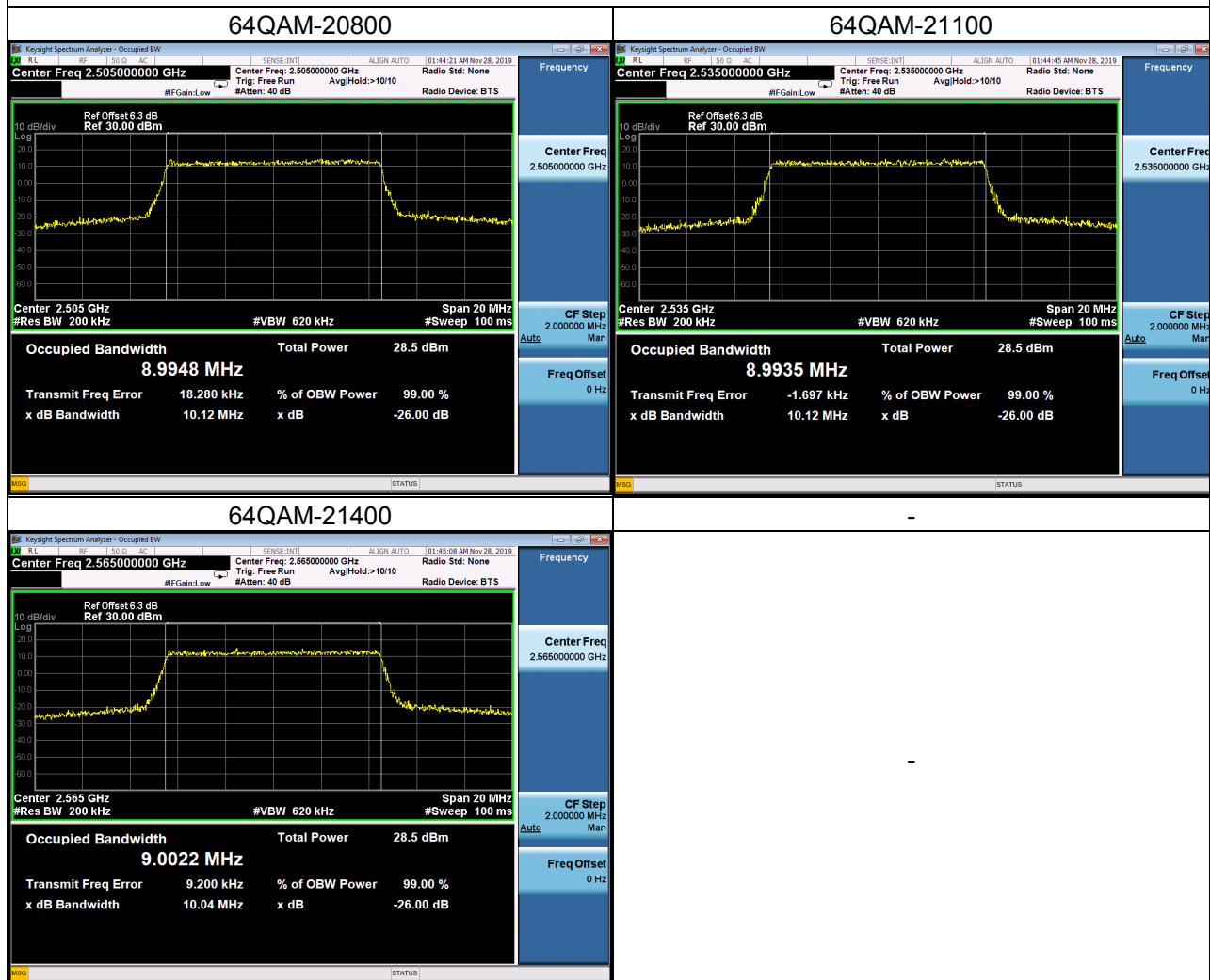
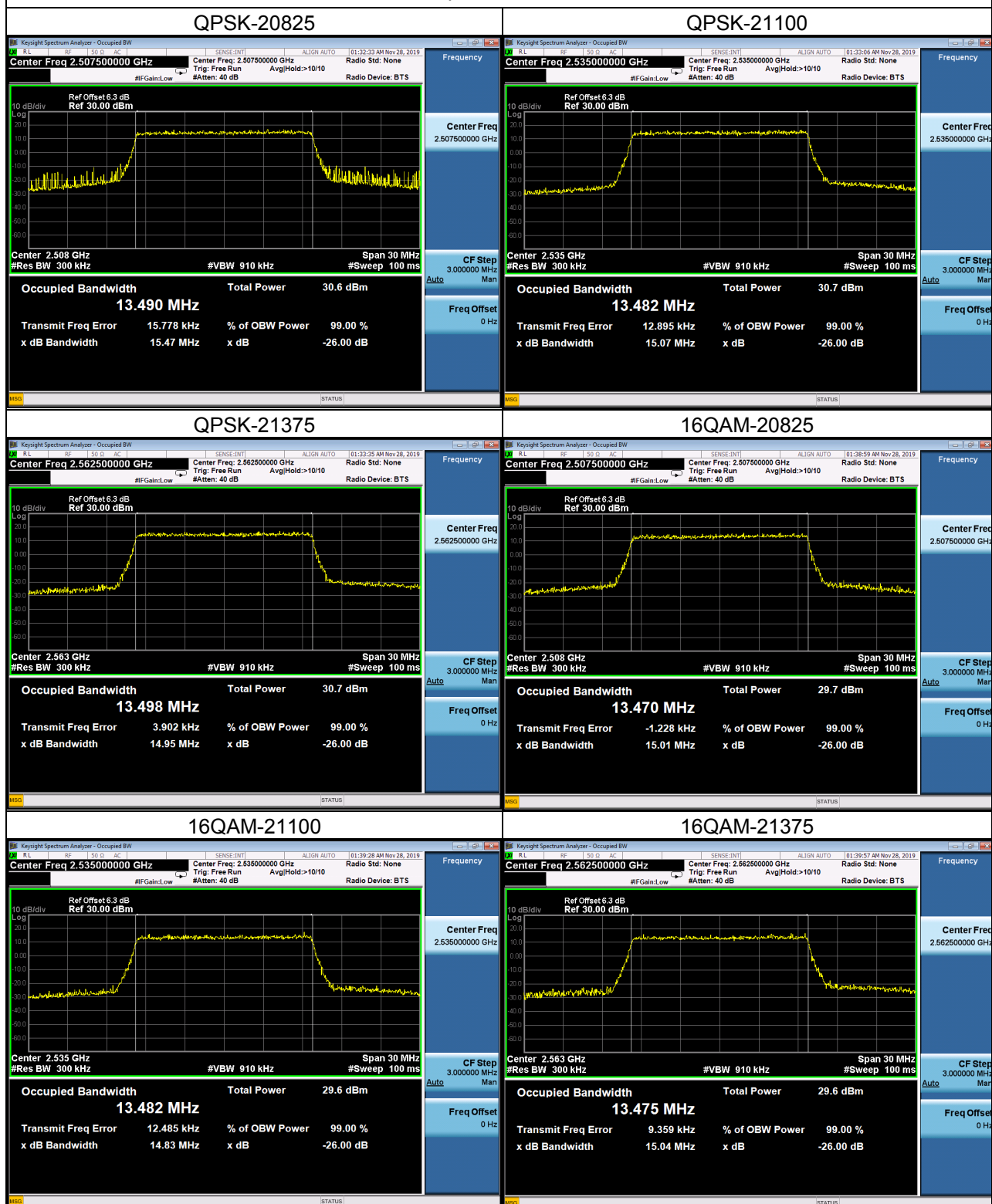


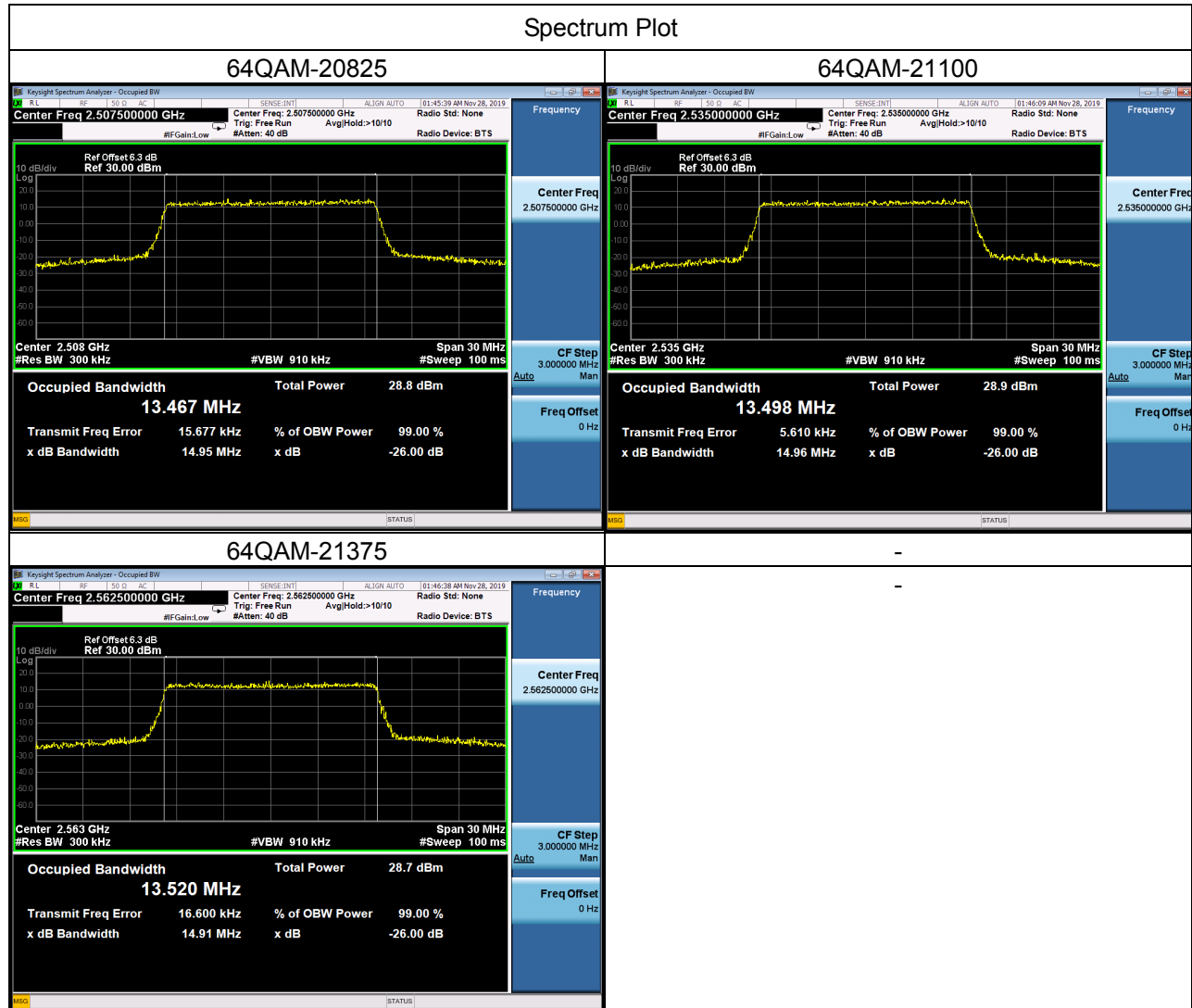
Spectrum Plot



LTE Band 7_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.490	20825	2507.5	15.47
21100	2535	13.482	21100	2535	15.07
21375	2562.5	13.498	21375	2562.5	14.95
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.470	20825	2507.5	15.01
21100	2535	13.482	21100	2535	14.83
21375	2562.5	13.475	21375	2562.5	15.04
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.467	20825	2507.5	14.95
21100	2535	13.498	21100	2535	14.96
21375	2562.5	13.520	21375	2562.5	14.91

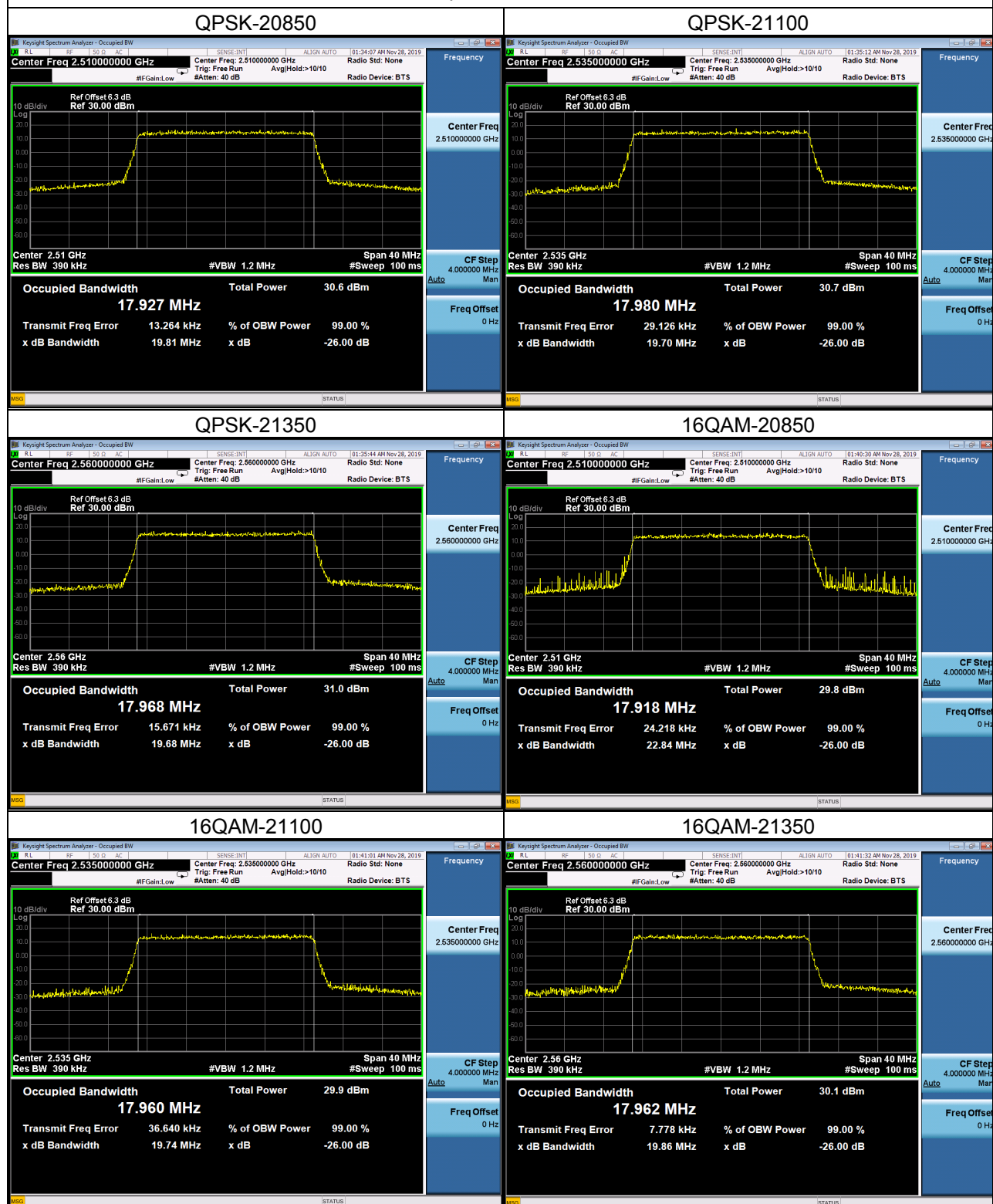
Spectrum Plot



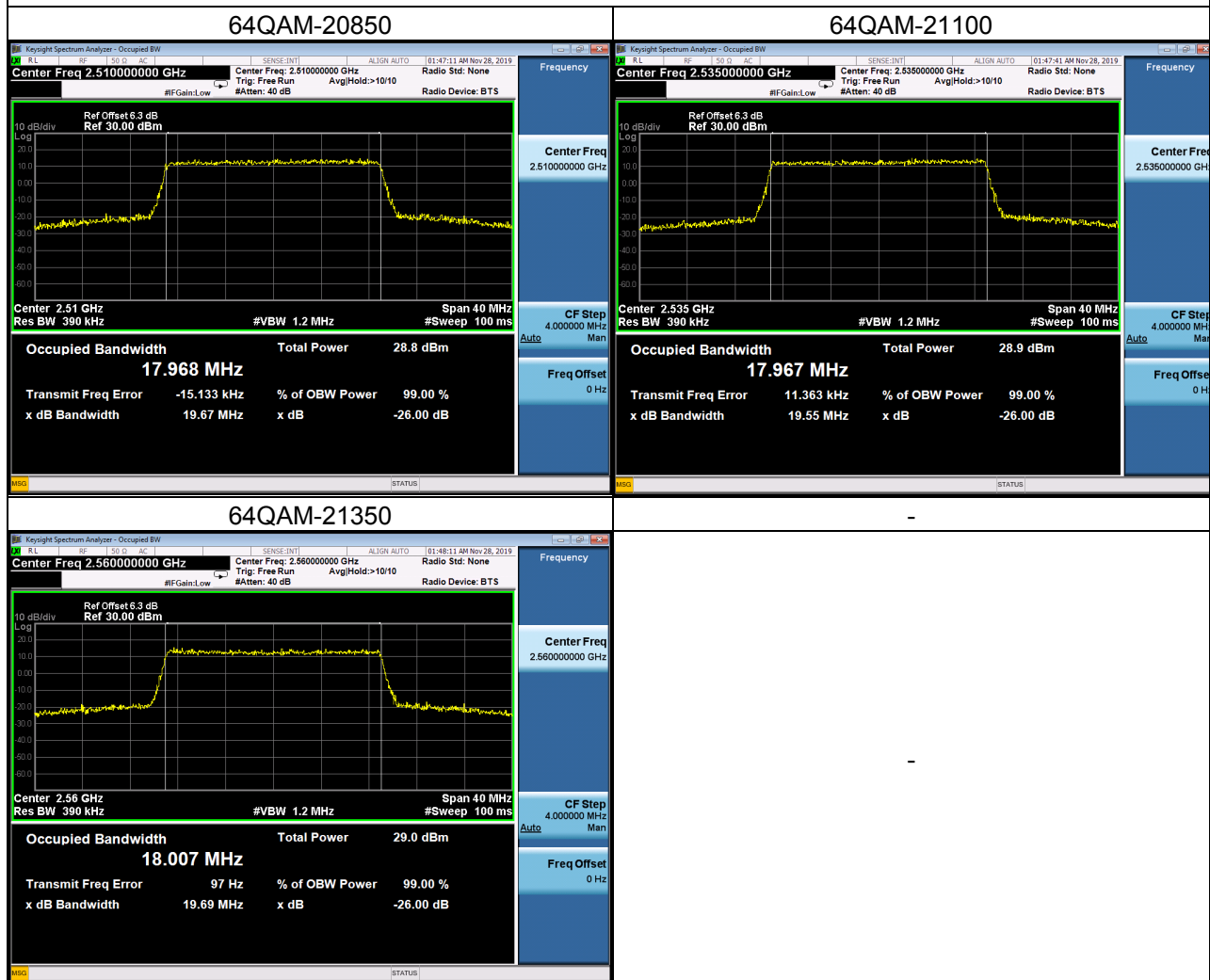


LTE Band 7_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.927	20850	2510	19.81
21100	2535	17.980	21100	2535	19.70
21350	2560	17.968	21350	2560	19.68
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.918	20850	2510	22.84
21100	2535	17.960	21100	2535	19.74
21350	2560	17.962	21350	2560	19.86
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.968	20850	2510	19.67
21100	2535	17.967	21100	2535	19.55
21350	2560	18.007	21350	2560	19.69

Spectrum Plot

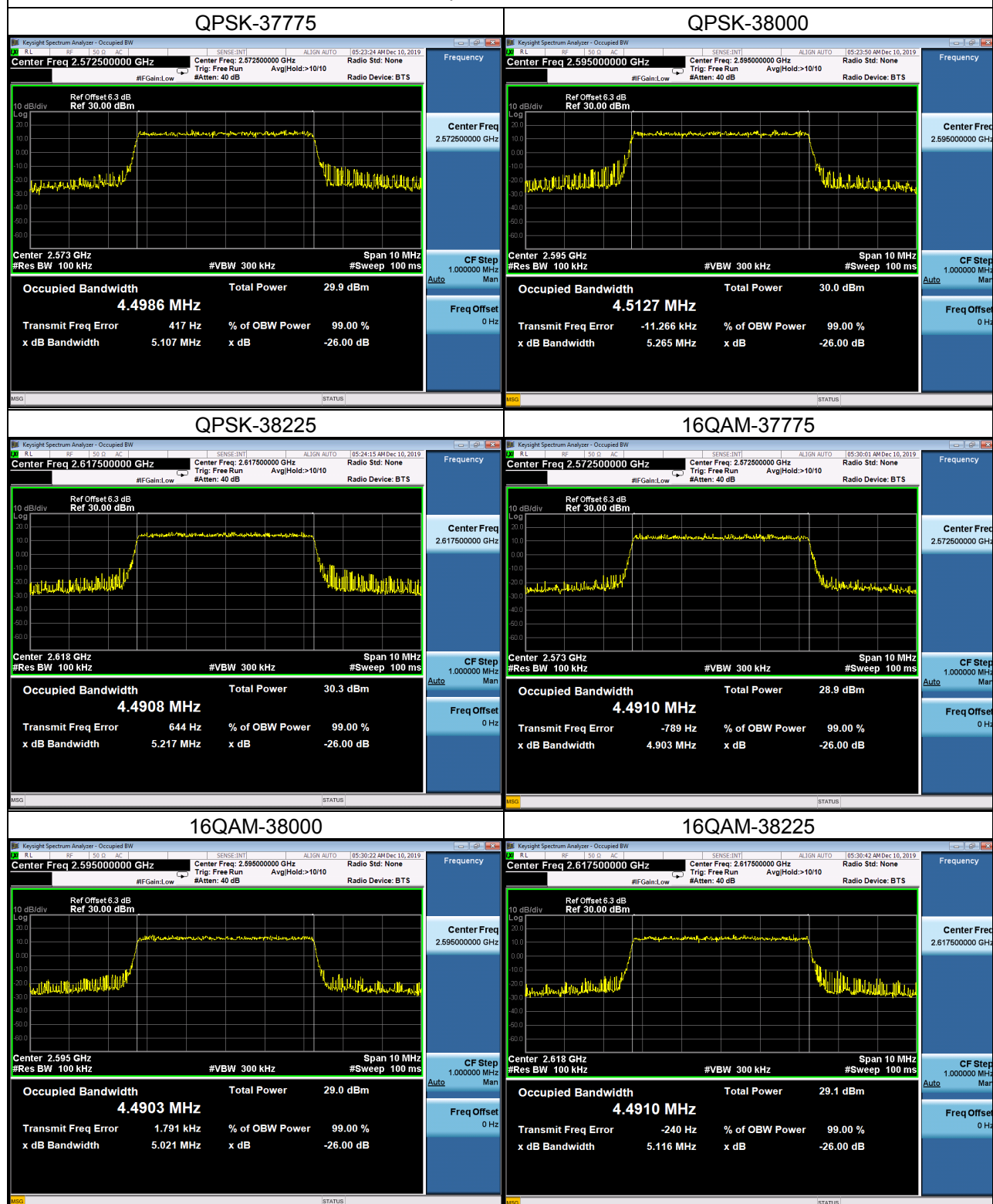


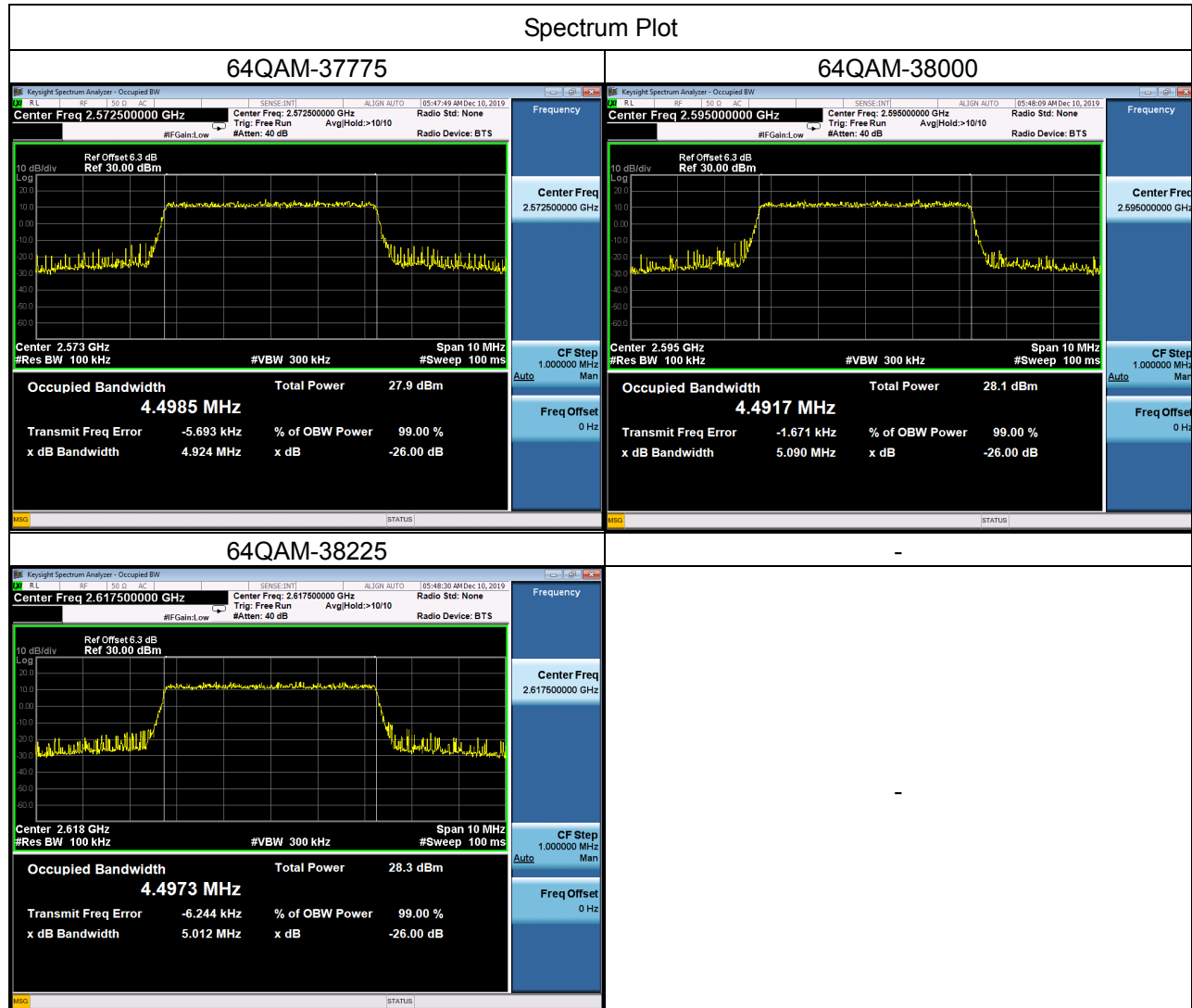
Spectrum Plot



LTE Band 38_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.4986	37775	2572.5	5.107
38000	2595	4.5127	38000	2595	5.265
38225	2617.5	4.4908	38225	2617.5	5.217
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.4910	37775	2572.5	4.903
38000	2595	4.4903	38000	2595	5.021
38225	2617.5	4.4910	38225	2617.5	5.116
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.4985	37775	2572.5	4.924
38000	2595	4.4917	38000	2595	5.090
38225	2617.5	4.4973	38225	2617.5	5.012

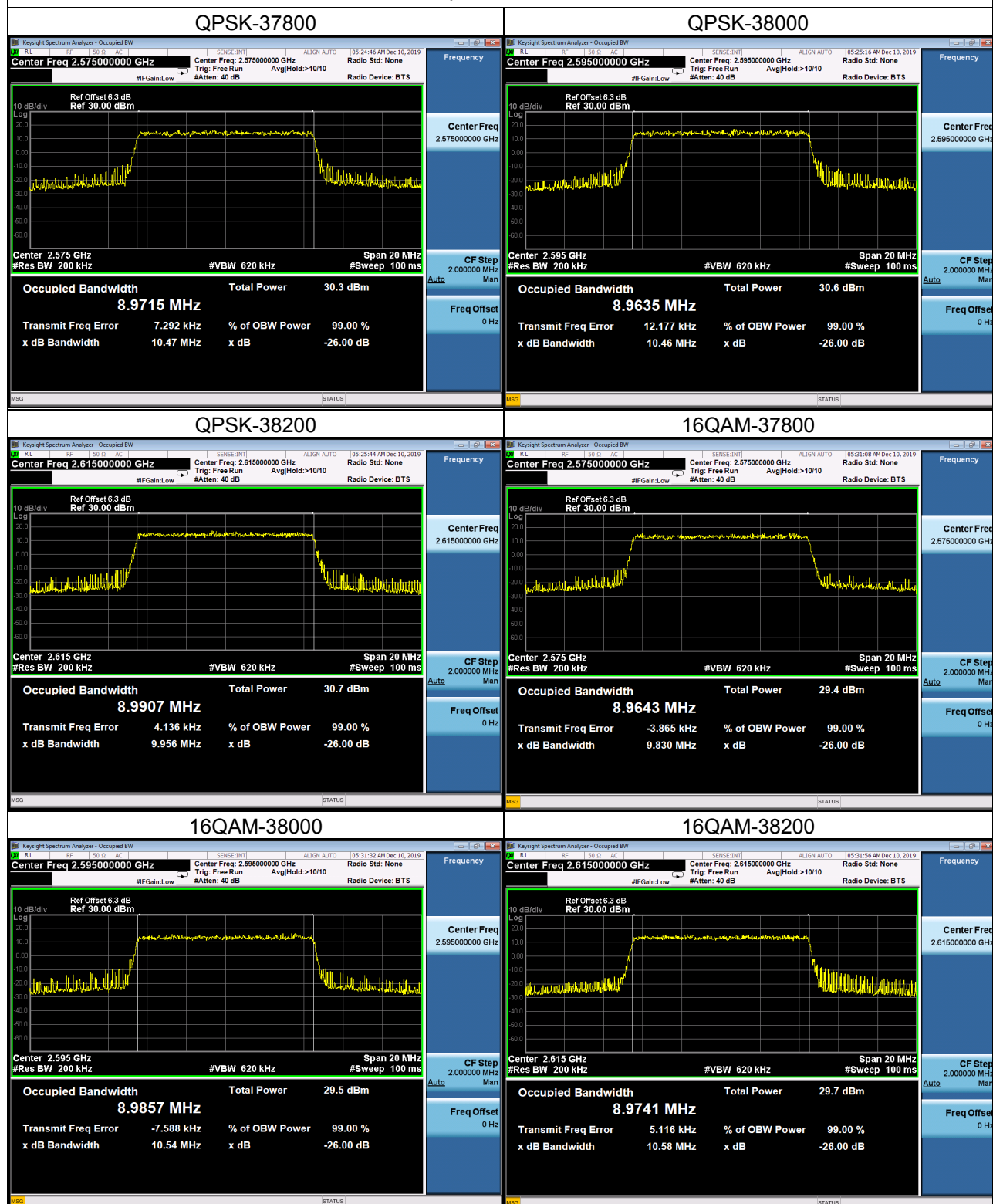
Spectrum Plot

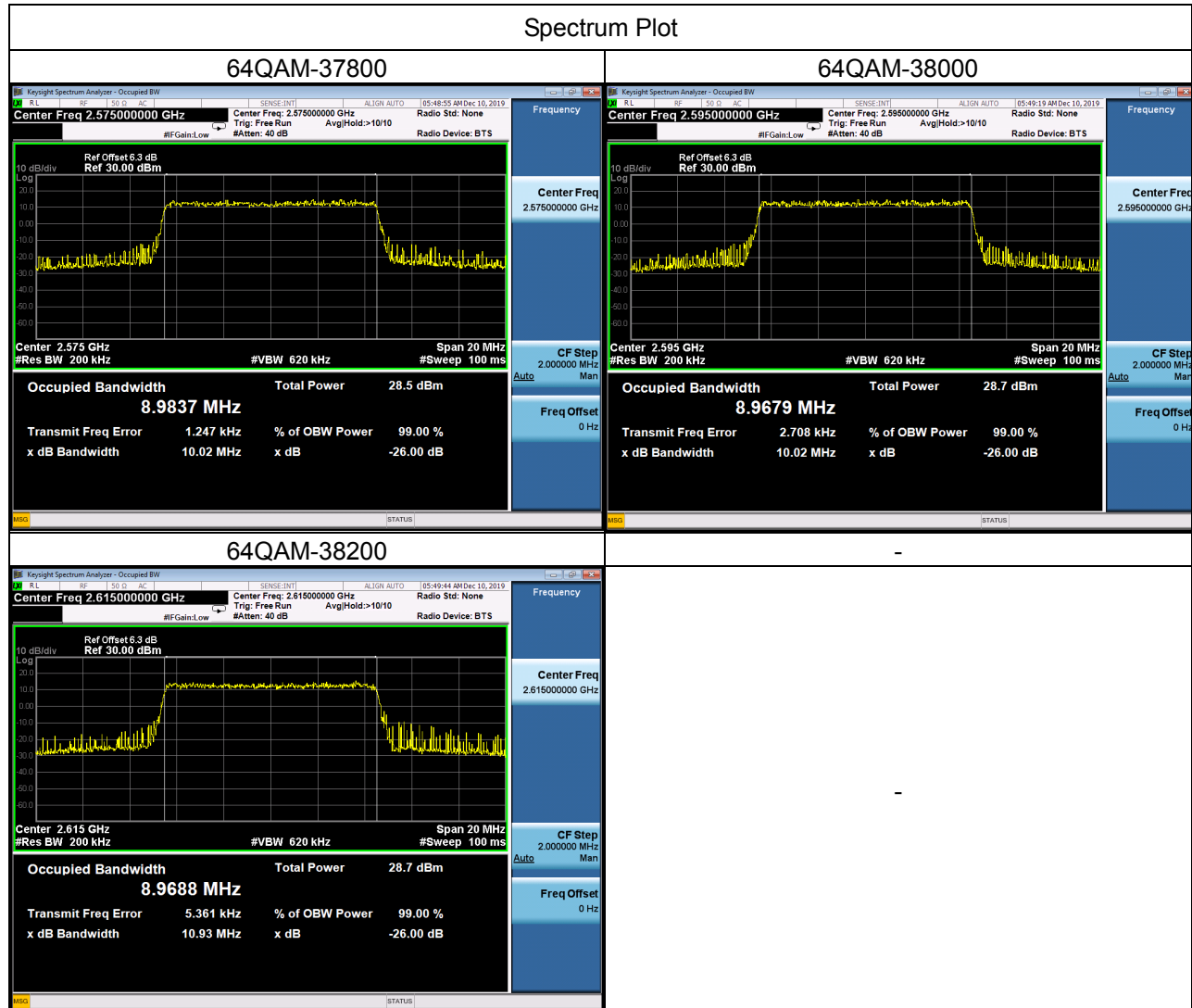




LTE Band 38_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.9715	37800	2575	10.47
38000	2595	8.9635	38000	2595	10.46
38200	2615	8.9907	38200	2615	9.956
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.9643	37800	2575	9.830
38000	2595	8.9857	38000	2595	10.54
38200	2615	8.9741	38200	2615	10.58
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.9837	37800	2575	10.02
38000	2595	8.9679	38000	2595	10.02
38200	2615	8.9688	38200	2615	10.03

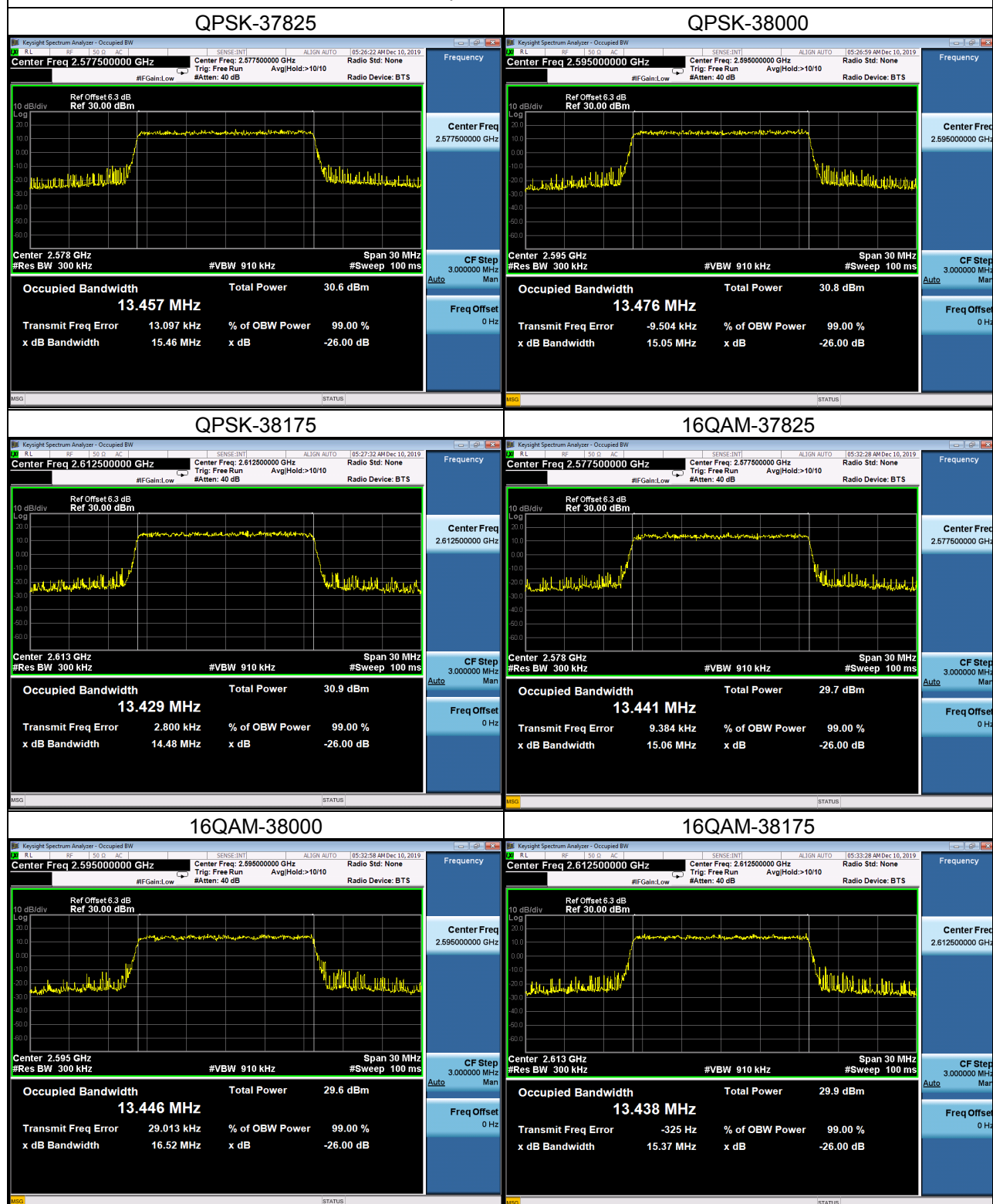
Spectrum Plot

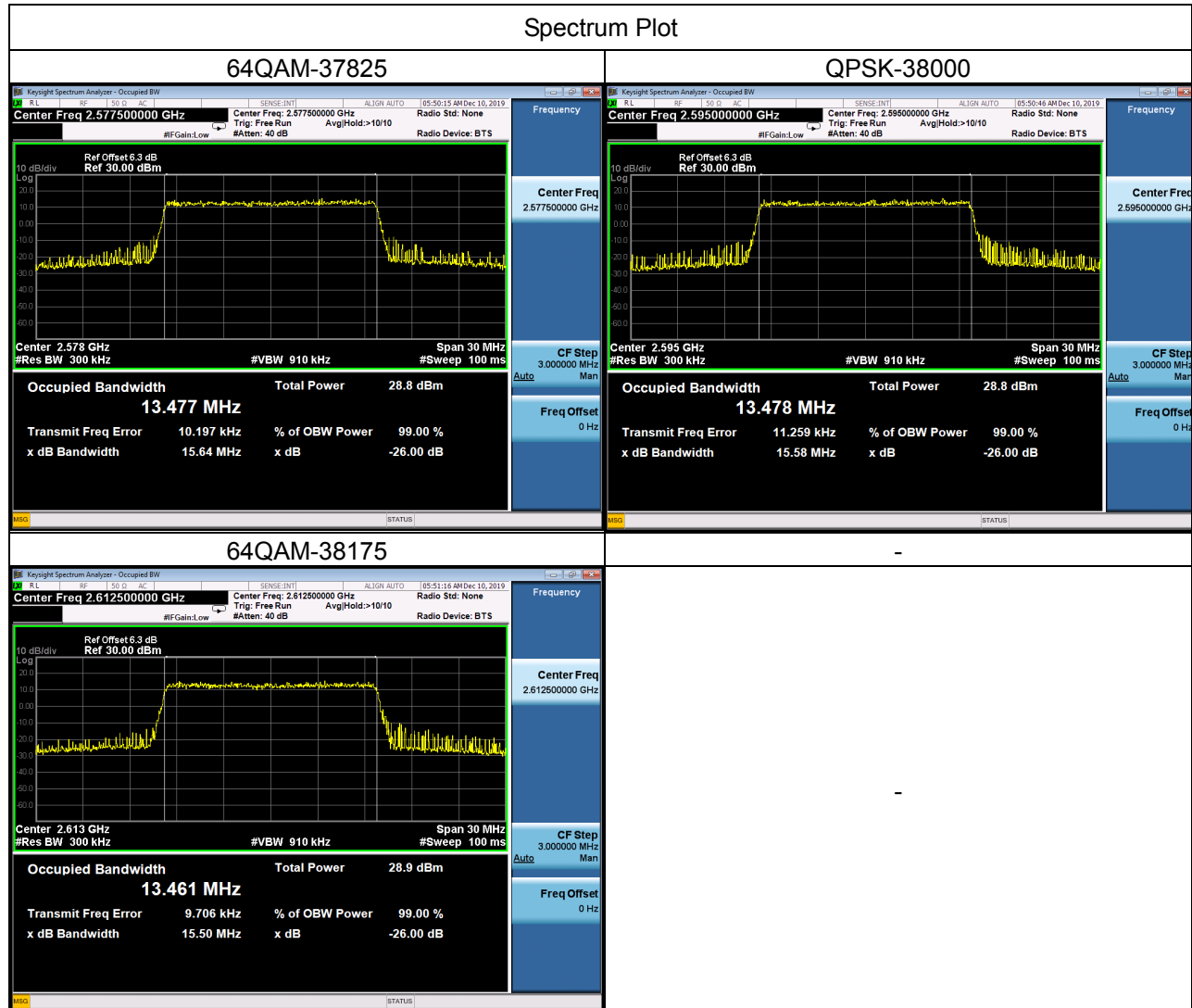




LTE Band 38_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.457	37825	2577.5	15.46
38000	2595	13.476	38000	2595	15.05
38175	2612.5	13.429	38175	2612.5	14.48
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.441	37825	2577.5	15.06
38000	2595	13.446	38000	2595	16.52
38175	2612.5	13.438	38175	2612.5	15.37
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.477	37825	2577.5	15.14
38000	2595	13.478	38000	2595	15.58
38175	2612.5	13.461	38175	2612.5	15.50

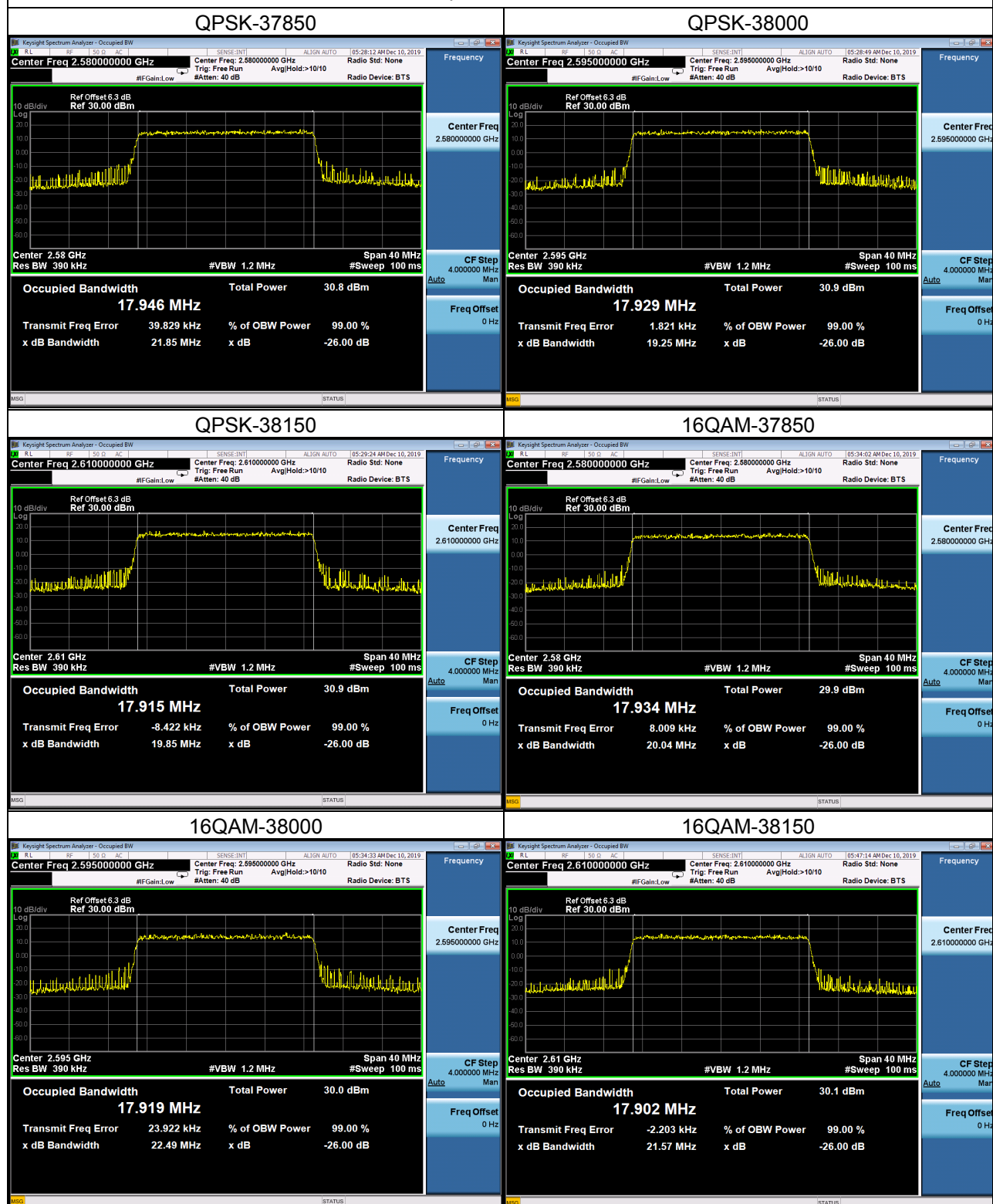
Spectrum Plot

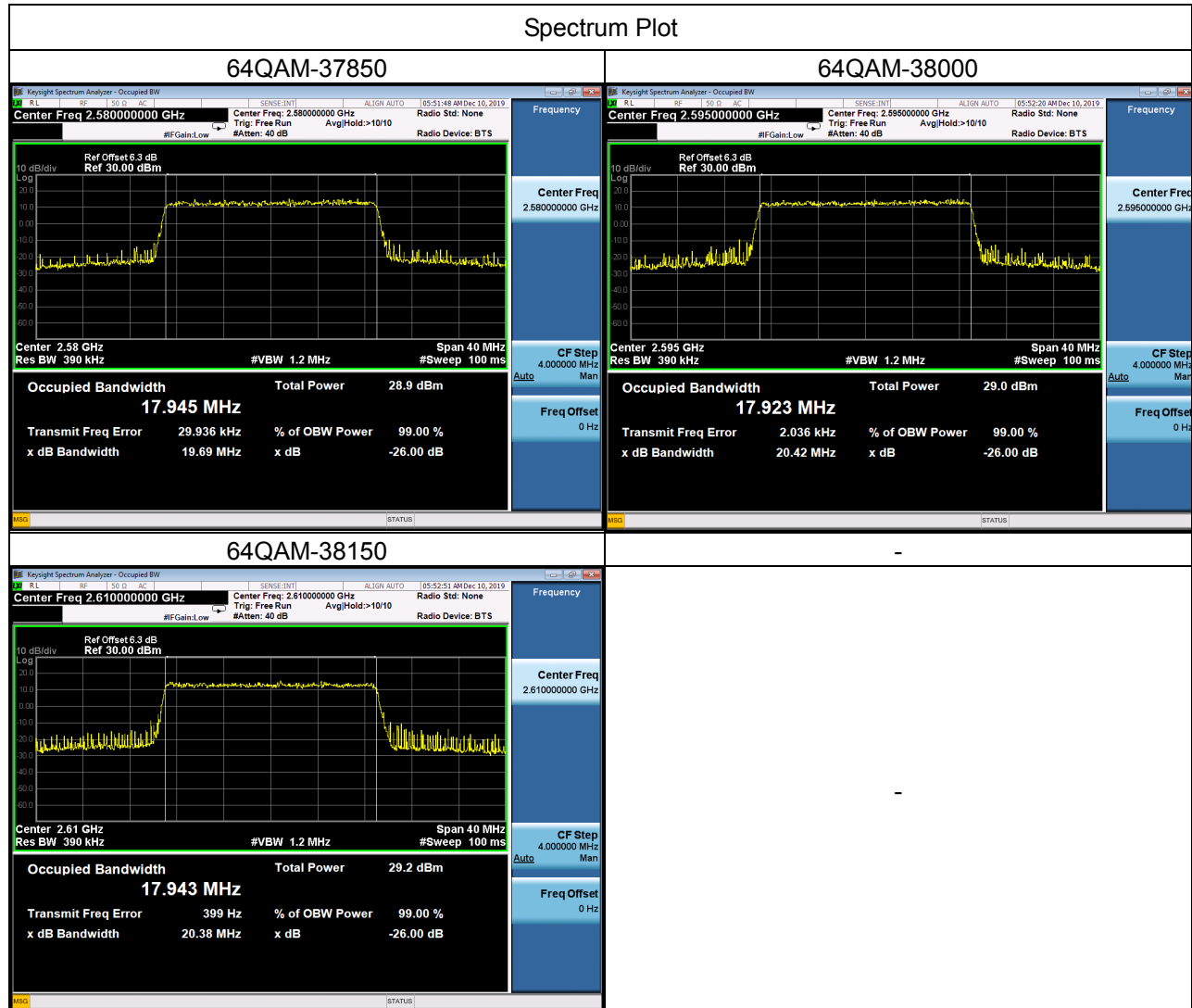




LTE Band 38_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.946	37850	2580	21.85
38000	2595	17.929	38000	2595	19.25
38150	2610	17.915	38150	2610	19.85
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.934	37850	2580	20.04
38000	2595	17.919	38000	2595	22.49
38150	2610	17.902	38150	2610	21.57
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.945	37850	2580	19.69
38000	2595	17.923	38000	2595	20.42
38150	2610	17.943	38150	2610	20.38

Spectrum Plot

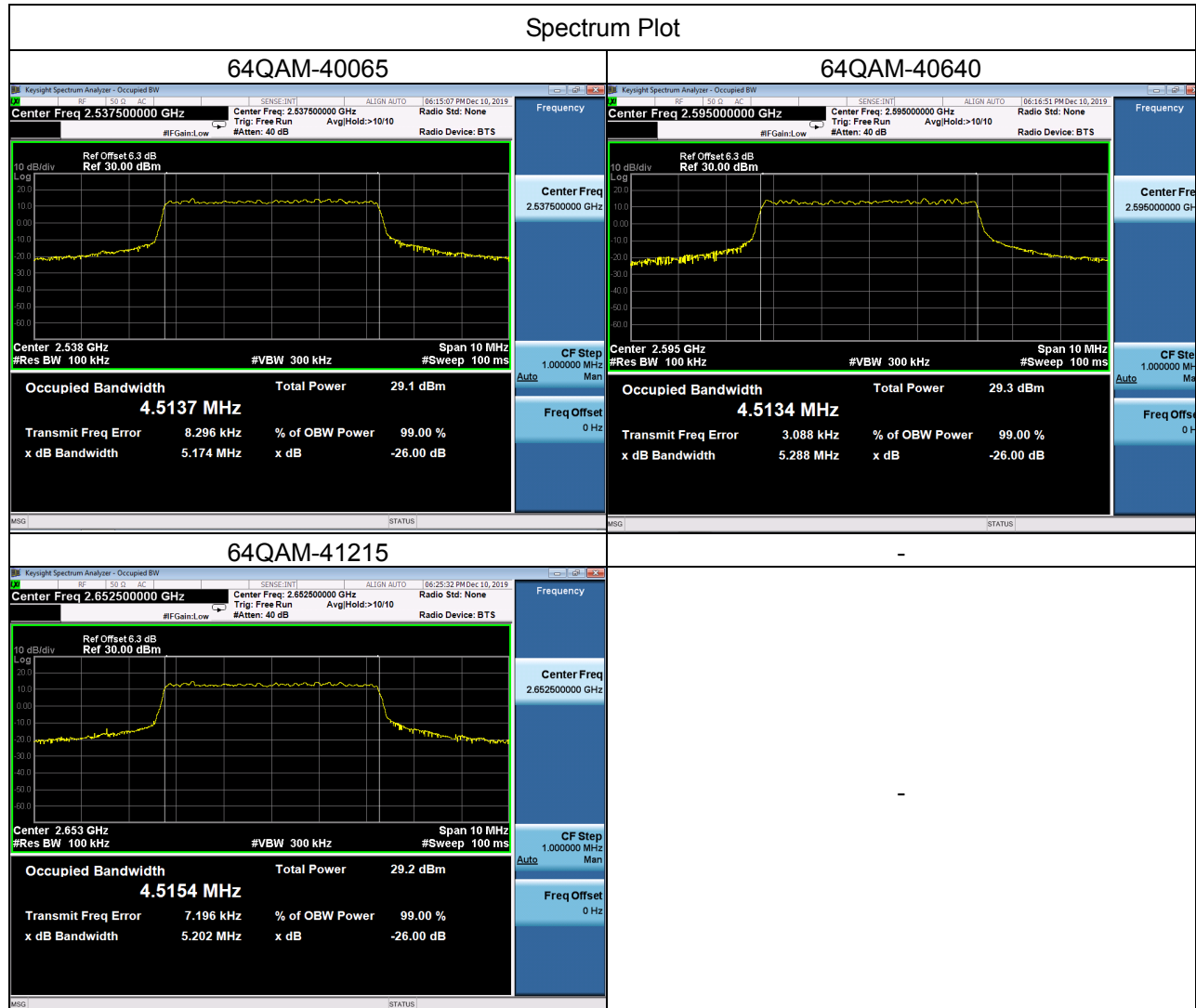




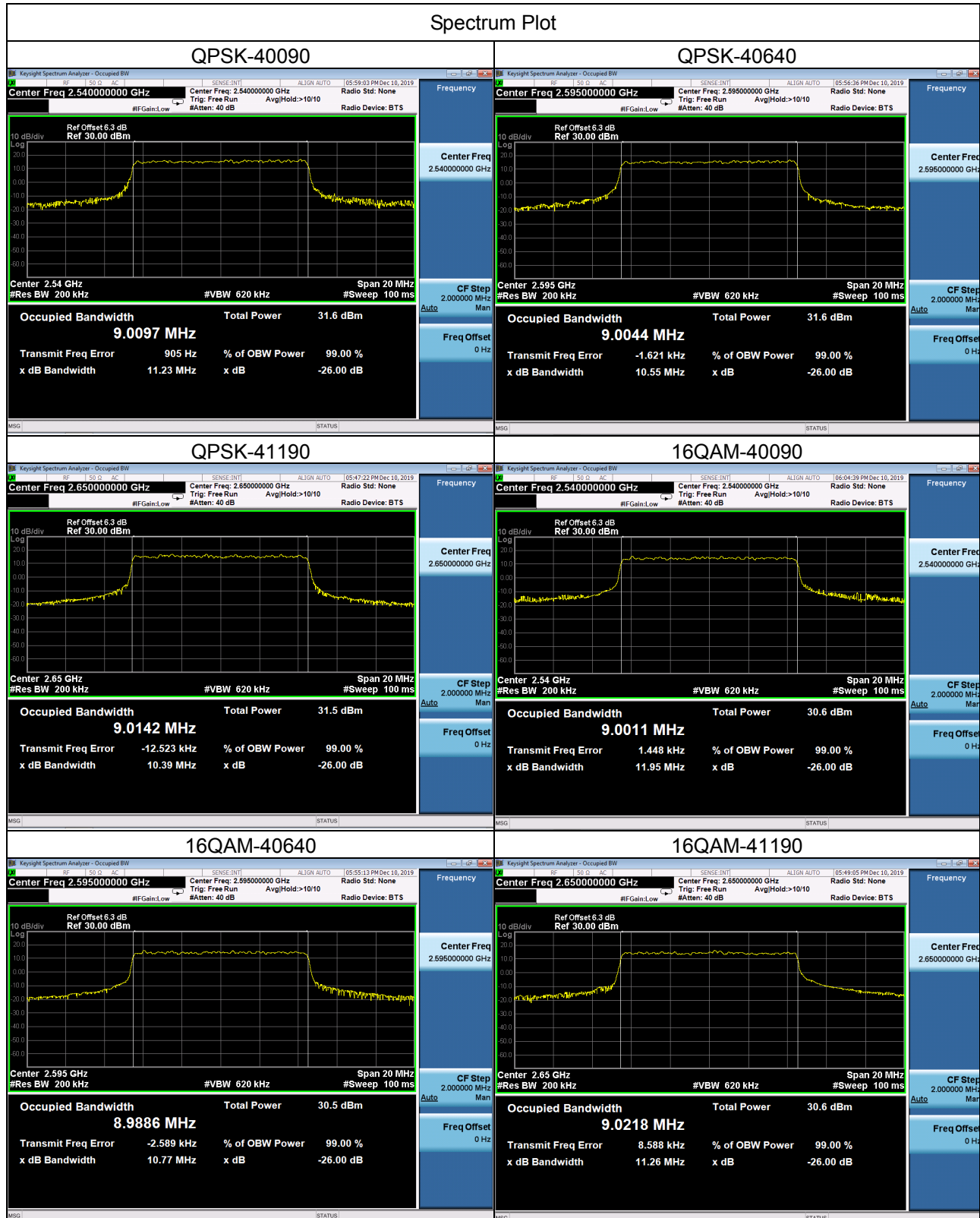
LTE Band 41_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40065	2537.5	4.4949	40065	2537.5	5.017
40640	2595	4.5153	40640	2595	5.348
41215	2652.5	4.4945	41215	2652.5	5.065
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40065	2537.5	4.5016	40065	2537.5	5.384
40640	2595	4.5014	40640	2595	5.318
41215	2652.5	4.5042	41215	2652.5	5.360
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40065	2537.5	4.5137	40065	2537.5	5.174
40640	2595	4.5134	40640	2595	5.288
41215	2652.5	4.5154	41215	2652.5	5.202

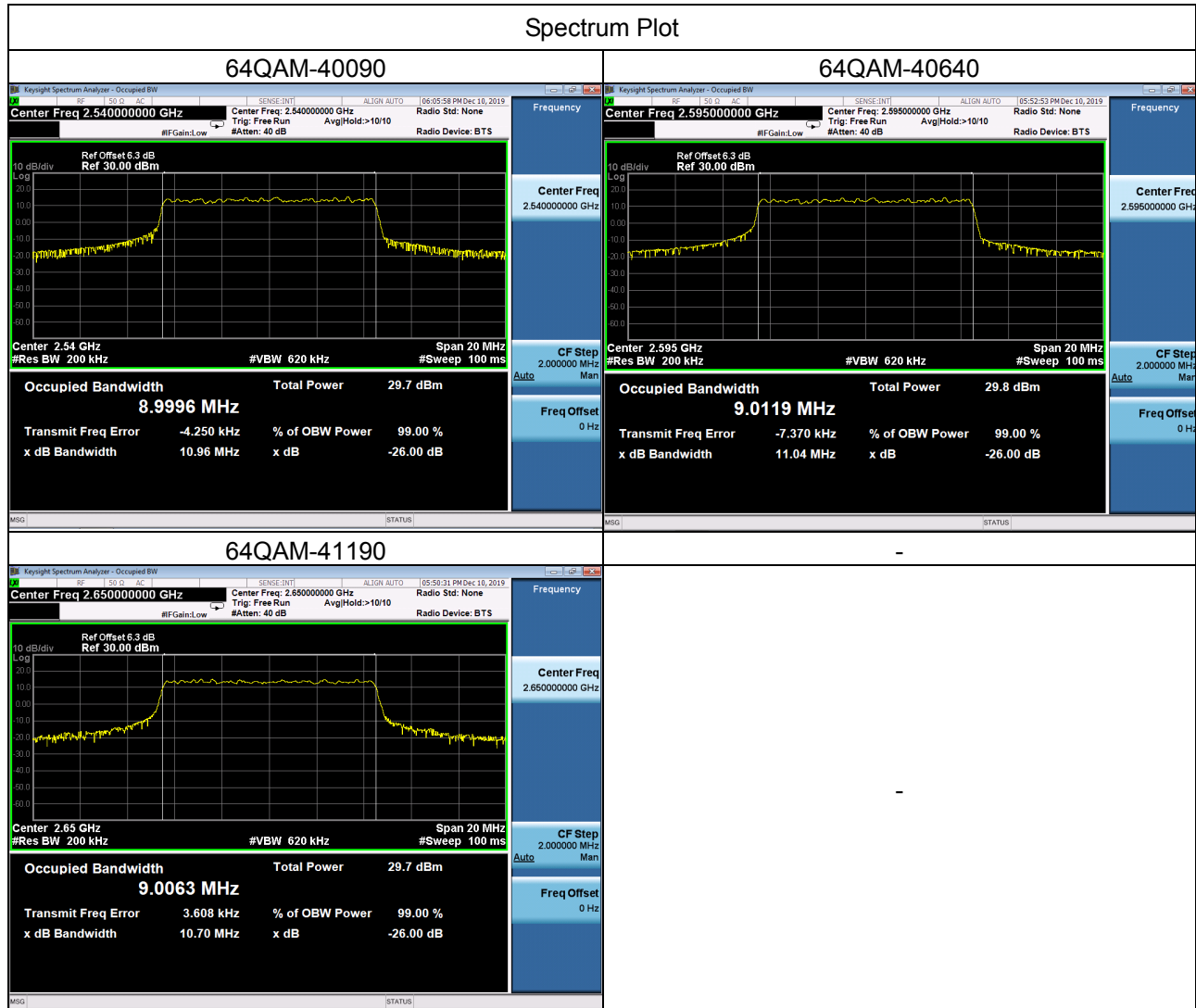
Spectrum Plot



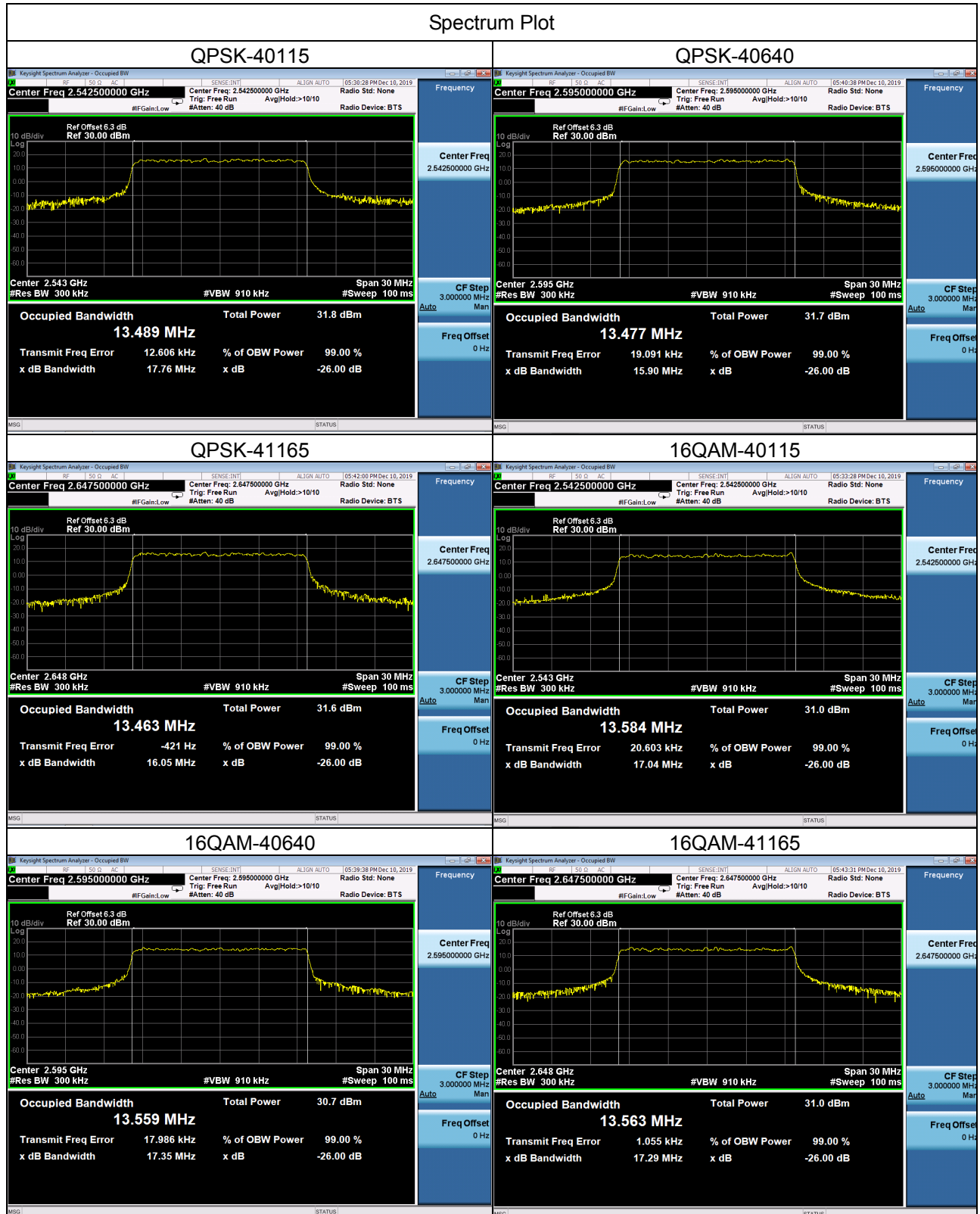


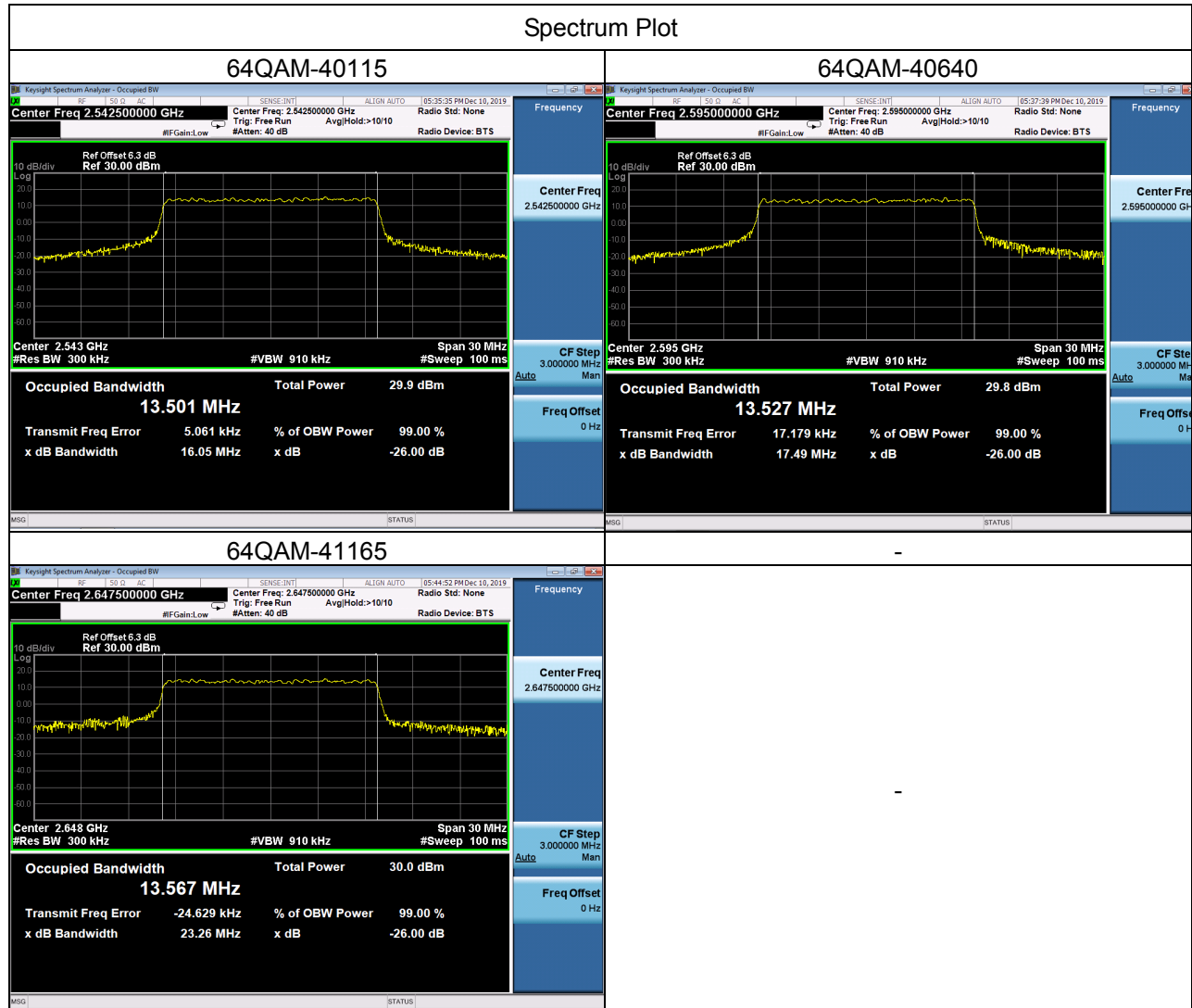
LTE Band 41_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40090	2540	9.0097	40090	2540	11.23
40640	2595	9.0044	40640	2595	10.55
41190	2650	9.0142	41190	2650	10.39
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40090	2540	9.0011	40090	2540	11.95
40640	2595	8.9886	40640	2595	10.77
41190	2650	9.0218	41190	2650	11.26
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40090	2540	8.9996	40090	2540	10.96
40640	2595	9.0119	40640	2595	11.04
41190	2650	9.0063	41190	2650	10.70





LTE Band 41_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40115	2542.5	13.489	40115	2542.5	17.76
40640	2595	13.477	40640	2595	15.90
41165	2647.5	13.463	41165	2647.5	16.05
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40115	2542.5	13.584	40115	2542.5	17.04
40640	2595	13.559	40640	2595	17.35
41165	2647.5	13.563	41165	2647.5	17.29
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40115	2542.5	13.501	40115	2542.5	16.05
40640	2595	13.527	40640	2595	17.49
41165	2647.5	13.567	41165	2647.5	23.26





LTE Band 41_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40140	2545	18.005	40140	2545	20.77
40640	2595	18.006	40640	2595	20.53
41140	2645	17.974	41140	2645	21.13
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40140	2545	17.962	40140	2545	20.80
40640	2595	17.966	40640	2595	20.81
41140	2645	18.011	41140	2645	22.73
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
40140	2545	17.965	40140	2545	21.17
40640	2595	18.039	40640	2595	22.81
41140	2645	17.985	41140	2645	20.64

