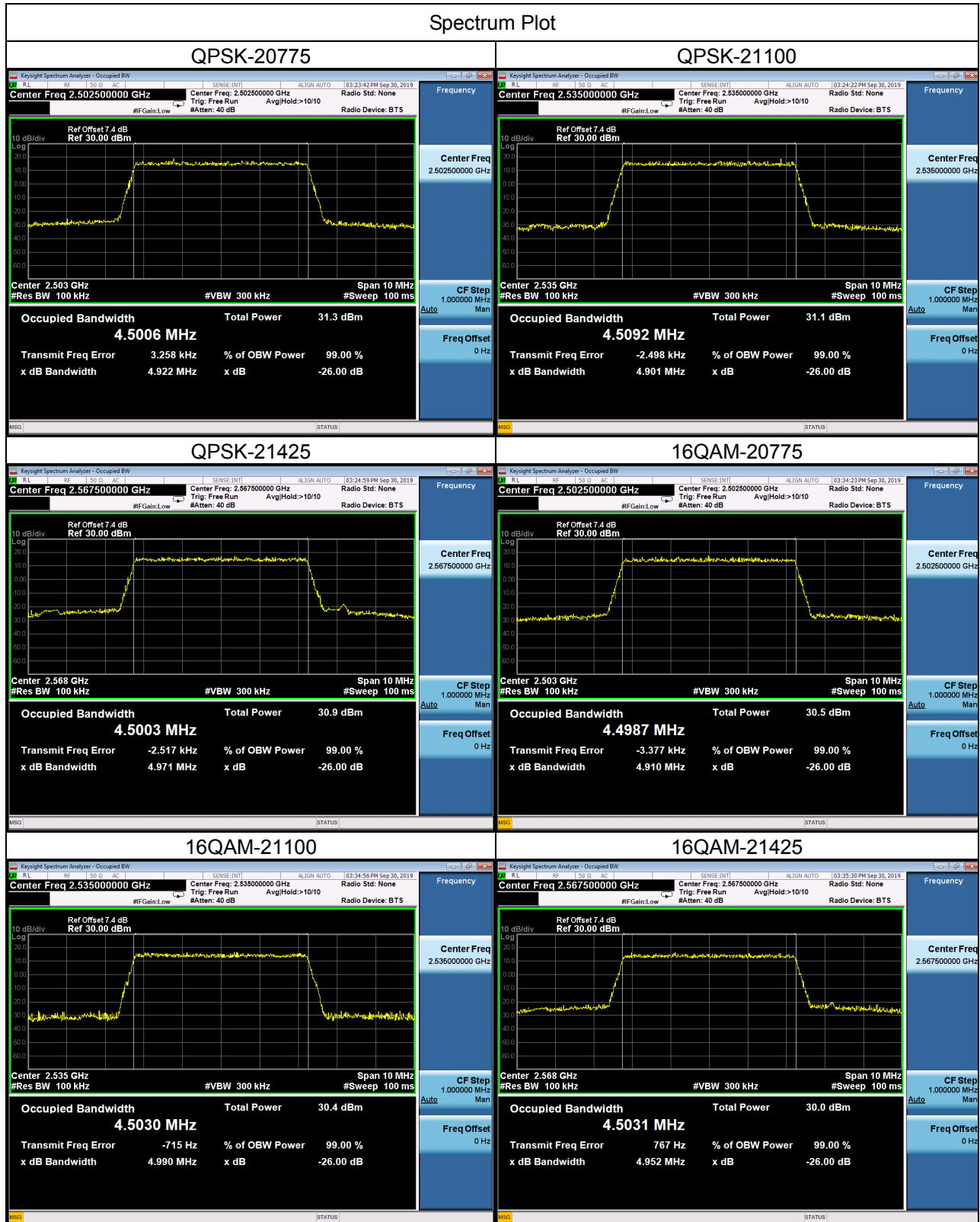


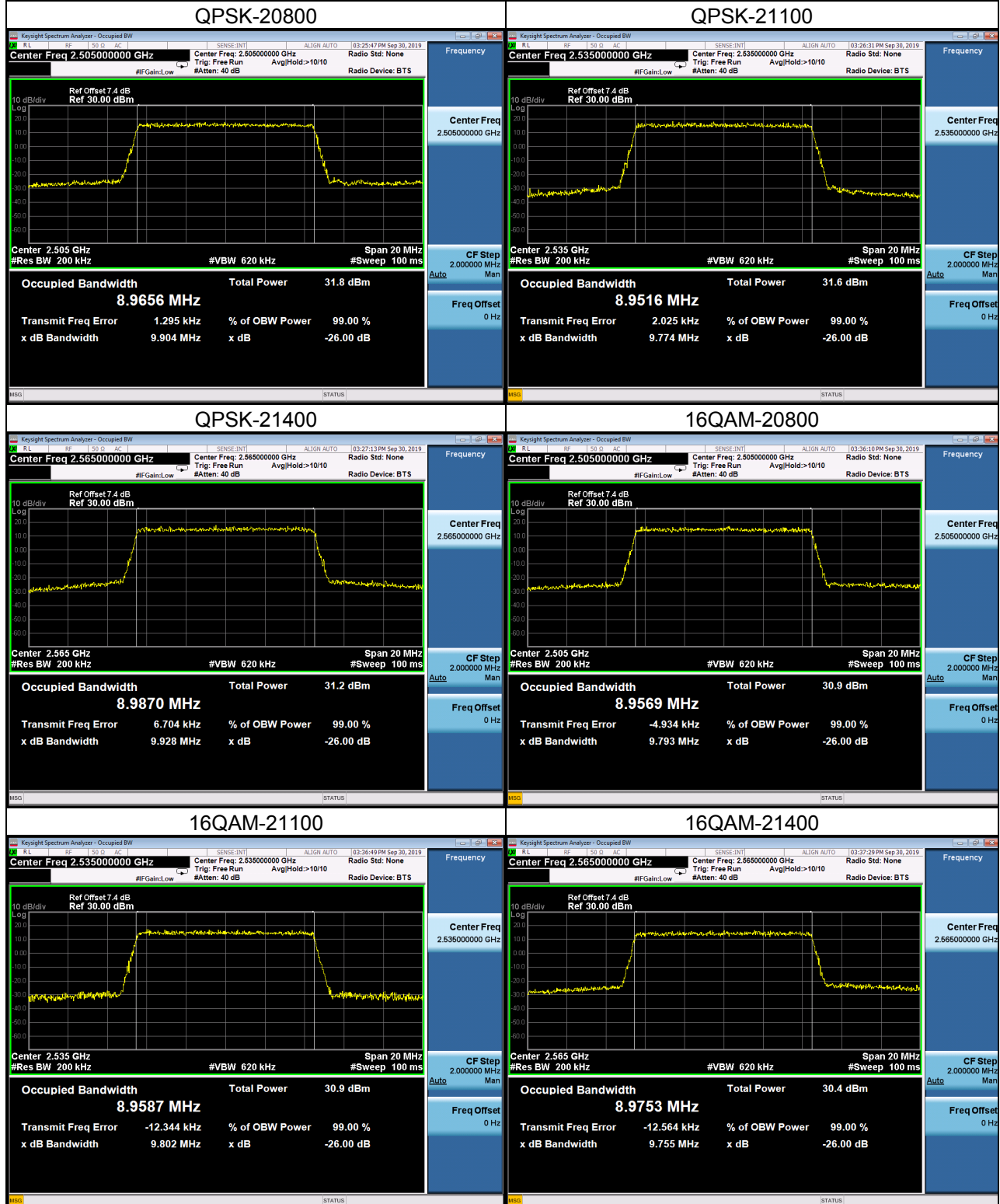
## Spectrum Plot

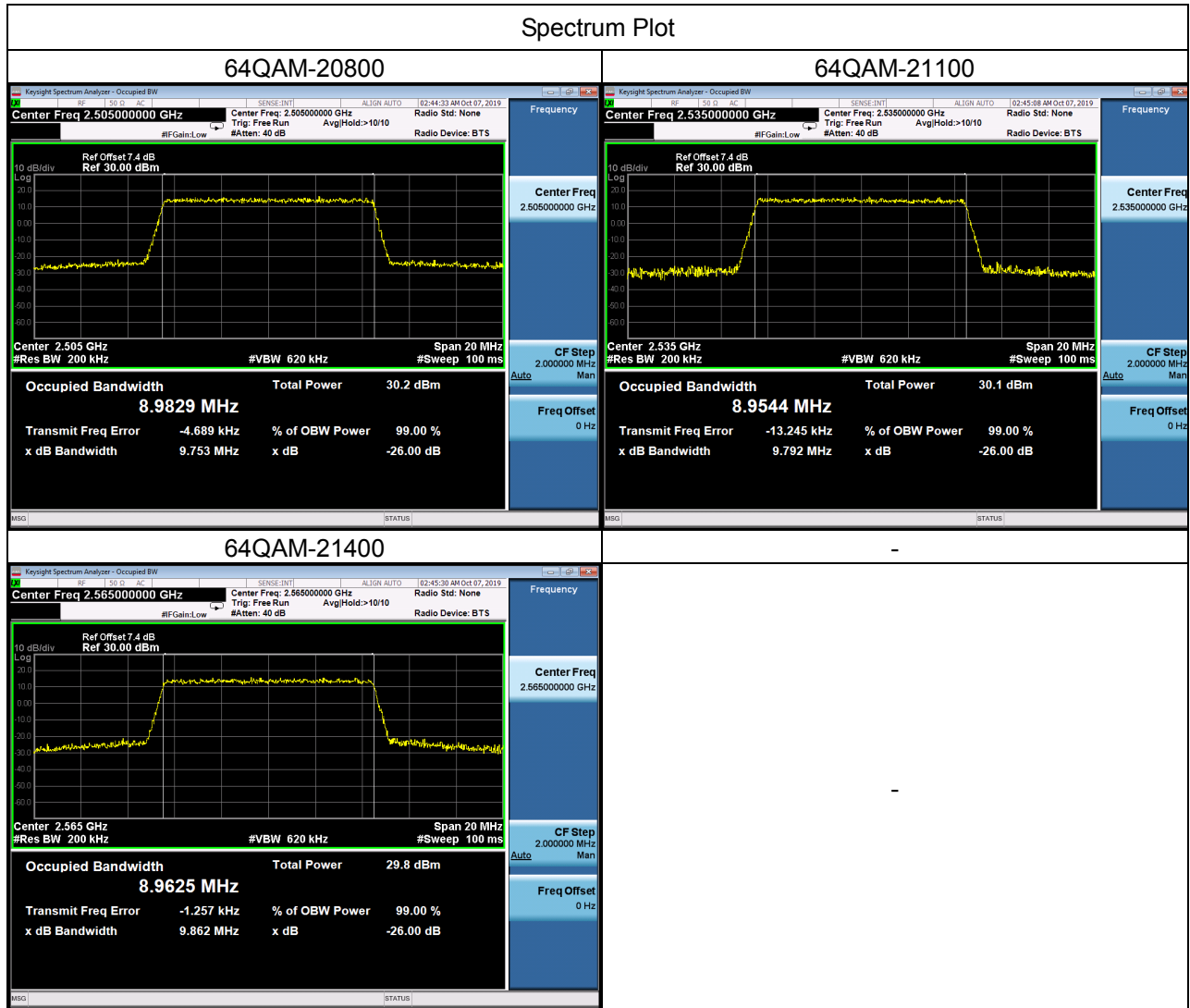




LTE Band 7_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.966	20800	2505	9.904
21100	2535	8.952	21100	2535	9.774
21400	2565	8.987	21400	2565	9.928
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.957	20800	2505	9.793
21100	2535	8.959	21100	2535	9.802
21400	2565	8.975	21400	2565	9.755
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.923	20800	2505	9.753
21100	2535	8.954	21100	2535	9.792
21400	2565	8.963	21400	2565	9.862

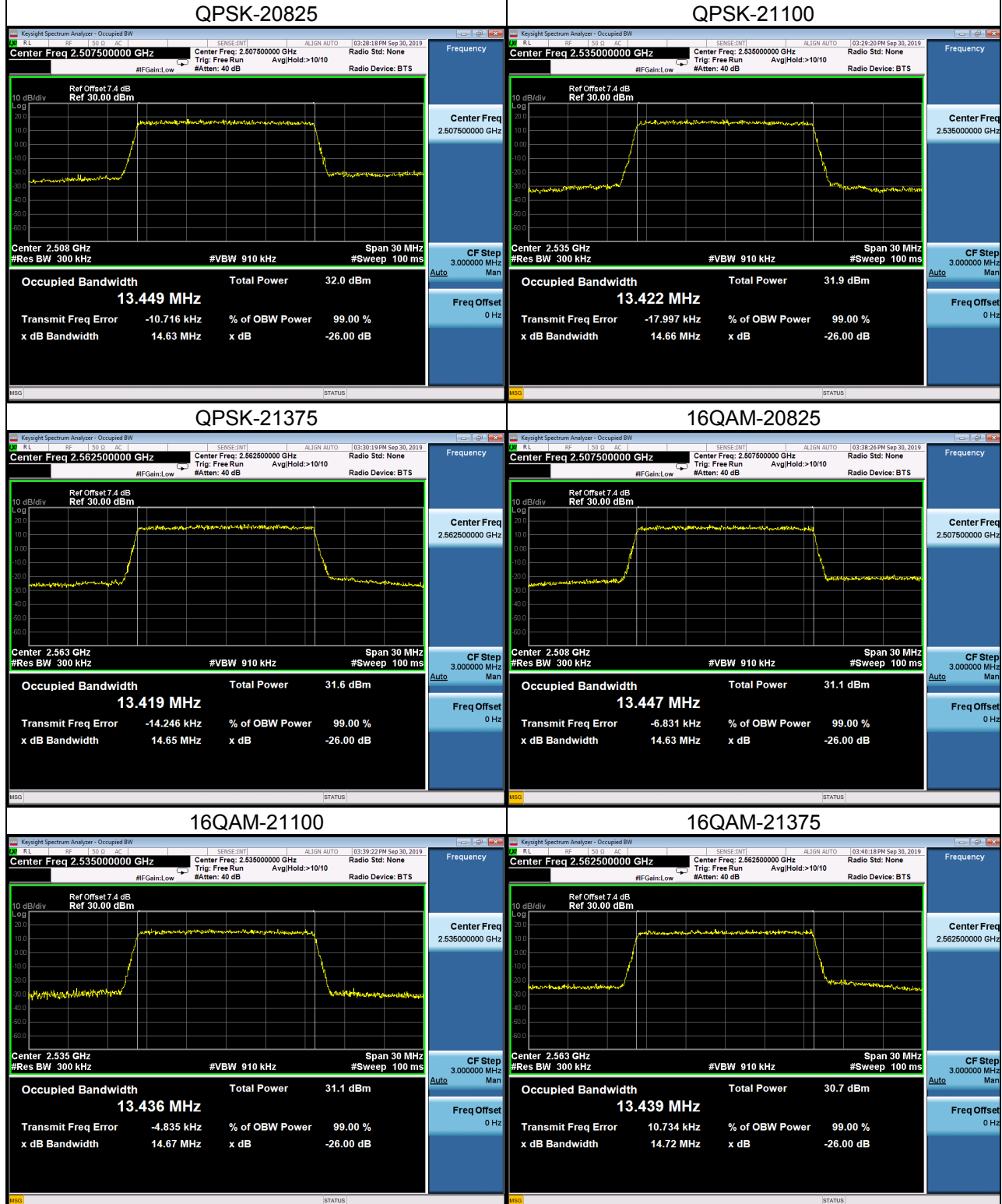
## Spectrum Plot





LTE Band 7_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.449	20825	2507.5	14.630
21100	2535	13.422	21100	2535	14.660
21375	2562.5	13.419	21375	2562.5	14.650
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.447	20825	2507.5	14.630
21100	2535	13.436	21100	2535	14.670
21375	2562.5	13.439	21375	2562.5	14.720
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.432	20825	2507.5	14.670
21100	2535	13.430	21100	2535	14.700
21375	2562.5	13.462	21375	2562.5	14.670

## Spectrum Plot

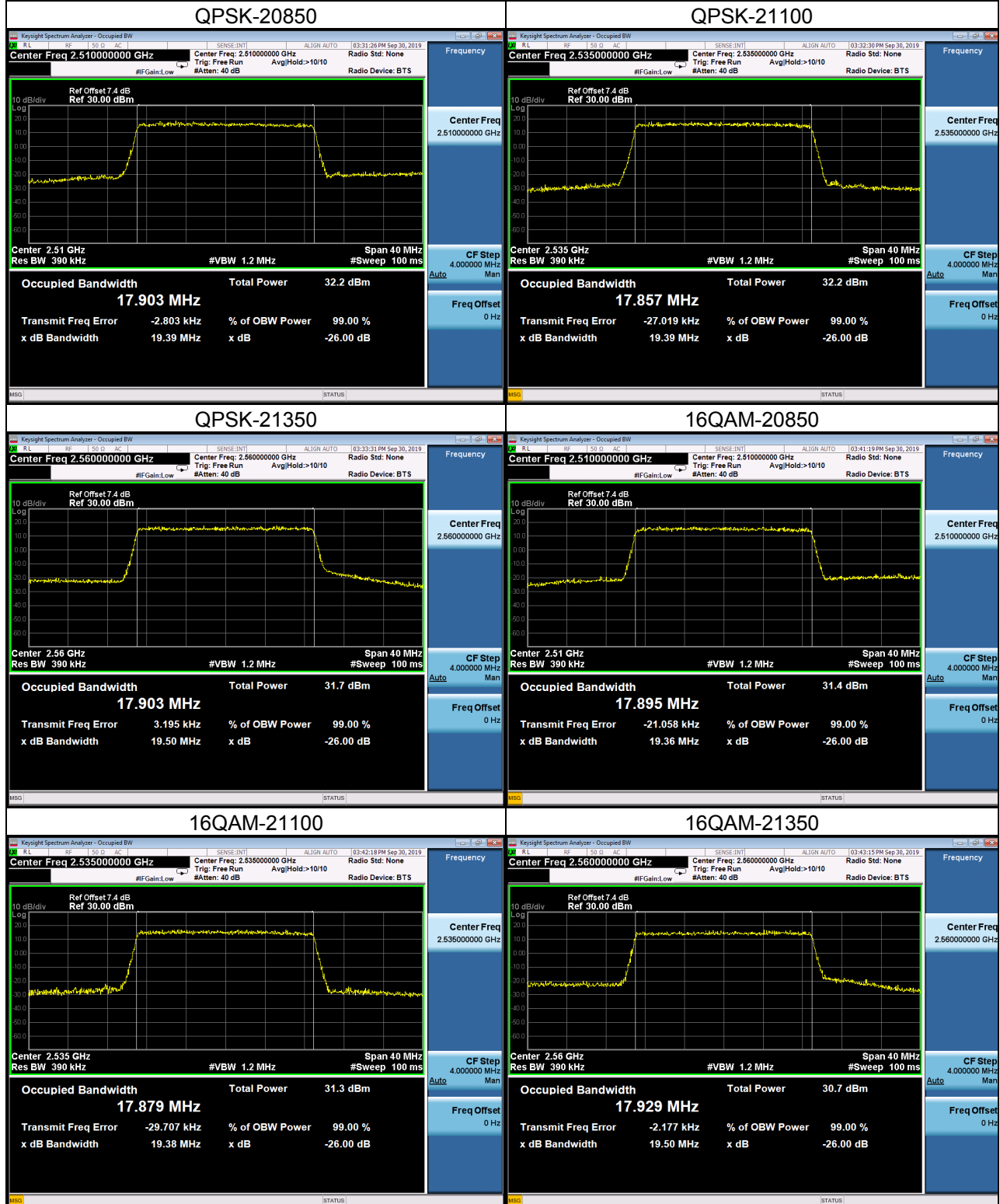






LTE Band 7_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.903	20850	2510	19.390
21100	2535	17.857	21100	2535	19.390
21350	2560	17.903	21350	2560	19.500
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.895	20850	2510	19.360
21100	2535	17.879	21100	2535	19.380
21350	2560	17.929	21350	2560	19.500
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.878	20850	2510	19.430
21100	2535	17.908	21100	2535	19.390
21350	2560	17.928	21350	2560	19.360

## Spectrum Plot

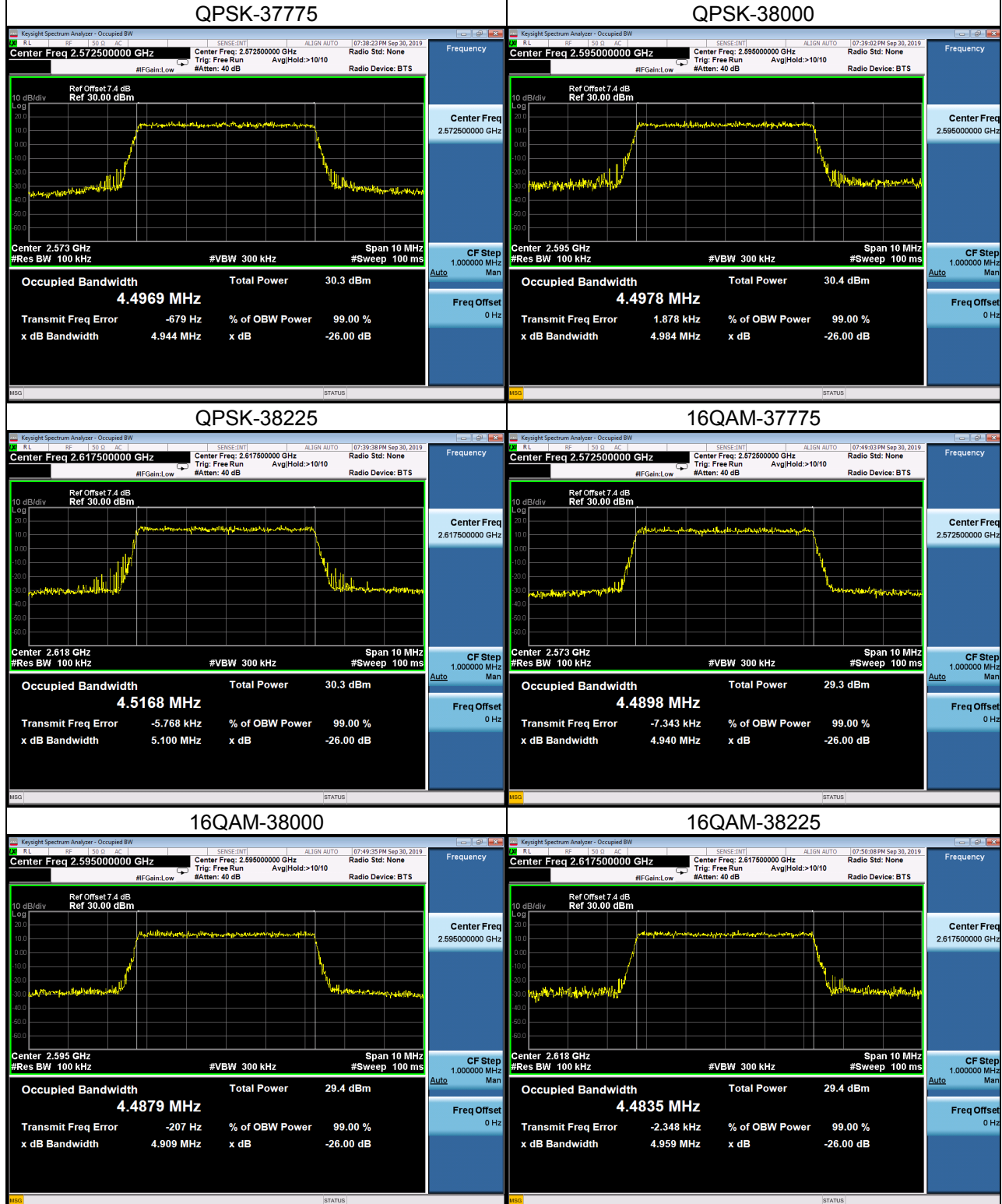


## Spectrum Plot

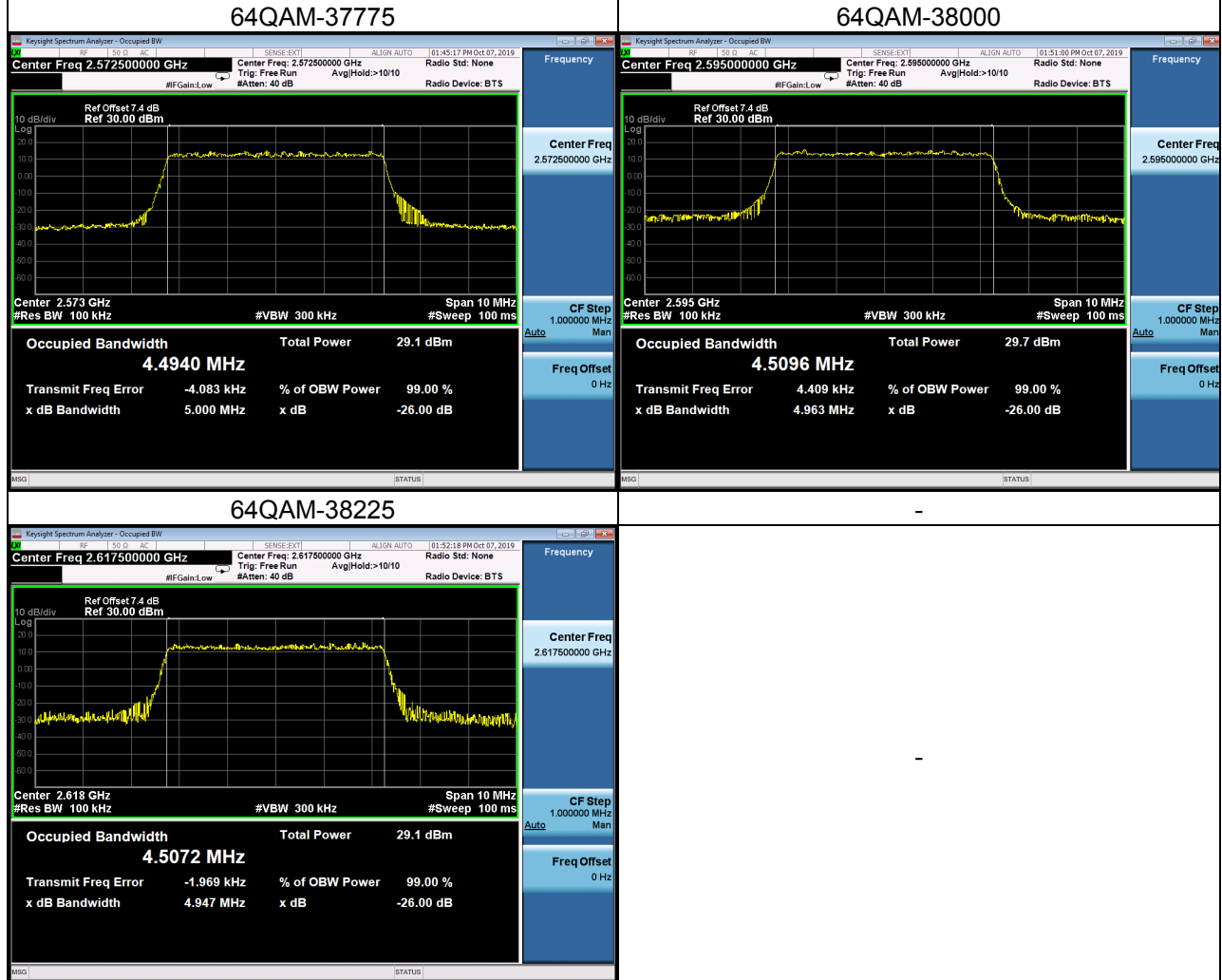


LTE Band 38_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.497	37775	2572.5	4.944
38000	2595	4.498	38000	2595	4.984
38225	2617.5	4.517	38225	2617.5	5.100
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.490	37775	2572.5	4.940
38000	2595	4.488	38000	2595	4.909
38225	2617.5	4.484	38225	2617.5	4.959
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37775	2572.5	4.499	37775	2572.5	5.000
38000	2595	4.510	38000	2595	4.963
38225	2617.5	4.507	38225	2617.5	4.947

## Spectrum Plot

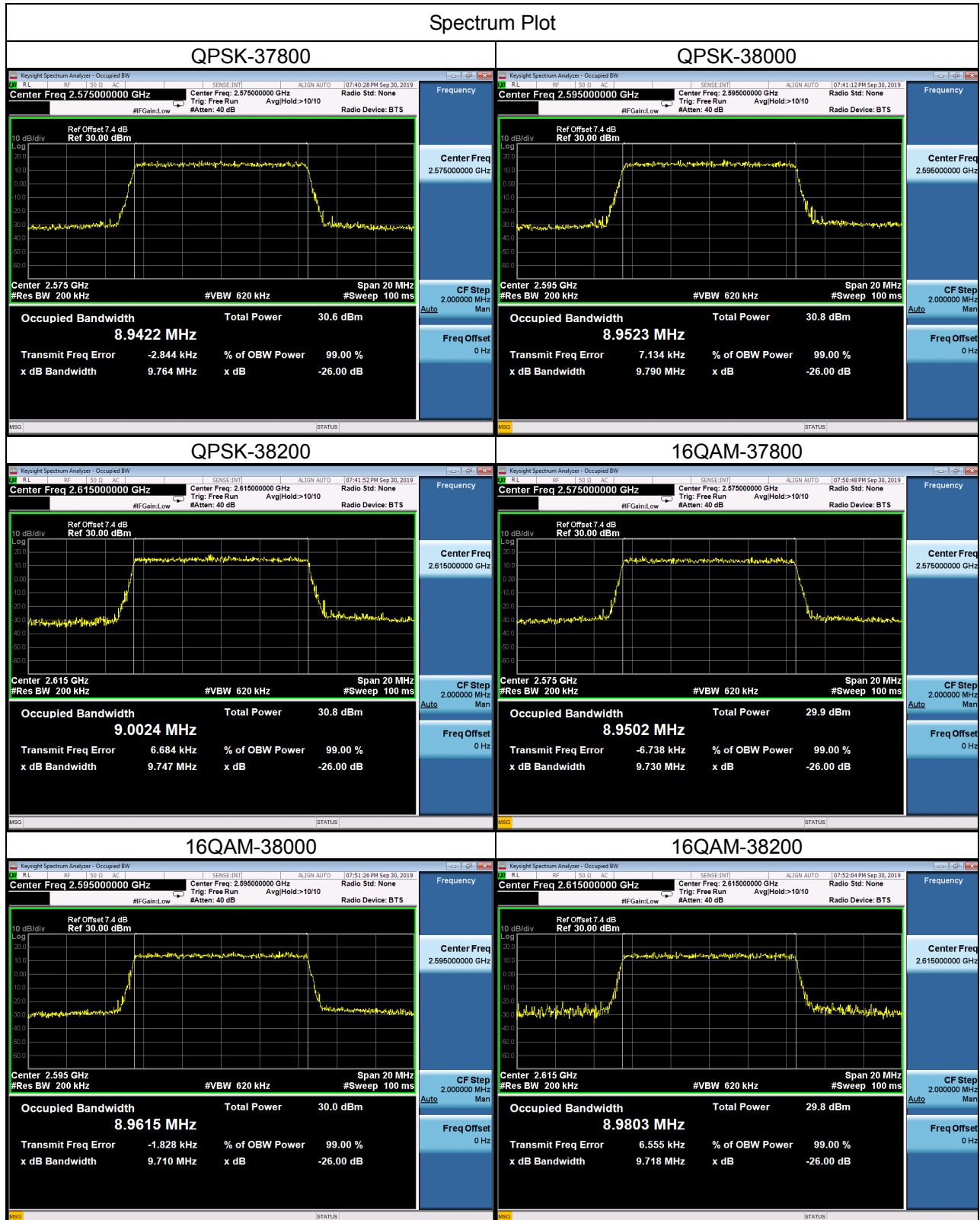


## Spectrum Plot



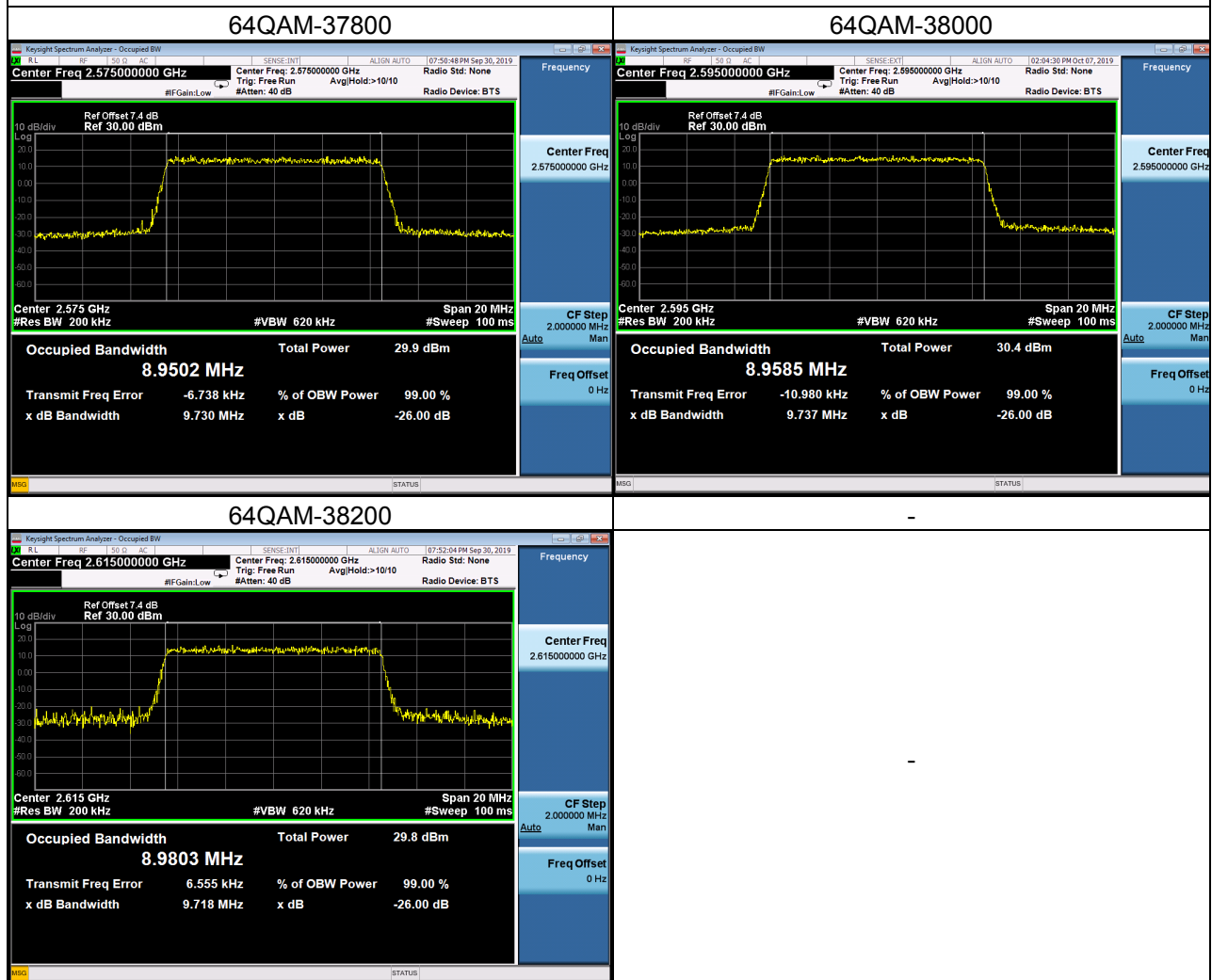
LTE Band 38_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.942	37800	2575	9.764
38000	2595	8.952	38000	2595	9.790
38200	2615	9.002	38200	2615	9.747
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.950	37800	2575	9.730
38000	2595	8.962	38000	2595	9.710
38200	2615	8.980	38200	2615	9.718
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37800	2575	8.950	37800	2575	9.730
38000	2595	8.959	38000	2595	9.737
38200	2615	8.980	38200	2615	9.718

## Spectrum Plot



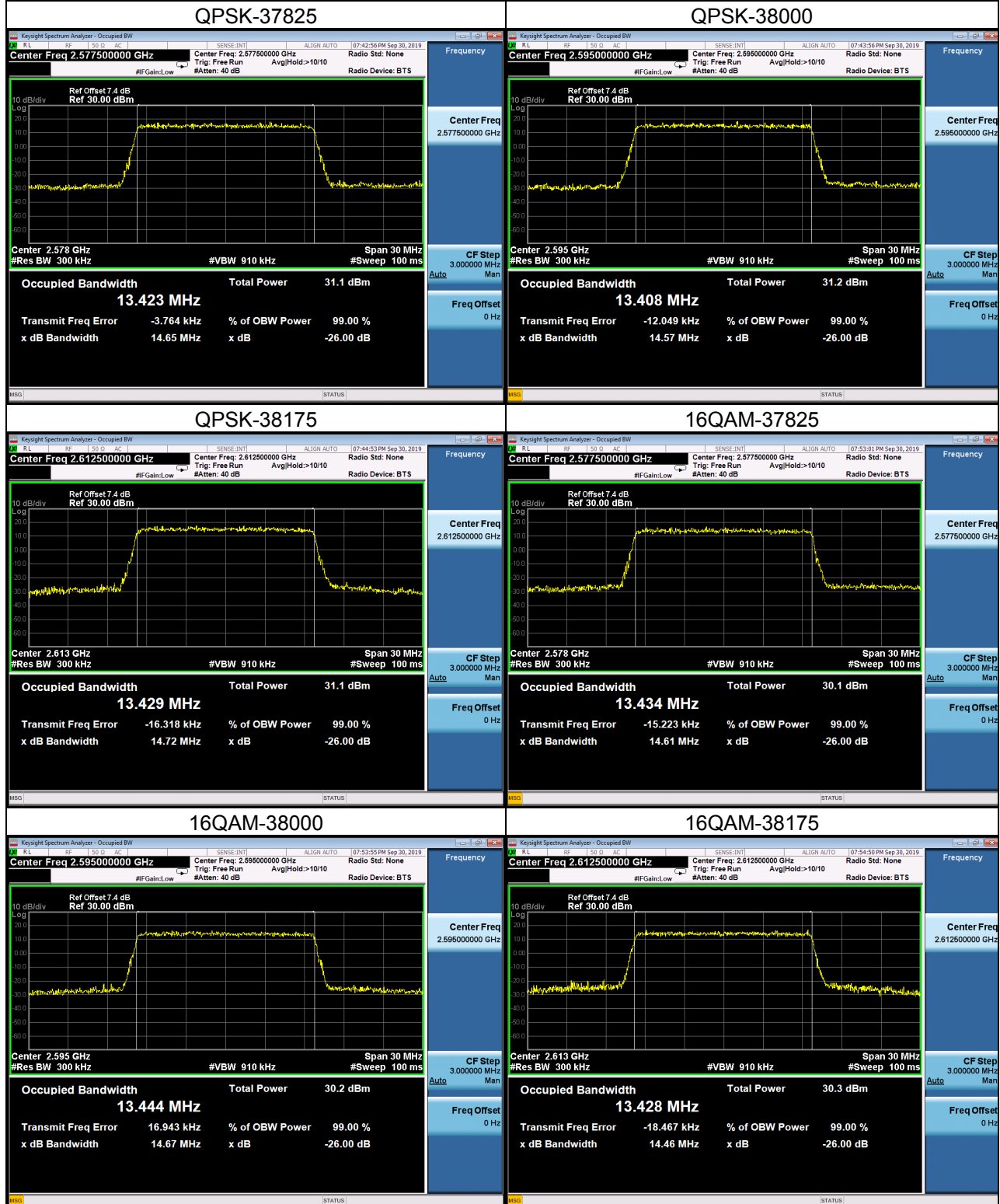


## Spectrum Plot



LTE Band 38_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.423	37825	2577.5	14.650
38000	2595	13.408	38000	2595	14.570
38175	2612.5	13.429	38175	2612.5	14.720
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.434	37825	2577.5	14.610
38000	2595	13.444	38000	2595	14.670
38175	2612.5	13.428	38175	2612.5	14.460
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37825	2577.5	13.434	37825	2577.5	14.61
38000	2595	13.455	38000	2595	14.70
38175	2612.5	13.428	38175	2612.5	14.460

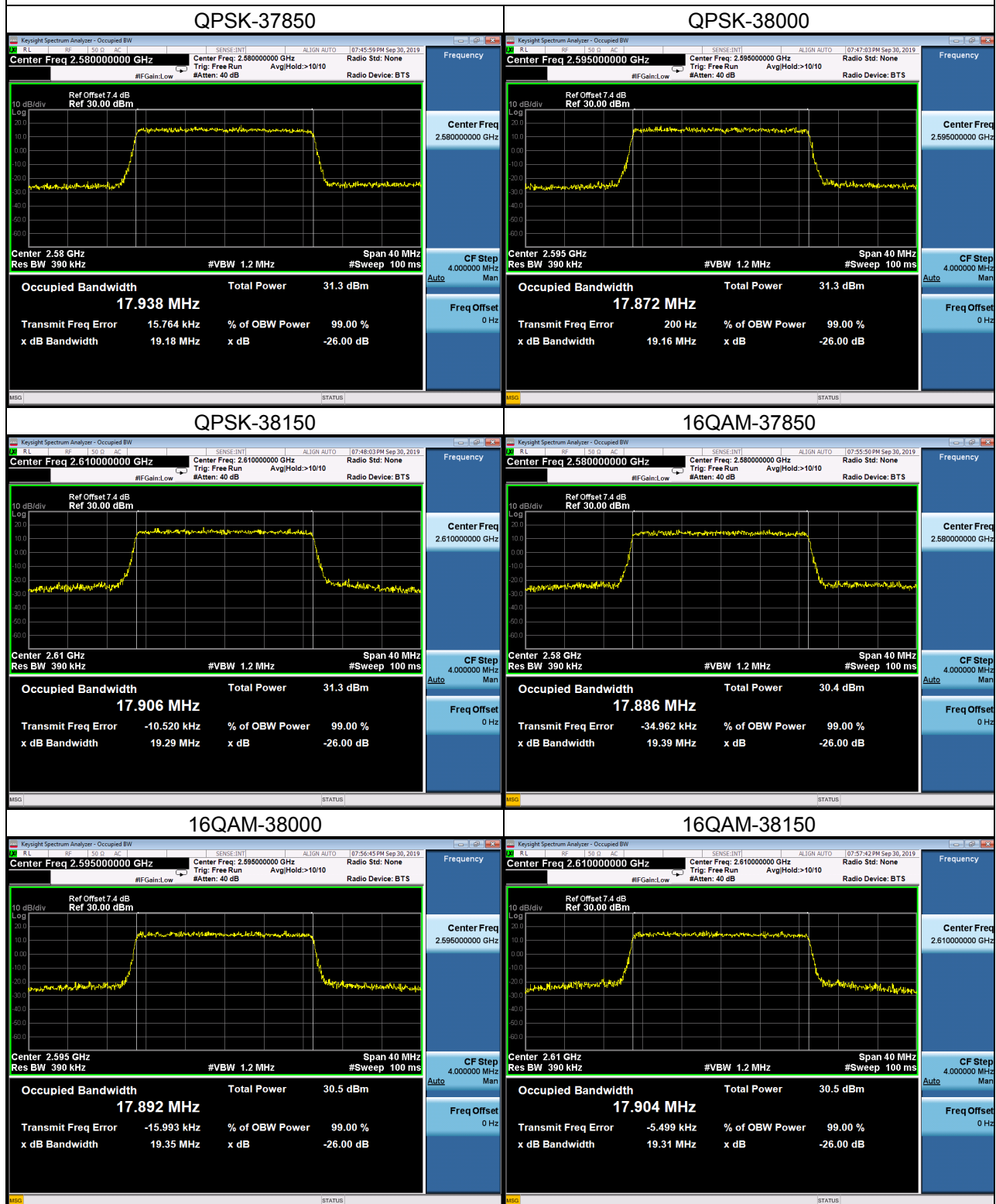
## Spectrum Plot

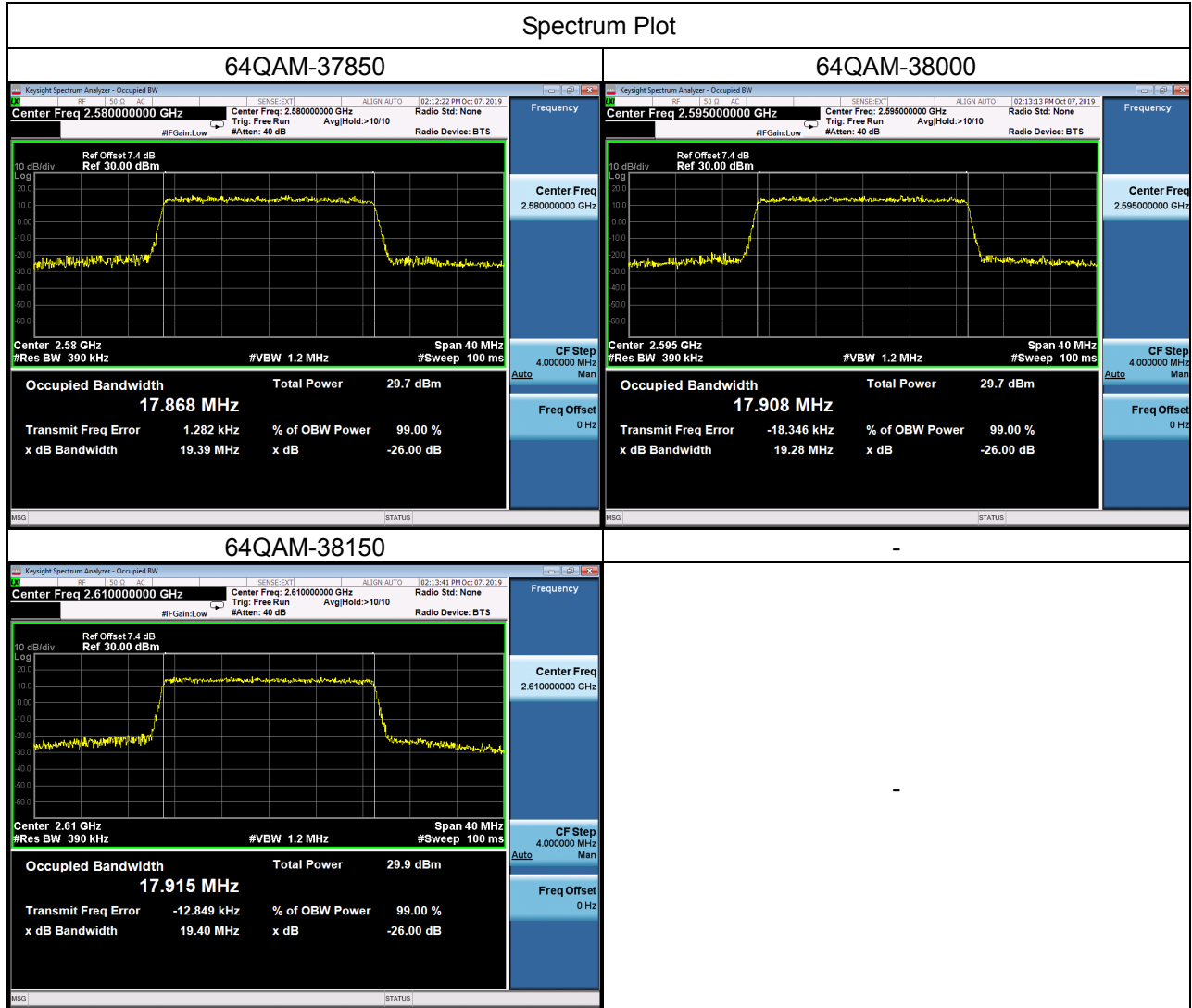




LTE Band 38_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.938	37850	2580	19.180
38000	2595	17.872	38000	2595	19.160
38150	2610	17.906	38150	2610	19.290
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.886	37850	2580	19.390
38000	2595	17.892	38000	2595	19.350
38150	2610	17.904	38150	2610	19.310
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
37850	2580	17.868	37850	2580	19.390
38000	2595	17.908	38000	2595	19.280
38150	2610	17.915	38150	2610	19.400

## Spectrum Plot

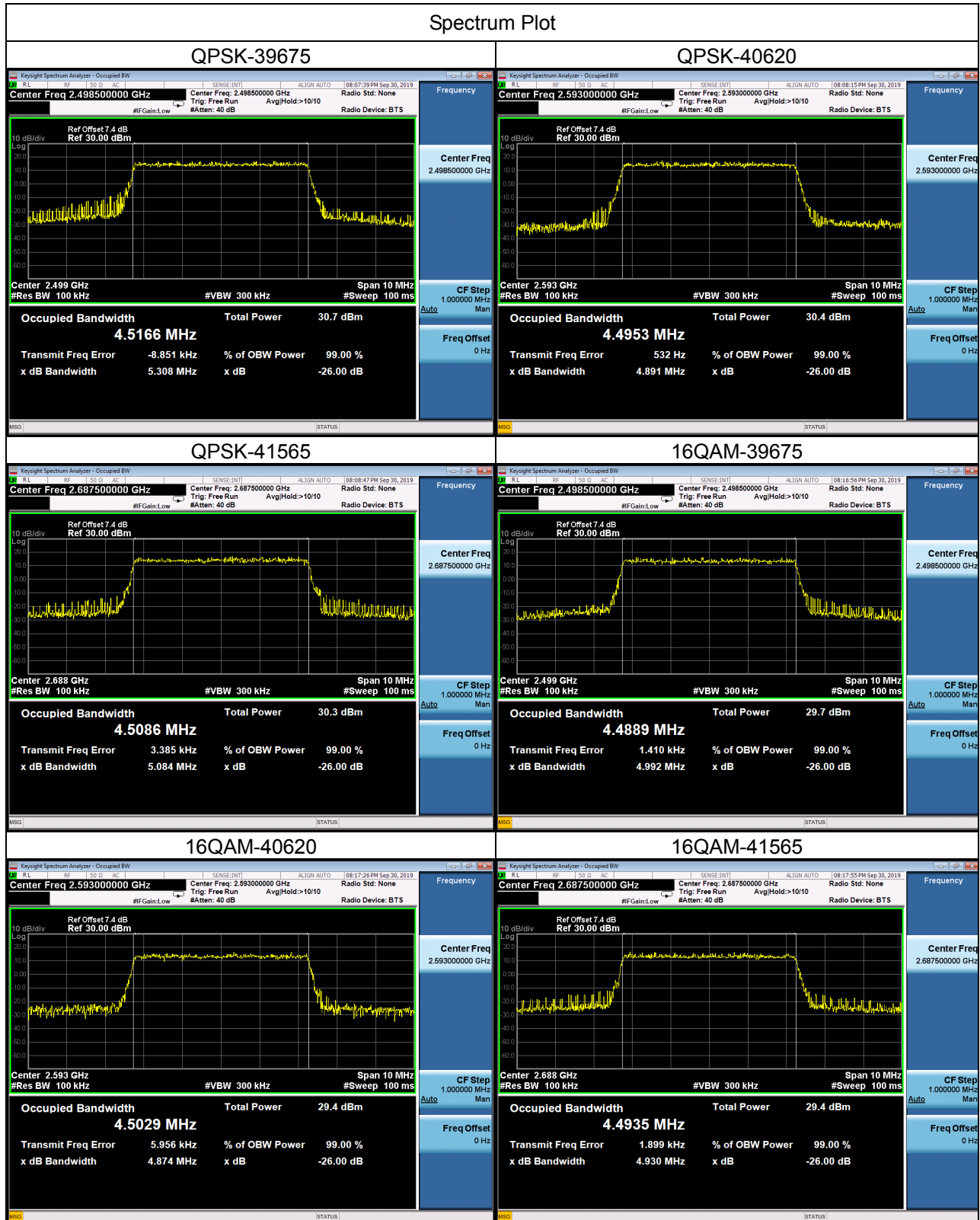




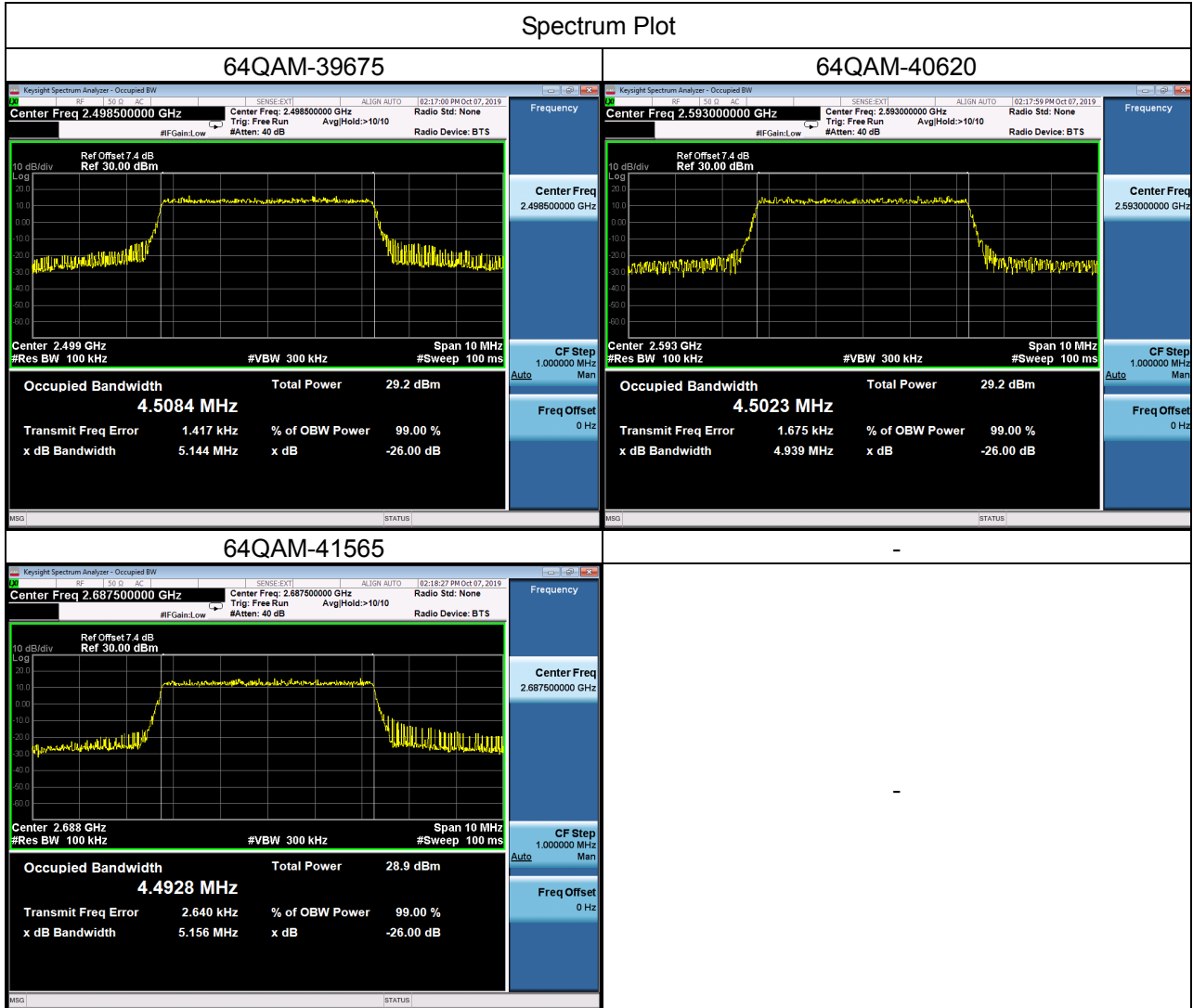
LTE Band 41_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39675	2498.5	4.517	39675	2498.5	5.308
40620	2593	4.495	40620	2593	4.891
41565	2687.5	4.509	41565	2687.5	5.084
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39675	2498.5	4.489	39675	2498.5	4.992
40620	2593	4.503	40620	2593	4.874
41565	2687.5	4.494	41565	2687.5	4.930
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39675	2498.5	4.508	39675	2498.5	5.144
40620	2593	4.502	40620	2593	4.939
41565	2687.5	4.493	41565	2687.5	5.156



## Spectrum Plot



## Spectrum Plot



LTE Band 41_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39700	2501	8.944	39700	2501	9.750
40620	2593	8.948	40620	2593	9.850
41540	2685	8.979	41540	2685	9.789
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39700	2501	8.954	39700	2501	9.730
40620	2593	8.956	40620	2593	9.818
41540	2685	8.943	41540	2685	9.728
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
39700	2501	8.953	39700	2501	9.730
40620	2593	8.950	40620	2593	9.732
41540	2685	8.961	41540	2685	9.770