



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	
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	≤ 30
5745		14.24	0.027	13.55	0.023	16.92	0.049	
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	≤ 30
5745		14.21	0.026	13.52	0.022	16.89	0.049	
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	360 M	14.34	0.027	14.22	0.026	17.29	0.054	≤ 24
5190		13.33	0.022	13.46	0.022	16.41	0.044	
5230		14.20	0.026	14.06	0.025	17.14	0.052	≤ 30
5755		14.20	0.026	14.28	0.027	17.25	0.053	
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

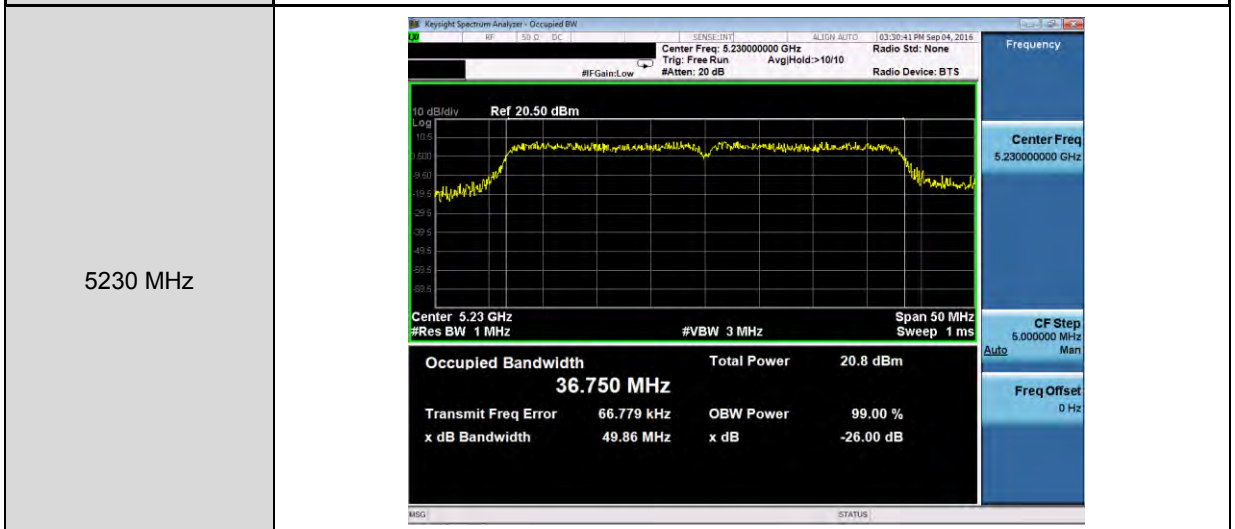
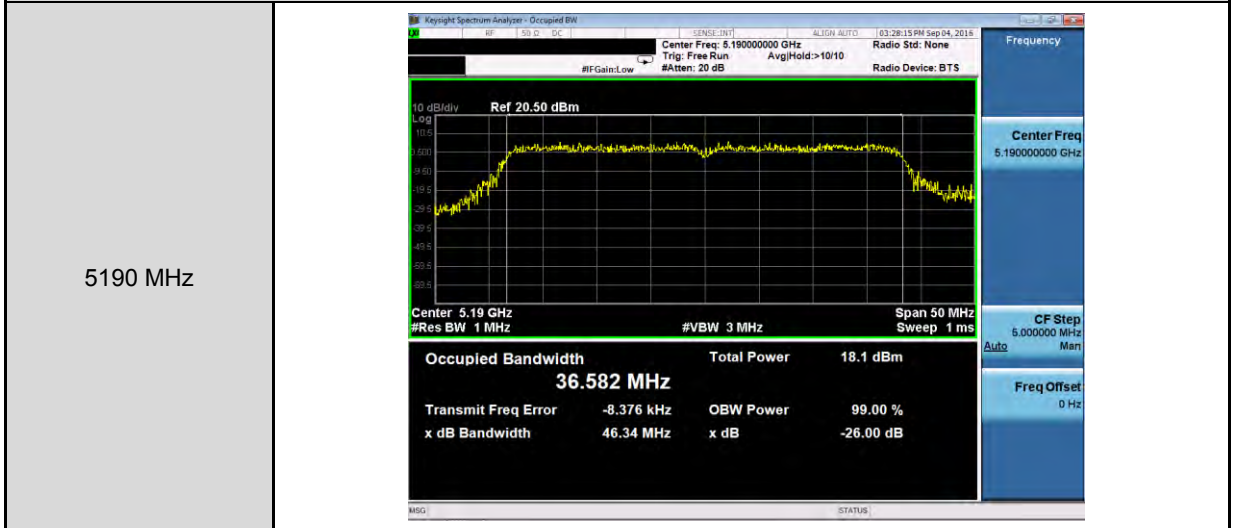
Mode 2: IEEE 802.11a Link Mode_ ANT-0																			
5180 MHz	<p>Center Freq: 5.18000000 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 25 MHz Sweep: 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>19.2 dBm</td> </tr> <tr> <td>16.771 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>59.217 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>24.18 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	19.2 dBm	16.771 MHz			Transmit Freq Error	OBW Power	99.00 %	59.217 kHz			x dB Bandwidth	x dB	-26.00 dB	24.18 MHz		
Occupied Bandwidth	Total Power	19.2 dBm																	
16.771 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
59.217 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
24.18 MHz																			
5200 MHz	<p>Center Freq: 5.20000000 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>19.0 dBm</td> </tr> <tr> <td>16.855 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>56.160 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>23.30 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	19.0 dBm	16.855 MHz			Transmit Freq Error	OBW Power	99.00 %	56.160 kHz			x dB Bandwidth	x dB	-26.00 dB	23.30 MHz		
Occupied Bandwidth	Total Power	19.0 dBm																	
16.855 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
56.160 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
23.30 MHz																			
5240 MHz	<p>Center Freq: 5.24000000 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>18.7 dBm</td> </tr> <tr> <td>16.771 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>52.515 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>24.51 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	18.7 dBm	16.771 MHz			Transmit Freq Error	OBW Power	99.00 %	52.515 kHz			x dB Bandwidth	x dB	-26.00 dB	24.51 MHz		
Occupied Bandwidth	Total Power	18.7 dBm																	
16.771 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
52.515 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
24.51 MHz																			



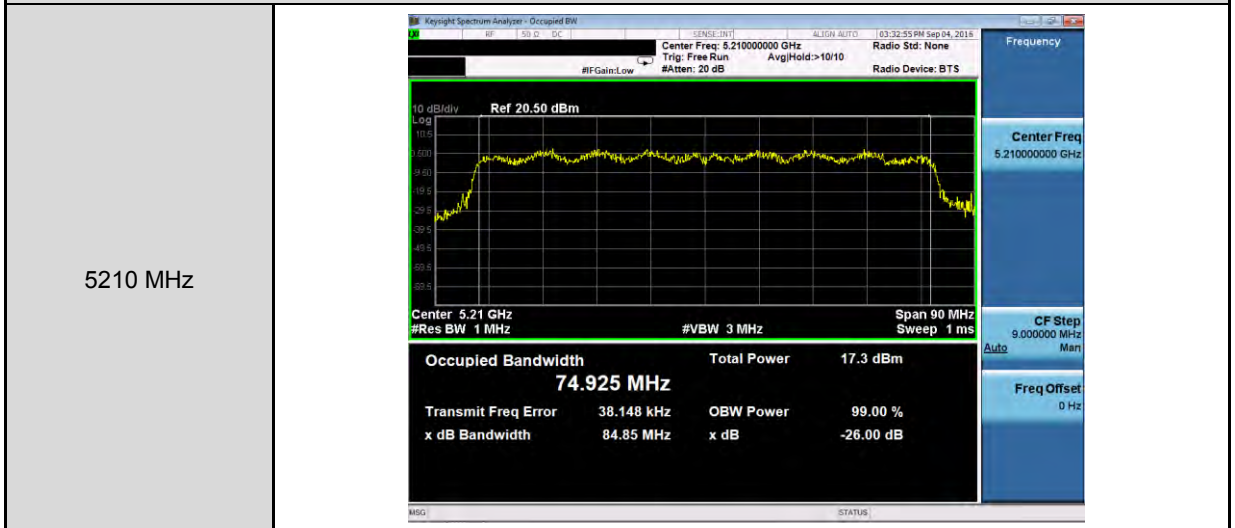
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-0															
5180 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.180000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: >10/10 Radio Std: None Radio Device: BTS</p> <p>10 dB/div Ref: 20.50 dBm</p> <p>Center 5.18 GHz #Res BW 300 kHz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



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



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

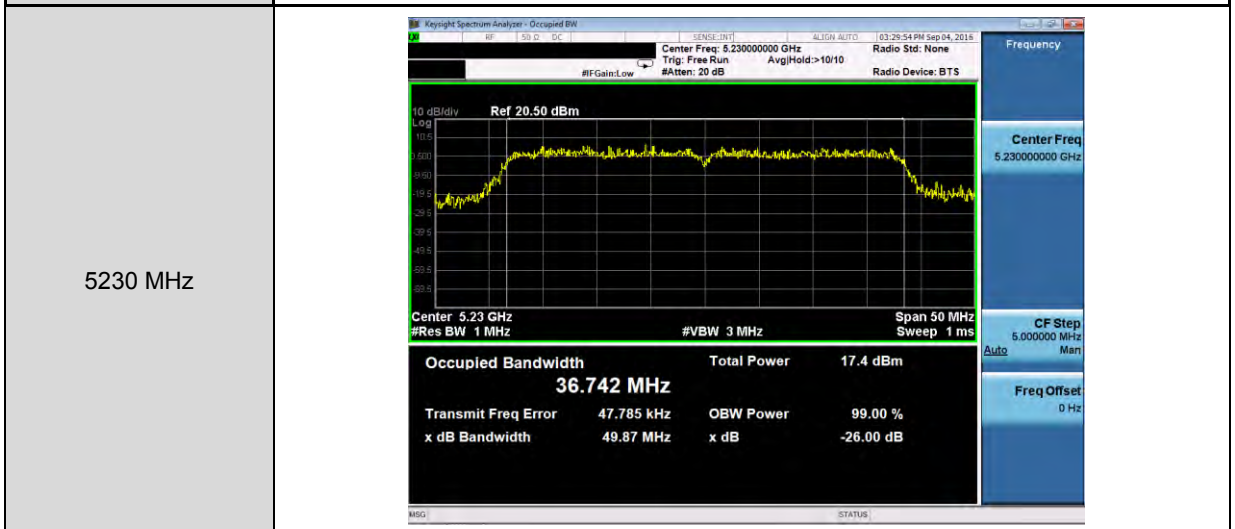
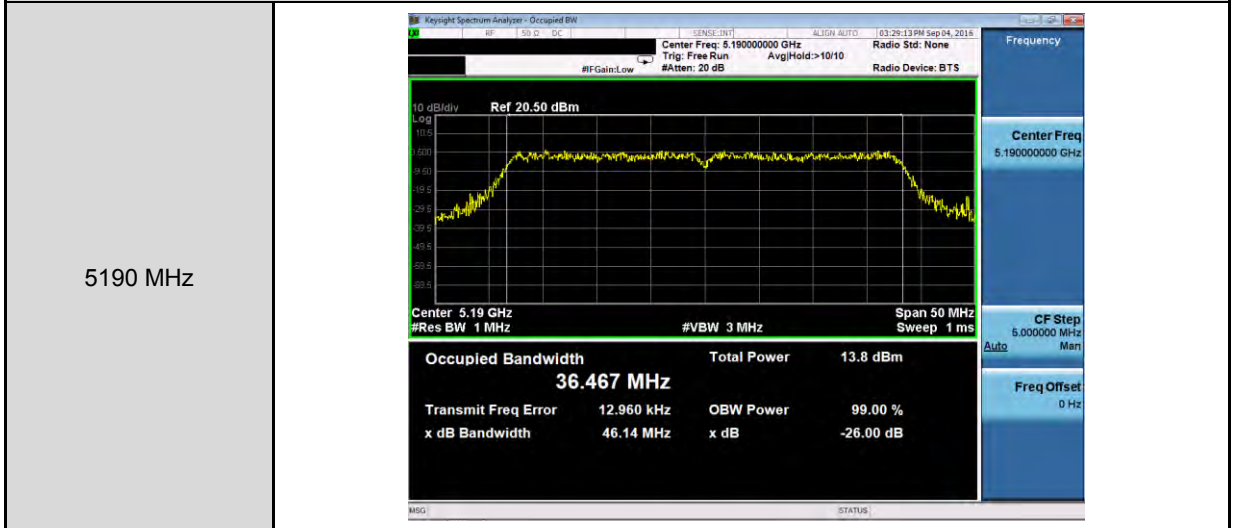




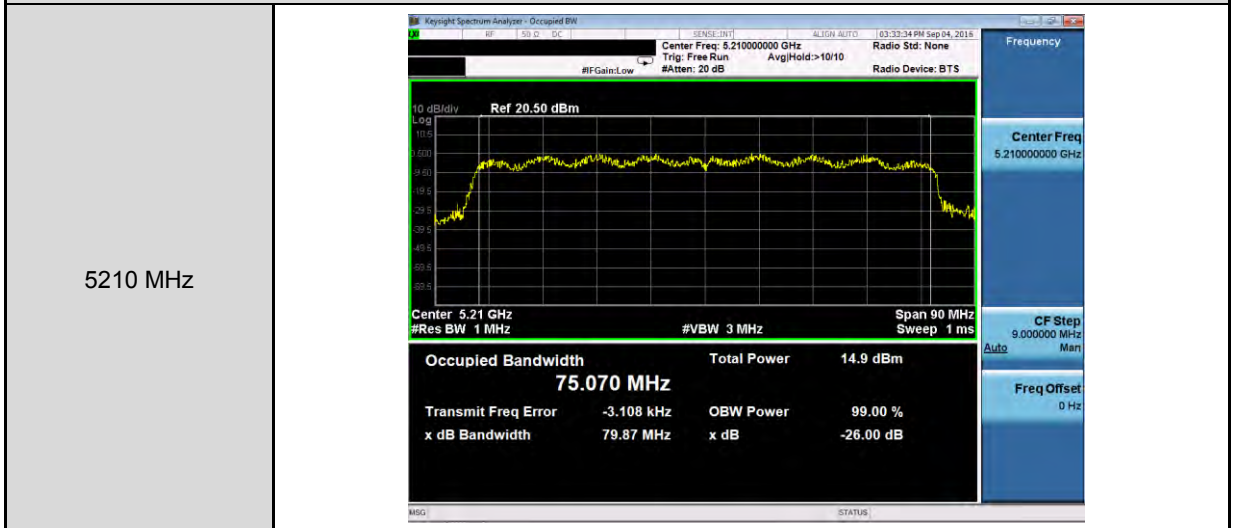
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-1																			
5180 MHz	<p>Center Freq: 5.18000000 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 25 MHz Sweep: 1 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>13.6 dBm</td> </tr> <tr> <td>17.740 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>54.668 kHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>22.96 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	13.6 dBm	17.740 MHz			Transmit Freq Error	OBW Power	99.00 %	54.668 kHz	x dB	-26.00 dB	x dB Bandwidth			22.96 MHz		
Occupied Bandwidth	Total Power	13.6 dBm																	
17.740 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
54.668 kHz	x dB	-26.00 dB																	
x dB Bandwidth																			
22.96 MHz																			
5200 MHz	<p>Center Freq: 5.20000000 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>19.5 dBm</td> </tr> <tr> <td>17.944 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>1.168 kHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>24.73 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	19.5 dBm	17.944 MHz			Transmit Freq Error	OBW Power	99.00 %	1.168 kHz	x dB	-26.00 dB	x dB Bandwidth			24.73 MHz		
Occupied Bandwidth	Total Power	19.5 dBm																	
17.944 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
1.168 kHz	x dB	-26.00 dB																	
x dB Bandwidth																			
24.73 MHz																			
5240 MHz	<p>Center Freq: 5.24000000 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>16.7 dBm</td> </tr> <tr> <td>17.906 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>24.299 kHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>25.00 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	16.7 dBm	17.906 MHz			Transmit Freq Error	OBW Power	99.00 %	24.299 kHz	x dB	-26.00 dB	x dB Bandwidth			25.00 MHz		
Occupied Bandwidth	Total Power	16.7 dBm																	
17.906 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
24.299 kHz	x dB	-26.00 dB																	
x dB Bandwidth																			
25.00 MHz																			



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1



Mode 5: IEEE 802.11ac 80 MHz Link Mode_ANT-1

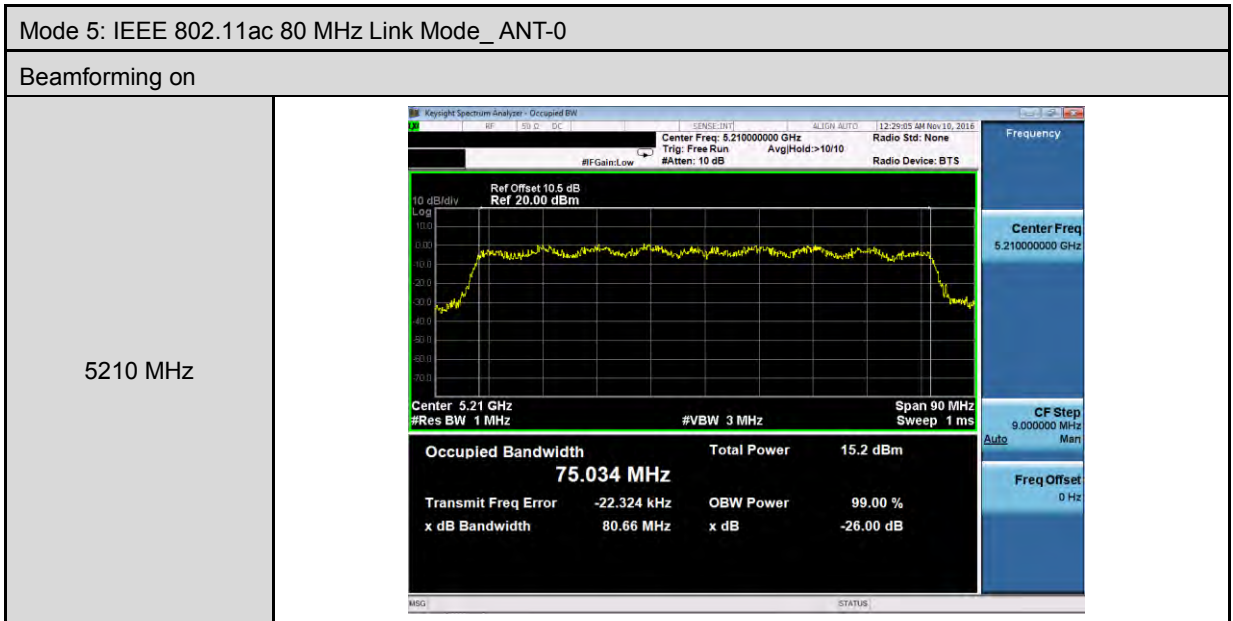




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-0	
Beamforming on	
5180 MHz	<p>Key parameters from the 5180 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.18000000 GHzOccupied Bandwidth: 17.910 MHzTotal Power: 18.7 dBmTransmit Freq Error: 86.226 kHzOBW Power: 99.00 %x dB Bandwidth: 24.95 MHzx dB: -26.00 dB
5200 MHz	<p>Key parameters from the 5200 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.20000000 GHzOccupied Bandwidth: 17.950 MHzTotal Power: 18.8 dBmTransmit Freq Error: 65.097 kHzOBW Power: 99.00 %x dB Bandwidth: 24.22 MHzx dB: -26.00 dB
5240 MHz	<p>Key parameters from the 5240 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.24000000 GHzOccupied Bandwidth: 17.999 MHzTotal Power: 18.8 dBmTransmit Freq Error: 45.955 kHzOBW Power: 99.00 %x dB Bandwidth: 25.00 MHzx dB: -26.00 dB



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-0																			
Beamforming on																			
5190 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.190000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS</p> <p>Ref Offset: 10.5 dB Ref: 20.00 dBm</p> <p>Center: 5.19 GHz #Res BW: 1 MHz #VBW: 3 MHz Span: 50 MHz Sweep: 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>17.8 dBm</td></tr><tr><td>36.631 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>2.782 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>46.72 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	17.8 dBm	36.631 MHz			Transmit Freq Error	OBW Power	99.00 %	2.782 kHz			x dB Bandwidth	x dB	-26.00 dB	46.72 MHz		
Occupied Bandwidth	Total Power	17.8 dBm																	
36.631 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
2.782 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
46.72 MHz																			
5230 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.230000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS</p> <p>Ref Offset: 10.5 dB Ref: 20.00 dBm</p> <p>Center: 5.23 GHz #Res BW: 1 MHz #VBW: 3 MHz Span: 50 MHz Sweep: 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>20.3 dBm</td></tr><tr><td>36.887 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>101.04 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>49.21 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	20.3 dBm	36.887 MHz			Transmit Freq Error	OBW Power	99.00 %	101.04 kHz			x dB Bandwidth	x dB	-26.00 dB	49.21 MHz		
Occupied Bandwidth	Total Power	20.3 dBm																	
36.887 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
101.04 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
49.21 MHz																			

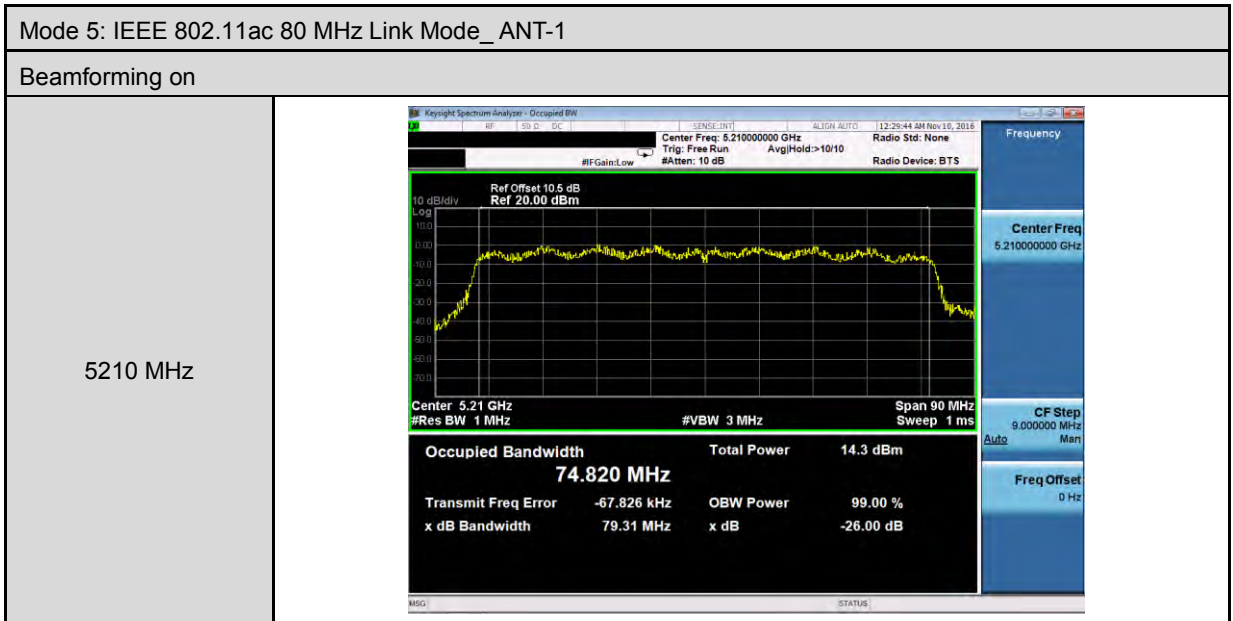




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ ANT-1																			
Beamforming on																			
5180 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.180000000 GHz Trig: Free Run #Atten: 10 dB Radio Device: BTS</p> <p>Ref Offset 10.5 dB Ref 20.00 dBm</p> <p>Center 5.18 GHz #Res 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>16.8 dBm</td></tr><tr><td>17.822 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>33.482 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>24.34 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	16.8 dBm	17.822 MHz			Transmit Freq Error	OBW Power	99.00 %	33.482 kHz			x dB Bandwidth	x dB	-26.00 dB	24.34 MHz		
Occupied Bandwidth	Total Power	16.8 dBm																	
17.822 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
33.482 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
24.34 MHz																			
5200 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.200000000 GHz Trig: Free Run #Atten: 10 dB Radio Device: BTS</p> <p>Ref Offset 10.5 dB Ref 20.00 dBm</p> <p>Center 5.2 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>17.9 dBm</td></tr><tr><td>17.828 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>15.272 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>24.10 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	17.9 dBm	17.828 MHz			Transmit Freq Error	OBW Power	99.00 %	15.272 kHz			x dB Bandwidth	x dB	-26.00 dB	24.10 MHz		
Occupied Bandwidth	Total Power	17.9 dBm																	
17.828 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
15.272 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
24.10 MHz																			
5240 MHz	<p>KeySight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.240000000 GHz Trig: Free Run #Atten: 10 dB Radio Device: BTS</p> <p>Ref Offset 10.5 dB Ref 20.00 dBm</p> <p>Center 5.24 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>17.1 dBm</td></tr><tr><td>17.840 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>65.014 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>24.67 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	17.1 dBm	17.840 MHz			Transmit Freq Error	OBW Power	99.00 %	65.014 kHz			x dB Bandwidth	x dB	-26.00 dB	24.67 MHz		
Occupied Bandwidth	Total Power	17.1 dBm																	
17.840 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
65.014 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
24.67 MHz																			



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1																			
Beamforming on																			
5190 MHz	<p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.190000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS</p> <p>Ref Offset 10.5 dB Ref 20.00 dBm</p> <p>Center 5.19 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>16.0 dBm</td></tr><tr><td>36.447 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-5.302 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>43.22 MHz</td><td></td><td></td></tr></table> <p>MSG STATUS</p>	Occupied Bandwidth	Total Power	16.0 dBm	36.447 MHz			Transmit Freq Error	OBW Power	99.00 %	-5.302 kHz			x dB Bandwidth	x dB	-26.00 dB	43.22 MHz		
Occupied Bandwidth	Total Power	16.0 dBm																	
36.447 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-5.302 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
43.22 MHz																			
5230 MHz	<p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.230000000 GHz Trig: Free Run #Gain: Low #Atten: 10 dB Radio Std: None Radio Device: BTS</p> <p>Ref Offset 10.5 dB Ref 20.00 dBm</p> <p>Center 5.23 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>20.2 dBm</td></tr><tr><td>36.772 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>-32.165 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>50.00 MHz</td><td></td><td></td></tr></table> <p>MSG STATUS</p>	Occupied Bandwidth	Total Power	20.2 dBm	36.772 MHz			Transmit Freq Error	OBW Power	99.00 %	-32.165 kHz			x dB Bandwidth	x dB	-26.00 dB	50.00 MHz		
Occupied Bandwidth	Total Power	20.2 dBm																	
36.772 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-32.165 kHz																			
x dB Bandwidth	x dB	-26.00 dB																	
50.00 MHz																			





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)		Limit (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)		Limit (kHz)
	ANT-0	ANT-1	
5745	17570	17200	> 500
5785	17600	16960	> 500
5825	17580	17550	> 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	09/04/2016		
Frequency (MHz)	6 dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	36060	35150	> 500
5795	36020	35720	> 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	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

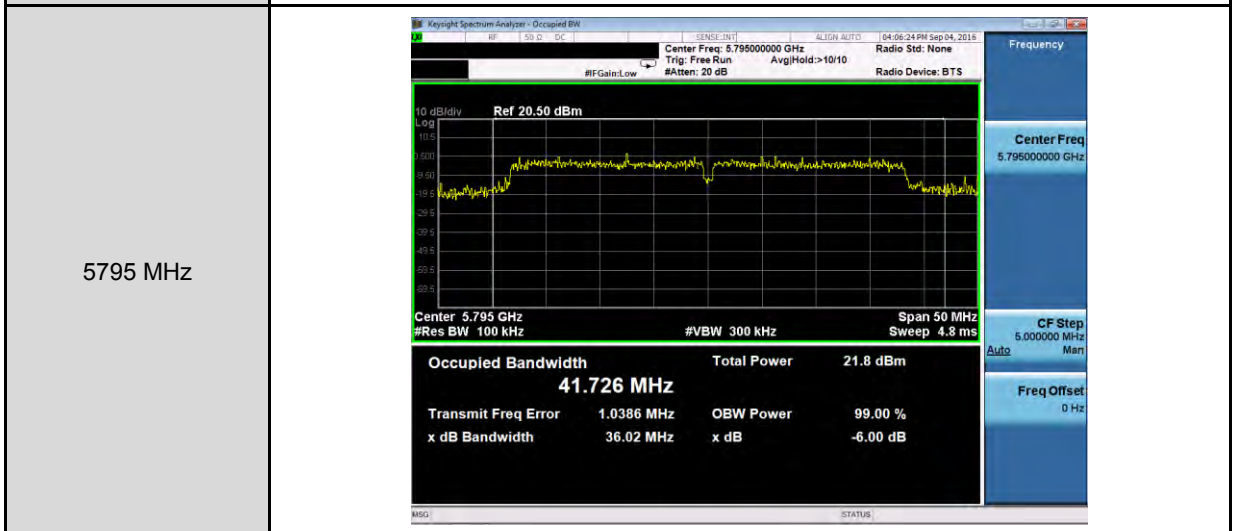
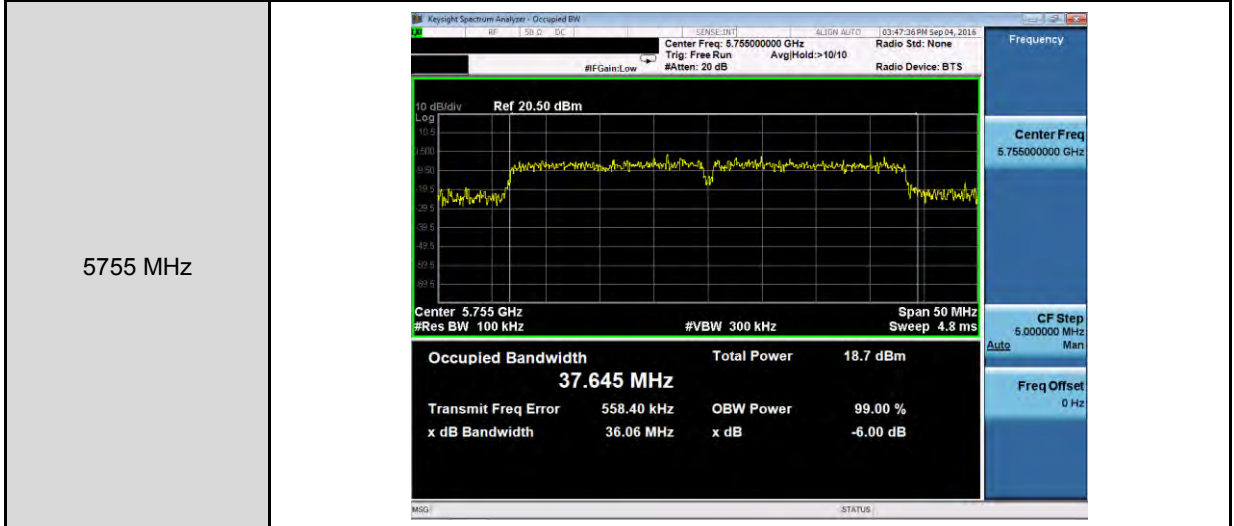
Mode 2: IEEE 802.11a Link Mode_ANT-0															
5745 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.745000000 GHz Trig: Free Run #Antenn: 20 dB</p> <p>Ref 20.50 dBm</p> <p>Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>18.1 dBm</td></tr><tr><td>20.970 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>440.02 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>16.35 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table> <p>MSG: (STATUS)</p>	Occupied Bandwidth	Total Power	18.1 dBm	20.970 MHz			Transmit Freq Error	440.02 kHz	OBW Power	99.00 %	x dB Bandwidth	16.35 MHz	x dB	-6.00 dB
Occupied Bandwidth	Total Power	18.1 dBm													
20.970 MHz															
Transmit Freq Error	440.02 kHz	OBW Power	99.00 %												
x dB Bandwidth	16.35 MHz	x dB	-6.00 dB												
5785 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.785000000 GHz Trig: Free Run #Antenn: 20 dB</p> <p>Ref 20.50 dBm</p> <p>Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>18.0 dBm</td></tr><tr><td>19.270 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>266.83 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>16.41 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table> <p>MSG: (STATUS)</p>	Occupied Bandwidth	Total Power	18.0 dBm	19.270 MHz			Transmit Freq Error	266.83 kHz	OBW Power	99.00 %	x dB Bandwidth	16.41 MHz	x dB	-6.00 dB
Occupied Bandwidth	Total Power	18.0 dBm													
19.270 MHz															
Transmit Freq Error	266.83 kHz	OBW Power	99.00 %												
x dB Bandwidth	16.41 MHz	x dB	-6.00 dB												
5825 MHz	<p>Keyight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.825000000 GHz Trig: Free Run #Antenn: 20 dB</p> <p>Ref 20.50 dBm</p> <p>Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>17.9 dBm</td></tr><tr><td>17.555 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>173.18 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>15.72 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table> <p>MSG: (STATUS)</p>	Occupied Bandwidth	Total Power	17.9 dBm	17.555 MHz			Transmit Freq Error	173.18 kHz	OBW Power	99.00 %	x dB Bandwidth	15.72 MHz	x dB	-6.00 dB
Occupied Bandwidth	Total Power	17.9 dBm													
17.555 MHz															
Transmit Freq Error	173.18 kHz	OBW Power	99.00 %												
x dB Bandwidth	15.72 MHz	x dB	-6.00 dB												



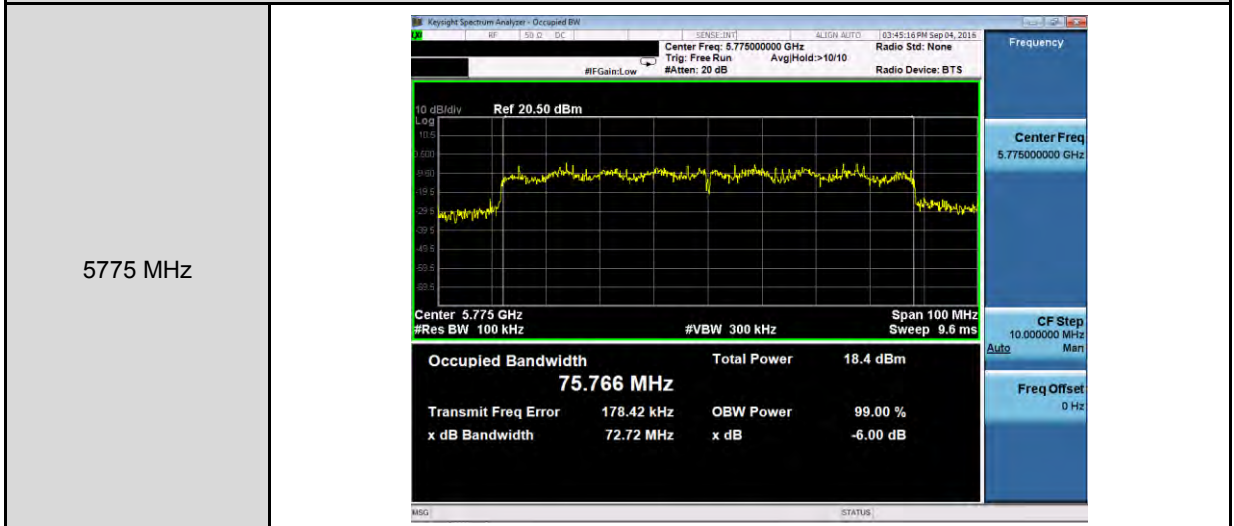
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-0													
5745 MHz	<p>Center Freq: 5.74500000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>21.073 MHz</td><td>Total Power</td><td>19.0 dBm</td></tr><tr><td>Transmit Freq Error</td><td>858.31 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>17.57 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	21.073 MHz	Total Power	19.0 dBm	Transmit Freq Error	858.31 kHz	OBW Power	99.00 %	x dB Bandwidth	17.57 MHz	x dB	-6.00 dB
Occupied Bandwidth	21.073 MHz	Total Power	19.0 dBm										
Transmit Freq Error	858.31 kHz	OBW Power	99.00 %										
x dB Bandwidth	17.57 MHz	x dB	-6.00 dB										
5785 MHz	<p>Center Freq: 5.78500000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>20.236 MHz</td><td>Total Power</td><td>18.5 dBm</td></tr><tr><td>Transmit Freq Error</td><td>262.62 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>17.60 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	20.236 MHz	Total Power	18.5 dBm	Transmit Freq Error	262.62 kHz	OBW Power	99.00 %	x dB Bandwidth	17.60 MHz	x dB	-6.00 dB
Occupied Bandwidth	20.236 MHz	Total Power	18.5 dBm										
Transmit Freq Error	262.62 kHz	OBW Power	99.00 %										
x dB Bandwidth	17.60 MHz	x dB	-6.00 dB										
5825 MHz	<p>Center Freq: 5.82500000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>18.388 MHz</td><td>Total Power</td><td>18.5 dBm</td></tr><tr><td>Transmit Freq Error</td><td>43.774 kHz</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>17.58 MHz</td><td>x dB</td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	18.388 MHz	Total Power	18.5 dBm	Transmit Freq Error	43.774 kHz	OBW Power	99.00 %	x dB Bandwidth	17.58 MHz	x dB	-6.00 dB
Occupied Bandwidth	18.388 MHz	Total Power	18.5 dBm										
Transmit Freq Error	43.774 kHz	OBW Power	99.00 %										
x dB Bandwidth	17.58 MHz	x dB	-6.00 dB										



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-0



Mode 5: IEEE 802.11ac 80 MHz Link Mode_ANT-0

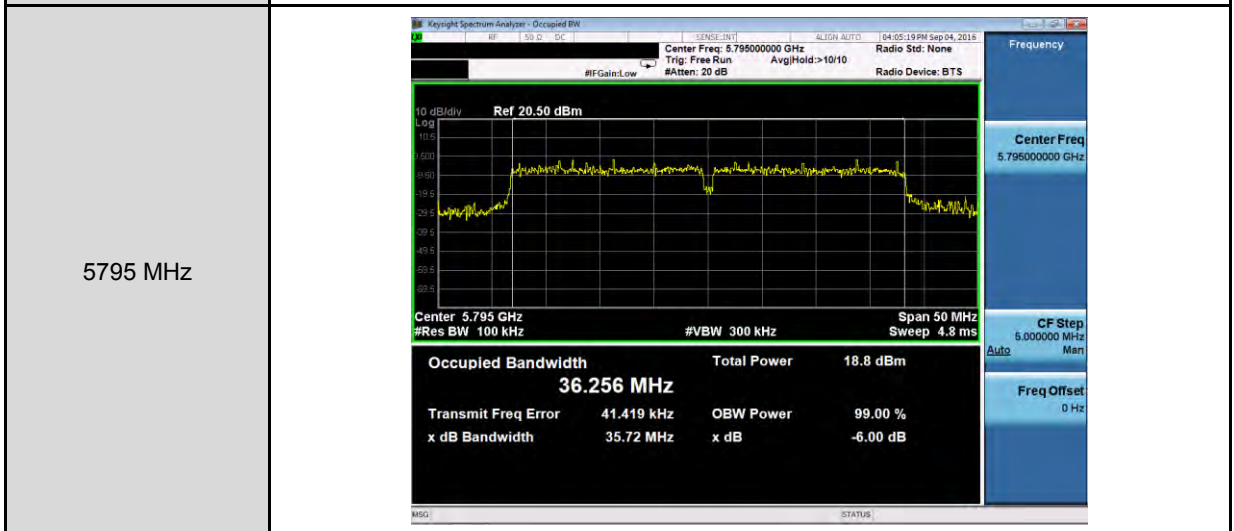
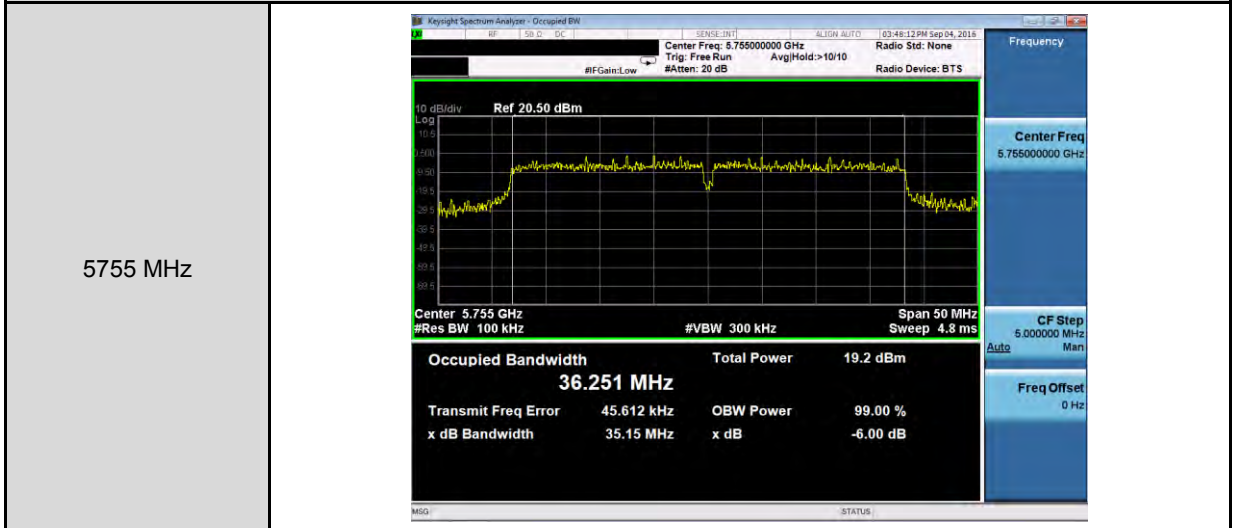




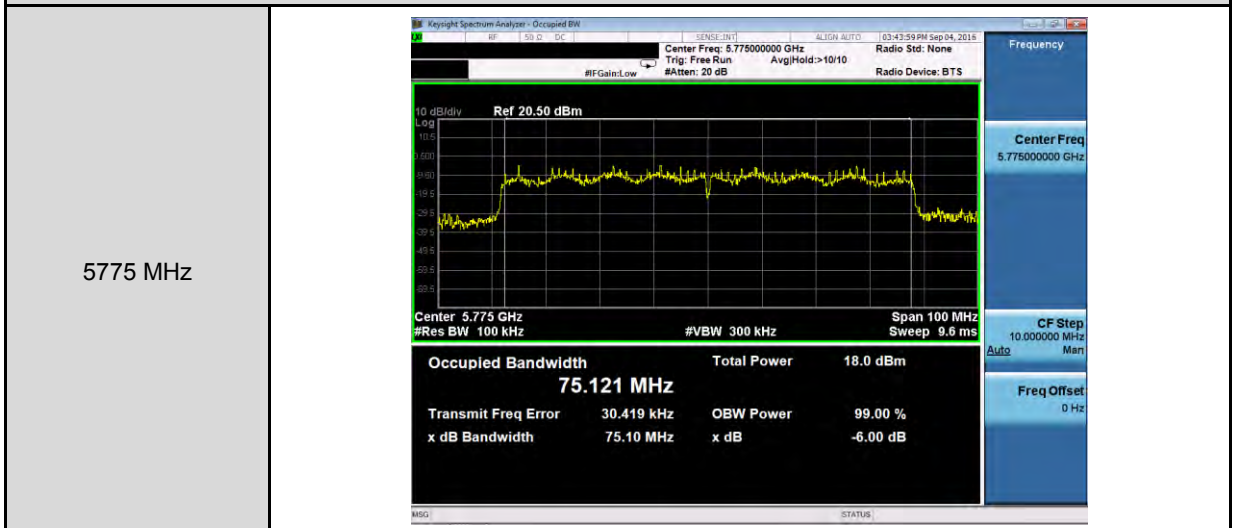
Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-1													
5745 MHz	<p>Center Freq: 5.745000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>16.3 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">17.709 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>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	16.3 dBm	17.709 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-6.00 dB
Occupied Bandwidth	Total Power	16.3 dBm											
17.709 MHz													
Transmit Freq Error	OBW Power	99.00 %											
x dB Bandwidth	x dB	-6.00 dB											
5785 MHz	<p>Center Freq: 5.785000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>15.2 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">17.709 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>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	15.2 dBm	17.709 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-6.00 dB
Occupied Bandwidth	Total Power	15.2 dBm											
17.709 MHz													
Transmit Freq Error	OBW Power	99.00 %											
x dB Bandwidth	x dB	-6.00 dB											
5825 MHz	<p>Center Freq: 5.825000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>15.0 dBm</td> </tr> <tr> <td colspan="3" style="text-align: center;">17.656 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>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	15.0 dBm	17.656 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-6.00 dB
Occupied Bandwidth	Total Power	15.0 dBm											
17.656 MHz													
Transmit Freq Error	OBW Power	99.00 %											
x dB Bandwidth	x dB	-6.00 dB											



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1



Mode 5: IEEE 802.11ac 80 MHz Link Mode_ANT-1

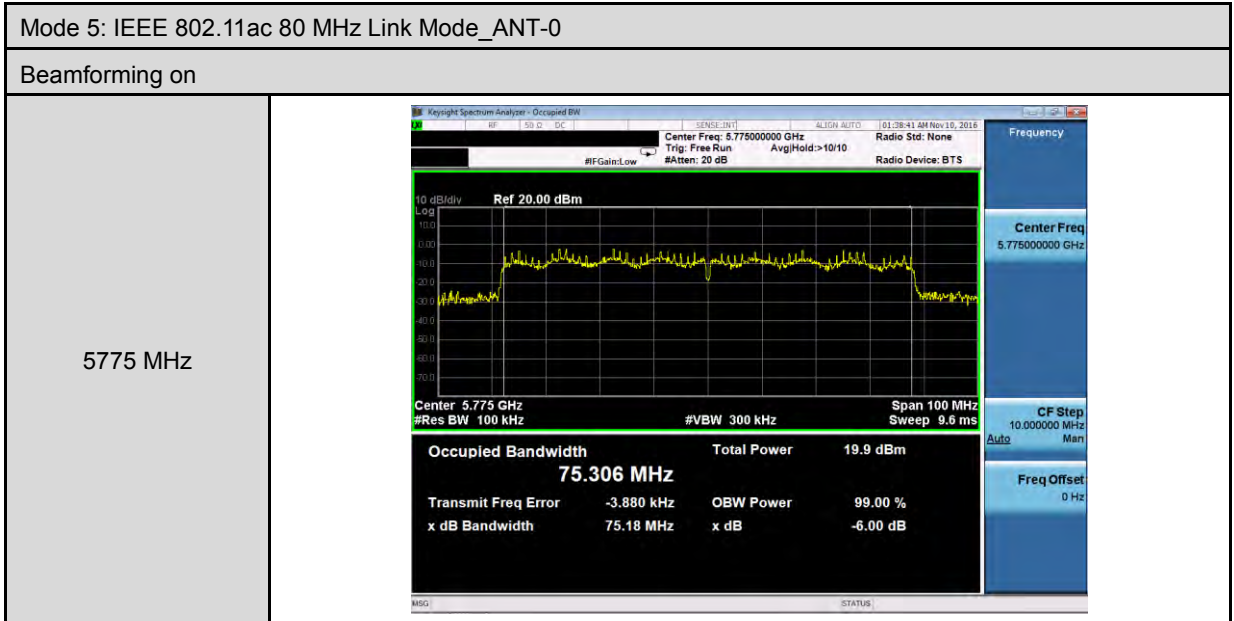




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-0	
Beamforming on	
5745 MHz	<p>Center Freq: 5.74500000 GHz</p> <p>Occupied Bandwidth: 18.513 MHz</p> <p>Total Power: 18.9 dBm</p> <p>Transmit Freq Error: 202.42 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 16.91 MHz</p> <p>x dB: -6.00 dB</p>
5785 MHz	<p>Center Freq: 5.78500000 GHz</p> <p>Occupied Bandwidth: 18.223 MHz</p> <p>Total Power: 18.8 dBm</p> <p>Transmit Freq Error: 97.108 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 17.30 MHz</p> <p>x dB: -6.00 dB</p>
5825 MHz	<p>Center Freq: 5.82500000 GHz</p> <p>Occupied Bandwidth: 18.268 MHz</p> <p>Total Power: 18.5 dBm</p> <p>Transmit Freq Error: 161.24 kHz</p> <p>OBW Power: 99.00 %</p> <p>x dB Bandwidth: 16.30 MHz</p> <p>x dB: -6.00 dB</p>



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-0	
Beamforming on	
5755 MHz	<p>Center Freq: 5.75500000 GHz Total Power: 18.8 dBm Occupied Bandwidth: 36.315 MHz Transmit Freq Error: 31.623 kHz x dB Bandwidth: 35.10 MHz OBW Power: 99.00 % x dB: -6.00 dB</p>
5795 MHz	<p>Center Freq: 5.79500000 GHz Total Power: 19.3 dBm Occupied Bandwidth: 36.330 MHz Transmit Freq Error: 38.317 kHz x dB Bandwidth: 35.22 MHz OBW Power: 99.00 % x dB: -6.00 dB</p>

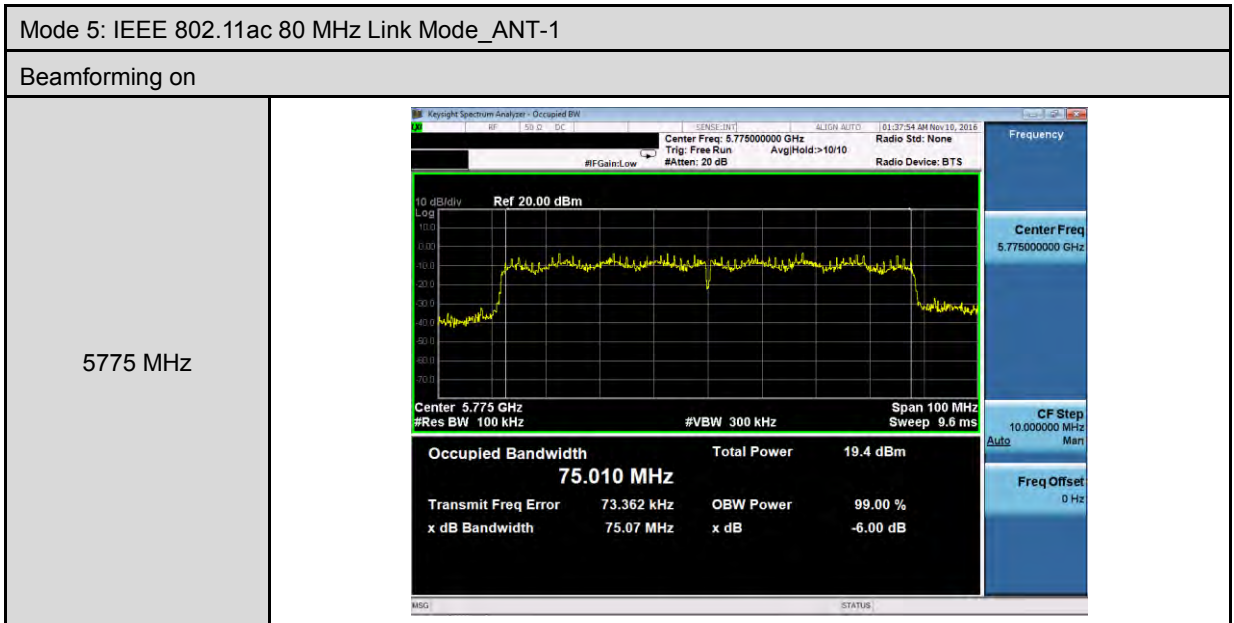




Mode 3: IEEE 802.11ac 20 MHz Link Mode_ANT-1	
Beamforming on	
5745 MHz	<p>Center Freq: 5.74500000 GHz</p> <p>Occupied Bandwidth: 17.682 MHz</p> <p>Total Power: 19.6 dBm</p> <p>Transmit Freq Error: 56.197 kHz</p> <p>x dB Bandwidth: 17.05 MHz</p>
5785 MHz	<p>Center Freq: 5.78500000 GHz</p> <p>Occupied Bandwidth: 17.688 MHz</p> <p>Total Power: 18.7 dBm</p> <p>Transmit Freq Error: 39.588 kHz</p> <p>x dB Bandwidth: 17.56 MHz</p>
5825 MHz	<p>Center Freq: 5.82500000 GHz</p> <p>Occupied Bandwidth: 17.661 MHz</p> <p>Total Power: 17.7 dBm</p> <p>Transmit Freq Error: 53.307 kHz</p> <p>x dB Bandwidth: 17.30 MHz</p>



Mode 4: IEEE 802.11ac 40 MHz Link Mode_ANT-1																			
Beamforming on																			
5755 MHz	<p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.75500000 GHz Trig: Free Run Avg/Hold: >10/10 #IFGain: Low #Atten: 20 dB Radio Std: None Radio Device: BTS</p> <p>10 dB/div Ref 20.00 dBm</p> <p>Center 5.755 GHz Span 50 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>20.1 dBm</td></tr><tr><td>36.140 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>33.187 kHz</td><td></td><td></td></tr><tr><td>x dB Bandwidth</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>35.50 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	20.1 dBm	36.140 MHz			Transmit Freq Error	OBW Power	99.00 %	33.187 kHz			x dB Bandwidth	x dB	-6.00 dB	35.50 MHz		
Occupied Bandwidth	Total Power	20.1 dBm																	
36.140 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
33.187 kHz																			
x dB Bandwidth	x dB	-6.00 dB																	
35.50 MHz																			
5795 MHz	<p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.79500000 GHz Trig: Free Run Avg/Hold: >10/10 #IFGain: Low #Atten: 20 dB Radio Std: None Radio Device: BTS</p> <p>10 dB/div Ref 20.00 dBm</p> <p>Center 5.795 GHz Span 50 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms</p> <table border="1"><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>18.3 dBm</td></tr><tr><td>36.163 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>OBW Power</td><td>99.00 %</td></tr><tr><td>55.959 kHz</td><td></td><td></td></tr><tr><td>x dB Bandwidth</td><td>x dB</td><td>-6.00 dB</td></tr><tr><td>35.57 MHz</td><td></td><td></td></tr></table>	Occupied Bandwidth	Total Power	18.3 dBm	36.163 MHz			Transmit Freq Error	OBW Power	99.00 %	55.959 kHz			x dB Bandwidth	x dB	-6.00 dB	35.57 MHz		
Occupied Bandwidth	Total Power	18.3 dBm																	
36.163 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
55.959 kHz																			
x dB Bandwidth	x dB	-6.00 dB																	
35.57 MHz																			





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			Limit (dBm/MHz)
	Calculated (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
	5785	-6.84	0.717	0.87
5825	-6.59	0.717	1.12	< 30
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
	5785	-9.61	0.717	-1.90
5825	-11.52	0.717	-3.81	< 30
Frequency (MHz)	ANT-0+1			
		Calculated (dBm/500 kHz)		Limit (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
5230	-6.462	0.473	-5.989	< 11
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
	5190	-3.935	0.473	-3.462
5230	-4.394	0.473	-3.921	< 11
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (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			Limit (dBm/500 kHz)
	Calculated (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			Limit (dBm/MHz)
	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			
		Calculated (dBm/MHz)		Limit (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			Limit (dBm/MHz)
	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.




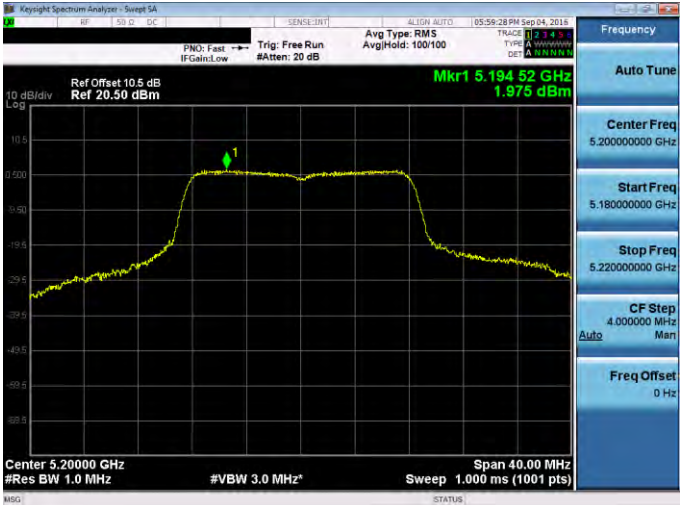
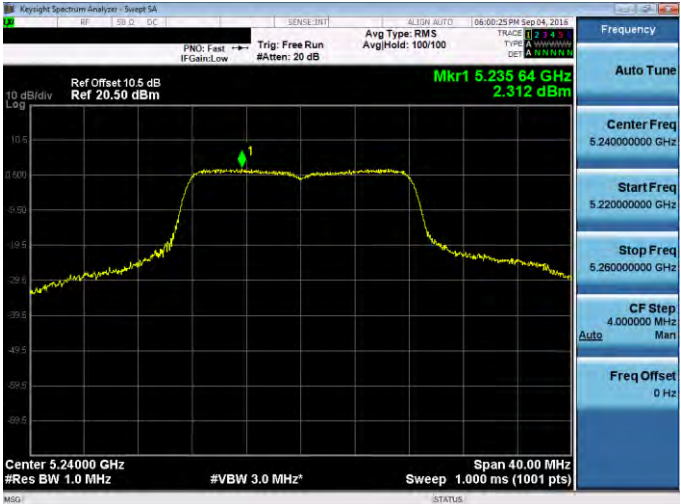
Model Number	DWA-181			
Test Item	Conducted power spectral density			
Test Mode	Mode 5: IEEE 802.11ac 80 MHz link mode			
Date of Test	09/04/2016			
Beamforming on				
Frequency (MHz)	ANT-0			
	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/MHz)
5775	-12.33	1.769	-3.57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

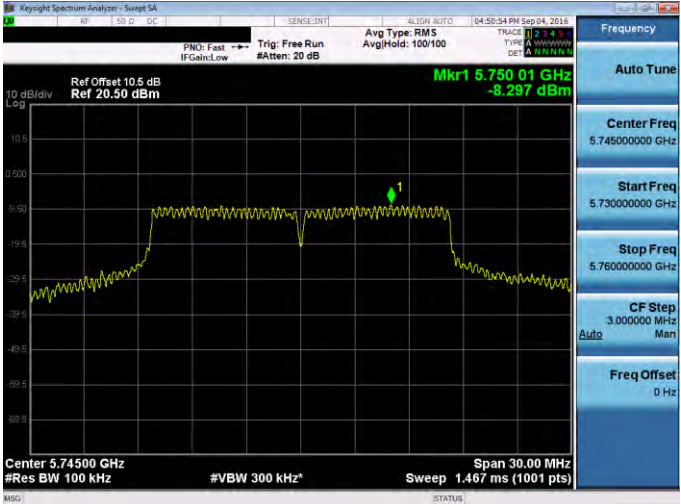
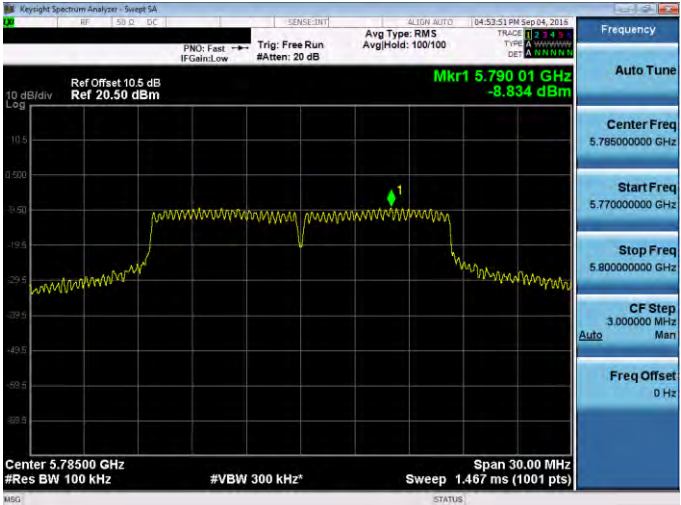
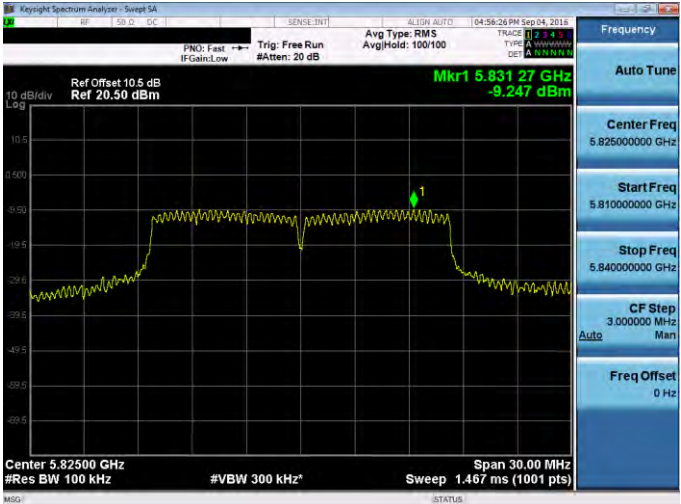
Conversion ratio = 10*Log(500 k/100 k)



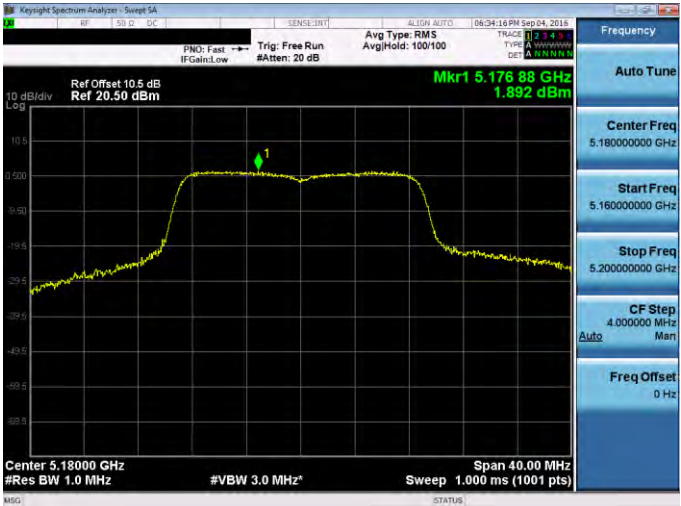
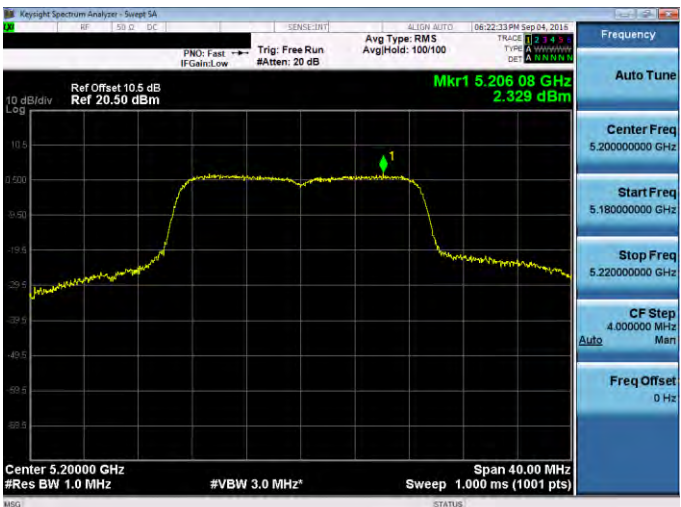
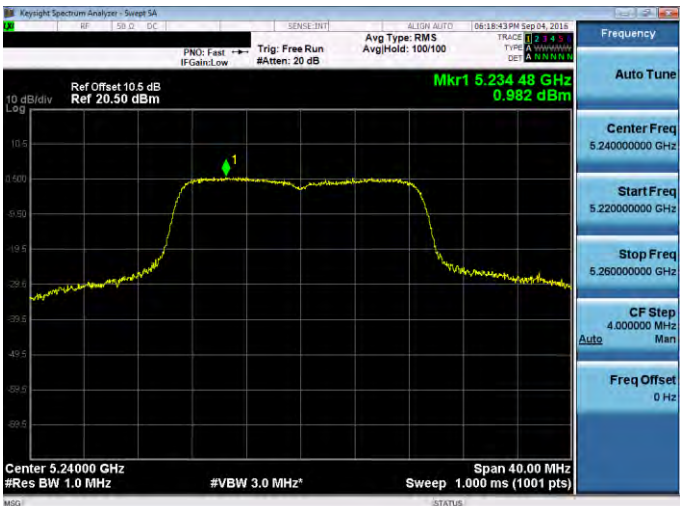
■ Test Graphs

Mode 2: IEEE 802.11a Link Mode_ ANT-0	
5180 MHz	 <p>Key features of the 5180 MHz graph:</p> <ul style="list-style-type: none">Center Freq: 5.180000 GHzMkr1: 5.185 72 GHz, 2.509 dBmRef Offset: 10.5 dB, Ref: 20.50 dBmSpan: 40.00 MHz#Res BW: 1.0 MHz#VBW: 3.0 MHzSweep: 1.000 ms (1001 pts)
5200 MHz	 <p>Key features of the 5200 MHz graph:</p> <ul style="list-style-type: none">Center Freq: 5.200000 GHzMkr1: 5.194 62 GHz, 1.975 dBmRef Offset: 10.5 dB, Ref: 20.50 dBmSpan: 40.00 MHz#Res BW: 1.0 MHz#VBW: 3.0 MHzSweep: 1.000 ms (1001 pts)
5240 MHz	 <p>Key features of the 5240 MHz graph:</p> <ul style="list-style-type: none">Center Freq: 5.240000 GHzMkr1: 5.235 64 GHz, 2.312 dBmRef Offset: 10.5 dB, Ref: 20.50 dBmSpan: 40.00 MHz#Res BW: 1.0 MHz#VBW: 3.0 MHzSweep: 1.000 ms (1001 pts)



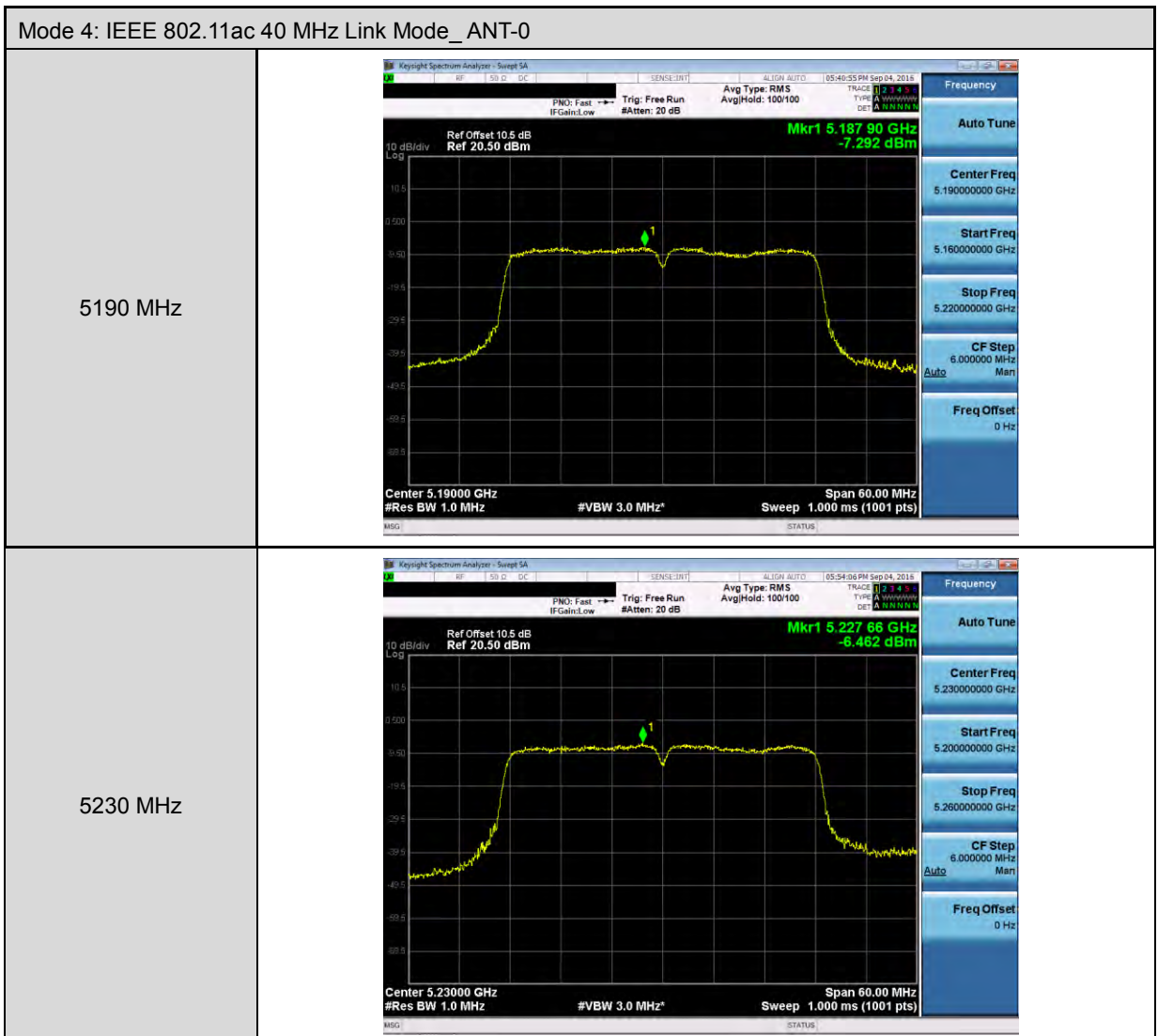
Mode 2: IEEE 802.11a Link Mode_ ANT-0	
5745 MHz	 <p>Key features of the 5745 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.74500000 GHzStart Freq: 5.73000000 GHzStop Freq: 5.76000000 GHzCF Step: 3.000000 MHzFreq Offset: 0 HzMkr1: 5.750 01 GHz, -8.297 dBmCenter: 5.74500 GHz, #Res BW 100 kHz, #VBW 300 kHz, Sweep 1.467 ms (1001 pts)
5785 MHz	 <p>Key features of the 5785 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.78500000 GHzStart Freq: 5.77000000 GHzStop Freq: 5.80000000 GHzCF Step: 3.000000 MHzFreq Offset: 0 HzMkr1: 5.790 01 GHz, -8.834 dBmCenter: 5.78500 GHz, #Res BW 100 kHz, #VBW 300 kHz, Sweep 1.467 ms (1001 pts)
5825 MHz	 <p>Key features of the 5825 MHz screenshot:</p> <ul style="list-style-type: none">Center Freq: 5.82500000 GHzStart Freq: 5.81000000 GHzStop Freq: 5.84000000 GHzCF Step: 3.000000 MHzFreq Offset: 0 HzMkr1: 5.831 27 GHz, -9.247 dBmCenter: 5.82500 GHz, #Res BW 100 kHz, #VBW 300 kHz, Sweep 1.467 ms (1001 pts)

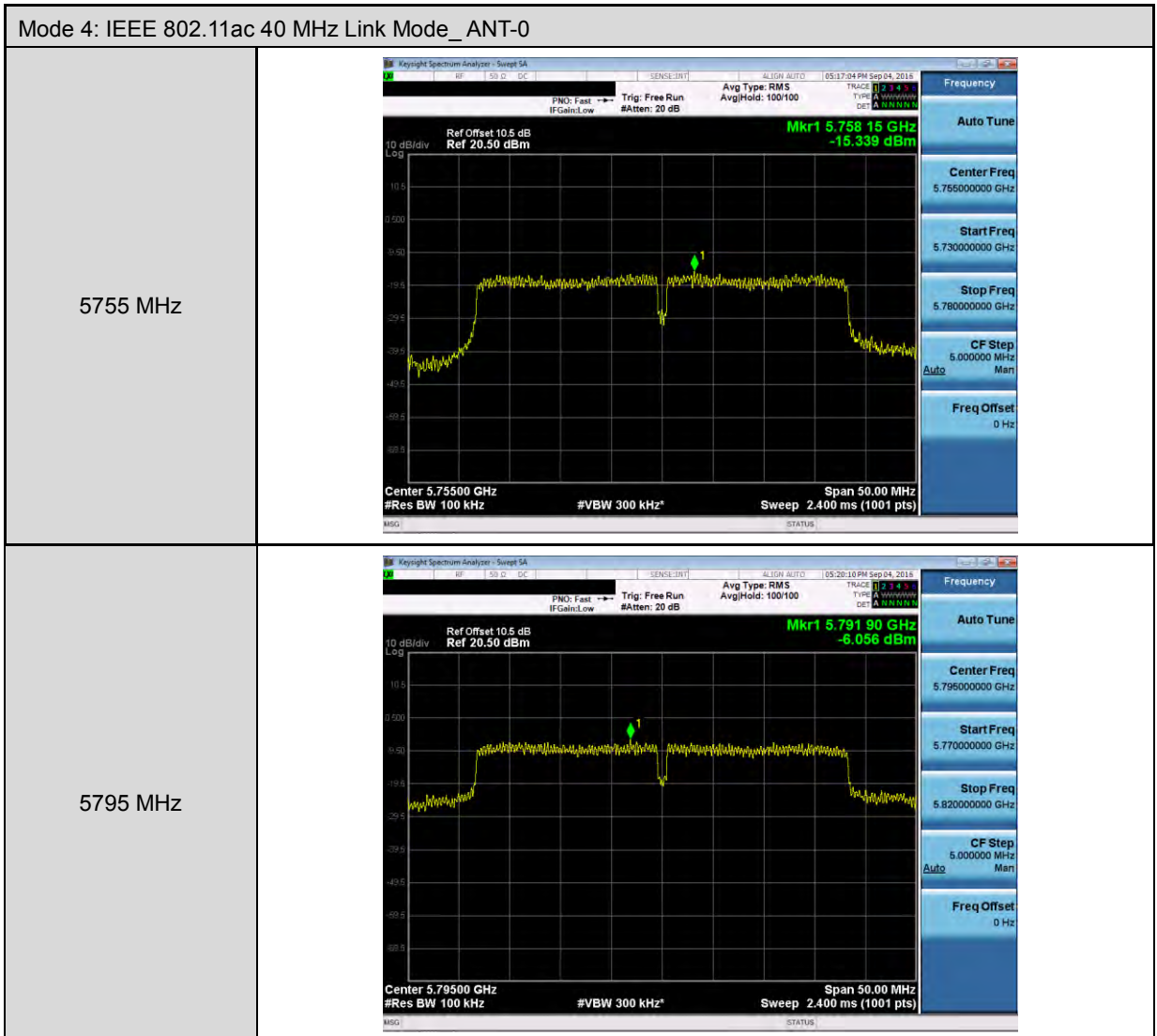


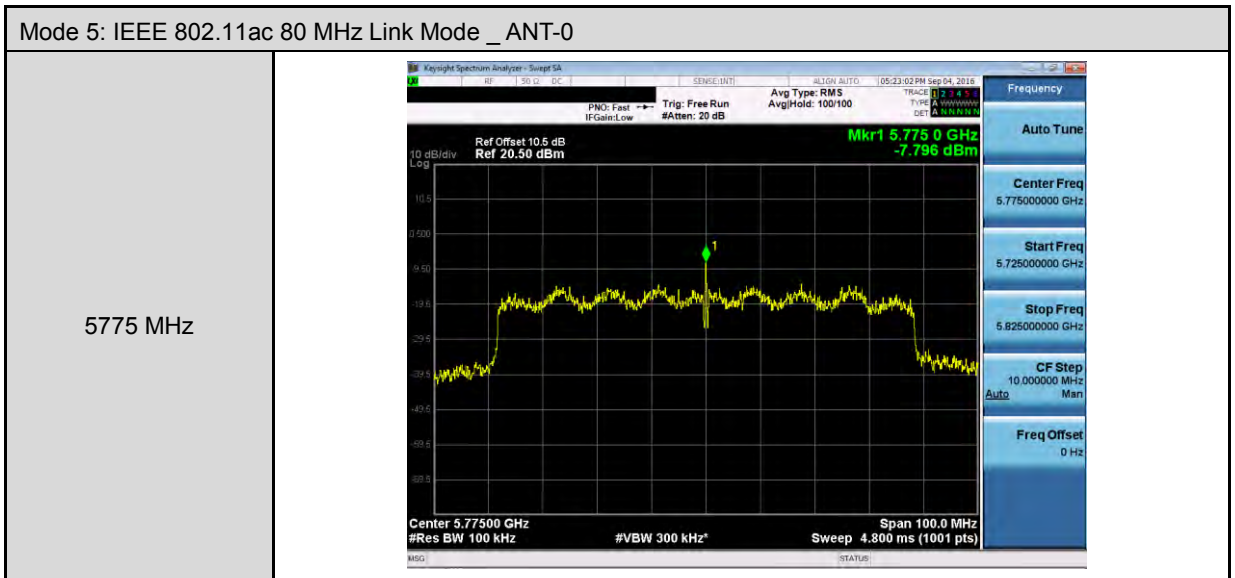
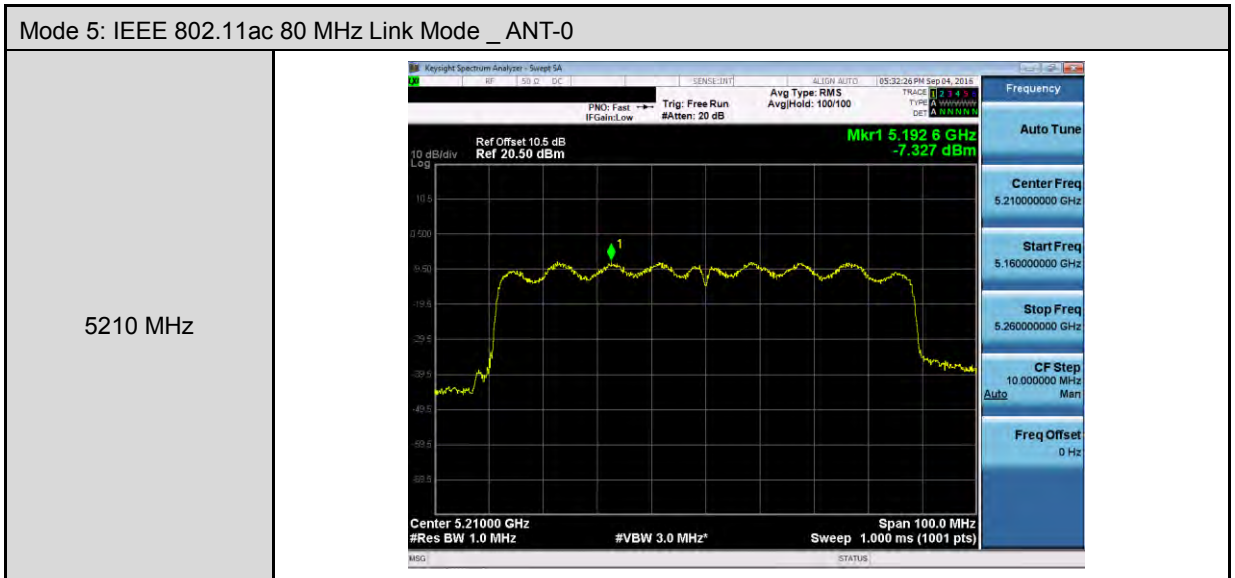
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	



Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
5745 MHz	<p>Key: Keyight Spectrum Analyzer - Sweet SA PNO: Fast Trig: Free Run Avg Type: RMS IF Gain: Low #Atten: 20 dB Avg/Hold: 100/100 Mkr1 5.739 99 GHz -6.674 dBm Ref Offset 10.5 dB Ref 20.50 dBm 10 dB/div Log Center 5.74500 GHz #Res BW 100 kHz #VBW 300 kHz* Span 30.00 MHz Sweep 1.467 ms (1001 pts)</p>
5785 MHz	<p>Key: Keyight Spectrum Analyzer - Sweet SA PNO: Fast Trig: Free Run Avg Type: RMS IF Gain: Low #Atten: 20 dB Avg/Hold: 100/100 Mkr1 5.791 27 GHz -6.841 dBm Ref Offset 10.5 dB Ref 20.50 dBm 10 dB/div Log Center 5.78500 GHz #Res BW 100 kHz #VBW 300 kHz* Span 30.00 MHz Sweep 1.467 ms (1001 pts)</p>
5825 MHz	<p>Key: Keyight Spectrum Analyzer - Sweet SA PNO: Fast Trig: Free Run Avg Type: RMS IF Gain: Low #Atten: 20 dB Avg/Hold: 100/100 Mkr1 5.819 99 GHz -6.588 dBm Ref Offset 10.5 dB Ref 20.50 dBm 10 dB/div Log Center 5.82500 GHz #Res BW 100 kHz #VBW 300 kHz* Span 30.00 MHz Sweep 1.467 ms (1001 pts)</p>





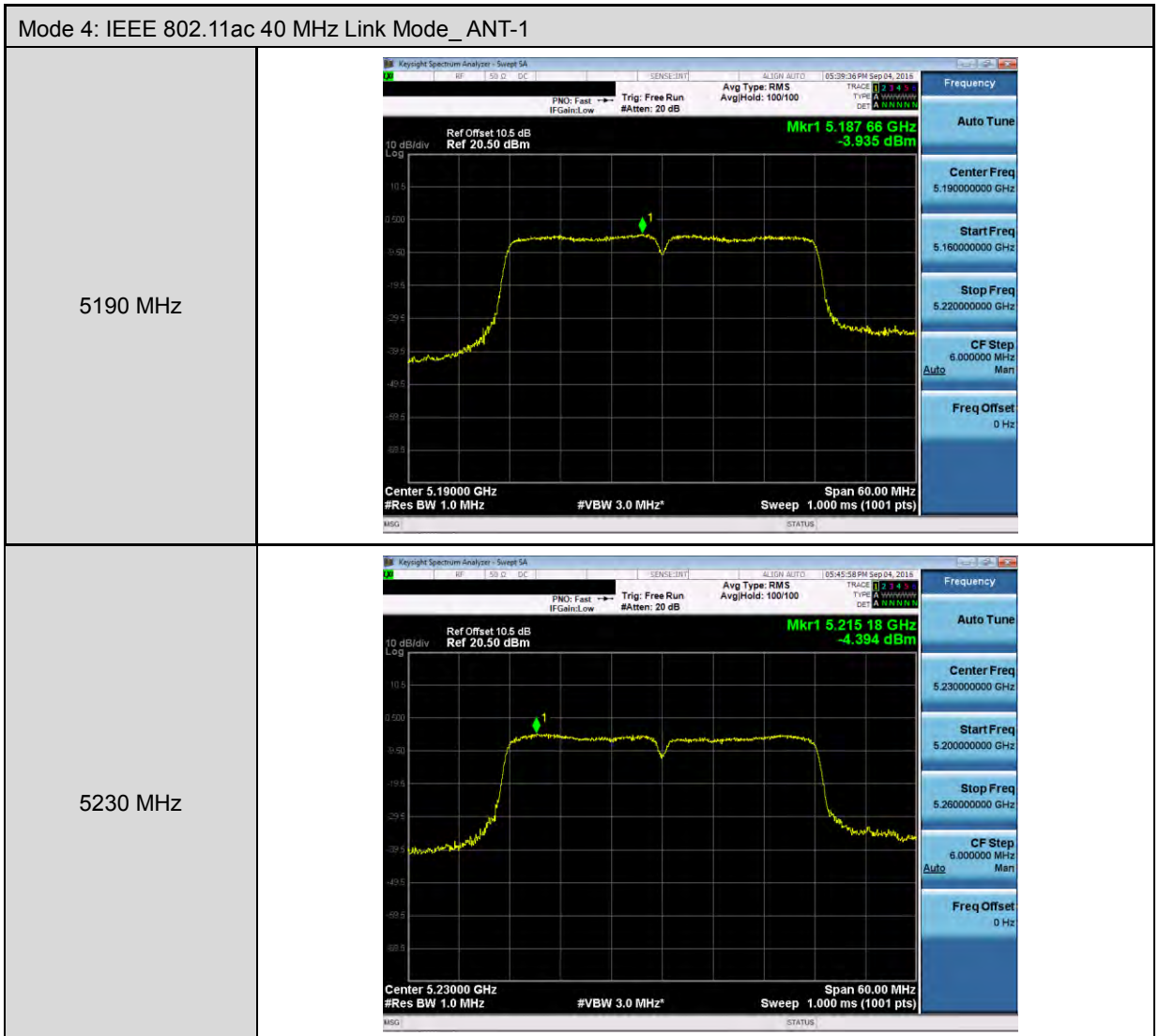


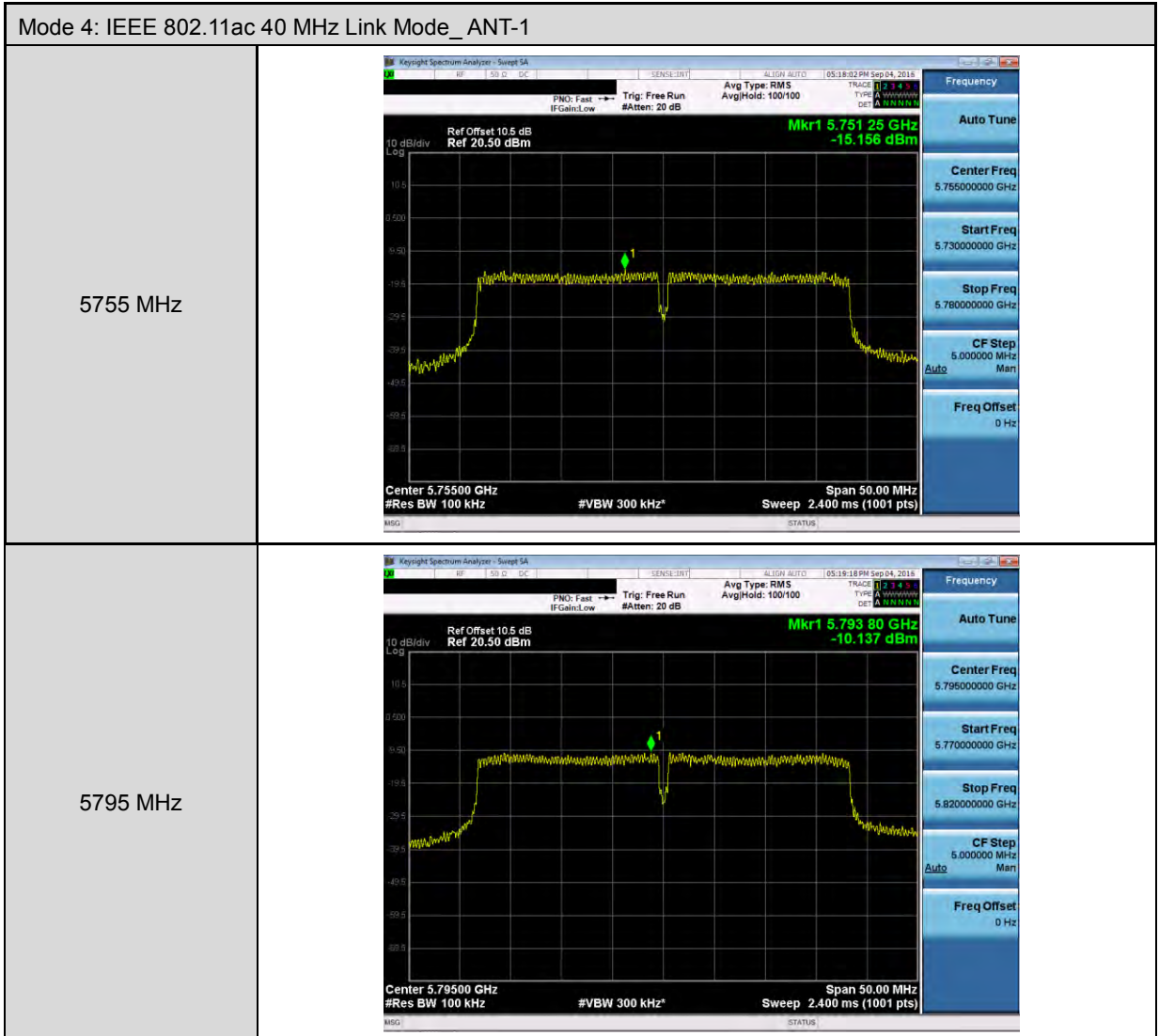


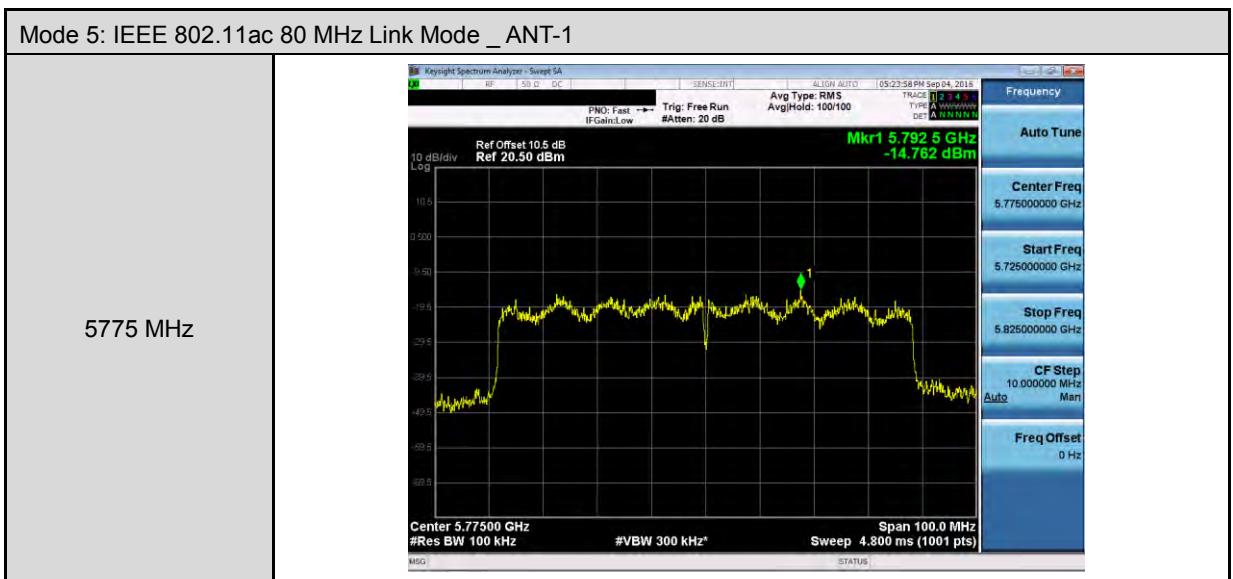
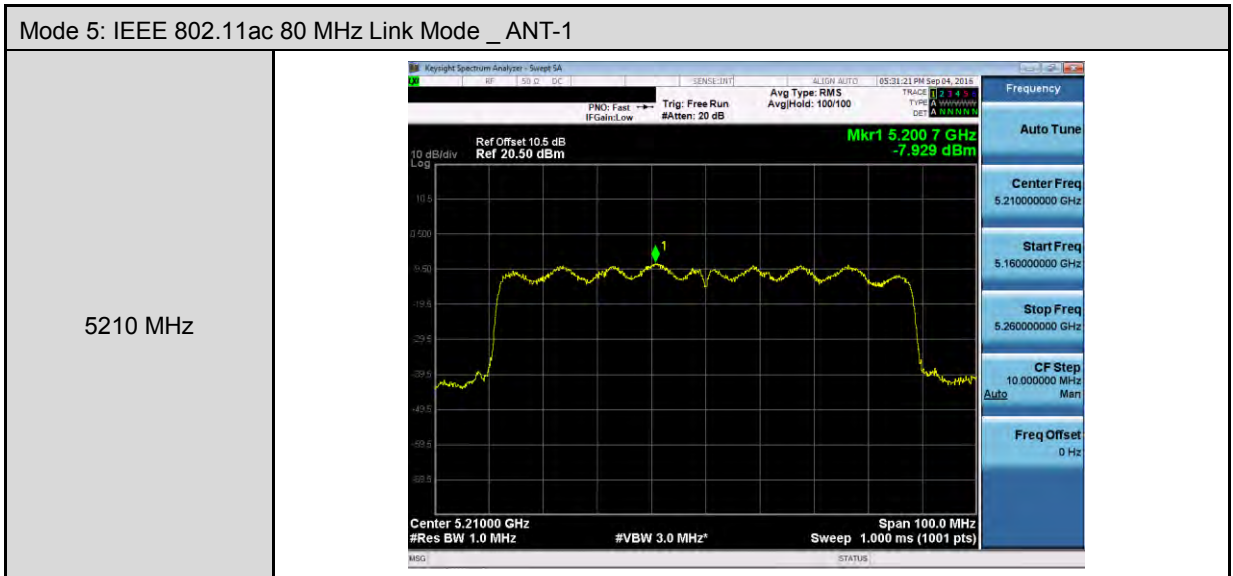
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	



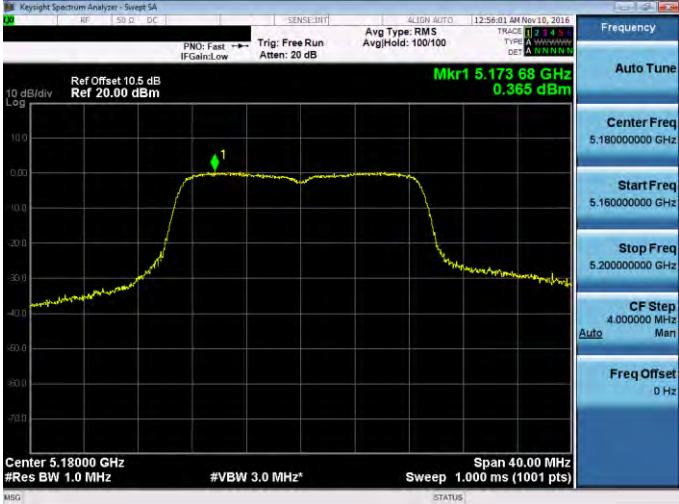
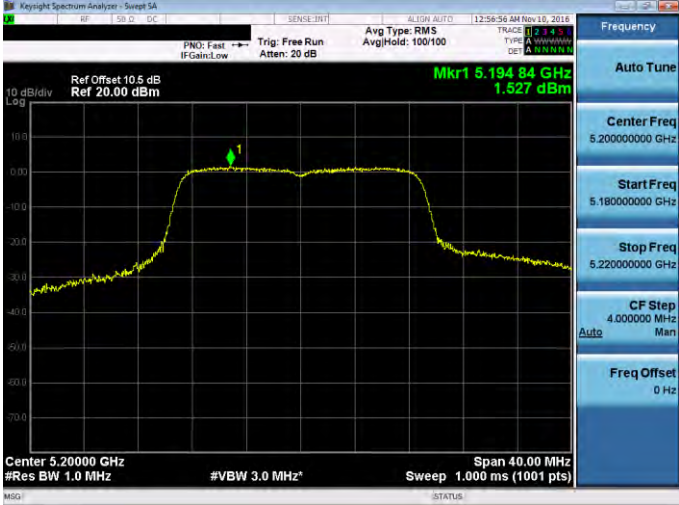
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	



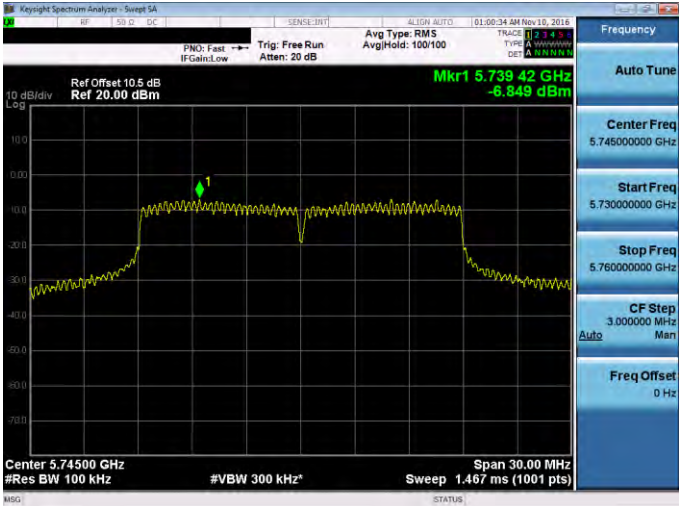
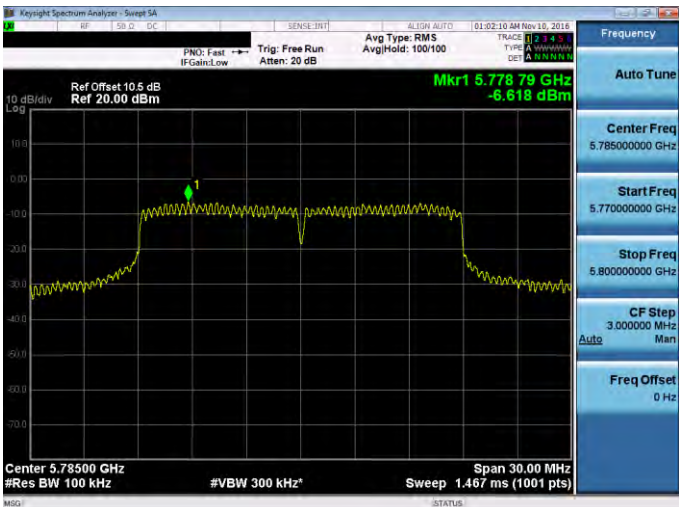
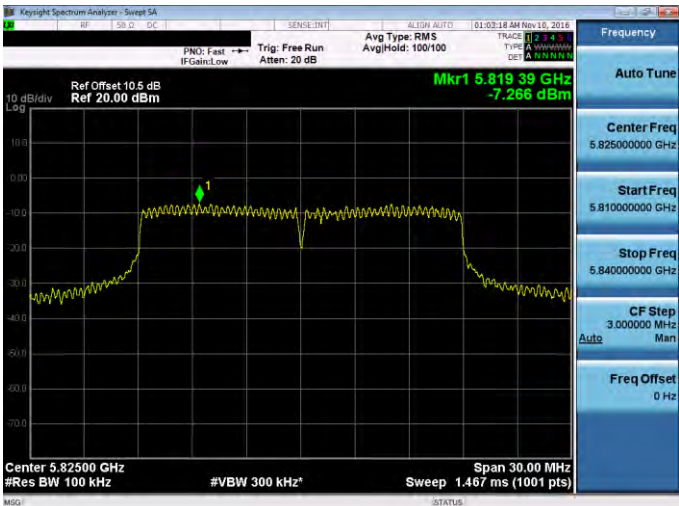


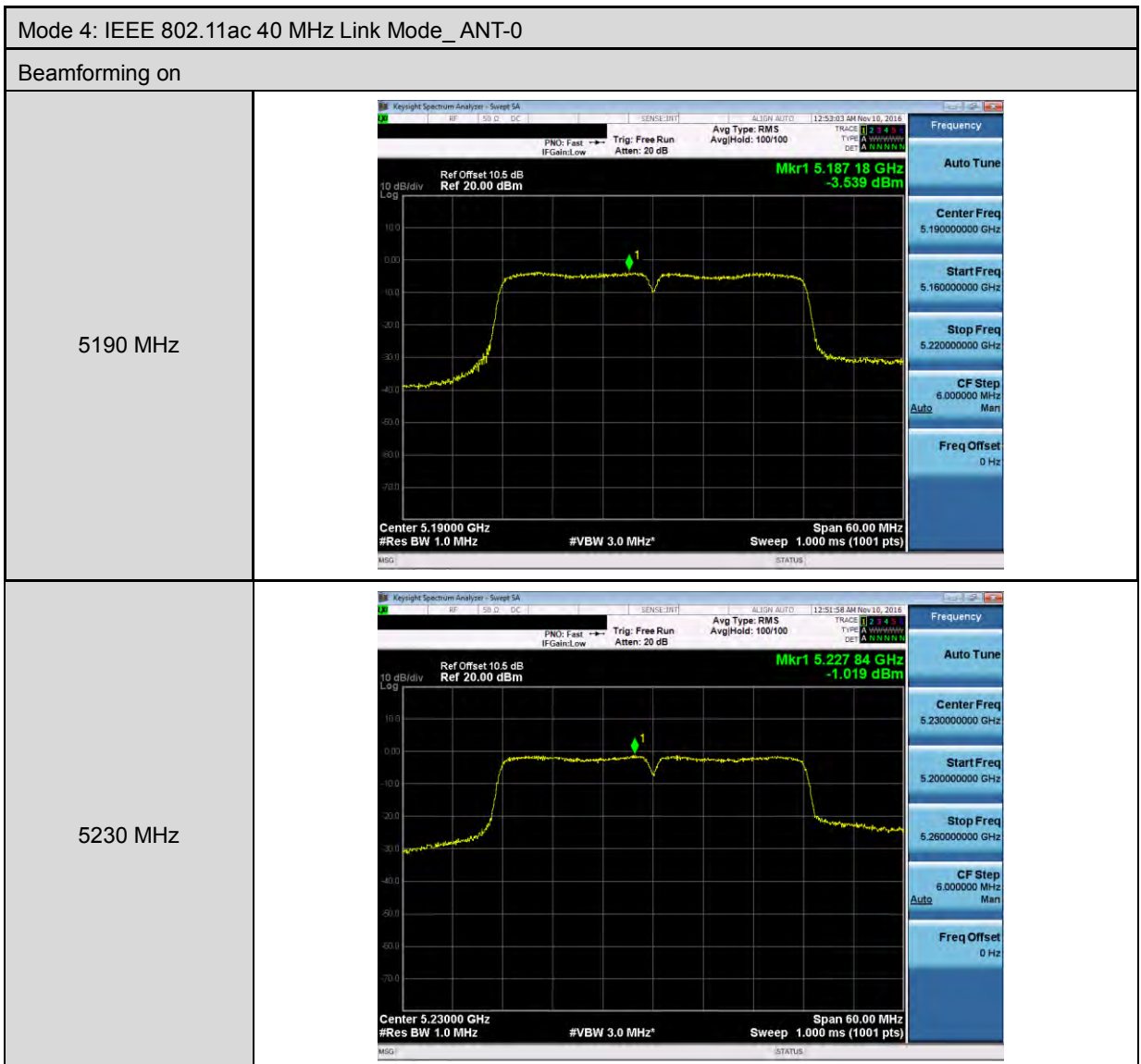


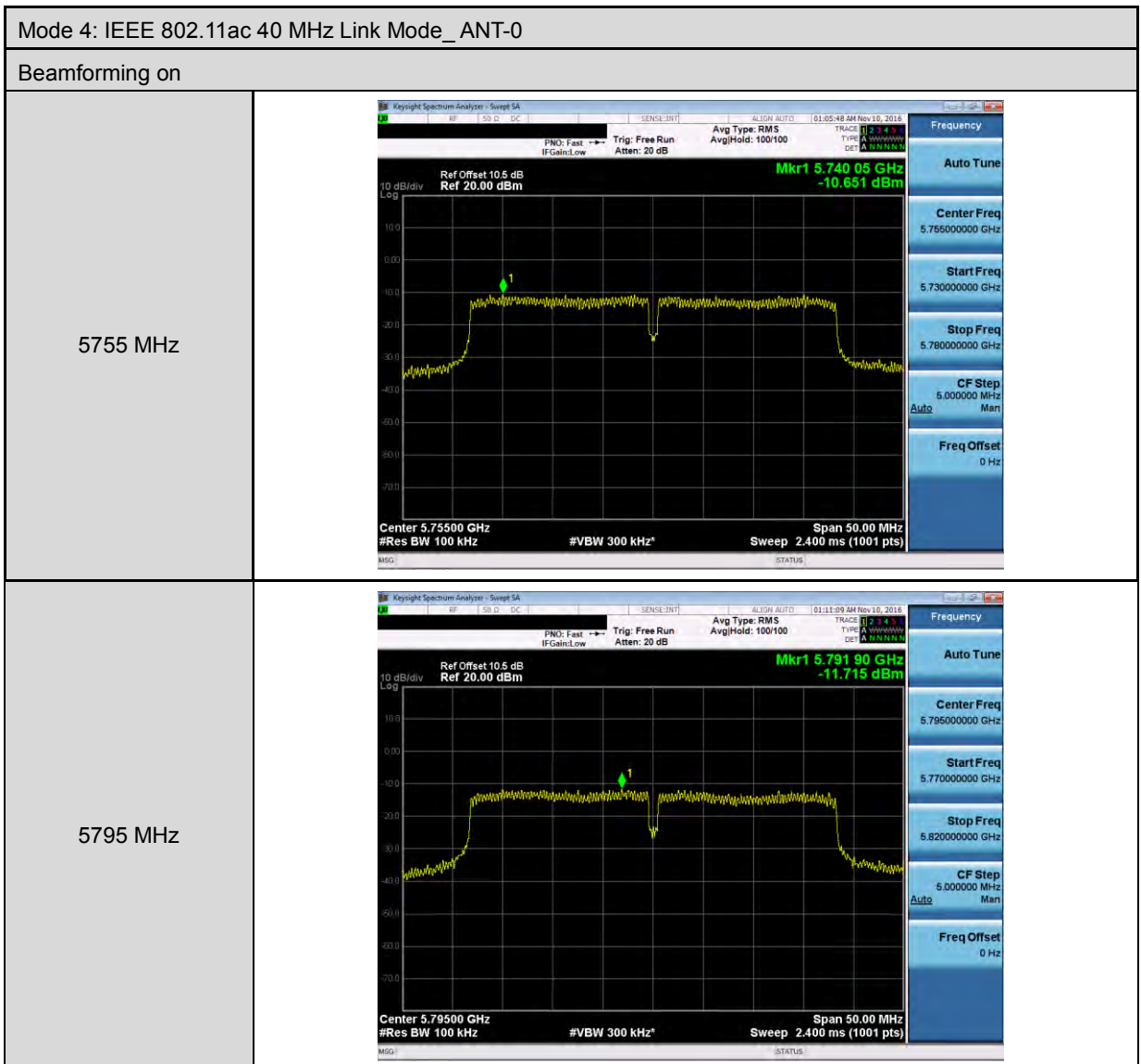


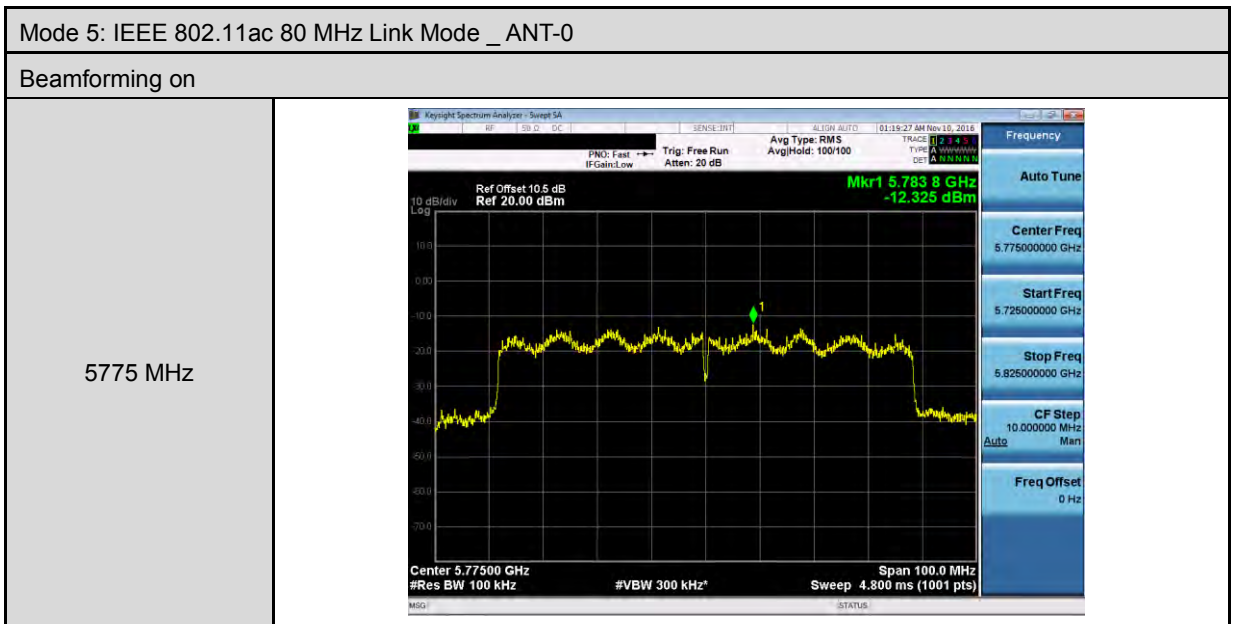
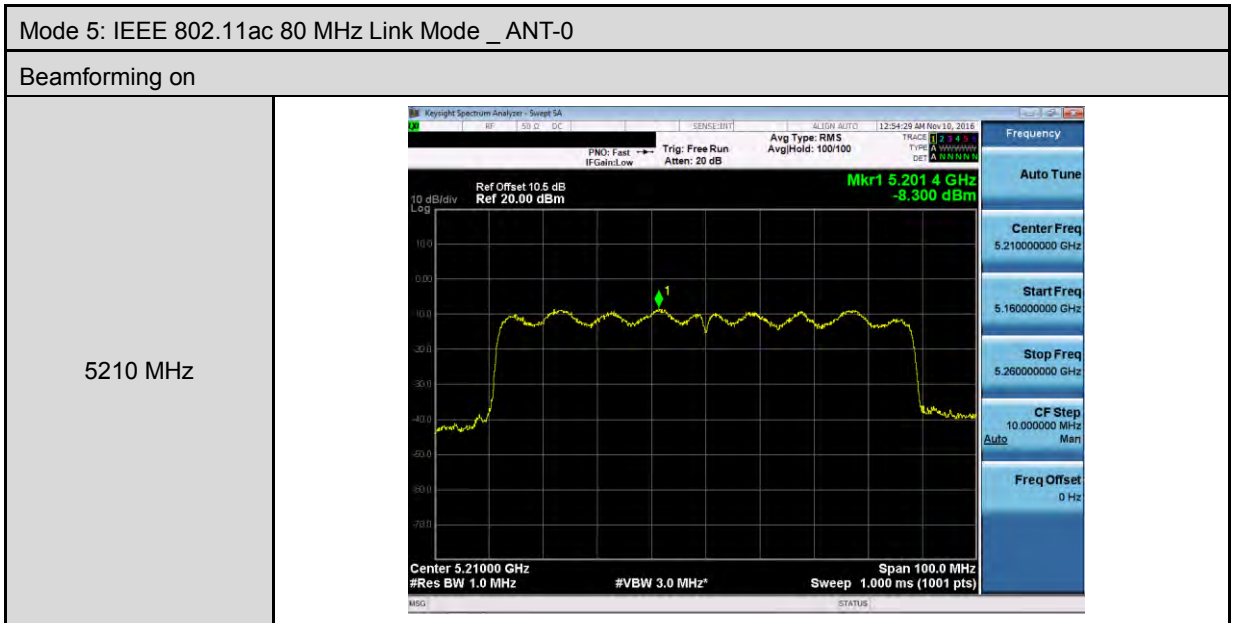
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-0	
Beamforming on	
5180 MHz	
5200 MHz	
5240 MHz	



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





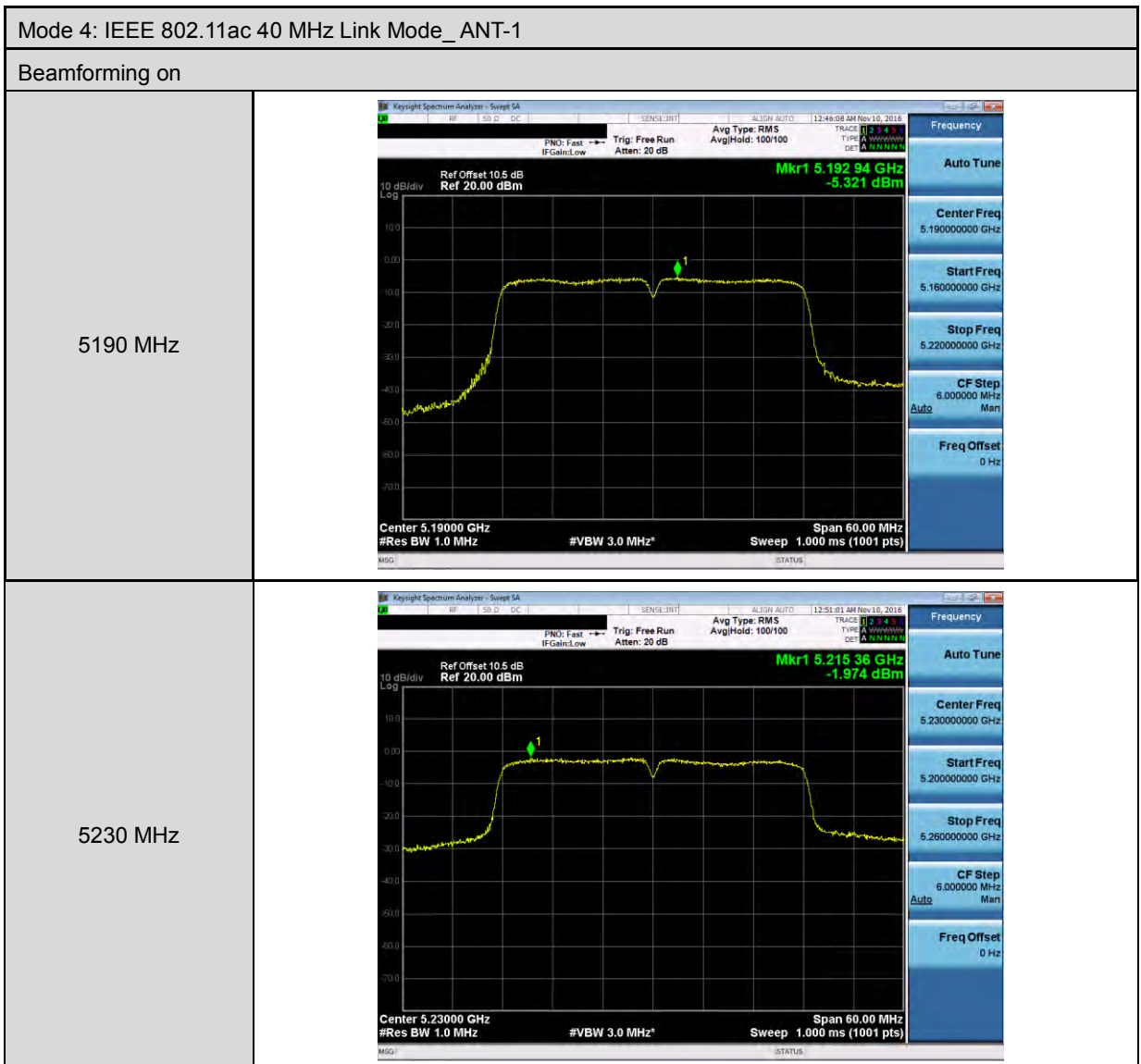


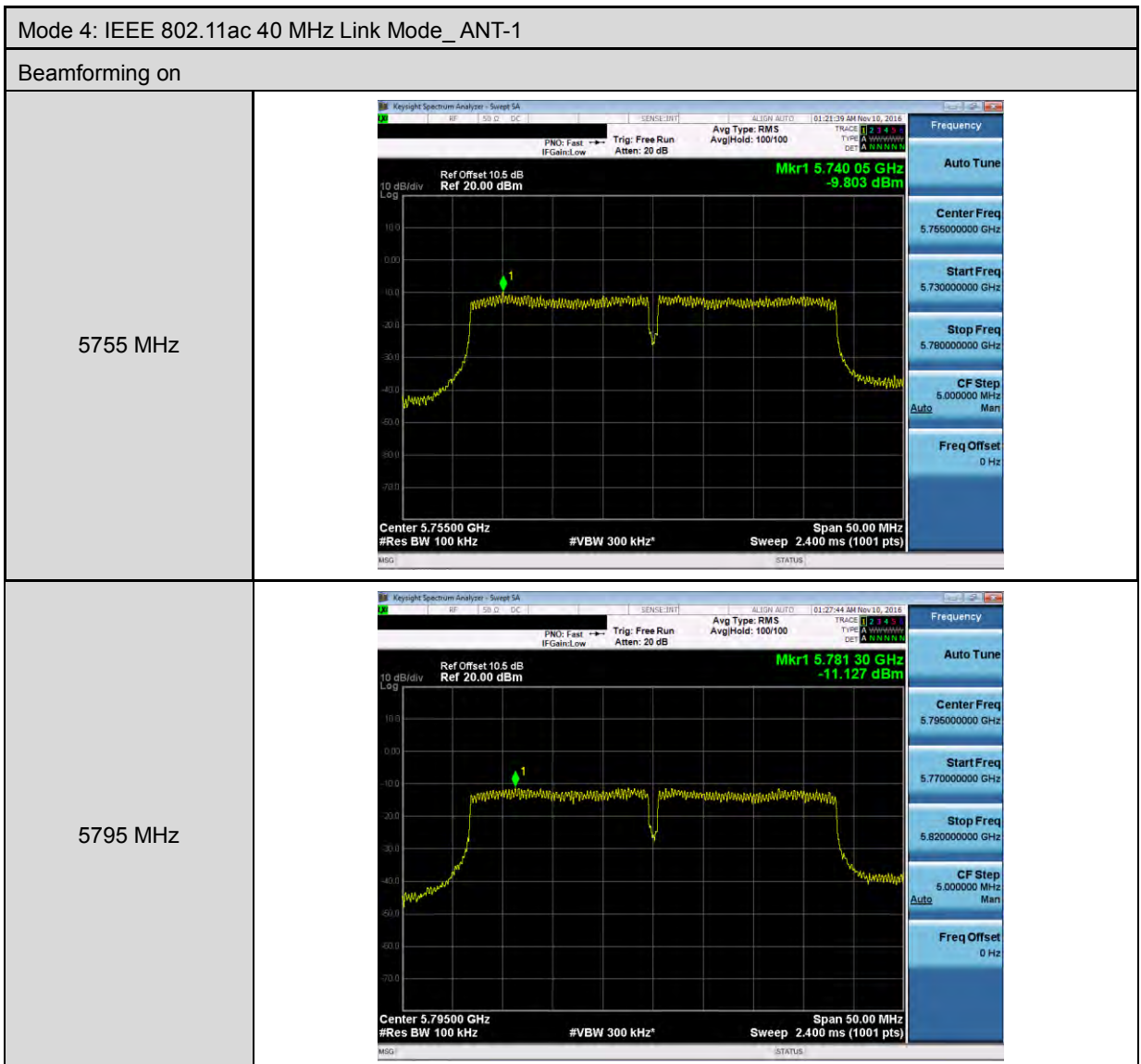


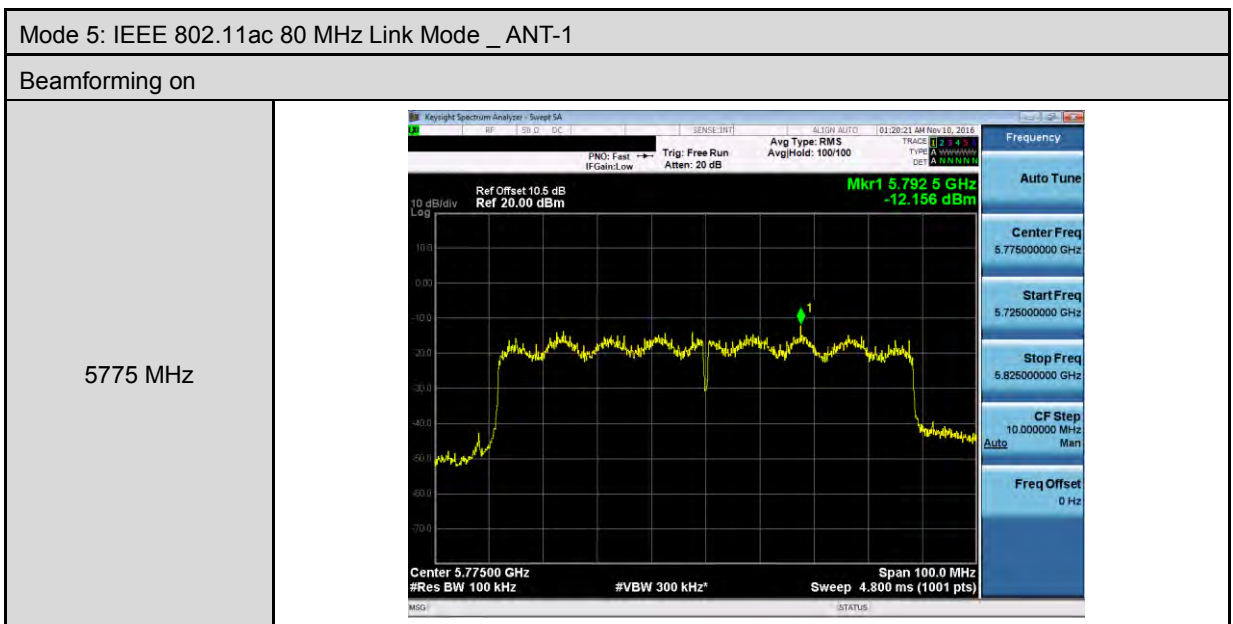
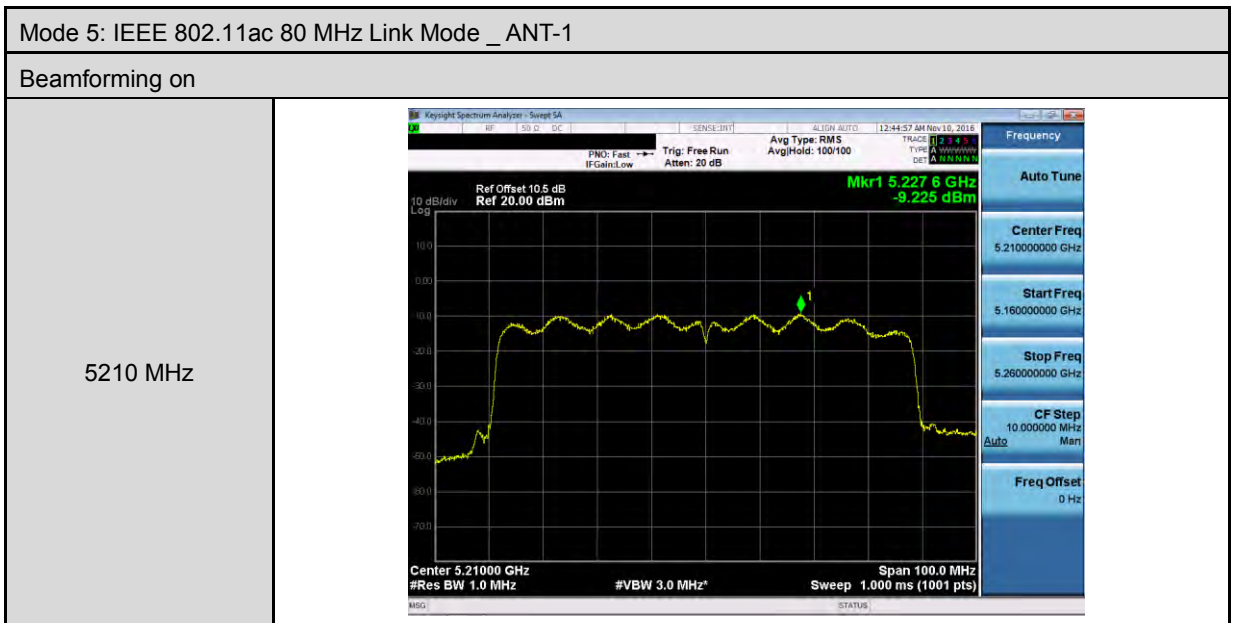
Mode 3: IEEE 802.11ac 20 MHz Link Mode _ ANT-1	
Beamforming on	
5180 MHz	
5200 MHz	
5240 MHz	



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









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.