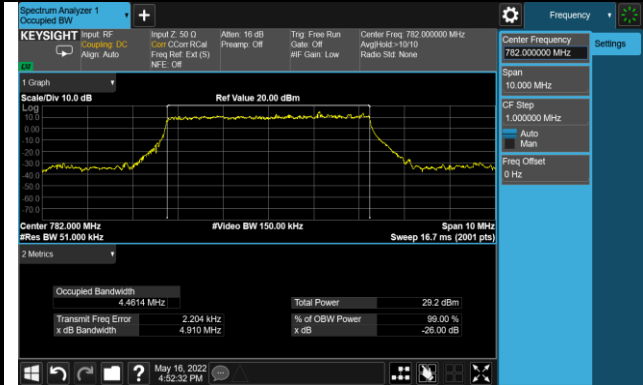
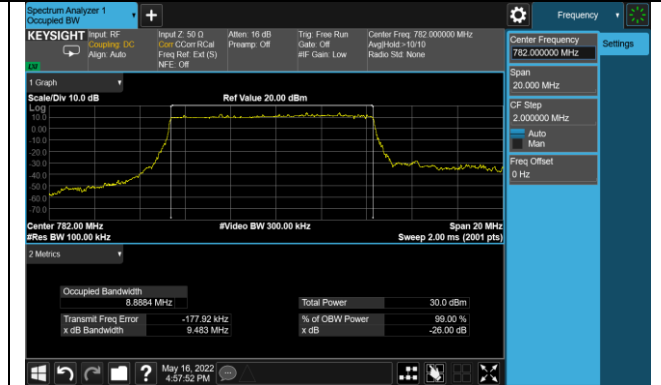


99% Bandwidth - PI/2 BPSK

5MHz Channel Bandwidth

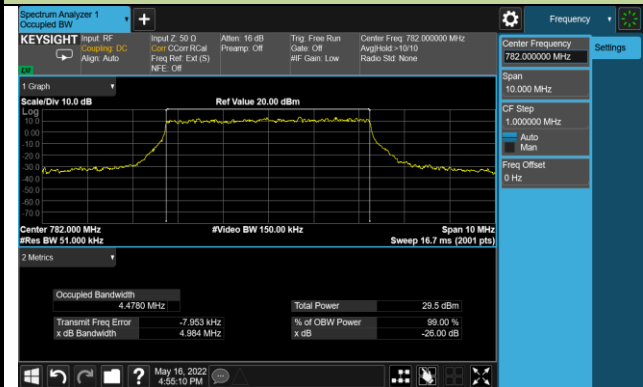


10MHz Channel Bandwidth

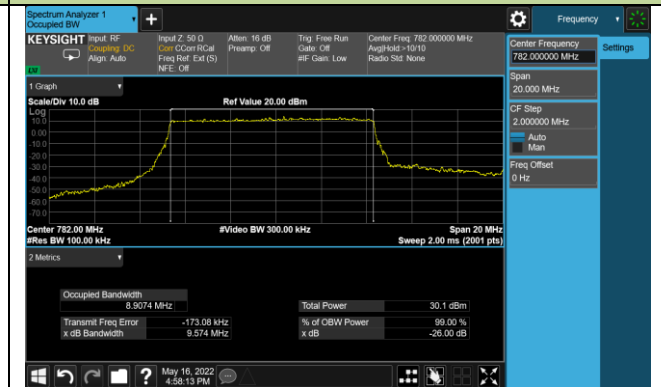


99% Bandwidth - QPSK

5MHz Channel Bandwidth

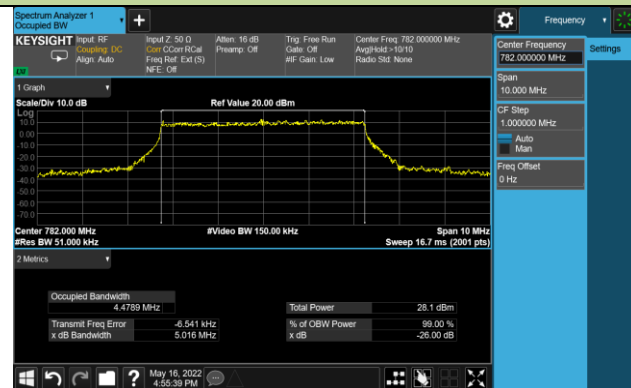


10MHz Channel Bandwidth



99% Bandwidth - 16QAM

5MHz Channel Bandwidth

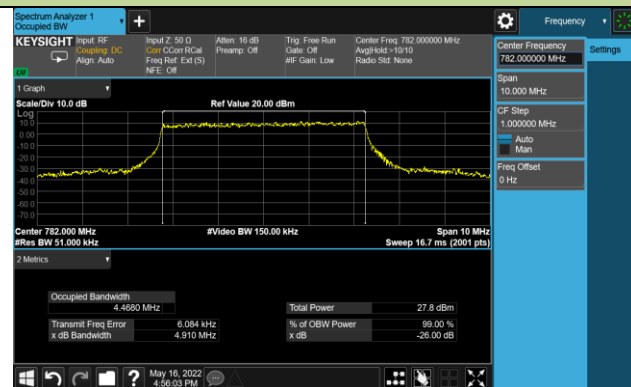


10MHz Channel Bandwidth



99% Bandwidth - 64QAM

5MHz Channel Bandwidth

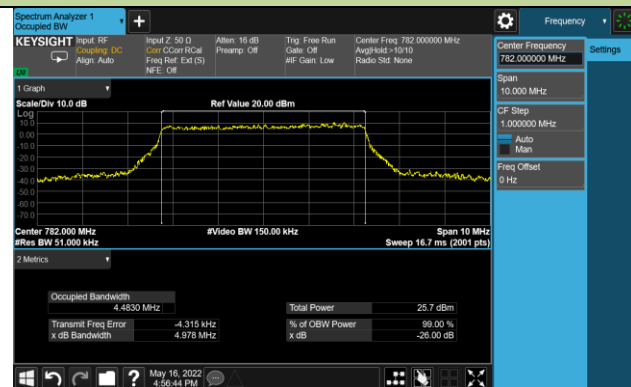


10MHz Channel Bandwidth



99% Bandwidth - 256QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



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

| Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|--------------------|--------------------|------------------------|
| PI/2 BPSK | | |
| 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 |
| QPSK | | |
| 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 |
| 16QAM | | |
| 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 |
| 64QAM | | |
| 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 |

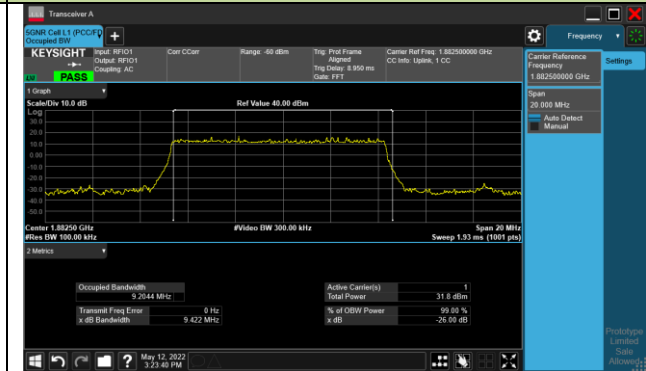
| 256QAM | | |
|--------|----|-------|
| 1882.5 | 5 | 4.48 |
| 1882.5 | 10 | 9.22 |
| 1882.5 | 15 | 14.00 |
| 1882.5 | 20 | 18.75 |
| 1882.5 | 25 | 23.62 |
| 1882.5 | 30 | 28.52 |
| 1882.5 | 40 | 38.49 |

99% Bandwidth - PI/2 BPSK

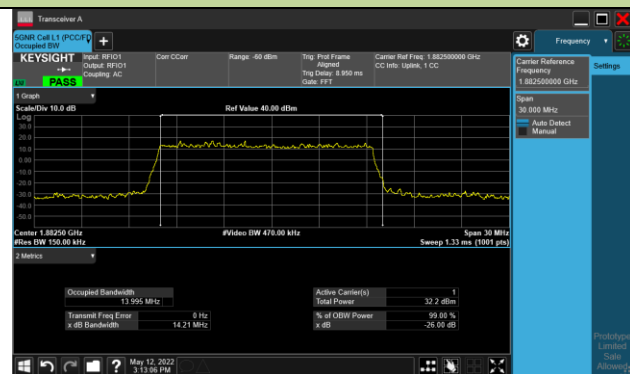
5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



25MHz Channel Bandwidth



30MHz Channel Bandwidth

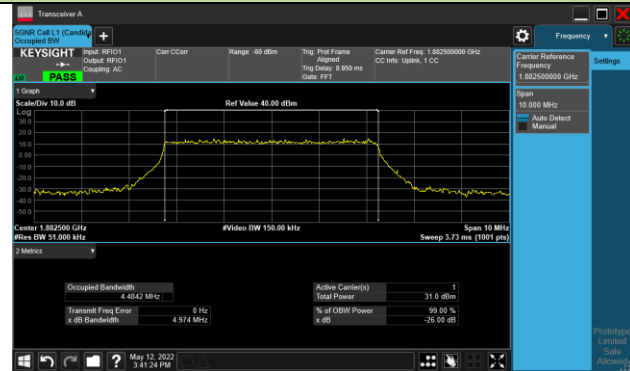


40MHz Channel Bandwidth



99% Bandwidth - QPSK

5MHz Channel Bandwidth



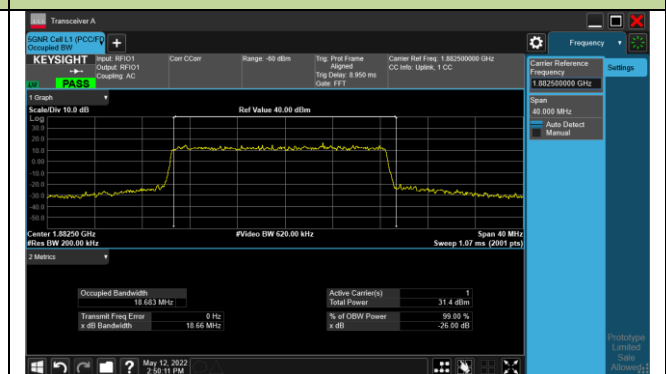
10MHz Channel Bandwidth



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



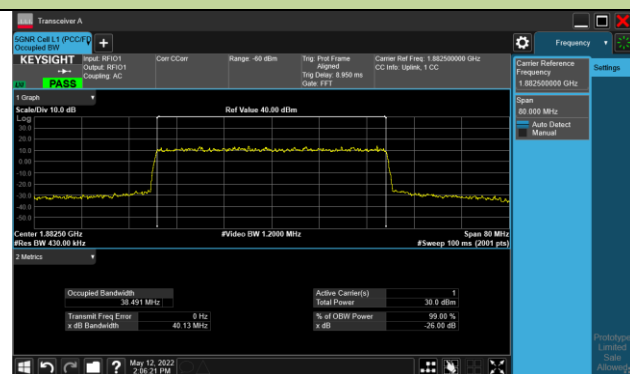
25MHz Channel Bandwidth



30MHz Channel Bandwidth

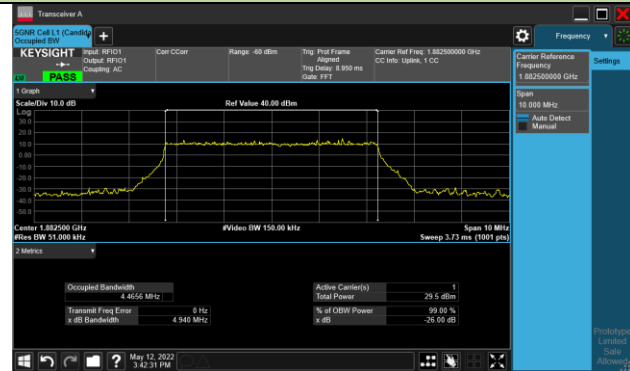


40MHz Channel Bandwidth



99% Bandwidth - 64QAM

5MHz Channel Bandwidth



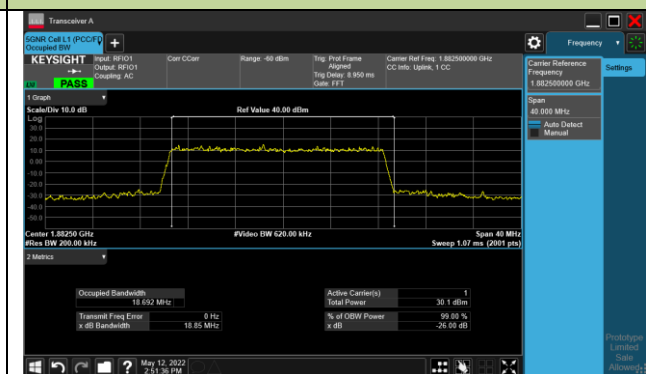
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



25MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth



99% Bandwidth - 256QAM

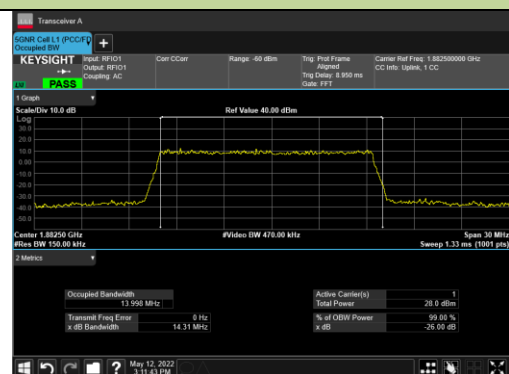
5MHz Channel Bandwidth



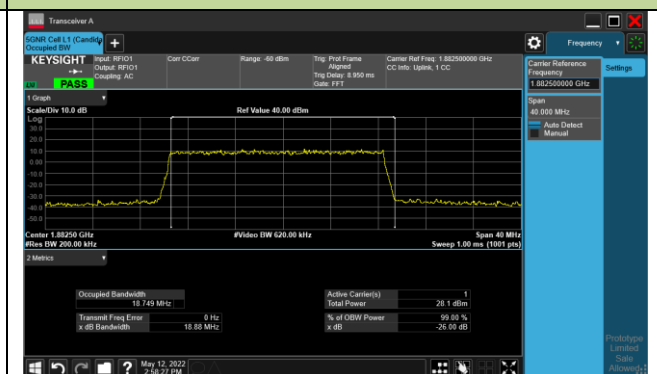
10MHz Channel Bandwidth



15MHz Channel Bandwidth



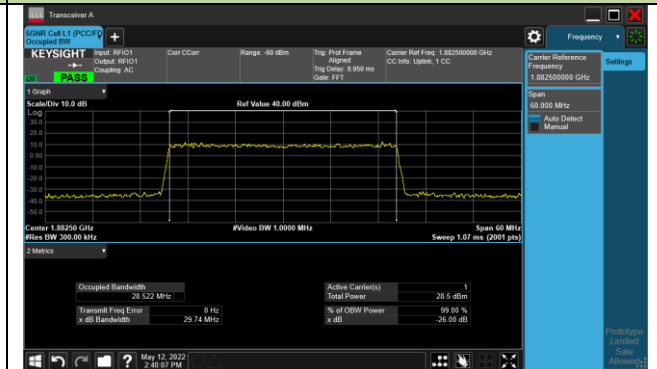
20MHz Channel Bandwidth



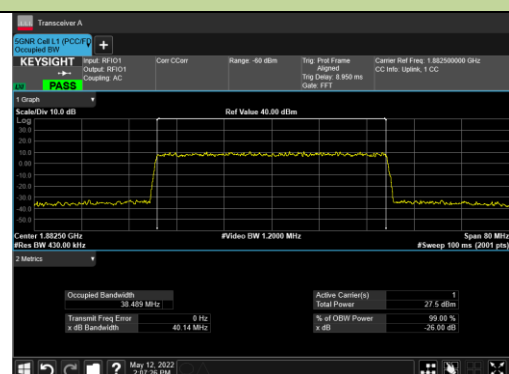
25MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth



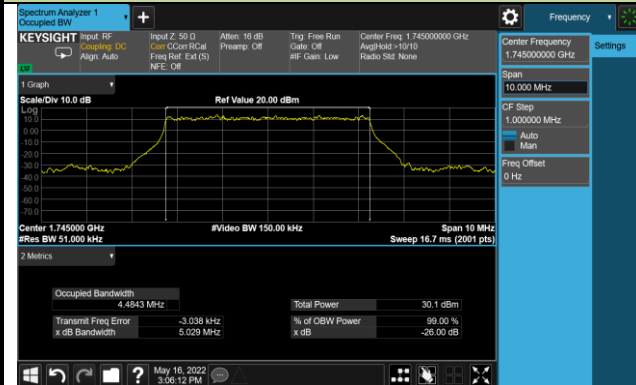
| | | | |
|-----------|------------|---------------|-----------|
| Test Site | SIP-SR1 | Test Engineer | Candy Luo |
| Test Date | 2022/05/16 | Test Band | n66 |

| Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|--------------------|--------------------|------------------------|
| PI/2 BPSK | | |
| 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 |
| QPSK | | |
| 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 |
| 16QAM | | |
| 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 |
| 64QAM | | |
| 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 |

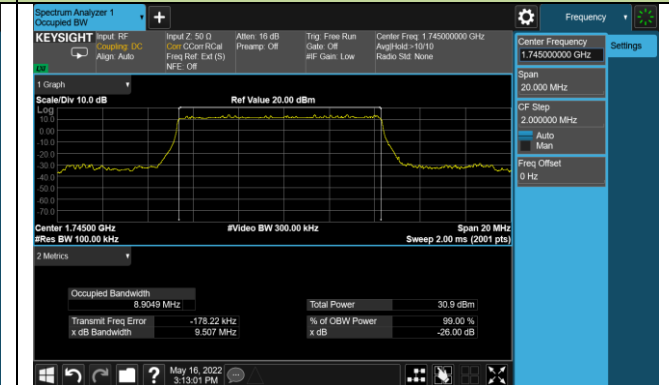
| 256QAM | | |
|--------|----|-------|
| 1745.0 | 5 | 4.48 |
| 1745.0 | 10 | 8.94 |
| 1745.0 | 15 | 13.42 |
| 1745.0 | 20 | 17.82 |
| 1745.0 | 30 | 28.52 |
| 1745.0 | 40 | 38.47 |

99% Bandwidth - PI/2 BPSK

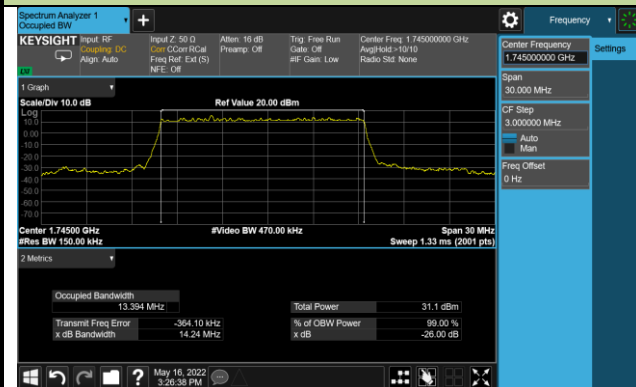
5MHz Channel Bandwidth



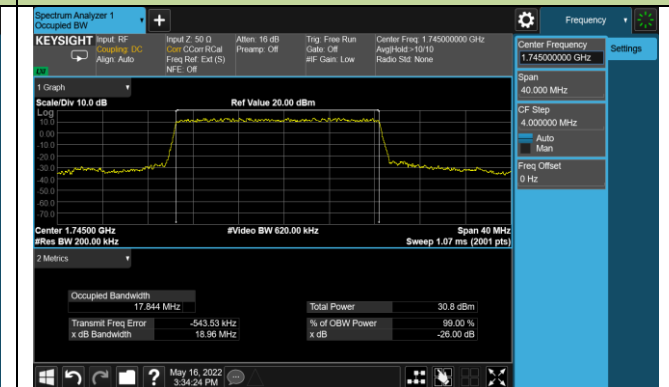
10MHz Channel Bandwidth



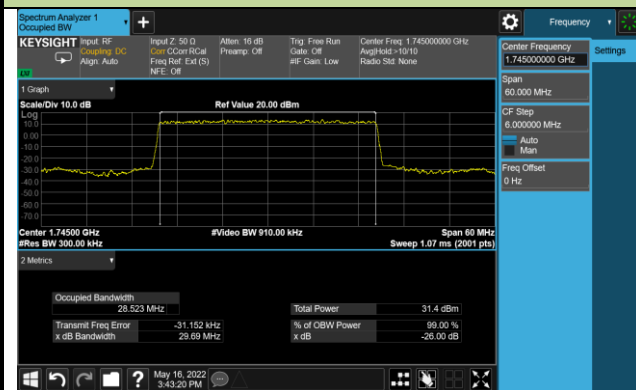
15MHz Channel Bandwidth



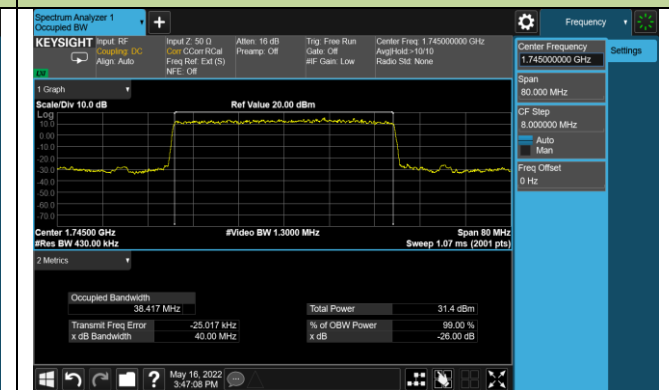
20MHz Channel Bandwidth



30MHz Channel Bandwidth

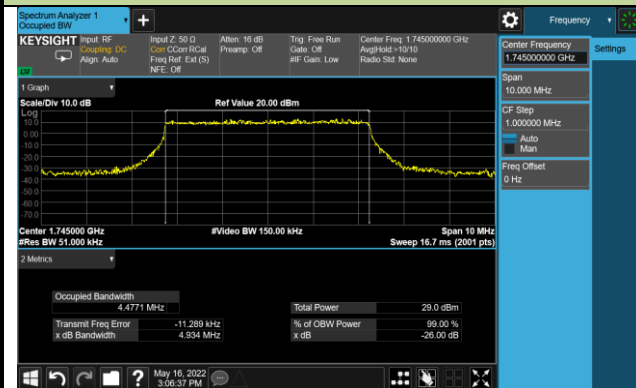


40MHz Channel Bandwidth

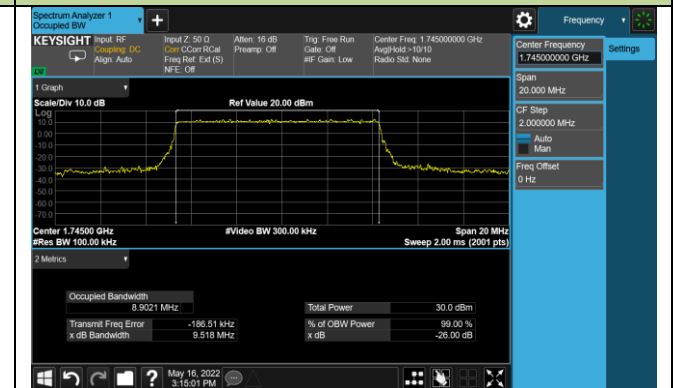


99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



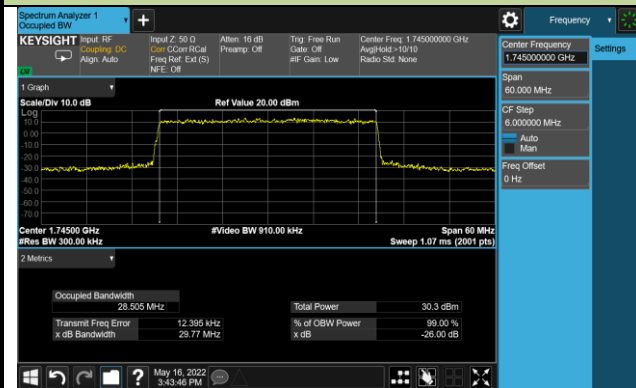
15MHz Channel Bandwidth



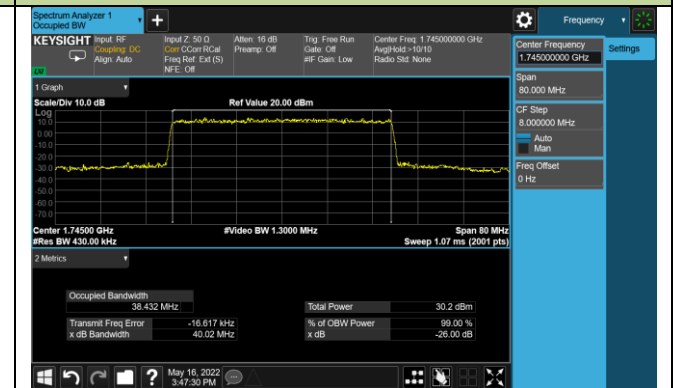
20MHz Channel Bandwidth



30MHz Channel Bandwidth

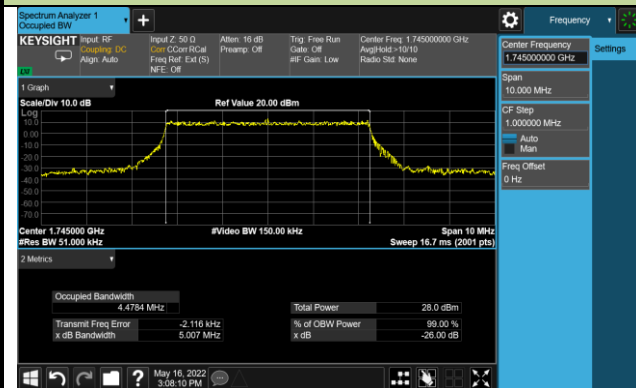


40MHz Channel Bandwidth

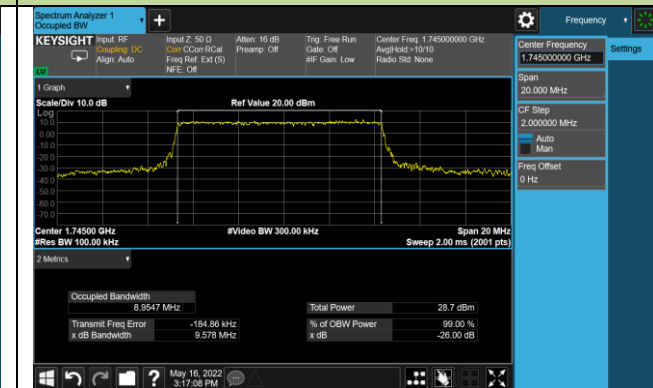


99% Bandwidth - 16QAM

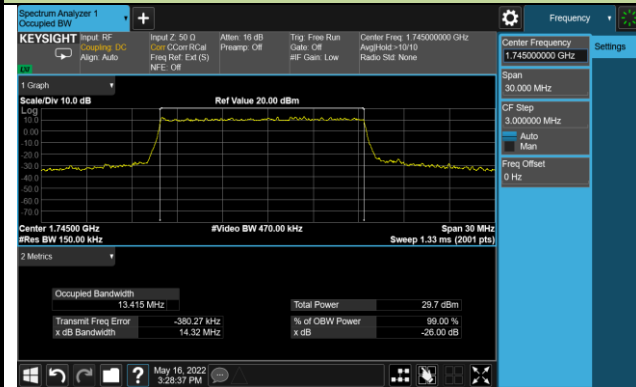
5MHz Channel Bandwidth



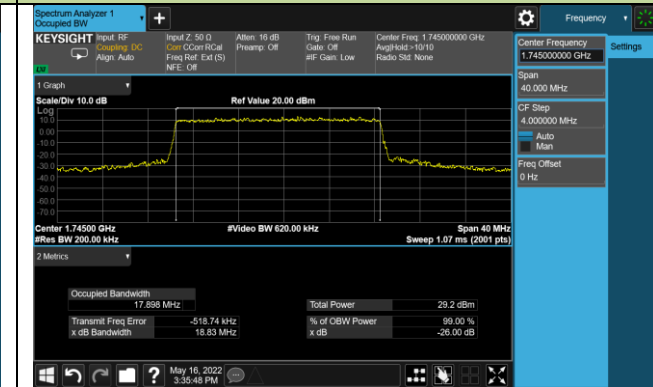
10MHz Channel Bandwidth



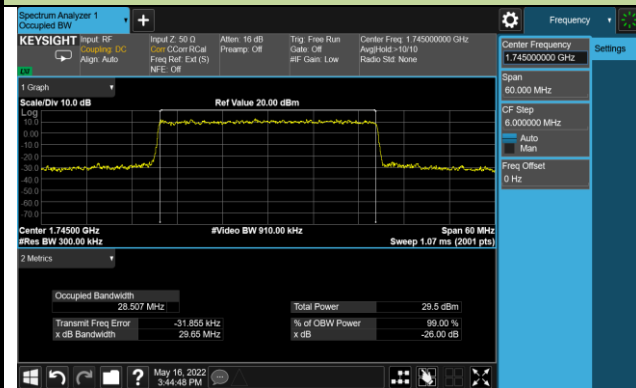
15MHz Channel Bandwidth



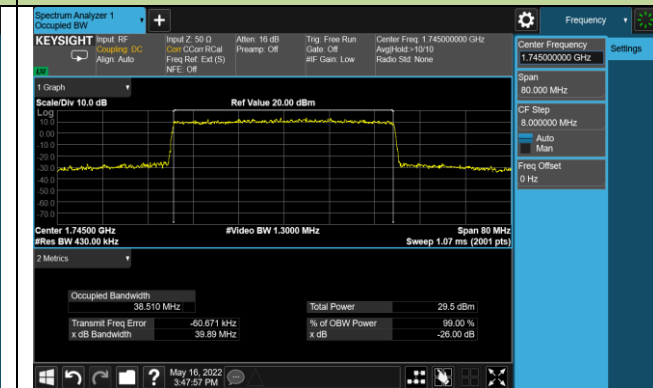
20MHz Channel Bandwidth



30MHz Channel Bandwidth

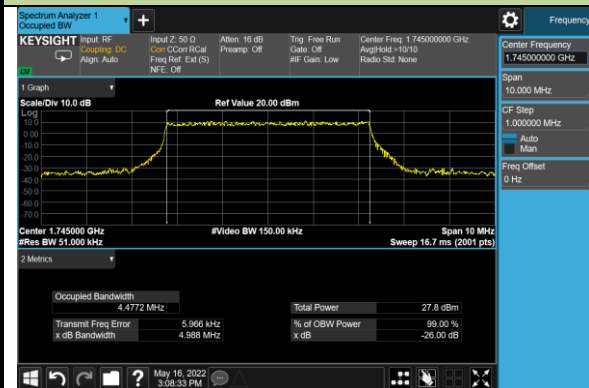


40MHz Channel Bandwidth

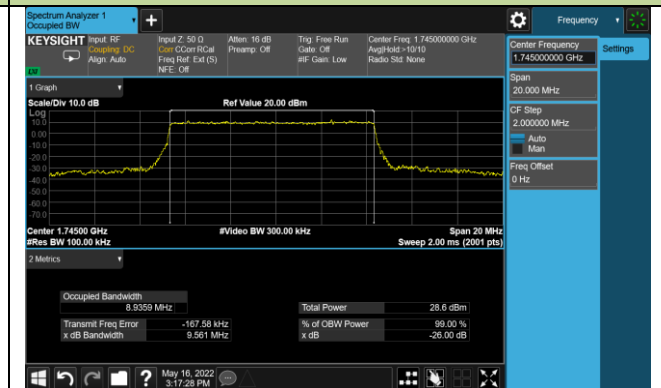


99% Bandwidth - 64QAM

5MHz Channel Bandwidth



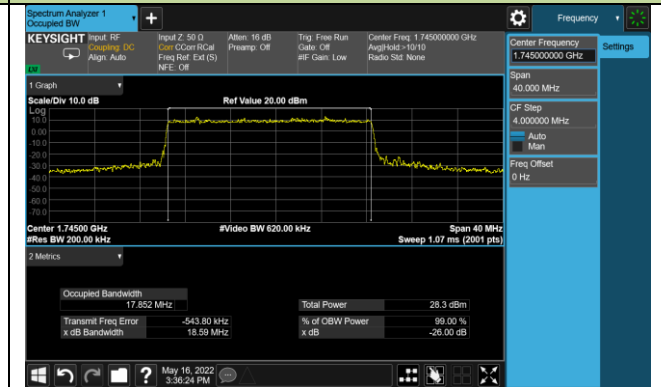
10MHz Channel Bandwidth



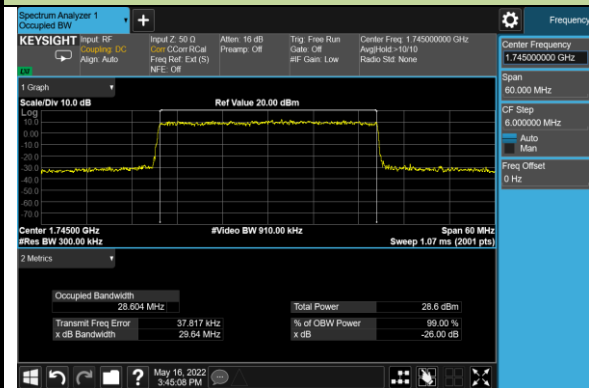
15MHz Channel Bandwidth



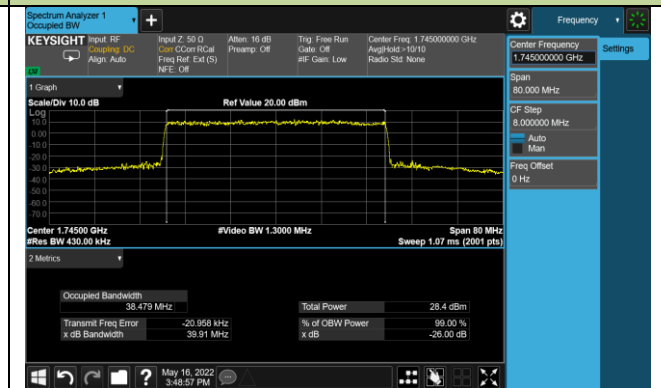
20MHz Channel Bandwidth



30MHz Channel Bandwidth

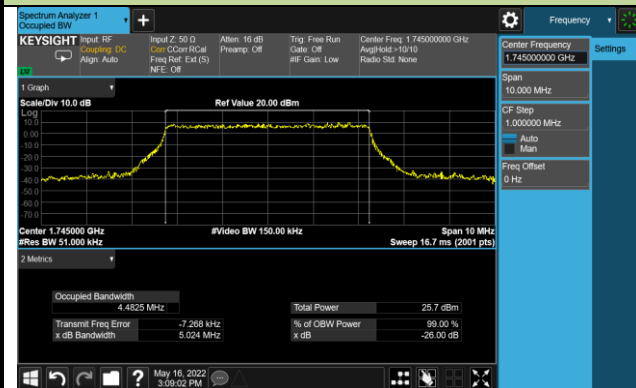


40MHz Channel Bandwidth

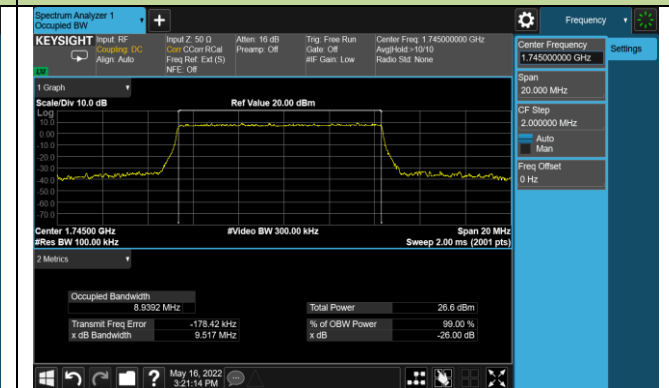


99% Bandwidth - 256QAM

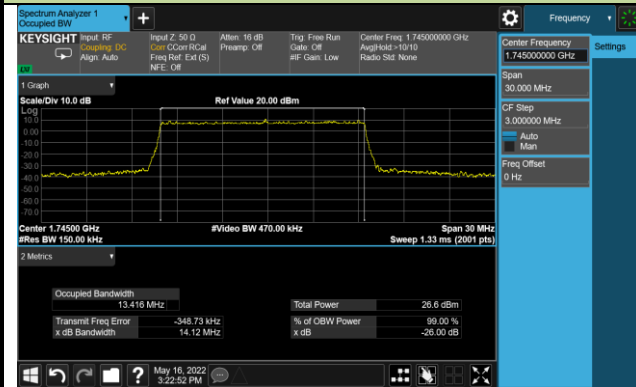
5MHz Channel Bandwidth



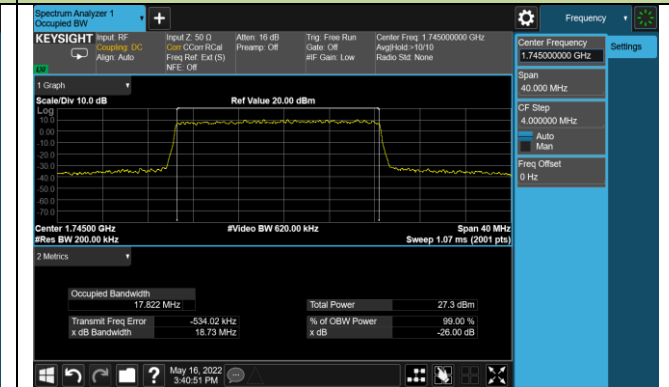
10MHz Channel Bandwidth



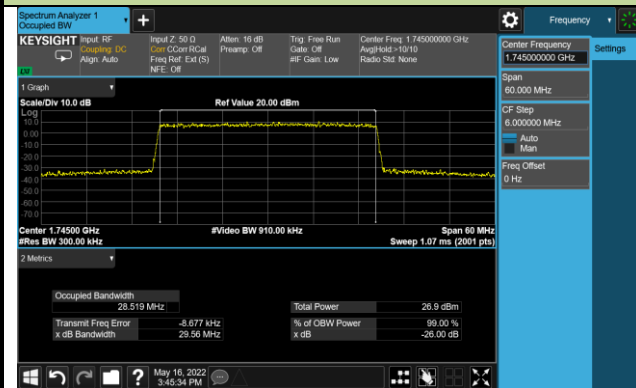
15MHz Channel Bandwidth



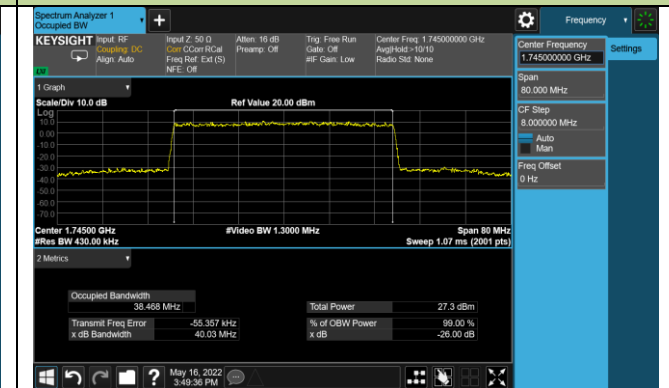
20MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth

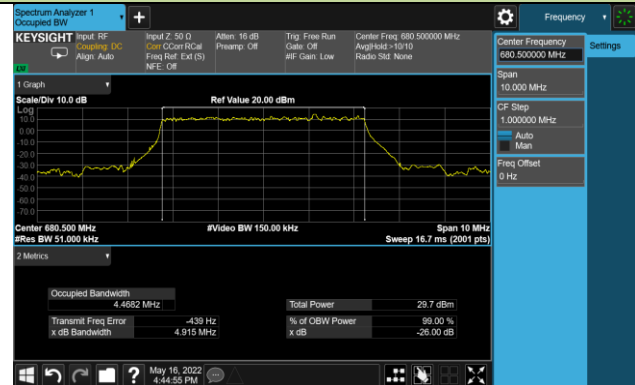


| | | | |
|-----------|------------|---------------|-----------|
| Test Site | SIP-SR1 | Test Engineer | Candy Luo |
| Test Date | 2022/05/16 | Test Band | n71 |

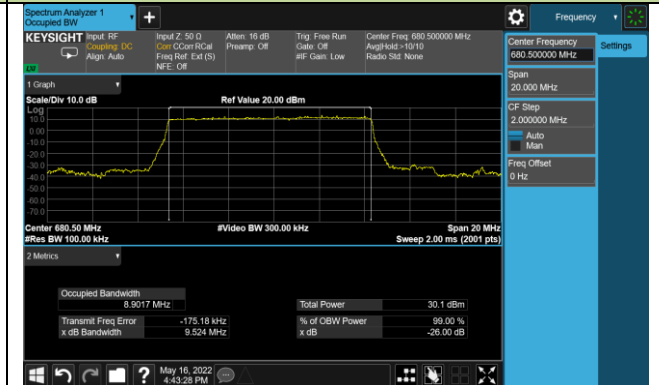
| Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|--------------------|--------------------|------------------------|
| PI/2 BPSK | | |
| 680.5 | 5 | 4.47 |
| 680.5 | 10 | 8.90 |
| 680.5 | 15 | 13.38 |
| 680.5 | 20 | 17.81 |
| QPSK | | |
| 680.5 | 5 | 4.50 |
| 680.5 | 10 | 8.89 |
| 680.5 |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

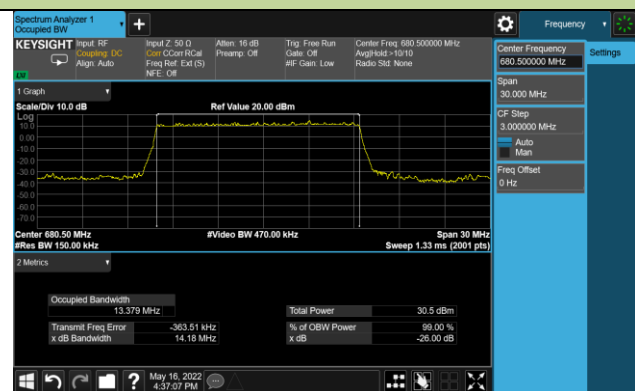
5MHz Channel Bandwidth



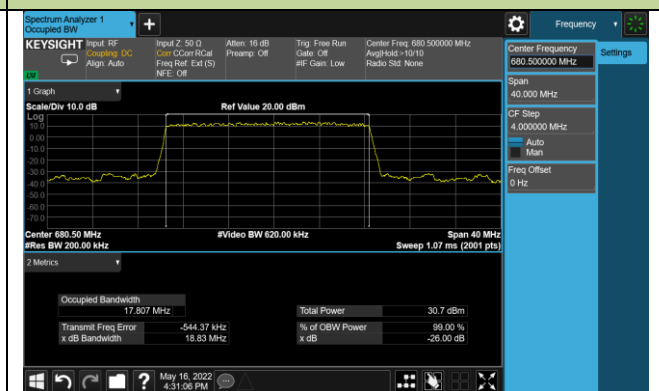
10MHz Channel Bandwidth



15MHz Channel Bandwidth

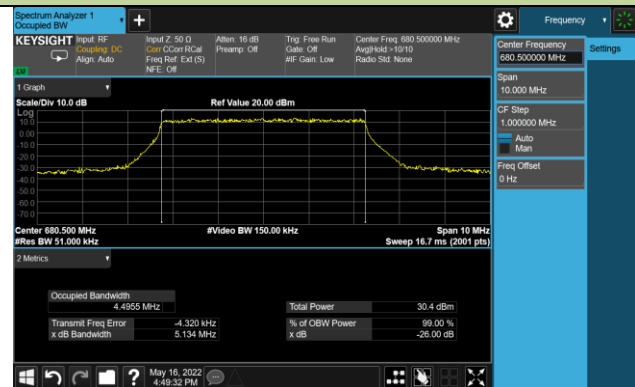


20MHz Channel Bandwidth

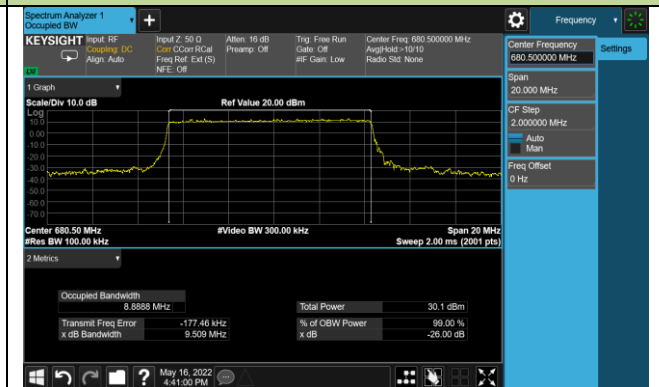


99% Bandwidth - QPSK

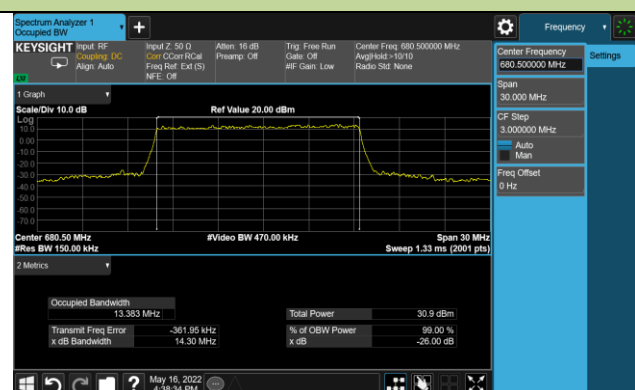
5MHz Channel Bandwidth



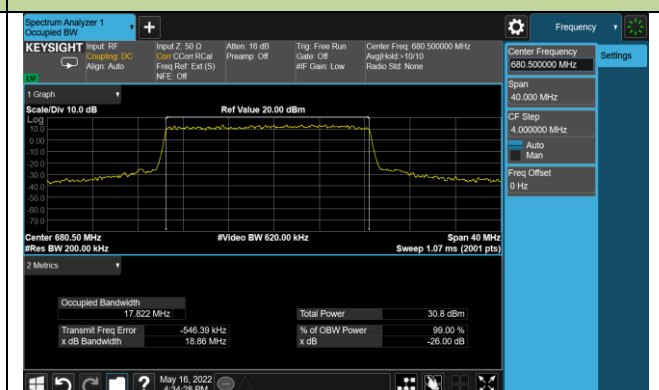
10MHz Channel Bandwidth



15MHz Channel Bandwidth

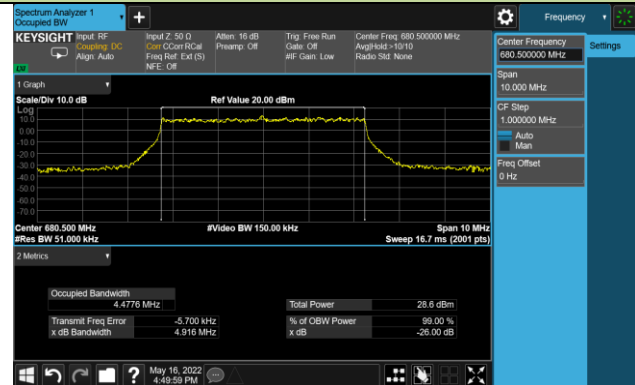


20MHz Channel Bandwidth

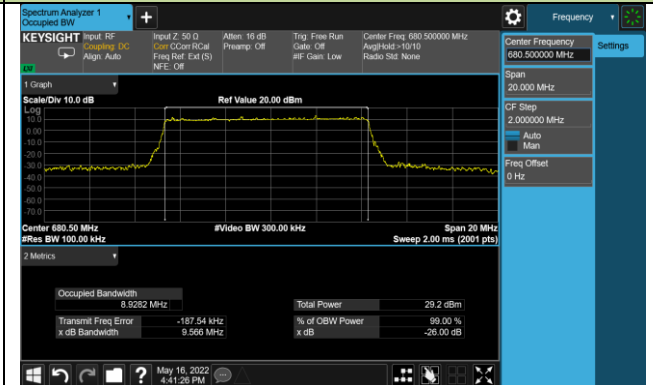


99% Bandwidth - 16QAM

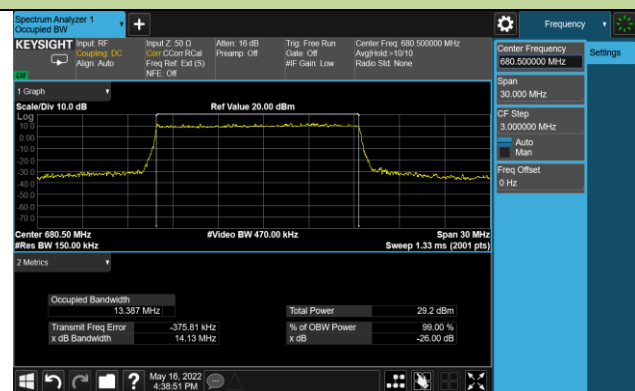
5MHz Channel Bandwidth



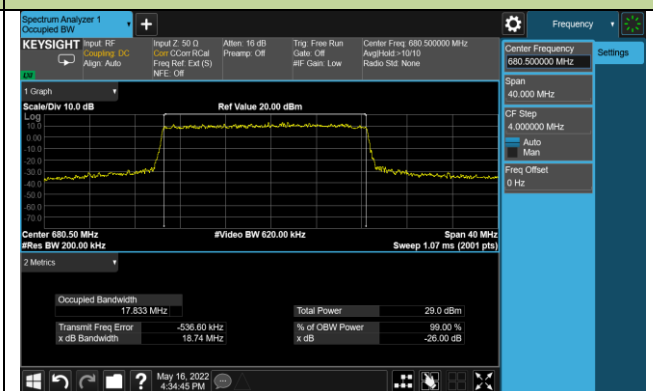
10MHz Channel Bandwidth



15MHz Channel Bandwidth

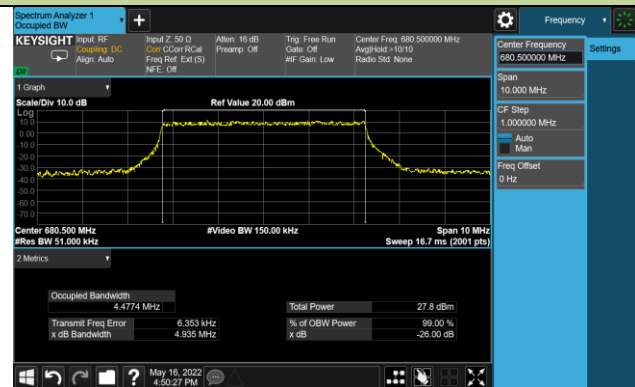


20MHz Channel Bandwidth

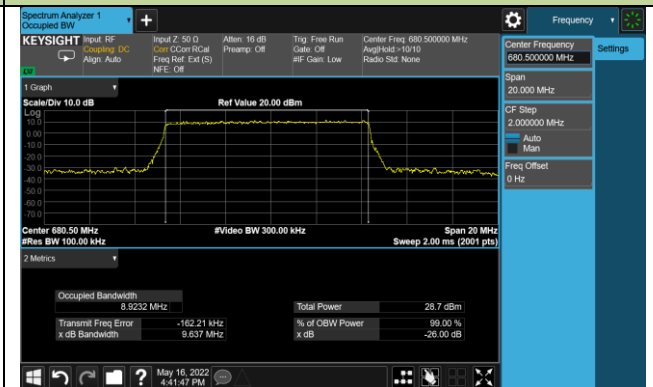


99% Bandwidth - 64QAM

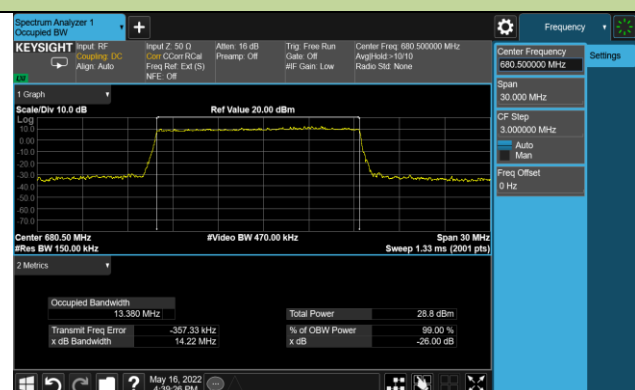
5MHz Channel Bandwidth



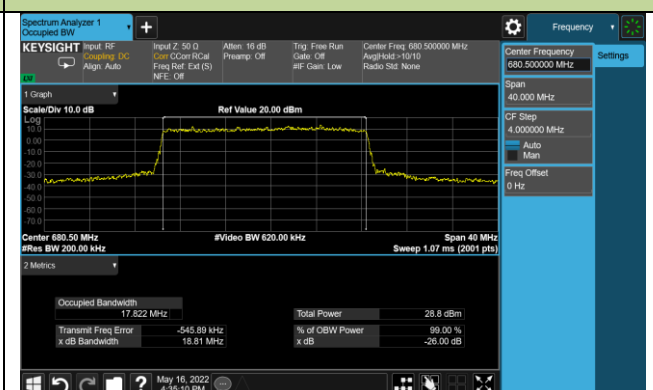
10MHz Channel Bandwidth



15MHz Channel Bandwidth

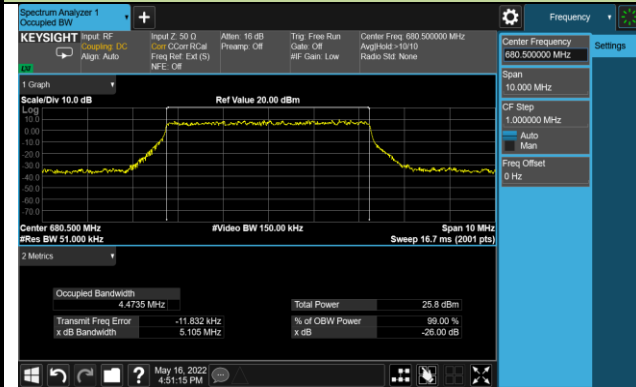


20MHz Channel Bandwidth

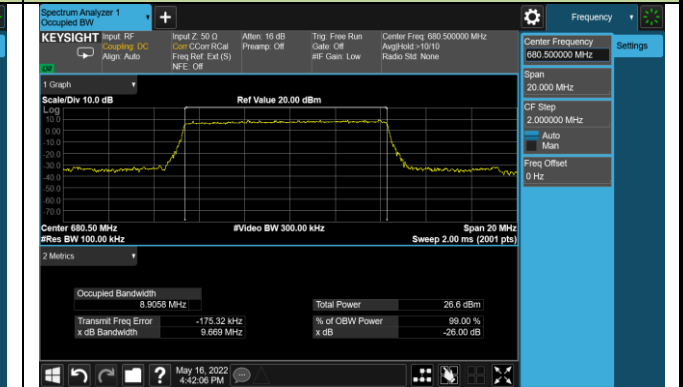


99% Bandwidth - 256QAM

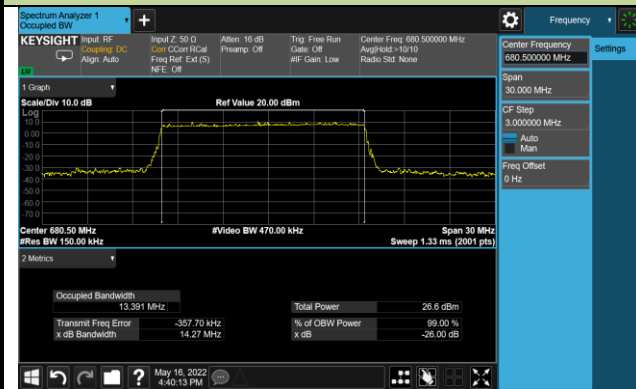
5MHz Channel Bandwidth



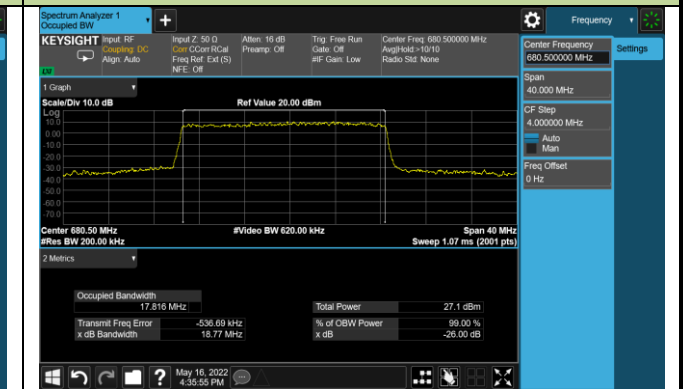
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth

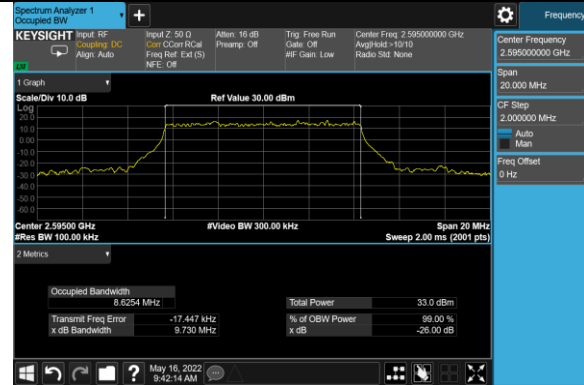


| | | | |
|-----------|------------|---------------|-----------|
| Test Site | SIP-SR1 | Test Engineer | Candy Luo |
| Test Date | 2022/05/16 | Test Band | n38_HPUE |

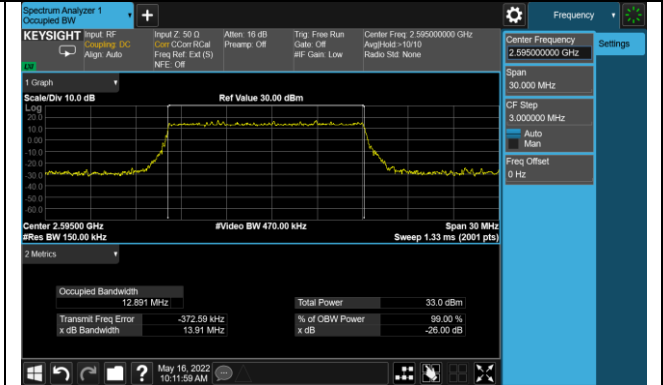
| Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|--------------------|--------------------|------------------------|
| PI/2 BPSK | | |
| 2595.00 | 10 | 8.63 |
| 2595.00 | 15 | 12.89 |
| 2595.00 | 20 | 17.83 |
| 2595.00 | 30 | 26.80 |
| 2595.00 | 40 | 35.74 |
| QPSK | | |
| 2595.00 | 10 | 8.60 |
| 2595.00 | 15 | 12.89 |
| 2595.00 | 20 | 17.80 |
| 2595.00 | 30 | 26.81 |
| 2595.00 | 40 | 35.73 |
| 16QAM | | |
| 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 |
| 64QAM | | |
| 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 |
| 256QAM | | |
| 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 |

99% Bandwidth - PI/2 BPSK

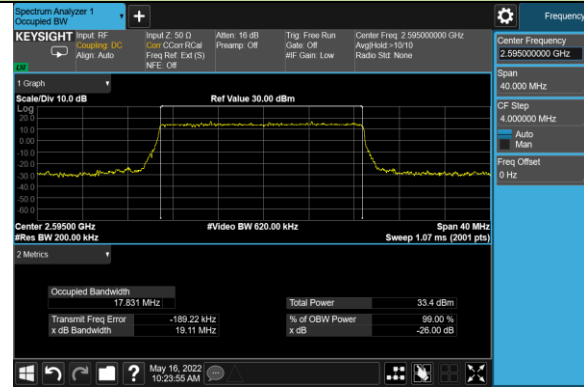
10MHz Channel Bandwidth



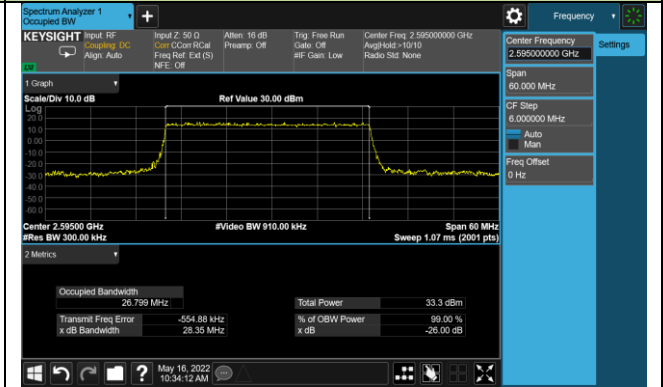
15MHz Channel Bandwidth



20MHz Channel Bandwidth



30MHz Channel Bandwidth



40MHz Channel Bandwidth

