

26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5180.0	21.065	16.522
5200.0	23.994	16.599
5240.0	26.953	16.755
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5180.0	20.299	16.509
5200.0	25.935	16.627
5240.0	26.530	16.583

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5180.0	20.477	17.660
5200.0	27.581	17.768
5240.0	25.277	17.800
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5180.0	20.732	17.673
5200.0	25.649	17.773
5240.0	24.054	17.740

Note: The 99 % occupied bandwidth not crossed 5250 MHz.

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5190.0	40.502	36.138
5230.0	69.209	36.658
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5190.0	39.969	36.029
5230.0	62.423	36.462

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5210.0	83.212	75.857
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5210.0	83.910	75.951

Note: The 99 % occupied bandwidth not crossed 5250 MHz.

Beamforming on

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5180.0	20.378	17.628
5200.0	20.423	17.639
5240.0	20.124	17.641
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5180.0	20.250	17.641
5200.0	20.143	17.647
5240.0	20.304	17.647

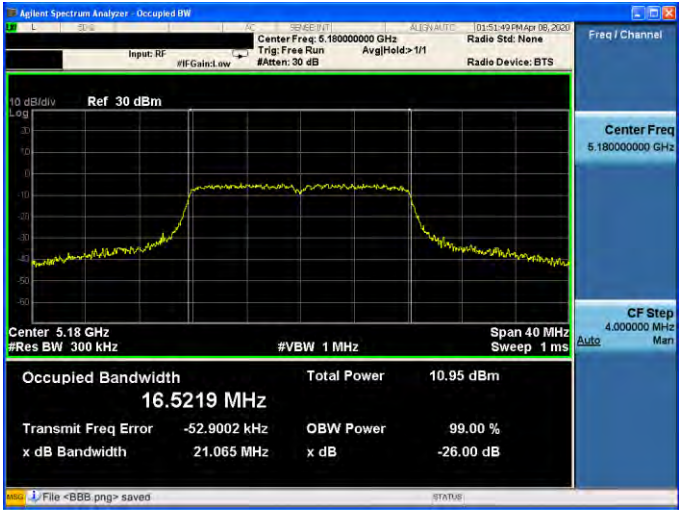
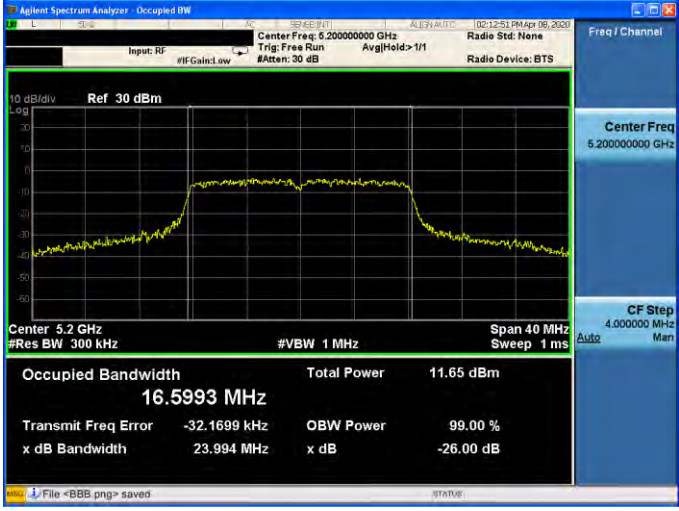
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5190.0	40.151	36.021
5230.0	40.156	36.057
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5190.0	40.003	36.111
5230.0	39.892	36.078

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode	
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-0	
5210.0	83.919	76.107
Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
	ANT-1	
5210.0	82.629	75.778

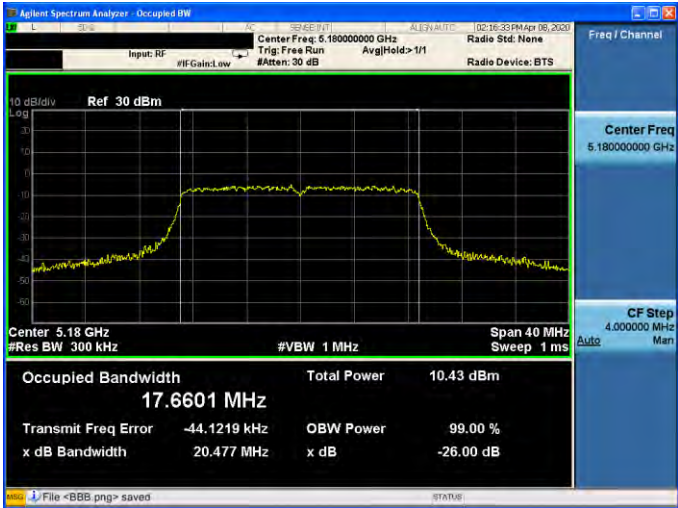
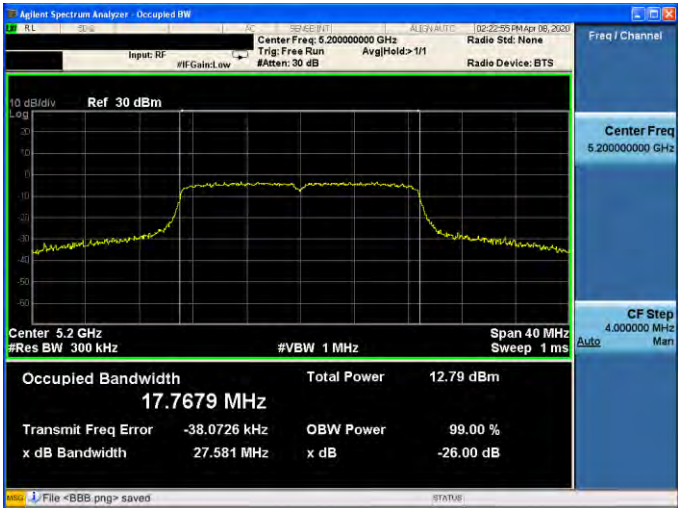
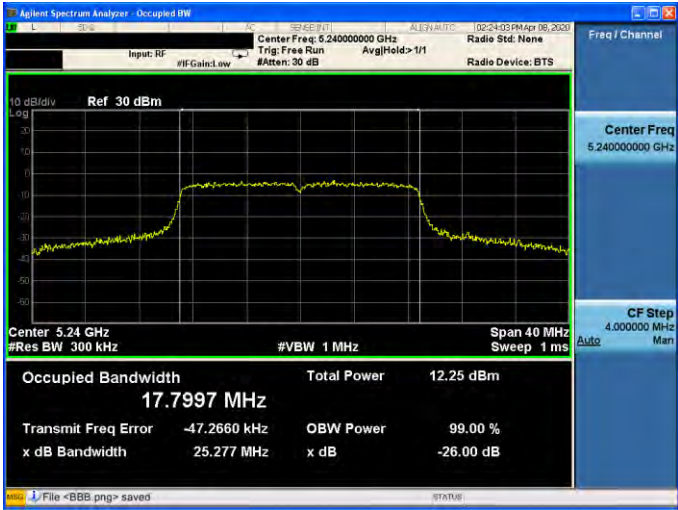
Note: The 99 % occupied bandwidth not crossed 5250 MHz.

Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0

5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.5219 MHz Total Power 10.95 dBm Transmit Freq Error -52.9002 kHz OBW Power 99.00 % x dB Bandwidth 21.065 MHz x dB -26.00 dB File <BBS.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.5993 MHz Total Power 11.65 dBm Transmit Freq Error -32.1699 kHz OBW Power 99.00 % x dB Bandwidth 23.994 MHz x dB -26.00 dB File <BBS.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.7554 MHz Total Power 12.63 dBm Transmit Freq Error -36.1465 kHz OBW Power 99.00 % x dB Bandwidth 26.953 MHz x dB -26.00 dB File <BBS.png> saved

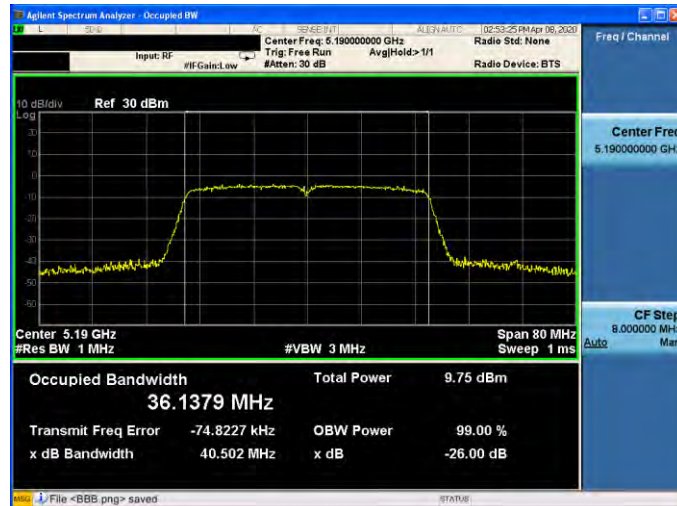


Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-0	
5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Input: RF Ref: 30 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.6601 MHz Total Power 10.43 dBm Transmit Freq Error -44.1219 kHz OBW Power 99.00 % x dB Bandwidth 20.477 MHz x dB -26.00 dB File <BBB.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Input: RF Ref: 30 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.7679 MHz Total Power 12.79 dBm Transmit Freq Error -38.0726 kHz OBW Power 99.00 % x dB Bandwidth 27.581 MHz x dB -26.00 dB File <BBB.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Input: RF Ref: 30 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.7997 MHz Total Power 12.25 dBm Transmit Freq Error -47.2660 kHz OBW Power 99.00 % x dB Bandwidth 25.277 MHz x dB -26.00 dB File <BBB.png> saved

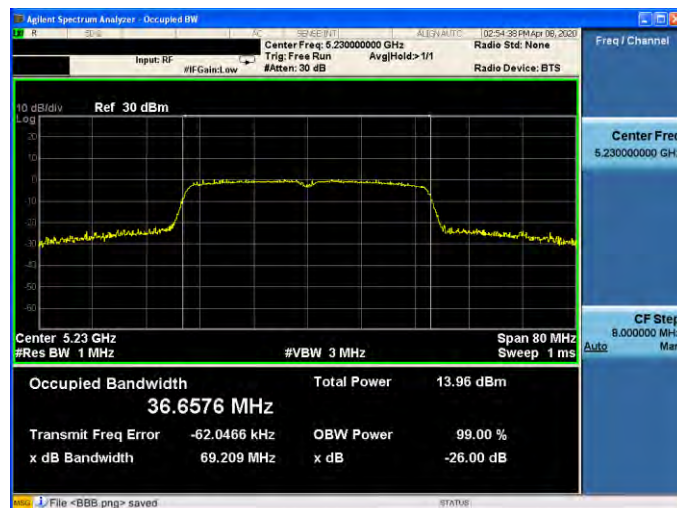


Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0

5190 MHz

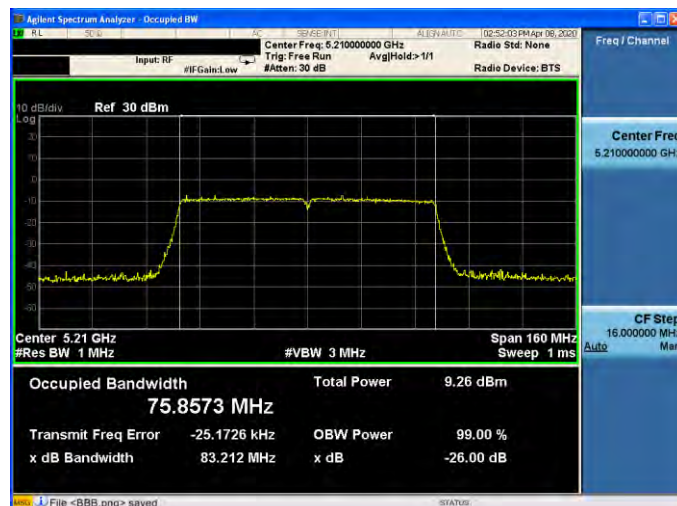


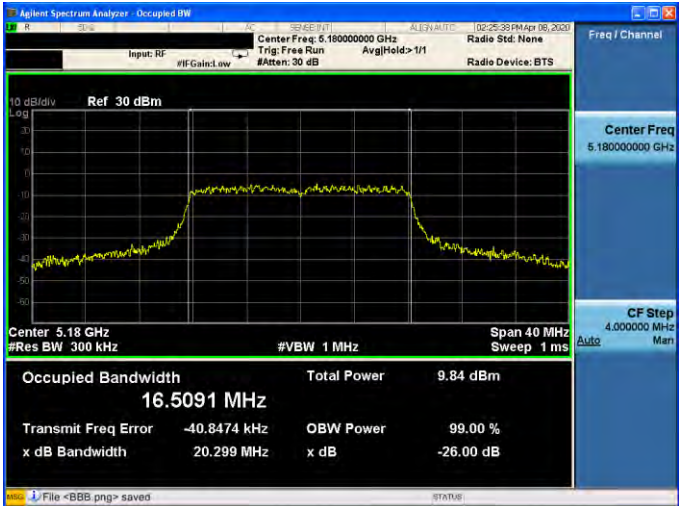
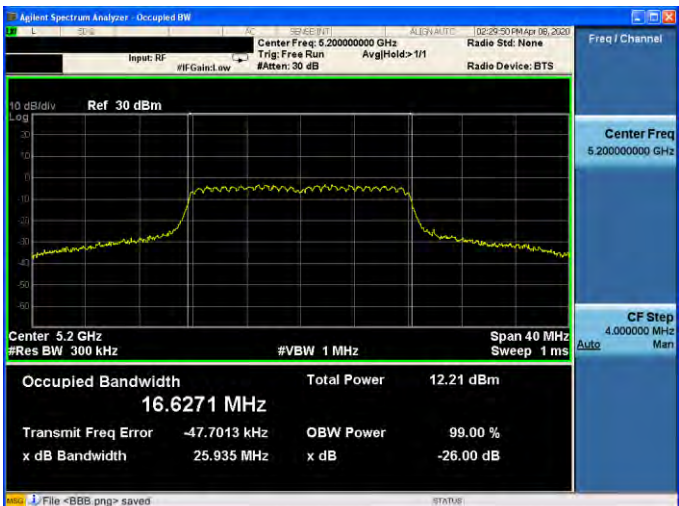
5230 MHz



Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-0

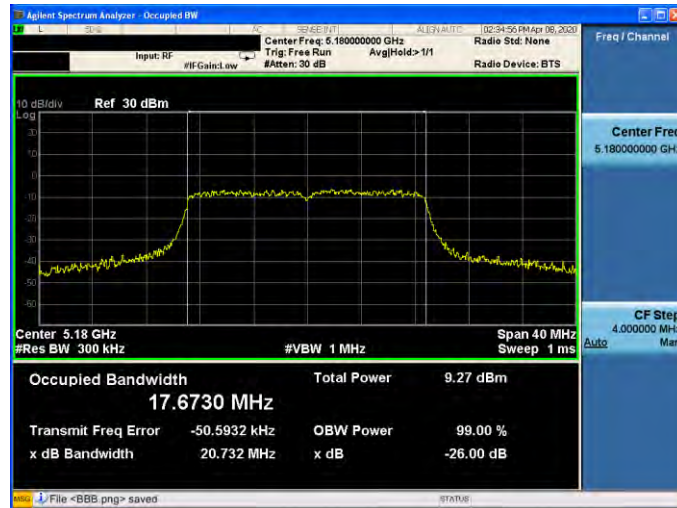
5210 MHz



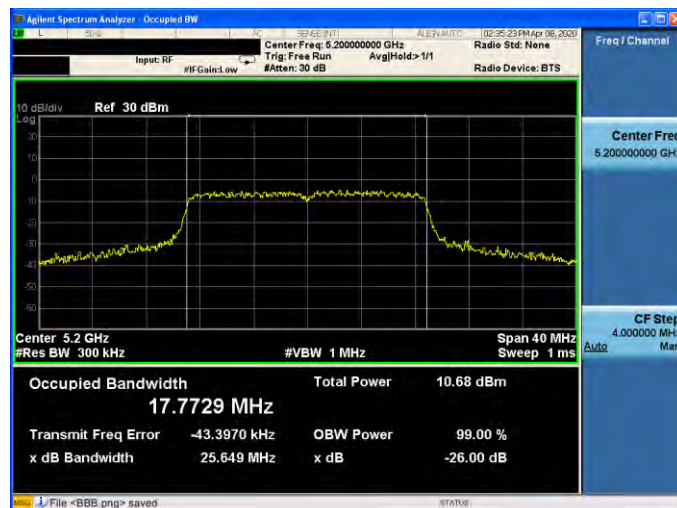
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.5091 MHz Total Power 9.84 dBm Transmit Freq Error -40.8474 kHz OBW Power 99.00 % x dB Bandwidth 20.299 MHz x dB -26.00 dB File <BBS.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.6271 MHz Total Power 12.21 dBm Transmit Freq Error -47.7013 kHz OBW Power 99.00 % x dB Bandwidth 25.935 MHz x dB -26.00 dB File <BBS.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 16.5828 MHz Total Power 11.43 dBm Transmit Freq Error -46.7413 kHz OBW Power 99.00 % x dB Bandwidth 26.530 MHz x dB -26.00 dB File <BBS.png> saved

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-1

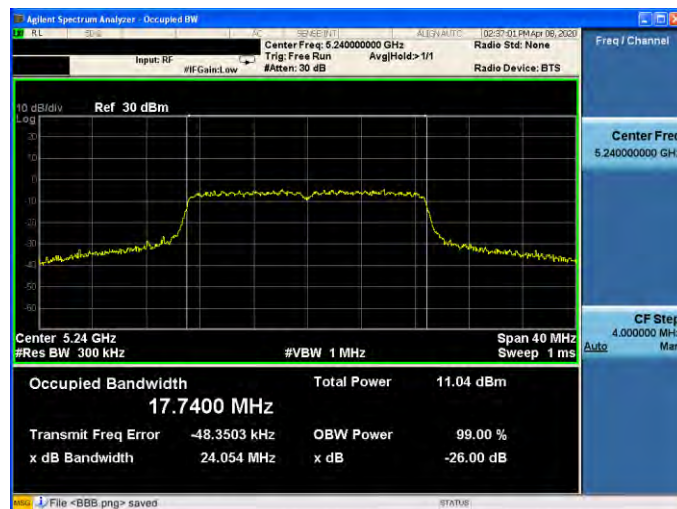
5180 MHz

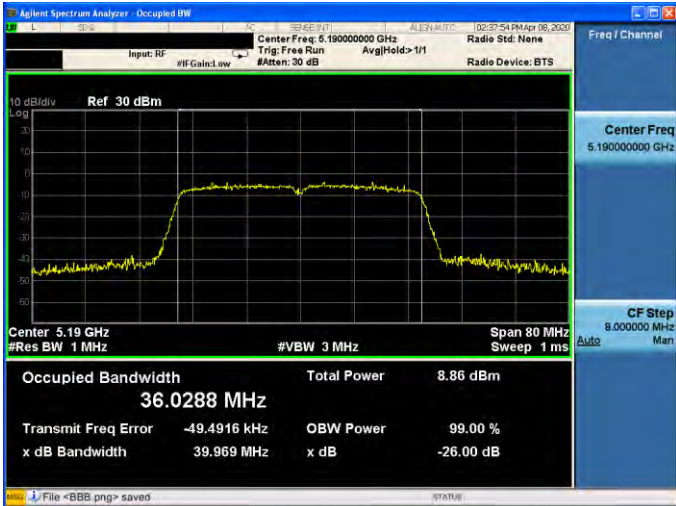
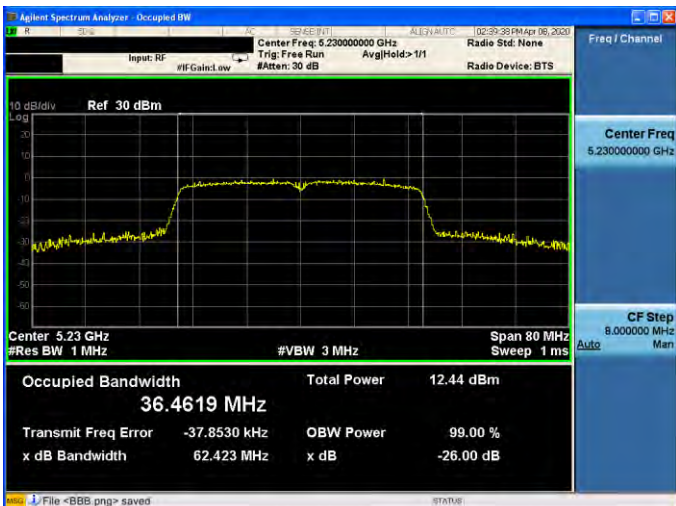
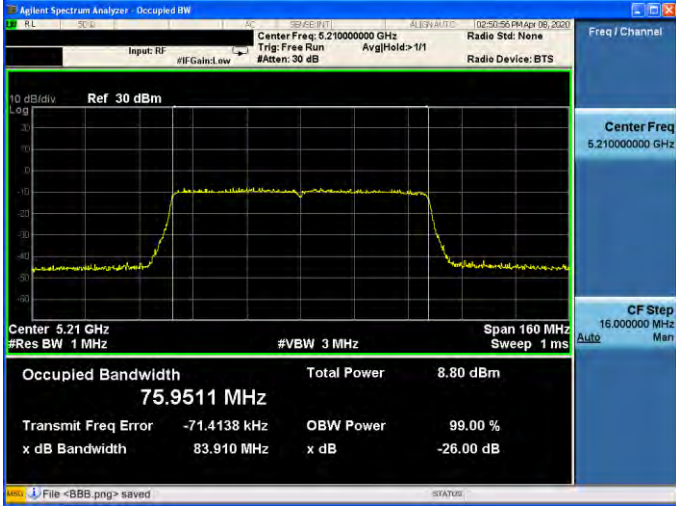


5200 MHz



5240 MHz

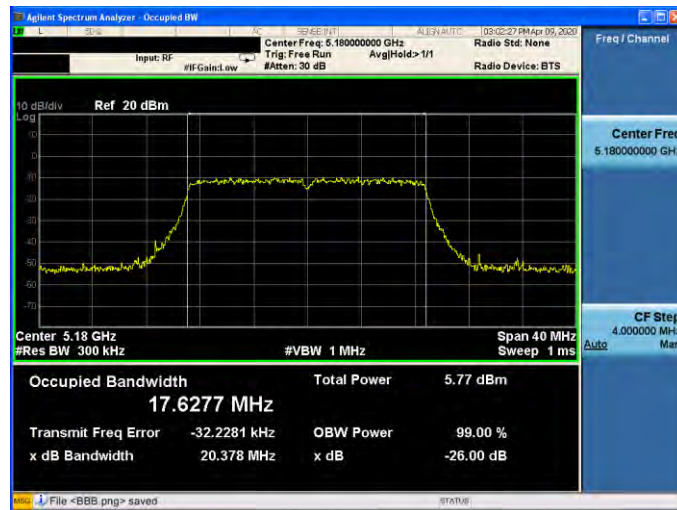


Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.19000000 GHz Span: 80 MHz Occupied Bandwidth: 36.0288 MHz Total Power: 8.86 dBm Transmit Freq Error: -49.4916 kHz OBW Power: 99.00 % x dB Bandwidth: 39.969 MHz x dB: -26.00 dB
5230 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.23000000 GHz Span: 80 MHz Occupied Bandwidth: 36.4619 MHz Total Power: 12.44 dBm Transmit Freq Error: -37.8530 kHz OBW Power: 99.00 % x dB Bandwidth: 62.423 MHz x dB: -26.00 dB
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-1	
5210 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.21000000 GHz Span: 160 MHz Occupied Bandwidth: 75.9511 MHz Total Power: 8.80 dBm Transmit Freq Error: -71.4138 kHz OBW Power: 99.00 % x dB Bandwidth: 83.910 MHz x dB: -26.00 dB

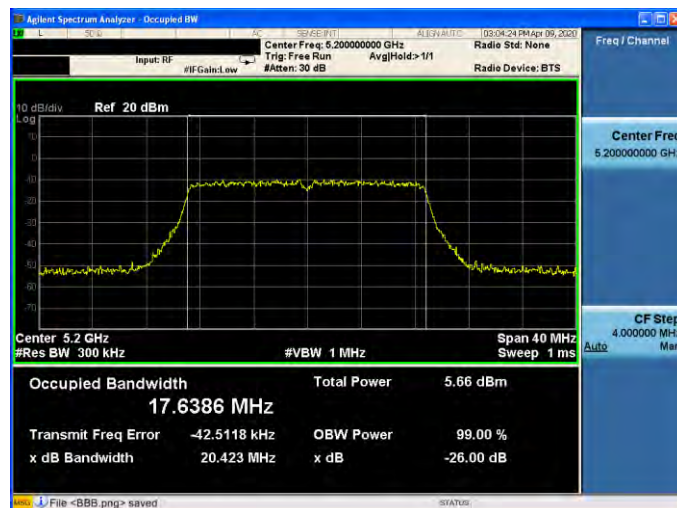
Beamforming on

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-0

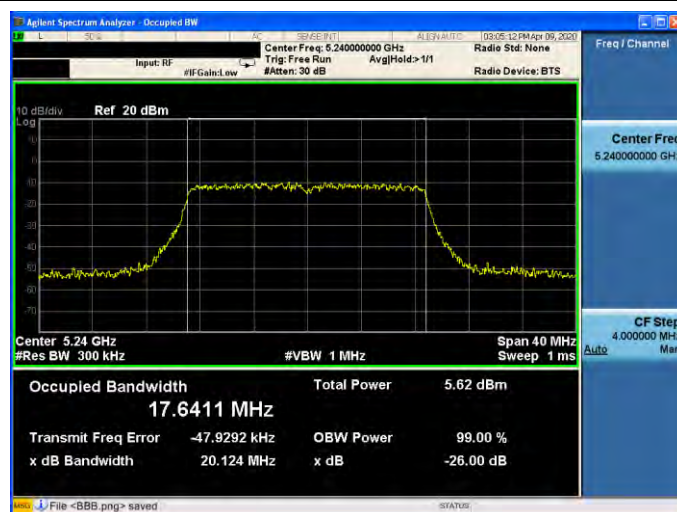
5180 MHz



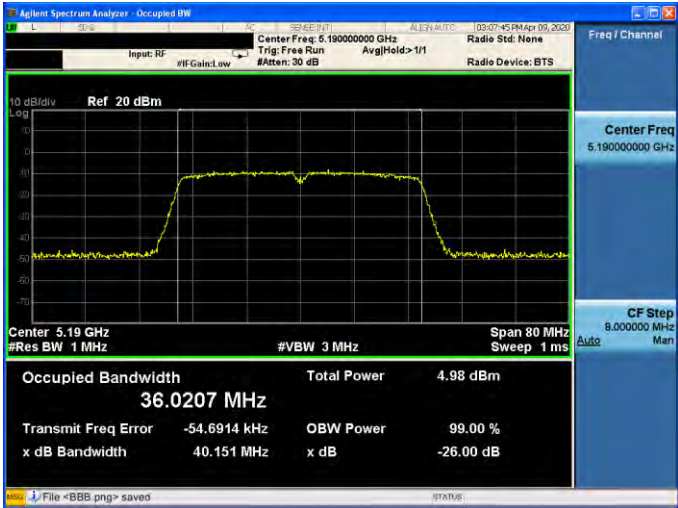
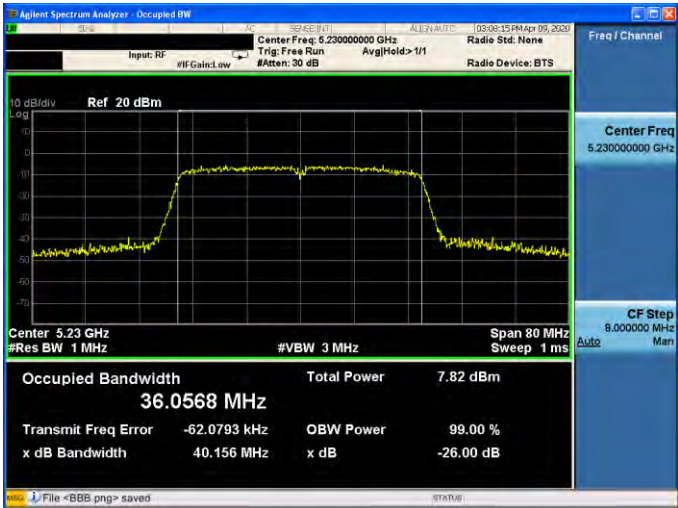
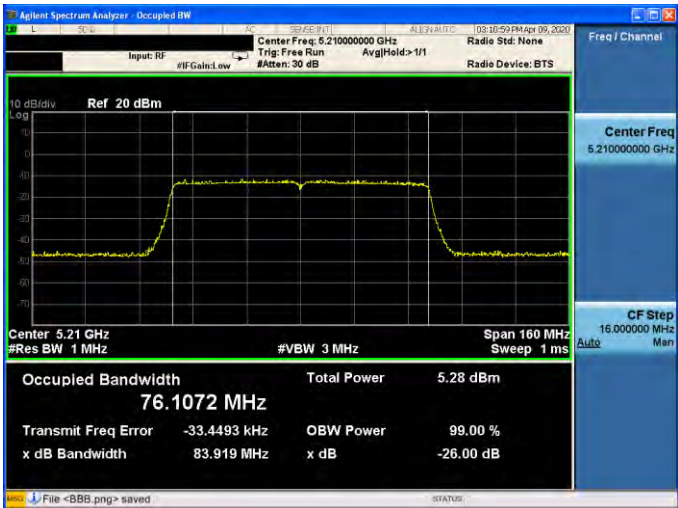
5200 MHz

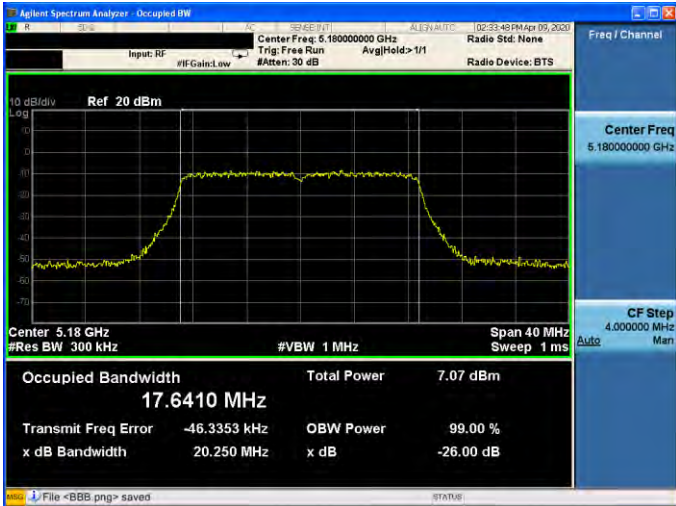
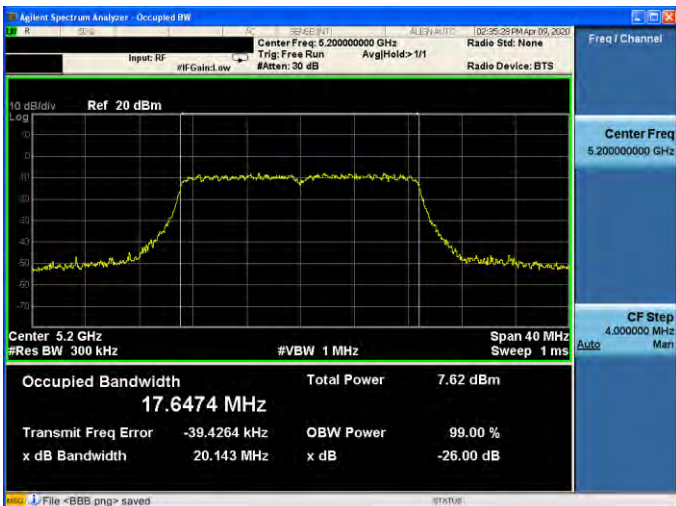
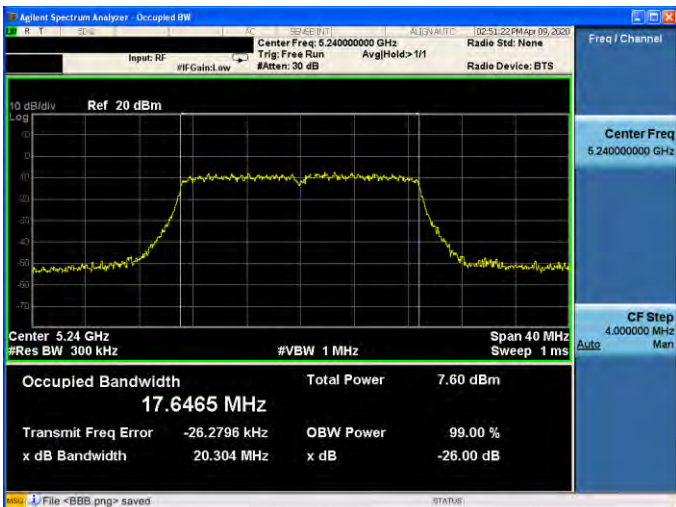


5240 MHz

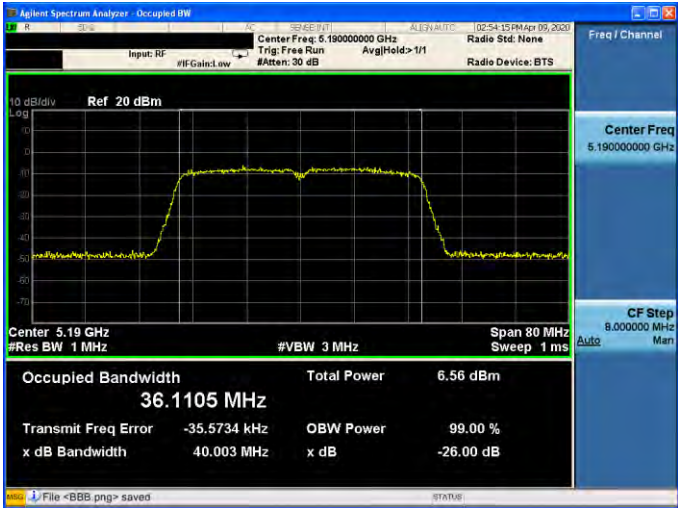
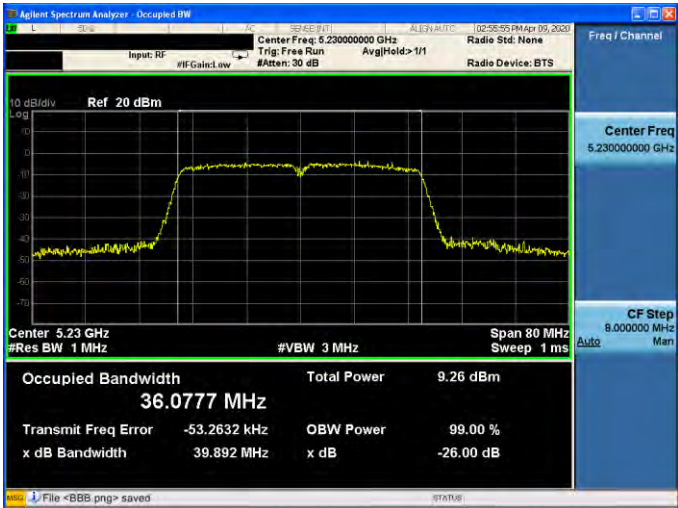
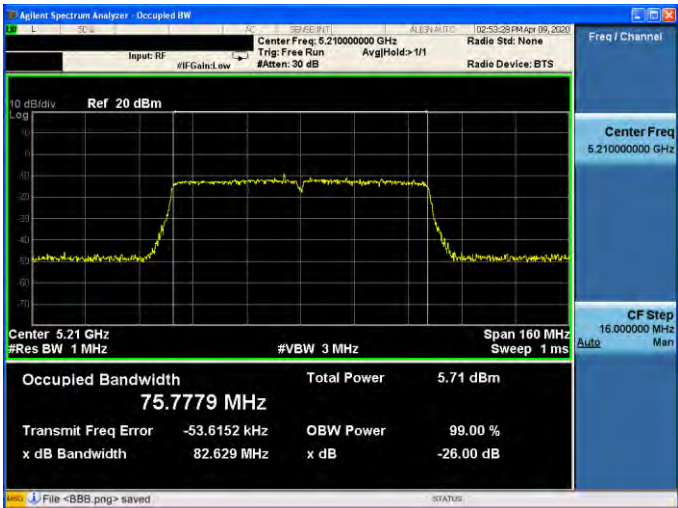




Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5190 MHz	
5230 MHz	
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-0	
5210 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ ANT-1	
5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.6410 MHz Total Power 7.07 dBm Transmit Freq Error -46.3353 kHz OBW Power 99.00 % x dB Bandwidth 20.250 MHz x dB -26.00 dB File <BBS.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.6474 MHz Total Power 7.62 dBm Transmit Freq Error -39.4264 kHz OBW Power 99.00 % x dB Bandwidth 20.143 MHz x dB -26.00 dB File <BBS.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.6465 MHz Total Power 7.60 dBm Transmit Freq Error -26.2796 kHz OBW Power 99.00 % x dB Bandwidth 20.304 MHz x dB -26.00 dB File <BBS.png> saved



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	
5230 MHz	
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-1	
5210 MHz	

6 dB RF Bandwidth Measurement

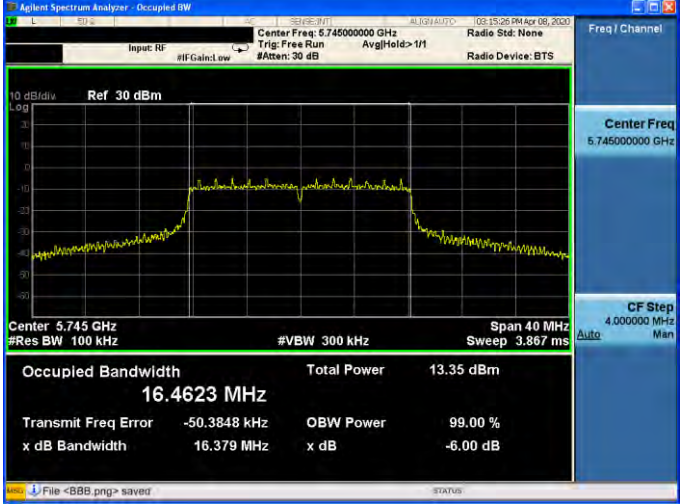
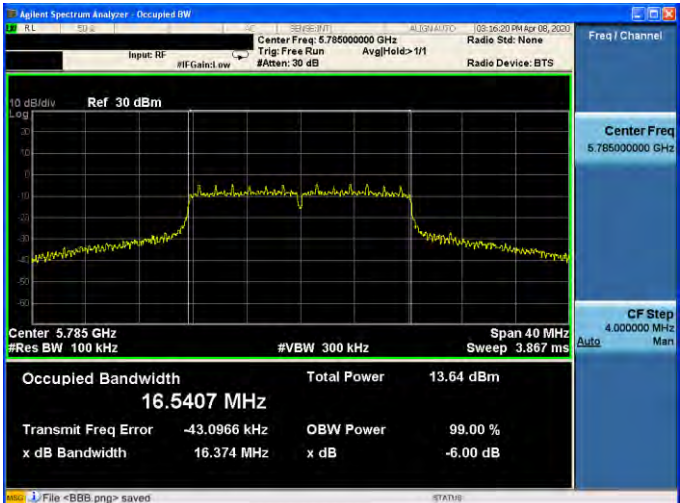
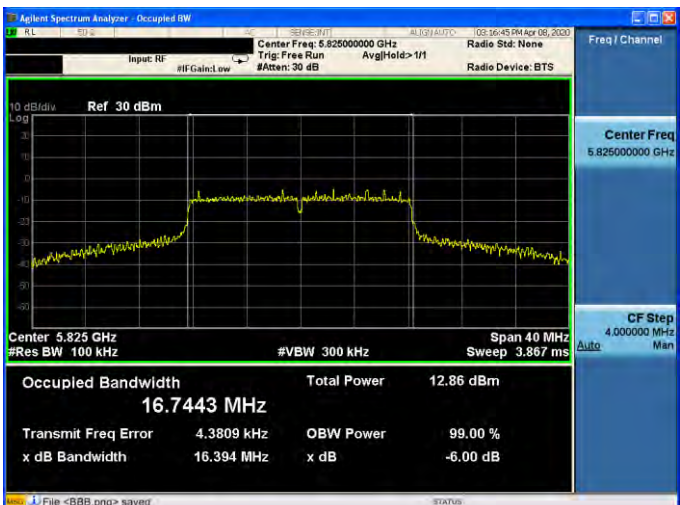
Test Mode	Mode 2: IEEE 802.11a Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5745.0	16379	≥ 500
5785.0	16374	≥ 500
5825.0	16394	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5745.0	16430	≥ 500
5785.0	16379	≥ 500
5825.0	16351	≥ 500
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5745.0	17584	≥ 500
5785.0	17586	≥ 500
5825.0	17623	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5745.0	17636	≥ 500
5785.0	17610	≥ 500
5825.0	17594	≥ 500
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5755.0	35234	≥ 500
5795.0	35191	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5755.0	35370	≥ 500
5795.0	35182	≥ 500
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5775.0	75526	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5775.0	75841	≥ 500

Beamforming on

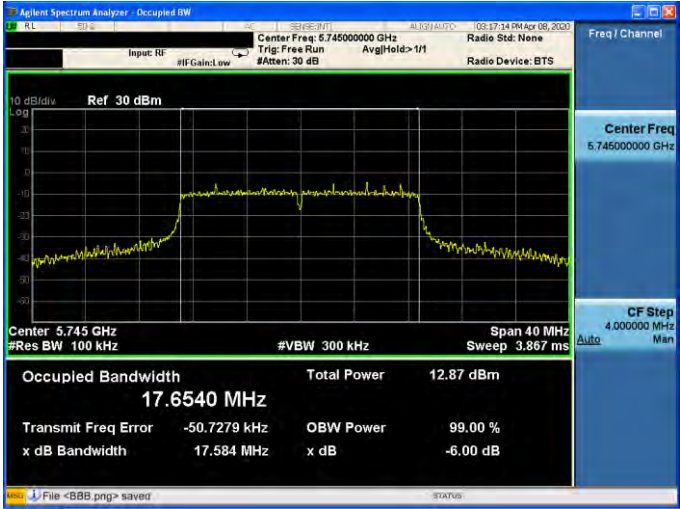
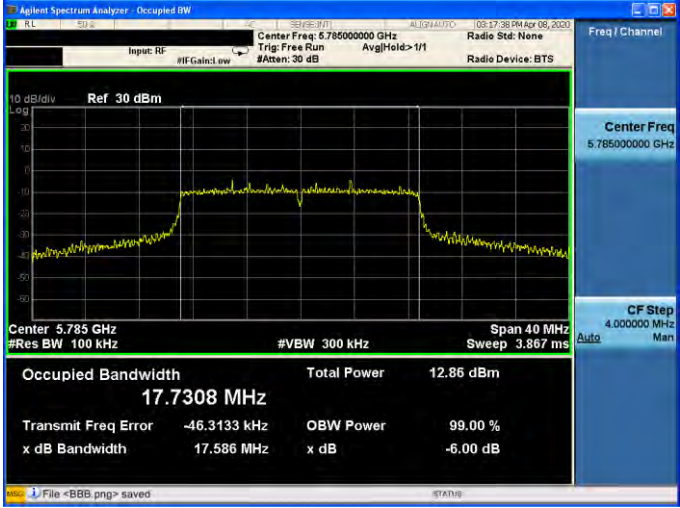
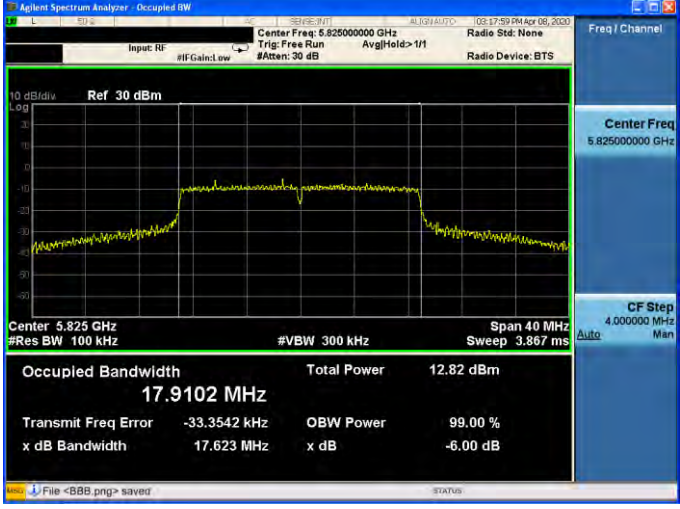
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5745.0	17604	≥ 500
5785.0	17603	≥ 500
5825.0	17591	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5745.0	17594	≥ 500
5785.0	17659	≥ 500
5825.0	17599	≥ 500
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5755.0	34458	≥ 500
5795.0	35198	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5755.0	35339	≥ 500
5795.0	35238	≥ 500
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode	
Frequency (MHz)	ANT-0	Limit (kHz)
5775.0	76053	≥ 500
Frequency (MHz)	ANT-1	Limit (kHz)
5775.0	75867	≥ 500

Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ANT-0

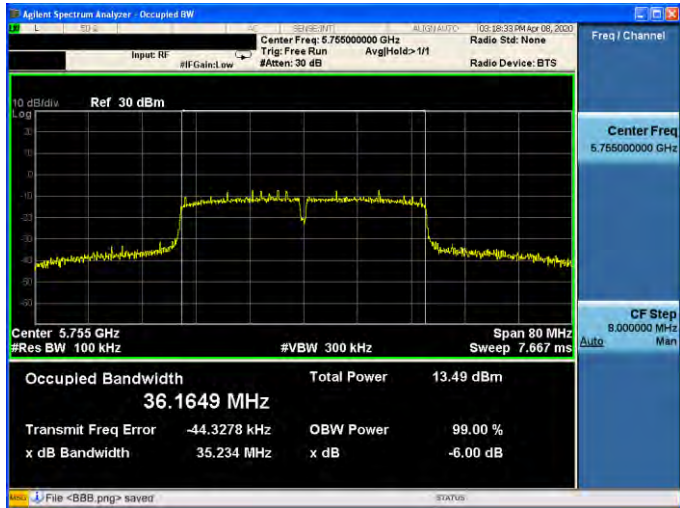
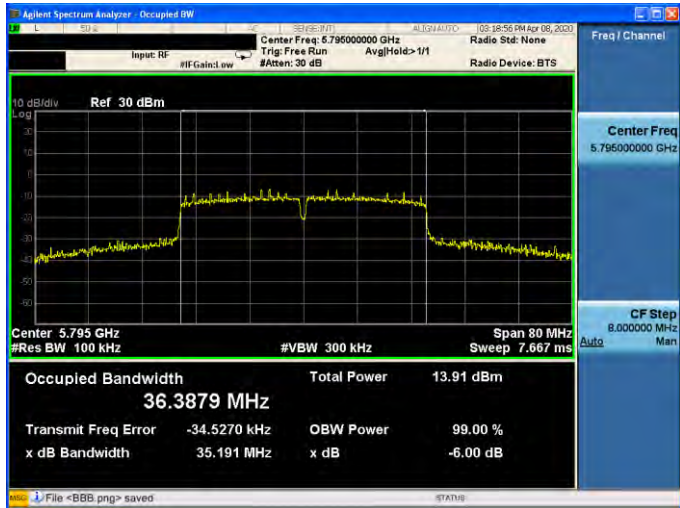
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Ref 30 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 16.4623 MHz Total Power 13.35 dBm Transmit Freq Error -50.3848 kHz OBW Power 99.00 % x dB Bandwidth 16.379 MHz x dB -6.00 dB File <BBB.png> saved
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Ref 30 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 16.5407 MHz Total Power 13.64 dBm Transmit Freq Error -43.0966 kHz OBW Power 99.00 % x dB Bandwidth 16.374 MHz x dB -6.00 dB File <BBB.png> saved
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Ref 30 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 16.7443 MHz Total Power 12.86 dBm Transmit Freq Error 4.3809 kHz OBW Power 99.00 % x dB Bandwidth 16.394 MHz x dB -6.00 dB File <BBB.png> saved



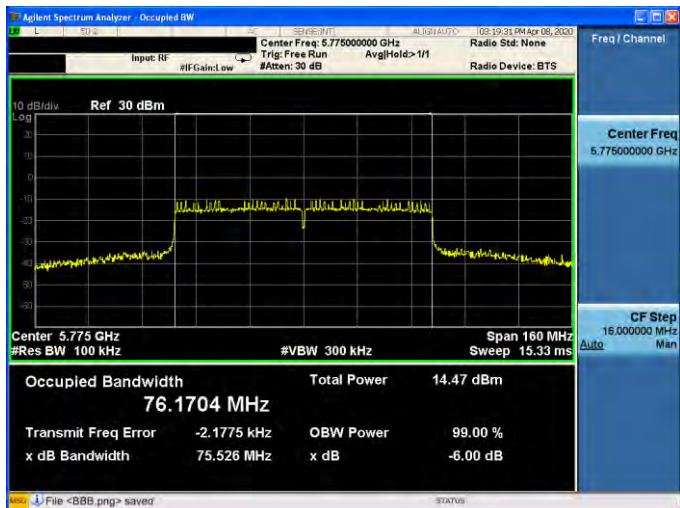
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0	
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Ref 30 dBm Center 5.745 GHz Res BW 100 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.6540 MHz Total Power 12.87 dBm Transmit Freq Error -50.7279 kHz OBW Power 99.00 % x dB Bandwidth 17.584 MHz x dB -6.00 dB
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Ref 30 dBm Center 5.785 GHz Res BW 100 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.7308 MHz Total Power 12.86 dBm Transmit Freq Error -46.3133 kHz OBW Power 99.00 % x dB Bandwidth 17.586 MHz x dB -6.00 dB
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Ref 30 dBm Center 5.825 GHz Res BW 100 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.9102 MHz Total Power 12.82 dBm Transmit Freq Error -33.3542 kHz OBW Power 99.00 % x dB Bandwidth 17.623 MHz x dB -6.00 dB



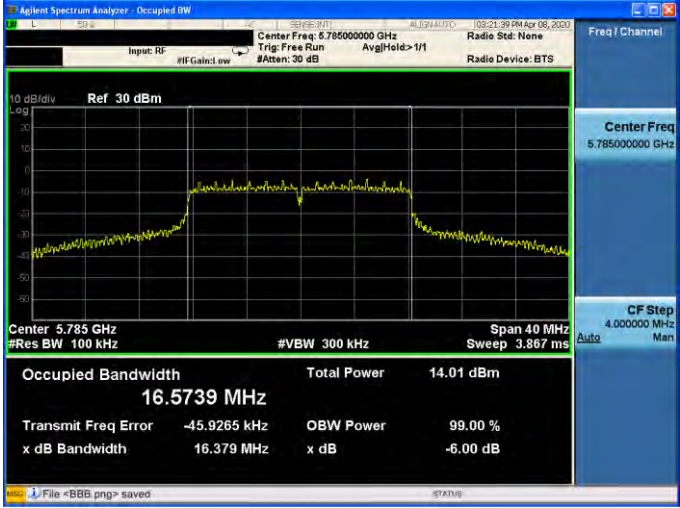
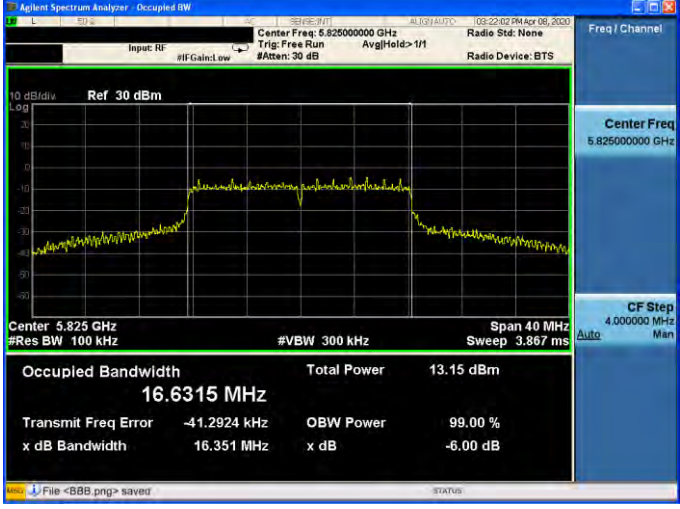
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-0

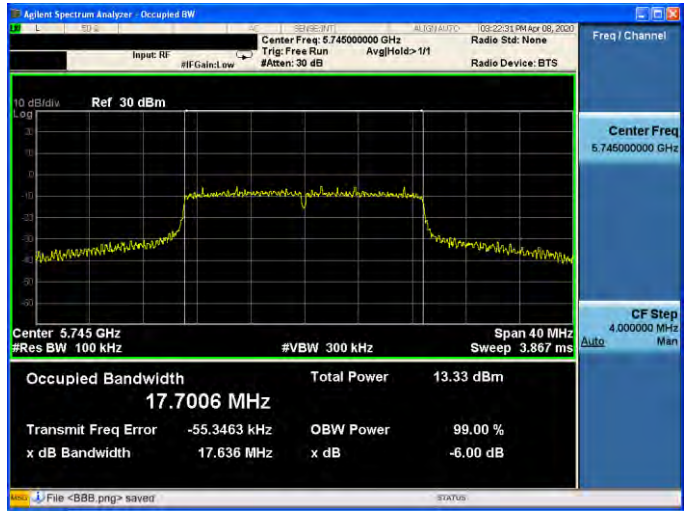
5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-0

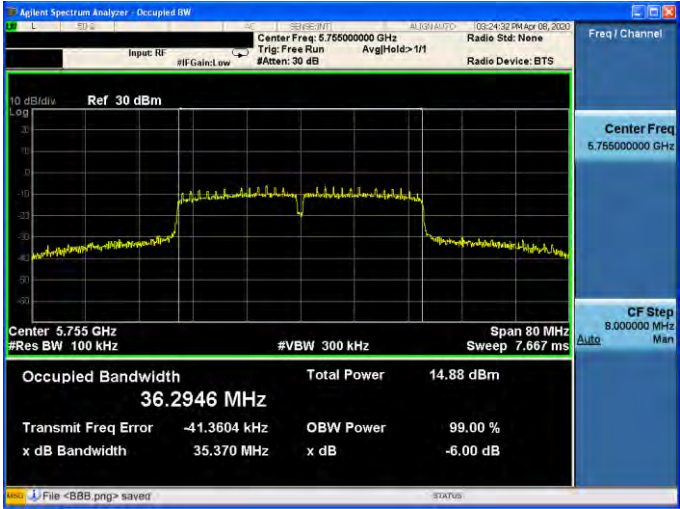
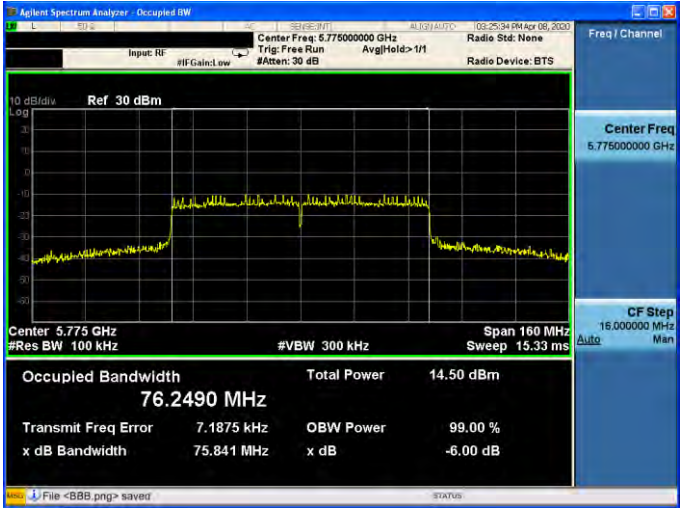
5775 MHz	
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Mode 2: IEEE 802.11a Continuous TX mode_ANT-1	
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz #Res BW: 100 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 17.0063 MHz Total Power: 13.28 dBm Transmit Freq Error: 210.0234 kHz OBW Power: 99.00 % x dB Bandwidth: 16.430 MHz x dB: -6.00 dB
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz #Res BW: 100 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 16.5739 MHz Total Power: 14.01 dBm Transmit Freq Error: -45.9265 kHz OBW Power: 99.00 % x dB Bandwidth: 16.379 MHz x dB: -6.00 dB
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz #Res BW: 100 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 16.6315 MHz Total Power: 13.15 dBm Transmit Freq Error: -41.2924 kHz OBW Power: 99.00 % x dB Bandwidth: 16.351 MHz x dB: -6.00 dB

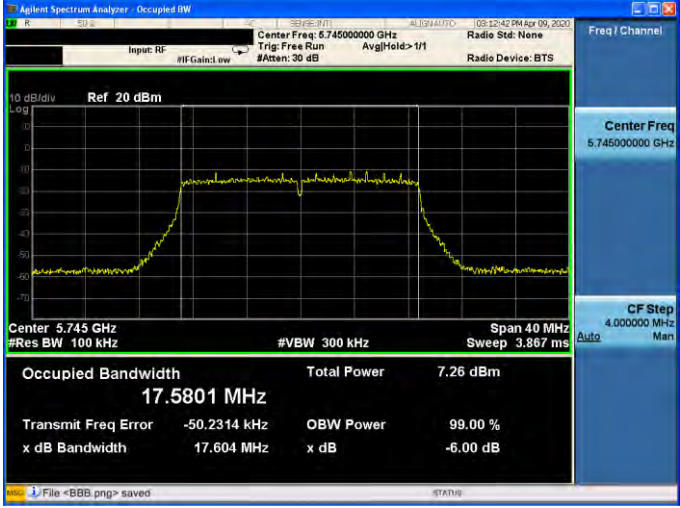
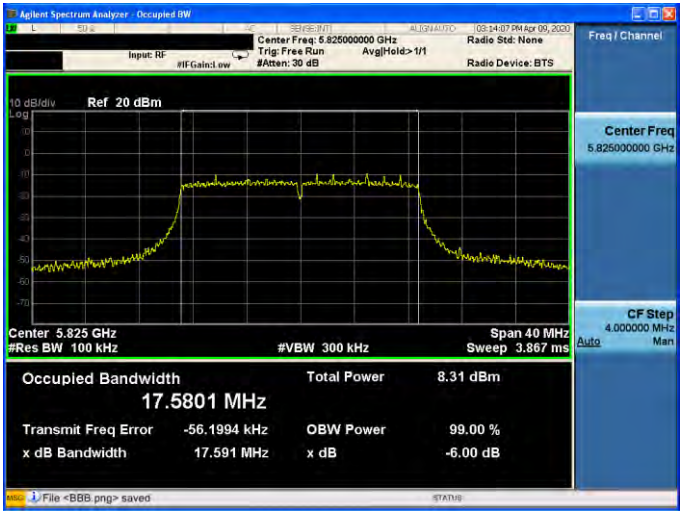
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1	
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Input: RF #IF Gain: Low #Att: 30 dB Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 30 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.7006 MHz Total Power 13.33 dBm Transmit Freq Error -55.3463 kHz OBW Power 99.00 % x dB Bandwidth 17.636 MHz x dB -6.00 dB File <BBB.png> saved
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Input: RF #IF Gain: Low #Att: 30 dB Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 30 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.7754 MHz Total Power 13.13 dBm Transmit Freq Error -58.0230 kHz OBW Power 99.00 % x dB Bandwidth 17.610 MHz x dB -6.00 dB File <BBB.png> saved
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Input: RF #IF Gain: Low #Att: 30 dB Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 30 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.8396 MHz Total Power 12.91 dBm Transmit Freq Error -49.5982 kHz OBW Power 99.00 % x dB Bandwidth 17.594 MHz x dB -6.00 dB File <BBB.png> saved



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-1	
5755 MHz	
5795 MHz	
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-1	
5775 MHz	

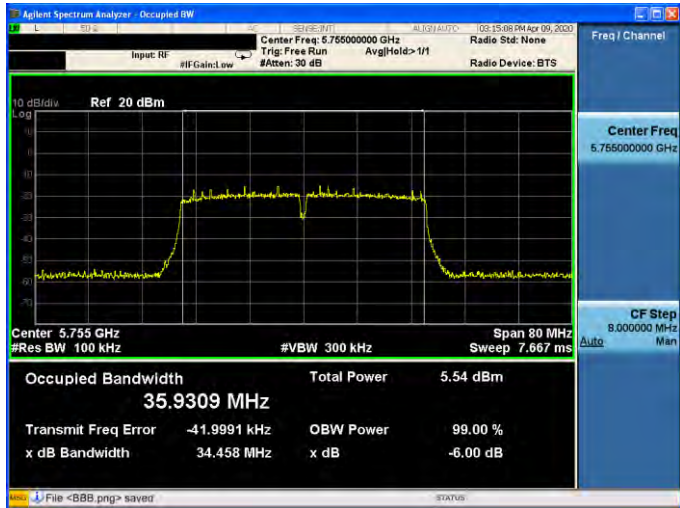
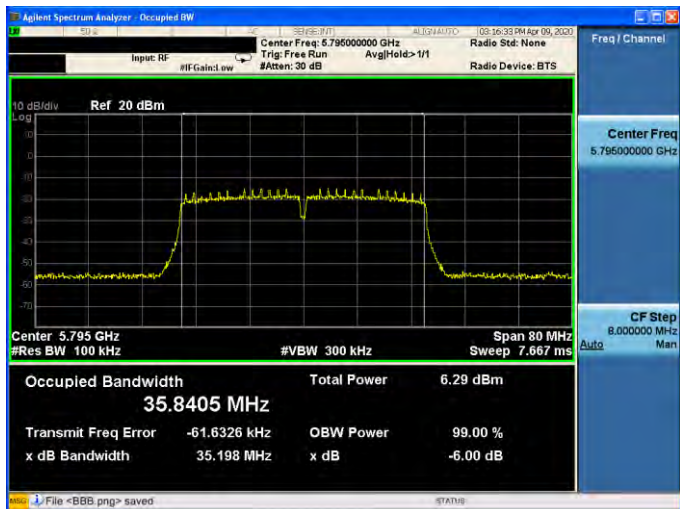
Beamforming on

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0

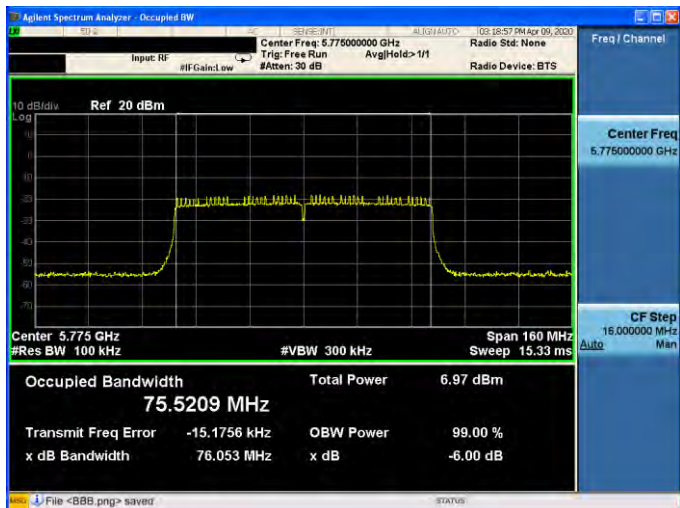
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.74500000 GHz Span 40 MHz Occupied Bandwidth: 17.5801 MHz Total Power: 7.26 dBm Transmit Freq Error: -50.2314 kHz OBW Power: 99.00 %
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.78500000 GHz Span 40 MHz Occupied Bandwidth: 17.5881 MHz Total Power: 7.97 dBm Transmit Freq Error: -58.8285 kHz OBW Power: 99.00 %
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.82500000 GHz Span 40 MHz Occupied Bandwidth: 17.5801 MHz Total Power: 8.31 dBm Transmit Freq Error: -56.1994 kHz OBW Power: 99.00 %

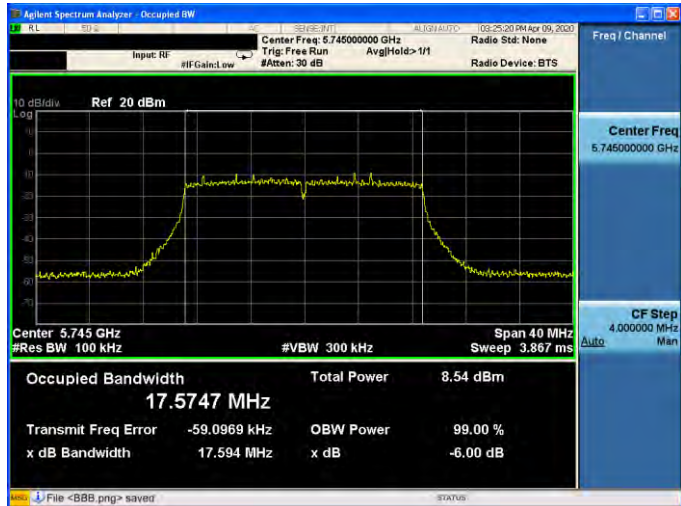
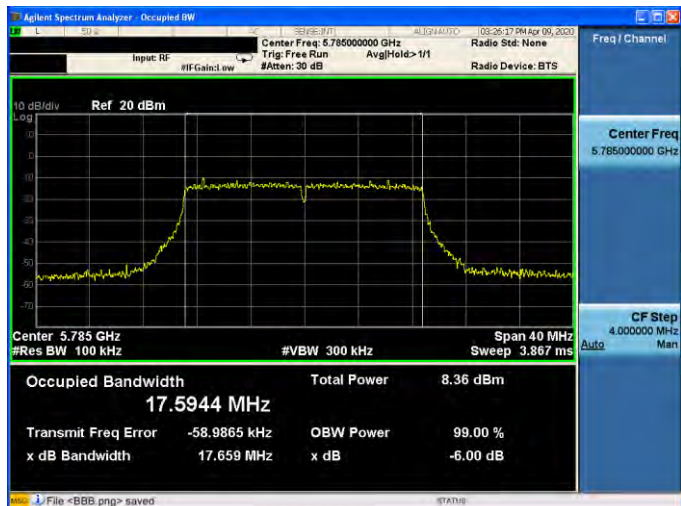
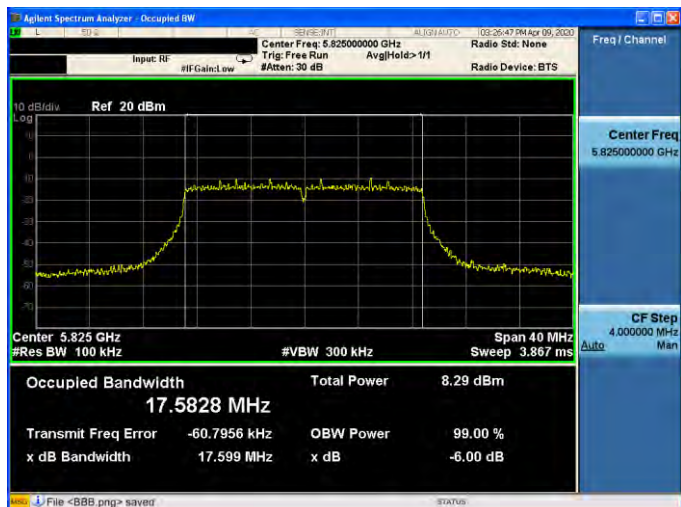


Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-0

5755 MHz	
5795 MHz	

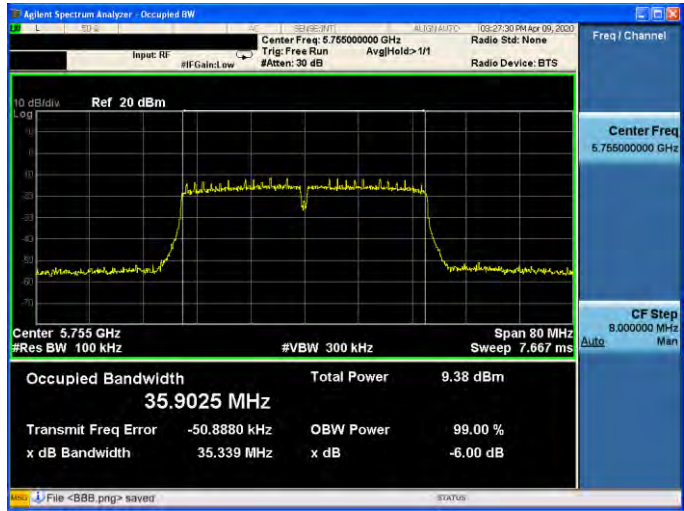
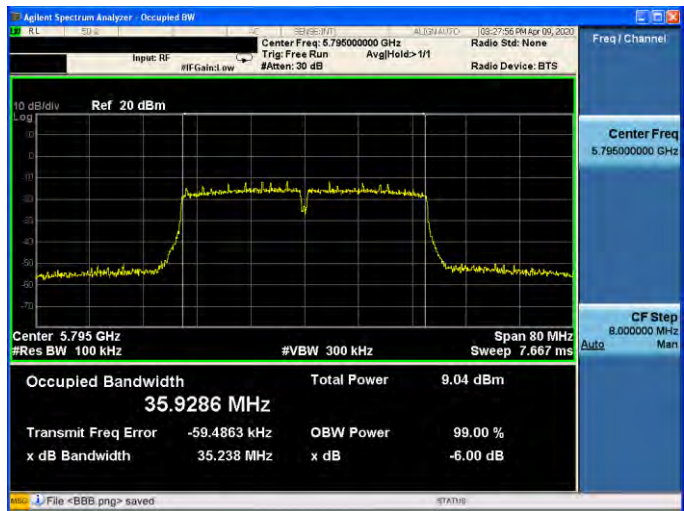
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-0

5775 MHz	
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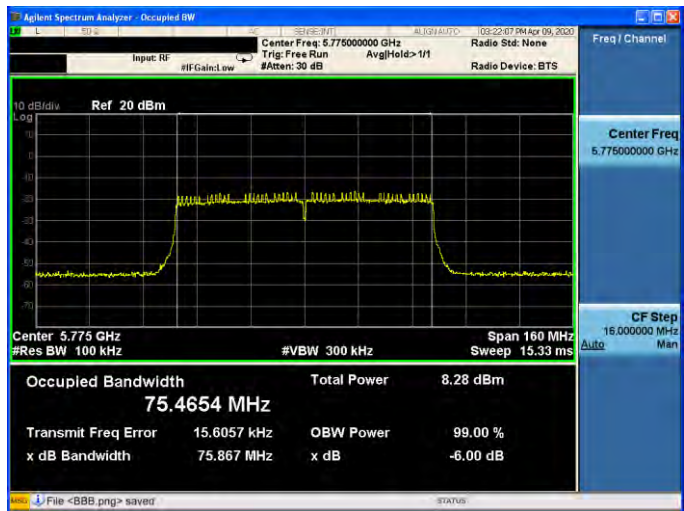
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1	
5745 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.74500000 GHz Ref 20 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.5747 MHz Total Power 8.54 dBm Transmit Freq Error -59.0969 kHz OBW Power 99.00 % x dB Bandwidth 17.594 MHz x dB -6.00 dB File <BBB.png> saved
5785 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.78500000 GHz Ref 20 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.5944 MHz Total Power 8.36 dBm Transmit Freq Error -58.9865 kHz OBW Power 99.00 % x dB Bandwidth 17.659 MHz x dB -6.00 dB File <BBB.png> saved
5825 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.82500000 GHz Ref 20 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.5828 MHz Total Power 8.29 dBm Transmit Freq Error -60.7956 kHz OBW Power 99.00 % x dB Bandwidth 17.599 MHz x dB -6.00 dB File <BBB.png> saved



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-1

5755 MHz	
5795 MHz	

Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-1

5775 MHz	
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Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	6.496	0.105	6.601	≤ 15.20
5200	7.370	0.105	7.475	
5240	7.668	0.105	7.773	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	6.155	0.105	6.260	≤ 15.20
5200	6.707	0.105	6.812	
5240	6.817	0.105	6.922	
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180.0	9.444			≤ 15.20
5200.0	10.166			
5240.0	10.378			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-0.321	0.105	6.773	≤ 28.67
5785	-0.759	0.105	6.335	
5825	-0.647	0.105	6.447	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-0.191	0.105	6.903	≤ 28.67
5785	-0.306	0.105	6.788	
5825	-0.369	0.105	6.725	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	9.849			≤ 28.67
5785	9.578			
5825	9.599			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	5.552	0.052	5.604	≤ 15.20
5200	7.089	0.052	7.141	
5240	7.312	0.052	7.364	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	5.180	0.052	5.232	≤ 15.20
5200	6.406	0.052	6.458	
5240	6.248	0.052	6.300	
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180.0	8.432			≤ 15.20
5200.0	9.823			
5240.0	9.875			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-1.150	0.052	5.892	≤ 28.67
5785	-0.918	0.052	6.124	
5825	-0.879	0.052	6.163	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-0.610	0.052	6.432	≤ 28.67
5785	-0.562	0.052	6.480	
5825	-0.632	0.052	6.410	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	9.180			≤ 28.67
5785	9.315			
5825	9.298			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	1.358	0.106	1.464	≤ 15.20
5230	4.781	0.106	4.887	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	0.576	0.106	0.682	≤ 15.20
5230	4.119	0.106	4.225	
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190.0	4.100			≤ 15.20
5230.0	7.578			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-3.295	0.106	3.800	≤ 28.67
5795	-3.480	0.106	3.615	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-2.734	0.106	4.361	≤ 28.67
5795	-2.542	0.106	4.553	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5755	7.100			≤ 28.67
5795	7.120			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-2.987	0.221	-2.766	≤ 15.20
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-2.966	0.221	-2.745	≤ 15.20
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5210.0	0.255			≤ 15.20

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-7.040	0.221	0.171	≤ 28.67
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-6.381	0.221	0.830	≤ 28.67
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5775	3.523			≤ 28.67

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Beamforming on

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	2.531	0.052	2.583	≤ 15.20
5200	3.580	0.052	3.632	
5240	3.785	0.052	3.837	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	2.446	0.052	2.498	≤ 15.20
5200	3.260	0.052	3.312	
5240	3.285	0.052	3.337	
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180.0	5.551			≤ 15.20
5200.0	6.485			
5240.0	6.604			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-4.701	0.052	2.341	≤ 28.67
5785	-4.586	0.052	2.456	
5825	-4.456	0.052	2.586	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-4.400	0.052	2.642	≤ 28.67
5785	-4.258	0.052	2.784	
5825	-4.565	0.052	2.477	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	5.504			≤ 28.67
5785	5.633			
5825	5.542			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-1.817	0.106	-1.711	≤ 15.20
5230	1.146	0.106	1.252	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-2.082	0.106	-1.976	≤ 15.20
5230	0.826	0.106	0.932	
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190.0	1.168			≤ 15.20
5230.0	4.105			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-7.067	0.106	0.028	≤ 28.67
5795	-6.599	0.106	0.496	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-6.989	0.106	0.106	≤ 28.67
5795	-6.306	0.106	0.789	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5755	3.078			≤ 28.67
5795	3.655			

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-5.891	0.221	-5.670	≤ 15.20
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-6.044	0.221	-5.823	≤ 15.20
Power Spectral Density and E.I.R.P. Spectral Density				
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5210.0	-2.736			≤ 15.20

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

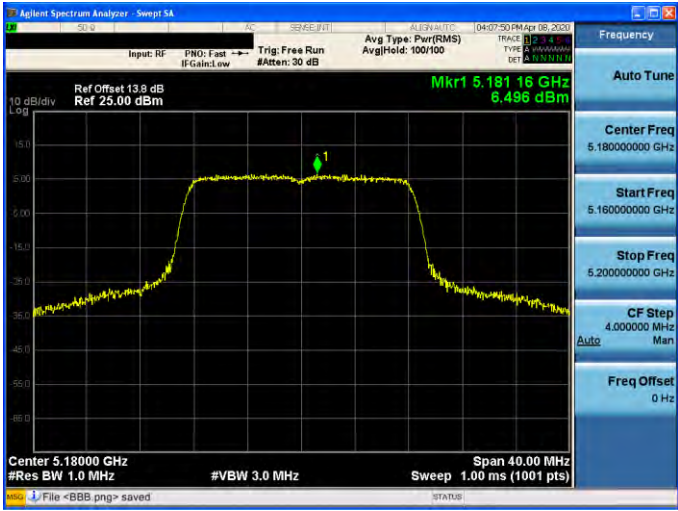
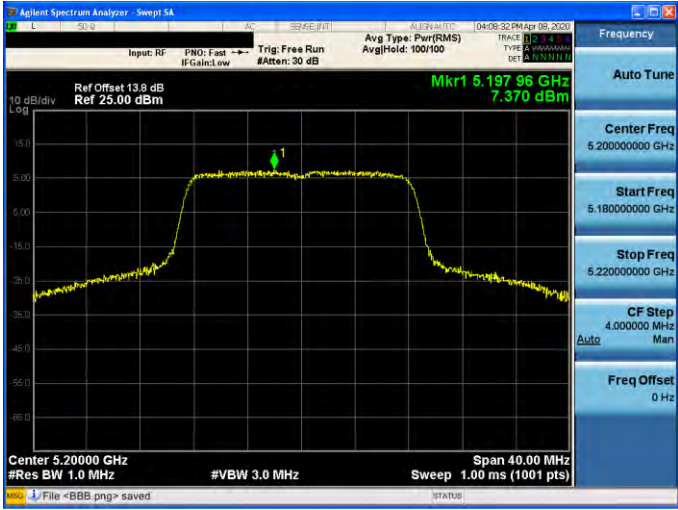
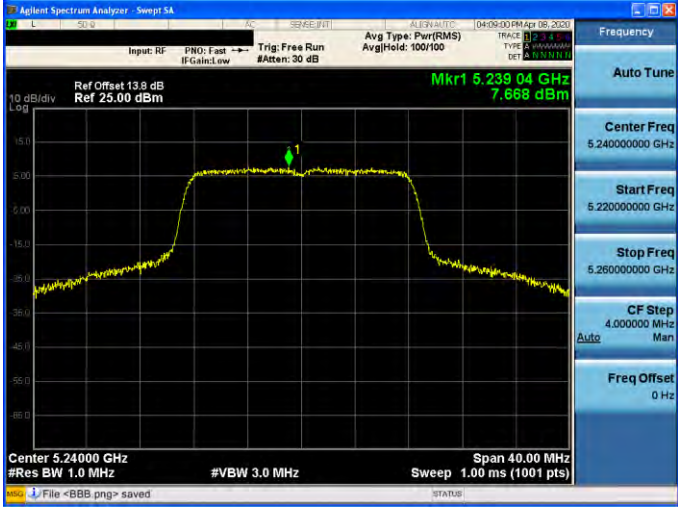
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-10.481	0.221	-3.270	≤ 28.67
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5775	-9.956	0.221	-2.745	≤ 28.67
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5775	0.010			≤ 28.67

Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10*Log(500 k/100 k)

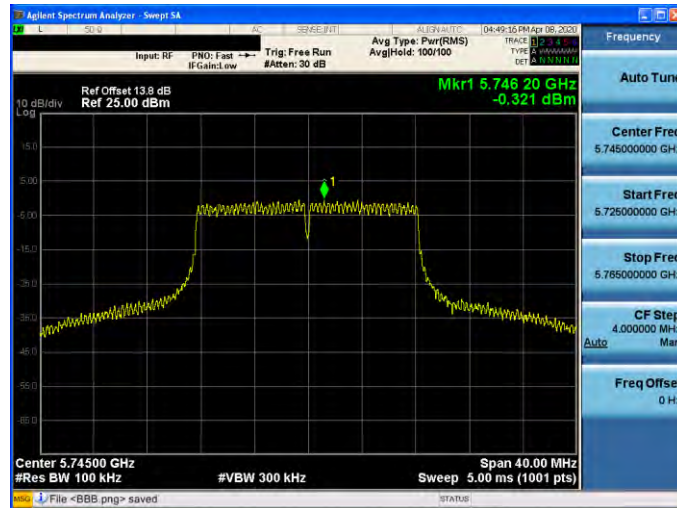


■ Test Graphs

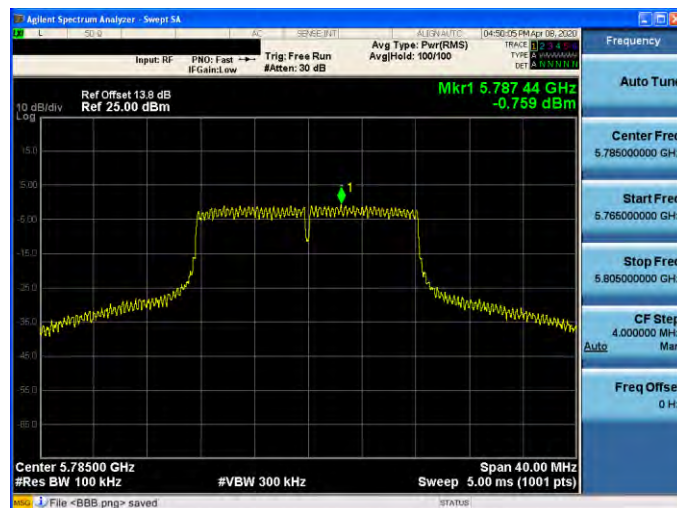
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0

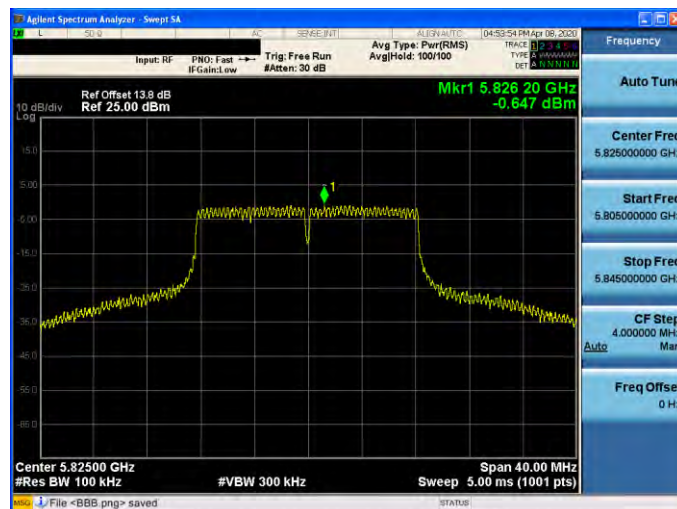
5745 MHz

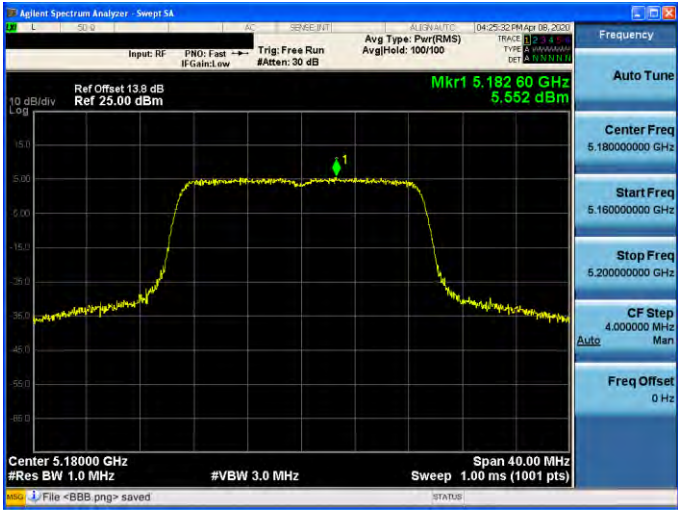
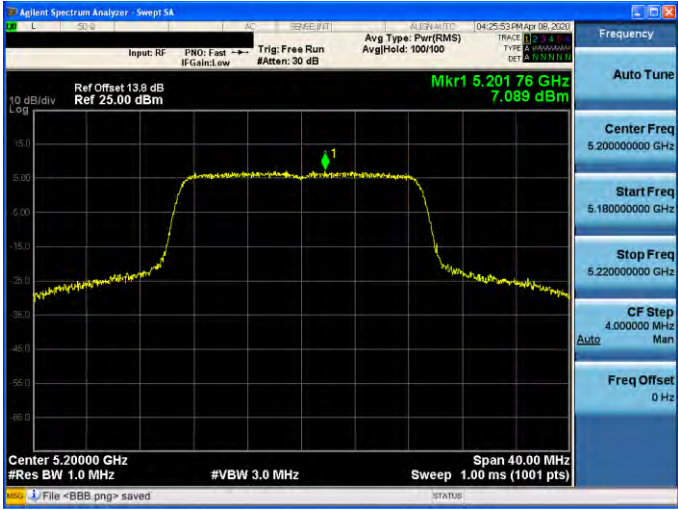
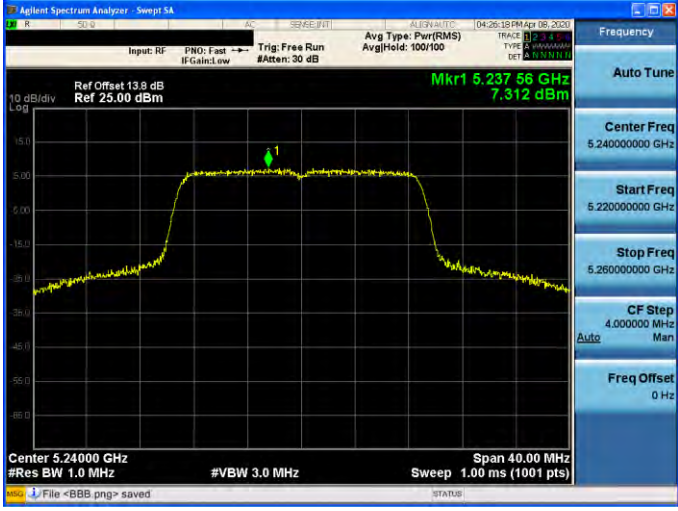


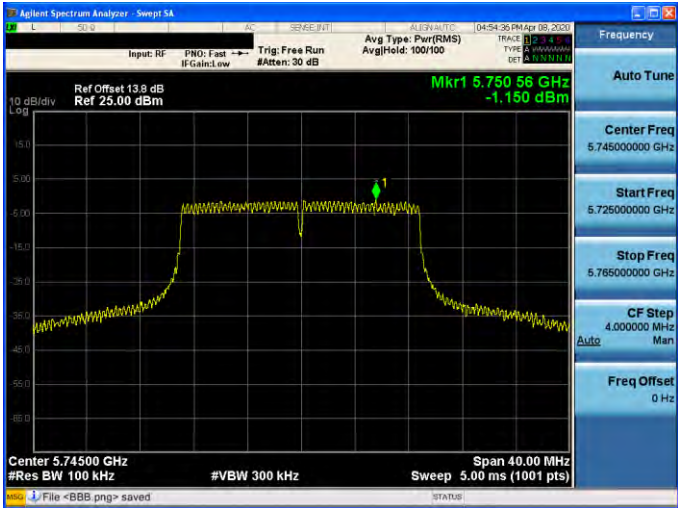
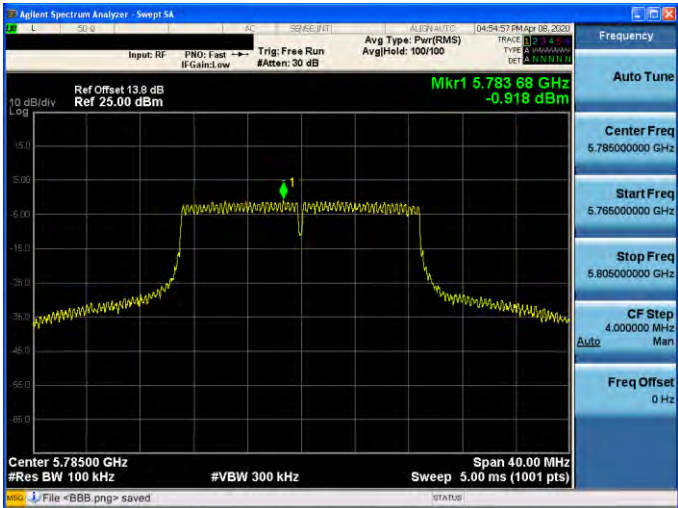
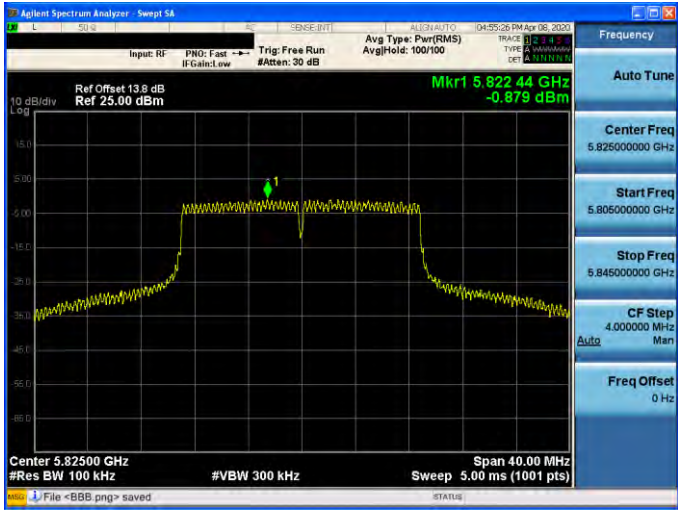
5785 MHz



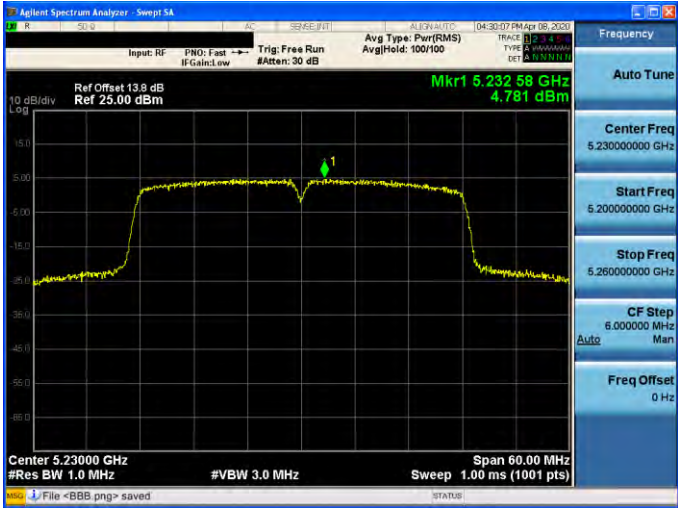
5825 MHz



Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	



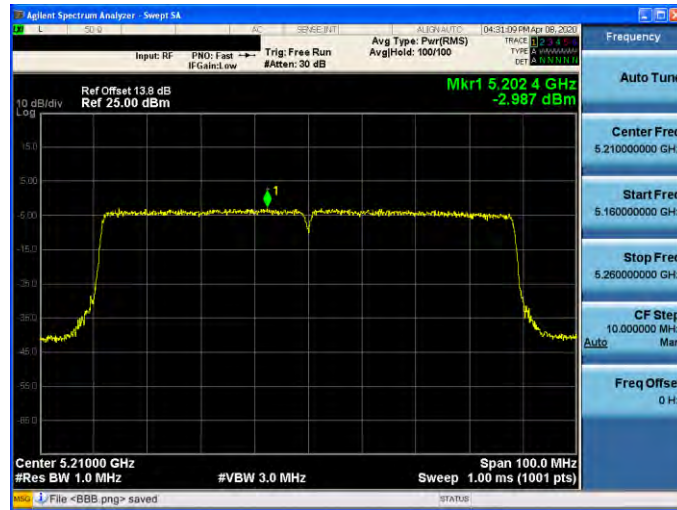
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5190 MHz	
5230 MHz	



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5755 MHz	
5795 MHz	

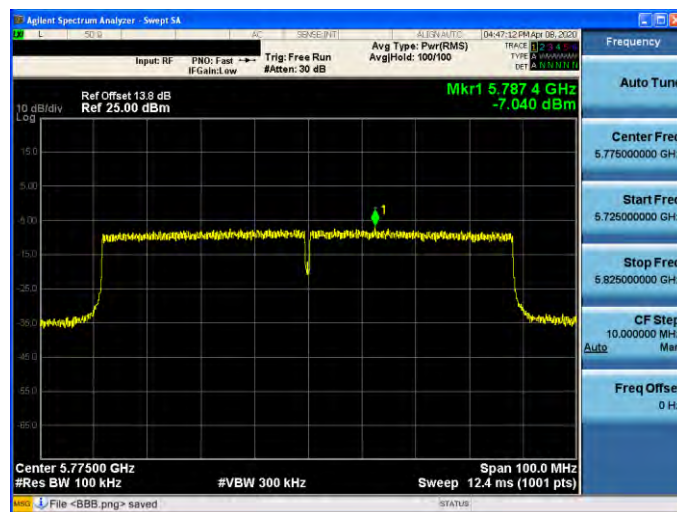
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0

5210 MHz

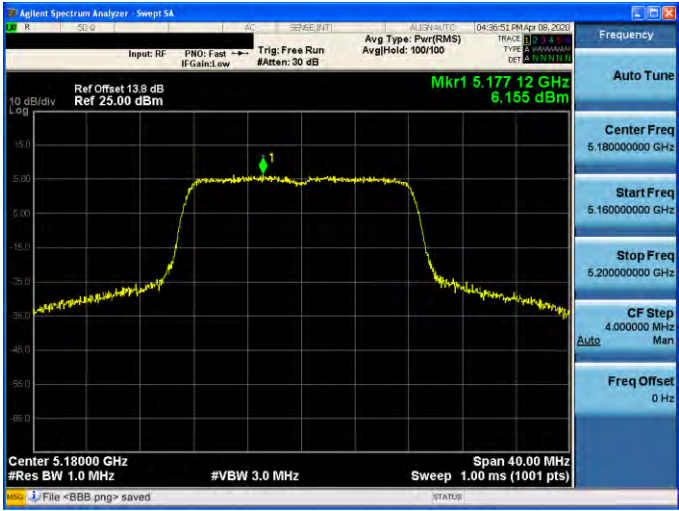
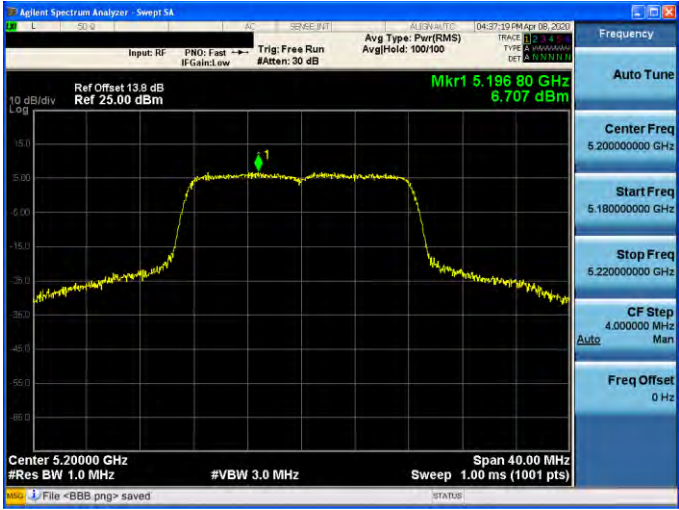
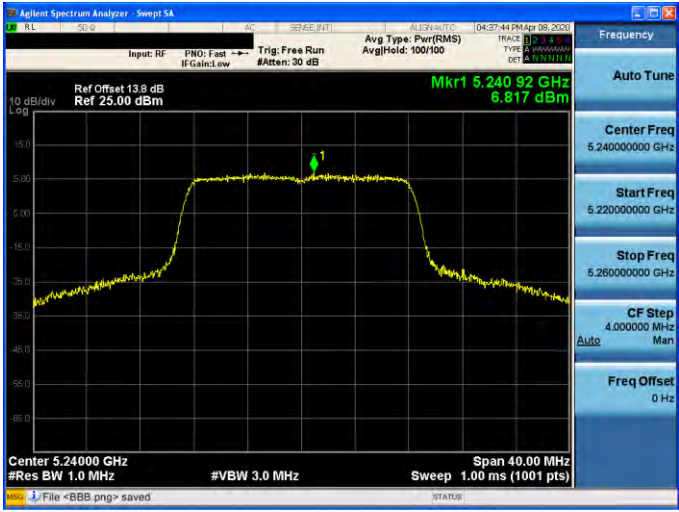


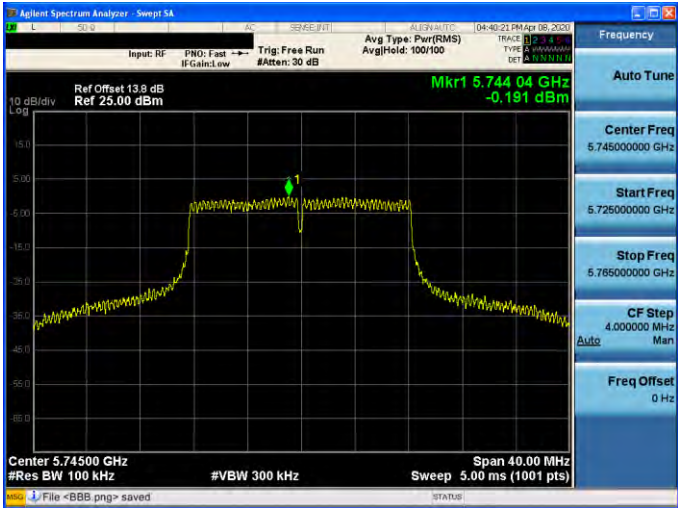
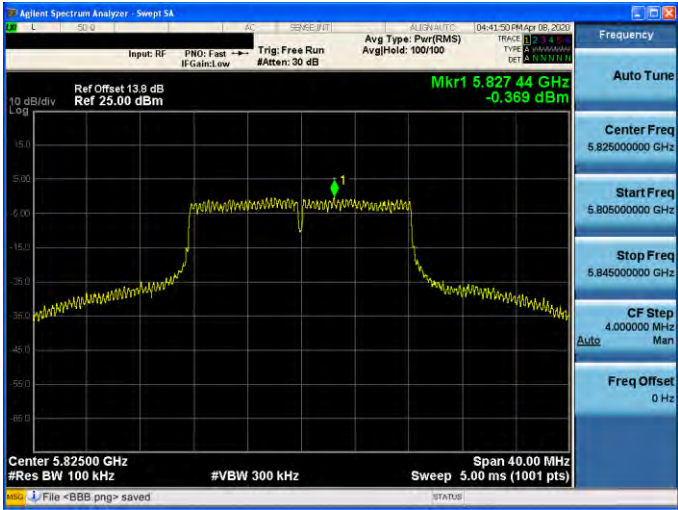
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0

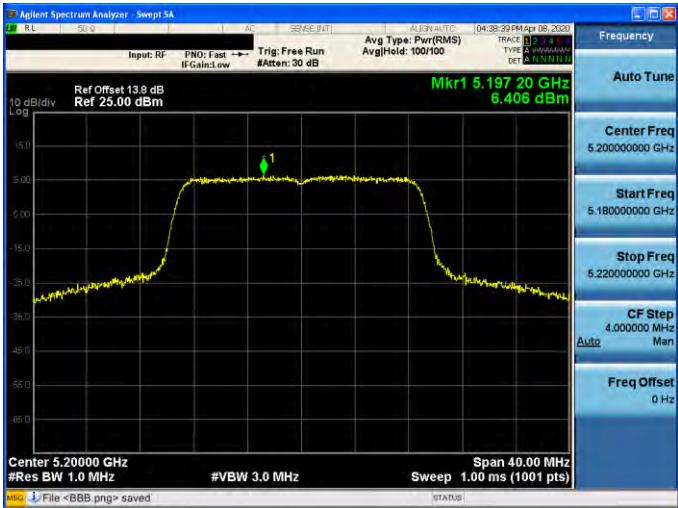
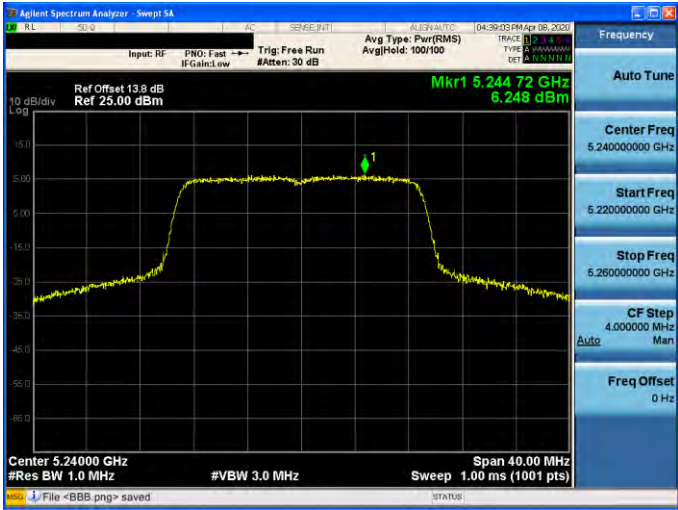
5775 MHz





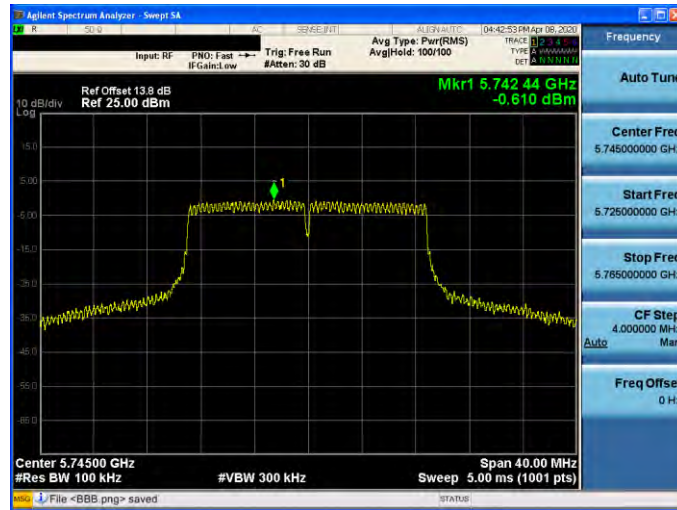
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5745 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.744 04 GHz -0.191 dBm Center 5.74500 GHz #Res BW 100 kHz #VBW 300 kHz Span 40.00 MHz Sweep 5.00 ms (1001 pts) File <BBB.png> saved
5785 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.788 40 GHz -0.306 dBm Center 5.78500 GHz #Res BW 100 kHz #VBW 300 kHz Span 40.00 MHz Sweep 5.00 ms (1001 pts) File <BBB.png> saved
5825 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.827 44 GHz -0.369 dBm Center 5.82500 GHz #Res BW 100 kHz #VBW 300 kHz Span 40.00 MHz Sweep 5.00 ms (1001 pts) File <BBB.png> saved

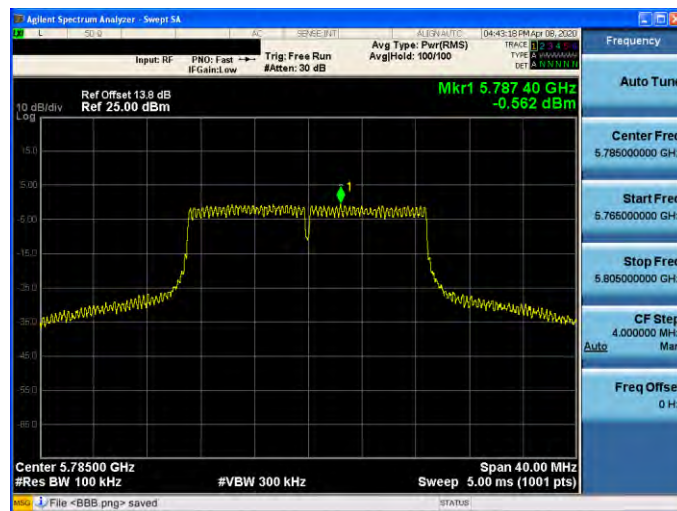
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5180 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.184 GHz 5.180 dBm Center 5.180000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Span 40.00 MHz Sweep 1.00 ms (1001 pts) File <BBB.png> saved
5200 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.197 GHz 6.406 dBm Center 5.200000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Span 40.00 MHz Sweep 1.00 ms (1001 pts) File <BBB.png> saved
5240 MHz	 Agilent Spectrum Analyzer - Swept SA Input: RF PNO: Fast Trig: Free Run Avg Type: Pwr(RMS) AvgHold: 100/100 Ref Offset 13.8 dB Ref 25.00 dBm Mkr1 5.244 GHz 6.248 dBm Center 5.240000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Span 40.00 MHz Sweep 1.00 ms (1001 pts) File <BBB.png> saved

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1

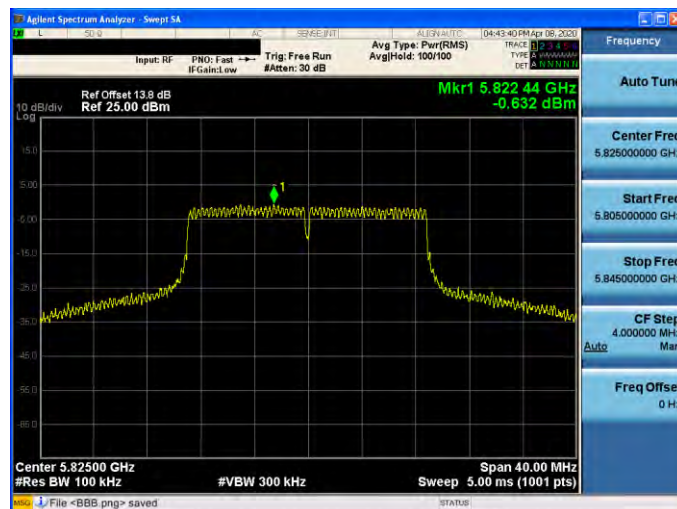
5745 MHz

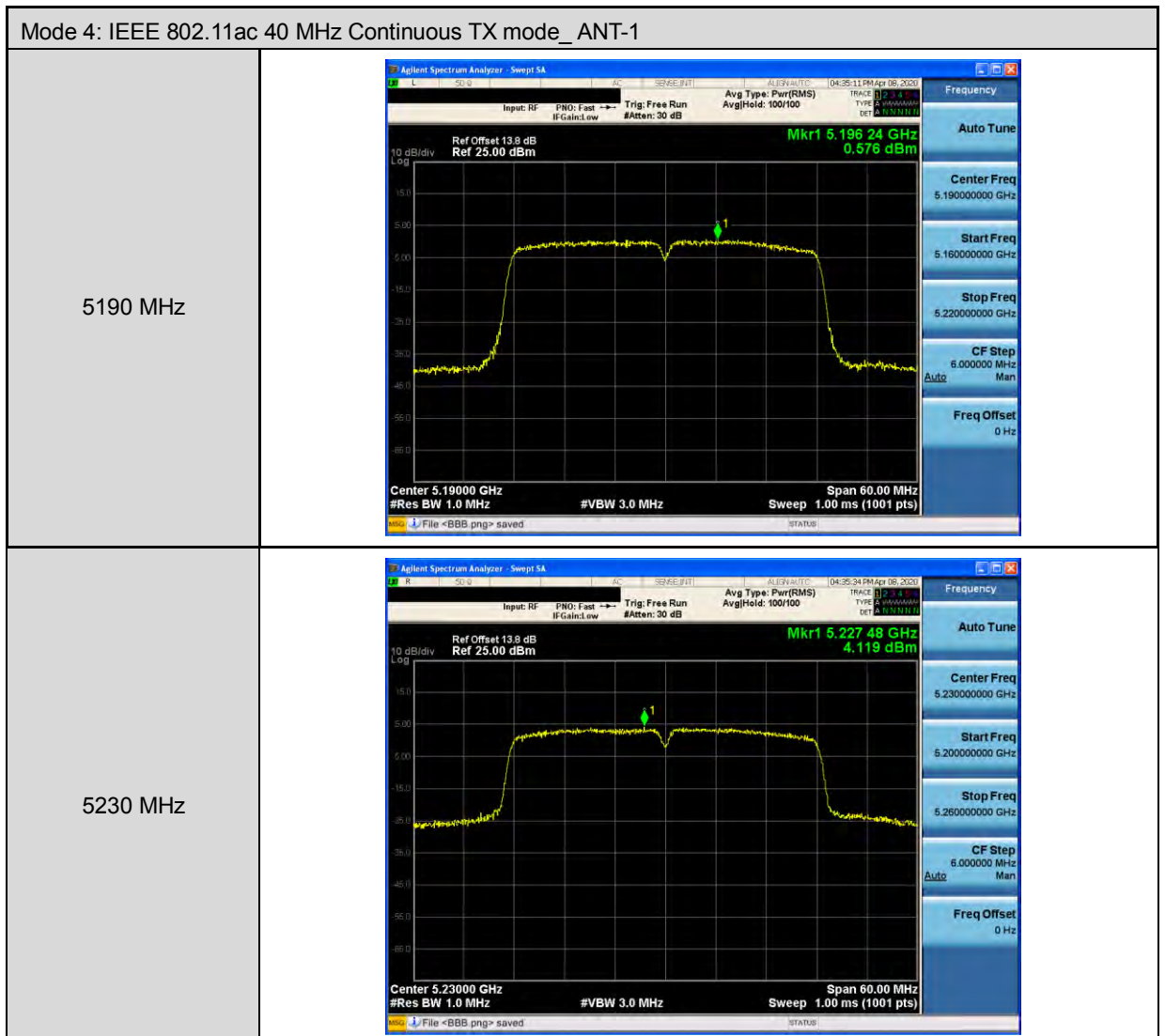


5785 MHz



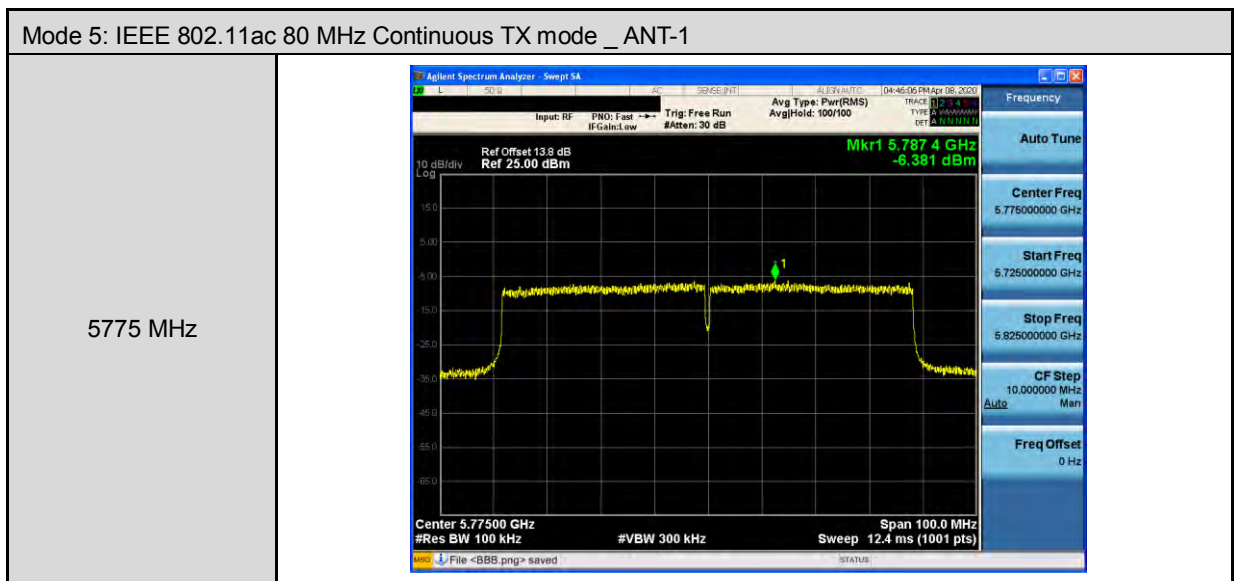
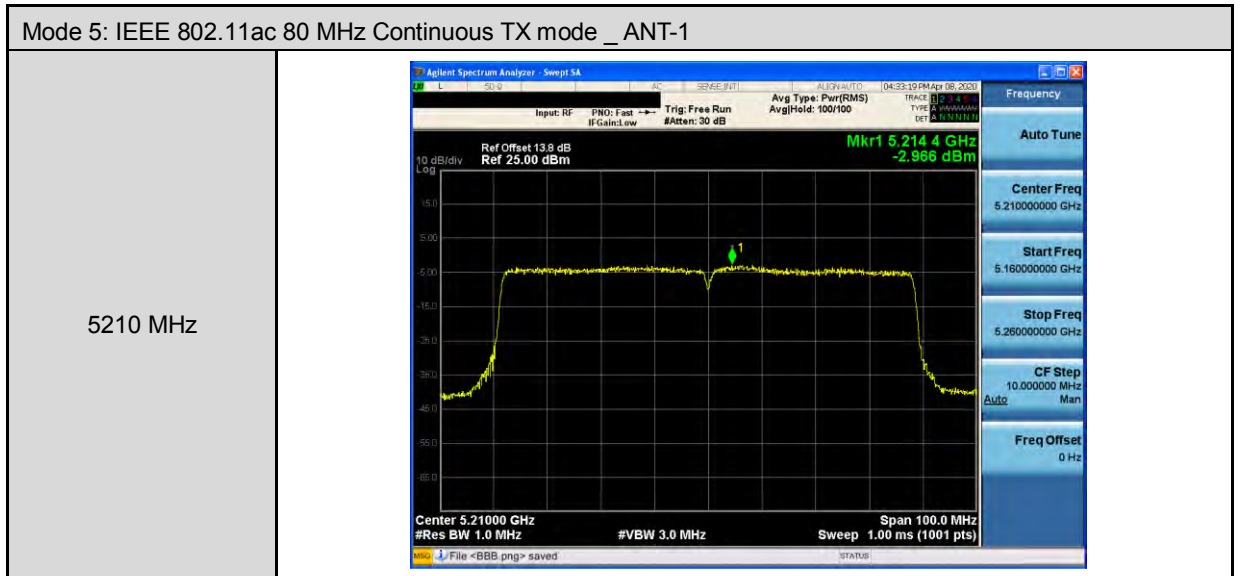
5825 MHz







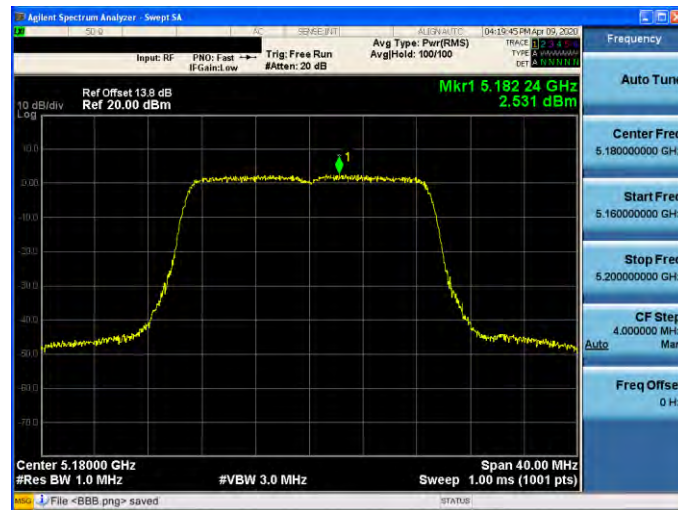
Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5755 MHz	
5795 MHz	



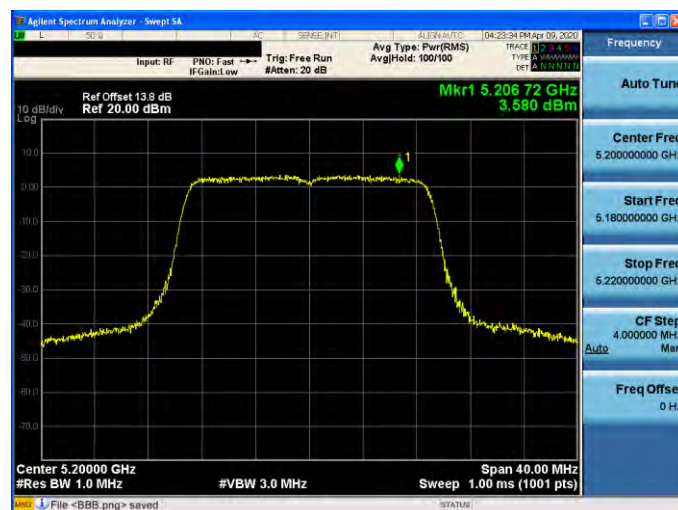
Beamforming on

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0

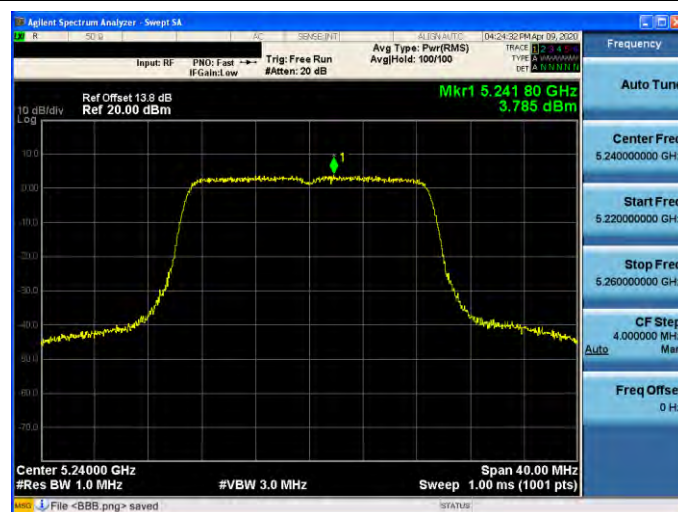
5180 MHz

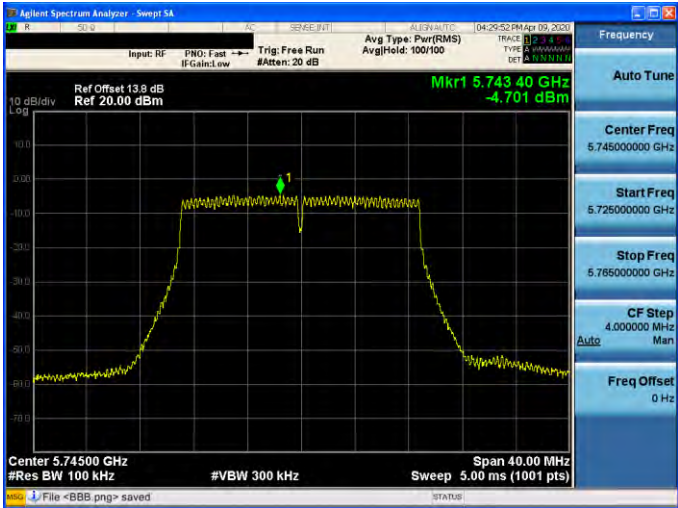
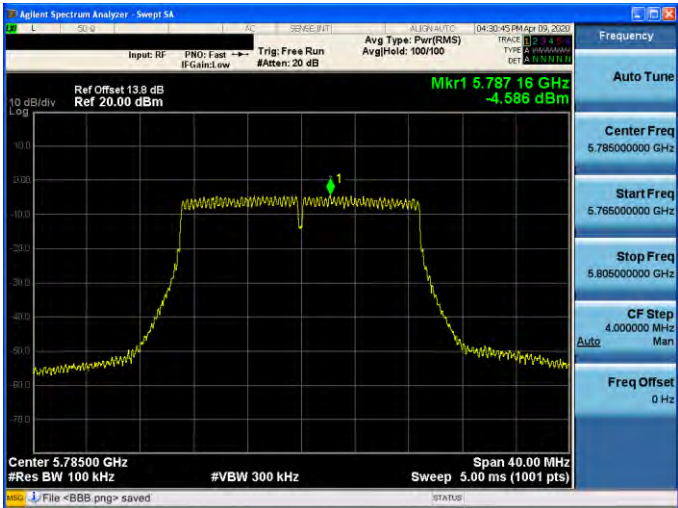
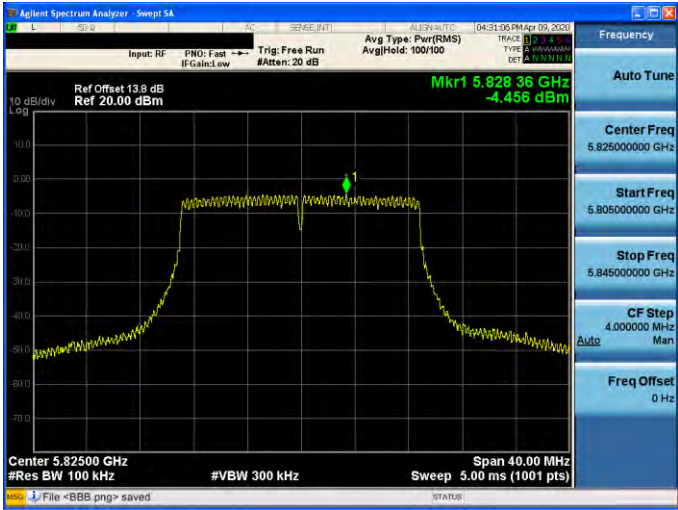


5200 MHz

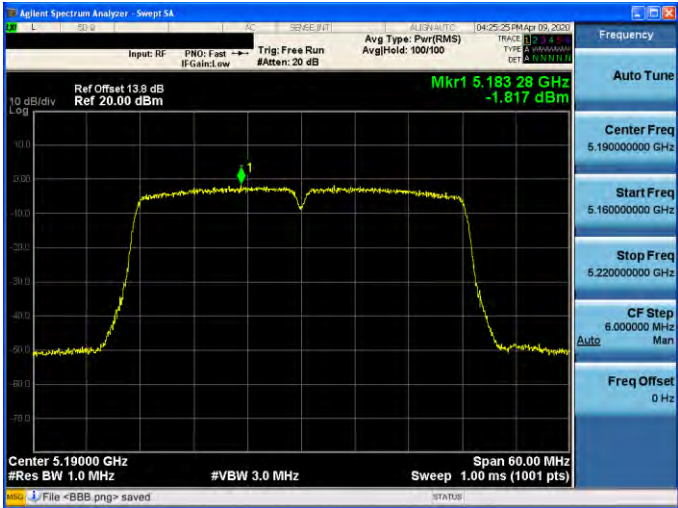
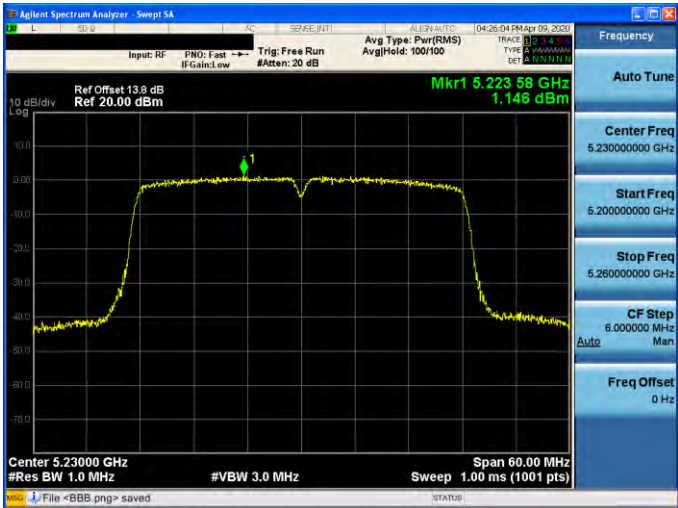


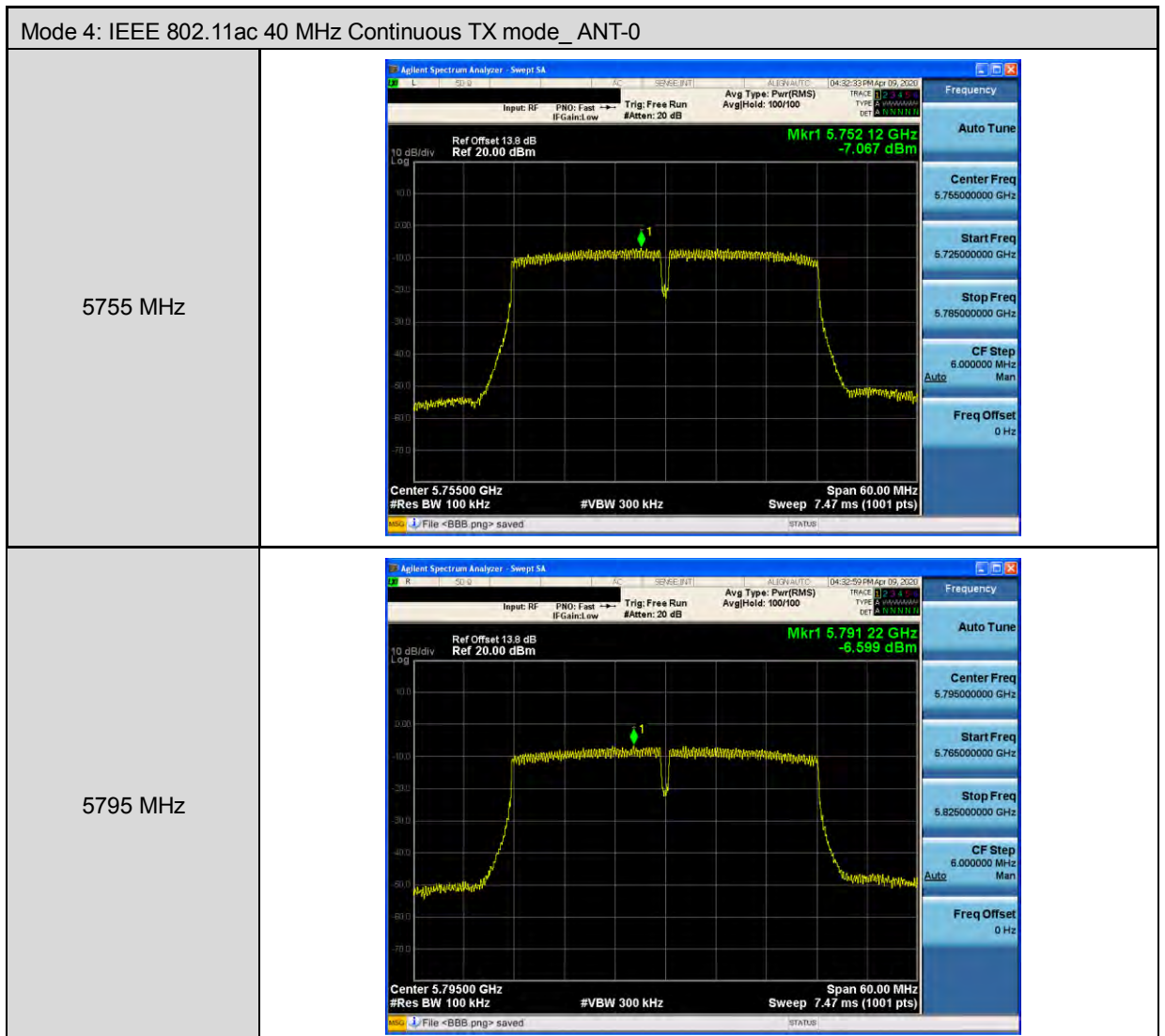
5240 MHz

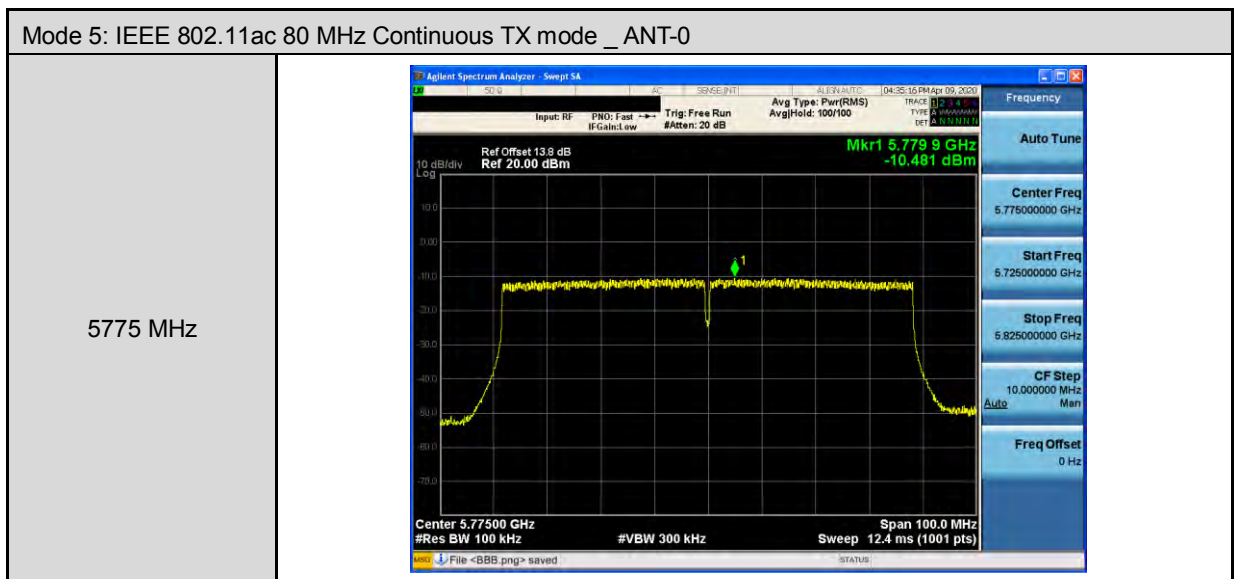
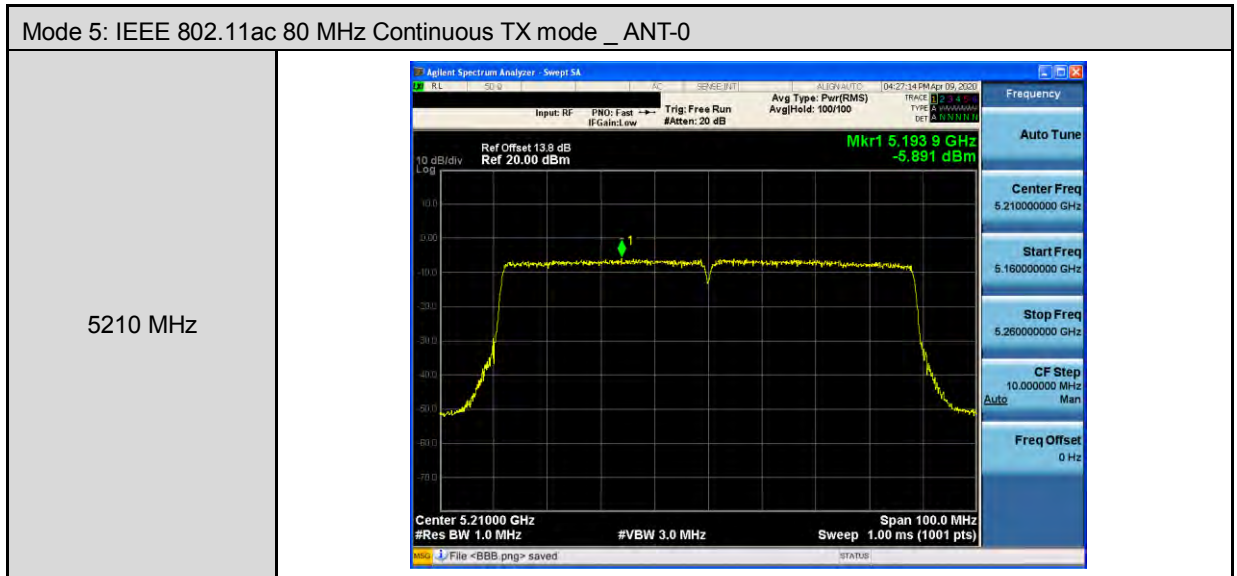


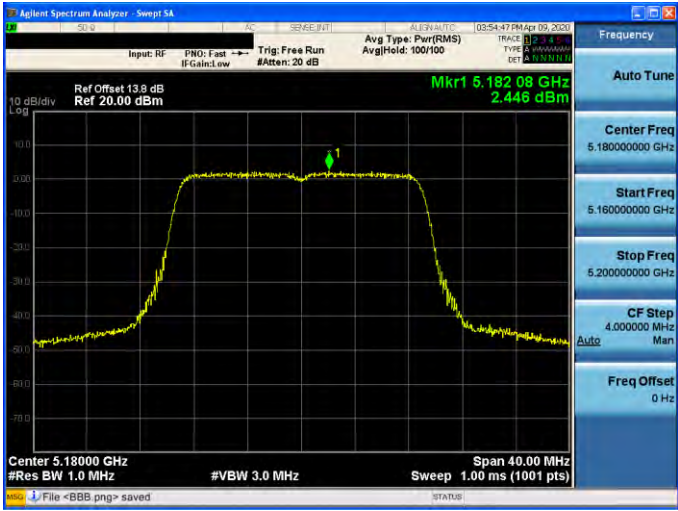
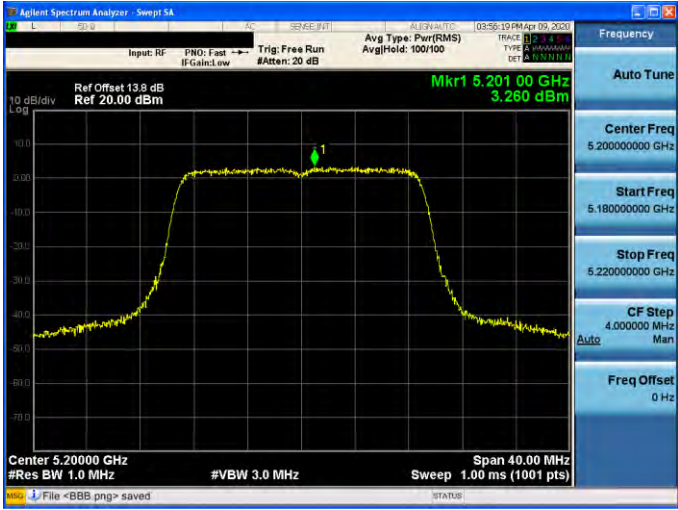
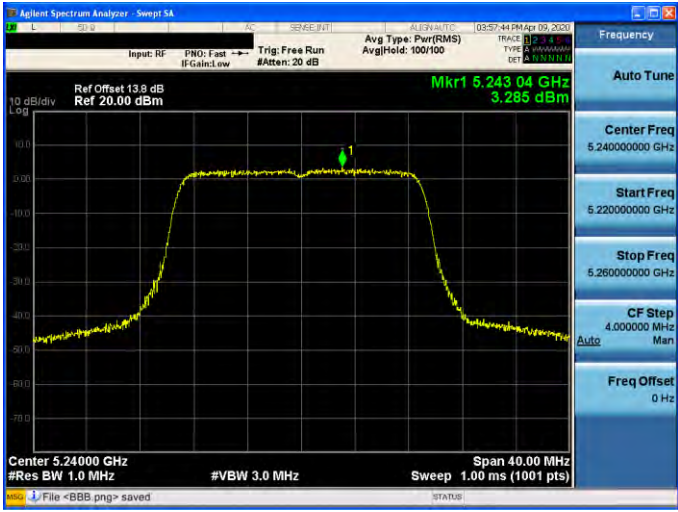
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

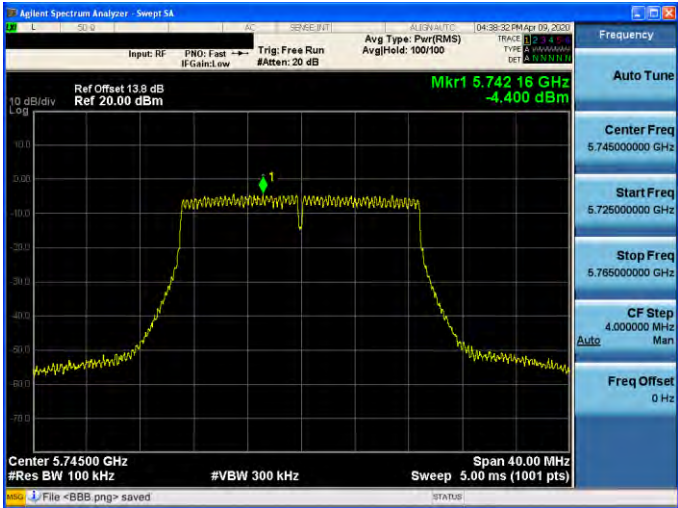
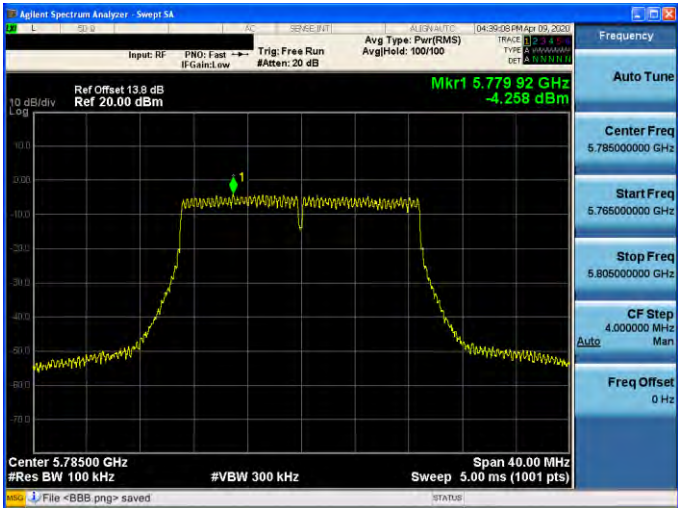
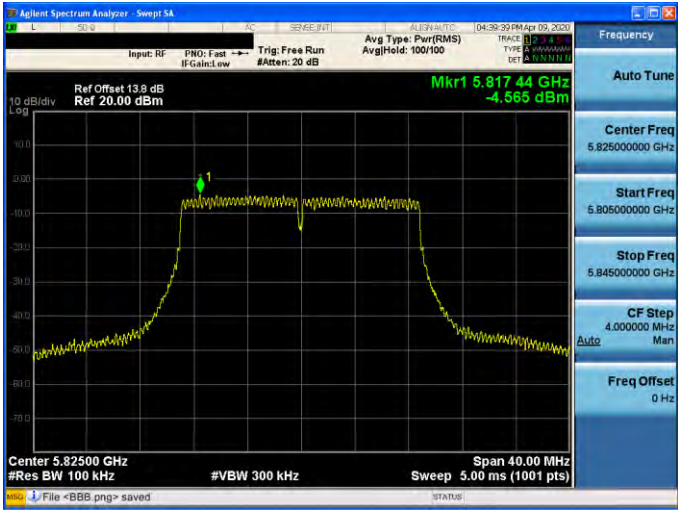


Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5190 MHz	
5230 MHz	

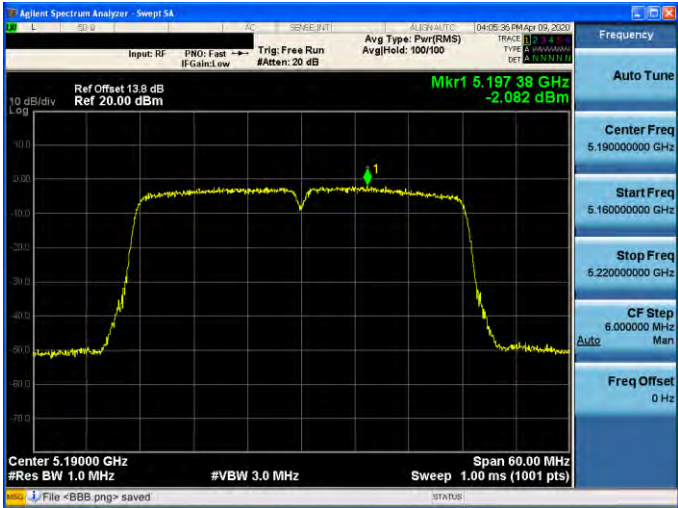
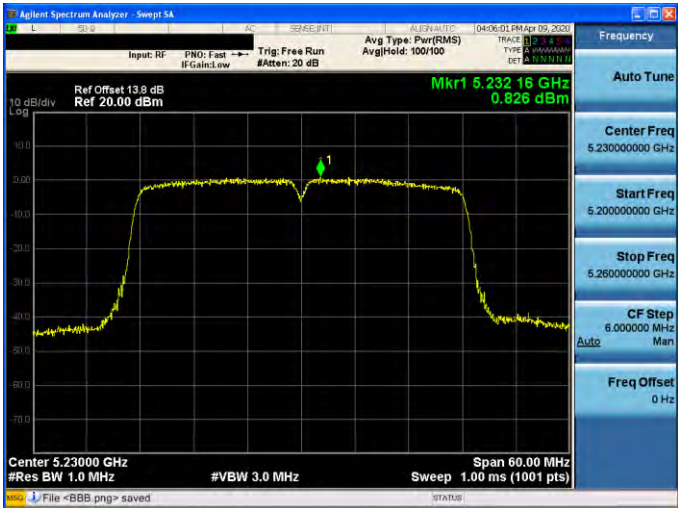


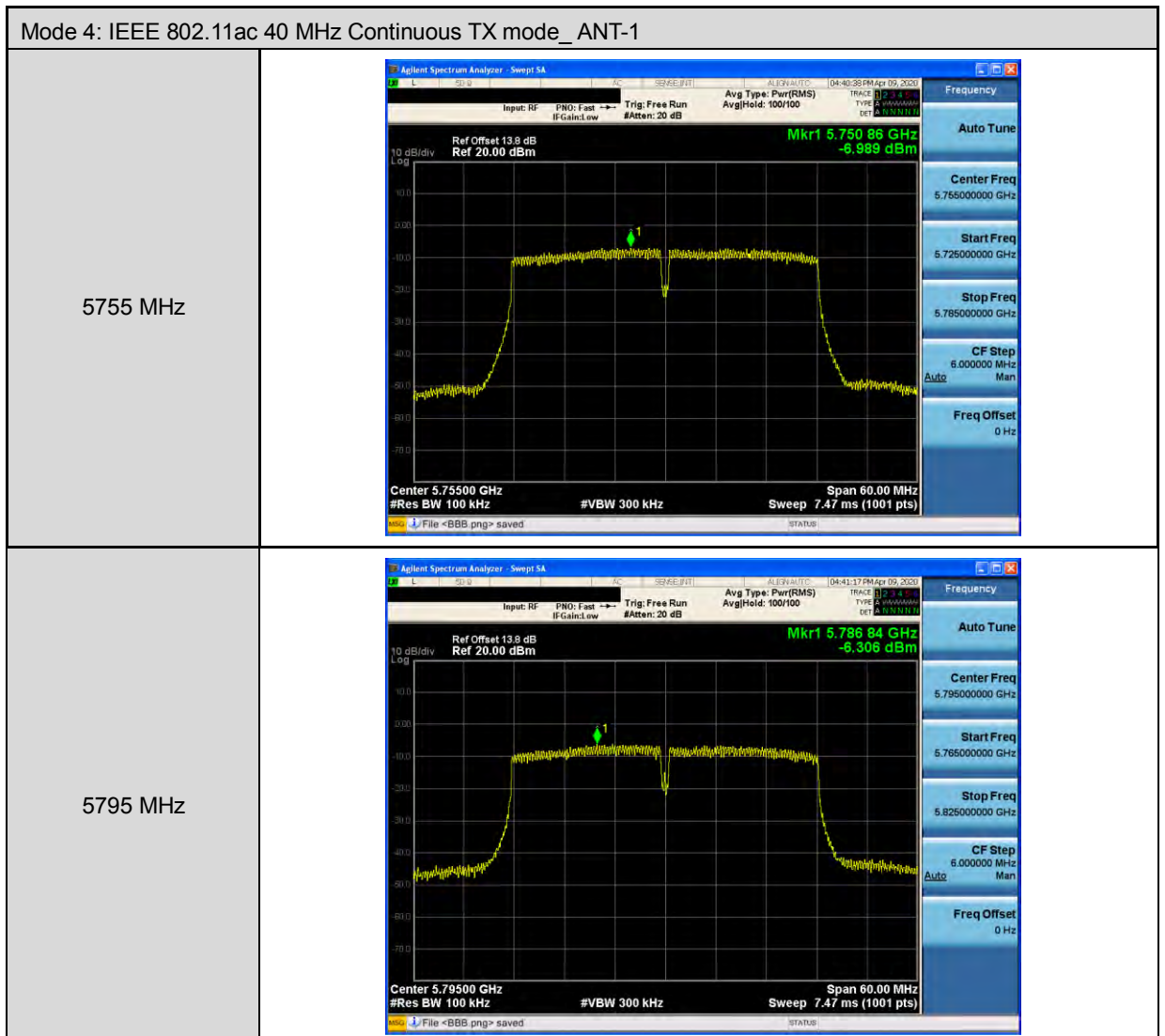


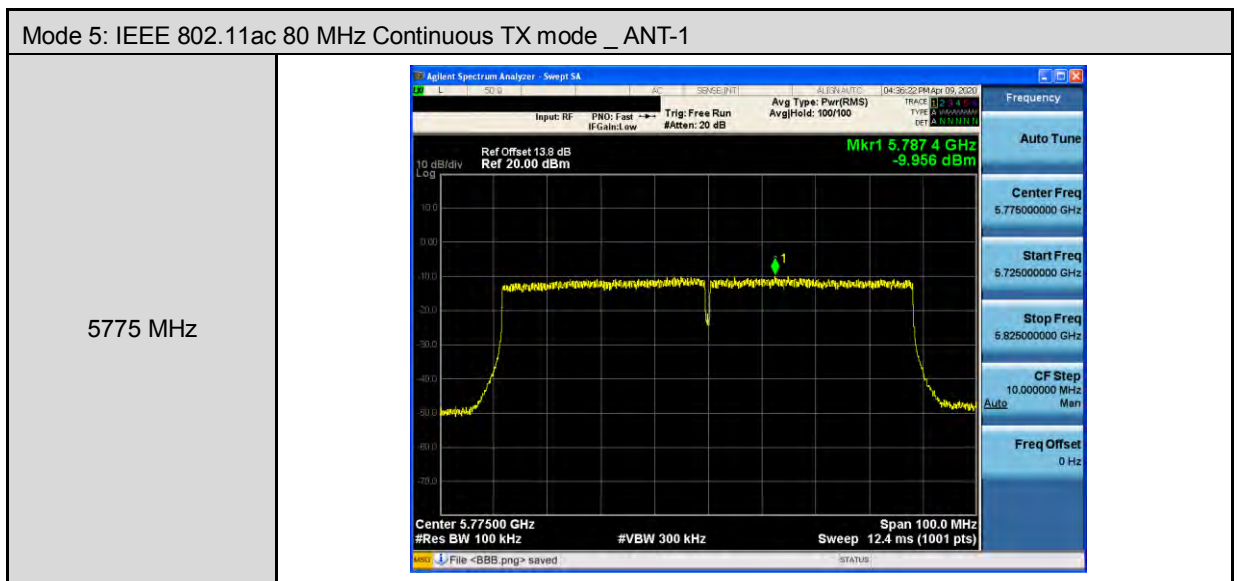
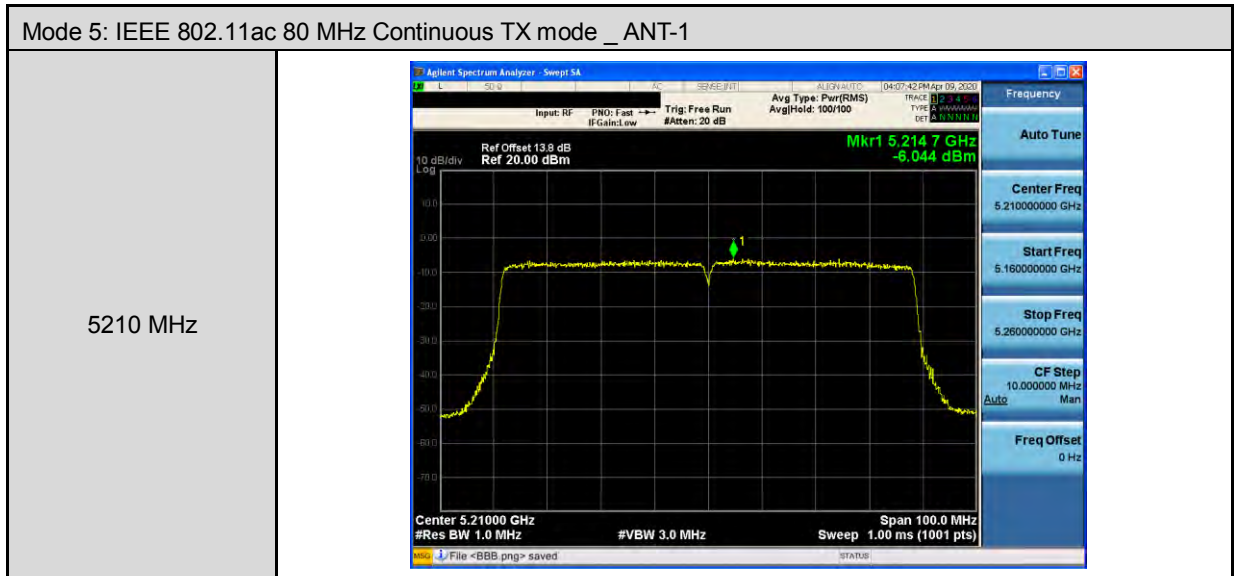
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	



Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	
5230 MHz	





---END---