

Appendix B. Test Plots

QCN5054

Duty Cycle

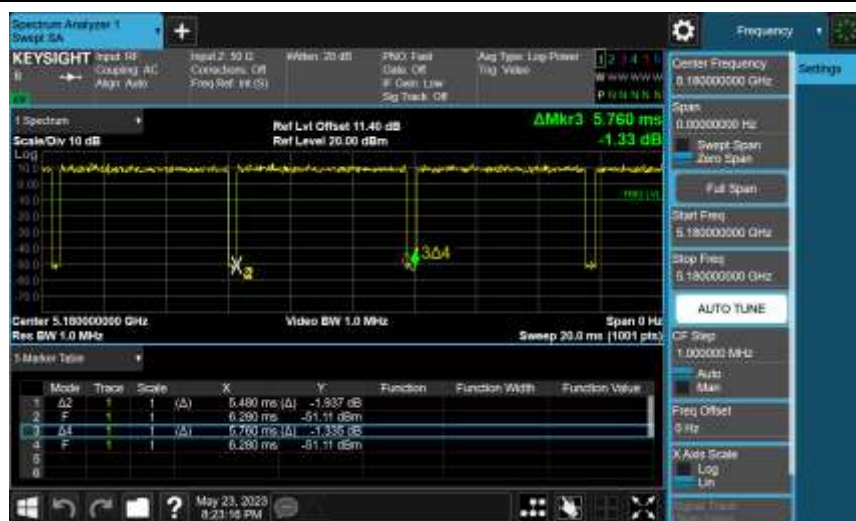
802.11a

On+off time



802.11ax HE20

On+off time



802.11ax HE40

On+off time



802.11ax HE80

On+off time



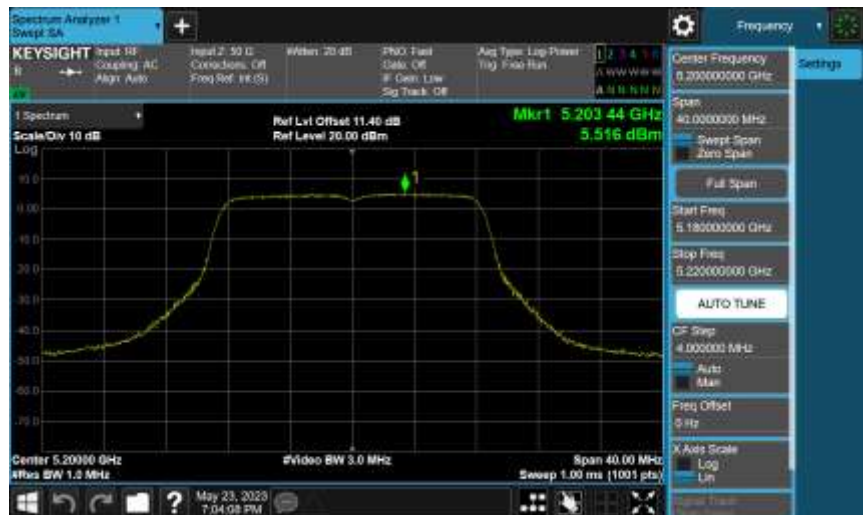
Maximum Power Spectral Density

802.11a_ANT-0

5180 MHz



5200 MHz



5240 MHz



802.11a_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-0

5180 MHz



5200 MHz



5240 MHz



802.11ax HE20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-0

5190 MHz



5230 MHz



802.11ax HE40_ANT-0

5755 MHz



5795 MHz



802.11ax HE80_ANT-0

5210 MHz



802.11ax HE80_ANT-0

5775 MHz



802.11a_ANT-1

5180 MHz



5200 MHz



5240 MHz



802.11a_ANT-1

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-1

5180 MHz



5200 MHz



5240 MHz





802.11ax HE40_ANT-1

5190 MHz



5230 MHz



802.11ax HE40_ANT-1

5755 MHz



5795 MHz



802.11ax HE80_ANT-1

5210 MHz



802.11ax HE80_ANT-1

5775 MHz

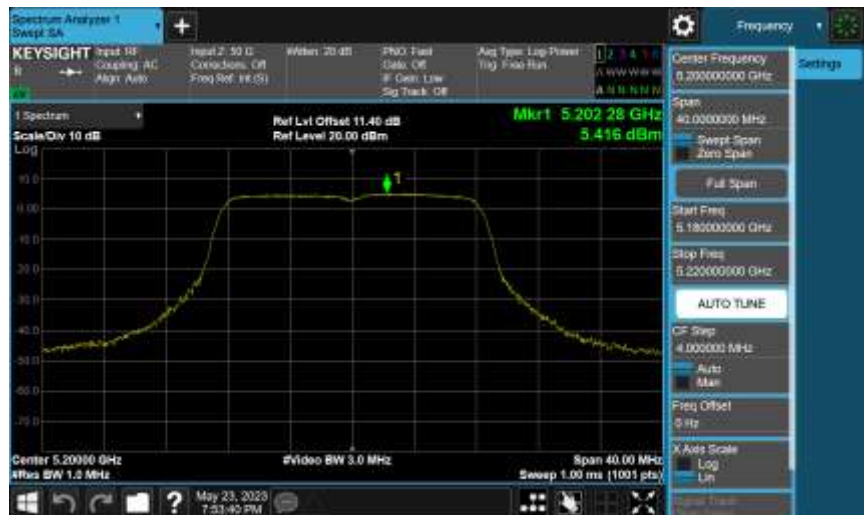


802.11a_ANT-2

5180 MHz



5200 MHz



5240 MHz



802.11a_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-2

5180 MHz



5200 MHz



5240 MHz



802.11ax HE20_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-2

5190 MHz



5230 MHz



802.11ax HE40_ANT-2

5755 MHz



5795 MHz



802.11ax HE80_ANT-2

5210 MHz



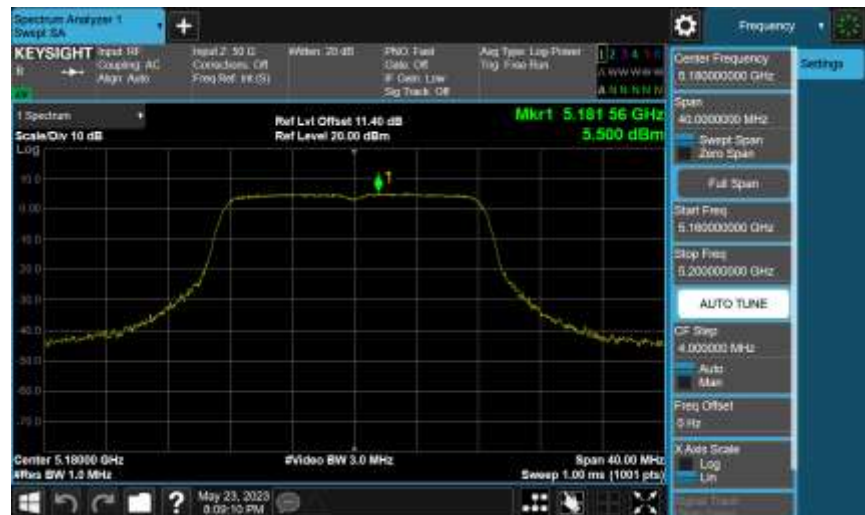
802.11ax HE80_ANT-2

5775 MHz



802.11a_ANT-3

5180 MHz



5200 MHz



5240 MHz



802.11a_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-3

5180 MHz



5200 MHz



5240 MHz



802.11ax HE20_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-3

5190 MHz



5230 MHz



802.11ax HE40_ANT-3

5755 MHz



5795 MHz



802.11ax HE80_ANT-3

5210 MHz



802.11ax HE80_ANT-3

5775 MHz



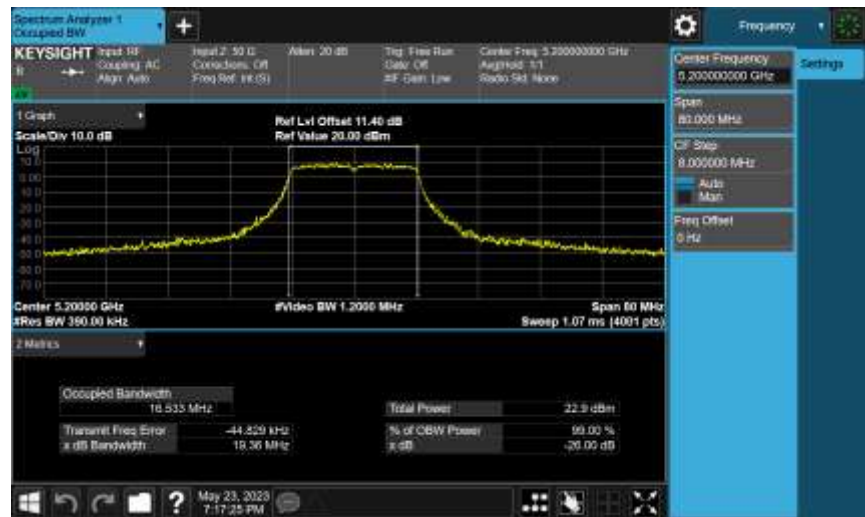
26 dB Bandwidth&99% Occupied Bandwidth

802.11a_ANT-0

5180 MHz



5200 MHz

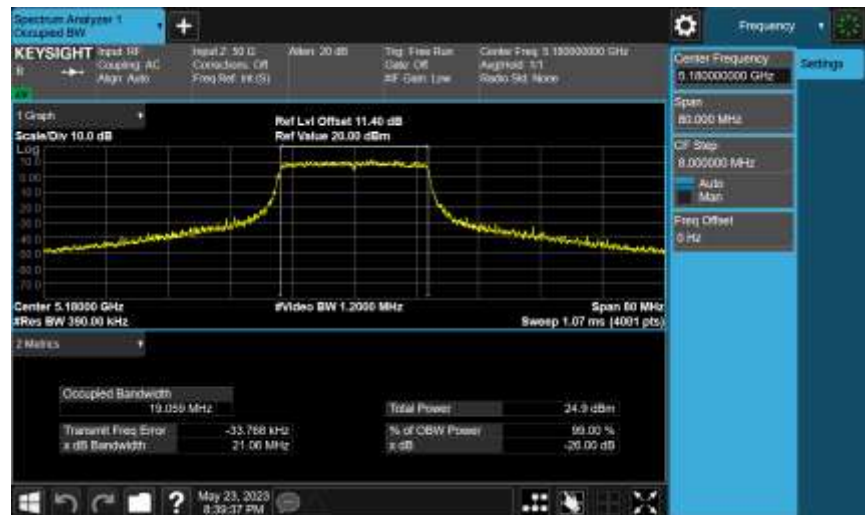


5240 MHz

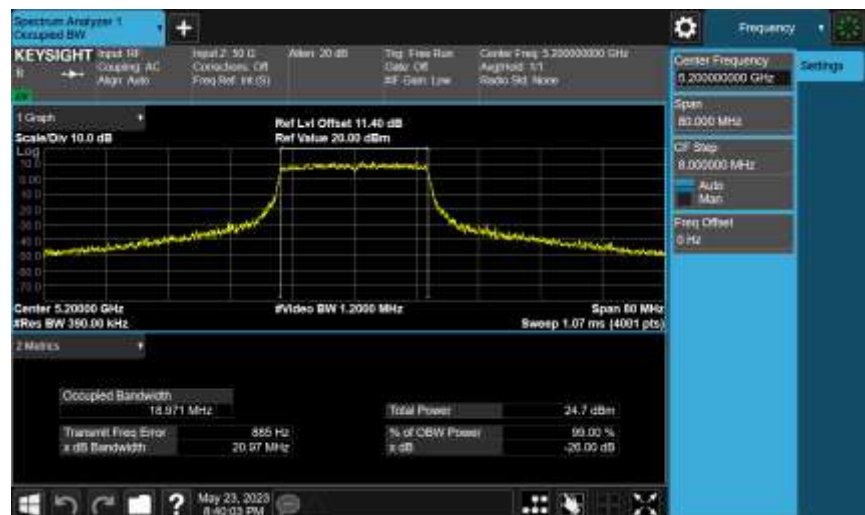


802.11ax HE20_ANT-0

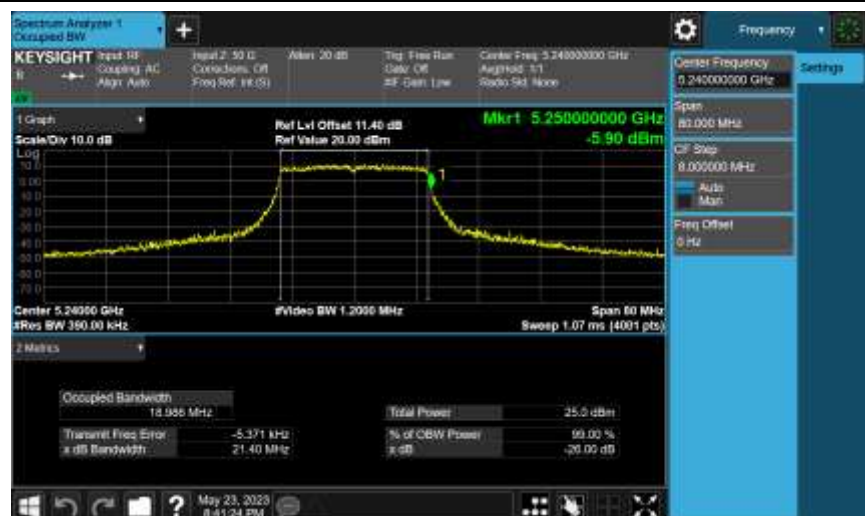
5180 MHz



5200 MHz

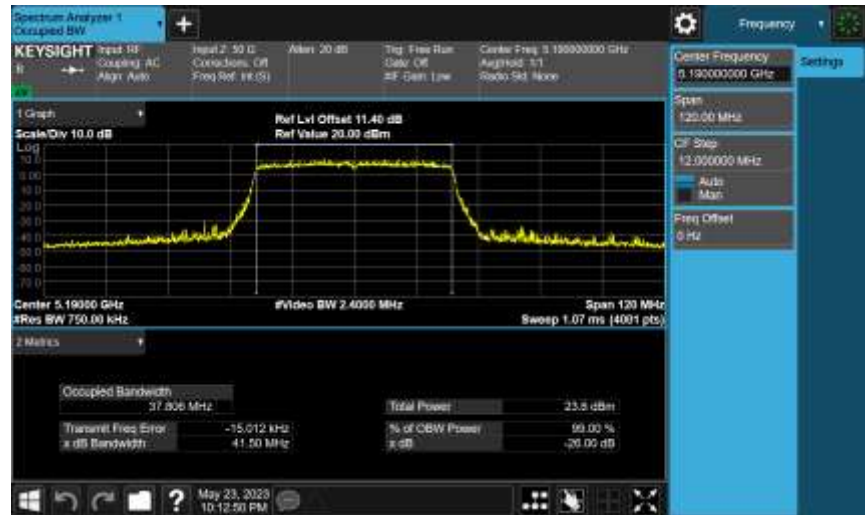


5240 MHz



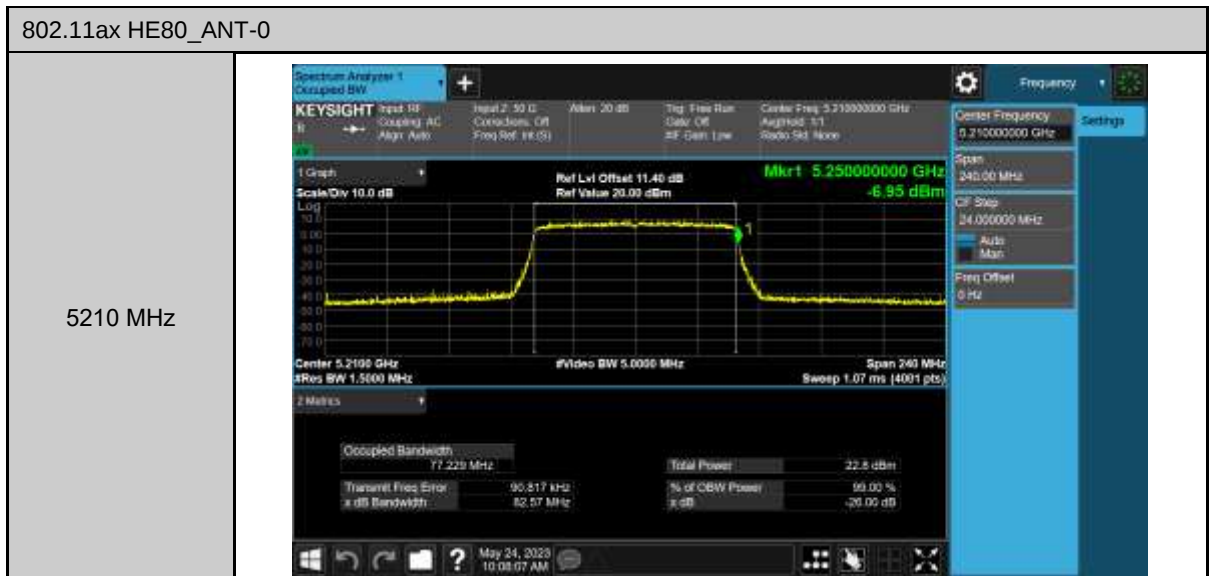
802.11ax HE40_ANT-0

5190 MHz



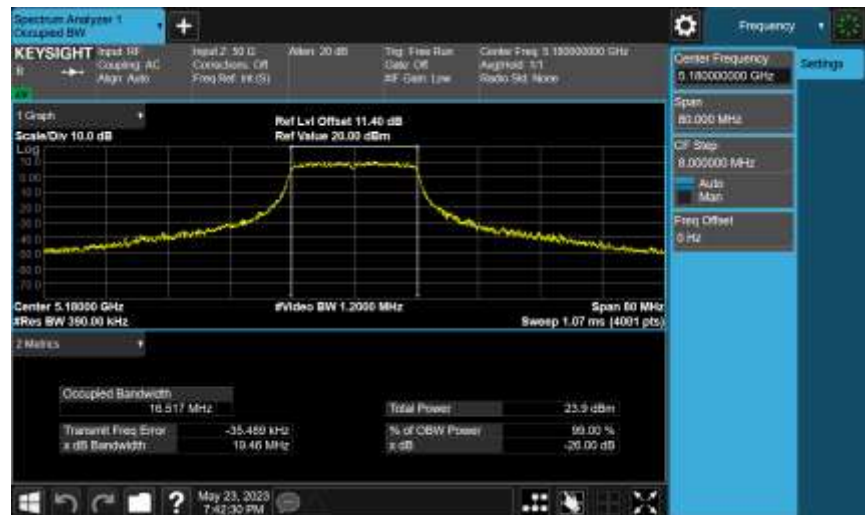
5230 MHz



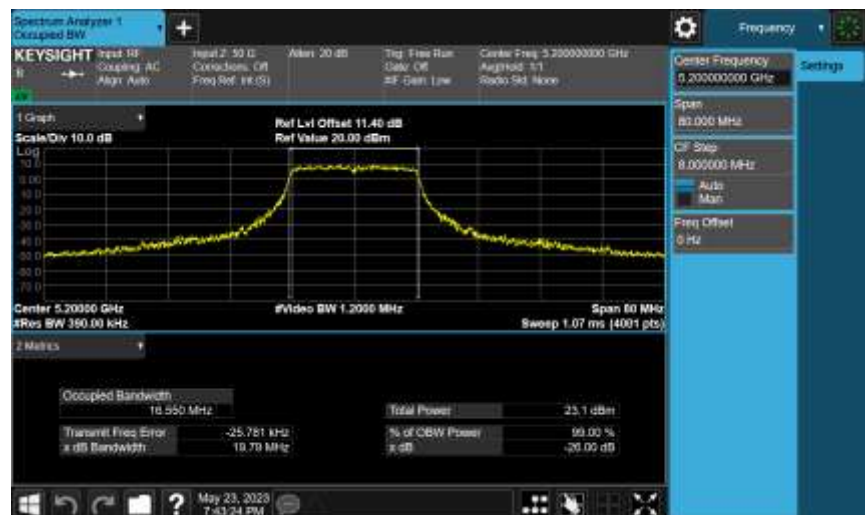


802.11a_ANT-1

5180 MHz



5200 MHz



5240 MHz

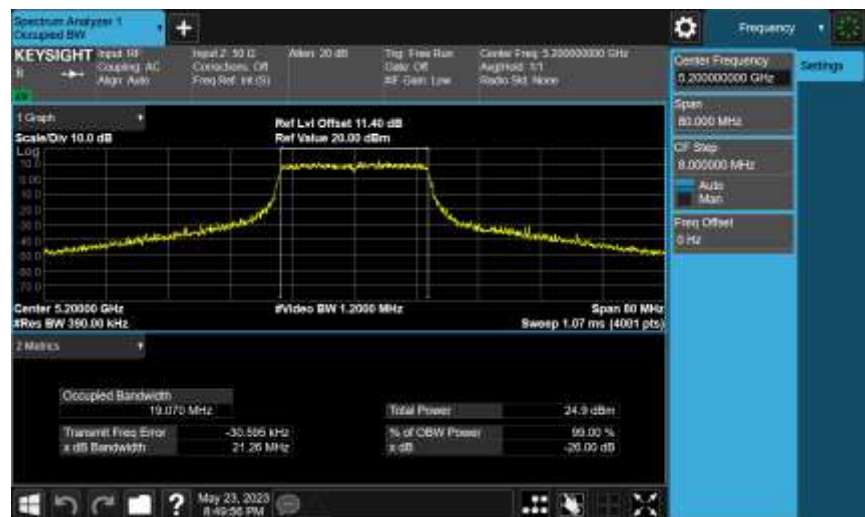


802.11ax HE20_ANT-1

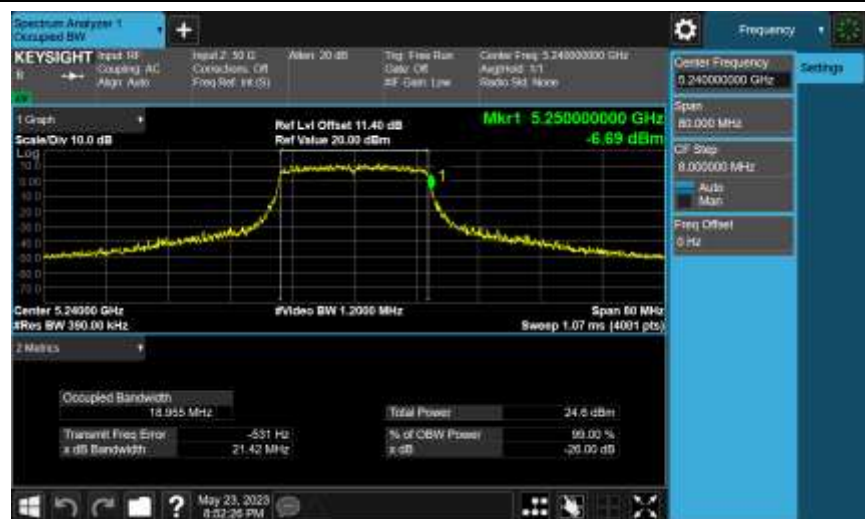
5180 MHz



5200 MHz

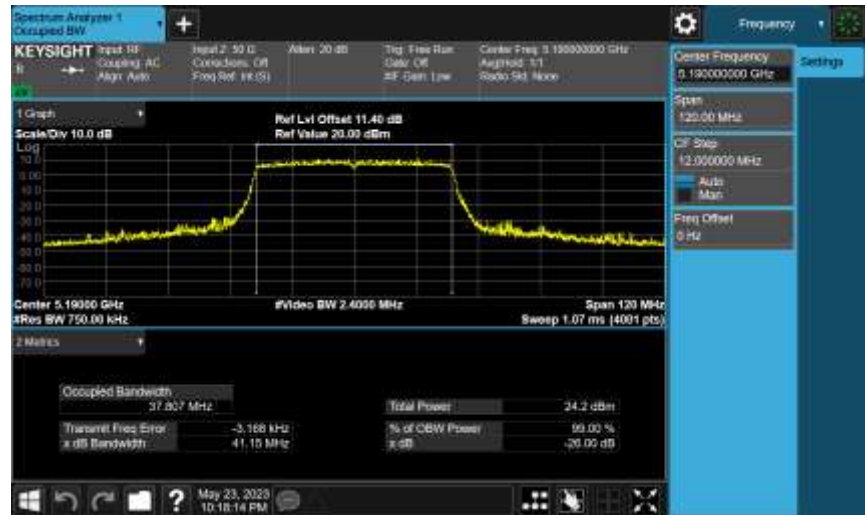


5240 MHz



802.11ax HE40_ANT-1

5190 MHz

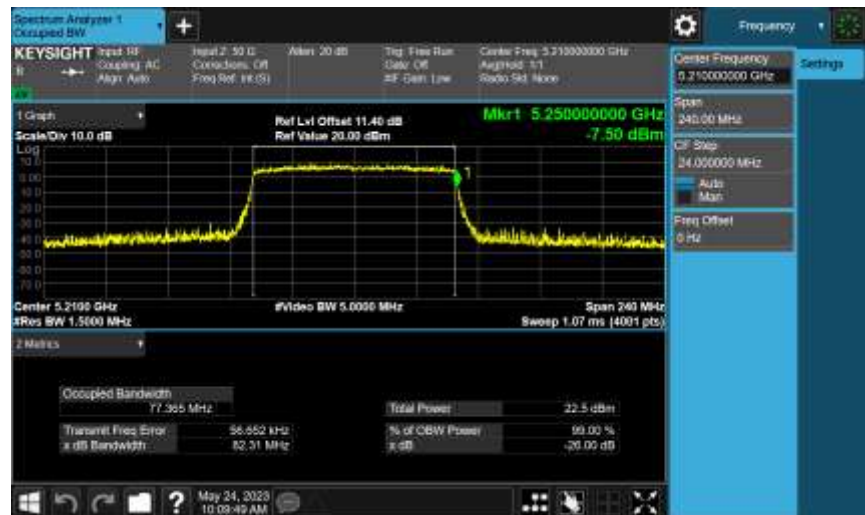


5230 MHz



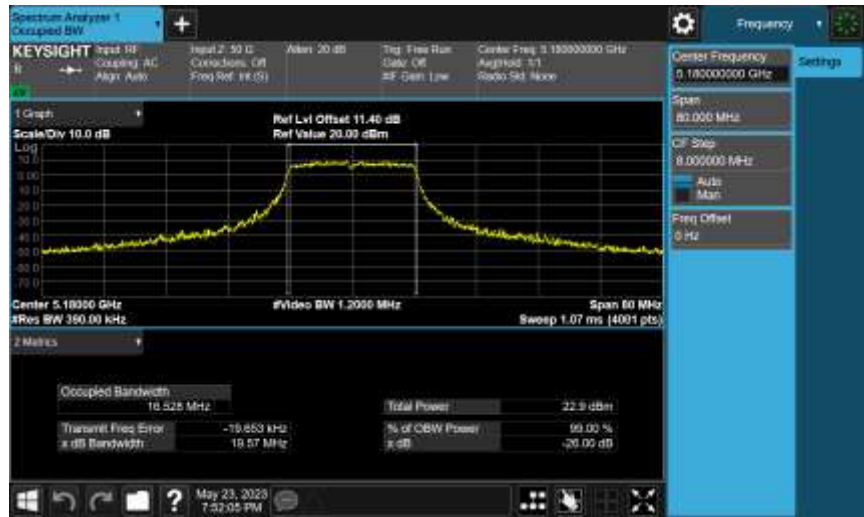
802.11ax HE80_ANT-1

5210 MHz



802.11a_ANT-2

5180 MHz



5200 MHz



5240 MHz



802.11ax HE20_ANT-2

5180 MHz



5200 MHz

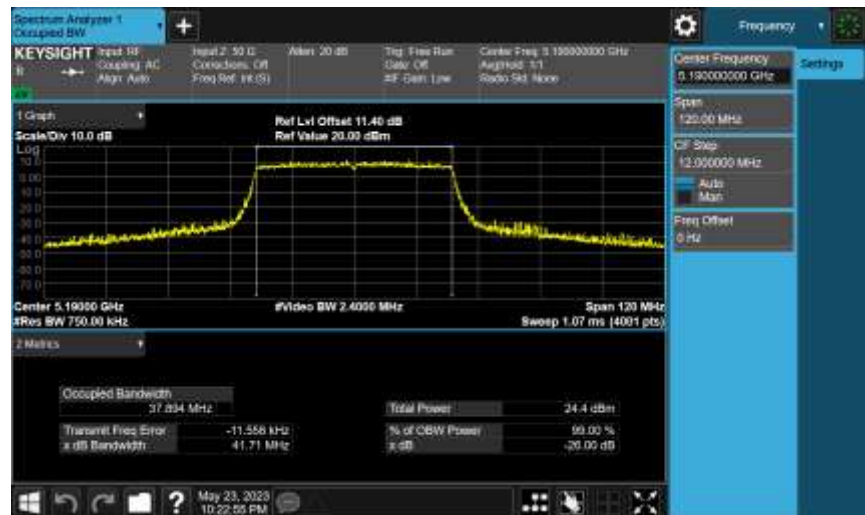


5240 MHz



802.11ax HE40_ANT-2

5190 MHz

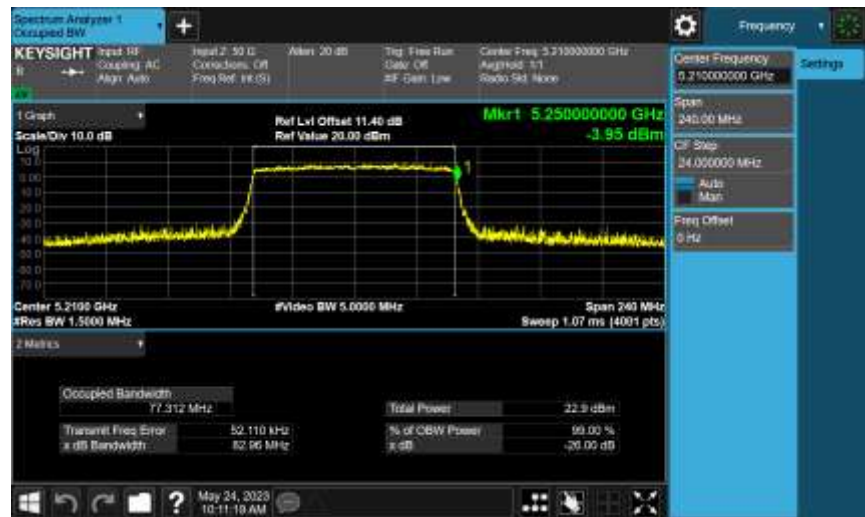


5230 MHz



802.11ax HE80_ANT-2

5210 MHz



802.11a_ANT-3

5180 MHz



5200 MHz



5240 MHz

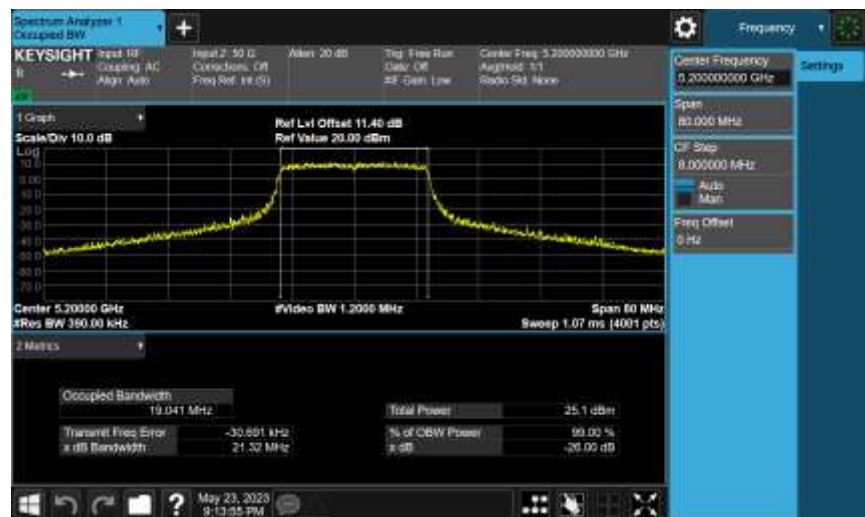


802.11ax HE20_ANT-3

5180 MHz



5200 MHz

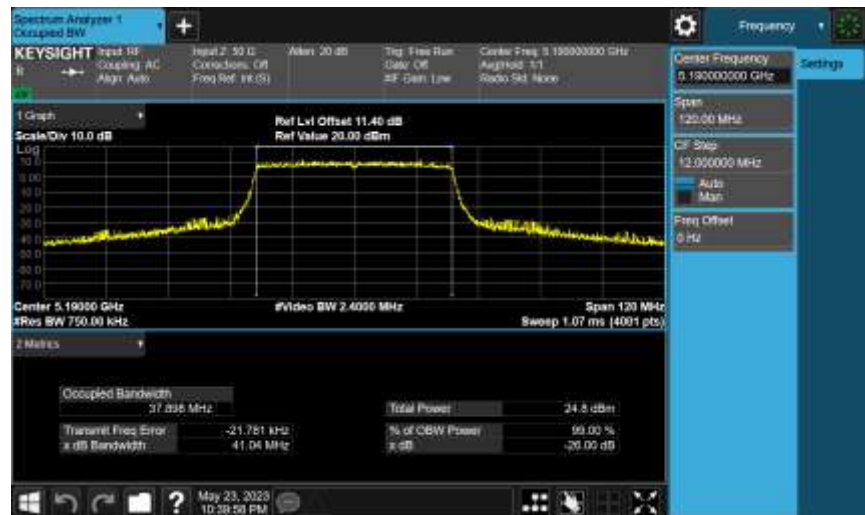


5240 MHz



802.11ax HE40_ANT-3

5190 MHz

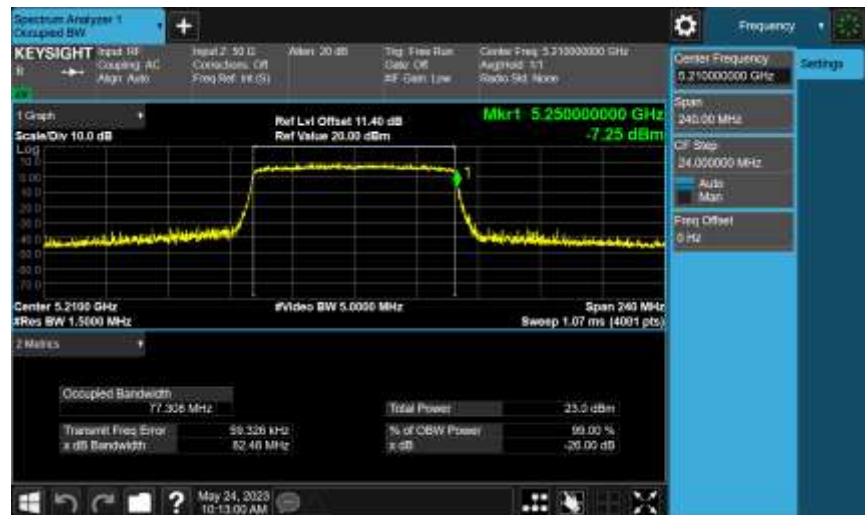


5230 MHz



802.11ax HE80_ANT-3

5210 MHz



6 dB Bandwidth

802.11a_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-0

5755 MHz



5795 MHz



802.11ax HE80_ANT-0

5775 MHz



802.11a_ANT-1

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-1

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-1

5755 MHz



5795 MHz



802.11ax HE80_ANT-1

5775 MHz



802.11a_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-2

5755 MHz



5795 MHz



802.11ax HE80_ANT-2

5775 MHz



802.11a_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-3

5755 MHz



5795 MHz



802.11ax HE80_ANT-3

5775 MHz



99% Occupied Bandwidth

802.11a_ANT-0

5745 MHz

KEYSIGHT Spectrum Analyzer 1
 Input IF: 50 dB, Coupling: AC, Attain: Auto, Alert: 20 dB, Trig: Free Run, Gate: Off, Center Freq: 5.74500000 GHz, Span: 60.000 MHz, Ref: 20.00 dBm, Res BW: 510.0 kHz, Video BW: 1.000 MHz, Sweep: 1.07 ms (4001 pts), Occupied BW: 27.231 MHz, Total Power: 26.5 dBm, Transmit Freq Error: -124.57 kHz, x dB Bandwidth: 41.69 MHz, % of CBW Power: 99.00 %, x dB: -20.00 dB

5785 MHz

KEYSIGHT Spectrum Analyzer 1
 Input IF: 50 dB, Coupling: AC, Attain: Auto, Alert: 20 dB, Trig: Free Run, Gate: Off, Center Freq: 5.78500000 GHz, Span: 60.000 MHz, Ref: 20.00 dBm, Res BW: 510.0 kHz, Video BW: 1.000 MHz, Sweep: 1.07 ms (4001 pts), Occupied BW: 28.041 MHz, Total Power: 26.5 dBm, Transmit Freq Error: 202.61 kHz, x dB Bandwidth: 42.56 MHz, % of CBW Power: 99.00 %, x dB: -20.00 dB

5825 MHz

KEYSIGHT Spectrum Analyzer 1
 Input IF: 50 dB, Coupling: AC, Attain: Auto, Alert: 20 dB, Trig: Free Run, Gate: Off, Center Freq: 5.82500000 GHz, Span: 60.000 MHz, Ref: 20.00 dBm, Res BW: 510.0 kHz, Video BW: 1.000 MHz, Sweep: 1.07 ms (4001 pts), Occupied BW: 28.283 MHz, Total Power: 26.3 dBm, Transmit Freq Error: 241.03 kHz, x dB Bandwidth: 42.83 MHz, % of CBW Power: 99.00 %, x dB: -20.00 dB

802.11ax HE20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-0

5755 MHz



5795 MHz



802.11ax HE80_ANT-0

5775 MHz



802.11a_ANT-1

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-1

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-1

5755 MHz



5795 MHz



802.11ax HE80_ANT-1

5775 MHz



802.11a_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-2

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-2

5755 MHz



5795 MHz



802.11ax HE80_ANT-2

5775 MHz



802.11a_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE20_ANT-3

5745 MHz



5785 MHz



5825 MHz



802.11ax HE40_ANT-3

5755 MHz



5795 MHz



802.11ax HE80_ANT-3

5775 MHz



QCA9889

Duty cycle

802.11a

On+off time



802.11ac VHT20

On+off time



802.11ac VHT40

On+off time



802.11ac VHT80

On+off time



Maximum Power Spectral Density

802.11a

5180 MHz



5200 MHz

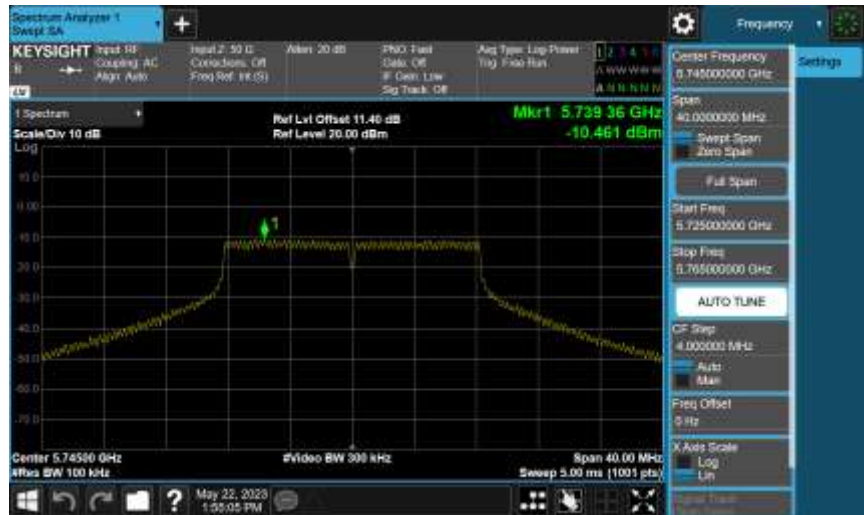


5240 MHz

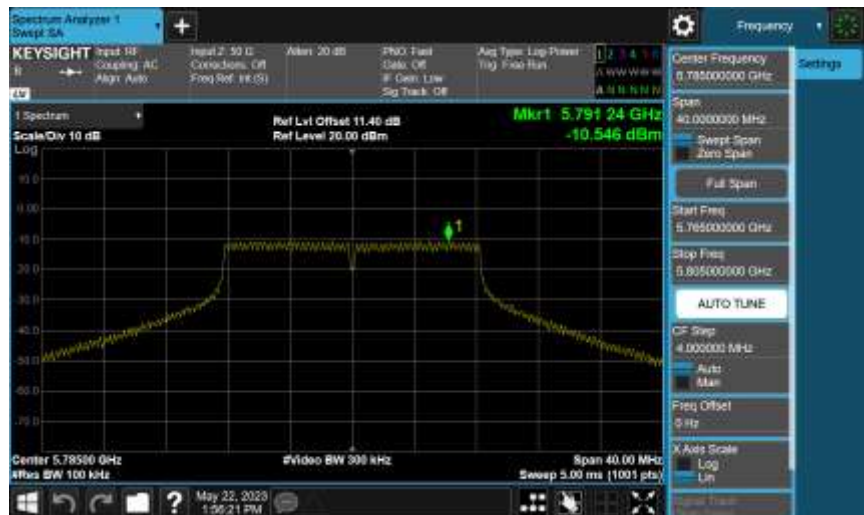


802.11a

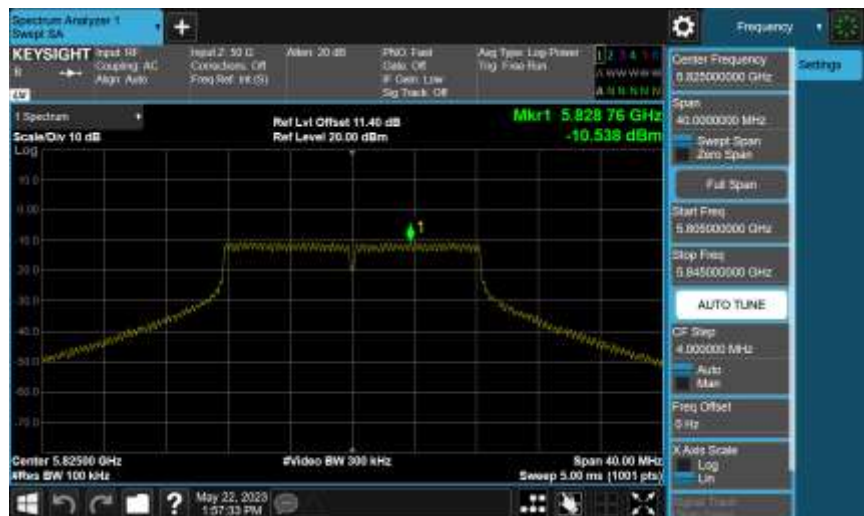
5745 MHz



5785 MHz



5825 MHz



802.11ac VHT20_ANT-0

5180 MHz



5200 MHz

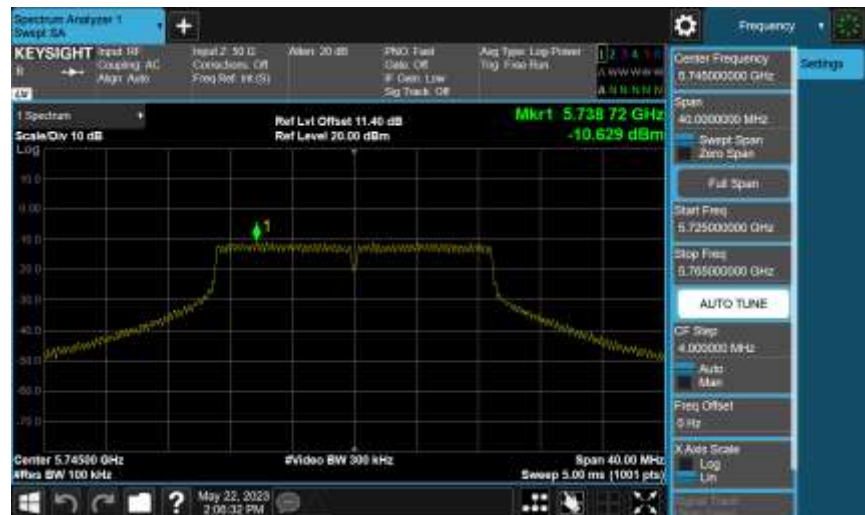


5240 MHz

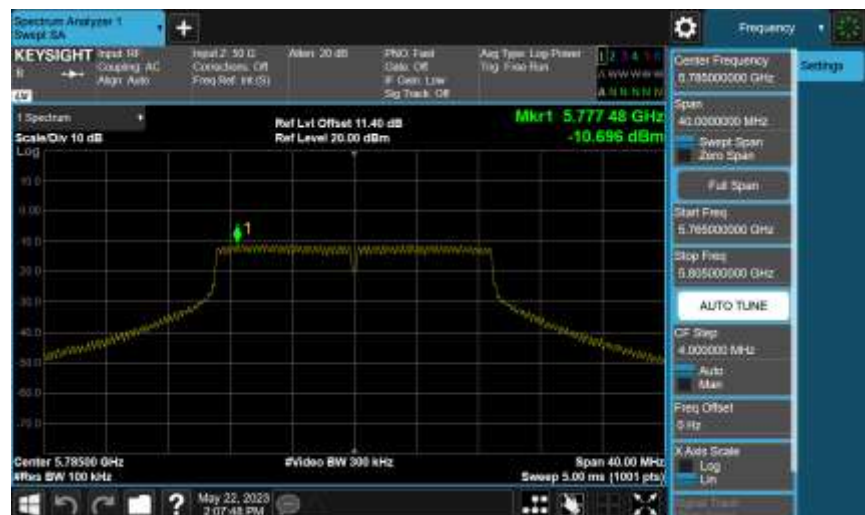


802.11ac VHT20_ANT-0

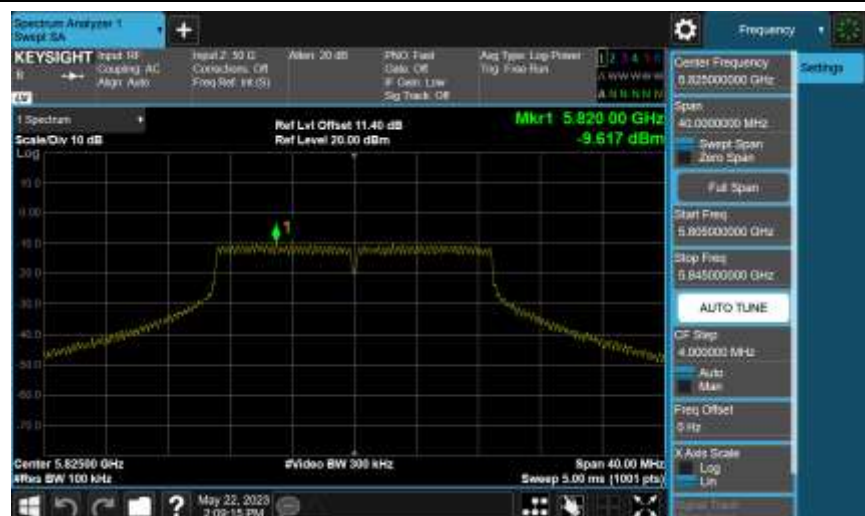
5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5190 MHz

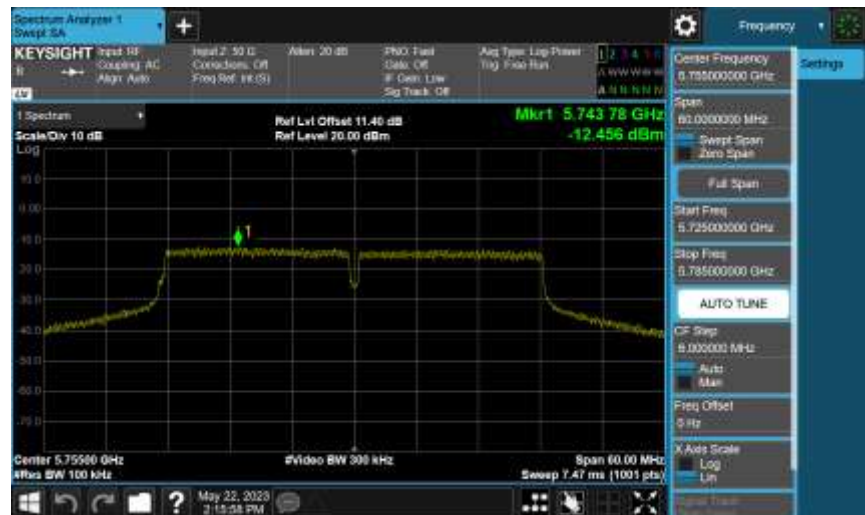


5230 MHz



802.11ac VHT40_ANT-0

5755 MHz



5795 MHz



802.11ac VHT80_ANT-0

5210 MHz



802.11ac VHT80_ANT-0

5775 MHz



26 dB Bandwidth&99% Occupied Bandwidth

802.11a	 5180 MHz
5200 MHz	 5200 MHz
5240 MHz	 5240 MHz

802.11ac VHT20_ANT-0

5180 MHz



5200 MHz



5240 MHz



802.11ac VHT40_ANT-0

5190 MHz



5230 MHz



802.11ac VHT80_ANT-0

5210 MHz



6 dB Bandwidth

802.11a

5745 MHz



5785 MHz



5825 MHz

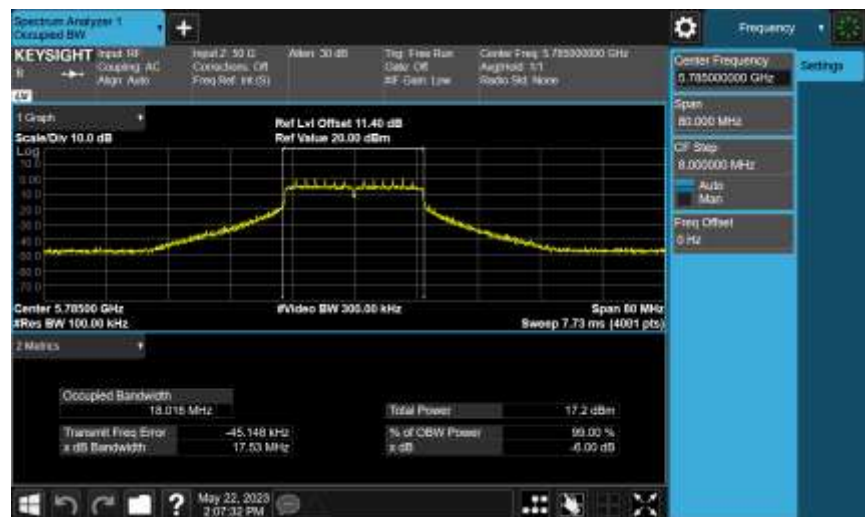


802.11ac VHT20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5755 MHz

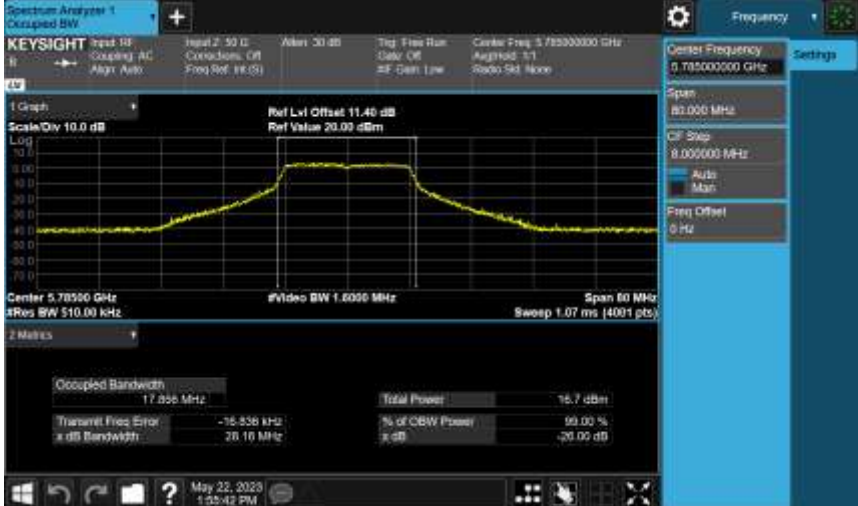


5795 MHz





99% Occupied Bandwidth

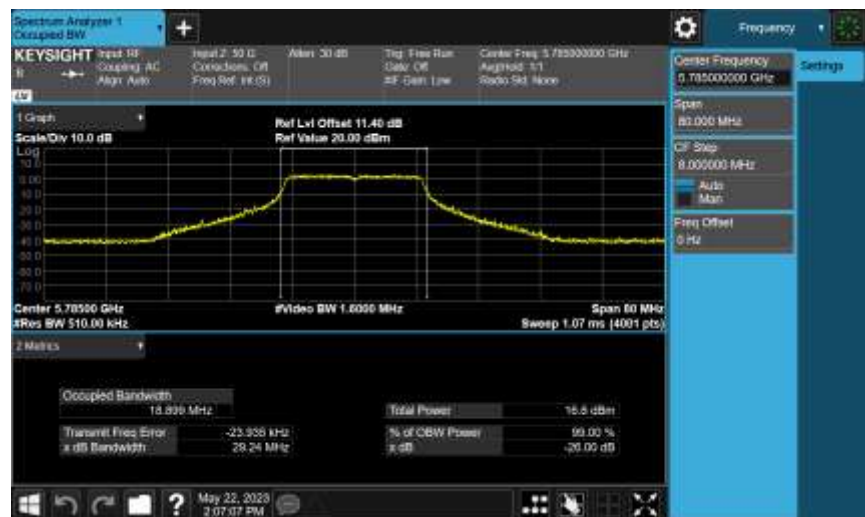
802.11a 5745 MHz	
5785 MHz	
5825 MHz	

802.11ac VHT20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5755 MHz



5795 MHz



802.11ac VHT80_ANT-0

5775 MHz

