



Test Mode		Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode						FCC Limit (dBm)
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27 M	14.31	0.027	14.25	0.027	17.29	0.054	≤ 28.05
5230		17.92	0.062	17.83	0.061	20.89	0.123	
5755		17.63	0.058	17.75	0.060	20.70	0.118	≤ 27.74
5795		17.42	0.055	17.31	0.054	20.38	0.109	
5190	400 M	14.23	0.026	14.20	0.026	17.23	0.053	≤ 28.05
5230		17.88	0.061	17.77	0.060	20.84	0.121	
5755		17.55	0.057	17.69	0.059	20.63	0.116	≤ 27.74
5755		17.35	0.054	17.27	0.053	20.32	0.108	

Test Mode		Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode						FCC Limit (dBm)
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6 M	14.10	0.026	14.23	0.026	17.18	0.052	≤ 28.05
5775		17.41	0.055	17.38	0.055	20.41	0.110	≤ 27.74
5210	866.6 M	13.95	0.025	14.00	0.025	16.99	0.050	≤ 28.05
5775		17.33	0.054	17.30	0.054	20.33	0.108	≤ 27.74

Note: The relevant measured result has the offset with cable loss already.



5.4. 26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5180	22.530	21.190	16.478	16.595
5200	32.350	31.430	17.348	17.041
5240	32.320	31.200	17.301	16.866

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5180	23.040	22.610	17.623	17.878
5200	40.650	36.740	18.985	18.608
5240	37.860	36.230	18.587	18.980

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5190	40.010	39.390	36.012	35.762
5230	63.010	63.410	36.572	36.533

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5210	82.440	83.020	75.524	75.263

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)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5180	19.840	20.610	17.523	17.791
5200	19.740	19.920	17.455	17.729
5240	20.080	19.940	17.584	17.586

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5190	39.610	39.460	35.743	35.779
5230	39.770	39.780	36.029	35.915

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
5210	82.560	81.160	75.487	75.242

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



■ Test Graphs

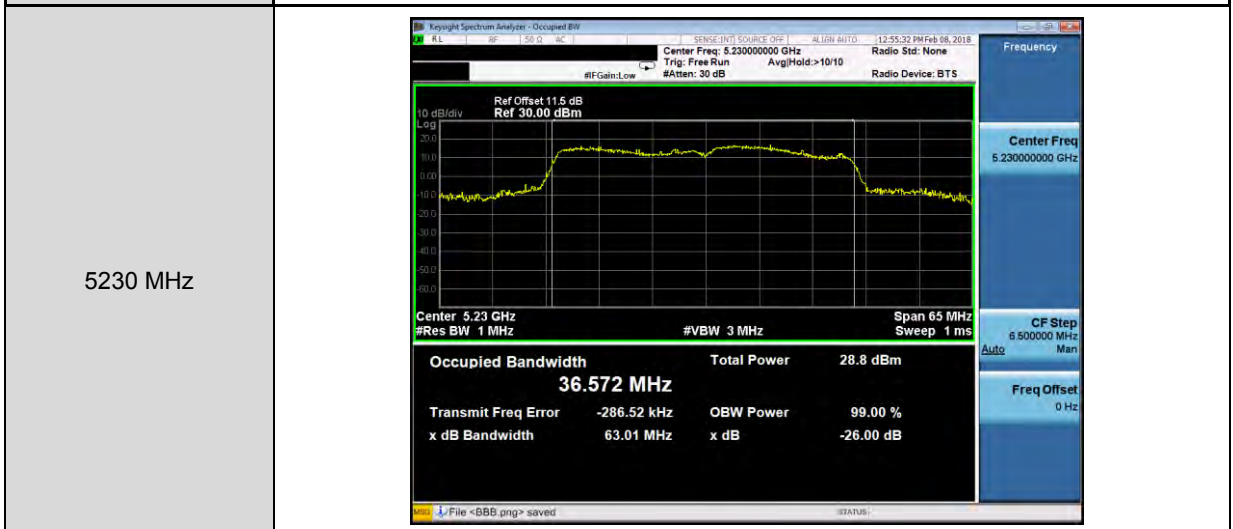
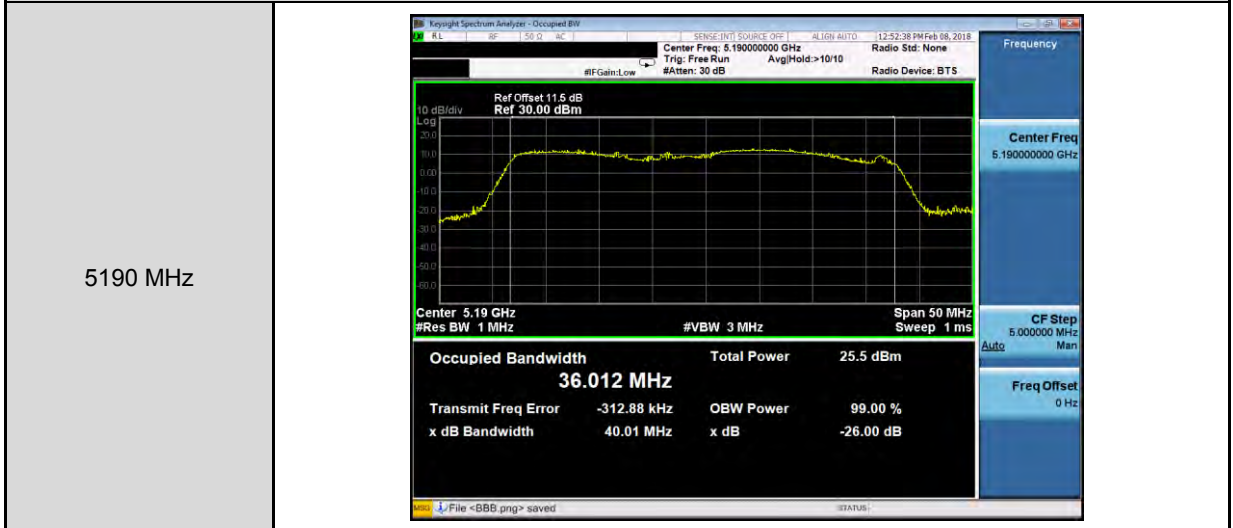
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0																
5180 MHz	<p>Center Freq: 5.18000000 GHz</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>25.1 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">16.478 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td></td> <td></td> <td>22.53 MHz</td> </tr> </table>	Occupied Bandwidth	Total Power	25.1 dBm	16.478 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-26.00 dB			22.53 MHz
Occupied Bandwidth	Total Power	25.1 dBm														
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Transmit Freq Error	OBW Power	99.00 %														
x dB Bandwidth	x dB	-26.00 dB														
		22.53 MHz														
5200 MHz	<p>Center Freq: 5.20000000 GHz</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 35 MHz Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>28.3 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">17.348 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td></td> <td></td> <td>32.35 MHz</td> </tr> </table>	Occupied Bandwidth	Total Power	28.3 dBm	17.348 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-26.00 dB			32.35 MHz
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5240 MHz	<p>Center Freq: 5.24000000 GHz</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 35 MHz Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>28.9 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">17.301 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td></td> <td></td> <td>32.32 MHz</td> </tr> </table>	Occupied Bandwidth	Total Power	28.9 dBm	17.301 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-26.00 dB			32.32 MHz
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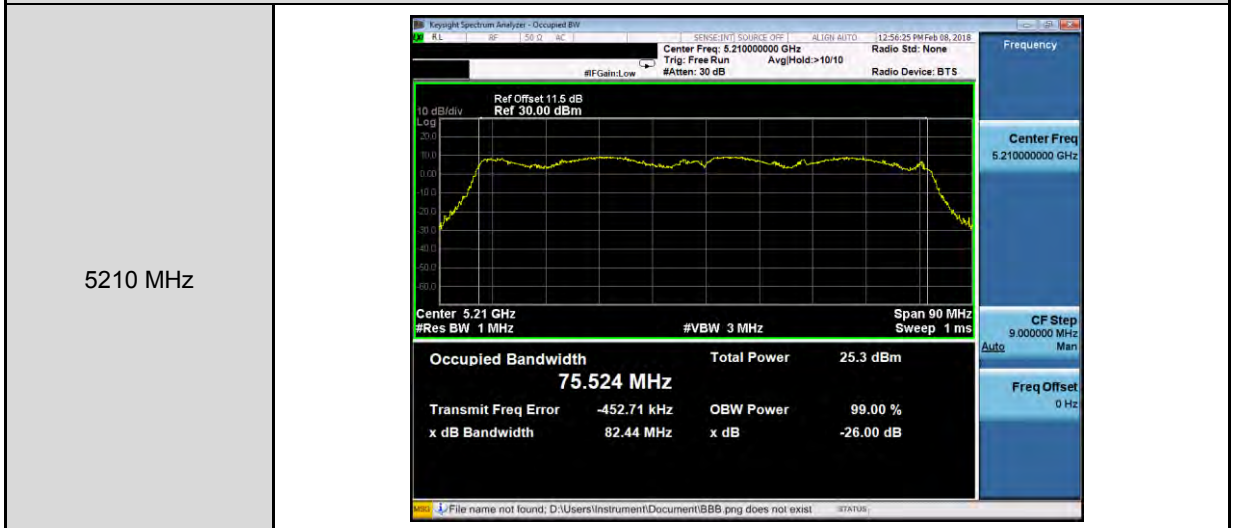
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0																			
5180 MHz	<p>Center Freq: 5.18000000 GHz</p> <p>Center 5.18 GHz</p> <p>#Res BW 300 kHz</p> <p>#VBW 1 MHz</p> <p>Span 25 MHz</p> <p>Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>26.9 dBm</td> </tr> <tr> <td>17.623 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>-7.823 kHz</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>23.04 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	26.9 dBm	17.623 MHz			Transmit Freq Error	OBW Power	99.00 %	-7.823 kHz			x dB Bandwidth	x dB	-26.00 dB	23.04 MHz		
Occupied Bandwidth	Total Power	26.9 dBm																	
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Transmit Freq Error	OBW Power	99.00 %																	
-7.823 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
23.04 MHz																			
5200 MHz	<p>Center Freq: 5.20000000 GHz</p> <p>Center 5.2 GHz</p> <p>#Res BW 300 kHz</p> <p>#VBW 1 MHz</p> <p>Span 45 MHz</p> <p>Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>29.3 dBm</td> </tr> <tr> <td>18.985 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>-41.569 kHz</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>40.65 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	29.3 dBm	18.985 MHz			Transmit Freq Error	OBW Power	99.00 %	-41.569 kHz			x dB Bandwidth	x dB	-26.00 dB	40.65 MHz		
Occupied Bandwidth	Total Power	29.3 dBm																	
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Transmit Freq Error	OBW Power	99.00 %																	
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x dB Bandwidth	x dB	-26.00 dB																	
40.65 MHz																			
5240 MHz	<p>Center Freq: 5.24000000 GHz</p> <p>Center 5.24 GHz</p> <p>#Res BW 300 kHz</p> <p>#VBW 1 MHz</p> <p>Span 40 MHz</p> <p>Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>29.0 dBm</td> </tr> <tr> <td>18.587 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>711 Hz</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>37.86 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	29.0 dBm	18.587 MHz			Transmit Freq Error	OBW Power	99.00 %	711 Hz			x dB Bandwidth	x dB	-26.00 dB	37.86 MHz		
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Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0



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





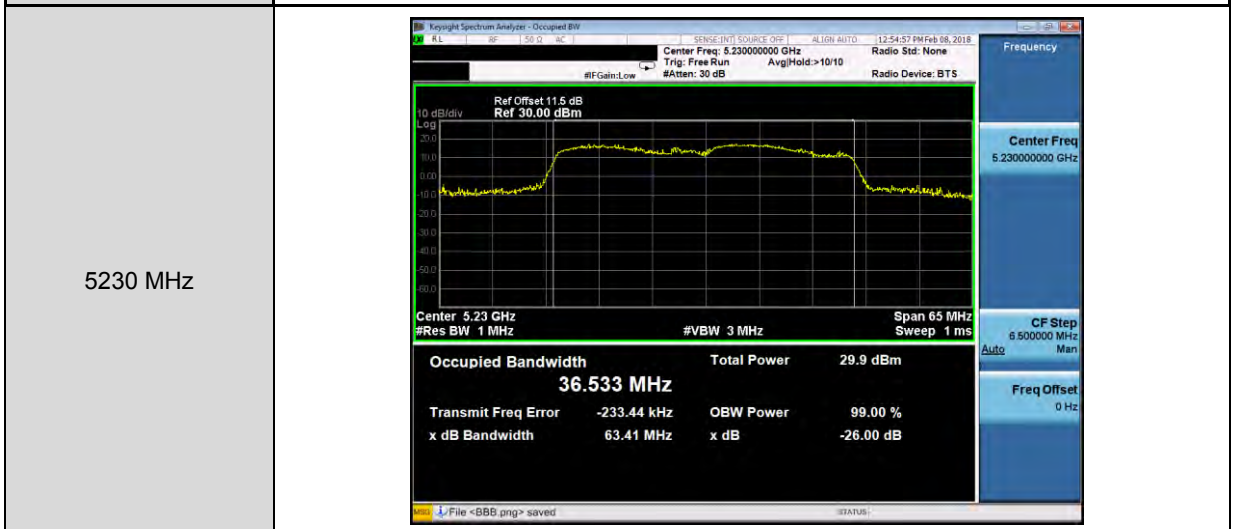
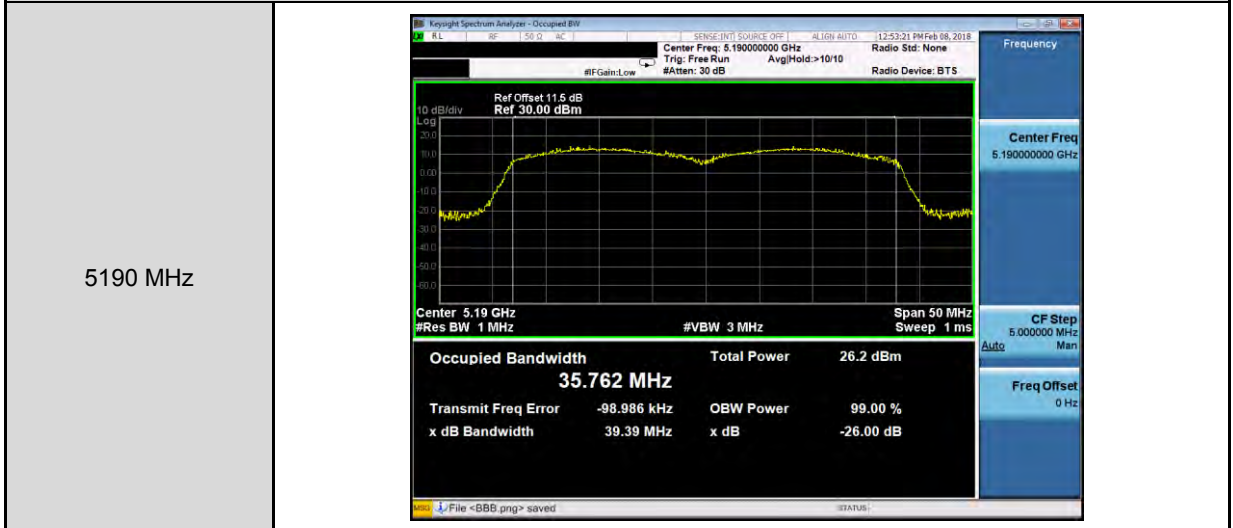
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1																			
5180 MHz	<p>Center Freq: 5.18000000 GHz</p> <p>Center 5.18 GHz</p> <p>#Res BW 300 kHz</p> <p>#VBW 1 MHz</p> <p>Span 25 MHz</p> <p>Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>27.6 dBm</td> </tr> <tr> <td>16.595 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>-89.097 kHz</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>21.19 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	27.6 dBm	16.595 MHz			Transmit Freq Error	OBW Power	99.00 %	-89.097 kHz			x dB Bandwidth	x dB	-26.00 dB	21.19 MHz		
Occupied Bandwidth	Total Power	27.6 dBm																	
16.595 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
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5200 MHz	<p>Center Freq: 5.20000000 GHz</p> <p>Center 5.2 GHz</p> <p>#Res BW 300 kHz</p> <p>#VBW 1 MHz</p> <p>Span 35 MHz</p> <p>Sweep 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>29.2 dBm</td> </tr> <tr> <td>17.041 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>-89.288 kHz</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>31.43 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	29.2 dBm	17.041 MHz			Transmit Freq Error	OBW Power	99.00 %	-89.288 kHz			x dB Bandwidth	x dB	-26.00 dB	31.43 MHz		
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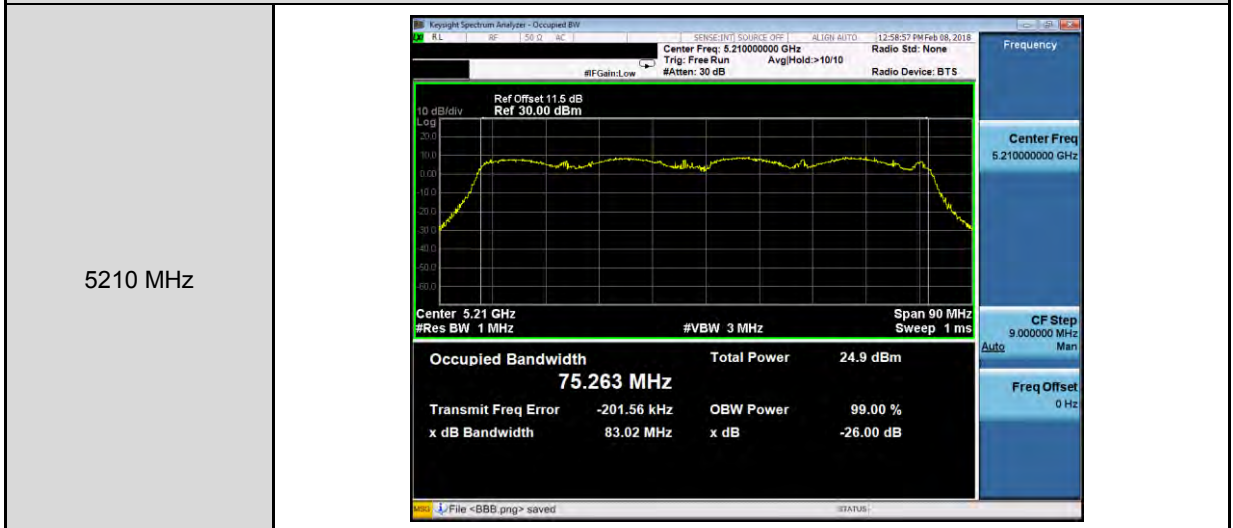
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1																			
5180 MHz	<p>Center Freq: 5.18000000 GHz</p> <p>Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>26.8 dBm</td></tr><tr><td>17.878 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-83.599 kHz</td><td></td><td></td></tr><tr><td>x dB Bandwidth</td><td>x dB</td><td>-26.00 dB</td></tr><tr><td>22.61 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	26.8 dBm	17.878 MHz			Transmit Freq Error	OBW Power	99.00 %	-83.599 kHz			x dB Bandwidth	x dB	-26.00 dB	22.61 MHz		
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x dB Bandwidth	x dB	-26.00 dB																	
22.61 MHz																			
5200 MHz	<p>Center Freq: 5.20000000 GHz</p> <p>Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>28.8 dBm</td></tr><tr><td>18.608 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-9.219 kHz</td><td></td><td></td></tr><tr><td>x dB Bandwidth</td><td>x dB</td><td>-26.00 dB</td></tr><tr><td>36.74 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	28.8 dBm	18.608 MHz			Transmit Freq Error	OBW Power	99.00 %	-9.219 kHz			x dB Bandwidth	x dB	-26.00 dB	36.74 MHz		
Occupied Bandwidth	Total Power	28.8 dBm																	
18.608 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
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x dB Bandwidth	x dB	-26.00 dB																	
36.74 MHz																			
5240 MHz	<p>Center Freq: 5.24000000 GHz</p> <p>Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>30.2 dBm</td></tr><tr><td>18.980 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>288.05 kHz</td><td></td><td></td></tr><tr><td>x dB Bandwidth</td><td>x dB</td><td>-26.00 dB</td></tr><tr><td>36.23 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	30.2 dBm	18.980 MHz			Transmit Freq Error	OBW Power	99.00 %	288.05 kHz			x dB Bandwidth	x dB	-26.00 dB	36.23 MHz		
Occupied Bandwidth	Total Power	30.2 dBm																	
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288.05 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
36.23 MHz																			



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

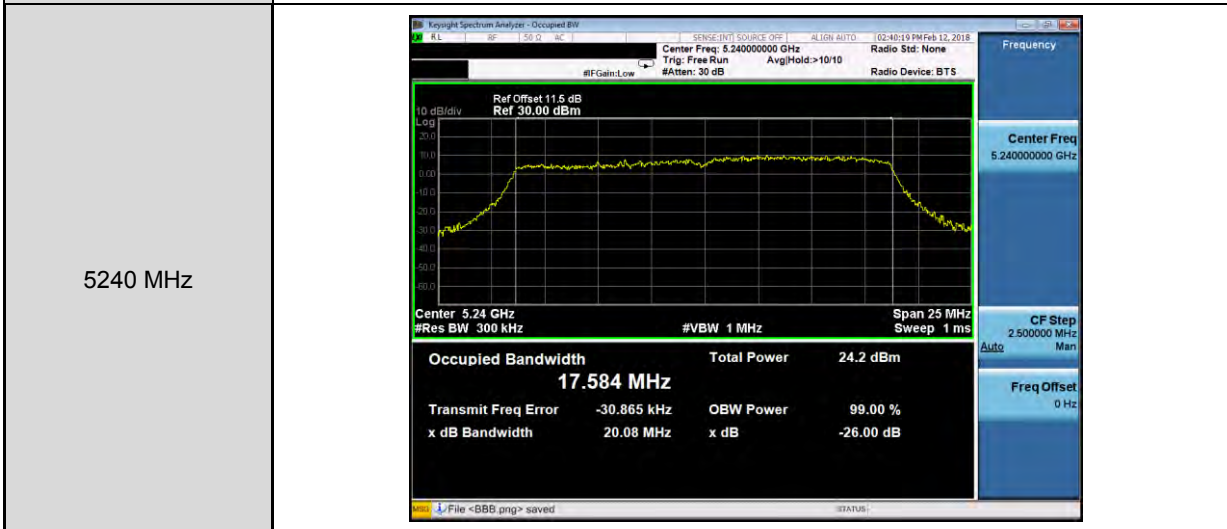
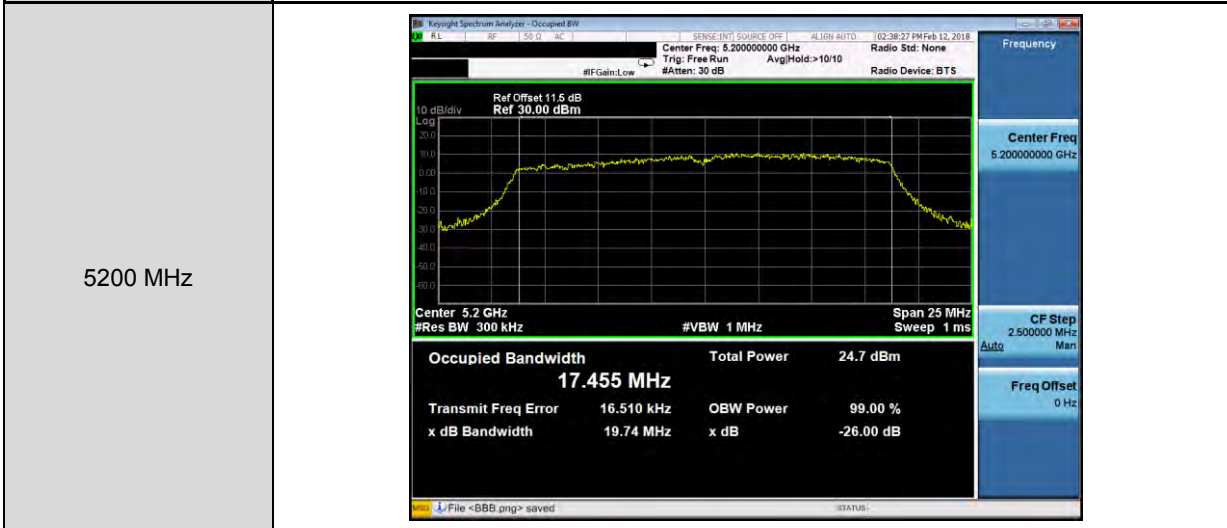
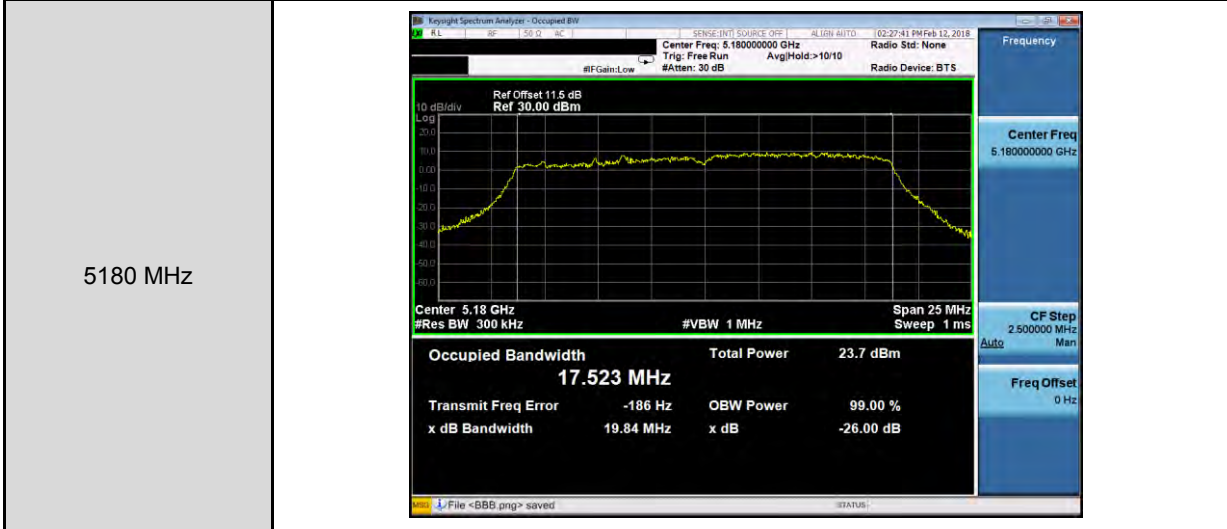


Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ ANT-1



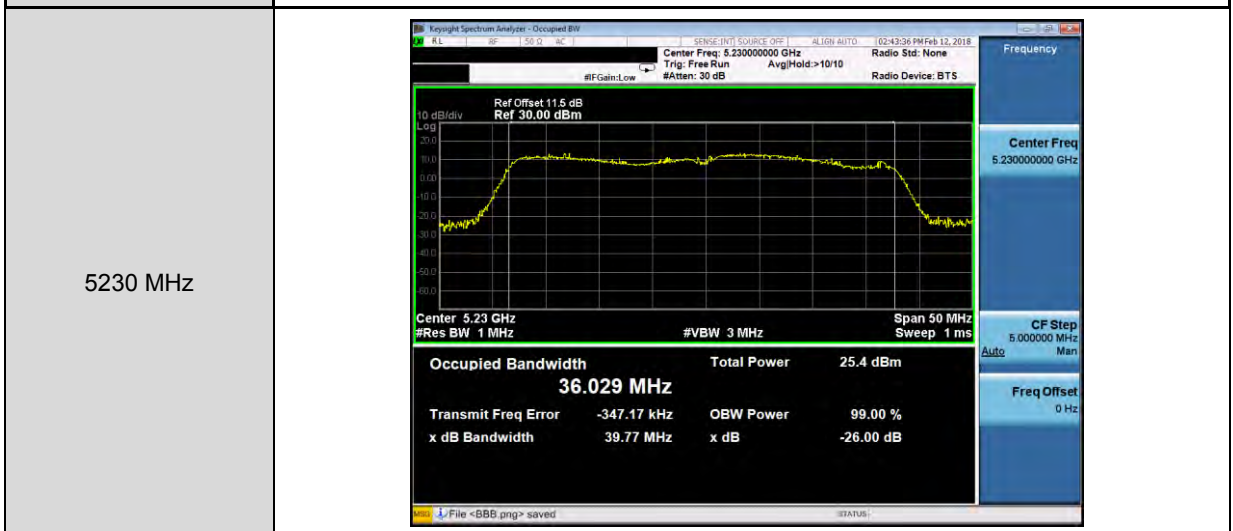
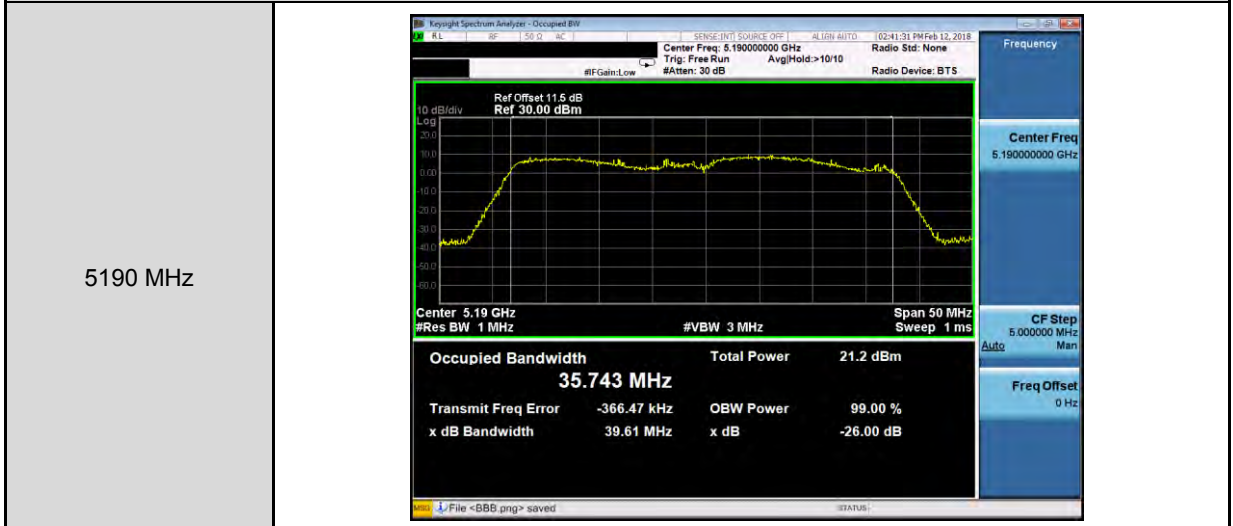
Beamforming on

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

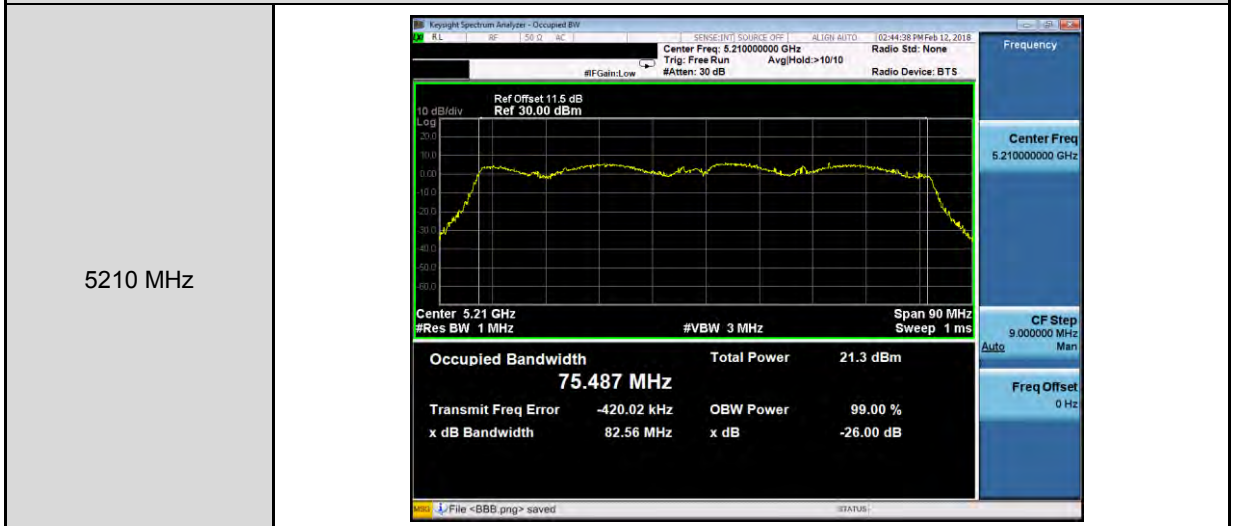




Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0



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

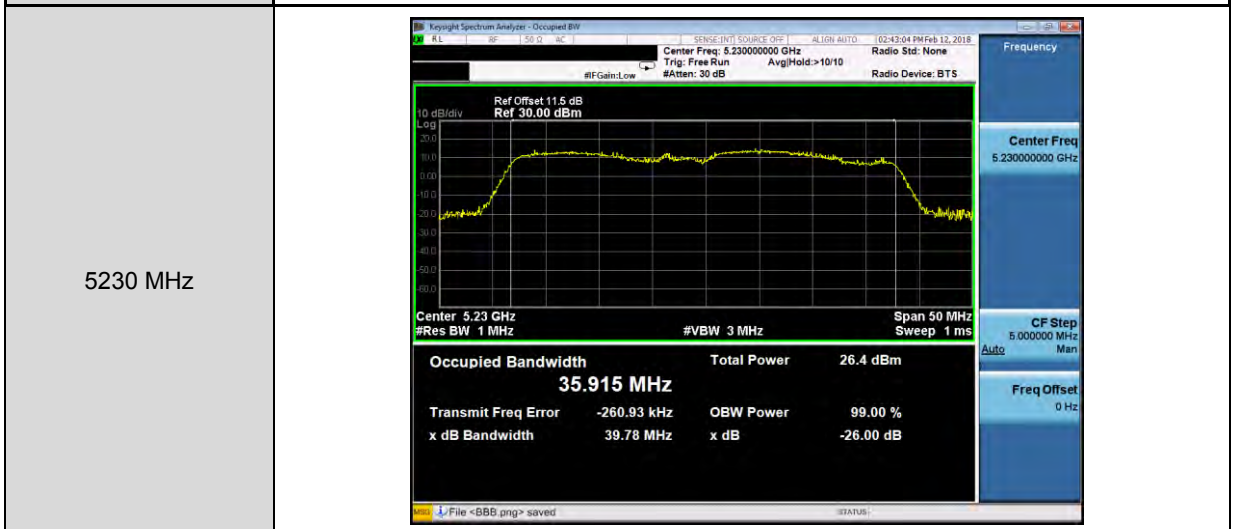
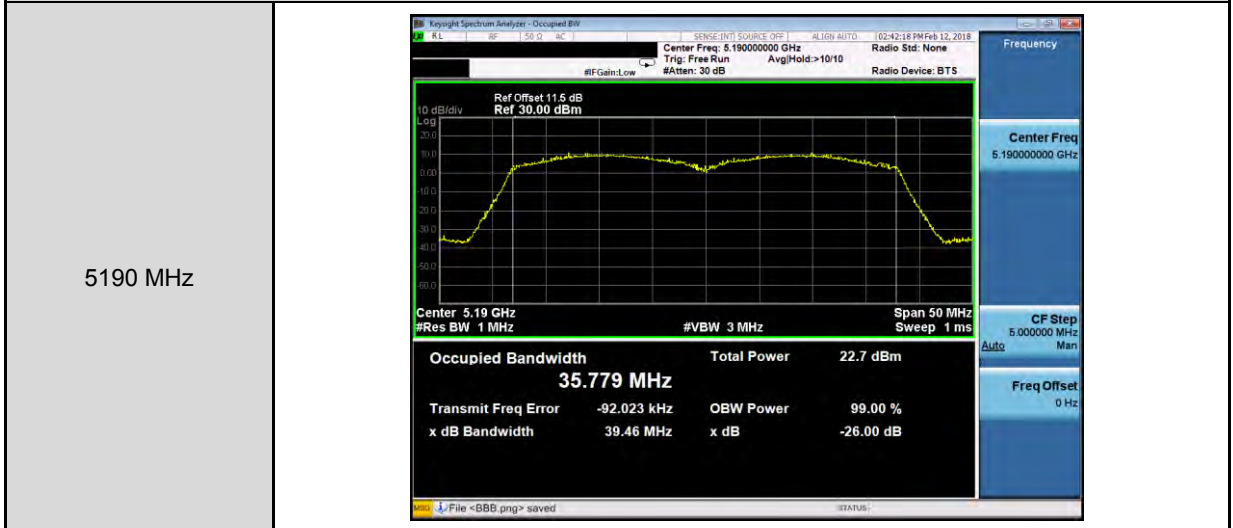




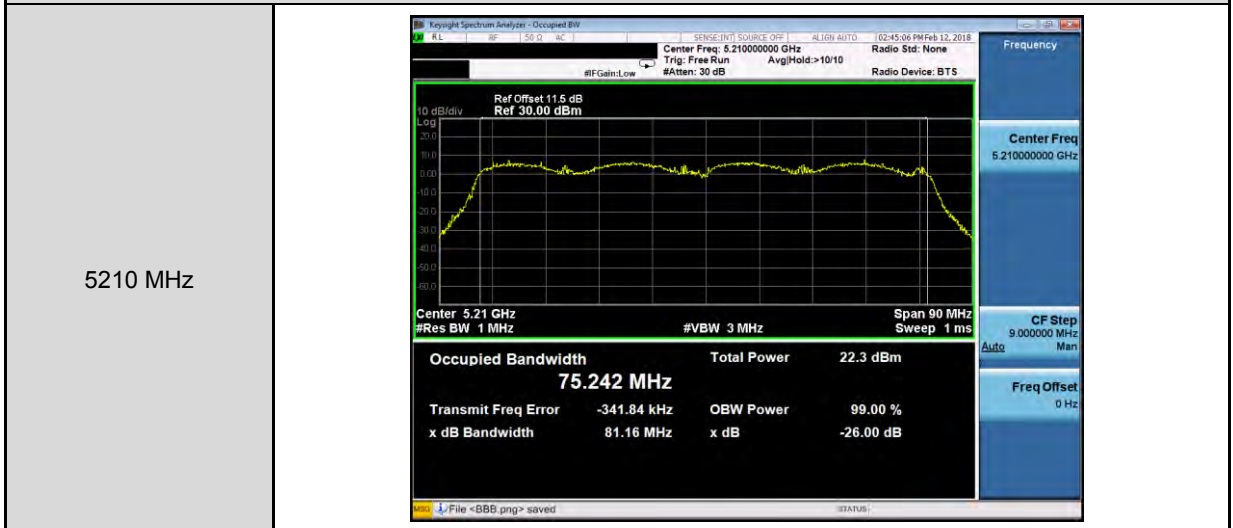
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1	
5180 MHz	<p>Center Freq: 5.18000000 GHz</p> <p>Center 5.18 GHz</p> <p>Occupied Bandwidth 17.791 MHz</p> <p>Total Power 24.6 dBm</p> <p>Transmit Freq Error -82.868 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 20.61 MHz</p> <p>x dB -26.00 dB</p>
5200 MHz	<p>Center Freq: 5.20000000 GHz</p> <p>Center 5.2 GHz</p> <p>Occupied Bandwidth 17.729 MHz</p> <p>Total Power 25.0 dBm</p> <p>Transmit Freq Error -50.627 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 19.92 MHz</p> <p>x dB -26.00 dB</p>
5240 MHz	<p>Center Freq: 5.24000000 GHz</p> <p>Center 5.24 GHz</p> <p>Occupied Bandwidth 17.586 MHz</p> <p>Total Power 25.4 dBm</p> <p>Transmit Freq Error -46.466 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 19.94 MHz</p> <p>x dB -26.00 dB</p>



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



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





5.5. 6dB RF Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	16320	16370	> 500
5785	15720	16340	> 500
5825	16320	15730	> 500

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17160	17610	> 500
5785	17140	16940	> 500
5825	17580	16340	> 500

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35740	35170	> 500
5795	35720	35670	> 500

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75820	75790	> 500



Beamforming on

Test Mode	Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17180	17640	> 500
5785	17290	16900	> 500
5825	17600	17550	> 500

Test Mode	Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35690	33890	> 500
5795	35460	35740	> 500

Test Mode	Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75770	75500	> 500



■ Test Graphs

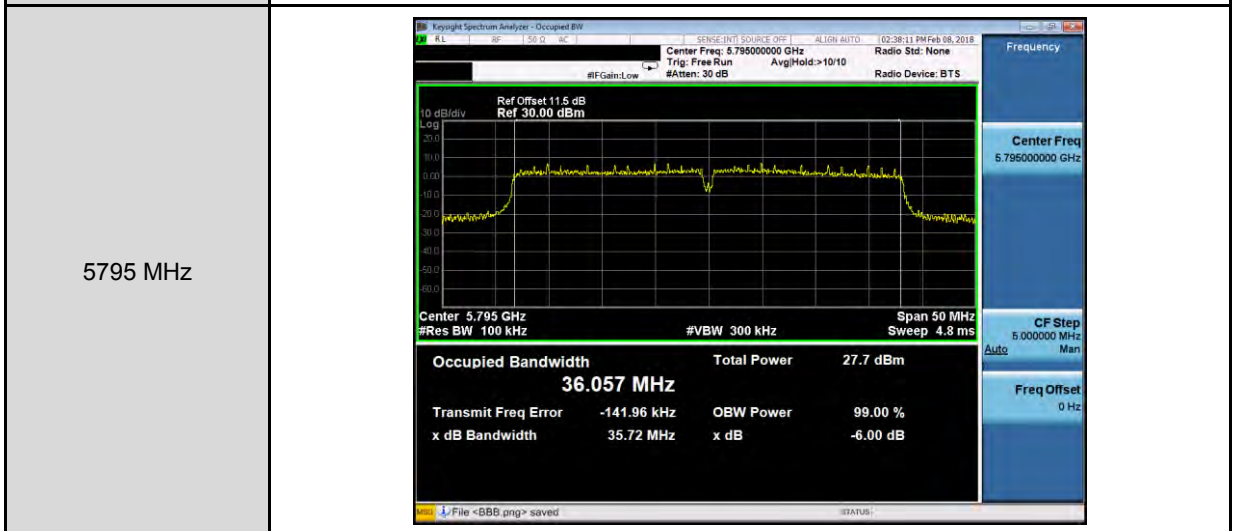
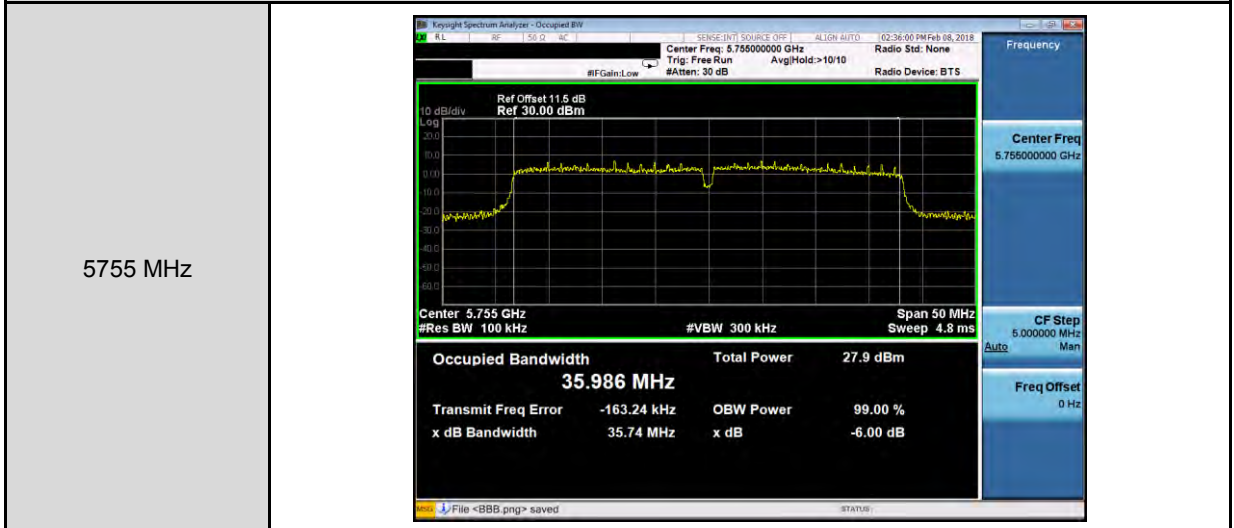
Mode 2: IEEE 802.11a Continuous TX mode_ANT-0	
5745 MHz	<p>Center Freq: 5.745 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 16.462 MHz</p> <p>Total Power: 28.5 dBm Transmit Freq Error: -97.546 kHz OBW Power: 99.00 % x dB Bandwidth: 16.32 MHz x dB: -6.00 dB</p>
5785 MHz	<p>Center Freq: 5.785 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 16.451 MHz</p> <p>Total Power: 28.0 dBm Transmit Freq Error: -103.11 kHz OBW Power: 99.00 % x dB Bandwidth: 15.72 MHz x dB: -6.00 dB</p>
5825 MHz	<p>Center Freq: 5.825 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 16.450 MHz</p> <p>Total Power: 27.5 dBm Transmit Freq Error: -113.75 kHz OBW Power: 99.00 % x dB Bandwidth: 16.32 MHz x dB: -6.00 dB</p>



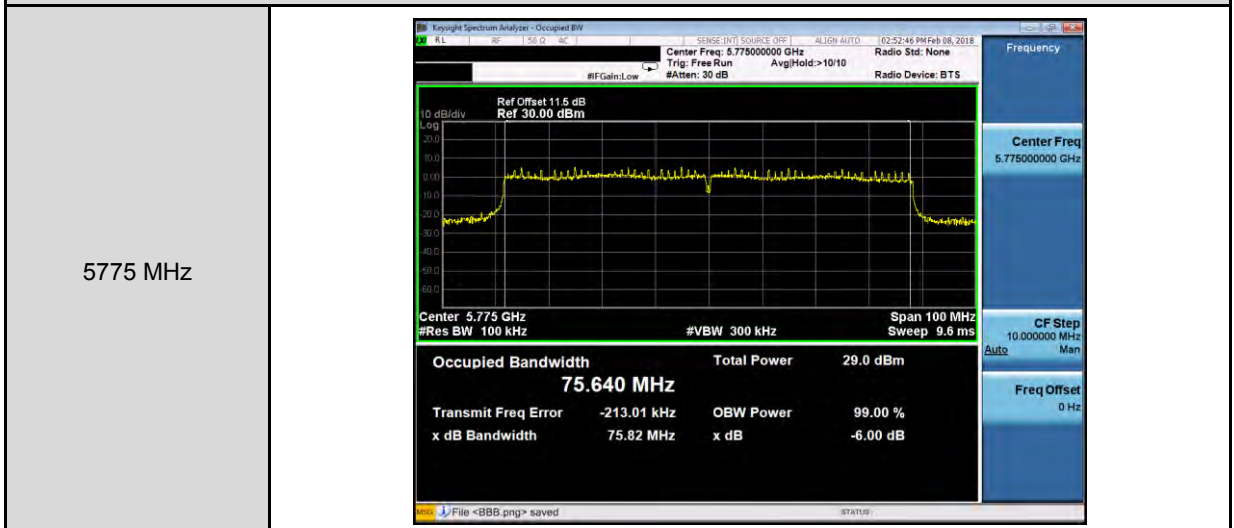
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-0															
5745 MHz	<p>Key Performance Indicators for 5745 MHz:</p> <table border="1"><tr><td>Center Freq</td><td>5.745 GHz</td></tr><tr><td>Occupied Bandwidth</td><td>17.790 MHz</td></tr><tr><td>Total Power</td><td>29.4 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-55.609 kHz</td></tr><tr><td>x dB Bandwidth</td><td>17.16 MHz</td></tr><tr><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB</td><td>-6.00 dB</td></tr></table>	Center Freq	5.745 GHz	Occupied Bandwidth	17.790 MHz	Total Power	29.4 dBm	Transmit Freq Error	-55.609 kHz	x dB Bandwidth	17.16 MHz	OBW Power	99.00 %	x dB	-6.00 dB
Center Freq	5.745 GHz														
Occupied Bandwidth	17.790 MHz														
Total Power	29.4 dBm														
Transmit Freq Error	-55.609 kHz														
x dB Bandwidth	17.16 MHz														
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x dB	-6.00 dB														
5785 MHz	<p>Key Performance Indicators for 5785 MHz:</p> <table border="1"><tr><td>Center Freq</td><td>5.785 GHz</td></tr><tr><td>Occupied Bandwidth</td><td>17.773 MHz</td></tr><tr><td>Total Power</td><td>29.5 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-83.789 kHz</td></tr><tr><td>x dB Bandwidth</td><td>17.14 MHz</td></tr><tr><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB</td><td>-6.00 dB</td></tr></table>	Center Freq	5.785 GHz	Occupied Bandwidth	17.773 MHz	Total Power	29.5 dBm	Transmit Freq Error	-83.789 kHz	x dB Bandwidth	17.14 MHz	OBW Power	99.00 %	x dB	-6.00 dB
Center Freq	5.785 GHz														
Occupied Bandwidth	17.773 MHz														
Total Power	29.5 dBm														
Transmit Freq Error	-83.789 kHz														
x dB Bandwidth	17.14 MHz														
OBW Power	99.00 %														
x dB	-6.00 dB														
5825 MHz	<p>Key Performance Indicators for 5825 MHz:</p> <table border="1"><tr><td>Center Freq</td><td>5.825 GHz</td></tr><tr><td>Occupied Bandwidth</td><td>17.837 MHz</td></tr><tr><td>Total Power</td><td>28.6 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-79.051 kHz</td></tr><tr><td>x dB Bandwidth</td><td>17.58 MHz</td></tr><tr><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB</td><td>-6.00 dB</td></tr></table>	Center Freq	5.825 GHz	Occupied Bandwidth	17.837 MHz	Total Power	28.6 dBm	Transmit Freq Error	-79.051 kHz	x dB Bandwidth	17.58 MHz	OBW Power	99.00 %	x dB	-6.00 dB
Center Freq	5.825 GHz														
Occupied Bandwidth	17.837 MHz														
Total Power	28.6 dBm														
Transmit Freq Error	-79.051 kHz														
x dB Bandwidth	17.58 MHz														
OBW Power	99.00 %														
x dB	-6.00 dB														



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



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





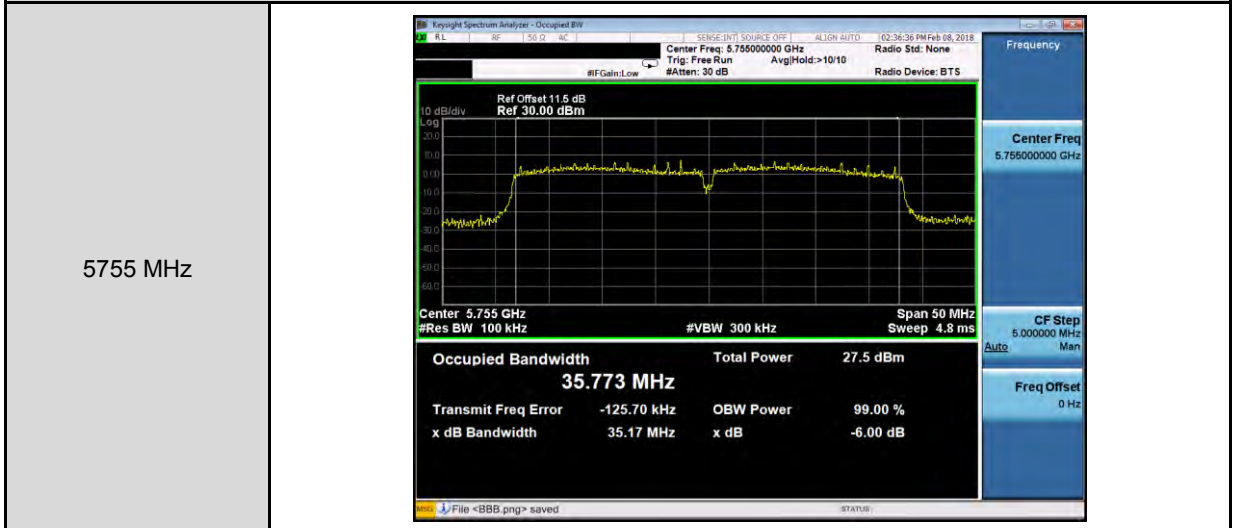
Mode 2: IEEE 802.11a Continuous TX mode_ANT-1																			
5745 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.745000000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>28.2 dBm</td></tr><tr><td>16.440 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-94.399 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>16.37 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	28.2 dBm	16.440 MHz			Transmit Freq Error	OBW Power	99.00 %	-94.399 kHz	x dB	-6.00 dB	x dB Bandwidth			16.37 MHz		
Occupied Bandwidth	Total Power	28.2 dBm																	
16.440 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-94.399 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
16.37 MHz																			
5785 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.785000000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>28.2 dBm</td></tr><tr><td>16.425 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-116.38 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>16.34 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	28.2 dBm	16.425 MHz			Transmit Freq Error	OBW Power	99.00 %	-116.38 kHz	x dB	-6.00 dB	x dB Bandwidth			16.34 MHz		
Occupied Bandwidth	Total Power	28.2 dBm																	
16.425 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-116.38 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
16.34 MHz																			
5825 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.825000000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>28.0 dBm</td></tr><tr><td>16.439 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-106.13 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>15.73 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	28.0 dBm	16.439 MHz			Transmit Freq Error	OBW Power	99.00 %	-106.13 kHz	x dB	-6.00 dB	x dB Bandwidth			15.73 MHz		
Occupied Bandwidth	Total Power	28.0 dBm																	
16.439 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-106.13 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
15.73 MHz																			



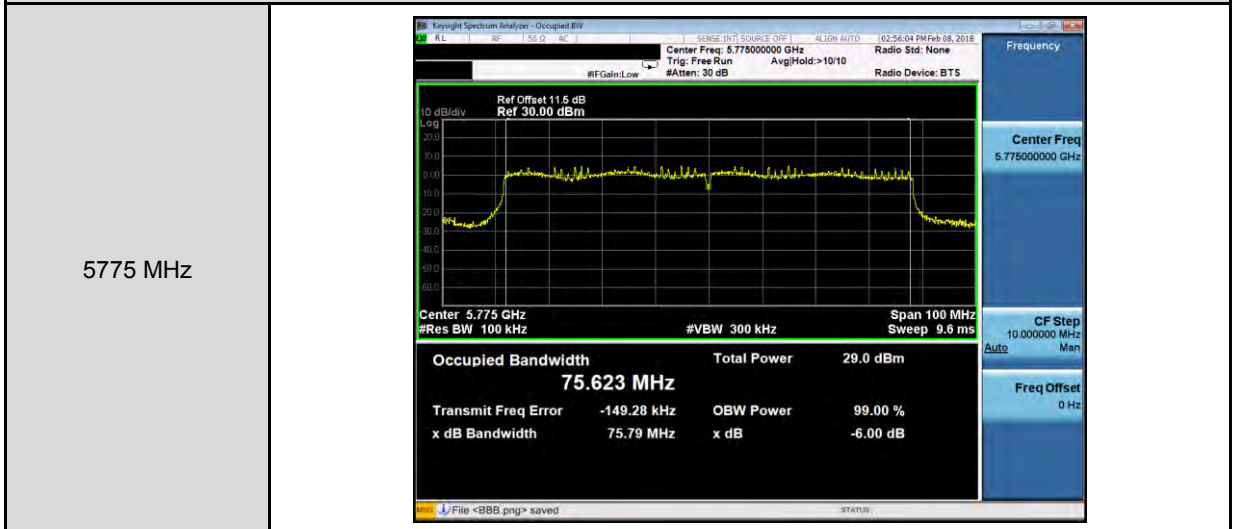
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1													
5745 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.74500000 GHz Trig: Free Run #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>17.758 MHz</td><td>Total Power</td><td>28.9 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-82.181 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>17.61 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	17.758 MHz	Total Power	28.9 dBm	Transmit Freq Error	-82.181 kHz	OBW Power	99.00 %	x dB Bandwidth	17.61 MHz	x dB	-6.00 dB
Occupied Bandwidth	17.758 MHz	Total Power	28.9 dBm										
Transmit Freq Error	-82.181 kHz	OBW Power	99.00 %										
x dB Bandwidth	17.61 MHz	x dB	-6.00 dB										
5785 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.785000000 GHz Trig: Free Run #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>17.643 MHz</td><td>Total Power</td><td>28.7 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-72.920 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>16.94 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	17.643 MHz	Total Power	28.7 dBm	Transmit Freq Error	-72.920 kHz	OBW Power	99.00 %	x dB Bandwidth	16.94 MHz	x dB	-6.00 dB
Occupied Bandwidth	17.643 MHz	Total Power	28.7 dBm										
Transmit Freq Error	-72.920 kHz	OBW Power	99.00 %										
x dB Bandwidth	16.94 MHz	x dB	-6.00 dB										
5825 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.825000000 GHz Trig: Free Run #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>17.644 MHz</td><td>Total Power</td><td>28.8 dBm</td></tr><tr><td>Transmit Freq Error</td><td>-81.012 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>16.34 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	17.644 MHz	Total Power	28.8 dBm	Transmit Freq Error	-81.012 kHz	OBW Power	99.00 %	x dB Bandwidth	16.34 MHz	x dB	-6.00 dB
Occupied Bandwidth	17.644 MHz	Total Power	28.8 dBm										
Transmit Freq Error	-81.012 kHz	OBW Power	99.00 %										
x dB Bandwidth	16.34 MHz	x dB	-6.00 dB										



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



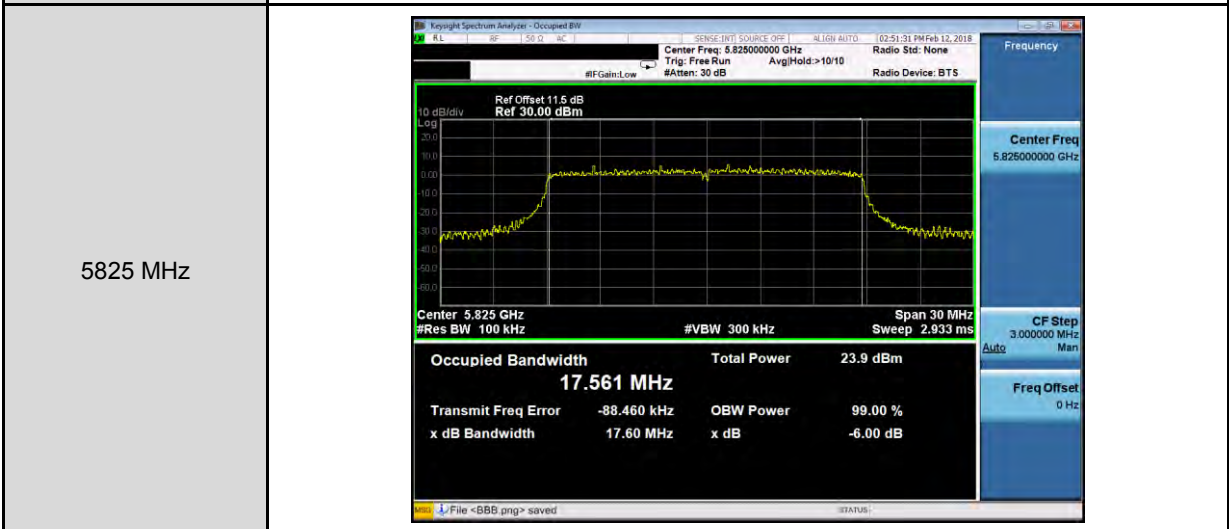
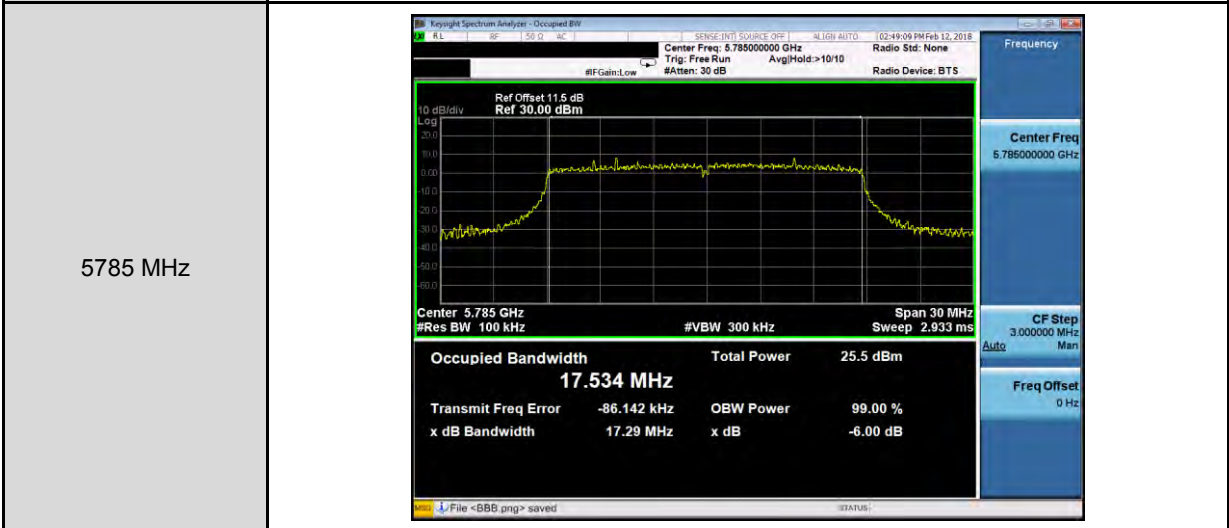
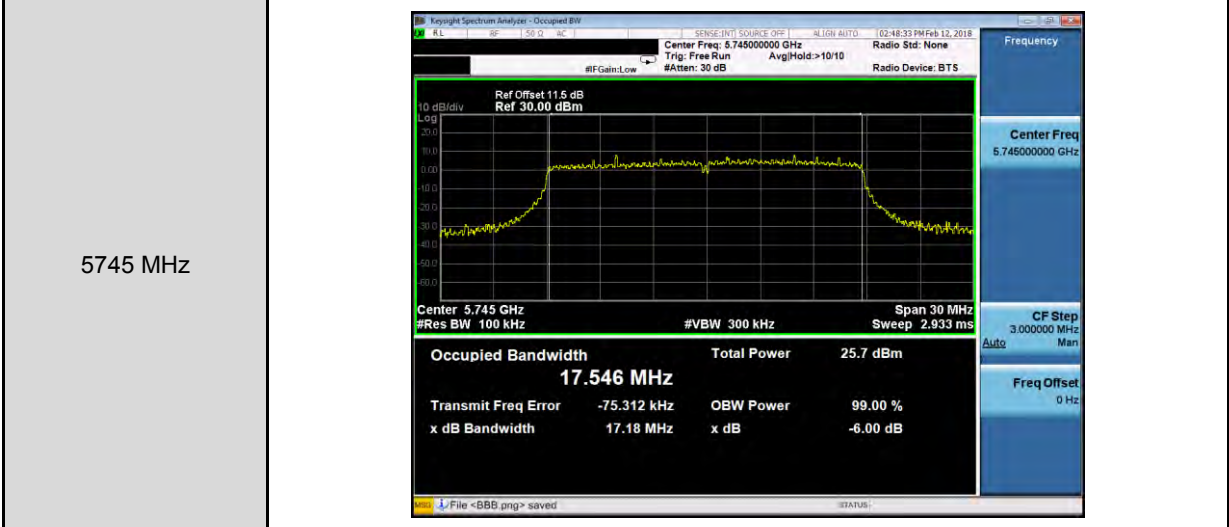
Mode 5: IEEE 802.11ac 80 MHz Continuous TX mode_ANT-1





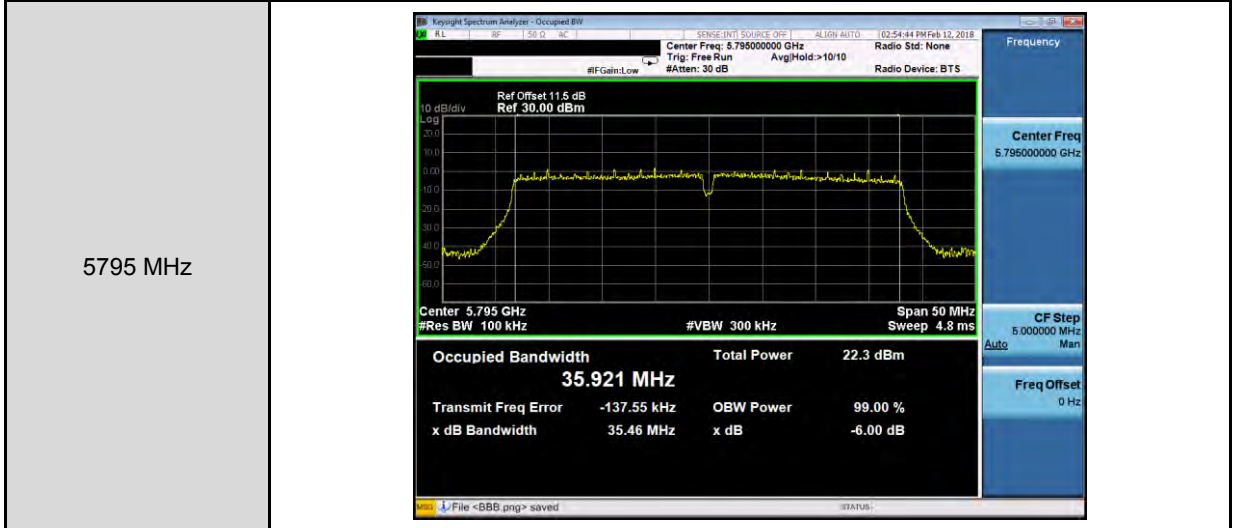
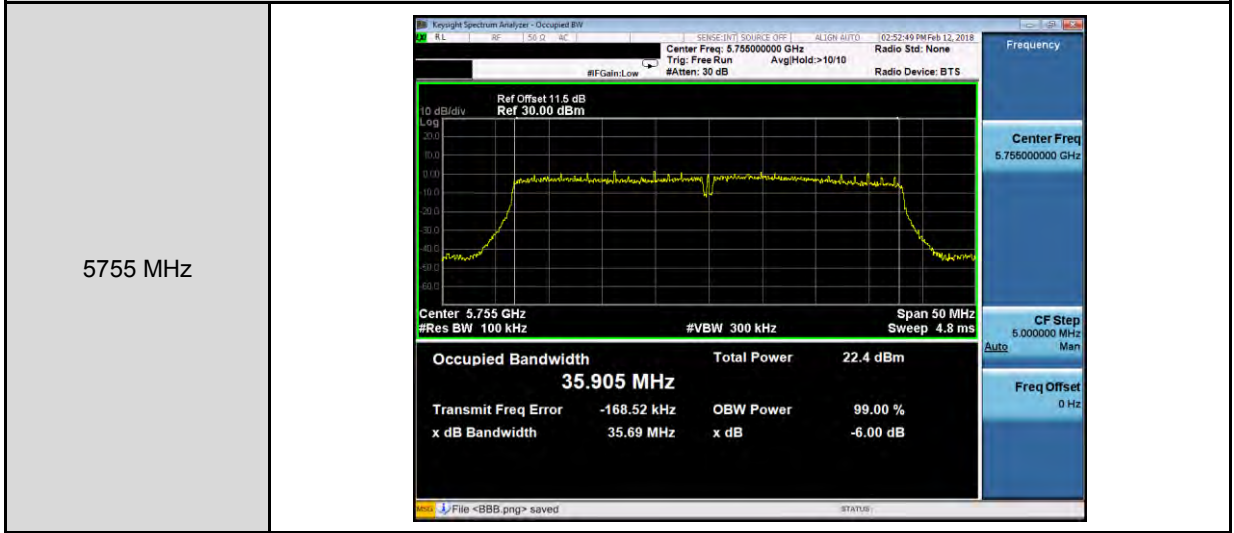
Beamforming on

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

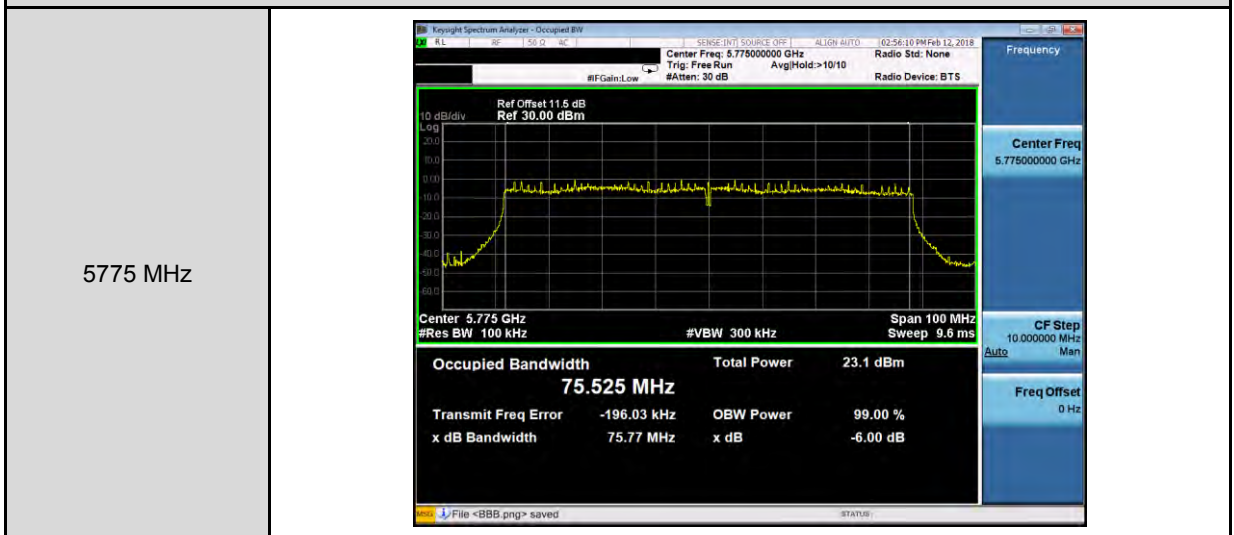




Mode 4: IEEE 802.11ac 40 MHz Continuous TX mode_ANT-0



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

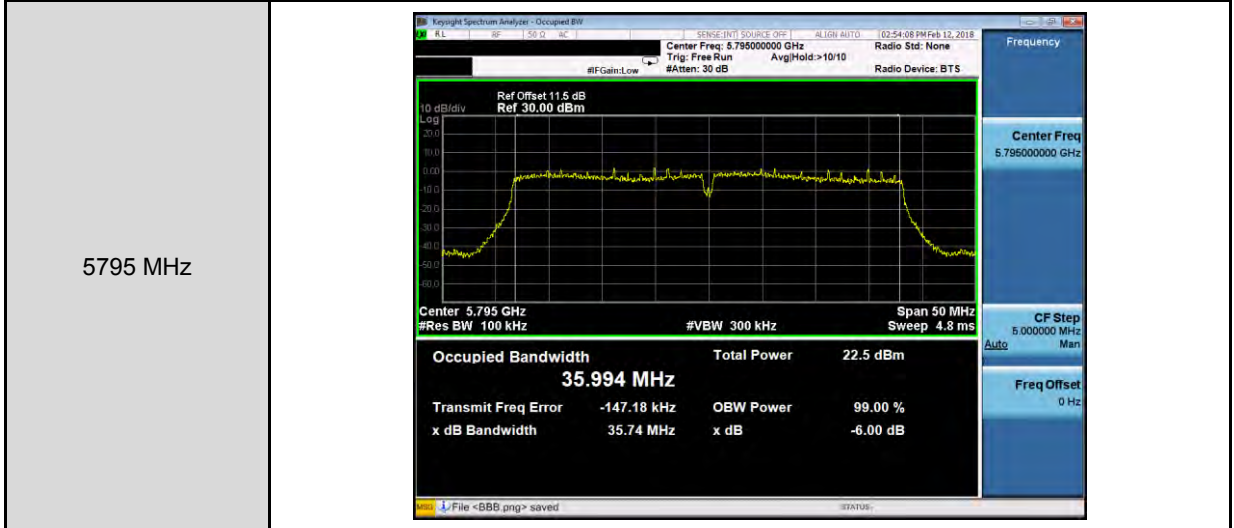
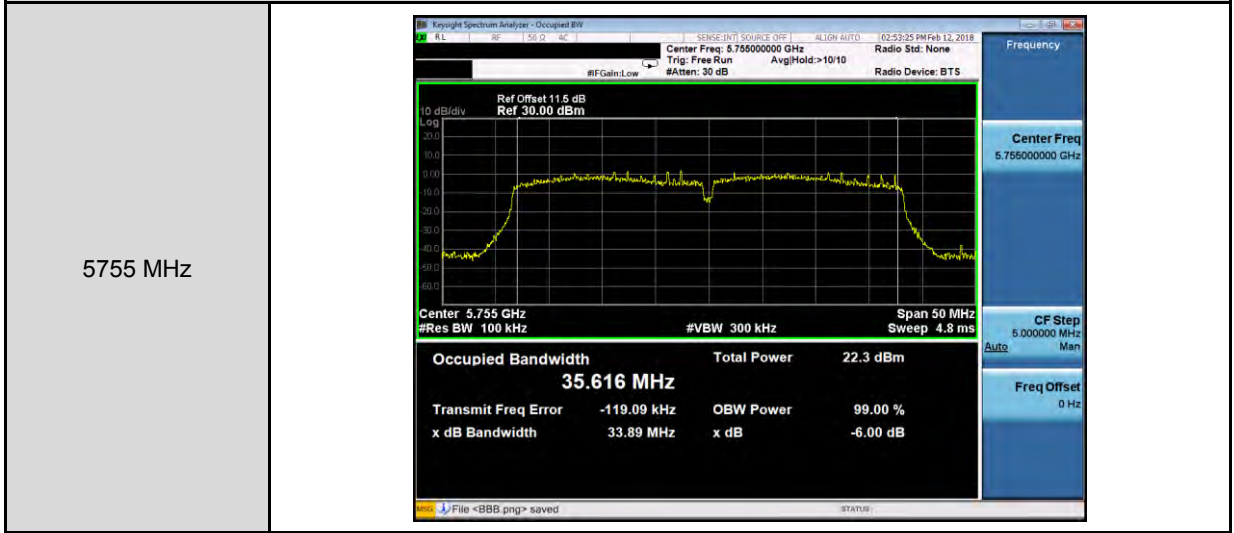




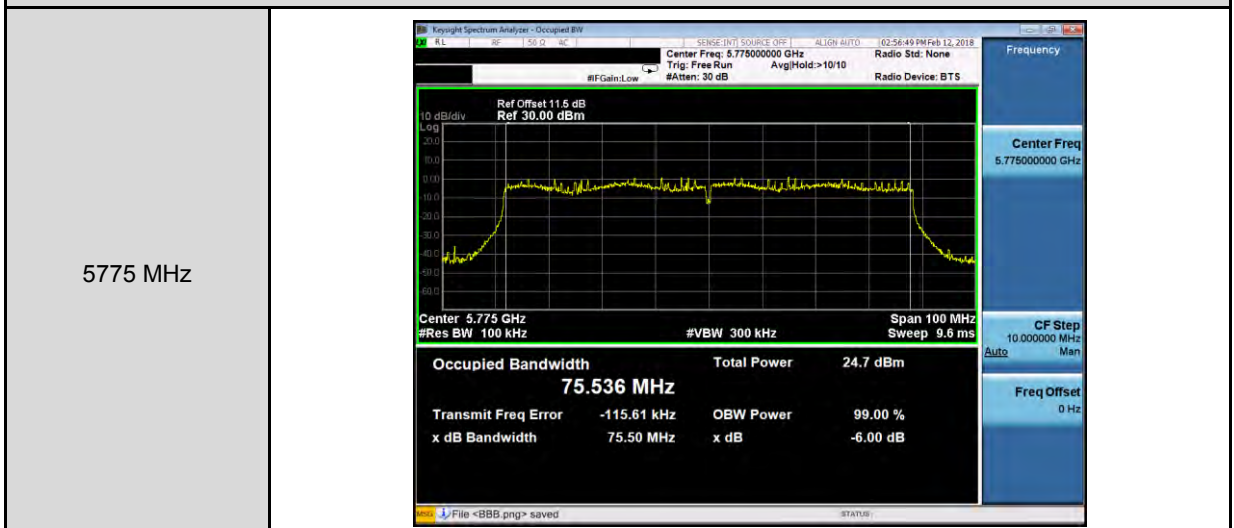
Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode_ANT-1																			
5745 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.74500000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>25.4 dBm</td></tr><tr><td>17.629 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-80.997 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>17.64 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	25.4 dBm	17.629 MHz			Transmit Freq Error	OBW Power	99.00 %	-80.997 kHz	x dB	-6.00 dB	x dB Bandwidth			17.64 MHz		
Occupied Bandwidth	Total Power	25.4 dBm																	
17.629 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
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x dB Bandwidth																			
17.64 MHz																			
5785 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.78500000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>25.4 dBm</td></tr><tr><td>17.521 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-75.381 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>16.90 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	25.4 dBm	17.521 MHz			Transmit Freq Error	OBW Power	99.00 %	-75.381 kHz	x dB	-6.00 dB	x dB Bandwidth			16.90 MHz		
Occupied Bandwidth	Total Power	25.4 dBm																	
17.521 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-75.381 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
16.90 MHz																			
5825 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.82500000 GHz Trig: Free Run Avg Hold:>10/10 #FGain:Low #Attnc: 30 dB</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.033 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>25.1 dBm</td></tr><tr><td>17.508 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-84.815 kHz</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>x dB Bandwidth</td><td></td><td></td></tr><tr><td>17.55 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	25.1 dBm	17.508 MHz			Transmit Freq Error	OBW Power	99.00 %	-84.815 kHz	x dB	-6.00 dB	x dB Bandwidth			17.55 MHz		
Occupied Bandwidth	Total Power	25.1 dBm																	
17.508 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-84.815 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
17.55 MHz																			



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



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





5.6. Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	10.281	0.105	10.386	< 15.05
5200	11.434	0.105	11.539	
5240	10.894	0.105	10.999	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	10.677	0.105	10.782	< 15.05
5200	11.620	0.105	11.725	
5240	11.785	0.105	11.890	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180	13.598			< 15.05
5200	14.643			
5240	14.477			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	2.38	0.105	9.47	< 27.74
5785	1.81	0.105	8.91	
5825	1.78	0.105	8.88	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	2.04	0.105	9.14	< 27.74
5785	2.22	0.105	9.32	
5825	1.94	0.105	9.04	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5745	12.32			< 27.74
5785	12.13			
5825	11.97			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	10.366	0.039	10.405	< 15.05
5200	11.507	0.039	11.546	
5240	10.601	0.039	10.640	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	9.832	0.039	9.871	< 15.05
5200	11.813	0.039	11.852	
5240	11.567	0.039	11.606	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5180	13.156			< 15.05
5200	14.712			
5240	14.160			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	2.69	0.039	9.72	< 27.74
5785	2.61	0.039	9.64	
5825	1.90	0.039	8.93	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	2.66	0.039	9.69	< 27.74
5785	2.64	0.039	9.67	
5825	2.49	0.039	9.52	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5745	12.71			< 27.74
5785	12.67			
5825	12.25			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	4.973	0.106	5.079	< 15.05
5230	8.255	0.106	8.361	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	5.355	0.106	5.461	< 15.05
5230	8.856	0.106	8.962	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190	8.284			< 15.05
5230	11.682			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5755	-1.39	0.106	5.71	< 27.74
5795	-1.59	0.106	5.51	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5755	-1.70	0.106	5.39	< 27.74
5795	-1.56	0.106	5.54	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5755	8.56			< 27.74
5795	8.53			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	1.527	0.240	1.767	< 15.05
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	1.678	0.240	1.918	< 15.05
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	4.853			< 15.05

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5775	-4.45	0.240	2.78	< 27.74
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5775	-4.46	0.240	2.77	< 27.74
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			Limit (dBm/500 KHz)
5775	5.79			< 27.74

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
	5180	6.709	0.039	6.748
	5200	7.790	0.039	7.829
5240	7.187	0.039	7.226	< 15.05
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
	5180	6.752	0.039	6.791
	5200	8.159	0.039	8.198
5240	8.269	0.039	8.308	< 15.05
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
	5180	9.780		< 15.05
	5200	11.028		
5240	10.811			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	-1.12	0.039	5.91	< 27.74
5785	-1.15	0.039	5.88	
5825	-1.49	0.039	5.54	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5745	-0.86	0.039	6.17	< 27.74
5785	-0.57	0.039	6.46	
5825	-1.06	0.039	5.97	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5745	9.05			< 27.74
5785	9.19			
5825	8.77			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	1.737	0.106	1.843	< 15.05
5230	4.620	0.106	4.726	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	2.279	0.106	2.385	< 15.05
5230	5.529	0.106	5.635	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190	5.133			< 15.05
5230	8.214			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5755	-4.26	0.106	2.84	< 27.74
5795	-4.51	0.106	2.59	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5755	-4.61	0.106	2.49	< 27.74
5795	-4.76	0.106	2.34	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5755	5.68			< 27.74
5795	5.48			

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-2.180	0.240	-1.940	< 15.05
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-1.842	0.240	-1.602	< 15.05
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5210	-3.482			< 15.05

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			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5775	-7.65	0.240	-0.42	< 27.74
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 KHz)	Duty Factor (dB)	Calculated (dBm/500 KHz)	Limit (dBm/500 KHz)
5775	-7.58	0.240	-0.35	< 27.74
Frequency (MHz)	ANT-0+1			Limit (dBm/500 KHz)
	Calculated (dBm/500 KHz)			
5775	2.62			< 27.74

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	

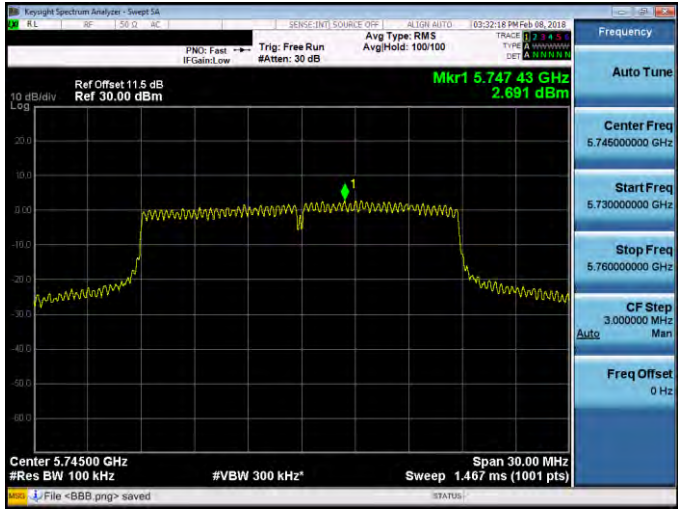
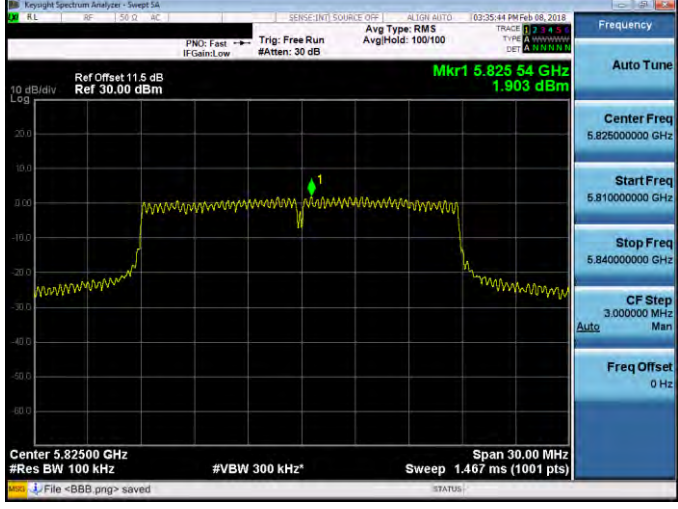


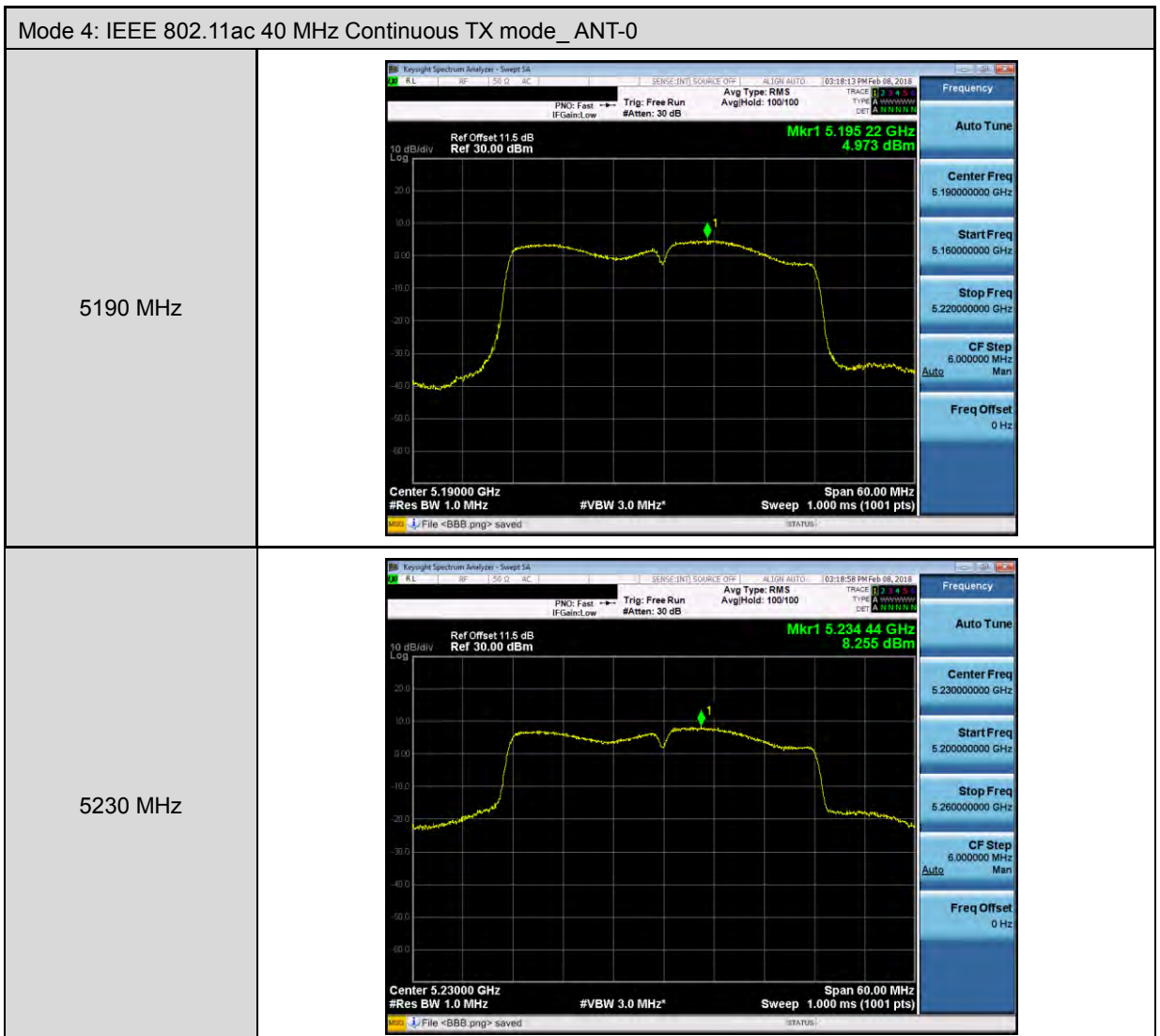
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5745 MHz	<p>Key parameters from screenshot: Center Freq: 5.74500000 GHz Start Freq: 5.73000000 GHz Stop Freq: 5.76000000 GHz CF Step: 3.000000 MHz Mkr1: 5.740 53 GHz, 2.377 dBm</p>
5785 MHz	<p>Key parameters from screenshot: Center Freq: 5.78500000 GHz Start Freq: 5.77000000 GHz Stop Freq: 5.80000000 GHz CF Step: 3.000000 MHz Mkr1: 5.779 93 GHz, 1.811 dBm</p>
5825 MHz	<p>Key parameters from screenshot: Center Freq: 5.82500000 GHz Start Freq: 5.81000000 GHz Stop Freq: 5.84000000 GHz CF Step: 3.000000 MHz Mkr1: 5.821 79 GHz, 1.784 dBm</p>



Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5180 MHz	<p>Key parameters from screenshot: Center Freq: 5.18000000 GHz Start Freq: 5.16000000 GHz Stop Freq: 5.20000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz Mkr1: 5.18372 GHz, 10.366 dBm</p>
5200 MHz	<p>Key parameters from screenshot: Center Freq: 5.20000000 GHz Start Freq: 5.18000000 GHz Stop Freq: 5.22000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz Mkr1: 5.20184 GHz, 11.507 dBm</p>
5240 MHz	<p>Key parameters from screenshot: Center Freq: 5.24000000 GHz Start Freq: 5.22000000 GHz Stop Freq: 5.26000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz Mkr1: 5.24352 GHz, 10.610 dBm</p>

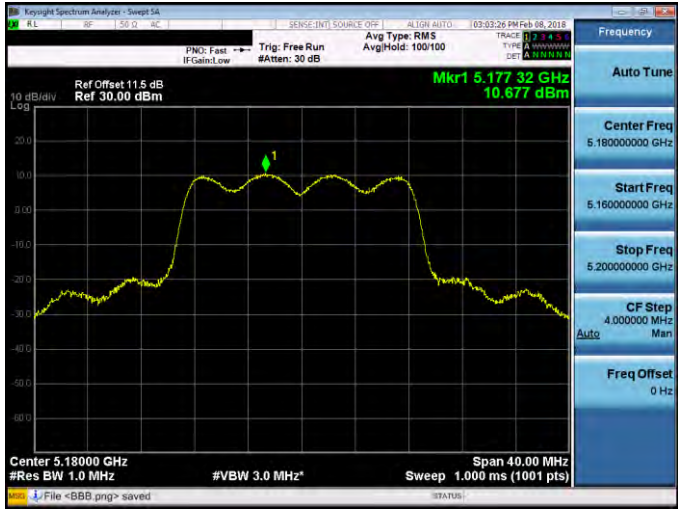
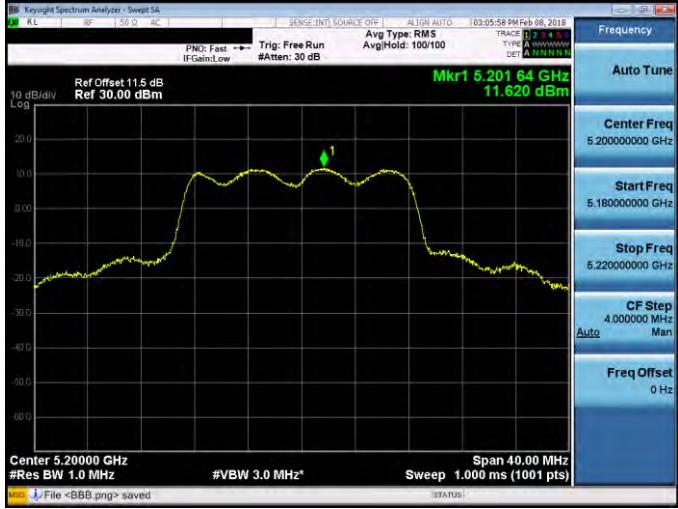



Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

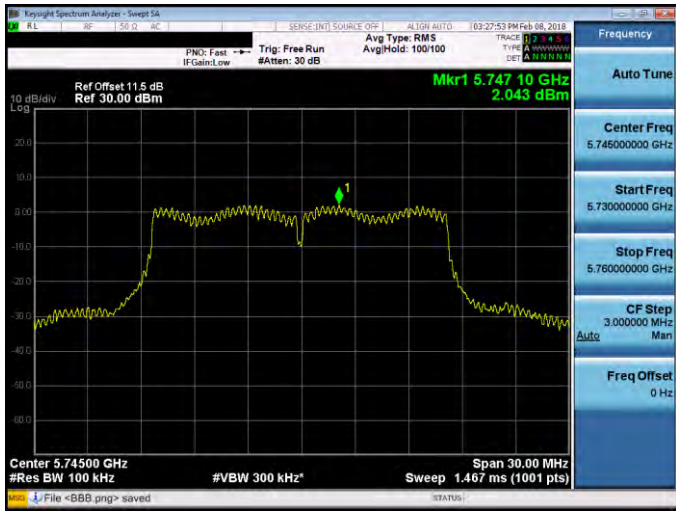
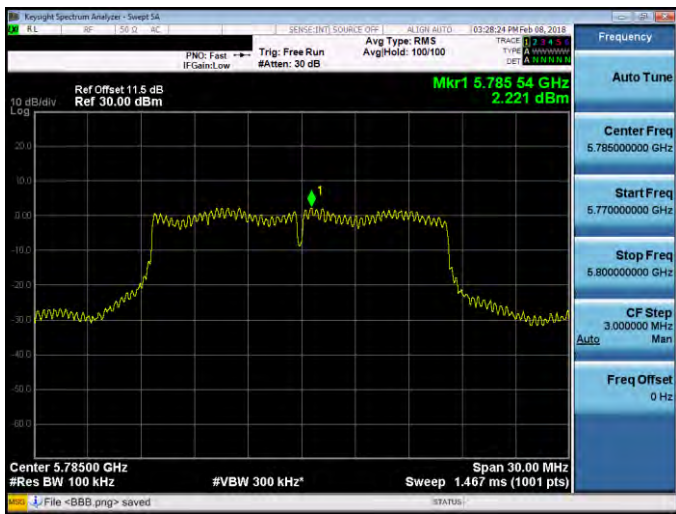
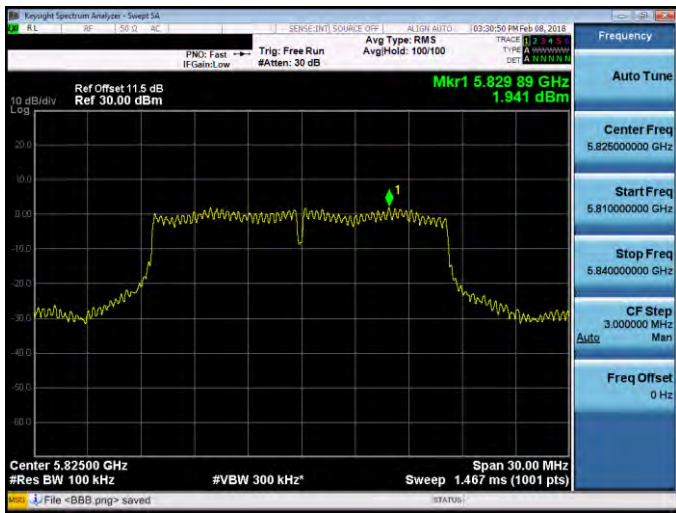






Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.18000000 GHzStart Freq: 5.16000000 GHzStop Freq: 5.20000000 GHzCF Step: 4.000000 MHzFreq Offset: 0 HzMkr1: 5.17732 GHz, 10.677 dBmRef Offset: 11.5 dB, Ref: 30.00 dBmSpan: 40.00 MHzRes BW: 1.0 MHzVBW: 3.0 MHzSweep: 1.000 ms (1001 pts)
5200 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.20000000 GHzStart Freq: 5.18000000 GHzStop Freq: 5.22000000 GHzCF Step: 4.000000 MHzFreq Offset: 0 HzMkr1: 5.20184 GHz, 11.620 dBmRef Offset: 11.5 dB, Ref: 30.00 dBmSpan: 40.00 MHzRes BW: 1.0 MHzVBW: 3.0 MHzSweep: 1.000 ms (1001 pts)
5240 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.24000000 GHzStart Freq: 5.22000000 GHzStop Freq: 5.26000000 GHzCF Step: 4.000000 MHzFreq Offset: 0 HzMkr1: 5.23572 GHz, 11.785 dBmRef Offset: 11.5 dB, Ref: 30.00 dBmSpan: 40.00 MHzRes BW: 1.0 MHzVBW: 3.0 MHzSweep: 1.000 ms (1001 pts)



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5745 MHz	
5785 MHz	
5825 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	<p>Key parameters from screenshot: Center Freq: 5.74500000 GHz Start Freq: 5.73000000 GHz Stop Freq: 5.76000000 GHz CF Step: 3.000000 MHz Mkr1: 5.75178 GHz, 2.658 dBm</p>
5785 MHz	<p>Key parameters from screenshot: Center Freq: 5.78500000 GHz Start Freq: 5.77000000 GHz Stop Freq: 5.80000000 GHz CF Step: 3.000000 MHz Mkr1: 5.78680 GHz, 2.644 dBm</p>
5825 MHz	<p>Key parameters from screenshot: Center Freq: 5.82500000 GHz Start Freq: 5.81000000 GHz Stop Freq: 5.84000000 GHz CF Step: 3.000000 MHz Mkr1: 5.82368 GHz, 2.491 dBm</p>

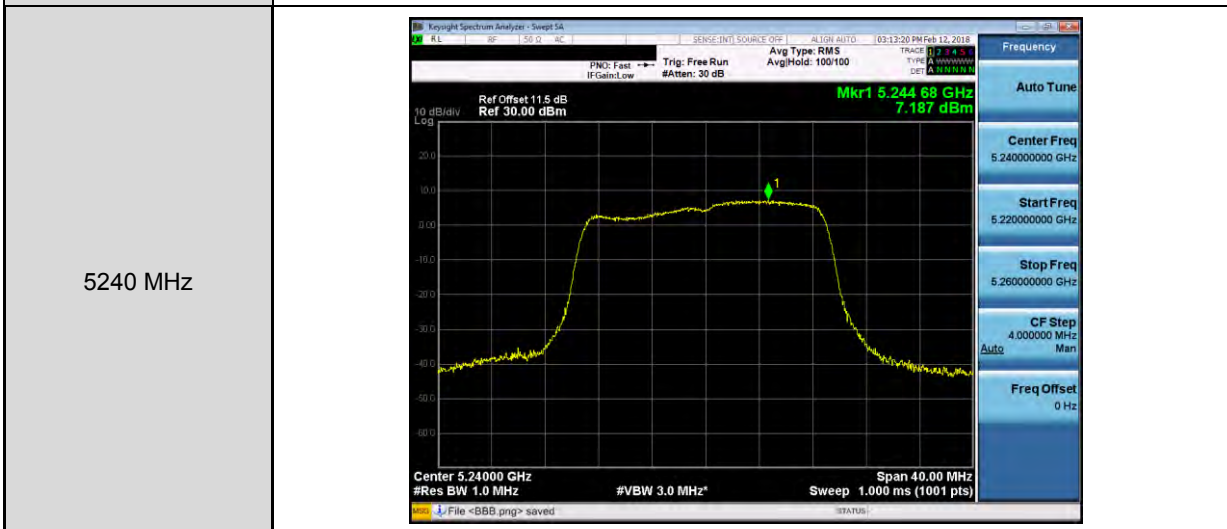
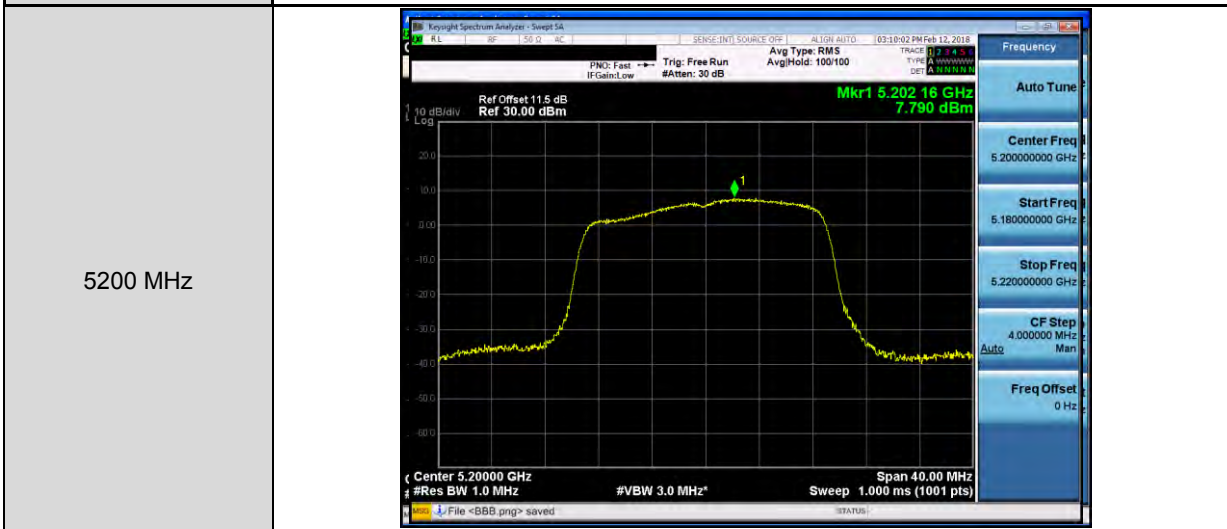
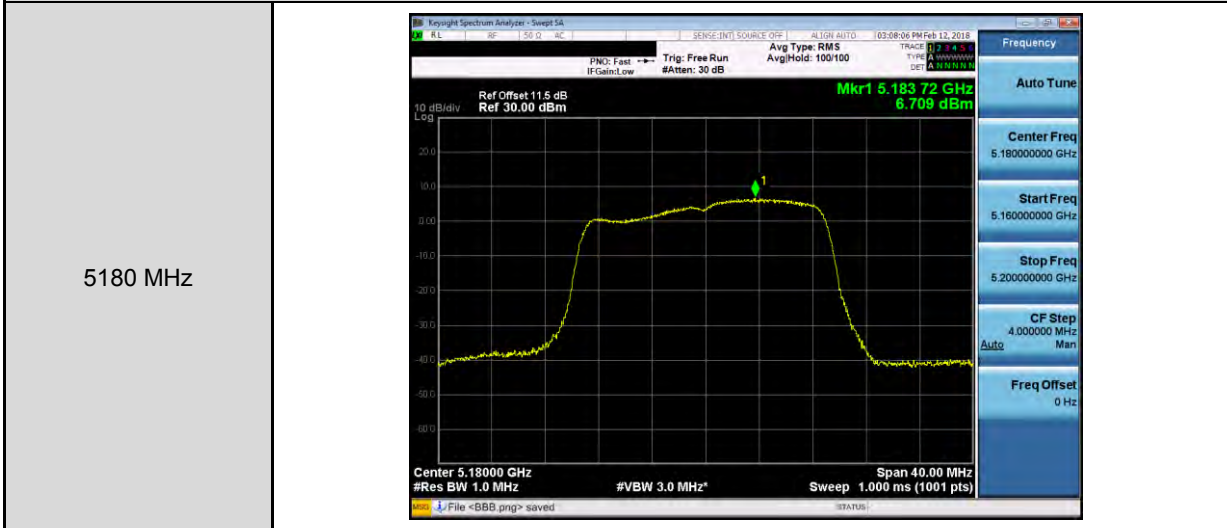




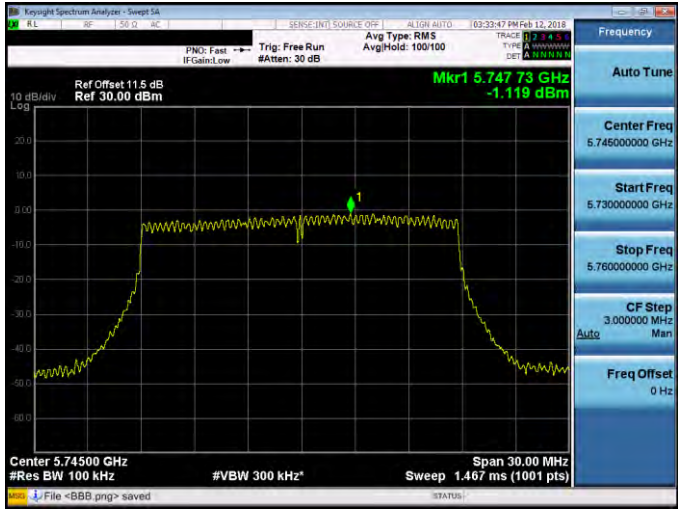
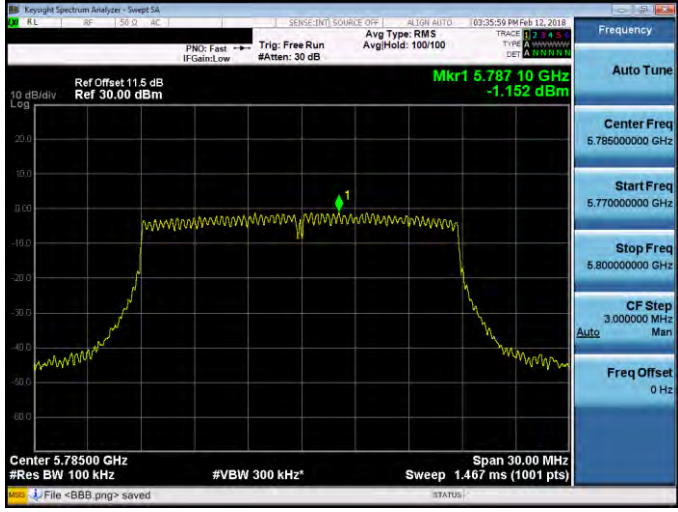
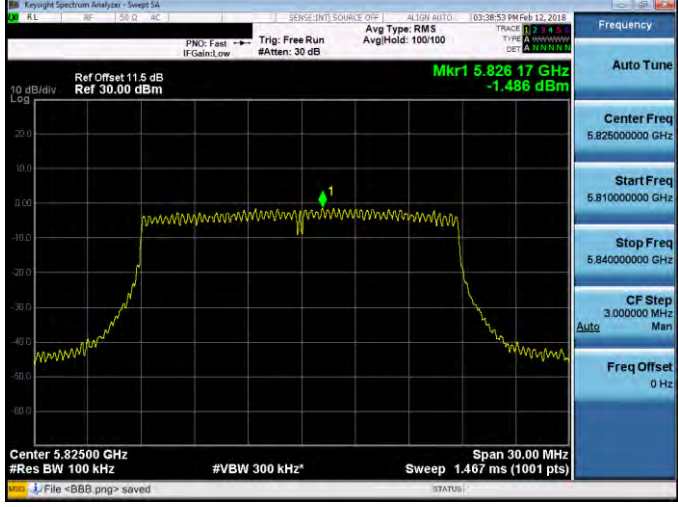


Beamforming on

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

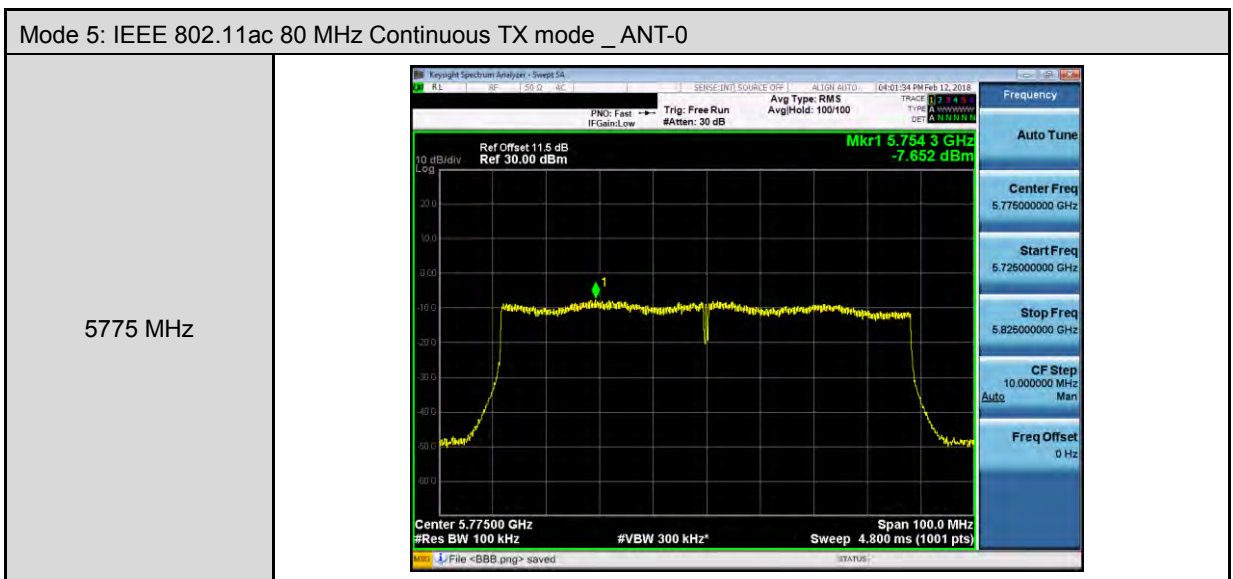
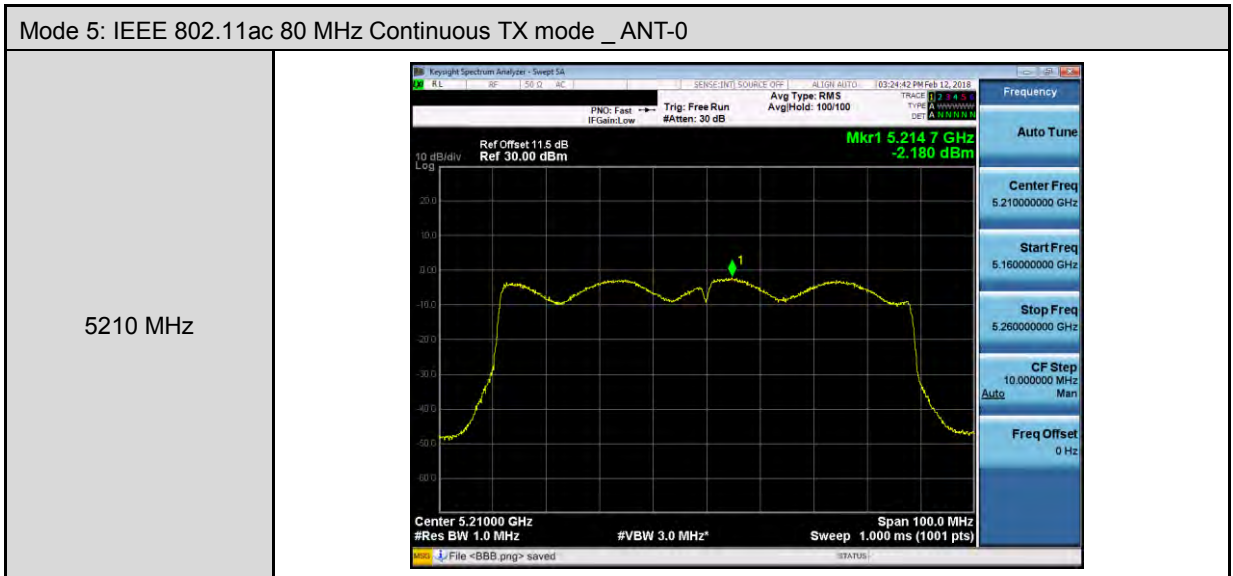




Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5745 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.74500000 GHzStart Freq: 5.73000000 GHzStop Freq: 5.76000000 GHzCF Step: 3.000000 MHzSpan: 30.00 MHzMarker 1: 5.74773 GHz, -1.119 dBm
5785 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.78500000 GHzStart Freq: 5.77000000 GHzStop Freq: 5.80000000 GHzCF Step: 3.000000 MHzSpan: 30.00 MHzMarker 1: 5.78710 GHz, -1.152 dBm
5825 MHz	 <p>Key parameters from the screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.82500000 GHzStart Freq: 5.81000000 GHzStop Freq: 5.84000000 GHzCF Step: 3.000000 MHzSpan: 30.00 MHzMarker 1: 5.82617 GHz, -1.486 dBm







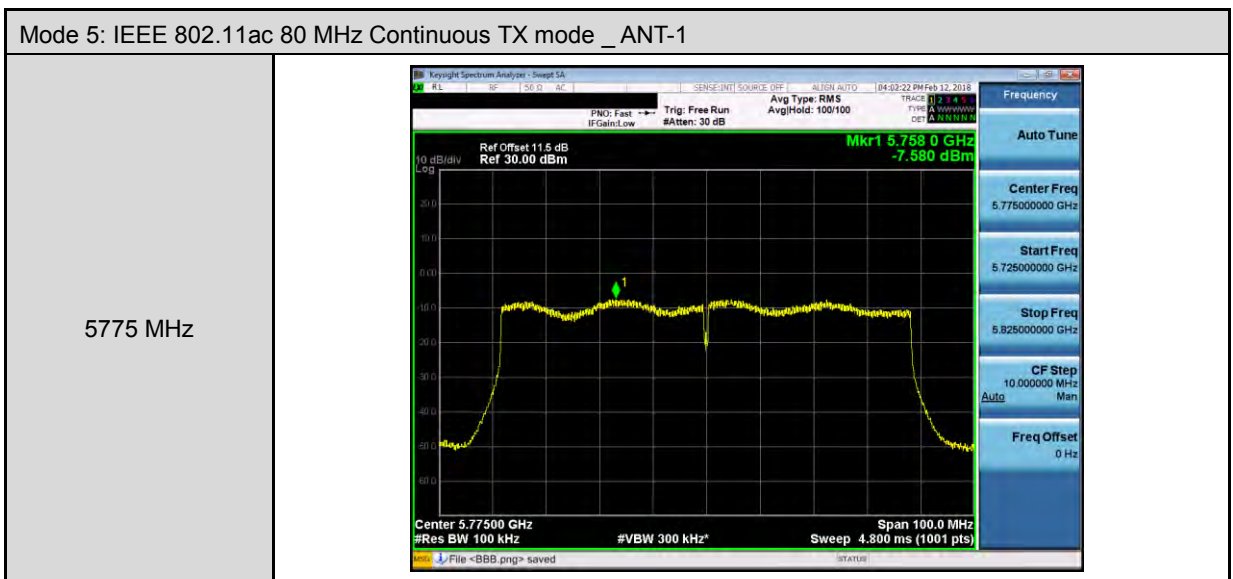
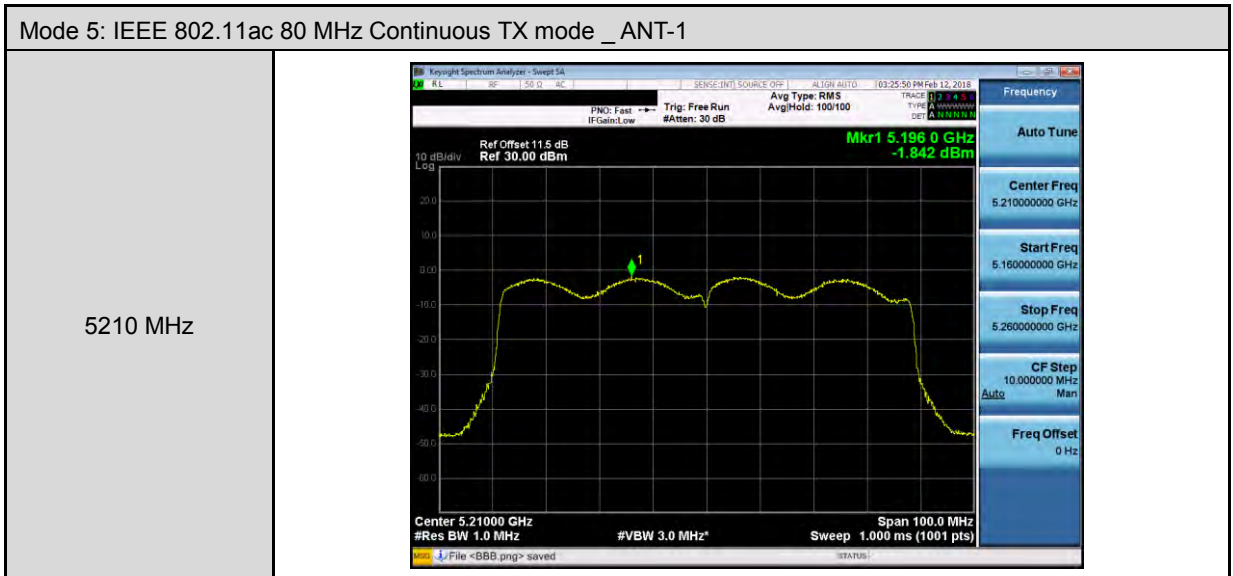


Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 3: IEEE 802.11ac 20 MHz Continuous TX mode _ANT-1	
5745 MHz	<p>Center 5.74500 GHz #Res BW 100 kHz #VBW 300 kHz* Sweep 1.467 ms (1001 pts) Span 30.00 MHz</p> <p>Mkr1 5.75148 GHz -0.857 dBm</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.74500000 GHz Start Freq: 5.73000000 GHz Stop Freq: 5.76000000 GHz CF Step: 3.000000 MHz Freq Offset: 0 Hz</p>
5785 MHz	<p>Center 5.78500 GHz #Res BW 100 kHz #VBW 300 kHz* Sweep 1.467 ms (1001 pts) Span 30.00 MHz</p> <p>Mkr1 5.78992 GHz -0.568 dBm</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.78500000 GHz Start Freq: 5.77000000 GHz Stop Freq: 5.80000000 GHz CF Step: 3.000000 MHz Freq Offset: 0 Hz</p>
5825 MHz	<p>Center 5.82500 GHz #Res BW 100 kHz #VBW 300 kHz* Sweep 1.467 ms (1001 pts) Span 30.00 MHz</p> <p>Mkr1 5.82740 GHz -1.061 dBm</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.82500000 GHz Start Freq: 5.81000000 GHz Stop Freq: 5.84000000 GHz CF Step: 3.000000 MHz Freq Offset: 0 Hz</p>







5.7. Frequency Stability Measurement

Temperature Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0367	36700	7.058	Pass
	10		5200.0128	12800	2.462	Pass
	20		5199.935	-65000	-12.500	Pass
	30		5199.9196	-80400	-15.462	Pass
	40		5199.9005	-99500	-19.135	Pass
5785 MHz	0	120	5785.0397	39700	6.863	Pass
	10		5785.0138	13800	2.385	Pass
	20		5784.9522	-47800	-8.263	Pass
	30		5784.9166	-83400	-14.417	Pass
	40		5784.9011	-98900	-17.096	Pass

Voltage Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5199.9023	-97700	-18.788	Pass
		120.00	5199.9196	-80400	-15.462	Pass
		102.00	5199.9309	-69100	-13.288	Pass
5785 MHz	20	138.00	5784.9017	-98300	-16.992	Pass
		120.00	5784.9166	-83400	-14.417	Pass
		102.00	5784.9315	-68500	-11.841	Pass

Note: The manufacturer's frequency stability specification is better than 20 ppm.



Beamforming on

Temperature Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0367	36700	7.058	Pass
	10		5200.0128	12800	2.462	Pass
	20		5199.935	-65000	-12.500	Pass
	30		5199.9196	-80400	-15.462	Pass
	40		5199.9005	-99500	-19.135	Pass
5785 MHz	0	120	5785.0397	39700	6.863	Pass
	10		5785.0138	13800	2.385	Pass
	20		5784.9522	-47800	-8.263	Pass
	30		5784.9166	-83400	-14.417	Pass
	40		5784.9011	-98900	-17.096	Pass

Voltage Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5199.9023	-97700	-18.788	Pass
		120.00	5199.9196	-80400	-15.462	Pass
		102.00	5199.9309	-69100	-13.288	Pass
5785 MHz	20	138.00	5784.9017	-98300	-16.992	Pass
		120.00	5784.9166	-83400	-14.417	Pass
		102.00	5784.9315	-68500	-11.841	Pass

Note: The manufacturer's frequency stability specification is better than 20 ppm.