



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	23.14	0.206	23.13	0.206	23.12	0.205
15	QPSK	1	37	23.02	0.200	23.26	0.212	23.33	0.215
15	QPSK	1	74	23.16	0.207	23.20	0.209	23.37	0.217
15	QPSK	36	0	22.26	0.168	22.29	0.169	22.52	0.179
15	QPSK	36	20	22.27	0.169	22.18	0.165	22.44	0.175
15	QPSK	36	39	22.26	0.168	22.14	0.164	22.55	0.180
15	QPSK	75	0	22.16	0.164	22.24	0.167	22.44	0.175
15	16QAM	1	0	22.29	0.169	21.88	0.154	21.89	0.155
15	16QAM	1	37	21.95	0.157	22.18	0.165	22.22	0.167
15	16QAM	1	74	22.05	0.160	22.13	0.163	22.38	0.173
15	16QAM	36	0	21.32	0.136	21.19	0.132	21.49	0.141
15	16QAM	36	20	21.18	0.131	21.23	0.133	21.50	0.141
15	16QAM	36	39	21.19	0.132	21.18	0.131	21.44	0.139
15	16QAM	75	0	21.16	0.131	21.19	0.132	21.53	0.142



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20000		20175		20350	
Frequency (MHz)				1715		1732.5		1750	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	23.08	0.203	22.98	0.199	23.35	0.216
10	QPSK	1	25	23.38	0.218	23.26	0.212	23.48	0.223
10	QPSK	1	49	23.09	0.204	23.20	0.209	23.08	0.203
10	QPSK	25	0	22.36	0.172	22.24	0.167	22.49	0.177
10	QPSK	25	12	22.36	0.172	22.21	0.166	22.53	0.179
10	QPSK	25	25	22.29	0.169	22.19	0.166	22.48	0.177
10	QPSK	50	0	22.33	0.171	22.28	0.169	22.50	0.178
10	16QAM	1	0	22.29	0.169	21.88	0.154	22.11	0.163
10	16QAM	1	25	21.99	0.158	21.93	0.156	22.36	0.172
10	16QAM	1	49	22.01	0.159	21.89	0.155	22.09	0.162
10	16QAM	25	0	21.61	0.145	21.43	0.139	21.43	0.139
10	16QAM	25	12	21.48	0.141	21.22	0.132	21.47	0.140
10	16QAM	25	25	21.24	0.133	21.20	0.132	21.46	0.140
10	16QAM	50	0	21.31	0.135	21.18	0.131	21.32	0.136





LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19975		20175		20375	
Frequency (MHz)				1712.5		1732.5		1752.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	23.18	0.208	23.09	0.204	23.34	0.216
5	QPSK	1	12	23.52	0.225	23.40	0.219	23.53	0.225
5	QPSK	1	24	23.04	0.201	23.25	0.211	23.04	0.201
5	QPSK	12	0	22.23	0.167	22.14	0.164	22.51	0.178
5	QPSK	12	7	22.39	0.173	22.34	0.171	22.57	0.181
5	QPSK	12	13	22.22	0.167	22.22	0.167	22.42	0.175
5	QPSK	25	0	22.34	0.171	22.18	0.165	22.49	0.177
5	16QAM	1	0	22.56	0.180	22.11	0.163	22.42	0.175
5	16QAM	1	12	22.28	0.169	22.19	0.166	22.49	0.177
5	16QAM	1	24	22.07	0.161	22.20	0.166	22.37	0.173
5	16QAM	12	0	21.06	0.128	21.05	0.127	21.47	0.140
5	16QAM	12	7	21.31	0.135	21.25	0.133	21.47	0.140
5	16QAM	12	13	21.27	0.134	21.20	0.132	21.31	0.135
5	16QAM	25	0	21.39	0.138	21.26	0.134	21.49	0.141



REPORT No.: SZ20100035W08

LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	23.08	0.203	23.00	0.200	23.20	0.209
3	QPSK	1	8	22.99	0.199	22.83	0.192	23.02	0.200
3	QPSK	1	14	23.16	0.207	23.28	0.213	23.29	0.213
3	QPSK	8	0	22.45	0.176	22.17	0.165	22.33	0.171
3	QPSK	8	4	22.38	0.173	22.21	0.166	22.34	0.171
3	QPSK	8	7	22.32	0.171	22.25	0.168	22.31	0.170
3	QPSK	15	0	22.26	0.168	22.26	0.168	22.38	0.173
3	16QAM	1	0	21.81	0.152	21.79	0.151	22.13	0.163
3	16QAM	1	8	21.65	0.146	21.70	0.148	22.11	0.163
3	16QAM	1	14	22.06	0.161	21.81	0.152	22.10	0.162
3	16QAM	8	0	21.46	0.140	21.19	0.132	21.31	0.135
3	16QAM	8	4	21.28	0.134	21.28	0.134	21.26	0.134
3	16QAM	8	7	21.26	0.134	21.50	0.141	21.38	0.137
3	16QAM	15	0	21.16	0.131	21.14	0.130	21.08	0.128



LTE Band 4				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19957		20175		20393	
Frequency (MHz)				1710.7		1732.5		1754.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	23.14	0.206	23.22	0.210	23.47	0.222
1.4	QPSK	1	3	23.23	0.210	23.02	0.200	23.33	0.215
1.4	QPSK	1	5	23.31	0.214	23.09	0.204	23.27	0.212
1.4	QPSK	3	0	23.47	0.222	23.12	0.205	23.46	0.222
1.4	QPSK	3	1	23.38	0.218	23.10	0.204	23.51	0.224
1.4	QPSK	3	3	23.40	0.219	23.11	0.205	23.37	0.217
1.4	QPSK	6	0	22.40	0.174	22.28	0.169	22.30	0.170
1.4	16QAM	1	0	22.03	0.160	22.12	0.163	22.13	0.163
1.4	16QAM	1	3	22.21	0.166	22.29	0.169	22.20	0.166
1.4	16QAM	1	5	22.33	0.171	22.43	0.175	22.30	0.170
1.4	16QAM	3	0	22.33	0.171	22.13	0.163	22.15	0.164
1.4	16QAM	3	1	22.26	0.168	22.18	0.165	22.61	0.182
1.4	16QAM	3	3	22.60	0.182	22.12	0.163	22.56	0.180
1.4	16QAM	6	0	21.11	0.129	21.05	0.127	21.07	0.128



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	19.88	0.097	19.92	0.098	20.04	0.101
10	QPSK	1	25	19.99	0.100	20.34	0.108	19.94	0.099
10	QPSK	1	49	19.93	0.098	20.14	0.103	19.88	0.097
10	QPSK	25	0	19.01	0.080	19.11	0.081	19.11	0.081
10	QPSK	25	12	19.10	0.081	19.17	0.083	19.10	0.081
10	QPSK	25	25	19.13	0.082	19.14	0.082	19.14	0.082
10	QPSK	50	0	19.07	0.081	19.11	0.081	19.16	0.082
10	16QAM	1	0	18.71	0.074	18.83	0.076	19.12	0.082
10	16QAM	1	25	19.19	0.083	19.08	0.081	18.97	0.079
10	16QAM	1	49	18.69	0.074	19.03	0.080	19.06	0.081
10	16QAM	25	0	18.05	0.064	18.23	0.067	18.19	0.066
10	16QAM	25	12	18.21	0.066	18.11	0.065	18.19	0.066
10	16QAM	25	25	18.16	0.065	18.17	0.066	18.17	0.066
10	16QAM	50	0	18.08	0.064	18.20	0.066	18.18	0.066



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.73	0.094	19.64	0.092	19.82	0.096
5	QPSK	1	12	19.91	0.098	20.06	0.101	20.04	0.101
5	QPSK	1	24	19.66	0.092	19.97	0.099	19.87	0.097
5	QPSK	12	0	19.04	0.080	19.10	0.081	19.18	0.083
5	QPSK	12	7	19.04	0.080	19.17	0.083	19.15	0.082
5	QPSK	12	13	18.97	0.079	19.09	0.081	19.13	0.082
5	QPSK	25	0	19.01	0.080	19.22	0.084	19.07	0.081
5	16QAM	1	0	18.85	0.077	19.16	0.082	19.04	0.080
5	16QAM	1	12	19.19	0.083	19.00	0.079	19.00	0.079
5	16QAM	1	24	18.87	0.077	18.77	0.075	19.18	0.083
5	16QAM	12	0	17.83	0.061	18.19	0.066	18.18	0.066
5	16QAM	12	7	17.90	0.062	18.26	0.067	18.28	0.067
5	16QAM	12	13	17.90	0.062	18.14	0.065	18.21	0.066
5	16QAM	25	0	17.81	0.060	18.19	0.066	18.13	0.065



REPORT No.: SZ20100035W08

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	19.85	0.097	19.86	0.097	19.93	0.098
3	QPSK	1	8	19.94	0.099	20.16	0.104	19.99	0.100
3	QPSK	1	14	19.81	0.096	20.13	0.103	20.02	0.100
3	QPSK	8	0	18.91	0.078	19.13	0.082	19.13	0.082
3	QPSK	8	4	19.08	0.081	19.16	0.082	19.19	0.083
3	QPSK	8	7	19.02	0.080	19.19	0.083	19.12	0.082
3	QPSK	15	0	18.93	0.078	19.22	0.084	19.23	0.084
3	16QAM	1	0	19.05	0.080	18.66	0.073	18.91	0.078
3	16QAM	1	8	19.04	0.080	18.86	0.077	18.59	0.072
3	16QAM	1	14	19.04	0.080	18.89	0.077	18.58	0.072
3	16QAM	8	0	18.06	0.064	18.18	0.066	17.91	0.062
3	16QAM	8	4	18.06	0.064	18.29	0.067	18.24	0.067
3	16QAM	8	7	18.12	0.065	18.13	0.065	17.80	0.060
3	16QAM	15	0	17.93	0.062	17.93	0.062	18.13	0.065





LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	19.90	0.098	19.90	0.098	19.99	0.100
1.4	QPSK	1	3	20.12	0.103	20.12	0.103	20.31	0.107
1.4	QPSK	1	5	20.21	0.105	20.21	0.105	20.19	0.104
1.4	QPSK	3	0	20.13	0.103	20.13	0.103	20.18	0.104
1.4	QPSK	3	1	20.14	0.103	20.14	0.103	20.44	0.111
1.4	QPSK	3	3	20.20	0.105	20.20	0.105	20.38	0.109
1.4	QPSK	6	0	19.12	0.082	19.12	0.082	19.21	0.083
1.4	16QAM	1	0	19.19	0.083	19.19	0.083	18.95	0.079
1.4	16QAM	1	3	19.20	0.083	19.21	0.083	18.97	0.079
1.4	16QAM	1	5	19.20	0.083	19.20	0.083	19.03	0.080
1.4	16QAM	3	0	19.19	0.083	19.19	0.083	19.07	0.081
1.4	16QAM	3	1	19.23	0.084	19.23	0.084	19.21	0.083
1.4	16QAM	3	3	19.28	0.085	19.28	0.085	18.99	0.079
1.4	16QAM	6	0	18.03	0.064	18.03	0.064	17.75	0.060



REPORT No.: SZ20100035W08

LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20850		21100		21350	
Frequency (MHz)				2510		2535		2560	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	20.99	0.126	20.89	0.123	20.77	0.119
20	QPSK	1	49	20.88	0.122	21.15	0.130	21.10	0.129
20	QPSK	1	99	20.89	0.123	21.00	0.126	20.93	0.124
20	QPSK	50	0	20.26	0.106	20.38	0.109	20.17	0.104
20	QPSK	50	24	20.38	0.109	20.25	0.106	20.24	0.106
20	QPSK	50	50	20.24	0.106	20.03	0.101	20.17	0.104
20	QPSK	100	0	20.24	0.106	20.25	0.106	20.21	0.105
20	16QAM	1	0	19.55	0.090	19.80	0.095	19.80	0.095
20	16QAM	1	49	19.72	0.094	19.63	0.092	19.65	0.092
20	16QAM	1	99	19.67	0.093	19.54	0.090	19.54	0.090
20	16QAM	50	0	19.12	0.082	19.08	0.081	19.25	0.084
20	16QAM	50	24	19.24	0.084	18.94	0.078	19.22	0.084
20	16QAM	50	50	18.84	0.077	19.00	0.079	19.02	0.080
20	16QAM	100	0	18.70	0.074	18.93	0.078	19.11	0.081



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	20.52	0.113	20.91	0.123	21.02	0.126
15	QPSK	1	37	20.94	0.124	21.02	0.126	21.01	0.126
15	QPSK	1	74	20.85	0.122	20.91	0.123	21.01	0.126
15	QPSK	36	0	20.12	0.103	19.89	0.097	20.24	0.106
15	QPSK	36	20	20.11	0.103	19.94	0.099	20.31	0.107
15	QPSK	36	39	20.13	0.103	20.04	0.101	20.11	0.103
15	QPSK	75	0	20.11	0.103	20.02	0.100	20.24	0.106
15	16QAM	1	0	19.82	0.096	19.74	0.094	19.78	0.095
15	16QAM	1	37	19.70	0.093	19.65	0.092	19.62	0.092
15	16QAM	1	74	19.77	0.095	19.73	0.094	19.96	0.099
15	16QAM	36	0	18.68	0.074	18.90	0.078	19.17	0.083
15	16QAM	36	20	18.77	0.075	18.92	0.078	19.12	0.082
15	16QAM	36	39	18.75	0.075	18.95	0.079	19.12	0.082
15	16QAM	75	0	18.77	0.075	18.85	0.077	19.23	0.084



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	20.88	0.122	20.86	0.122	21.02	0.126
10	QPSK	1	25	20.93	0.124	21.04	0.127	21.01	0.126
10	QPSK	1	49	20.73	0.118	21.01	0.126	20.94	0.124
10	QPSK	25	0	20.22	0.105	19.85	0.097	20.28	0.107
10	QPSK	25	12	20.21	0.105	20.01	0.100	20.22	0.105
10	QPSK	25	25	19.80	0.095	20.04	0.101	20.13	0.103
10	QPSK	50	0	19.83	0.096	19.99	0.100	20.14	0.103
10	16QAM	1	0	19.85	0.097	19.72	0.094	19.91	0.098
10	16QAM	1	25	19.60	0.091	19.63	0.092	20.00	0.100
10	16QAM	1	49	19.57	0.091	20.01	0.100	19.91	0.098
10	16QAM	25	0	18.81	0.076	19.08	0.081	19.12	0.082
10	16QAM	25	12	18.73	0.075	18.99	0.079	19.02	0.080
10	16QAM	25	25	18.73	0.075	19.07	0.081	19.19	0.083
10	16QAM	50	0	19.02	0.080	19.11	0.081	19.24	0.084



REPORT No.: SZ20100035W08

LTE Band 7				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	20.99	0.126	20.68	0.117	21.00	0.126
5	QPSK	1	12	21.01	0.126	21.01	0.126	20.99	0.126
5	QPSK	1	24	20.89	0.123	20.77	0.119	20.83	0.121
5	QPSK	12	0	19.70	0.093	19.89	0.097	20.07	0.102
5	QPSK	12	7	19.77	0.095	19.98	0.100	20.17	0.104
5	QPSK	12	13	19.73	0.094	19.96	0.099	20.11	0.103
5	QPSK	25	0	19.71	0.094	19.99	0.100	20.18	0.104
5	16QAM	1	0	19.62	0.092	19.91	0.098	19.64	0.092
5	16QAM	1	12	19.62	0.092	19.80	0.095	19.55	0.090
5	16QAM	1	24	19.97	0.099	19.73	0.094	19.76	0.095
5	16QAM	12	0	18.82	0.076	18.99	0.079	19.02	0.080
5	16QAM	12	7	18.74	0.075	19.11	0.081	19.03	0.080
5	16QAM	12	13	18.68	0.074	18.89	0.077	19.02	0.080
5	16QAM	25	0	19.11	0.081	19.04	0.080	19.23	0.084

Product Quality



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	19.94	0.099	19.89	0.097	20.05	0.101
10	QPSK	1	25	20.34	0.108	19.93	0.098	20.33	0.108
10	QPSK	1	49	19.87	0.097	19.92	0.098	20.35	0.108
10	QPSK	25	0	19.15	0.082	19.13	0.082	19.32	0.086
10	QPSK	25	12	19.18	0.083	19.27	0.085	19.37	0.086
10	QPSK	25	25	19.23	0.084	19.22	0.084	19.35	0.086
10	QPSK	50	0	19.33	0.086	19.28	0.085	19.31	0.085
10	16QAM	1	0	18.70	0.074	19.13	0.082	19.02	0.080
10	16QAM	1	25	18.98	0.079	19.02	0.080	19.17	0.083
10	16QAM	1	49	18.77	0.075	19.18	0.083	18.96	0.079
10	16QAM	25	0	18.08	0.064	18.19	0.066	18.11	0.065
10	16QAM	25	12	18.07	0.064	18.24	0.067	18.30	0.068
10	16QAM	25	25	18.32	0.068	18.27	0.067	18.33	0.068
10	16QAM	50	0	18.29	0.067	18.20	0.066	18.30	0.068





LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23095		23155	
Frequency (MHz)				701.5		707.5		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.76	0.095	19.93	0.098	19.97	0.099
5	QPSK	1	12	20.16	0.104	20.18	0.104	20.26	0.106
5	QPSK	1	24	19.81	0.096	19.93	0.098	20.03	0.101
5	QPSK	12	0	19.08	0.081	19.22	0.084	19.28	0.085
5	QPSK	12	7	19.17	0.083	19.26	0.084	19.34	0.086
5	QPSK	12	13	19.19	0.083	19.29	0.085	19.33	0.086
5	QPSK	25	0	19.18	0.083	19.24	0.084	19.26	0.084
5	16QAM	1	0	19.04	0.080	18.79	0.076	18.81	0.076
5	16QAM	1	12	18.96	0.079	19.17	0.083	18.95	0.079
5	16QAM	1	24	19.10	0.081	18.70	0.074	18.87	0.077
5	16QAM	12	0	18.12	0.065	18.06	0.064	18.36	0.069
5	16QAM	12	7	18.31	0.068	18.08	0.064	18.41	0.069
5	16QAM	12	13	18.19	0.066	18.06	0.064	18.05	0.064
5	16QAM	25	0	18.25	0.067	17.91	0.062	18.28	0.067



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23025		23095		23165	
Frequency (MHz)				700.5		707.5		714.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	20.00	0.100	20.09	0.102	20.25	0.106
3	QPSK	1	8	20.31	0.107	19.94	0.099	20.01	0.100
3	QPSK	1	14	20.08	0.102	19.89	0.097	19.91	0.098
3	QPSK	8	0	19.15	0.082	19.22	0.084	19.32	0.086
3	QPSK	8	4	19.15	0.082	19.23	0.084	19.31	0.085
3	QPSK	8	7	19.13	0.082	19.21	0.083	19.42	0.087
3	QPSK	15	0	20.10	0.102	20.25	0.106	20.31	0.107
3	16QAM	1	0	19.18	0.083	19.42	0.087	19.18	0.083
3	16QAM	1	8	19.15	0.082	19.44	0.088	19.03	0.080
3	16QAM	1	14	19.02	0.080	18.98	0.079	19.37	0.086
3	16QAM	8	0	18.05	0.064	18.25	0.067	18.24	0.067
3	16QAM	8	4	18.02	0.063	18.26	0.067	18.09	0.064
3	16QAM	8	7	18.05	0.064	18.23	0.067	18.28	0.067
3	16QAM	15	0	18.91	0.078	19.13	0.082	19.12	0.082



LTE Band 12				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	20.05	0.101	20.26	0.106	20.22	0.105
1.4	QPSK	1	3	20.11	0.103	20.21	0.105	20.18	0.104
1.4	QPSK	1	5	20.06	0.101	20.19	0.104	20.06	0.101
1.4	QPSK	3	0	20.24	0.106	20.22	0.105	20.26	0.106
1.4	QPSK	3	1	20.13	0.103	20.33	0.108	20.34	0.108
1.4	QPSK	3	3	20.20	0.105	20.23	0.105	20.32	0.108
1.4	QPSK	6	0	19.10	0.081	19.21	0.083	19.29	0.085
1.4	16QAM	1	0	19.47	0.089	19.32	0.086	19.43	0.088
1.4	16QAM	1	3	19.66	0.092	19.47	0.089	19.75	0.094
1.4	16QAM	1	5	19.30	0.085	19.34	0.086	19.34	0.086
1.4	16QAM	3	0	19.16	0.082	19.15	0.082	19.19	0.083
1.4	16QAM	3	1	19.19	0.083	19.23	0.084	19.46	0.088
1.4	16QAM	3	3	19.17	0.083	19.30	0.085	19.47	0.089
1.4	16QAM	6	0	18.26	0.067	18.07	0.064	18.27	0.067



LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		23230		/	
Frequency (MHz)				/		782		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	20.80	0.120	/	/
10	QPSK	1	25	/	/	21.13	0.130	/	/
10	QPSK	1	49	/	/	20.79	0.120	/	/
10	QPSK	25	0	/	/	20.06	0.101	/	/
10	QPSK	25	12	/	/	20.05	0.101	/	/
10	QPSK	25	25	/	/	19.96	0.099	/	/
10	QPSK	50	0	/	/	20.04	0.101	/	/
10	16QAM	1	0	/	/	19.61	0.091	/	/
10	16QAM	1	25	/	/	19.98	0.100	/	/
10	16QAM	1	49	/	/	19.48	0.089	/	/
10	16QAM	25	0	/	/	19.23	0.084	/	/
10	16QAM	25	12	/	/	19.02	0.080	/	/
10	16QAM	25	25	/	/	18.99	0.079	/	/
10	16QAM	50	0	/	/	19.14	0.082	/	/



REPORT No.: SZ20100035W08

LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23205		23230		23255	
Frequency (MHz)				779.5		782		784.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	20.62	0.115	20.85	0.122	20.85	0.122
5	QPSK	1	12	21.10	0.129	21.00	0.126	21.05	0.127
5	QPSK	1	24	20.74	0.119	20.79	0.120	20.79	0.120
5	QPSK	12	0	19.89	0.097	20.08	0.102	20.08	0.102
5	QPSK	12	7	20.09	0.102	20.06	0.101	20.06	0.101
5	QPSK	12	13	20.07	0.102	20.13	0.103	20.13	0.103
5	QPSK	25	0	20.09	0.102	20.12	0.103	20.12	0.103
5	16QAM	1	0	19.94	0.099	19.98	0.100	19.98	0.100
5	16QAM	1	12	19.99	0.100	19.95	0.099	20.04	0.101
5	16QAM	1	24	19.88	0.097	19.83	0.096	19.84	0.096
5	16QAM	12	0	18.97	0.079	19.19	0.083	19.19	0.083
5	16QAM	12	7	19.20	0.083	19.20	0.083	19.20	0.083
5	16QAM	12	13	19.20	0.083	18.96	0.079	18.96	0.079
5	16QAM	25	0	19.09	0.081	19.18	0.083	19.18	0.083

Product Quality



LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23780		23790		23800	
Frequency (MHz)				709		710		711	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	19.89	0.097	20.06	0.101	19.83	0.096
10	QPSK	1	25	19.95	0.099	20.18	0.104	20.09	0.102
10	QPSK	1	49	20.16	0.104	20.03	0.101	20.03	0.101
10	QPSK	25	0	19.20	0.083	19.14	0.082	19.20	0.083
10	QPSK	25	12	19.28	0.085	19.17	0.083	19.22	0.084
10	QPSK	25	25	19.39	0.087	19.45	0.088	19.43	0.088
10	QPSK	50	0	19.26	0.084	19.25	0.084	19.27	0.085
10	16QAM	1	0	18.91	0.078	19.11	0.081	18.95	0.079
10	16QAM	1	25	19.36	0.086	19.05	0.080	19.31	0.085
10	16QAM	1	49	19.37	0.086	19.27	0.085	19.35	0.086
10	16QAM	25	0	18.09	0.064	17.95	0.062	18.05	0.064
10	16QAM	25	12	18.06	0.064	18.15	0.065	18.17	0.066
10	16QAM	25	25	18.17	0.066	18.16	0.065	18.26	0.067
10	16QAM	50	0	18.16	0.065	18.16	0.065	18.10	0.065





LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.85	0.097	19.94	0.099	19.92	0.098
5	QPSK	1	12	20.08	0.102	20.32	0.108	20.30	0.107
5	QPSK	1	24	19.84	0.096	19.89	0.097	19.93	0.098
5	QPSK	12	0	19.10	0.081	19.09	0.081	19.32	0.086
5	QPSK	12	7	19.11	0.081	19.20	0.083	19.34	0.086
5	QPSK	12	13	19.16	0.082	19.27	0.085	19.32	0.086
5	QPSK	25	0	19.10	0.081	19.14	0.082	19.35	0.086
5	16QAM	1	0	18.81	0.076	19.03	0.080	18.91	0.078
5	16QAM	1	12	19.05	0.080	18.83	0.076	19.12	0.082
5	16QAM	1	24	18.77	0.075	18.74	0.075	19.06	0.081
5	16QAM	12	0	17.82	0.061	18.15	0.065	17.92	0.062
5	16QAM	12	7	17.90	0.062	18.19	0.066	18.30	0.068
5	16QAM	12	13	17.91	0.062	18.06	0.064	18.00	0.063
5	16QAM	25	0	17.95	0.062	18.20	0.066	18.40	0.069



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	23.11	0.205	23.01	0.200	23.06	0.202
20	QPSK	1	49	23.23	0.210	23.02	0.200	23.04	0.201
20	QPSK	1	99	23.20	0.209	22.99	0.199	22.95	0.197
20	QPSK	50	0	22.42	0.175	22.27	0.169	22.20	0.166
20	QPSK	50	24	22.38	0.173	22.22	0.167	22.15	0.164
20	QPSK	50	50	22.31	0.170	22.17	0.165	22.05	0.160
20	QPSK	100	0	22.36	0.172	22.22	0.167	22.23	0.167
20	16QAM	1	0	22.06	0.161	22.04	0.160	21.73	0.149
20	16QAM	1	49	22.07	0.161	21.88	0.154	21.91	0.155
20	16QAM	1	99	21.83	0.152	21.97	0.157	21.73	0.149
20	16QAM	50	0	21.21	0.132	21.30	0.135	21.09	0.129
20	16QAM	50	24	21.30	0.135	21.11	0.129	21.05	0.127
20	16QAM	50	50	21.28	0.134	21.16	0.131	20.94	0.124
20	16QAM	100	0	21.32	0.136	21.10	0.129	21.13	0.130



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	23.14	0.206	23.15	0.207	23.07	0.203
15	QPSK	1	37	23.13	0.206	23.19	0.208	22.99	0.199
15	QPSK	1	74	23.22	0.210	22.96	0.198	23.12	0.205
15	QPSK	36	0	22.38	0.173	22.20	0.166	22.20	0.166
15	QPSK	36	20	22.42	0.175	22.23	0.167	22.13	0.163
15	QPSK	36	39	22.36	0.172	22.21	0.166	22.11	0.163
15	QPSK	75	0	22.36	0.172	22.23	0.167	22.18	0.165
15	16QAM	1	0	22.04	0.160	21.84	0.153	21.70	0.148
15	16QAM	1	37	22.02	0.159	21.86	0.153	21.60	0.145
15	16QAM	1	74	21.97	0.157	21.68	0.147	21.66	0.147
15	16QAM	36	0	21.22	0.132	21.21	0.132	21.12	0.129
15	16QAM	36	20	21.33	0.136	21.17	0.131	21.17	0.131
15	16QAM	36	39	21.28	0.134	21.05	0.127	21.04	0.127
15	16QAM	75	0	21.29	0.135	21.21	0.132	21.05	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				37800		38000		38200	
Frequency (MHz)				2575		2595		2615	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	23.17	0.207	23.01	0.200	22.82	0.191
10	QPSK	1	25	23.21	0.209	23.06	0.202	22.97	0.198
10	QPSK	1	49	23.20	0.209	23.15	0.207	22.93	0.196
10	QPSK	25	0	22.47	0.177	22.28	0.169	22.12	0.163
10	QPSK	25	12	22.43	0.175	22.30	0.170	22.21	0.166
10	QPSK	25	25	22.45	0.176	22.23	0.167	22.13	0.163
10	QPSK	50	0	22.50	0.178	22.24	0.167	22.17	0.165
10	16QAM	1	0	22.07	0.161	21.93	0.156	21.77	0.150
10	16QAM	1	25	22.18	0.165	21.81	0.152	21.86	0.153
10	16QAM	1	49	21.92	0.156	21.70	0.148	21.94	0.156
10	16QAM	25	0	21.51	0.142	21.46	0.140	21.01	0.126
10	16QAM	25	12	21.48	0.141	21.50	0.141	21.05	0.127
10	16QAM	25	25	21.50	0.141	21.22	0.132	21.02	0.126
10	16QAM	50	0	21.45	0.140	21.24	0.133	21.16	0.131



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	23.03	0.201	22.90	0.195	22.72	0.187
5	QPSK	1	12	23.20	0.209	23.12	0.205	23.03	0.201
5	QPSK	1	24	23.21	0.209	22.98	0.199	22.88	0.194
5	QPSK	12	0	22.52	0.179	22.24	0.167	22.16	0.164
5	QPSK	12	7	22.39	0.173	22.30	0.170	22.11	0.163
5	QPSK	12	13	22.35	0.172	22.22	0.167	22.12	0.163
5	QPSK	25	0	22.36	0.172	22.18	0.165	22.09	0.162
5	16QAM	1	0	21.86	0.153	21.68	0.147	21.61	0.145
5	16QAM	1	12	21.96	0.157	21.78	0.151	21.68	0.147
5	16QAM	1	24	21.84	0.153	21.55	0.143	21.49	0.141
5	16QAM	12	0	21.24	0.133	21.18	0.131	21.16	0.131
5	16QAM	12	7	21.45	0.140	21.34	0.136	21.21	0.132
5	16QAM	12	13	21.40	0.138	21.05	0.127	20.96	0.125
5	16QAM	25	0	21.43	0.139	21.49	0.141	21.20	0.132



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	/	/	23.36	0.217	/	/
10	QPSK	1	25	/	/	23.31	0.214	/	/
10	QPSK	1	49	/	/	23.45	0.221	/	/
10	QPSK	25	0	/	/	22.50	0.178	/	/
10	QPSK	25	12	/	/	22.51	0.178	/	/
10	QPSK	25	25	/	/	22.45	0.176	/	/
10	QPSK	50	0	/	/	22.47	0.177	/	/
10	16QAM	1	0	/	/	22.19	0.166	/	/
10	16QAM	1	25	/	/	22.25	0.168	/	/
10	16QAM	1	49	/	/	21.96	0.157	/	/
10	16QAM	25	0	/	/	21.77	0.150	/	/
10	16QAM	25	12	/	/	21.60	0.145	/	/
10	16QAM	25	25	/	/	21.55	0.143	/	/
10	16QAM	50	0	/	/	21.57	0.144	/	/





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	23.29	0.213	23.23	0.210	23.19	0.208
5	QPSK	1	12	23.41	0.219	23.36	0.217	23.44	0.221
5	QPSK	1	24	23.22	0.210	23.23	0.210	23.27	0.212
5	QPSK	12	0	22.47	0.177	22.52	0.179	22.54	0.179
5	QPSK	12	7	22.52	0.179	22.49	0.177	22.52	0.179
5	QPSK	12	13	22.49	0.177	22.49	0.177	22.51	0.178
5	QPSK	25	0	22.52	0.179	22.49	0.177	22.53	0.179
5	16QAM	1	0	22.01	0.159	22.01	0.159	22.02	0.159
5	16QAM	1	12	22.11	0.163	22.20	0.166	22.15	0.164
5	16QAM	1	24	21.87	0.154	21.99	0.158	22.05	0.160
5	16QAM	12	0	21.35	0.136	21.52	0.142	21.37	0.137
5	16QAM	12	7	21.59	0.144	21.59	0.144	21.54	0.143
5	16QAM	12	13	21.39	0.138	21.40	0.138	21.35	0.136
5	16QAM	25	0	21.53	0.142	21.62	0.145	21.57	0.144



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	/	/	23.25	0.211	/	/
10	QPSK	1	25	/	/	23.49	0.223	/	/
10	QPSK	1	49	/	/	23.51	0.224	/	/
10	QPSK	25	0	/	/	22.60	0.182	/	/
10	QPSK	25	12	/	/	22.61	0.182	/	/
10	QPSK	25	25	/	/	22.59	0.182	/	/
10	QPSK	50	0	/	/	22.60	0.182	/	/
10	16QAM	1	0	/	/	22.30	0.170	/	/
10	16QAM	1	25	/	/	22.42	0.175	/	/
10	16QAM	1	49	/	/	22.10	0.162	/	/
10	16QAM	25	0	/	/	21.67	0.147	/	/
10	16QAM	25	12	/	/	21.68	0.147	/	/
10	16QAM	25	25	/	/	21.68	0.147	/	/
10	16QAM	50	0	/	/	21.68	0.147	/	/



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	23.09	0.204	23.17	0.207	23.29	0.213
5	QPSK	1	12	23.38	0.218	23.45	0.221	23.48	0.223
5	QPSK	1	24	23.26	0.212	23.31	0.214	23.36	0.217
5	QPSK	12	0	22.51	0.178	22.61	0.182	22.63	0.183
5	QPSK	12	7	22.59	0.182	22.68	0.185	22.63	0.183
5	QPSK	12	13	22.54	0.179	22.53	0.179	22.60	0.182
5	QPSK	25	0	22.56	0.180	22.57	0.181	22.56	0.180
5	16QAM	1	0	22.09	0.162	22.12	0.163	22.14	0.164
5	16QAM	1	12	22.27	0.169	22.29	0.169	22.28	0.169
5	16QAM	1	24	22.05	0.160	22.04	0.160	22.19	0.166
5	16QAM	12	0	21.40	0.138	21.38	0.137	21.63	0.146
5	16QAM	12	7	21.66	0.147	21.77	0.150	21.73	0.149
5	16QAM	12	13	21.60	0.145	21.48	0.141	21.69	0.148
5	16QAM	25	0	21.86	0.153	21.87	0.154	21.68	0.147





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				40340		40740		41140	
Frequency (MHz)				2565		2605		2645	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	23.15	0.207	23.32	0.215	23.08	0.203
20	QPSK	1	49	23.21	0.209	23.16	0.207	23.17	0.207
20	QPSK	1	99	23.18	0.208	23.11	0.205	23.07	0.203
20	QPSK	50	0	22.25	0.168	22.41	0.174	22.25	0.168
20	QPSK	50	24	22.33	0.171	22.40	0.174	22.30	0.170
20	QPSK	50	50	22.44	0.175	22.28	0.169	22.31	0.170
20	QPSK	100	0	22.31	0.170	22.33	0.171	22.26	0.168
20	16QAM	1	0	21.89	0.155	21.89	0.155	21.82	0.152
20	16QAM	1	49	22.13	0.163	22.02	0.159	22.13	0.163
20	16QAM	1	99	22.11	0.163	21.48	0.141	21.84	0.153
20	16QAM	50	0	21.34	0.136	21.33	0.136	21.16	0.131
20	16QAM	50	24	21.42	0.139	21.20	0.132	21.32	0.136
20	16QAM	50	50	21.45	0.140	21.09	0.129	21.24	0.133
20	16QAM	100	0	21.31	0.135	21.10	0.129	21.29	0.135



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				40315		40740		41165	
Frequency (MHz)				2562.5		2605		2647.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	23.14	0.206	23.21	0.209	23.27	0.212
15	QPSK	1	37	23.22	0.210	23.35	0.216	23.24	0.211
15	QPSK	1	74	23.20	0.209	23.01	0.200	23.25	0.211
15	QPSK	36	0	22.15	0.164	22.36	0.172	22.33	0.171
15	QPSK	36	20	22.24	0.167	22.15	0.164	22.25	0.168
15	QPSK	36	39	22.33	0.171	22.46	0.176	22.28	0.169
15	QPSK	75	0	22.23	0.167	22.40	0.174	22.27	0.169
15	16QAM	1	0	21.93	0.156	21.89	0.155	22.06	0.161
15	16QAM	1	37	21.88	0.154	21.97	0.157	21.95	0.157
15	16QAM	1	74	22.04	0.160	21.58	0.144	21.73	0.149
15	16QAM	36	0	21.29	0.135	21.28	0.134	21.30	0.135
15	16QAM	36	20	21.27	0.134	21.36	0.137	21.21	0.132
15	16QAM	36	39	21.38	0.137	21.21	0.132	21.38	0.137
15	16QAM	75	0	21.32	0.136	21.21	0.132	21.38	0.137



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				40290		40740		41190	
Frequency (MHz)				2560		2605		2650	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.90	0.195	23.13	0.206	23.11	0.205
10	QPSK	1	25	23.01	0.200	23.10	0.204	23.03	0.201
10	QPSK	1	49	22.94	0.197	23.01	0.200	23.05	0.202
10	QPSK	25	0	22.24	0.167	22.36	0.172	22.29	0.169
10	QPSK	25	12	22.23	0.167	22.28	0.169	22.29	0.169
10	QPSK	25	25	22.20	0.166	22.20	0.166	22.29	0.169
10	QPSK	50	0	22.24	0.167	22.25	0.168	22.37	0.173
10	16QAM	1	0	21.71	0.148	22.00	0.158	21.87	0.154
10	16QAM	1	25	21.97	0.157	21.96	0.157	22.03	0.160
10	16QAM	1	49	21.85	0.153	21.90	0.155	21.78	0.151
10	16QAM	25	0	21.16	0.131	21.47	0.140	21.22	0.132
10	16QAM	25	12	21.25	0.133	21.24	0.133	21.23	0.133
10	16QAM	25	25	21.21	0.132	21.15	0.130	21.24	0.133
10	16QAM	50	0	21.14	0.130	21.24	0.133	21.39	0.138





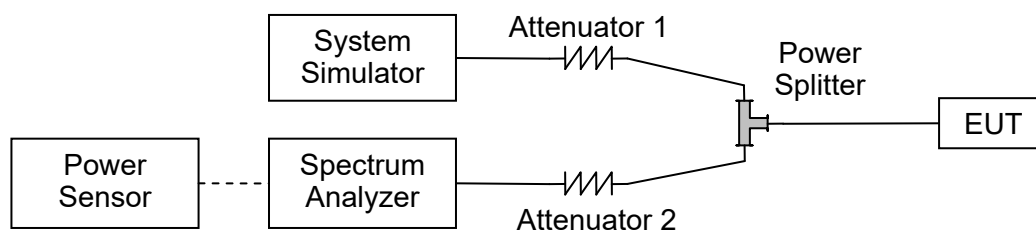
LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40265		40740		41215	
Frequency (MHz)				2557.5		2605		2652.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.81	0.191	22.97	0.198	22.95	0.197
5	QPSK	1	12	23.04	0.201	22.95	0.197	23.11	0.205
5	QPSK	1	24	22.81	0.191	22.90	0.195	23.01	0.200
5	QPSK	12	0	22.12	0.163	22.39	0.173	22.32	0.171
5	QPSK	12	7	22.14	0.164	22.20	0.166	22.30	0.170
5	QPSK	12	13	22.13	0.163	22.14	0.164	22.26	0.168
5	QPSK	25	0	22.13	0.163	22.10	0.162	22.28	0.169
5	16QAM	1	0	21.68	0.147	21.97	0.157	21.68	0.147
5	16QAM	1	12	21.80	0.151	21.59	0.144	21.93	0.156
5	16QAM	1	24	21.67	0.147	21.50	0.141	21.76	0.150
5	16QAM	12	0	21.24	0.133	21.61	0.145	21.14	0.130
5	16QAM	12	7	21.15	0.130	21.59	0.144	21.43	0.139
5	16QAM	12	13	21.12	0.129	21.63	0.146	21.39	0.138
5	16QAM	25	0	21.45	0.140	21.60	0.145	21.24	0.133

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	1.09	1.29
	Low	16QAM	1.10	1.30
	Mid	QPSK	1.10	1.29
	Mid	16QAM	1.10	1.28
	High	QPSK	1.10	1.30
	High	16QAM	1.10	1.31
3	Low	QPSK	2.70	2.97
	Low	16QAM	2.70	3.00
	Mid	QPSK	2.71	3.02
	Mid	16QAM	2.71	3.00
	High	QPSK	2.71	2.99
	High	16QAM	2.70	2.99
5	Low	QPSK	4.50	5.03
	Low	16QAM	4.51	4.99
	Mid	QPSK	4.50	5.03
	Mid	16QAM	4.51	5.00
	High	QPSK	4.50	5.02
	High	16QAM	4.50	5.02
10	Low	QPSK	8.98	9.86
	Low	16QAM	8.93	9.78
	Mid	QPSK	8.99	9.82
	Mid	16QAM	8.96	9.75
	High	QPSK	8.98	9.90
	High	16QAM	8.96	9.76
15	Low	QPSK	13.42	14.50
	Low	16QAM	13.41	14.72
	Mid	QPSK	13.44	14.55
	Mid	16QAM	13.43	14.70
	High	QPSK	13.44	14.67
	High	16QAM	13.42	14.68
20	Low	QPSK	17.89	19.36
	Low	16QAM	17.91	19.41
	Mid	QPSK	17.93	19.44
	Mid	16QAM	17.95	19.40
	High	QPSK	17.90	19.42
	High	16QAM	17.94	19.50



LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.28
	Low	16QAM	1.10	1.30
	Mid	QPSK	1.10	1.30
	Mid	16QAM	1.10	1.31
	High	QPSK	1.10	1.28
	High	16QAM	1.10	1.30
3	Low	QPSK	2.70	2.99
	Low	16QAM	2.70	3.00
	Mid	QPSK	2.70	2.99
	Mid	16QAM	2.70	3.01
	High	QPSK	2.71	2.98
	High	16QAM	2.70	2.99
5	Low	QPSK	4.50	5.00
	Low	16QAM	4.50	5.00
	Mid	QPSK	4.51	5.01
	Mid	16QAM	4.51	5.04
	High	QPSK	4.50	5.06
	High	16QAM	4.50	4.97
10	Low	QPSK	8.97	9.91
	Low	16QAM	8.94	9.82
	Mid	QPSK	8.99	9.84
	Mid	16QAM	8.96	9.79
	High	QPSK	8.96	9.81
	High	16QAM	8.94	9.76
15	Low	QPSK	13.40	14.58
	Low	16QAM	13.41	14.62
	Mid	QPSK	13.48	14.60
	Mid	16QAM	13.44	14.71
	High	QPSK	13.38	14.63
	High	16QAM	13.37	14.60
20	Low	QPSK	17.90	19.43
	Low	16QAM	17.94	19.45
	Mid	QPSK	17.97	19.53
	Mid	16QAM	17.99	19.38
	High	QPSK	17.82	19.29
	High	16QAM	17.84	19.34



LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.29
	Low	16QAM	1.10	1.31
	Mid	QPSK	1.10	1.27
	Mid	16QAM	1.10	1.30
	High	QPSK	1.10	1.27
	High	16QAM	1.10	1.30
3	Low	QPSK	2.70	3.00
	Low	16QAM	2.69	2.99
	Mid	QPSK	2.70	2.98
	Mid	16QAM	2.70	2.99
	High	QPSK	2.70	2.97
	High	16QAM	2.70	2.99
5	Low	QPSK	4.51	5.06
	Low	16QAM	4.50	4.95
	Mid	QPSK	4.49	4.95
	Mid	16QAM	4.49	4.97
	High	QPSK	4.50	5.04
	High	16QAM	4.50	4.97
10	Low	QPSK	9.03	9.92
	Low	16QAM	8.99	9.82
	Mid	QPSK	8.94	9.84
	Mid	16QAM	8.91	9.79
	High	QPSK	9.04	9.97
	High	16QAM	8.99	9.82



LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	5.04
	Low	16QAM	4.50	4.98
	Mid	QPSK	4.50	5.08
	Mid	16QAM	4.50	4.99
	High	QPSK	4.50	5.02
	High	16QAM	4.49	4.99
10	Low	QPSK	9.00	9.84
	Low	16QAM	8.96	9.85
	Mid	QPSK	8.97	9.83
	Mid	16QAM	8.94	9.85
	High	QPSK	8.97	9.84
	High	16QAM	8.95	9.83
15	Low	QPSK	13.48	14.79
	Low	16QAM	13.45	14.71
	Mid	QPSK	13.41	14.68
	Mid	16QAM	13.41	14.63
	High	QPSK	13.42	14.65
	High	16QAM	13.42	14.76
20	Low	QPSK	17.95	19.62
	Low	16QAM	18.01	19.61
	Mid	QPSK	17.86	19.34
	Mid	16QAM	17.87	19.31
	High	QPSK	17.94	19.47
	High	16QAM	17.93	19.49





LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.27
	Low	16QAM	1.10	1.29
	Mid	QPSK	1.09	1.29
	Mid	16QAM	1.10	1.29
	High	QPSK	1.10	1.29
	High	16QAM	1.10	1.29
3	Low	QPSK	2.69	2.96
	Low	16QAM	2.69	2.99
	Mid	QPSK	2.70	2.97
	Mid	16QAM	2.70	3.00
	High	QPSK	2.70	3.00
	High	16QAM	2.70	2.98
5	Low	QPSK	4.49	5.00
	Low	16QAM	4.50	4.95
	Mid	QPSK	4.50	5.03
	Mid	16QAM	4.51	5.00
	High	QPSK	4.49	4.99
	High	16QAM	4.49	4.98
10	Low	QPSK	8.99	9.86
	Low	16QAM	8.95	9.82
	Mid	QPSK	9.01	9.87
	Mid	16QAM	8.96	9.77
	High	QPSK	8.94	9.79
	High	16QAM	8.91	9.77



LTE Band 13				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.48	4.95
	Low	16QAM	4.48	4.99
	Mid	QPSK	4.51	5.06
	Mid	16QAM	4.50	5.00
	High	QPSK	4.51	5.04
	High	16QAM	4.50	4.99
10	Low	QPSK	/	/
	Low	16QAM	/	/
	Mid	QPSK	8.96	9.85
	Mid	16QAM	8.92	9.76
	High	QPSK	/	/
	High	16QAM	/	/



LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	5.04
	Low	16QAM	4.51	5.01
	Mid	QPSK	4.48	4.97
	Mid	16QAM	4.49	4.97
	High	QPSK	4.50	5.00
	High	16QAM	4.50	4.99
10	Low	QPSK	8.97	9.85
	Low	16QAM	8.94	9.73
	Mid	QPSK	8.96	9.78
	Mid	16QAM	8.92	9.70
	High	QPSK	8.95	9.81
	High	16QAM	8.93	9.78





LTE Band 38				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.12
	Low	16QAM	4.50	5.03
	Mid	QPSK	4.50	5.19
	Mid	16QAM	4.50	4.97
	High	QPSK	4.50	5.22
	High	16QAM	4.50	5.01
10	Low	QPSK	8.97	9.88
	Low	16QAM	8.95	9.87
	Mid	QPSK	8.98	9.78
	Mid	16QAM	8.94	9.80
	High	QPSK	8.98	9.83
	High	16QAM	8.95	9.74
15	Low	QPSK	13.44	14.61
	Low	16QAM	13.45	15.07
	Mid	QPSK	13.44	14.84
	Mid	16QAM	13.45	15.02
	High	QPSK	13.45	14.69
	High	16QAM	13.44	21.26
20	Low	QPSK	17.91	19.89
	Low	16QAM	17.86	19.48
	Mid	QPSK	17.90	20.75
	Mid	16QAM	17.89	19.37
	High	QPSK	17.94	20.38
	High	16QAM	17.94	19.41



LTE Band 40, Block A				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	5.26
	Low	16QAM	4.50	5.13
	Mid	QPSK	4.49	5.35
	Mid	16QAM	4.49	5.15
	High	QPSK	4.49	4.95
	High	16QAM	4.49	4.96
10	Mid	QPSK	8.91	9.53
	Mid	16QAM	8.93	9.46

LTE Band 40, Block B				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.49	5.34
	Low	16QAM	4.48	5.19
	Mid	QPSK	4.49	5.09
	Mid	16QAM	4.49	4.96
	High	QPSK	4.49	5.24
	High	16QAM	4.50	5.12
10	Mid	QPSK	8.92	9.55
	Mid	16QAM	8.91	9.51

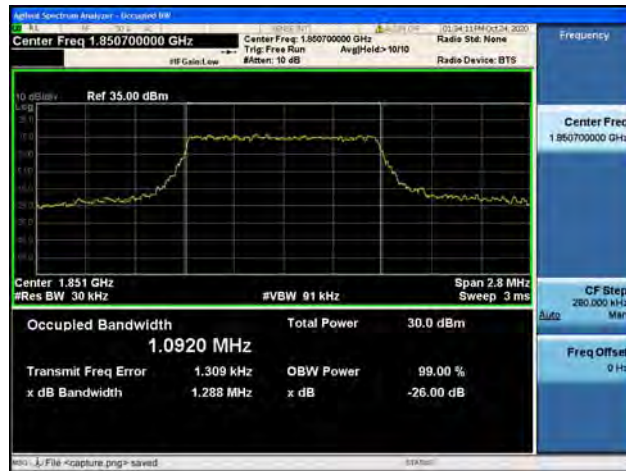


LTE Band 41				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.50	5.10
	Low	16QAM	4.49	5.14
	Mid	QPSK	4.48	5.12
	Mid	16QAM	4.49	5.22
	High	QPSK	4.49	5.07
	High	16QAM	4.49	5.11
10	Low	QPSK	8.90	9.54
	Low	16QAM	8.90	9.57
	Mid	QPSK	8.91	9.63
	Mid	16QAM	8.92	9.57
	High	QPSK	8.89	9.62
	High	16QAM	8.90	9.63
15	Low	QPSK	13.38	14.32
	Low	16QAM	13.36	14.24
	Mid	QPSK	13.39	14.35
	Mid	16QAM	13.36	14.28
	High	QPSK	13.35	14.15
	High	16QAM	13.36	14.13
20	Low	QPSK	17.77	18.86
	Low	16QAM	17.77	18.76
	Mid	QPSK	17.79	18.66
	Mid	16QAM	17.79	18.69
	High	QPSK	17.75	18.55
	High	16QAM	17.77	18.67

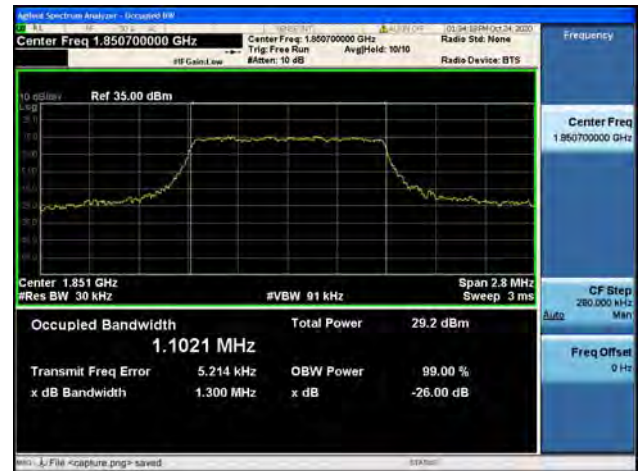




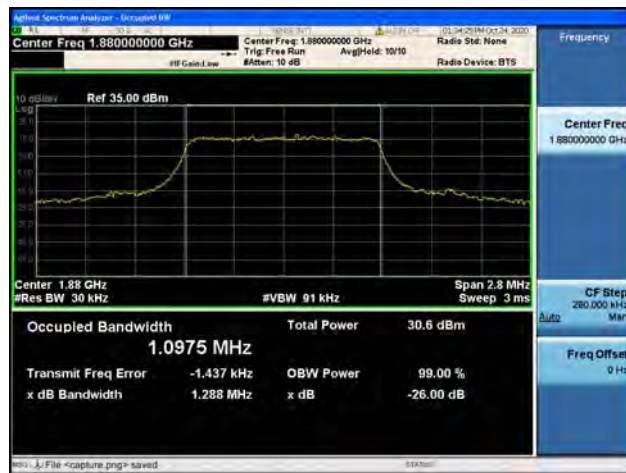
Band2 / 1.4MHz / Low CH / QPSK



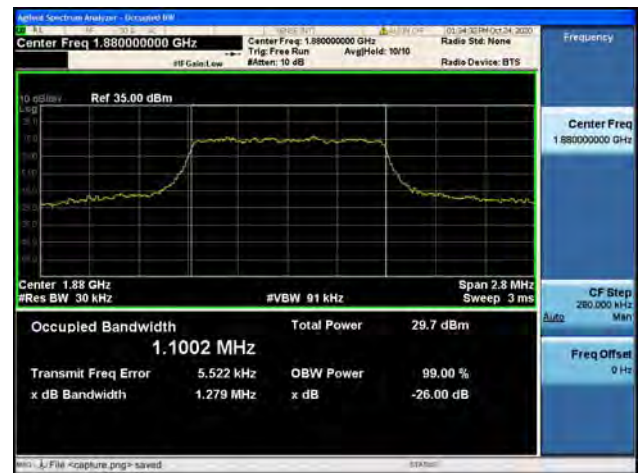
Band2 / 1.4MHz / Low CH / 16QAM



Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



Band2 / 1.4MHz / High CH / QPSK

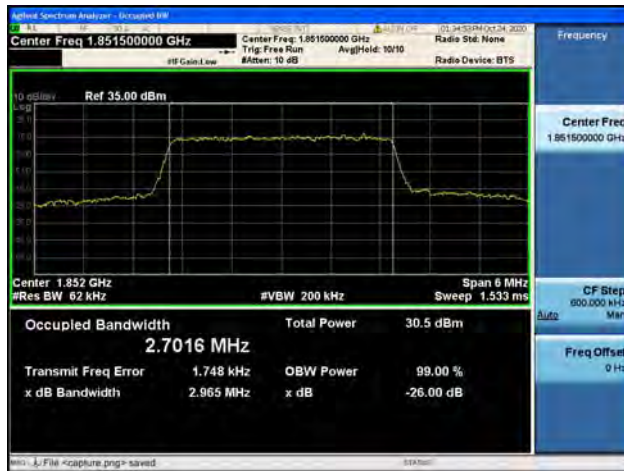


Band2 / 1.4MHz / High CH / 16QAM

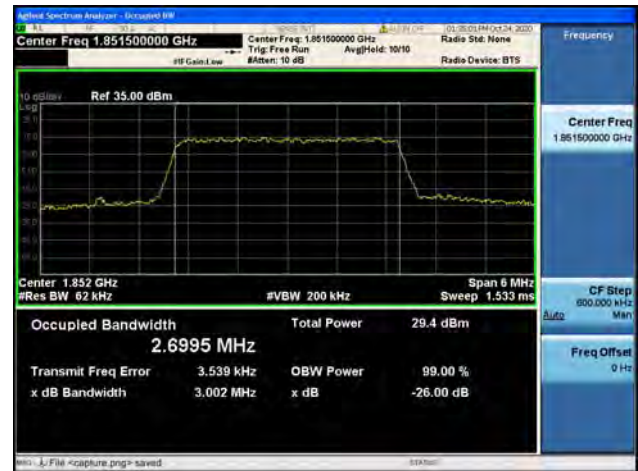




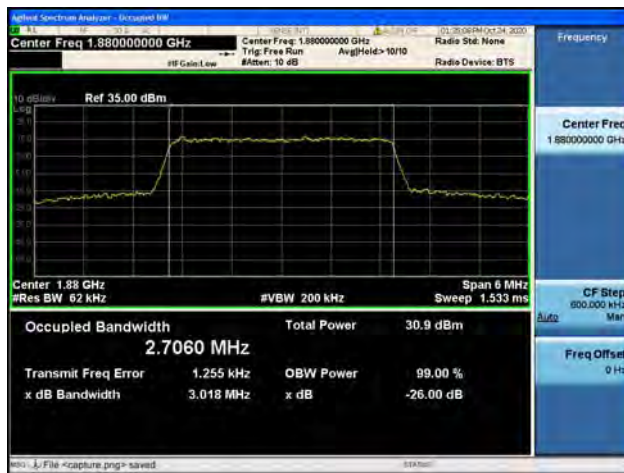
Band2 / 3MHz / Low CH / QPSK



Band2 / 3MHz / Low CH / 16QAM



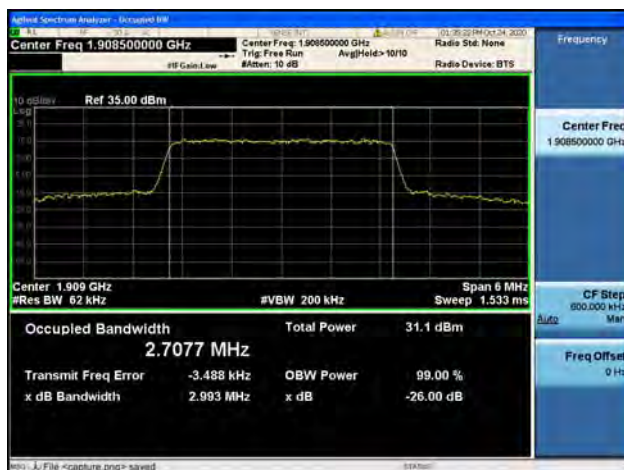
Band2 / 3MHz / Mid CH / QPSK



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



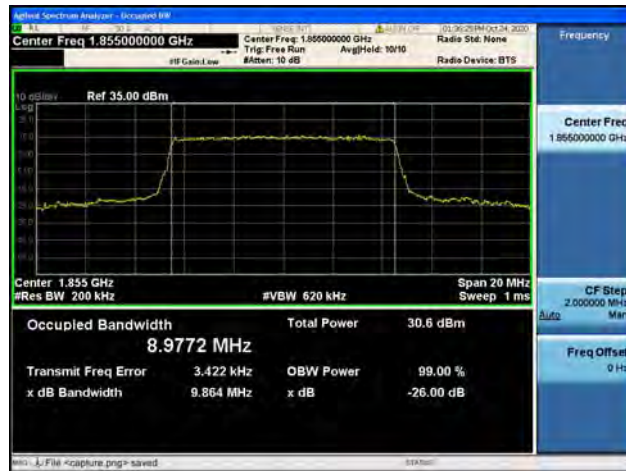
Band2 / 5MHz / High CH / QPSK



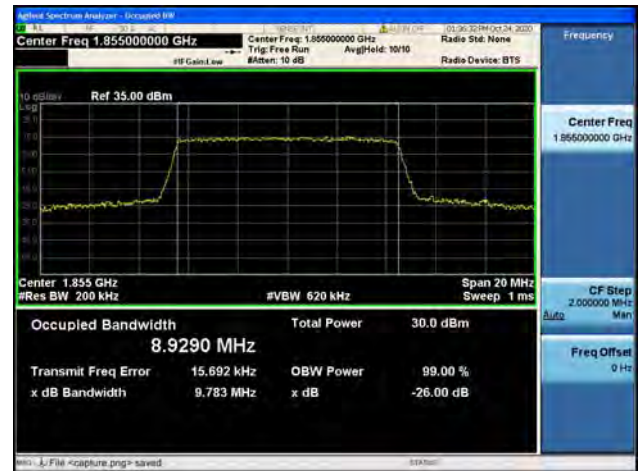
Band2 / 5MHz / High CH / 16QAM



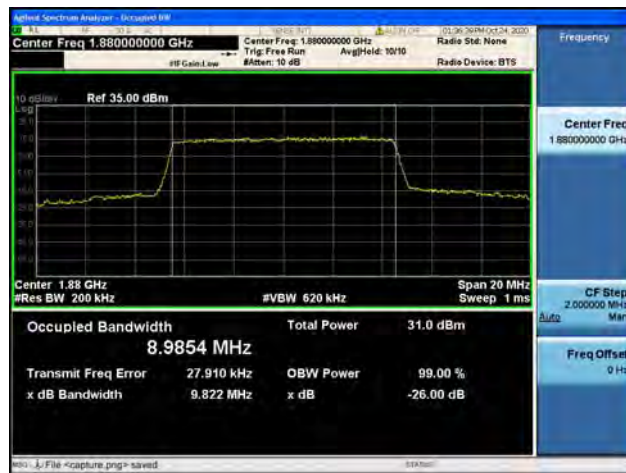
Band2 / 10MHz / Low CH / QPSK



Band2 / 10MHz / Low CH / 16QAM



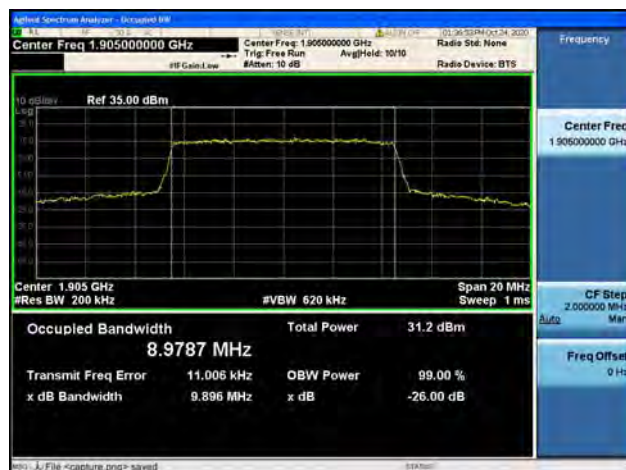
Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



Band2 / 10MHz / High CH / QPSK

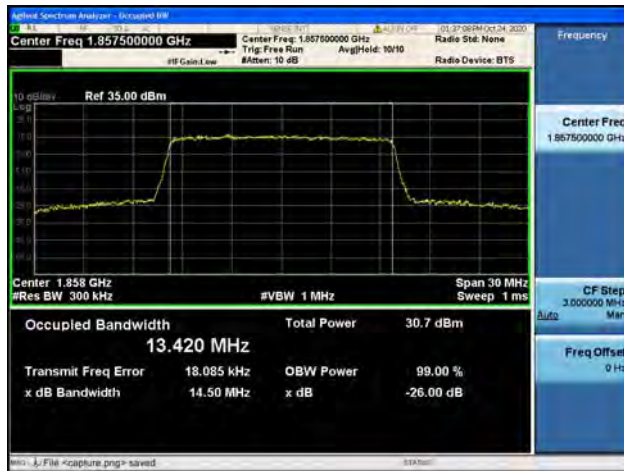


Band2 / 10MHz / High CH / 16QAM

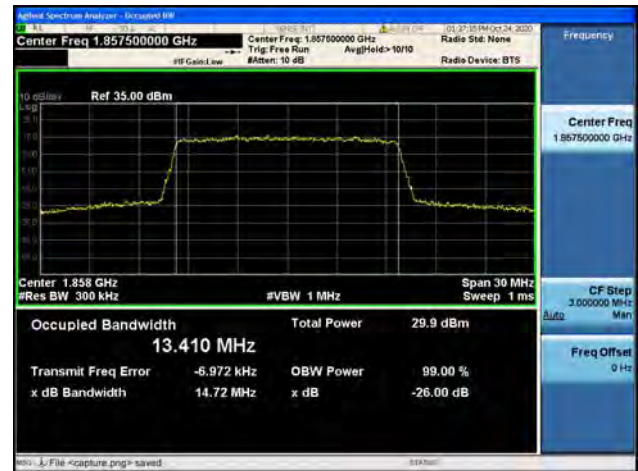




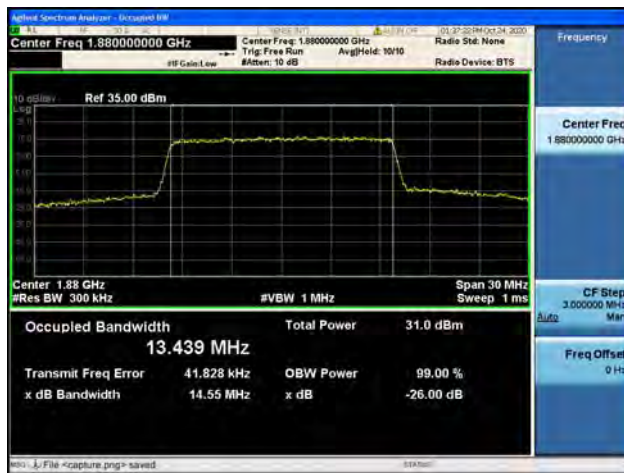
Band2 / 15MHz / Low CH / QPSK



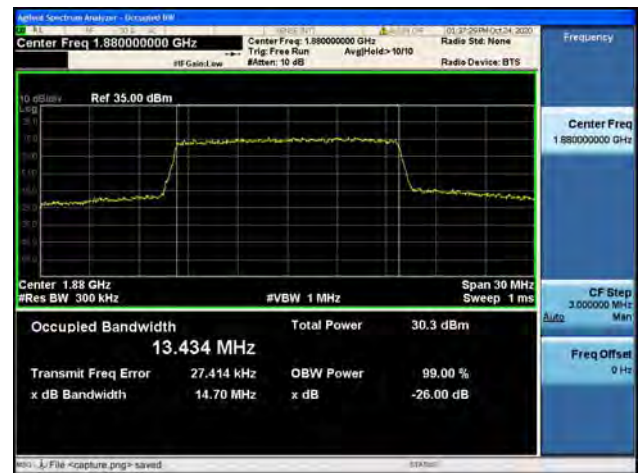
Band2 / 15MHz / Low CH / 16QAM



Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM



Band2 / 15MHz / High CH / QPSK

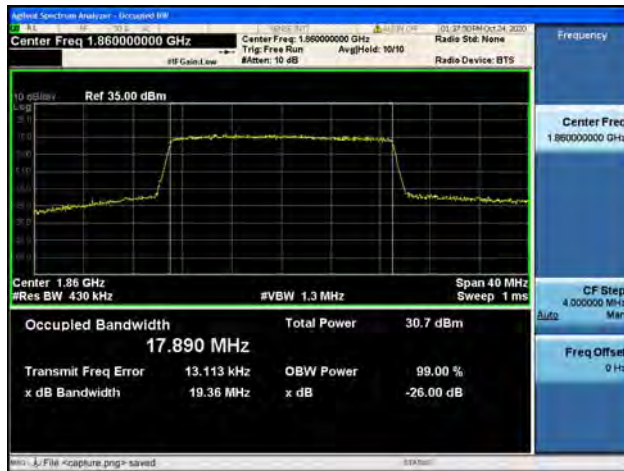


Band2 / 15MHz / High CH / 16QAM

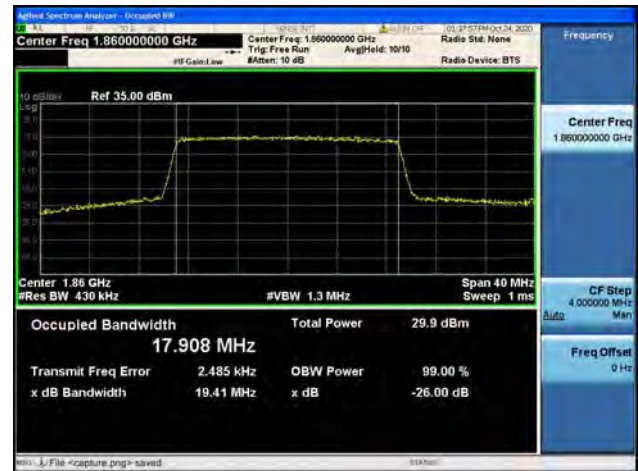




Band2 / 20MHz / Low CH / QPSK



Band2 / 20MHz / Low CH / 16QAM



Band2 / 20MHz / Mid CH / QPSK



Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK

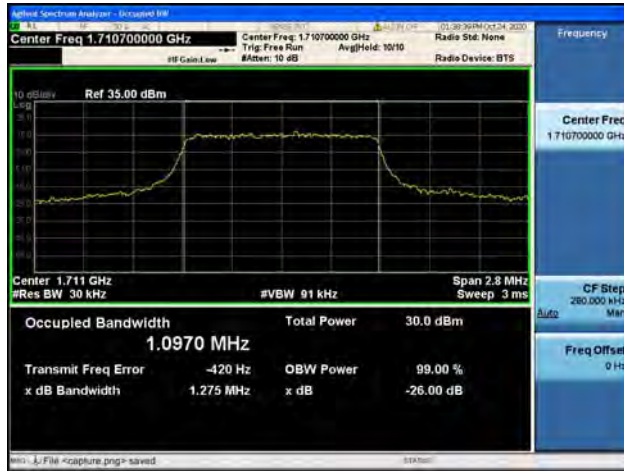


Band2 / 20MHz / High CH / 16QAM

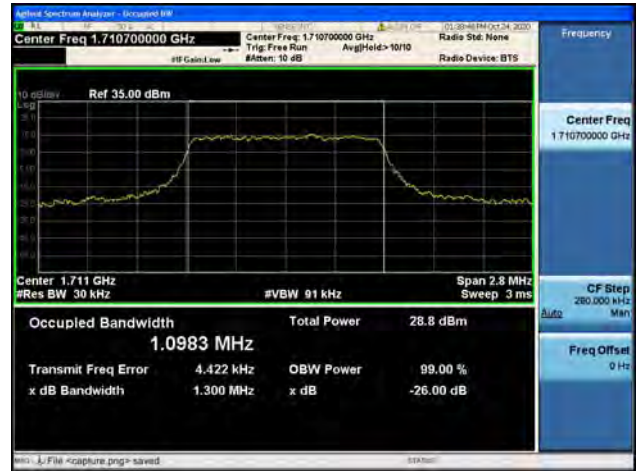




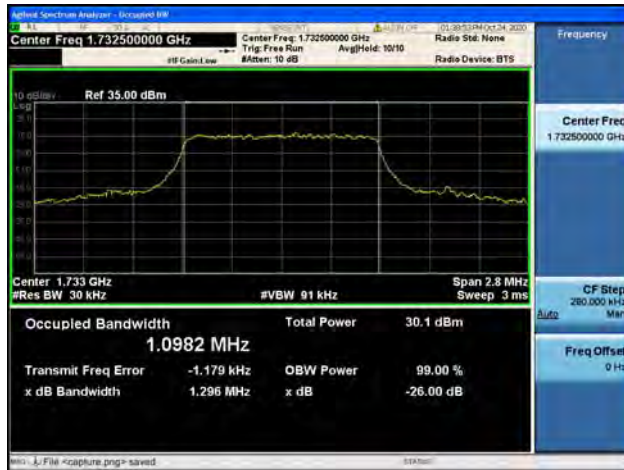
Band4 / 1.4MHz / Low CH / QPSK



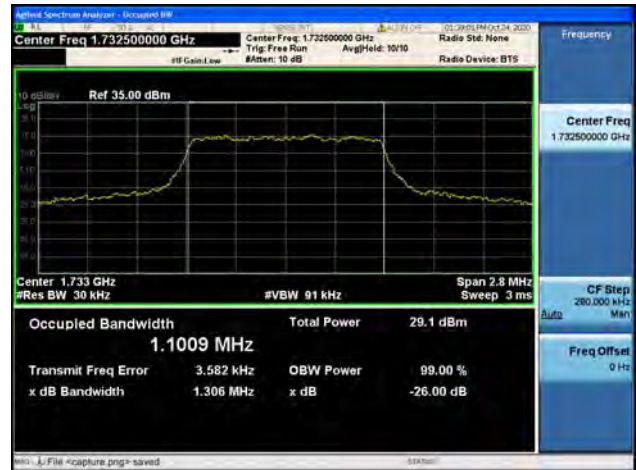
Band4 / 1.4MHz / Low CH / 16QAM



Band4 / 1.4MHz / Mid CH / QPSK



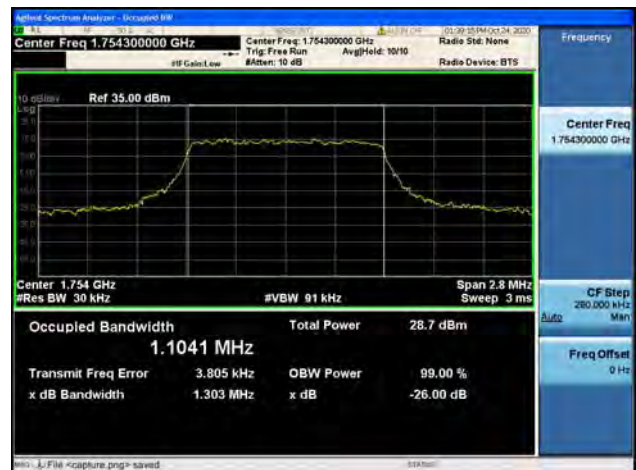
Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK

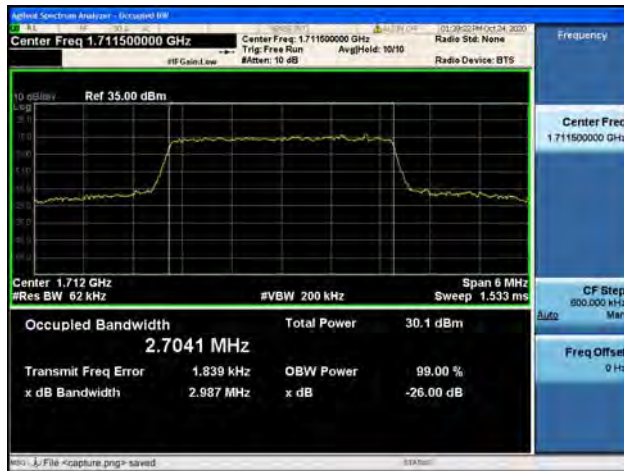


Band4 / 1.4MHz / High CH / 16QAM





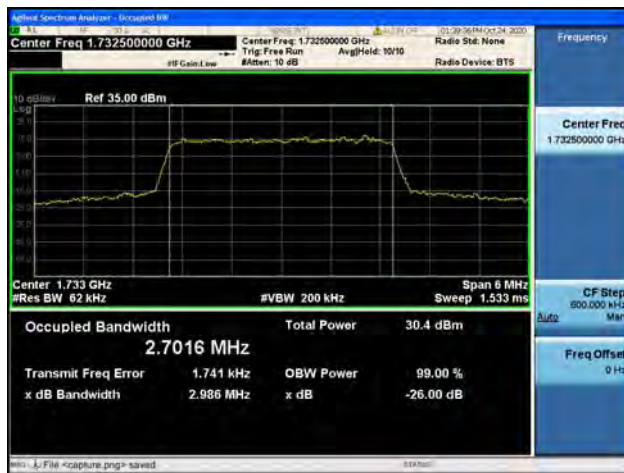
Band4 / 3MHz / Low CH / QPSK



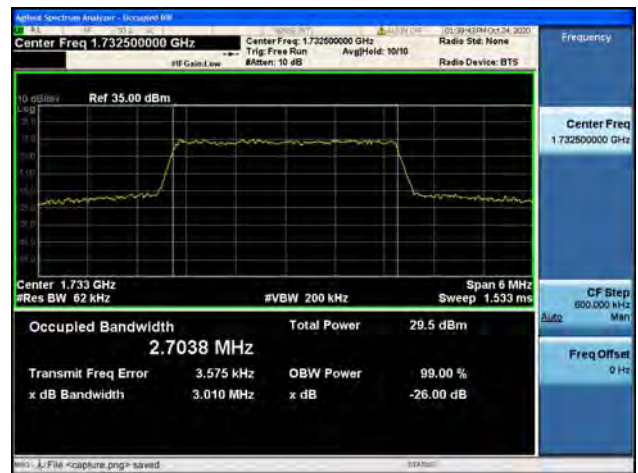
Band4 / 3MHz / Low CH / 16QAM



Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



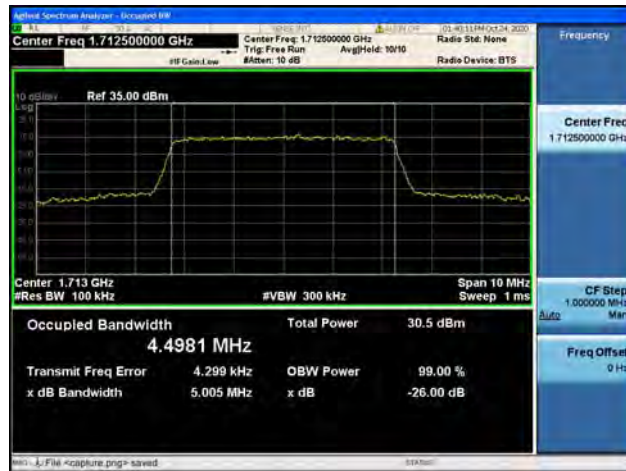
Band4 / 3MHz / High CH / QPSK



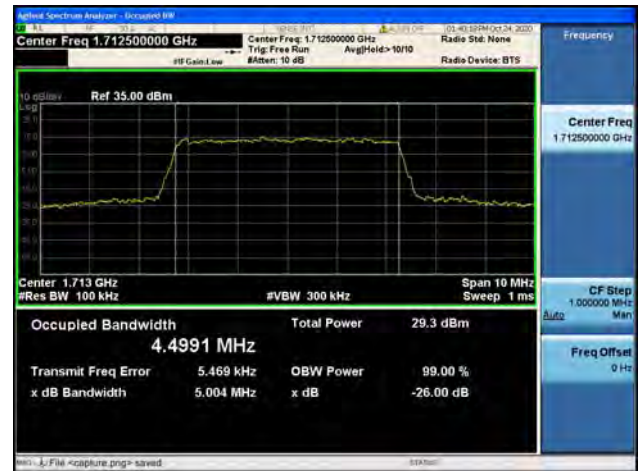
Band4 / 3MHz / High CH / 16QAM



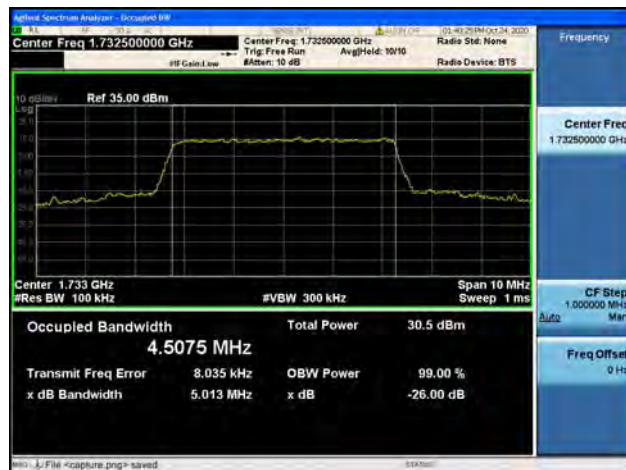
Band4 / 5MHz / Low CH / QPSK



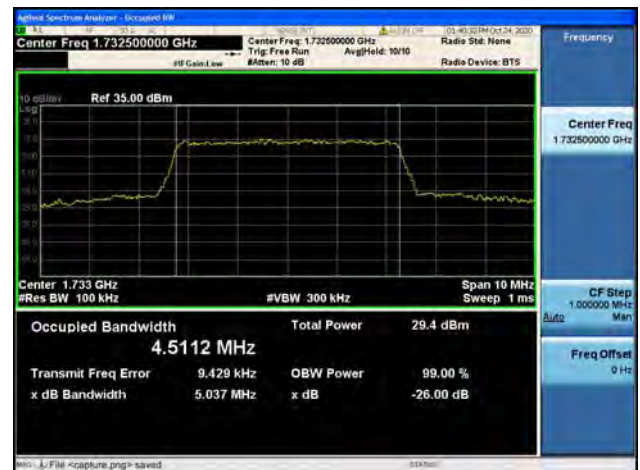
Band4 / 5MHz / Low CH / 16QAM



Band4 / 5MHz / Mid CH / QPSK



Band4 / 5MHz / Mid CH / 16QAM



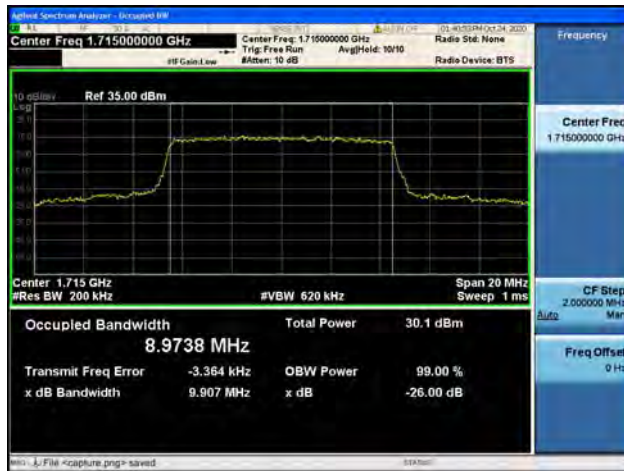
Band4 / 5MHz / High CH / QPSK



Band4 / 5MHz / High CH / 16QAM



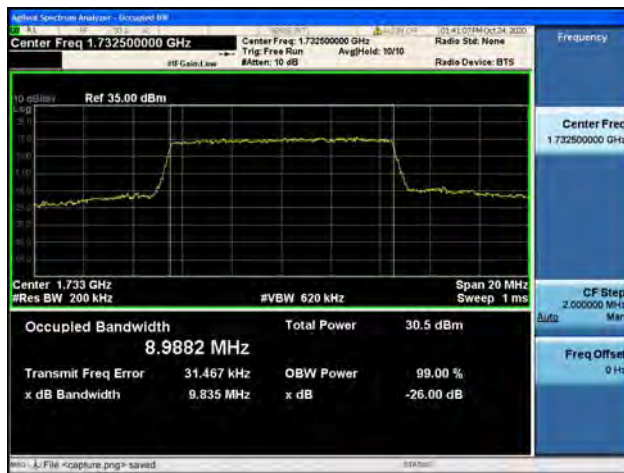
Band4 / 10MHz / Low CH / QPSK



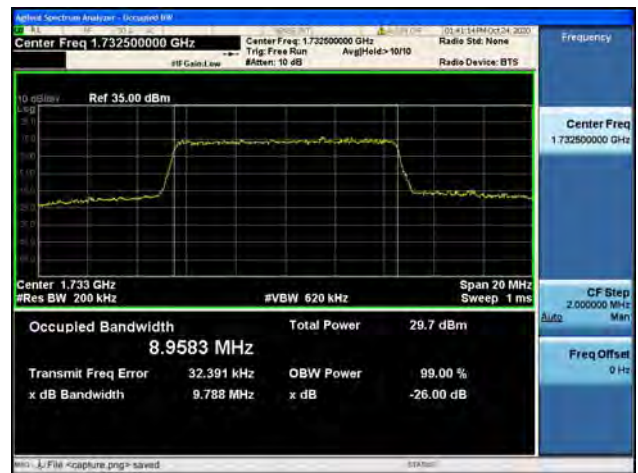
Band4 / 10MHz / Low CH / 16QAM



Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM



Band4 / 10MHz / High CH / QPSK

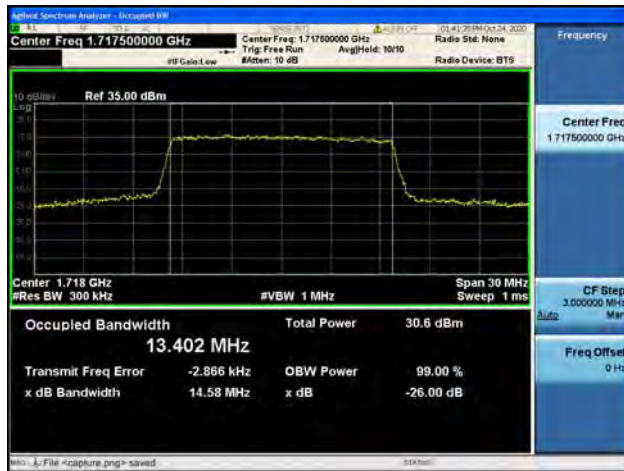


Band4 / 10MHz / High CH / 16QAM

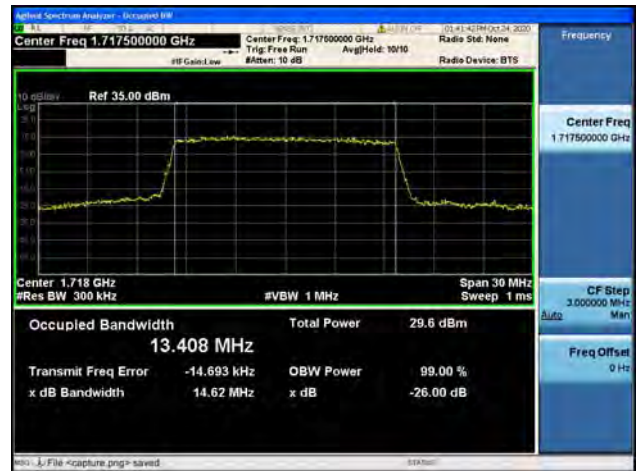




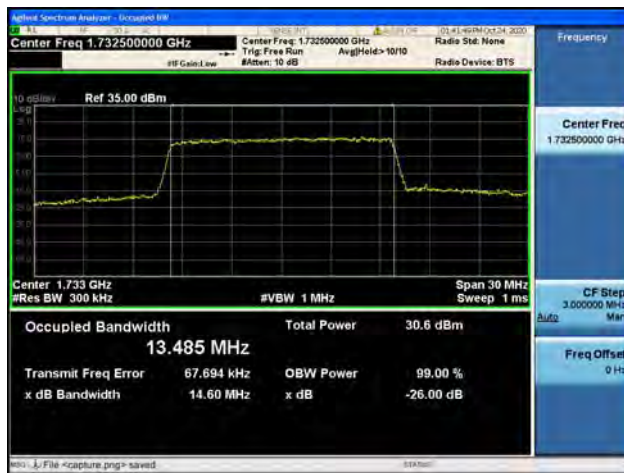
Band4 / 15MHz / Low CH / QPSK



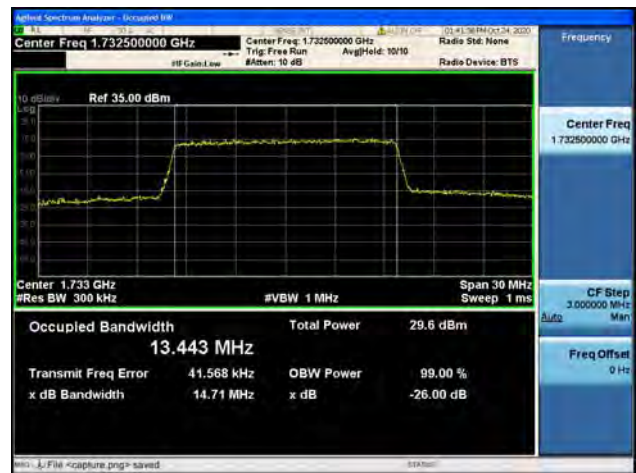
Band4 / 15MHz / Low CH / 16QAM



Band4 / 15MHz / Mid CH / QPSK



Band4 / 15MHz / Mid CH / 16QAM



Band4 / 15MHz / High CH / QPSK

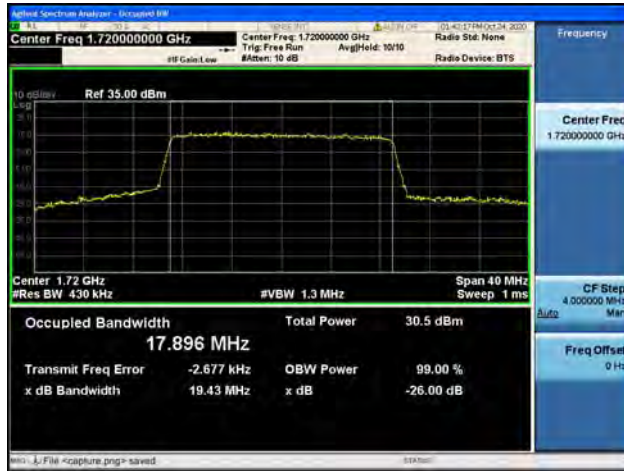


Band4 / 15MHz / High CH / 16QAM

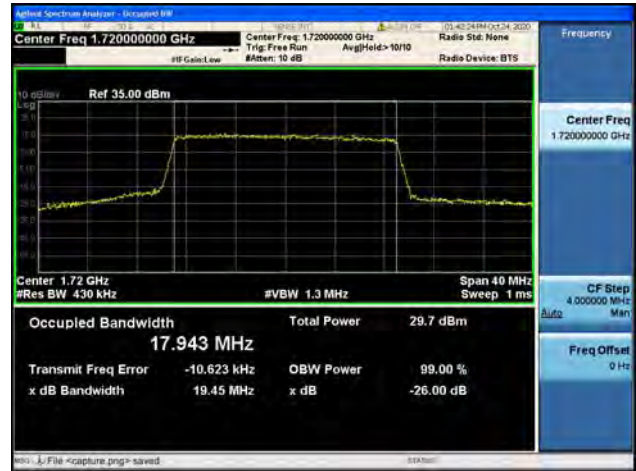




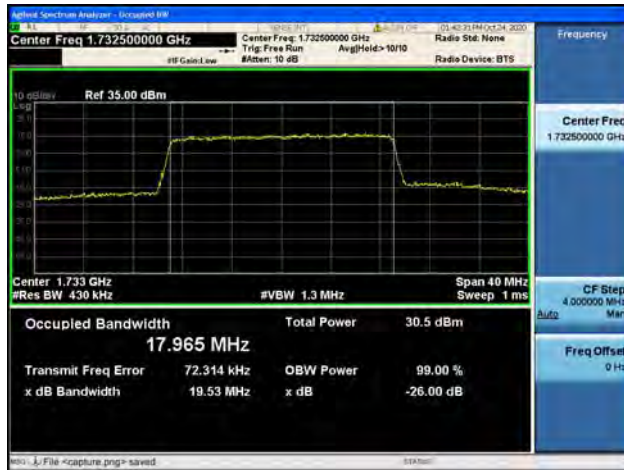
Band4 / 20MHz / Low CH / QPSK



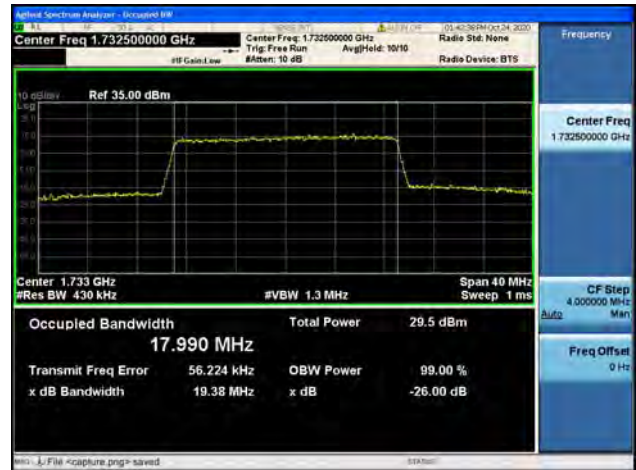
Band4 / 20MHz / Low CH / 16QAM



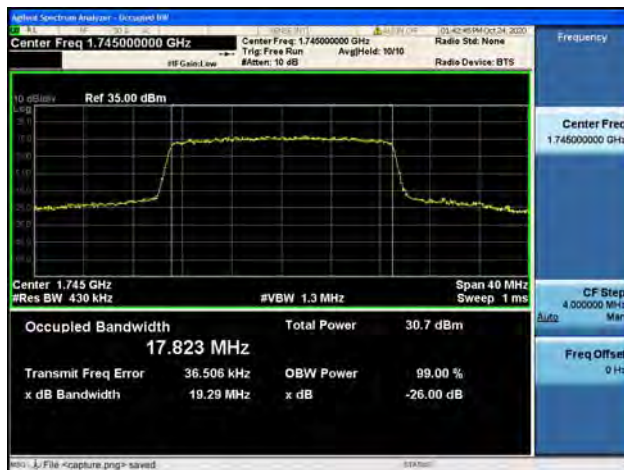
Band4 / 20MHz / Mid CH / QPSK



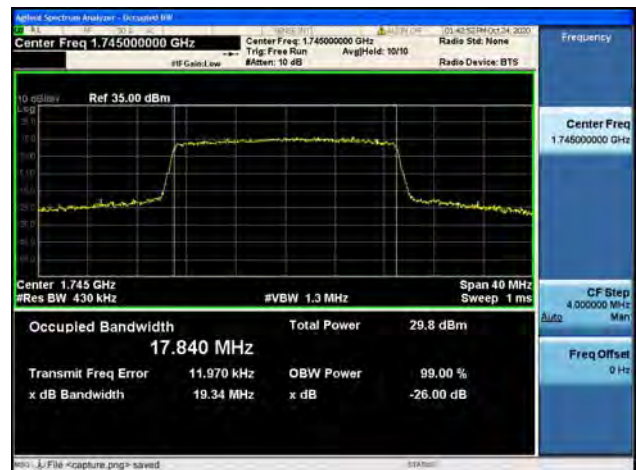
Band4 / 20MHz / Mid CH / 16QAM



Band4 / 20MHz / High CH / QPSK

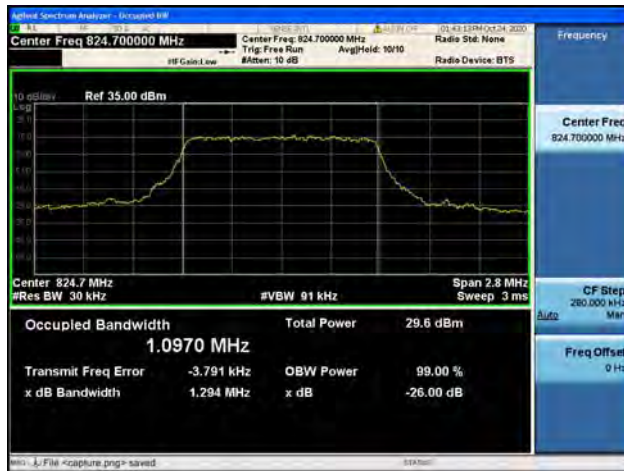


Band4 / 20MHz / High CH / 16QAM

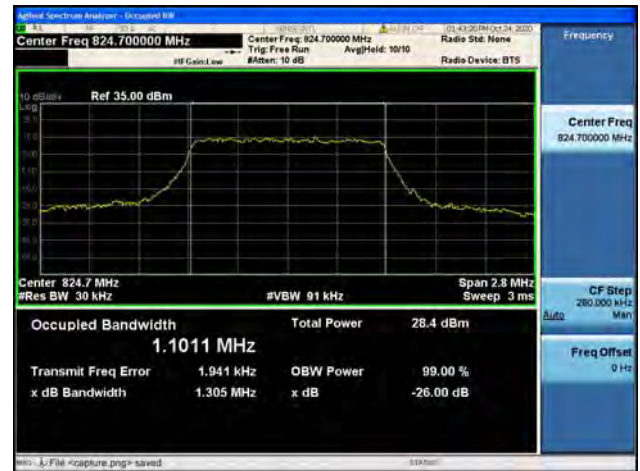




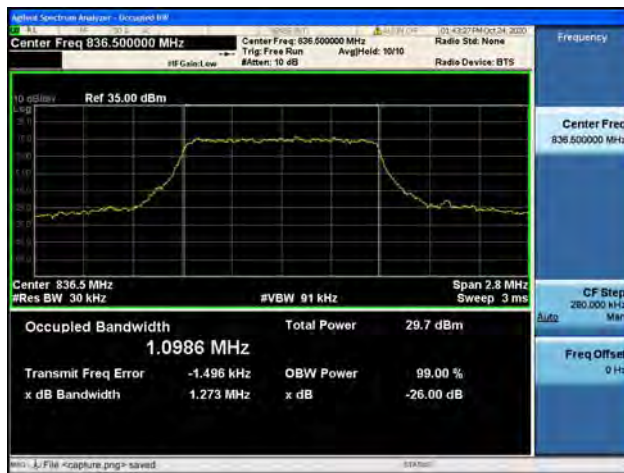
Band5 / 1.4MHz / Low CH / QPSK



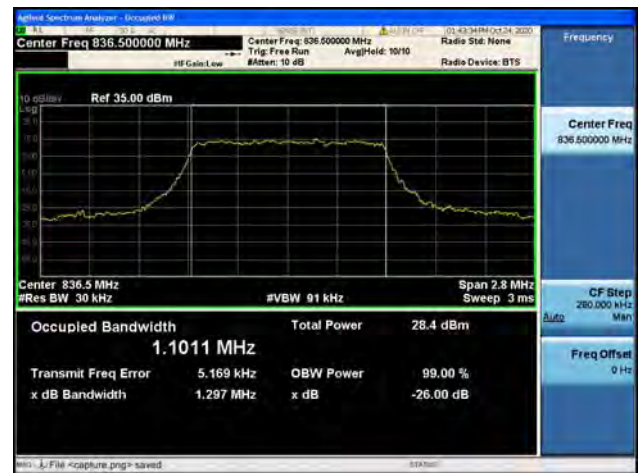
Band5 / 1.4MHz / Low CH / 16QAM



Band5 / 1.4MHz / Mid CH / QPSK



Band5 / 1.4MHz / Mid CH / 16QAM



Band5 / 1.4MHz / High CH / QPSK

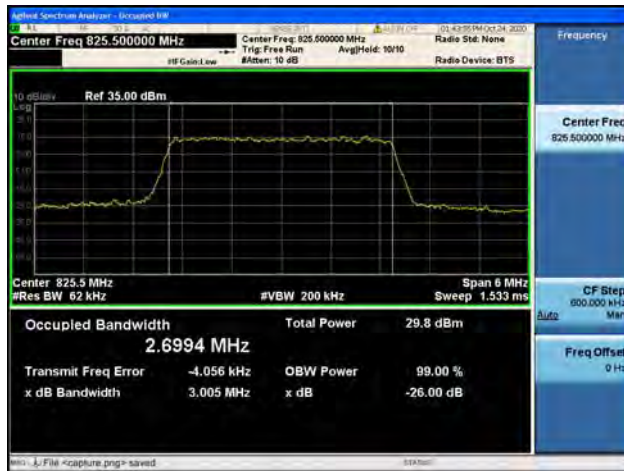


Band5 / 1.4MHz / High CH / 16QAM





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

