



Annex C. Conducted Test Results

Maximum Conducted Output Power Measurement

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5180.0	6 M	12.91	0.020	13.63	0.023	≤ 24.00
5200.0		12.87	0.019	13.65	0.023	
5220.0		12.52	0.018	13.31	0.021	
5240.0		12.71	0.019	13.32	0.021	
5260.0		12.52	0.018	13.09	0.020	≤ 24.00
5280.0		12.61	0.018	13.16	0.021	
5300.0		12.73	0.019	13.39	0.022	
5320.0		12.89	0.019	13.42	0.022	
5500.0		13.49	0.022	13.74	0.024	≤ 22.97
5520.0		13.49	0.022	13.59	0.023	
5540.0		13.80	0.024	13.88	0.024	
5560.0		13.75	0.024	13.79	0.024	
5580.0		13.86	0.024	13.88	0.024	
5600.0		13.66	0.023	13.70	0.023	
5620.0		13.82	0.024	13.84	0.024	
5640.0		13.90	0.025	13.94	0.025	
5660.0		13.86	0.024	13.93	0.025	
5680.0		13.73	0.024	13.87	0.024	
5700.0		13.62	0.023	13.77	0.024	
5720.0		12.53	0.018	13.06	0.020	≤ 30.00
5720.0		6.12	0.004	6.64	0.005	
5745.0		13.38	0.022	13.78	0.024	
5765.0		13.23	0.021	13.90	0.025	
5785.0		13.06	0.020	13.76	0.024	
5805.0		13.03	0.020	13.66	0.023	
5825.0		12.94	0.020	13.61	0.023	

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



Test Mode		Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5180.0	6.5 M	12.48	0.018	13.25	0.021	≤ 24.00
5200.0		12.60	0.018	13.41	0.022	
5220.0		12.36	0.017	13.02	0.020	
5240.0		12.30	0.017	13.14	0.021	
5260.0		12.43	0.017	13.04	0.020	≤ 24.00
5280.0		12.44	0.018	13.07	0.020	
5300.0		12.41	0.017	13.12	0.021	
5320.0		12.84	0.019	13.26	0.021	
5500.0		13.27	0.021	13.51	0.022	≤ 23.04
5520.0		13.34	0.022	13.35	0.022	
5540.0		13.63	0.023	13.65	0.023	
5560.0		13.37	0.022	13.41	0.022	
5580.0		13.58	0.023	13.63	0.023	
5600.0		13.41	0.022	13.45	0.022	
5620.0		13.51	0.022	13.63	0.023	
5640.0		13.73	0.024	13.76	0.024	
5660.0		13.76	0.024	13.82	0.024	
5680.0		13.67	0.023	13.78	0.024	
5700.0		13.54	0.023	13.80	0.024	
5720.0		12.86	0.019	13.44	0.022	
5720.0		6.84	0.005	7.39	0.005	≤ 30.00
5745.0		13.30	0.021	13.87	0.024	
5765.0		13.11	0.020	13.81	0.024	
5785.0		12.99	0.020	13.59	0.023	
5805.0		13.04	0.020	13.82	0.024	
5825.0		12.83	0.019	13.69	0.023	

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



Test Mode		Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0		ANT-1		FCC Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
5190.0	13.5 M	9.79	0.010	9.93	0.010	≤ 24.00
5230.0		11.86	0.015	12.46	0.018	
5270.0		11.70	0.015	12.19	0.017	
5310.0		12.02	0.016	12.37	0.017	
5510.0		12.75	0.019	12.81	0.019	
5550.0		12.78	0.019	12.88	0.019	
5590.0		12.71	0.019	12.92	0.020	
5630.0		13.05	0.020	13.25	0.021	
5670.0		12.92	0.020	13.44	0.022	
5710.0		11.52	0.014	11.53	0.014	
5710.0		-1.60	0.001	-1.54	0.001	≤ 30.00
5755.0		12.71	0.019	12.98	0.020	
5795.0		12.75	0.019	12.94	0.020	

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



26 dB RF Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode
Frequency (MHz)	ANT-1
5180.0	20.660
5200.0	21.100
5240.0	20.590
5260.0	21.020
5280.0	20.640
5320.0	20.880
5500.0	20.830
5560.0	20.460
5700.0	21.970
5720.0	15.730


Test Mode	Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode
Frequency (MHz)	ANT-1
5180.0	21.640
5200.0	21.640
5240.0	21.540
5260.0	21.010
5280.0	21.240
5320.0	21.460
5500.0	20.940
5560.0	21.190
5700.0	22.010
5720.0	16.000



Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode
Frequency (MHz)	ANT-1
5190.0	42.180
5230.0	42.350
5270.0	43.780
5310.0	42.280
5510.0	42.990
5550.0	42.840
5670.0	42.580
5710.0	36.310



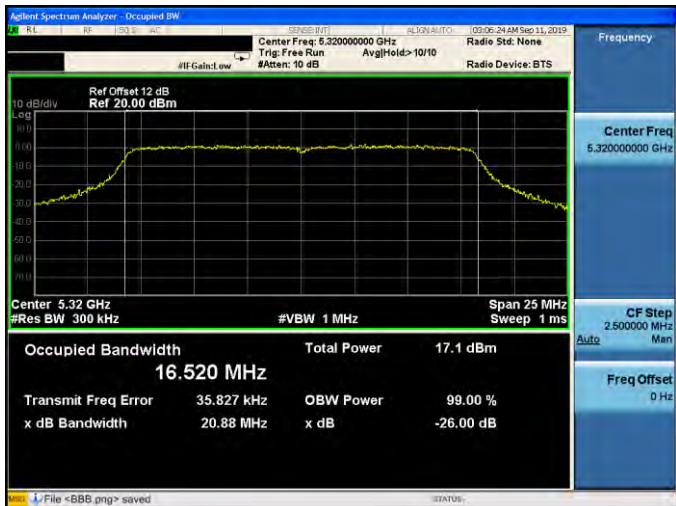


■ Test Graphs

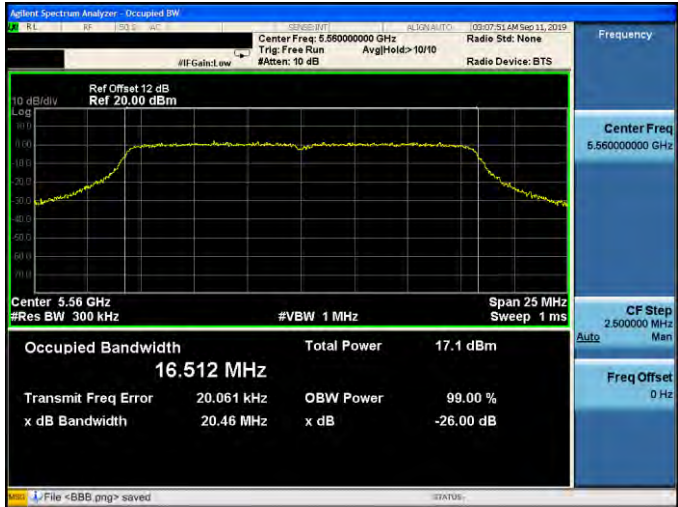
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

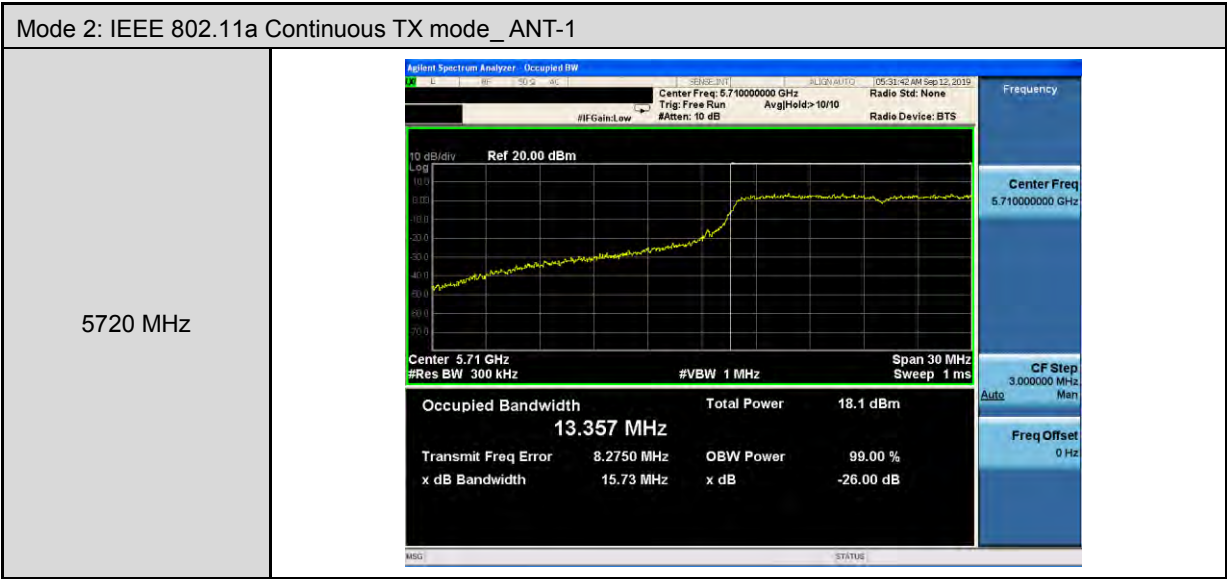


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

5260 MHz	
5280 MHz	
5320 MHz	






Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5500 MHz	 <p>Center Freq: 5.50000000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.5 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 16.512 MHz Total Power 17.2 dBm Transmit Freq Error 17.674 kHz OBW Power 99.00 % x dB Bandwidth 20.83 MHz x dB -26.00 dB</p> <p>File <550.png> saved</p>
5560 MHz	 <p>Center Freq: 5.56000000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.56 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 16.512 MHz Total Power 17.1 dBm Transmit Freq Error 20.061 kHz OBW Power 99.00 % x dB Bandwidth 20.46 MHz x dB -26.00 dB</p> <p>File <556.png> saved</p>
5700 MHz	 <p>Center Freq: 5.70000000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.7 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 16.581 MHz Total Power 17.0 dBm Transmit Freq Error 11.066 kHz OBW Power 99.00 % x dB Bandwidth 21.97 MHz x dB -26.00 dB</p> <p>File <570.png> saved</p>

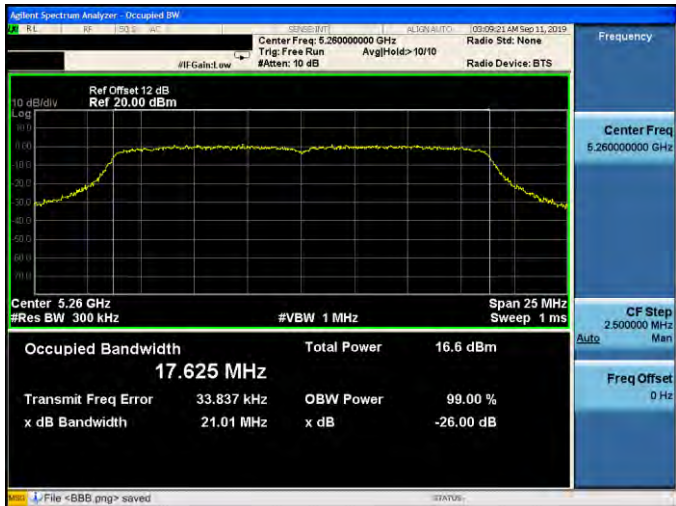
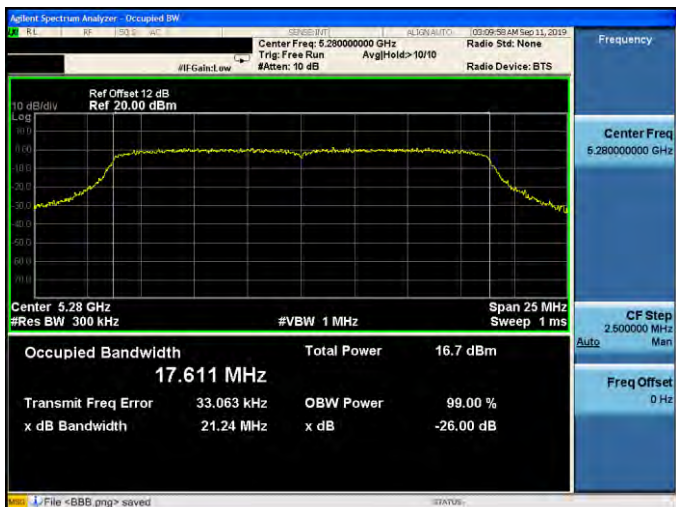








Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode_ANT-1

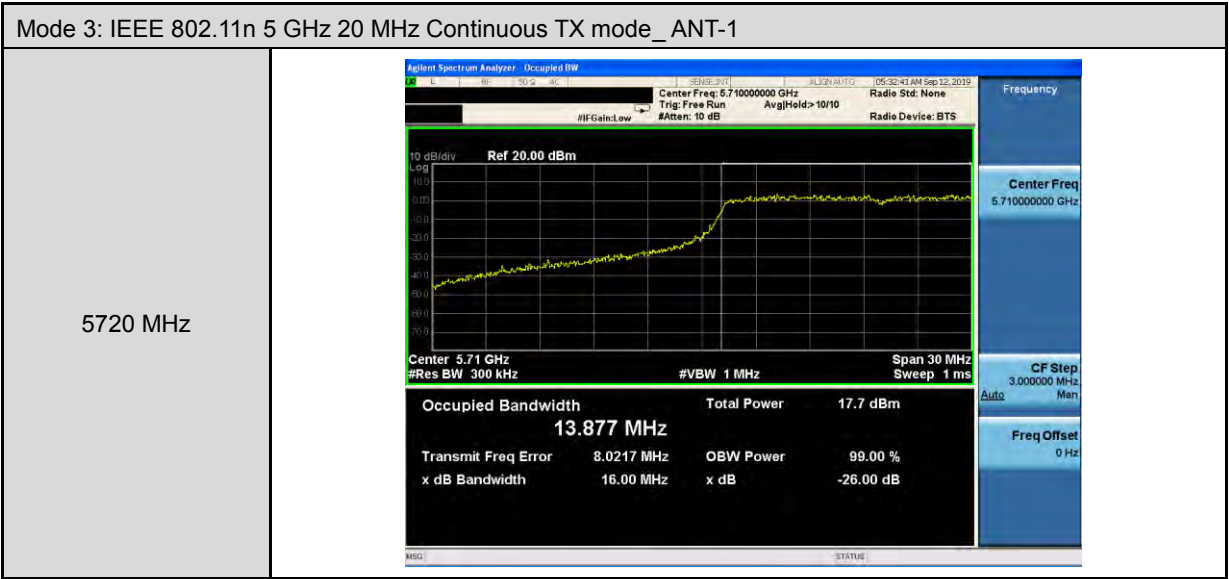
5180 MHz	
5200 MHz	
5240 MHz	



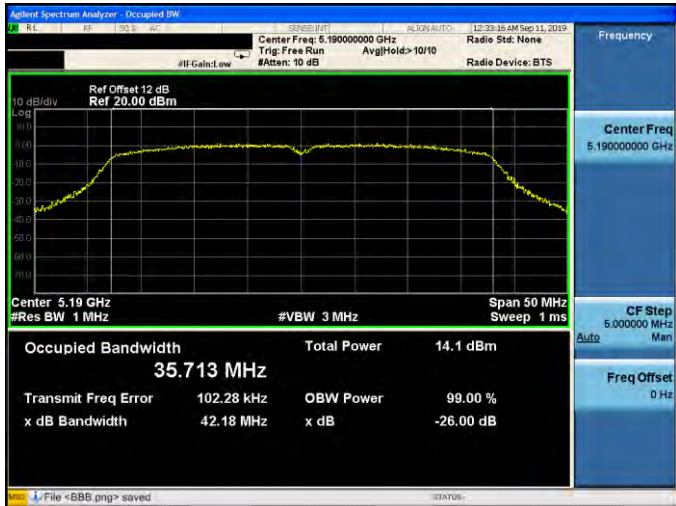

Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode_ANT-1	
5260 MHz	
5280 MHz	
5320 MHz	

Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode_ANT-1



5500 MHz	 <p>Center Freq: 5.50000000 GHz</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.5 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.630 MHz</p> <p>Total Power 17.2 dBm</p> <p>Transmit Freq Error 10.937 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 20.94 MHz</p> <p>x dB -26.00 dB</p> <p>File <550.png> saved</p>
5560 MHz	 <p>Center Freq: 5.56000000 GHz</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.56 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.617 MHz</p> <p>Total Power 16.8 dBm</p> <p>Transmit Freq Error 21.672 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 21.19 MHz</p> <p>x dB -26.00 dB</p> <p>File <556.png> saved</p>
5700 MHz	 <p>Center Freq: 5.70000000 GHz</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.7 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.655 MHz</p> <p>Total Power 16.8 dBm</p> <p>Transmit Freq Error 22.027 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 22.01 MHz</p> <p>x dB -26.00 dB</p> <p>File <570.png> saved</p>



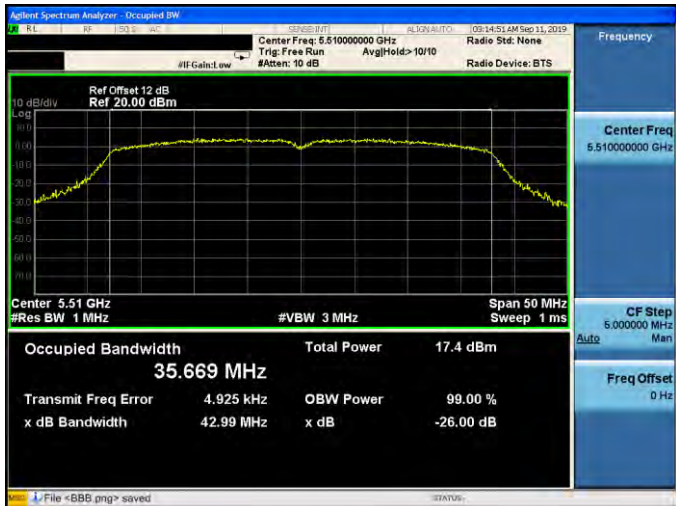



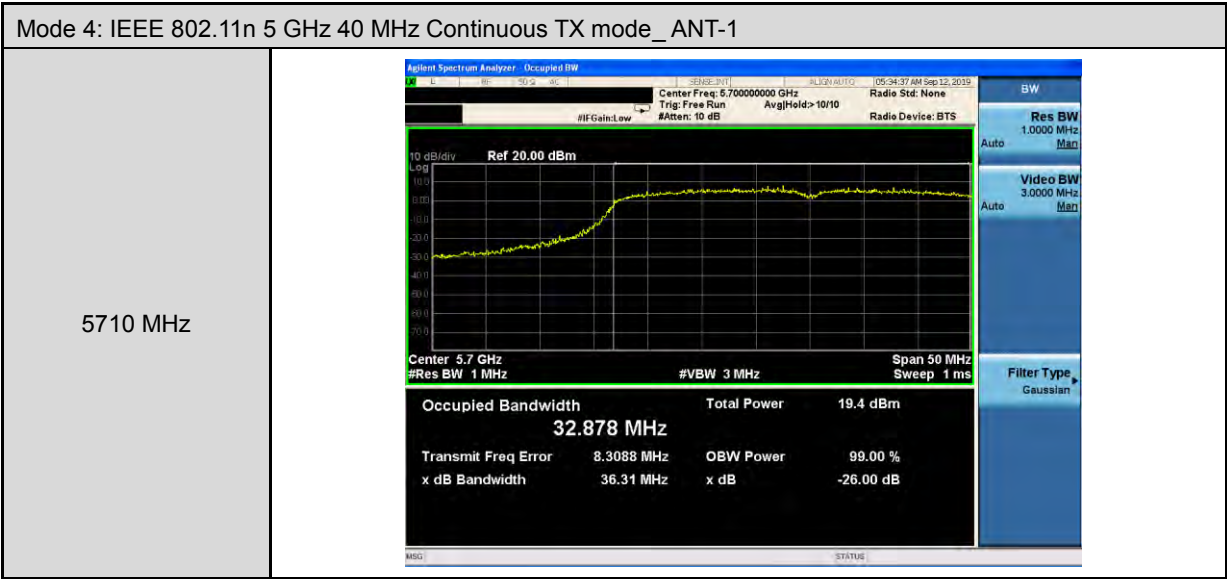
Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode_ ANT-1	
5190 MHz	 <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.19 GHz #Res BW 1 MHz</p> <p>Span 50 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 35.713 MHz</p> <p>Total Power 14.1 dBm</p> <p>Transmit Freq Error 102.28 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 42.18 MHz</p> <p>x dB -26.00 dB</p> <p>File <BBB.png> saved</p>
5230 MHz	 <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.23 GHz #Res BW 1 MHz</p> <p>Span 50 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 35.647 MHz</p> <p>Total Power 14.3 dBm</p> <p>Transmit Freq Error 111.96 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 42.35 MHz</p> <p>x dB -26.00 dB</p> <p>File <BBB.png> saved</p>



Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode_ ANT-1	
5270 MHz	
5310 MHz	



Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode_ANT-1	
5510 MHz	
5550 MHz	
5670 MHz	





6 dB RF Bandwidth Measurement


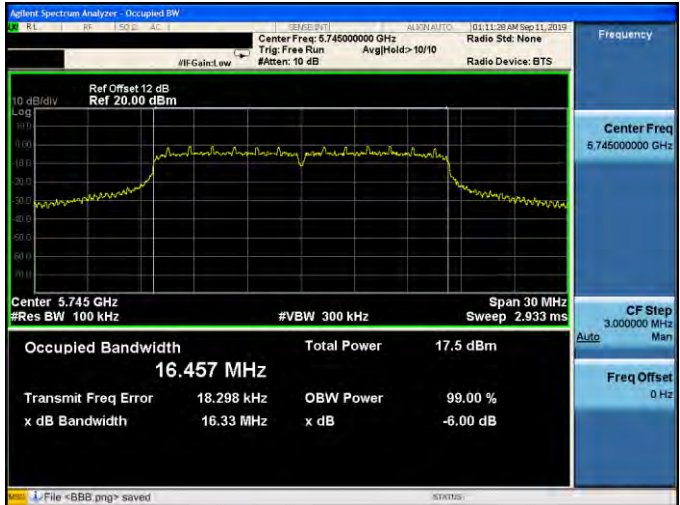
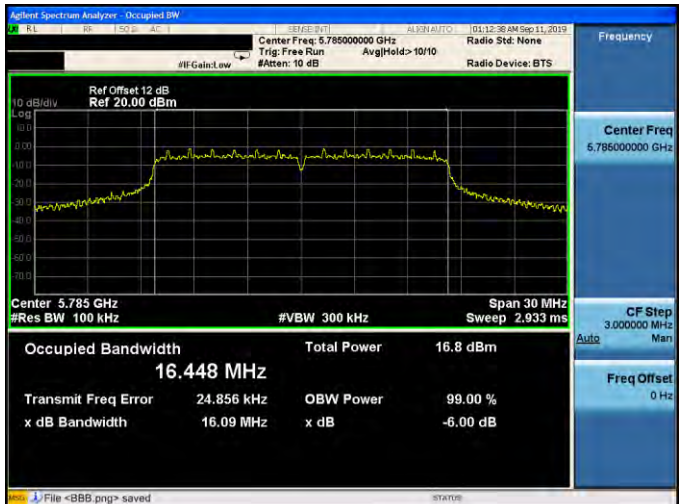
Test Mode	Mode 2: IEEE 802.11a Continuous TX mode	
Frequency (MHz)	ANT-1	Limit (kHz)
5720.0	3193	≥ 500
5745.0	16330	≥ 500
5785.0	16090	≥ 500
5825.0	16050	≥ 500

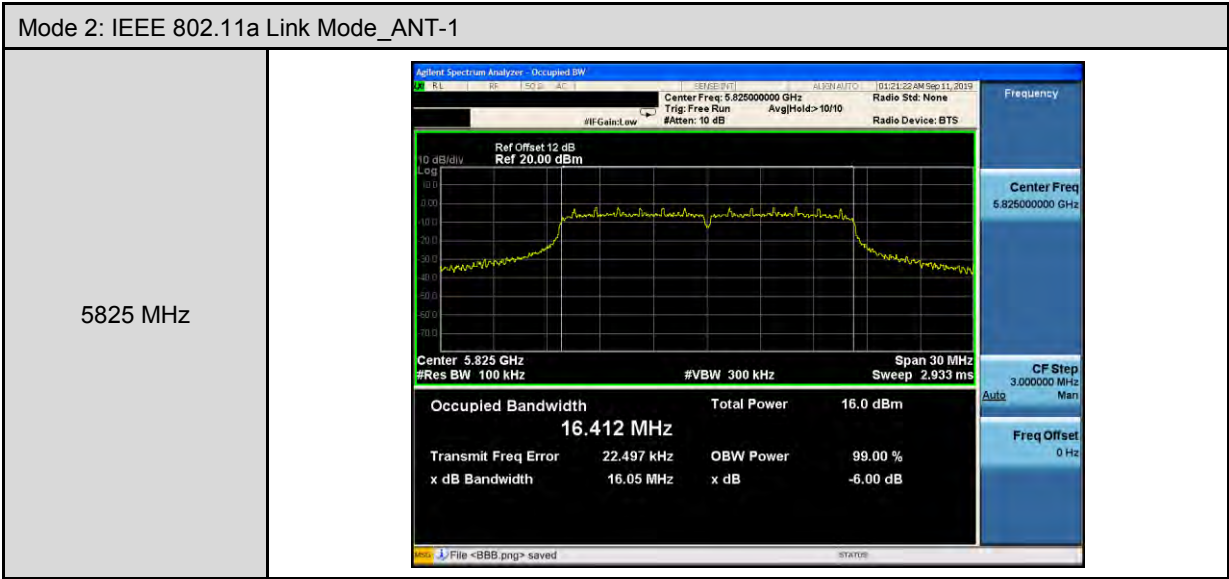
Test Mode	Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode	
Frequency (MHz)	ANT-1	Limit (kHz)
5720.0	3159	≥ 500
5745.0	16820	≥ 500
5785.0	16780	≥ 500
5825.0	16590	≥ 500

Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode	
Frequency (MHz)	ANT-1	Limit (kHz)
5710.0	2596	≥ 500
5755.0	33830	≥ 500
5795.0	33810	≥ 500





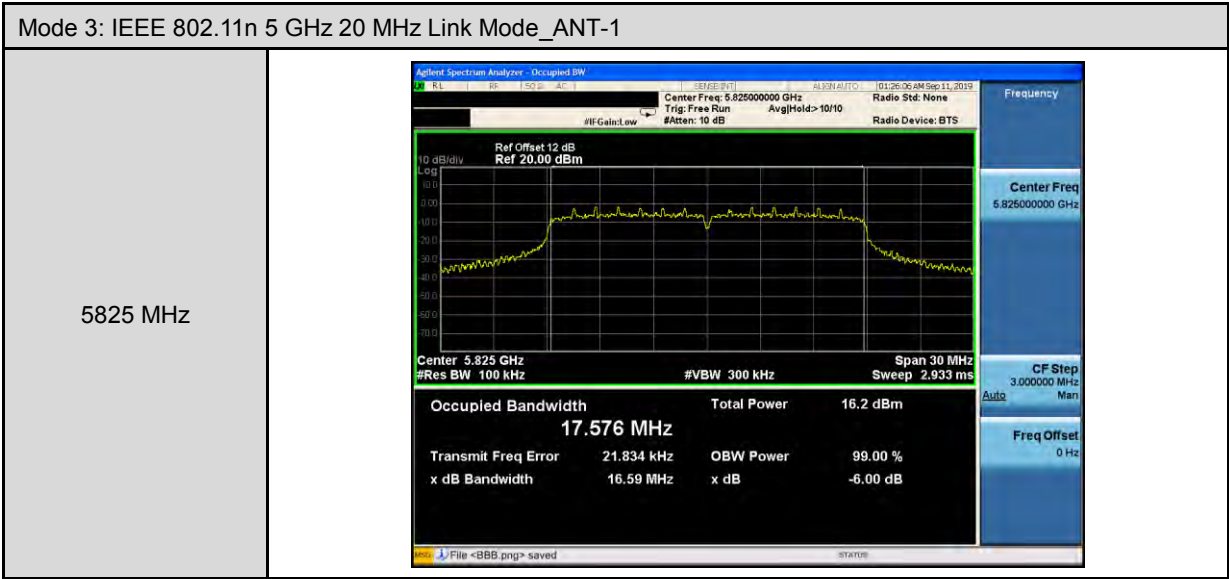
■ Test Graphs

Mode 2: IEEE 802.11a Link Mode_ ANT-1	
5720 MHz	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.74000000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref 20.00 dBm</p> <p>Center 5.74 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 4.6151 MHz</p> <p>Total Power 11.6 dBm</p> <p>Transmit Freq Error -12.694 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 3.193 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency Center Freq 5.74000000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
5745 MHz	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.74500000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 16.457 MHz</p> <p>Total Power 17.5 dBm</p> <p>Transmit Freq Error 18.298 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 16.33 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency Center Freq 5.74500000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p> <p>File <BBB.png> saved</p>
5785 MHz	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.78500000 GHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS</p> <p>Ref Offset 12 dB Ref 20.00 dBm</p> <p>Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 16.448 MHz</p> <p>Total Power 16.8 dBm</p> <p>Transmit Freq Error 24.856 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 16.09 MHz</p> <p>x dB -6.00 dB</p> <p>Frequency Center Freq 5.78500000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p> <p>File <BBB.png> saved</p>





Mode 3: IEEE 802.11n 5 GHz 20 MHz Link Mode_ANT-1	
5720 MHz	
5745 MHz	
5785 MHz	





Mode 4: IEEE 802.11n 5 GHz 40 MHz Link Mode_ANT-1	
5710 MHz	
5755 MHz	
5795 MHz	



Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180.0	-2.007	0.021	-1.986	≤ 11
5200.0	-2.400	0.021	-2.379	
5240.0	-1.762	0.021	-1.741	
5260.0	-1.598	0.021	-1.577	
5280.0	-1.581	0.021	-1.560	
5320.0	-0.814	0.021	-0.793	
5500.0	-0.661	0.021	-0.640	
5560.0	-1.244	0.021	-1.223	
5700.0	-1.045	0.021	-1.024	
5720.0	0.937	0.021	0.958	

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-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5720.0	-5.800	0.021	1.211	≤ 30
5745.0	-9.993	0.021	-2.982	
5785.0	-10.399	0.021	-3.388	
5825.0	-11.463	0.021	-4.452	

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 802.11n 5 GHz 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180.0	-2.126	0.023	-2.103	≤ 11
5200.0	-1.991	0.023	-1.968	
5240.0	-2.196	0.023	-2.173	
5260.0	-2.209	0.023	-2.186	
5280.0	-1.650	0.023	-1.627	
5320.0	-1.367	0.023	-1.344	
5500.0	-1.277	0.023	-1.254	
5560.0	-1.616	0.023	-1.593	
5700.0	-1.508	0.023	-1.485	
5720.0	0.649	0.023	0.672	

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

Test Mode	Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5720.0	-6.656	0.023	0.356	≤ 30
5745.0	-10.153	0.023	-3.141	
5785.0	-11.726	0.023	-4.714	
5825.0	-12.240	0.023	-5.228	

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)

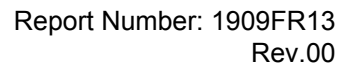
Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190.0	-7.611	0.045	-7.566	≤ 11
5230.0	-4.918	0.045	-4.873	
5270.0	-4.486	0.045	-4.441	
5310.0	-4.447	0.045	-4.402	
5510.0	-4.411	0.045	-4.366	
5550.0	-4.858	0.045	-4.813	
5670.0	-4.186	0.045	-4.141	
5710.0	-1.785	0.045	-1.740	

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

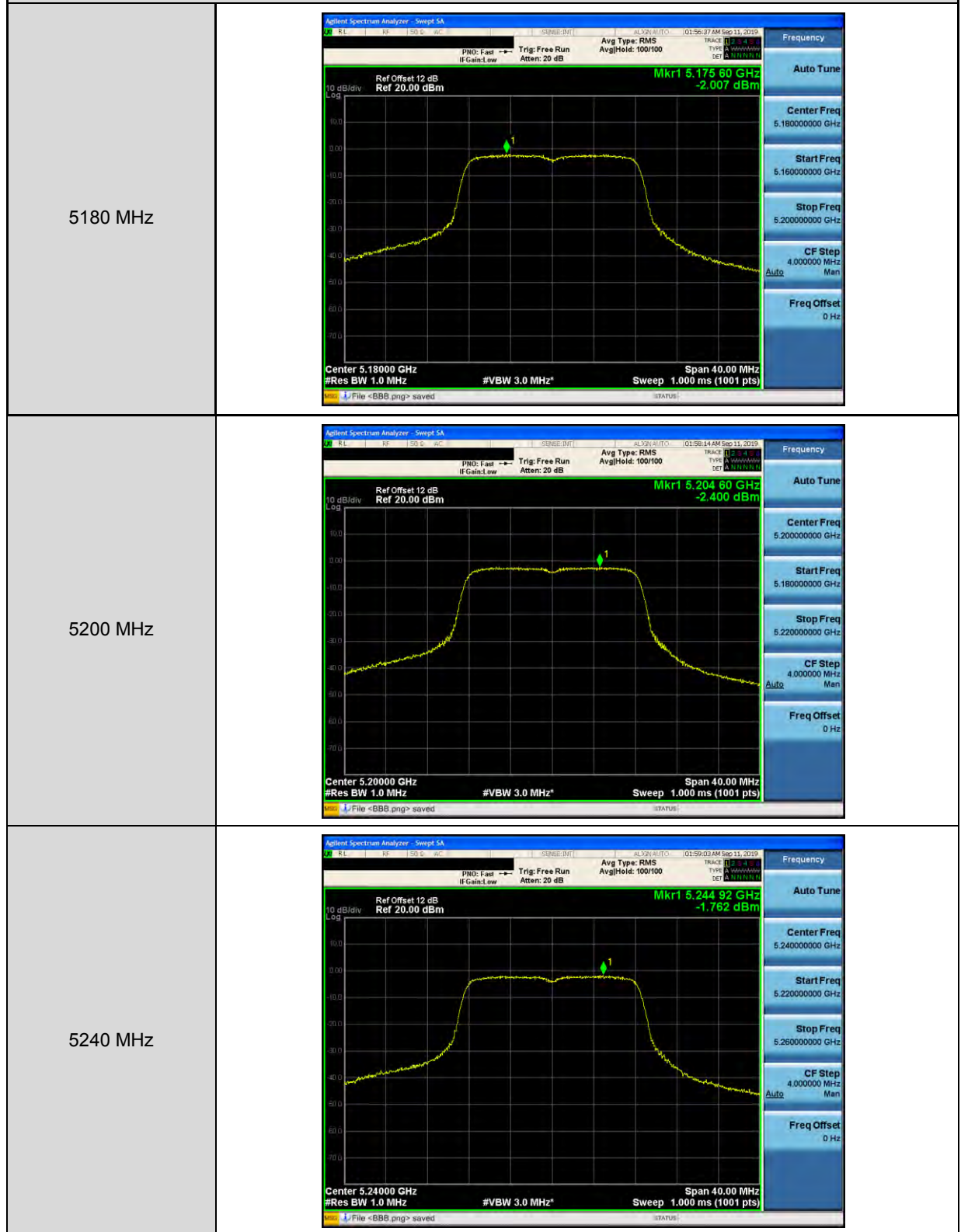
Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode			
Conducted power spectral density				
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5710.0	-11.692	0.045	-4.657	≤ 30
5755.0	-13.373	0.045	-6.338	
5795.0	-13.470	0.045	-6.435	

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)



Mode 2: IEEE 802.11a Continuous TX mode_ANT-1




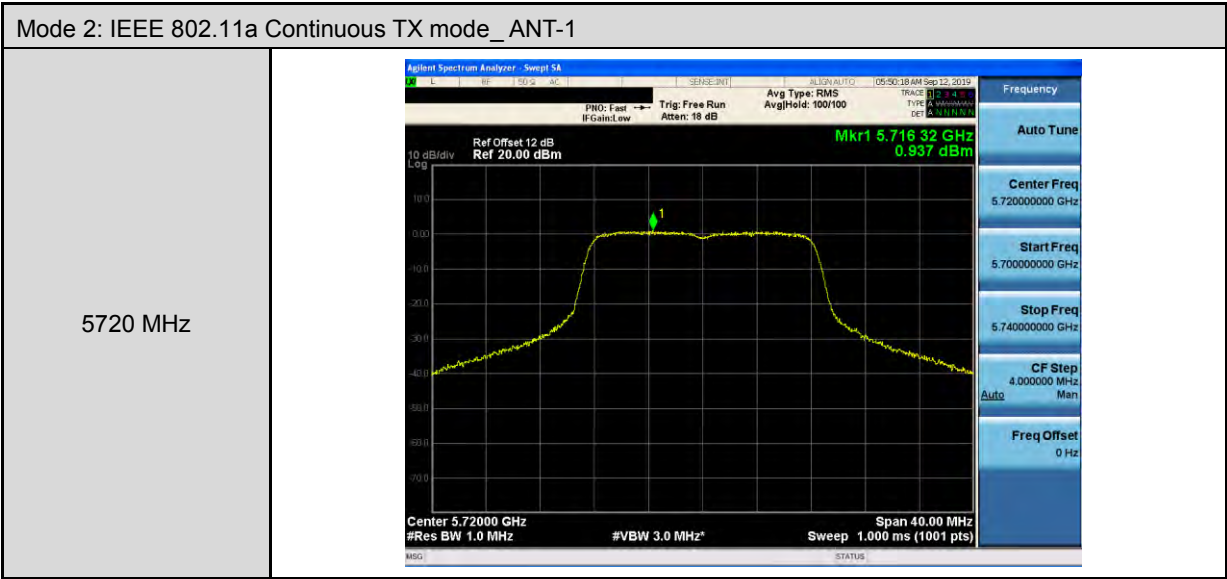


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5260 MHz	
5280 MHz	
5320 MHz	


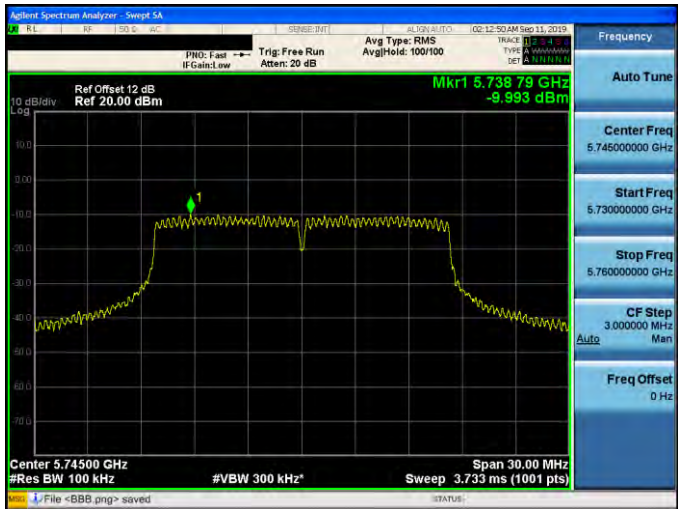
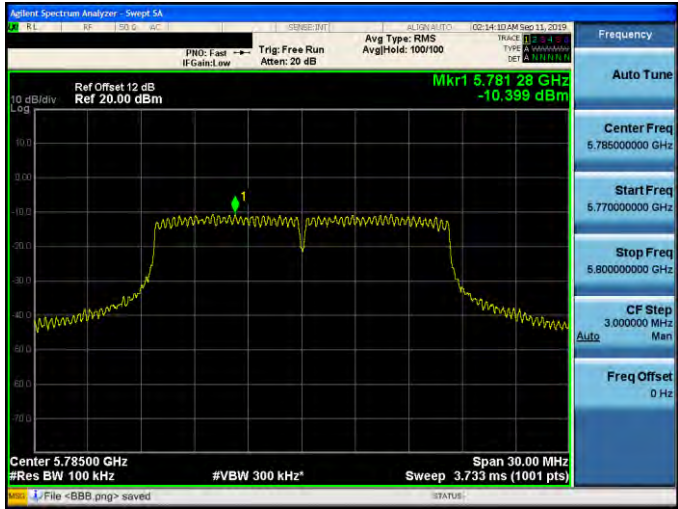


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

5500 MHz	
5560 MHz	
5700 MHz	

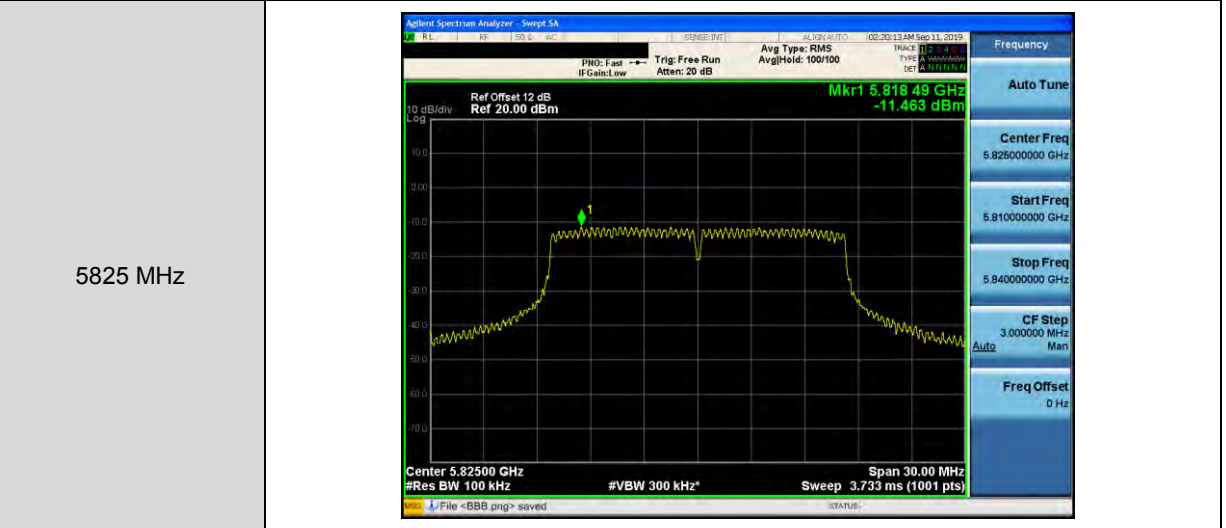




Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5720 MHz	
5745 MHz	
5785 MHz	



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1




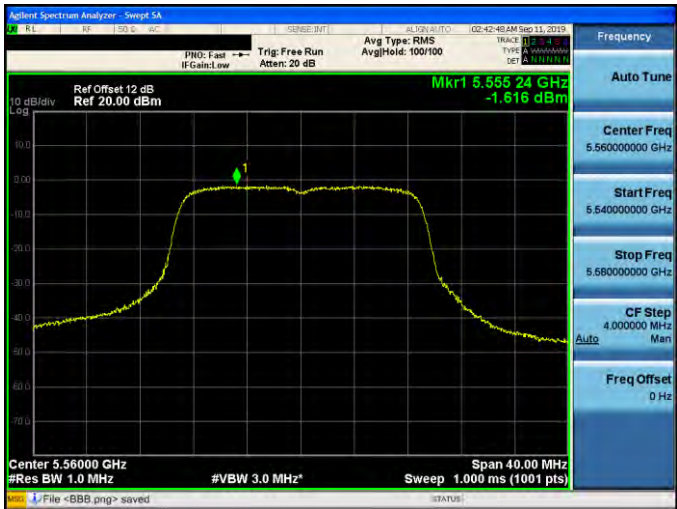



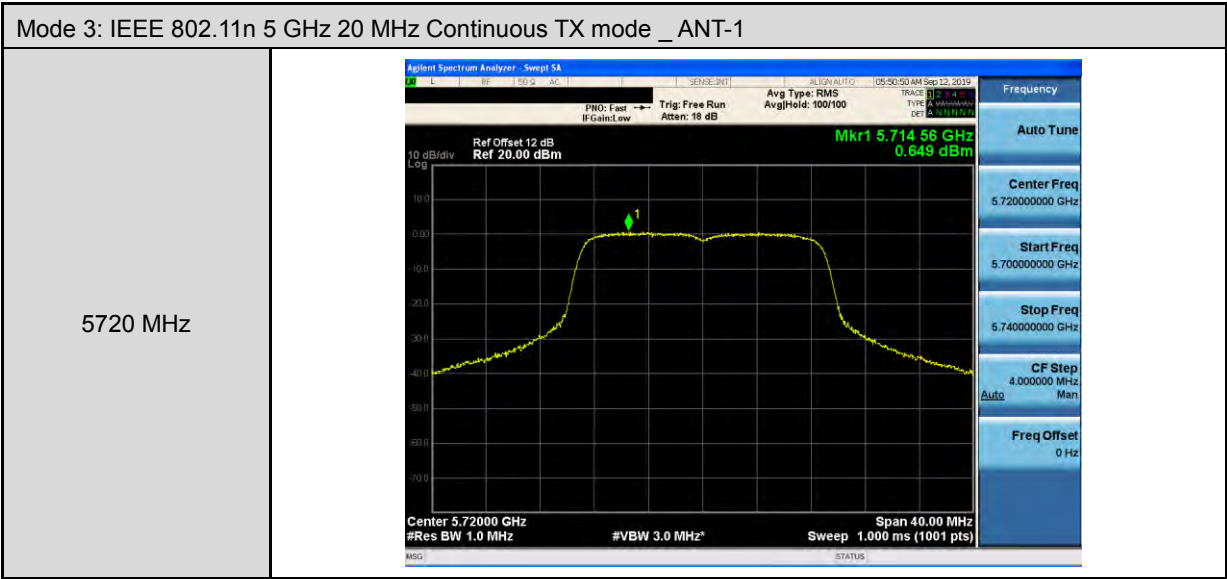
Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-1	
5260 MHz	
5280 MHz	
5320 MHz	






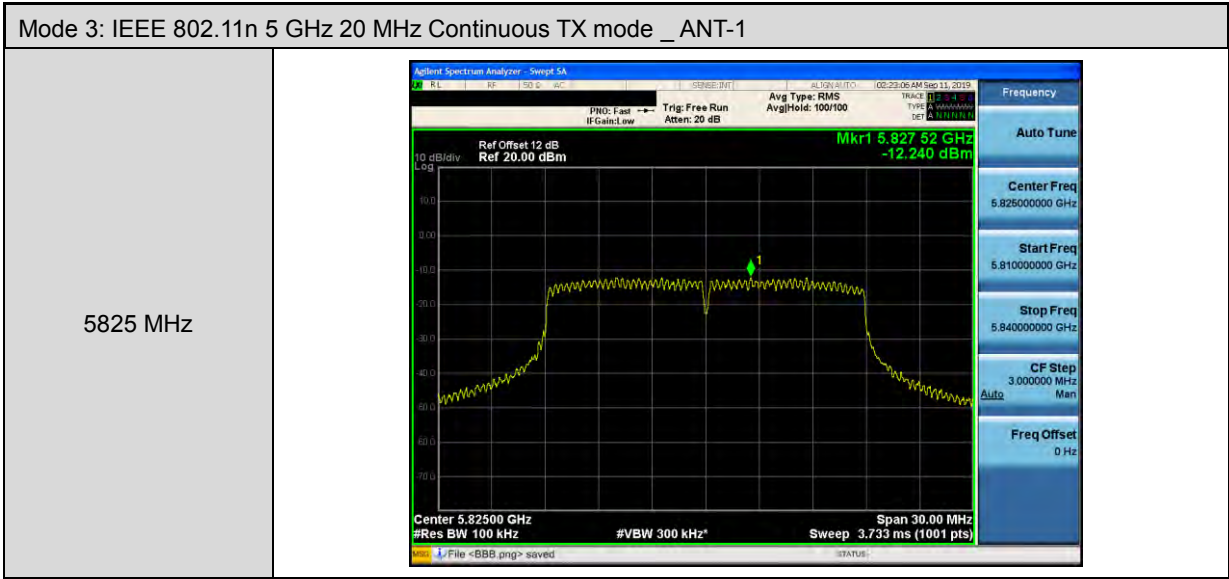
Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-1	
5500 MHz	
5560 MHz	
5700 MHz	

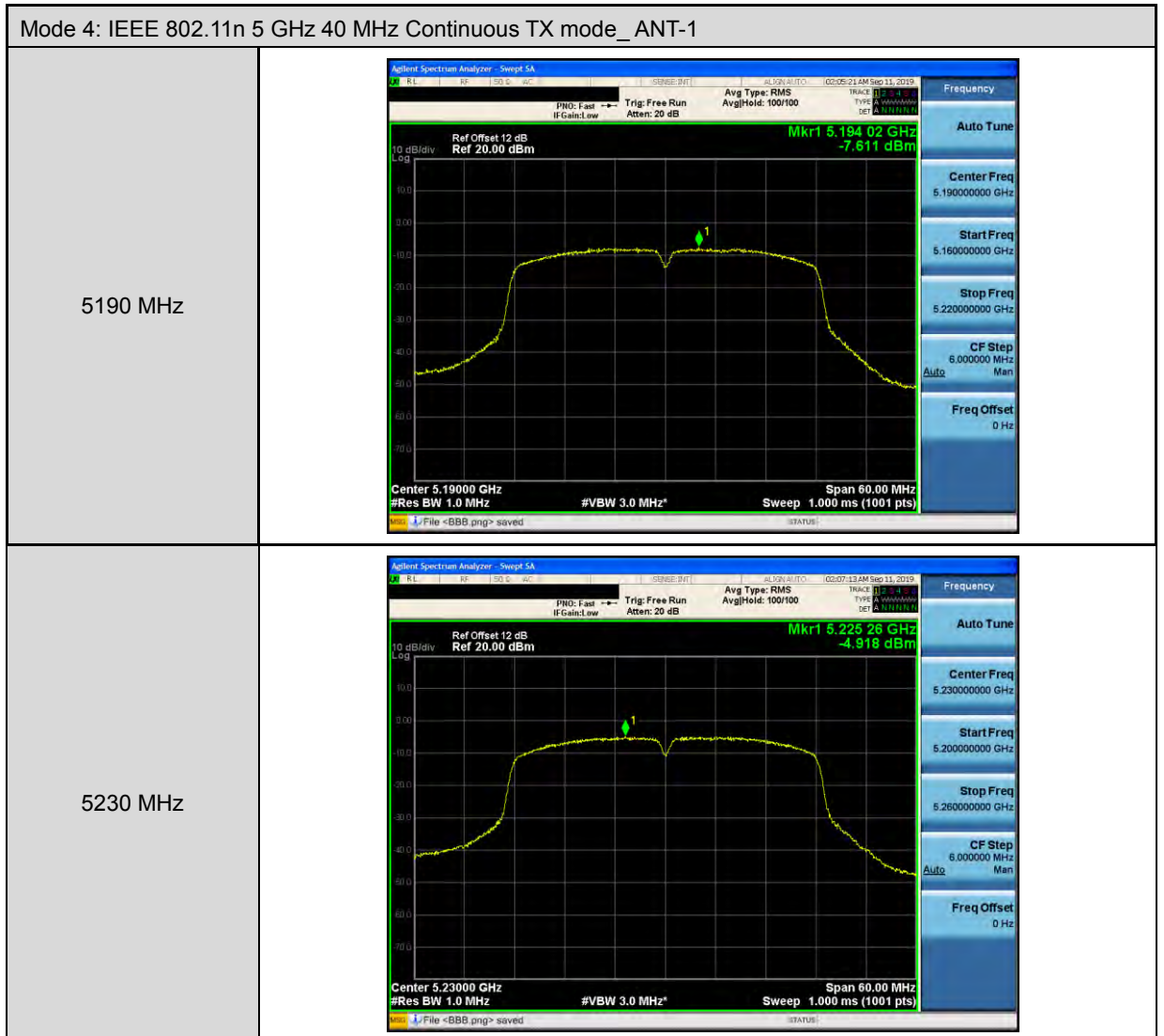


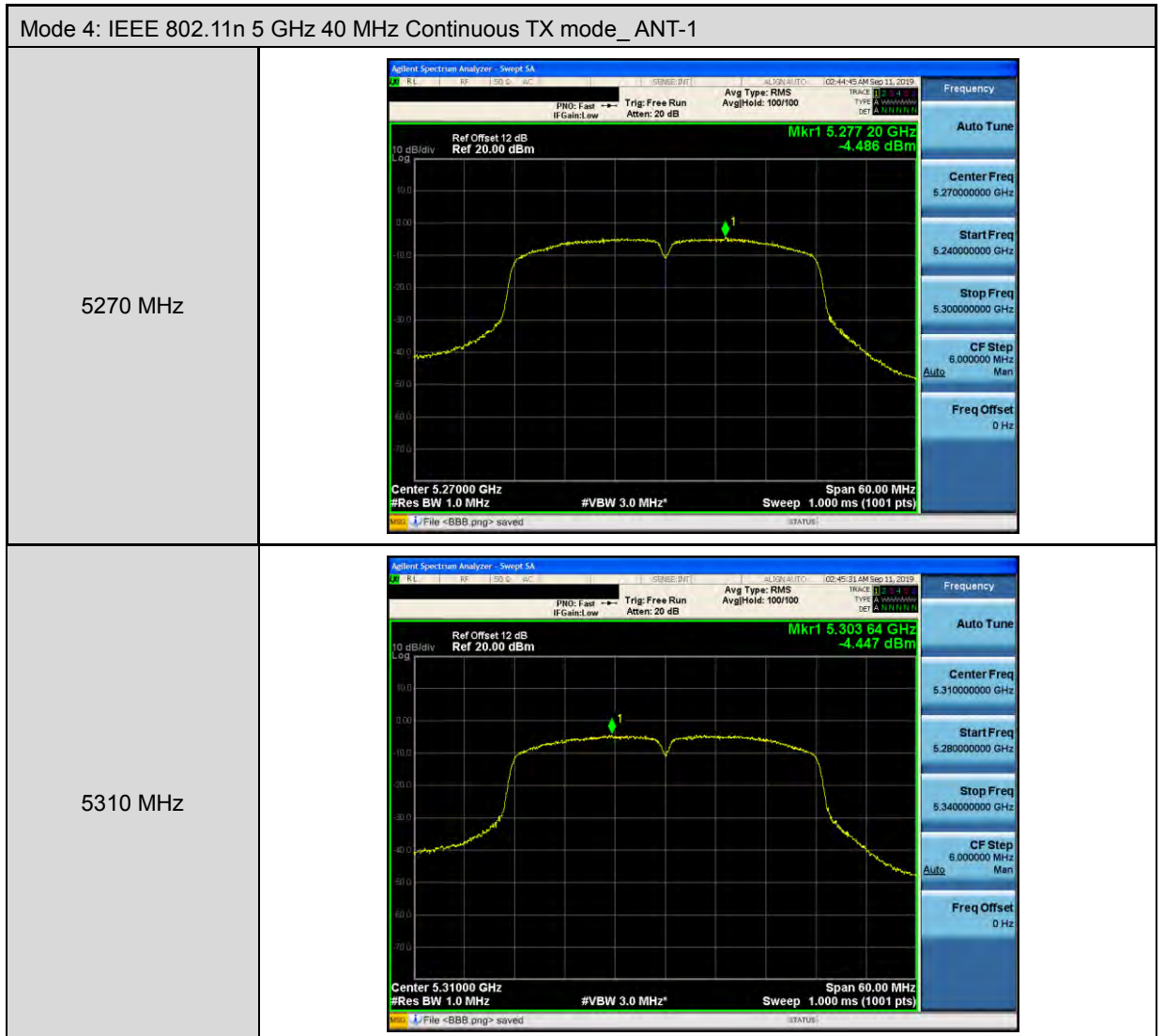


Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-1

5720 MHz	
5745 MHz	
5785 MHz	

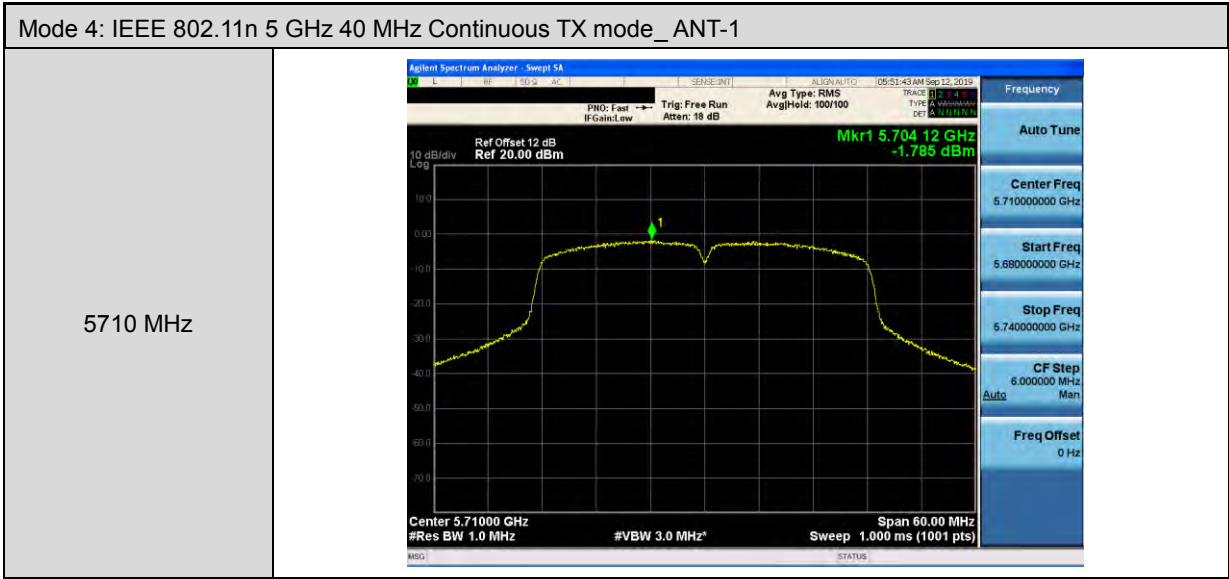








Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode_ANT-1	
5510 MHz	
5550 MHz	
5670 MHz	





Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode_ANT-1	
5710 MHz	
5755 MHz	
5795 MHz	

--- END---