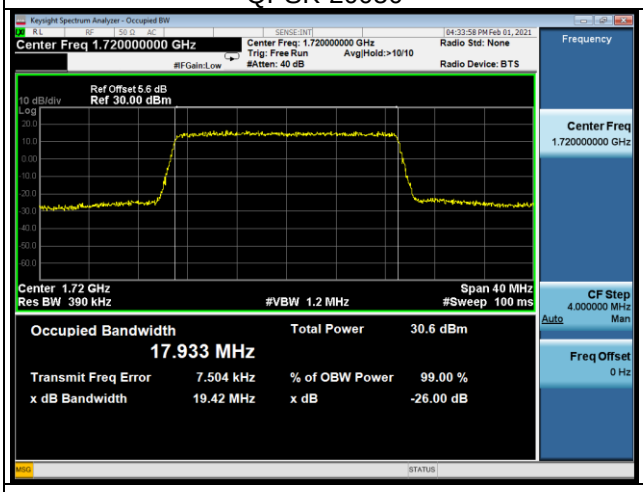
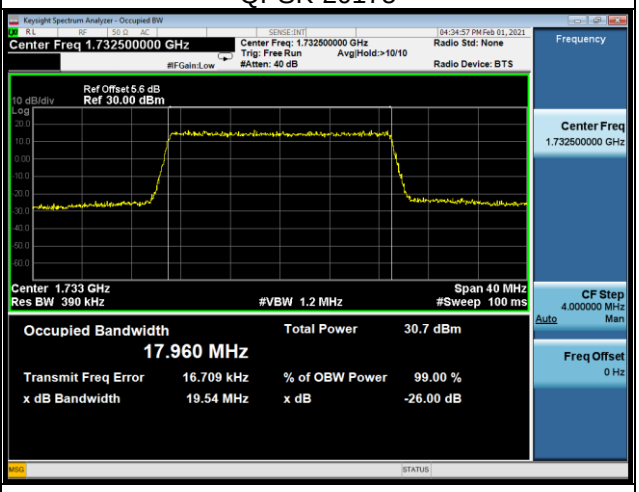
LTE Band 4_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.933	20050	1720	19.42
20175	1732.5	17.960	20175	1732.5	19.54
20300	1740	17.899	20300	1740	19.47
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.913	20050	1720	19.45
20175	1732.5	17.956	20175	1732.5	19.56
20300	1740	17.916	20300	1740	19.49
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20050	1720	17.904	20050	1720	19.47
20175	1732.5	17.943	20175	1732.5	19.53
20300	1740	17.958	20300	1740	19.58

Spectrum Plot

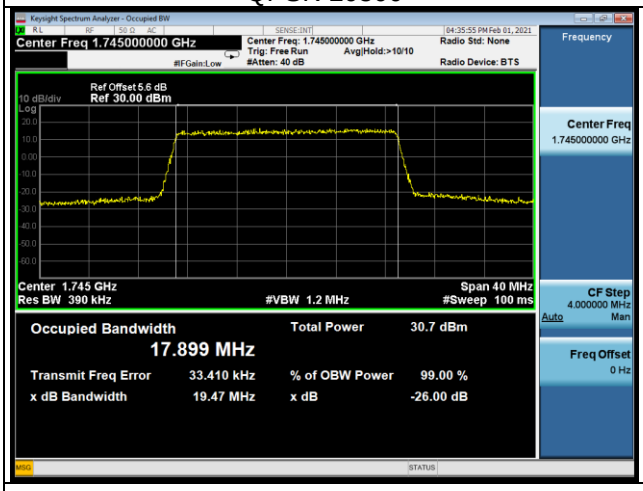
QPSK-20050



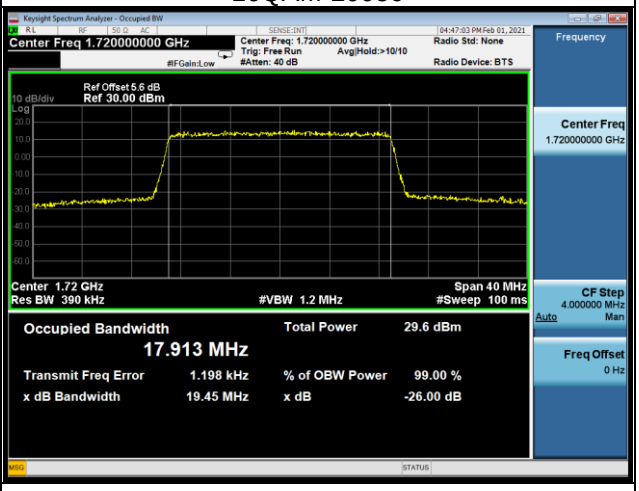
QPSK-20175



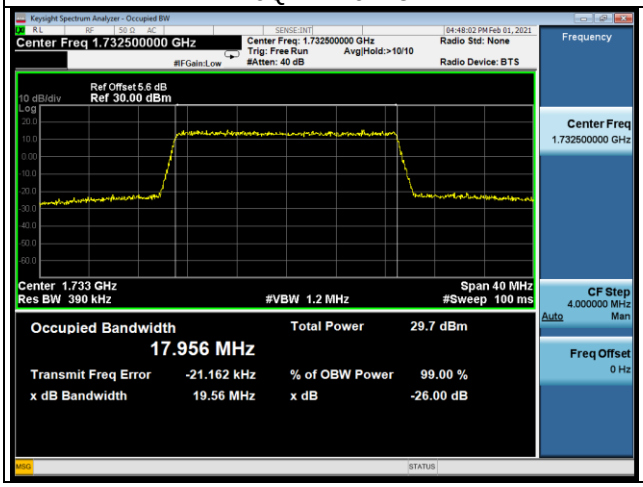
QPSK-20300



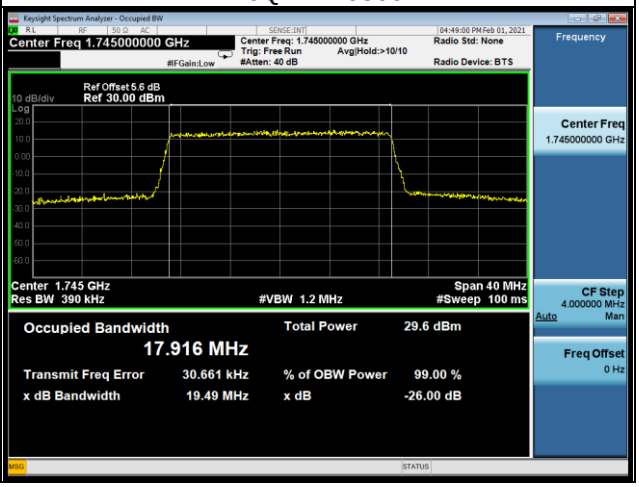
16QAM-20050

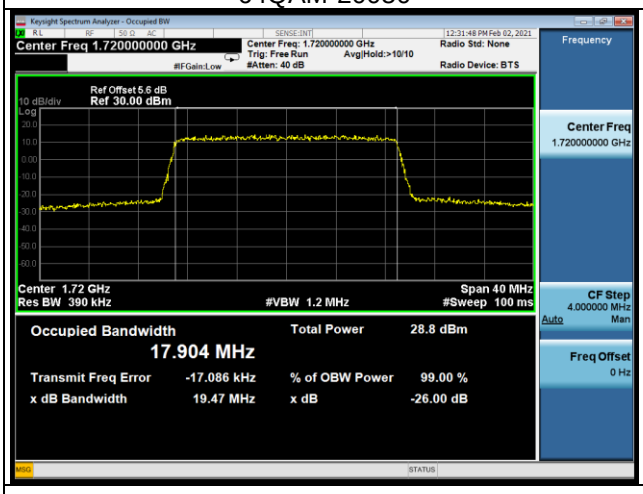
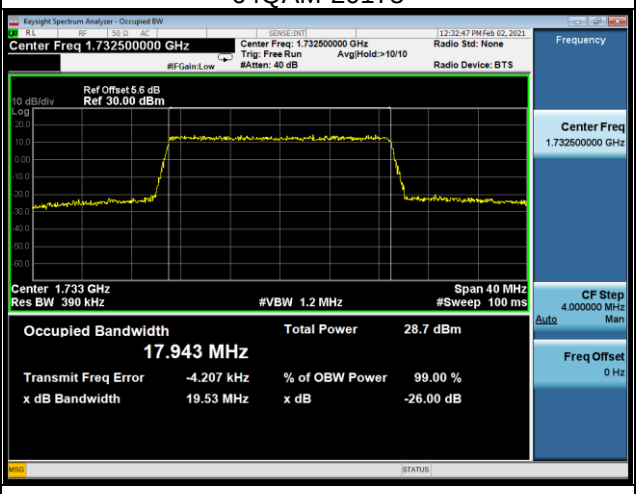
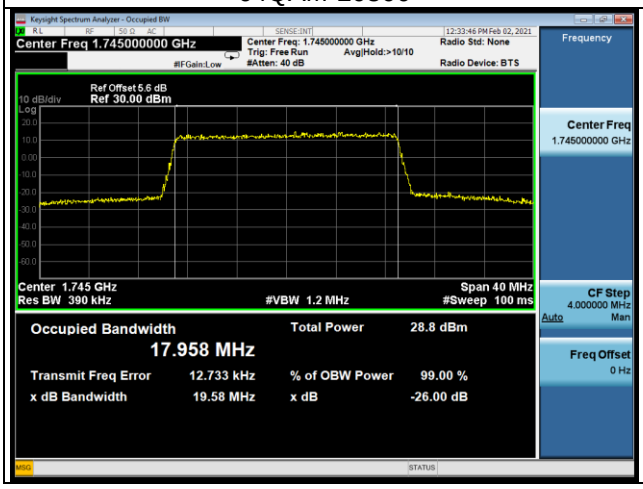


16QAM-20175



16QAM-20300

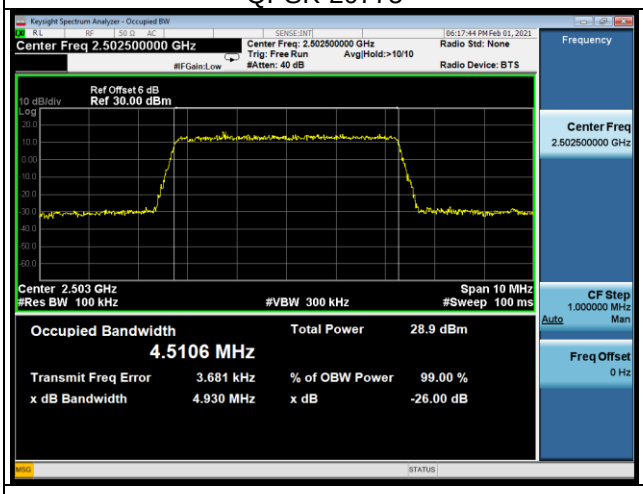


Spectrum Plot	
64QAM-20050	64QAM-20175
	
64QAM-20300	-
	-

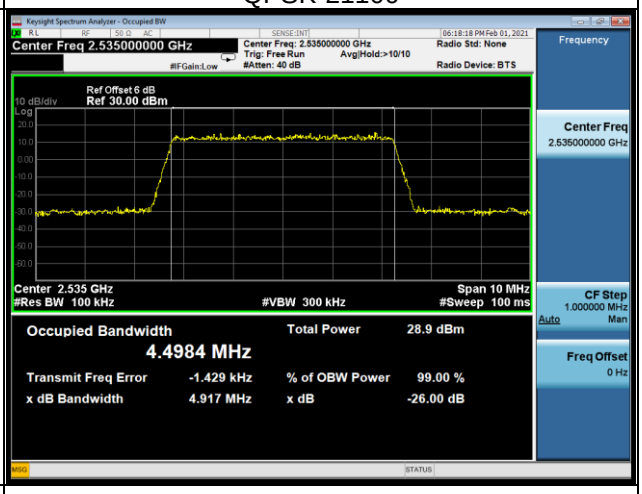
LTE Band 7_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.5106	20775	2502.5	4.930
21100	2535	4.4984	21100	2535	4.917
21425	2567.5	4.5208	21425	2567.5	4.957
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.4947	20775	2502.5	4.952
21100	2535	4.4960	21100	2535	4.970
21425	2567.5	4.4972	21425	2567.5	5.003
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.5005	20775	2502.5	4.942
21100	2535	4.5087	21100	2535	4.965
21425	2567.5	4.5087	21425	2567.5	4.939

Spectrum Plot

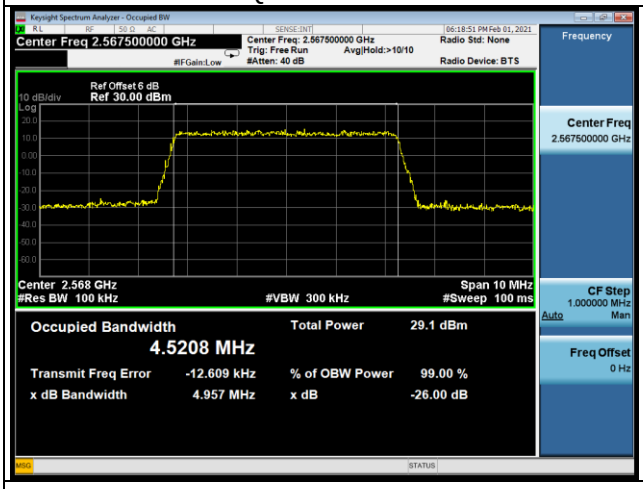
QPSK-20775



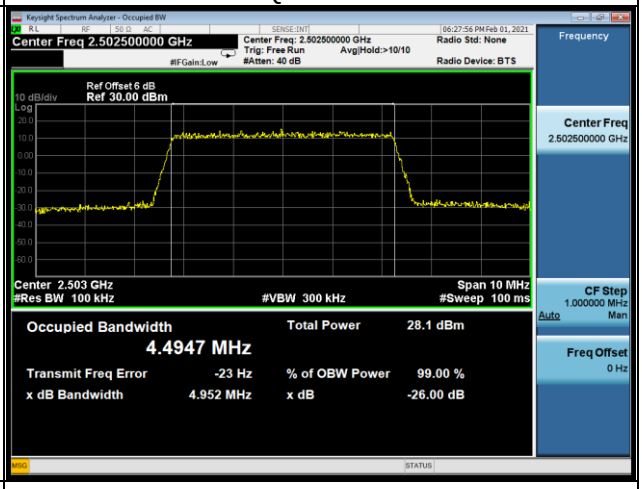
QPSK-21100



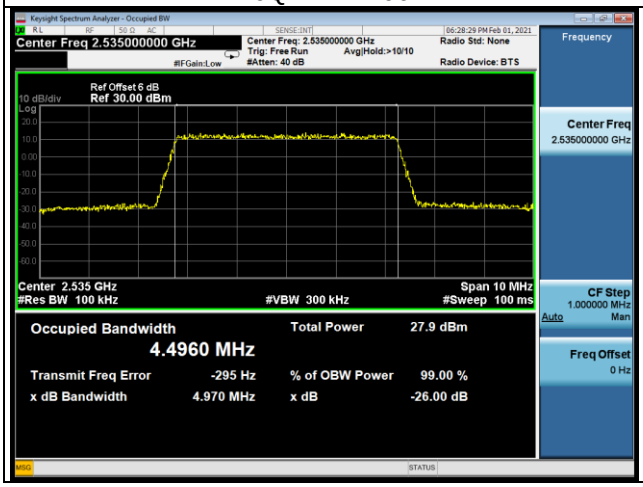
QPSK-21425



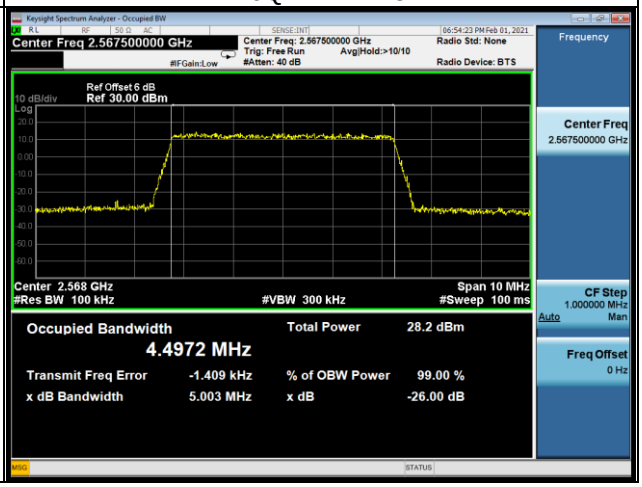
16QAM-20775

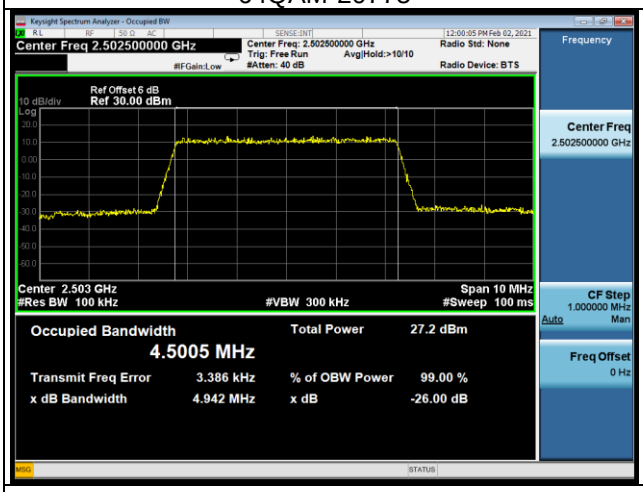
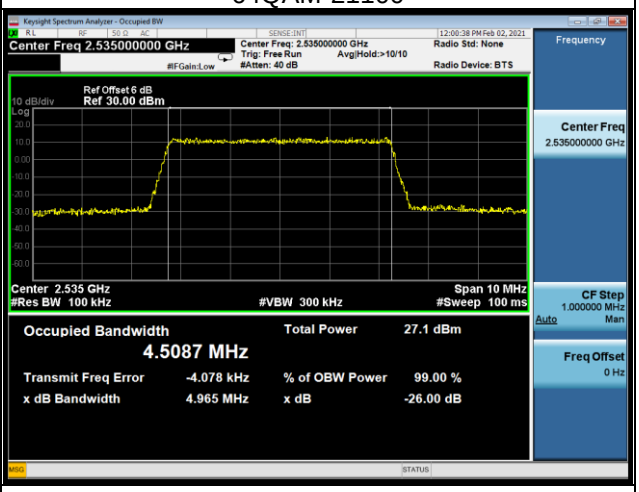
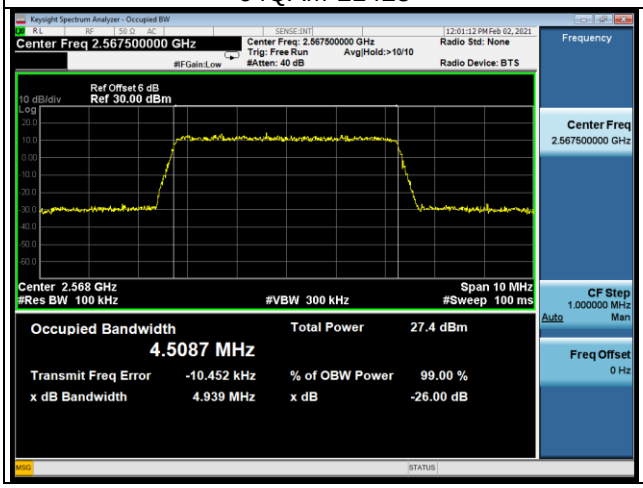


16QAM-21100



16QAM-21425

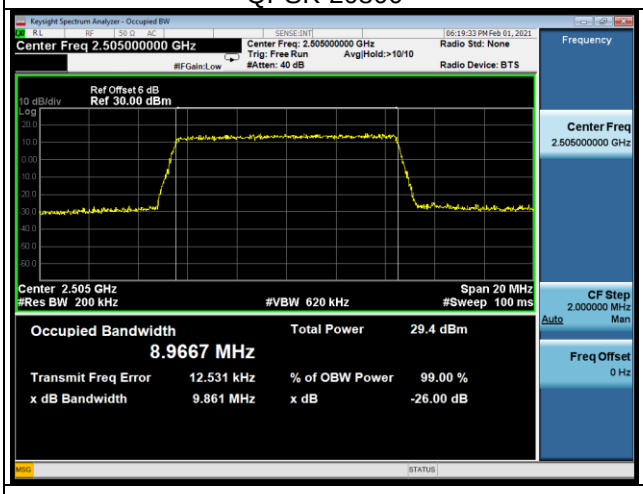


Spectrum Plot	
64QAM-20775	64QAM-21100
	
64QAM-21425	-
	-

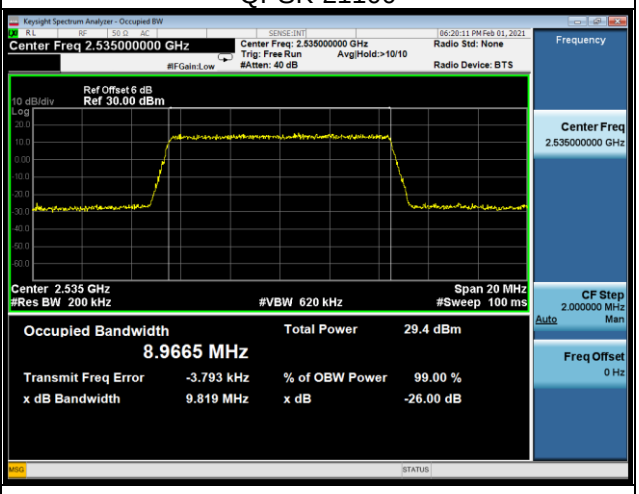
LTE Band 7_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.9667	20800	2505	9.861
21100	2535	8.9665	21100	2535	9.819
21400	2565	8.9754	21400	2565	9.859
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.9532	20800	2505	9.792
21100	2535	8.9733	21100	2535	9.809
21400	2565	9.0006	21400	2565	9.833
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.9530	20800	2505	9.787
21100	2535	8.9806	21100	2535	9.856
21400	2565	8.9681	21400	2565	9.779

Spectrum Plot

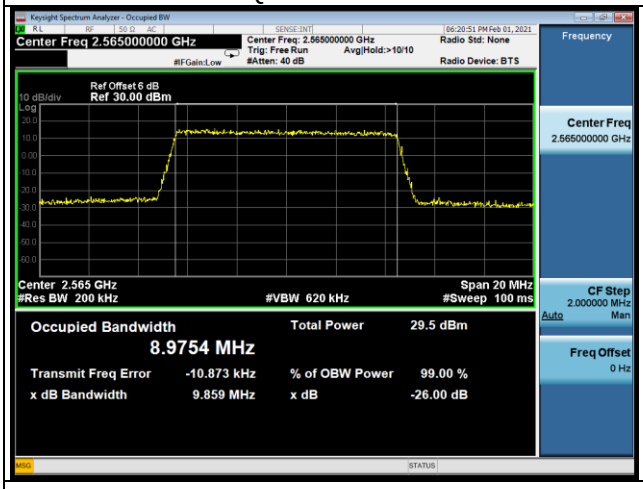
QPSK-20800



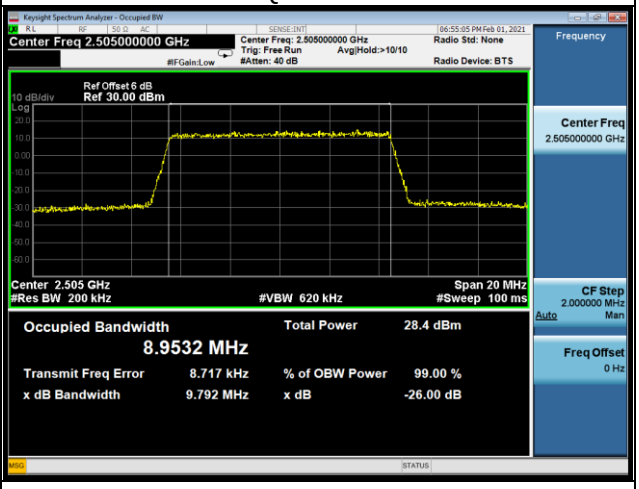
QPSK-21100



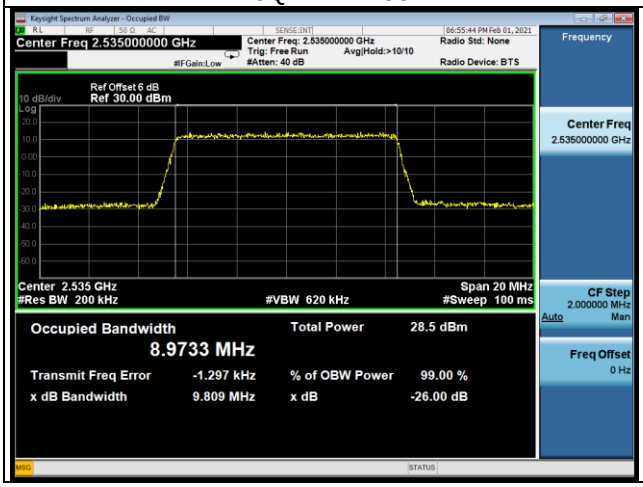
QPSK-21400



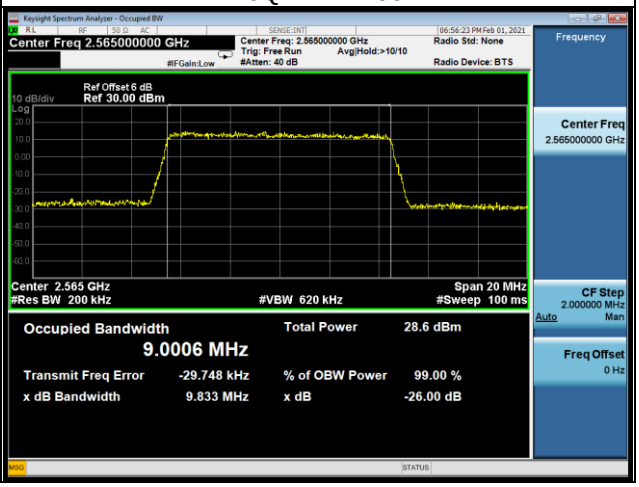
16QAM-20800

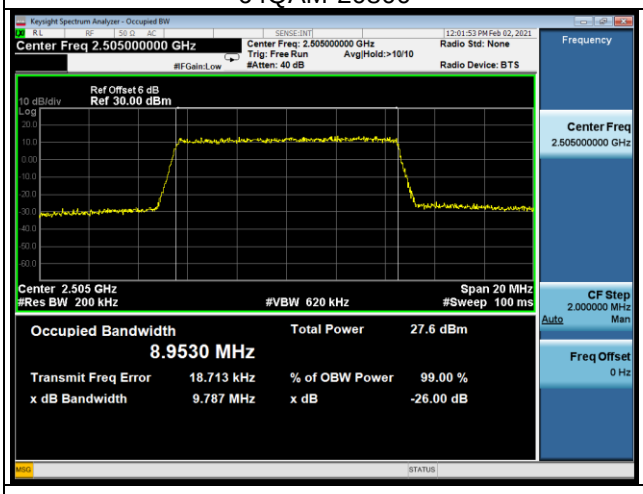
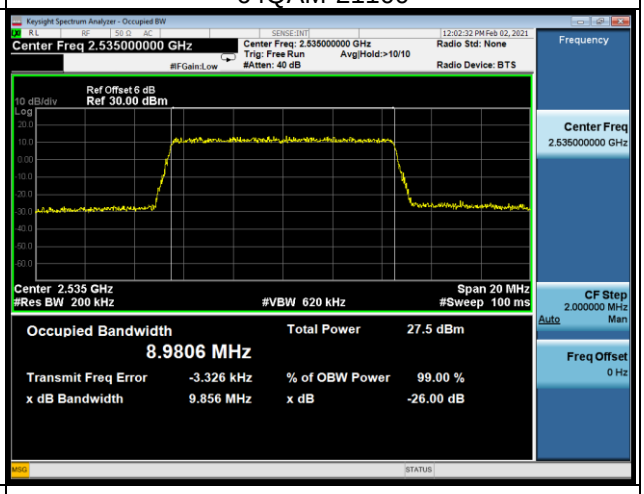
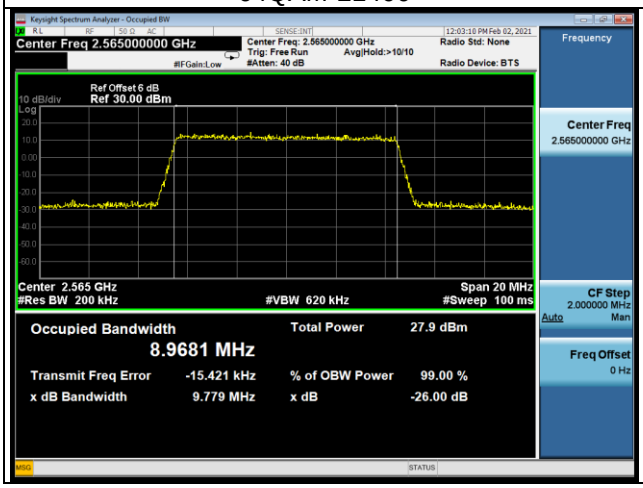


16QAM-21100



16QAM-21400

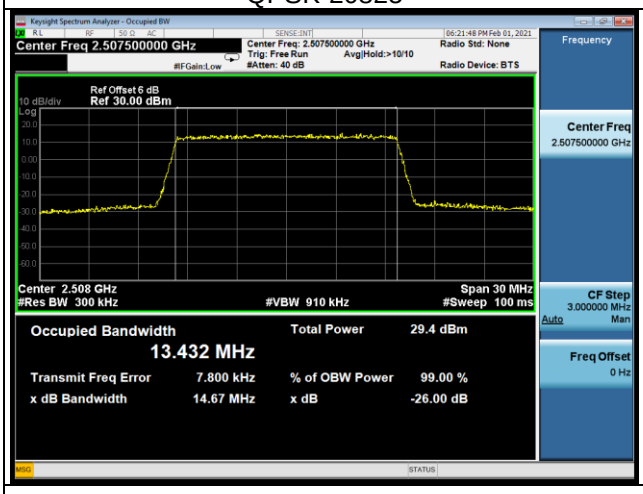


Spectrum Plot	
64QAM-20800	64QAM-21100
	
64QAM-21400	-
	-

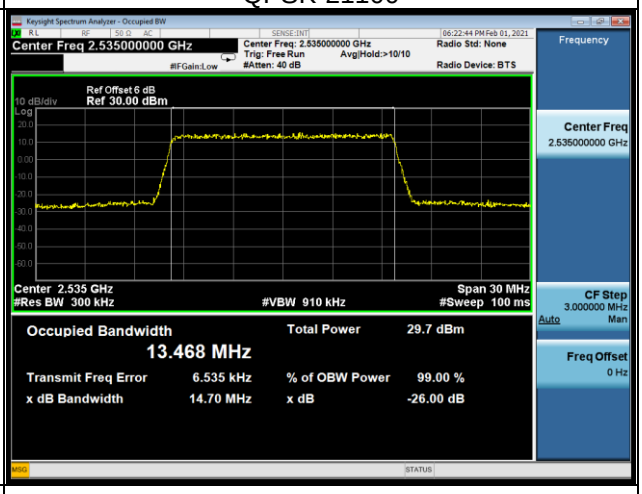
LTE Band 7_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.432	20825	2507.5	14.67
21100	2535	13.468	21100	2535	14.70
21375	2562.5	13.451	21375	2562.5	14.75
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.418	20825	2507.5	14.64
21100	2535	13.484	21100	2535	14.67
21375	2562.5	13.459	21375	2562.5	14.62
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.438	20825	2507.5	14.62
21100	2535	13.461	21100	2535	14.77
21375	2562.5	13.455	21375	2562.5	14.63

Spectrum Plot

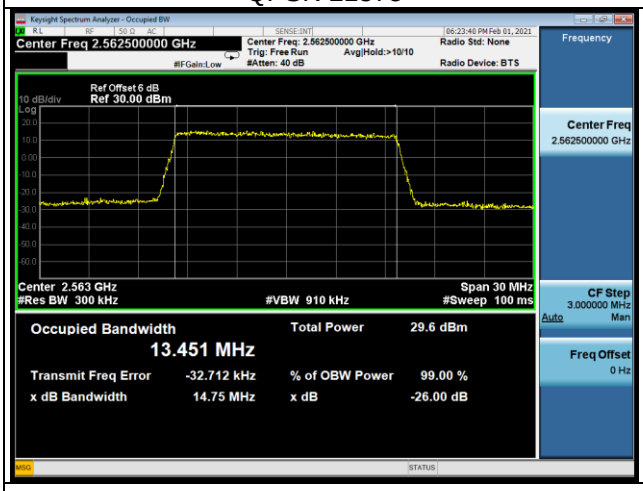
QPSK-20825



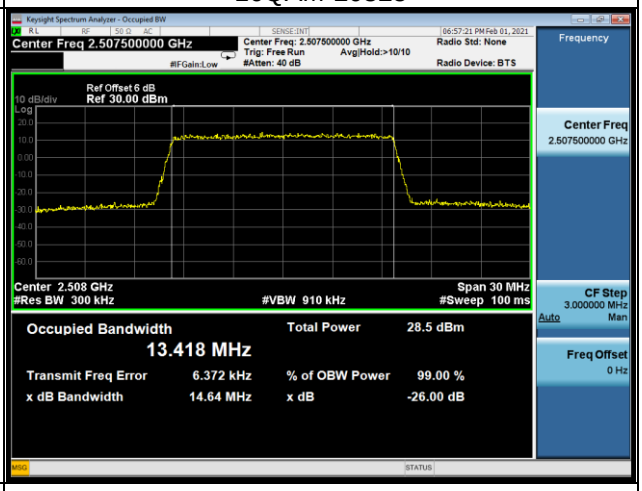
QPSK-21100



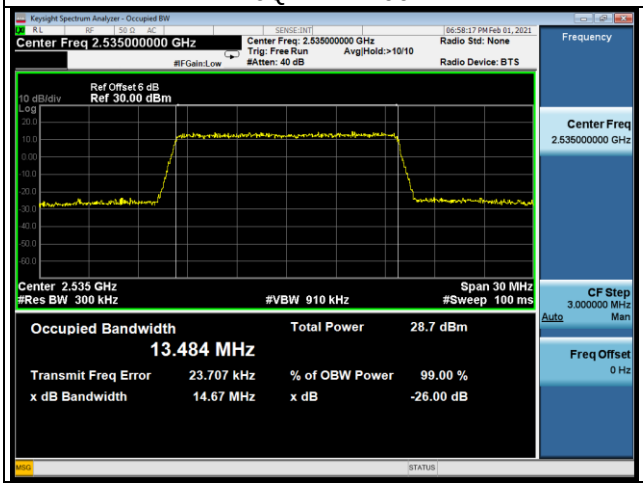
QPSK-21375



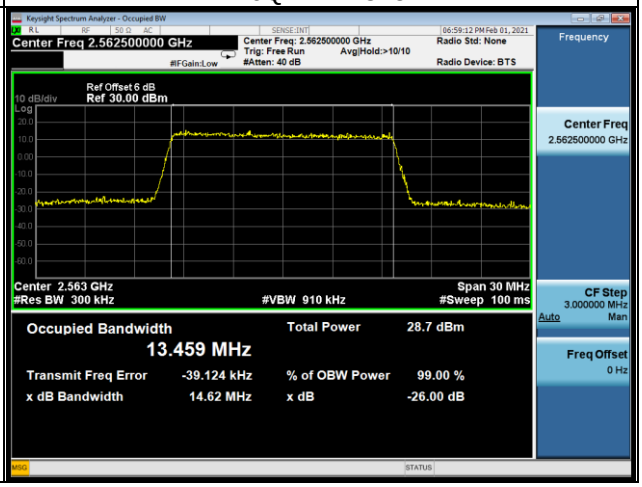
16QAM-20825

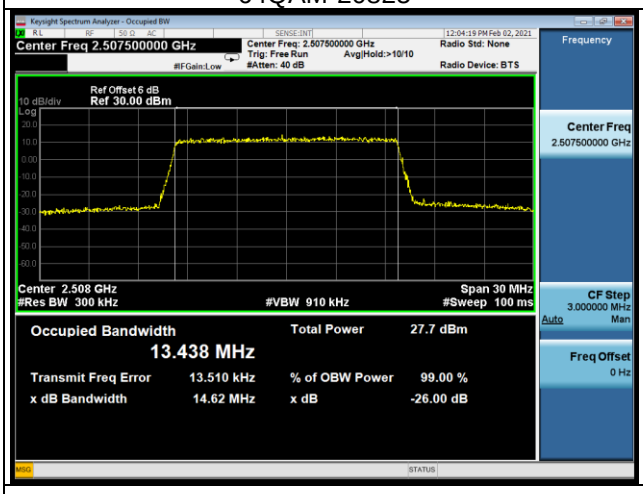
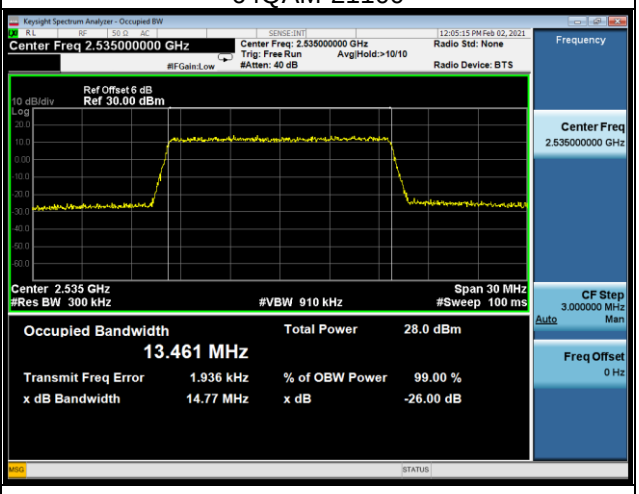
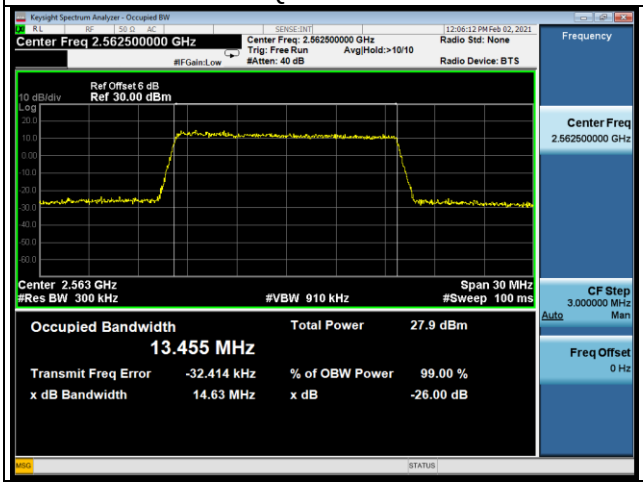


16QAM-21100



16QAM-21375

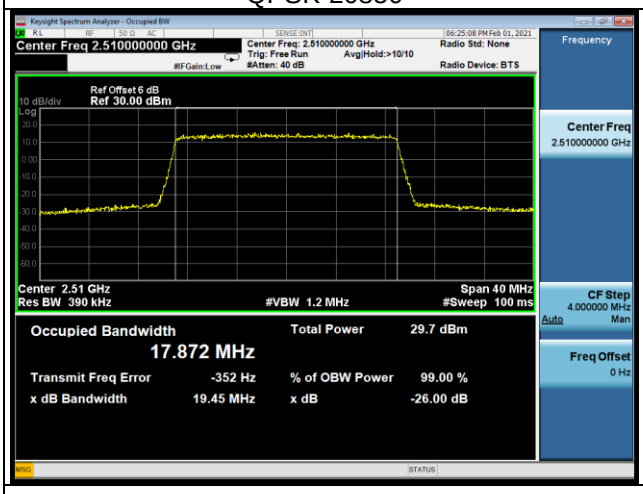


Spectrum Plot	
64QAM-20825	64QAM-21100
	
64QAM-21375	-
	-

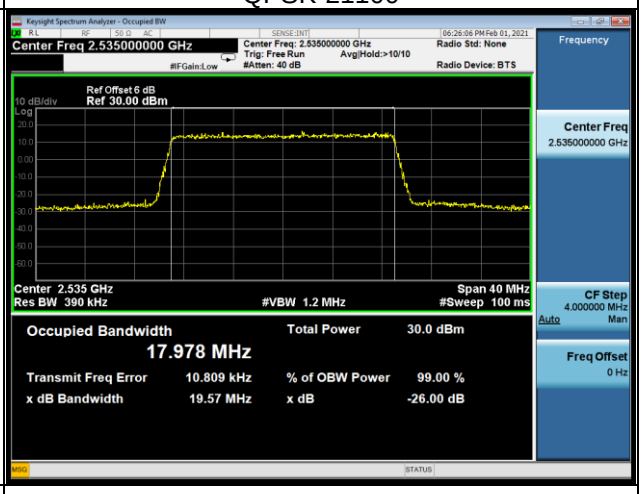
LTE Band 7_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.872	20850	2510	19.45
21100	2535	17.978	21100	2535	19.57
21350	2560	17.939	21350	2560	19.46
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.875	20850	2510	19.42
21100	2535	17.938	21100	2535	19.42
21350	2560	17.893	21350	2560	19.51
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.860	20850	2510	19.43
21100	2535	17.977	21100	2535	19.47
21350	2560	17.914	21350	2560	19.43

Spectrum Plot

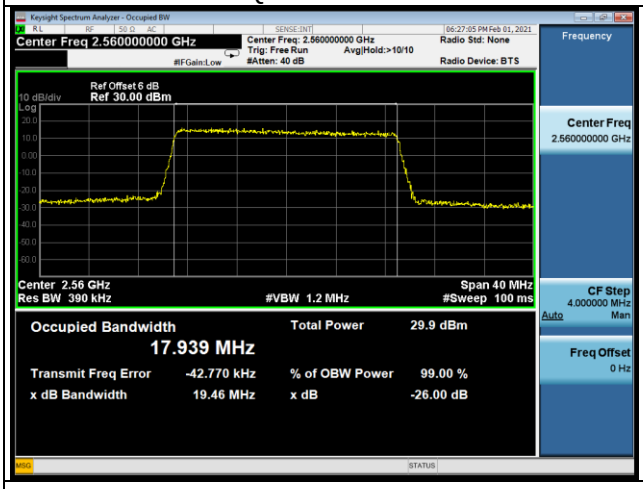
QPSK-20850



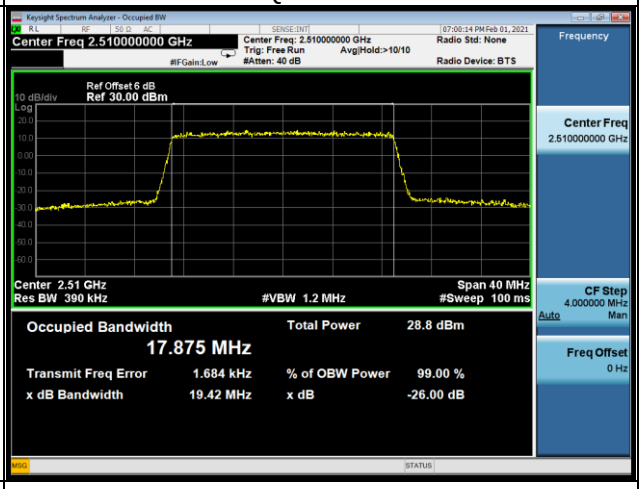
QPSK-21100



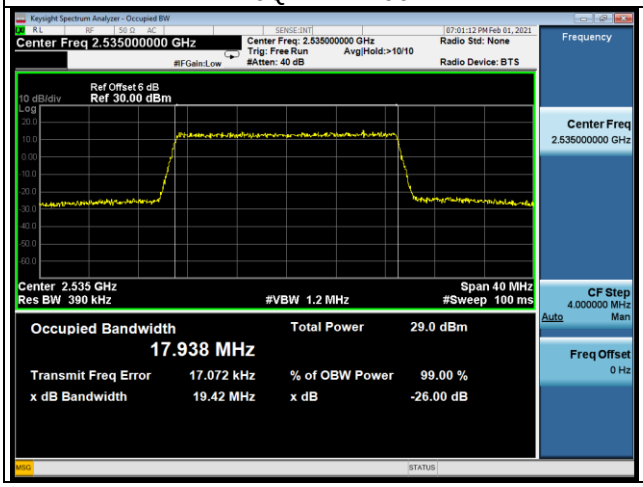
QPSK-21350



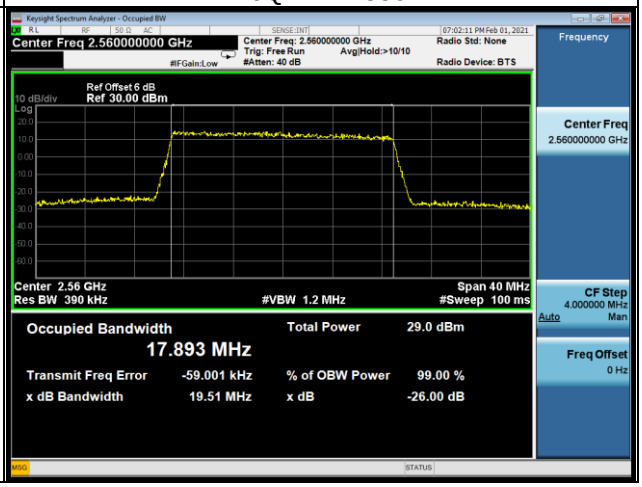
16QAM-20850

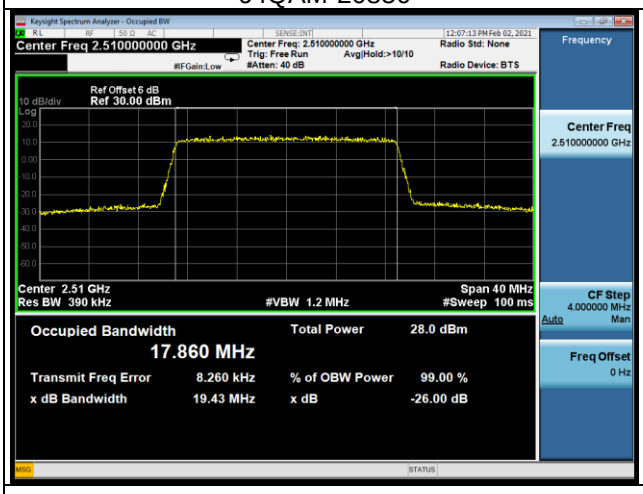
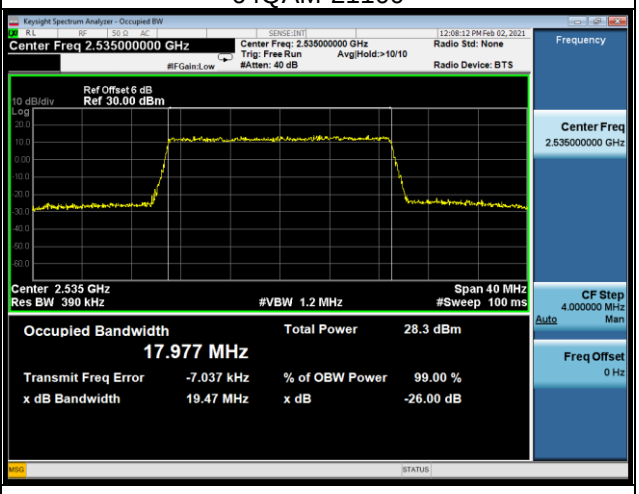


16QAM-21100



16QAM-21350

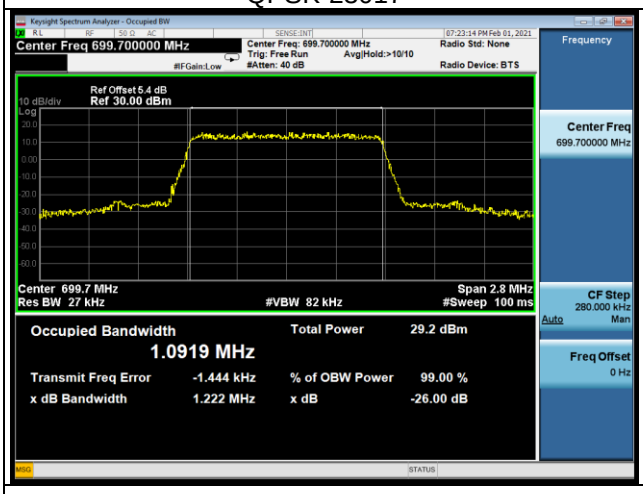


Spectrum Plot	
64QAM-20850	64QAM-21100
	
64QAM-21350	-
	-

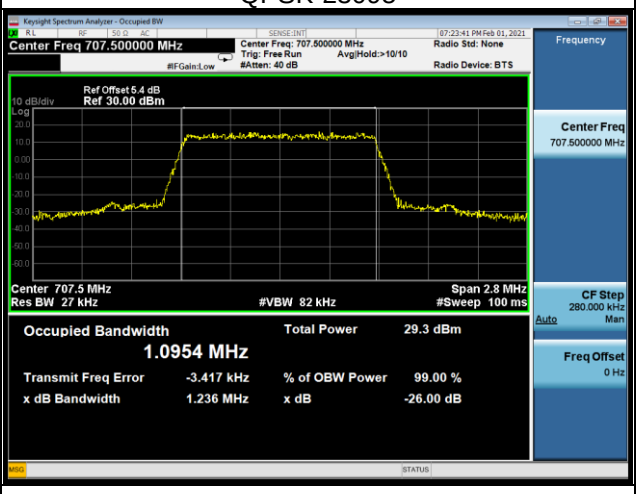
LTE Band 12_1.4M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0919	23017	699.7	1.222
23095	707.5	1.0954	23095	707.5	1.236
23173	715.3	1.0857	23173	715.3	1.224
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0837	23017	699.7	1.228
23095	707.5	1.0890	23095	707.5	1.232
23173	715.3	1.0914	23173	715.3	1.236
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23017	699.7	1.0877	23017	699.7	1.238
23095	707.5	1.0849	23095	707.5	1.224
23173	715.3	1.0870	23173	715.3	1.228

Spectrum Plot

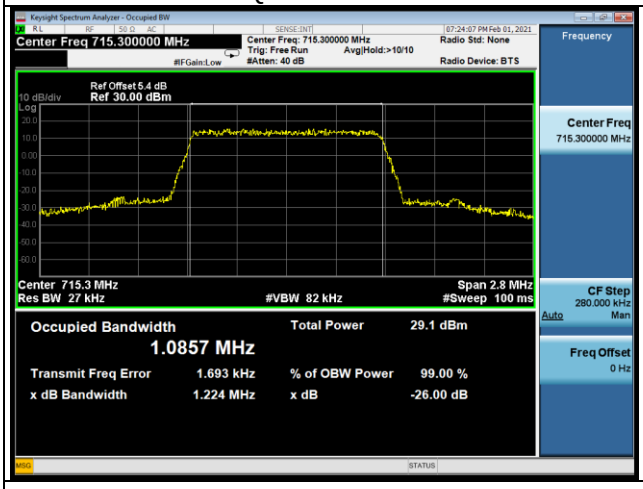
QPSK-23017



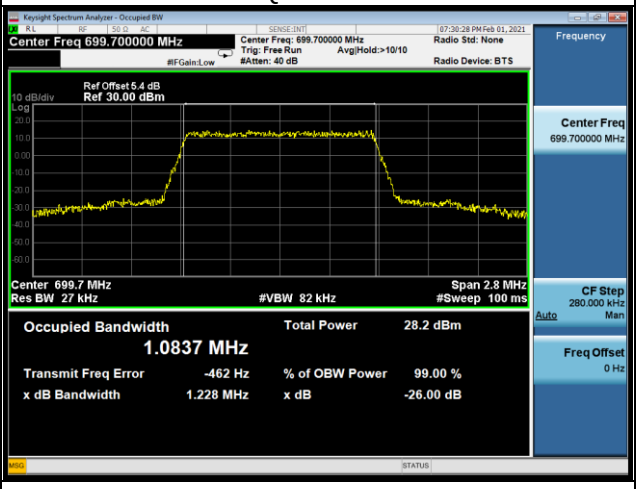
QPSK-23095



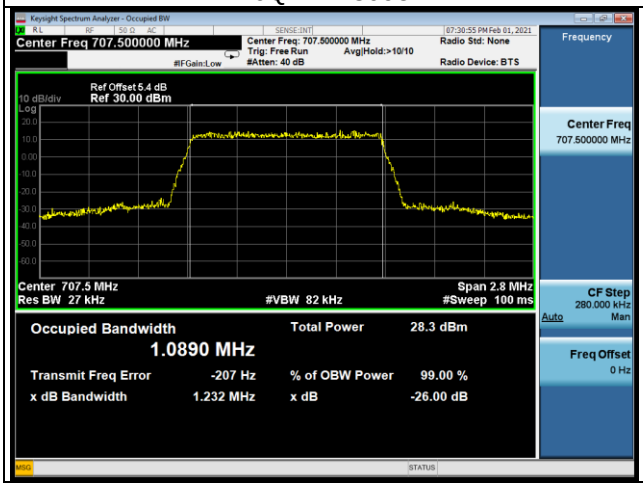
QPSK-23173



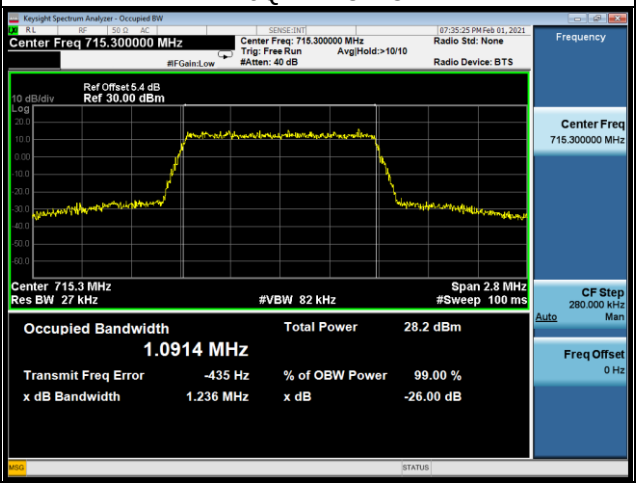
16QAM-23017

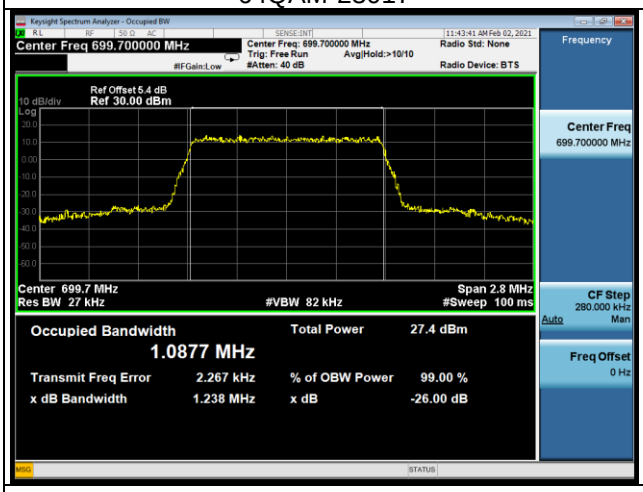
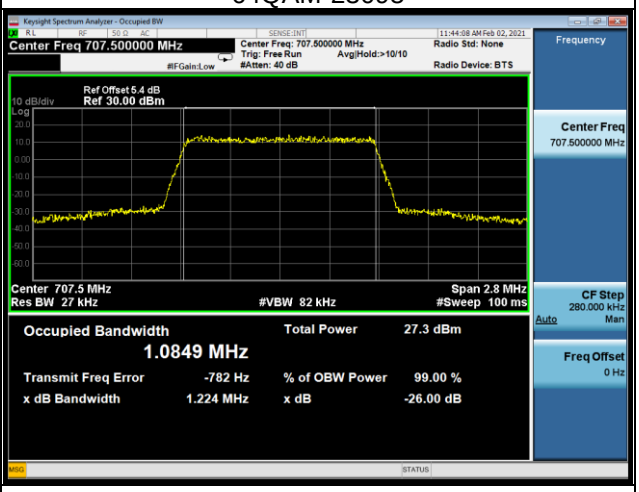
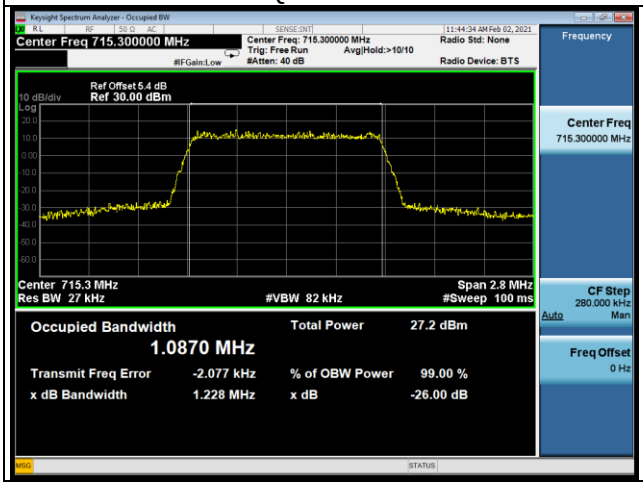


16QAM-23095



16QAM-23173

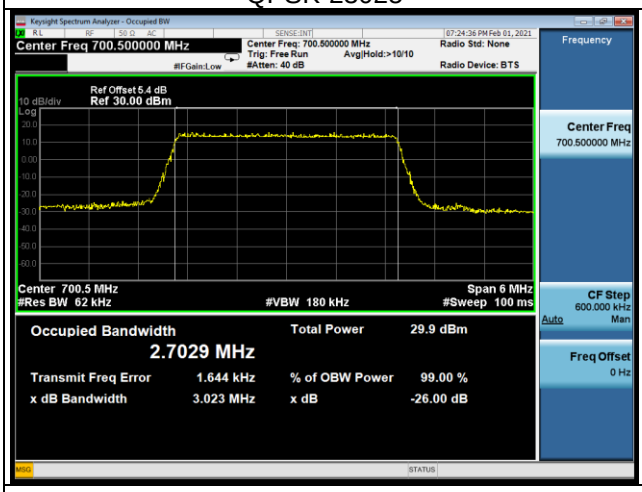


Spectrum Plot	
64QAM-23017	64QAM-23095
	
64QAM-23173	-
	-

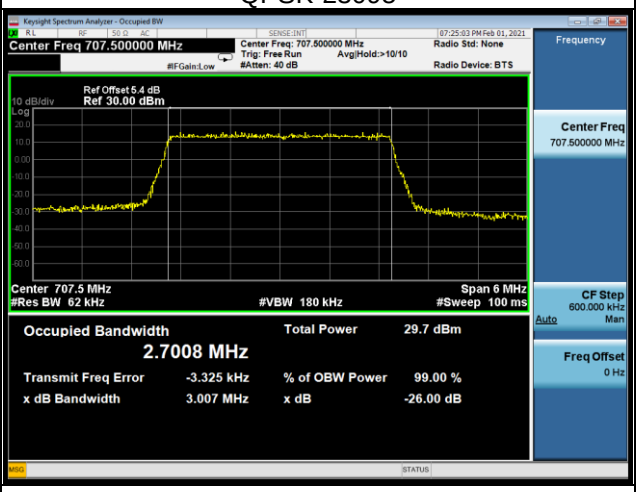
LTE Band 12_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.0729	23025	700.5	3.023
23095	707.5	2.7008	23095	707.5	3.007
23165	714.5	2.7020	23165	714.5	2.998
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7073	23025	700.5	2.985
23095	707.5	2.7029	23095	707.5	3.004
23165	714.5	2.6983	23165	714.5	3.004
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7010	23025	700.5	3.000
23095	707.5	2.7017	23095	707.5	2.972
23165	714.5	2.6987	23165	714.5	2.991

Spectrum Plot

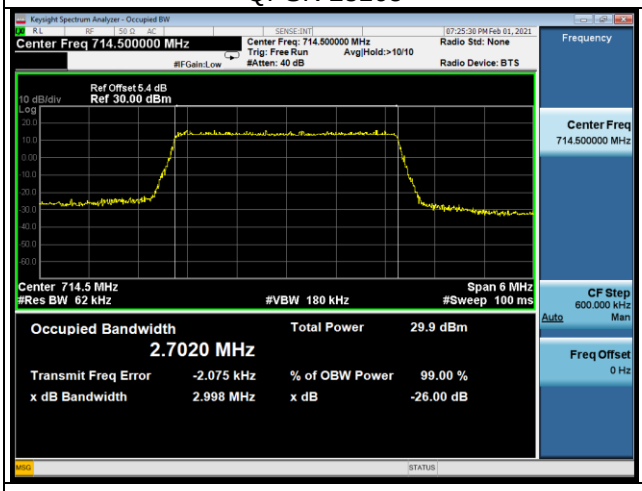
QPSK-23025



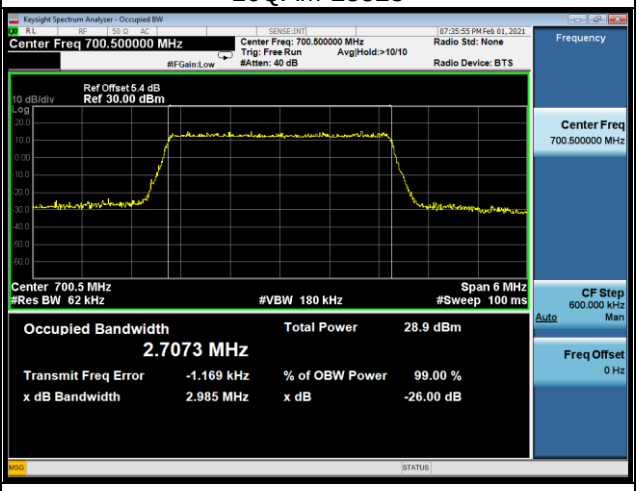
QPSK-23095



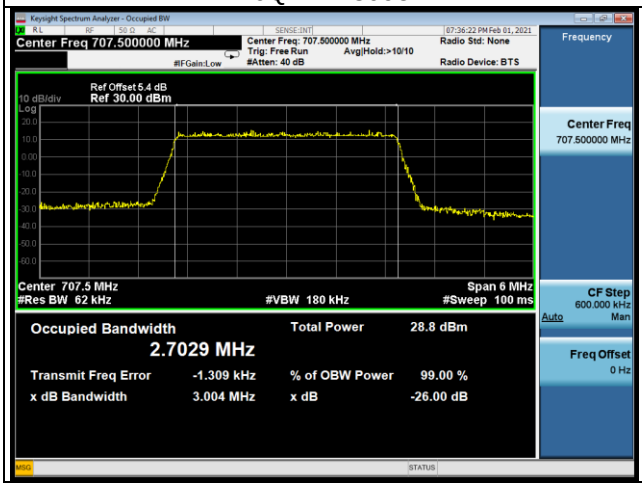
QPSK-23165



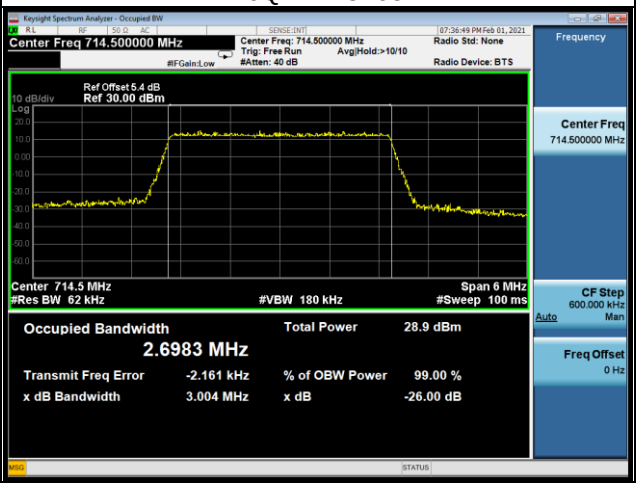
16QAM-23525

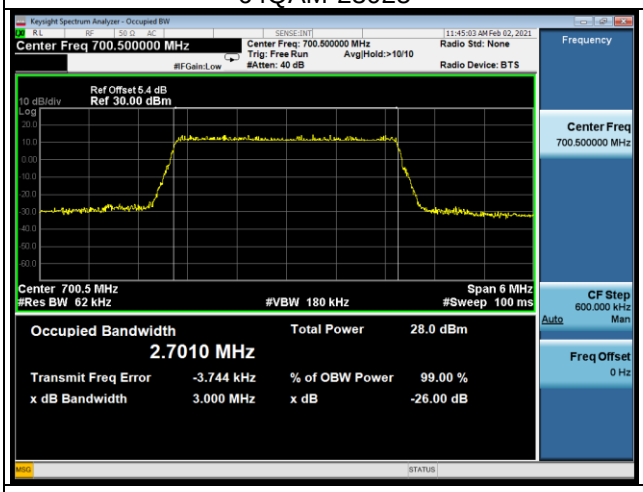
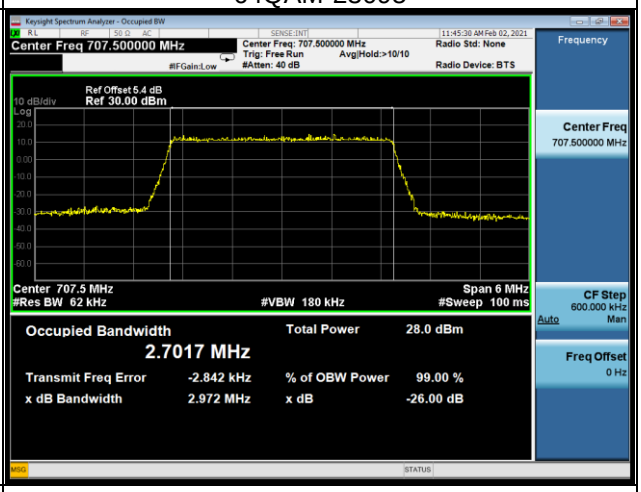
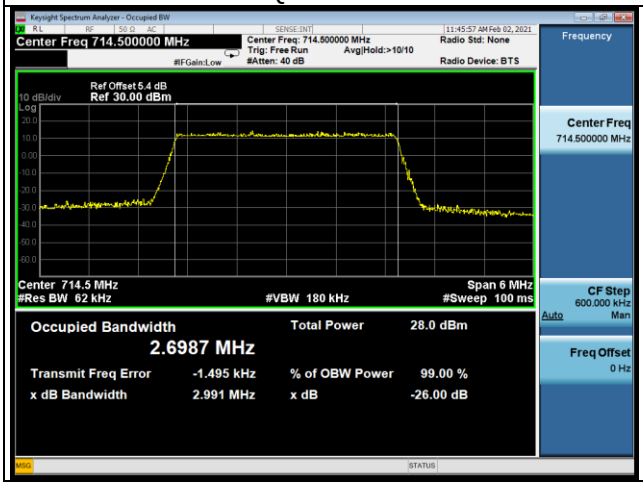


16QAM-23095



16QAM-23165



Spectrum Plot	
64QAM-23025	64QAM-23095
	
64QAM-23165	-
	-