

Annex C. Conducted Test Results

Maximum Conducted Output Power and Transmit power control Measurement

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5260	6 M	12.67	0.018	11.58	0.014	11.10	0.013	10.88	0.012	≤ 23.90
5280		12.72	0.019	11.51	0.014	11.22	0.013	10.95	0.012	
5300		12.77	0.019	11.49	0.014	11.09	0.013	11.22	0.013	
5320		12.75	0.019	11.08	0.013	10.81	0.012	11.43	0.014	
5500		10.69	0.012	10.57	0.011	9.75	0.009	10.11	0.010	≤ 23.91
5520		10.58	0.011	10.48	0.011	9.95	0.010	10.04	0.010	
5540		10.62	0.012	10.40	0.011	9.83	0.010	9.99	0.010	
5560		10.11	0.010	9.90	0.010	10.04	0.010	10.02	0.010	
5580		10.05	0.010	9.74	0.009	9.97	0.010	10.17	0.010	
5660		10.17	0.010	9.67	0.009	9.72	0.009	10.09	0.010	
5680		10.15	0.010	9.45	0.009	9.57	0.009	9.86	0.010	
5700		10.22	0.011	9.24	0.008	9.31	0.009	9.94	0.010	

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5260	6 M	17.63	0.058	≤ 23.90	
5280		17.68	0.059		
5300		17.72	0.059		
5320		17.60	0.058		
5500		16.32	0.043	≤ 23.91	
5520		16.29	0.043		
5540		16.24	0.042		
5560		16.04	0.040		
5580		16.01	0.040		
5660		15.94	0.039		
5680		15.79	0.038		
5700		15.72	0.037		

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

Test Mode		Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode									
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)	
		Max. Output Power									
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5260	26 M	17.05	0.051	16.35	0.043	16.08	0.041	15.23	0.033	≤ 24.00	
5280		17.01	0.050	16.38	0.043	16.14	0.041	15.40	0.035		
5300		17.08	0.051	16.29	0.043	16.15	0.041	15.65	0.037		
5320		17.18	0.052	16.10	0.041	16.03	0.040	15.77	0.038		
5500		15.78	0.038	15.69	0.037	15.58	0.036	15.11	0.032	≤ 24.00	
5520		15.67	0.037	15.64	0.037	15.69	0.037	15.19	0.033		
5540		15.66	0.037	15.50	0.035	15.78	0.038	15.13	0.033		
5560		15.89	0.039	15.71	0.037	15.93	0.039	15.34	0.034		
5580		15.79	0.038	15.62	0.036	15.90	0.039	15.37	0.034		
5660		15.66	0.037	15.27	0.034	15.81	0.038	15.04	0.032		
5680		15.70	0.037	15.16	0.033	15.55	0.036	15.13	0.033		
5700		15.74	0.037	14.87	0.031	15.88	0.039	15.11	0.032		

Test Mode		Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5260	26 M	22.25	0.168	≤ 24.00	
5280		22.29	0.169		
5300		22.34	0.172		
5320		22.33	0.171		
5500		21.57	0.143	≤ 24.00	
5520		21.57	0.144		
5540		21.54	0.143		
5560		21.74	0.149		
5580		21.70	0.148		
5660		21.48	0.140		
5680		21.41	0.138		
5700		21.44	0.139		

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

Test Mode		Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5270	54 M	18.45	0.070	17.64	0.058	17.47	0.056	16.56	0.045	≤ 24.00
5310		17.48	0.056	16.47	0.044	16.38	0.043	15.91	0.039	
5510		15.79	0.038	15.52	0.036	15.28	0.034	15.04	0.032	≤ 24.00
5550		18.01	0.063	17.28	0.053	18.09	0.064	17.29	0.054	
5670		17.59	0.057	16.68	0.047	17.52	0.056	16.94	0.049	

Test Mode		Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5270	54 M	23.60	0.229	≤ 24.00	
5310		22.62	0.183		
5510		21.44	0.139	≤ 24.00	
5550		23.71	0.235		
5670		23.22	0.210		

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

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode									
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)	
		Max. Output Power									
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5260	26 M	17.14	0.052	16.49	0.045	16.16	0.041	15.31	0.034	≤ 24.00	
5280		17.13	0.052	16.45	0.044	16.24	0.042	15.51	0.036		
5300		17.22	0.053	16.38	0.043	16.23	0.042	15.72	0.037		
5320		17.26	0.053	16.20	0.042	16.12	0.041	15.91	0.039		
5500		15.89	0.039	15.84	0.038	15.72	0.037	15.19	0.033	≤ 24.00	
5520		15.76	0.038	15.77	0.038	15.81	0.038	15.28	0.034		
5540		15.83	0.038	15.70	0.037	15.94	0.039	15.27	0.034		
5560		15.97	0.040	15.83	0.038	16.10	0.041	15.49	0.035		
5580		15.88	0.039	15.75	0.038	16.05	0.040	15.48	0.035		
5660		15.79	0.038	15.37	0.034	15.92	0.039	15.21	0.033		
5680		15.85	0.038	15.31	0.034	15.73	0.037	15.28	0.034		
5700		15.89	0.039	14.94	0.031	15.97	0.040	15.23	0.033		

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode		
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)
		(dBm)	(W)	
5260	26 M	22.35	0.172	≤ 24.00
5280		22.39	0.173	
5300		22.44	0.175	
5320		22.43	0.175	
5500		21.69	0.148	≤ 24.00
5520		21.68	0.147	
5540		21.71	0.148	
5560		21.87	0.154	
5580		21.82	0.152	
5660		21.60	0.145	
5680		21.57	0.144	
5700		21.55	0.143	

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

Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5270	54 M	18.52	0.071	17.75	0.060	17.59	0.057	16.70	0.047	≤ 24.00
5310		17.60	0.058	16.54	0.045	16.48	0.044	16.02	0.040	
5510		15.90	0.039	15.67	0.037	15.42	0.035	15.12	0.033	≤ 24.00
5550		18.14	0.065	17.49	0.056	18.20	0.066	17.43	0.055	
5670		17.68	0.059	16.95	0.050	17.64	0.058	17.03	0.050	

Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5270	54 M	23.71	0.235	≤ 24.00	
5310		22.72	0.187		
5510		21.56	0.143	≤ 24.00	
5550		23.85	0.243		
5670		23.36	0.217		

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5290	117.2 M	14.01	0.025	13.36	0.022	13.22	0.021	12.40	0.017	≤ 24.00
5530		10.12	0.010	10.28	0.011	10.27	0.011	9.75	0.009	≤ 24.00

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5290	117.2 M	19.31	0.085	≤ 24.00	
5530		16.13	0.041	≤ 24.00	

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



Beamforming on

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5260	26 M	10.99	0.013	10.34	0.011	9.98	0.010	9.20	0.008	≤ 19.59
5280		10.95	0.012	10.36	0.011	10.03	0.010	9.31	0.009	
5300		11.06	0.013	10.21	0.010	10.01	0.010	9.58	0.009	
5320		11.08	0.013	10.02	0.010	9.96	0.010	9.71	0.009	
5500		9.79	0.010	9.76	0.009	9.57	0.009	9.04	0.008	≤ 18.70
5520		9.65	0.009	9.58	0.009	9.69	0.009	9.08	0.008	
5540		9.73	0.009	9.55	0.009	9.76	0.009	9.11	0.008	
5560		9.81	0.010	9.72	0.009	9.94	0.010	9.17	0.008	
5580		9.77	0.009	9.62	0.009	9.84	0.010	9.24	0.008	
5660		9.69	0.009	9.14	0.008	9.72	0.009	9.10	0.008	
5680		9.74	0.009	9.09	0.008	9.55	0.009	9.16	0.008	
5700		9.80	0.010	8.74	0.007	9.75	0.009	9.12	0.008	

Test Mode		Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5260	26 M	16.20	0.042	≤ 19.59	
5280		16.22	0.042		
5300		16.27	0.042		
5320		16.25	0.042		
5500		15.57	0.036	≤ 18.70	
5520		15.53	0.036		
5540		15.57	0.036		
5560		15.69	0.037		
5580		15.64	0.037		
5660		15.44	0.035		
5680		15.41	0.035		
5700		15.40	0.035		

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



Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5270	54 M	12.23	0.017	11.65	0.015	11.35	0.014	10.47	0.011	≤ 19.59
5310		11.42	0.014	10.42	0.011	10.27	0.011	9.79	0.010	
5510		9.47	0.009	9.54	0.009	9.13	0.008	8.80	0.008	≤ 18.70
5550		12.00	0.016	11.32	0.014	12.08	0.016	11.32	0.014	
5670		11.59	0.014	10.78	0.012	11.46	0.014	10.76	0.012	

Test Mode		Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
5270	54 M	17.49	0.056	≤ 19.59	
5310		16.54	0.045		
5510		15.27	0.034	≤ 18.70	
5550		17.72	0.059		
5670		17.18	0.052		

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode								
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-2		ANT-3		FCC Limit (dBm)
		Max. Output Power								
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5290	117.2 M	7.86	0.006	7.09	0.005	6.89	0.005	6.07	0.004	≤ 19.59
5530		3.96	0.002	4.14	0.003	4.13	0.003	3.63	0.002	≤ 18.70

Test Mode		Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	Data Rate	Max. Transmitter Output Power (ANT-0+1+2+3)		FCC Limit (dBm)	
		(dBm)	(W)		
		5290	117.2 M	13.04	0.020
5530	9.99	0.010		≤ 18.70	

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



26 dB RF Bandwidth

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	19.790	19.800	19.780	19.960
5280.0	19.760	19.910	19.870	19.940
5320.0	20.040	19.810	19.720	19.480
5500.0	19.990	19.790	19.650	19.960
5560.0	19.920	19.920	19.610	19.870
5700.0	19.710	19.810	19.560	19.870

Test Mode	Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	20.430	20.600	20.580	20.320
5280.0	20.380	20.530	20.580	20.390
5320.0	20.560	20.470	20.540	20.380
5500.0	20.400	20.570	20.590	20.670
5560.0	20.470	20.490	20.480	20.580
5700.0	20.390	20.490	20.450	20.690

Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	40.420	40.520	40.180	40.310
5310.0	40.460	40.290	40.240	40.160
5510.0	40.800	40.560	40.370	40.050
5550.0	40.560	40.480	40.440	40.040
5670.0	40.730	40.710	40.510	40.210

	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	20.490	20.390	20.690	20.850
5280.0	20.470	20.500	20.640	20.720
5320.0	20.380	20.550	20.660	20.730
5500.0	20.340	20.570	20.600	20.780
5560.0	20.420	20.630	20.600	20.660
5700.0	20.810	20.490	20.670	20.690



Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	40.440	40.420	40.420	40.410
5310.0	40.390	40.480	40.490	40.370
5510.0	40.280	40.410	40.440	40.530
5550.0	40.420	40.570	40.480	40.580
5670.0	40.330	40.360	40.450	40.410

Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5290.0	83.820	83.110	83.710	82.310
5530.0	83.790	83.660	83.710	82.480



Beamforming on

	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	20.550	20.670	20.550	20.370
5280.0	20.460	20.570	20.660	20.460
5320.0	20.540	20.500	20.720	20.540
5500.0	20.450	20.580	20.630	20.570
5560.0	20.320	20.760	20.560	20.590
5700.0	20.620	20.540	20.650	20.740

Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	40.430	40.610	40.230	40.070
5310.0	40.510	40.620	40.250	40.100
5510.0	40.430	40.570	40.320	40.140
5550.0	40.520	40.450	40.090	40.120
5670.0	40.380	40.660	40.110	40.150

Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5290.0	83.860	83.450	84.040	83.450
5530.0	84.060	84.060	84.290	83.130



99 % Occupied Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	16.494	16.461	16.456	16.452
5280.0	16.458	16.471	16.476	16.443
5320.0	16.491	16.473	16.472	16.425
5500.0	16.482	16.462	16.455	16.430
5560.0	16.480	16.492	16.453	16.424
5700.0	16.484	16.452	16.456	16.438

Test Mode	Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	17.610	17.624	17.616	17.603
5280.0	17.605	17.629	17.620	17.607
5320.0	17.623	17.617	17.611	17.616
5500.0	17.632	17.618	17.623	17.644
5560.0	17.603	17.624	17.625	17.646
5700.0	17.613	17.621	17.619	17.633

Test Mode	Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	35.928	35.956	35.891	35.959
5310.0	35.956	35.953	35.901	35.975
5510.0	35.994	35.944	35.929	35.897
5550.0	35.991	35.944	35.936	35.911
5670.0	36.026	36.018	35.987	35.947

Test Mode	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	17.624	17.621	17.633	17.649
5280.0	17.621	17.620	17.642	17.629
5320.0	17.622	17.618	17.625	17.639
5500.0	17.618	17.650	17.636	17.639
5560.0	17.641	17.639	17.656	17.633
5700.0	17.632	17.635	17.638	17.637



Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	35.995	36.021	36.002	35.998
5310.0	36.015	35.987	35.986	36.020
5510.0	36.043	36.036	36.026	36.031
5550.0	36.036	36.052	36.040	36.039
5670.0	36.058	36.038	36.027	36.048

Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5290.0	75.794	75.693	75.790	75.704
5530.0	75.765	75.654	75.770	75.625

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

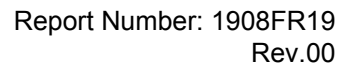
Beamforming on

	Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5260.0	17.620	17.636	17.633	17.606
5280.0	17.624	17.644	17.628	17.617
5320.0	17.627	17.634	17.631	17.622
5500.0	17.627	17.631	17.636	17.633
5560.0	17.624	17.639	17.631	17.645
5700.0	17.625	17.637	17.641	17.634

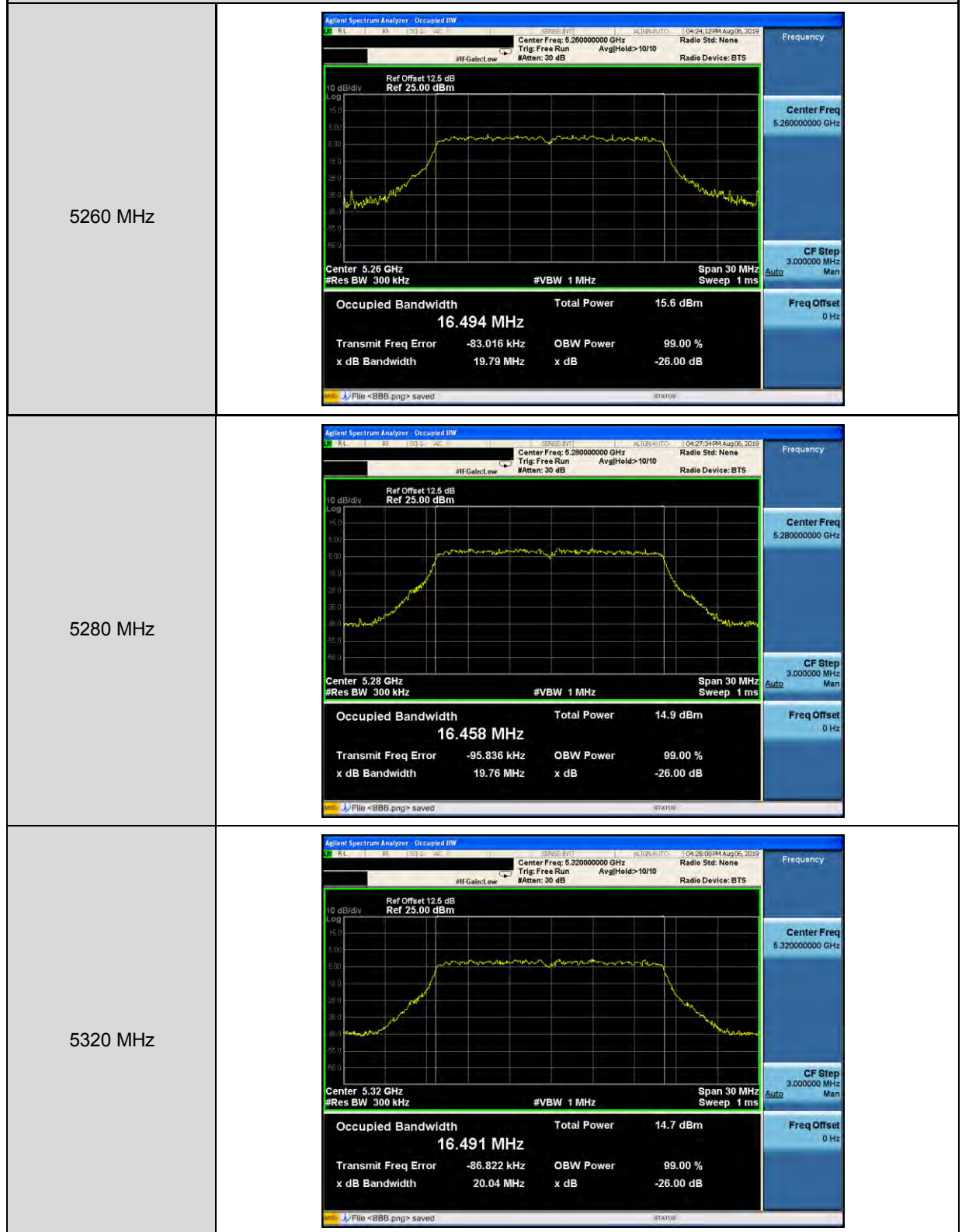
Test Mode	Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5270.0	35.947	35.961	35.903	35.960
5310.0	35.999	35.958	35.907	35.936
5510.0	35.998	35.957	35.946	35.885
5550.0	36.007	35.931	35.923	35.896
5670.0	36.001	35.998	35.961	35.928

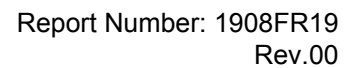
Test Mode	Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-2	ANT-3
5290.0	75.764	75.692	75.825	75.785
5530.0	75.737	75.687	75.779	75.668

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

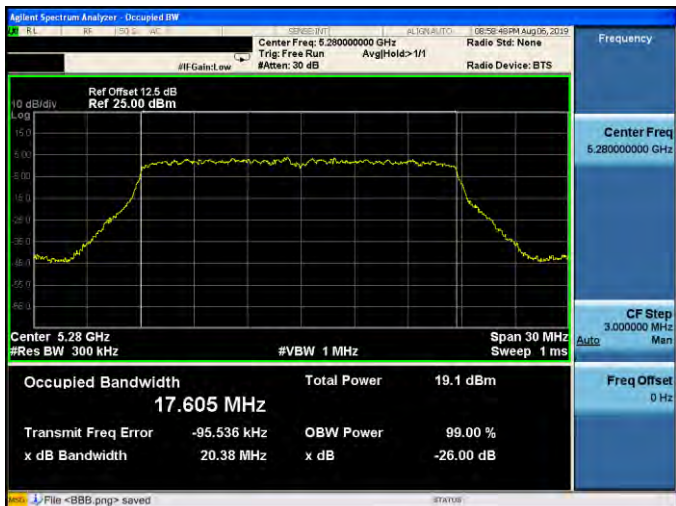
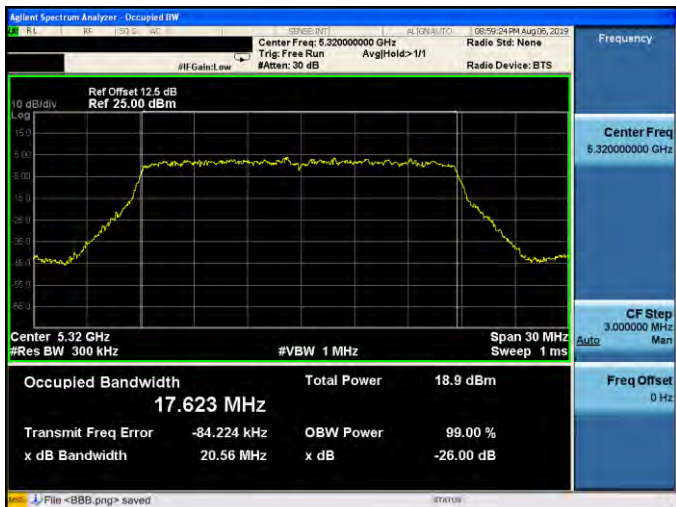


Mode 2: IEEE 802.11a Continuous TX mode_ANT-0



235 of 357

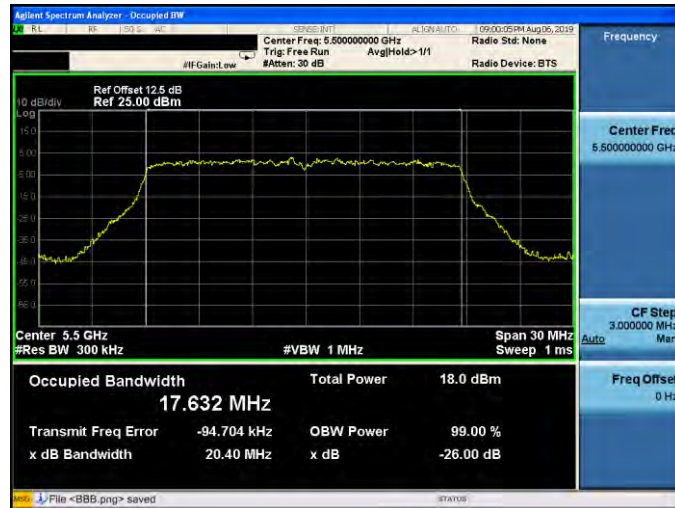


Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-0	
5260 MHz	 Center Freq: 5.26000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.26 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.610 MHz Total Power 19.1 dBm Transmit Freq Error -81.475 kHz OBW Power 99.00 % x dB Bandwidth 20.43 MHz x dB -26.00 dB File <BBB.png> saved
5280 MHz	 Center Freq: 5.28000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.28 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.605 MHz Total Power 19.1 dBm Transmit Freq Error -95.536 kHz OBW Power 99.00 % x dB Bandwidth 20.38 MHz x dB -26.00 dB File <BBB.png> saved
5320 MHz	 Center Freq: 5.32000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.32 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.623 MHz Total Power 18.9 dBm Transmit Freq Error -84.224 kHz OBW Power 99.00 % x dB Bandwidth 20.56 MHz x dB -26.00 dB File <BBB.png> saved

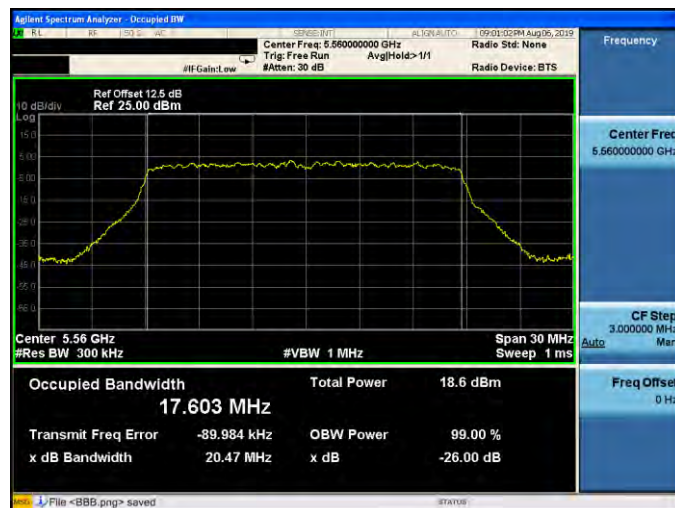


Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-0

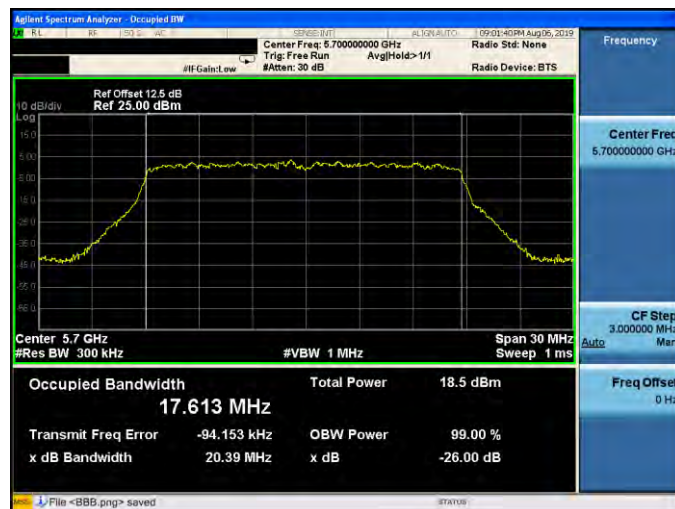
5500 MHz



5560 MHz



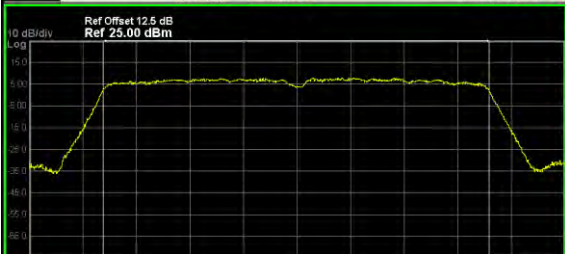
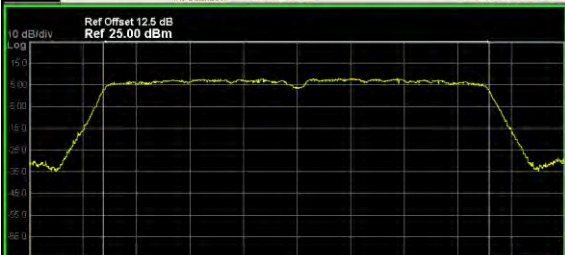
5700 MHz

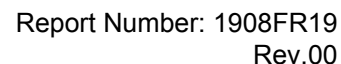


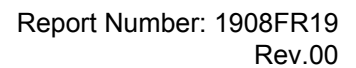


Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-0	
5270 MHz	
5310 MHz	
5510 MHz	

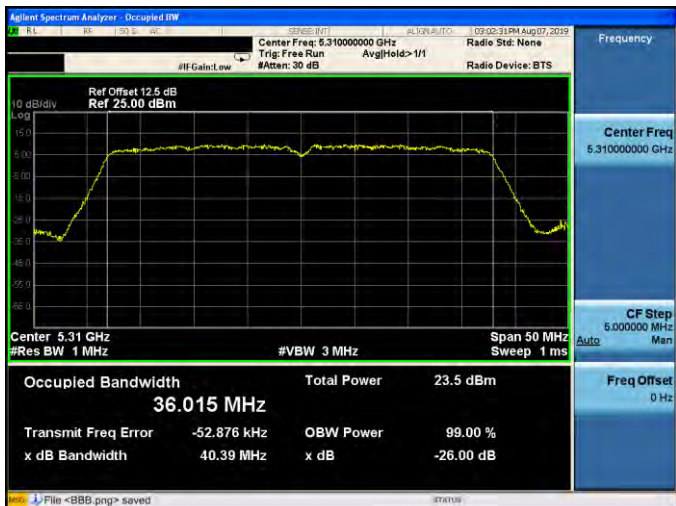


Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-0	
5550 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.550000000 GHz Trig: Free Run Avg/Hold: >1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm  Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.991 MHz Total Power 21.7 dBm Transmit Freq Error -74.029 kHz OBW Power 99.00 % x dB Bandwidth 40.56 MHz x dB -26.00 dB File <BBB.png> saved STATUS Frequency Center Freq 5.550000000 GHz CF Step 5.000000 MHz Man Freq Offset 0 Hz
5670 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.670000000 GHz Trig: Free Run Avg/Hold: >1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm  Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.026 MHz Total Power 21.8 dBm Transmit Freq Error -61.086 kHz OBW Power 99.00 % x dB Bandwidth 40.73 MHz x dB -26.00 dB File <BBB.png> saved STATUS Frequency Center Freq 5.670000000 GHz CF Step 5.000000 MHz Man Freq Offset 0 Hz

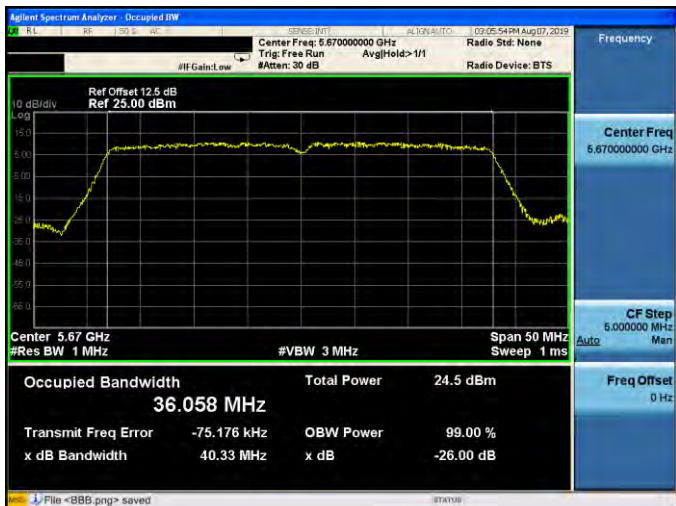
240 of 357

241 of 357



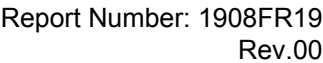
Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5270 MHz	
5310 MHz	
5510 MHz	



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5550 MHz	
5670 MHz	

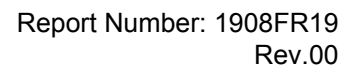


Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0	
5290 MHz	 Center Freq: 5.29000000 GHz Trig: Free Run Ave/Hold: 10/10 Radio Std: Nene Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.29 GHz #Res BW 1 MHz #VBW 3 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 75.794 MHz Total Power 16.7 dBm Transmit Freq Error -189.38 kHz OBW Power 99.00 % x dB Bandwidth 83.82 MHz x dB -26.00 dB Frequency Center Freq 5.29000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
5530 MHz	 Center Freq: 5.53000000 GHz Trig: Free Run Ave/Hold: 10/10 Radio Std: Nene Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.53 GHz #Res BW 1 MHz #VBW 3 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 75.765 MHz Total Power 18.2 dBm Transmit Freq Error -154.85 kHz OBW Power 99.00 % x dB Bandwidth 83.79 MHz x dB -26.00 dB Frequency Center Freq 5.53000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved

245 of 357



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5500 MHz	
5560 MHz	
5700 MHz	

247 of 357



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

5500 MHz

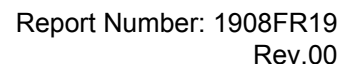


5560 MHz

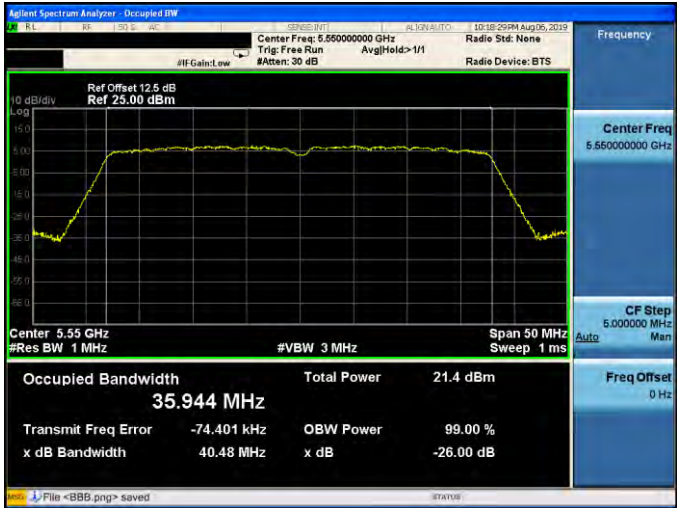


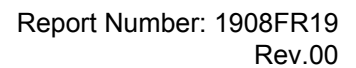
5700 MHz

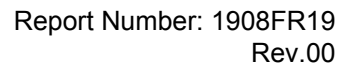


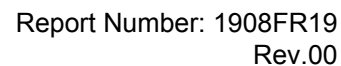
249 of 357



Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-1	
5550 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.944 MHz Total Power 21.4 dBm Transmit Freq Error -74.401 kHz OBW Power 99.00 % x dB Bandwidth 40.48 MHz x dB -26.00 dB File <BBB.png> saved
5670 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.018 MHz Total Power 20.9 dBm Transmit Freq Error -73.698 kHz OBW Power 99.00 % x dB Bandwidth 40.71 MHz x dB -26.00 dB File <BBB.png> saved

251 of 357

252 of 357

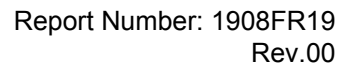
253 of 357



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-1	
5550 MHz	Center Freq: 5.55000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.052 MHz Total Power 26.2 dBm Transmit Freq Error -78.505 kHz OBW Power 99.00 % x dB Bandwidth 40.57 MHz x dB -26.00 dB File <BBB.png> saved
5670 MHz	Center Freq: 5.67000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.038 MHz Total Power 24.9 dBm Transmit Freq Error -72.805 kHz OBW Power 99.00 % x dB Bandwidth 40.36 MHz x dB -26.00 dB File <BBB.png> saved



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-1	
5290 MHz	
5530 MHz	

256 of 357

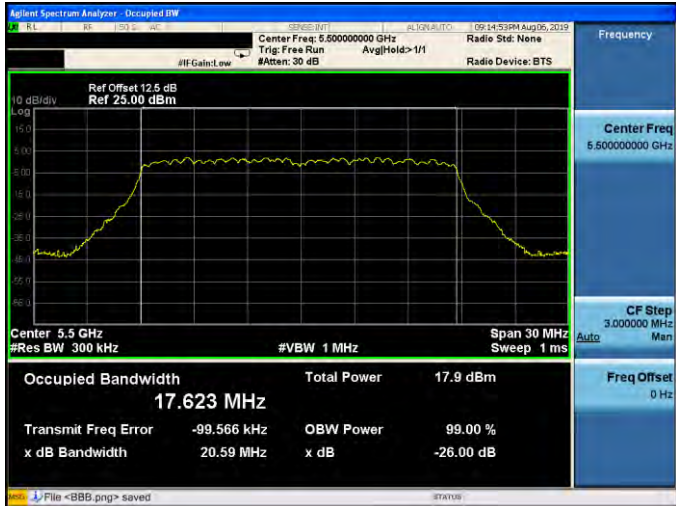
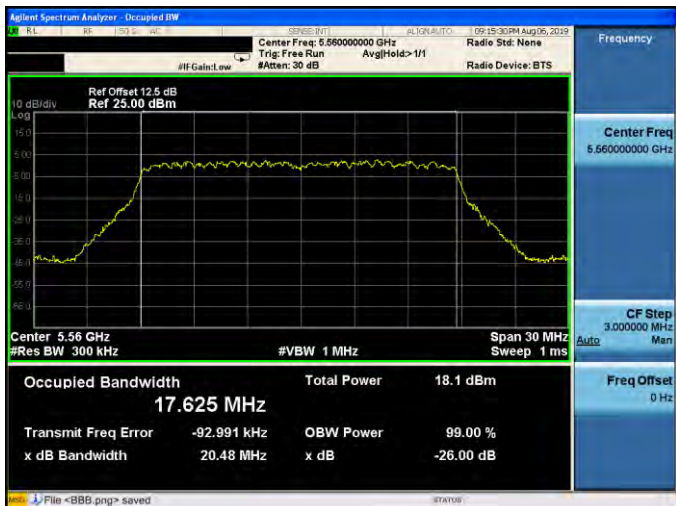
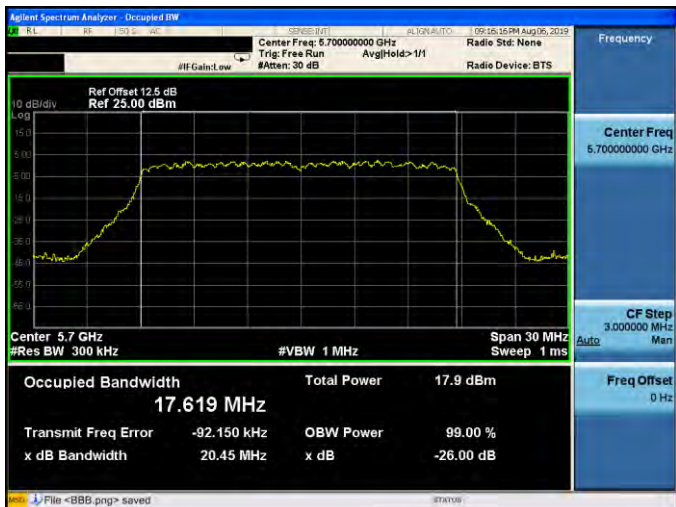


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-2	
5500 MHz	
5560 MHz	
5700 MHz	

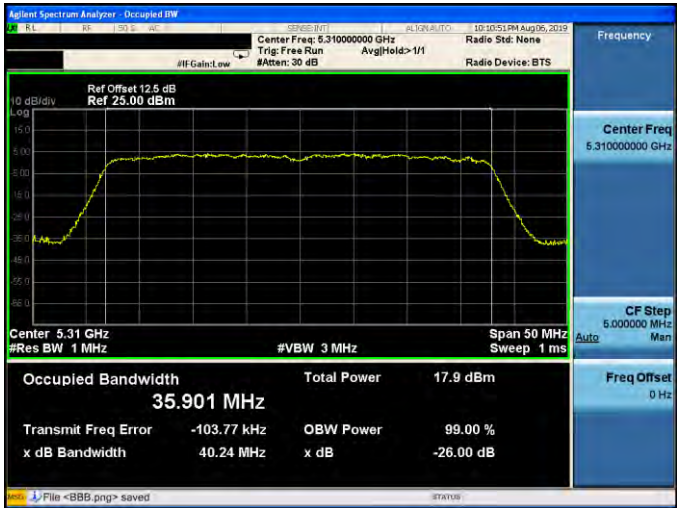


Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-2	
5260 MHz	
5280 MHz	
5320 MHz	



Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-2	
5500 MHz	
5560 MHz	
5700 MHz	

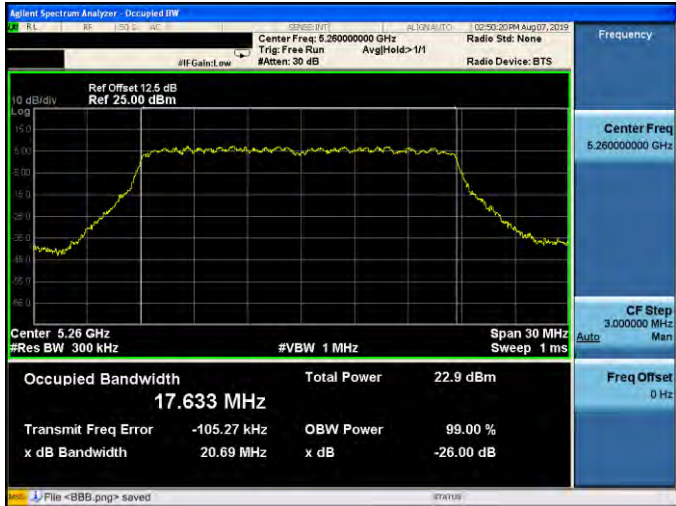
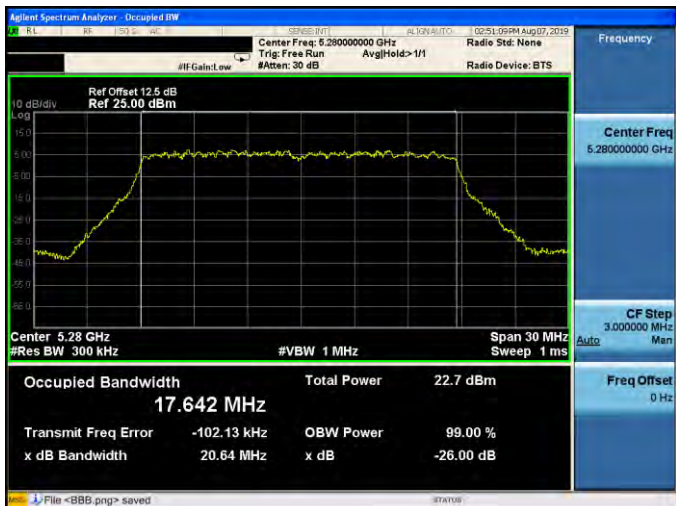
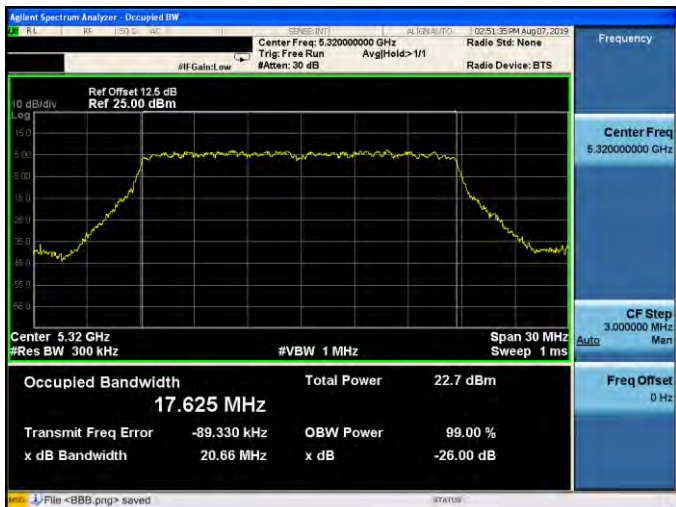


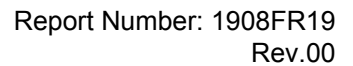
Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-2	
5270 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.27 GHz #Res BW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.891 MHz Total Power 20.0 dBm Transmit Freq Error -73.446 kHz OBW Power 99.00 % x dB Bandwidth 40.18 MHz x dB -26.00 dB File <BBB.png> saved
5310 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.31 GHz #Res BW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.901 MHz Total Power 17.9 dBm Transmit Freq Error -103.77 kHz OBW Power 99.00 % x dB Bandwidth 40.24 MHz x dB -26.00 dB File <BBB.png> saved
5510 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.51 GHz #Res BW 1 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.929 MHz Total Power 18.2 dBm Transmit Freq Error -100.27 kHz OBW Power 99.00 % x dB Bandwidth 40.37 MHz x dB -26.00 dB File <BBB.png> saved



Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-2	
5550 MHz	
5670 MHz	



Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-2	
5260 MHz	
5280 MHz	
5320 MHz	

263 of 357



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-2

5270 MHz

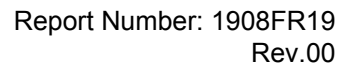


5310 MHz



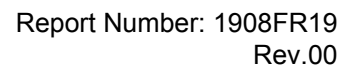
5510 MHz

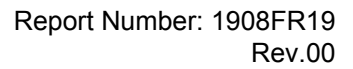


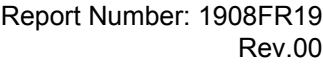
265 of 357



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-2	
5290 MHz	
5530 MHz	

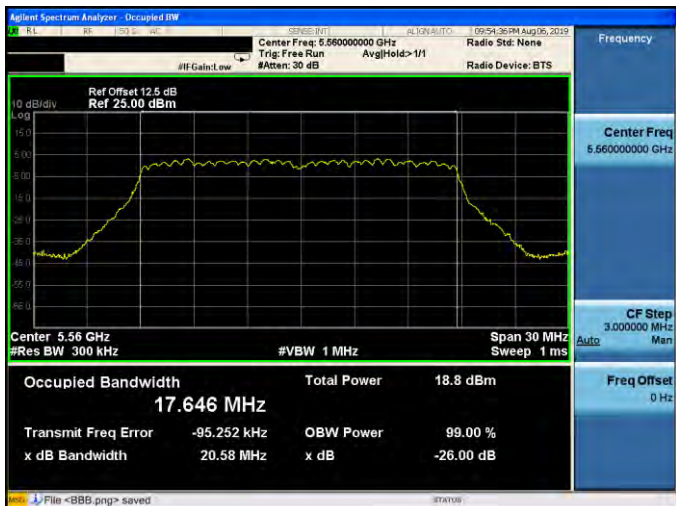
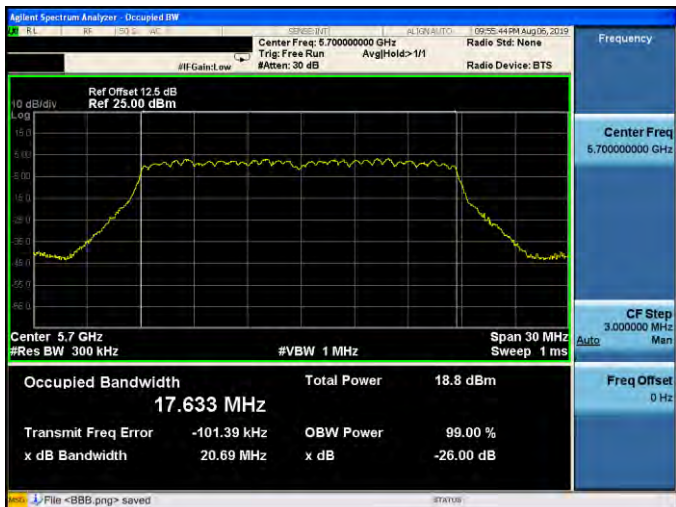
267 of 357

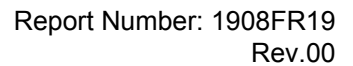
268 of 357



Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous-TX mode _ ANT-3	
5260 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz Span 30 MHz Res BW 300 kHz VBW 1 MHz Sweep 1 ms Occupied Bandwidth: 17.603 MHz Total Power: 16.7 dBm Transmit Freq Error: -95.679 kHz x dB Bandwidth: 20.32 MHz OBW Power: x dB -26.00 dB
5280 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz Span 30 MHz Res BW 300 kHz VBW 1 MHz Sweep 1 ms Occupied Bandwidth: 17.607 MHz Total Power: 17.1 dBm Transmit Freq Error: -101.32 kHz x dB Bandwidth: 20.39 MHz OBW Power: x dB -26.00 dB
5320 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz Span 30 MHz Res BW 300 kHz VBW 1 MHz Sweep 1 ms Occupied Bandwidth: 17.616 MHz Total Power: 16.9 dBm Transmit Freq Error: -98.911 kHz x dB Bandwidth: 20.38 MHz OBW Power: x dB -26.00 dB



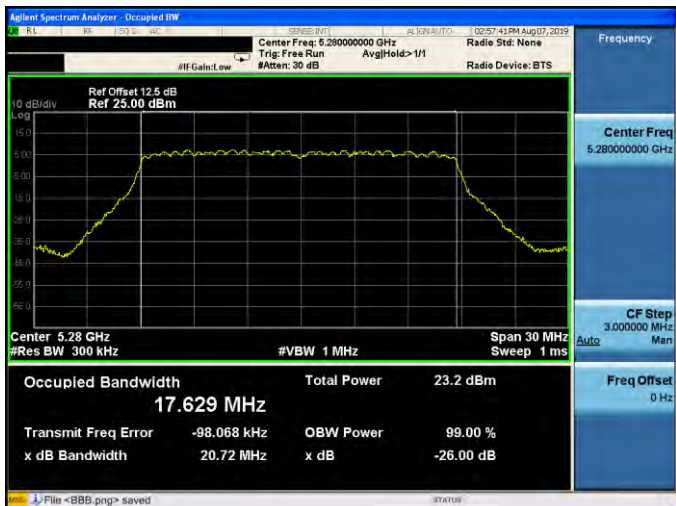
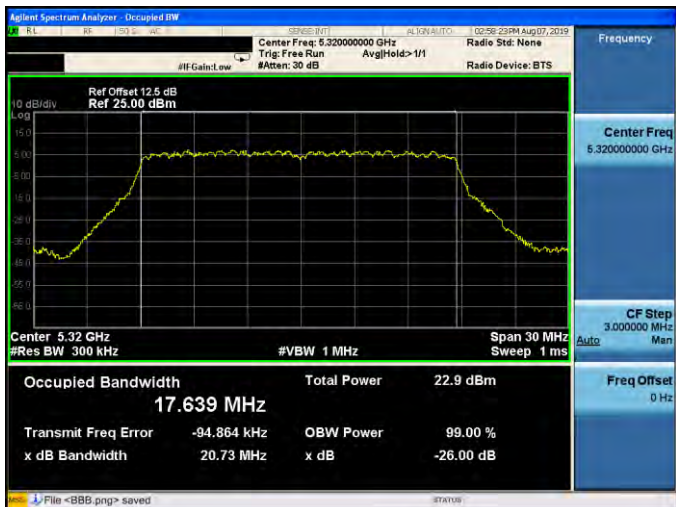
Mode 3: IEEE 802.11n 5 GHz 20 MHz Continuous TX mode _ ANT-3	
5500 MHz	
5560 MHz	
5700 MHz	

271 of 357

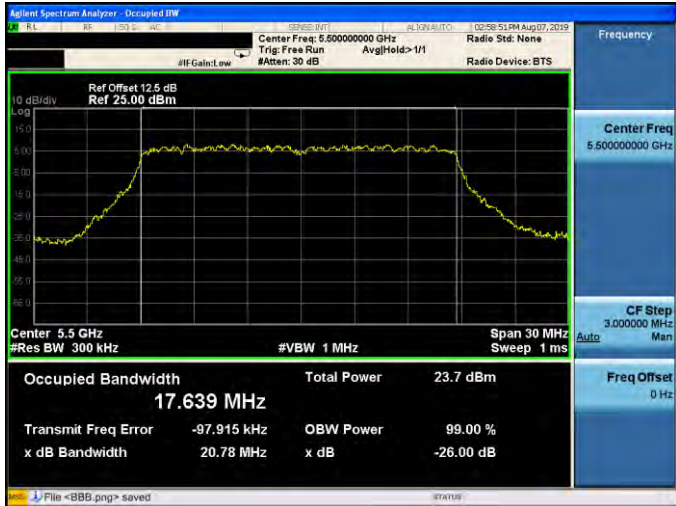
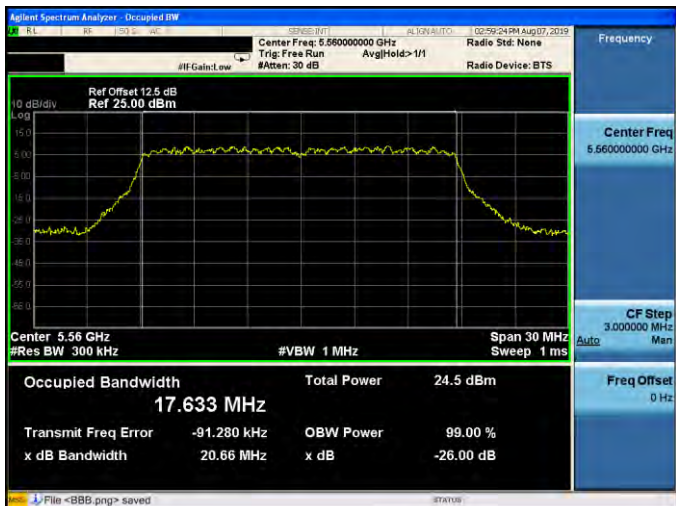
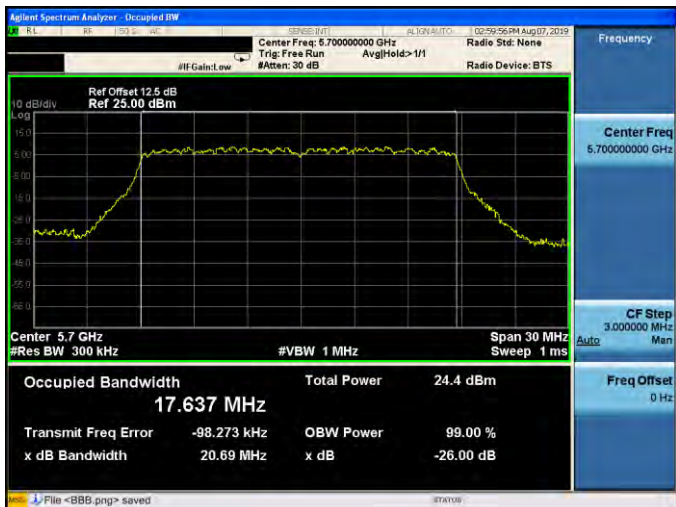


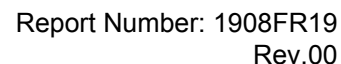
Mode 4: IEEE 802.11n 5 GHz 40 MHz Continuous TX mode _ ANT-3	
5550 MHz	 Center Freq: 5.55000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.911 MHz Total Power 21.6 dBm Transmit Freq Error -56.136 kHz OBW Power 99.00 % x dB Bandwidth 40.04 MHz x dB -26.00 dB File <BBB.png> saved
5670 MHz	 Center Freq: 5.67000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.947 MHz Total Power 22.0 dBm Transmit Freq Error -74.691 kHz OBW Power 99.00 % x dB Bandwidth 40.21 MHz x dB -26.00 dB File <BBB.png> saved



Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-3	
5260 MHz	 Center Freq: 5.26000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.26 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.649 MHz Total Power 23.1 dBm Transmit Freq Error -95.687 kHz OBW Power 99.00 % x dB Bandwidth 20.85 MHz x dB -26.00 dB File <BBB.png> saved
5280 MHz	 Center Freq: 5.28000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.28 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.629 MHz Total Power 23.2 dBm Transmit Freq Error -98.068 kHz OBW Power 99.00 % x dB Bandwidth 20.72 MHz x dB -26.00 dB File <BBB.png> saved
5320 MHz	 Center Freq: 5.32000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.32 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.639 MHz Total Power 22.9 dBm Transmit Freq Error -94.864 kHz OBW Power 99.00 % x dB Bandwidth 20.73 MHz x dB -26.00 dB File <BBB.png> saved



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

275 of 357



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-3	
5550 MHz	
5670 MHz	

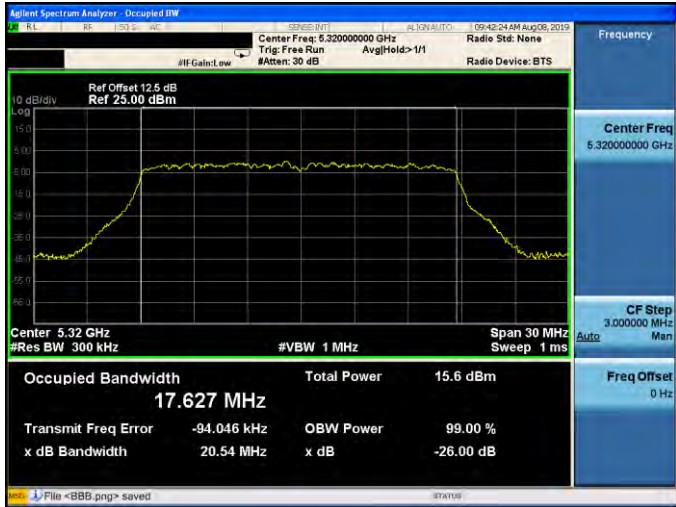


Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-3	
5290 MHz	 Center Freq: 5.29000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: Nene Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.29 GHz #Res BW 1 MHz #VBW 3 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 75.704 MHz Total Power 17.6 dBm Transmit Freq Error -89.625 kHz OBW Power 99.00 % x dB Bandwidth 82.31 MHz x dB -26.00 dB Frequency Center Freq 5.29000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
5530 MHz	 Center Freq: 5.53000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: Nene Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.53 GHz #Res BW 1 MHz #VBW 3 MHz Span 100 MHz Sweep 1 ms Occupied Bandwidth 75.625 MHz Total Power 19.4 dBm Transmit Freq Error -55.273 kHz OBW Power 99.00 % x dB Bandwidth 82.48 MHz x dB -26.00 dB Frequency Center Freq 5.53000000 GHz CF Step 10.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved

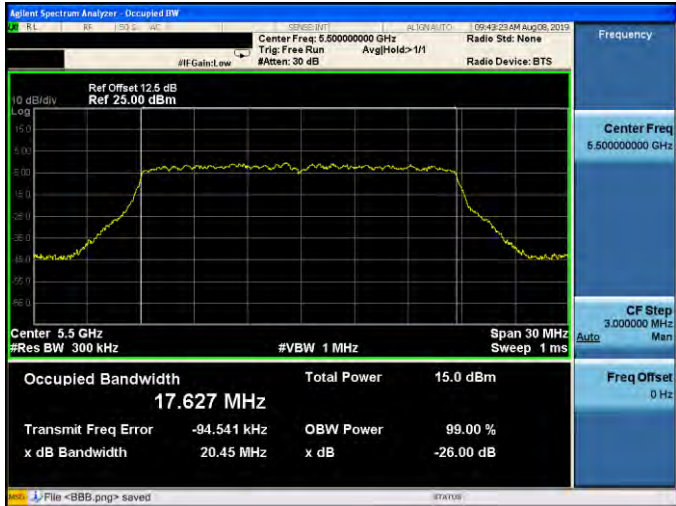
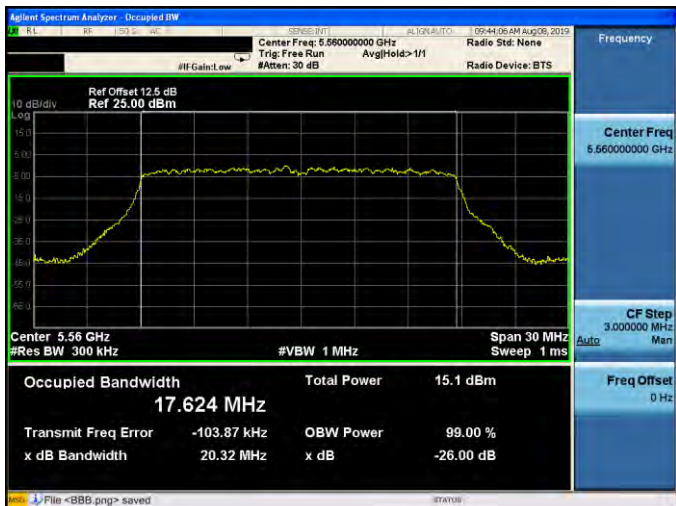
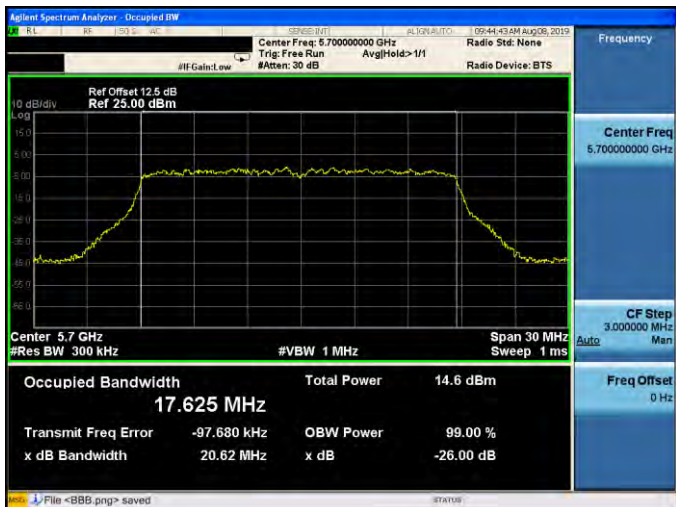


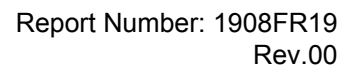
Beamforming on

Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0

5260 MHz	 Center Freq: 5.26000000 GHz Ref Offset 12.5 dB Ref 25.00 dBm Center 5.26 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.620 MHz Total Power 16.3 dBm Transmit Freq Error -100.84 kHz OBW Power 99.00 % x dB Bandwidth 20.55 MHz x dB -26.00 dB
5280 MHz	 Center Freq: 5.28000000 GHz Ref Offset 12.5 dB Ref 25.00 dBm Center 5.28 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.624 MHz Total Power 15.7 dBm Transmit Freq Error -100.65 kHz OBW Power 99.00 % x dB Bandwidth 20.46 MHz x dB -26.00 dB
5320 MHz	 Center Freq: 5.32000000 GHz Ref Offset 12.5 dB Ref 25.00 dBm Center 5.32 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.627 MHz Total Power 15.6 dBm Transmit Freq Error -94.046 kHz OBW Power 99.00 % x dB Bandwidth 20.54 MHz x dB -26.00 dB



Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-0	
5500 MHz	
5560 MHz	
5700 MHz	

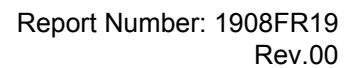
280 of 357



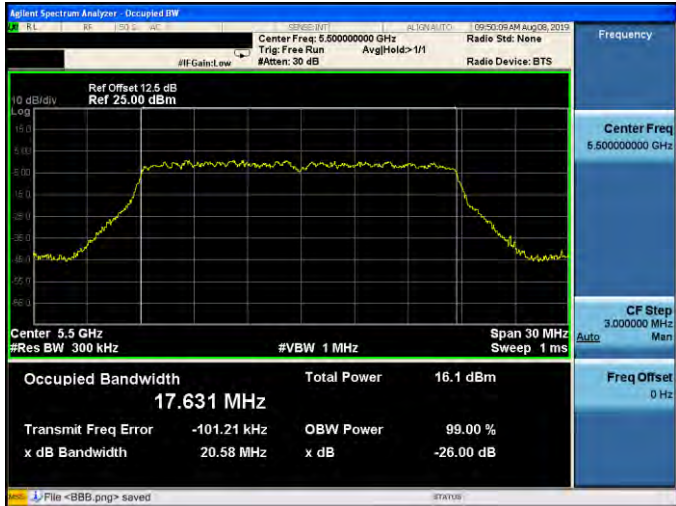
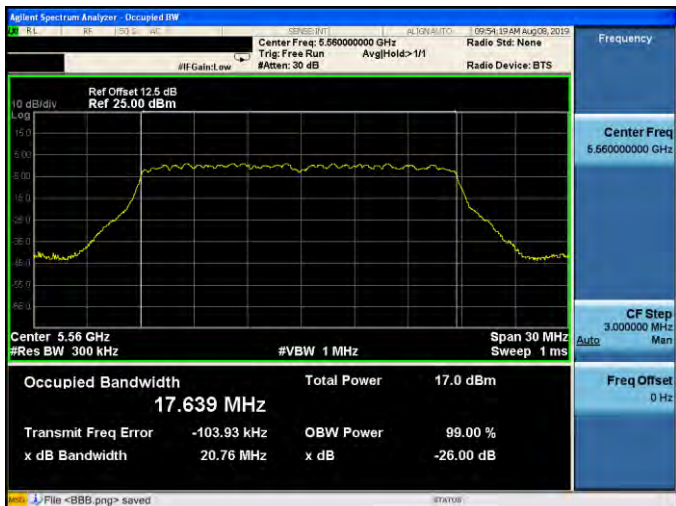
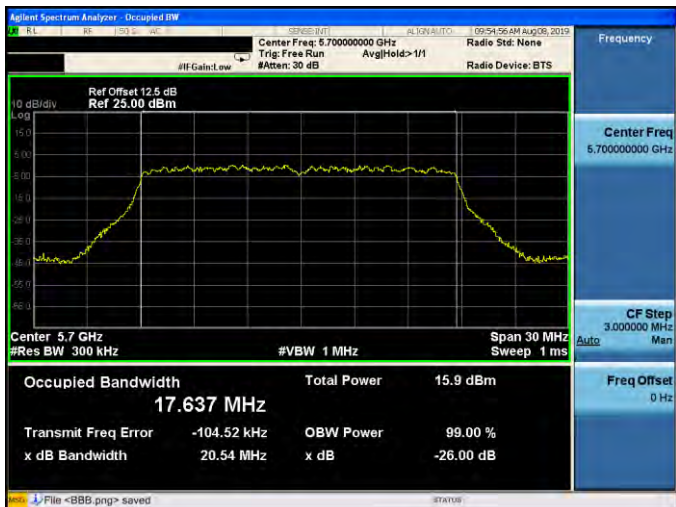
Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-0	
5550 MHz	 Center Freq: 5.55000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.007 MHz Total Power 20.1 dBm Transmit Freq Error -44.946 kHz OBW Power 99.00 % x dB Bandwidth 40.52 MHz x dB -26.00 dB File <BBB.png> saved
5670 MHz	 Center Freq: 5.67000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Radio Device: BTS Ref Offset 12.5 dB Ref 25.00 dBm Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 36.001 MHz Total Power 20.2 dBm Transmit Freq Error -63.396 kHz OBW Power 99.00 % x dB Bandwidth 40.38 MHz x dB -26.00 dB File <BBB.png> saved

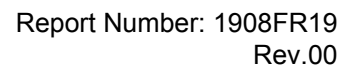


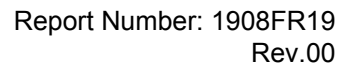
Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-0	
5290 MHz	
5530 MHz	

283 of 357



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

285 of 357

286 of 357

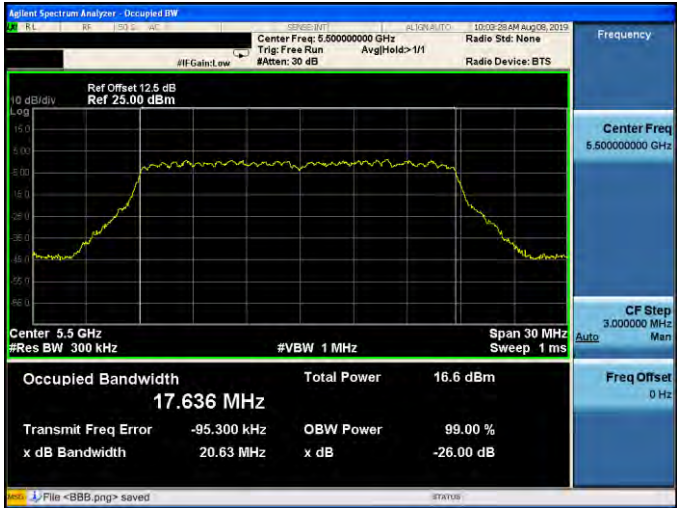
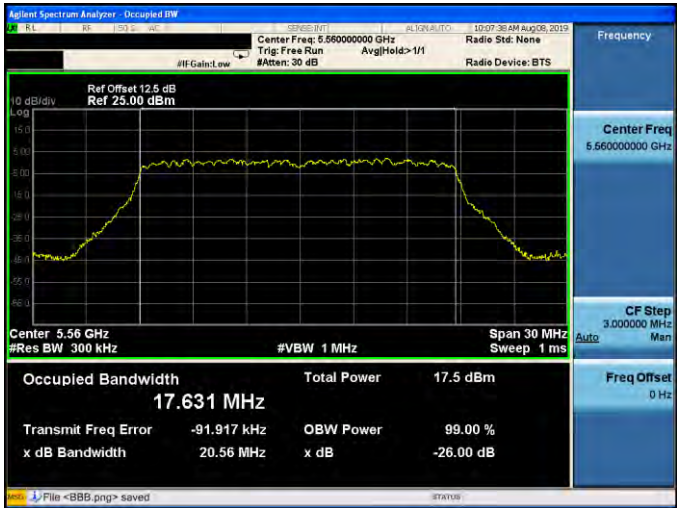
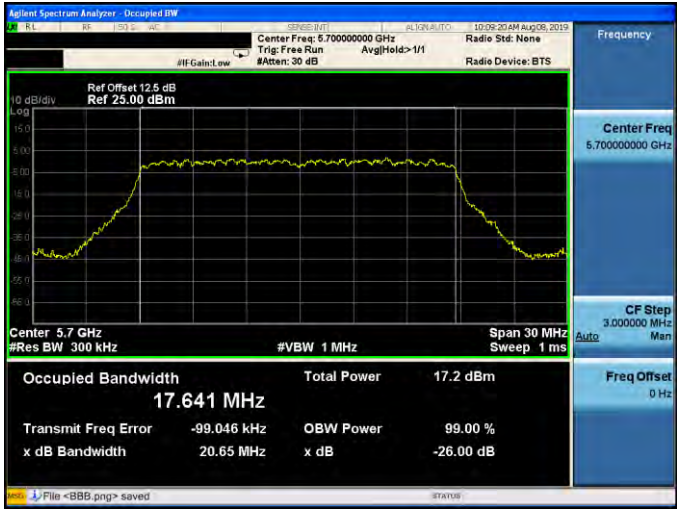


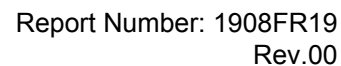
Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-1	
5290 MHz	
5530 MHz	

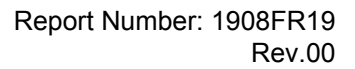


Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-2	
5260 MHz	
5280 MHz	
5320 MHz	



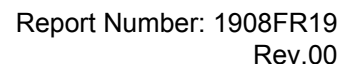
Mode 5: IEEE 802.11ac 20 MHz Continuous TX mode _ ANT-2	
5500 MHz	
5560 MHz	
5700 MHz	

290 of 357

291 of 357



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-2	
5290 MHz	
5530 MHz	

293 of 357



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



Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-3

5270 MHz



5310 MHz



5510 MHz





Mode 6: IEEE 802.11ac 40 MHz Continuous TX mode_ ANT-3	
5550 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.896 MHz Total Power 19.1 dBm Transmit Freq Error -75.043 kHz OBW Power 99.00 % x dB Bandwidth 40.12 MHz x dB -26.00 dB File <BBB.png> saved
5670 MHz	 Ref Offset 12.5 dB Ref 25.00 dBm Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Span 50 MHz Sweep 1 ms Occupied Bandwidth 35.928 MHz Total Power 18.5 dBm Transmit Freq Error -93.839 kHz OBW Power 99.00 % x dB Bandwidth 40.15 MHz x dB -26.00 dB File <BBB.png> saved



Mode 7: IEEE 802.11ac 80 MHz Continuous TX mode _ ANT-3	
5290 MHz	
5530 MHz	