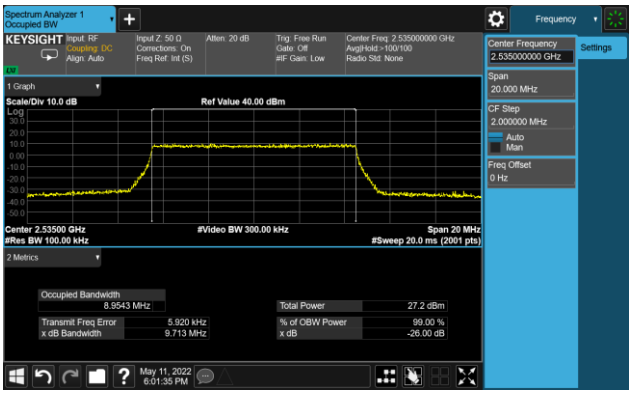
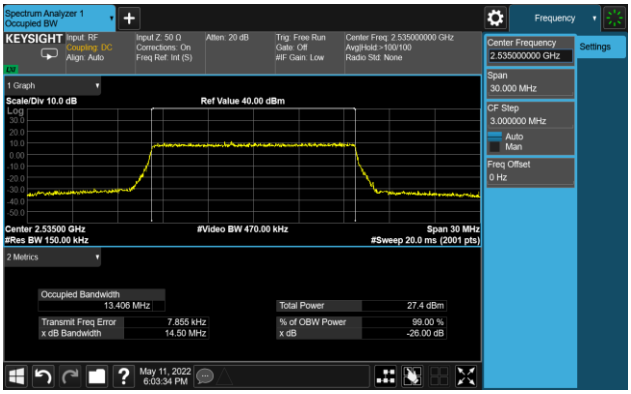
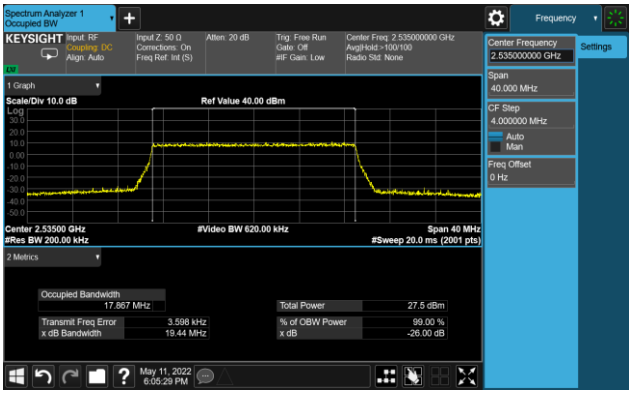
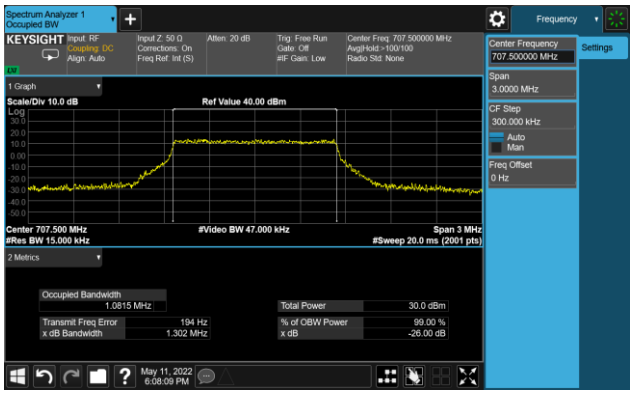
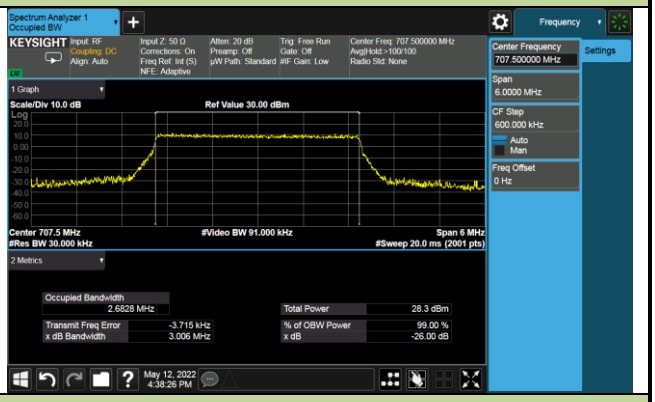
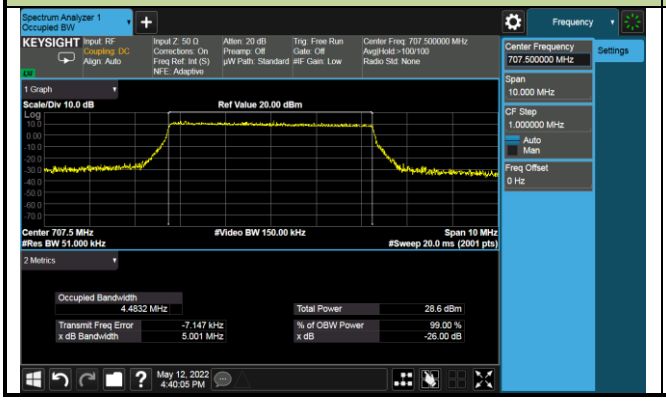
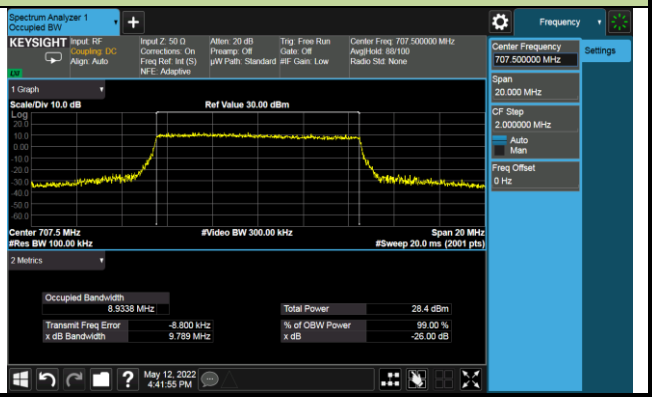
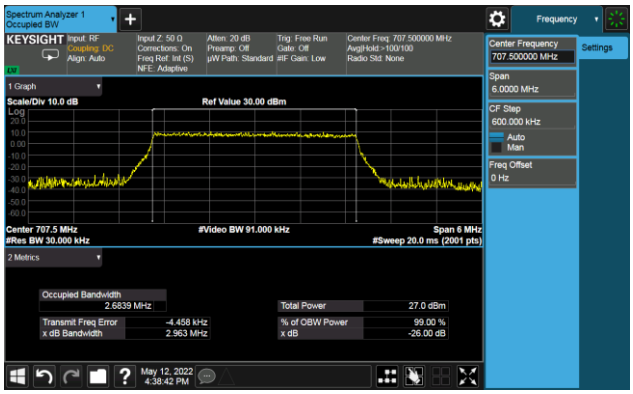
99% Bandwidth - 256QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	
15MHz Channel Bandwidth	20MHz Channel Bandwidth
	

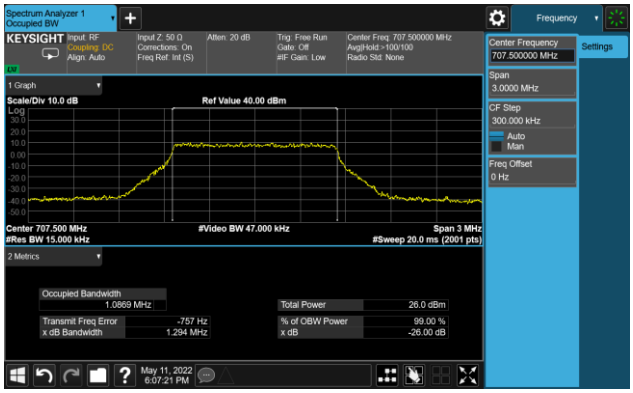
Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/11 ~ 2022/05/12	Test Band	LTE Band 12

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK		
707.5	1.4	1.08
	3	2.69
	5	4.47
	10	8.93
16QAM		
707.5	1.4	1.08
	3	2.68
	5	4.48
	10	8.93
64QAM		
707.5	1.4	1.08
	3	2.68
	5	4.48
	10	8.93
256QAM		
707.5	1.4	1.09
	3	2.68
	5	4.48
	10	8.93

99% Bandwidth - QPSK	
1.4MHz Channel Bandwidth	3MHz Channel Bandwidth
	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

99% Bandwidth - 16QAM	
1.4MHz Channel Bandwidth	3MHz Channel Bandwidth
	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	

99% Bandwidth - 64QAM	
1.4MHz Channel Bandwidth	3MHz Channel Bandwidth
	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

99% Bandwidth - 256QAM	
1.4MHz Channel Bandwidth	3MHz Channel Bandwidth
	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/12	Test Band	LTE Band 13

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK		
782.0	5	4.48
	10	8.92
16QAM		
782.0	5	4.47
	10	8.91
64QAM		
782.0	5	4.47
	10	8.92
256QAM		
782.0	5	4.49
	10	8.93

99% Bandwidth - QPSK	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

99% Bandwidth - 16QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

99% Bandwidth - 64QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

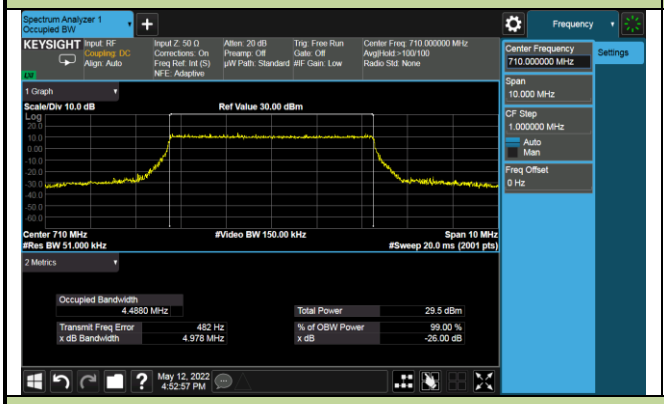
99% Bandwidth - 256QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/12	Test Band	LTE Band 17

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK		
710.0	5	4.49
	10	8.95
16QAM		
710.0	5	4.48
	10	8.97
64QAM		
710.0	5	4.48
	10	8.96
256QAM		
710.0	5	4.48
	10	8.96

99% Bandwidth - QPSK

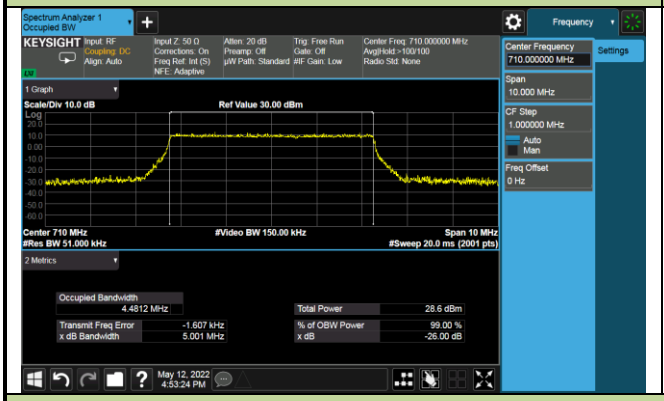
5MHz Channel Bandwidth



10MHz Channel Bandwidth

99% Bandwidth - 16QAM

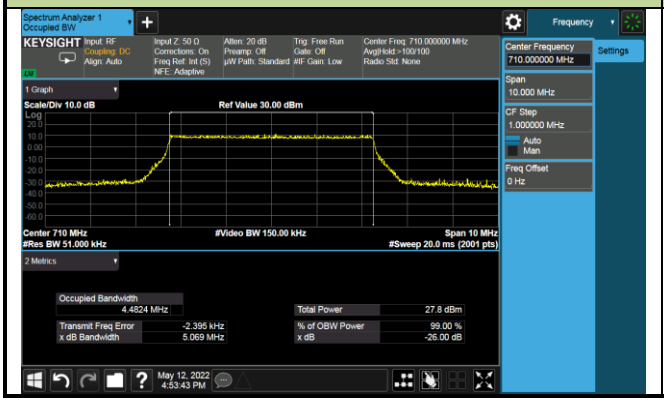
5MHz Channel Bandwidth



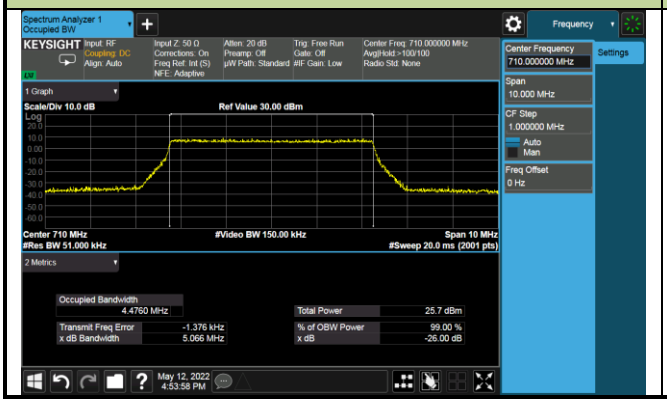
10MHz Channel Bandwidth

99% Bandwidth - 64QAM

5MHz Channel Bandwidth

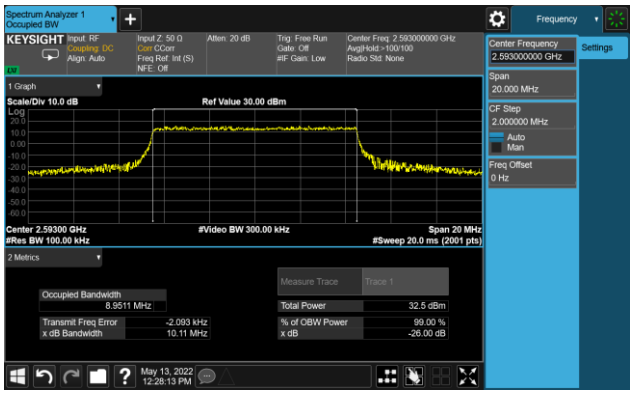
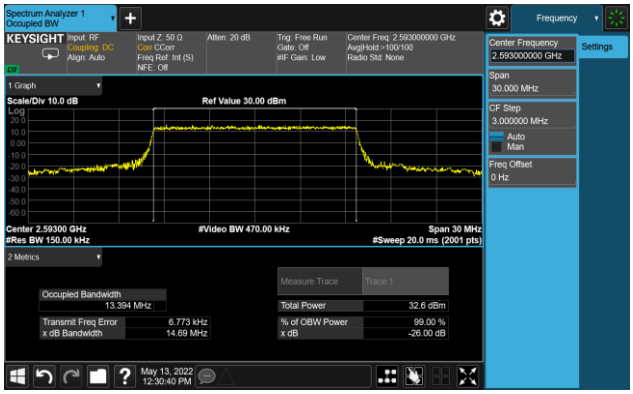


10MHz Channel Bandwidth

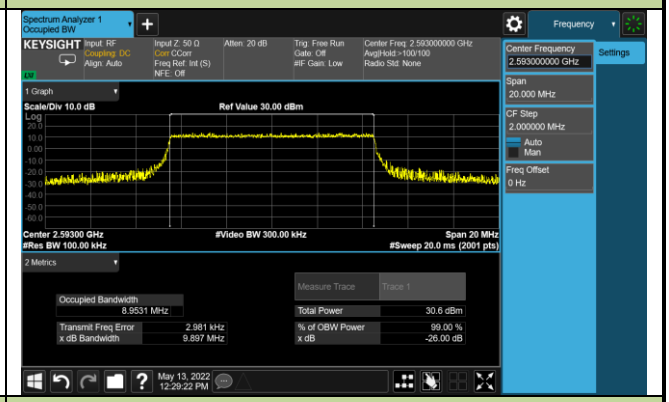
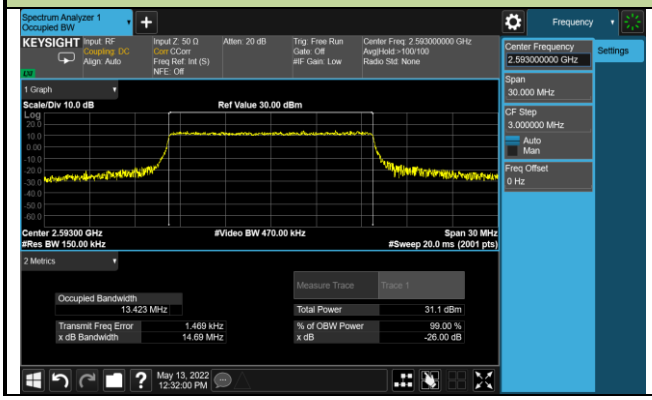
99% Bandwidth - 256QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	

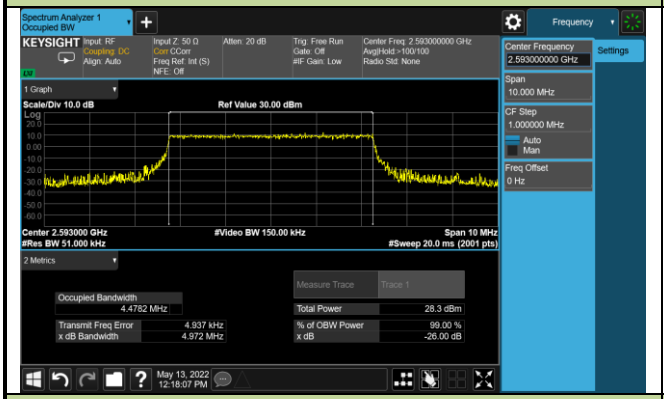
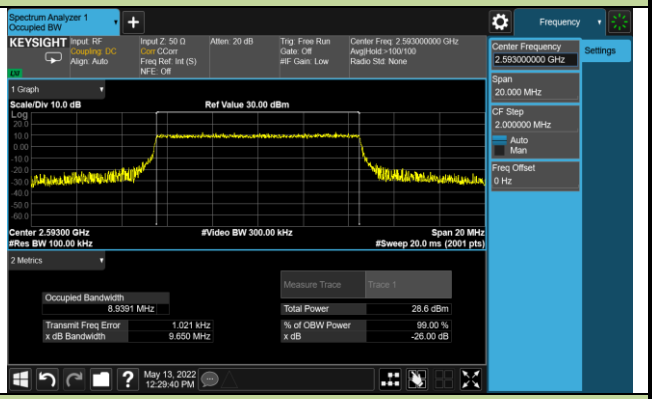
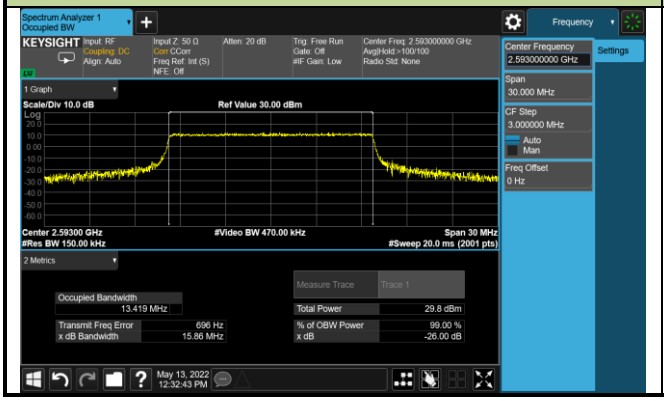
Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/13	Test Band	LTE Band 38/41_HPUE

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK		
2593.0	5	4.48
	10	8.95
	15	13.39
	20	17.88
16QAM		
2593.0	5	4.47
	10	8.94
	15	13.44
	20	17.87
64QAM		
2593.0	5	4.48
	10	8.95
	15	13.42
	20	17.87
256QAM		
2593.0	5	4.48
	10	8.94
	15	13.42
	20	17.89

99% Bandwidth - QPSK	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	
15MHz Channel Bandwidth	20MHz Channel Bandwidth
	

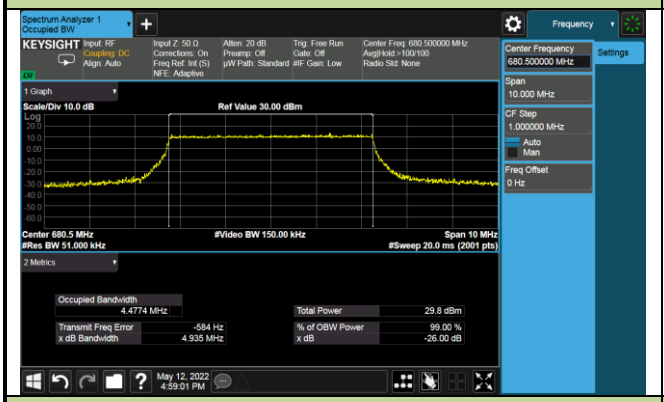
99% Bandwidth - 16QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
15MHz Channel Bandwidth	20MHz Channel Bandwidth

99% Bandwidth - 64QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	
15MHz Channel Bandwidth	20MHz Channel Bandwidth
	

99% Bandwidth - 256QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	
15MHz Channel Bandwidth	20MHz Channel Bandwidth
	

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/12	Test Band	LTE Band 71

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK		
680.5	5	4.48
	10	8.92
	15	13.36
	20	17.80
16QAM		
680.5	5	4.48
	10	8.92
	15	13.39
	20	17.82
64QAM		
680.5	5	4.48
	10	8.92
	15	13.39
	20	17.82
256QAM		
680.5	5	4.47
	10	8.93
	15	13.37
	20	17.82

99% Bandwidth - QPSK	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
	
15MHz Channel Bandwidth	20MHz Channel Bandwidth

99% Bandwidth - 16QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
15MHz Channel Bandwidth	20MHz Channel Bandwidth

99% Bandwidth - 64QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
15MHz Channel Bandwidth	20MHz Channel Bandwidth

99% Bandwidth - 256QAM	
5MHz Channel Bandwidth	10MHz Channel Bandwidth
15MHz Channel Bandwidth	20MHz Channel Bandwidth

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/05/11	Test Band	Intra-Band CA_2C

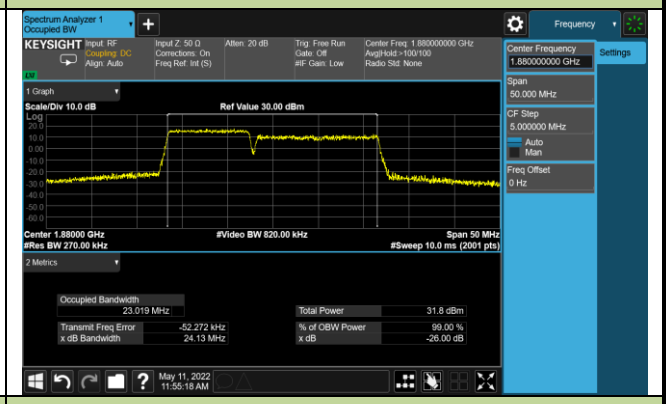
Modulation	Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
QPSK	1870.8 + 1882.5	5+20	22.72
	1872.9 + 1884.9	10+15	23.02
	1870.6 + 1885.0	10+20	27.56
	1875.1 + 1887.1	15+10	23.06
	1872.5 + 1887.5	15+15	28.24
	1870.3 + 1887.4	15+20	32.46
	1877.5 + 1889.2	20+5	22.81
	1875.1 + 1889.5	20+10	27.70
	1872.6 + 1889.7	20+15	32.60
	1870.1 + 1889.9	20+20	37.46
16QAM	1870.8 + 1882.5	5+20	22.72
	1872.9 + 1884.9	10+15	23.02
	1870.6 + 1885.0	10+20	27.60
	1875.1 + 1887.1	15+10	23.04
	1872.5 + 1887.5	15+15	28.27
	1870.3 + 1887.4	15+20	32.49
	1877.5 + 1889.2	20+5	22.79
	1875.1 + 1889.5	20+10	27.65
	1872.6 + 1889.7	20+15	32.50
	1870.1+ 1889.9	20+20	37.38
64QAM	1870.8 + 1882.5	5+20	22.71
	1872.9 + 1884.9	10+15	23.03
	1870.6 + 1885.0	10+20	27.63
	1875.1 + 1887.1	15+10	23.04
	1872.5 + 1887.5	15+15	28.28
	1870.3 + 1887.4	15+20	32.56
	1877.5 + 1889.2	20+5	22.82
	1875.1 + 1889.5	20+10	27.67
	1872.6 + 1889.7	20+15	32.54
	1870.1 + 1889.9	20+20	37.42

Modulation	Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
256QAM	1870.8 + 1882.5	5+20	22.72
	1872.9 + 1884.9	10+15	23.02
	1870.6 + 1885.0	10+20	27.63
	1875.1 + 1887.1	15+10	23.06
	1872.5 + 1887.5	15+15	28.22
	1870.3 + 1887.4	15+20	32.47
	1877.5 + 1889.2	20+5	22.82
	1875.1 + 1889.5	20+10	27.66
	1872.6 + 1889.7	20+15	32.61
	1870.1 + 1889.9	20+20	37.43

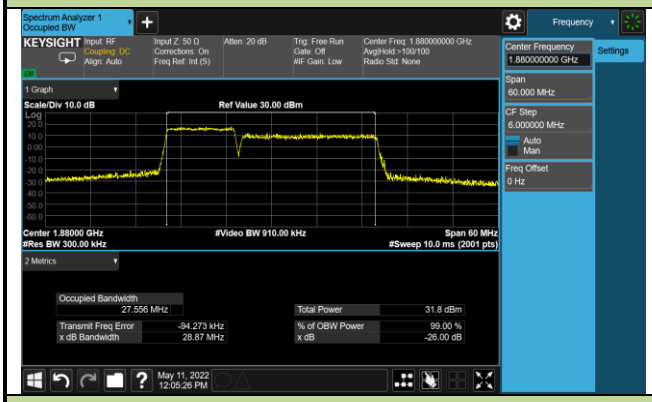
99% Bandwidth - QPSK

5+20MHz Channel Bandwidth

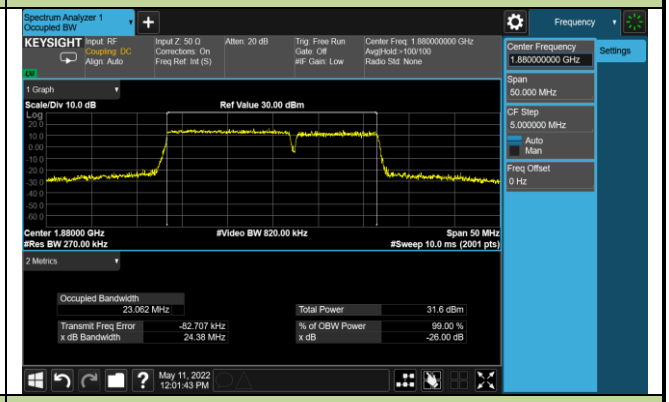
10+15MHz Channel Bandwidth



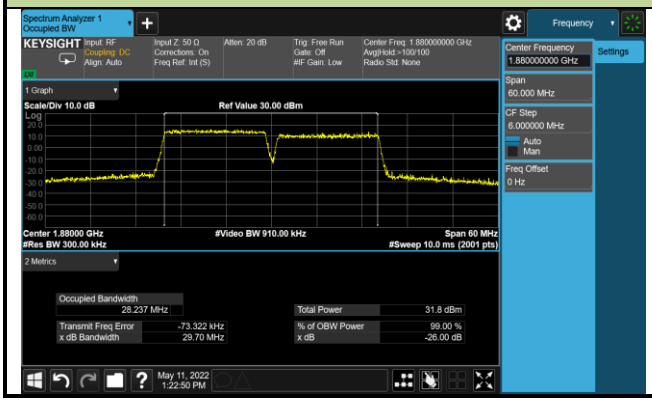
10+20MHz Channel Bandwidth



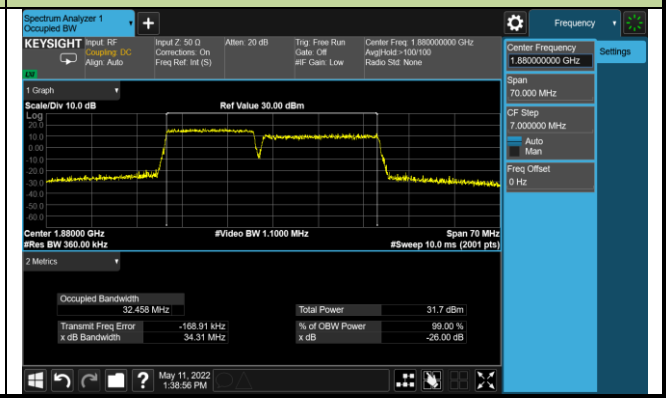
15+10MHz Channel Bandwidth



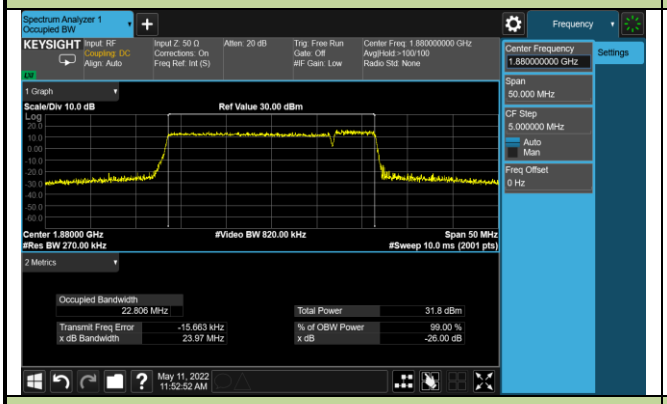
15+15MHz Channel Bandwidth



15+20MHz Channel Bandwidth

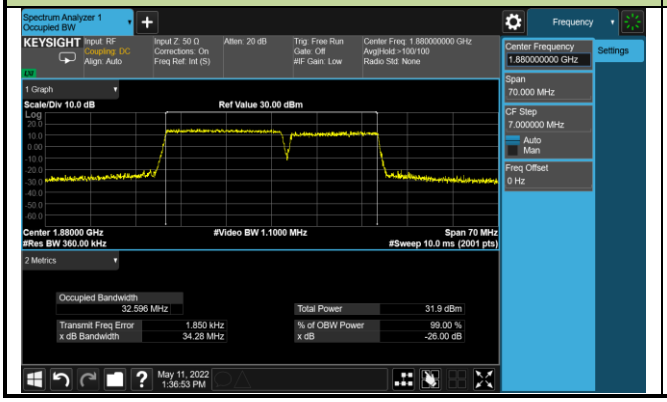
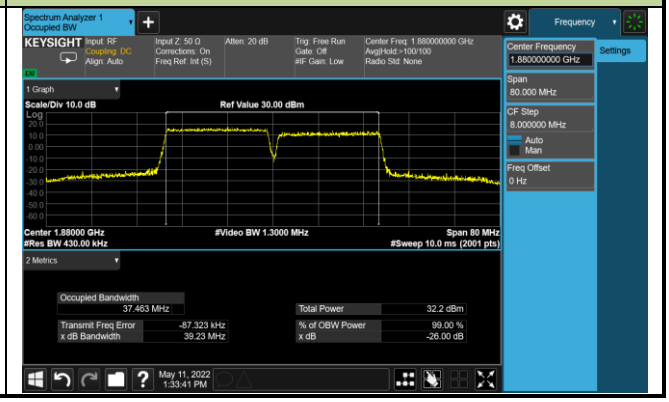


20+5MHz Channel Bandwidth



20+10MHz Channel Bandwidth

20+15MHz Channel Bandwidth



20+20MHz Channel Bandwidth