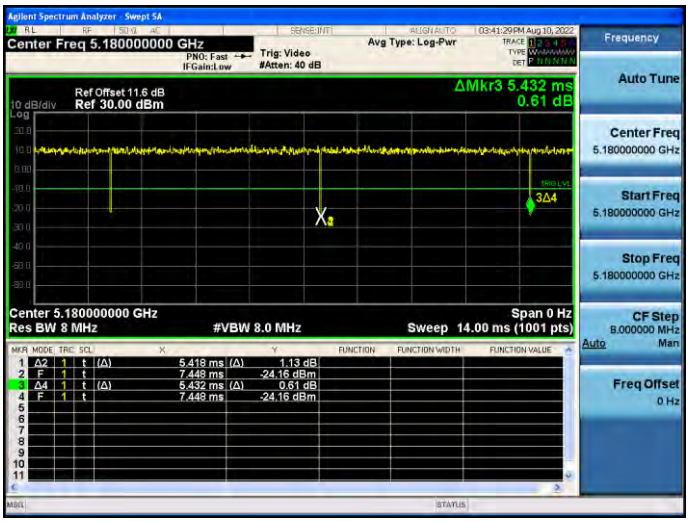
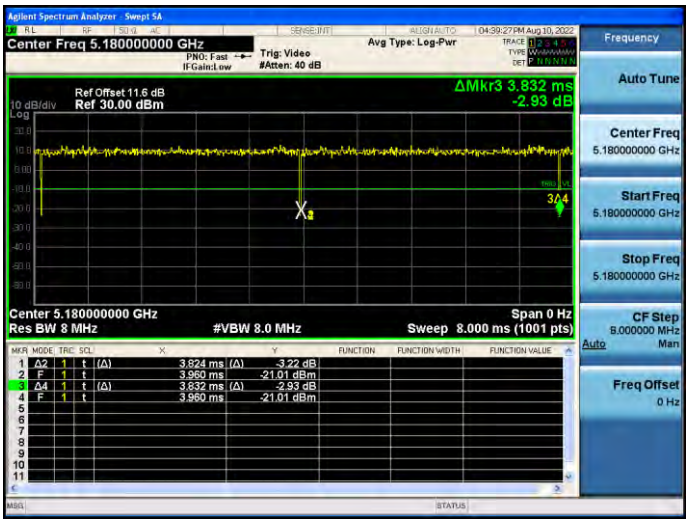
5.3. Conducted Test Results

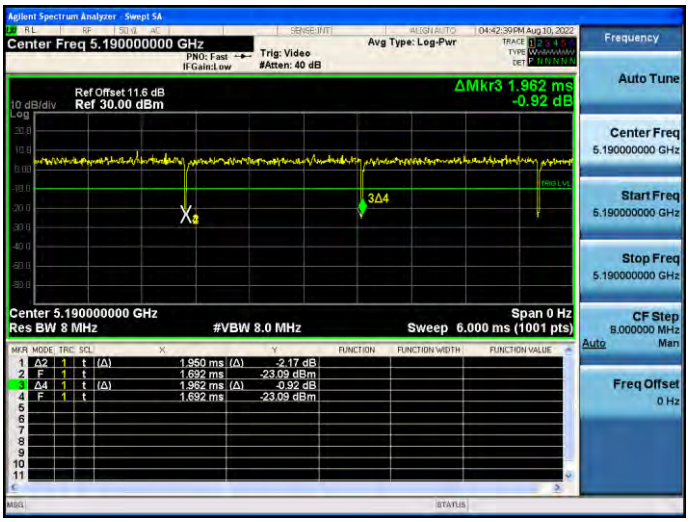
Duty cycle

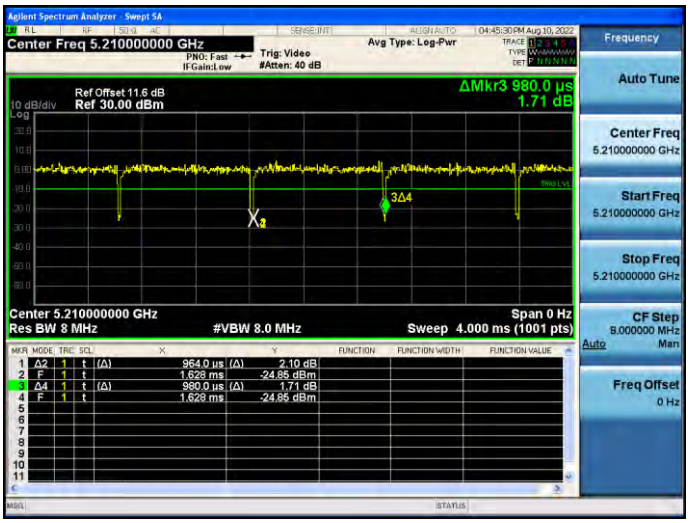
Test Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
Mode 2	5180	5.418	5.432	0.997	0.011	0.010
Mode 8	5180	3.824	3.832	0.998	0.009	0.010
Mode 9	5190	1.950	1.962	0.994	0.027	0.010
Mode 10	5210	0.964	0.980	0.984	0.071	0.010

Duty Cycle Graphs

Mode 2: IEEE 802.11a Continuous TX mode	
On+off time	

Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode	
On+off time	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode	
On+off time	

Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode	
On+off time	

Maximum Conducted Output Power Measurement

Test Mode	Frequency (MHz)	RF Power setting in Test Software		Test Software Version
		ANT-0	ANT-1	
Mode 2	5180	20	20	DUT GUI Version 610.36
	5200	26	26	
	5220	26	26	
	5240	26	26	
	5745	25	25	
	5765	25	25	
	5785	25	25	
	5805	25	25	
	5825	25	25	
Mode 3	5180	20	20	
	5200	25	25	
	5220	25	25	
	5240	25	25	
	5745	24	24	
	5765	24	24	
	5785	24	24	
	5805	24	24	
	5825	24	24	
Mode 4	5190	16	16	
	5230	27	27	
	5755	23	23	
	5795	25	25	
Mode 5	5180	20	20	
	5200	25	25	
	5220	25	25	
	5240	25	25	
	5745	24	24	
	5765	24	24	
	5785	24	24	
	5805	24	24	
	5825	24	24	

Test Mode	Frequency (MHz)	RF Power setting in Test Software		Test Software Version
		ANT-0	ANT-1	
Mode 6	5190	16	16	DUT GUI Version 610.36
	5230	27	27	
	5755	23	23	
	5795	25	25	
Mode 7	5210	16	16	
	5775	21	21	
Mode 8	5180	20	20	
	5200	25	25	
	5220	25	25	
	5240	25	25	
	5745	24	24	
	5765	24	24	
	5785	24	24	
	5805	24	24	
	5825	24	24	
Mode 9	5190	16	16	
	5230	27	27	
	5755	23	23	
	5795	25	25	
Mode 10	5210	16	16	
	5775	21	21	

Beamforming on

Test Mode	Frequency (MHz)	RF Power setting in Test Software		Test Software Version
		ANT-0	ANT-1	
Mode 5	5180	16	16	DUT GUI Version 610.36
	5200	21	21	
	5220	21	21	
	5240	21	21	
	5745	20	20	
	5765	20	20	
	5785	20	20	
	5805	20	20	
	5825	20	20	
Mode 6	5190	12	12	
	5230	23	23	
	5755	19	19	
	5795	21	21	
Mode 7	5210	12	12	
	5775	17	17	
Mode 8	5180	16	16	
	5200	21	21	
	5220	21	21	
	5240	21	21	
	5745	20	20	
	5765	20	20	
	5785	20	20	
	5805	20	20	
	5825	20	20	
Mode 9	5190	12	12	
	5230	23	23	
	5755	19	19	
	5795	21	21	
Mode 10	5210	12	12	
	5775	17	17	

Test Mode	Data Rate (Mbps)	Frequency (MHz)	Max. Output Power (Average)						Limit (dBm)
			ANT-0		ANT-1		ANT-0+1		
			dBm	W	dBm	W	dBm	W	
Mode 2	6	5180	19.91	0.098	19.67	0.093	22.80	0.191	≤ 30.00
		5200	25.55	0.359	25.37	0.344	28.47	0.703	≤ 30.00
		5220	25.48	0.353	25.32	0.340	28.41	0.693	≤ 30.00
		5240	25.52	0.356	25.34	0.342	28.44	0.698	≤ 30.00
		5745	24.62	0.290	26.01	0.399	28.38	0.689	≤ 30.00
		5765	24.45	0.279	25.92	0.391	28.26	0.670	≤ 30.00
		5785	24.50	0.282	25.97	0.395	28.31	0.678	≤ 30.00
		5805	24.41	0.276	25.85	0.385	28.20	0.661	≤ 30.00
		5825	24.55	0.285	25.64	0.366	28.14	0.652	≤ 30.00
Mode 3	13	5180	20.19	0.104	20.03	0.101	23.12	0.205	≤ 30.00
		5200	24.89	0.308	24.87	0.307	27.89	0.615	≤ 30.00
		5220	24.69	0.294	24.77	0.300	27.74	0.594	≤ 30.00
		5240	25.04	0.319	24.88	0.308	27.97	0.627	≤ 30.00
		5745	23.89	0.245	25.00	0.316	27.49	0.561	≤ 30.00
		5765	23.85	0.243	24.70	0.295	27.31	0.538	≤ 30.00
		5785	23.82	0.241	24.82	0.303	27.36	0.545	≤ 30.00
		5805	23.86	0.243	24.67	0.293	27.29	0.536	≤ 30.00
		5825	23.53	0.225	24.54	0.284	27.07	0.509	≤ 30.00
Mode 4	27	5190	16.04	0.040	16.27	0.042	19.17	0.083	≤ 30.00
		5230	26.21	0.418	25.93	0.392	29.08	0.809	≤ 30.00
		5755	22.83	0.192	24.15	0.260	26.55	0.452	≤ 30.00
		5795	24.68	0.294	25.50	0.355	28.12	0.649	≤ 30.00
Mode 5	13	5180	20.30	0.107	20.15	0.104	23.24	0.211	≤ 30.00
		5200	24.95	0.313	24.88	0.308	27.93	0.621	≤ 30.00
		5220	24.82	0.303	24.83	0.304	27.84	0.608	≤ 30.00
		5240	25.15	0.327	25.02	0.318	28.10	0.646	≤ 30.00
		5745	23.90	0.245	25.10	0.324	27.55	0.569	≤ 30.00
		5765	23.88	0.244	24.79	0.301	27.37	0.546	≤ 30.00
		5785	23.92	0.247	24.89	0.308	27.44	0.555	≤ 30.00
		5805	23.90	0.245	24.79	0.301	27.38	0.547	≤ 30.00
		5825	23.60	0.229	24.68	0.294	27.18	0.522	≤ 30.00
Mode 6	27	5190	16.18	0.041	16.34	0.043	19.27	0.085	≤ 30.00
		5230	26.27	0.424	25.94	0.393	29.12	0.817	≤ 30.00
		5755	22.88	0.194	24.20	0.263	26.60	0.457	≤ 30.00
		5795	24.78	0.301	25.63	0.366	28.24	0.667	≤ 30.00
Mode 7	58.6	5210	15.21	0.033	15.61	0.036	18.42	0.070	≤ 30.00
		5775	20.78	0.120	22.09	0.162	24.49	0.281	≤ 30.00

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

Test Mode	Data Rate (Mbps)	Frequency (MHz)	Max. Output Power (Average)						Limit (dBm)
			ANT-0		ANT-1		ANT-0+1		
			dBm	W	dBm	W	dBm	W	
Mode 8	MCS 0	5180	20.35	0.108	20.17	0.104	23.27	0.212	≤ 30.00
		5200	24.98	0.315	24.91	0.310	27.96	0.625	≤ 30.00
		5220	24.93	0.311	24.88	0.308	27.92	0.619	≤ 30.00
		5240	25.21	0.332	25.10	0.324	28.17	0.656	≤ 30.00
		5745	24.03	0.253	25.13	0.326	27.63	0.579	≤ 30.00
		5765	23.99	0.251	24.91	0.310	27.48	0.560	≤ 30.00
		5785	24.04	0.254	24.94	0.312	27.52	0.565	≤ 30.00
		5805	23.91	0.246	24.85	0.305	27.42	0.552	≤ 30.00
		5825	23.63	0.231	24.69	0.294	27.20	0.525	≤ 30.00
Mode 9	MCS 0	5190	16.29	0.043	16.37	0.043	19.34	0.086	≤ 30.00
		5230	26.41	0.438	26.04	0.402	29.24	0.839	≤ 30.00
		5755	22.92	0.196	24.32	0.270	26.69	0.467	≤ 30.00
		5795	24.86	0.306	25.68	0.370	28.30	0.676	≤ 30.00
Mode 10	MCS 0	5210	15.32	0.034	15.63	0.037	18.49	0.071	≤ 30.00
		5775	20.83	0.121	22.21	0.166	24.58	0.287	≤ 30.00

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

Beamforming on

Test Mode	Data Rate (Mbps)	Frequency (MHz)	Max. Output Power (Average)						Limit (dBm)
			ANT-0		ANT-1		ANT-0+1		
			dBm	W	dBm	W	dBm	W	
Mode 5	13	5180	16.60	0.046	16.29	0.043	19.46	0.088	≤ 30.00
		5200	21.39	0.138	20.99	0.126	24.20	0.263	≤ 30.00
		5220	21.36	0.137	20.98	0.125	24.18	0.262	≤ 30.00
		5240	21.56	0.143	21.21	0.132	24.40	0.275	≤ 30.00
		5745	20.54	0.113	21.87	0.154	24.27	0.267	≤ 30.00
		5765	20.46	0.111	21.37	0.137	23.95	0.248	≤ 30.00
		5785	20.46	0.111	21.44	0.139	23.99	0.251	≤ 30.00
		5805	20.30	0.107	21.30	0.135	23.84	0.242	≤ 30.00
		5825	20.13	0.103	21.45	0.140	23.85	0.243	≤ 30.00
Mode 6	27	5190	12.40	0.017	12.61	0.018	15.52	0.036	≤ 30.00
		5230	23.04	0.201	22.86	0.193	25.96	0.394	≤ 30.00
		5755	19.13	0.082	20.91	0.123	23.12	0.205	≤ 30.00
		5795	21.05	0.127	22.49	0.177	24.84	0.305	≤ 30.00
Mode 7	58.6	5210	11.51	0.014	11.59	0.014	14.56	0.029	≤ 30.00
		5775	16.97	0.050	18.56	0.072	20.85	0.122	≤ 30.00
Mode 8	MCS 0	5180	16.65	0.046	16.33	0.043	19.50	0.089	≤ 30.00
		5200	21.51	0.142	21.13	0.130	24.33	0.271	≤ 30.00
		5220	21.45	0.140	21.08	0.128	24.28	0.268	≤ 30.00
		5240	21.57	0.144	21.22	0.132	24.41	0.276	≤ 30.00
		5745	20.65	0.116	21.98	0.158	24.38	0.274	≤ 30.00
		5765	20.49	0.112	21.47	0.140	24.02	0.252	≤ 30.00
		5785	20.55	0.114	21.51	0.142	24.07	0.255	≤ 30.00
		5805	20.34	0.108	21.39	0.138	23.91	0.246	≤ 30.00
		5825	20.19	0.104	21.49	0.141	23.90	0.245	≤ 30.00
Mode 9	MCS 0	5190	12.53	0.018	12.67	0.018	15.61	0.036	≤ 30.00
		5230	23.12	0.205	22.98	0.199	26.06	0.404	≤ 30.00
		5755	19.21	0.083	21.03	0.127	23.22	0.210	≤ 30.00
		5795	21.15	0.130	22.53	0.179	24.90	0.309	≤ 30.00
Mode 10	MCS 0	5210	11.54	0.014	11.71	0.015	14.64	0.029	≤ 30.00
		5775	17.03	0.050	18.67	0.074	20.94	0.124	≤ 30.00

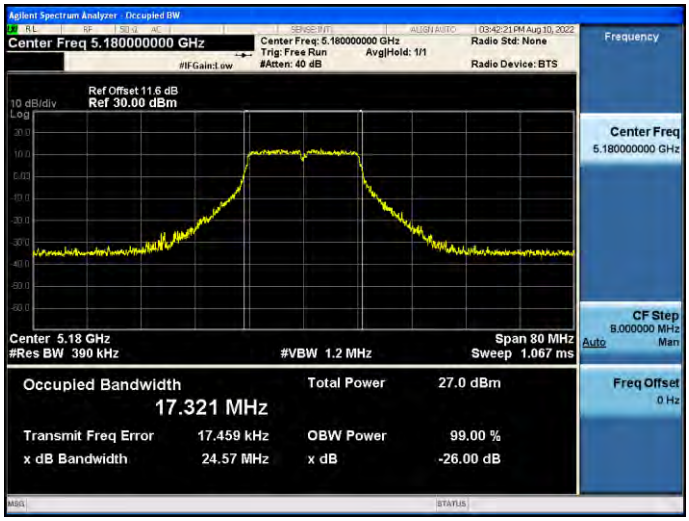
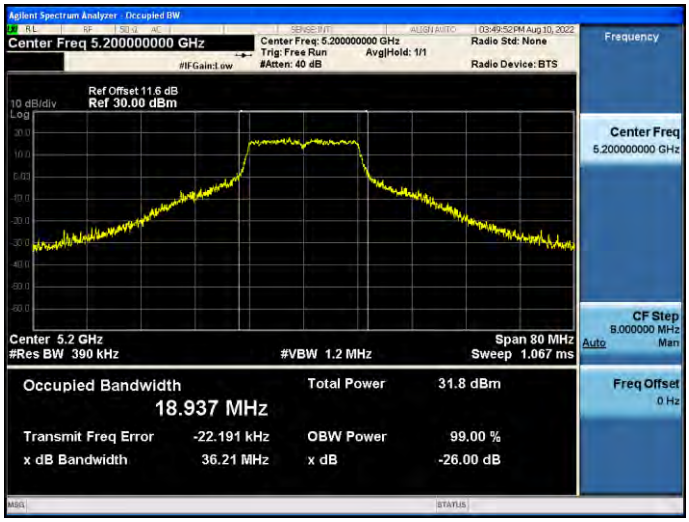
Note: The relevant measured result has the offset with cable loss already.

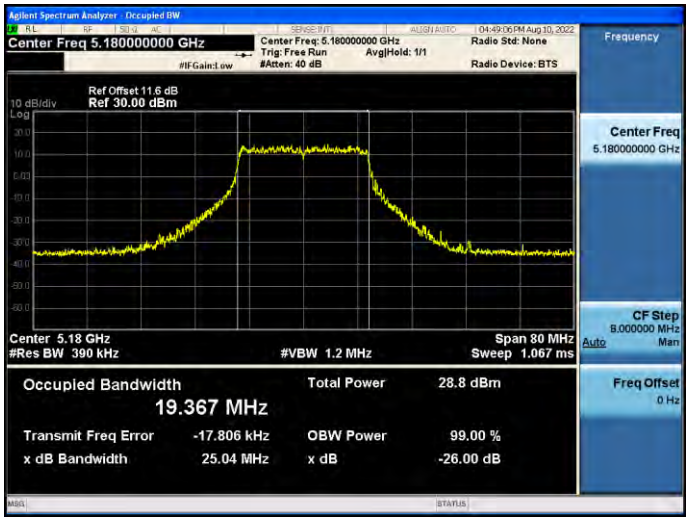
26 dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

Test Mode	Frequency (MHz)	ANT-0		ANT-1	
		26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
Mode 2	5180	24.570	17.321	23.240	16.981
	5200	36.210	18.937	34.780	18.449
	5240	38.840	19.534	34.880	18.384
Mode 8	5180	25.040	19.367	24.330	19.322
	5200	31.860	19.603	32.150	19.491
	5240	39.430	19.610	31.930	19.481
Mode 9	5190	45.920	38.178	45.500	38.160
	5230	79.030	39.685	73.660	39.087
Mode 10	5210	84.780	78.240	89.690	77.885

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

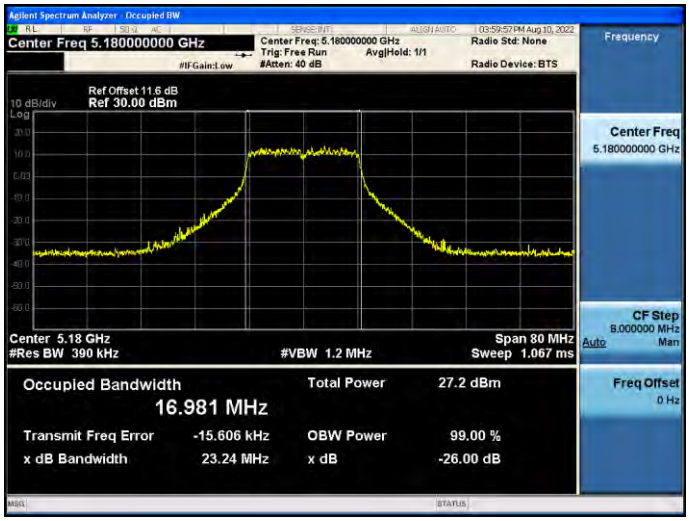
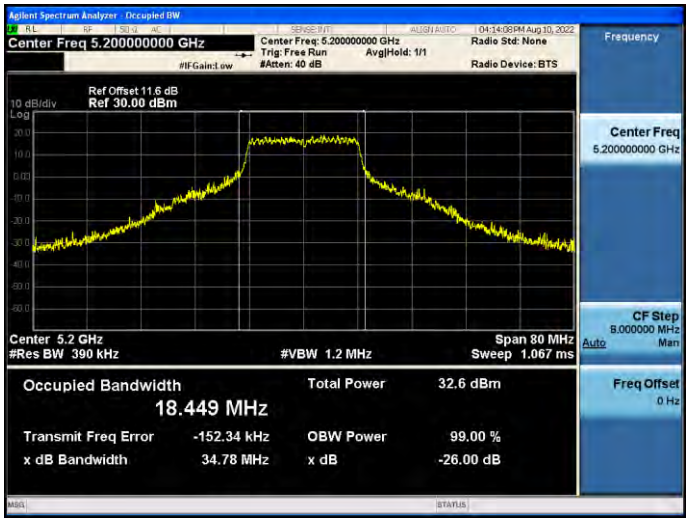
■ **Test Graphs**

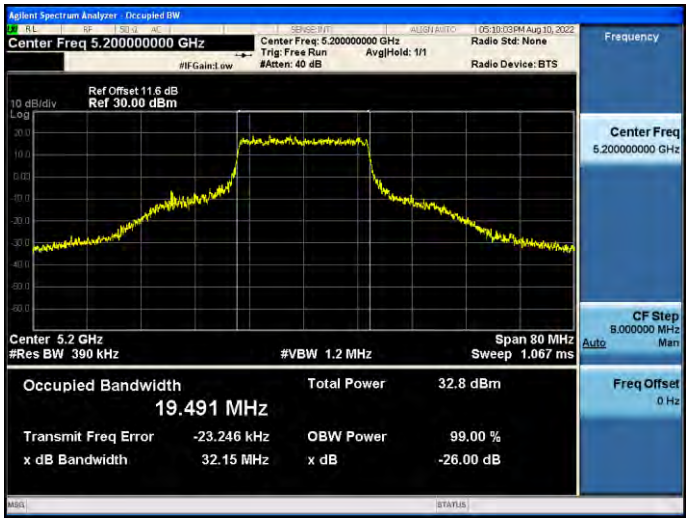
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

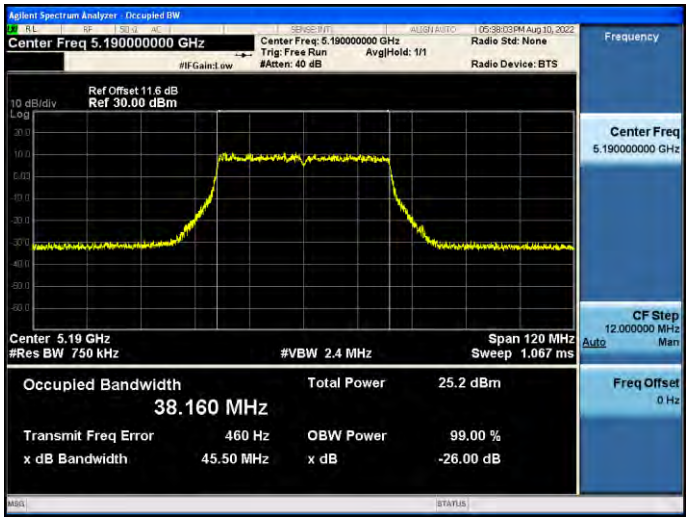
Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-0	
5190 MHz	
5230 MHz	

Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode_ ANT-0	
5210 MHz	

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

Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode_ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

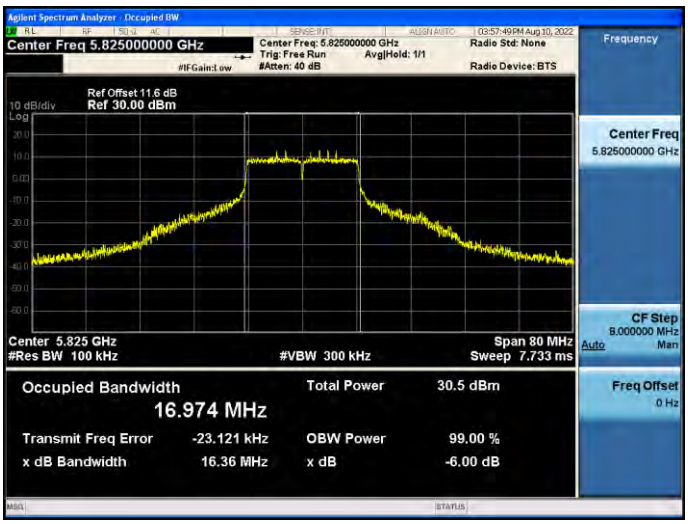
Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-1	
5190 MHz	
5230 MHz	

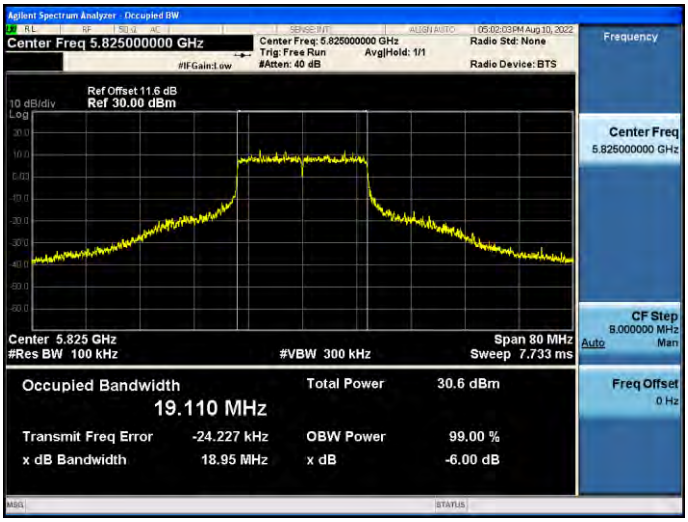
Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode_ ANT-1	
5210 MHz	

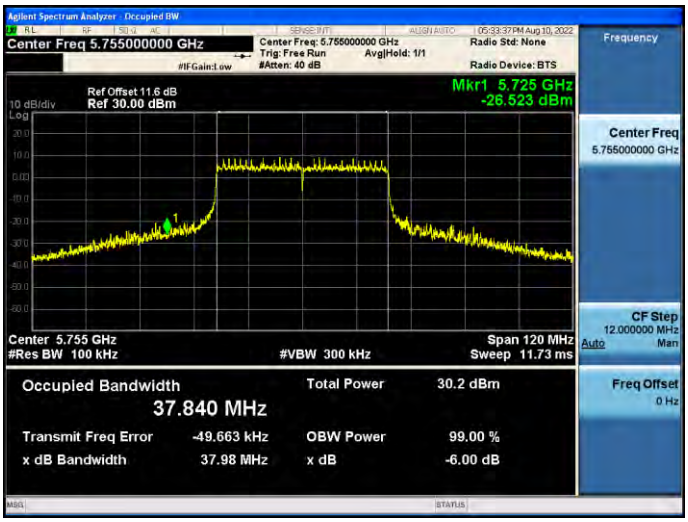
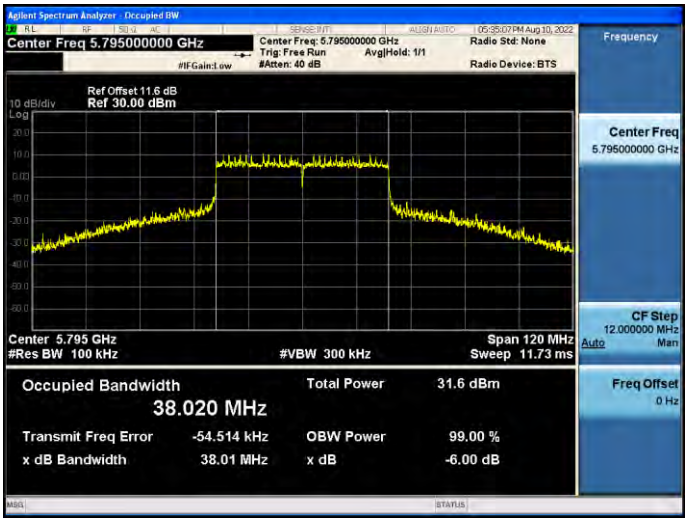
6 dB RF Bandwidth Measurement

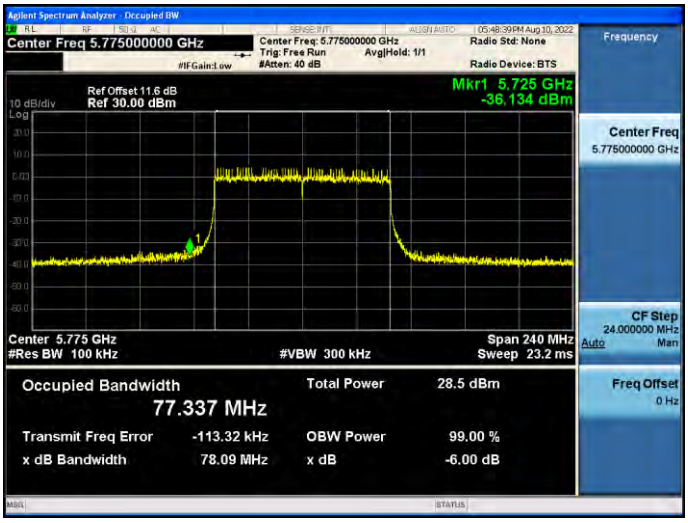
Test Mode	Frequency (MHz)	Measurement (kHz)		Limit (kHz)
		ANT-0	ANT-1	
Mode 2	5745	16350	16360	≥ 500
	5785	16350	16340	≥ 500
	5825	16360	16320	≥ 500
Mode 8	5745	18890	18910	≥ 500
	5785	18920	18790	≥ 500
	5825	18950	18990	≥ 500
Mode 9	5755	37980	37720	≥ 500
	5795	38010	38350	≥ 500
Mode 10	5775	78090	77850	≥ 500

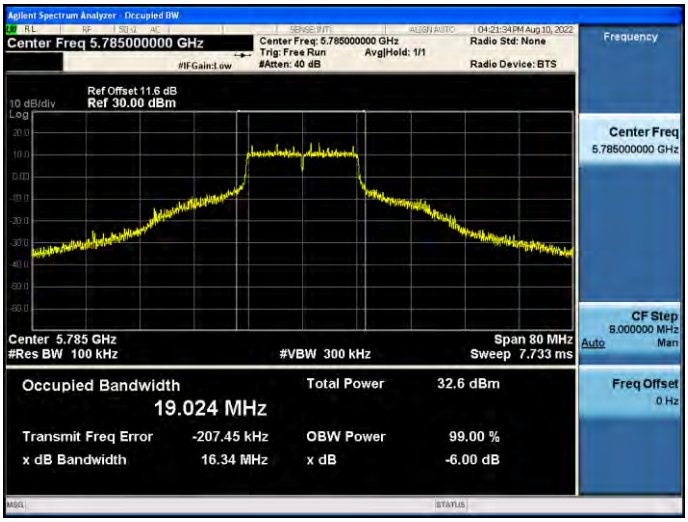
■ **Test Graphs**

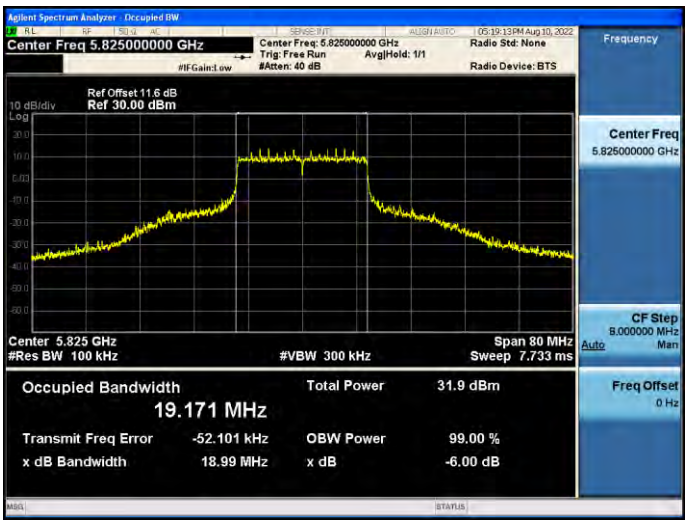
Mode 2: IEEE 802.11a Continuous TX mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

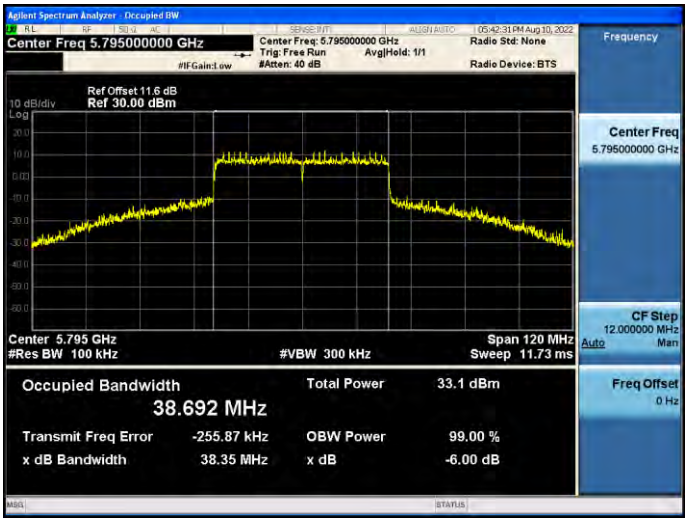
Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode_ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

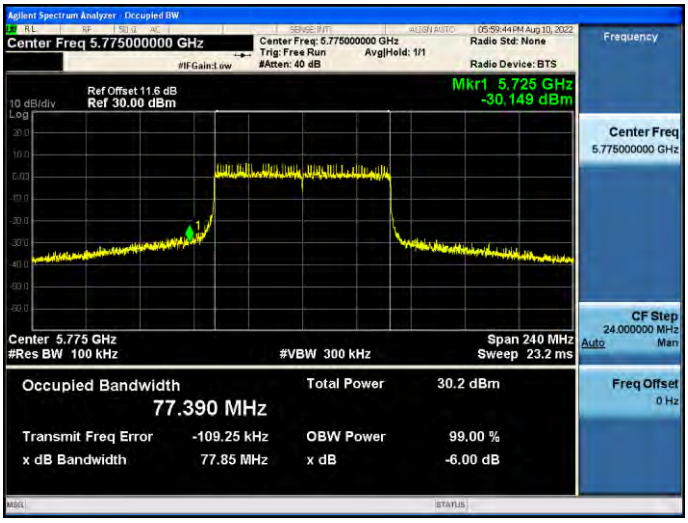
Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ANT-0	
5755 MHz	
5795 MHz	

Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode_ANT-0	
5775 MHz	

Mode 2: IEEE 802.11a Continuous TX mode_ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode_ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ANT-1	
5755 MHz	
5795 MHz	

Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode_ANT-1	
5775 MHz	

Maximum Power Spectral Density Measurement

ANT-0

Test Mode	Frequency (MHz)	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
Mode 2	5180	9.091	0.011	9.102	17.00
	5200	13.726	0.011	13.737	17.00
	5240	13.712	0.011	13.723	17.00
Mode 8	5180	9.167	0.009	9.176	17.00
	5200	13.257	0.009	13.266	17.00
	5240	13.055	0.009	13.064	17.00
Mode 9	5190	1.284	0.027	1.311	17.00
	5230	11.230	0.027	11.257	17.00
Mode 10	5210	-2.193	0.071	-2.122	17.00

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

Test Mode	Frequency (MHz)	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
Mode 2	5745	4.598	0.011	11.599	30.00
	5785	3.859	0.011	10.860	30.00
	5825	3.616	0.011	10.617	30.00
Mode 8	5745	2.844	0.009	9.843	30.00
	5785	2.239	0.009	9.238	30.00
	5825	1.577	0.009	8.576	30.00
Mode 9	5755	-1.465	0.027	5.551	30.00
	5795	-0.126	0.027	6.890	30.00
Mode 10	5775	-6.372	0.071	0.689	30.00

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)

ANT-1

Test Mode	Frequency (MHz)	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
Mode 2	5180	8.629	0.011	8.640	17.00
	5200	13.856	0.011	13.867	17.00
	5240	13.789	0.011	13.800	17.00
Mode 8	5180	8.852	0.009	8.861	17.00
	5200	12.892	0.009	12.901	17.00
	5240	13.009	0.009	13.018	17.00
Mode 9	5190	2.202	0.027	2.229	17.00
	5230	11.467	0.027	11.494	17.00
Mode 10	5210	-1.742	0.071	-1.671	17.00

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

Test Mode	Frequency (MHz)	Measurement (dBm/100 kHz)	Duty Factor (dB)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
Mode 2	5745	6.178	0.011	13.179	30.00
	5785	5.374	0.011	12.375	30.00
	5825	5.566	0.011	12.567	30.00
Mode 8	5745	3.830	0.009	10.829	30.00
	5785	3.155	0.009	10.154	30.00
	5825	2.836	0.009	9.835	30.00
Mode 9	5755	0.333	0.027	7.349	30.00
	5795	1.063	0.027	8.079	30.00
Mode 10	5775	-4.502	0.071	2.559	30.00

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)

ANT-0+1

Test Mode	Frequency (MHz)	Calculated (dBm/MHz)	Limit (dBm/MHz)
Mode 2	5180	11.888	17.00
	5200	16.813	17.00
	5240	16.772	17.00
Mode 8	5180	12.032	17.00
	5200	16.098	17.00
	5240	16.051	17.00
Mode 9	5190	4.804	17.00
	5230	14.387	17.00
Mode 10	5210	1.120	17.00

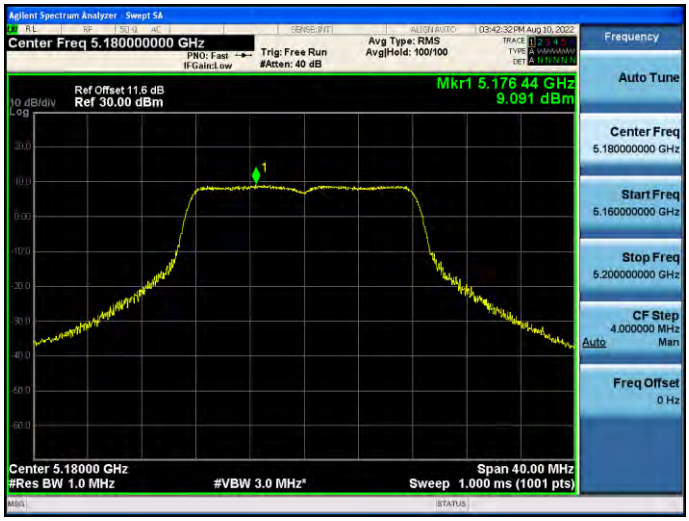
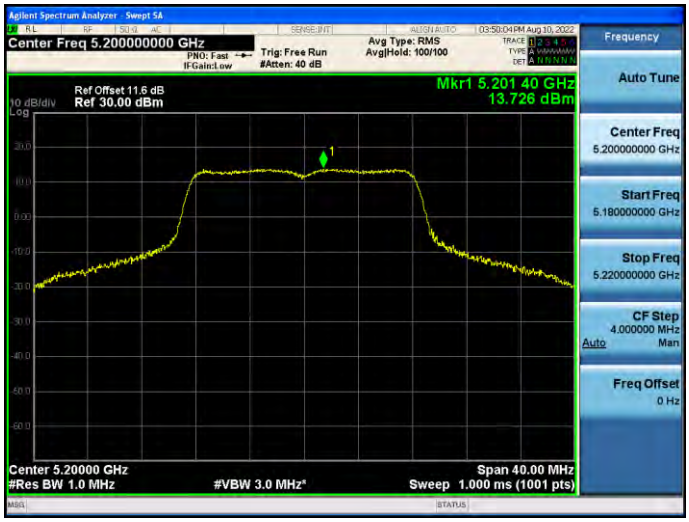
Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

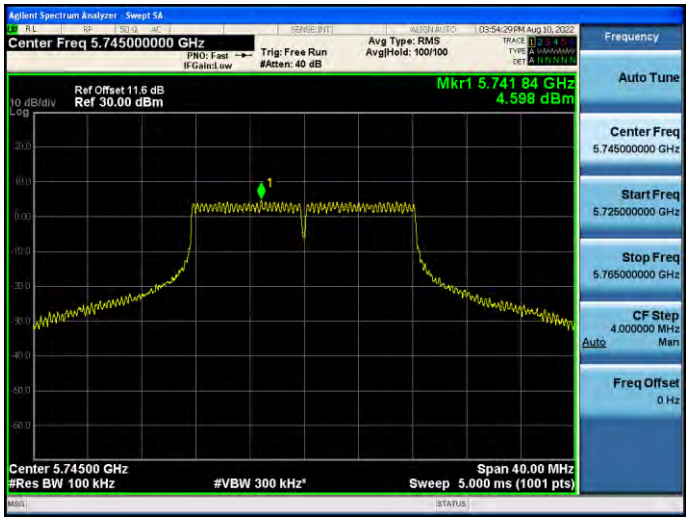
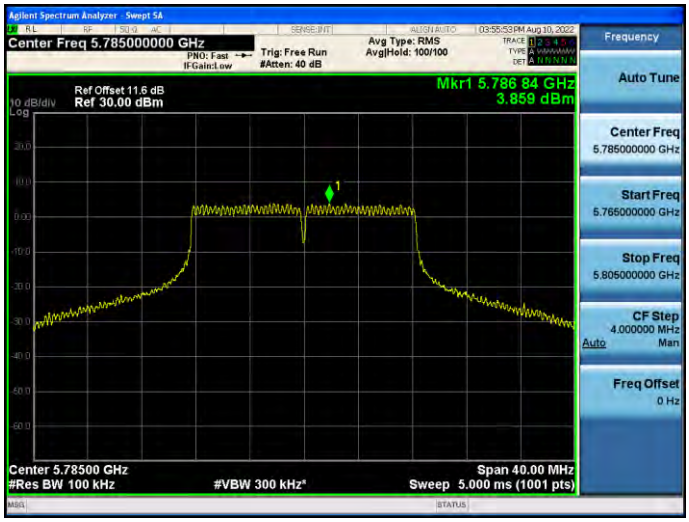
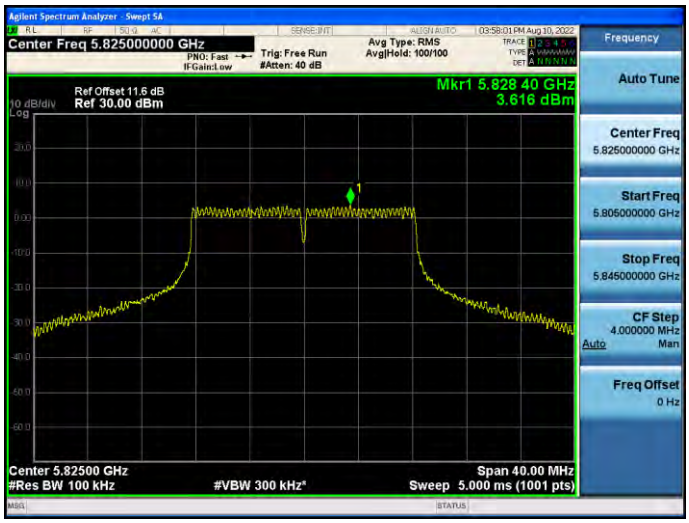
Test Mode	Frequency (MHz)	Calculated (dBm/500 kHz)	Limit (dBm/500 kHz)
Mode 2	5745	15.471	30.00
	5785	14.693	30.00
	5825	14.711	30.00
Mode 8	5745	13.374	30.00
	5785	12.730	30.00
	5825	12.261	30.00
Mode 9	5755	9.553	30.00
	5795	10.536	30.00
Mode 10	5775	4.734	30.00

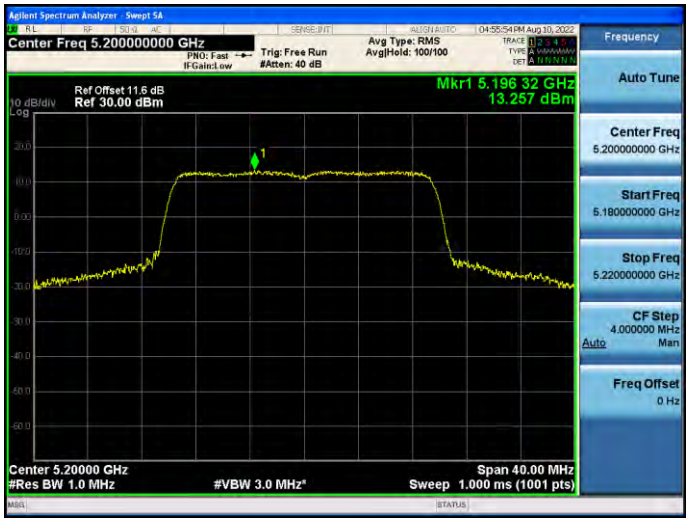
Note: Method SA-2, Power density = measured result + 10 log(1/duty cycle) + Conversion ratio = measured result + duty factor.

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

■ **Test Graphs**

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

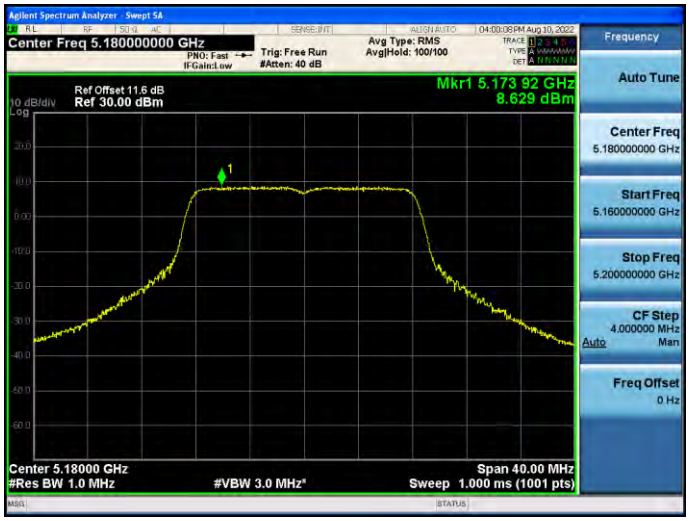
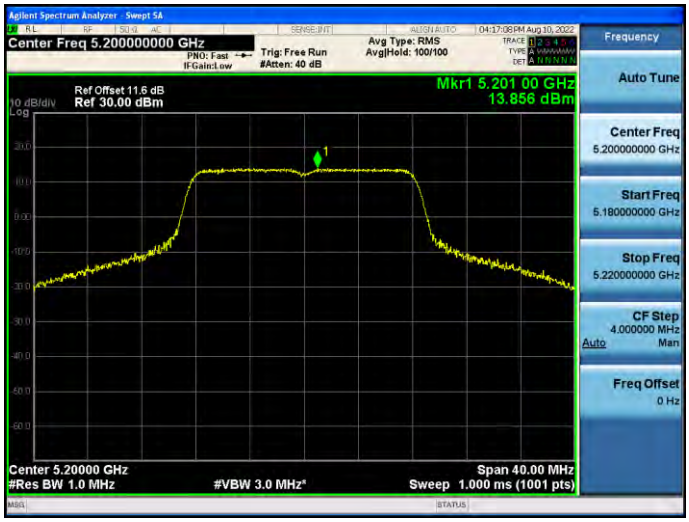
Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode _ ANT-0	
5180 MHz	
5200 MHz	
5240 MHz	

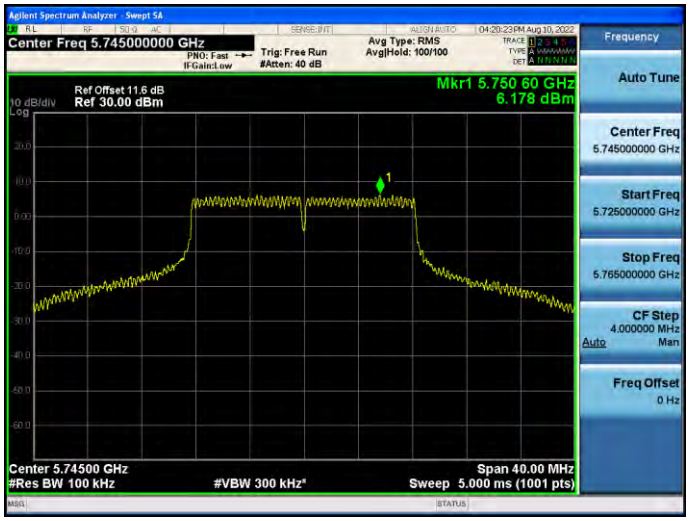
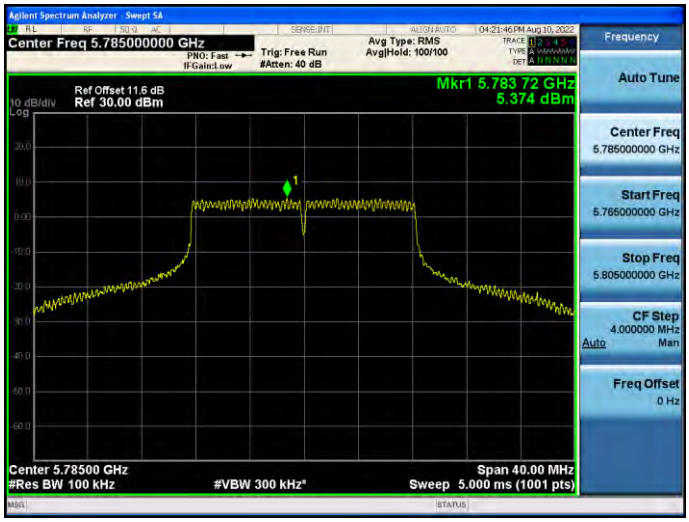
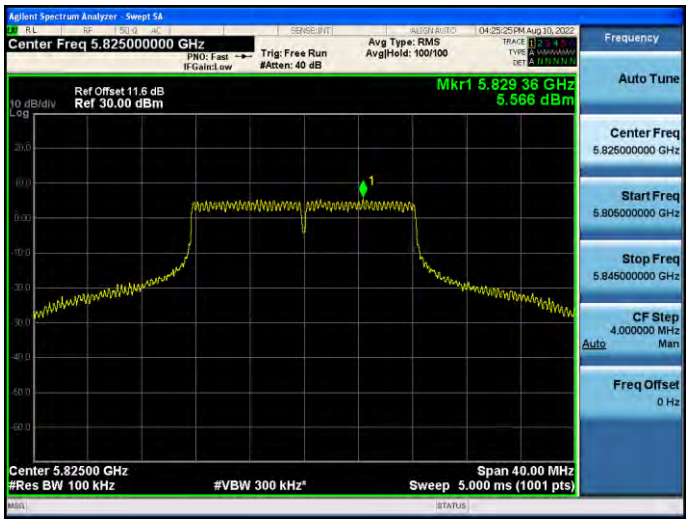
Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode _ ANT-0	
5745 MHz	
5785 MHz	
5825 MHz	

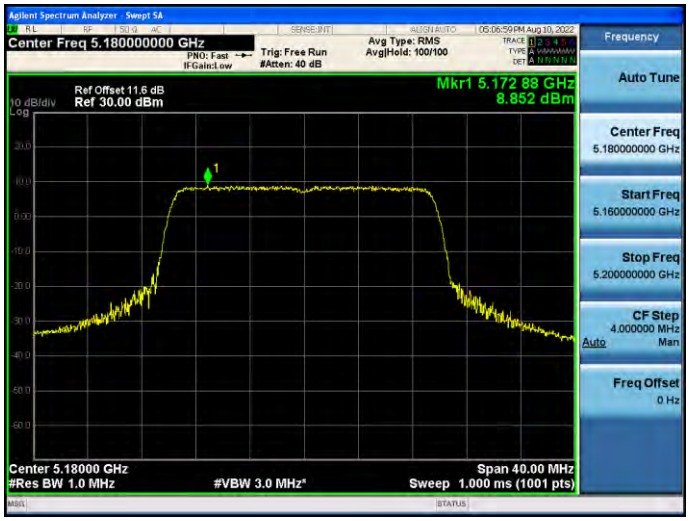
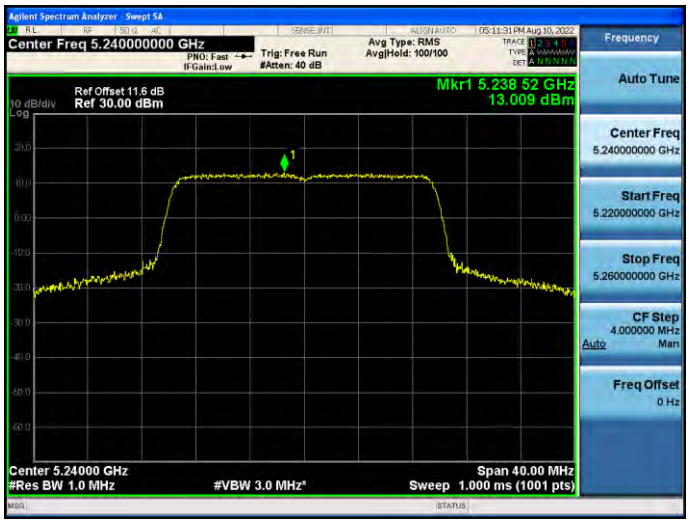
Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-0	
5190 MHz	
5230 MHz	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-0	
5755 MHz	
5795 MHz	

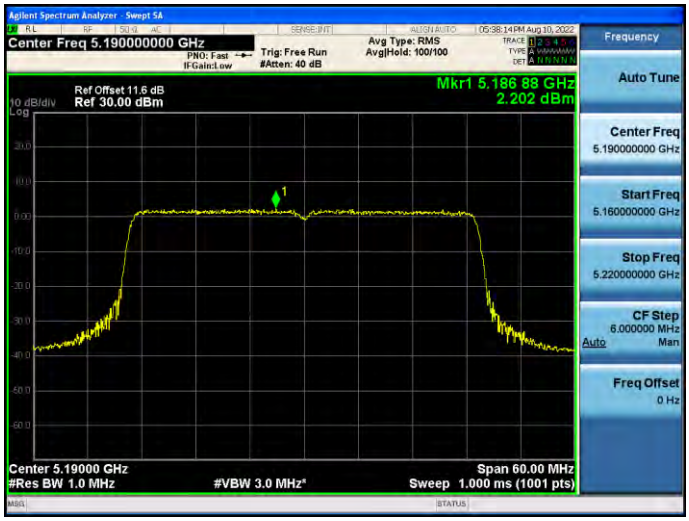
Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode _ ANT-0	
5210 MHz	
5775 MHz	

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

Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode _ ANT-1	
5180 MHz	
5200 MHz	
5240 MHz	

Mode 8: IEEE 802.11ax 20 MHz Continuous TX Mode _ ANT-1	
5745 MHz	
5785 MHz	
5825 MHz	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-1	
5190 MHz	
5230 MHz	

Mode 9: IEEE 802.11ax 40 MHz Continuous TX Mode_ ANT-1	
5755 MHz	
5795 MHz	

Mode 10: IEEE 802.11ax 80 MHz Continuous TX Mode _ ANT-1	
5210 MHz	
5775 MHz	

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