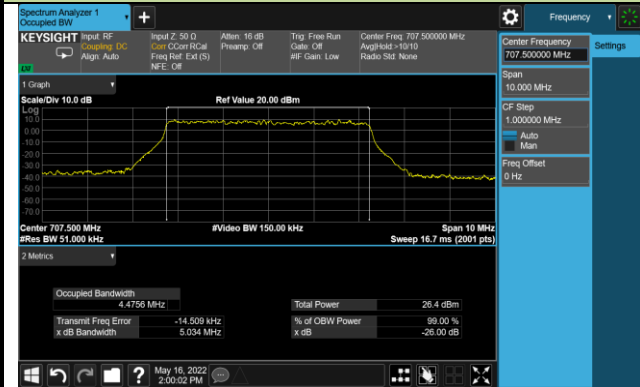
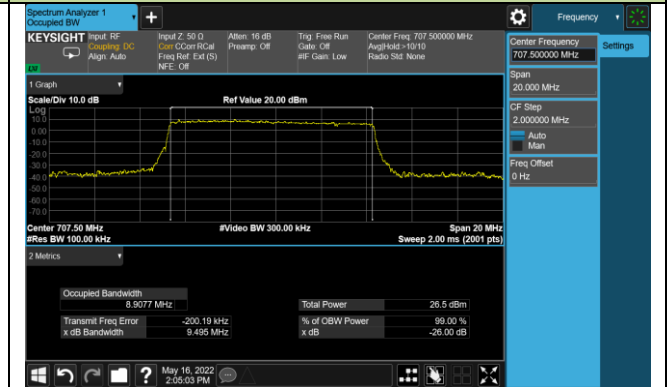


99% Bandwidth - 256QAM

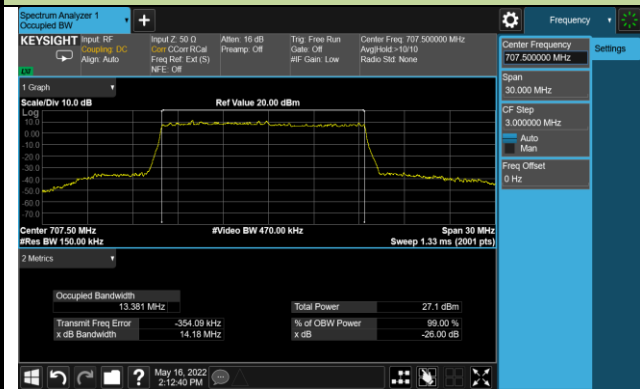
5MHz Channel Bandwidth



10MHz Channel Bandwidth

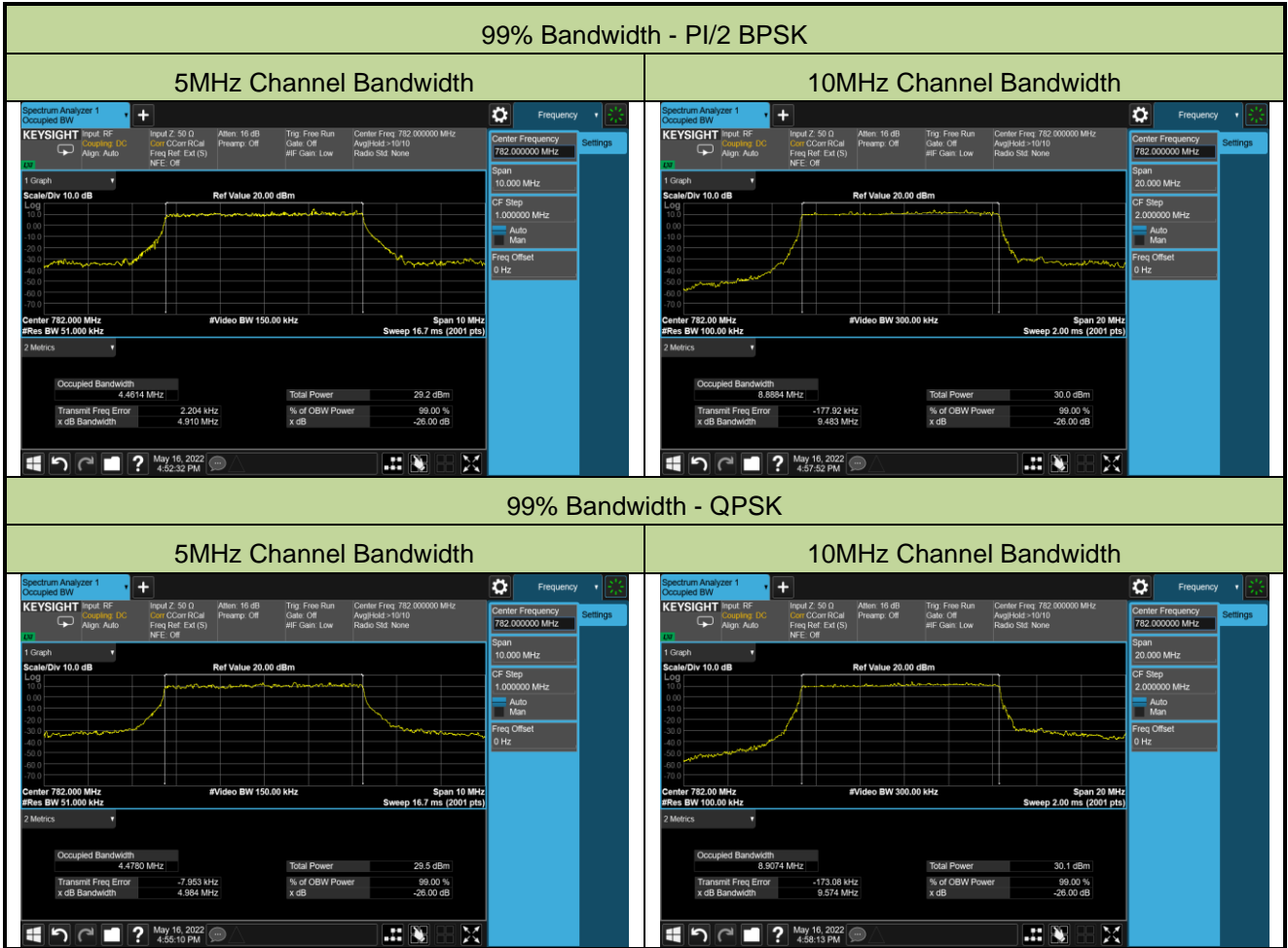


15MHz Channel Bandwidth



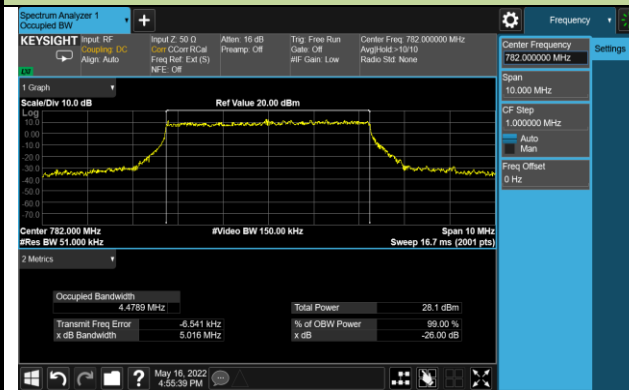
Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2022/05/16	Test Band	n13

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
<b>PI/2 BPSK</b>		
707.5	5	4.46
707.5	10	8.89
<b>QPSK</b>		
707.5	5	4.48
707.5	10	8.91
<b>16QAM</b>		
707.5	5	4.48
707.5	10	8.94
<b>64QAM</b>		
707.5	5	4.47
707.5	10	8.92
<b>256QAM</b>		
707.5	5	4.48
707.5	10	8.92

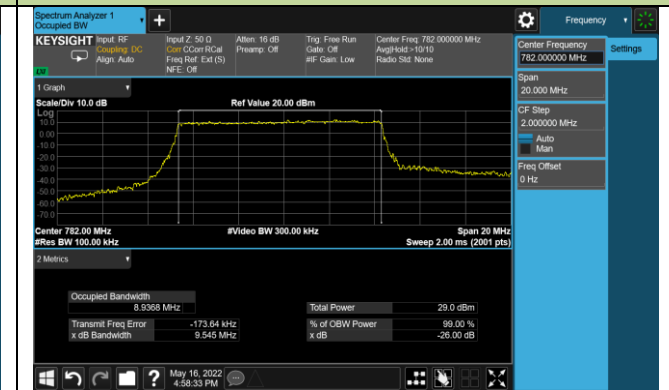


99% Bandwidth - 16QAM

5MHz Channel Bandwidth

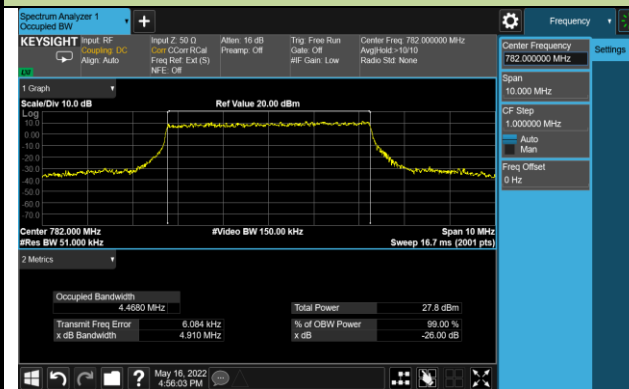


10MHz Channel Bandwidth

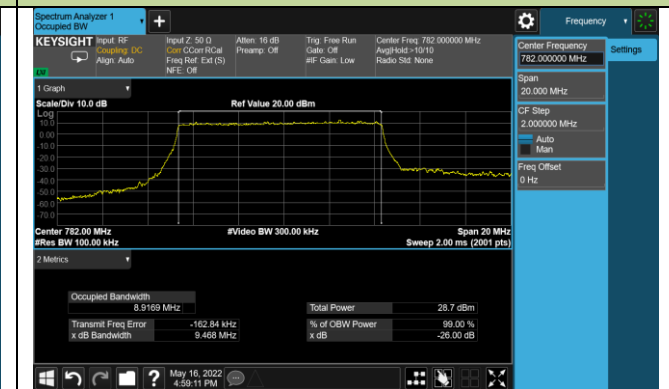


99% Bandwidth - 64QAM

5MHz Channel Bandwidth

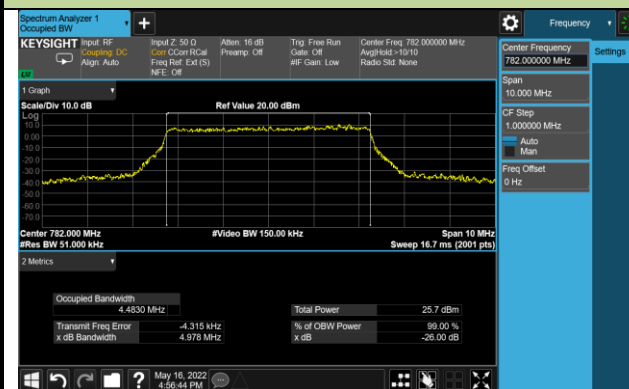


10MHz Channel Bandwidth

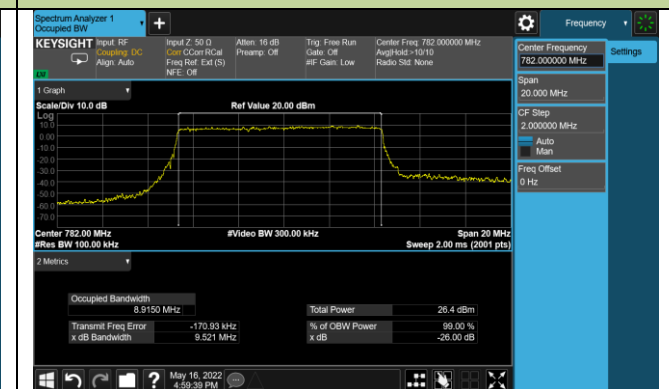


99% Bandwidth - 256QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2022/05/12	Test Band	n25

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
<b>PI/2 BPSK</b>		
1882.5	5	4.47
1882.5	10	9.20
1882.5	15	14.00
1882.5	20	18.70
1882.5	25	23.46
1882.5	30	28.51
1882.5	40	38.42
<b>QPSK</b>		
1882.5	5	4.48
1882.5	10	9.21
1882.5	15	14.00
1882.5	20	18.68
1882.5	25	23.67
1882.5	30	28.51
1882.5	40	38.50
<b>16QAM</b>		
1882.5	5	4.48
1882.5	10	9.24
1882.5	15	1.06
1882.5	20	18.70
1882.5	25	23.66
1882.5	30	28.52
1882.5	40	38.49
<b>64QAM</b>		
1882.5	5	4.47
1882.5	10	9.21
1882.5	15	13.98
1882.5	25	18.69
1882.5	30	23.42
1882.5	40	28.58
1882.5	20	38.42

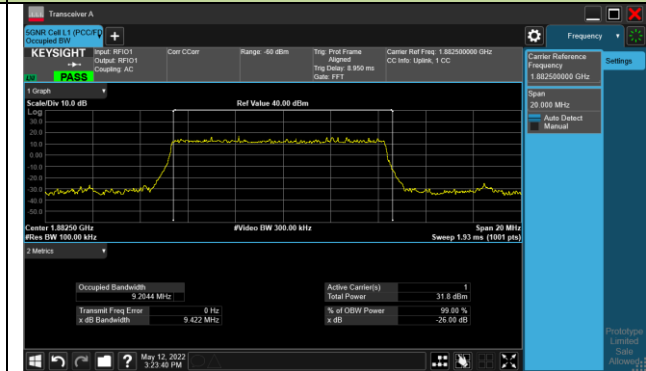
256QAM		
1882.5	5	4.48
1882.5	10	9.22
1882.5	15	14.00
1882.5	20	18.75
1882.5	25	23.62
1882.5	30	28.52
1882.5	40	38.49

99% Bandwidth - PI/2 BPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



25MHz Channel Bandwidth



30MHz Channel Bandwidth

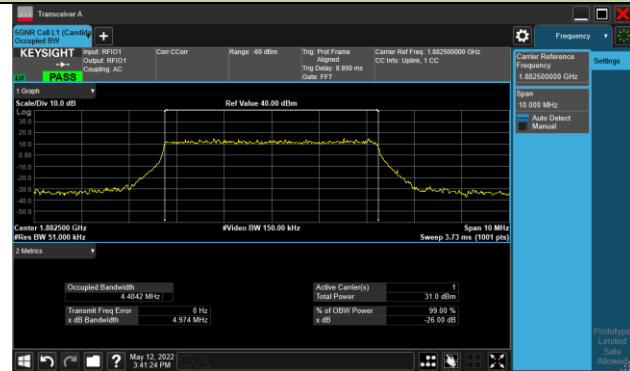


40MHz Channel Bandwidth

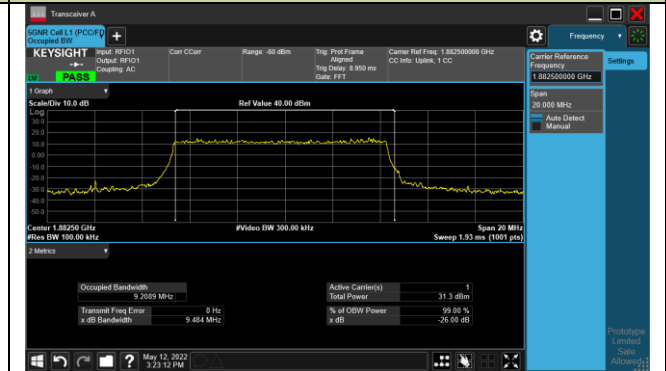


99% Bandwidth - QPSK

5MHz Channel Bandwidth



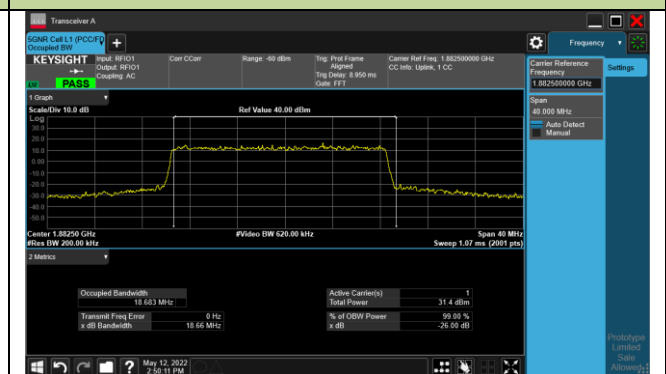
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



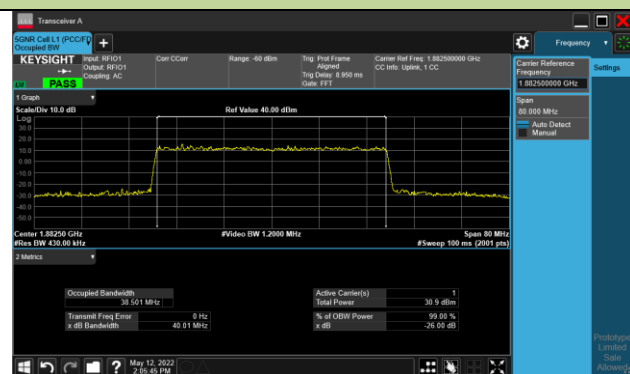
25MHz Channel Bandwidth



30MHz Channel Bandwidth



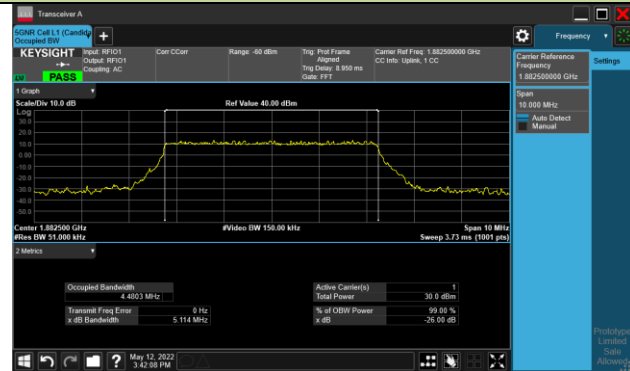
40MHz Channel Bandwidth



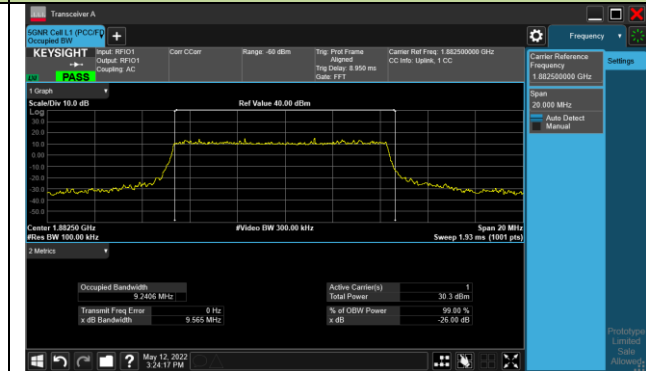


99% Bandwidth - 16QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



25MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth



## 99% Bandwidth - 64QAM

## 5MHz Channel Bandwidth



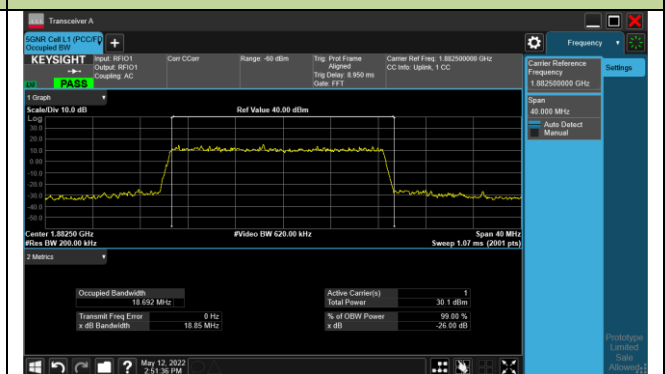
## 10MHz Channel Bandwidth



## 15MHz Channel Bandwidth



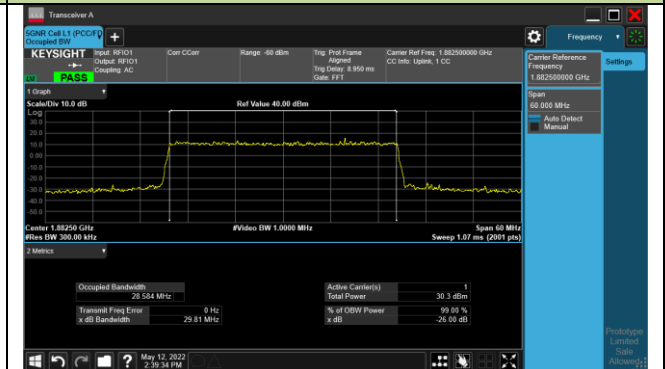
## 20MHz Channel Bandwidth



## 25MHz Channel Bandwidth



## 30MHz Channel Bandwidth

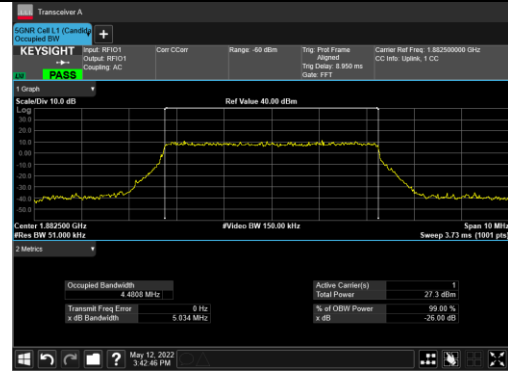


## 40MHz Channel Bandwidth

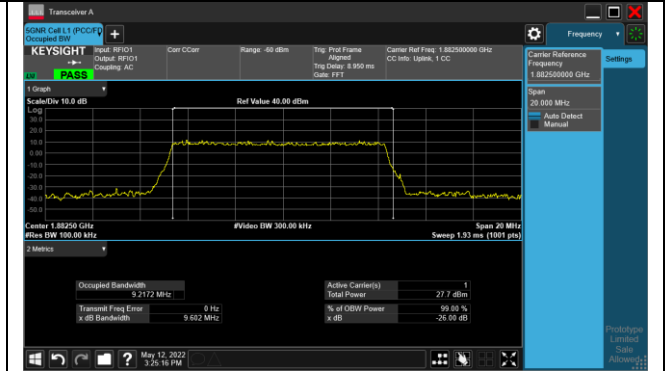


99% Bandwidth - 256QAM

5MHz Channel Bandwidth



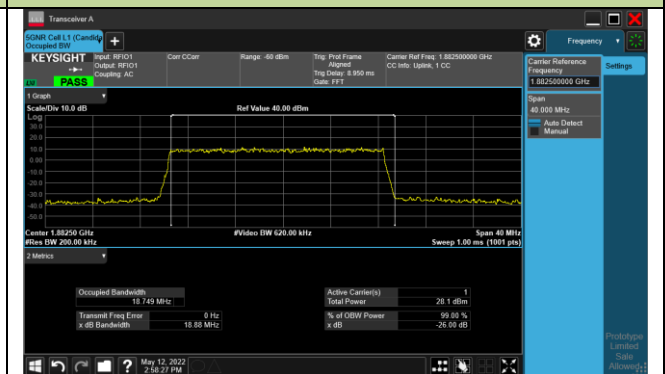
10MHz Channel Bandwidth



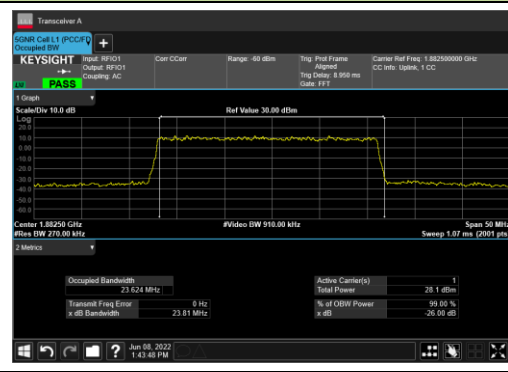
15MHz Channel Bandwidth



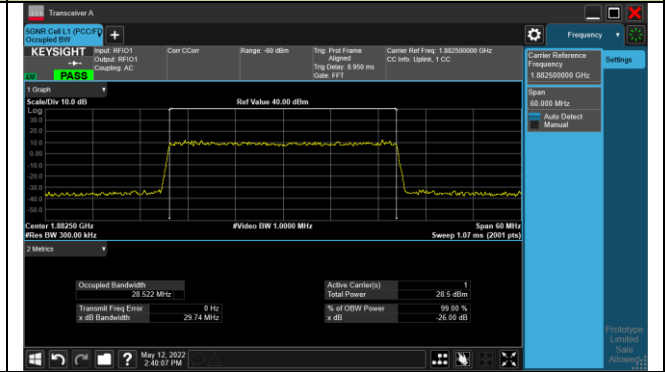
20MHz Channel Bandwidth



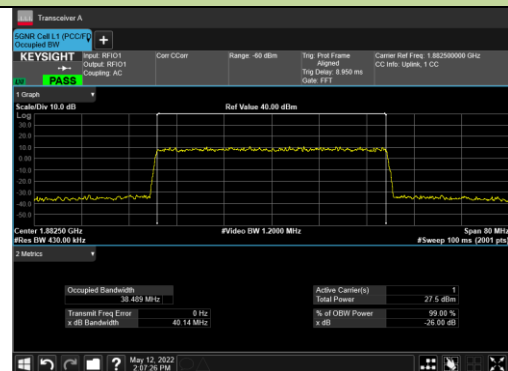
25MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth



Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2022/05/16	Test Band	n66

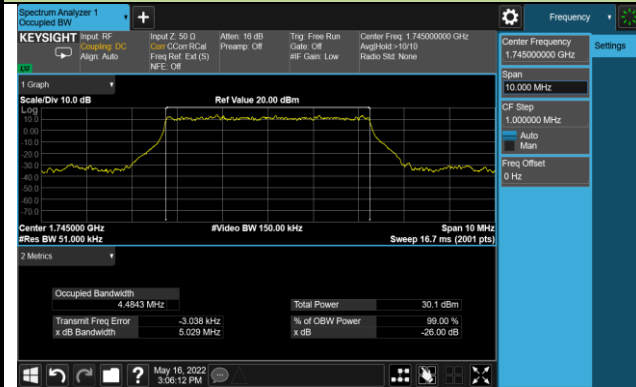
Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
<b>PI/2 BPSK</b>		
1745.0	5	4.48
1745.0	10	8.90
1745.0	15	13.39
1745.0	20	17.84
1745.0	30	28.52
1745.0	40	38.42
<b>QPSK</b>		
1745.0	5	4.48
1745.0	10	8.90
1745.0	15	13.44
1745.0	20	17.84
1745.0	30	28.51
1745.0	40	38.43
<b>16QAM</b>		
1745.0	5	4.48
1745.0	10	8.95
1745.0	15	13.42
1745.0	20	17.90
1745.0	30	28.51
1745.0	40	38.51
<b>64QAM</b>		
1745.0	5	4.48
1745.0	10	8.94
1745.0	15	13.39
1745.0	20	17.85
1745.0	30	28.60
1745.0	40	38.48

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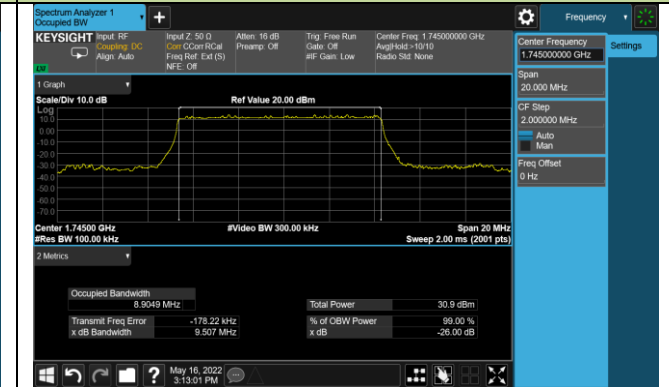
256QAM		
1745.0	5	4.48
1745.0	10	8.94
1745.0	15	13.42
1745.0	20	17.82
1745.0	30	28.52
1745.0	40	38.47

99% Bandwidth - PI/2 BPSK

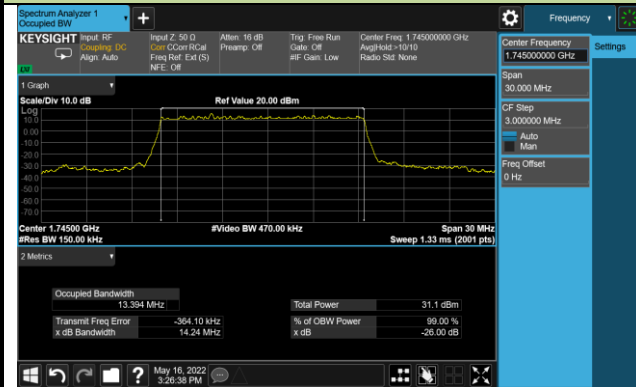
5MHz Channel Bandwidth



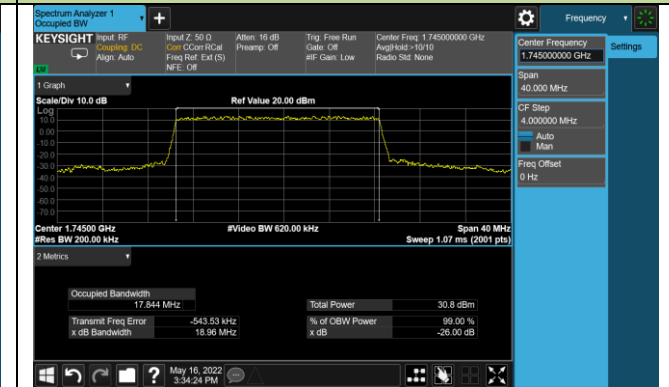
10MHz Channel Bandwidth



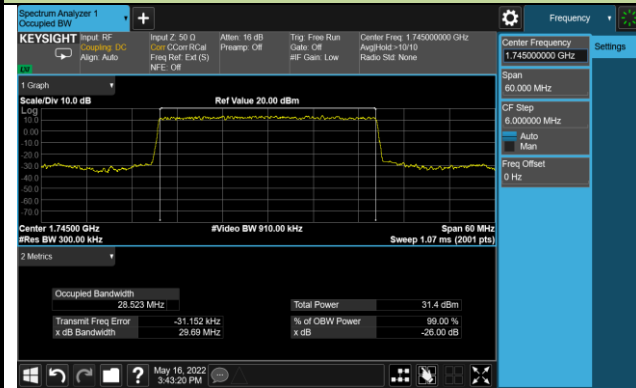
15MHz Channel Bandwidth



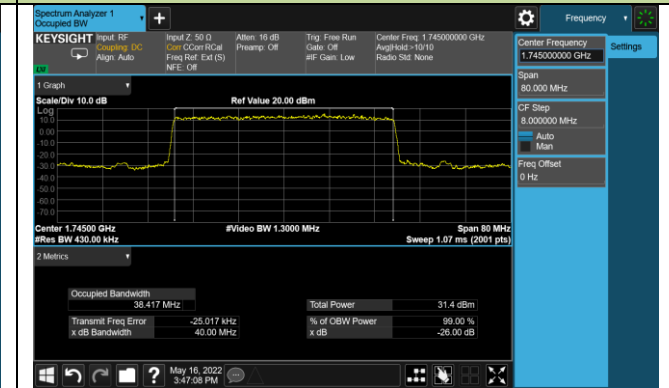
20MHz Channel Bandwidth



30MHz Channel Bandwidth

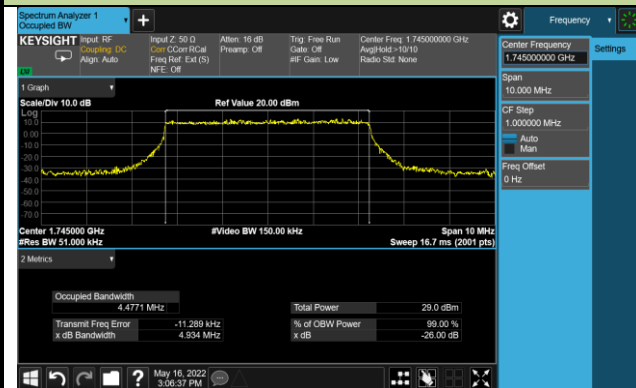


40MHz Channel Bandwidth

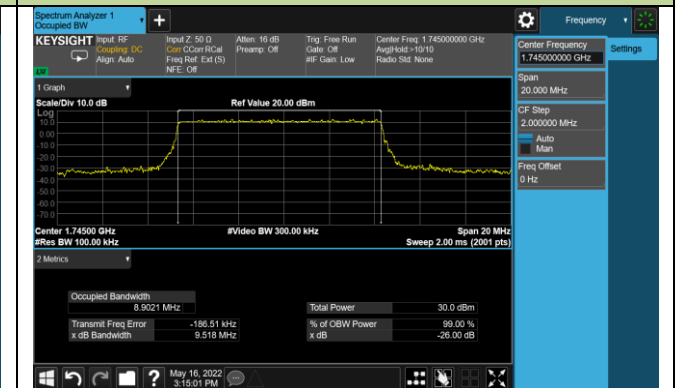


## 99% Bandwidth - QPSK

## 5MHz Channel Bandwidth



## 10MHz Channel Bandwidth



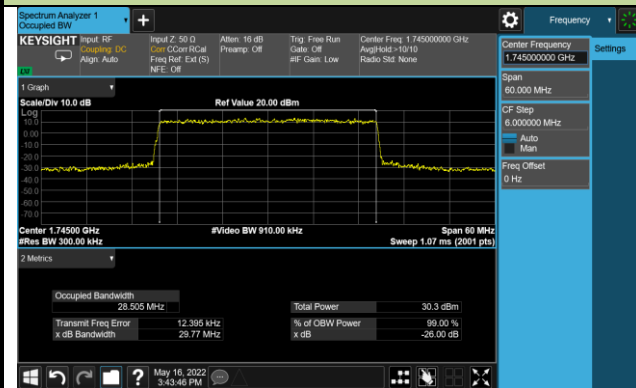
## 15MHz Channel Bandwidth



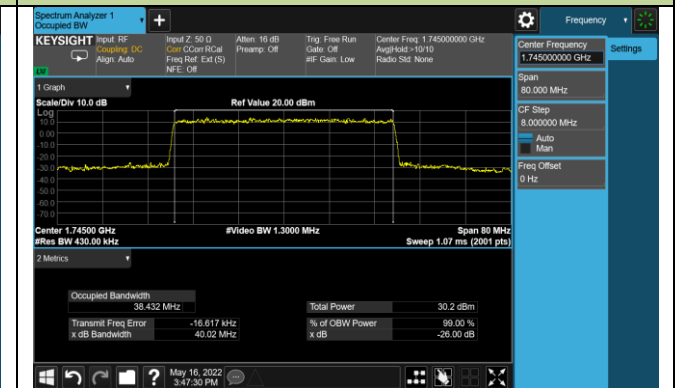
## 20MHz Channel Bandwidth



## 30MHz Channel Bandwidth

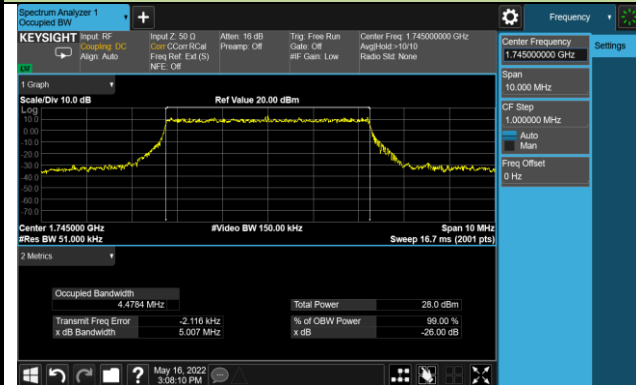


## 40MHz Channel Bandwidth

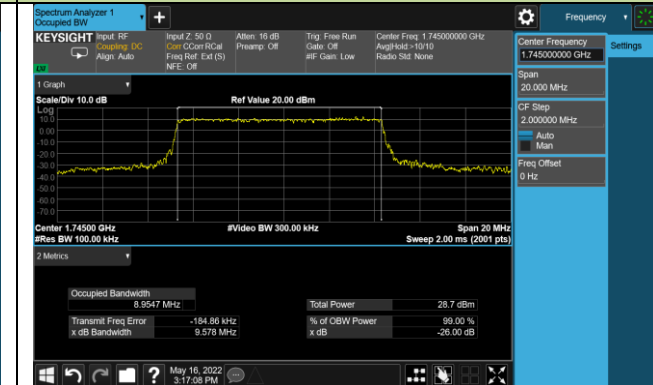


99% Bandwidth - 16QAM

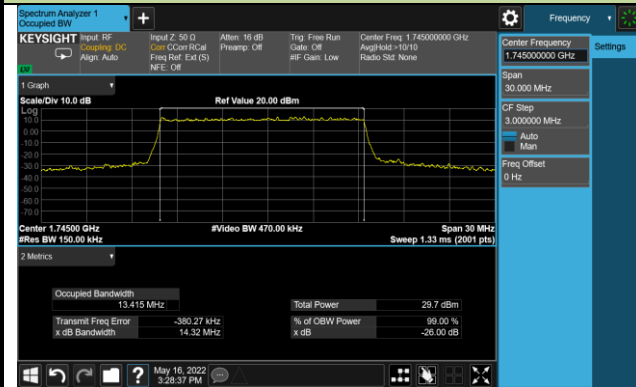
5MHz Channel Bandwidth



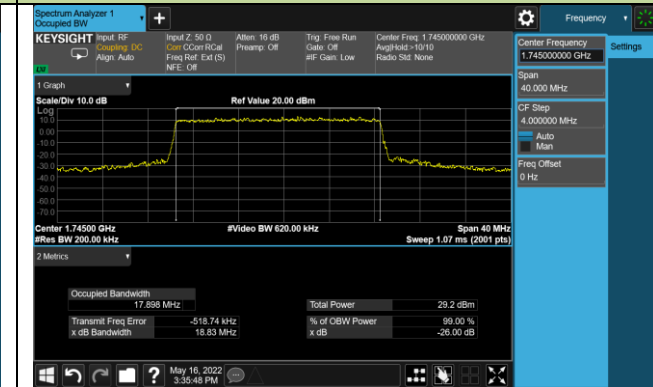
10MHz Channel Bandwidth



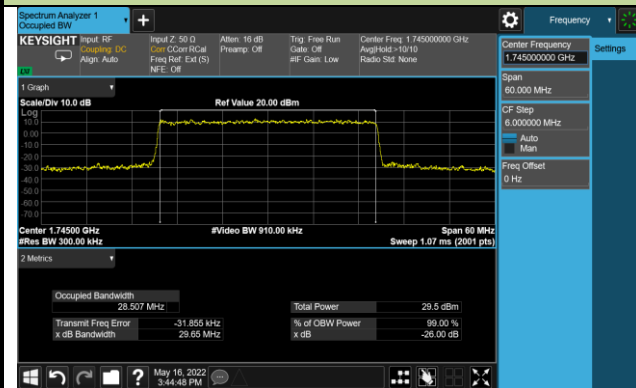
15MHz Channel Bandwidth



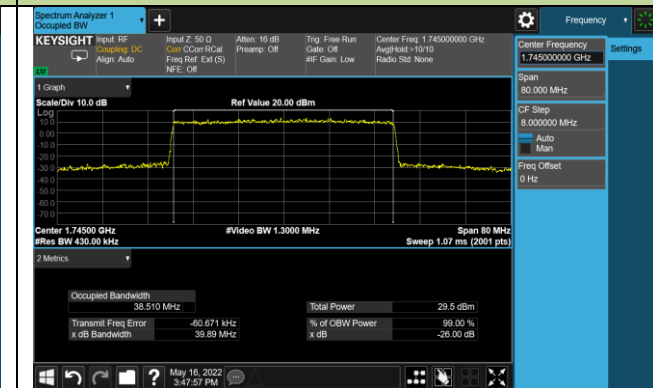
20MHz Channel Bandwidth



30MHz Channel Bandwidth



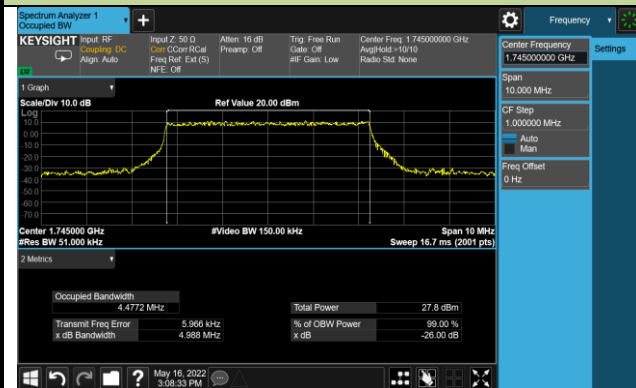
40MHz Channel Bandwidth



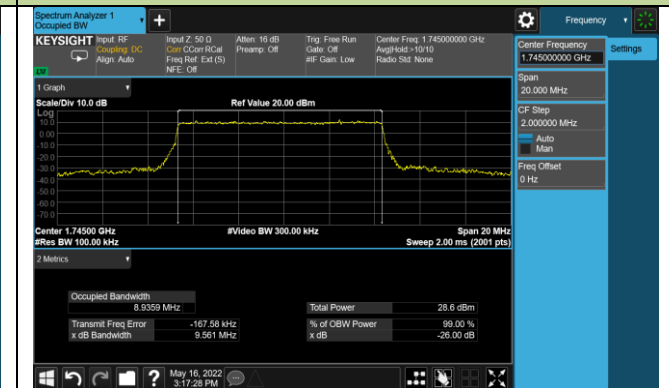


99% Bandwidth - 64QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



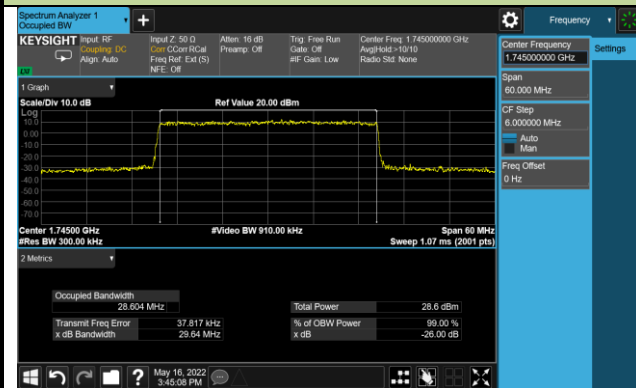
15MHz Channel Bandwidth



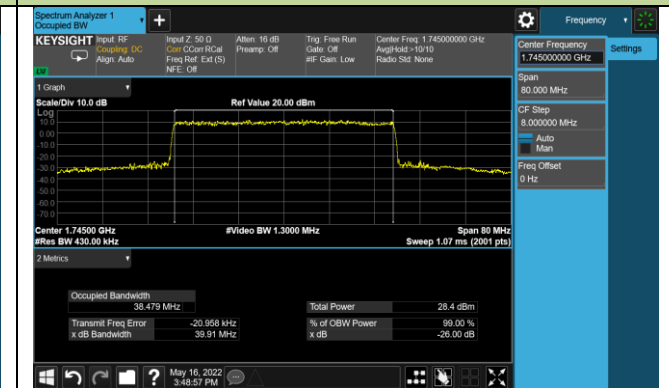
20MHz Channel Bandwidth



30MHz Channel Bandwidth

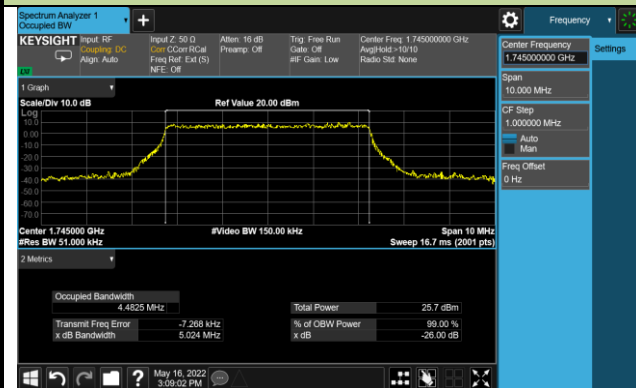


40MHz Channel Bandwidth

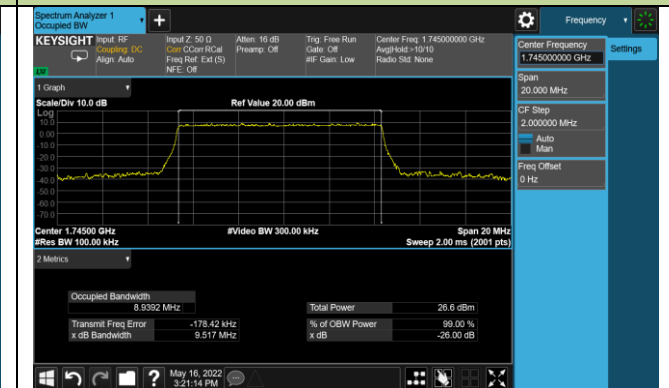


## 99% Bandwidth - 256QAM

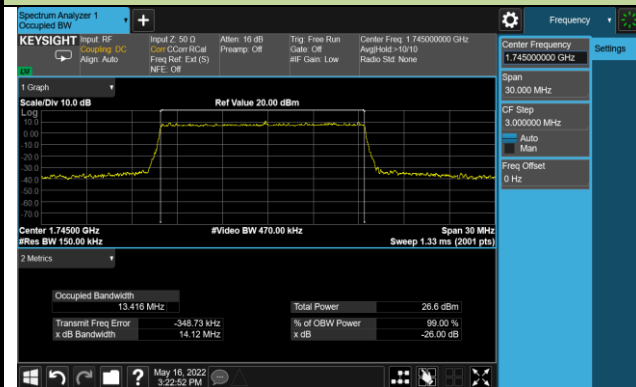
## 5MHz Channel Bandwidth



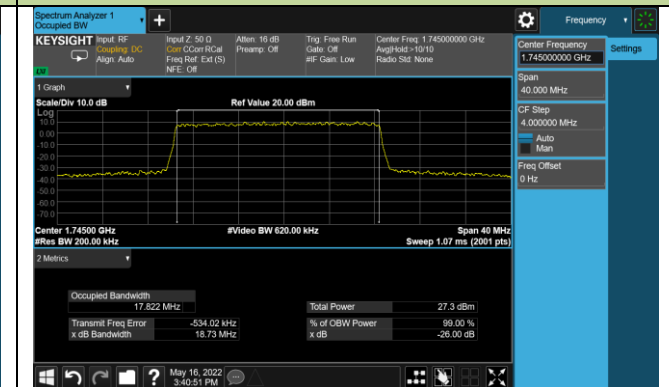
## 10MHz Channel Bandwidth



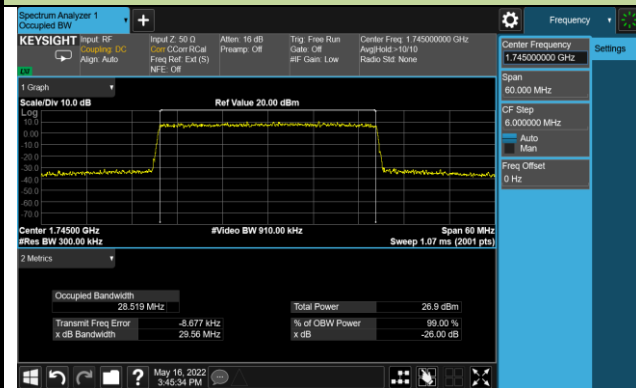
## 15MHz Channel Bandwidth



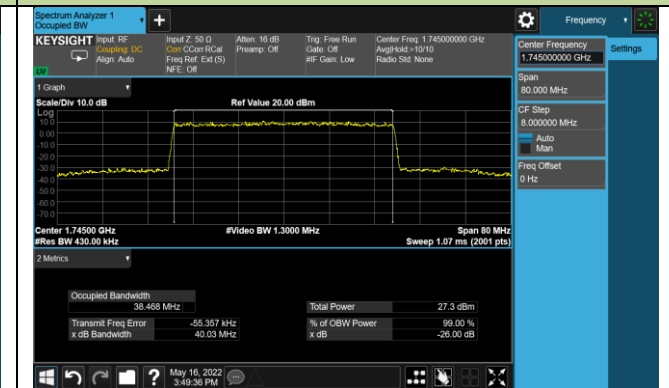
## 20MHz Channel Bandwidth



## 30MHz Channel Bandwidth



## 40MHz Channel Bandwidth

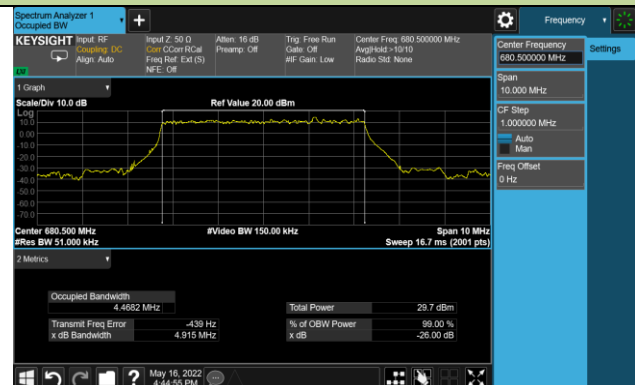


Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2022/05/16	Test Band	n71

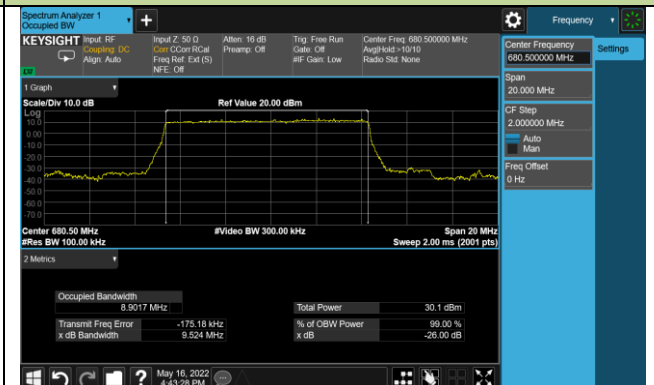
Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
<b>PI/2 BPSK</b>		
680.5	5	4.47
680.5	10	8.90
680.5	15	13.38
680.5	20	17.81
<b>QPSK</b>		
680.5	5	4.50
680.5	10	8.89
680.5	15	13.38
680.5	20	17.82
<b>16QAM4.48</b>		
680.5	5	4.48
680.5	10	8.93
680.5	15	13.39
680.5	20	17.83
<b>64QAM</b>		
680.5	5	4.48
680.5	10	8.92
680.5	15	13.38
680.5	20	17.82
<b>256QAM</b>		
680.5	5	4.47
680.5	10	8.91
680.5	15	13.39
680.5	20	17.82

## 99% Bandwidth - PI/2 BPSK

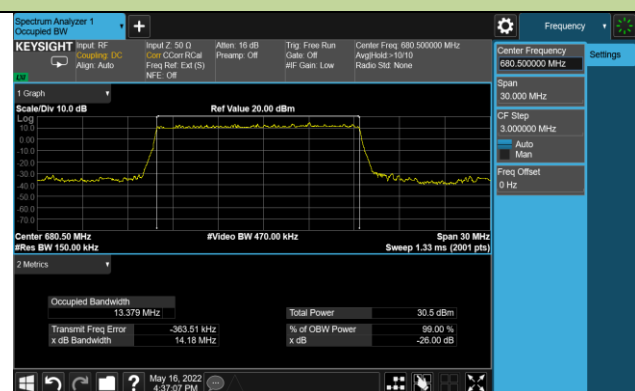
## 5MHz Channel Bandwidth



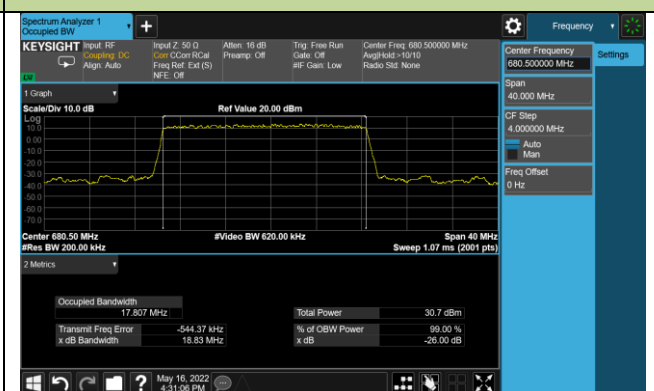
## 10MHz Channel Bandwidth



## 15MHz Channel Bandwidth

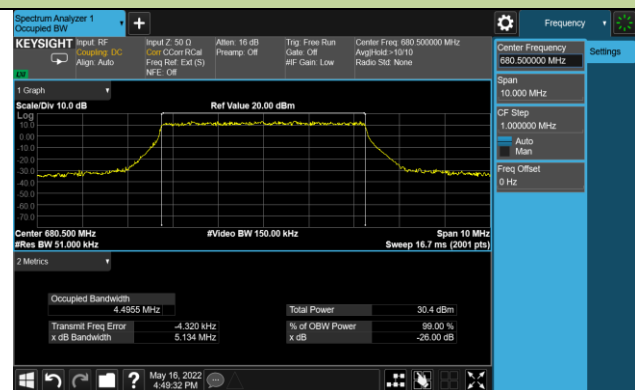


## 20MHz Channel Bandwidth

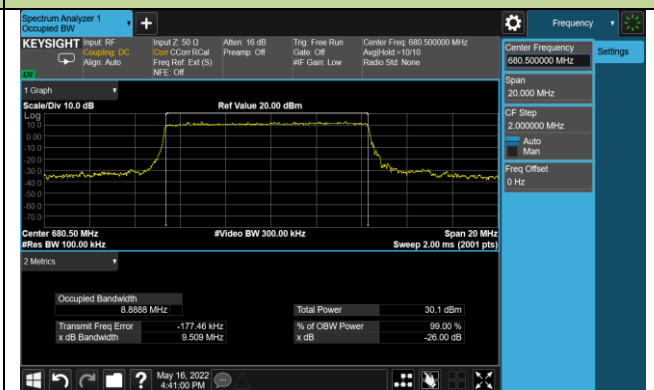


## 99% Bandwidth - QPSK

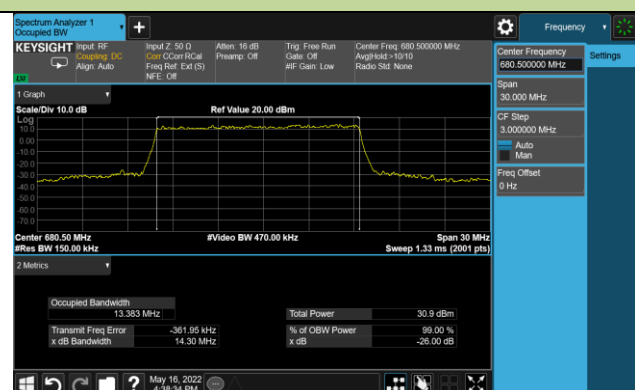
## 5MHz Channel Bandwidth



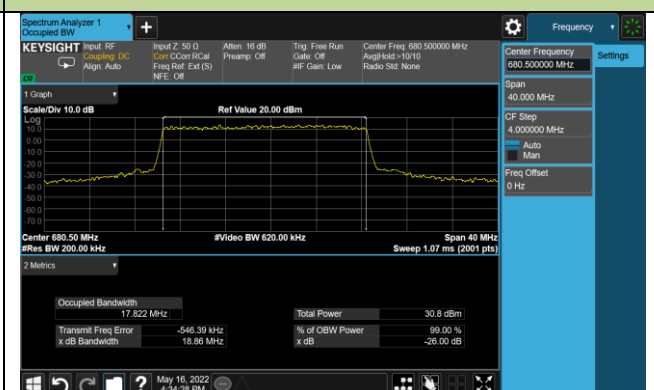
## 10MHz Channel Bandwidth



## 15MHz Channel Bandwidth

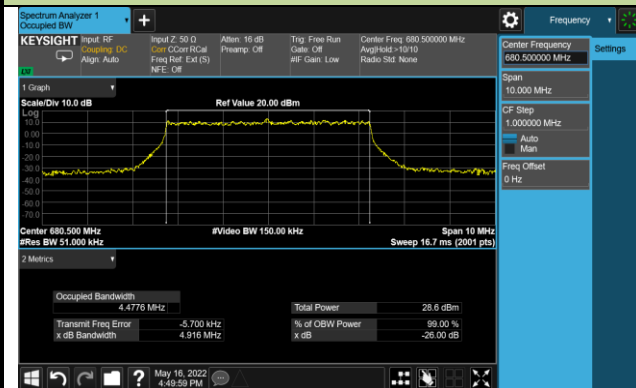


## 20MHz Channel Bandwidth

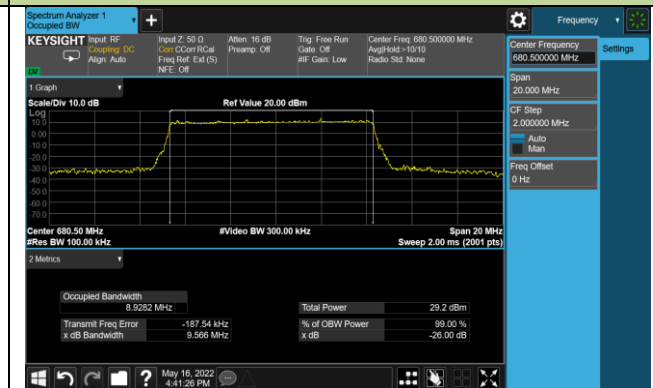


99% Bandwidth - 16QAM

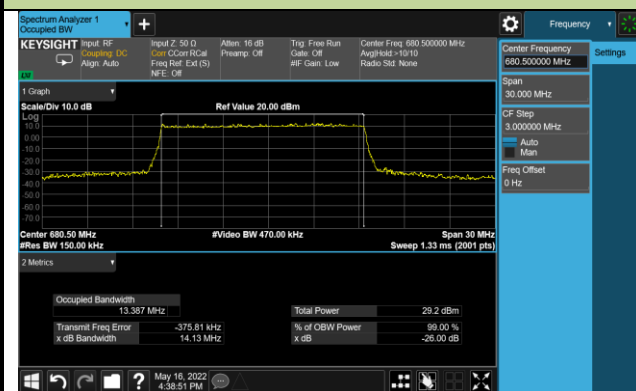
5MHz Channel Bandwidth



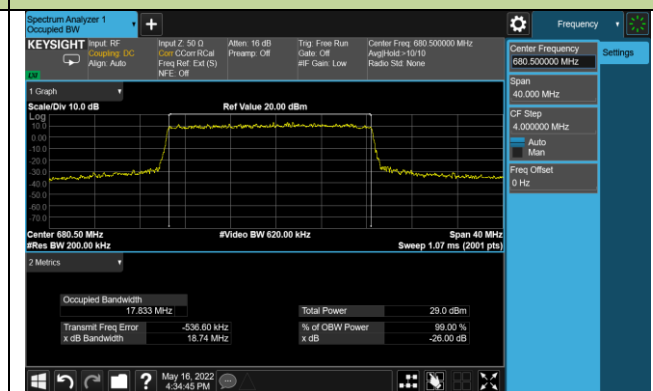
10MHz Channel Bandwidth



15MHz Channel Bandwidth

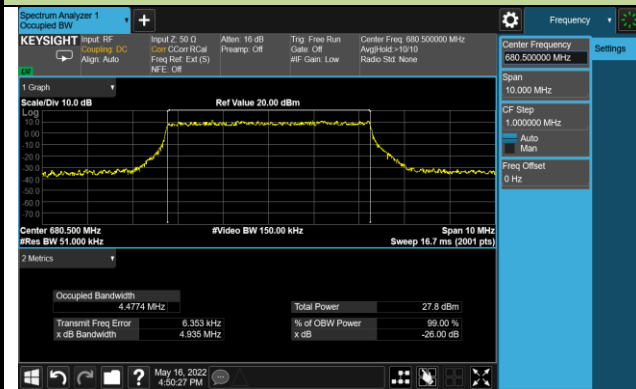


20MHz Channel Bandwidth

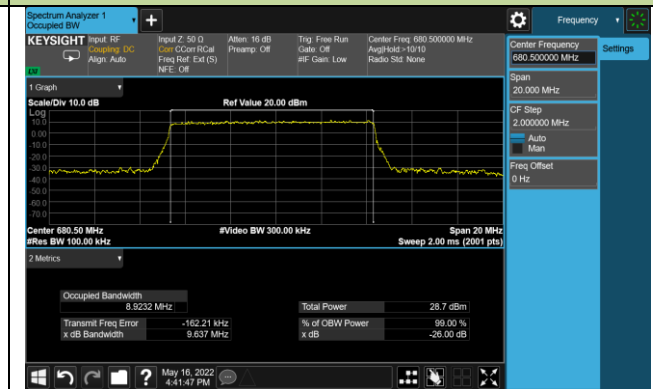


99% Bandwidth - 64QAM

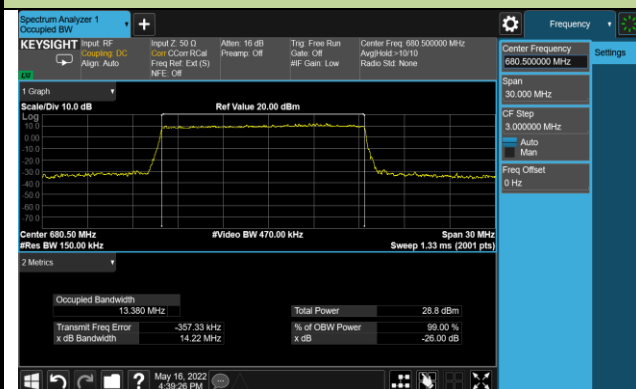
5MHz Channel Bandwidth



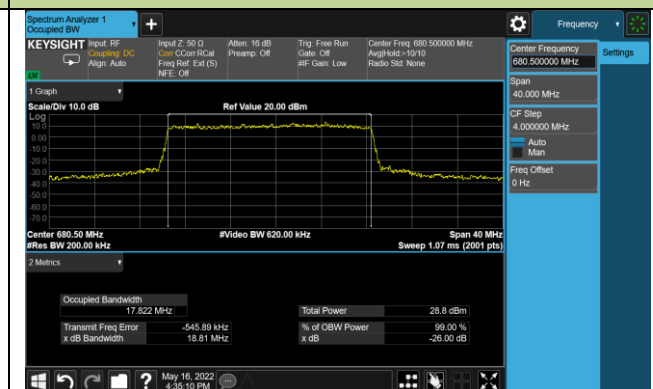
10MHz Channel Bandwidth



15MHz Channel Bandwidth

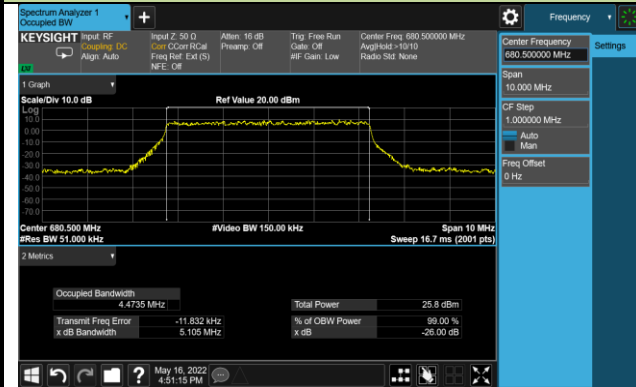


20MHz Channel Bandwidth

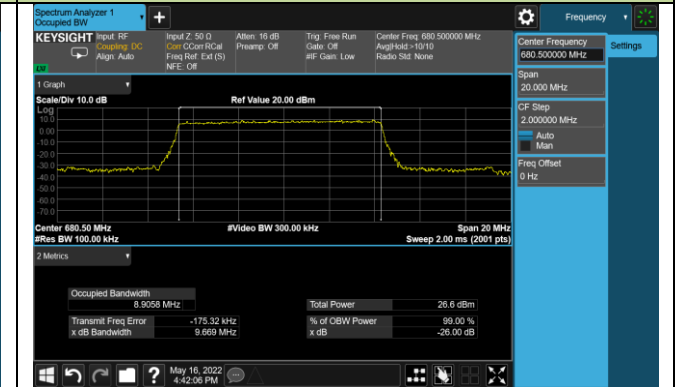


99% Bandwidth - 256QAM

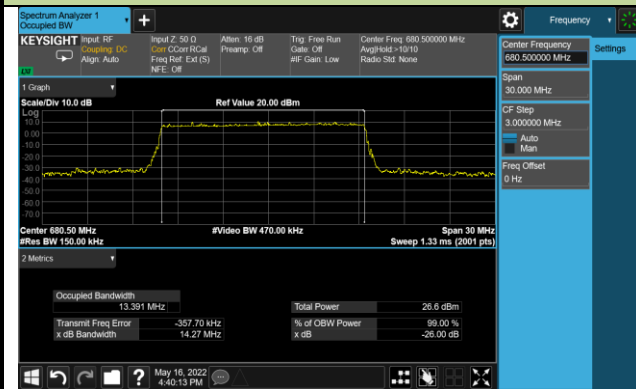
5MHz Channel Bandwidth



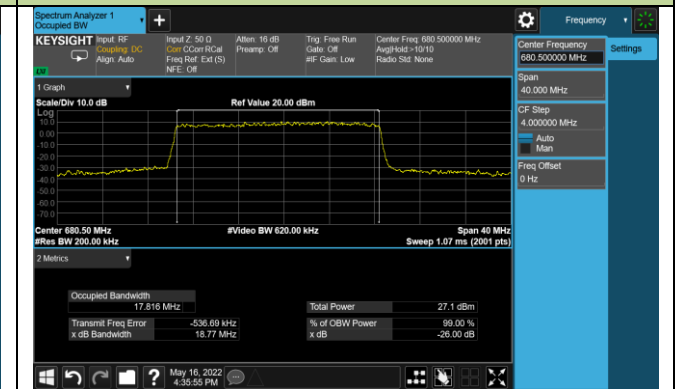
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2022/05/16	Test Band	n38_HPUE

Frequency (MHz)	Bandwidth (MHz)	99% Bandwidth (MHz)
<b>PI/2 BPSK</b>		
2595.00	10	8.63
2595.00	15	12.89
2595.00	20	17.83
2595.00	30	26.80
2595.00	40	35.74
<b>QPSK</b>		
2595.00	10	8.60
2595.00	15	12.89
2595.00	20	17.80
2595.00	30	26.81
2595.00	40	35.73
<b>16QAM</b>		
2595.00	10	8.62
2595.00	15	12.91
2595.00	20	17.91
2595.00	30	26.79
2595.00	40	35.74
<b>64QAM</b>		
2595.00	10	8.59
2595.00	15	12.87
2595.00	20	17.89
2595.00	30	26.77
2595.00	40	35.70
<b>256QAM</b>		
2595.00	10	8.59
2595.00	15	12.84
2595.00	20	17.88
2595.00	30	26.81
2595.00	40	35.75