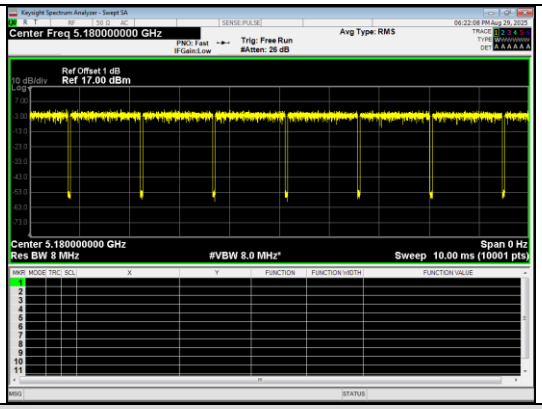
Duty Cycle

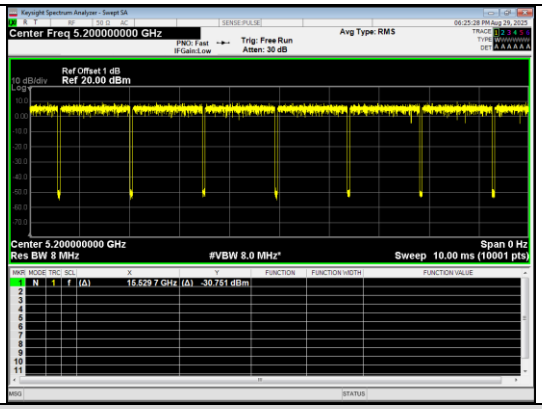
Test Result

Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11a	6	36	1	1.400	1.451	96.49	0.9649	0.1552	0.7143
		40		1.400	1.451	96.49	0.9649	0.1552	0.7143
		48		1.400	1.451	96.49	0.9649	0.1552	0.7143
IEEE 802.11n_20	MCS 0	36		1.184	1.236	95.85	0.9585	0.1841	0.8446
		40		1.184	1.236	95.79	0.9579	0.1868	0.8446
		48		1.184	1.236	95.79	0.9579	0.1868	0.8446
IEEE 802.11n_40		38		0.589	0.640	91.95	0.9195	0.3645	1.6978
		46		0.589	0.640	91.95	0.9195	0.3645	1.6978
IEEE 802.11ac_20		36		1.191	1.242	95.87	0.9587	0.1832	0.8396
		40		1.192	1.243	95.87	0.9587	0.1832	0.8389
		48		1.192	1.243	95.87	0.9587	0.1832	0.8389
IEEE 802.11ac_40		38		0.596	0.648	91.98	0.9198	0.3631	1.6779
		46		0.596	0.649	91.92	0.9192	0.3659	1.6779
IEEE 802.11ac_80		42		0.297	0.349	84.95	0.8495	0.7084	3.3670

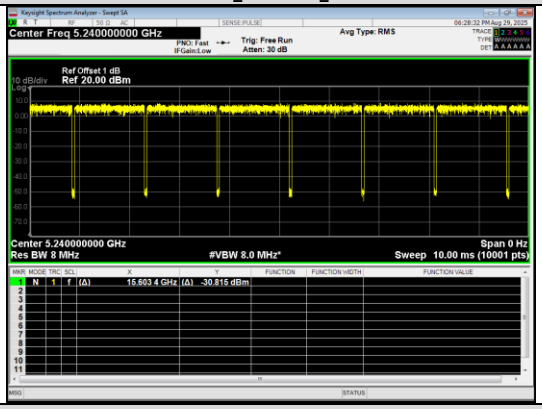
Test Graphs



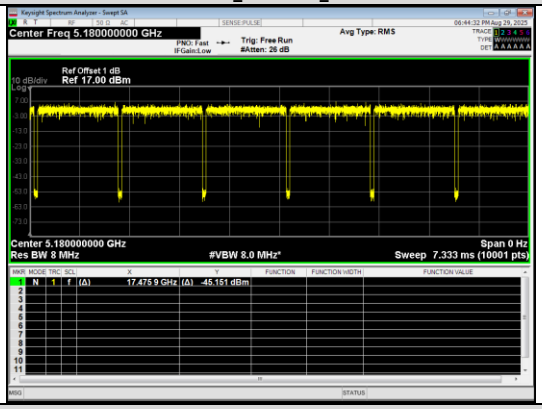
IEEE 802.11a_20MHz_Channel 36



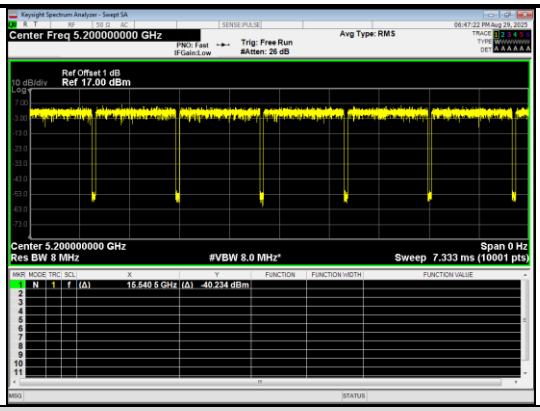
IEEE 802.11a_20MHz_Channel 40



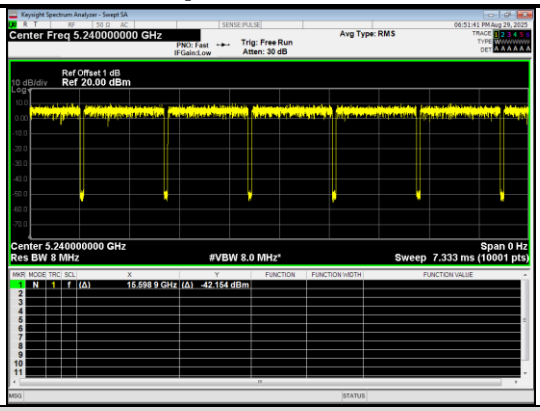
IEEE 802.11a_20MHz_Channel 48



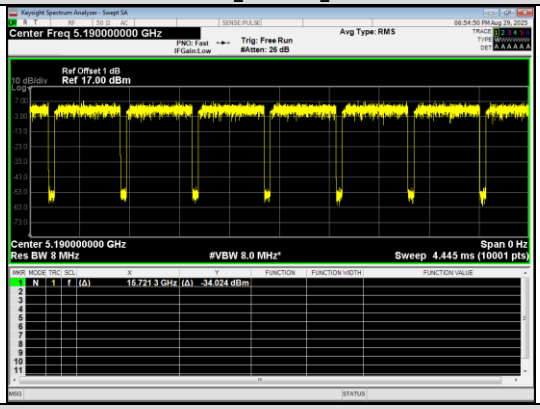
IEEE 802.11n_20MHz_Channel 36



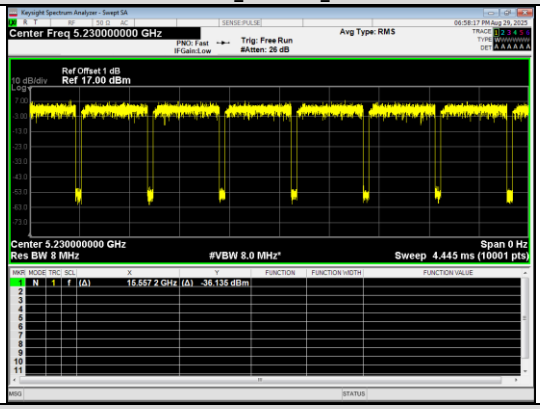
IEEE 802.11n_20MHz_Channel 40



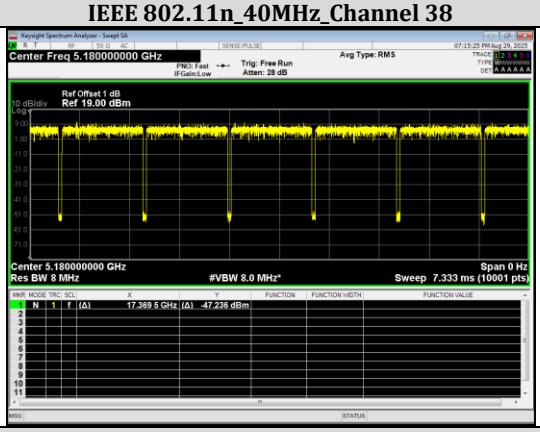
IEEE 802.11n_20MHz_Channel 48



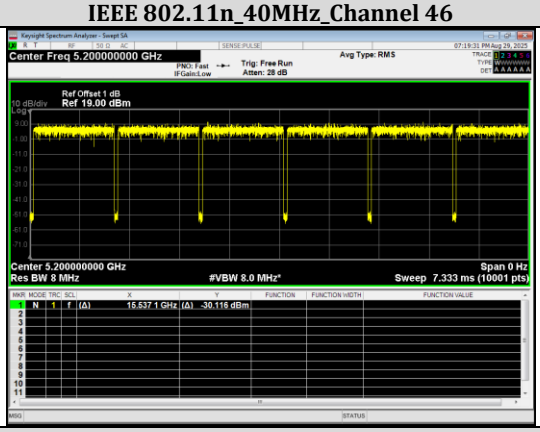
IEEE 802.11n_40MHz_Channel 38



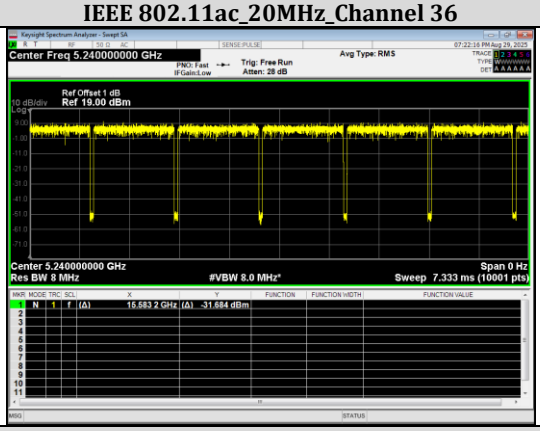
IEEE 802.11n_40MHz_Channel 46



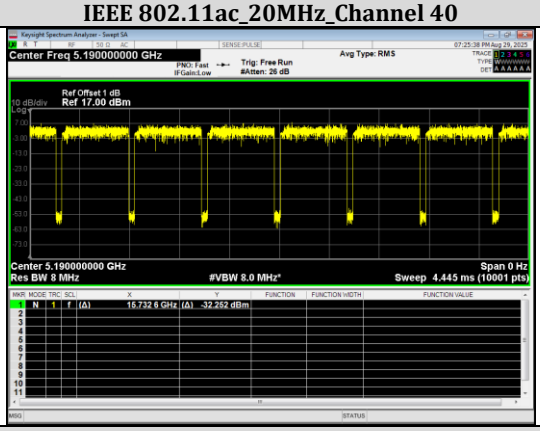
IEEE 802.11ac_20MHz_Channel 36



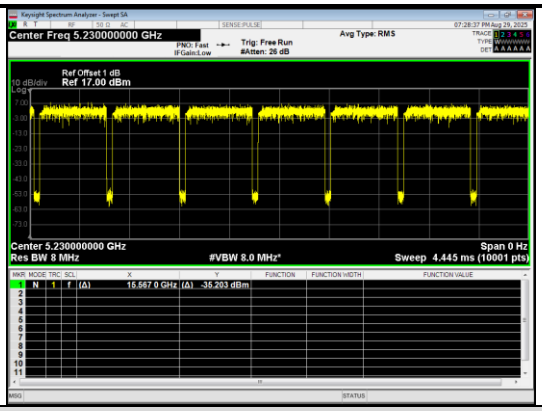
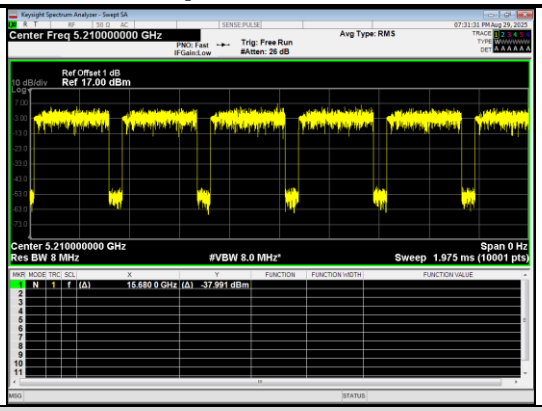
IEEE 802.11ac_20MHz_Channel 40



IEEE 802.11ac_20MHz_Channel 48



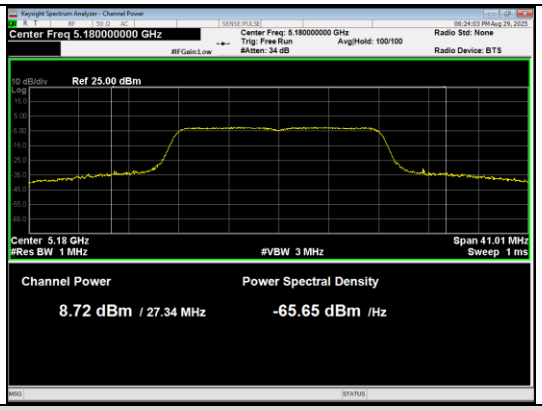
IEEE 802.11ac_40MHz_Channel 38

	
IEEE 802.11ac_40MHz_Channel 46	**IEEE 802.11ac_80MHz_Channel 42**

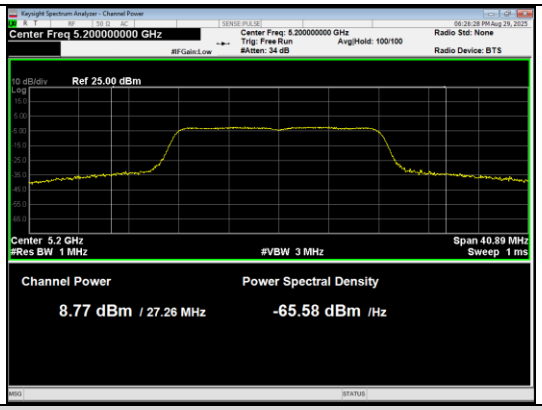
Conducted Output Power

Conducted output power

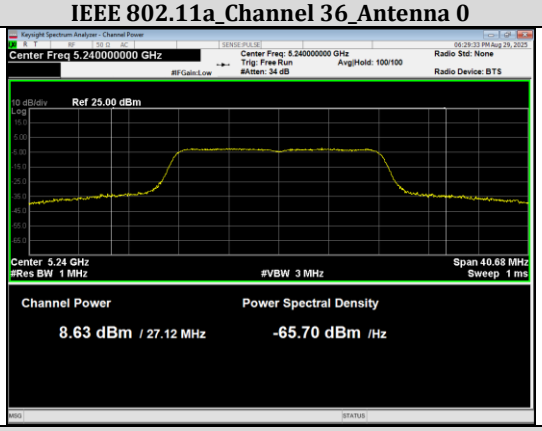
Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	8.72	8.88	≤24	PASS
	40	8.77	8.93	≤24	PASS
	48	8.63	8.79	≤24	PASS
IEEE 802.11n_20	36	9.04	9.23	≤24	PASS
	40	9.08	9.27	≤24	PASS
	48	8.84	9.03	≤24	PASS
IEEE 802.11n_40	38	8.55	8.91	≤24	PASS
	46	8.52	8.88	≤24	PASS
IEEE 802.11ac_20	36	8.99	9.18	≤24	PASS
	40	9.01	9.19	≤24	PASS
	48	8.88	9.06	≤24	PASS
IEEE 802.11ac_40	38	8.52	8.88	≤24	PASS
	46	8.54	8.91	≤24	PASS
IEEE 802.11ac_80	42	8.08	8.79	≤24	PASS
Note: Corrected Value = Antenna Power + Duty Cycle Factor.					



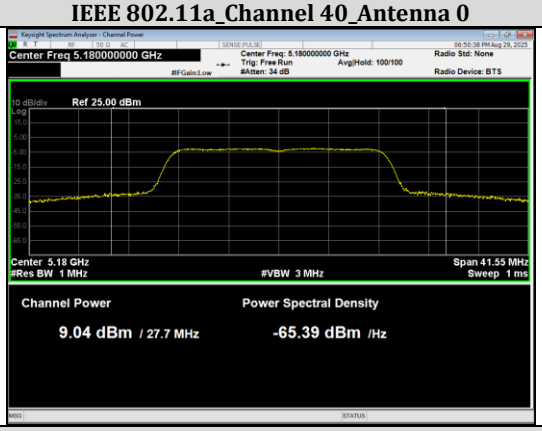
Conducted AVG output power
IEEE 802.11a_Channel 36_Antenna 0



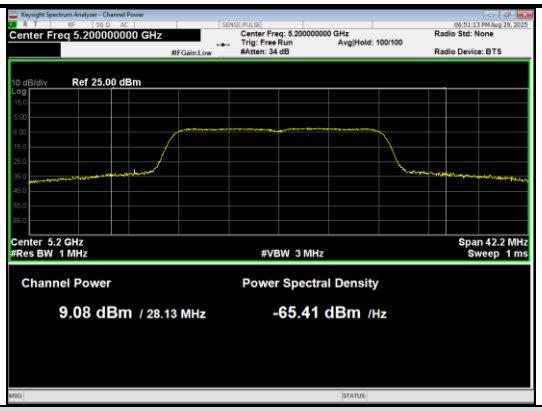
Conducted AVG output power
IEEE 802.11a_Channel 40_Antenna 0



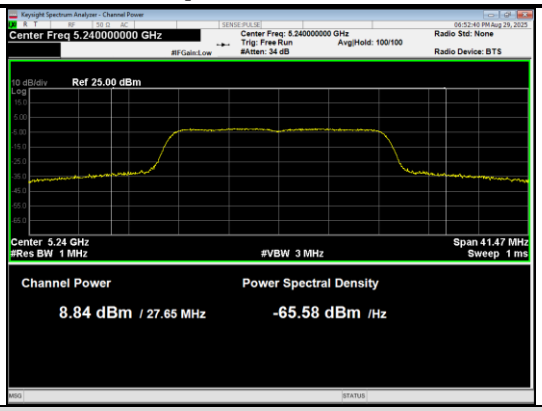
Conducted AVG output power
IEEE 802.11a_Channel 48_Antenna 0



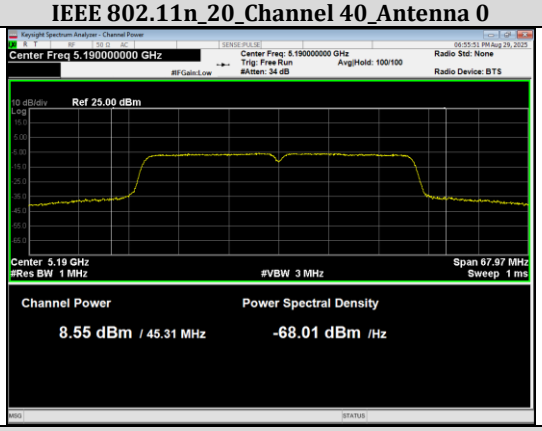
Conducted AVG output power
IEEE 802.11n_20_Channel 36_Antenna 0



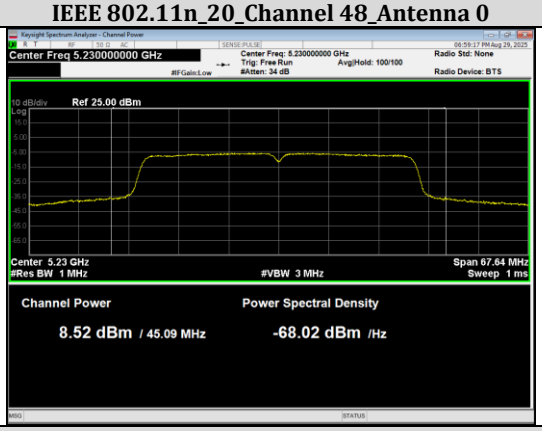
Conducted AVG output power
IEEE 802.11n_20_Channel 40_Antenna 0



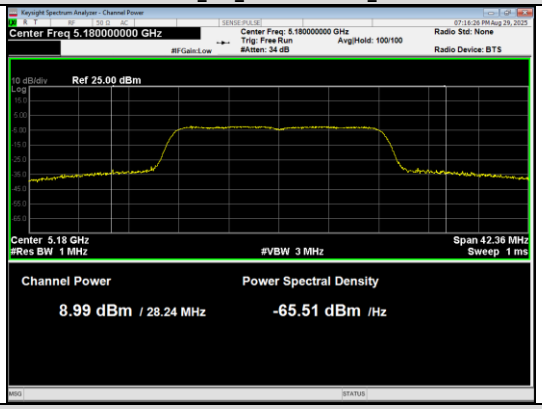
Conducted AVG output power
IEEE 802.11n_20_Channel 48_Antenna 0



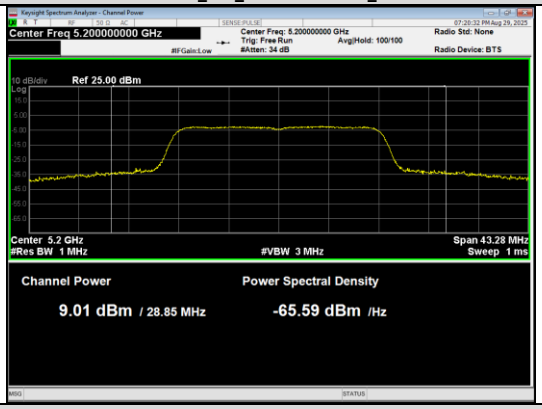
Conducted AVG output power
IEEE 802.11n_40_Channel 38_Antenna 0



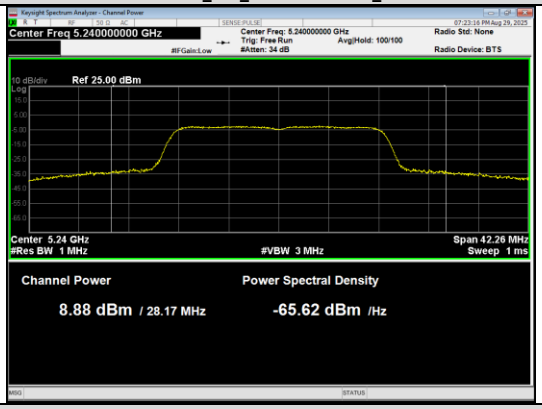
Conducted AVG output power
IEEE 802.11n_40_Channel 46_Antenna 0



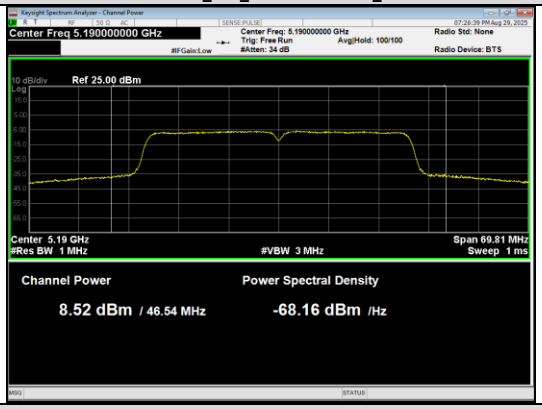
Conducted AVG output power
IEEE 802.11ac_20_Channel 36_Antenna 0



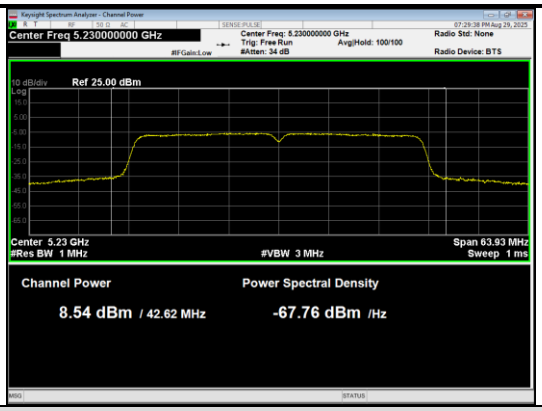
Conducted AVG output power
IEEE 802.11ac_20_Channel 40_Antenna 0



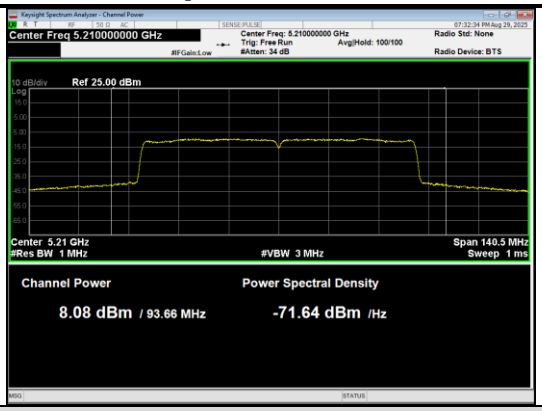
Conducted AVG output power
IEEE 802.11ac_20_Channel 48_Antenna 0



Conducted AVG output power
IEEE 802.11ac_40_Channel 38_Antenna 0



Conducted AVG output power
IEEE 802.11ac_40_Channel 46_Antenna 0



Conducted AVG output power
IEEE 802.11ac_80_Channel 42_Antenna 0

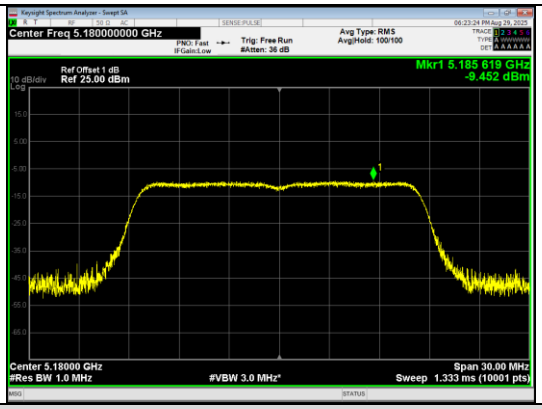
Peak Power Spectral Density

Test Result

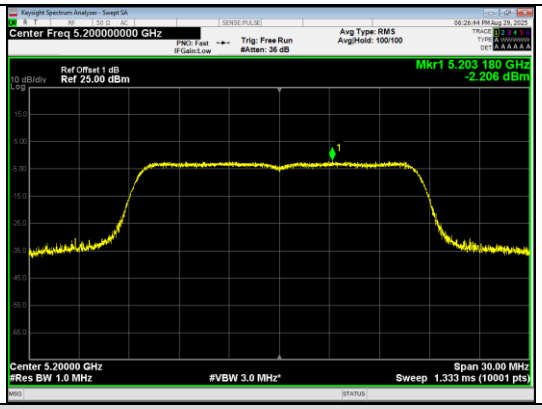
Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.5MHz)	Ant. 0 Corr'd PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	36	-9.450	-9.295	11	PASS
	40	-2.210	-2.055		PASS
	48	-2.020	-1.865		PASS
IEEE 802.11n_20	36	-5.840	-5.653		PASS
	40	-6.080	-5.893		PASS
	48	-2.030	-1.843		PASS
IEEE 802.11n_40	38	-5.260	-4.896		PASS
	46	-5.130	-4.766		PASS
IEEE 802.11ac_20	36	-1.730	-1.547		PASS
	40	-1.850	-1.667		PASS
	48	-1.860	-1.677		PASS
IEEE 802.11ac_40	38	-5.350	-4.984		PASS
	46	-5.360	-4.994		PASS
IEEE 802.11ac_80	42	-8.660	-7.952		PASS

Note: Corr'd Value= Ant. 0 (dBm)+Duty cycle Factor.

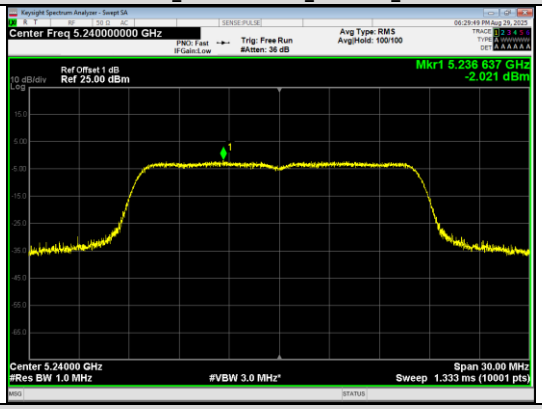
Test Graphs



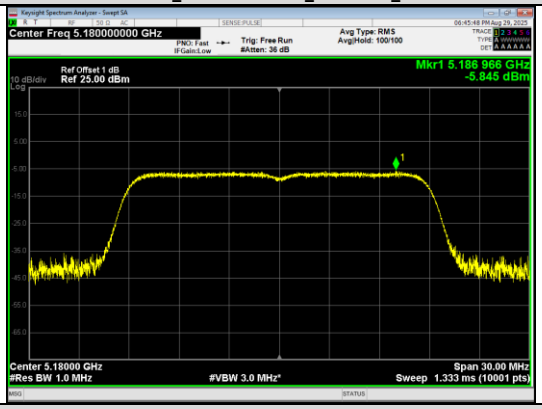
IEEE 802.11a_Channel 36_20MHz_Antenna 0



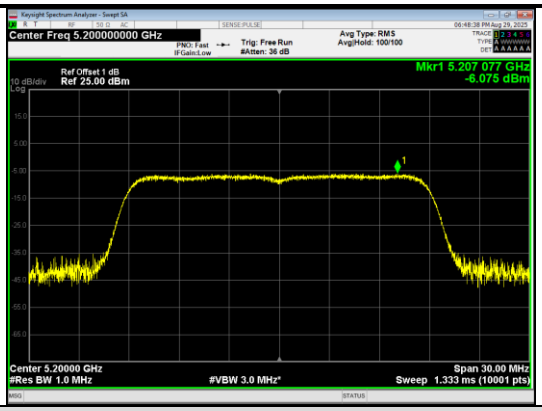
IEEE 802.11a_Channel 40_20MHz_Antenna 0



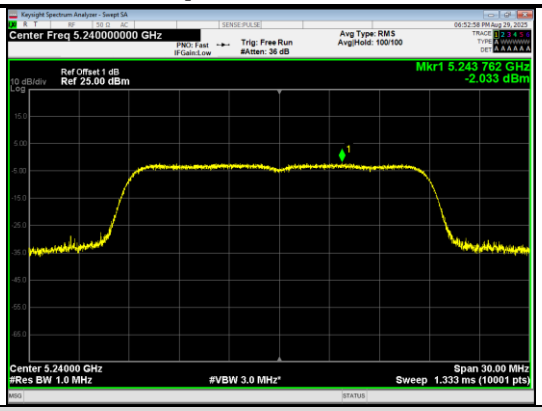
IEEE 802.11a_Channel 48_20MHz_Antenna 0



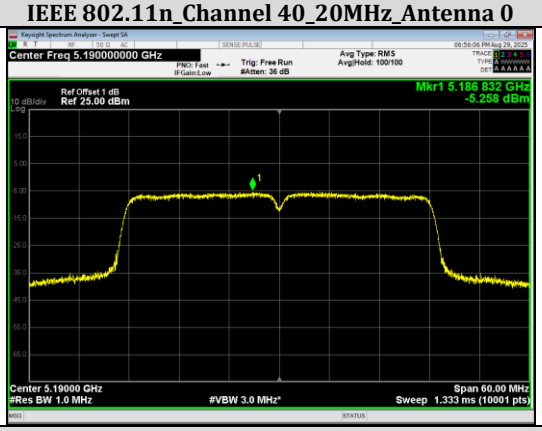
IEEE 802.11n_Channel 36_20MHz_Antenna 0



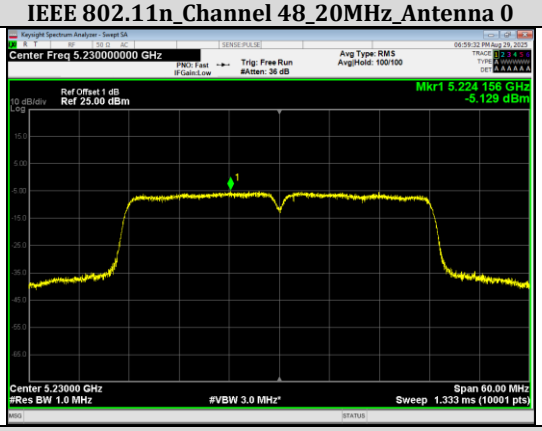
IEEE 802.11n_Channel 40_20MHz_Antenna 0



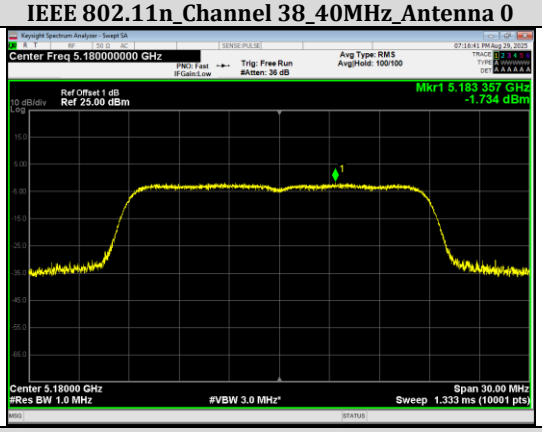
IEEE 802.11n_Channel 48_20MHz_Antenna 0



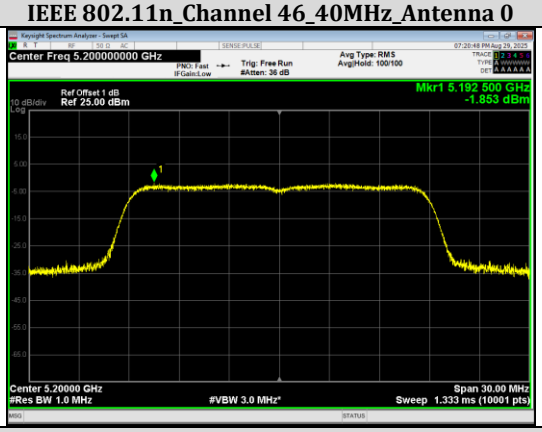
IEEE 802.11n_Channel 38_40MHz_Antenna 0



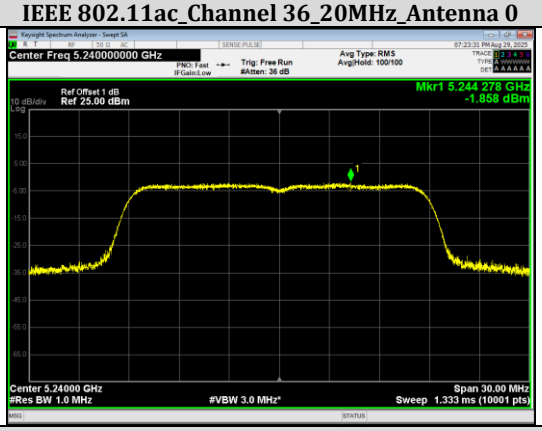
IEEE 802.11n_Channel 46_40MHz_Antenna 0



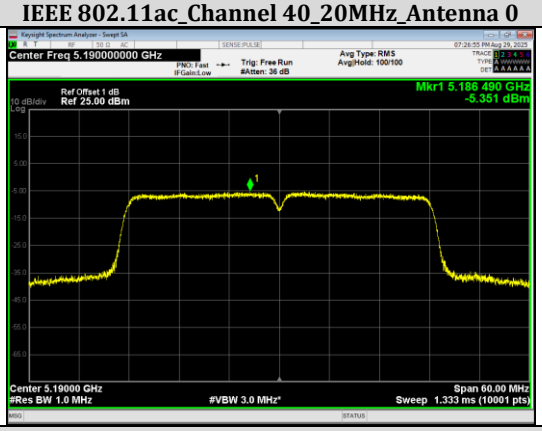
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



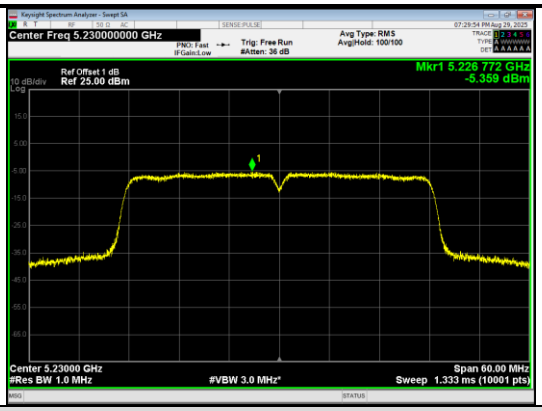
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



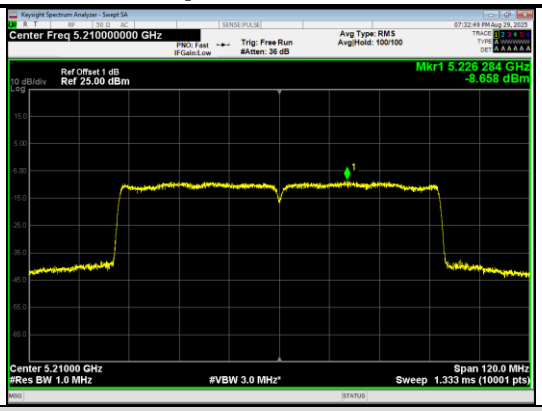
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



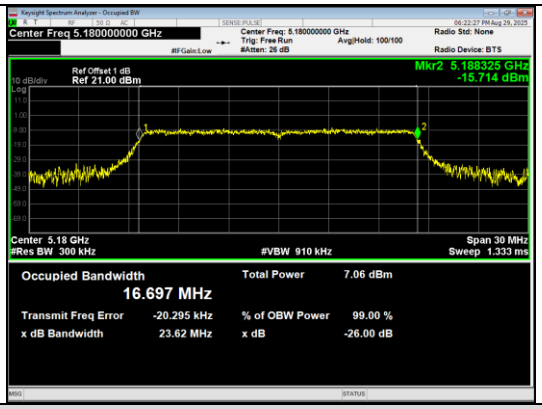
IEEE 802.11ac_Channel 42_80MHz_Antenna 0

99% Bandwidth

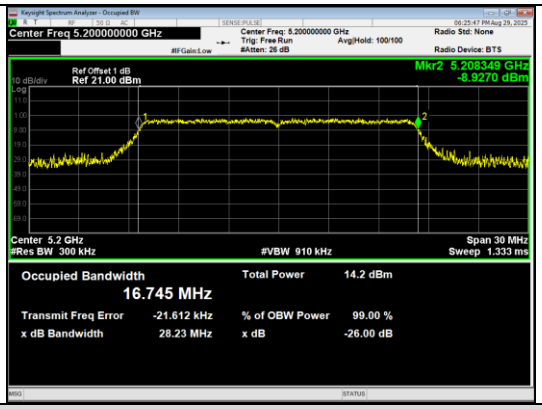
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	0	5180	16.697
	40		5200	16.745
	48		5240	16.719
IEEE 802.11n_20	36		5180	17.749
	40		5200	17.697
	48		5240	17.745
IEEE 802.11n_40	38		5190	36.089
	46		5230	36.101
IEEE 802.11ac_20	36		5180	17.715
	40		5200	17.720
	48		5240	17.734
IEEE 802.11ac_40	38		5190	36.148
	46		5230	36.085
IEEE 802.11ac_80	42		5210	75.619

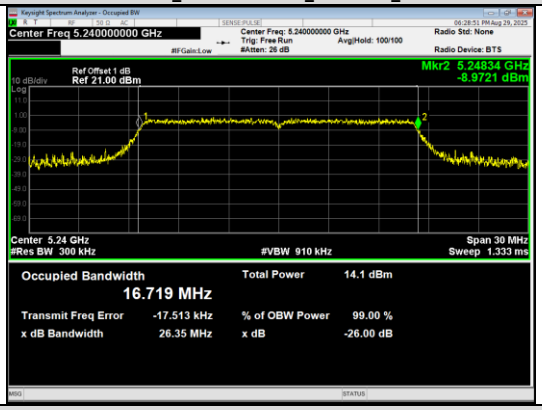
Test Graphs



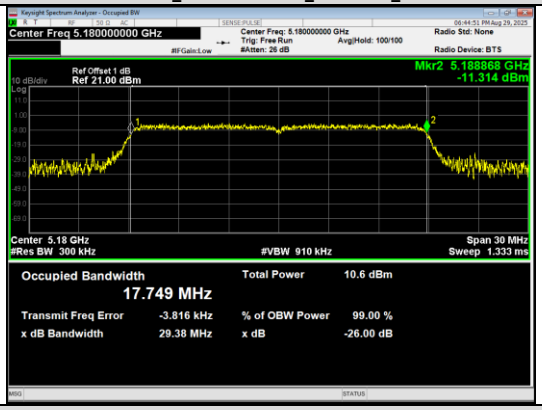
IEEE 802.11a_Channel 36_20MHz_Antenna 0



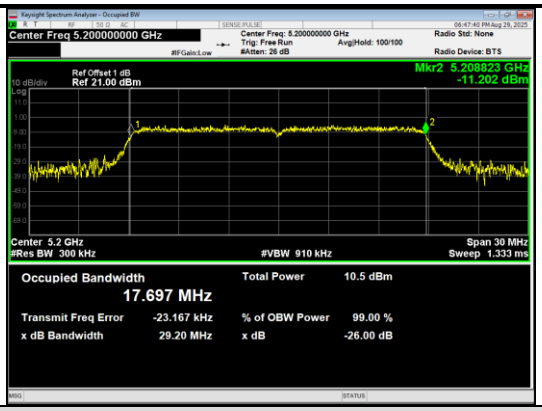
IEEE 802.11a_Channel 40_20MHz_Antenna 0



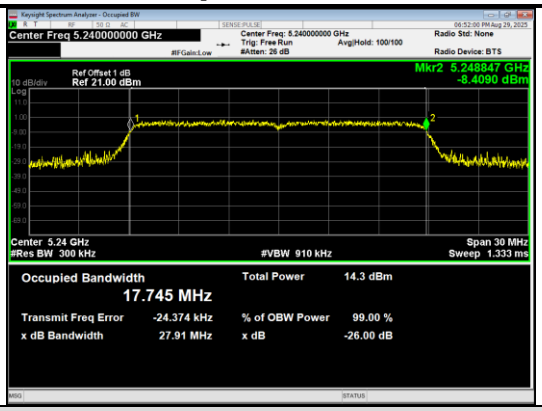
IEEE 802.11a_Channel 48_20MHz_Antenna 0



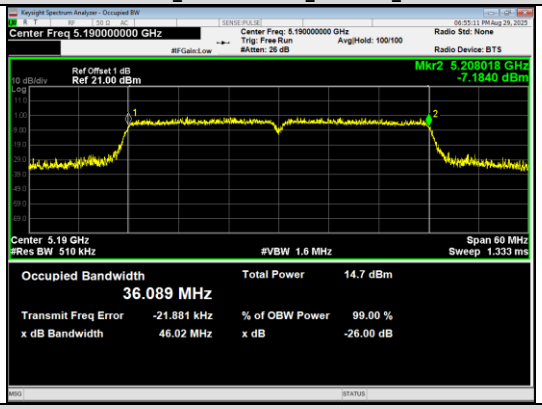
IEEE 802.11n_Channel 36_20MHz_Antenna 0



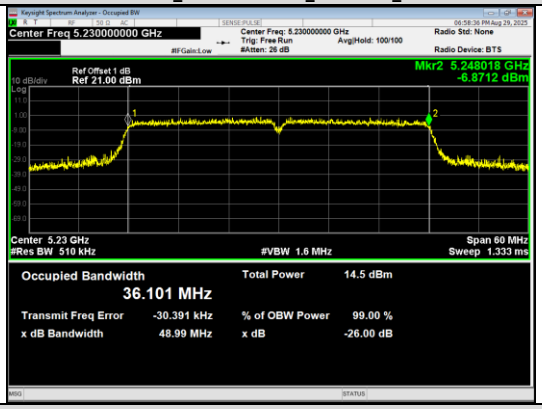
IEEE 802.11n_Channel 40_20MHz_Antenna 0



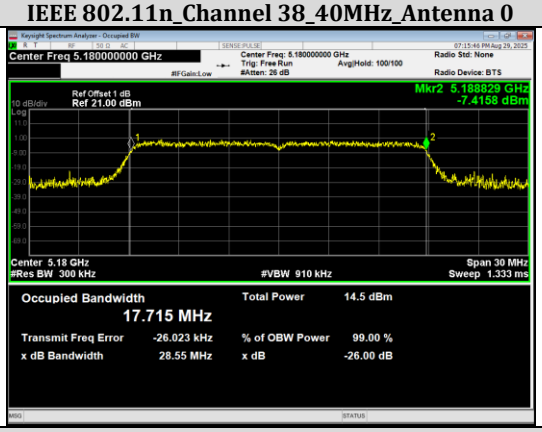
IEEE 802.11n_Channel 48_20MHz_Antenna 0



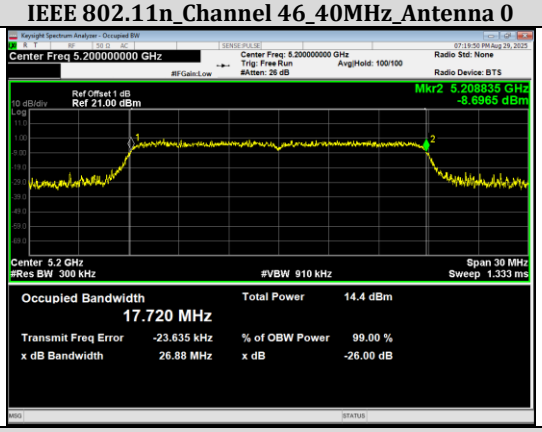
IEEE 802.11n_Channel 38_40MHz_Antenna 0



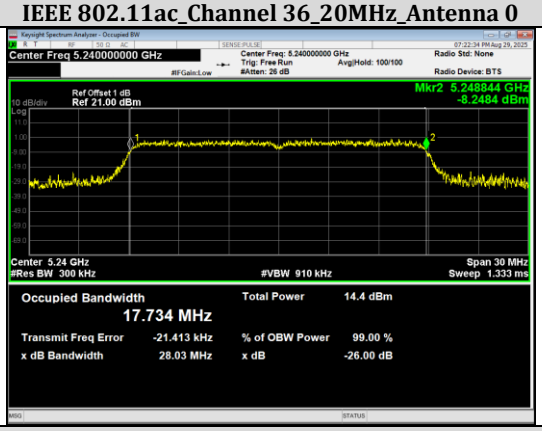
IEEE 802.11n_Channel 46_40MHz_Antenna 0



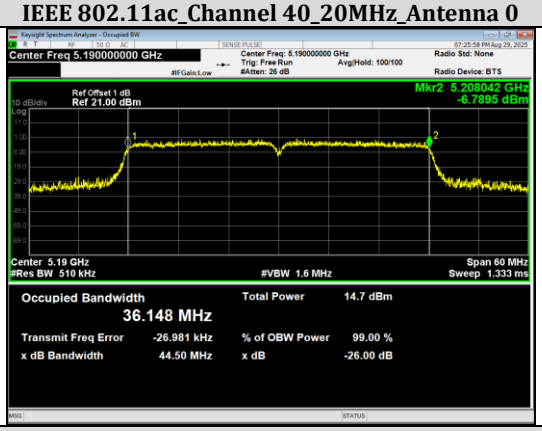
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



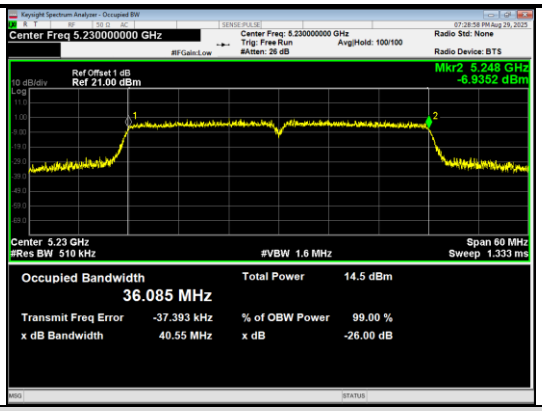
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



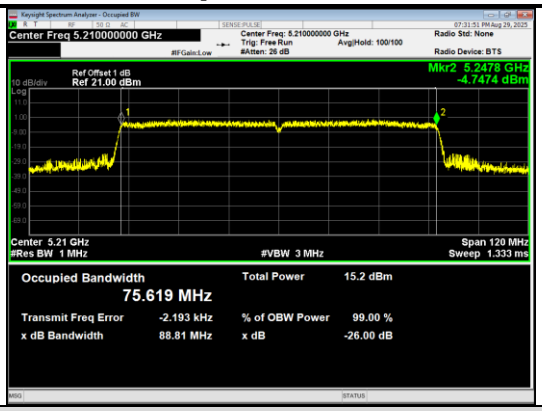
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



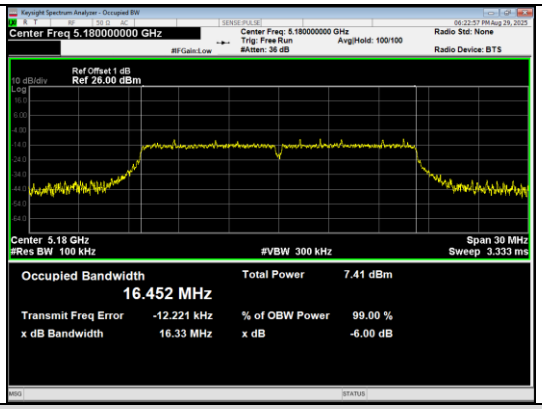
IEEE 802.11ac_Channel 42_80MHz_Antenna 0

6dB Bandwidth

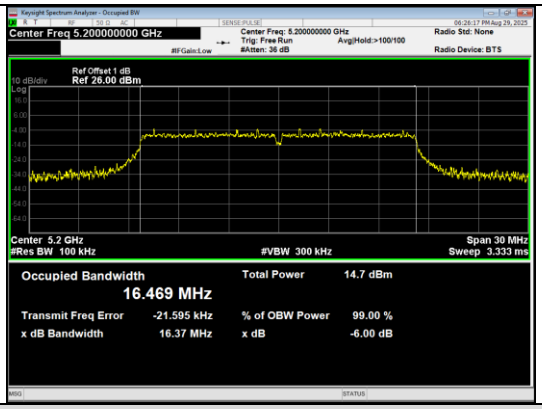
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	36	0	5180	16.33	≥0.5	PASS
	40		5200	16.37		PASS
	48		5240	16.34		PASS
IEEE 802.11n_20	36		5180	17.42		PASS
	40		5200	17.27		PASS
	48		5240	17.55		PASS
IEEE 802.11n_40	38		5190	35.87		PASS
	46		5230	35.77		PASS
IEEE 802.11ac_20	36		5180	17.55		PASS
	40		5200	17.53		PASS
	48		5240	17.54		PASS
IEEE 802.11ac_40	38		5190	35.92		PASS
	46		5230	35.77		PASS
IEEE 802.11ac_80	42		5210	75.87		PASS

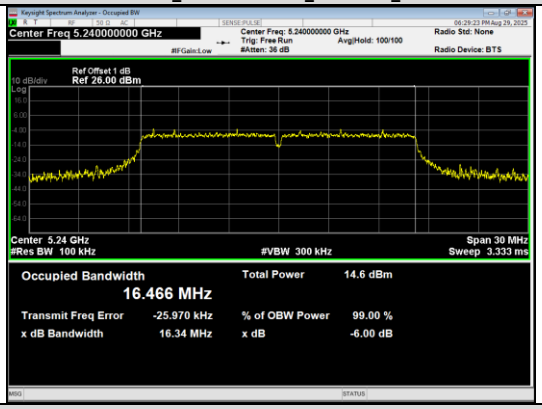
Test Graphs



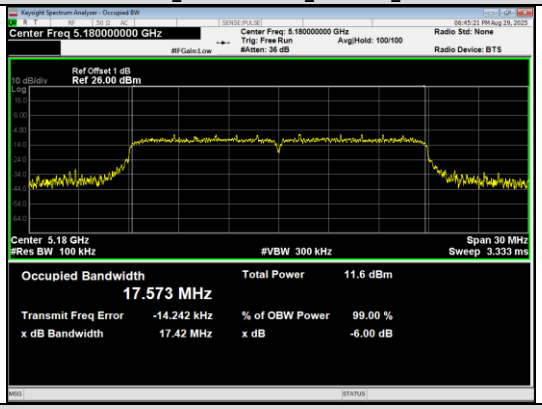
IEEE 802.11a_Channel 36_20MHz_Antenna 0



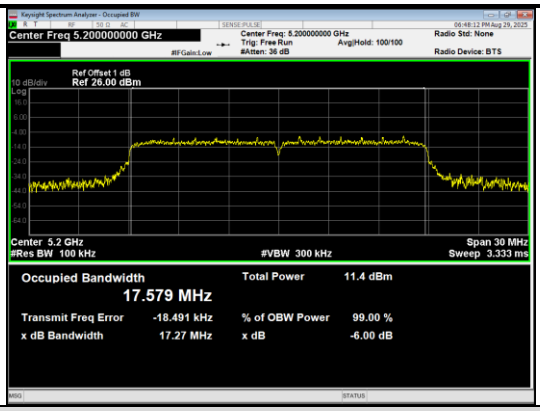
IEEE 802.11a_Channel 40_20MHz_Antenna 0



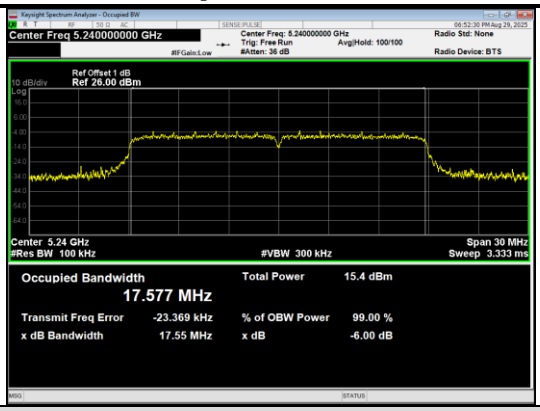
IEEE 802.11a_Channel 48_20MHz_Antenna 0



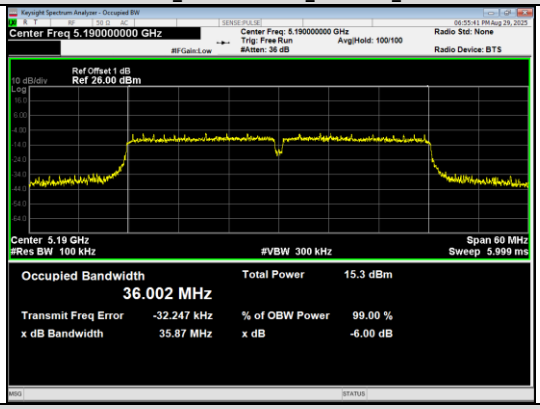
IEEE 802.11n_Channel 36_20MHz_Antenna 0



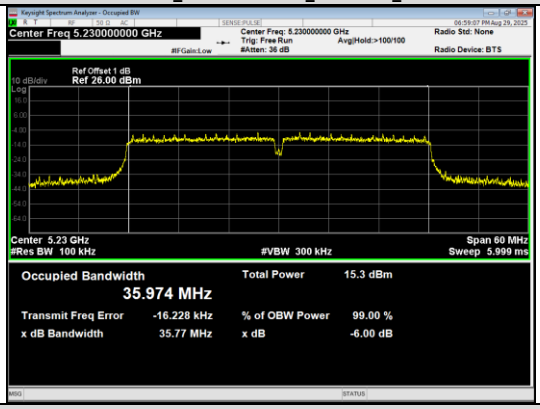
IEEE 802.11n_Channel 40_20MHz_Antenna 0



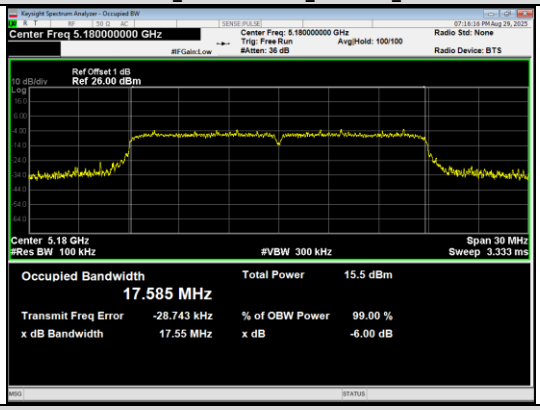
IEEE 802.11n_Channel 48_20MHz_Antenna 0



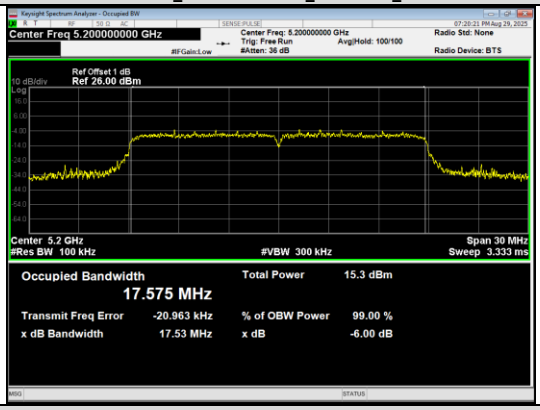
IEEE 802.11n_Channel 38_40MHz_Antenna 0



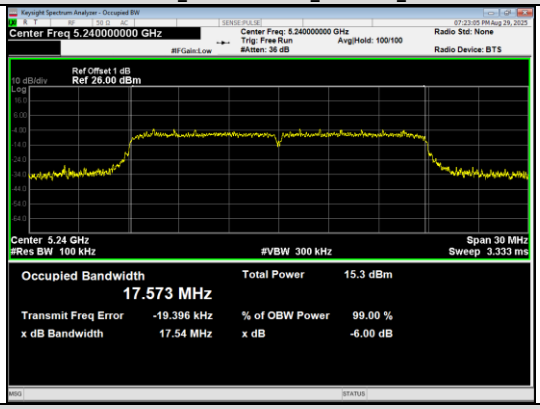
IEEE 802.11n_Channel 46_40MHz_Antenna 0



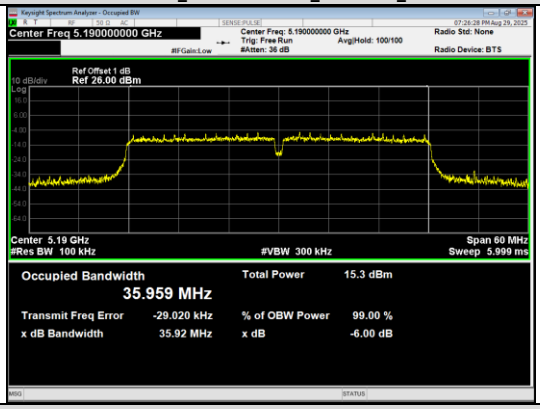
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



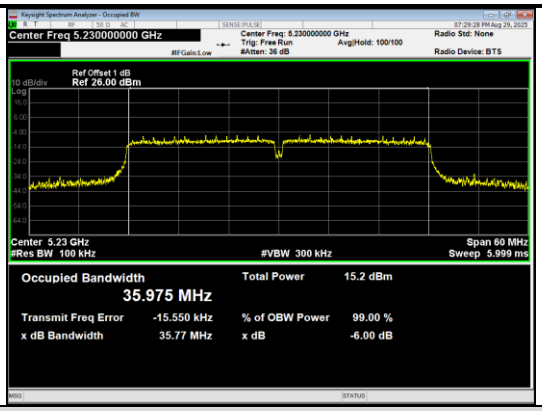
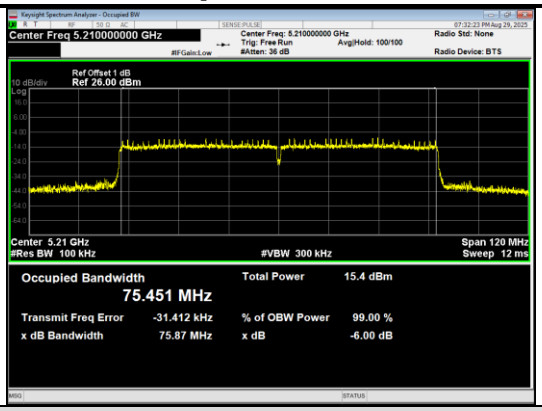
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0

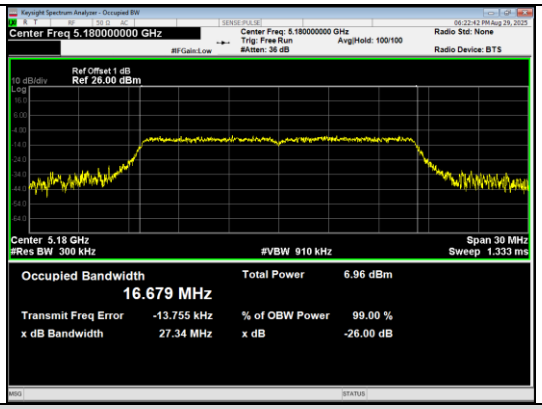
	
IEEE 802.11ac_Channel 46_40MHz_Antenna 0	**IEEE 802.11ac_Channel 42_80MHz_Antenna 0**

26dB Bandwidth

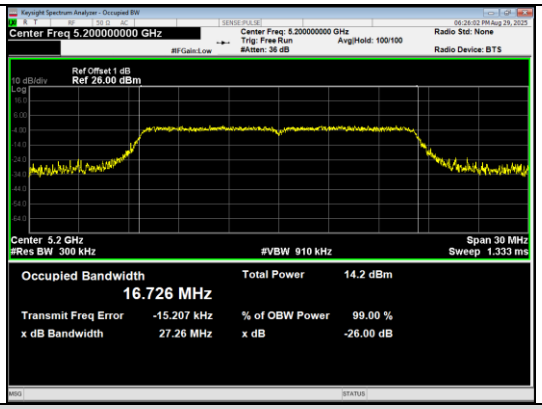
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	36	0	5180	27.34	1.1
	40		5200	27.26	1.1
	48		5240	27.12	1.11
IEEE 802.11n_20	36		5180	27.70	1.08
	40		5200	28.13	1.07
	48		5240	27.65	1.08
IEEE 802.11n_40	38		5190	45.31	1.13
	46		5230	45.09	1.13
IEEE 802.11ac_20	36		5180	28.24	1.06
	40		5200	28.85	1.04
	48		5240	28.17	1.06
IEEE 802.11ac_40	38		5190	46.54	1.1
	46		5230	42.62	1.2
IEEE 802.11ac_80	42		5210	93.66	1.07

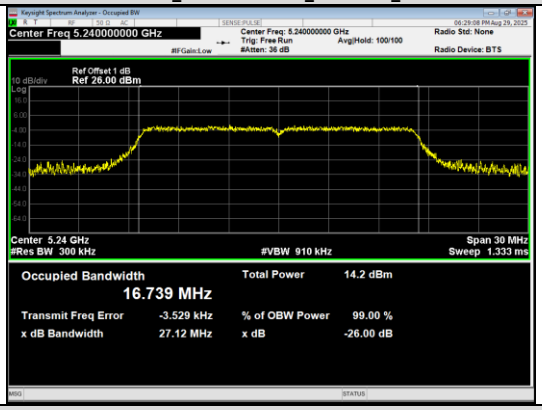
Test Graphs



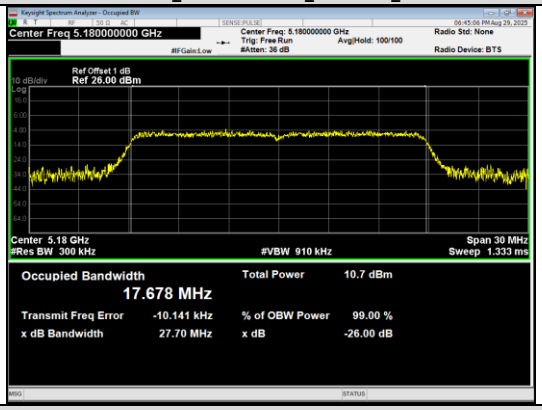
IEEE 802.11a_Channel 36_20MHz_Antenna 0



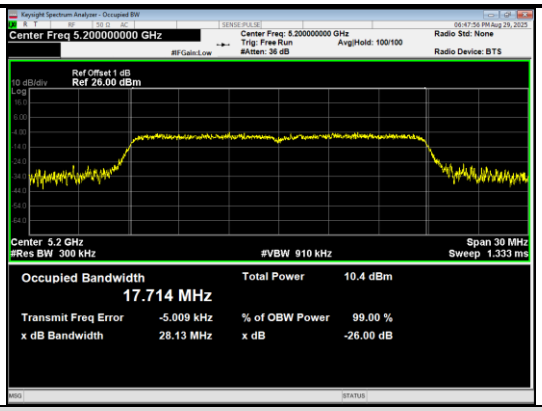
IEEE 802.11a_Channel 40_20MHz_Antenna 0



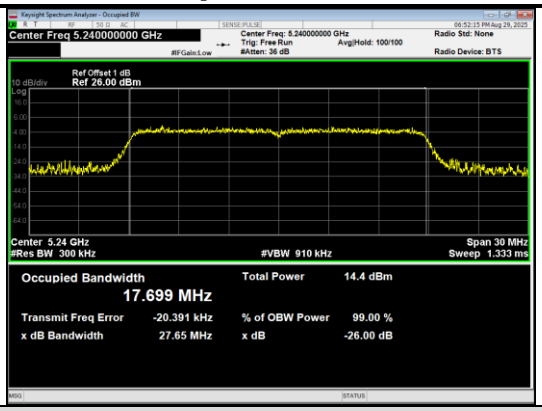
IEEE 802.11a_Channel 48_20MHz_Antenna 0



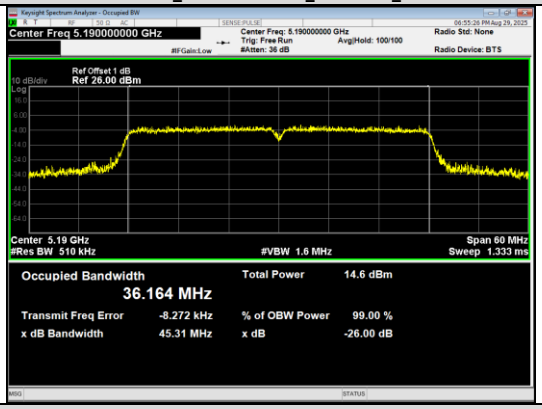
IEEE 802.11n_Channel 36_20MHz_Antenna 0



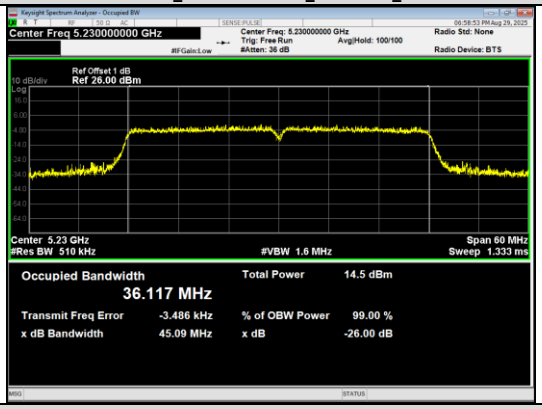
IEEE 802.11n_Channel 40_20MHz_Antenna 0



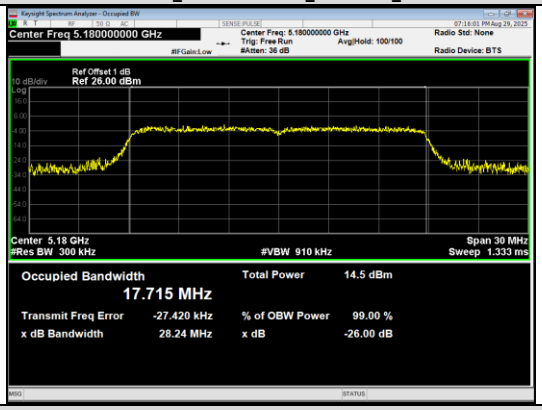
IEEE 802.11n_Channel 48_20MHz_Antenna 0



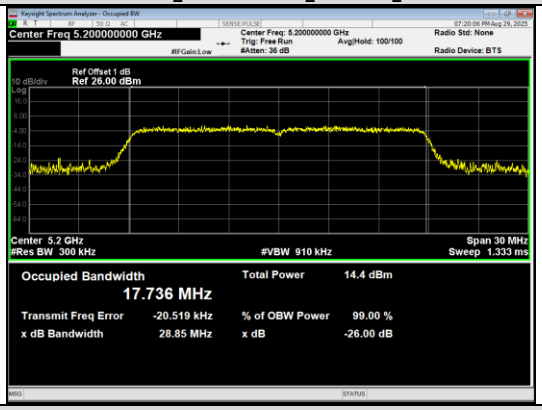
IEEE 802.11n_Channel 38_40MHz_Antenna 0



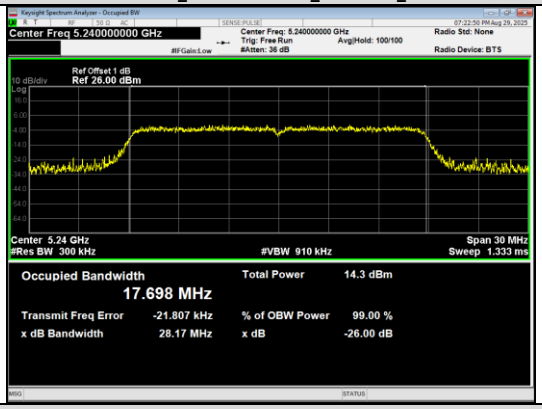
IEEE 802.11n_Channel 46_40MHz_Antenna 0



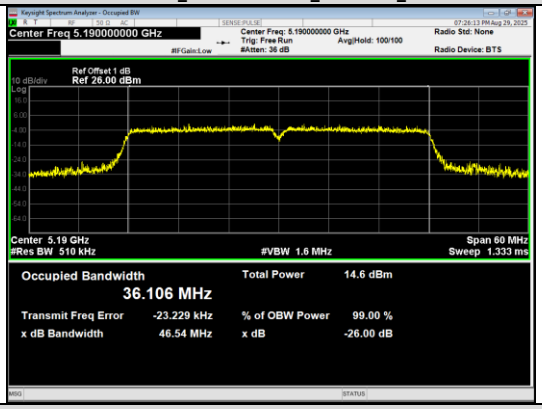
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



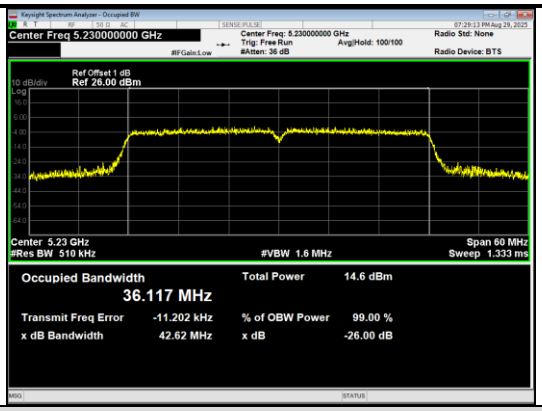
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0

	
IEEE 802.11ac_Channel 46_40MHz_Antenna 0	**IEEE 802.11ac_Channel 42_80MHz_Antenna 0**

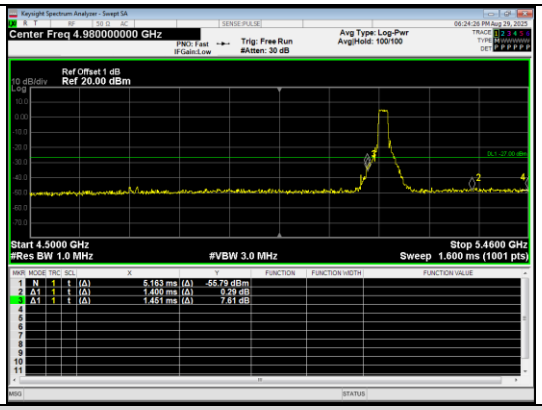
Conducted Out Of Band Emission

Test Result

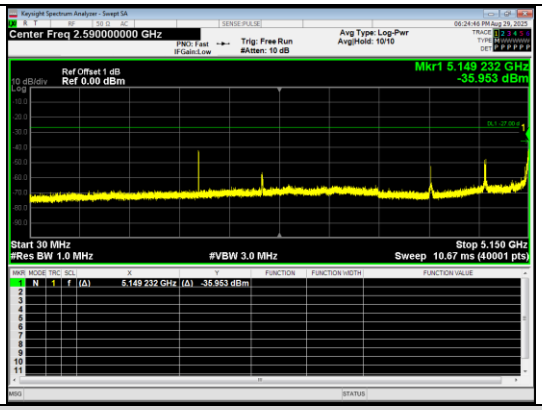
Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11a	36	0	5148.96	-33.459	-27	-6.000	PASS
			5149.23	-35.950	-27	-8.950	PASS
			5150.00	-35.950	-27	-9.000	PASS
			5350.00	-48.900	-27	-22.000	PASS
			5459.04	-48.800	-27	-22.000	PASS
			15529.7	-30.750	-27	-3.750	PASS
	40		1764.02	-43.170	-27	-16.170	PASS
			5148.96	-48.117	-27	-21.000	PASS
			5150.00	-48.850	-27	-22.000	PASS
			5350.00	-49.220	-27	-22.000	PASS
			5460.00	-48.122	-27	-21.000	PASS
			15603.4	-30.820	-27	-3.820	PASS
	48		1764.02	-43.830	-27	-16.830	PASS
			5148.96	-49.091	-27	-22.000	PASS
			5150.00	-49.730	-27	-23.000	PASS
			5350.00	-48.310	-27	-21.000	PASS
			5458.08	-48.183	-27	-21.000	PASS
			15720.3	-32.620	-27	-5.620	PASS
IEEE 802.11n_20	36		1752.75	-38.130	-27	-11.130	PASS
			5148.96	-39.779	-27	-13.000	PASS
			5150.00	-40.120	-27	-13.000	PASS
			5350.00	-48.940	-27	-22.000	PASS
			5460.00	-48.054	-27	-21.000	PASS
			15540.5	-40.230	-27	-13.230	PASS
	40		1755.70	-42.100	-27	-15.100	PASS
			5149.92	-49.408	-27	-22.000	PASS
			5150.00	-49.410	-27	-22.000	PASS
			5350.00	-47.030	-27	-20.000	PASS
			5410.08	-46.165	-27	-19.000	PASS
			15598.9	-42.150	-27	-15.150	PASS
	48		1746.35	-44.420	-27	-17.420	PASS
			5136.48	-48.430	-27	-21.000	PASS
			5150.00	-48.730	-27	-22.000	PASS
			5350.00	-49.110	-27	-22.000	PASS
			5460.00	-48.241	-27	-21.000	PASS
			15721.3	-34.020	-27	-7.020	PASS
IEEE 802.11n_40	38		5149.23	-33.080	-27	-6.080	PASS
			5150.00	-33.800	-27	-7.000	PASS
			5350.00	-48.900	-27	-22.000	PASS
			5460.00	-48.316	-27	-21.000	PASS
			15557.2	-36.130	-27	-9.130	PASS
	46		4732.85	-44.740	-27	-17.740	PASS
			5148.96	-47.567	-27	-21.000	PASS
			5150.00	-47.680	-27	-21.000	PASS
			5350.00	-46.740	-27	-20.000	PASS
			5457.12	-46.593	-27	-20.000	PASS
			15675.6	-37.080	-27	-10.080	PASS
IEEE 802.11ac_20	36		5148.72	-35.960	-27	-8.960	PASS
			5150.00	-34.150	-27	-7.000	PASS
			5350.00	-49.030	-27	-22.000	PASS
			5460.00	-48.781	-27	-22.000	PASS
			15537.1	-30.120	-27	-3.120	PASS
	40		4711.98	-47.180	-27	-20.180	PASS
			5148.96	-45.755	-27	-19.000	PASS
			5150.00	-46.710	-27	-20.000	PASS

			5350.00	-47.640	-27	-21.000	PASS
			5460.00	-46.884	-27	-20.000	PASS
			15583.2	-31.680	-27	-4.680	PASS
	48		4752.94	-47.440	-27	-20.440	PASS
			5148.00	-48.564	-27	-22.000	PASS
			5150.00	-49.670	-27	-23.000	PASS
			5350.00	-47.820	-27	-21.000	PASS
			5459.04	-47.531	-27	-21.000	PASS
			15732.6	-32.250	-27	-5.250	PASS
IEEE 802.11ac_40	38		5148.96	-33.863	-27	-7.000	PASS
			5149.23	-34.360	-27	-7.360	PASS
			5150.00	-34.570	-27	-8.000	PASS
			5350.00	-48.470	-27	-21.000	PASS
			5458.08	-48.298	-27	-21.000	PASS
			15567.0	-35.200	-27	-8.200	PASS
	46		4766.77	-43.810	-27	-16.810	PASS
			5147.04	-47.273	-27	-20.000	PASS
			5150.00	-47.530	-27	-21.000	PASS
			5350.00	-48.960	-27	-22.000	PASS
			5460.00	-48.785	-27	-22.000	PASS
			15680.0	-37.990	-27	-10.990	PASS
IEEE 802.11ac_80	42		5150.00	-31.770	-27	-5.000	PASS
			5150.00	-31.460	-27	-4.460	PASS
			5350.00	-44.500	-27	-18.000	PASS
			5377.44	-44.352	-27	-17.000	PASS
			15631.4	-38.080	-27	-11.080	PASS

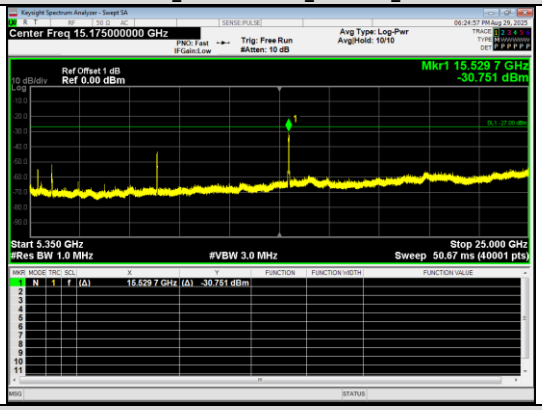
Test Graphs



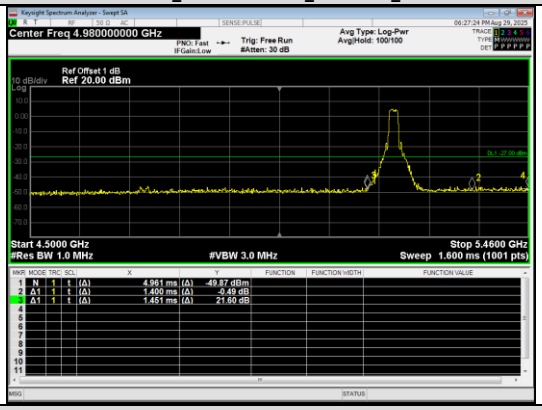
Out Of Band Emission
IEEE 802.11a_Channel 36_20MHz_Antenna 0



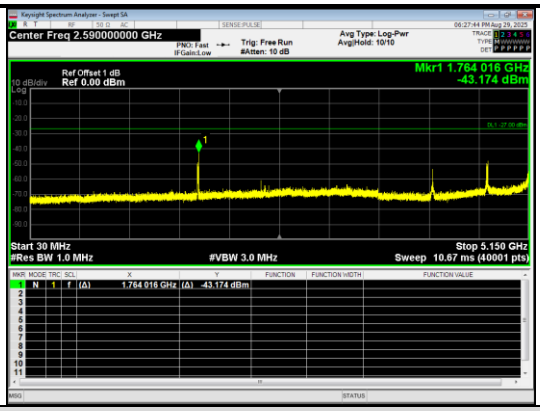
Spurious Emission:30.0~5150 MHz
IEEE 802.11a_Channel 36_20MHz_Antenna 0



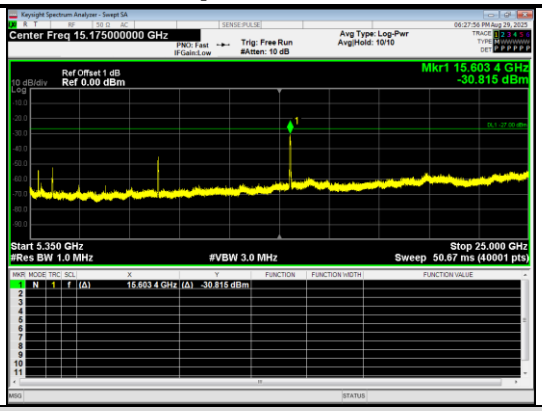
Spurious Emission:5350~25000.0 MHz
IEEE 802.11a_Channel 36_20MHz_Antenna 0



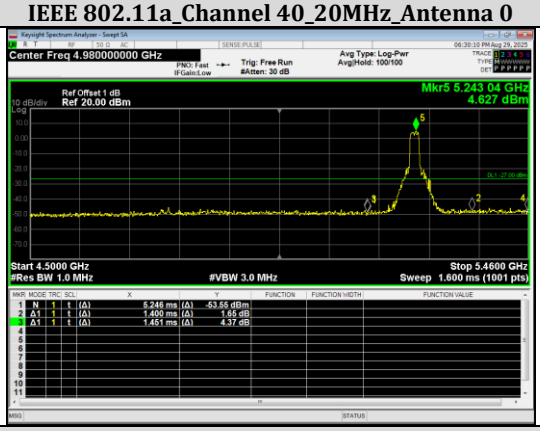
Out Of Band Emission
IEEE 802.11a_Channel 40_20MHz_Antenna 0



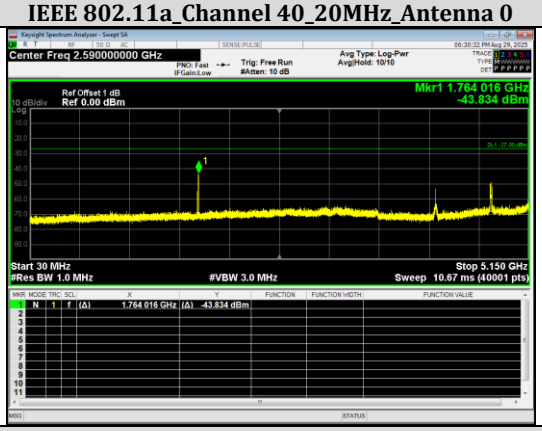
Spurious Emission:30.0~5150 MHz
IEEE 802.11a_Channel 40_20MHz_Antenna 0



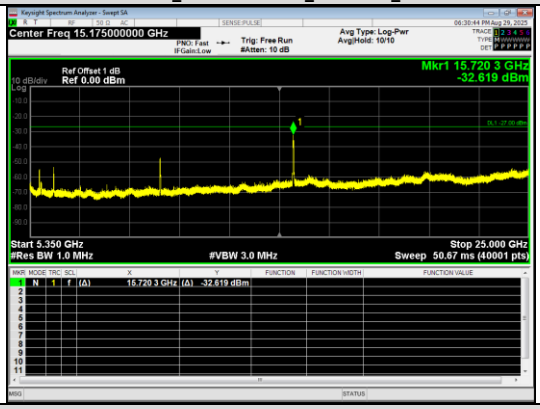
Spurious Emission:5350~25000.0 MHz
IEEE 802.11a_Channel 40_20MHz_Antenna 0



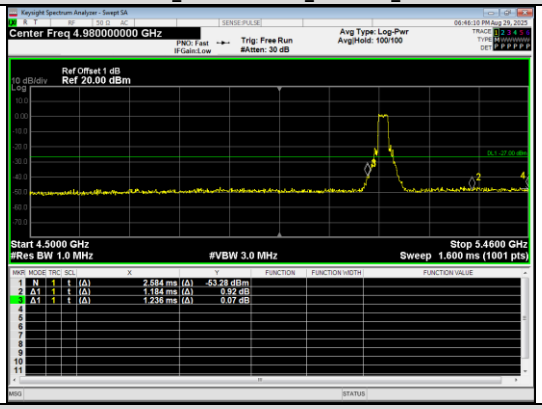
Out Of Band Emission
IEEE 802.11a_Channel 48_20MHz_Antenna 0



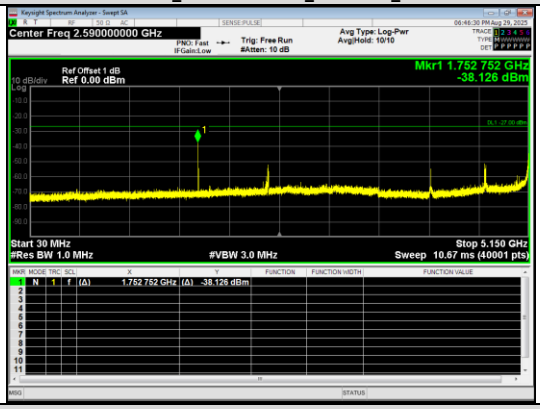
Spurious Emission:30.0~5150 MHz
IEEE 802.11a_Channel 48_20MHz_Antenna 0



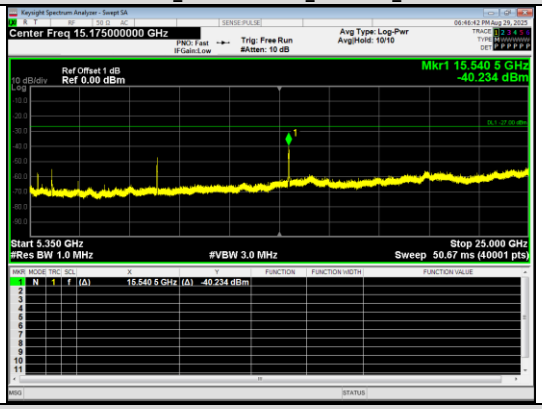
Spurious Emission:5350~25000.0 MHz
IEEE 802.11a_Channel 48_20MHz_Antenna 0



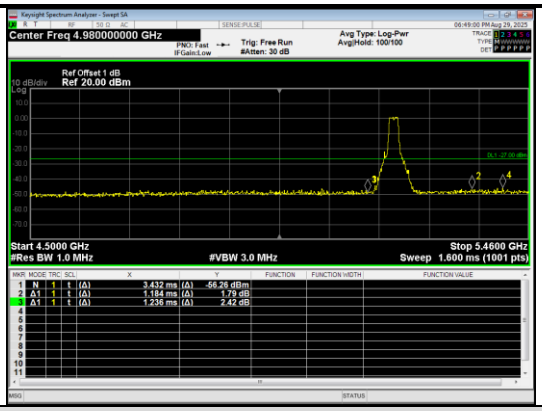
Out Of Band Emission
IEEE 802.11n_Channel 36_20MHz_Antenna 0



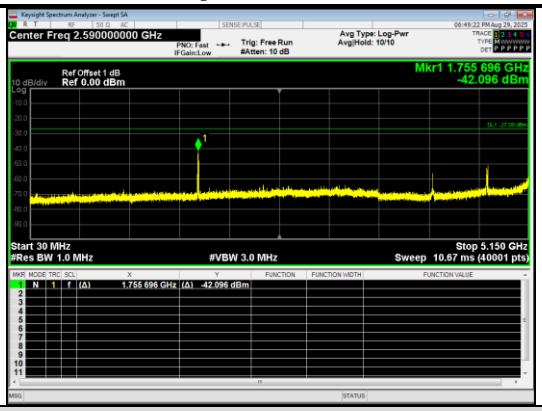
Spurious Emission:30.0~5150 MHz
IEEE 802.11n_Channel 36_20MHz_Antenna 0



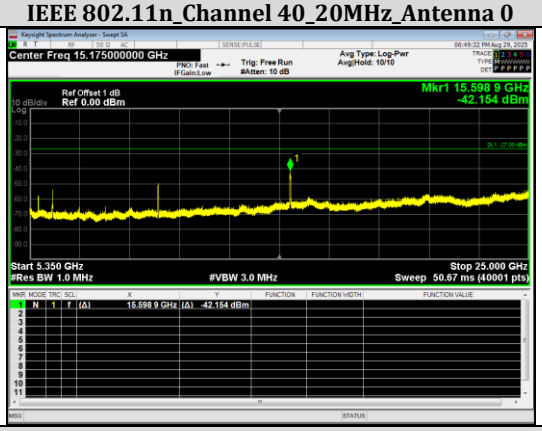
Spurious Emission:5350~25000.0 MHz
IEEE 802.11n_Channel 36_20MHz_Antenna 0



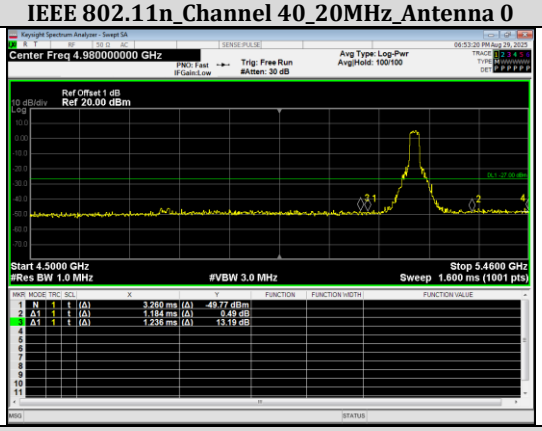
Out Of Band Emission
IEEE 802.11n_Channel 40_20MHz_Antenna 0



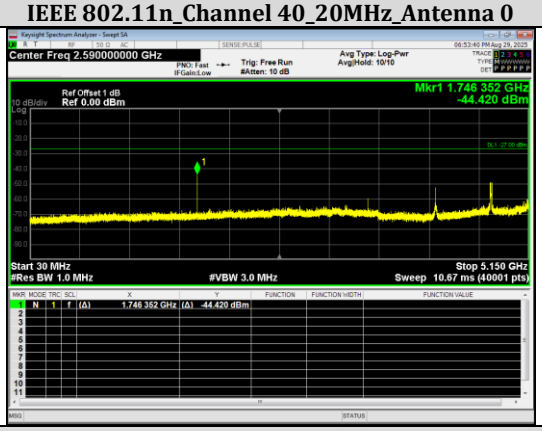
Spurious Emission:30.0~5150 MHz
IEEE 802.11n_Channel 40_20MHz_Antenna 0



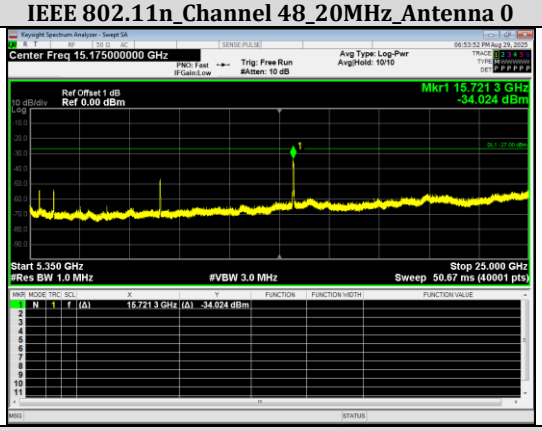
Spurious Emission:5350~25000.0 MHz
IEEE 802.11n_Channel 40_20MHz_Antenna 0



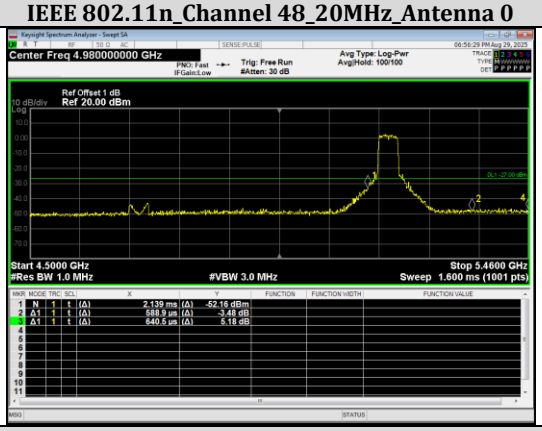
Out Of Band Emission
IEEE 802.11n_Channel 48_20MHz_Antenna 0



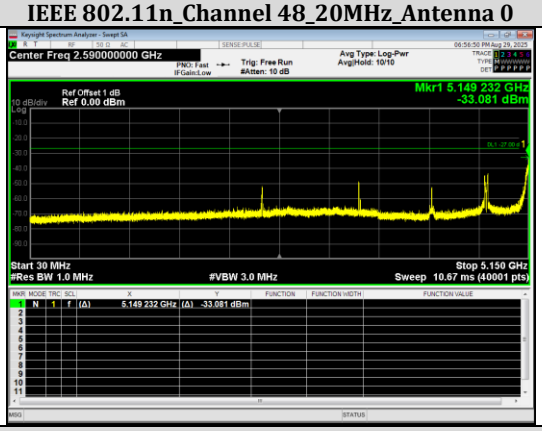
Spurious Emission:30.0~5150 MHz
IEEE 802.11n_Channel 48_20MHz_Antenna 0



Spurious Emission:5350~25000.0 MHz
IEEE 802.11n_Channel 48_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 38_40MHz_Antenna 0



Spurious Emission:30.0~5150 MHz
IEEE 802.11n_Channel 38_40MHz_Antenna 0