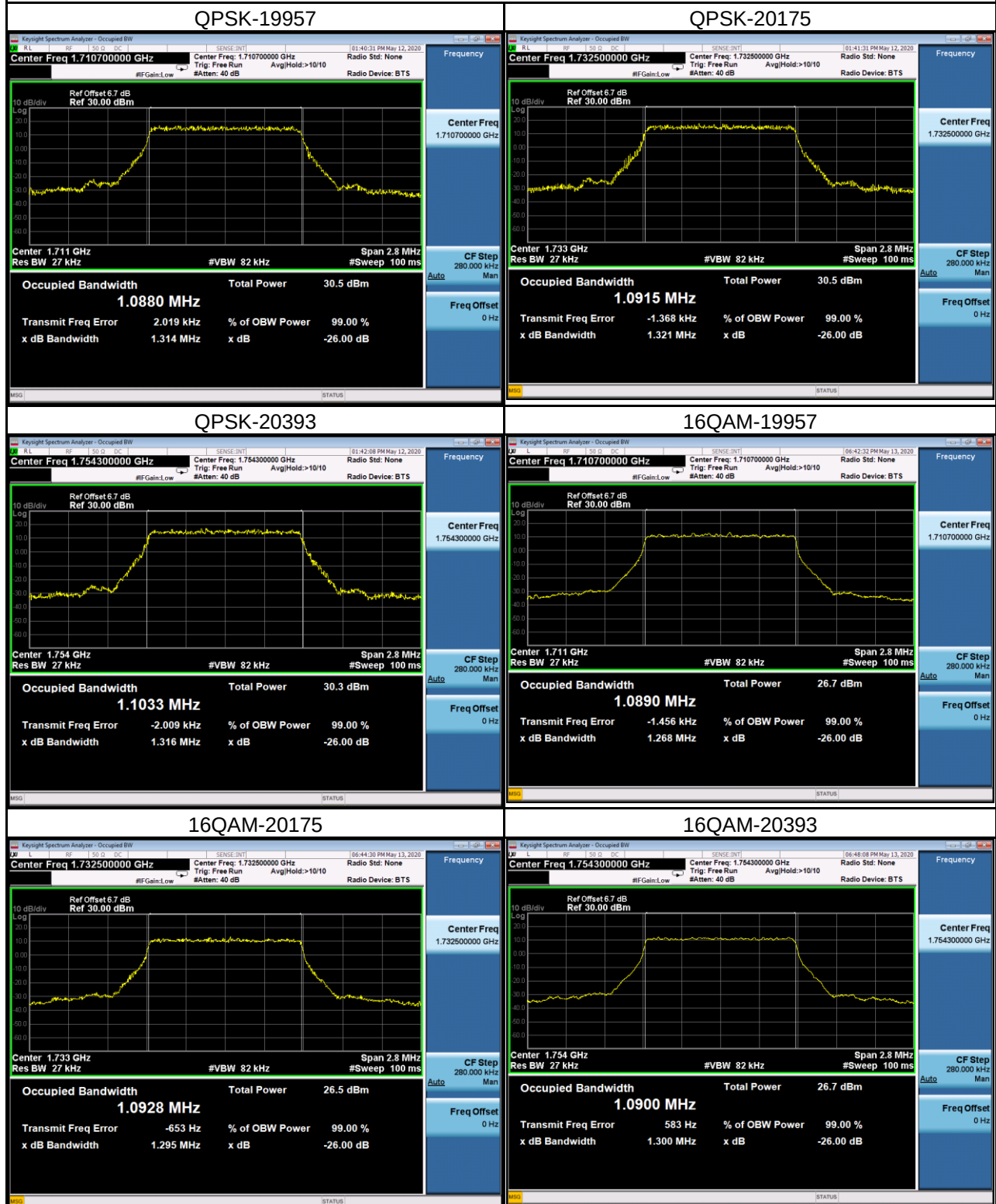


Spectrum Plot



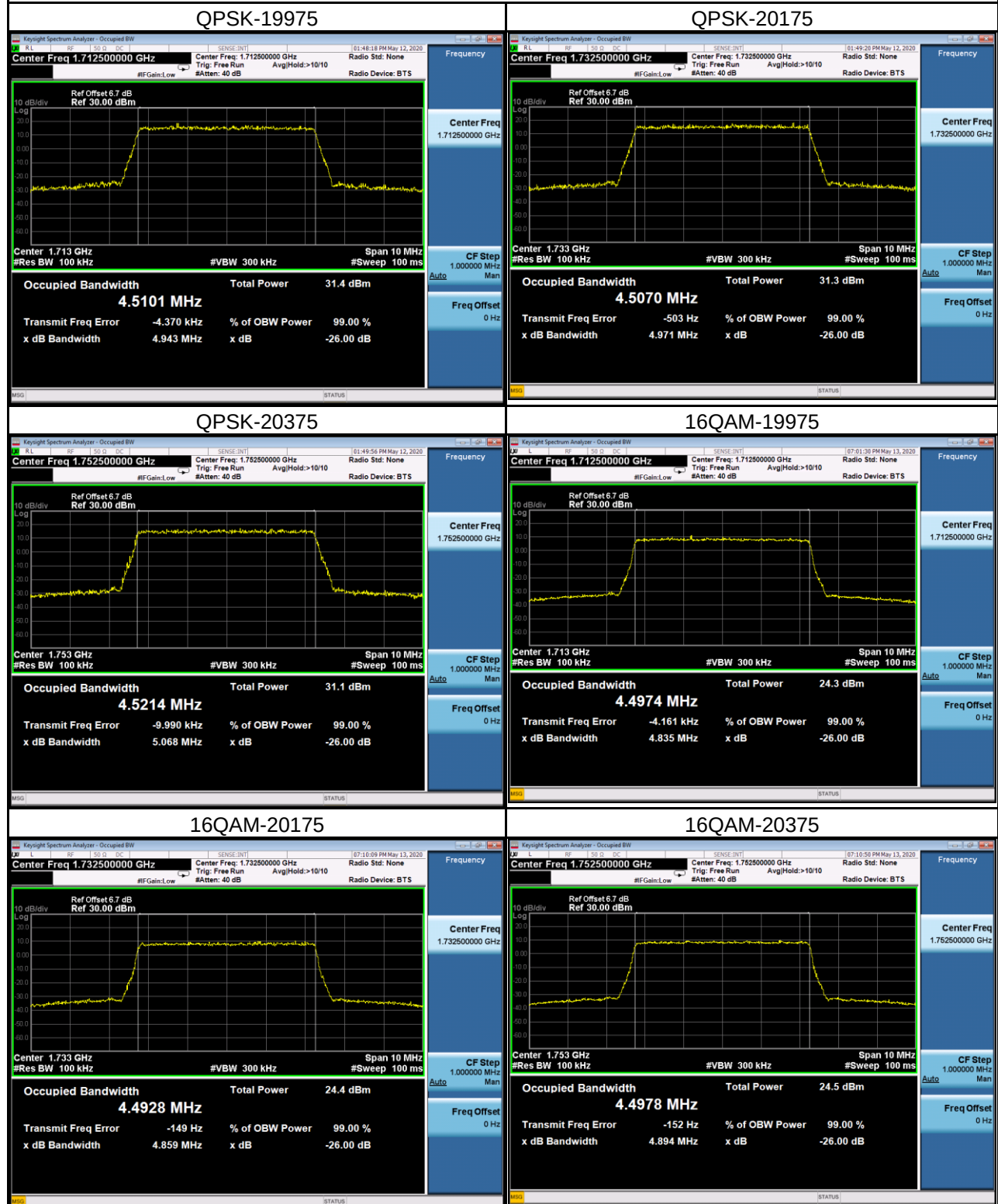
LTE Band 4_3M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
19965	1711.5	2.6998	19965	1711.5	2.7023
20175	1732.5	2.7024	20175	1732.5	2.6996
20385	1753.5	2.7011	20385	1753.5	2.7081
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	3.0110	19965	1711.5	2.9420
20175	1732.5	2.9960	20175	1732.5	2.9350
20385	1753.5	2.9700	20385	1753.5	2.9620

Spectrum Plot



LTE Band 4_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
19975	1712.5	4.5101	19975	1712.5	4.4974
20175	1732.5	4.5070	20175	1732.5	4.4928
20375	1752.5	4.5214	20375	1752.5	4.4978
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.9430	19975	1712.5	4.8350
20175	1732.5	4.9710	20175	1732.5	4.8590
20375	1752.5	5.0680	20375	1752.5	4.8940

Spectrum Plot



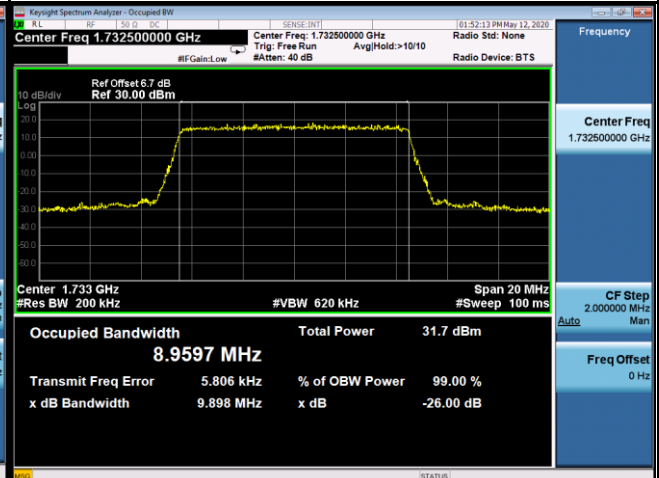
LTE Band 4_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20000	1715	8.9611	20000	1715	8.9611
20175	1732.5	8.9597	20175	1732.5	8.9499
20350	1750	8.9695	20350	1750	8.9738
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	10.030	20000	1715	9.5280
20175	1732.5	9.8980	20175	1732.5	9.5380
20350	1750	9.8580	20350	1750	9.5610

Spectrum Plot

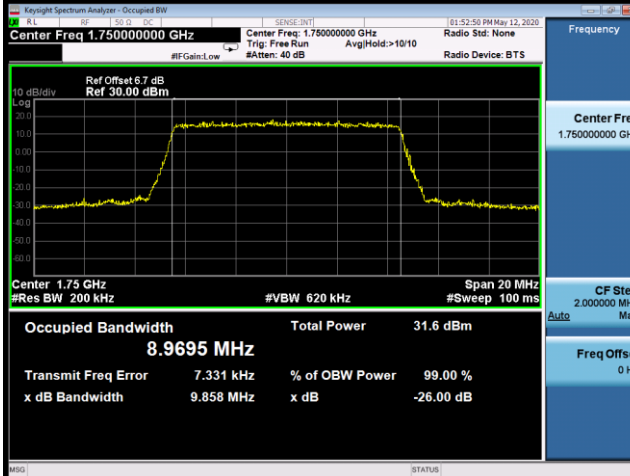
QPSK-20000



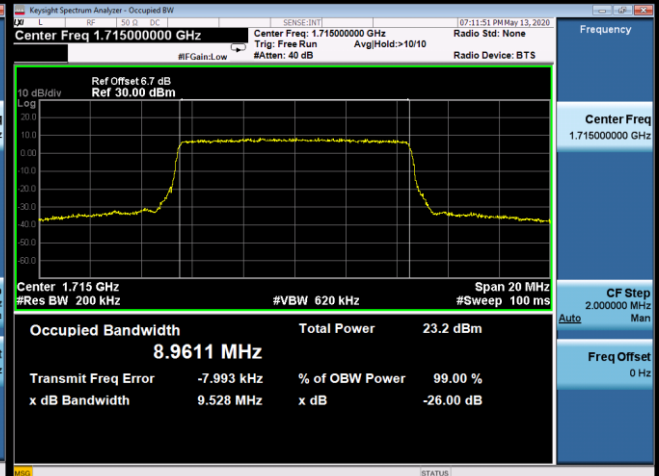
QPSK-20175



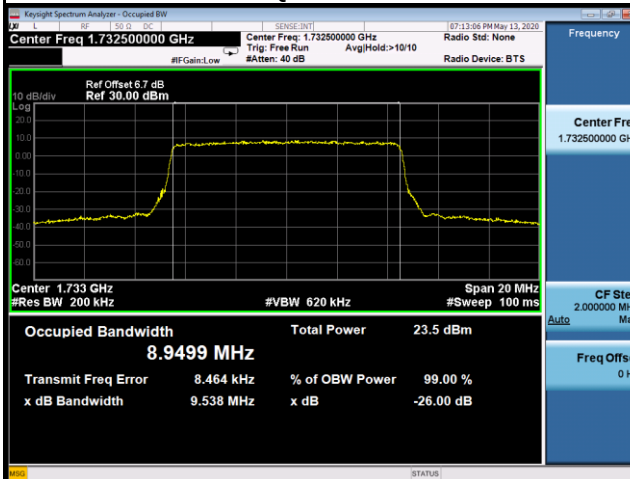
QPSK-20350



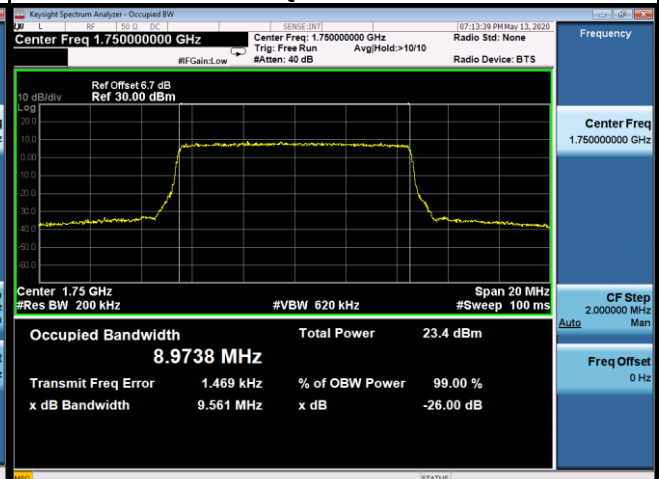
16QAM-20000



16QAM-20175

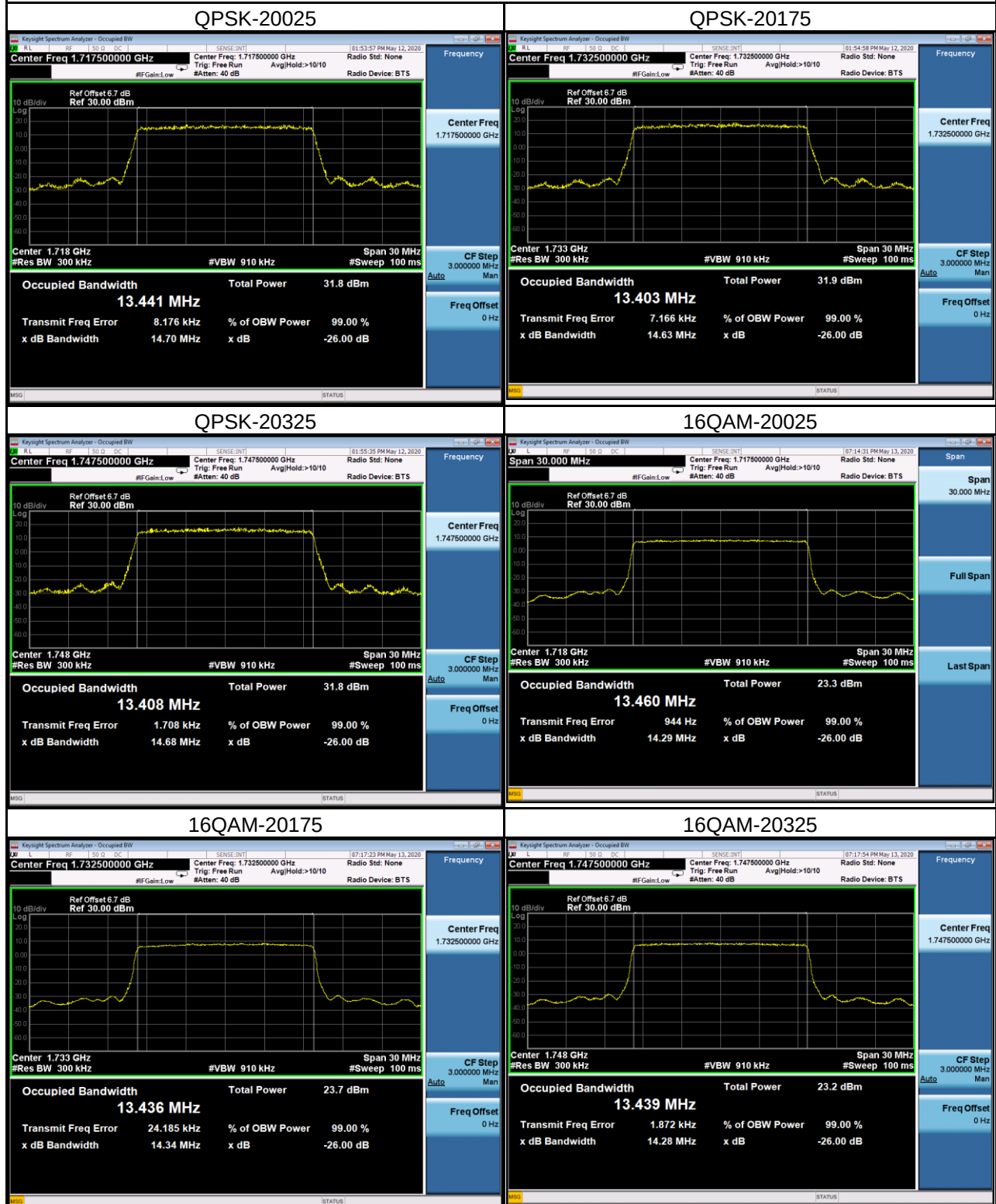


16QAM-20350



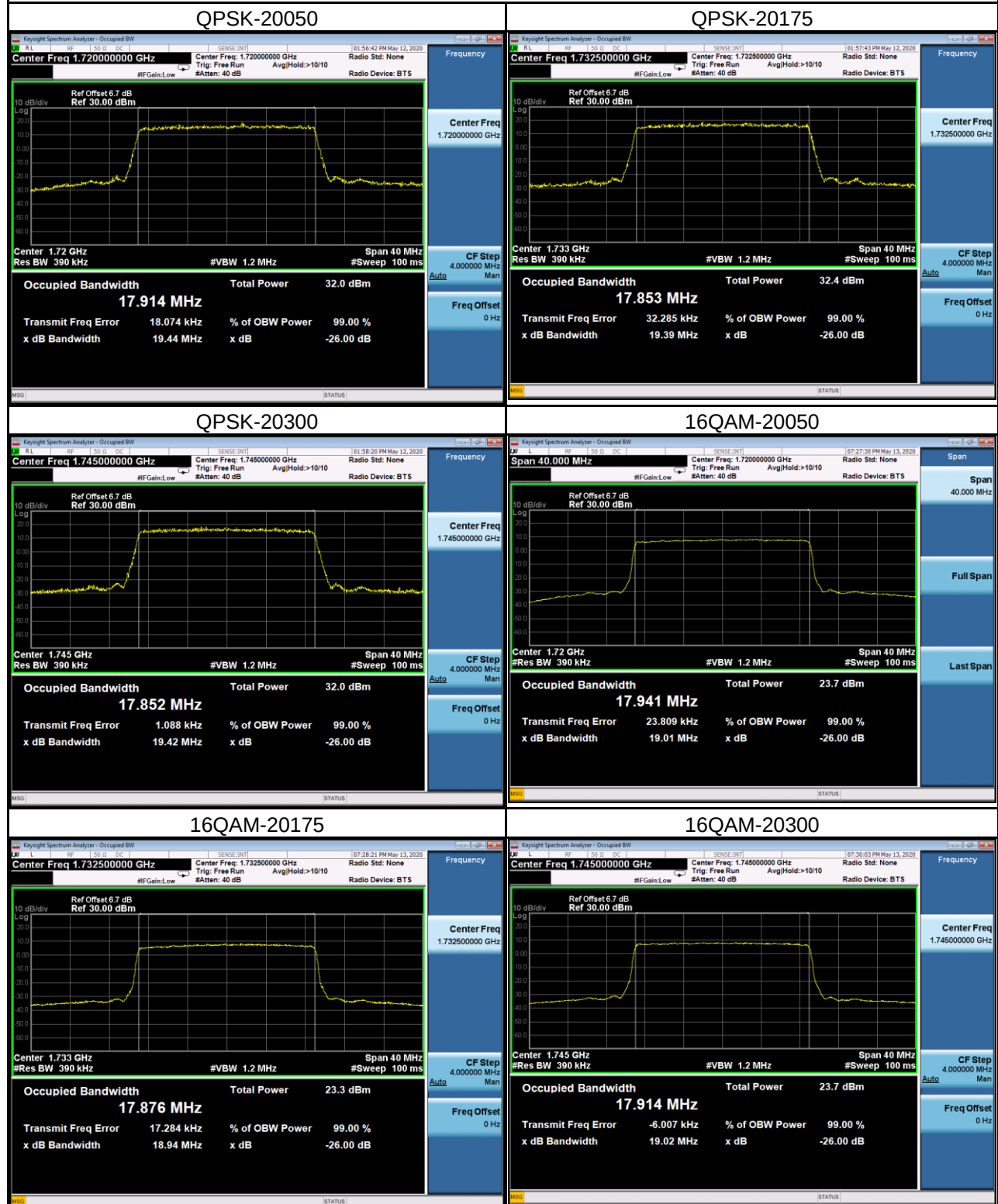
LTE Band 4_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20025	1717.5	13.4410	20025	1717.5	13.4600
20175	1732.5	13.4030	20175	1732.5	13.4360
20325	1747.5	13.4080	20325	1747.5	13.4390
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	14.7000	20025	1717.5	14.2900
20175	1732.5	14.6300	20175	1732.5	14.3400
20325	1747.5	14.6800	20325	1747.5	14.2800

Spectrum Plot



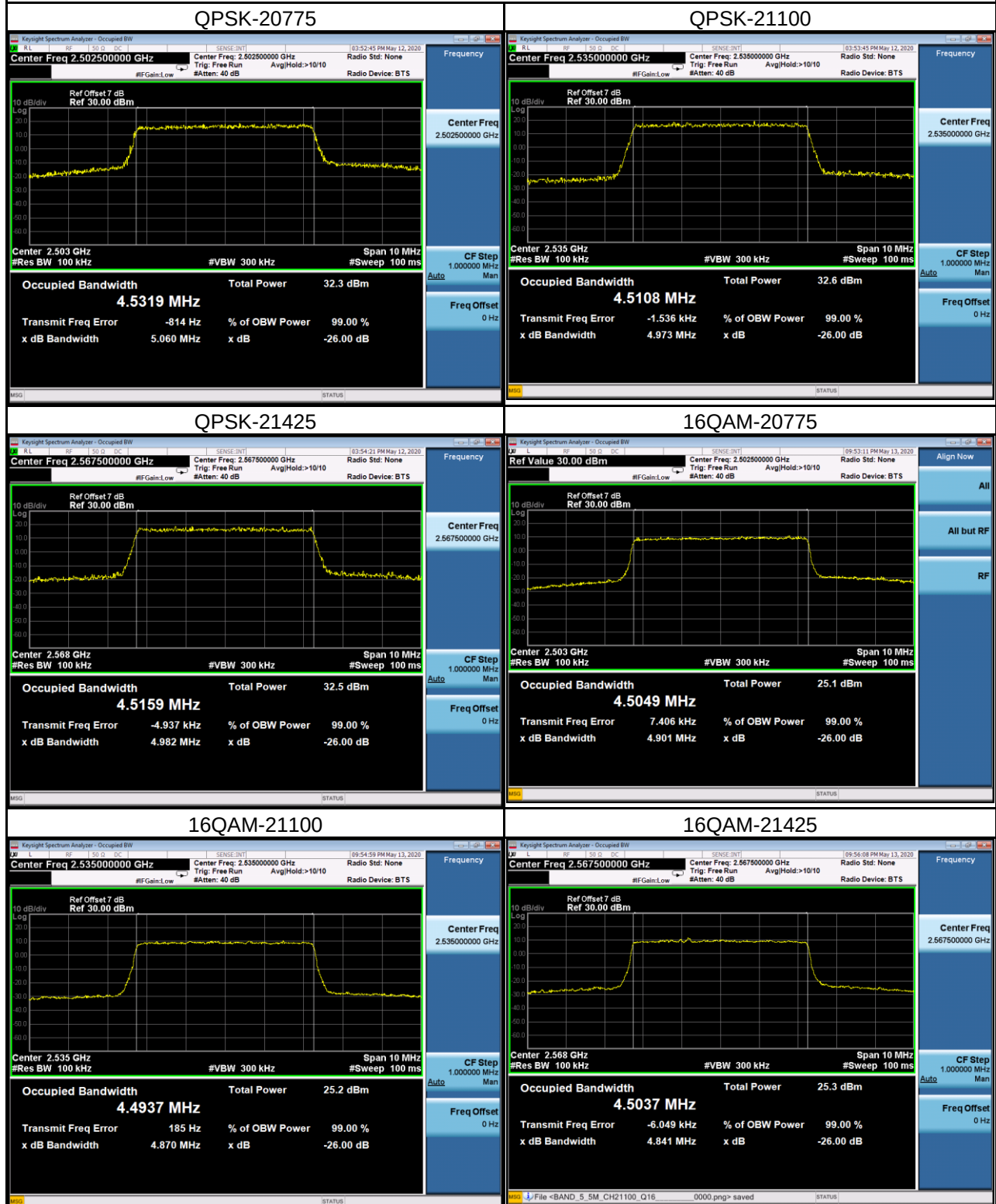
LTE Band 4_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20050	1720	17.9140	20050	1720	17.9410
20175	1732.5	17.8530	20175	1732.5	17.8760
20300	1745	17.8520	20300	1745	17.9140
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	19.4400	20050	1720	19.0100
20175	1732.5	19.3900	20175	1732.5	18.9400
20300	1745	19.4200	20300	1745	19.0200

Spectrum Plot



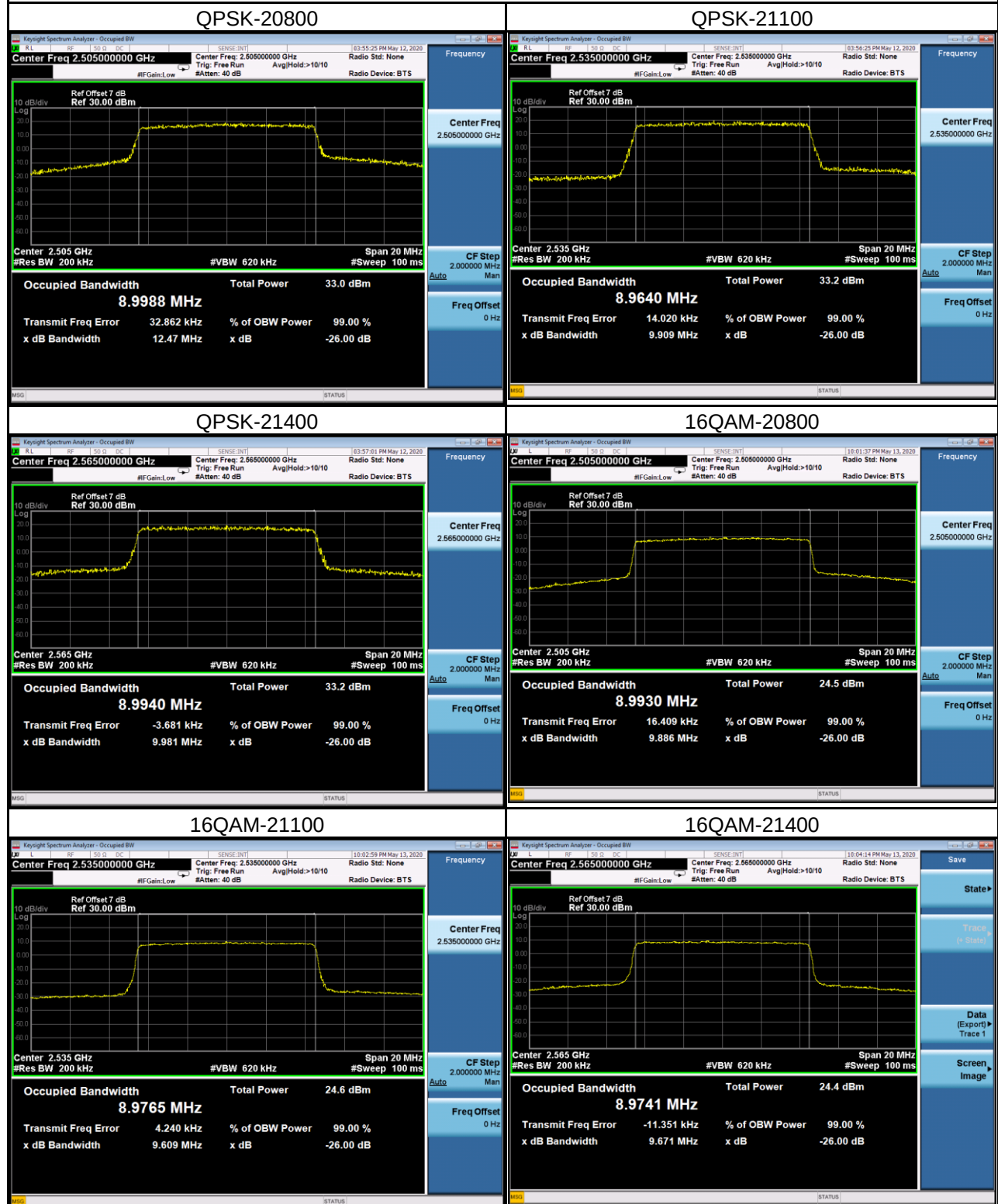
LTE Band 7_5M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20775	2502.5	4.5319	20775	2502.5	4.5049
21100	2535	4.5108	21100	2535	4.4937
21425	2567.5	4.5159	21425	2567.5	4.5037
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	5.0600	20775	2502.5	4.9010
21100	2535	4.9730	21100	2535	4.8700
21425	2567.5	4.9820	21425	2567.5	4.9540

Spectrum Plot



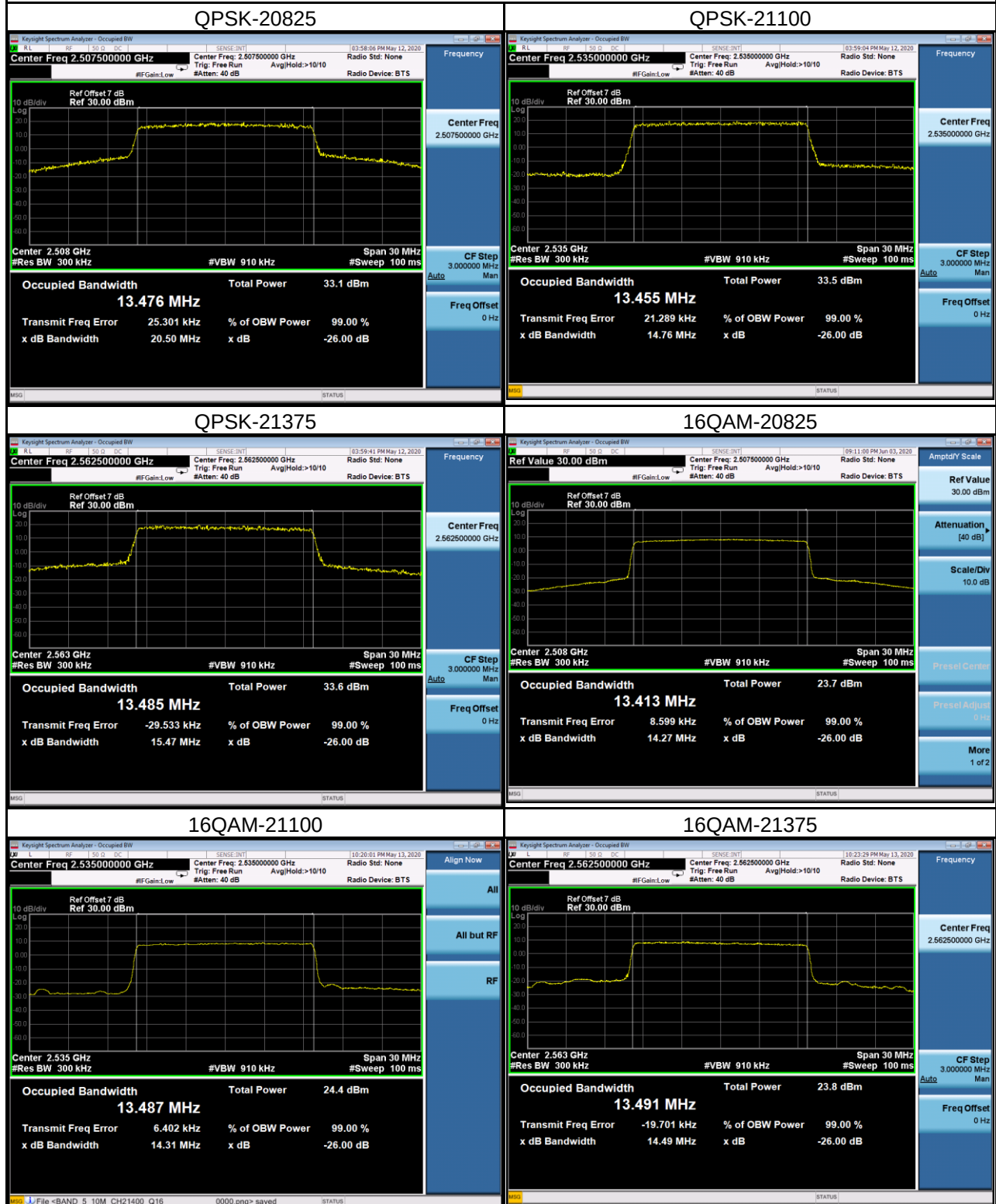
LTE Band 7_10M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20800	2505	8.9988	20800	2505	8.9930
21100	2535	8.9640	21100	2535	8.9765
21400	2565	8.9940	21400	2565	8.9741
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	12.470	20800	2505	9.8860
21100	2535	9.9090	21100	2535	9.6090
21400	2565	9.9810	21400	2565	9.6710

Spectrum Plot



LTE Band 7_15M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20825	2507.5	13.4760	20825	2507.5	13.4130
21100	2535	13.4550	21100	2535	13.4870
21375	2562.5	13.4850	21375	2562.5	13.4910
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	20.5000	20825	2507.5	14.2700
21100	2535	14.7600	21100	2535	14.3100
21375	2562.5	15.4700	21375	2562.5	14.4900

Spectrum Plot



LTE Band 7_20M					
QPSK			16QAM		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
20850	2510	17.9860	20850	2510	17.9010
21100	2535	17.9170	21100	2535	17.9700
21350	2560	17.9600	21350	2560	17.9640
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	25.8000	20850	2510	19.8100
21100	2535	19.3400	21100	2535	19.0200
21350	2560	23.7100	21350	2560	19.5700