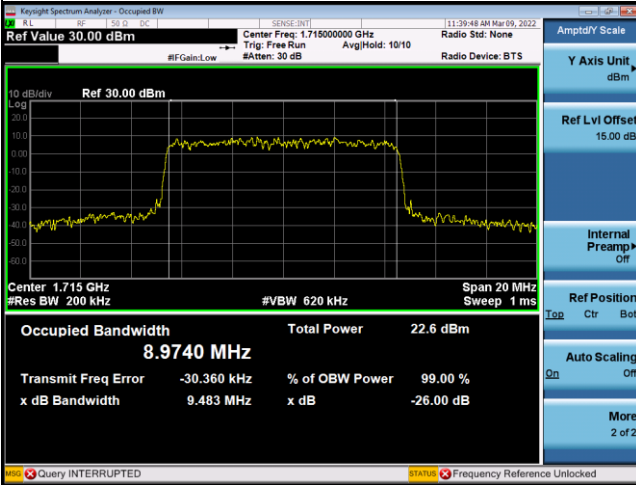
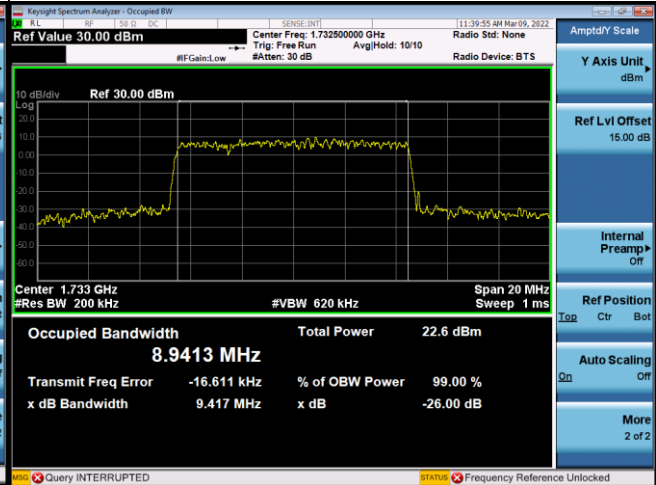


Spectrum Plot

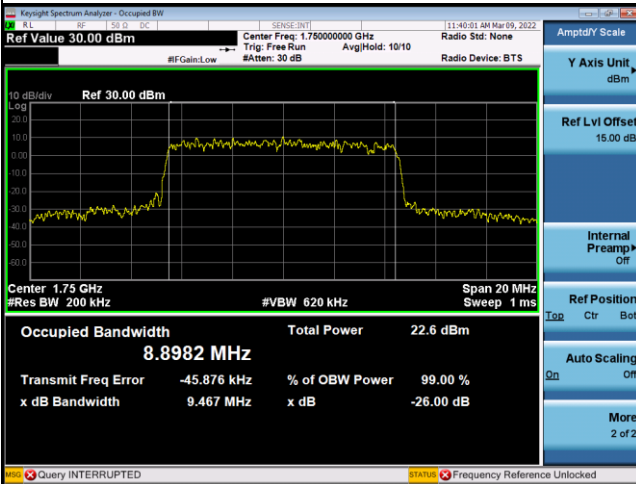
QPSK-20000



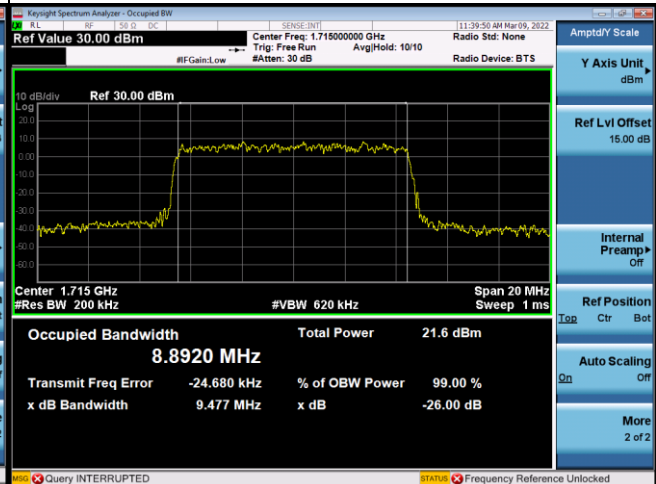
QPSK-20175



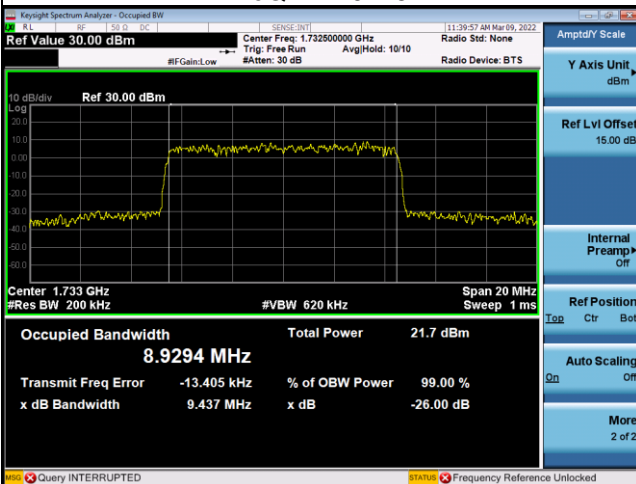
QPSK-20350



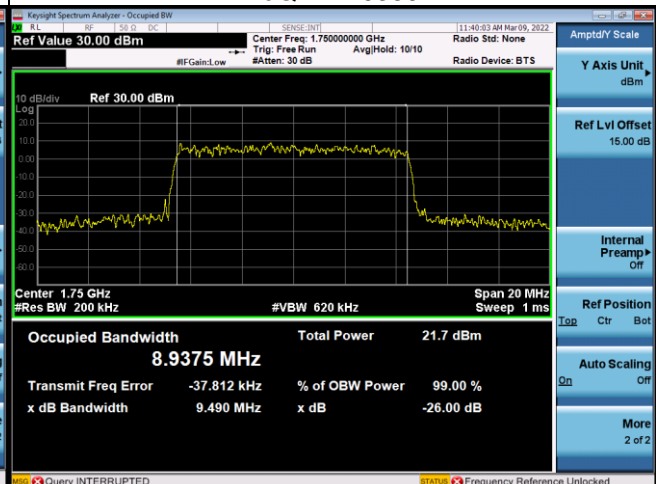
16QAM-20000



16QAM-20175



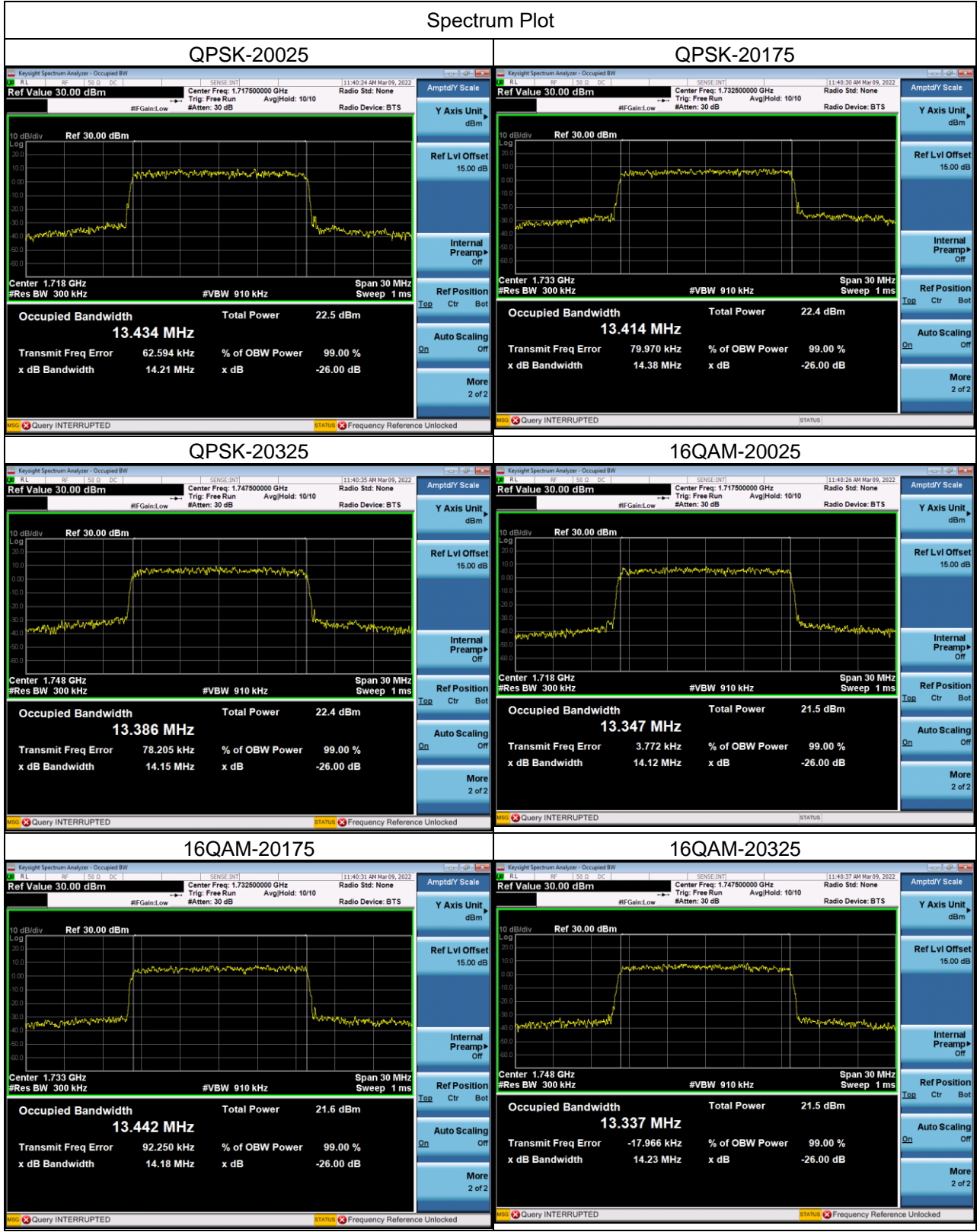
16QAM-20350





LTE Band 4_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.434	20025	1717.5	14.21
20175	1732.5	13.414	20175	1732.5	14.38
20325	1747.5	13.386	20325	1747.5	14.15
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.347	20025	1717.5	14.12
20175	1732.5	13.442	20175	1732.5	14.18
20325	1747.5	13.337	20325	1747.5	14.23
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.414	20025	1717.5	14.18
20175	1732.5	13.436	20175	1732.5	14.30
20325	1747.5	13.363	20325	1747.5	14.21

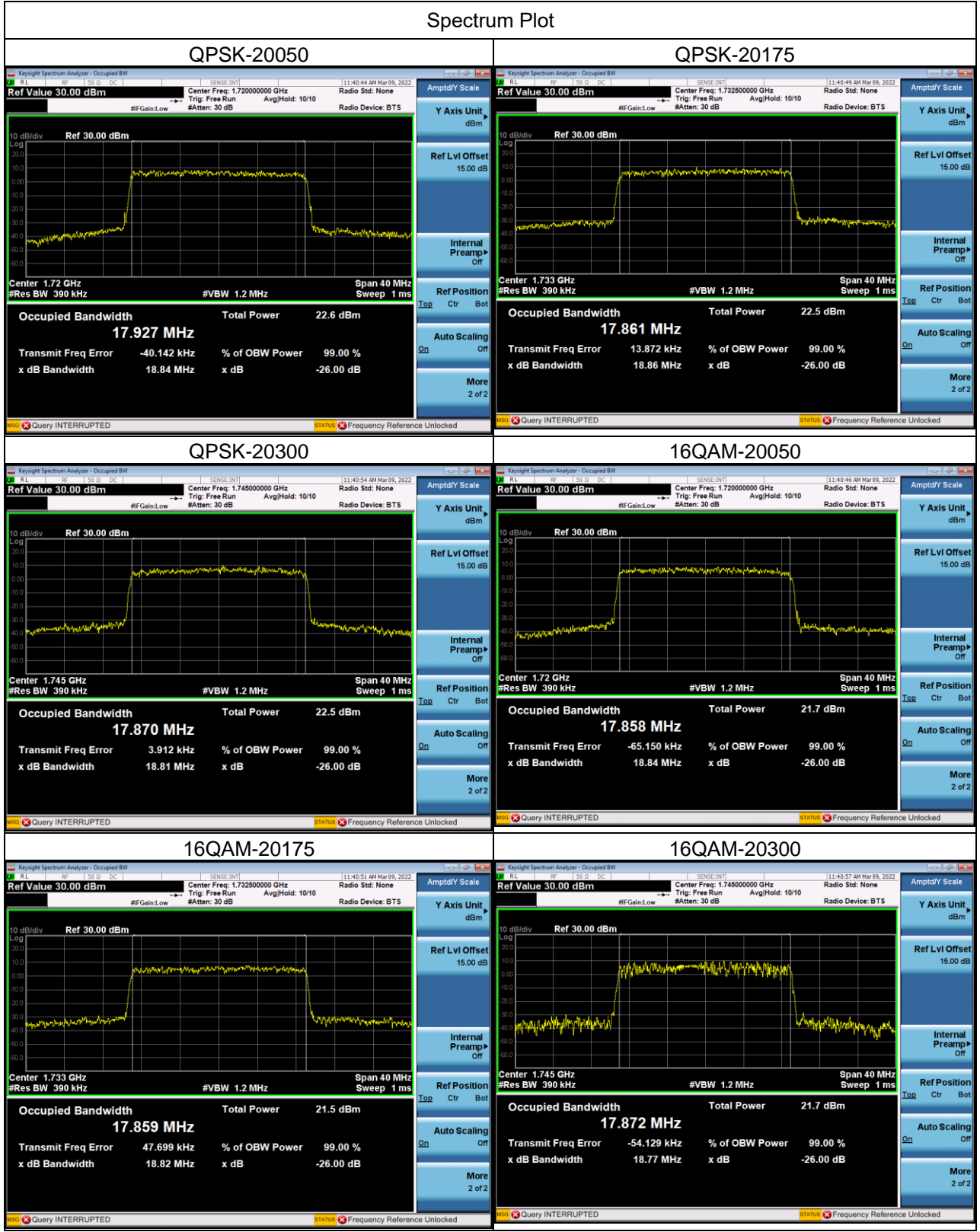
Spectrum Plot

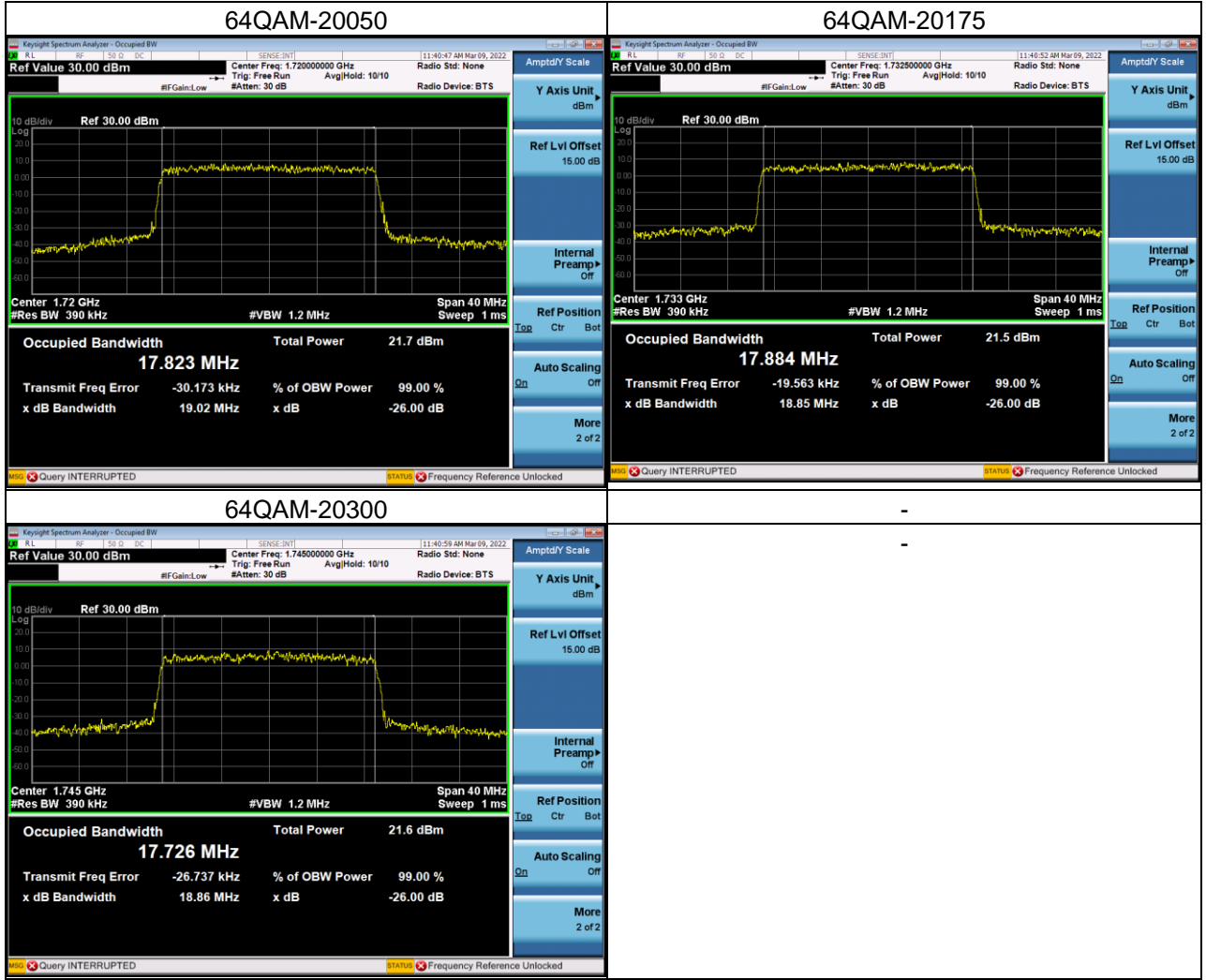




LTE Band 4_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.927	20050	1720	18.84
20175	1732.5	17.861	20175	1732.5	18.86
20300	1745	17.870	20300	1745	18.81
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.858	20050	1720	18.84
20175	1732.5	17.859	20175	1732.5	18.82
20300	1745	17.872	20300	1745	18.77
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.823	20050	1720	19.02
20175	1732.5	17.884	20175	1732.5	18.85
20300	1745	17.726	20300	1745	18.86

Spectrum Plot





LTE Band 12_1.4M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.1006	23017	699.7	1.213
23095	707.5	1.0936	23095	707.5	1.191
23173	715.3	1.0985	23173	715.3	1.253
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0942	23017	699.7	1.235
23095	707.5	1.1030	23095	707.5	1.214
23173	715.3	1.0574	23173	715.3	1.232
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0996	23017	699.7	1.213
23095	707.5	1.0874	23095	707.5	1.234
23173	715.3	1.1009	23173	715.3	1.196

Spectrum Plot





LTE Band 12_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7005	23025	700.5	2.926
23095	707.5	2.7257	23095	707.5	2.925
23165	714.5	2.7068	23165	714.5	2.936
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.6951	23025	700.5	2.921
23095	707.5	2.7117	23095	707.5	2.947
23165	714.5	2.7090	23165	714.5	2.917
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7319	23025	700.5	2.945
23095	707.5	2.7068	23095	707.5	2.954
23165	714.5	2.7213	23165	714.5	2.925