

Appendix B. Test Plots

QCN5054

Duty Cycle

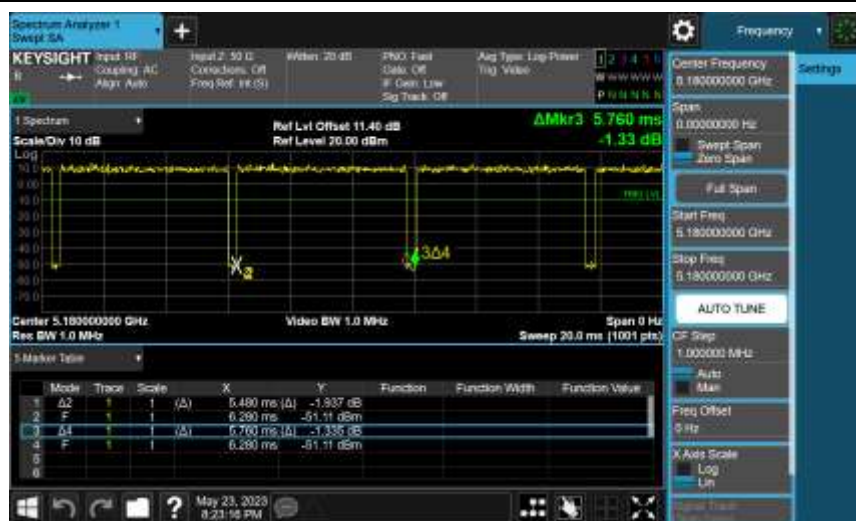
802.11a

On+off time



802.11ax HE20

On+off time



802.11ax HE40

On+off time



802.11ax HE80

On+off time



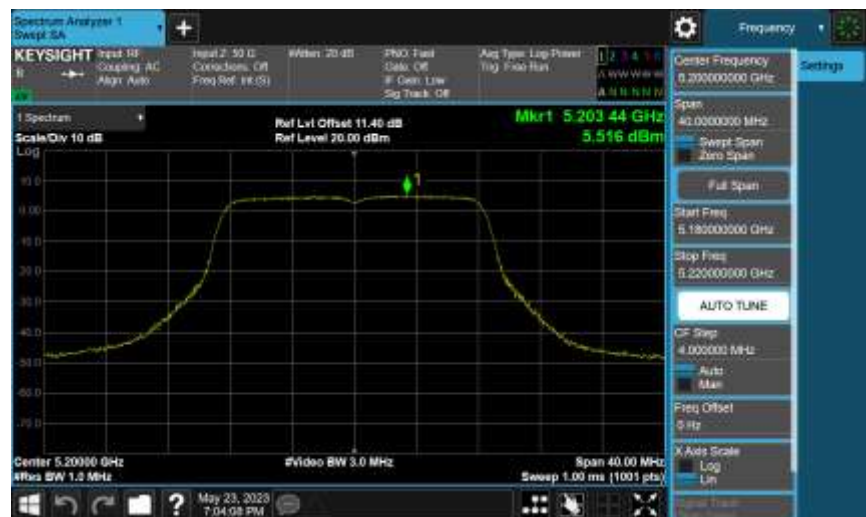
Maximum Power Spectral Density

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 HE20_ANT-1

5745 MHz



5785 MHz



5825 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

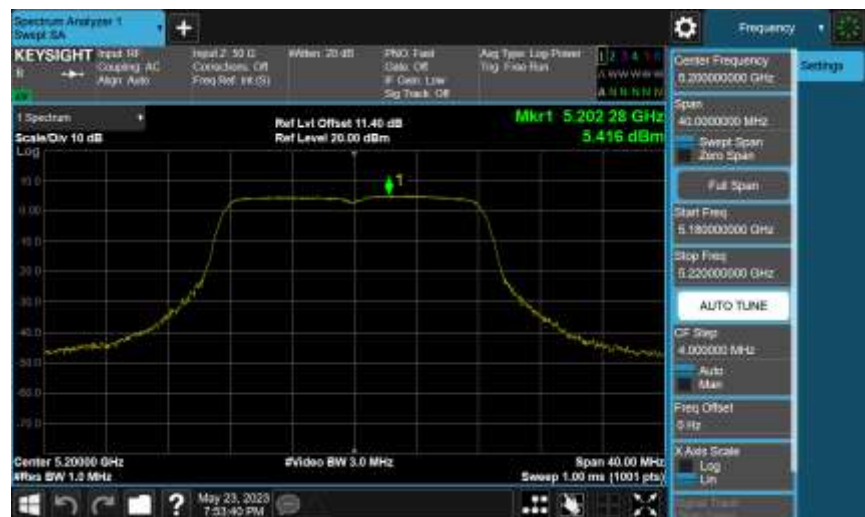


802.11a_ANT-2

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



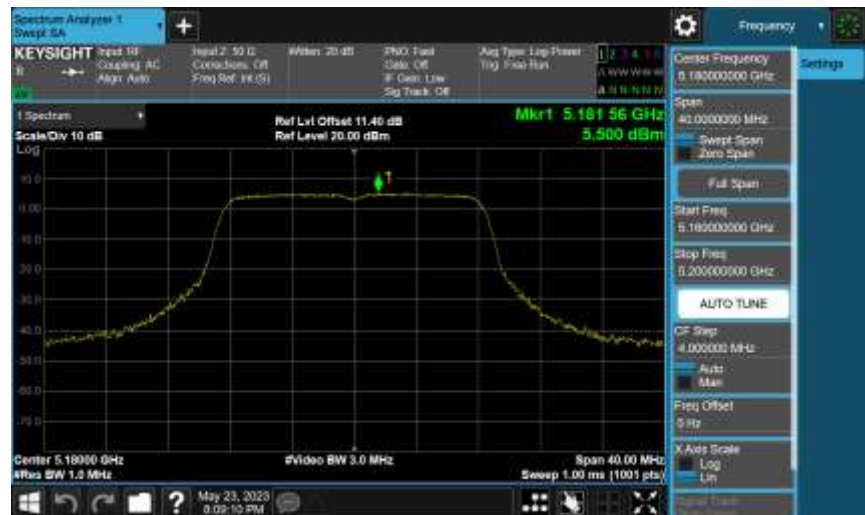
802.11ax HE80_ANT-2

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

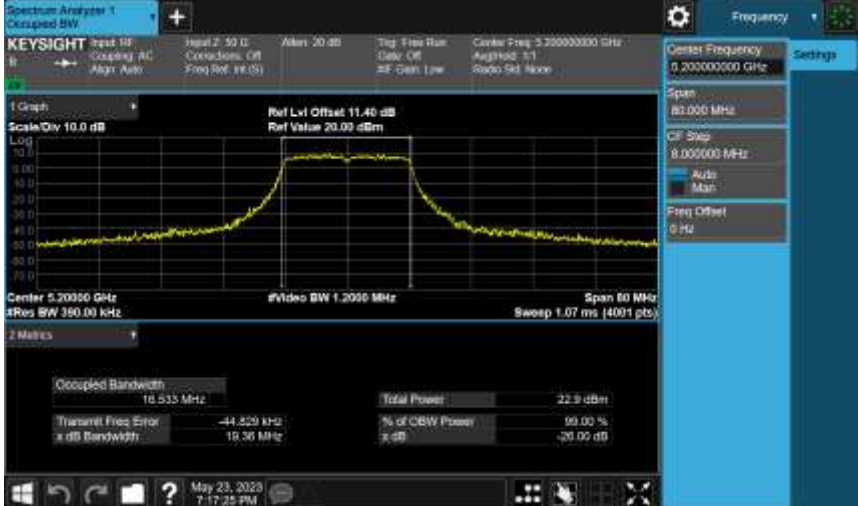


802.11ax HE80_ANT-3

5775 MHz

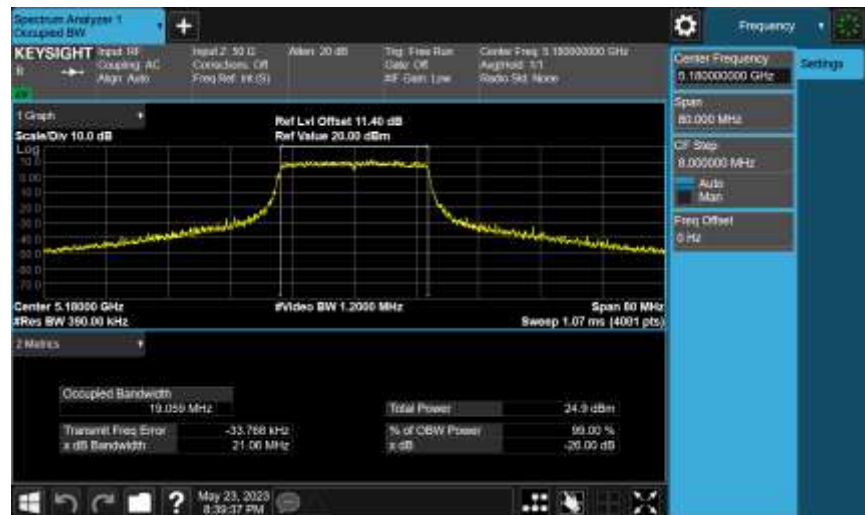


26 dB Bandwidth&99% Occupied Bandwidth

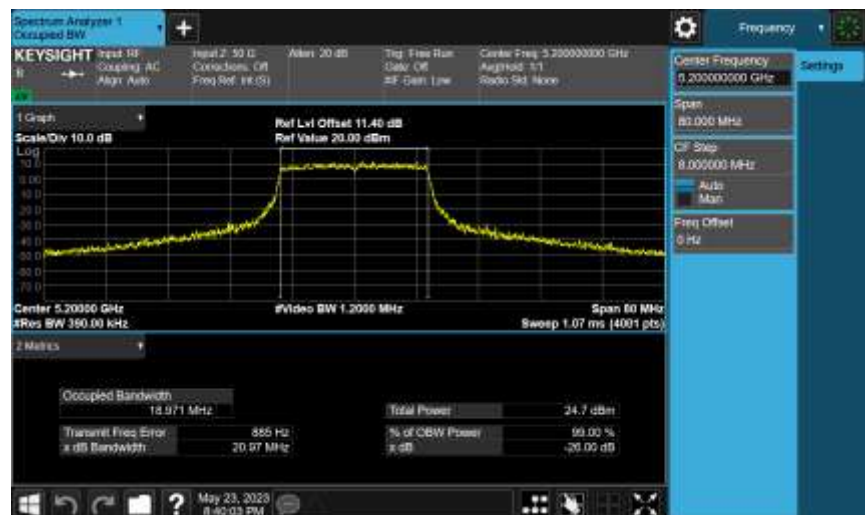
802.11a_ANT-0	 5180 MHz
5200 MHz	 5200 MHz
5240 MHz	 5240 MHz

802.11ax HE20_ANT-0

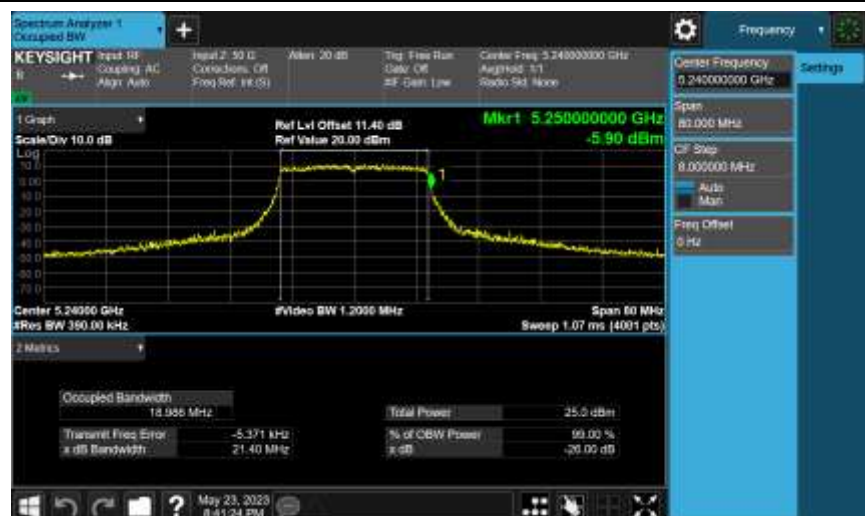
5180 MHz



5200 MHz

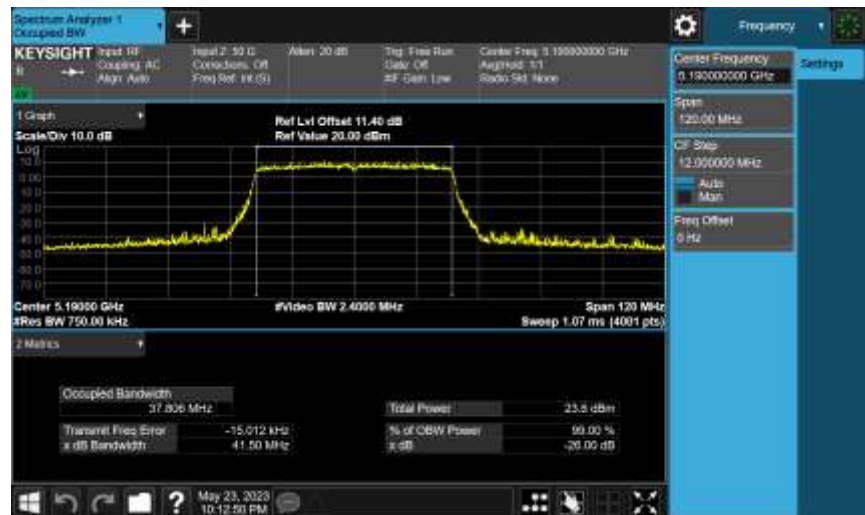


5240 MHz



802.11ax HE40_ANT-0

5190 MHz



5230 MHz



802.11ax HE80_ANT-0

5210 MHz

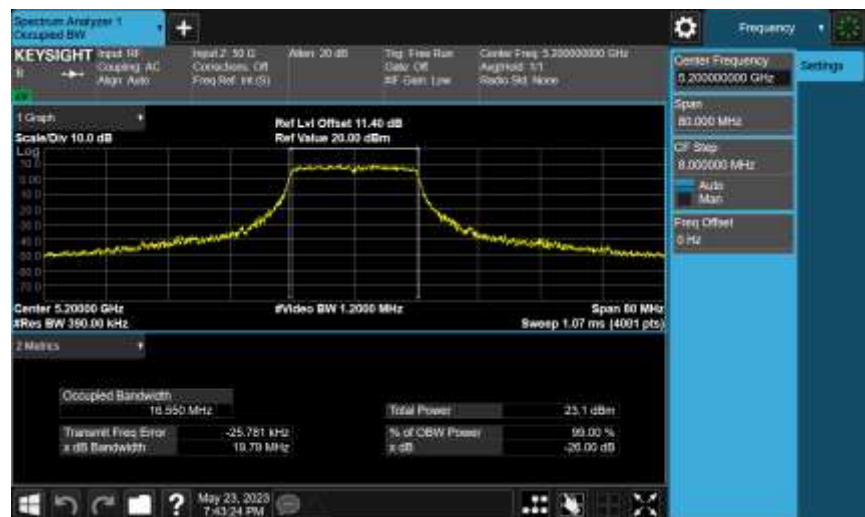


802.11a_ANT-1

5180 MHz



5200 MHz



5240 MHz

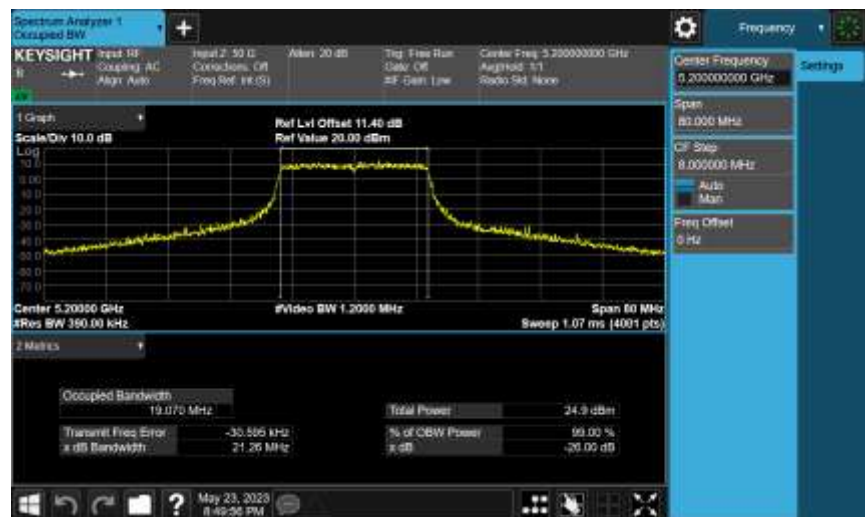


802.11ax HE20_ANT-1

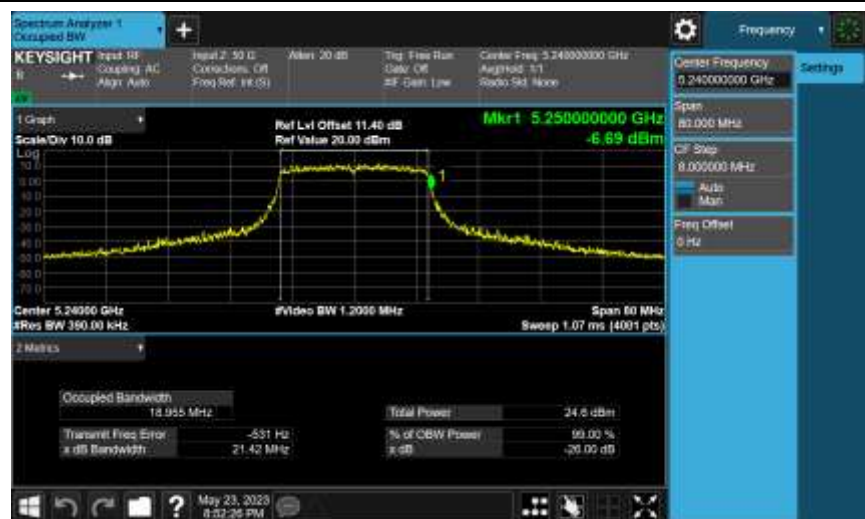
5180 MHz



5200 MHz

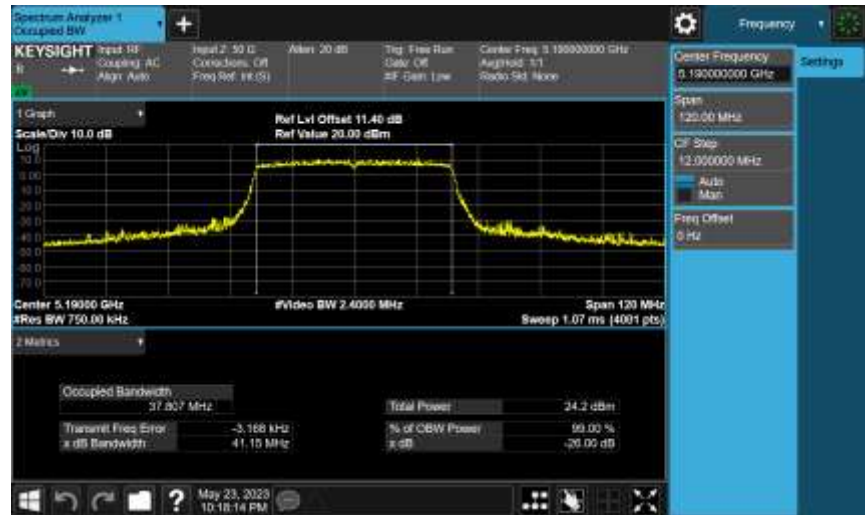


5240 MHz



802.11ax HE40_ANT-1

5190 MHz



5230 MHz



802.11ax HE80_ANT-1

5210 MHz

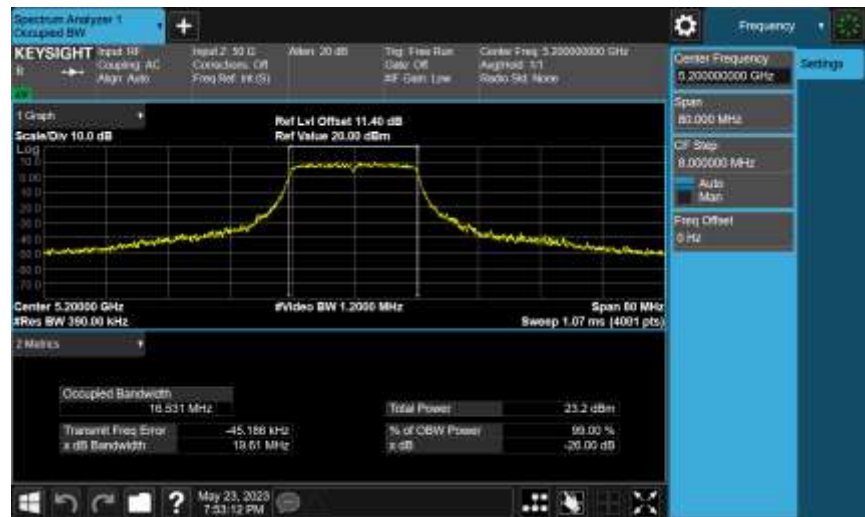


802.11a_ANT-2

5180 MHz



5200 MHz

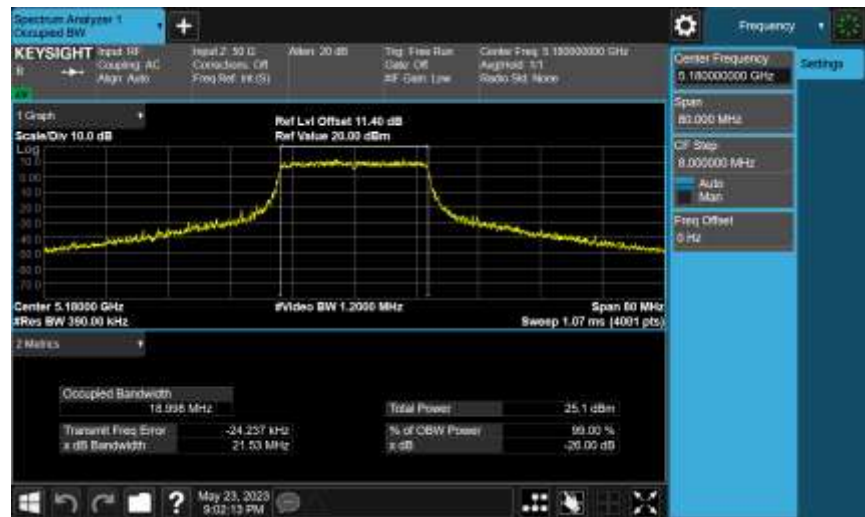


5240 MHz

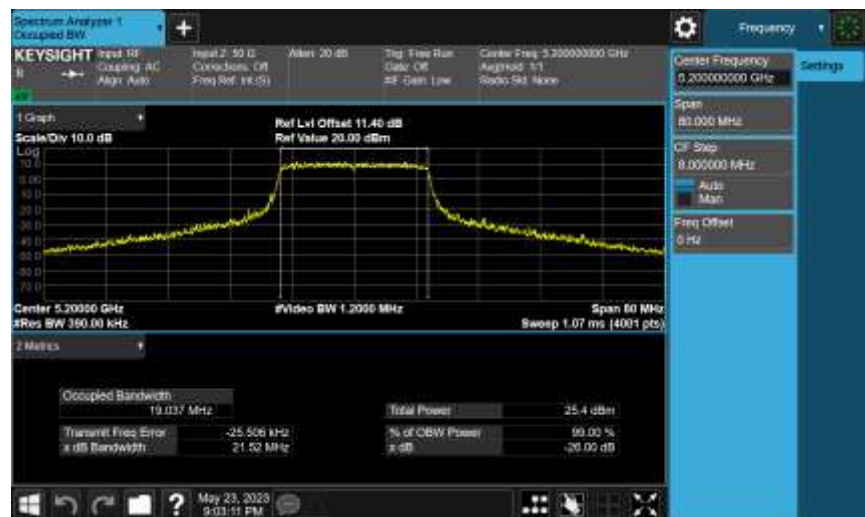


802.11ax HE20_ANT-2

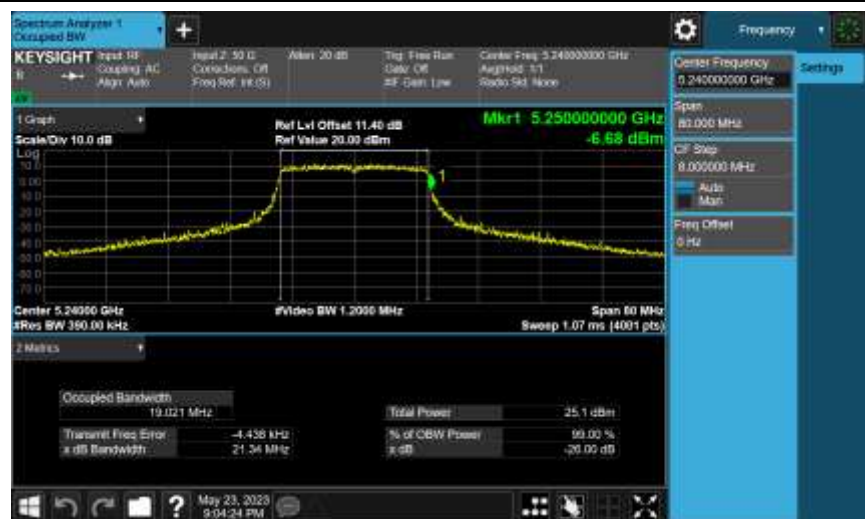
5180 MHz



5200 MHz

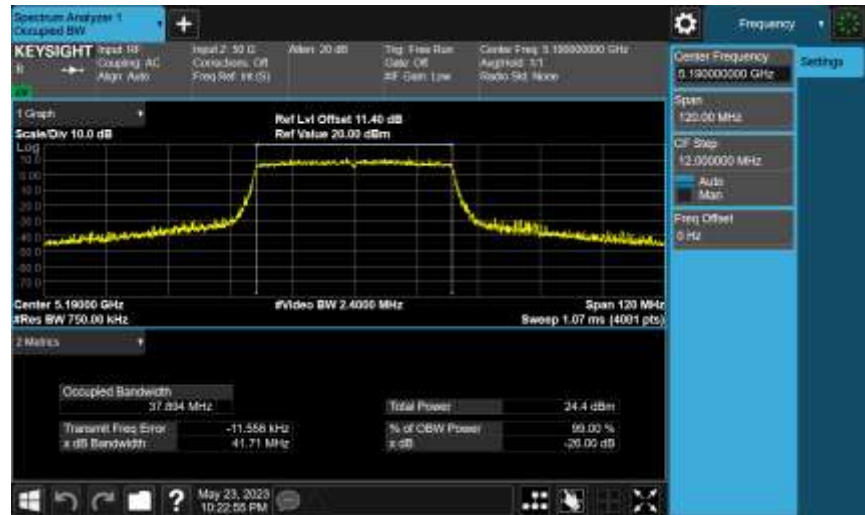


5240 MHz



802.11ax HE40_ANT-2

5190 MHz

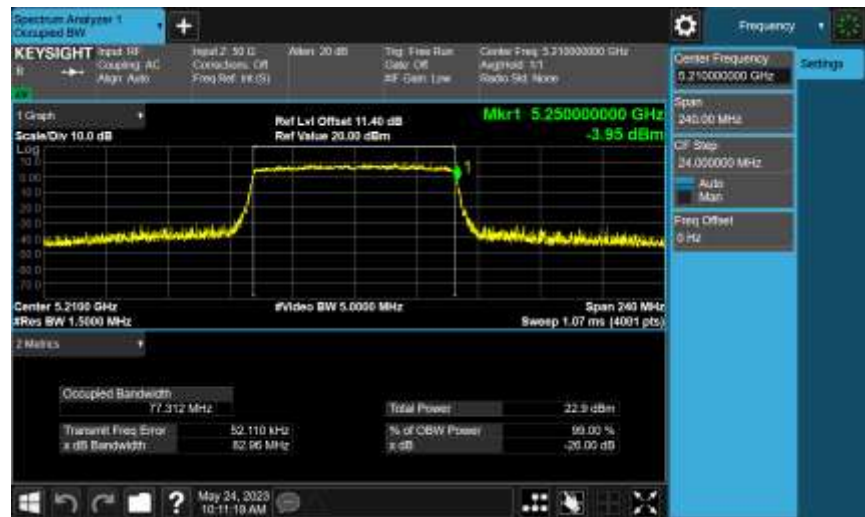


5230 MHz



802.11ax HE80_ANT-2

5210 MHz



802.11a_ANT-3

5180 MHz



5200 MHz



5240 MHz

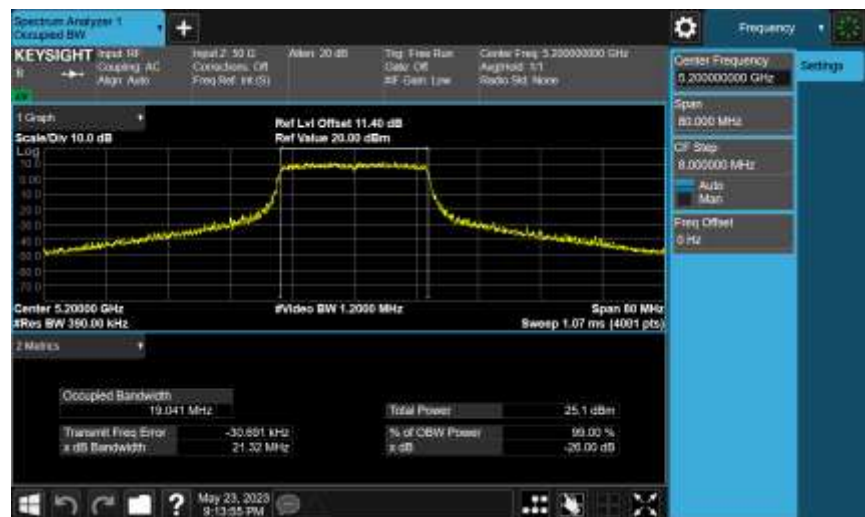


802.11ax HE20_ANT-3

5180 MHz



5200 MHz



5240 MHz



802.11ax HE40_ANT-3

5190 MHz

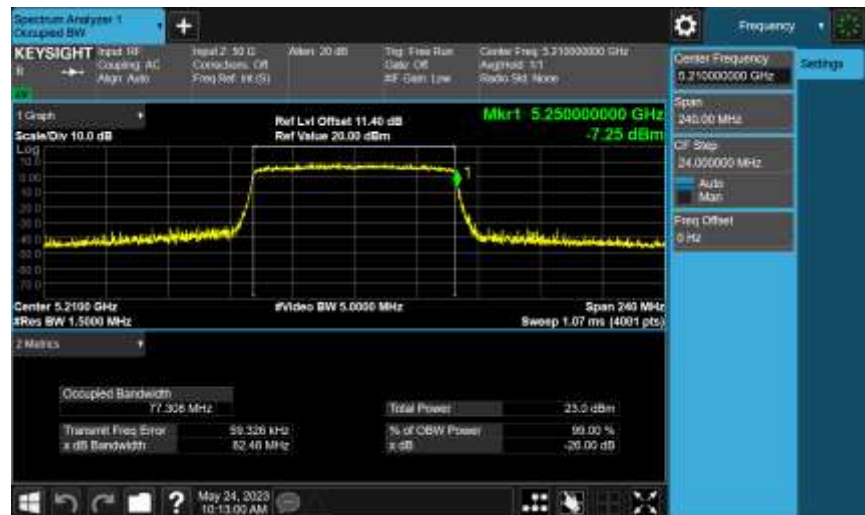


5230 MHz



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	 Center Frequency: 5.74500000 GHz Span: 80.000 MHz CF Step: 8.000000 MHz Auto Man Freq Offset: 0 Hz 1 Graph Scale/Div 10.0 dB Log Ref Lvl Offset 11.40 dB Ref Value 20.00 dBm Center 5.74500 GHz #Video BW 1.6000 MHz Span 80 MHz Res BW 510.00 kHz Sweep 1.07 ms (4091 pts) 2 Metrics Occupied Bandwidth: 27.231 MHz Total Power: -25.5 dBm Transmit Freq Error: -124.57 kHz % of CBW Power: 99.00 % 3 dB Bandwidth: 41.69 MHz % dB: -20.00 dB May 23, 2020 7:10:37 PM
5785 MHz	 Center Frequency: 5.78500000 GHz Span: 80.000 MHz CF Step: 8.000000 MHz Auto Man Freq Offset: 0 Hz 1 Graph Scale/Div 10.0 dB Log Ref Lvl Offset 11.40 dB Ref Value 20.00 dBm Center 5.78500 GHz #Video BW 1.6000 MHz Span 80 MHz Res BW 510.00 kHz Sweep 1.07 ms (4091 pts) 2 Metrics Occupied Bandwidth: 28.041 MHz Total Power: -25.5 dBm Transmit Freq Error: -202.61 kHz % of CBW Power: 99.00 % 3 dB Bandwidth: 42.58 MHz % dB: -20.00 dB May 23, 2020 7:13:18 PM
5825 MHz	 Center Frequency: 5.82500000 GHz Span: 80.000 MHz CF Step: 8.000000 MHz Auto Man Freq Offset: 0 Hz 1 Graph Scale/Div 10.0 dB Log Ref Lvl Offset 11.40 dB Ref Value 20.00 dBm Center 5.82500 GHz #Video BW 1.6000 MHz Span 80 MHz Res BW 510.00 kHz Sweep 1.07 ms (4091 pts) 2 Metrics Occupied Bandwidth: 28.283 MHz Total Power: -25.3 dBm Transmit Freq Error: -241.03 kHz % of CBW Power: 99.00 % 3 dB Bandwidth: 42.83 MHz % dB: -20.00 dB May 23, 2020 7:15:04 PM

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

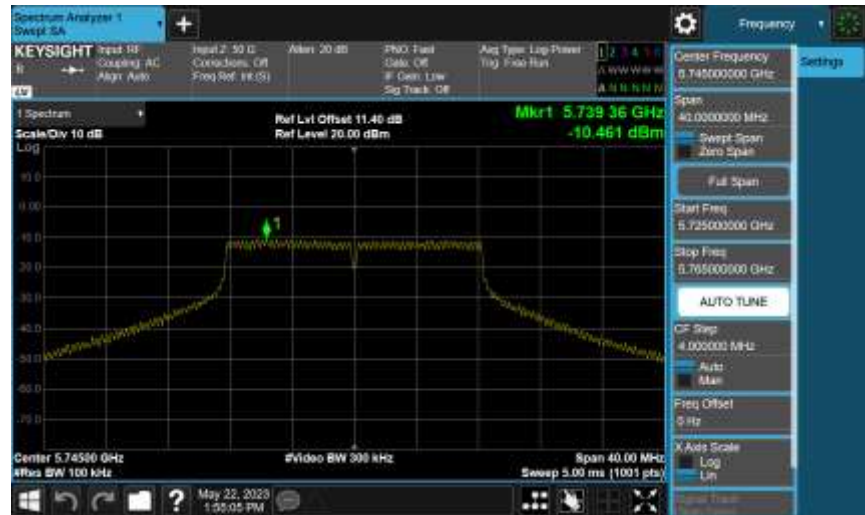


5240 MHz

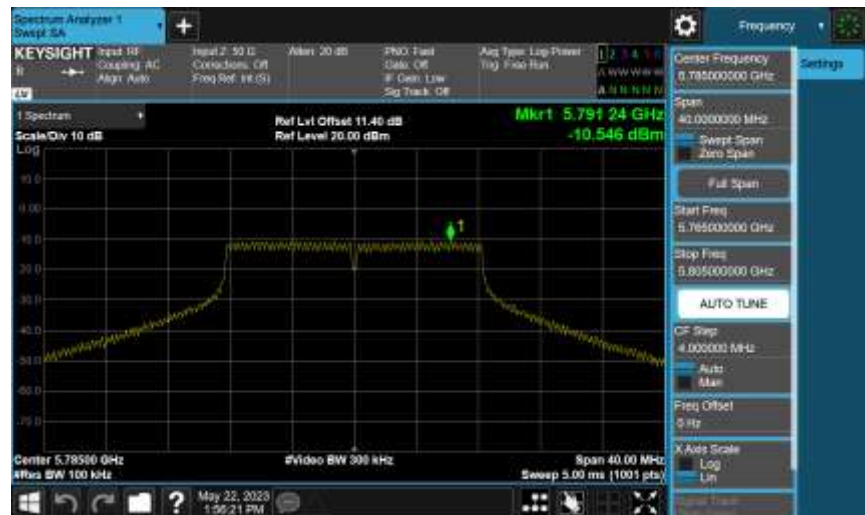


802.11a

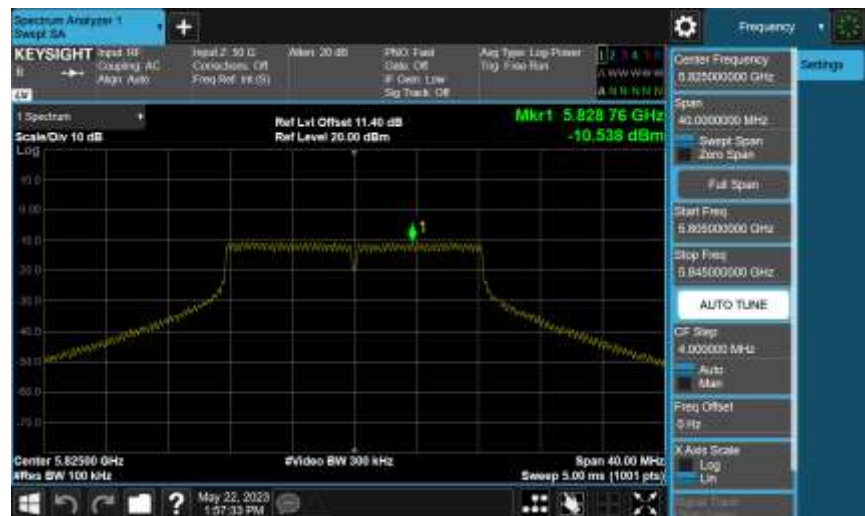
5745 MHz



5785 MHz



5825 MHz



802.11ac VHT20_ANT-0

5180 MHz



5200 MHz

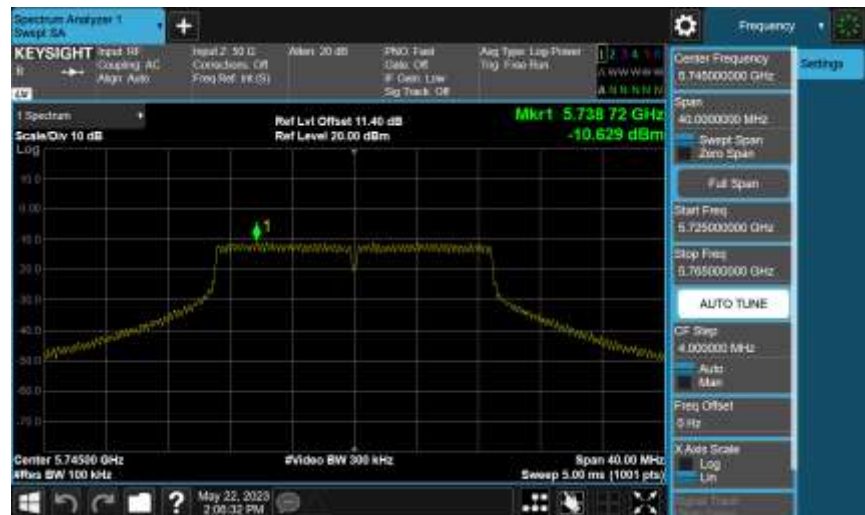


5240 MHz

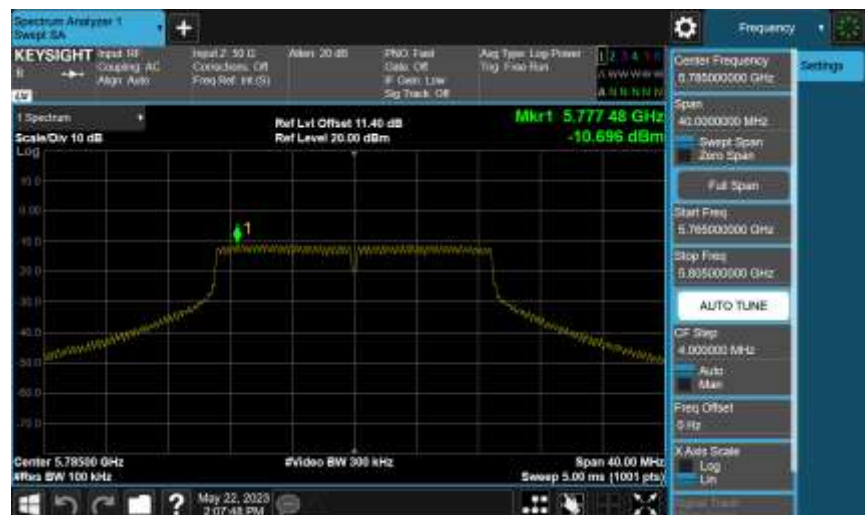


802.11ac VHT20_ANT-0

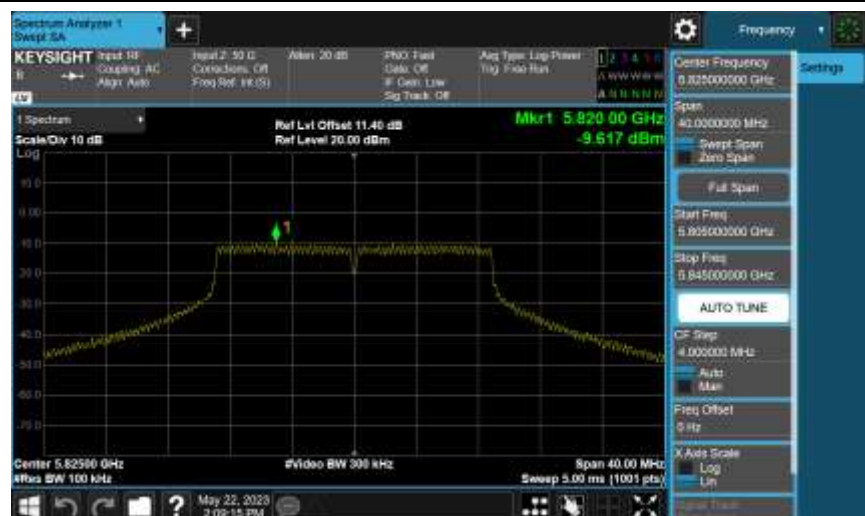
5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5190 MHz

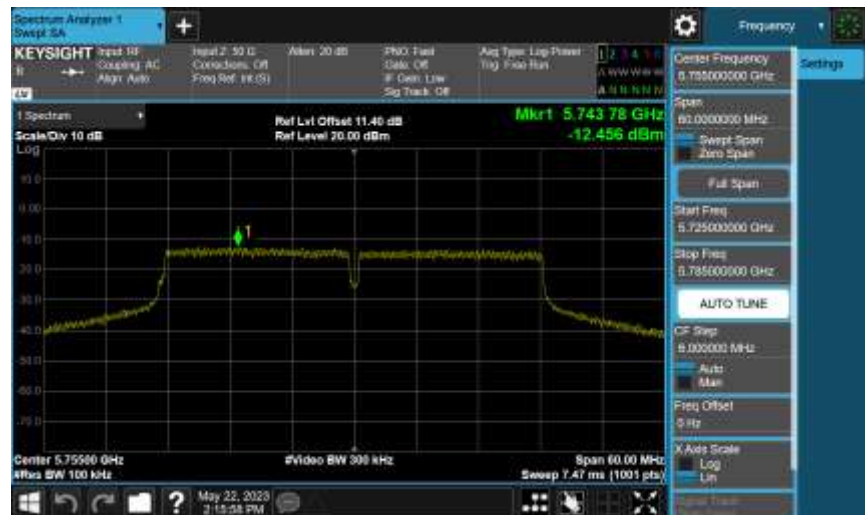


5230 MHz



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	
5240 MHz	

802.11ac VHT20_ANT-0

5180 MHz



5200 MHz



5240 MHz



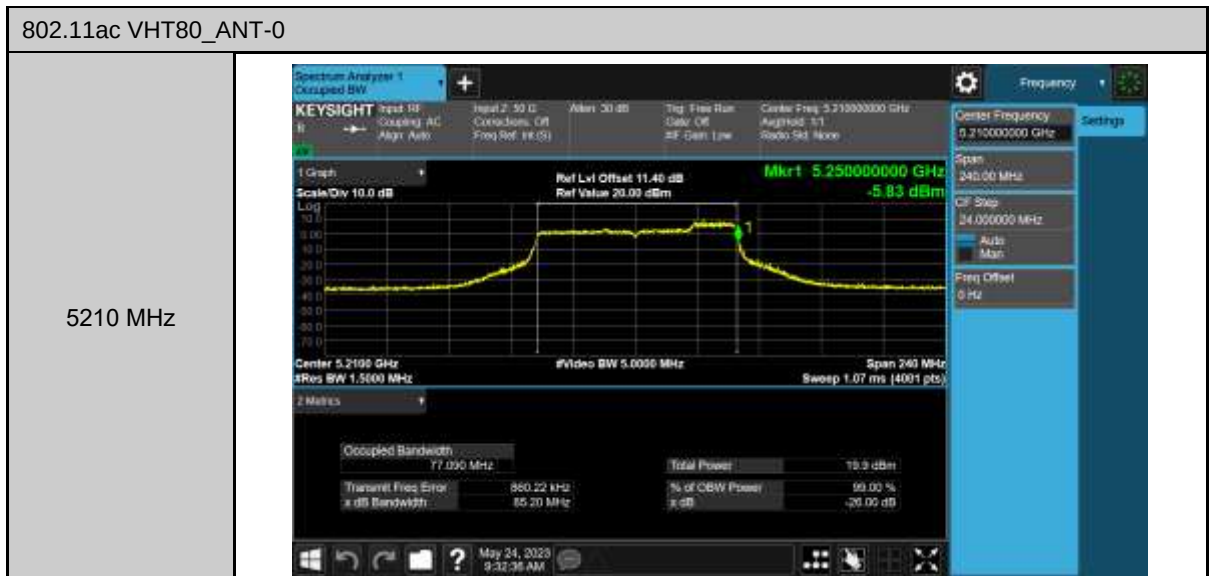
802.11ac VHT40_ANT-0

5190 MHz



5230 MHz





6 dB Bandwidth

802.11a

5745 MHz



5785 MHz



5825 MHz

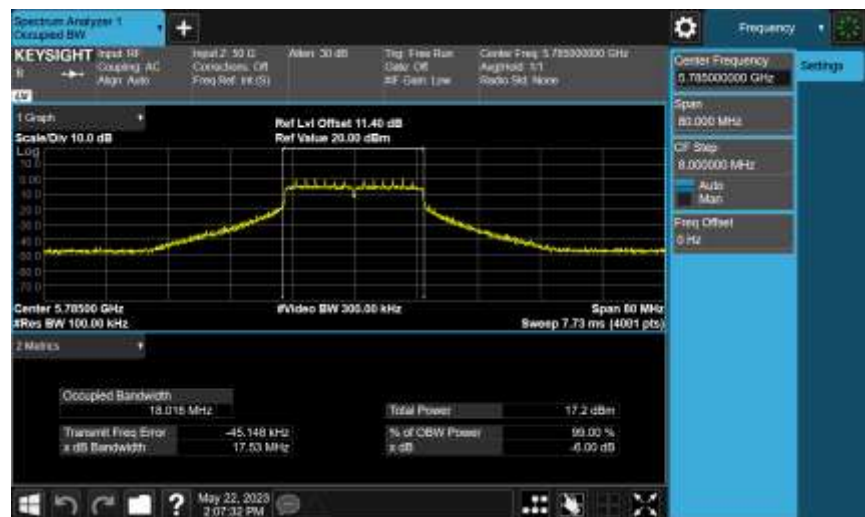


802.11ac VHT20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5755 MHz



5795 MHz



802.11ac VHT80_ANT-0

5775 MHz



99% Occupied Bandwidth

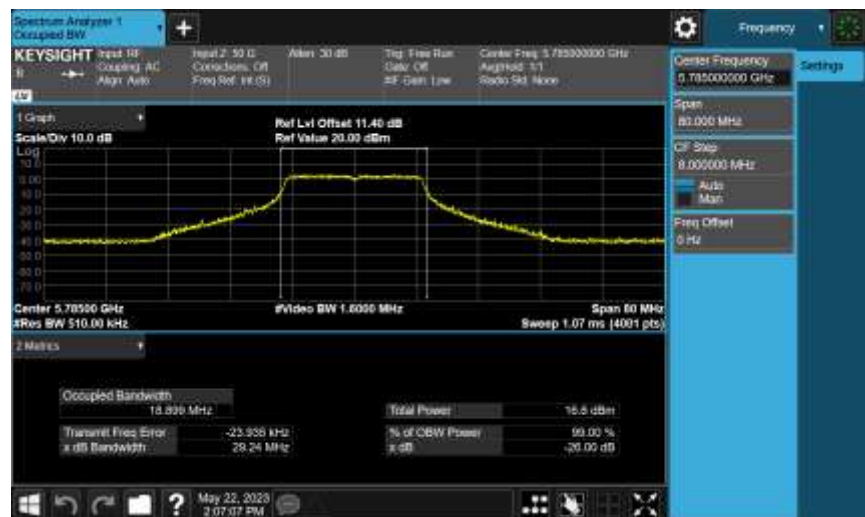
802.11a 5745 MHz	
5785 MHz	
5825 MHz	

802.11ac VHT20_ANT-0

5745 MHz



5785 MHz



5825 MHz



802.11ac VHT40_ANT-0

5755 MHz



5795 MHz



