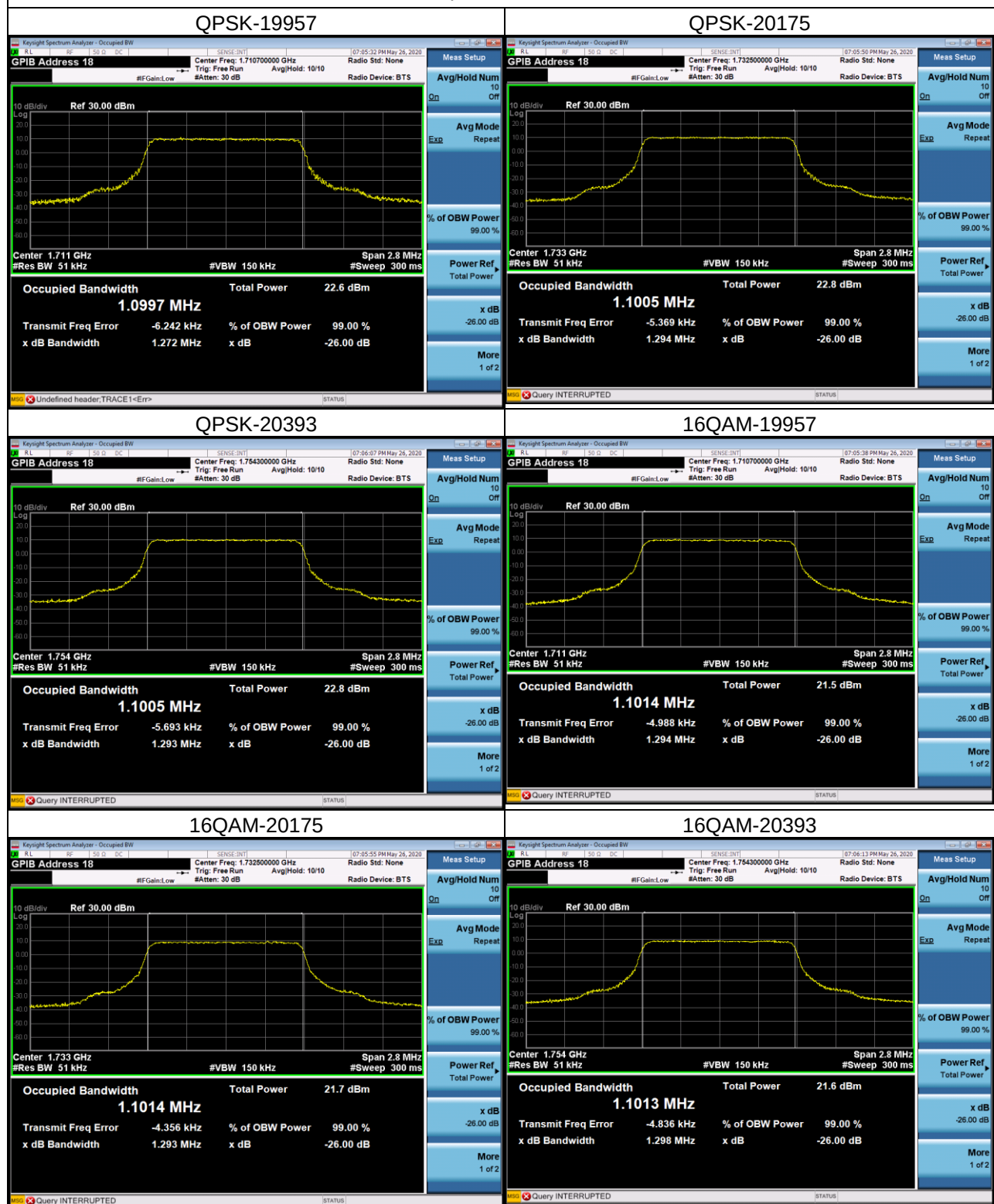


APPENDIX B - OCCUPIED BANDWIDTH

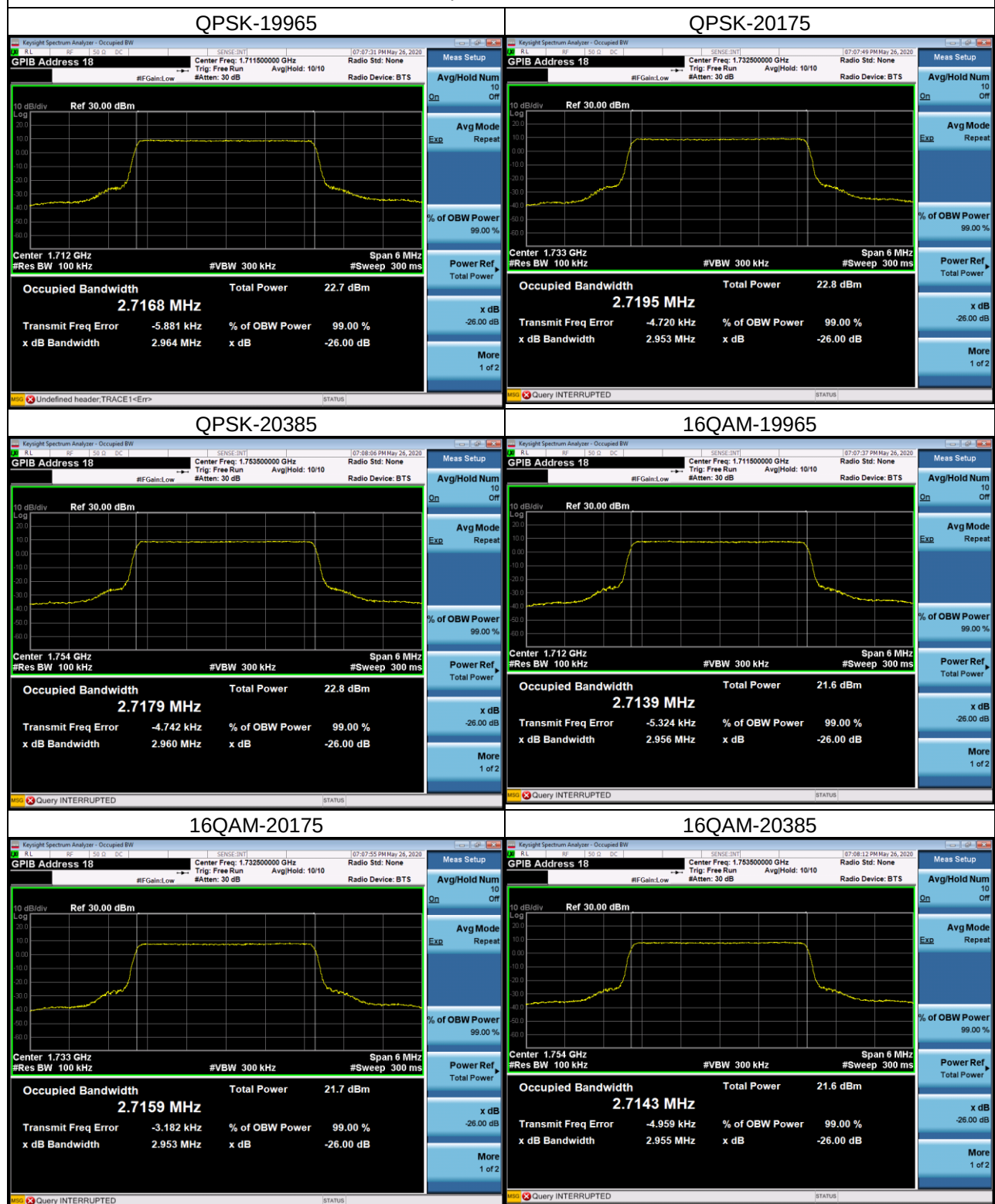
LTE Band 4_1.4M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.0997	19957	1710.7	1.272
20175	1732.5	1.1005	20175	1732.5	1.294
20393	1754.3	1.1005	20393	1754.3	1.293
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.1014	19957	1710.7	1.294
20175	1732.5	1.1014	20175	1732.5	1.293
20393	1754.3	1.1013	20393	1754.3	1.298

Spectrum Plot



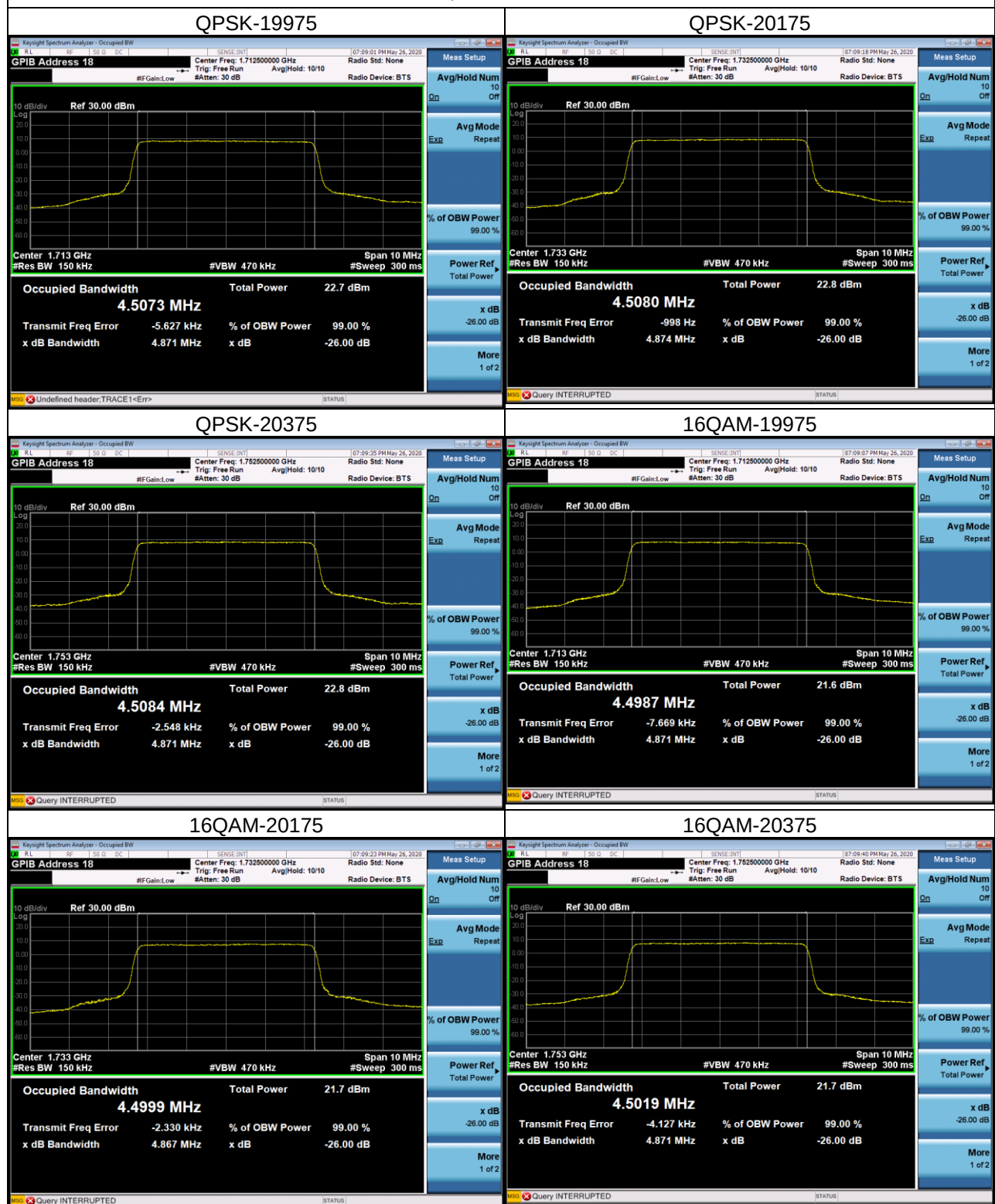
LTE Band 4_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.7168	19965	1711.5	2.964
20175	1732.5	2.7195	20175	1732.5	2.953
20385	1753.5	2.7179	20385	1753.5	2.960
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.7139	19965	1711.5	2.956
20175	1732.5	2.7159	20175	1732.5	2.953
20385	1753.5	2.7143	20385	1753.5	2.955

Spectrum Plot



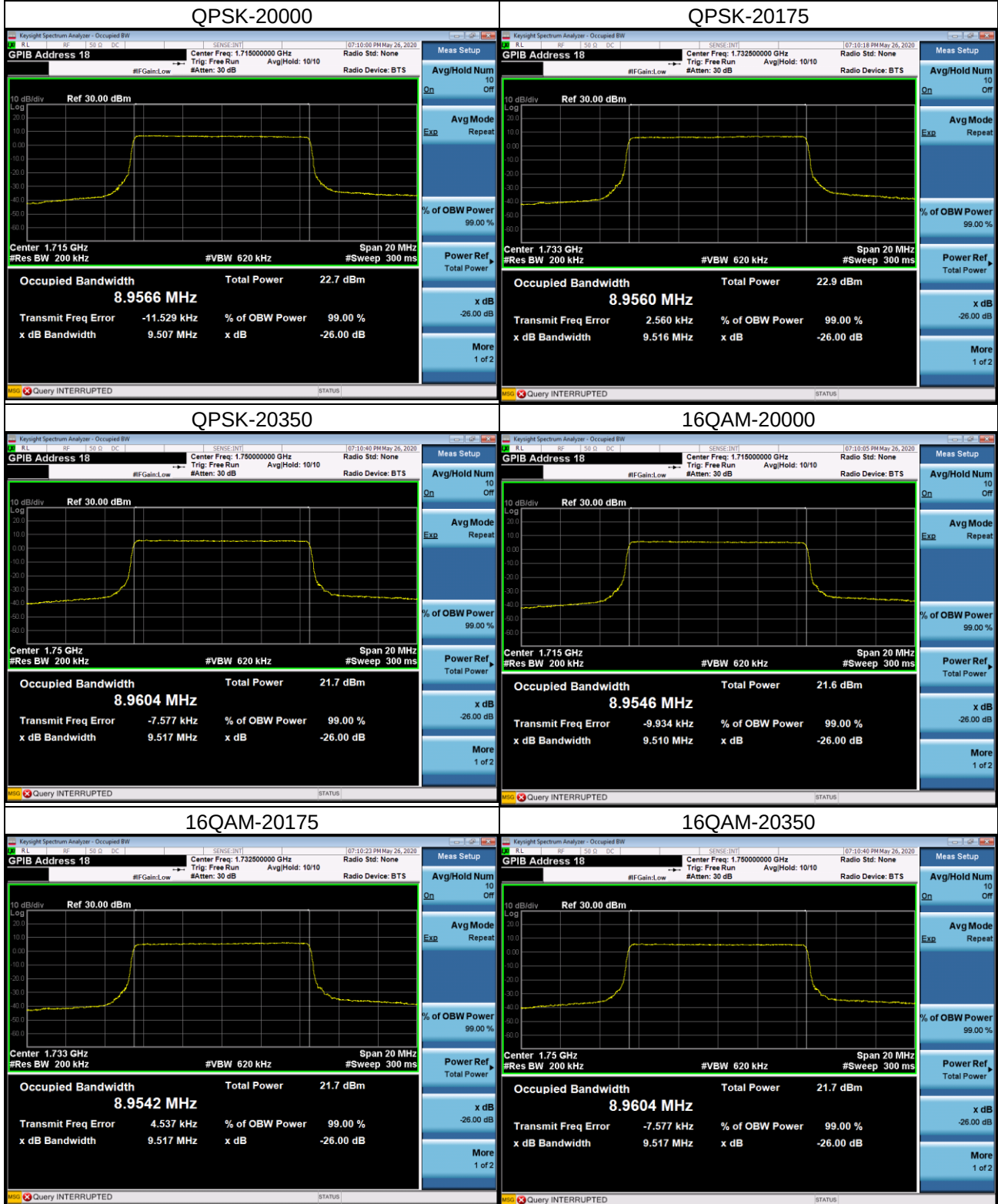
LTE Band 4_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.5073	19975	1712.5	4.871
20175	1732.5	4.5080	20175	1732.5	4.874
20375	1752.5	4.5084	20375	1752.5	4.871
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.4987	19975	1712.5	4.871
20175	1732.5	4.4999	20175	1732.5	4.867
20375	1752.5	4.5019	20375	1752.5	4.871

Spectrum Plot



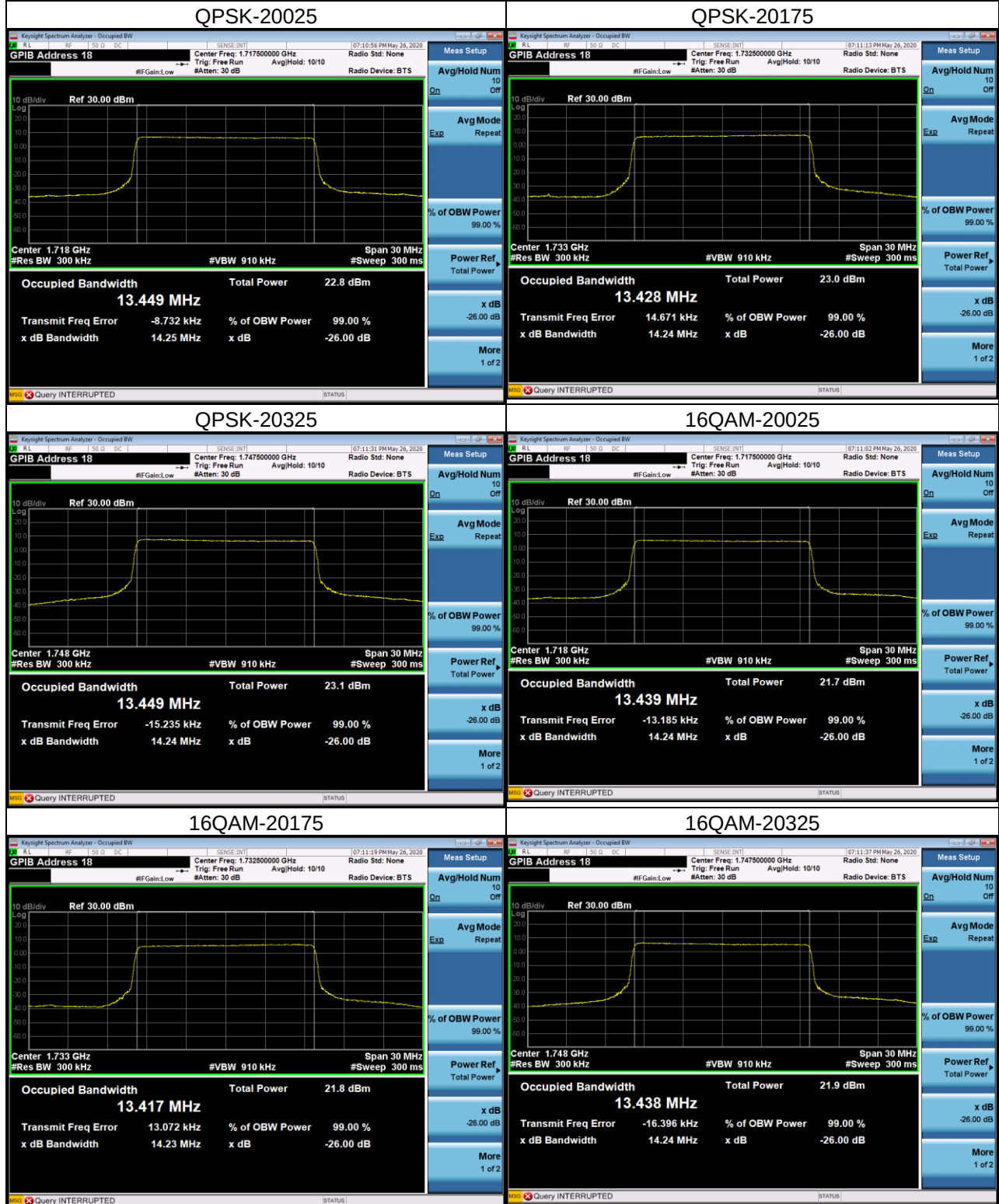
LTE Band 4_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	8.9566	20000	1715	9.507
20175	1732.5	8.9560	20175	1732.5	9.516
20350	1750	8.9604	20350	1750	9.517
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	8.9546	20000	1715	9.510
20175	1732.5	8.9542	20175	1732.5	9.517
20350	1750	8.9604	20350	1750	9.517

Spectrum Plot



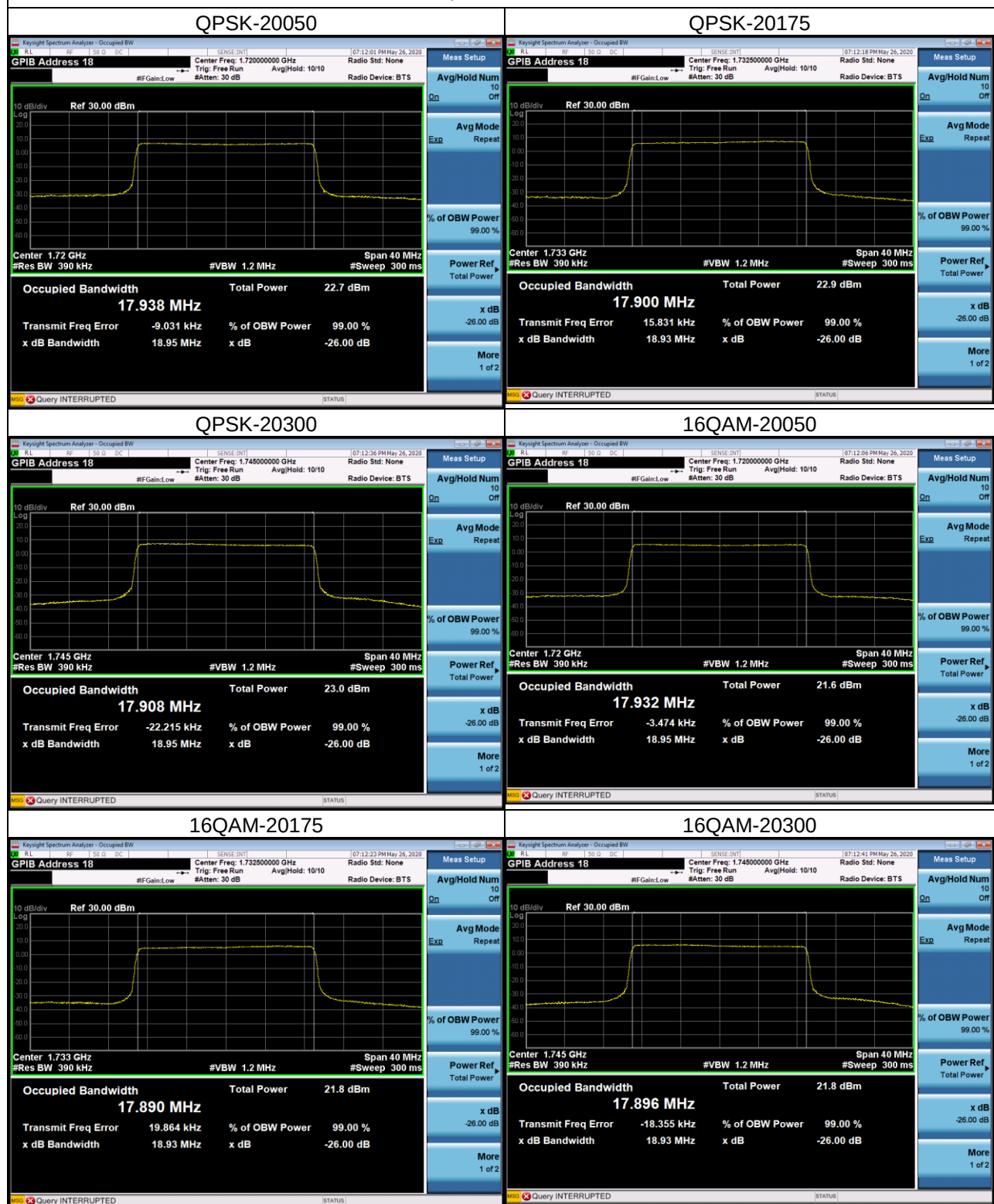
LTE Band 4_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.449	20025	1717.5	14.25
20175	1732.5	13.428	20175	1732.5	14.24
20325	1747.5	13.449	20325	1747.5	14.24
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.439	20025	1717.5	14.24
20175	1732.5	13.417	20175	1732.5	14.23
20325	1747.5	13.438	20325	1747.5	14.24

Spectrum Plot



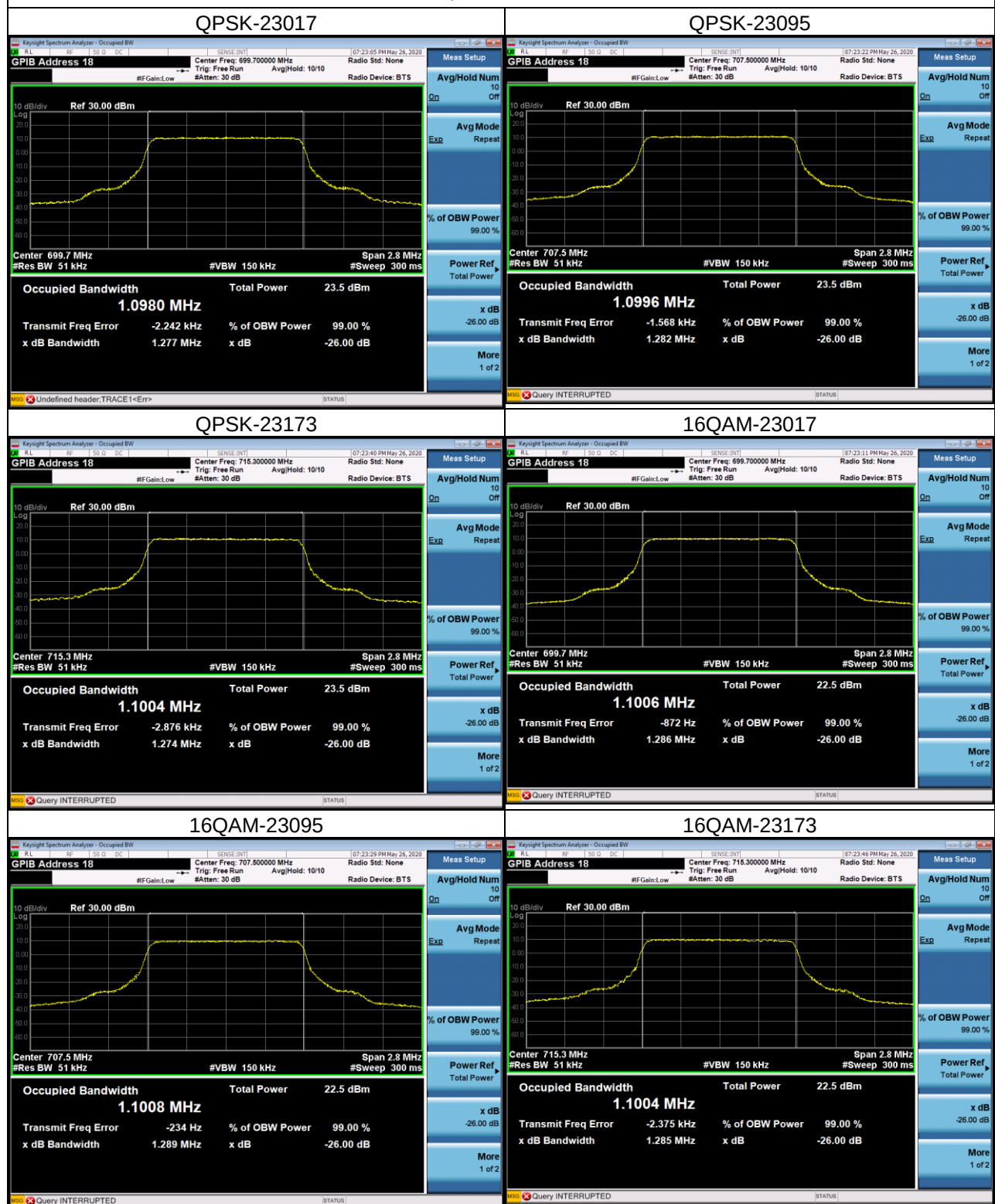
LTE Band 4_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.938	20050	1720	18.95
20175	1732.5	17.900	20175	1732.5	18.93
20300	1745	17.908	20300	1745	18.95
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.932	20050	1720	18.95
20175	1732.5	17.890	20175	1732.5	18.93
20300	1745	17.896	20300	1745	18.93

Spectrum Plot



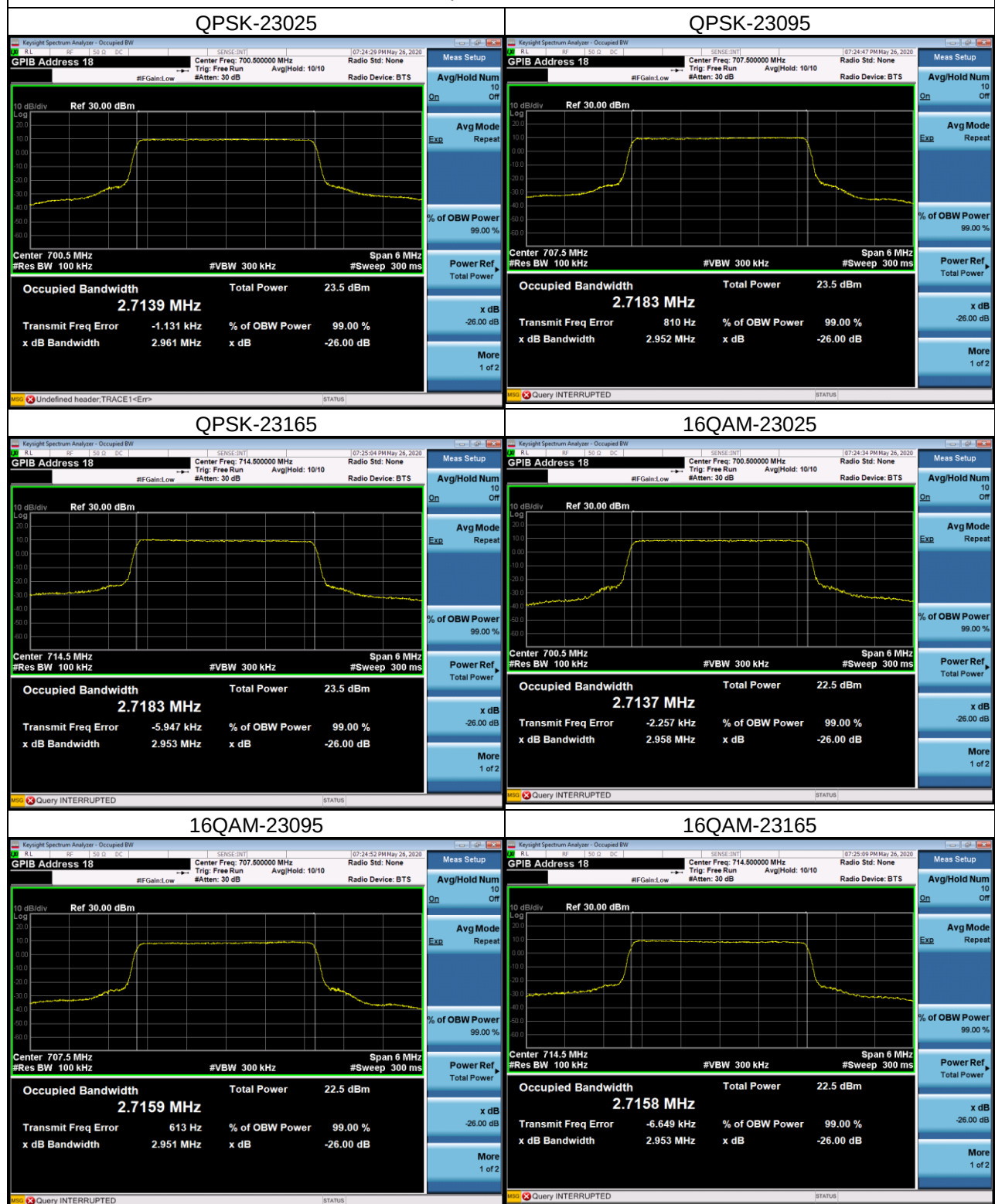
LTE Band 12_1.4M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0980	23017	699.7	1.277
23095	707.5	1.0996	23095	707.5	1.282
23173	715.3	1.1004	23173	715.3	1.274
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.1006	23017	699.7	1.286
23095	707.5	1.1008	23095	707.5	1.289
23173	715.3	1.1004	23173	715.3	1.285

Spectrum Plot



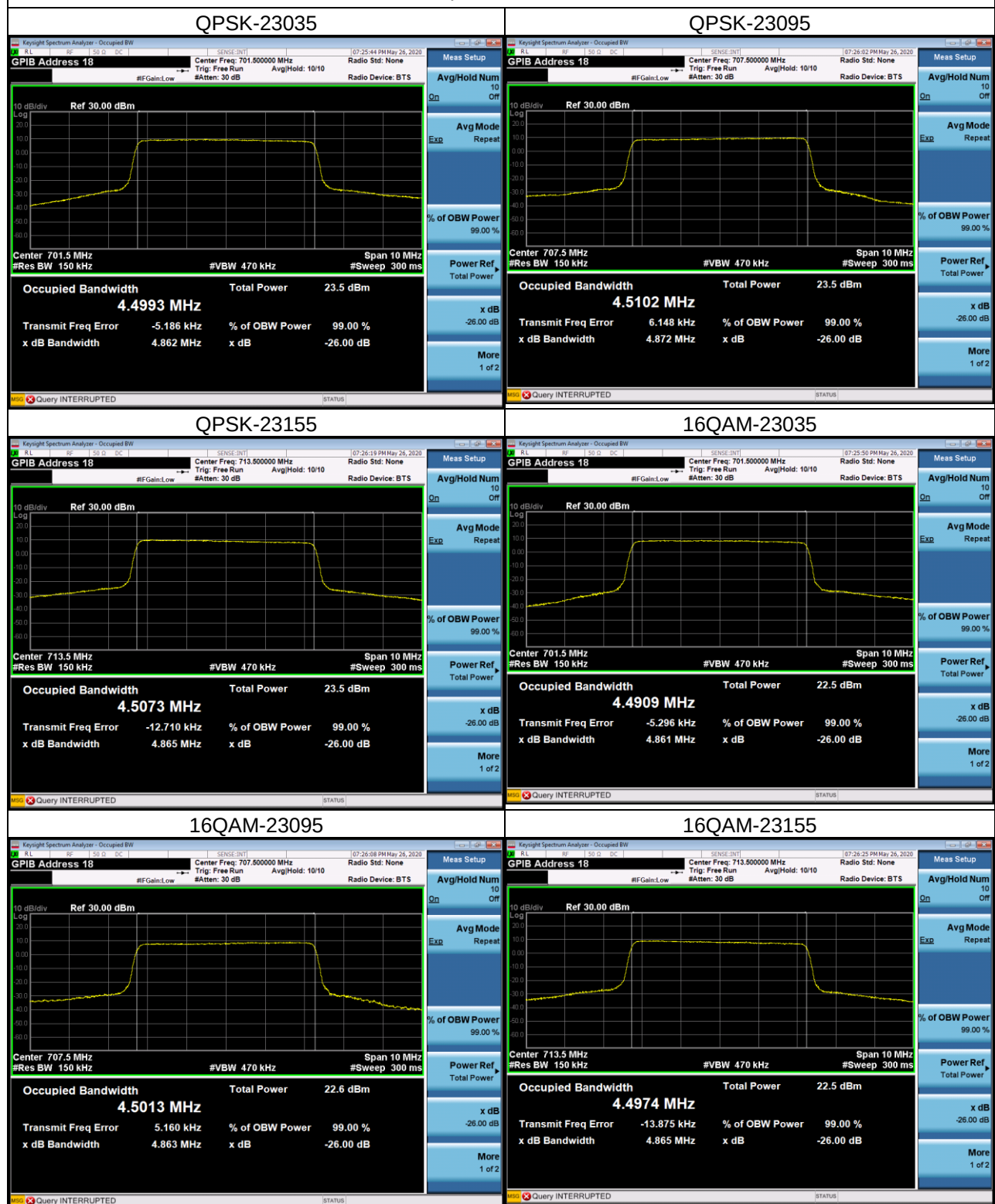
LTE Band 12_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7139	23025	700.5	2.961
23095	707.5	2.7183	23095	707.5	2.952
23165	714.5	2.7183	23165	714.5	2.953
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7137	23025	700.5	2.958
23095	707.5	2.7159	23095	707.5	2.951
23165	714.5	2.7158	23165	714.5	2.953

Spectrum Plot



LTE Band 12_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23035	701.5	4.4993	23035	701.5	4.862
23095	707.5	4.5102	23095	707.5	4.872
23155	713.5	4.5073	23155	713.5	4.865
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23035	701.5	4.4909	23035	701.5	4.861
23095	707.5	4.5013	23095	707.5	4.863
23155	713.5	4.4974	23155	713.5	4.865

Spectrum Plot



LTE Band 12_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23060	704.0	8.9687	23060	704.0	9.509
23095	707.5	8.9594	23095	707.5	9.505
23130	711.0	8.9189	23130	711.0	9.479
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23060	704.0	8.9672	23060	704.0	9.506
23095	707.5	8.9597	23095	707.5	9.514
23130	711.0	8.9177	23130	711.0	9.478

Spectrum Plot

