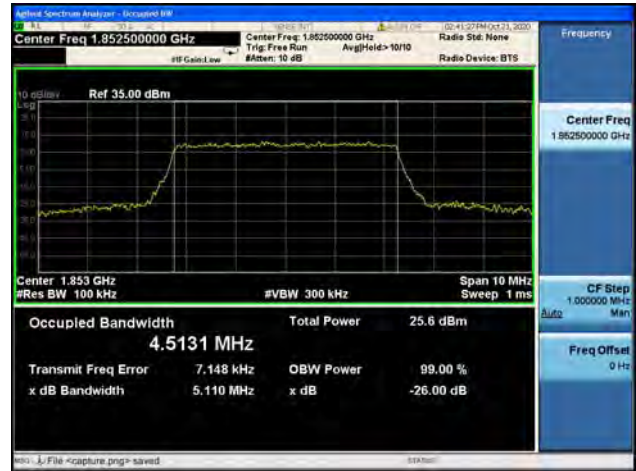




Band2 / 5MHz / Low CH / QPSK



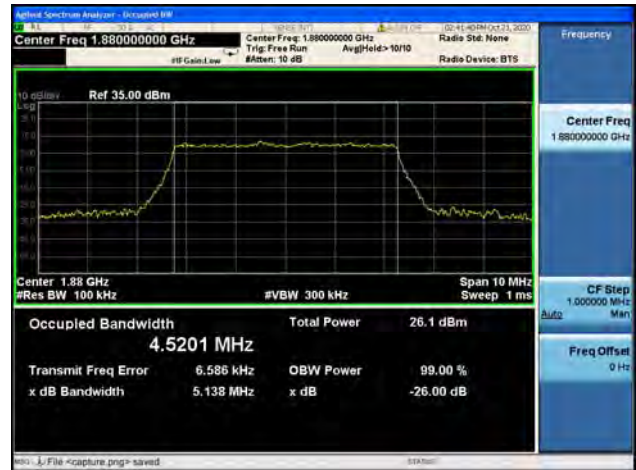
Band2 / 5MHz / Low CH / 16QAM



Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / High CH / QPSK



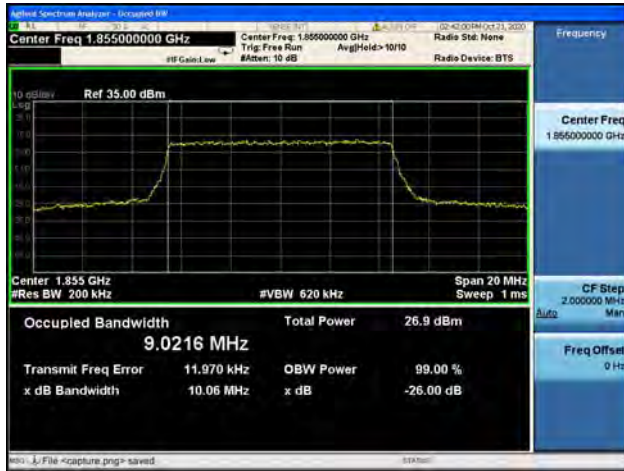
Band2 / 5MHz / High CH / 16QAM



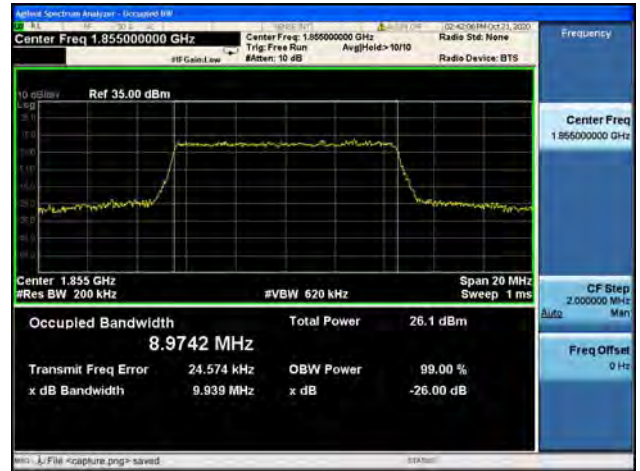




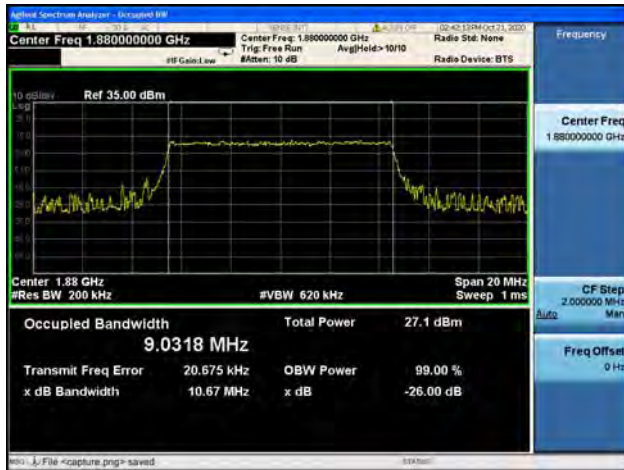
Band2 / 10MHz / Low CH / QPSK



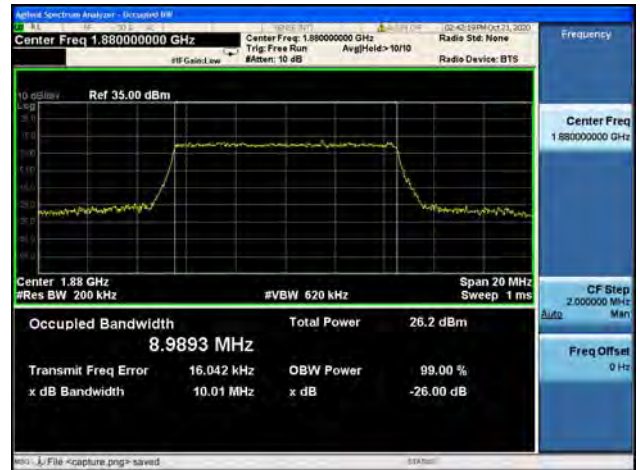
Band2 / 10MHz / Low CH / 16QAM



Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK

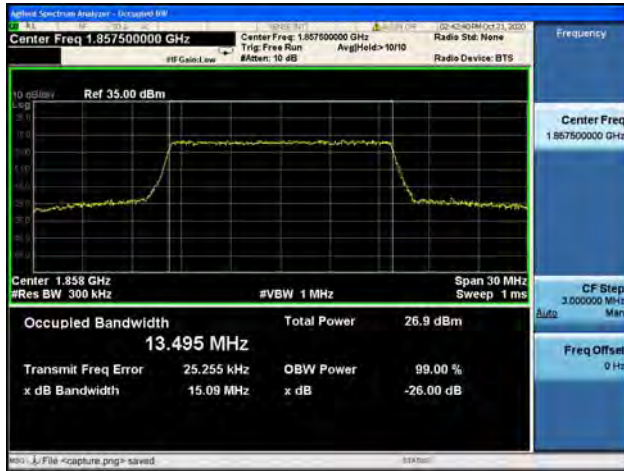


Band2 / 10MHz / High CH / 16QAM

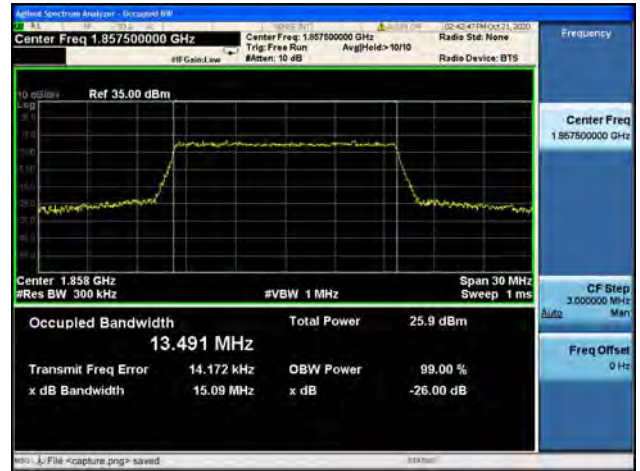




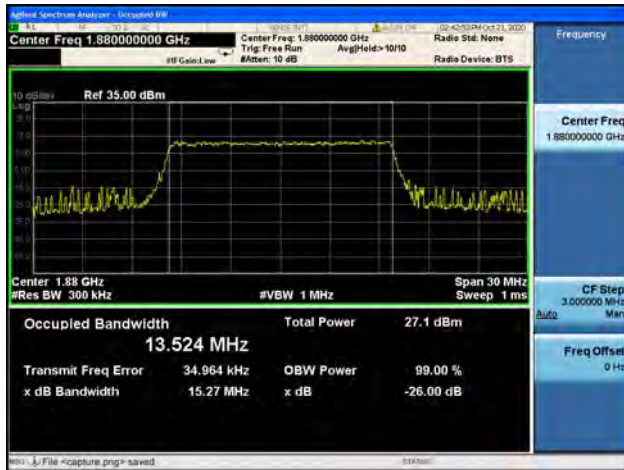
Band2 / 15MHz / Low CH / QPSK



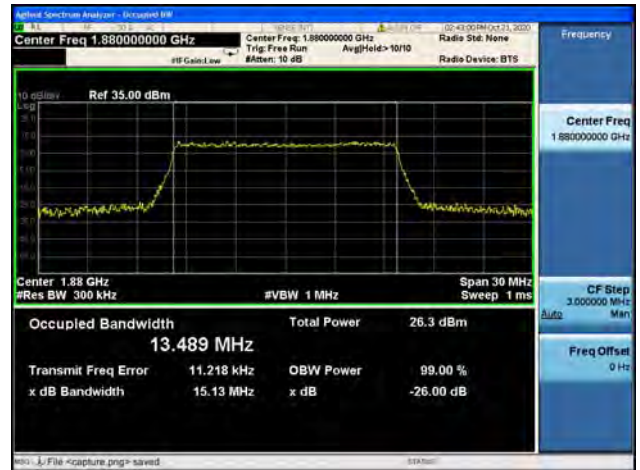
Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Mid CH / QPSK



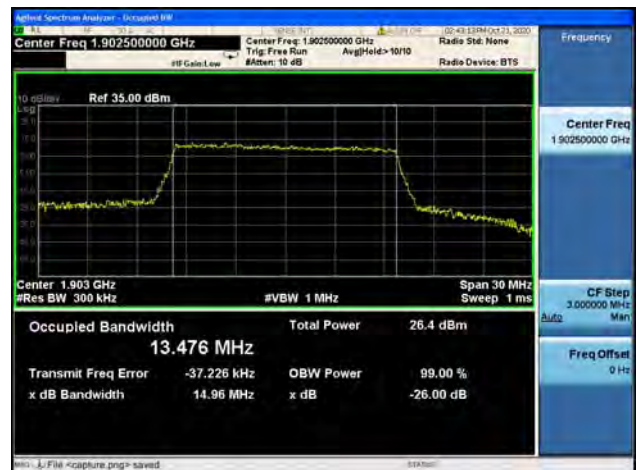
Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / High CH / QPSK

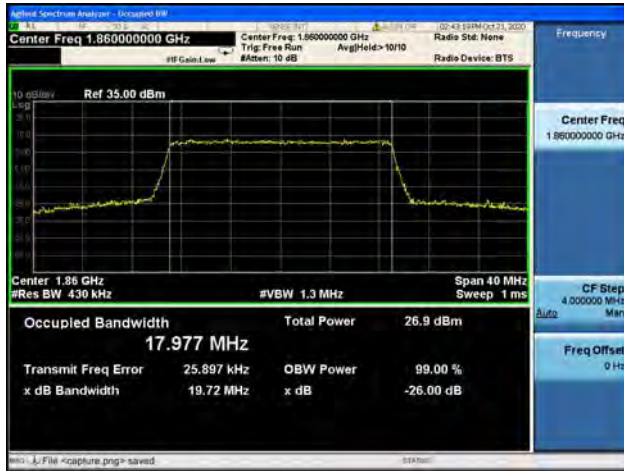


Band2 / 15MHz / High CH / 16QAM





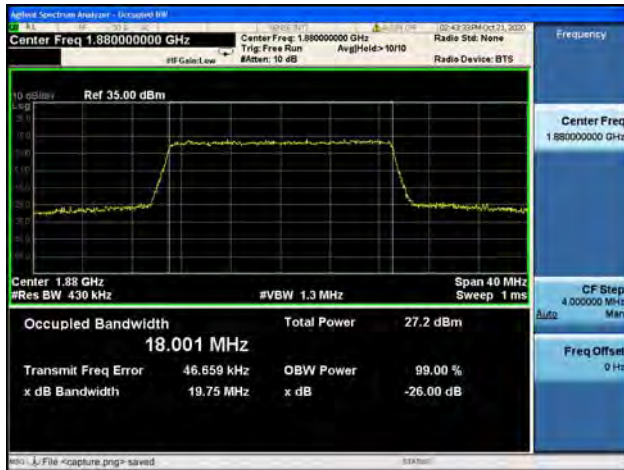
Band2 / 20MHz / Low CH / QPSK



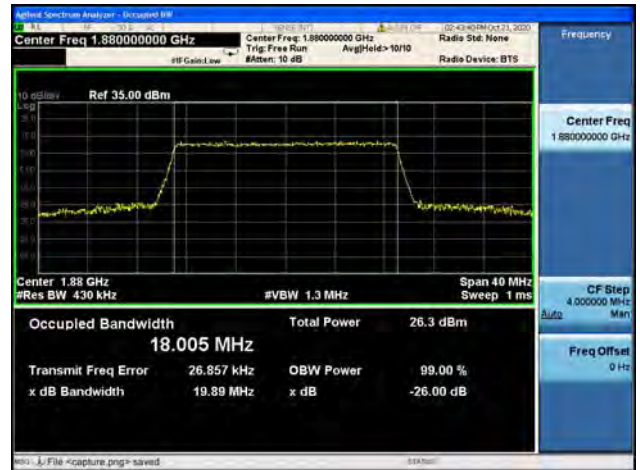
Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



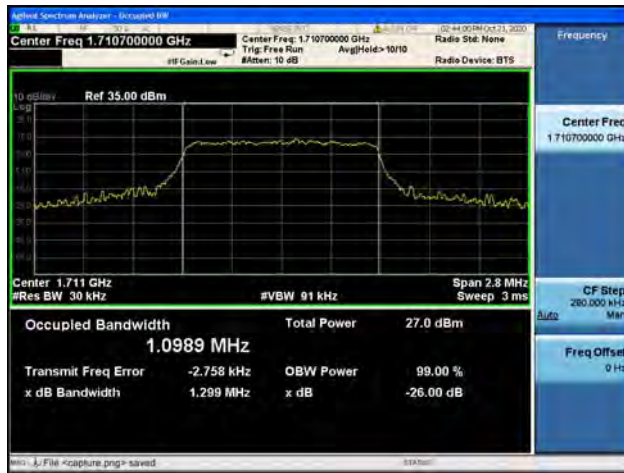
Band2 / 20MHz / High CH / QPSK



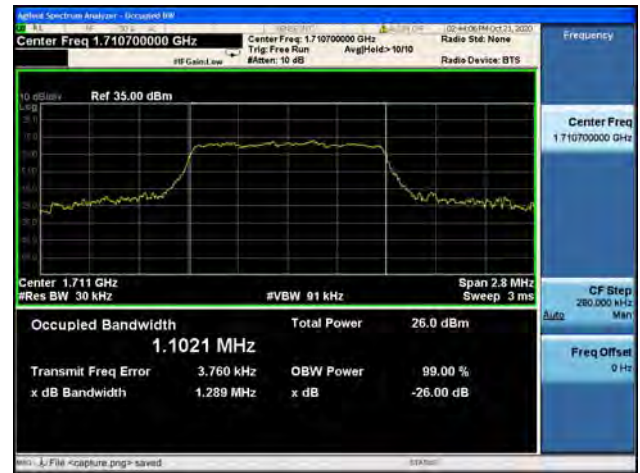
Band2 / 20MHz / High CH / 16QAM



Band4 / 1.4MHz / Low CH / QPSK



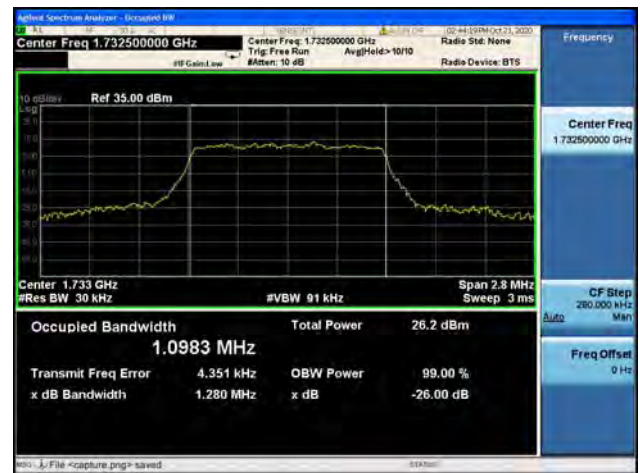
Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK

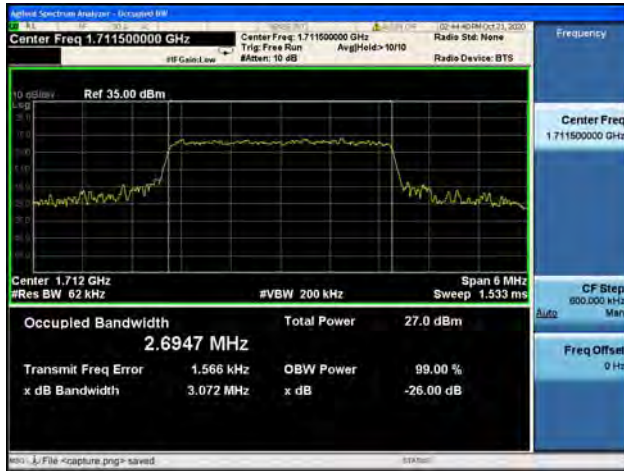


Band4 / 1.4MHz / High CH / 16QAM

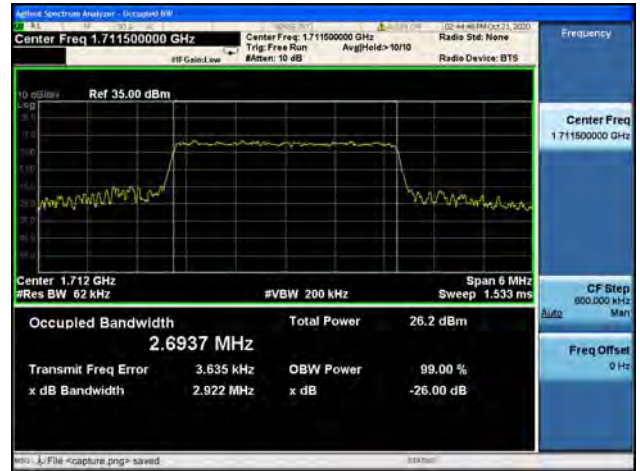




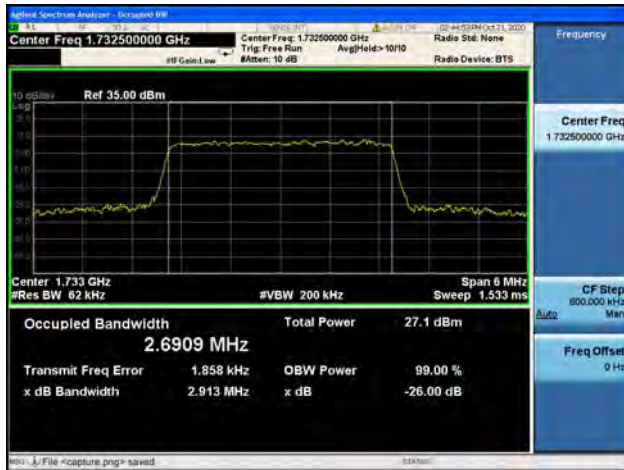
Band4 / 3MHz / Low CH / QPSK



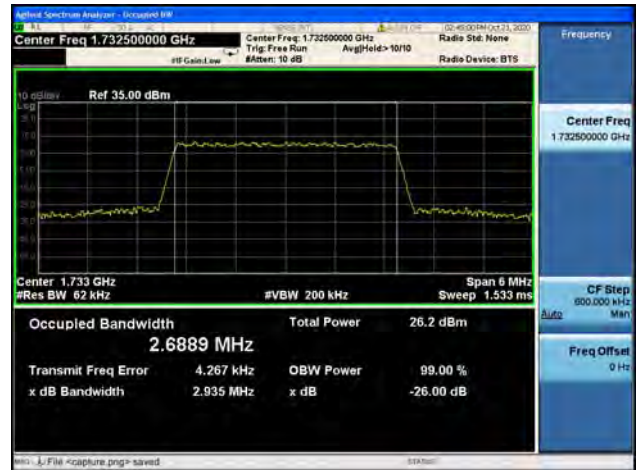
Band4 / 3MHz / Low CH / 16QAM



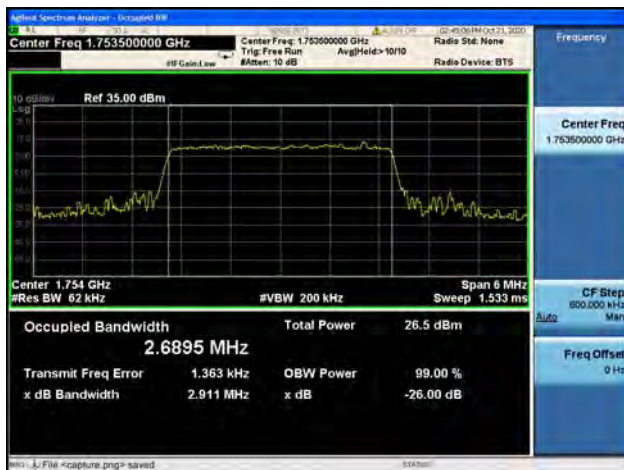
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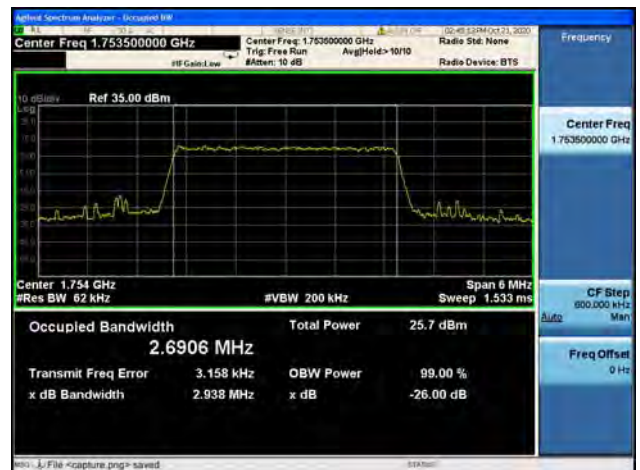
Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK

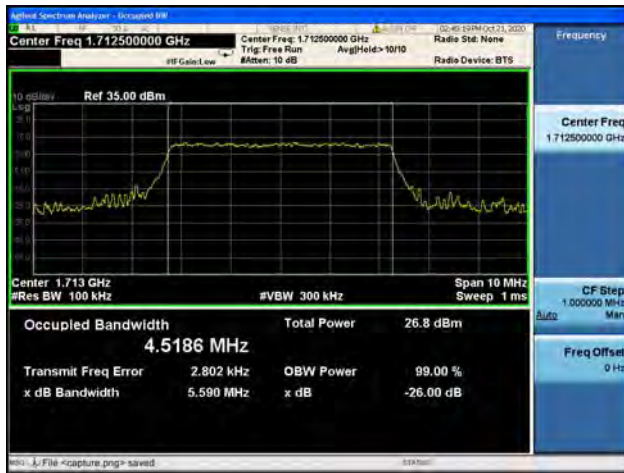


Band4 / 3MHz / High CH / 16QAM

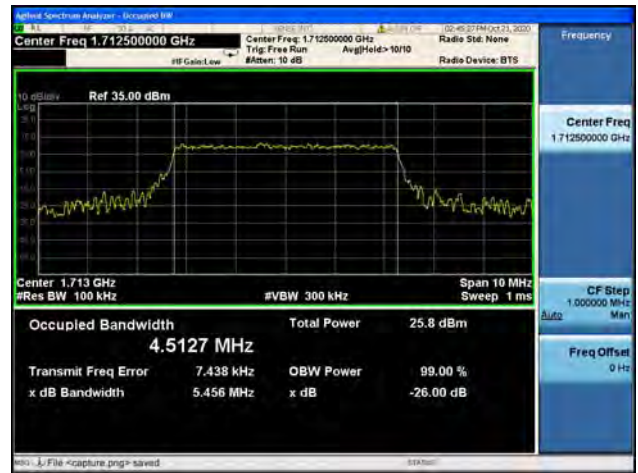




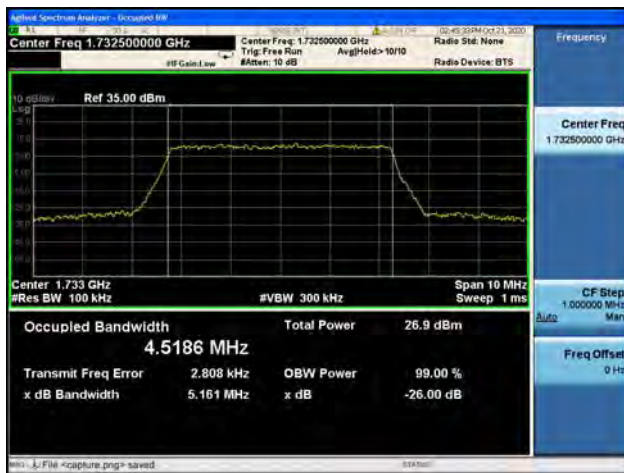
Band4 / 5MHz / Low CH / QPSK



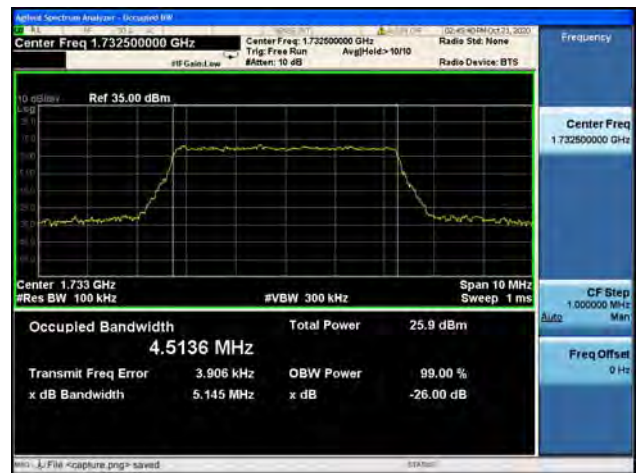
Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM

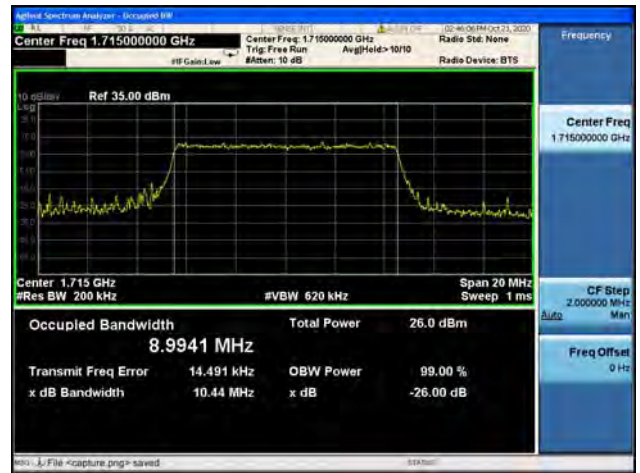




Band4 / 10MHz / Low CH / QPSK



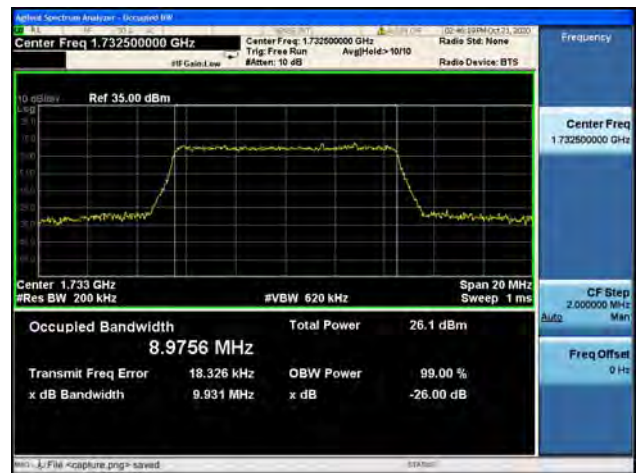
Band4 / 10MHz / Low CH / 16QAM



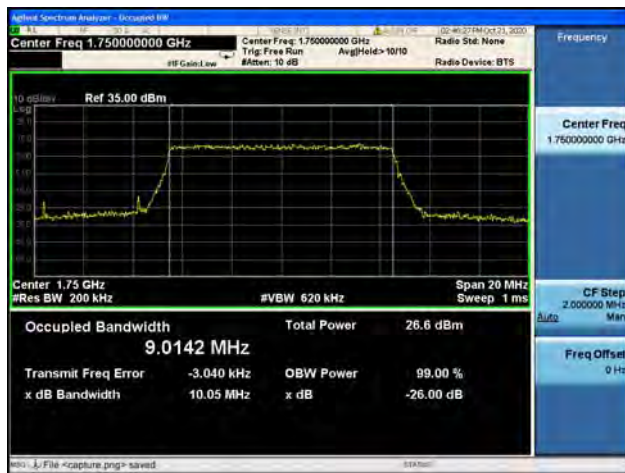
Band4 / 10MHz / Mid CH / QPSK



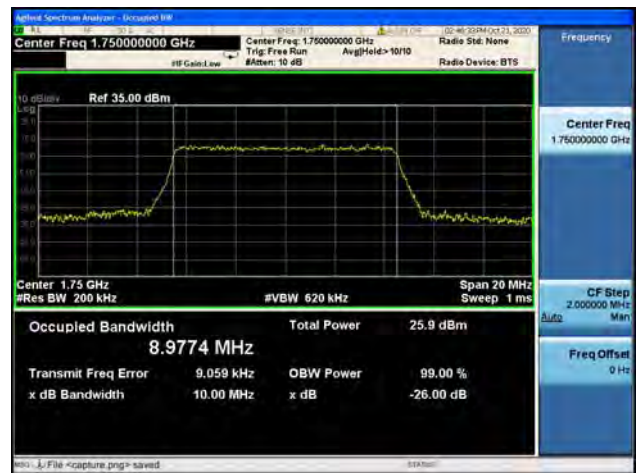
Band4 / 10MHz / Mid CH / 16QAM



Band4 / 10MHz / High CH / QPSK

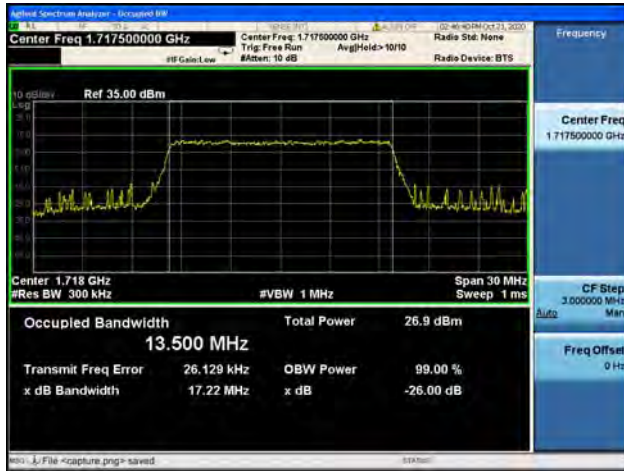


Band4 / 10MHz / High CH / 16QAM

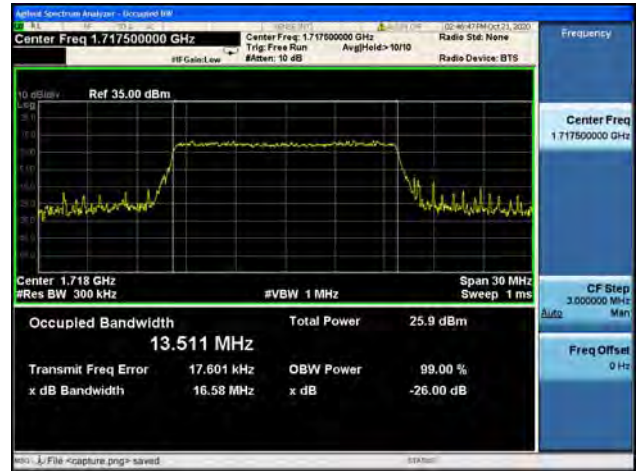




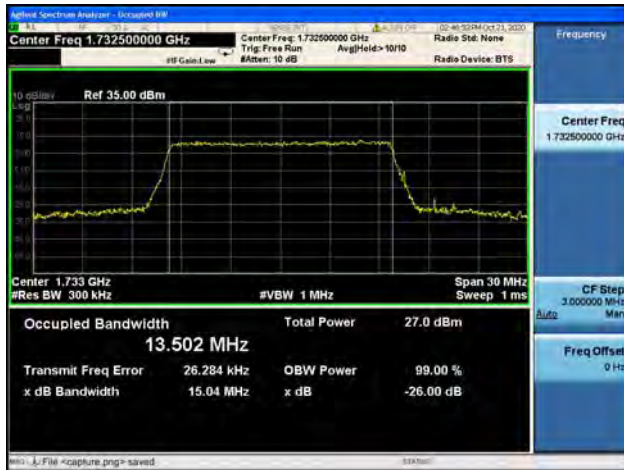
Band4 / 15MHz / Low CH / QPSK



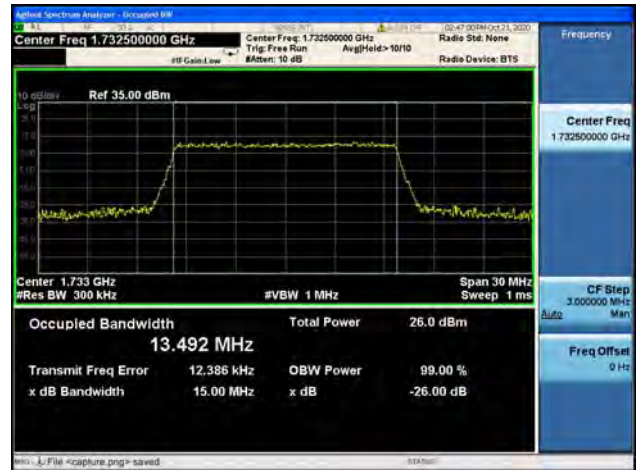
Band4 / 15MHz / Low CH / 16QAM



Band4 / 15MHz / Mid CH / QPSK



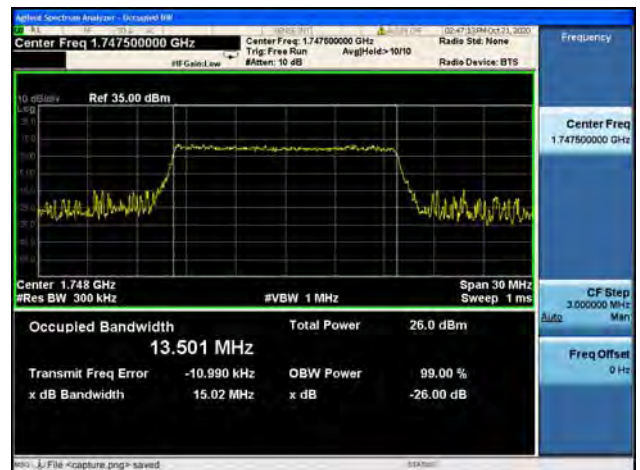
Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / High CH / QPSK



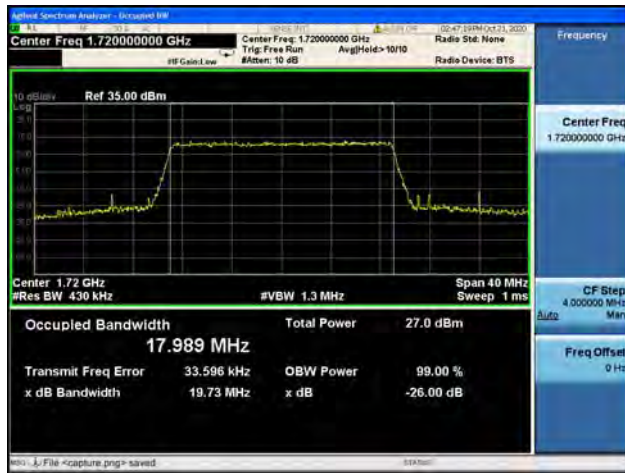
Band4 / 15MHz / High CH / 16QAM



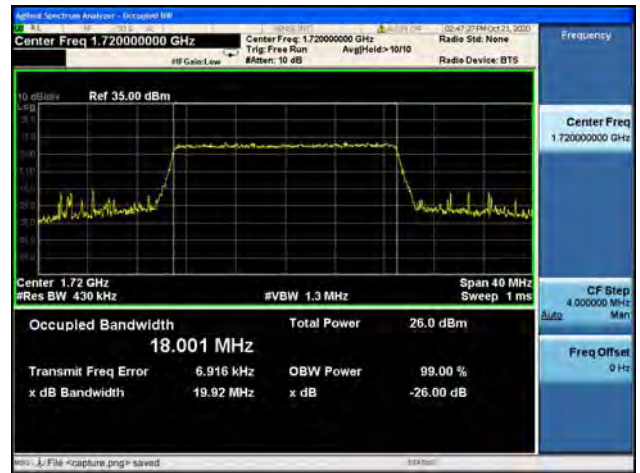




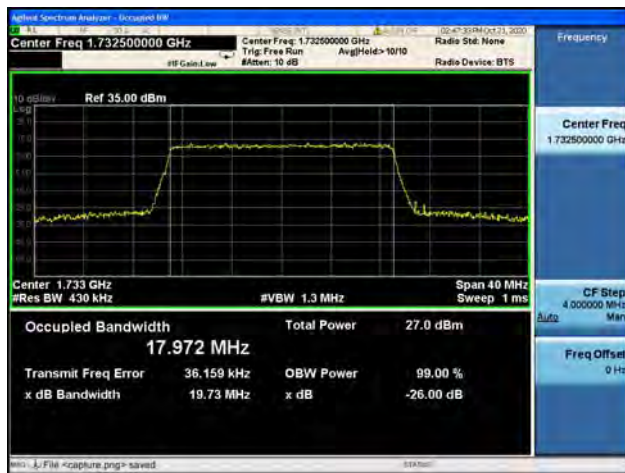
Band4 / 20MHz / Low CH / QPSK



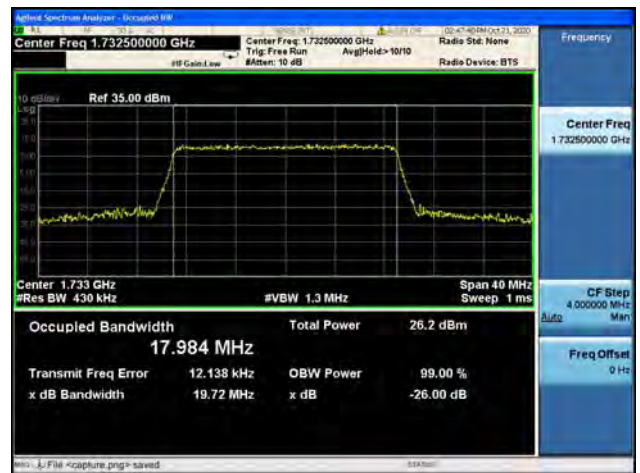
Band4 / 20MHz / Low CH / 16QAM



Band4 / 20MHz / Mid CH / QPSK



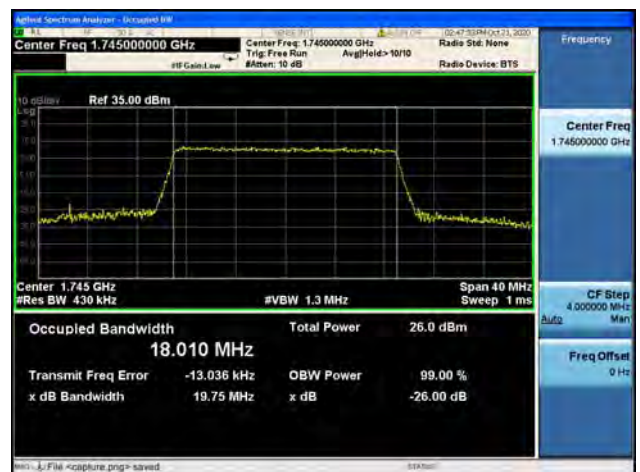
Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / High CH / QPSK

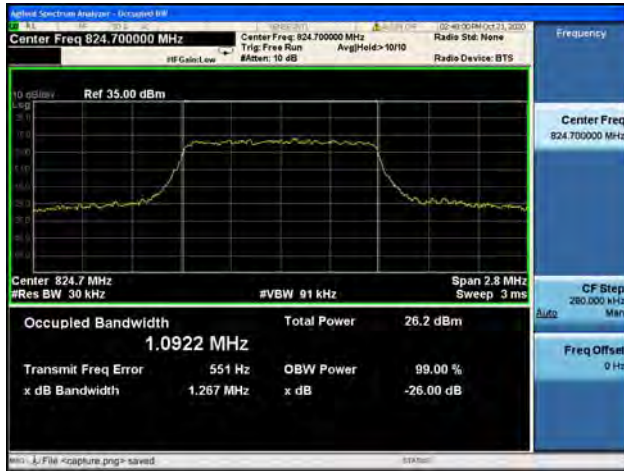


Band4 / 20MHz / High CH / 16QAM

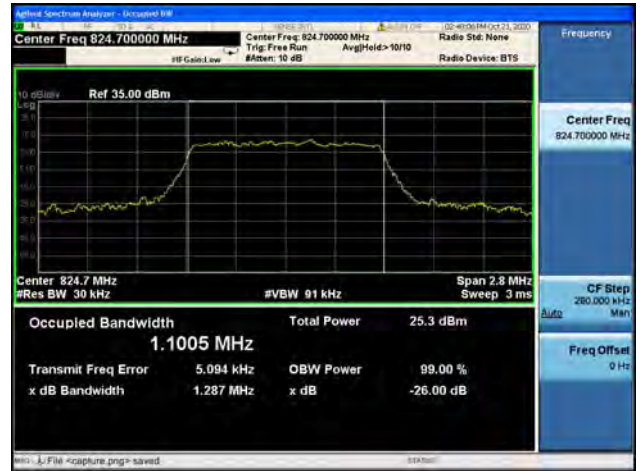




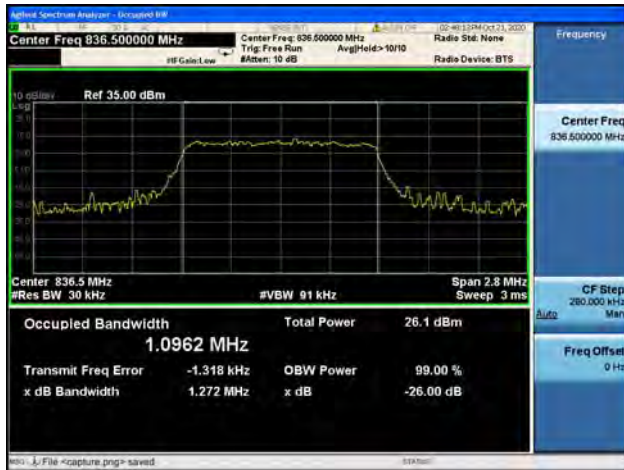
Band5 / 1.4MHz / Low CH / QPSK



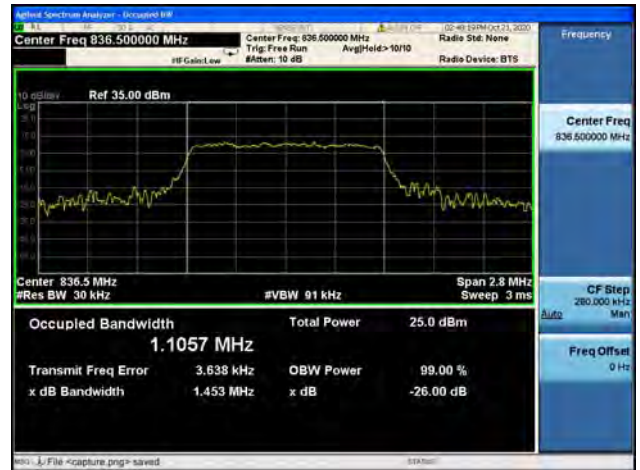
Band5 / 1.4MHz / Low CH / 16QAM



Band5 / 1.4MHz / Mid CH / QPSK



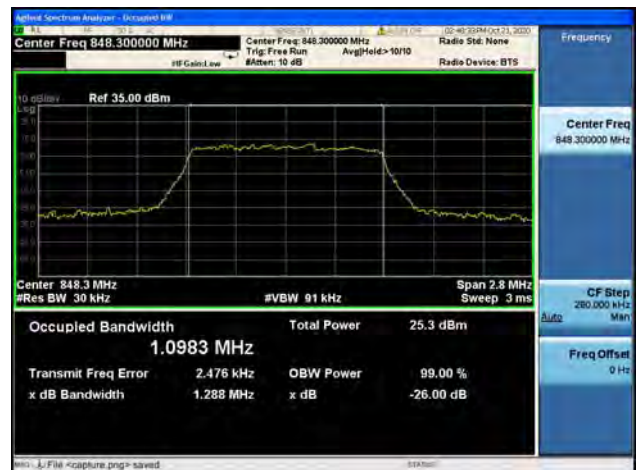
Band5 / 1.4MHz / Mid CH / 16QAM



Band5 / 1.4MHz / High CH / QPSK

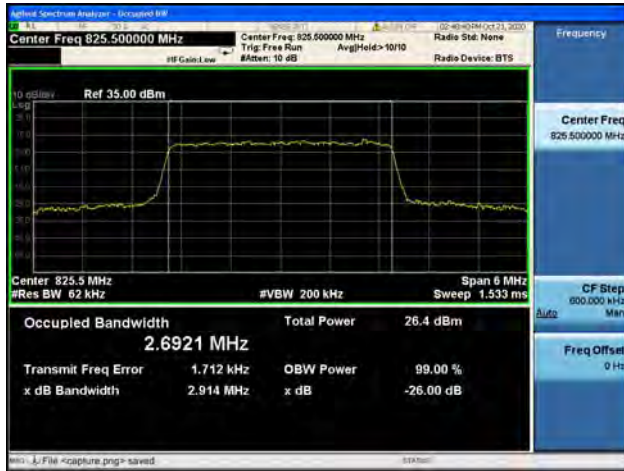


Band5 / 1.4MHz / High CH / 16QAM





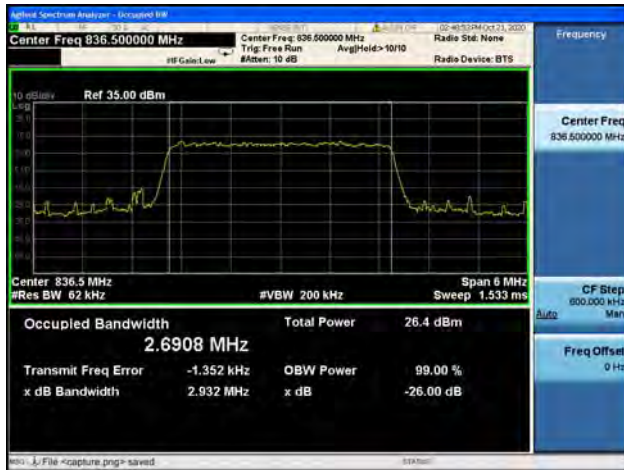
Band5 / 3MHz / Low CH / QPSK



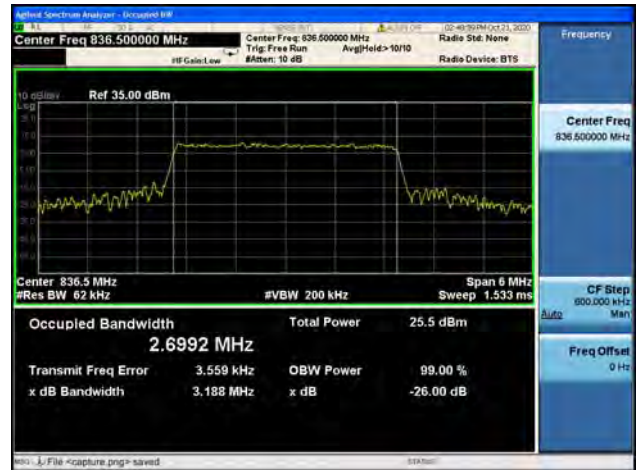
Band5 / 3MHz / Low CH / 16QAM



Band5 / 3MHz / Mid CH / QPSK



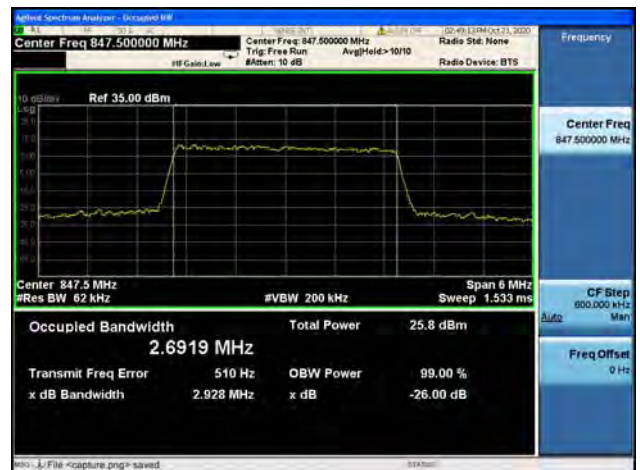
Band5 / 3MHz / Mid CH / 16QAM



Band5 / 3MHz / High CH / QPSK

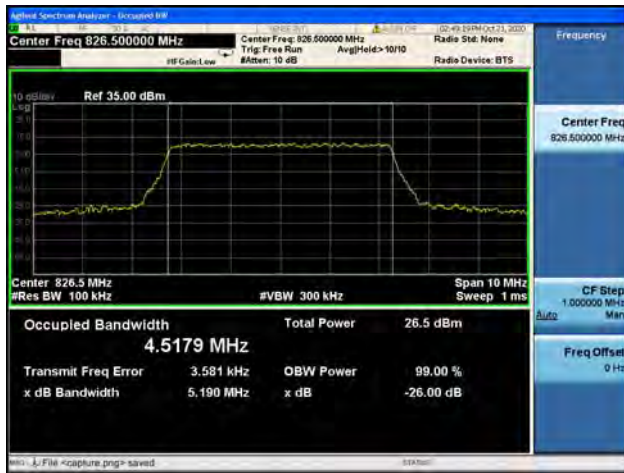


Band5 / 3MHz / High CH / 16QAM

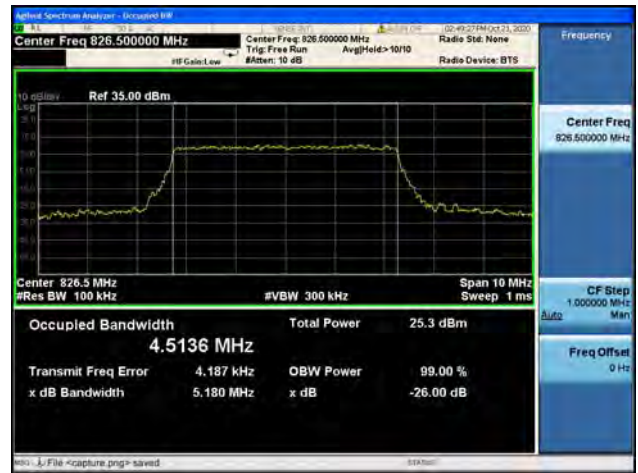




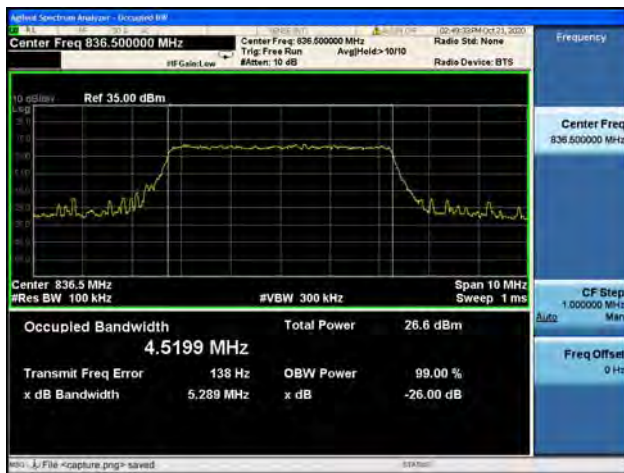
Band5 / 5MHz / Low CH / QPSK



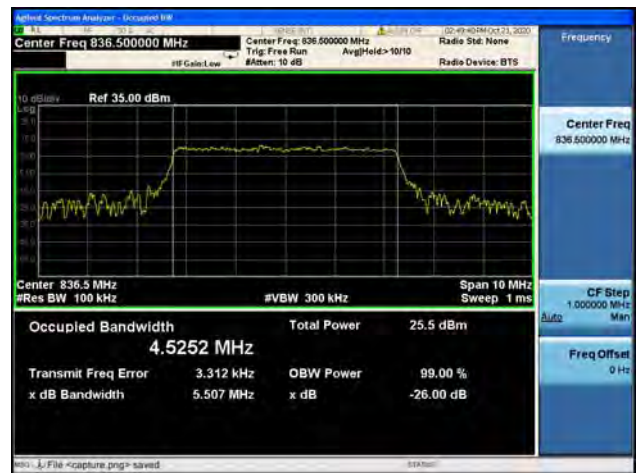
Band5 / 5MHz / Low CH / 16QAM



Band5 / 5MHz / Mid CH / QPSK



Band5 / 5MHz / Mid CH / 16QAM



Band5 / 5MHz / High CH / QPSK

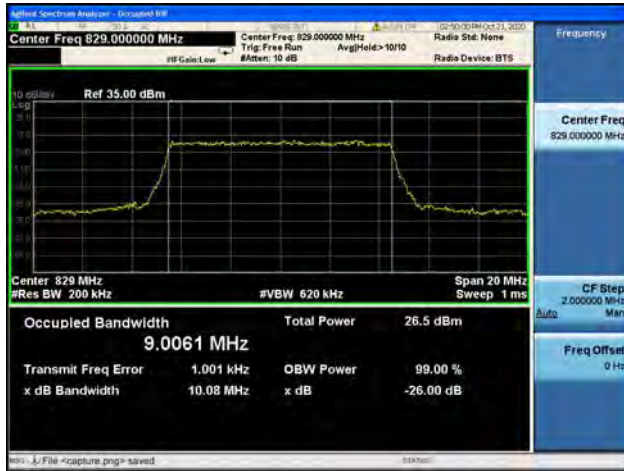


Band5 / 5MHz / High CH / 16QAM





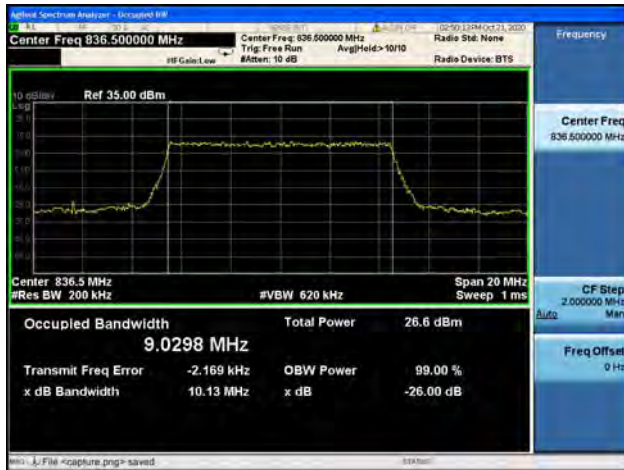
Band5 / 10MHz / Low CH / QPSK



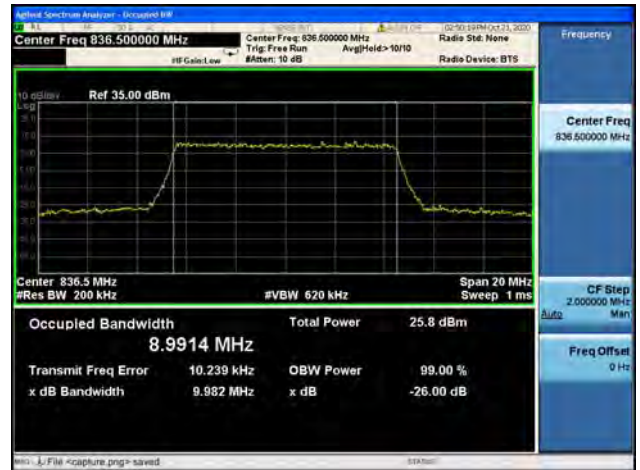
Band5 / 10MHz / Low CH / 16QAM



Band5 / 10MHz / Mid CH / QPSK



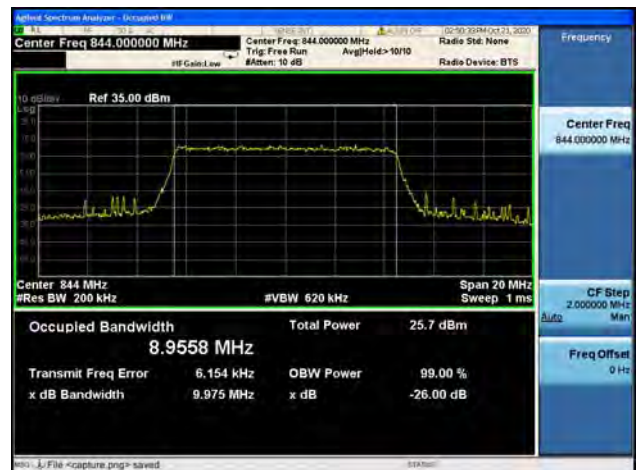
Band5 / 10MHz / Mid CH / 16QAM



Band5 / 10MHz / High CH / QPSK

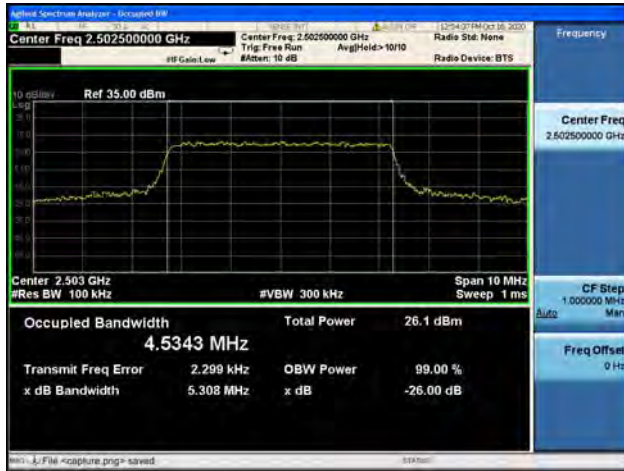


Band5 / 10MHz / High CH / 16QAM

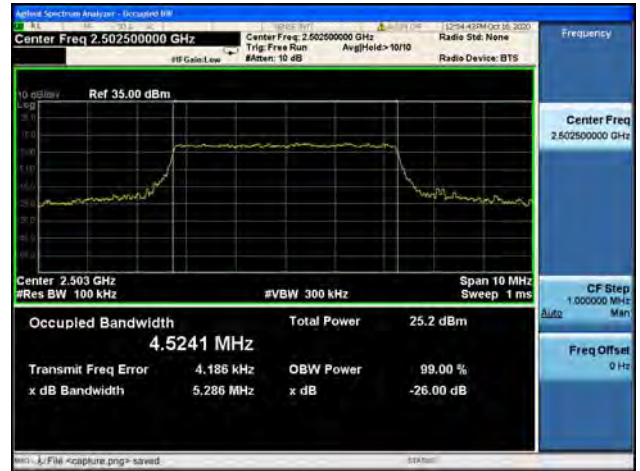




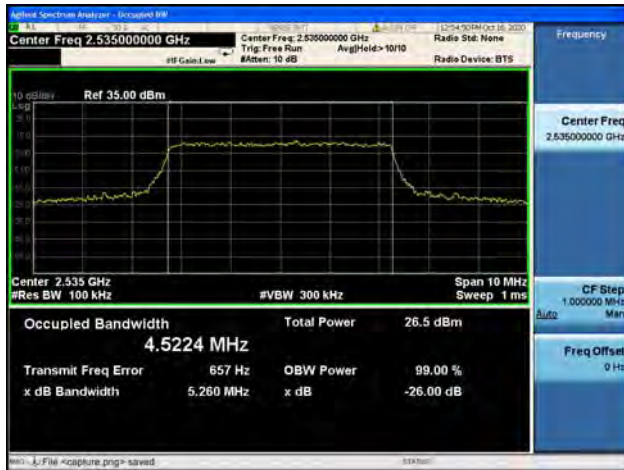
Band7 / 5MHz / Low CH / QPSK



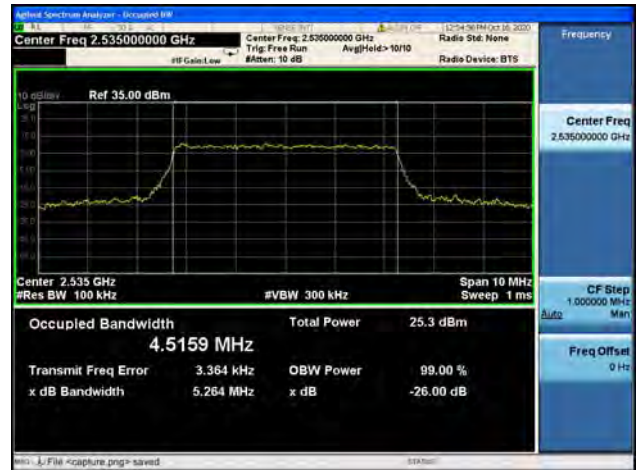
Band7 / 5MHz / Low CH / 16QAM



Band7 / 5MHz / Mid CH / QPSK



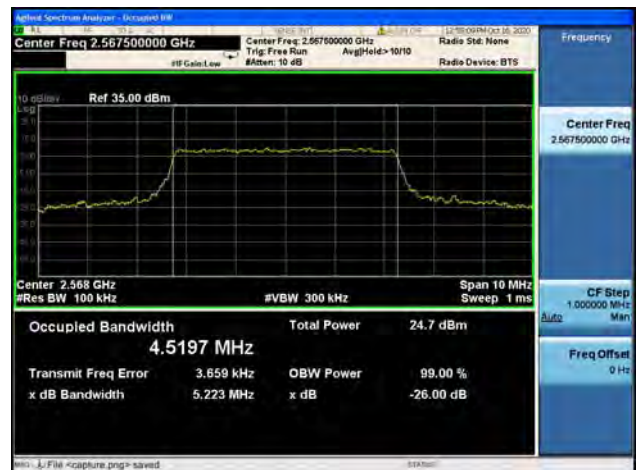
Band7 / 5MHz / Mid CH / 16QAM



Band7 / 5MHz / High CH / QPSK



Band7 / 5MHz / High CH / 16QAM





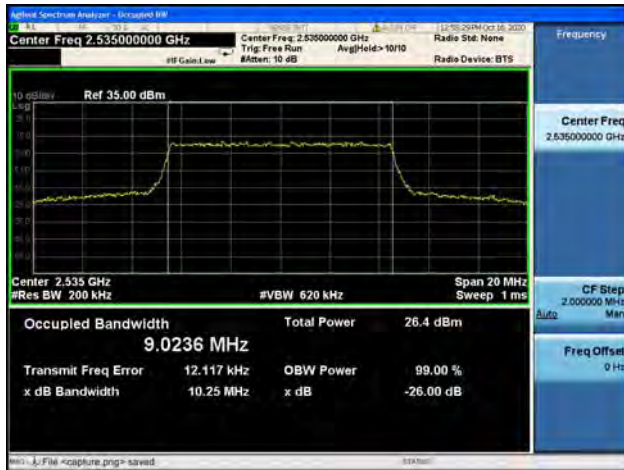
Band7 / 10MHz / Low CH / QPSK



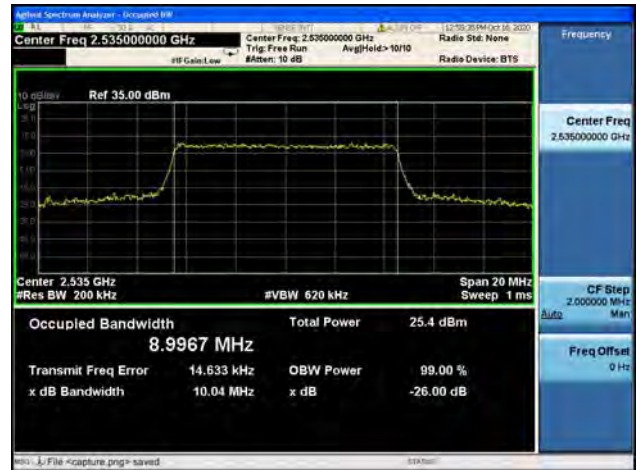
Band7 / 10MHz / Low CH / 16QAM



Band7 / 10MHz / Mid CH / QPSK



Band7 / 10MHz / Mid CH / 16QAM



Band7 / 10MHz / High CH / QPSK

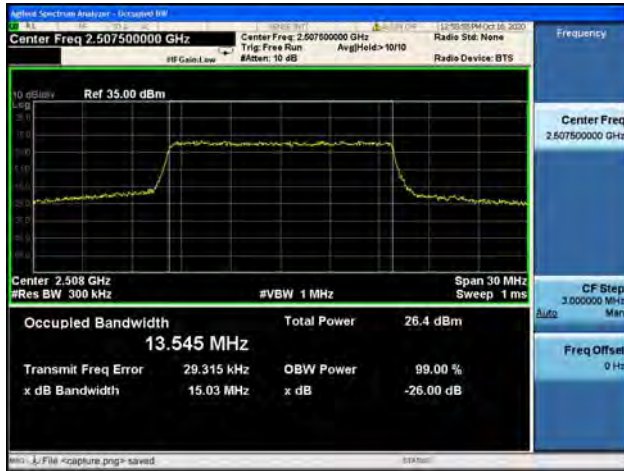


Band7 / 10MHz / High CH / 16QAM





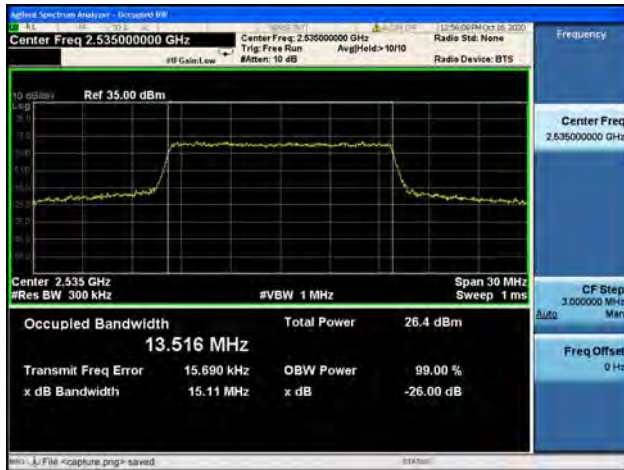
Band7 / 15MHz / Low CH / QPSK



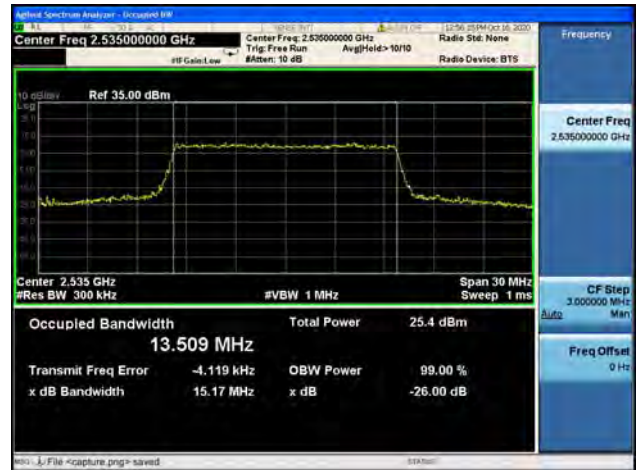
Band7 / 15MHz / Low CH / 16QAM



Band7 / 15MHz / Mid CH / QPSK



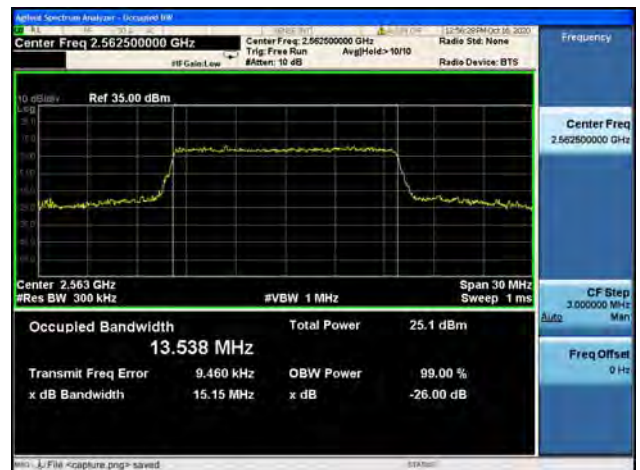
Band7 / 15MHz / Mid CH / 16QAM



Band7 / 15MHz / High CH / QPSK



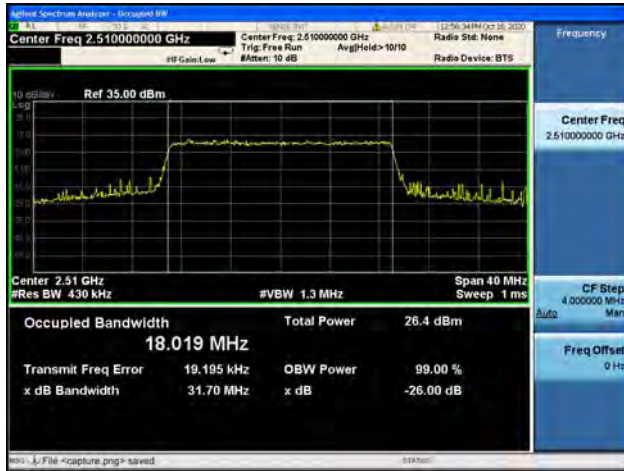
Band7 / 15MHz / High CH / 16QAM







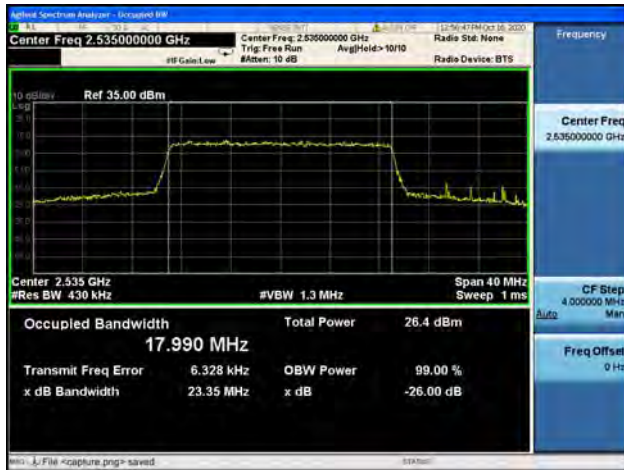
Band7 / 20MHz / Low CH / QPSK



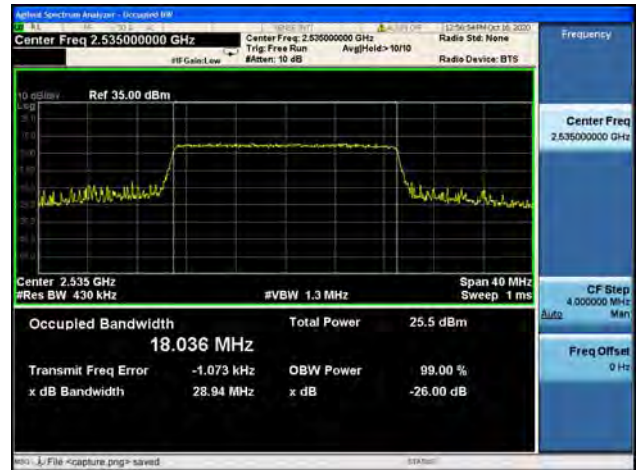
Band7 / 20MHz / Low CH / 16QAM



Band7 / 20MHz / Mid CH / QPSK



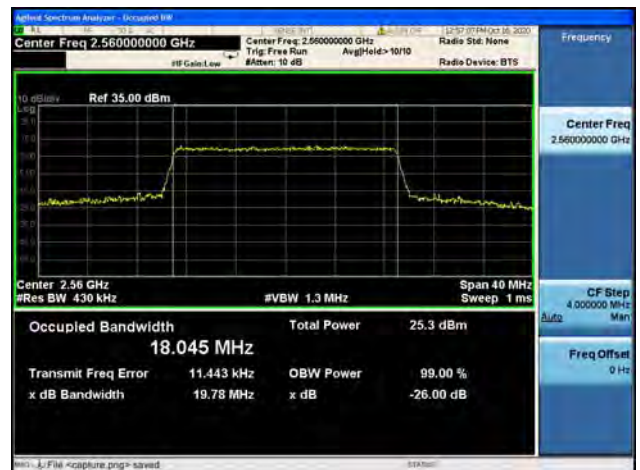
Band7 / 20MHz / Mid CH / 16QAM



Band7 / 20MHz / High CH / QPSK

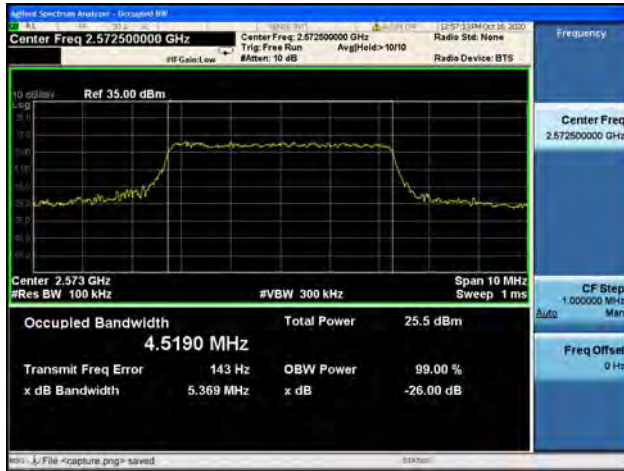


Band7 / 20MHz / High CH / 16QAM

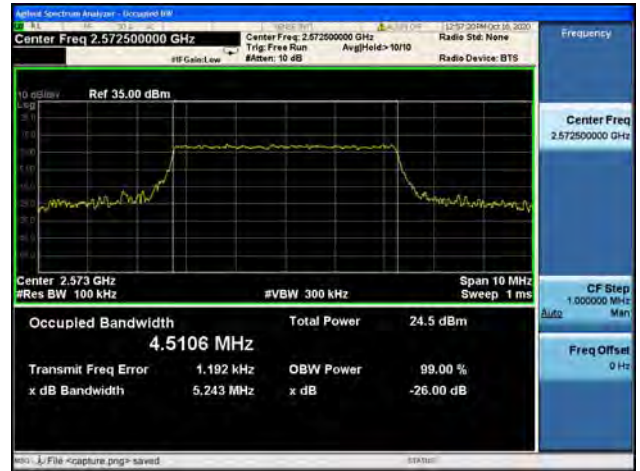




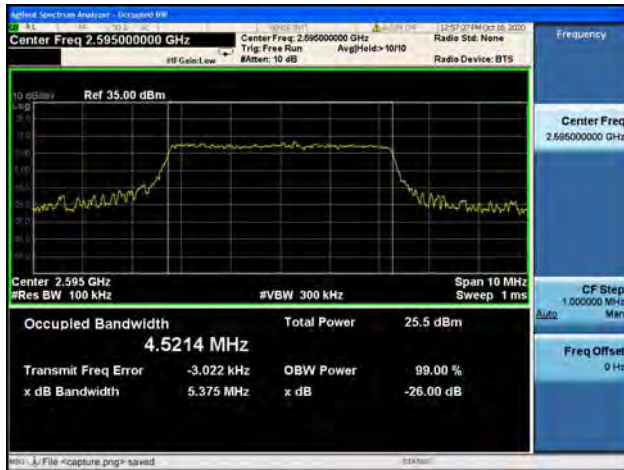
Band38 / 5MHz / Low CH / QPSK



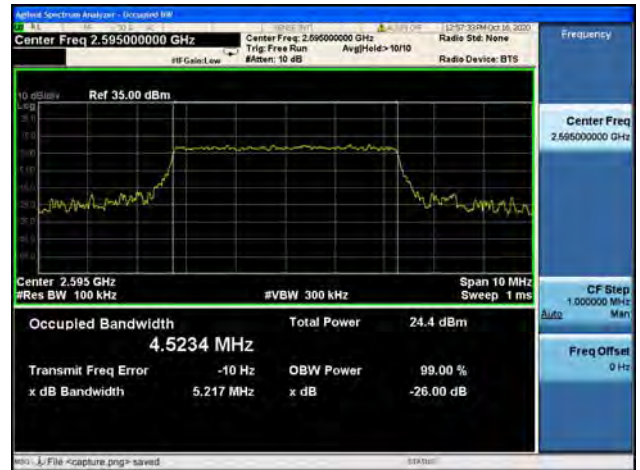
Band38 / 5MHz / Low CH / 16QAM



Band38 / 5MHz / Mid CH / QPSK



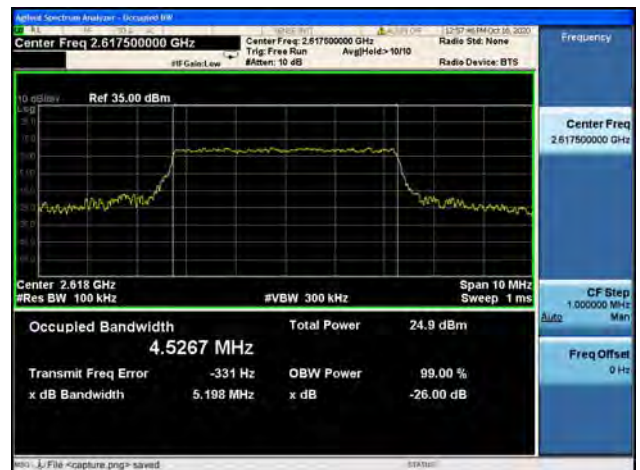
Band38 / 5MHz / Mid CH / 16QAM



Band38 / 5MHz / High CH / QPSK

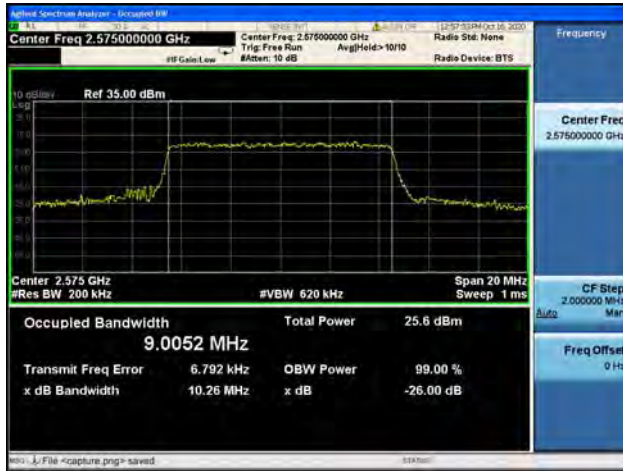


Band38 / 5MHz / High CH / 16QAM

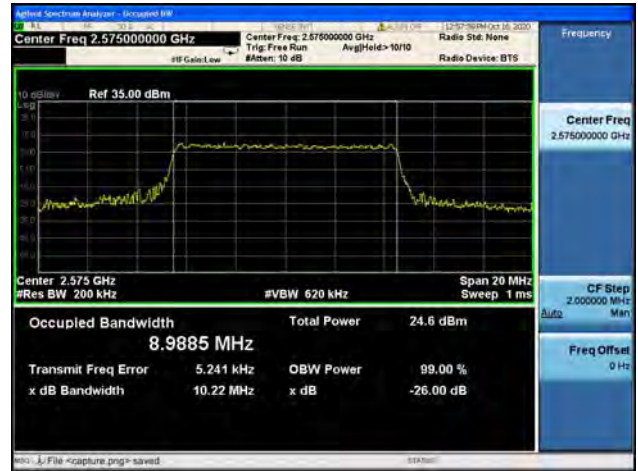




Band38 / 10MHz / Low CH / QPSK



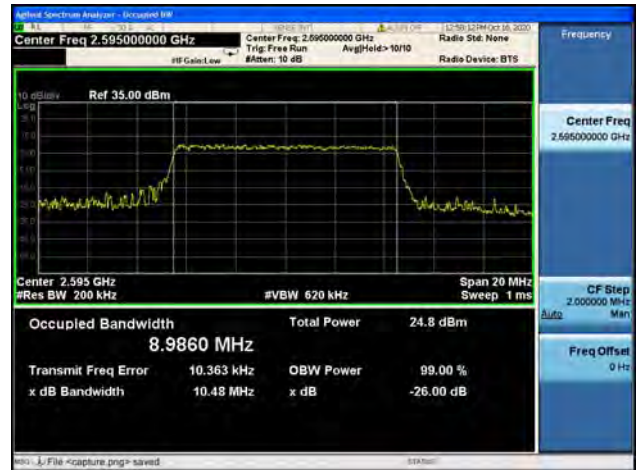
Band38 / 10MHz / Low CH / 16QAM



Band38 / 10MHz / Mid CH / QPSK



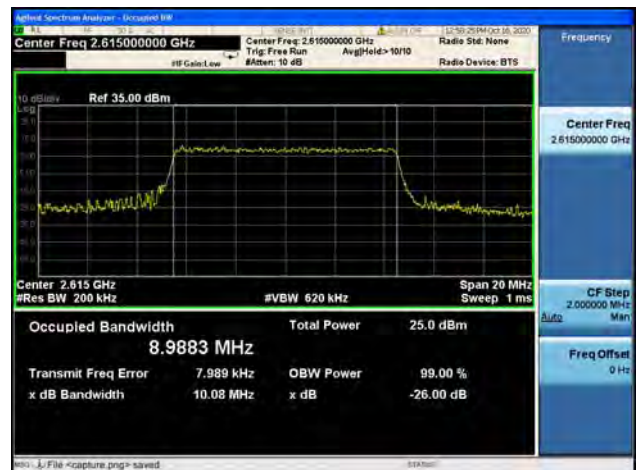
Band38 / 10MHz / Mid CH / 16QAM



Band38 / 10MHz / High CH / QPSK

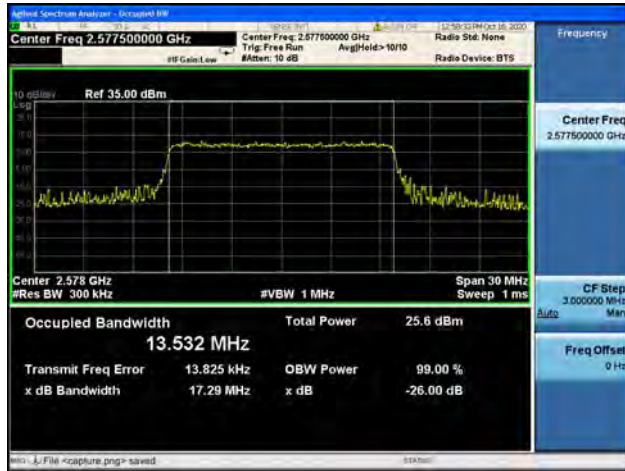


Band38 / 10MHz / High CH / 16QAM

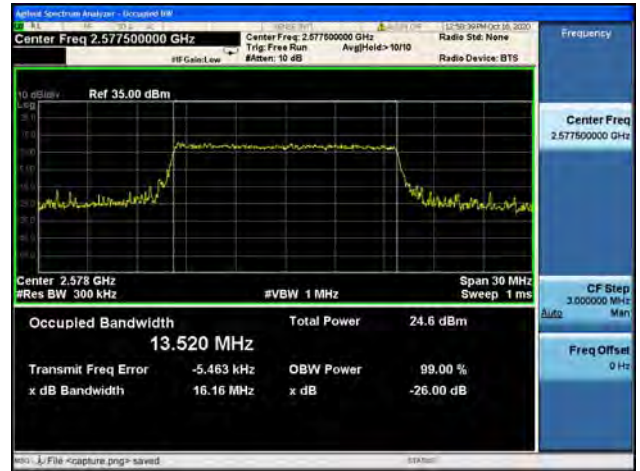




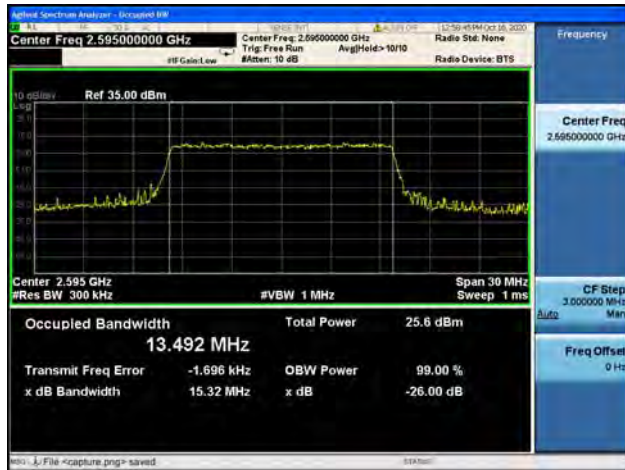
Band38 / 15MHz / Low CH / QPSK



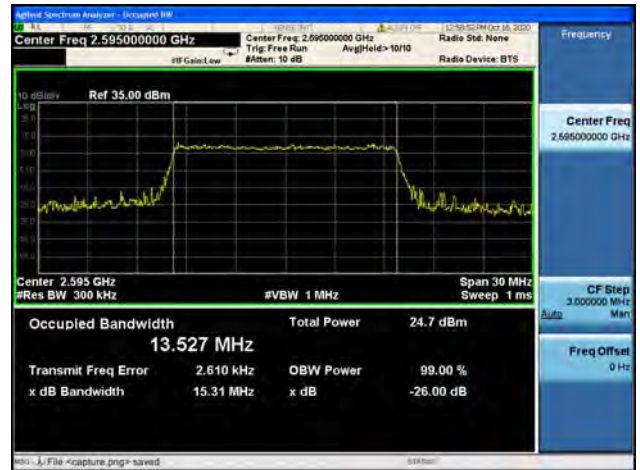
Band38 / 15MHz / Low CH / 16QAM



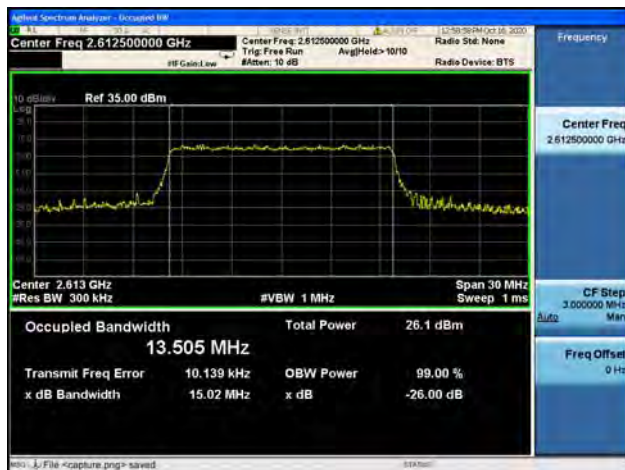
Band38 / 15MHz / Mid CH / QPSK



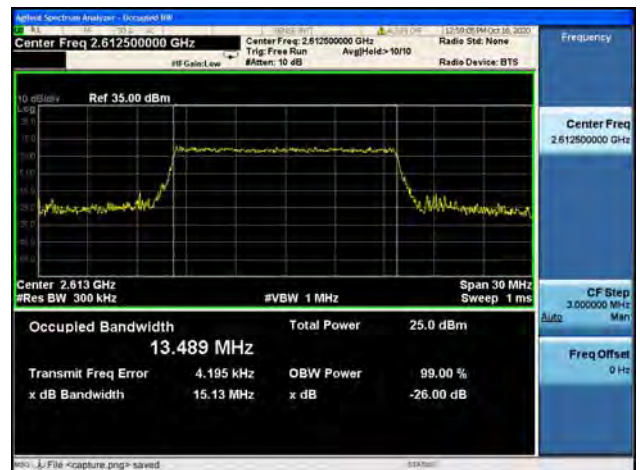
Band38 / 15MHz / Mid CH / 16QAM



Band38 / 15MHz / High CH / QPSK

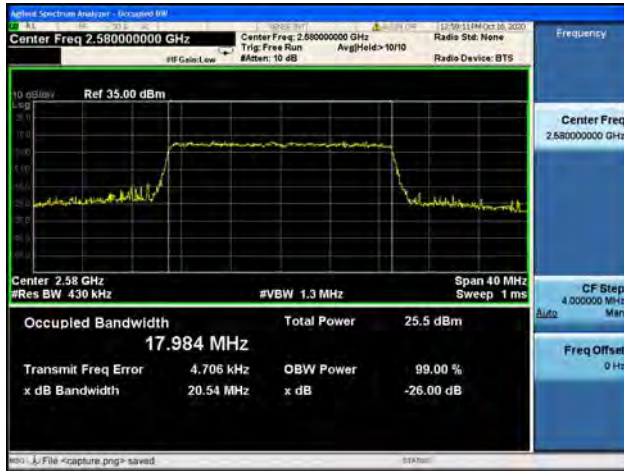


Band38 / 15MHz / High CH / 16QAM

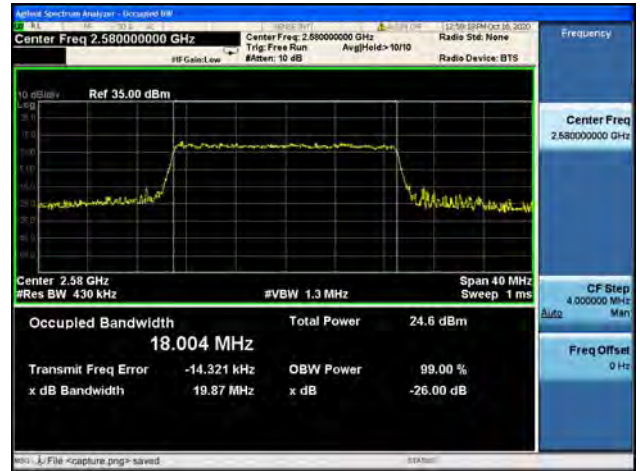




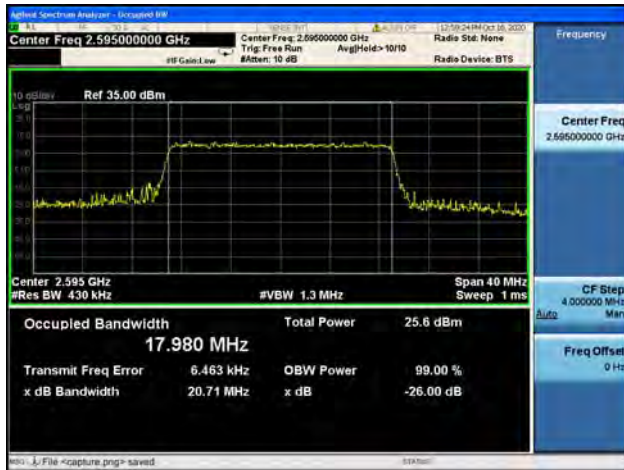
Band38 / 20MHz / Low CH / QPSK



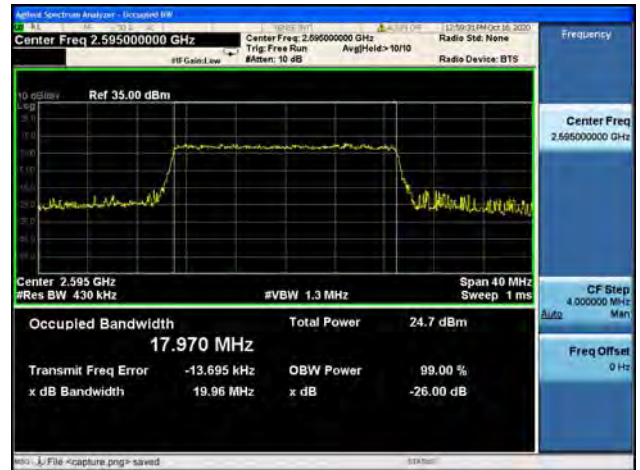
Band38 / 20MHz / Low CH / 16QAM



Band38 / 20MHz / Mid CH / QPSK



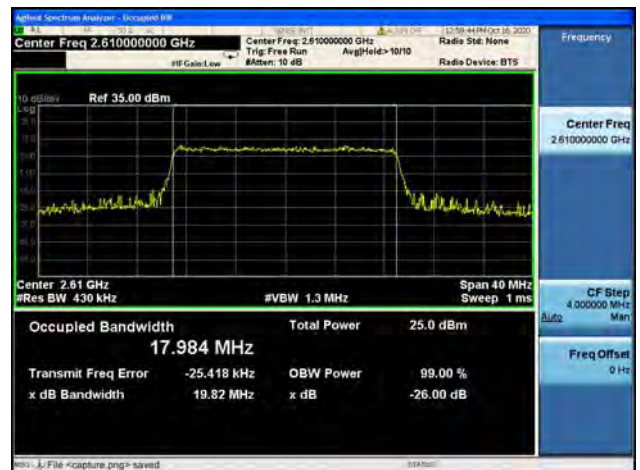
Band38 / 20MHz / Mid CH / 16QAM



Band38 / 20MHz / High CH / QPSK



Band38 / 20MHz / High CH / 16QAM

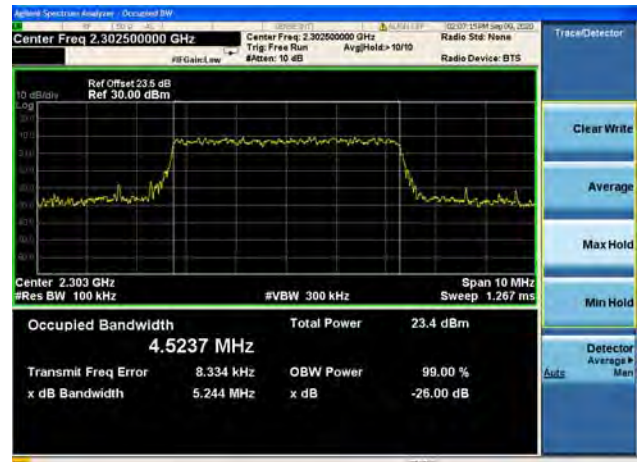




Band40/ Block A / 5MHz / Low CH / QPSK



Band40/ Block A / 5MHz / Low CH / 16QAM



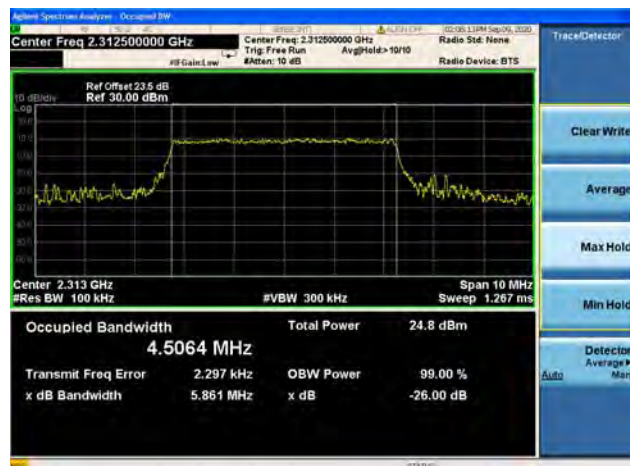
Band40/ Block A / 5MHz / Mid CH / QPSK



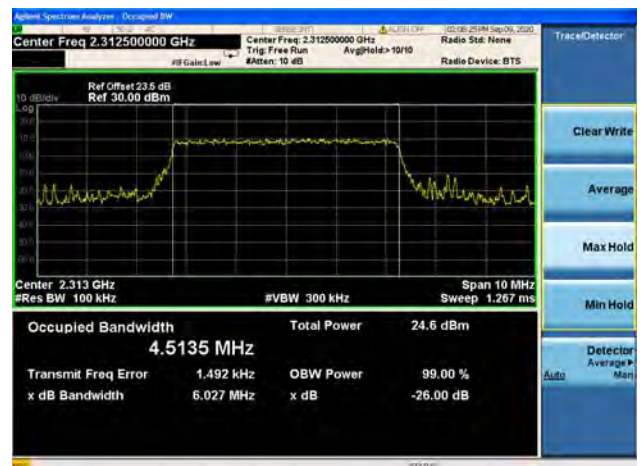
Band40/ Block A / 5MHz / Mid CH / 16QAM

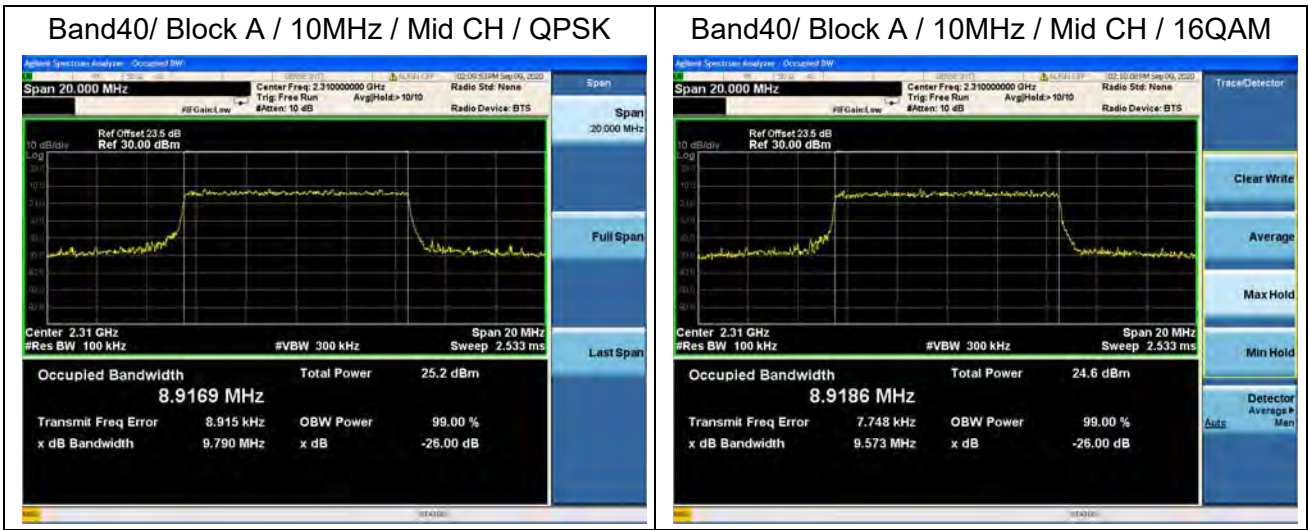


Band40/ Block A / 5MHz / High CH / QPSK



Band40/ Block A / 5MHz / High CH / 16QAM



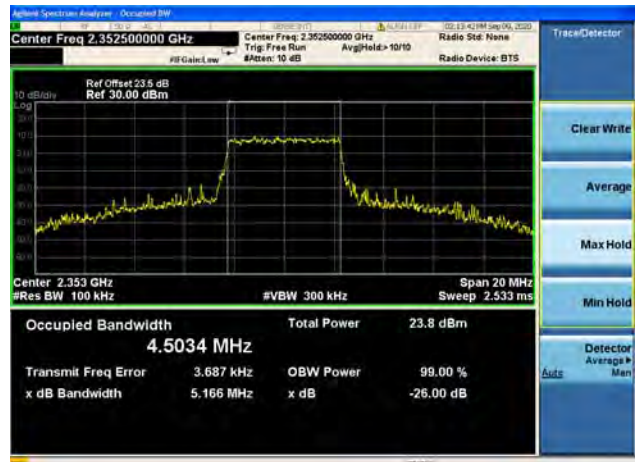




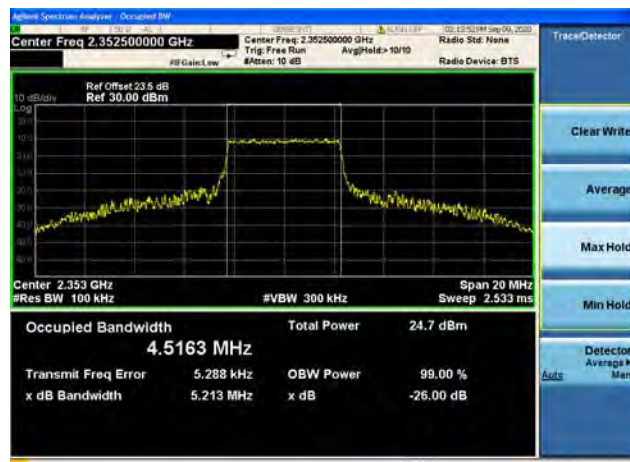
Band40/ Block B / 5MHz / Low CH / QPSK



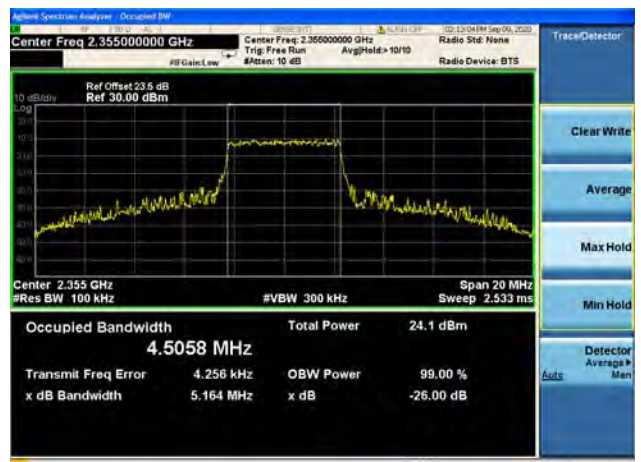
Band40/ Block B / 5MHz / Low CH / 16QAM



Band40/ Block B / 5MHz / Mid CH / QPSK



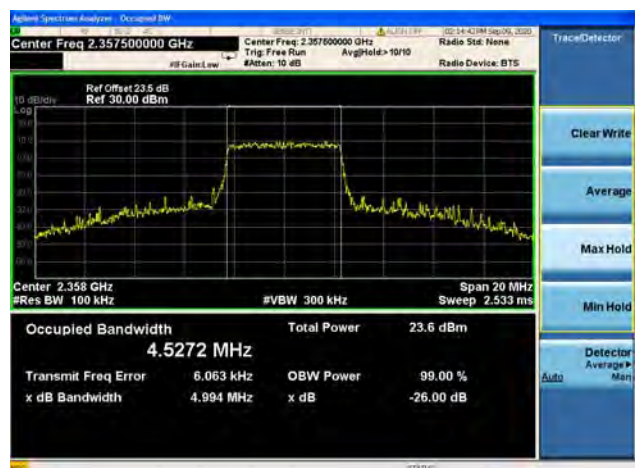
Band40/ Block B / 5MHz / Mid CH / 16QAM



Band40/ Block B / 5MHz / High CH / QPSK



Band40/ Block B / 5MHz / High CH / 16QAM







Band40/ Block B / 10MHz / Mid CH / QPSK

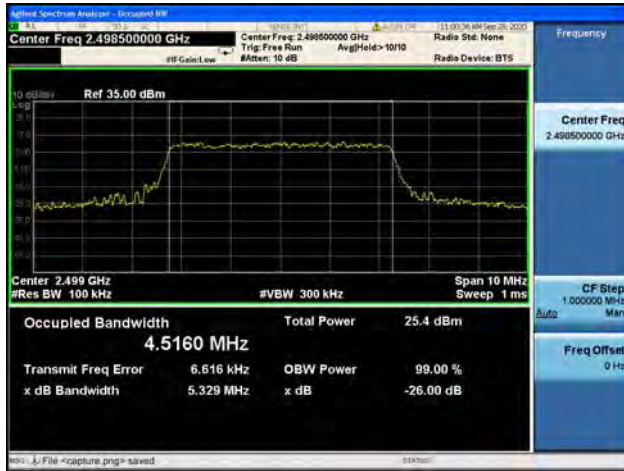


Band40/ Block B / 10MHz / Mid CH / 16QAM

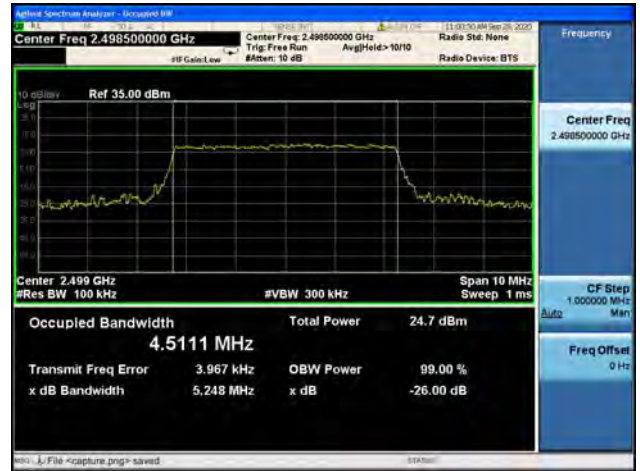




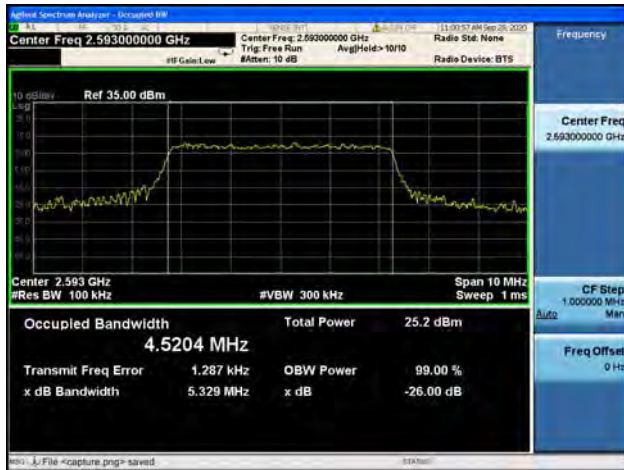
Band41 / 5MHz / Low CH / QPSK



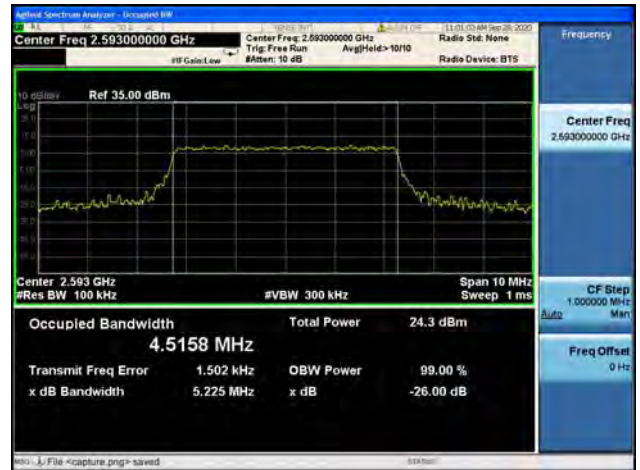
Band41 / 5MHz / Low CH / 16QAM



Band41 / 5MHz / Mid CH / QPSK



Band41 / 5MHz / Mid CH / 16QAM



Band41 / 5MHz / High CH / QPSK

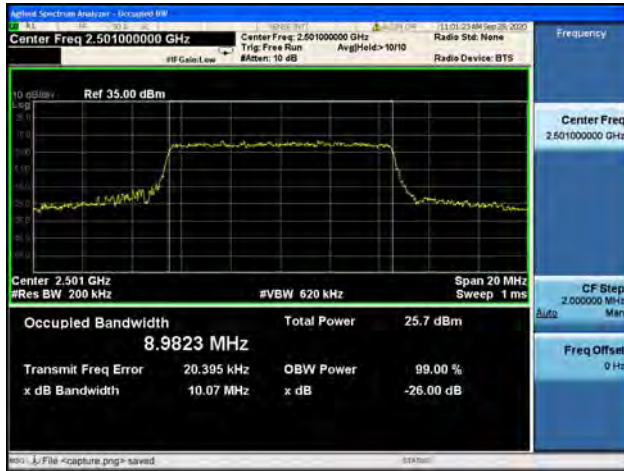


Band41 / 5MHz / High CH / 16QAM

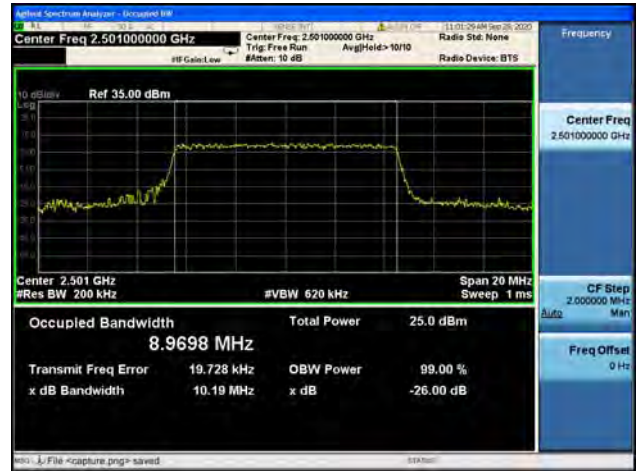




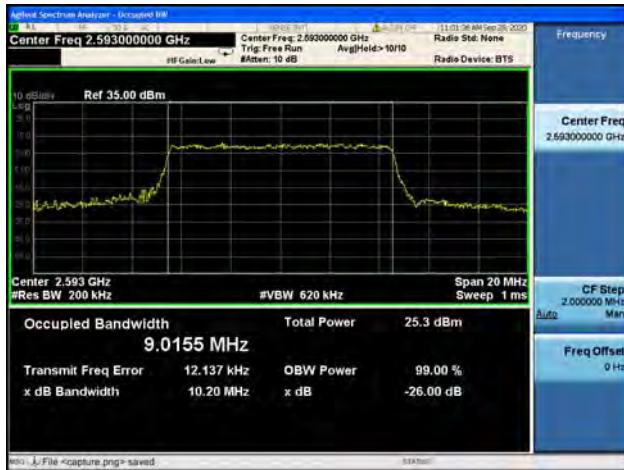
Band41 / 10MHz / Low CH / QPSK



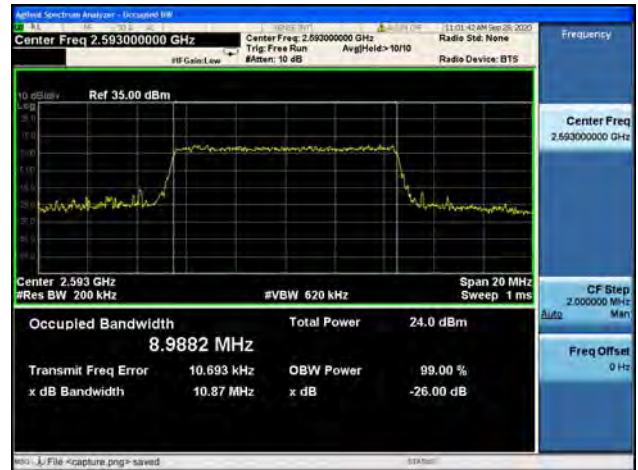
Band41 / 10MHz / Low CH / 16QAM



Band41 / 10MHz / Mid CH / QPSK



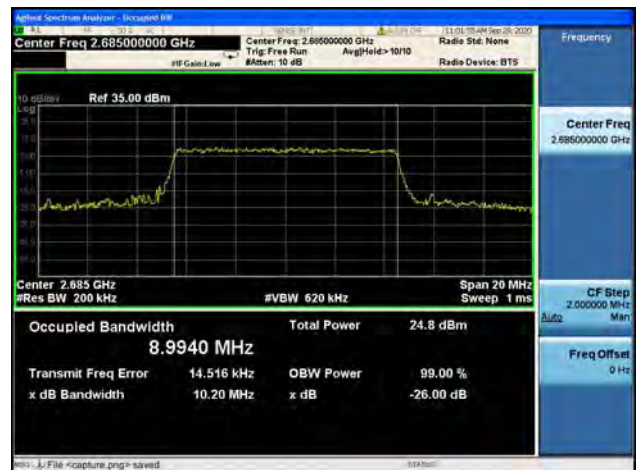
Band41 / 10MHz / Mid CH / 16QAM



Band41 / 10MHz / High CH / QPSK

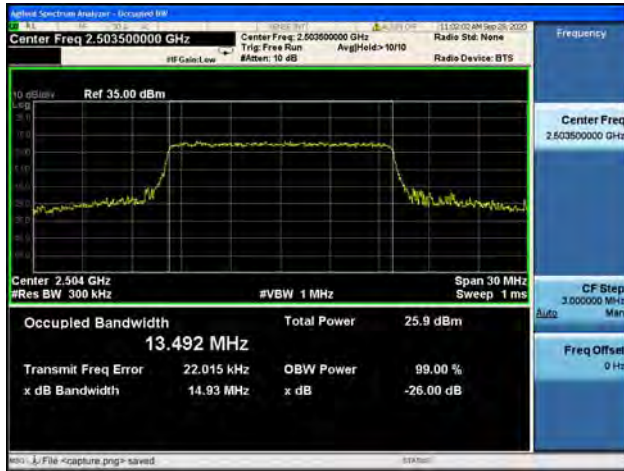


Band41 / 10MHz / High CH / 16QAM

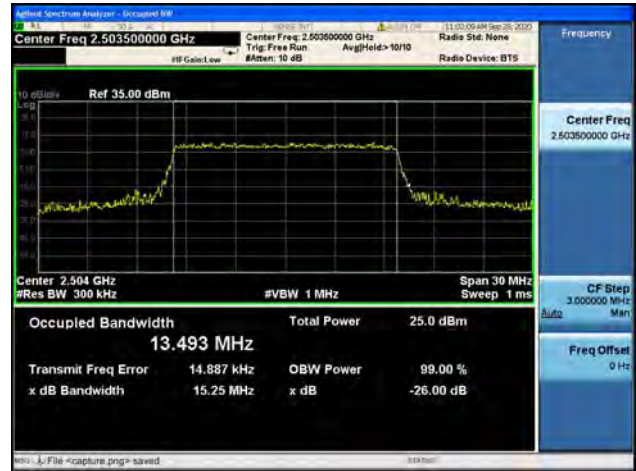




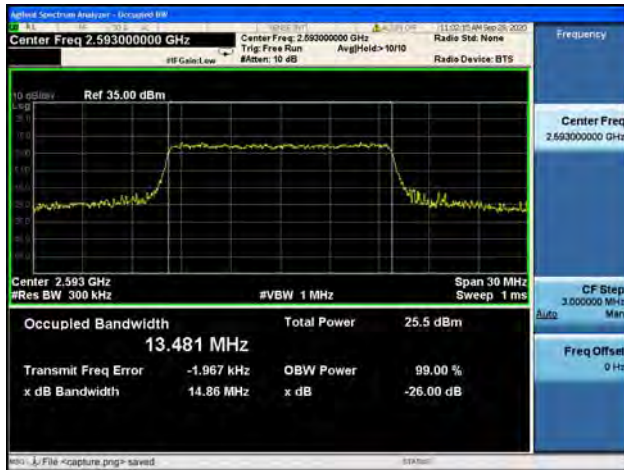
Band41 / 15MHz / Low CH / QPSK



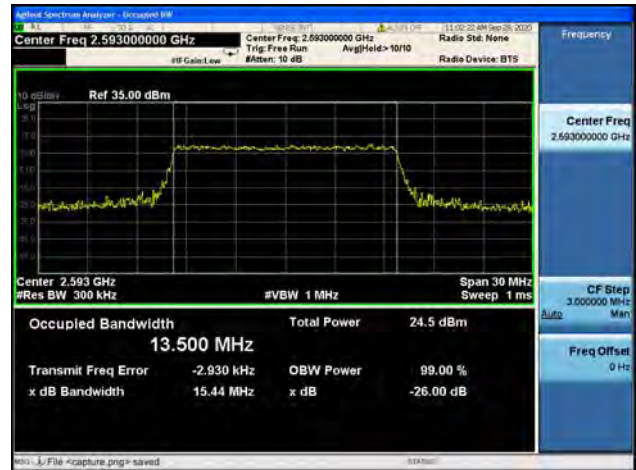
Band41 / 15MHz / Low CH / 16QAM



Band41 / 15MHz / Mid CH / QPSK



Band41 / 15MHz / Mid CH / 16QAM



Band41 / 15MHz / High CH / QPSK

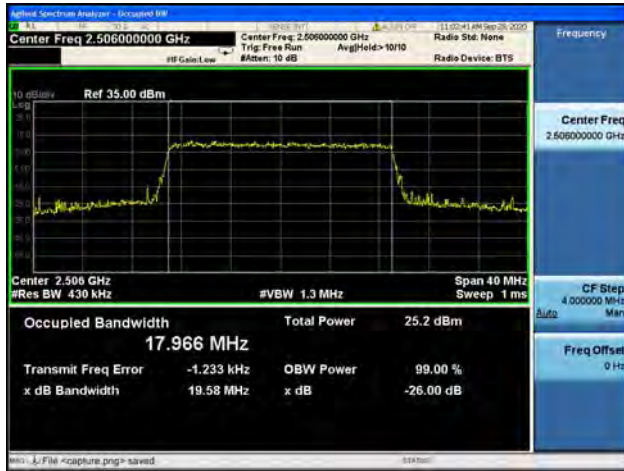


Band41 / 15MHz / High CH / 16QAM

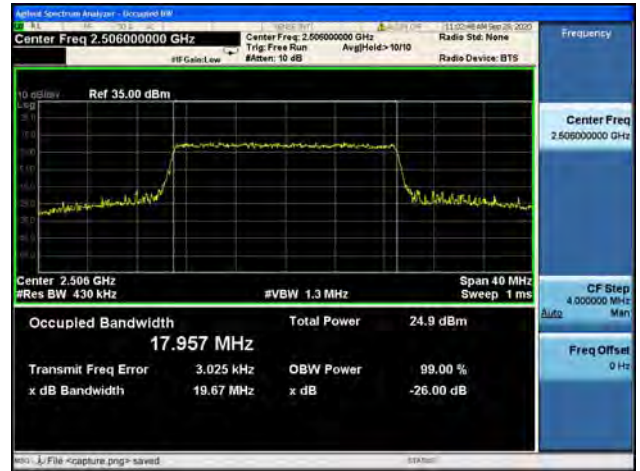




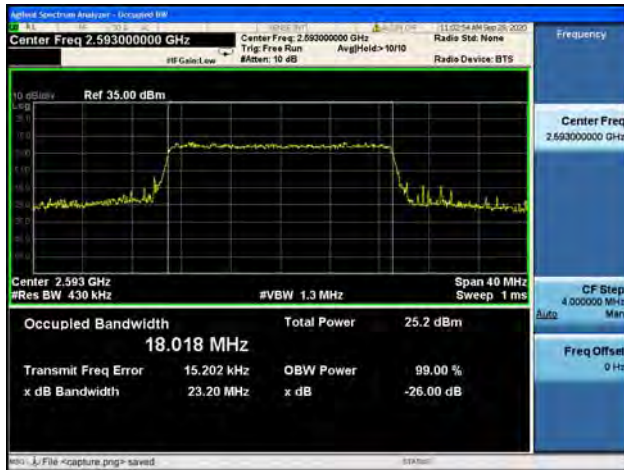
Band41 / 20MHz / Low CH / QPSK



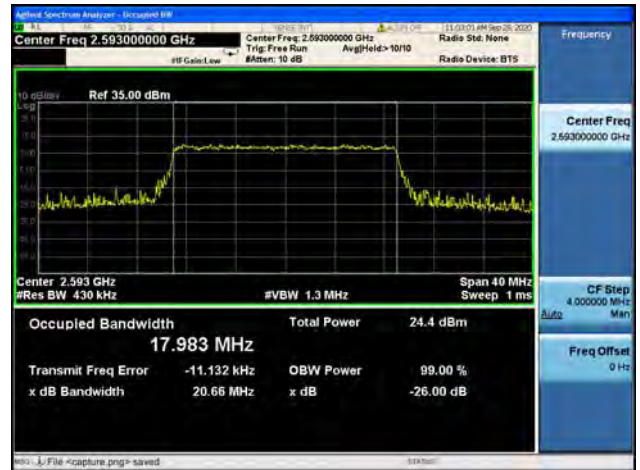
Band41 / 20MHz / Low CH / 16QAM



Band41 / 20MHz / Mid CH / QPSK



Band41 / 20MHz / Mid CH / 16QAM



Band41 / 20MHz / High CH / QPSK



Band41 / 20MHz / High CH / 16QAM



## 2.3. Frequency Stability

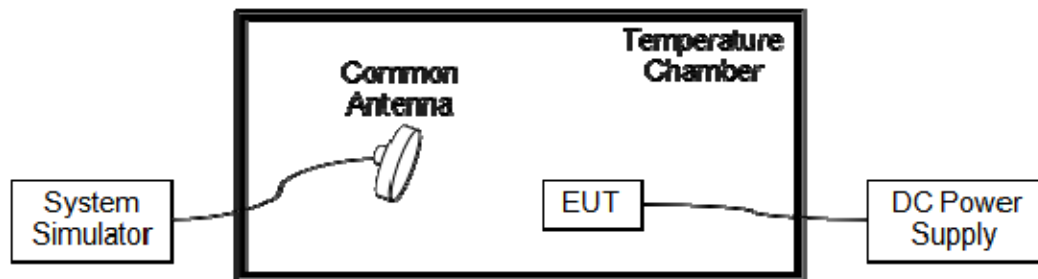
### 2.3.1. Requirement

According to FCC section 2.1055, 24.235, 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  at intervals of not more than  $10^{\circ}\text{C}$ .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

**Note:** The operating temperature of EUT is from  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ , which are specified by the applicant.

### 2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

### 2.3.3. Test procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.



**2.3.4. Test Result**

The nominal, highest and lowest extreme voltages are separately 3.80V, 4.35V and 3.00V, which are specified by the applicant; the normal temperature here used is 20°C.

<b>LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz</b>					
<b>Limit =Within Authorized Band</b>					
<b>Voltage(%)</b>	<b>Power (VDC)</b>	<b>Temp(°C)</b>	<b>Fre. Dev.(Hz)</b>	<b>Deviation (ppm)</b>	<b>Result</b>
100	3.80	+20 (Ref)	52	0.028	PASS
100		-10	43	0.023	
100		0	59	0.031	
100		+10	-55	-0.029	
100		+20	49	0.026	
100		+30	-15	-0.008	
100		+40	-47	-0.025	
100		+50	42	0.022	
115	4.37	+20	-19	-0.010	
85	3.23	+20	54	0.029	

<b>LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz</b>					
<b>Limit =Within Authorized Band</b>					
<b>Voltage(%)</b>	<b>Power (VDC)</b>	<b>Temp(°C)</b>	<b>Fre. Dev.(Hz)</b>	<b>Deviation (ppm)</b>	<b>Result</b>
100	3.80	+20 (Ref)	50	0.029	PASS
100		-10	43	0.025	
100		0	41	0.024	
100		+10	-49	-0.028	
100		+20	-46	-0.027	
100		+30	34	0.020	
100		+40	45	0.026	
100		+50	-47	-0.027	
115	4.37	+20	-19	-0.011	
85	3.23	+20	53	0.031	



LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	38	0.045	PASS
100		-10	43	0.051	
100		0	-32	-0.038	
100		+10	-55	-0.066	
100		+20	-41	-0.049	
100		+30	-37	-0.044	
100		+40	-59	-0.071	
100		+50	53	0.063	
115	4.37	+20	42	0.050	
85	3.23	+20	76	0.091	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	52	0.021	PASS
100		-10	44	0.017	
100		0	31	0.012	
100		+10	-47	-0.019	
100		+20	-35	-0.014	
100		+30	74	0.029	
100		+40	42	0.017	
100		+50	-37	-0.015	
115	4.37	+20	-40	-0.016	
85	3.23	+20	52	0.021	





LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	-45	-0.017	PASS
100		-10	42	0.016	
100		0	15	0.006	
100		+10	31	0.012	
100		+20	-30	-0.012	
100		+30	-55	-0.021	
100		+40	-49	-0.019	
100		+50	43	0.017	
115	4.37	+20	-54	-0.021	
85	3.23	+20	61	0.024	

LTE Band 40, Block A, QPSK, Channel 38750, Frequency 2310MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	32	0.014	PASS
100		-10	46	0.020	
100		0	68	0.029	
100		+10	59	0.026	
100		+20	-50	-0.022	
100		+30	-62	-0.027	
100		+40	-45	-0.019	
100		+50	50	0.022	
115	4.37	+20	81	0.035	
85	3.23	+20	55	0.024	



LTE Band 40 Block B, QPSK, Channel 39200, Frequency 2355MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	33	0.014	PASS
100		-10	42	0.018	
100		0	51	0.022	
100		+10	58	0.025	
100		+20	-48	-0.020	
100		+30	-60	-0.025	
100		+40	-35	-0.015	
100		+50	40	0.017	
115	4.37	+20	85	0.036	
85	3.23	+20	53	0.023	

LTE Band 41, QPSK, Channel 40620, Frequency 2593MHz					
Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.80	+20 (Ref)	22	0.008	PASS
100		-10	46	0.018	
100		0	38	0.015	
100		+10	40	0.015	
100		+20	-62	-0.024	
100		+30	-75	-0.029	
100		+40	-51	-0.020	
100		+50	58	0.022	
115	4.37	+20	69	0.027	
85	3.23	+20	32	0.012	

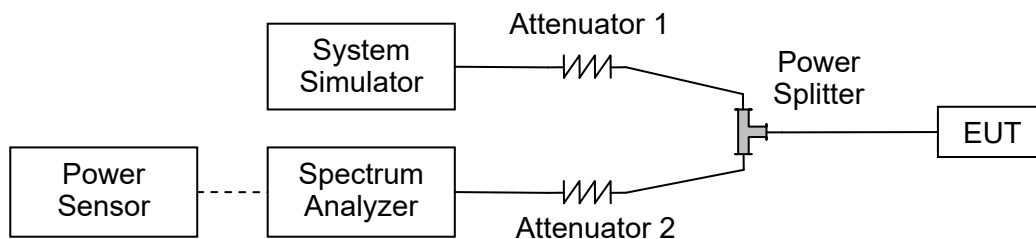
## 2.4. Peak to Average Ratio

### 2.4.1. Requirement

According to FCC section 24.232(d) and 27.50(d), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

### 2.4.2. Test Description

#### Test Set:



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.

### 2.4.3. Test procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

### 2.4.4. Test Result

Record the maximum PAPR level associated with a probability of 0.1%.



LTE Band 2					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.75	<=13	PASS
	Low	16QAM	5.58	<=13	PASS
	Mid	QPSK	5.31	<=13	PASS
	Mid	16QAM	6.14	<=13	PASS
	High	QPSK	4.73	<=13	PASS
	High	16QAM	5.58	<=13	PASS
3	Low	QPSK	5.12	<=13	PASS
	Low	16QAM	5.91	<=13	PASS
	Mid	QPSK	5.38	<=13	PASS
	Mid	16QAM	6.23	<=13	PASS
	High	QPSK	5.02	<=13	PASS
	High	16QAM	5.87	<=13	PASS
5	Low	QPSK	5.18	<=13	PASS
	Low	16QAM	5.98	<=13	PASS
	Mid	QPSK	5.56	<=13	PASS
	Mid	16QAM	6.20	<=13	PASS
	High	QPSK	5.33	<=13	PASS
	High	16QAM	6.00	<=13	PASS
10	Low	QPSK	5.40	<=13	PASS
	Low	16QAM	6.03	<=13	PASS
	Mid	QPSK	5.67	<=13	PASS
	Mid	16QAM	6.25	<=13	PASS
	High	QPSK	5.42	<=13	PASS
	High	16QAM	6.12	<=13	PASS
15	Low	QPSK	5.32	<=13	PASS
	Low	16QAM	5.92	<=13	PASS
	Mid	QPSK	5.48	<=13	PASS
	Mid	16QAM	6.16	<=13	PASS
	High	QPSK	5.27	<=13	PASS
	High	16QAM	6.00	<=13	PASS
20	Low	QPSK	5.33	<=13	PASS
	Low	16QAM	6.10	<=13	PASS
	Mid	QPSK	5.56	<=13	PASS
	Mid	16QAM	6.29	<=13	PASS
	High	QPSK	5.32	<=13	PASS
	High	16QAM	6.10	<=13	PASS



LTE Band 4					
BW(MHz)	Channel Level	Modulation	PAR Radio(dB)	Limit(dB)	Verdict
1.4	Low	QPSK	4.96	<=13	PASS
	Low	16QAM	5.80	<=13	PASS
	Mid	QPSK	5.39	<=13	PASS
	Mid	16QAM	6.13	<=13	PASS
	High	QPSK	5.31	<=13	PASS
	High	16QAM	6.00	<=13	PASS
3	Low	QPSK	5.39	<=13	PASS
	Low	16QAM	6.04	<=13	PASS
	Mid	QPSK	5.47	<=13	PASS
	Mid	16QAM	6.38	<=13	PASS
	High	QPSK	5.45	<=13	PASS
	High	16QAM	6.23	<=13	PASS
5	Low	QPSK	5.48	<=13	PASS
	Low	16QAM	6.16	<=13	PASS
	Mid	QPSK	5.62	<=13	PASS
	Mid	16QAM	6.26	<=13	PASS
	High	QPSK	5.67	<=13	PASS
	High	16QAM	6.27	<=13	PASS
10	Low	QPSK	5.50	<=13	PASS
	Low	16QAM	6.25	<=13	PASS
	Mid	QPSK	5.65	<=13	PASS
	Mid	16QAM	6.27	<=13	PASS
	High	QPSK	5.55	<=13	PASS
	High	16QAM	6.29	<=13	PASS
15	Low	QPSK	5.47	<=13	PASS
	Low	16QAM	6.16	<=13	PASS
	Mid	QPSK	5.55	<=13	PASS
	Mid	16QAM	6.19	<=13	PASS
	High	QPSK	5.59	<=13	PASS
	High	16QAM	6.27	<=13	PASS
20	Low	QPSK	5.48	<=13	PASS
	Low	16QAM	6.26	<=13	PASS
	Mid	QPSK	5.50	<=13	PASS
	Mid	16QAM	6.26	<=13	PASS
	High	QPSK	5.56	<=13	PASS
	High	16QAM	6.30	<=13	PASS