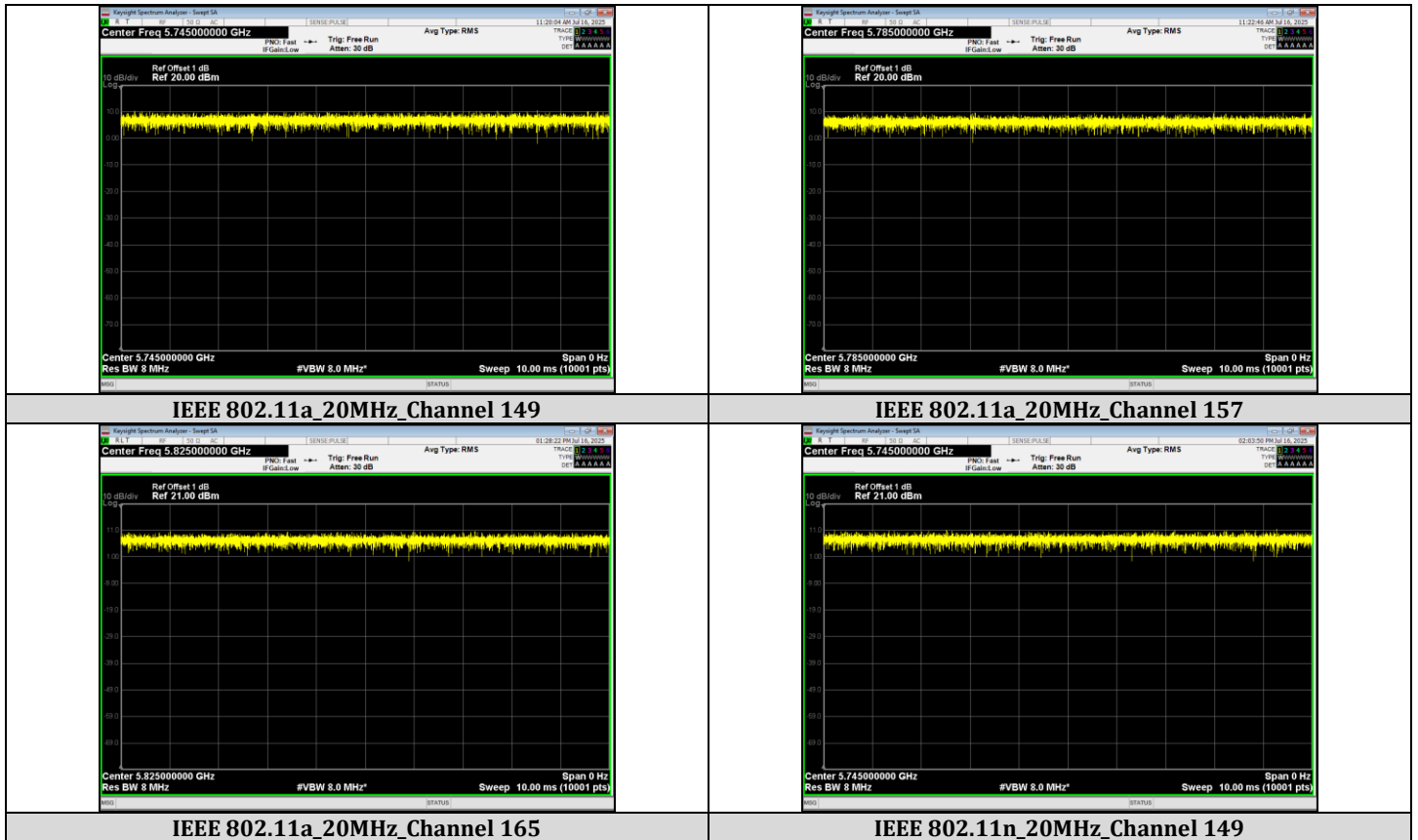


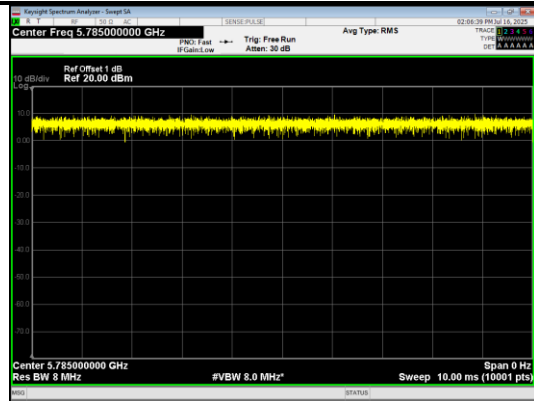
Appendix RF test data for 5G WIFI_NII band 3

Duty Cycle Test Result

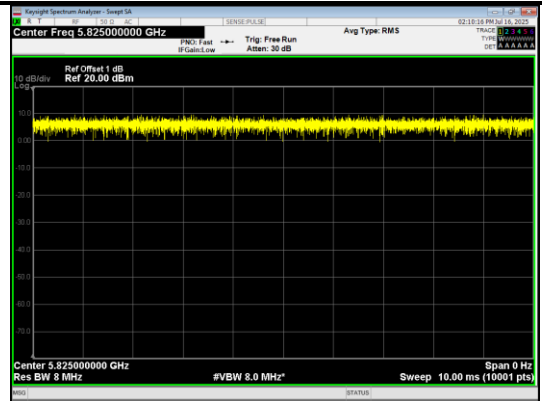
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11a	6	149	0	10.000	10.000	100	1	0.0	0.1000
		157		10.000	10.000	100	1	0.0	0.1000
		165		10.000	10.000	100	1	0.0	0.1000
IEEE 802.11n_20	149	10.000		10.000	100	1	0.0	0.1000	
	157	10.000		10.000	100	1	0.0	0.1000	
	165	10.000		10.000	100	1	0.0	0.1000	
IEEE 802.11n_40	151	10.000		10.000	100	1	0.0	0.1000	
	159	10.000		10.000	100	1	0.0	0.1000	
IEEE 802.11ac_20	MCS 0	149		10.000	10.000	100	1	0.0	0.1000
		157		10.000	10.000	100	1	0.0	0.1000
		165		10.000	10.000	100	1	0.0	0.1000
IEEE 802.11ac_40		151		10.000	10.000	100	1	0.0	0.1000
		159		10.000	10.000	100	1	0.0	0.1000
IEEE 802.11ac_80		155		10.000	10.000	100	1	0.0	0.1000

Test Graphs





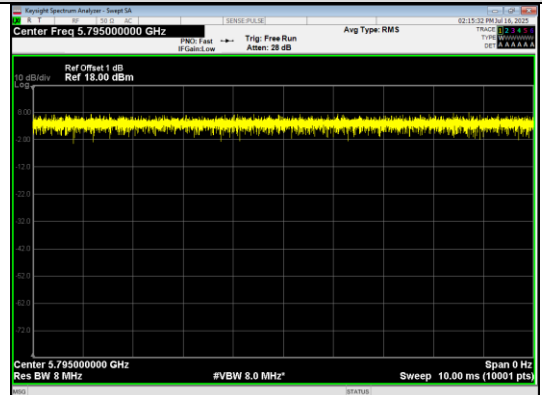
IEEE 802.11n 20MHz_Channel 157



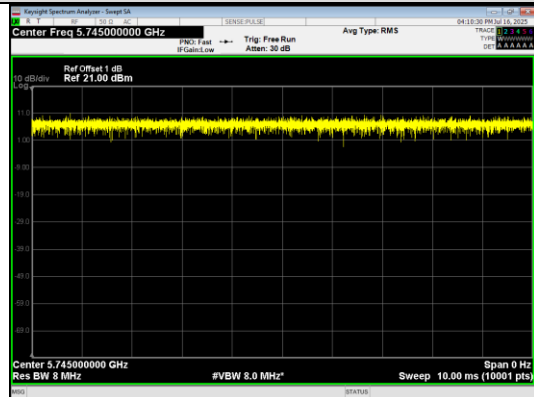
IEEE 802.11n 20MHz_Channel 165



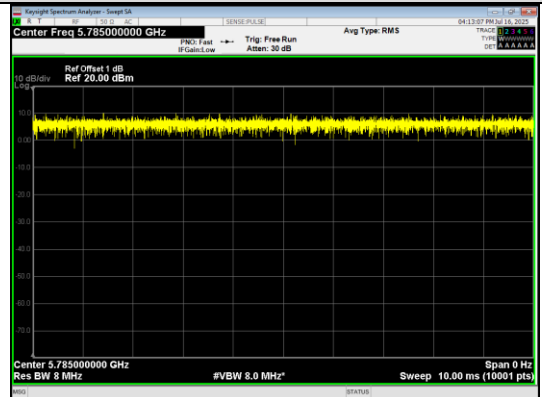
IEEE 802.11n 40MHz_Channel 151



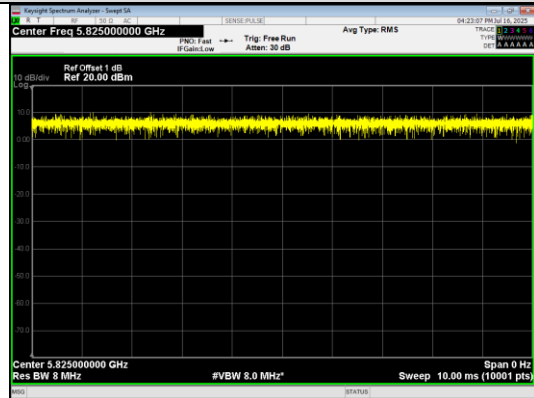
IEEE 802.11n 40MHz_Channel 159



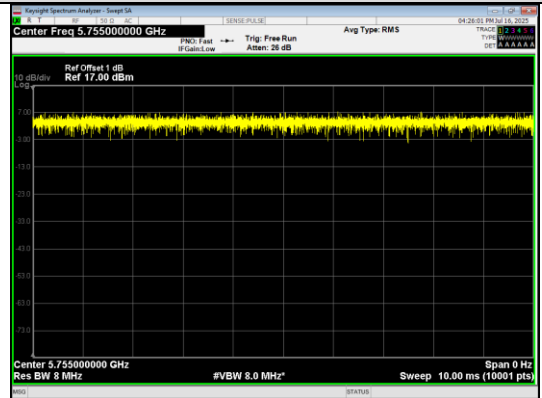
IEEE 802.11ac 20MHz_Channel 149



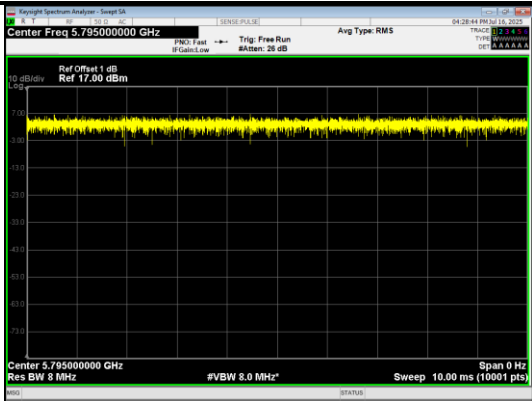
IEEE 802.11ac 20MHz_Channel 157



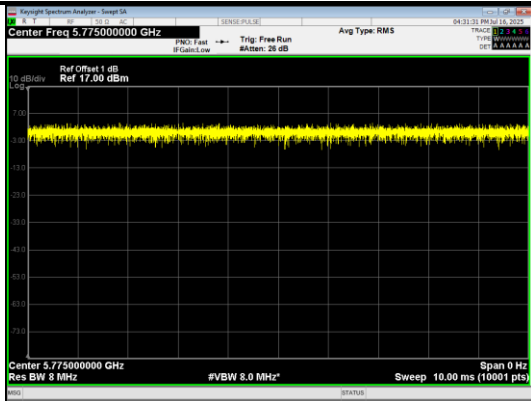
IEEE 802.11ac 20MHz_Channel 165



IEEE 802.11ac 40MHz_Channel 151



IEEE 802.11ac_40MHz_Channel 159



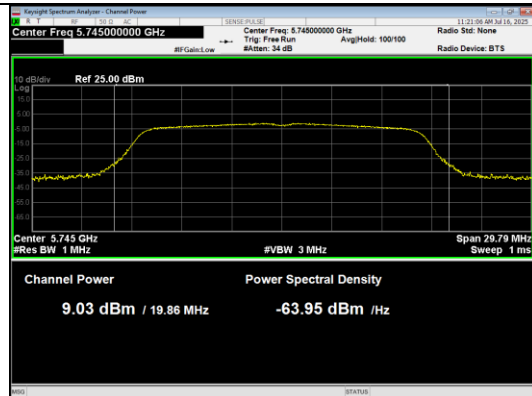
IEEE 802.11ac_80MHz_Channel 155

Conducted Output Power

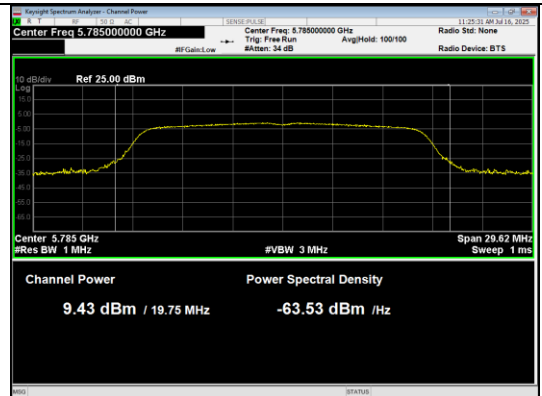
Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	149	9.03	9.03	≤30	PASS
	157	9.43	9.43	≤30	PASS
	165	9.81	9.81	≤30	PASS
IEEE 802.11n_20	149	10.11	10.11	≤30	PASS
	157	8.67	8.67	≤30	PASS
	165	8.84	8.84	≤30	PASS
IEEE 802.11n_40	151	9.85	9.85	≤30	PASS
	159	9.66	9.66	≤30	PASS
IEEE 802.11ac_20	149	9.36	9.36	≤30	PASS
	157	8.47	8.47	≤30	PASS
	165	8.83	8.83	≤30	PASS
IEEE 802.11ac_40	151	8.96	8.96	≤30	PASS
	159	8.56	8.56	≤30	PASS
IEEE 802.11ac_80	155	8.80	8.8	≤30	PASS

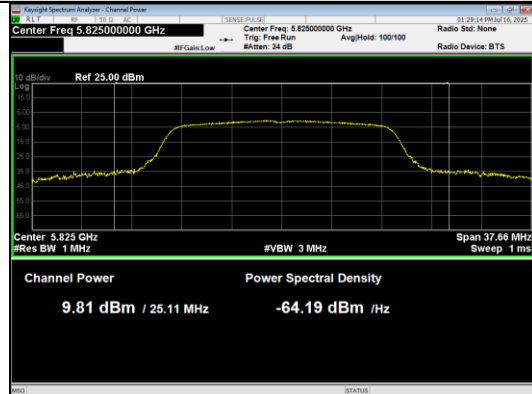
Note: Corrected Value = Antenna Power + Duty Cycle Factor.



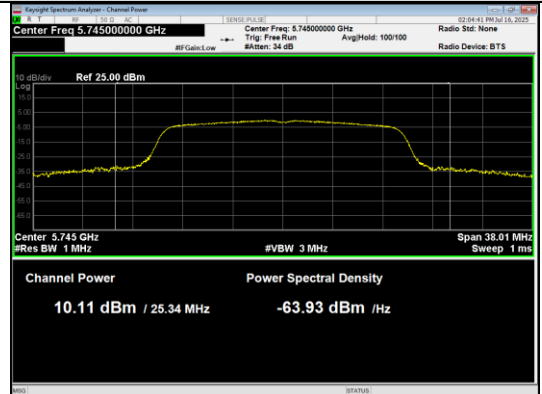
Conducted AVG output power
IEEE 802.11a_Channel 149_Antenna 0



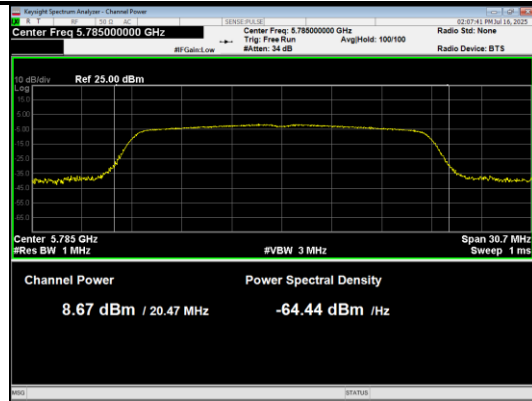
Conducted AVG output power
IEEE 802.11a_Channel 157_Antenna 0



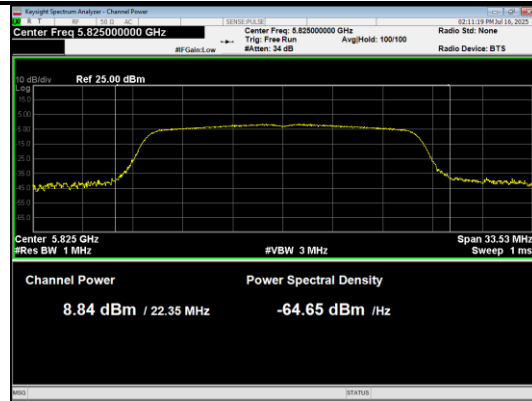
Conducted AVG output power
IEEE 802.11a_Channel 165_Antenna 0



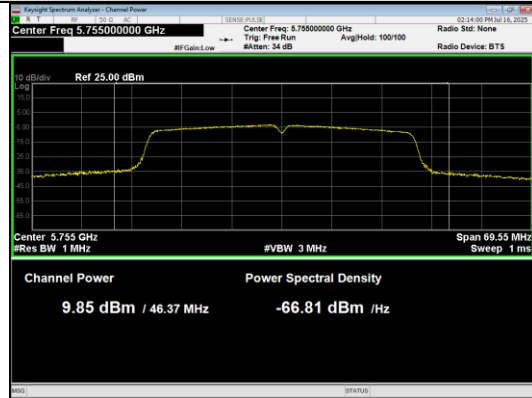
Conducted AVG output power
IEEE 802.11n_20_Channel 149_Antenna 0



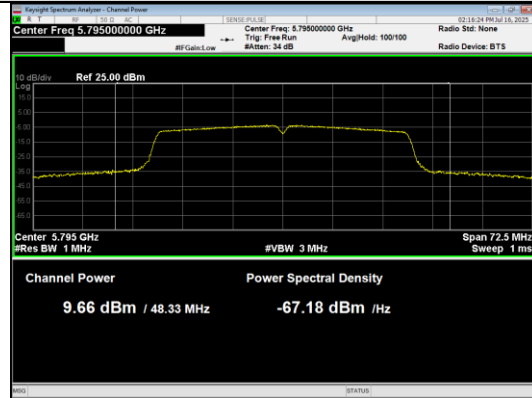
Conducted AVG output power
IEEE 802.11n_20_Channel 157_Antenna 0



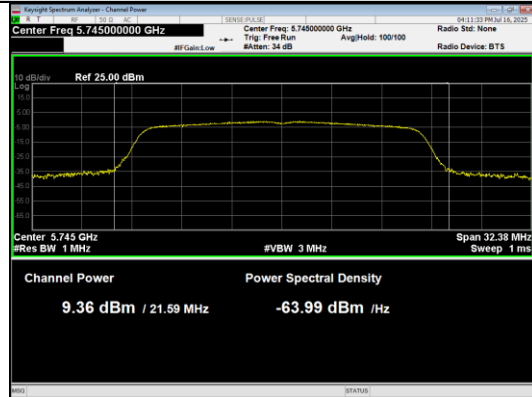
Conducted AVG output power
IEEE 802.11n_20_Channel 165_Antenna 0



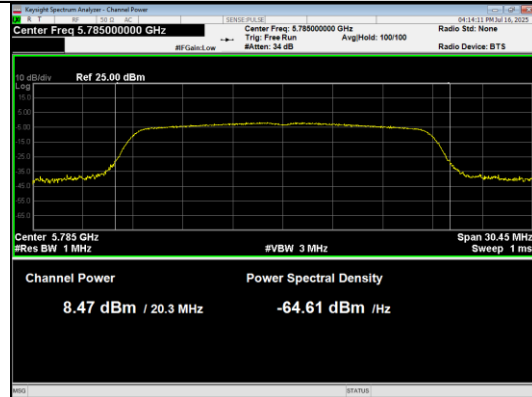
Conducted AVG output power
IEEE 802.11n_40_Channel 151_Antenna 0



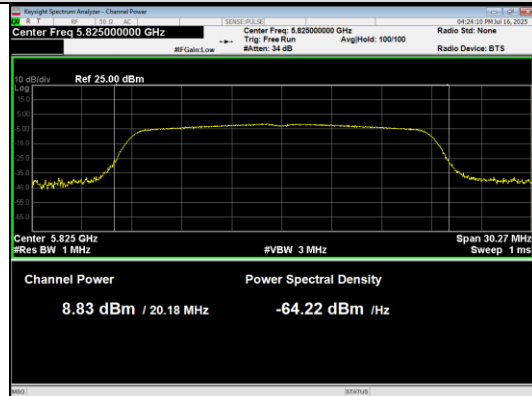
Conducted AVG output power
IEEE 802.11n_40_Channel 159_Antenna 0



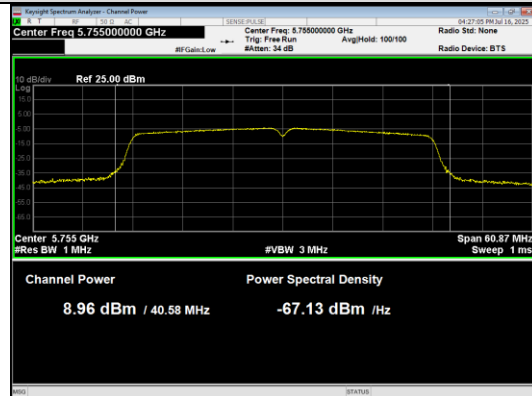
Conducted AVG output power
IEEE 802.11ac_20_Channel 149_Antenna 0



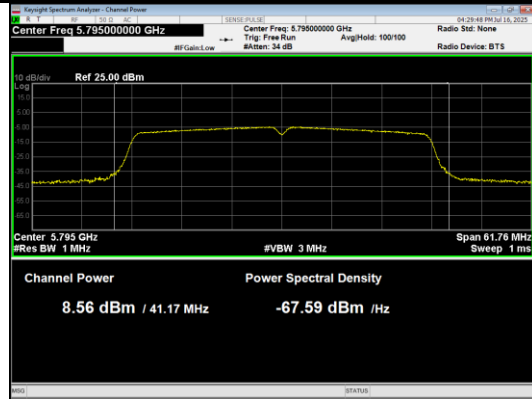
Conducted AVG output power
IEEE 802.11ac_20_Channel 157_Antenna 0



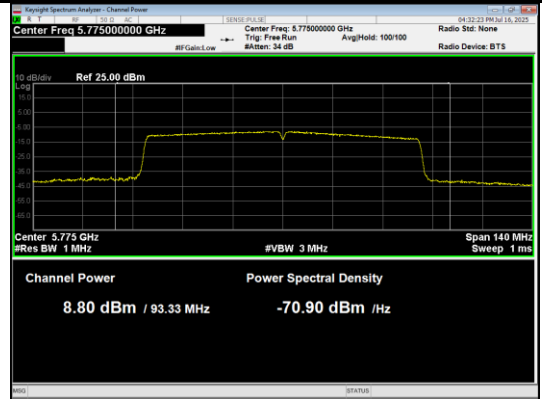
Conducted AVG output power
IEEE 802.11ac_20_Channel 165_Antenna 0



Conducted AVG output power
IEEE 802.11ac_40_Channel 151_Antenna 0



Conducted AVG output power
 IEEE 802.11ac_40_Channel 159_Antenna 0



Conducted AVG output power
 IEEE 802.11ac_80_Channel 155_Antenna 0

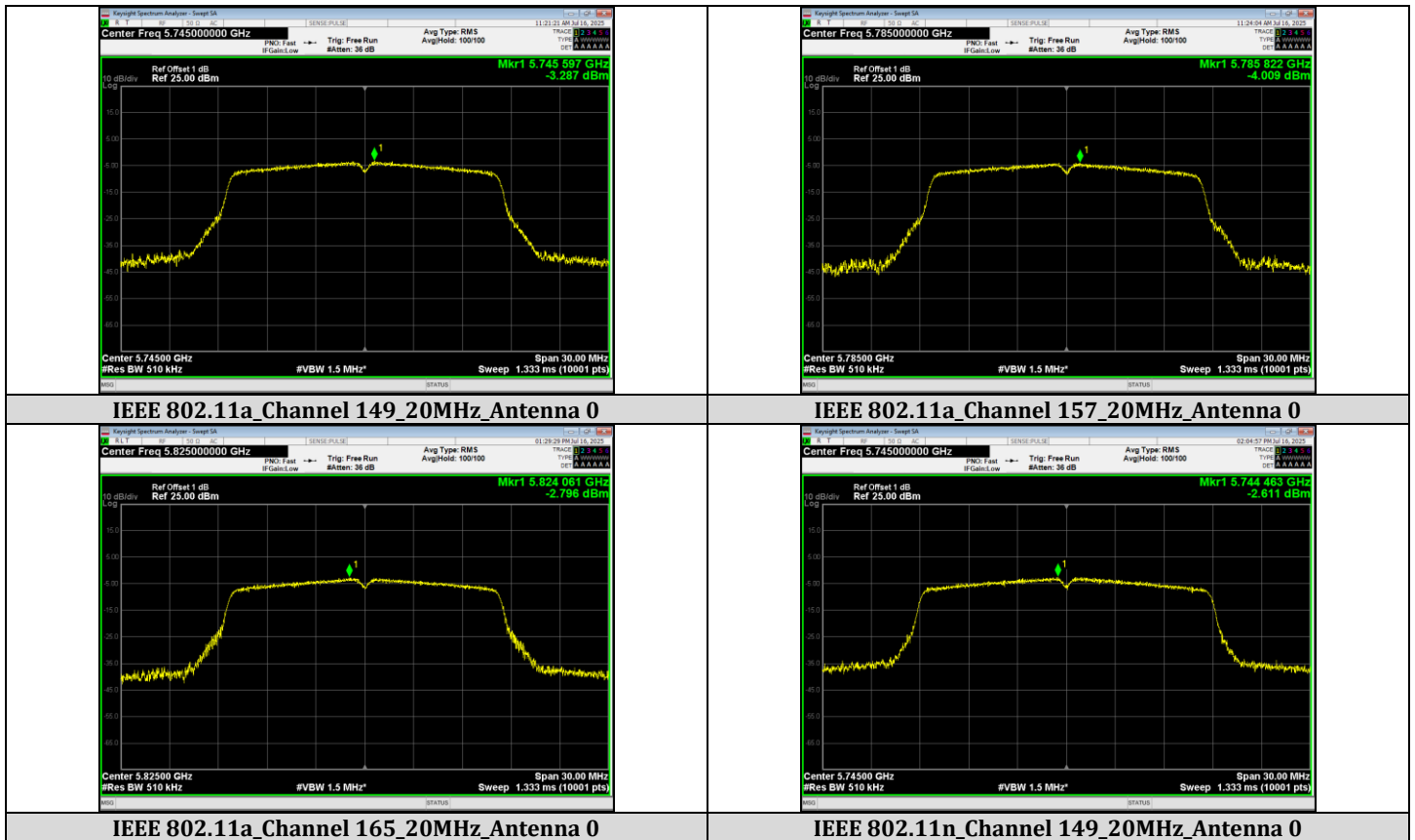
Peak Power Spectral Density

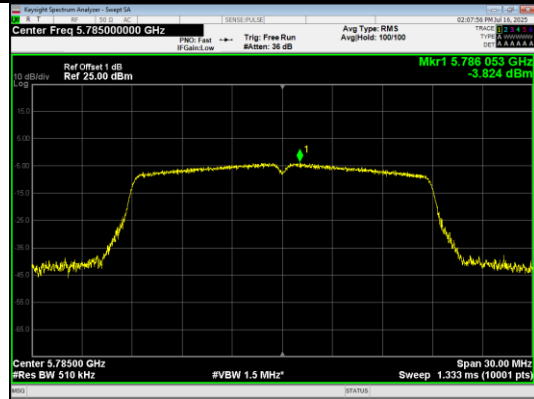
Test Result

Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.51MHz)	Ant. 0 Corr'd PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	149	-3.290	-3.376	30	PASS
	157	-4.010	-4.096		PASS
	165	-2.800	-2.886		PASS
IEEE 802.11n_20	149	-2.610	-2.696		PASS
	157	-3.820	-3.906		PASS
	165	-4.030	-4.116		PASS
IEEE 802.11n_40	151	-5.660	-5.746		PASS
	159	-5.980	-6.066		PASS
IEEE 802.11ac_20	149	-3.330	-3.416		PASS
	157	-4.080	-4.166		PASS
	165	-4.120	-4.206		PASS
IEEE 802.11ac_40	151	-6.690	-6.776		PASS
	159	-6.680	-6.766		PASS
IEEE 802.11ac_80	155	-10.190	-10.276		PASS

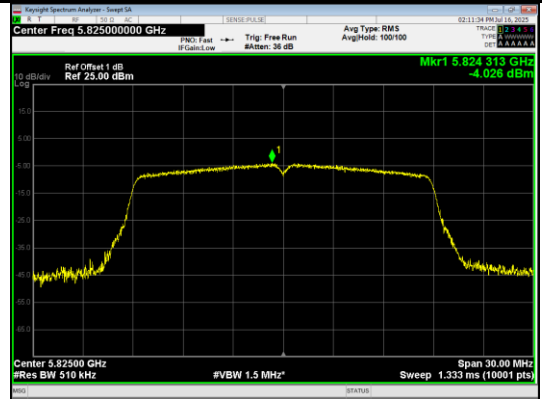
Note: Corr'd PSD = Meas PSD +Duty cycle Factor- BW factor($10 \cdot \log(510/500)$).

Test Graphs

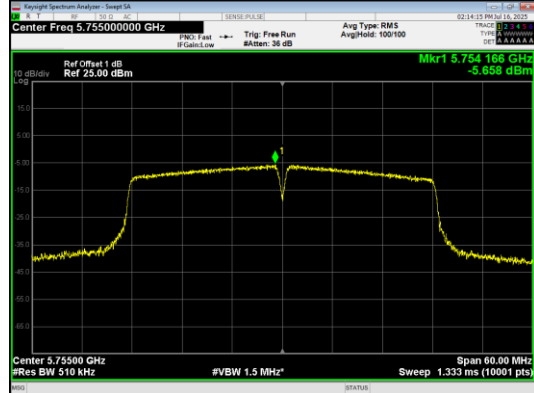




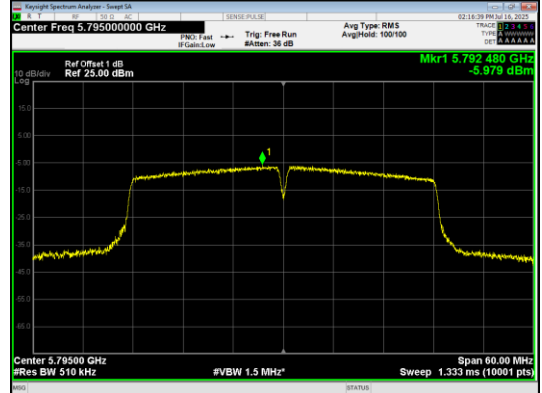
IEEE 802.11n_Channel 157_20MHz_Antenna 0



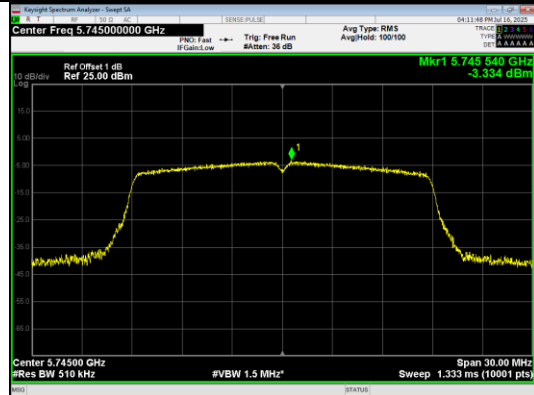
IEEE 802.11n_Channel 165_20MHz_Antenna 0



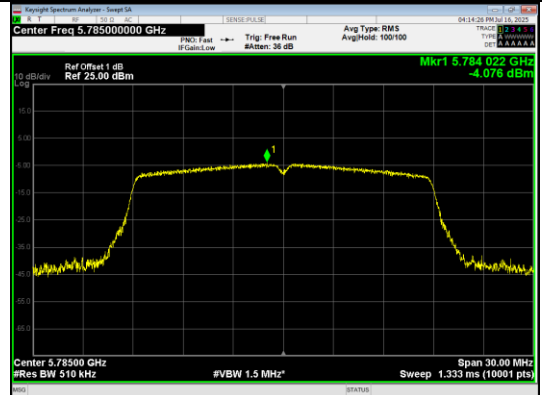
IEEE 802.11n_Channel 151_40MHz_Antenna 0



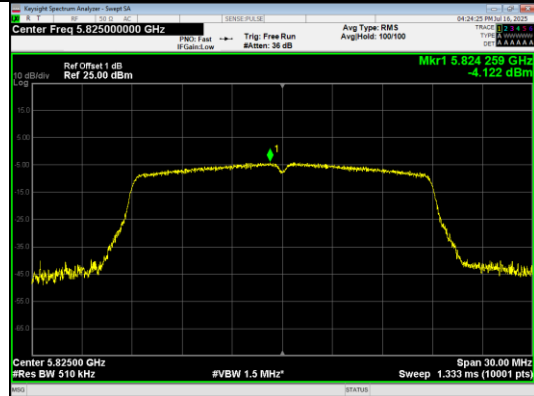
IEEE 802.11n_Channel 159_40MHz_Antenna 0



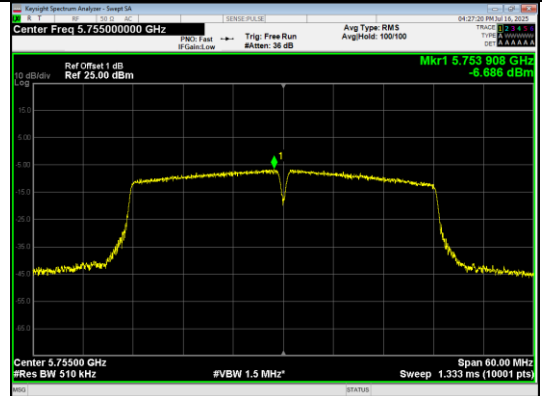
IEEE 802.11ac_Channel 149_20MHz_Antenna 0



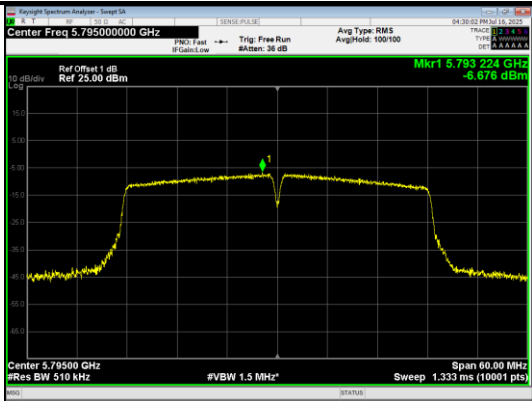
IEEE 802.11ac_Channel 157_20MHz_Antenna 0



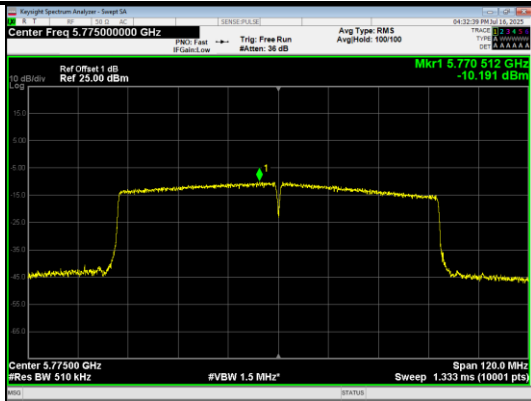
IEEE 802.11ac_Channel 165_20MHz_Antenna 0



IEEE 802.11ac_Channel 151_40MHz_Antenna 0



IEEE 802.11ac_Channel 159_40MHz_Antenna 0



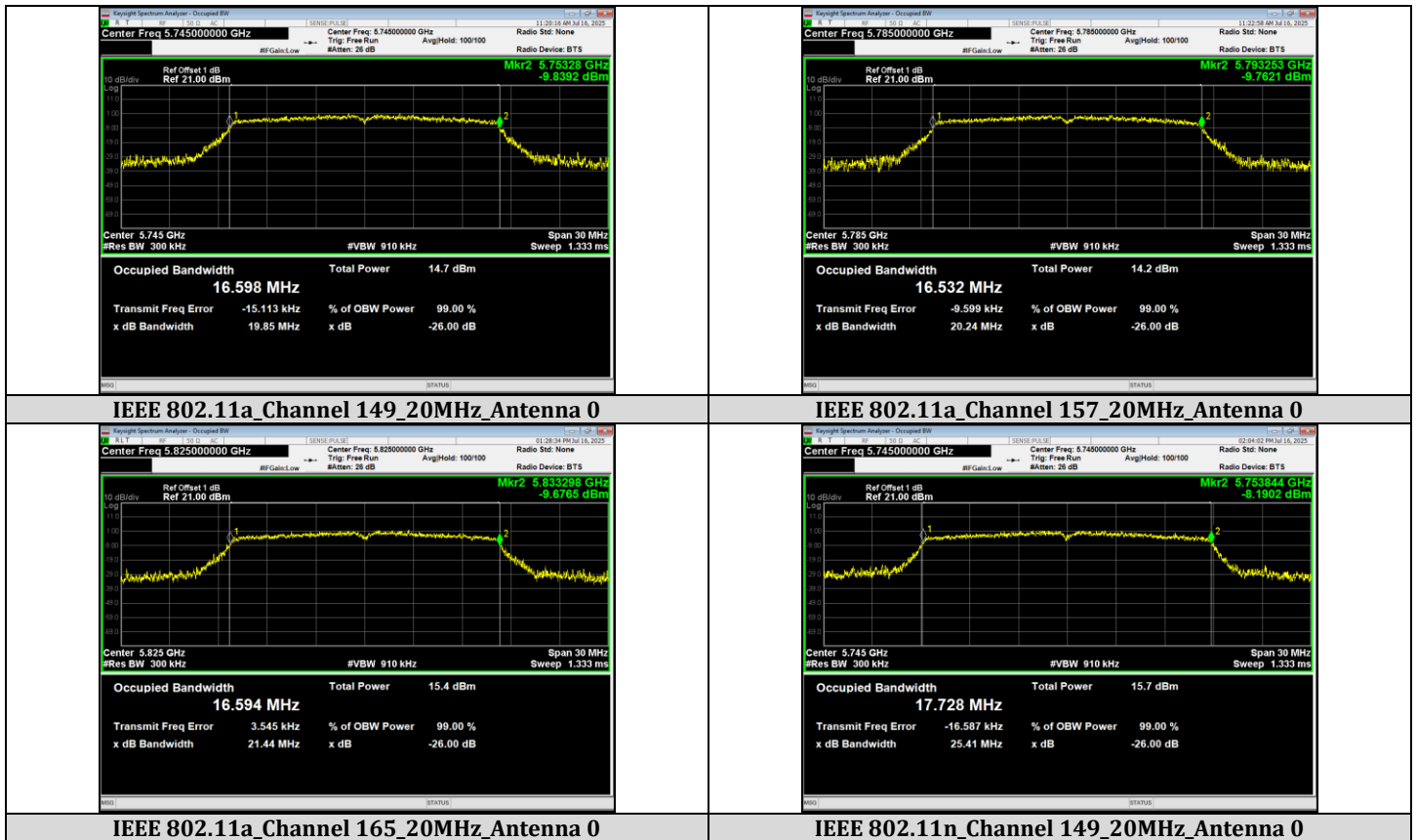
IEEE 802.11ac_Channel 155_80MHz_Antenna 0

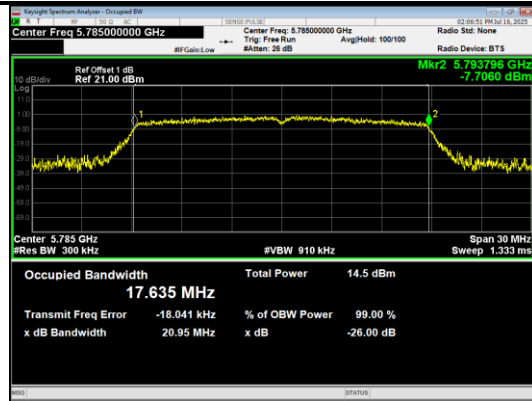
99% Bandwidth

Test Result

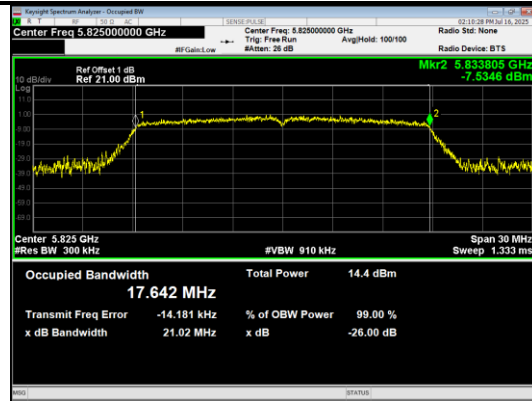
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	149	0	5745	16.598
	157		5785	16.532
	165		5825	16.594
IEEE 802.11n_20	149		5745	17.728
	157		5785	17.635
	165		5825	17.642
IEEE 802.11n_40	151		5755	36.069
	159		5795	36.066
IEEE 802.11ac_20	149		5745	17.646
	157		5785	17.658
	165		5825	17.673
IEEE 802.11ac_40	151		5755	35.955
	159		5795	36.004
IEEE 802.11ac_80	155		5775	75.269

Test Graphs

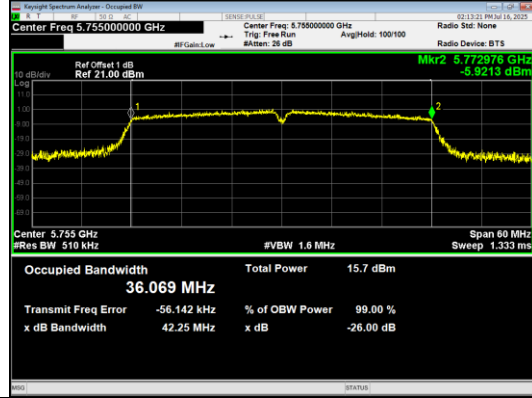




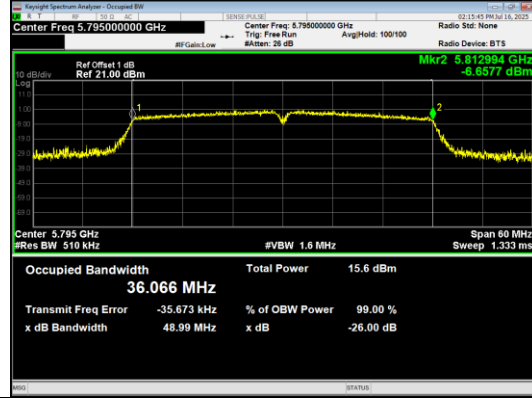
IEEE 802.11n_Channel 157_20MHz_Antenna 0



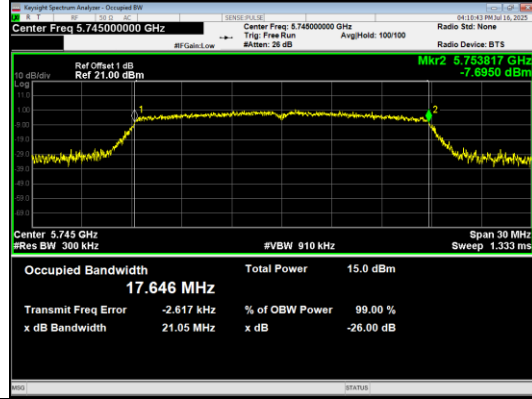
IEEE 802.11n_Channel 165_20MHz_Antenna 0



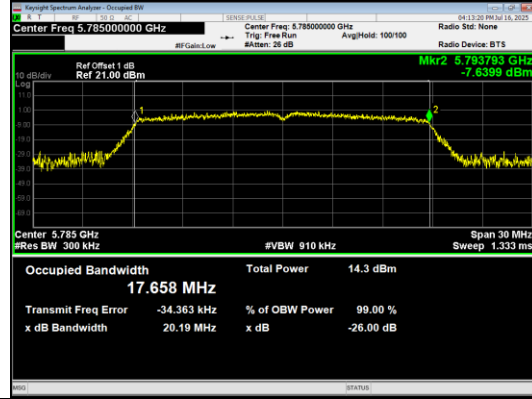
IEEE 802.11n_Channel 151_40MHz_Antenna 0



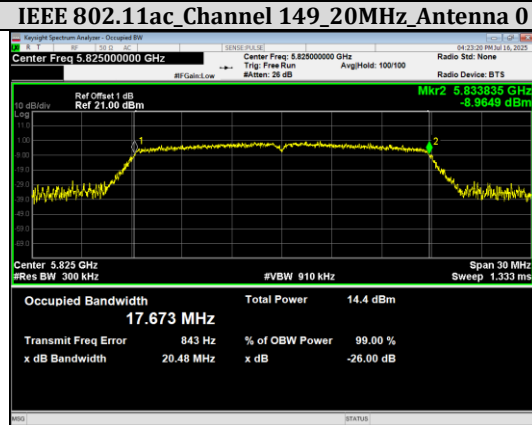
IEEE 802.11n_Channel 165_40MHz_Antenna 0



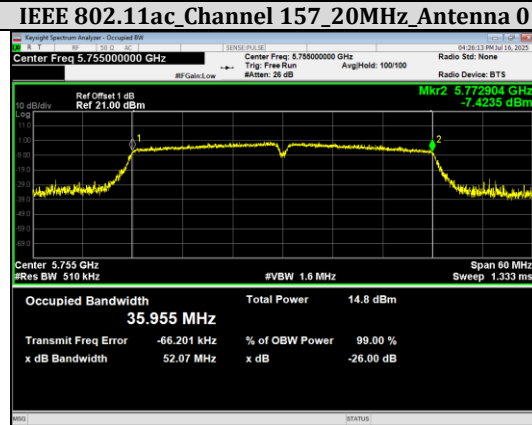
IEEE 802.11n_Channel 151_40MHz_Antenna 0



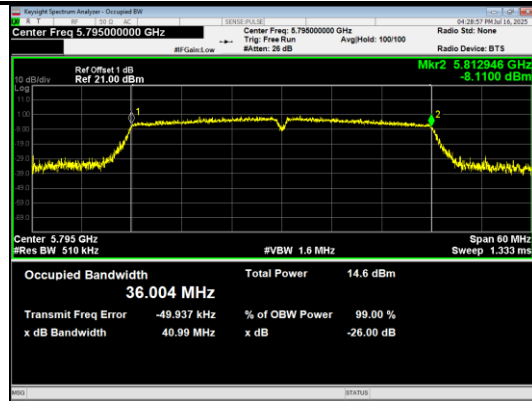
IEEE 802.11n_Channel 159_40MHz_Antenna 0



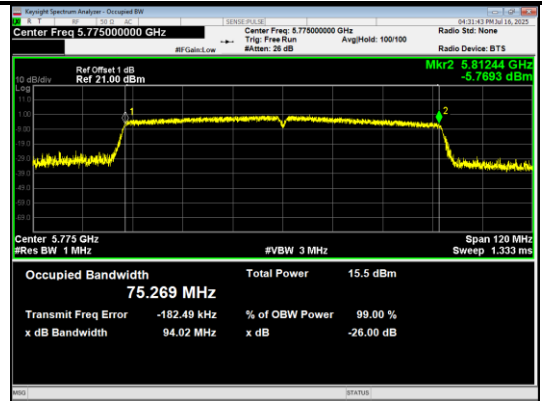
IEEE 802.11ac_Channel 149_20MHz_Antenna 0



IEEE 802.11ac_Channel 157_20MHz_Antenna 0



IEEE 802.11ac_Channel 159_40MHz_Antenna 0



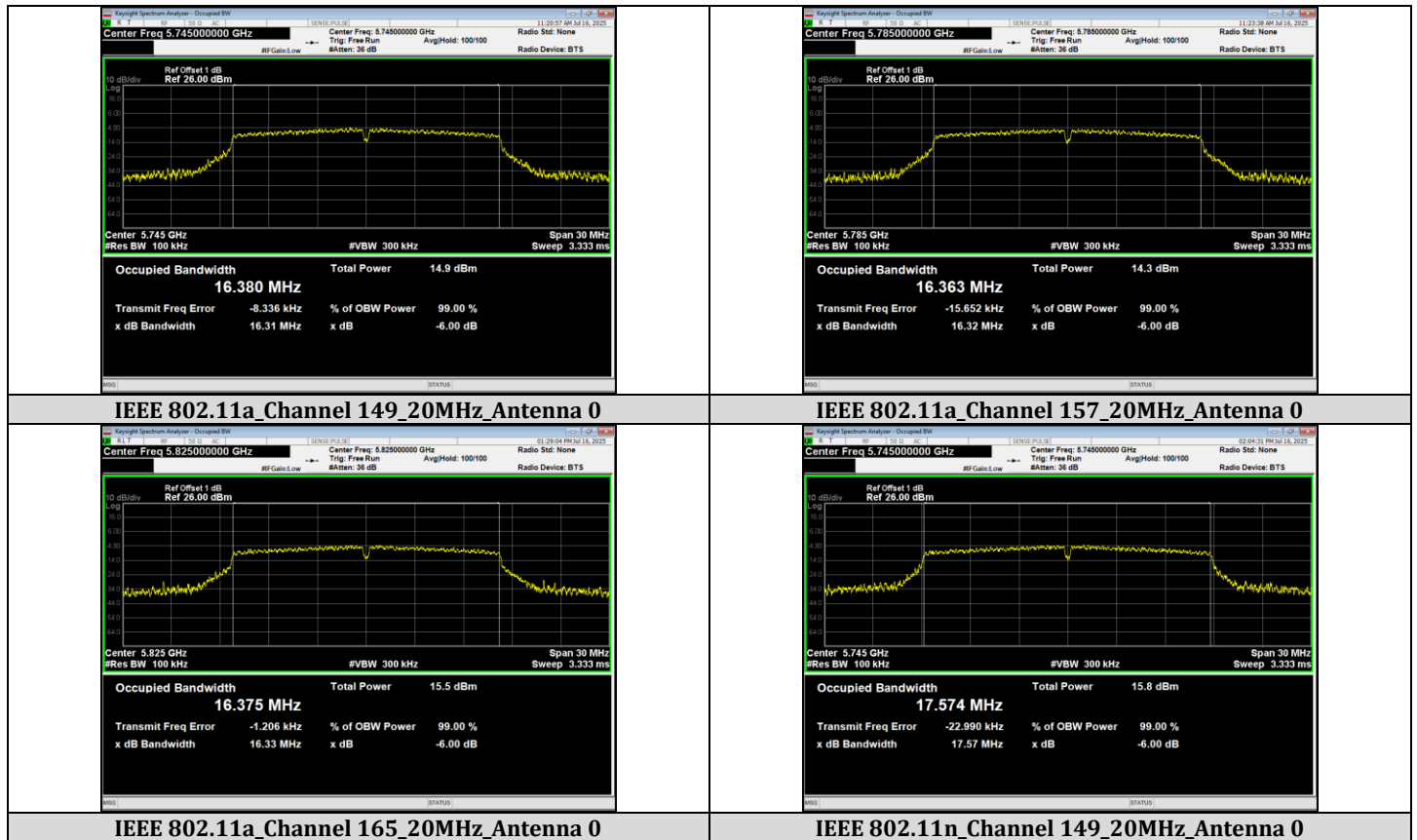
IEEE 802.11ac_Channel 155_80MHz_Antenna 0

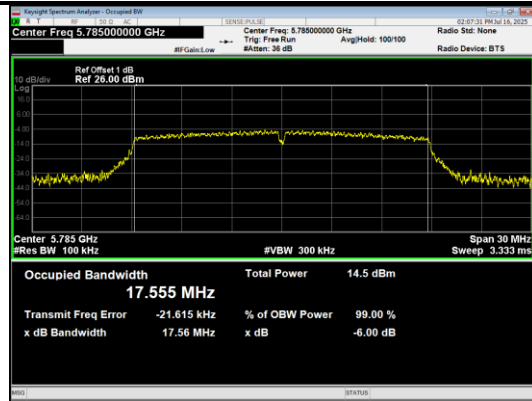
6dB Bandwidth

Test Result

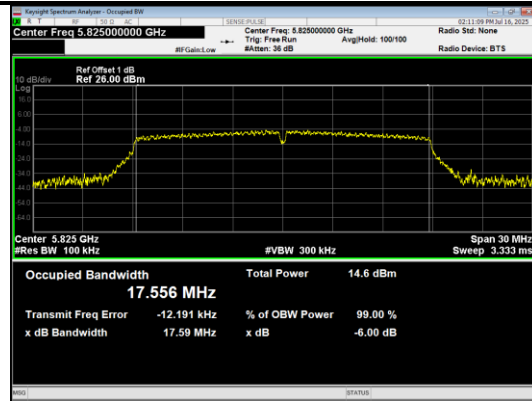
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	149	0	5745	16.31	≥0.5	PASS
	157		5785	16.32		PASS
	165		5825	16.33		PASS
IEEE 802.11n_20	149		5745	17.57		PASS
	157		5785	17.56		PASS
	165		5825	17.59		PASS
IEEE 802.11n_40	151		5755	35.93		PASS
	159		5795	35.80		PASS
IEEE 802.11ac_20	149		5745	17.59		PASS
	157		5785	17.58		PASS
	165		5825	17.58		PASS
IEEE 802.11ac_40	151		5755	35.92		PASS
	159		5795	36.32		PASS
IEEE 802.11ac_80	155		5775	75.94		PASS

Test Graphs

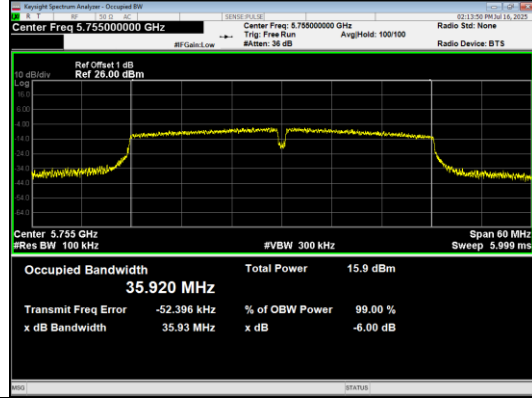




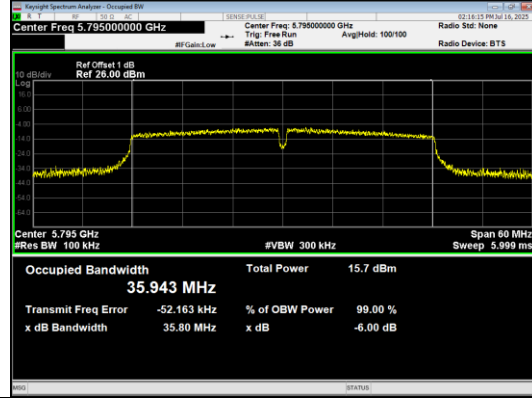
IEEE 802.11n_Channel 157_20MHz_Antenna 0



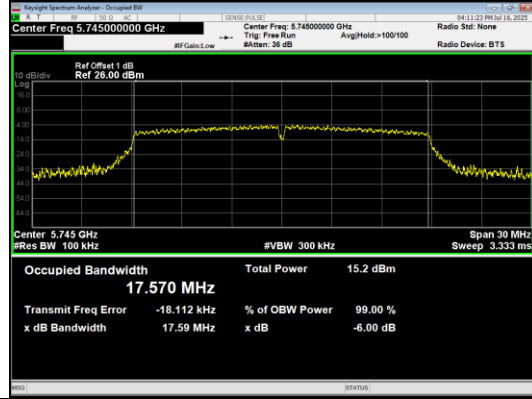
IEEE 802.11n_Channel 165_20MHz_Antenna 0



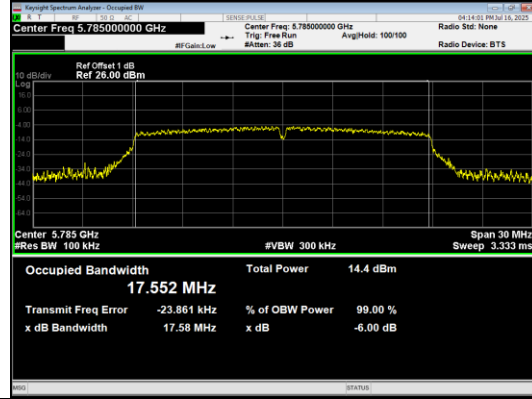
IEEE 802.11n_Channel 151_40MHz_Antenna 0



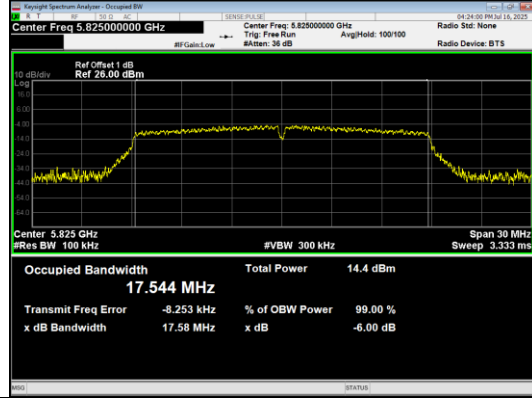
IEEE 802.11n_Channel 159_40MHz_Antenna 0



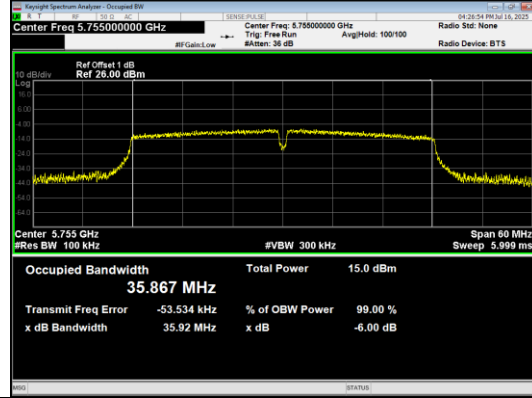
IEEE 802.11ac_Channel 149_20MHz_Antenna 0



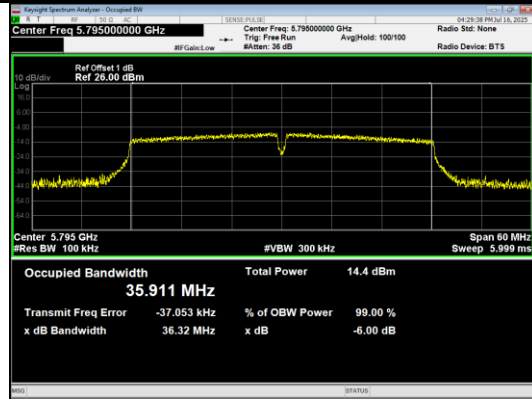
IEEE 802.11ac_Channel 157_20MHz_Antenna 0



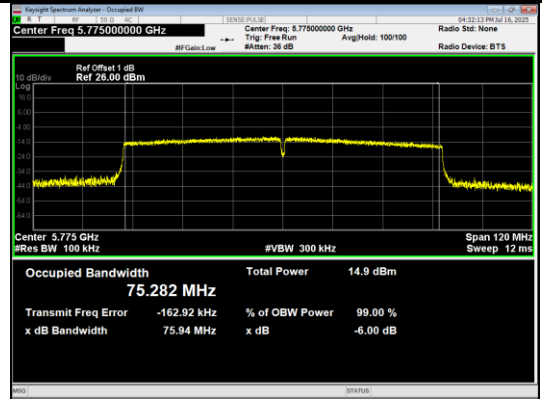
IEEE 802.11ac_Channel 165_20MHz_Antenna 0



IEEE 802.11ac_Channel 151_40MHz_Antenna 0



IEEE 802.11ac_Channel 159_40MHz_Antenna 0



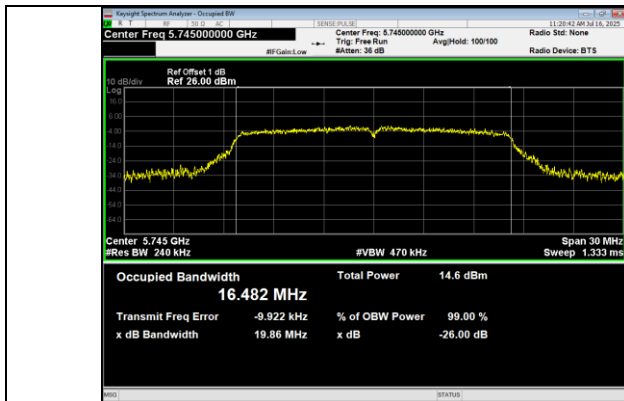
IEEE 802.11ac_Channel 155_80MHz_Antenna 0

26dB Bandwidth

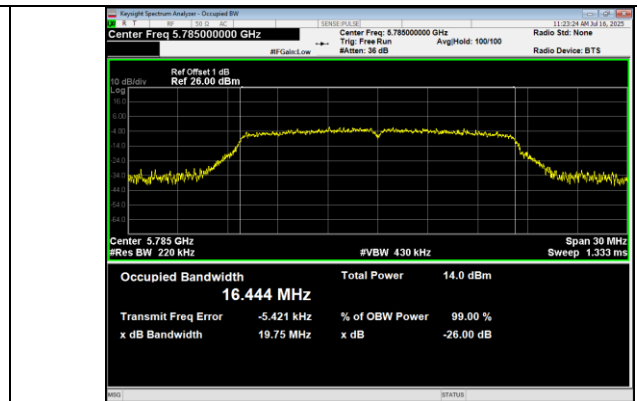
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	149	0	5745	19.86	1.17
	157		5785	19.75	1.11
	165		5825	25.11	1.19
IEEE 802.11n_20	149		5745	25.34	1.18
	157		5785	20.47	1.14
	165		5825	22.35	1.16
IEEE 802.11n_40	151		5755	46.37	1.1
	159		5795	48.33	1.06
IEEE 802.11ac_20	149		5745	21.59	1.06
	157		5785	20.30	1.1
	165		5825	20.18	1.2
IEEE 802.11ac_40	151		5755	40.58	1.06
	159		5795	41.17	1.06
IEEE 802.11ac_80	155		5775	93.33	1.07

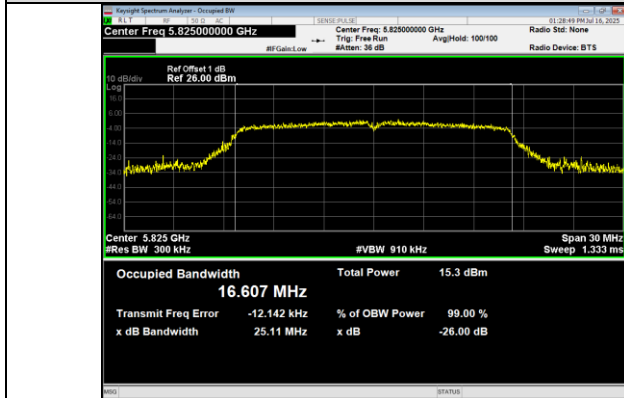
Test Graphs



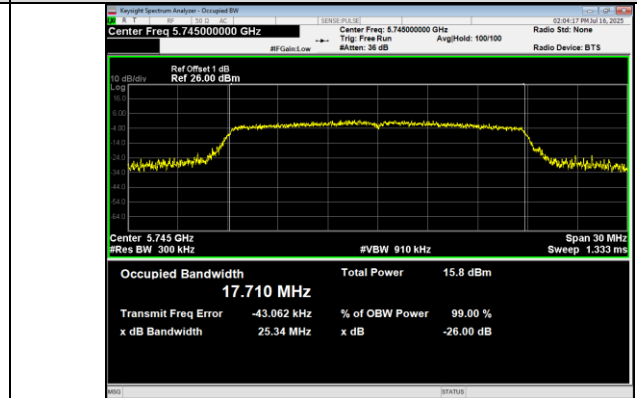
IEEE 802.11a_Channel 149_20MHz_Antenna 0



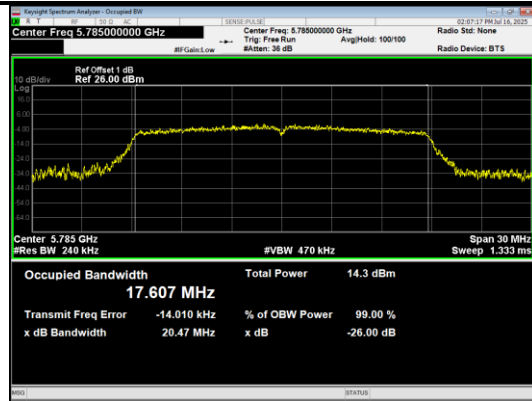
IEEE 802.11a_Channel 157_20MHz_Antenna 0



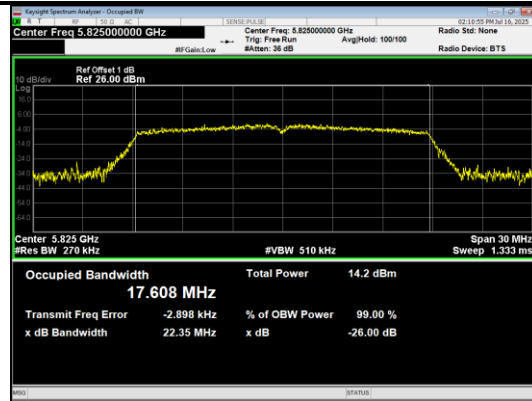
IEEE 802.11a_Channel 165_20MHz_Antenna 0



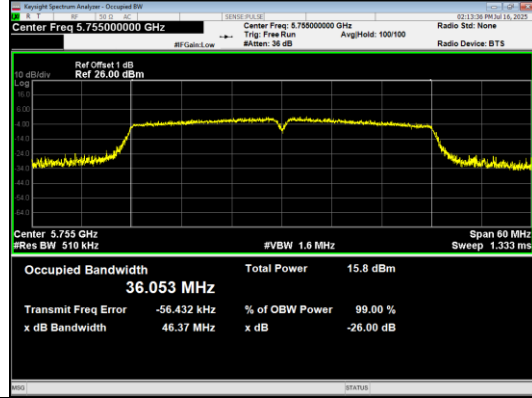
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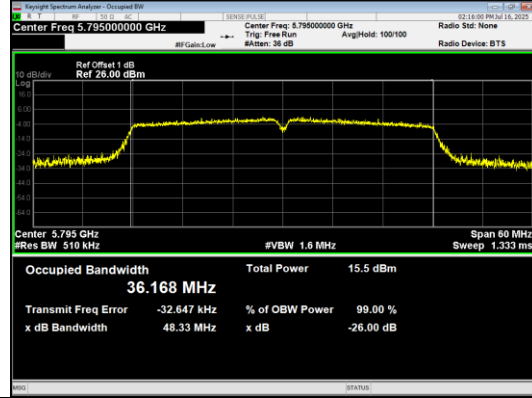
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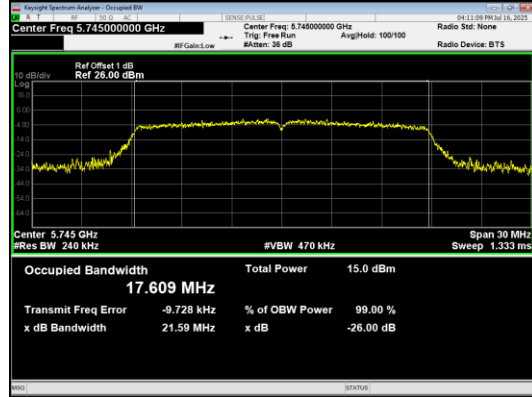
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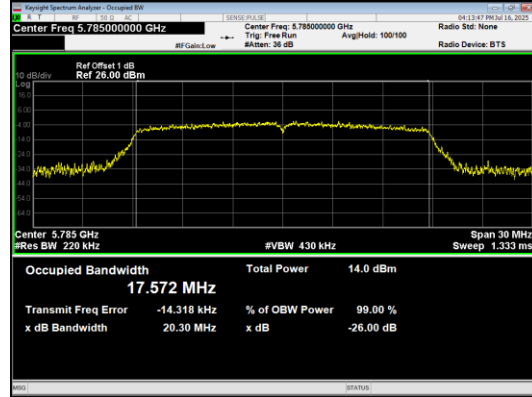
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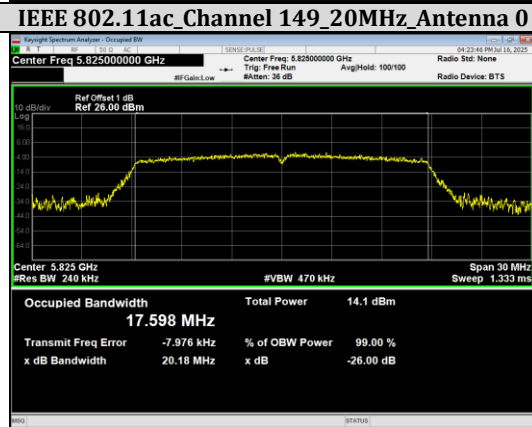
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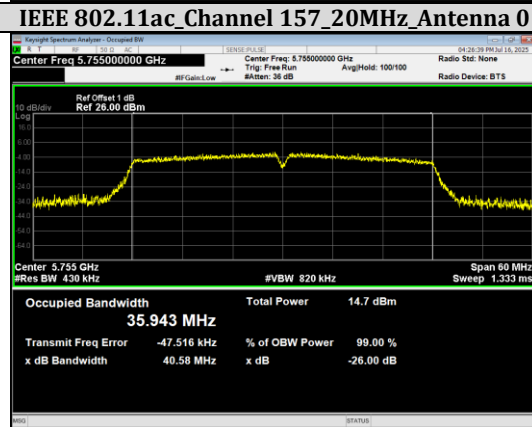
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IEEE 802.11n_Channel 159_40MHz_Antenna 0



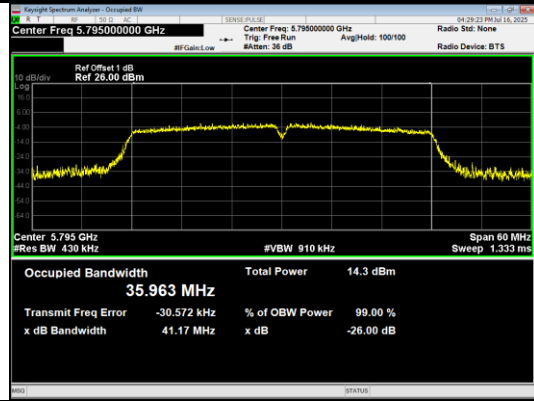
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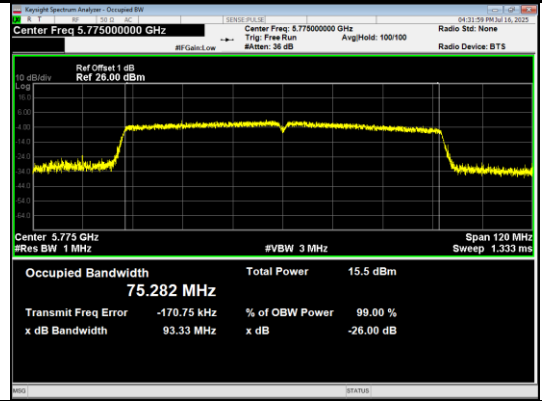
IEEE 802.11ac_Channel 157_20MHz_Antenna 0

IEEE 802.11ac_Channel 165_20MHz_Antenna 0

IEEE 802.11ac_Channel 151_40MHz_Antenna 0



IEEE 802.11ac_Channel 159_40MHz_Antenna 0



IEEE 802.11ac_Channel 155_80MHz_Antenna 0

Conducted Out Of Band Emission

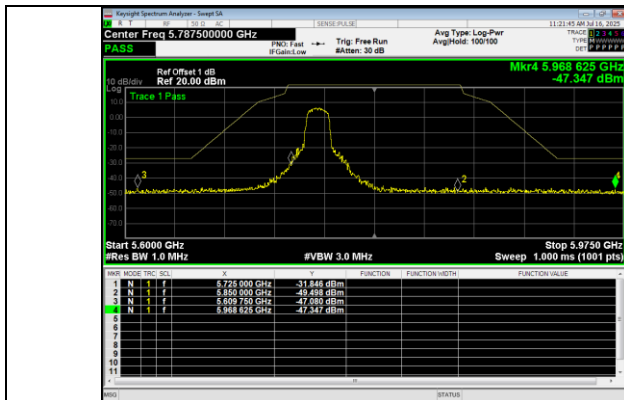
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11a	149	0	5609.75	-47.080	-27	-20.080	PASS
			5642.55	-51.720	-27	-24.720	PASS
			5725.00	-31.850	27	-58.850	PASS
			5850.00	-49.500	27	-76.500	PASS
			5968.62	-47.347	-27	-20.348	PASS
			24963.8	-54.650	-27	-27.650	PASS
	157		5630.75	-47.580	-27	-20.580	PASS
			5645.08	-53.780	-27	-26.780	PASS
			5725.00	-48.350	27	-75.350	PASS
			5850.00	-46.370	27	-73.370	PASS
			5965.25	-46.977	-27	-19.977	PASS
			24904.6	-53.340	-27	-26.340	PASS
	165		1753.93	-49.030	-27	-22.030	PASS
			5641.25	-48.058	-27	-21.058	PASS
			5725.00	-49.940	27	-76.940	PASS
			5850.00	-30.840	27	-57.840	PASS
			5928.88	-46.340	-27	-19.340	PASS
			24973.3	-53.490	-27	-26.490	PASS
IEEE 802.11n_20	149		2423.28	-41.010	-27	-14.010	PASS
			5643.12	-46.781	-27	-19.781	PASS
			5725.00	-21.450	27	-48.450	PASS
			5850.00	-49.260	27	-76.260	PASS
			5933.75	-46.862	-27	-19.862	PASS
			24866.0	-54.340	-27	-27.340	PASS
	157		5605.25	-47.187	-27	-20.187	PASS
			5628.36	-53.700	-27	-26.700	PASS
			5725.00	-47.270	27	-74.270	PASS
			5850.00	-47.520	27	-74.520	PASS
			5944.62	-46.736	-27	-19.736	PASS
			24990.5	-54.560	-27	-27.560	PASS
	165		5616.50	-47.741	-27	-20.741	PASS
			5632.44	-55.440	-27	-28.440	PASS
			5725.00	-48.720	27	-75.720	PASS
			5850.00	-32.300	27	-59.300	PASS
			5924.75	-46.008	-26.815	-19.193	PASS
			24953.3	-54.200	-27	-27.200	PASS
IEEE 802.11n_40	151		2413.58	-48.110	-27	-21.110	PASS
			5649.88	-46.594	-27	-19.594	PASS
			5725.00	-24.450	27	-51.450	PASS
			5850.00	-47.960	27	-74.960	PASS
			5928.50	-46.846	-27	-19.846	PASS
			24419.6	-53.680	-27	-26.680	PASS
	159		2415.55	-47.480	-27	-20.480	PASS
			5639.38	-47.428	-27	-20.428	PASS
			5725.00	-43.790	27	-70.790	PASS
			5850.00	-35.640	27	-62.640	PASS
			5926.91	-52.750	-27	-25.750	PASS
			5944.62	-46.456	-27	-19.456	PASS
IEEE 802.11ac_20	149		1752.25	-39.140	-27	-12.140	PASS
			5648.75	-46.698	-27	-19.698	PASS
			5725.00	-28.620	27	-55.620	PASS
			5850.00	-48.510	27	-75.510	PASS
			5932.62	-46.286	-27	-19.286	PASS
			24940.4	-54.070	-27	-27.070	PASS
	157		5637.92	-54.240	-27	-27.240	PASS

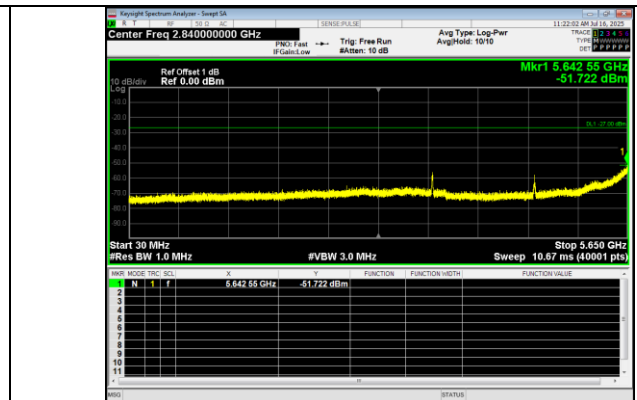
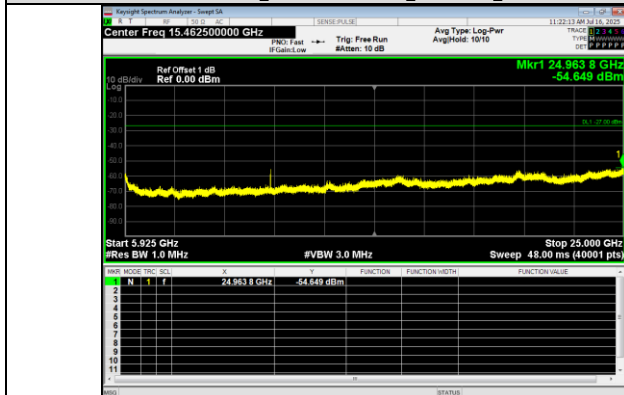


	165	5650.25	-46.500	9.815	-19.685	PASS
		5725.00	-48.220	27	-75.220	PASS
		5850.00	-46.720	27	-73.720	PASS
		5953.62	-47.191	-27	-20.191	PASS
		24417.7	-54.090	-27	-27.090	PASS
		5615.72	-55.080	-27	-28.080	PASS
		5638.62	-47.494	-27	-20.494	PASS
		5725.00	-49.350	27	-76.350	PASS
		5850.00	-34.300	27	-61.300	PASS
		5925.00	-53.770	-27	-26.770	PASS
IEEE 802.11ac_40	151	5950.62	-46.161	-27	-19.161	PASS
		5613.12	-45.630	-27	-18.630	PASS
		5643.40	-51.890	-27	-24.890	PASS
		5725.00	-27.090	27	-54.090	PASS
		5850.00	-47.950	27	-74.950	PASS
	159	5949.12	-46.681	-27	-19.681	PASS
		24998.6	-52.850	-27	-25.850	PASS
		5645.50	-53.490	-27	-26.490	PASS
		5649.12	-47.379	-27	-20.379	PASS
		5725.00	-47.630	27	-74.630	PASS
IEEE 802.11ac_80	155	5850.00	-37.790	27	-64.790	PASS
		5926.25	-46.819	-27	-19.819	PASS
		24971.4	-55.120	-27	-28.120	PASS
		5645.64	-43.810	-27	-16.810	PASS
		5648.00	-42.426	-27	-15.426	PASS
		5725.00	-27.110	27	-54.110	PASS
		5850.00	-35.220	27	-62.220	PASS
		5925.00	-46.030	-27	-19.030	PASS
		5928.12	-43.855	-27	-16.855	PASS

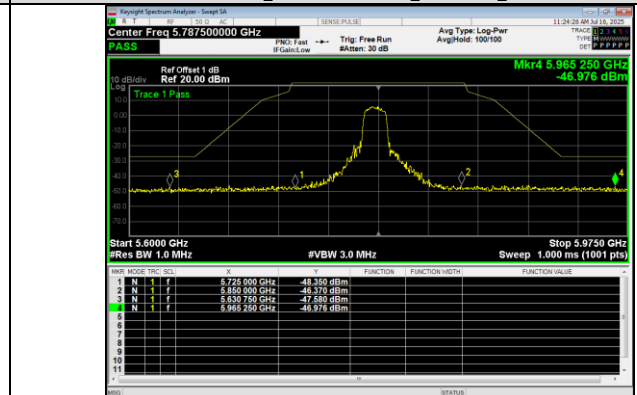
Test Graphs



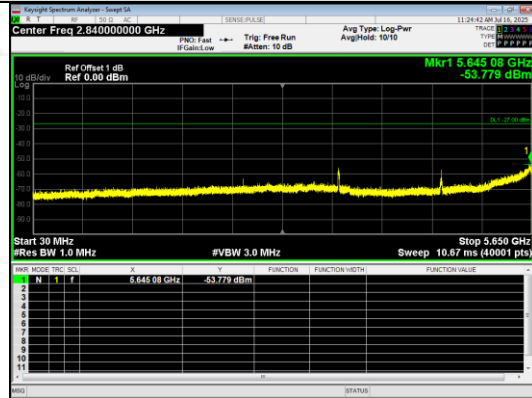
Out Of Band Emission
IEEE 802.11a_Channel 149_20MHz_Antenna 0



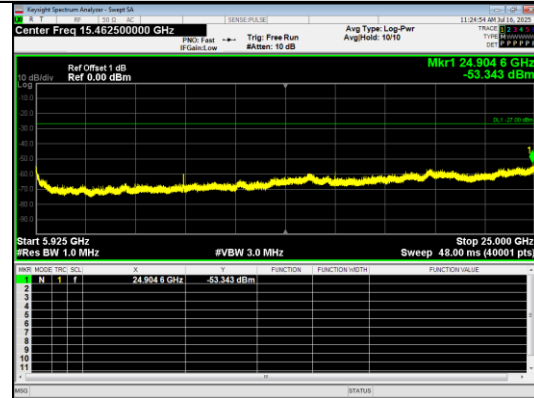
Spurious Emission:30.0~5650 MHz
IEEE 802.11a_Channel 149_20MHz_Antenna 0



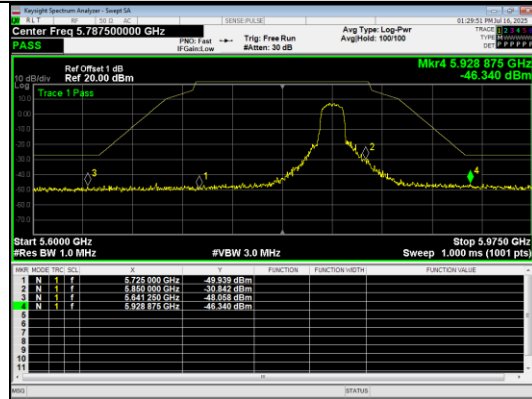
Spurious Emission:5925~25000.0 MHz IEEE 802.11a_Channel 149_20MHz_Antenna 0



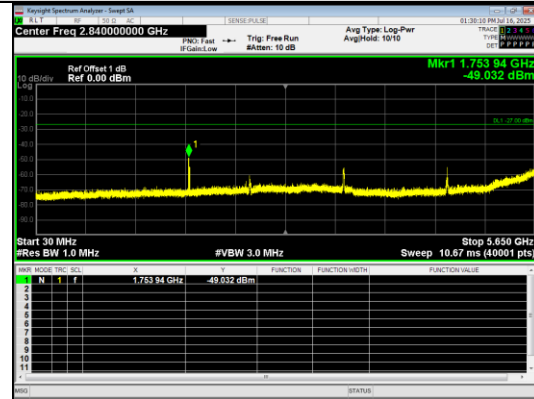
Out Of Band Emission IEEE 802.11a_Channel 157_20MHz_Antenna 0



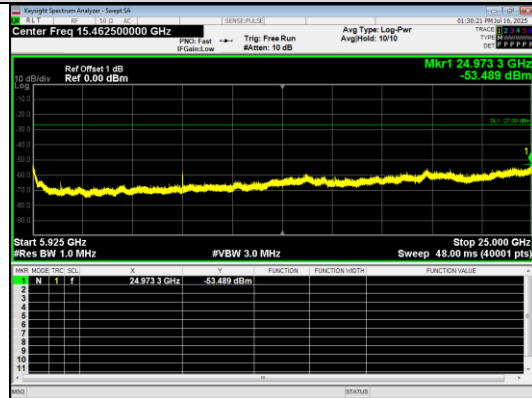
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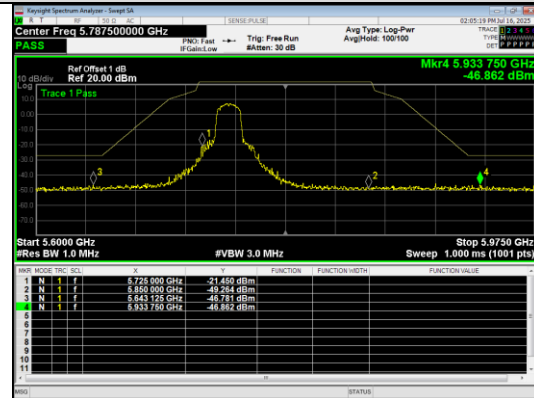
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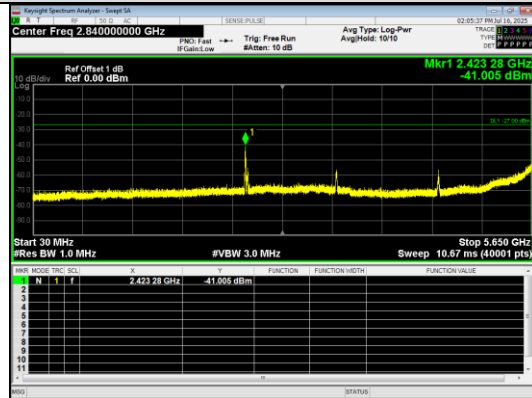
Out Of Band Emission IEEE 802.11a_Channel 165_20MHz_Antenna 0



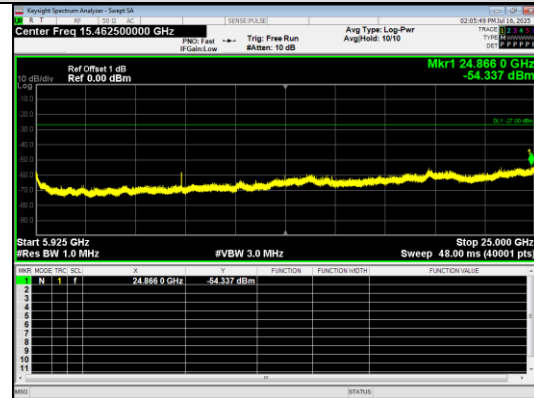
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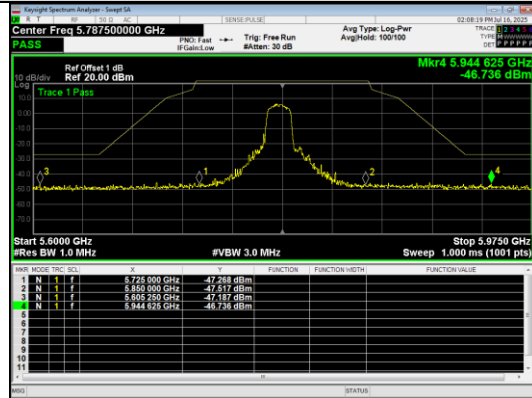
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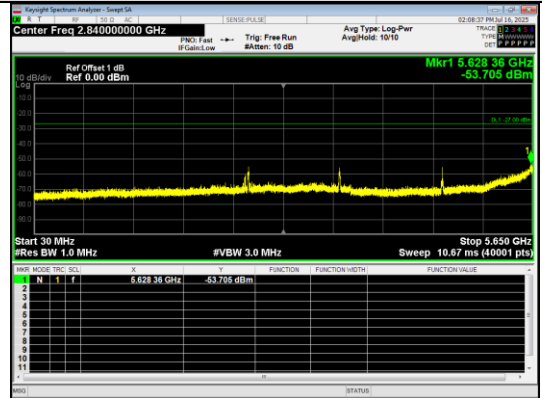
Out Of Band Emission IEEE 802.11n_Channel 149_20MHz_Antenna 0



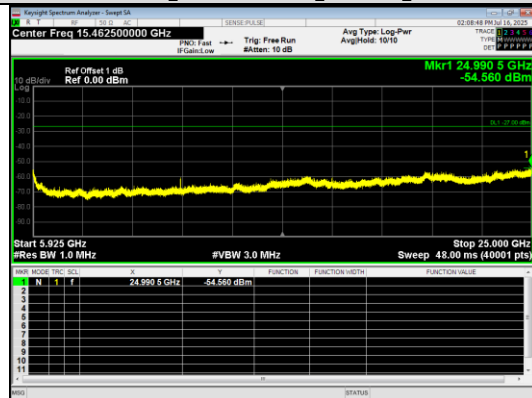
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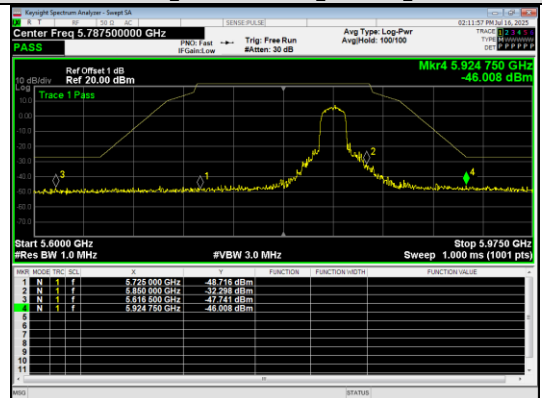
Spurious Emission:5925~25000.0 MHz IEEE 802.11n_Channel 149_20MHz_Antenna 0



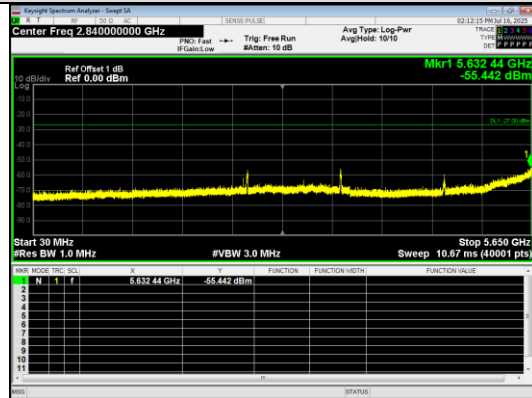
Out Of Band Emission IEEE 802.11n_Channel 157_20MHz_Antenna 0



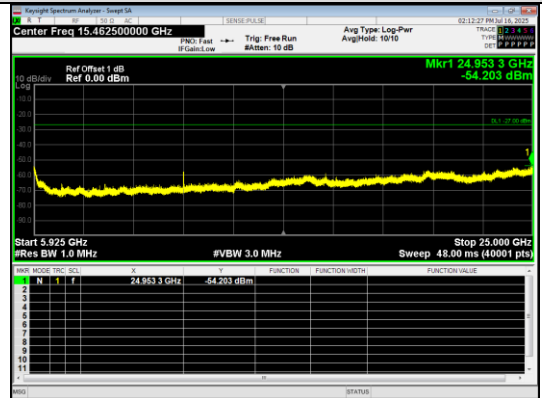
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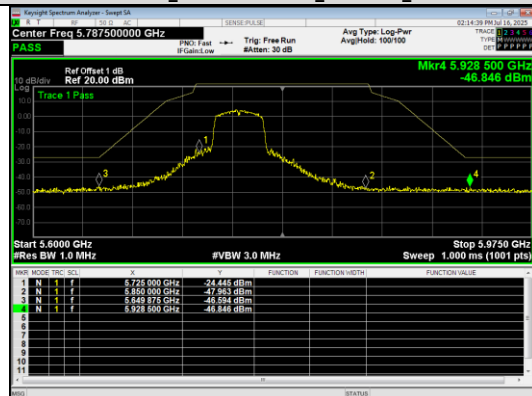
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Out Of Band Emission IEEE 802.11n_Channel 165_20MHz_Antenna 0



Spurious Emission:30.0~5650 MHz IEEE 802.11n_Channel 165_20MHz_Antenna 0



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