



5.3. Maximum Conducted Output Power

Model Number		DWA-181		
Test Item		Maximum Conducted Output Power		
Test Mode		Mode 2: IEEE 802.11a Link Mode		
Date of Test		07/29/2016		
Frequency (MHz)	Data Rate	ANT-0		FCC Limit (dBm)
		Max. Outup Power		
		(dBm)	(W)	
5180	6 M	14.70	0.030	≤ 24
5200		15.08	0.032	
5220		14.96	0.031	
5240		14.66	0.029	
5745		13.67	0.023	≤ 30
5765		14.32	0.027	
5785		14.21	0.026	
5805		13.99	0.025	
5825		14.27	0.027	
5180	54 M	14.65	0.029	≤ 24
5200		15.04	0.032	
5220		14.91	0.031	
5240		14.63	0.029	
5745		13.63	0.023	≤ 30
5765		14.28	0.027	
5785		14.17	0.026	
5805		13.95	0.025	
5825		14.23	0.026	

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



Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 3: IEEE 802.11ac 20 MHz Link Mode						
Date of Test		07/29/2016						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	13 M	13.58	0.023	13.77	0.024	16.69	0.047	≤ 24
5200		13.53	0.023	15.43	0.035	17.59	0.057	
5220		13.75	0.024	15.27	0.034	17.59	0.057	
5240		13.65	0.023	15.20	0.033	17.50	0.056	
5745		14.24	0.027	13.55	0.023	16.92	0.049	≤ 30
5765		14.19	0.026	13.94	0.025	17.08	0.051	
5785		14.12	0.026	13.87	0.024	17.01	0.050	
5805		14.30	0.027	13.79	0.024	17.06	0.051	
5825		14.03	0.025	13.74	0.024	16.90	0.049	
5180	156 M	13.56	0.023	13.72	0.024	16.65	0.046	≤ 24
5200		13.50	0.022	15.38	0.035	17.55	0.057	
5220		13.71	0.023	15.23	0.033	17.55	0.057	
5240		13.63	0.023	15.18	0.033	17.48	0.056	
5745		14.21	0.026	13.52	0.022	16.89	0.049	≤ 30
5765		14.16	0.026	13.92	0.025	17.05	0.051	
5785		14.10	0.026	13.82	0.024	16.97	0.050	
5805		14.26	0.027	13.77	0.024	17.03	0.051	
5825		13.98	0.025	13.69	0.023	16.85	0.048	

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



Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 4: IEEE 802.11ac 40 MHz Link Mode						
Date of Test		07/29/2016						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27 M	13.39	0.022	13.48	0.022	16.45	0.044	≤ 24
5230		14.22	0.026	14.11	0.026	17.18	0.052	
5755		14.23	0.026	14.33	0.027	17.29	0.054	≤ 30
5795		14.34	0.027	14.22	0.026	17.29	0.054	
5190	360 M	13.33	0.022	13.46	0.022	16.41	0.044	≤ 24
5230		14.20	0.026	14.06	0.025	17.14	0.052	
5755		14.20	0.026	14.28	0.027	17.25	0.053	≤ 30
5755		14.30	0.027	14.19	0.026	17.26	0.053	

Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 5: IEEE 802.11ac 80 MHz Link Mode						
Date of Test		07/29/2016						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6 M	13.06	0.020	13.15	0.021	16.12	0.041	≤ 24
5775		12.68	0.019	13.33	0.022	16.03	0.040	≤ 30
5210	780 M	13.04	0.020	13.10	0.020	16.08	0.041	≤ 24
5775		12.67	0.018	13.30	0.021	16.01	0.040	≤ 30

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



Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 3: IEEE 802.11ac 20 MHz Link Mode						
Date of Test		07/29/2016						
Beamforming on								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	13 M	13.22	0.021	13.17	0.021	16.21	0.042	≤ 24
5200		14.65	0.029	14.21	0.026	17.45	0.056	
5220		14.14	0.026	14.13	0.026	17.15	0.052	
5240		14.15	0.026	14.12	0.026	17.15	0.052	
5745		14.20	0.026	13.96	0.025	17.09	0.051	≤ 30
5765		14.36	0.027	14.22	0.026	17.30	0.054	
5785		14.39	0.027	14.26	0.027	17.34	0.054	
5805		14.43	0.028	13.57	0.023	17.03	0.050	
5825	14.01	0.025	12.62	0.018	16.38	0.043		
5180	156 M	13.20	0.021	13.13	0.021	16.18	0.041	≤ 24
5200		14.60	0.029	14.14	0.026	17.39	0.055	
5220		14.10	0.026	14.08	0.026	17.10	0.051	
5240		14.09	0.026	14.07	0.026	17.09	0.051	
5745		14.17	0.026	13.94	0.025	17.07	0.051	≤ 30
5765		14.33	0.027	14.13	0.026	17.24	0.053	
5785		14.34	0.027	14.21	0.026	17.29	0.054	
5805		14.38	0.027	13.51	0.022	16.98	0.050	
5825	13.99	0.025	12.60	0.018	16.36	0.043		

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



Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 4: IEEE 802.11ac 40 MHz Link Mode						
Date of Test		07/29/2016						
Beamforming on								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27 M	11.82	0.015	11.03	0.013	14.45	0.028	≤ 24
5230		14.24	0.027	13.61	0.023	16.95	0.050	
5755		14.01	0.025	13.91	0.025	16.97	0.050	≤ 30
5795		14.04	0.025	13.60	0.023	16.84	0.048	
5190	360 M	11.81	0.015	11.00	0.013	14.43	0.028	≤ 24
5230		14.20	0.026	13.57	0.023	16.91	0.049	
5755		13.99	0.025	13.88	0.024	16.95	0.049	≤ 30
5755		14.00	0.025	13.52	0.022	16.78	0.048	

Model Number		DWA-181						
Test Item		Maximum Conducted Output Power						
Test Mode		Mode 5: IEEE 802.11ac 80 MHz Link Mode						
Date of Test		07/29/2016						
Beamforming on								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6 M	10.25	0.011	10.18	0.010	13.23	0.021	≤ 24
5775		14.24	0.027	13.53	0.023	16.91	0.049	≤ 30
5210	780 M	10.23	0.011	10.10	0.010	13.18	0.021	≤ 24
5775		14.18	0.026	13.50	0.022	16.86	0.049	≤ 30

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

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

Model Number	DWA-181
Test Item	26 dB RF Bandwidth Measurement
Test Mode	Mode 2: IEEE 802.11a Link Mode
Date of Test	09/04/2016
Frequency (MHz)	ANT-0
	26 dB Bandwidth (MHz)
5180	24.180
5200	23.300
5240	24.510

Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5180	23.090	22.960
5200	24.860	24.730
5240	24.860	25.000

Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5190	46.340	46.140
5230	49.860	49.870

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



Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5210	84.850	79.870

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



Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Link Mode	
Date of Test	10/10/2016	
Beamforming on		
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5180	24.950	24.340
5200	24.220	24.100
5240	25.000	24.670

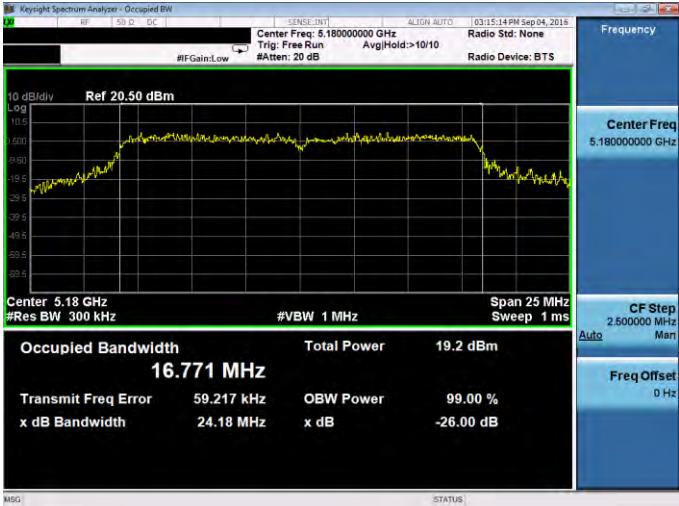
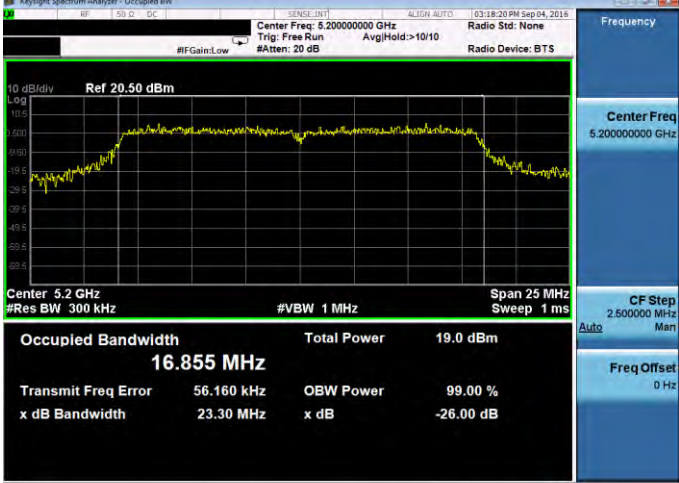
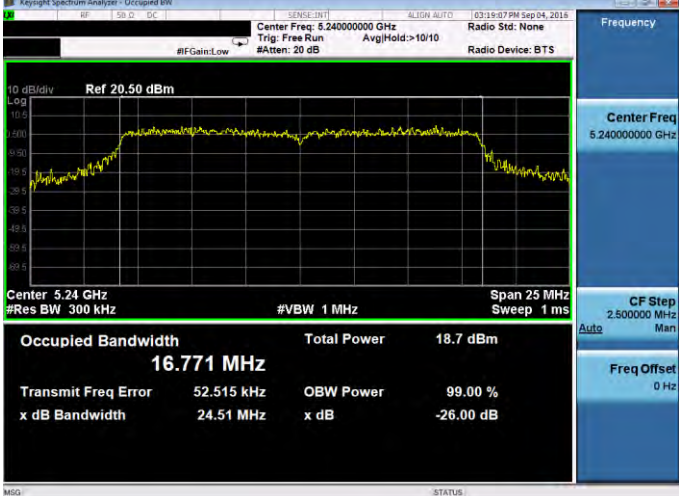
Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Link Mode	
Date of Test	10/10/2016	
Beamforming on		
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5190	46.720	43.220
5230	49.210	50.000

Model Number	DWA-181	
Test Item	26 dB RF Bandwidth Measurement	
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Link Mode	
Date of Test	10/10/2016	
Beamforming on		
Frequency (MHz)	ANT-0	Ant-1
	26 dB Bandwidth (MHz)	26 dB Bandwidth (MHz)
5210	80.660	79.310

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



■ Test Graphs

Mode 2: IEEE 802.11a Link Mode_ ANT-0	
5200 MHz	
5240 MHz	

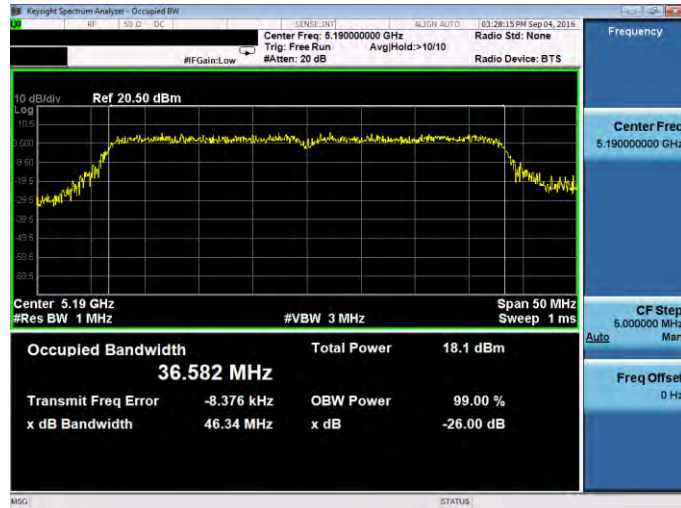


Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-0	
5180 MHz	KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.50 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.820 MHz Total Power 17.8 dBm Transmit Freq Error 12.209 kHz OBW Power 99.00 % x dB Bandwidth 23.09 MHz x dB -26.00 dB MSG STATUS
5200 MHz	KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.50 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.888 MHz Total Power 15.2 dBm Transmit Freq Error 70.429 kHz OBW Power 99.00 % x dB Bandwidth 24.86 MHz x dB -26.00 dB MSG STATUS
5240 MHz	KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS 10 dB/div Ref 20.50 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.890 MHz Total Power 19.6 dBm Transmit Freq Error 70.160 kHz OBW Power 99.00 % x dB Bandwidth 24.86 MHz x dB -26.00 dB MSG STATUS

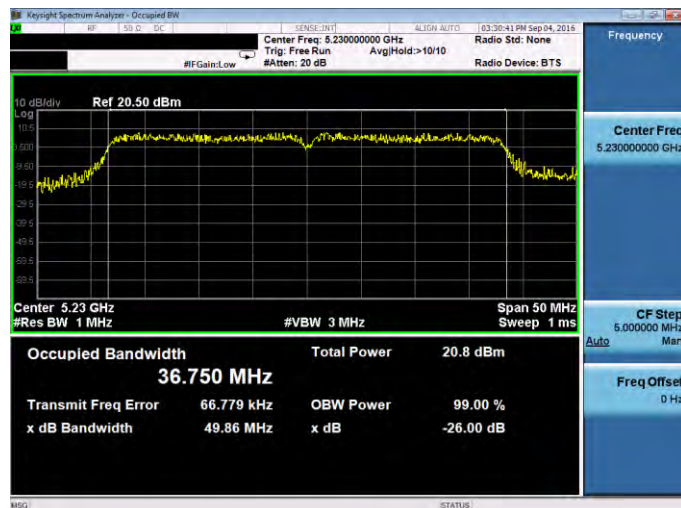


Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-0

5190 MHz

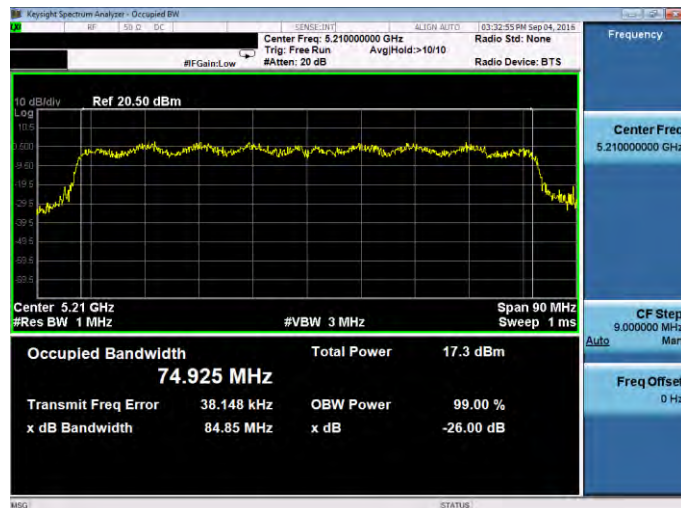


5230 MHz

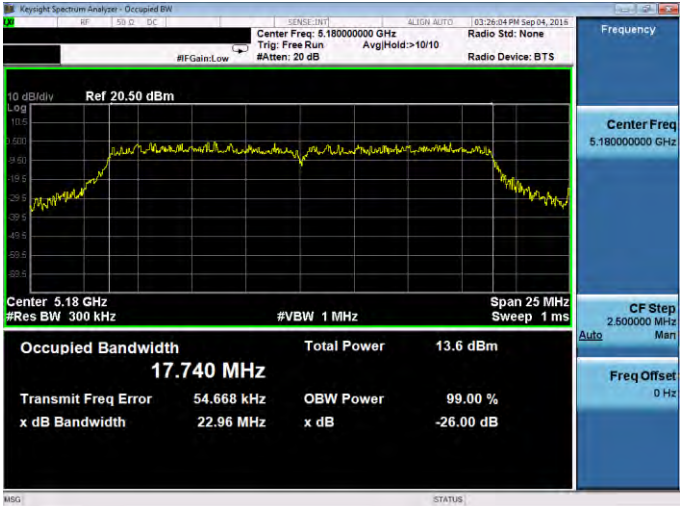
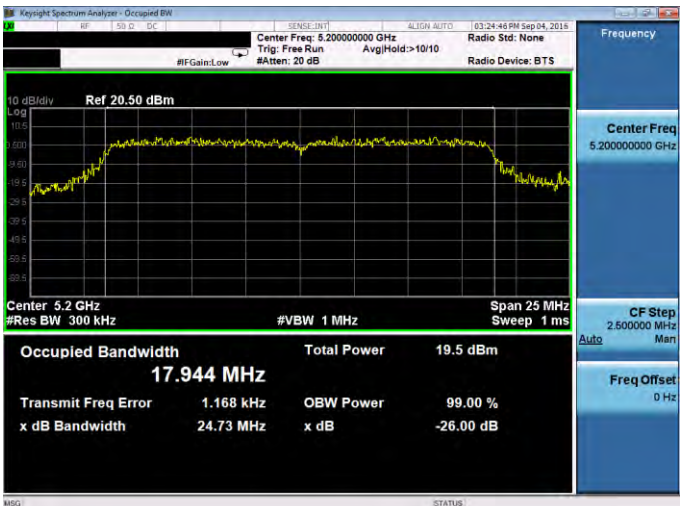
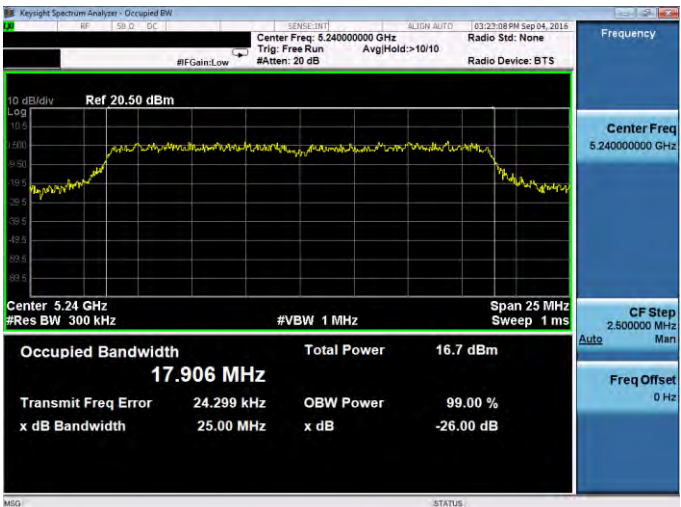


Mode 5: IEEE 802.11ac 80 MHz Link Mode_ ANT-0

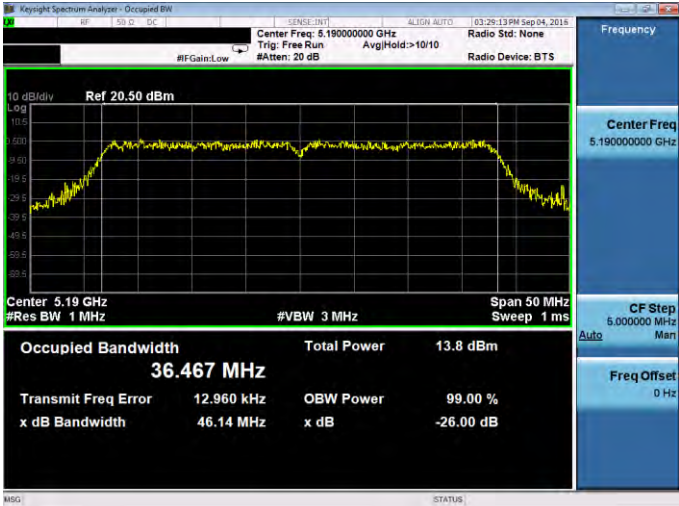
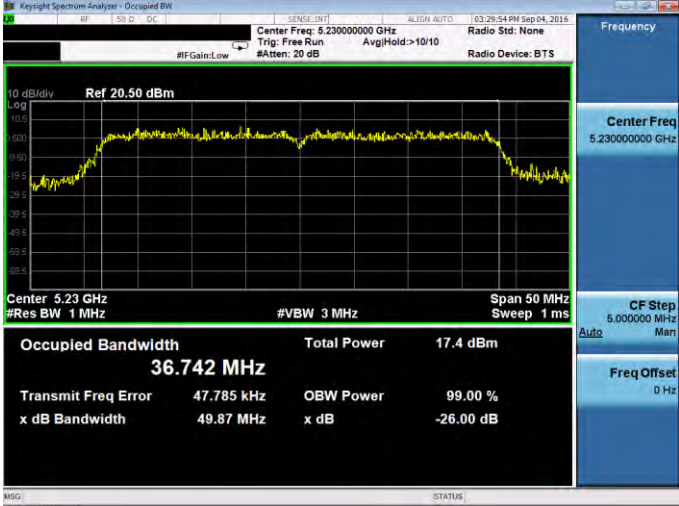
5210 MHz



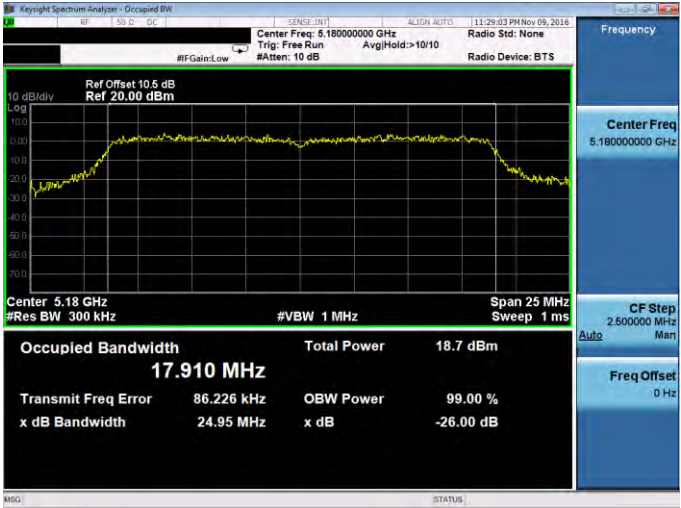
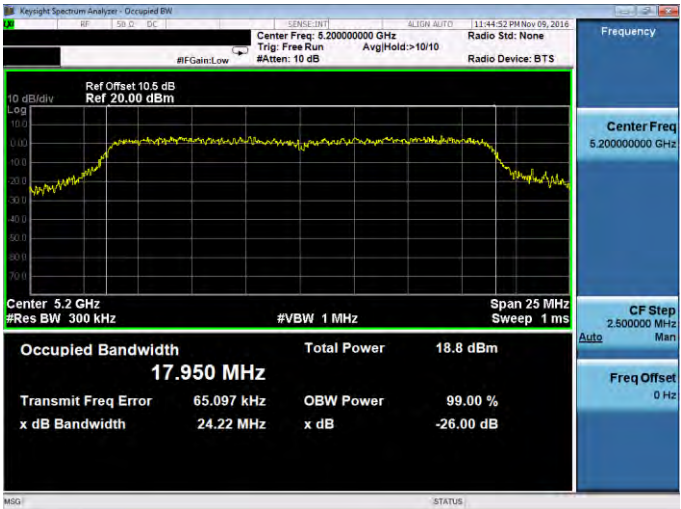
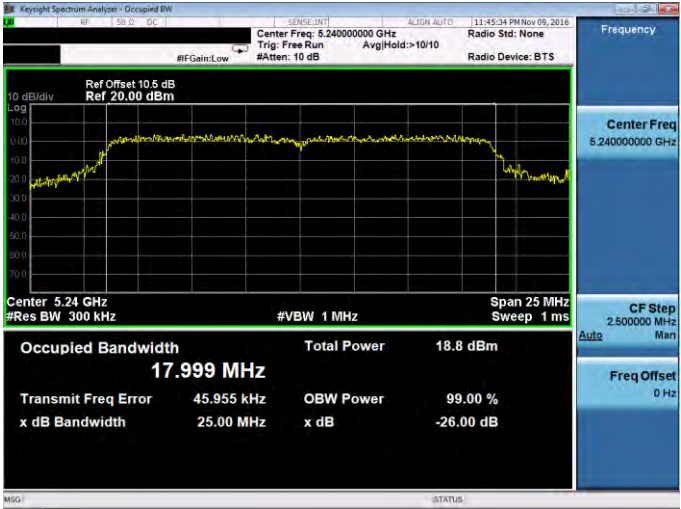


Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

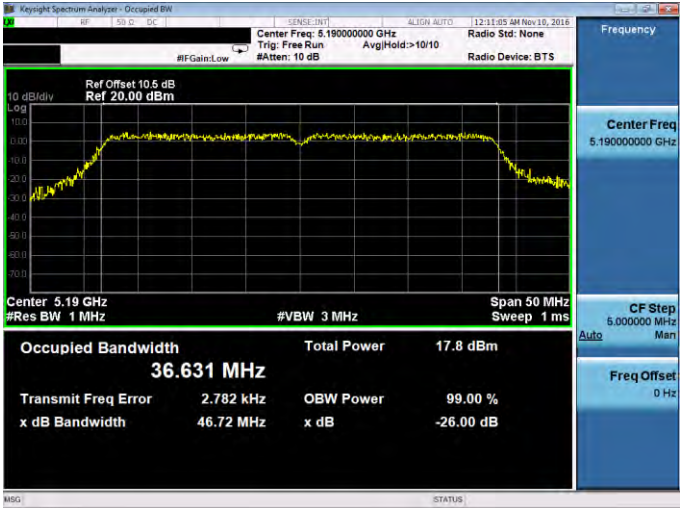
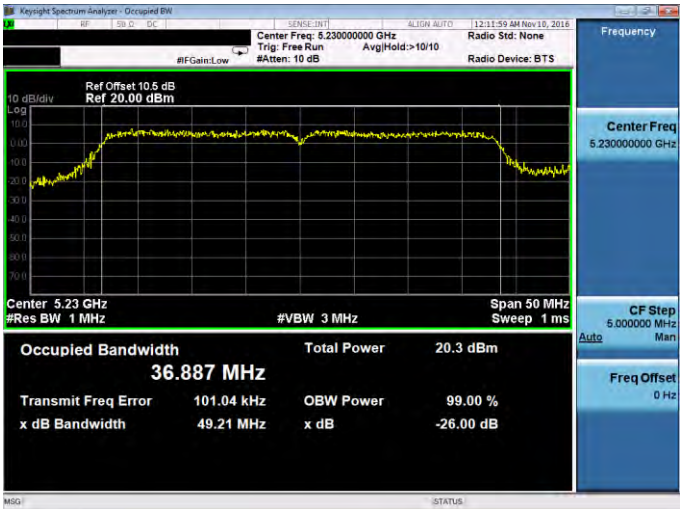


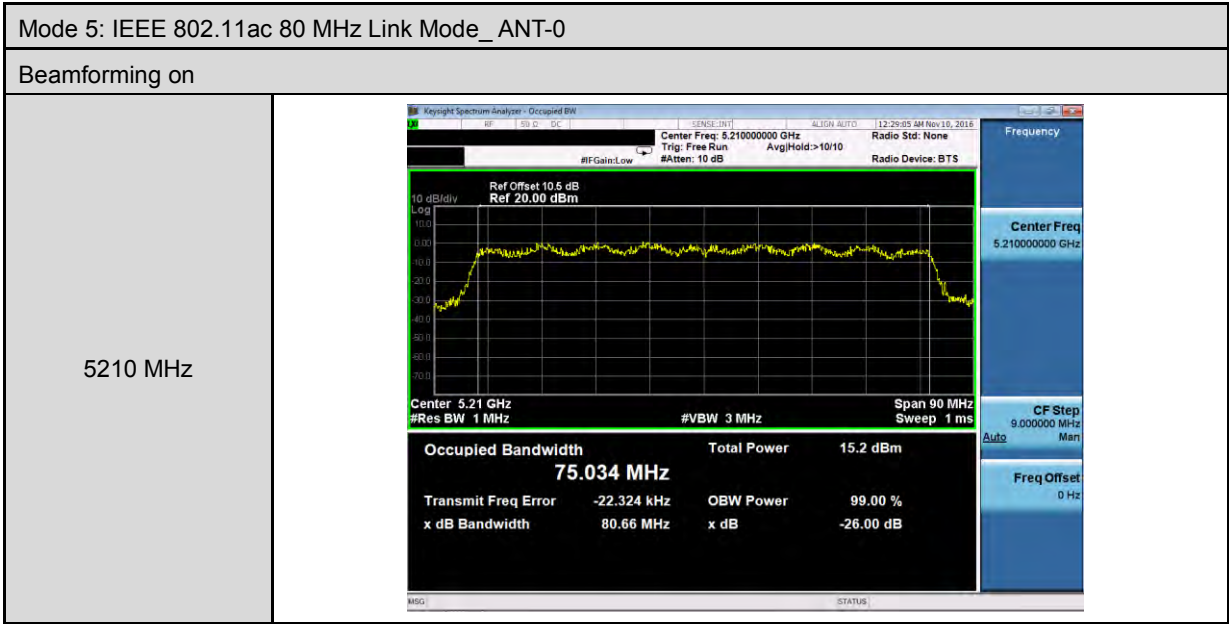
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-1	
5190 MHz	
5230 MHz	
Mode 5: IEEE 802.11ac 80 MHz Link Mode_ ANT-1	
5210 MHz	



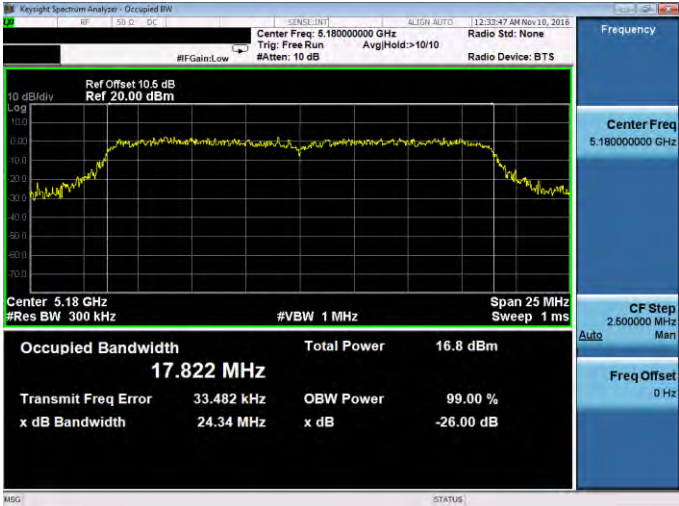
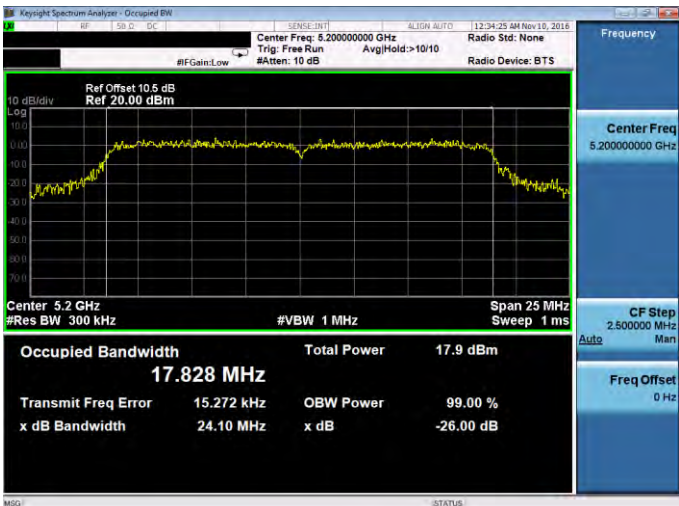
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-0	
Beamforming on	
5180 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.910 MHz Total Power 18.7 dBm Transmit Freq Error 86.226 kHz OBW Power 99.00 % x dB Bandwidth 24.95 MHz x dB -26.00 dB
5200 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.950 MHz Total Power 18.8 dBm Transmit Freq Error 65.097 kHz OBW Power 99.00 % x dB Bandwidth 24.22 MHz x dB -26.00 dB
5240 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.999 MHz Total Power 18.8 dBm Transmit Freq Error 45.955 kHz OBW Power 99.00 % x dB Bandwidth 25.00 MHz x dB -26.00 dB



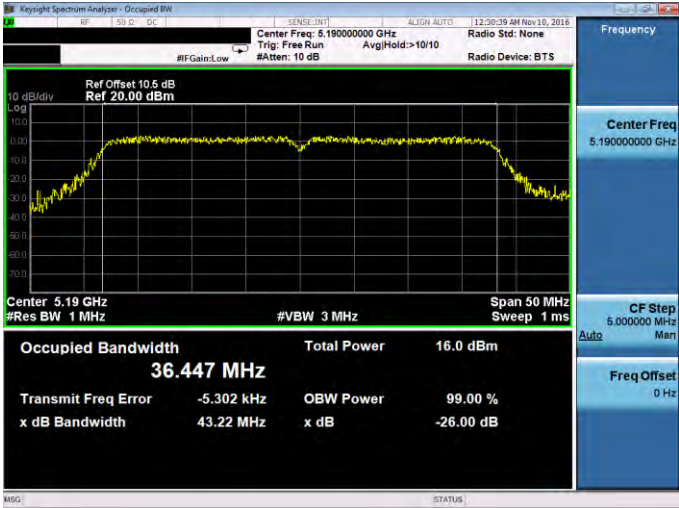
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-0	
Beamforming on	
5190 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.19000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.19 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.631 MHz Total Power 17.8 dBm Transmit Freq Error 2.782 kHz OBW Power 99.00 % x dB Bandwidth 46.72 MHz x dB -26.00 dB Frequency Center Freq 5.19000000 GHz CF Step 5.000000 MHz Auto Man Freq Offset 0 Hz
5230 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.23000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.23 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.887 MHz Total Power 20.3 dBm Transmit Freq Error 101.04 kHz OBW Power 99.00 % x dB Bandwidth 49.21 MHz x dB -26.00 dB Frequency Center Freq 5.23000000 GHz CF Step 5.000000 MHz Auto Man Freq Offset 0 Hz

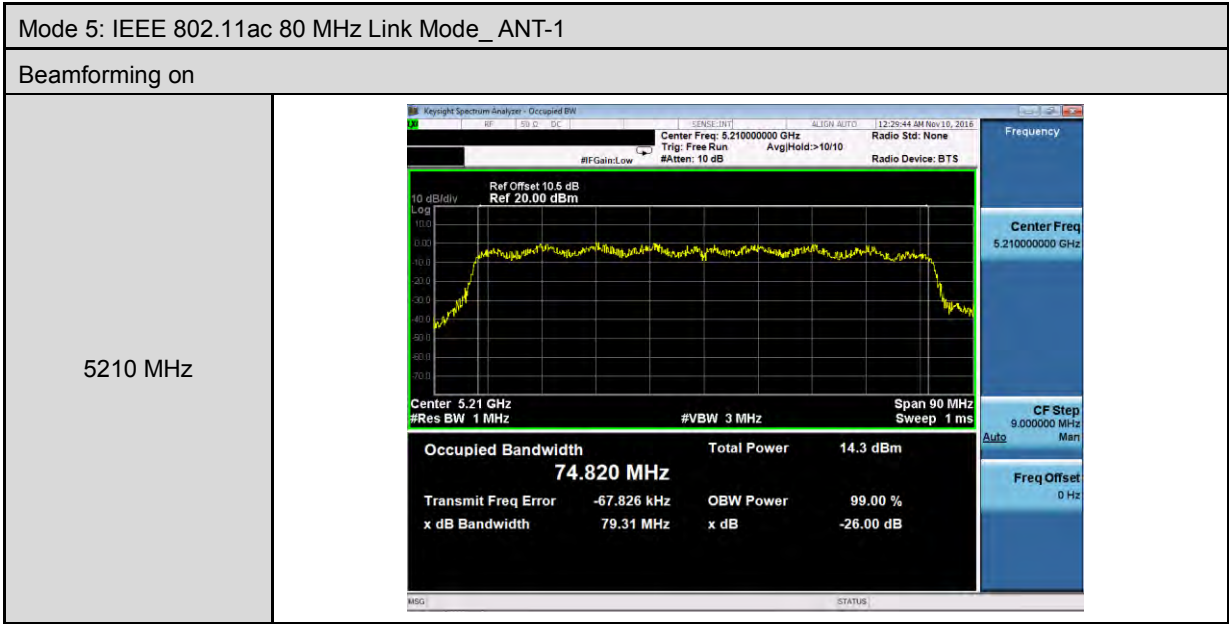




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-1	
Beamforming on	
5180 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.822 MHz Total Power 16.8 dBm Transmit Freq Error 33.482 kHz OBW Power 99.00 % x dB Bandwidth 24.34 MHz x dB -26.00 dB
5200 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.828 MHz Total Power 17.9 dBm Transmit Freq Error 15.272 kHz OBW Power 99.00 % x dB Bandwidth 24.10 MHz x dB -26.00 dB
5240 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 25 MHz Sweep 1 ms Occupied Bandwidth 17.840 MHz Total Power 17.1 dBm Transmit Freq Error 65.014 kHz OBW Power 99.00 % x dB Bandwidth 24.67 MHz x dB -26.00 dB



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1	
Beamforming on	
5190 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.190000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.19 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.447 MHz Total Power 16.0 dBm Transmit Freq Error -5.302 kHz OBW Power 99.00 % x dB Bandwidth 43.22 MHz x dB -26.00 dB Frequency 5.190000000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0 Hz
5230 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.230000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS Ref Offset 10.5 dB Ref 20.00 dBm Center 5.23 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.772 MHz Total Power 20.2 dBm Transmit Freq Error -32.165 kHz OBW Power 99.00 % x dB Bandwidth 50.00 MHz x dB -26.00 dB Frequency 5.230000000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0 Hz





5.5. 6 dB RF Bandwidth Measurement

Model Number	DWA-181	
Test Item	6 dB RF Bandwidth	
Test Mode	Mode 2: IEEE 802.11a Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	6 dB Bandwidth (kHz)	
	ANT-0	
5745	16350	> 500
5785	16410	> 500
5825	15720	> 500

Model Number	DWA-181	
Test Item	6 dB RF Bandwidth	
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	6 dB Bandwidth (kHz)	
	ANT-0	ANT-1
5745	17570	17200
5785	17600	16960
5825	17580	17550

Model Number	DWA-181	
Test Item	6 dB RF Bandwidth	
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Link Mode	
Date of Test	09/04/2016	
Frequency (MHz)	6 dB Bandwidth (kHz)	
	ANT-0	ANT-1
5755	36060	35150
5795	36020	35720



Model Number	DWA-181		
Test Item	6 dB RF Bandwidth		
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Link Mode		
Date of Test	09/04/2016		
Frequency (MHz)	6 dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	72720	75100	> 500



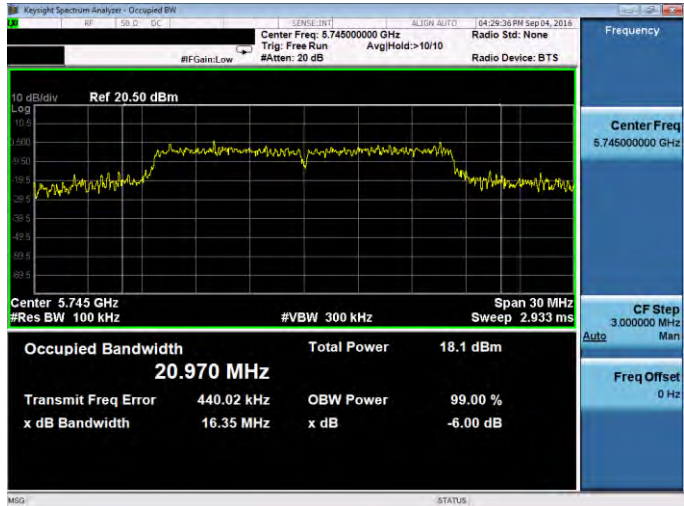
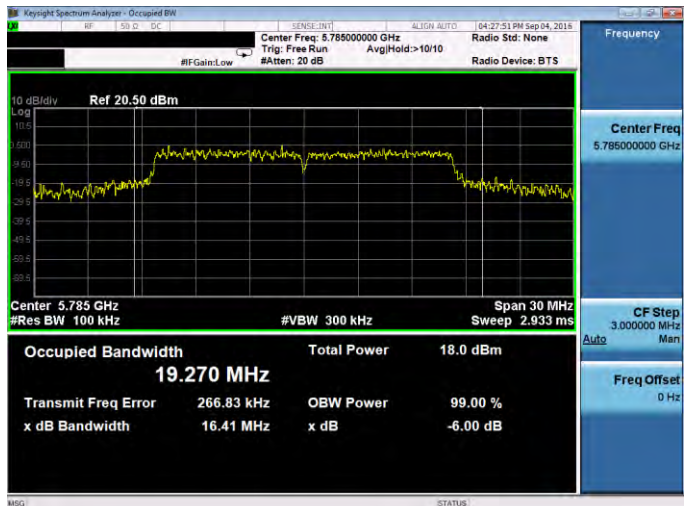
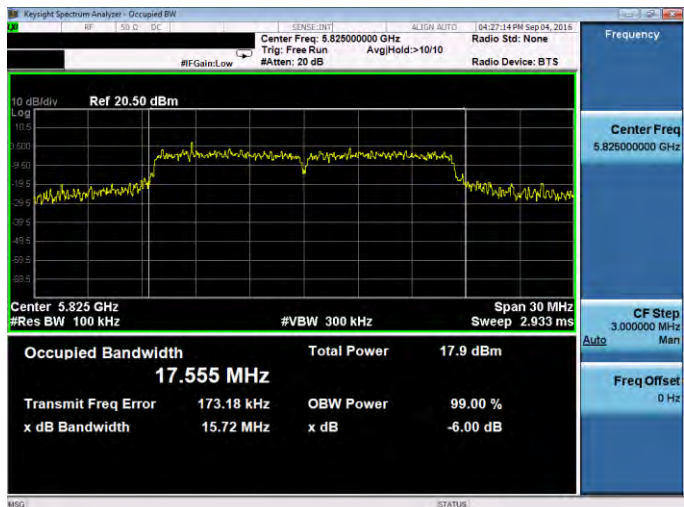
Model Number	DWA-181		
Test Item	6 dB RF Bandwidth		
Test Mode	Mode 3: IEEE 802.11ac 20 MHz Link Mode		
Date of Test	10/10/2016		
Beamforming on			
Frequency (MHz)	6 dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	16910	17050	> 500
5785	17300	17560	> 500
5825	16300	17300	> 500

Model Number	DWA-181		
Test Item	6 dB RF Bandwidth		
Test Mode	Mode 4: IEEE 802.11ac 40 MHz Link Mode		
Date of Test	10/10/2016		
Beamforming on			
Frequency (MHz)	6 dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35100	35500	> 500
5795	35220	35570	> 500

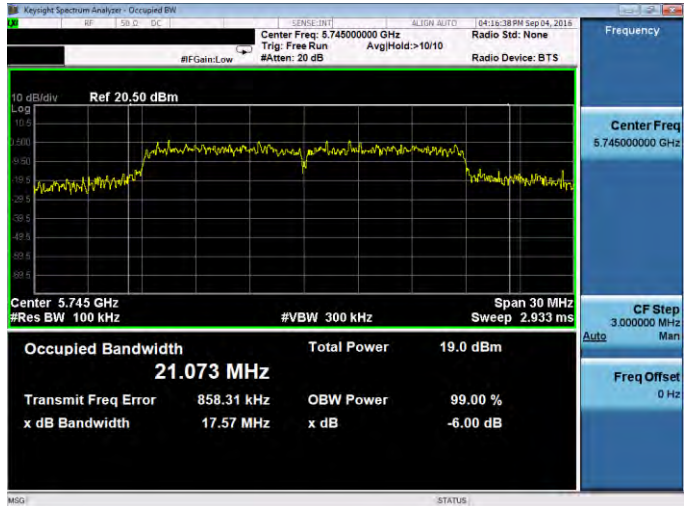
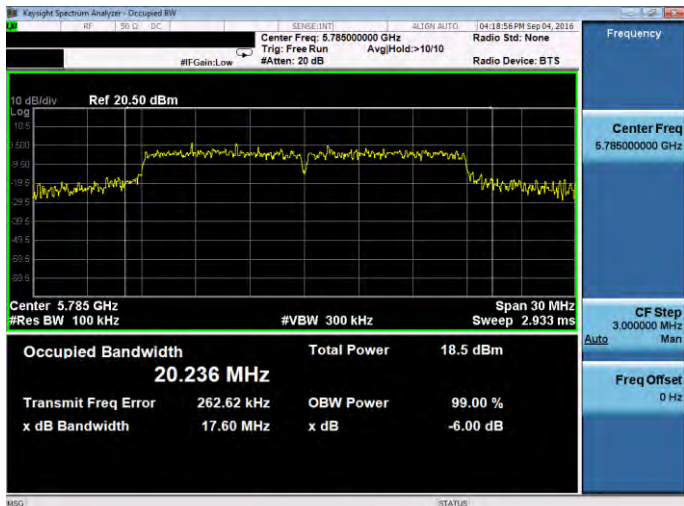
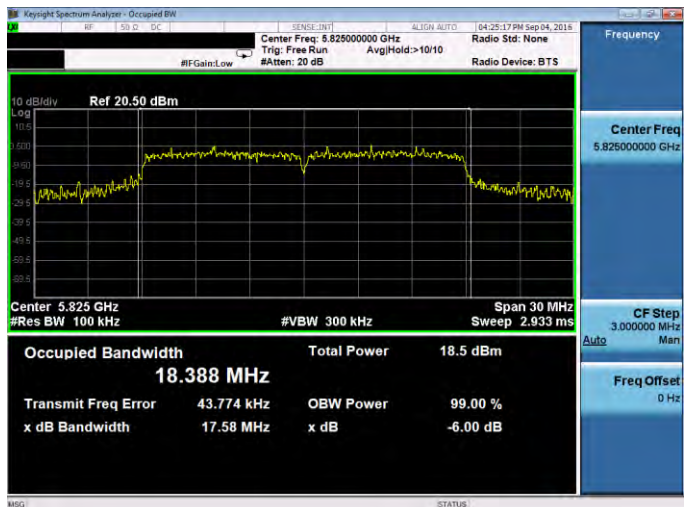
Model Number	DWA-181		
Test Item	6 dB RF Bandwidth		
Test Mode	Mode 5: IEEE 802.11ac 80 MHz Link Mode		
Date of Test	10/10/2016		
Beamforming on			
Frequency (MHz)	6 dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75180	75070	> 500



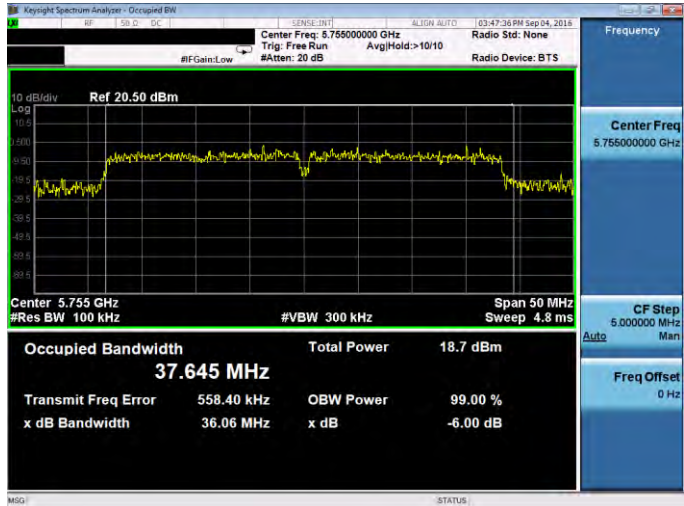
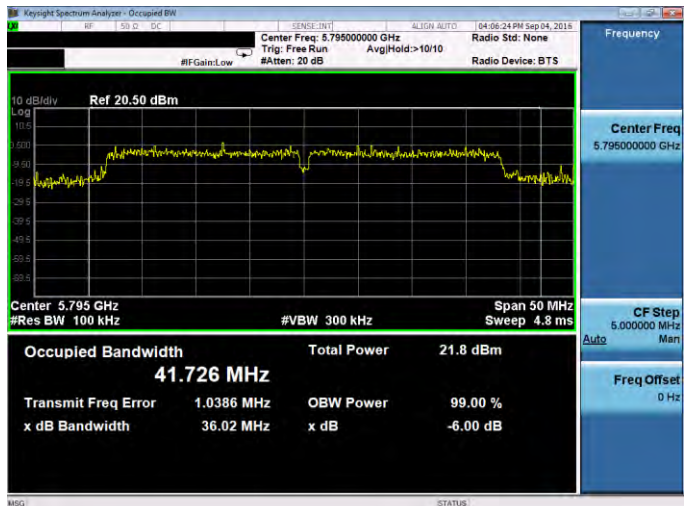
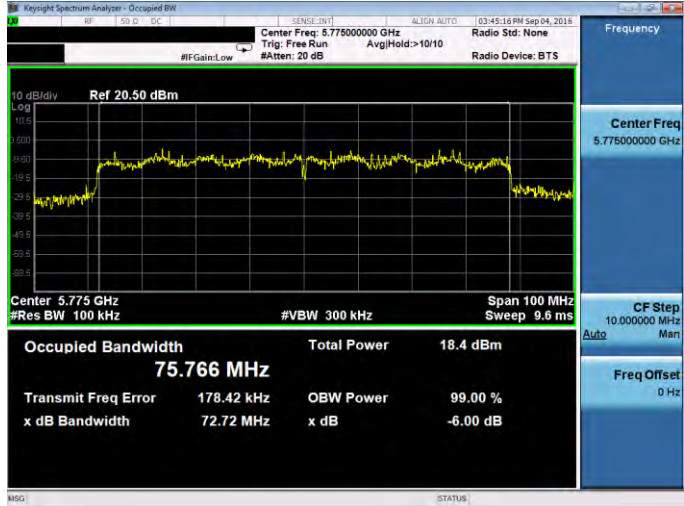
■ Test Graphs

Mode 2: IEEE 802.11a Link Mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	



Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

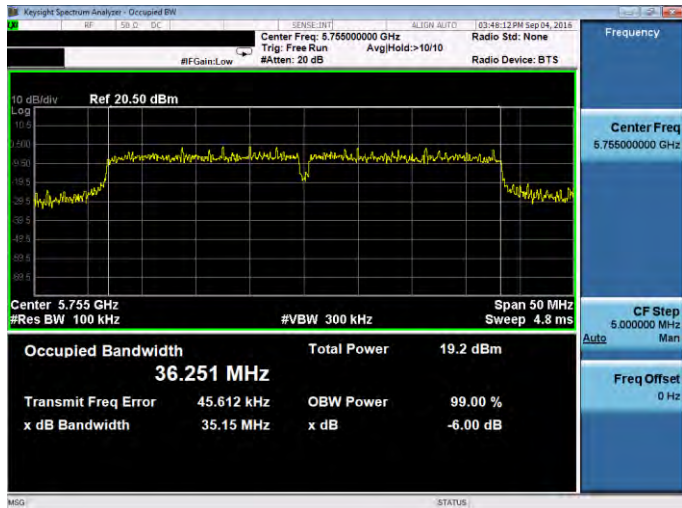
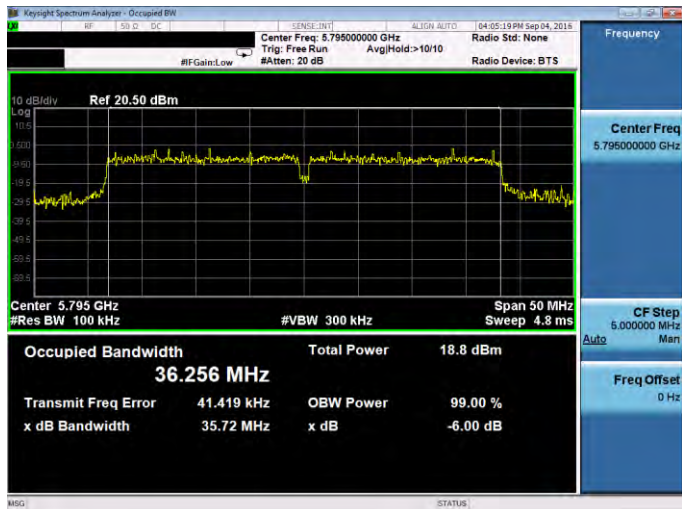
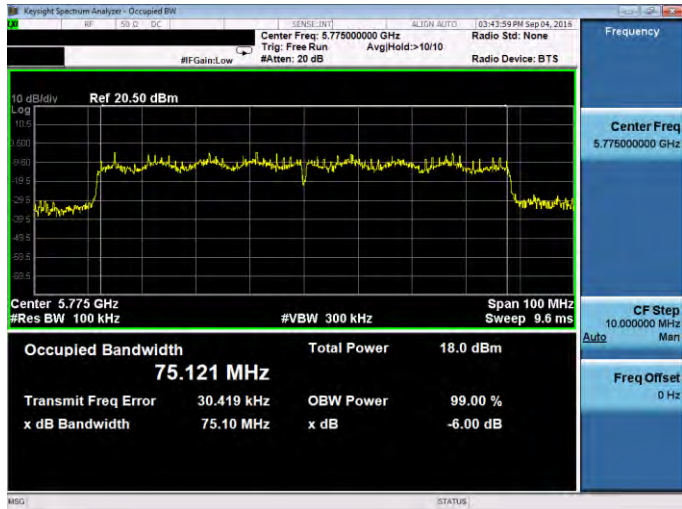


Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-0	
5755 MHz	
5795 MHz	
Mode 5: IEEE 802.11ac 80 MHz Link Mode_ANT-0	
5775 MHz	

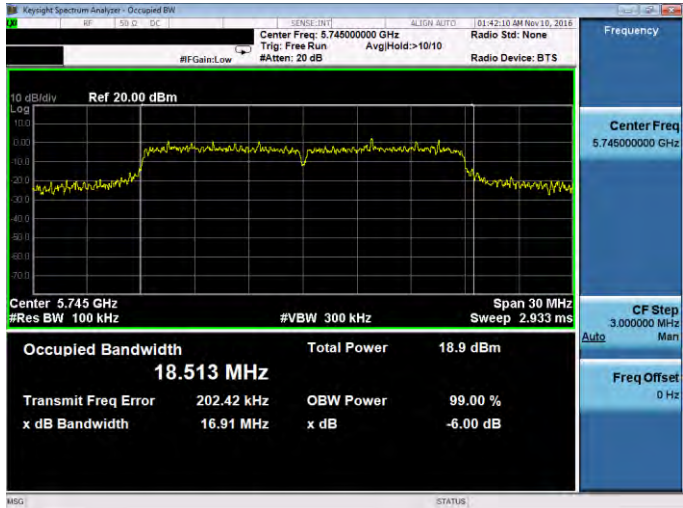
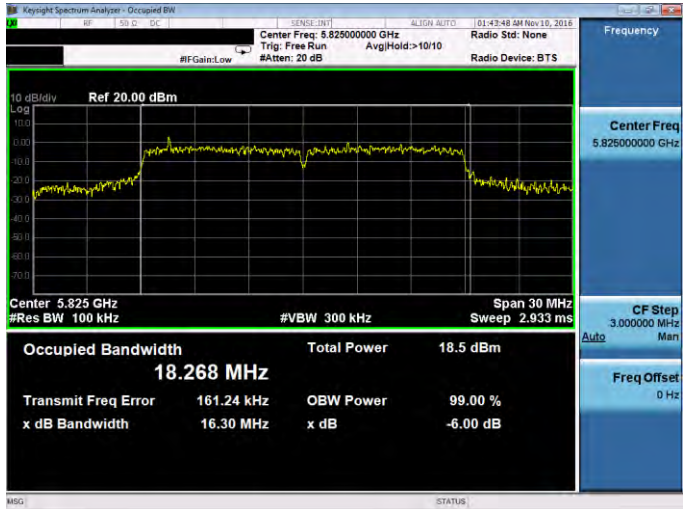


Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

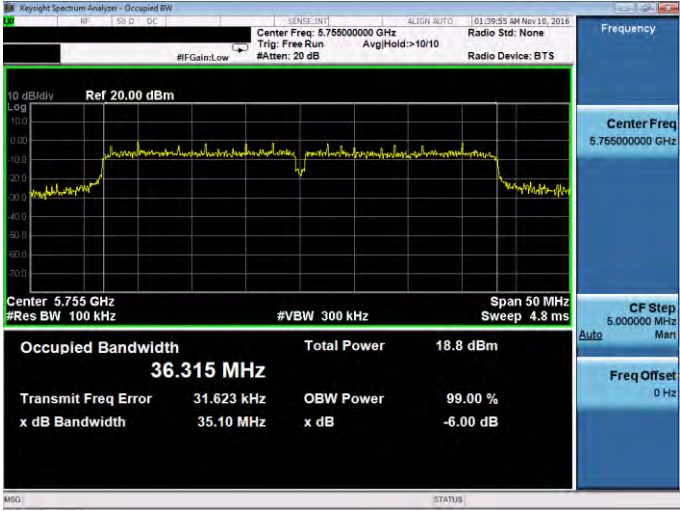


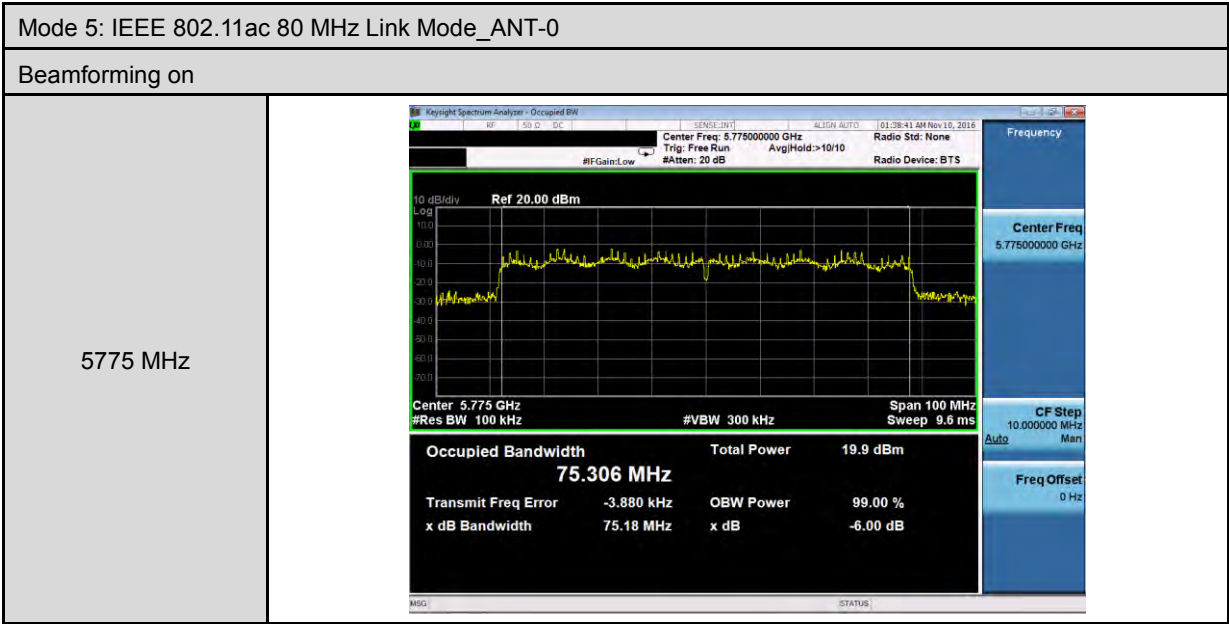
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1																			
5755 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.755000000 GHz Trig: Free Run #Gain: Low #Attenu: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.50 dBm Center 5.755 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>19.2 dBm</td></tr><tr><td>36.251 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>45.612 kHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>35.15 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table> MSG: STATUS:	Occupied Bandwidth	Total Power	19.2 dBm	36.251 MHz			Transmit Freq Error	45.612 kHz	OBW Power	x dB Bandwidth	35.15 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	19.2 dBm																	
36.251 MHz																			
Transmit Freq Error	45.612 kHz	OBW Power																	
x dB Bandwidth	35.15 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	
5795 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.795000000 GHz Trig: Free Run #Gain: Low #Attenu: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.50 dBm Center 5.795 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>18.8 dBm</td></tr><tr><td>36.256 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>41.419 kHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>35.72 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table> MSG: STATUS:	Occupied Bandwidth	Total Power	18.8 dBm	36.256 MHz			Transmit Freq Error	41.419 kHz	OBW Power	x dB Bandwidth	35.72 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	18.8 dBm																	
36.256 MHz																			
Transmit Freq Error	41.419 kHz	OBW Power																	
x dB Bandwidth	35.72 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	
Mode 5: IEEE 802.11ac 80 MHz Link Mode_ANT-1																			
5775 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.775000000 GHz Trig: Free Run #Gain: Low #Attenu: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.50 dBm Center 5.775 GHz #Res BW 100 kHz #VBW 300 kHz Span 100 MHz Sweep 9.6 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>18.0 dBm</td></tr><tr><td>75.121 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>30.419 kHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>75.10 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table> MSG: STATUS:	Occupied Bandwidth	Total Power	18.0 dBm	75.121 MHz			Transmit Freq Error	30.419 kHz	OBW Power	x dB Bandwidth	75.10 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	18.0 dBm																	
75.121 MHz																			
Transmit Freq Error	30.419 kHz	OBW Power																	
x dB Bandwidth	75.10 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	



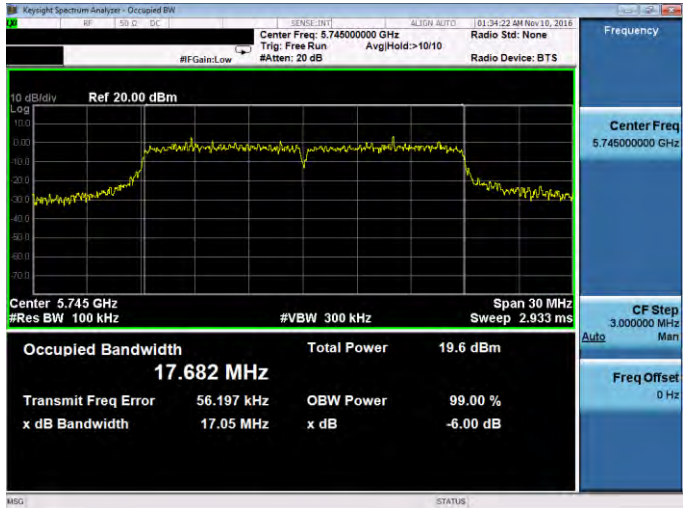
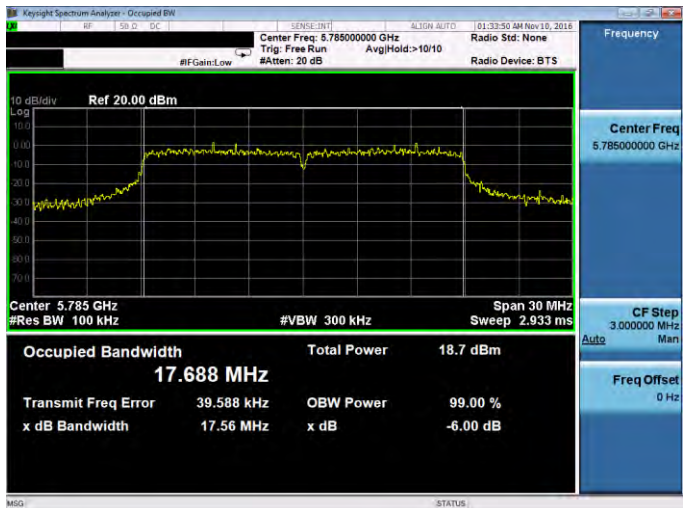
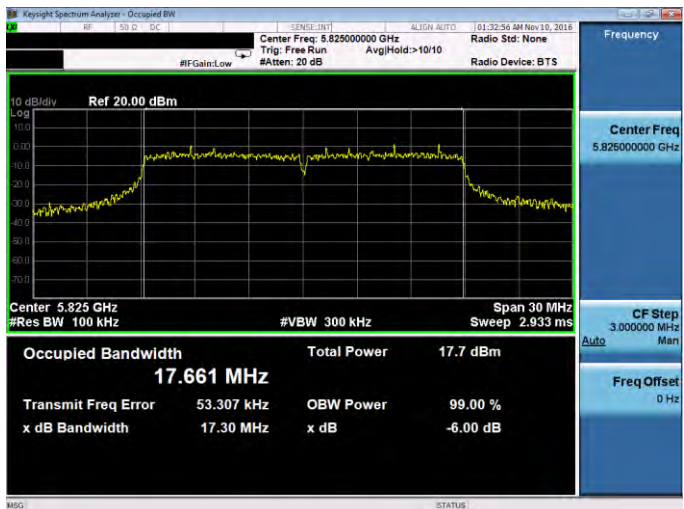
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-0	
Beamforming on	
5745 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 18.513 MHz Total Power 18.9 dBm Transmit Freq Error 202.42 kHz OBW Power 99.00 % x dB Bandwidth 16.91 MHz x dB -6.00 dB
5785 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 18.223 MHz Total Power 18.8 dBm Transmit Freq Error 97.108 kHz OBW Power 99.00 % x dB Bandwidth 17.30 MHz x dB -6.00 dB
5825 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 18.268 MHz Total Power 18.5 dBm Transmit Freq Error 161.24 kHz OBW Power 99.00 % x dB Bandwidth 16.30 MHz x dB -6.00 dB



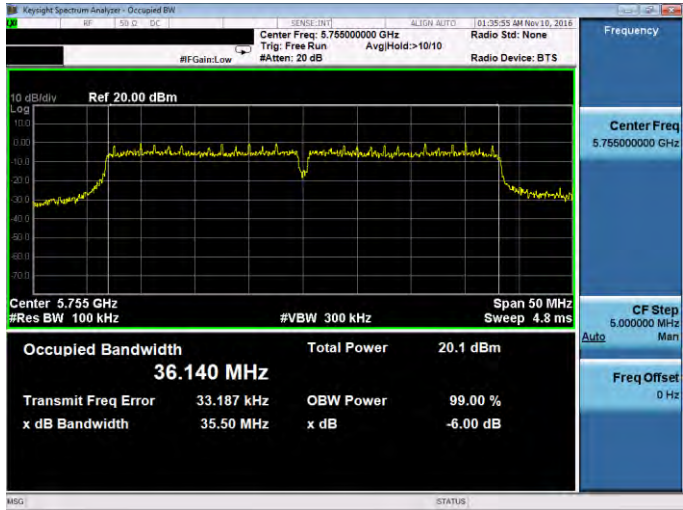
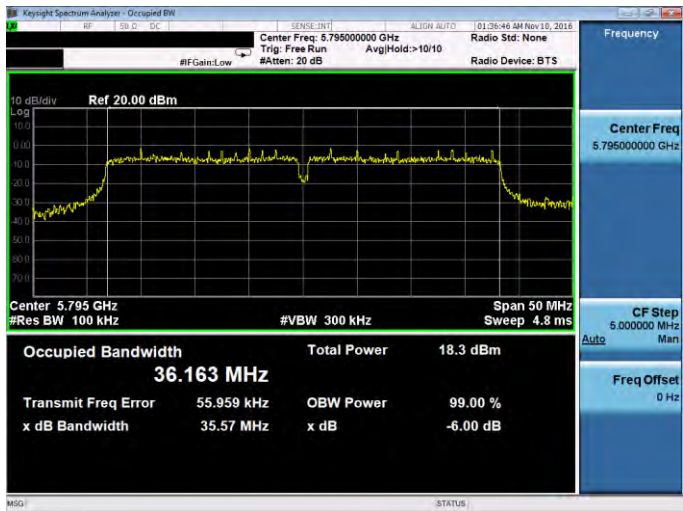
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-0	
Beamforming on	
5755 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.75500000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.755 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms Occupied Bandwidth 36.315 MHz Total Power 18.8 dBm Transmit Freq Error 31.623 kHz OBW Power 99.00 % x dB Bandwidth 35.10 MHz x dB -6.00 dB
5795 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.79500000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.795 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms Occupied Bandwidth 36.330 MHz Total Power 19.3 dBm Transmit Freq Error 38.317 kHz OBW Power 99.00 % x dB Bandwidth 35.22 MHz x dB -6.00 dB

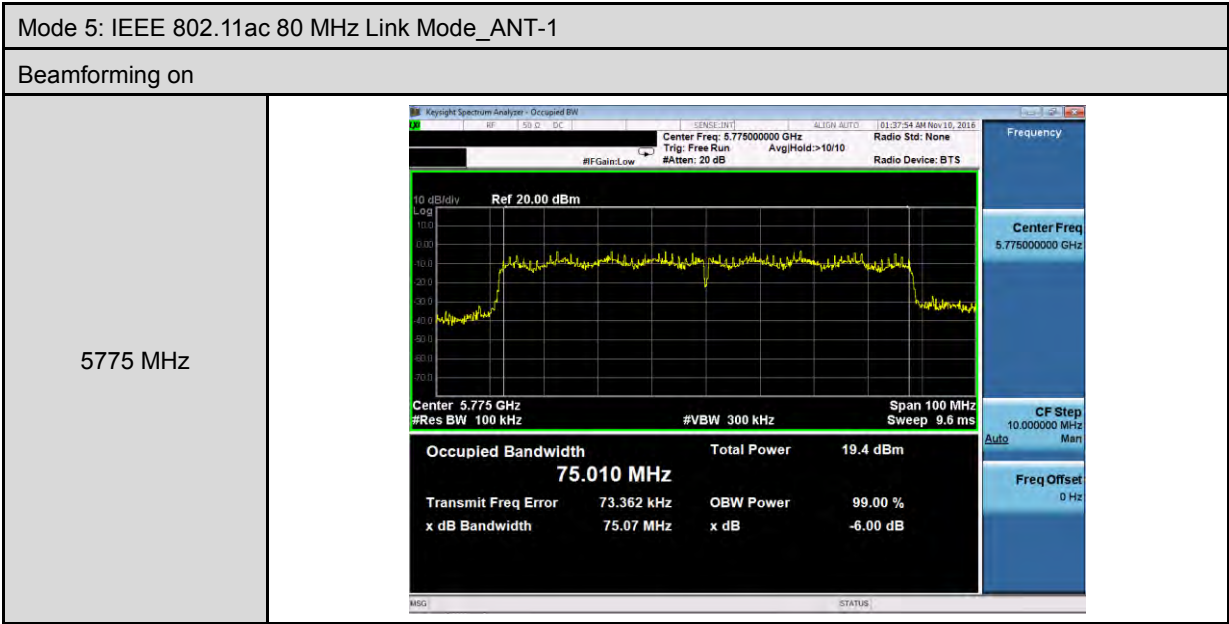




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-1	
Beamforming on	
5745 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.74500000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.682 MHz Total Power 19.6 dBm Transmit Freq Error 56.197 kHz OBW Power 99.00 % x dB Bandwidth 17.05 MHz x dB -6.00 dB
5785 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.78500000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.688 MHz Total Power 18.7 dBm Transmit Freq Error 39.588 kHz OBW Power 99.00 % x dB Bandwidth 17.56 MHz x dB -6.00 dB
5825 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.82500000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.661 MHz Total Power 17.7 dBm Transmit Freq Error 53.307 kHz OBW Power 99.00 % x dB Bandwidth 17.30 MHz x dB -6.00 dB



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1	
Beamforming on	
5755 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.755000000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.755 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms Occupied Bandwidth 36.140 MHz Total Power 20.1 dBm Transmit Freq Error 33.187 kHz OBW Power 99.00 % x dB Bandwidth 35.50 MHz x dB -6.00 dB
5795 MHz	 KeySight Spectrum Analyzer - Occupied BW Center Freq: 5.795000000 GHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.795 GHz #Res BW 100 kHz #VBW 300 kHz Span 50 MHz Sweep 4.8 ms Occupied Bandwidth 36.163 MHz Total Power 18.3 dBm Transmit Freq Error 55.959 kHz OBW Power 99.00 % x dB Bandwidth 35.57 MHz x dB -6.00 dB





5.6. Maximum Power Spectral Density Measurement

Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 2: IEEE 802.11a link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	2.509	0.305	2.814	< 11
5200	1.975	0.305	2.280	
5240	2.312	0.305	2.617	

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

Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 2: IEEE 802.11a link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-8.30	0.305	-1.00	< 30
5785	-8.83	0.305	-1.54	
5825	-9.25	0.305	-1.95	

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 3: IEEE 802.11ac 20 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	1.892	0.717	2.609	< 11
5200	2.329	0.717	3.046	
5240	0.982	0.717	1.699	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	-2.214	0.717	-1.497	< 11
5200	-1.313	0.717	-0.596	
5240	1.984	0.717	2.701	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5180	4.034			< 11
5200	4.606			
5240	5.239			

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



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 3: IEEE 802.11ac 20 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-6.67	0.717	1.03	< 30
5785	-6.84	0.717	0.87	
5825	-6.59	0.717	1.12	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-8.74	0.717	-1.03	< 30
5785	-9.61	0.717	-1.90	
5825	-11.52	0.717	-3.81	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	3.13			< 30
5785	2.71			
5825	2.33			

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 4: IEEE 802.11ac 40 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-7.292	0.473	-6.819	< 11
5230	-6.462	0.473	-5.989	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-3.935	0.473	-3.462	< 11
5230	-4.394	0.473	-3.921	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5190	-1.813			< 11
5230	-1.822			

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



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 4: IEEE 802.11ac 40 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-15.34	0.473	-7.88	< 30
5795	-6.06	0.473	1.41	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-15.16	0.473	-7.69	< 30
5795	-10.14	0.473	-2.67	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5755	-4.77			< 30
5795	2.84			

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-7.327	1.753	-5.574	< 11
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-7.929	1.753	-6.176	< 11
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	-2.854			< 11

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



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Date of Test	09/04/2016			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/MHz)
5775	-7.80	1.753	0.95	< 30
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/MHz)
5775	-14.76	1.753	-6.02	< 30
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/MHz)
5775	1.74			< 30

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 3: IEEE 802.11ac 20 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	0.365	0.120	0.485	< 11
5200	1.527	0.120	1.647	
5240	1.654	0.120	1.774	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5180	0.861	0.120	0.981	< 11
5200	1.004	0.120	1.124	
5240	1.349	0.120	1.469	
Frequency (MHz)	ANT-0+1			Limit (dBm/MHz)
	Calculated (dBm/MHz)			
5180	3.750			< 11
5200	4.404			
5240	4.635			

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



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 3: IEEE 802.11ac 20 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-6.85	0.120	0.26	< 30
5785	-6.62	0.120	0.49	
5825	-7.27	0.120	-0.16	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5745	-7.48	0.120	-0.37	< 30
5785	-6.69	0.120	0.42	
5825	-8.55	0.120	-1.44	
Frequency (MHz)	ANT-0+1			Limit (dBm/500 kHz)
	Calculated (dBm/500 kHz)			
5745	2.97			< 30
5785	3.47			
5825	2.26			

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 4: IEEE 802.11ac 40 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-3.539	0.964	-2.575	< 11
5230	-1.019	0.964	-0.055	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	-5.321	0.964	-4.357	< 11
5230	-1.974	0.964	-1.010	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5190	-0.365			< 11
5230	2.504			

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



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 4: IEEE 802.11ac 40 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-10.65	0.964	-2.70	< 30
5795	-11.72	0.964	-3.76	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
5755	-9.80	0.964	-1.85	< 30
5795	-11.13	0.964	-3.17	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/500 kHz)
5755	0.76			< 30
5795	-0.45			

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)



Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-8.300	1.769	-6.531	< 11
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-9.225	1.769	-7.456	< 11
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	-3.959			< 11

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



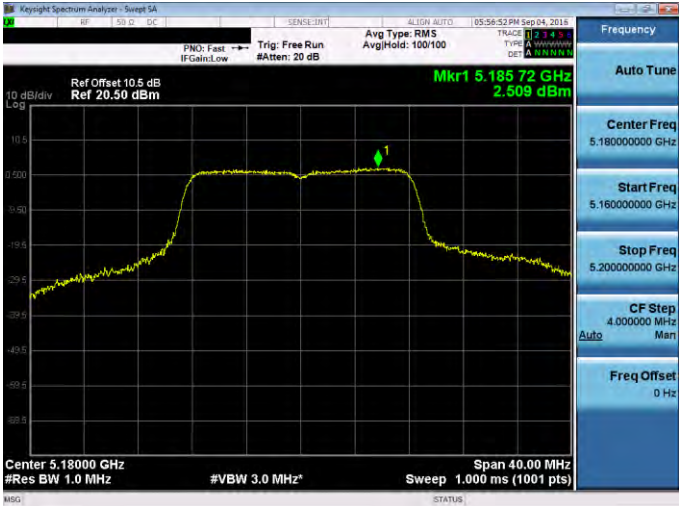
Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/MHz)
5775	-12.33	1.769	-3.57	< 30
Frequency (MHz)	ANT-1			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/MHz)
5775	-12.16	1.769	-3.40	< 30
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500 kHz)			Limit (dBm/MHz)
5775	-0.47			< 30

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

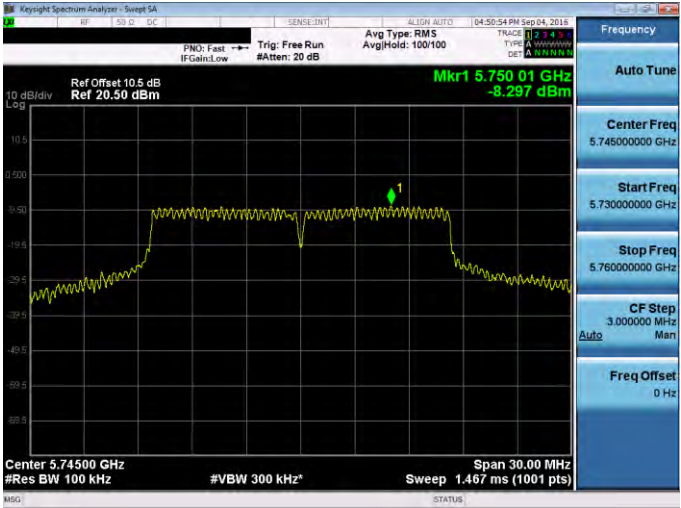
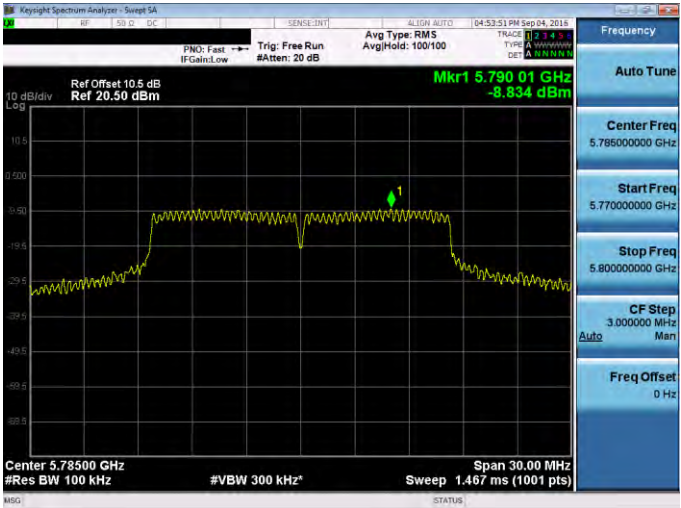
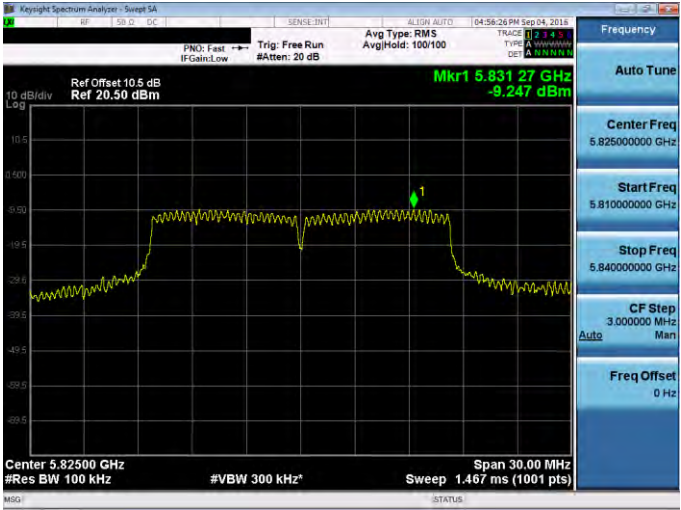
Conversion ratio = 10*Log(500 k/100 k)



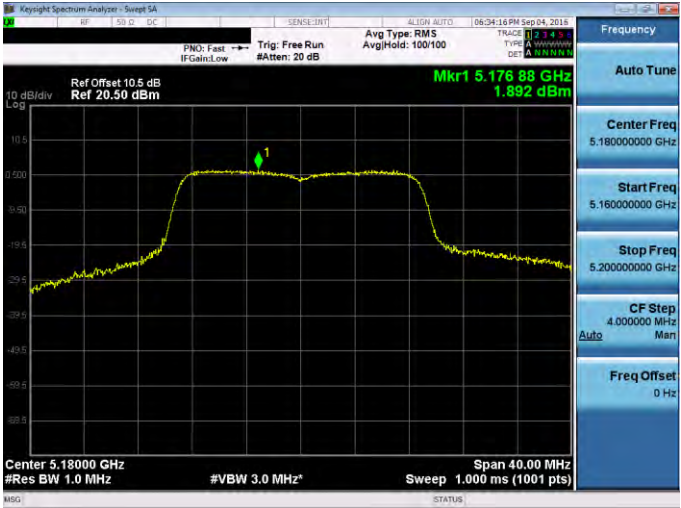
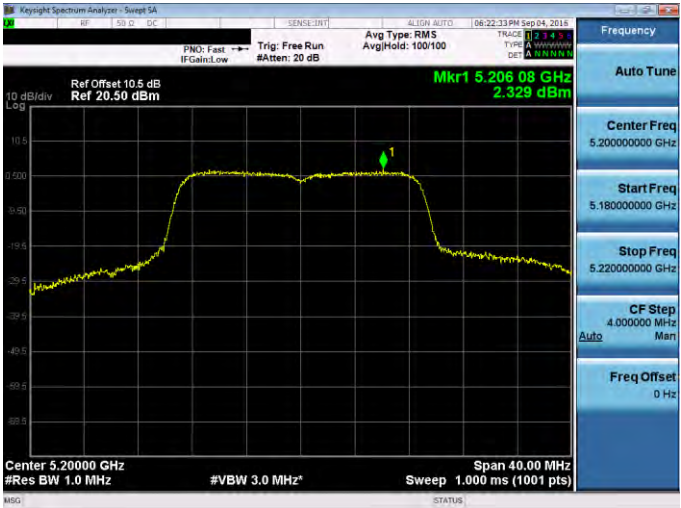
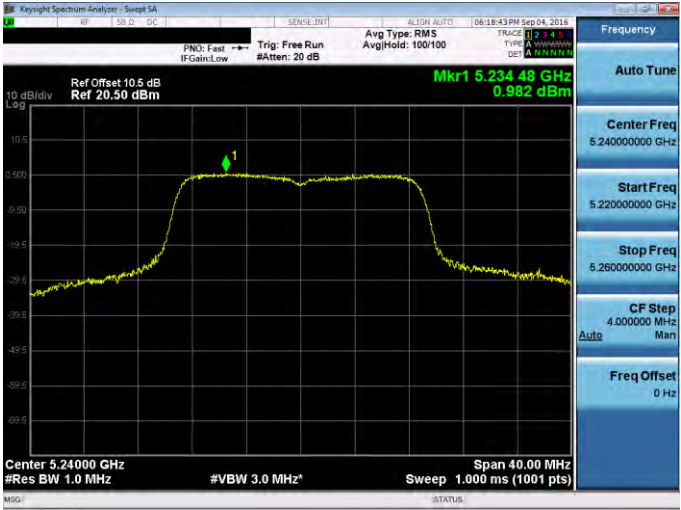
■ Test Graphs

Mode 2: IEEE 802.11a Link Mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

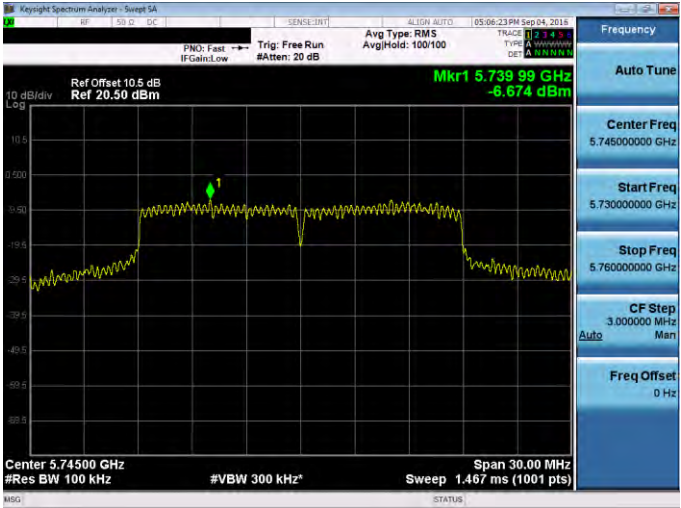
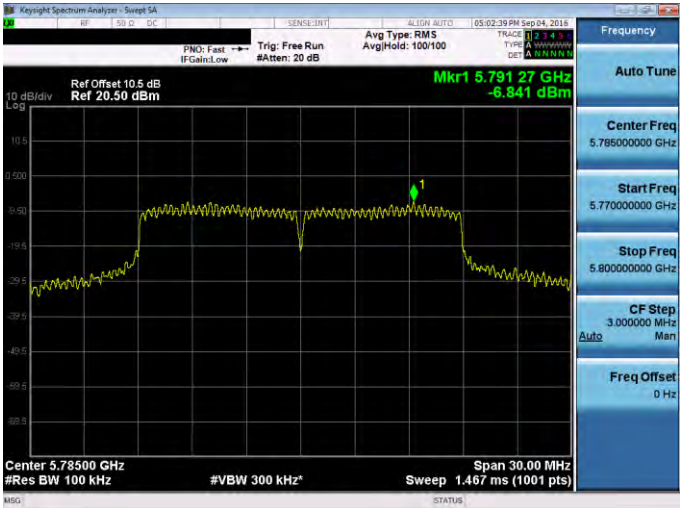
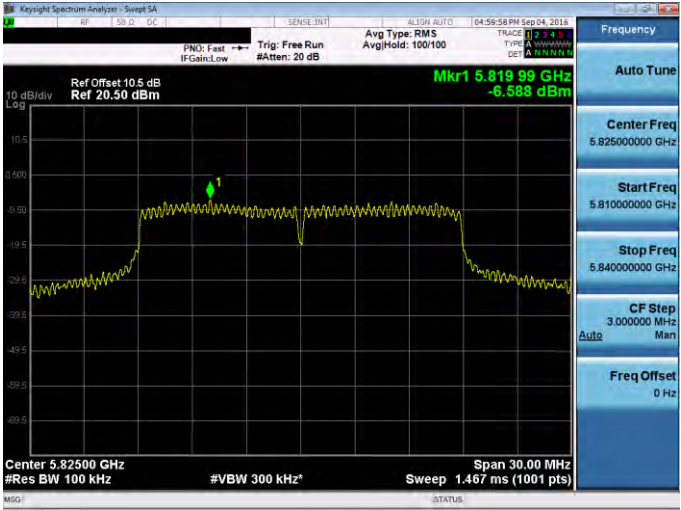


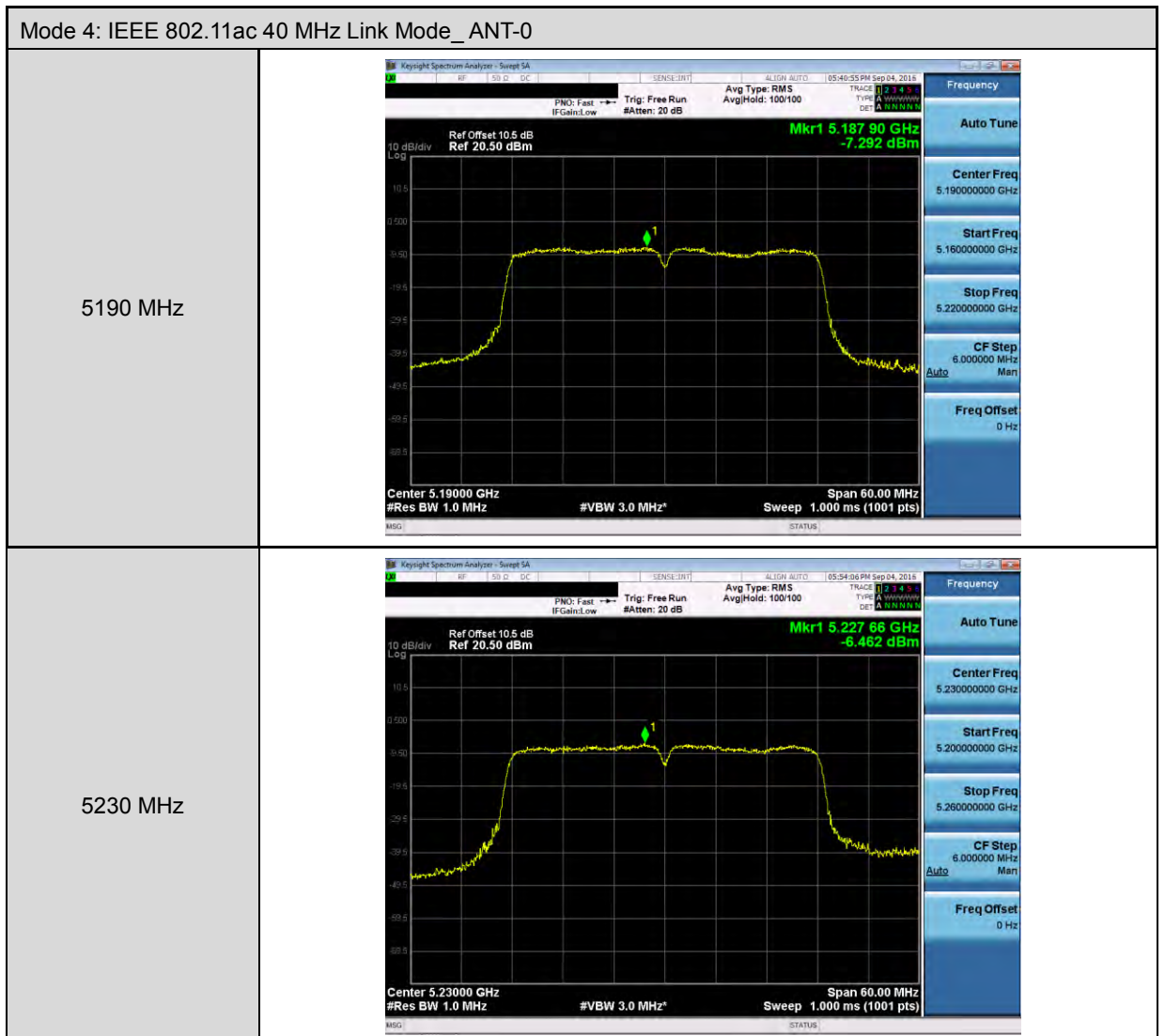
Mode 2: IEEE 802.11a Link Mode_ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

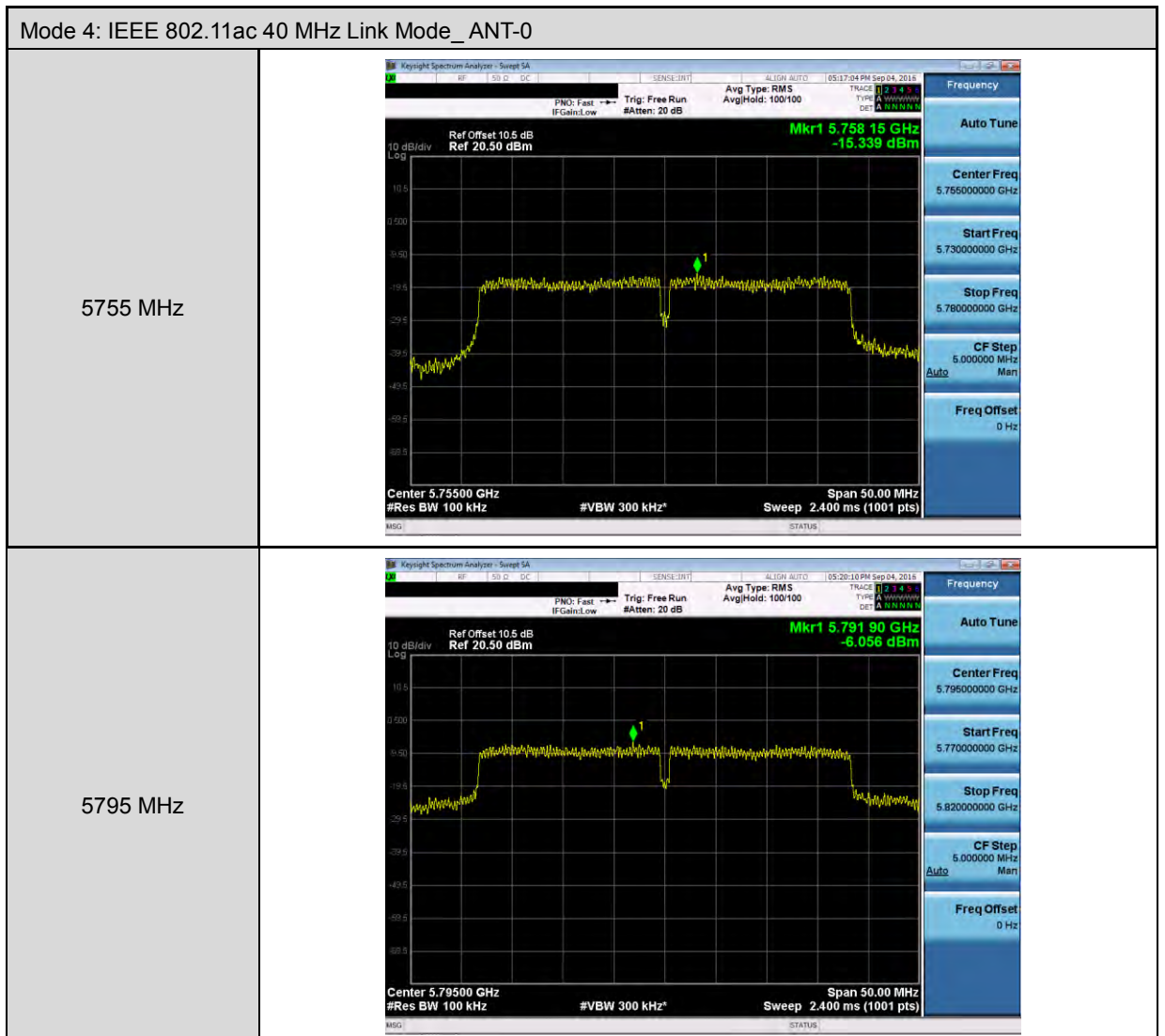


Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

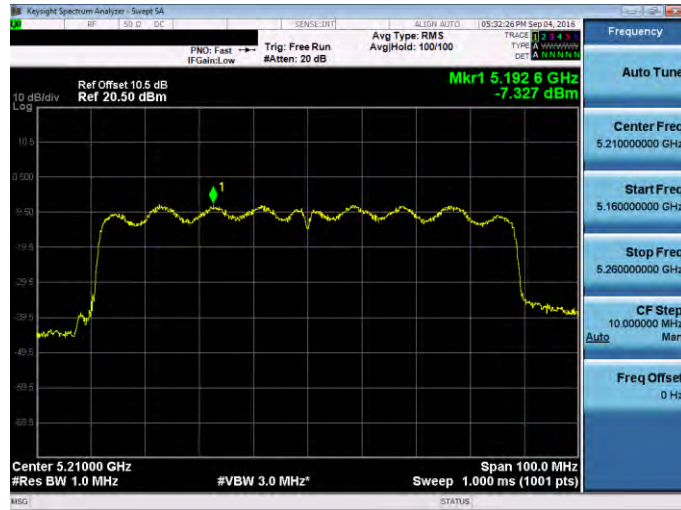






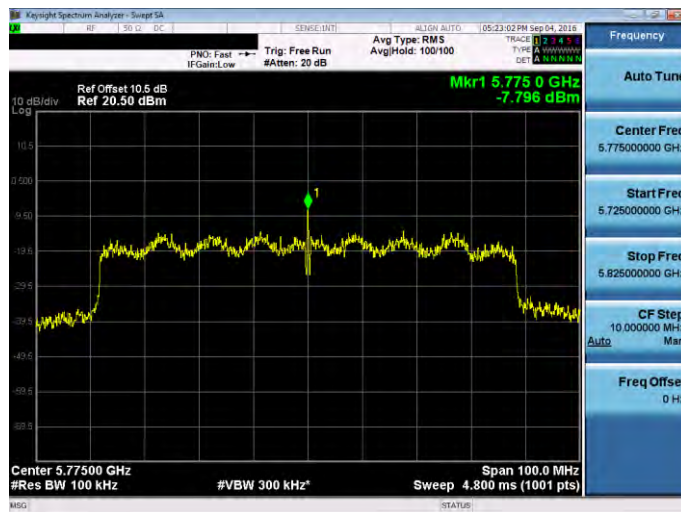
Mode 5: IEEE 802.11ac 80 MHz Link Mode _ ANT-0

5210 MHz

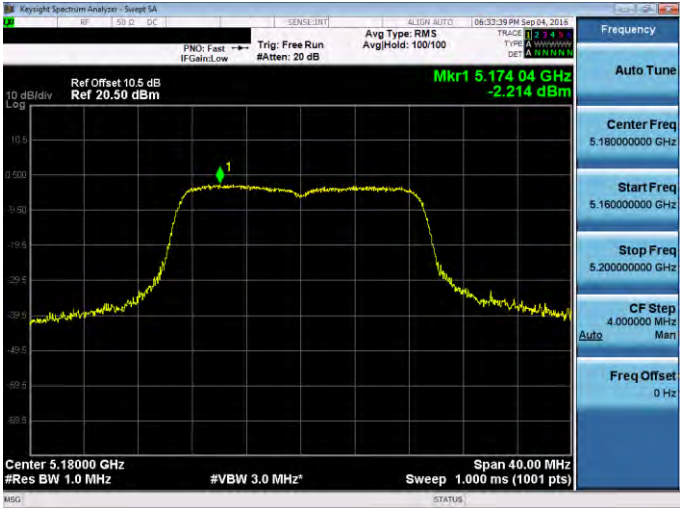
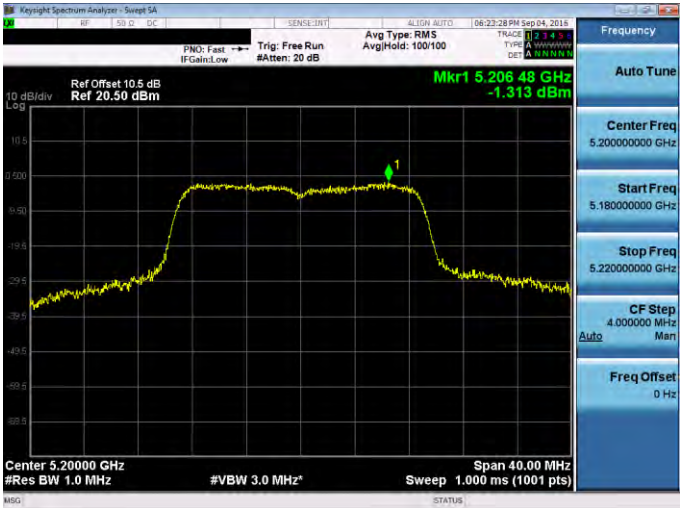


Mode 5: IEEE 802.11ac 80 MHz Link Mode _ ANT-0

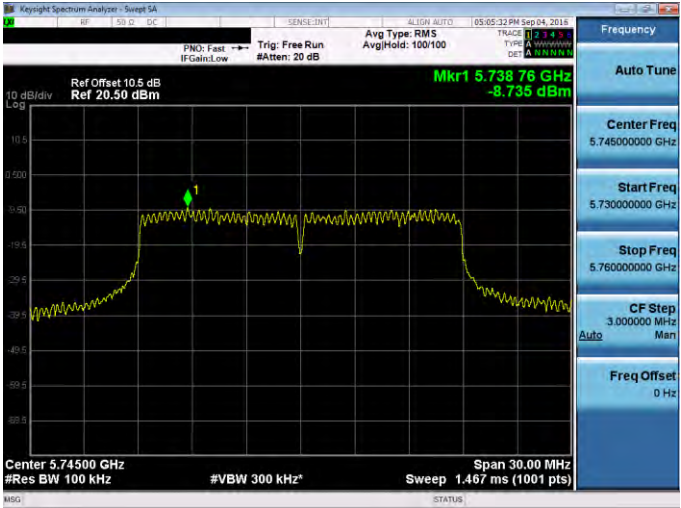
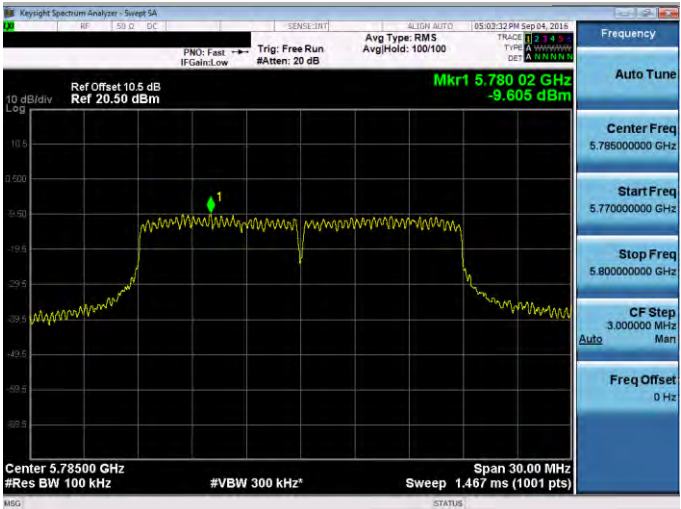
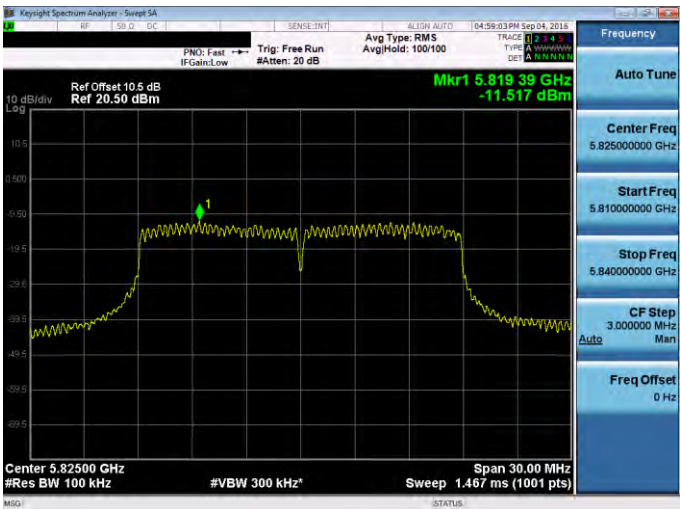
5775 MHz





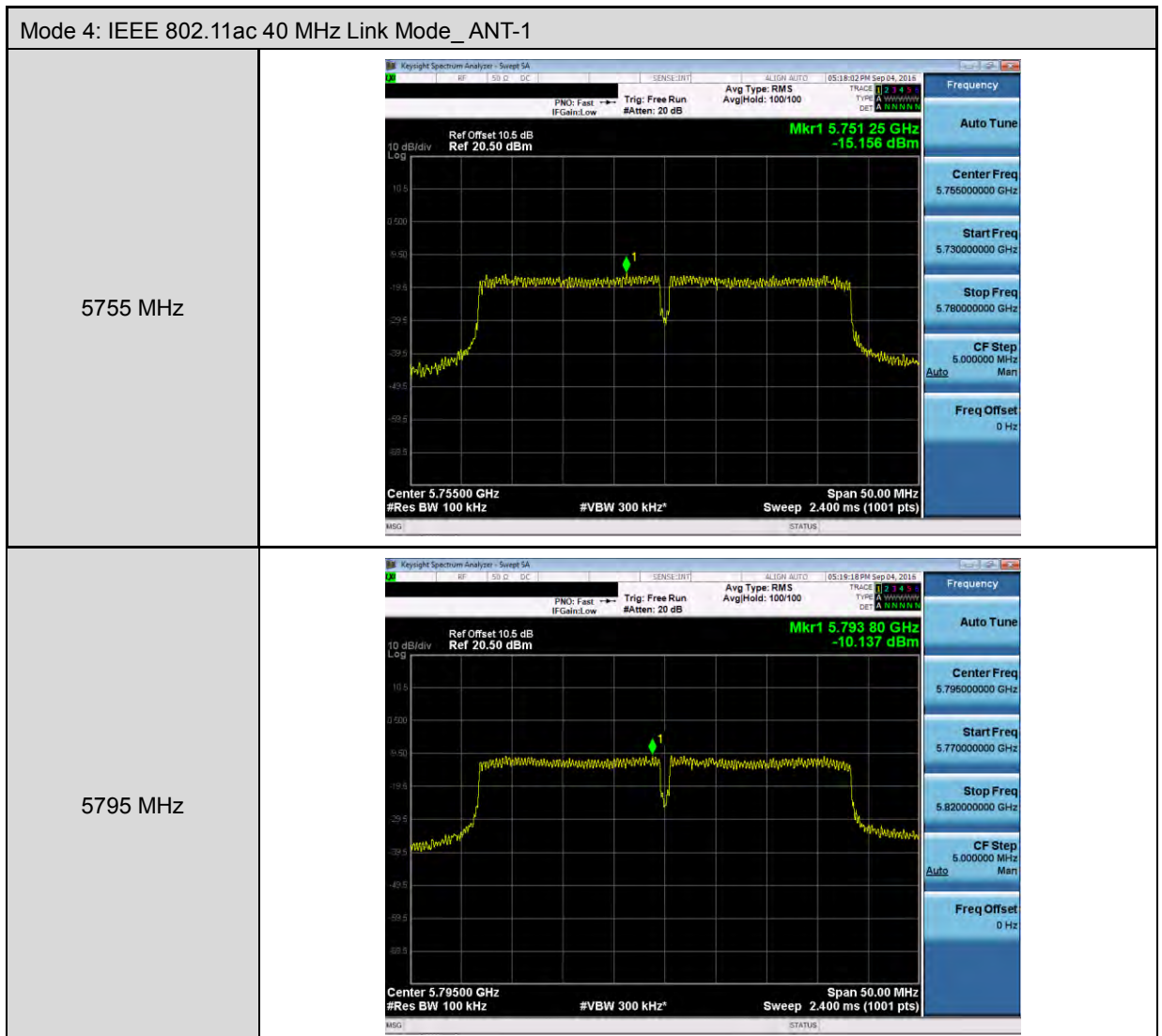
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	



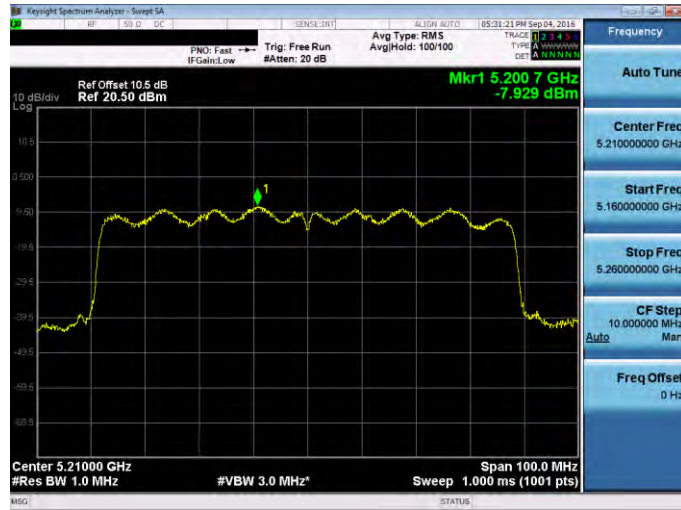
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-1	
5190 MHz	
5230 MHz	





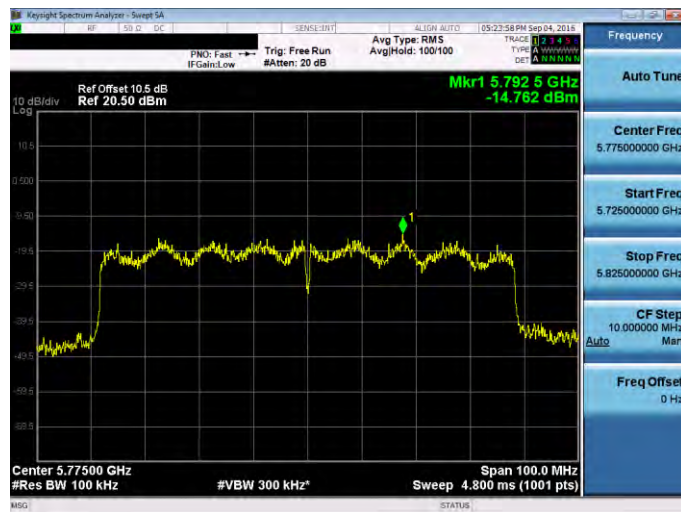
Mode 5: IEEE 802.11ac 80 MHz Link Mode _ ANT-1

5210 MHz



Mode 5: IEEE 802.11ac 80 MHz Link Mode _ ANT-1

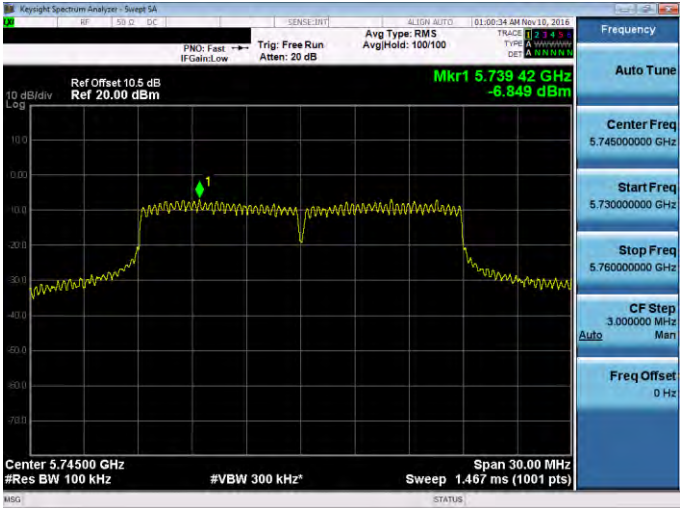
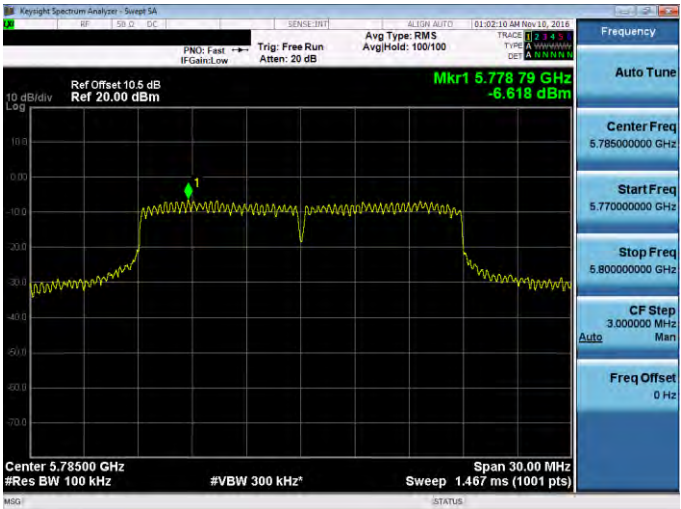
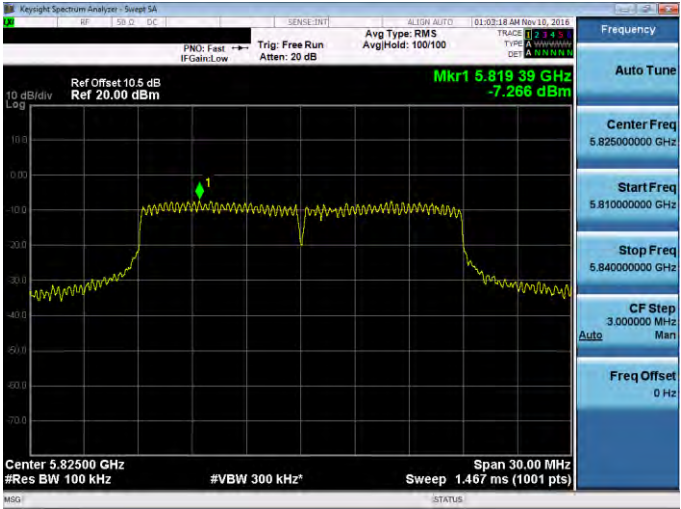
5775 MHz



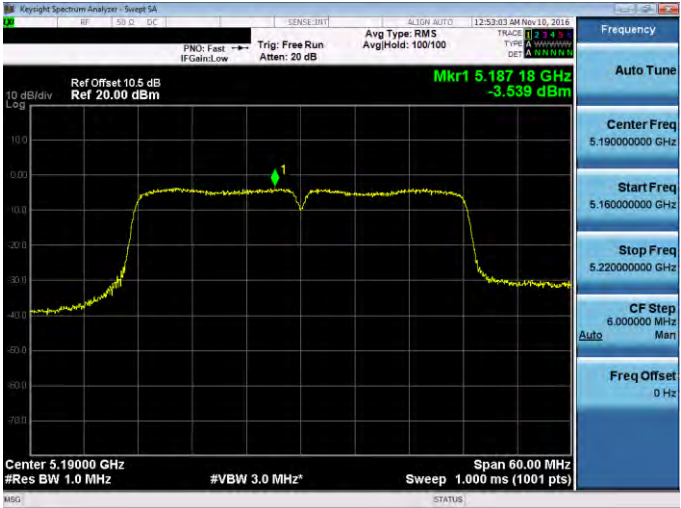


Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
Beamforming on	
5180 MHz	
5200 MHz	
5240 MHz	

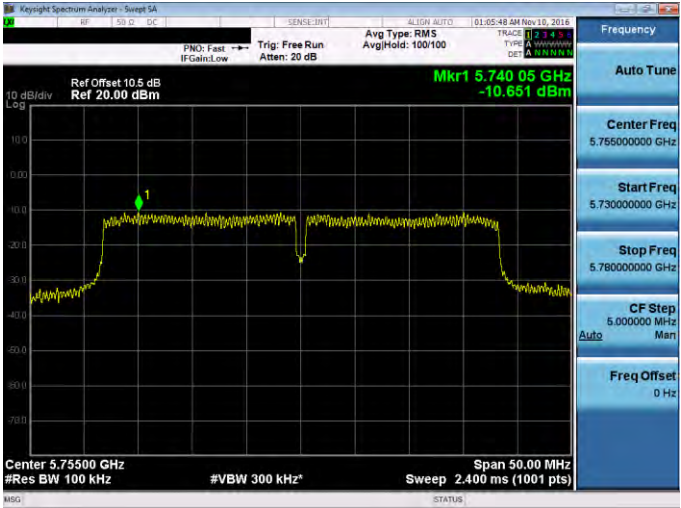


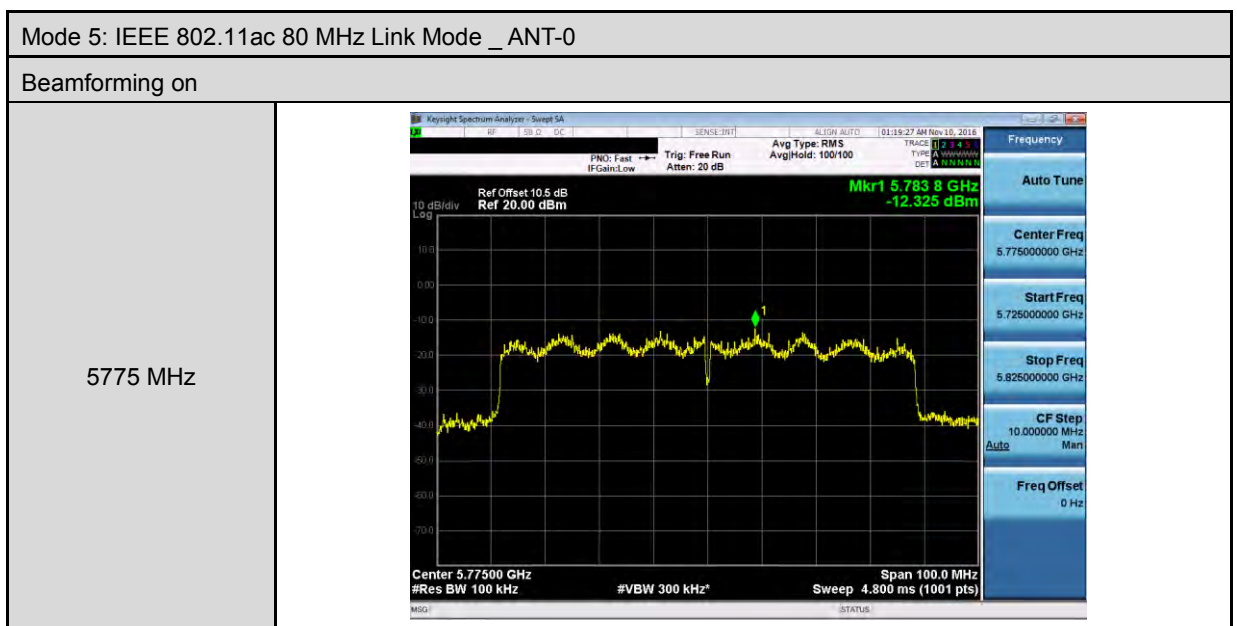
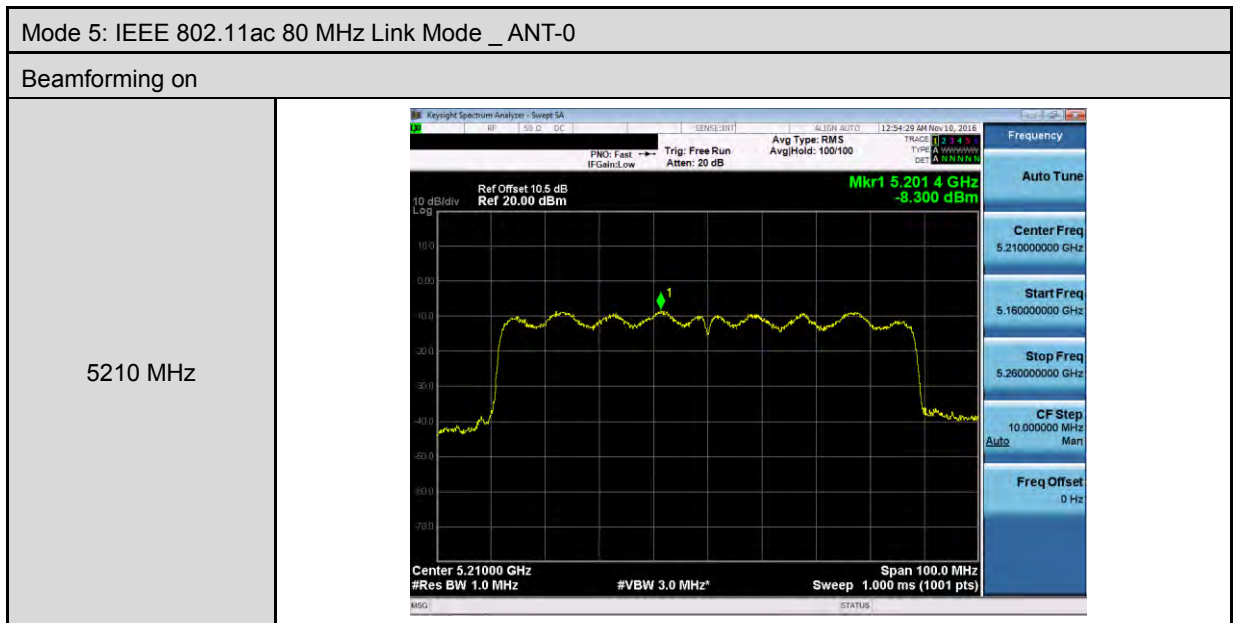
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
Beamforming on	
5745 MHz	
5785 MHz	
5825 MHz	



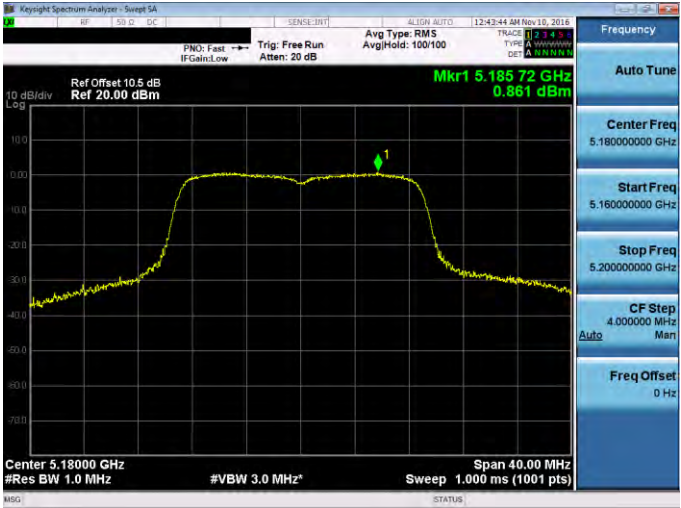
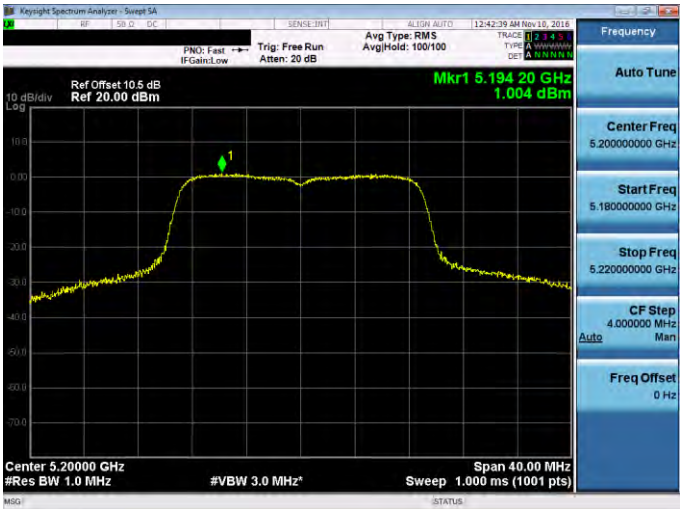
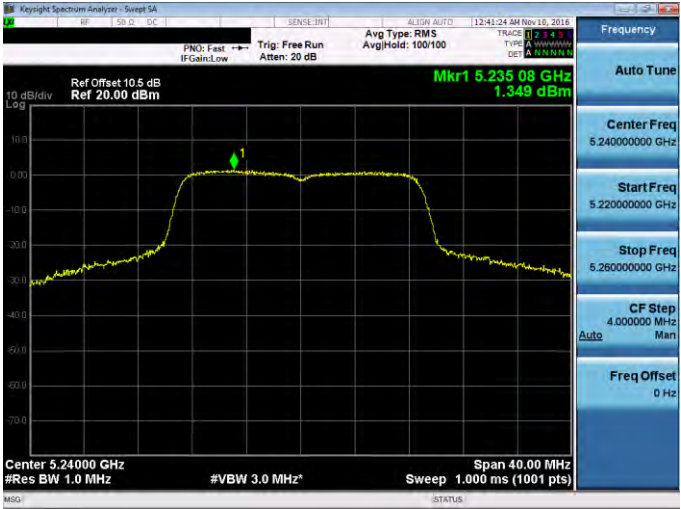
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-0	
Beamforming on	
5190 MHz	
5230 MHz	



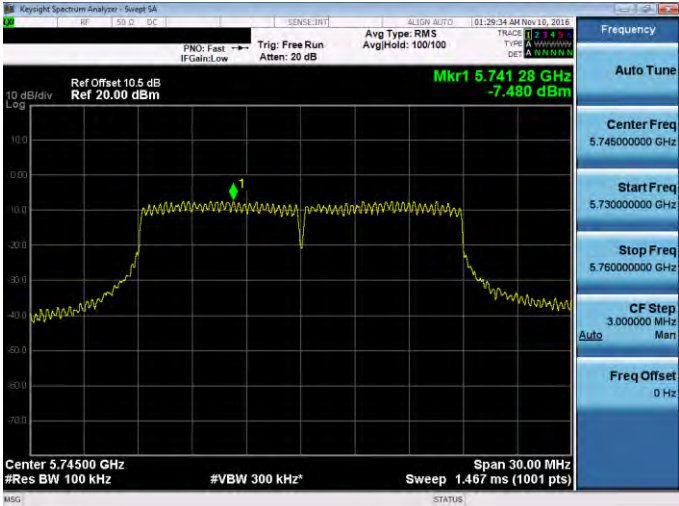
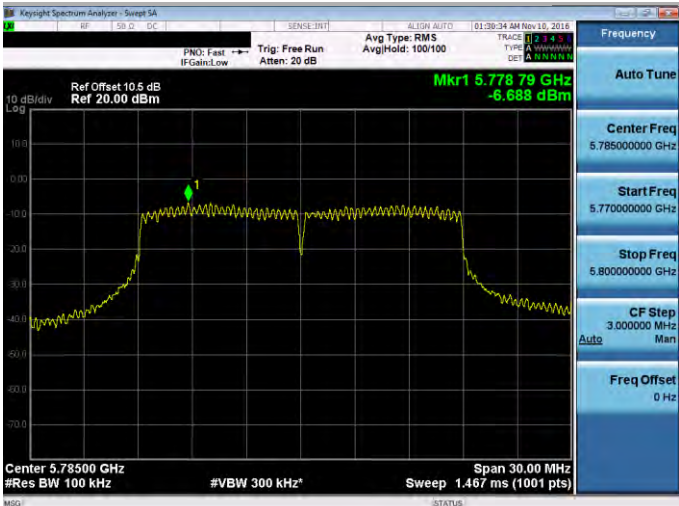
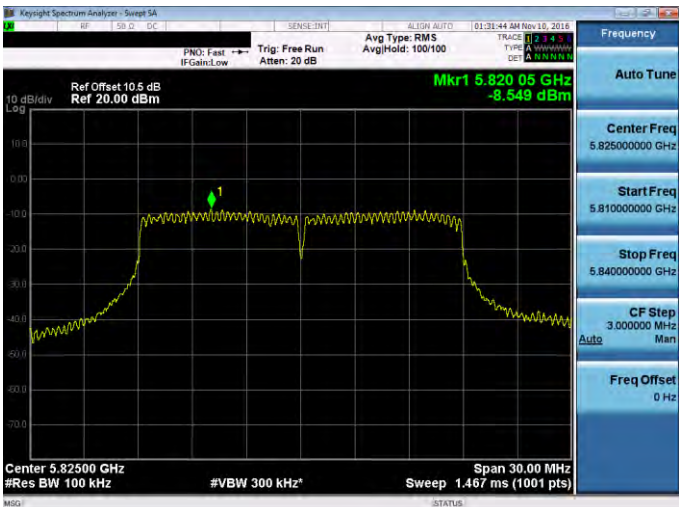
Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-0	
Beamforming on	
5755 MHz	
5795 MHz	



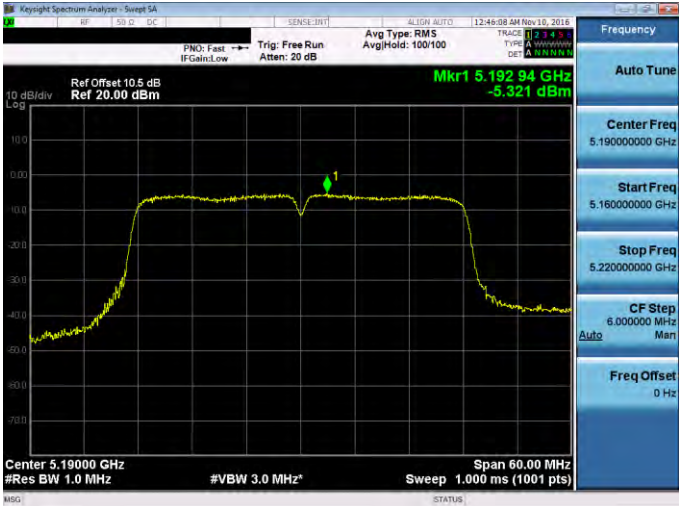
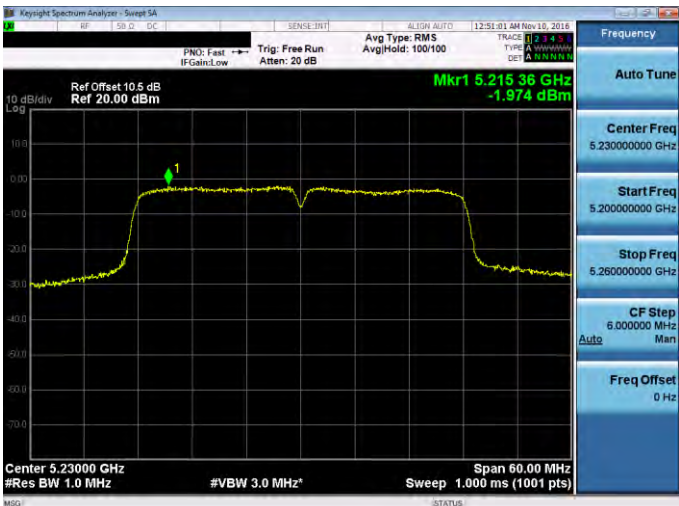


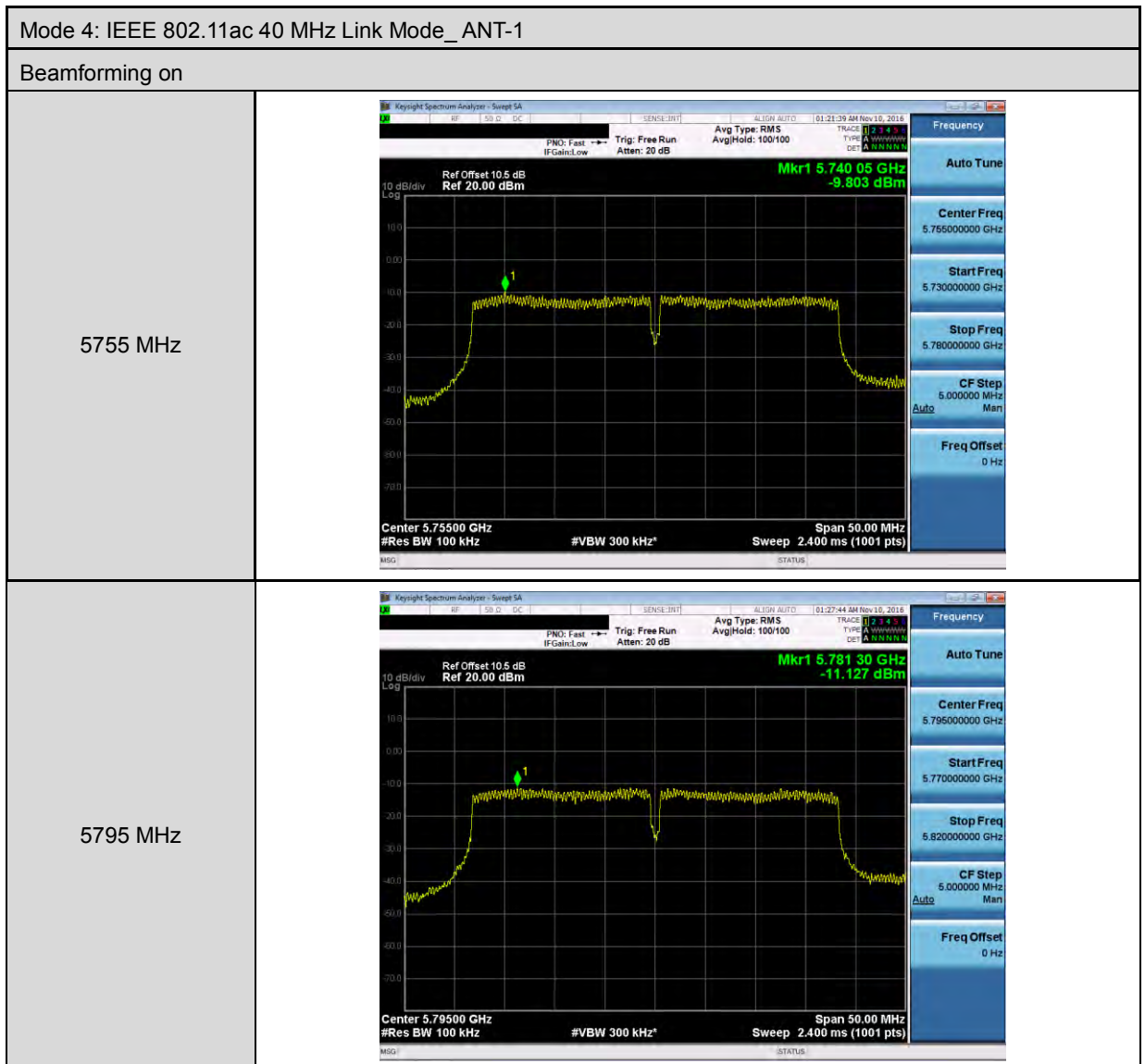
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
Beamforming on	
5180 MHz	
5200 MHz	
5240 MHz	

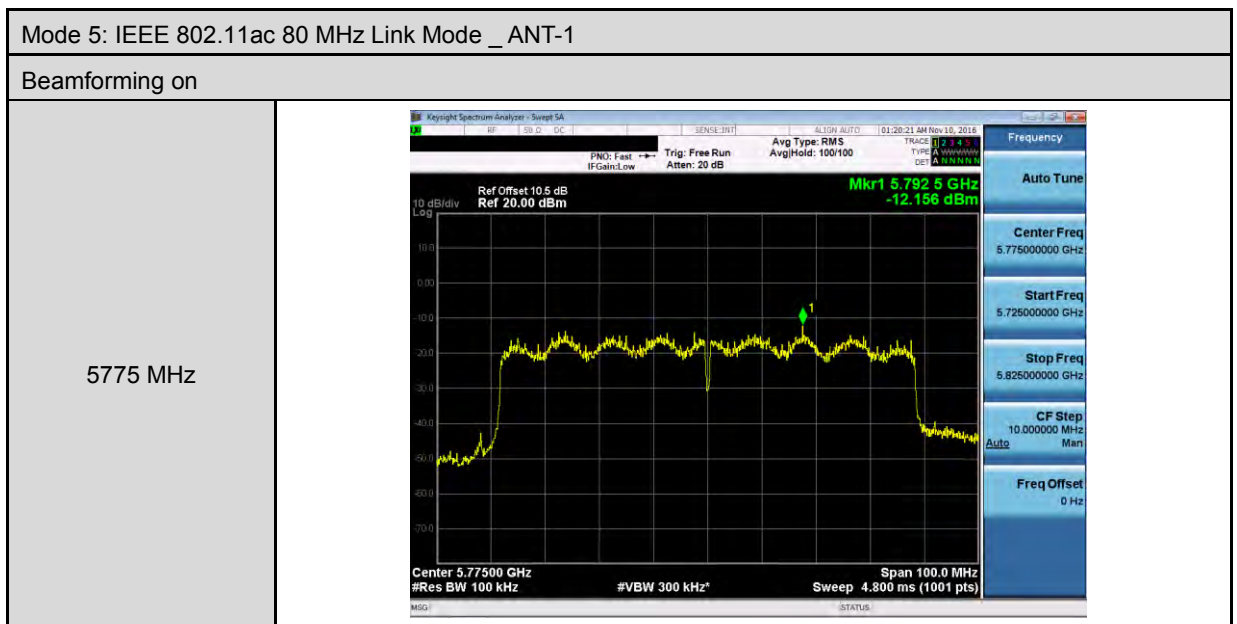
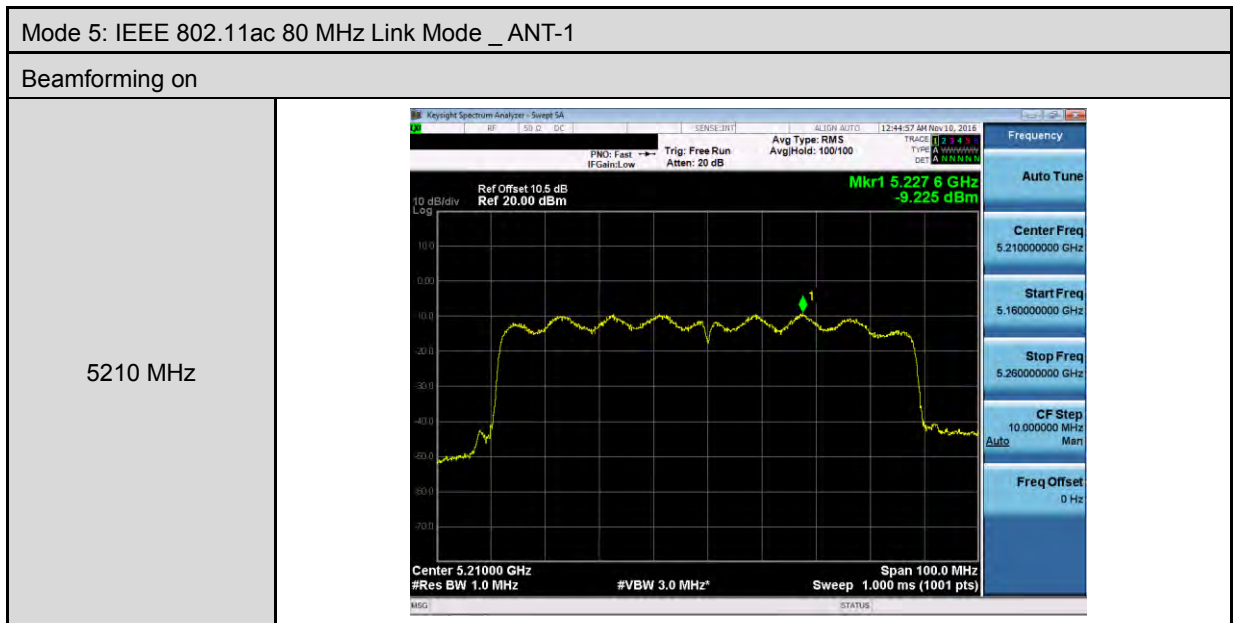


Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
Beamforming on	
5745 MHz	
5785 MHz	
5825 MHz	



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ ANT-1	
Beamforming on	
5190 MHz	
5230 MHz	







5.7. Frequency Stability Measurement

Temperature Variations

Model Number	DWA-181					
Test Item	Frequency Stability					
Date of Test	07/29/2016					
Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0103	10300	1.981	Pass
	10		5200.0102	10200	1.962	Pass
	20		5200.0096	9600	1.846	Pass
	30		5200.0018	1800	0.346	Pass
	40		5200.0082	8200	1.577	Pass
5785 MHz	0	120	5785.0233	23300	4.028	Pass
	10		5785.0175	17500	3.025	Pass
	20		5785.0144	14400	2.489	Pass
	30		5785.0097	9700	1.677	Pass
	40		5785.0104	10400	1.798	Pass

Voltage Variations

Model Number	DWA-181					
Test Item	Frequency Stability					
Date of Test	07/29/2016					
Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5200.0182	18200	3.500	Pass
		120.00	5200.0096	9600	1.846	Pass
		102.00	5200.0046	4600	0.885	Pass
5785 MHz	20	138.00	5785.0162	16200	2.800	Pass
		120.00	5785.0144	14400	2.489	Pass
		102.00	5785.0057	5700	0.985	Pass

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



Temperature Variations

Model Number	DWA-181					
Test Item	Frequency Stability					
Date of Test	07/29/2016					
Beamforming on						
Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0103	10300	1.981	Pass
	10		5200.0102	10200	1.962	Pass
	20		5200.0096	9600	1.846	Pass
	30		5200.0018	1800	0.346	Pass
	40		5200.0082	8200	1.577	Pass
5785 MHz	0	120	5785.0233	23300	4.028	Pass
	10		5785.0175	17500	3.025	Pass
	20		5785.0144	14400	2.489	Pass
	30		5785.0097	9700	1.677	Pass
	40		5785.0104	10400	1.798	Pass

Voltage Variations

Model Number	DWA-181					
Test Item	Frequency Stability					
Date of Test	07/29/2016					
Beamforming on						
Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5200.0182	18200	3.500	Pass
		120.00	5200.0096	9600	1.846	Pass
		102.00	5200.0046	4600	0.885	Pass
5785 MHz	20	138.00	5785.0162	16200	2.800	Pass
		120.00	5785.0144	14400	2.489	Pass
		102.00	5785.0057	5700	0.985	Pass

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