



Frequency Stability

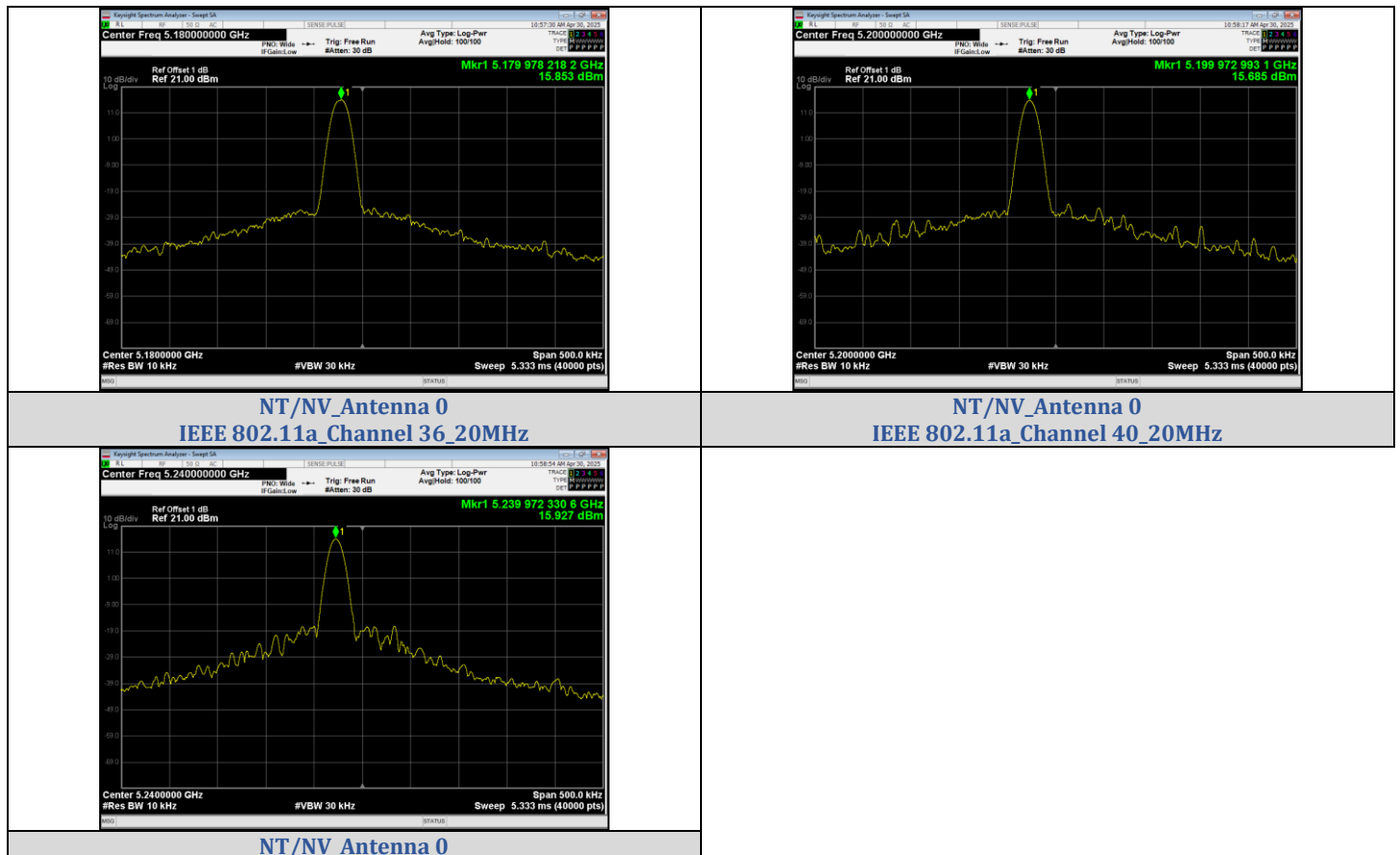
Test Result

Condition	Mode	Ch.	Antenna	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	36	0	5180.0	5179.978218	-4.2	Within authorized band	PASS
		40		5200.0	5199.972993	-5.19		PASS
		48		5240.0	5239.972331	-5.28		PASS
	IEEE 802.11n_20	36		5180.0	5179.982856	-3.31		PASS
		40		5200.0	5199.973006	-5.19		PASS
		48		5240.0	5239.974356	-4.89		PASS
	IEEE 802.11n_40	38		5190.0	5189.975468	-4.73		PASS
		46		5230.0	5229.976393	-4.51		PASS
	IEEE 802.11ac_20	36		5180.0	5179.979531	-3.95		PASS
		40		5200.0	5199.981056	-3.64		PASS
		48		5240.0	5239.981743	-3.48		PASS
	IEEE 802.11ac_40	38		5190.0	5189.981743	-3.52		PASS
		46		5230.0	5229.981706	-3.5		PASS
	IEEE 802.11ac_80	42		5210.0	5209.980843	-3.68		PASS

Test Graphs

NT/NV

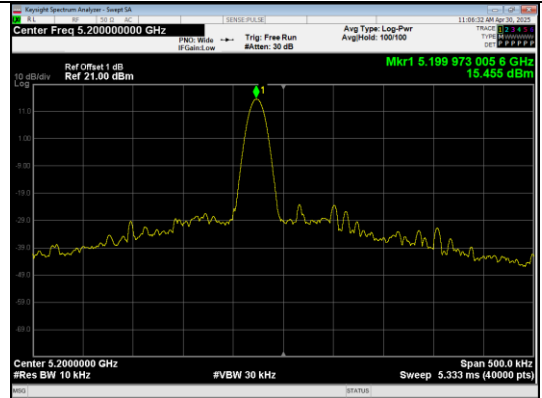
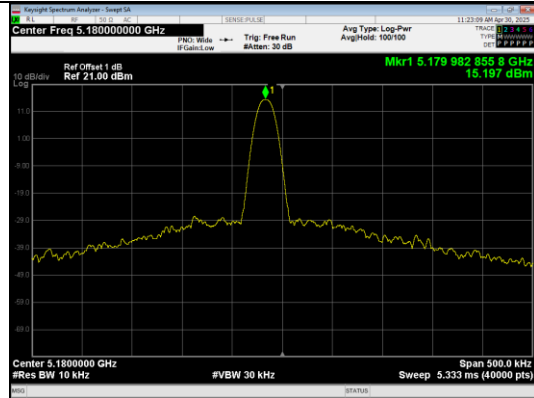
IEEE 802.11a





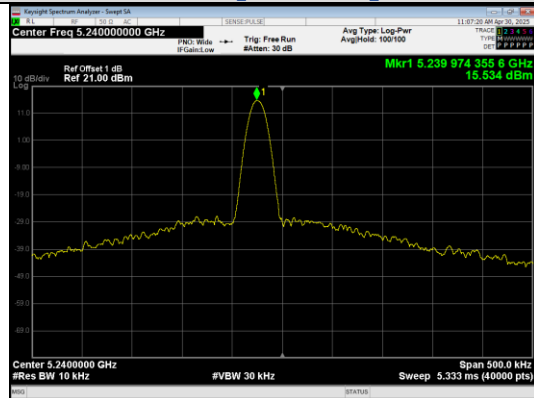
IEEE 802.11a_Channel 48_20MHz

IEEE 802.11n_20



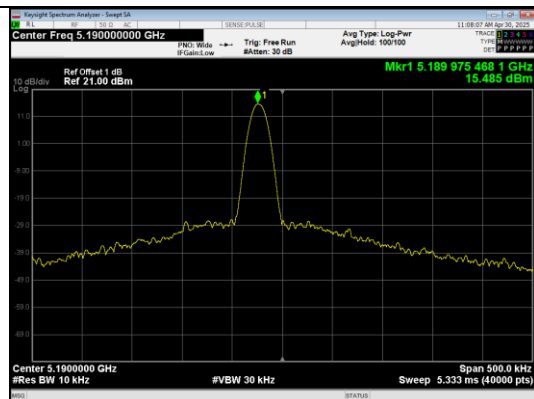
NT/NV_Antenna 0
IEEE 802.11n_Channel 36_20MHz

NT/NV_Antenna 0
IEEE 802.11n_Channel 40_20MHz

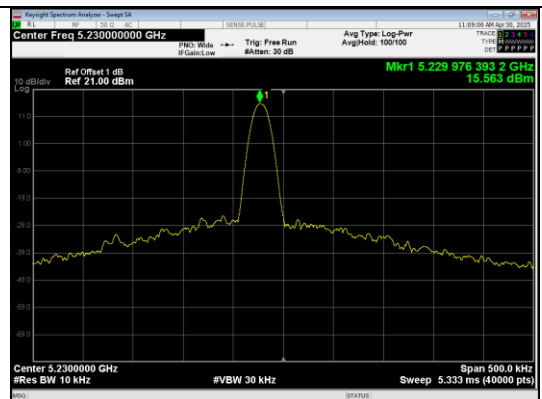


NT/NV_Antenna 0
IEEE 802.11n_Channel 48_20MHz

IEEE 802.11n_40

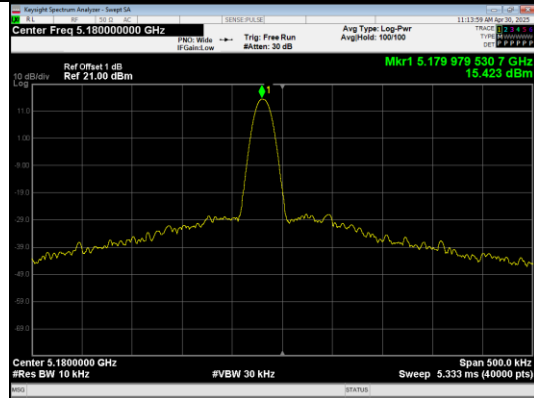


NT/NV_Antenna 0
IEEE 802.11n_Channel 38_40MHz

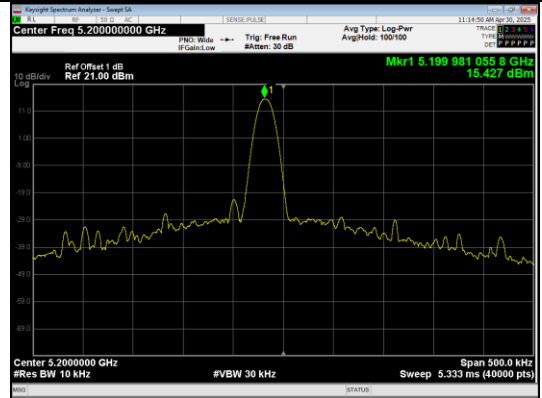


NT/NV_Antenna 0
IEEE 802.11n_Channel 46_40MHz

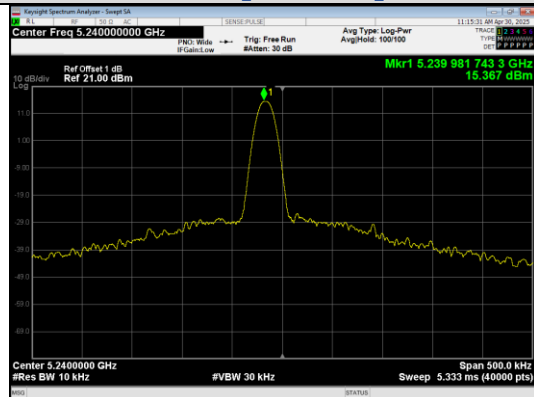
IEEE 802.11ac_20



NT/NV_Antenna 0
IEEE 802.11ac_Channel 36_20MHz

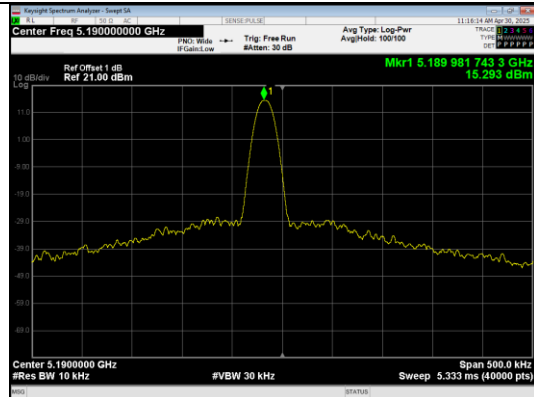


NT/NV_Antenna 0
IEEE 802.11ac_Channel 40_20MHz

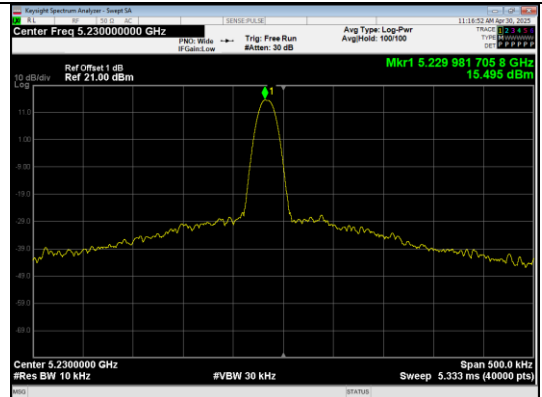


NT/NV_Antenna 0
IEEE 802.11ac_Channel 48_20MHz

IEEE 802.11ac_40

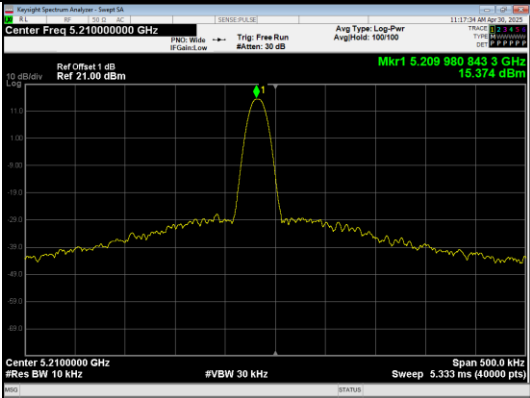


NT/NV_Antenna 0
IEEE 802.11ac_Channel 38_40MHz



NT/NV_Antenna 0
IEEE 802.11ac_Channel 46_40MHz

IEEE 802.11ac_80



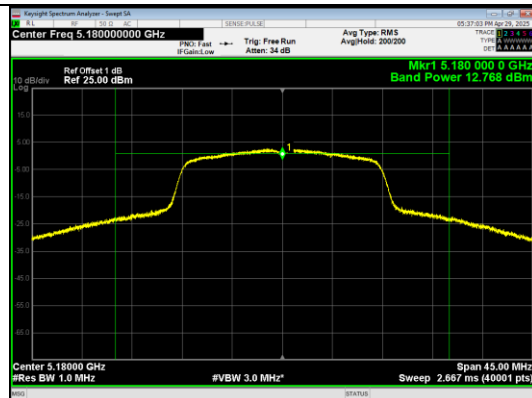
NT/NV_Antenna 0
IEEE 802.11ac_Channel 42_80MHz



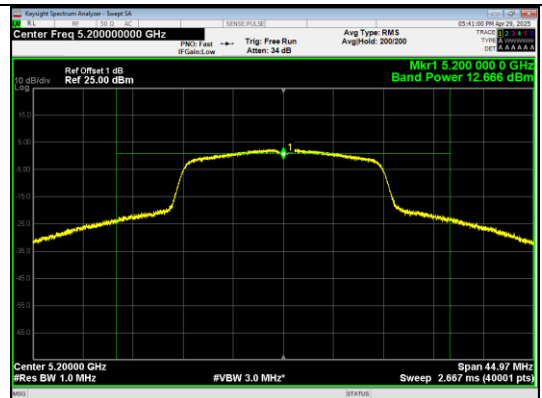
Conducted Output Power

Conducted output power

Mode	Channel	Ant. 0 (dBm)	Corr'd Value Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	12.768	12.9	≤24	PASS
	40	12.666	12.8	≤24	PASS
	48	12.622	12.76	≤24	PASS
IEEE 802.11n_20	36	12.745	12.88	≤24	PASS
	40	12.760	12.9	≤24	PASS
	48	12.584	12.72	≤24	PASS
IEEE 802.11n_40	38	12.031	12.31	≤24	PASS
	46	11.940	12.22	≤24	PASS
IEEE 802.11ac_20	36	12.519	12.66	≤24	PASS
	40	12.441	12.58	≤24	PASS
	48	12.277	12.41	≤24	PASS
IEEE 802.11ac_40	38	12.903	13.18	≤24	PASS
	46	11.833	12.11	≤24	PASS
IEEE 802.11ac_80	42	12.554	13.1	≤24	PASS



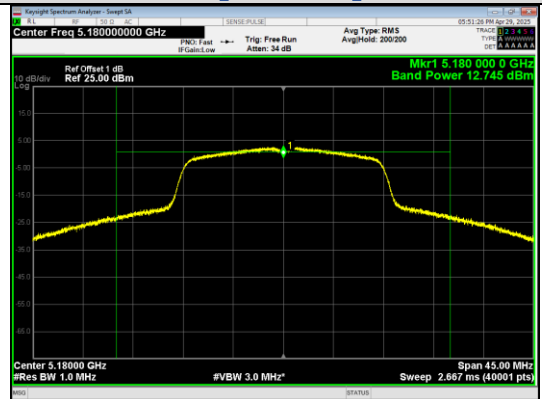
Conducted AVG output power
IEEE 802.11a_Channel 36_Antenna 0



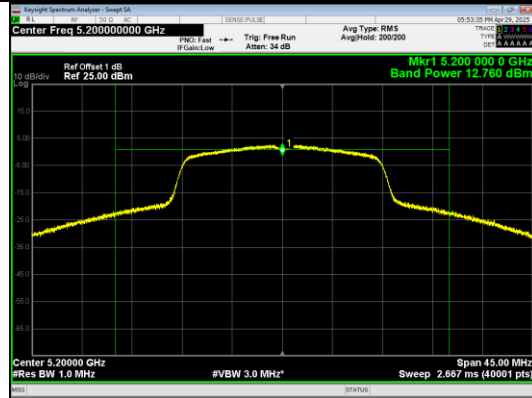
Conducted AVG output power
IEEE 802.11a_Channel 40_Antenna 0



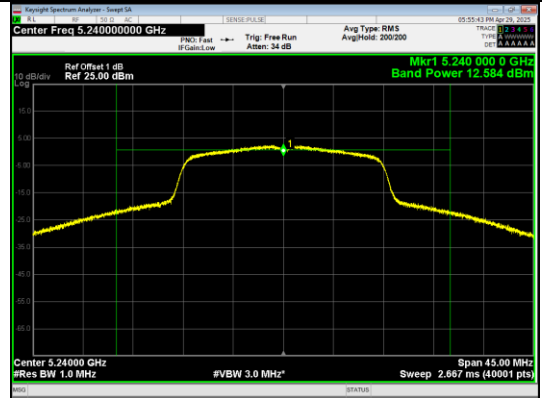
Conducted AVG output power
IEEE 802.11a_Channel 48_Antenna 0



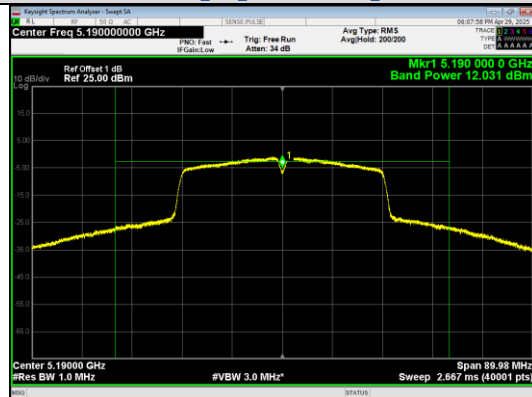
Conducted AVG output power
IEEE 802.11n_20_Channel 36_Antenna 0



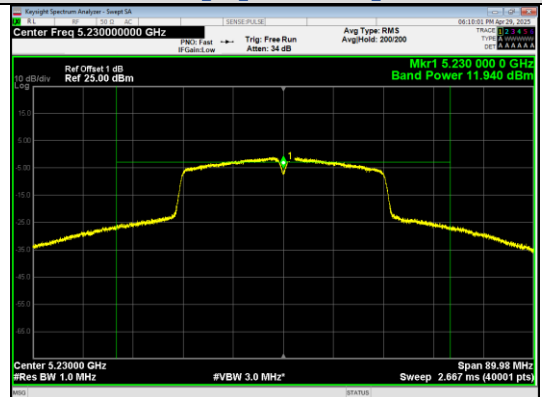
Conducted AVG output power
IEEE 802.11n_20_Channel 40_Antenna 0



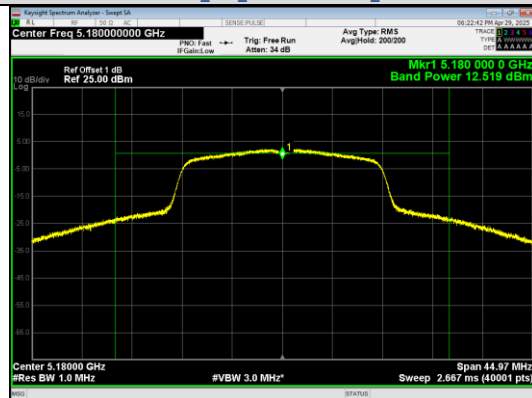
Conducted AVG output power
IEEE 802.11n_20_Channel 48_Antenna 0



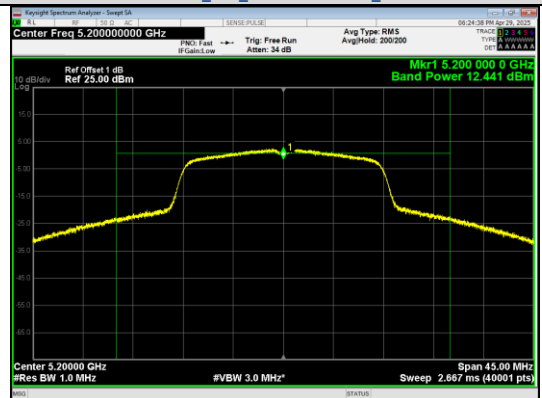
Conducted AVG output power
IEEE 802.11n_40_Channel 38_Antenna 0



Conducted AVG output power
IEEE 802.11n_40_Channel 46_Antenna 0



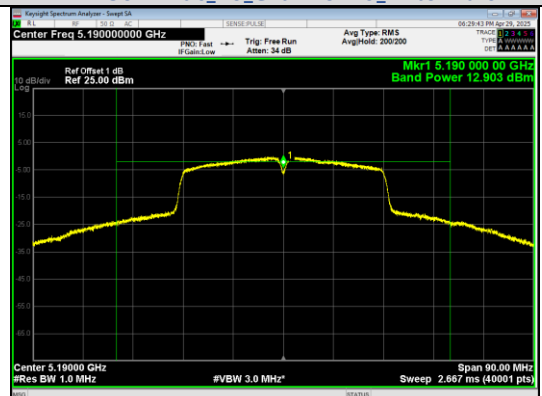
Conducted AVG output power
IEEE 802.11ac_20_Channel 36_Antenna 0



Conducted AVG output power
IEEE 802.11ac_20_Channel 40_Antenna 0



Conducted AVG output power



Conducted AVG output power



IEEE 802.11ac_20_Channel 48_Antenna 0 Conducted AVG output power IEEE 802.11ac_40_Channel 46_Antenna 0	IEEE 802.11ac_40_Channel 38_Antenna 0 Conducted AVG output power IEEE 802.11ac_80_Channel 42_Antenna 0
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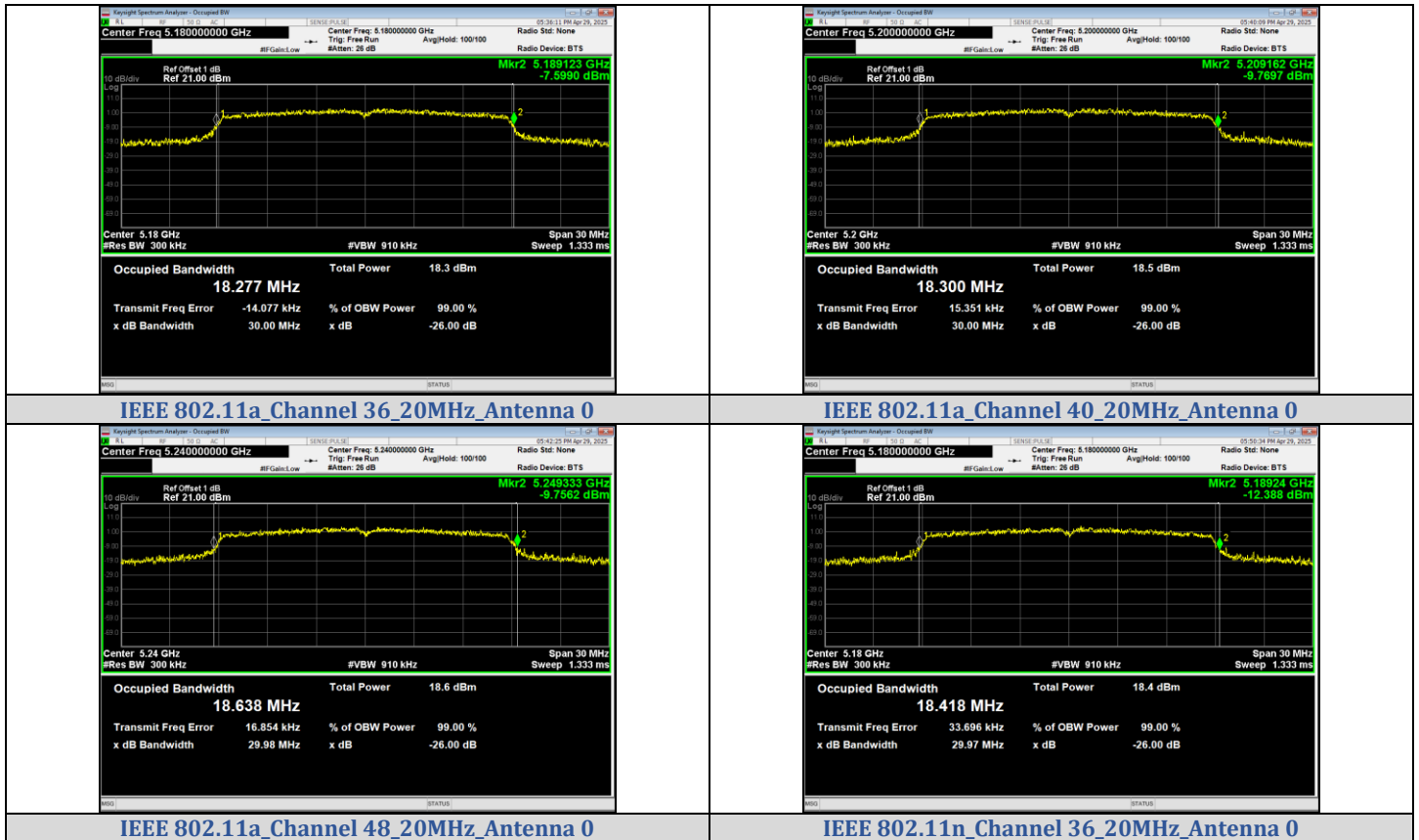


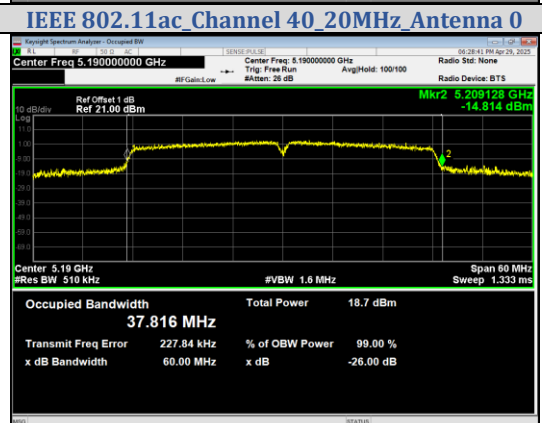
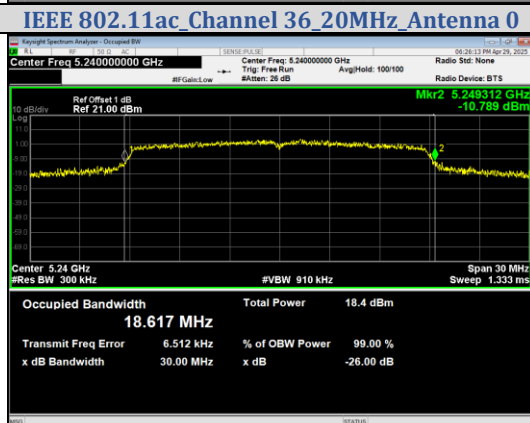
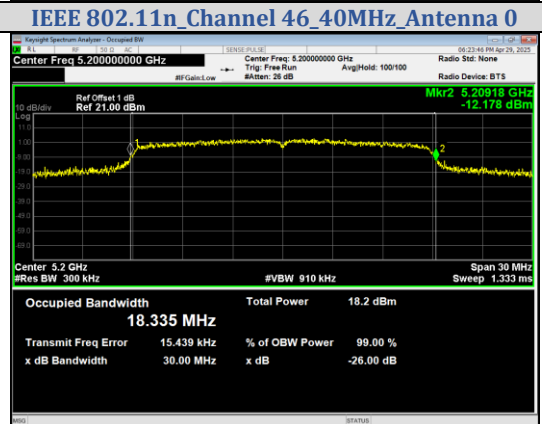
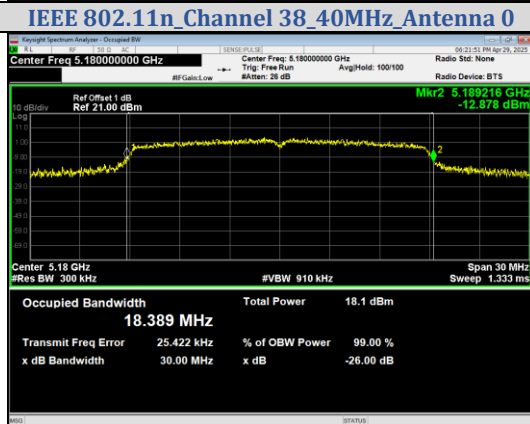
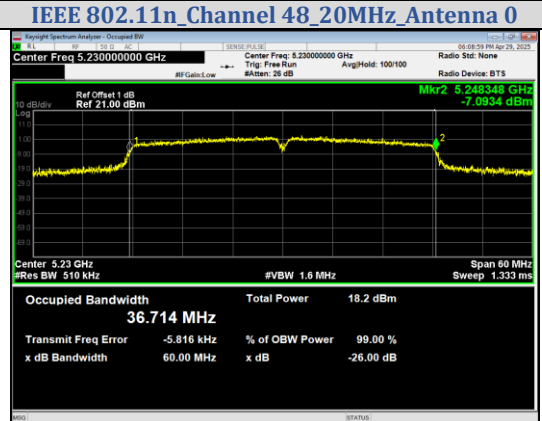
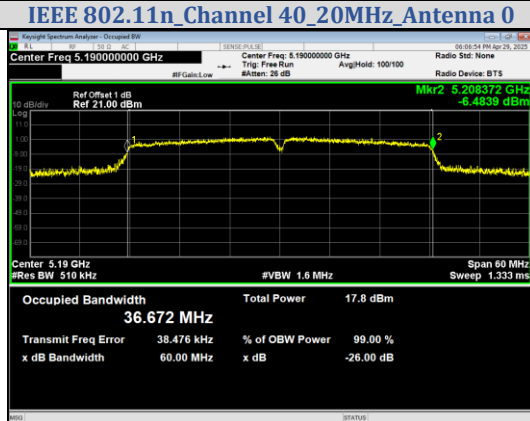
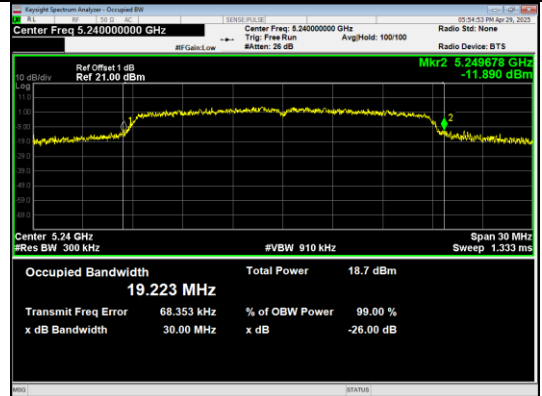
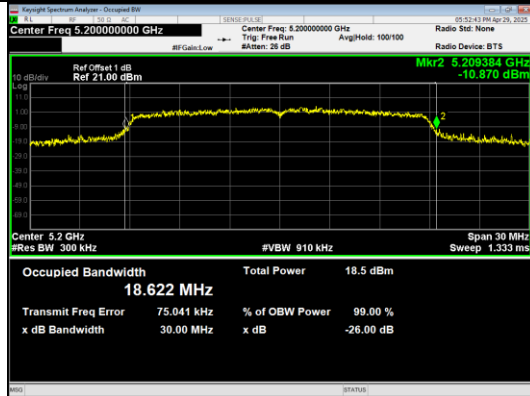
99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	5180	18.277
	40	5200	18.300
	48	5240	18.638
IEEE 802.11n_20	36	5180	18.418
	40	5200	18.622
	48	5240	19.223
IEEE 802.11n_40	38	5190	36.672
	46	5230	36.714
IEEE 802.11ac_20	36	5180	18.389
	40	5200	18.335
	48	5240	18.617
IEEE 802.11ac_40	38	5190	37.816
	46	5230	36.632
IEEE 802.11ac_80	42	5210	77.537

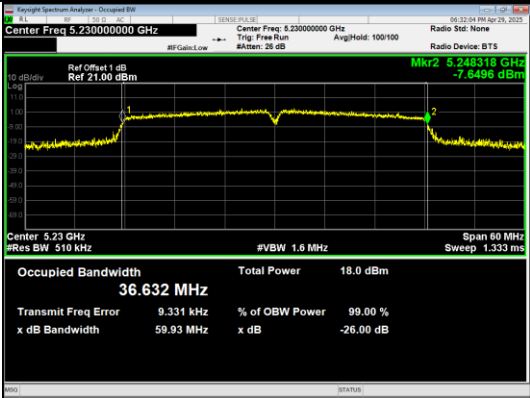
Test Graphs



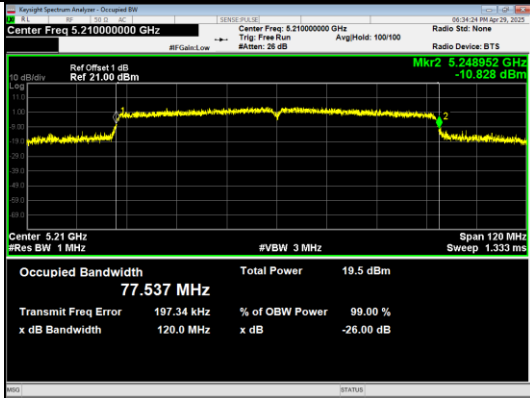


IEEE 802.11ac Channel 48_20MHz_Antenna 0

IEEE 802.11ac Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



IEEE 802.11ac_Channel 42_80MHz_Antenna 0

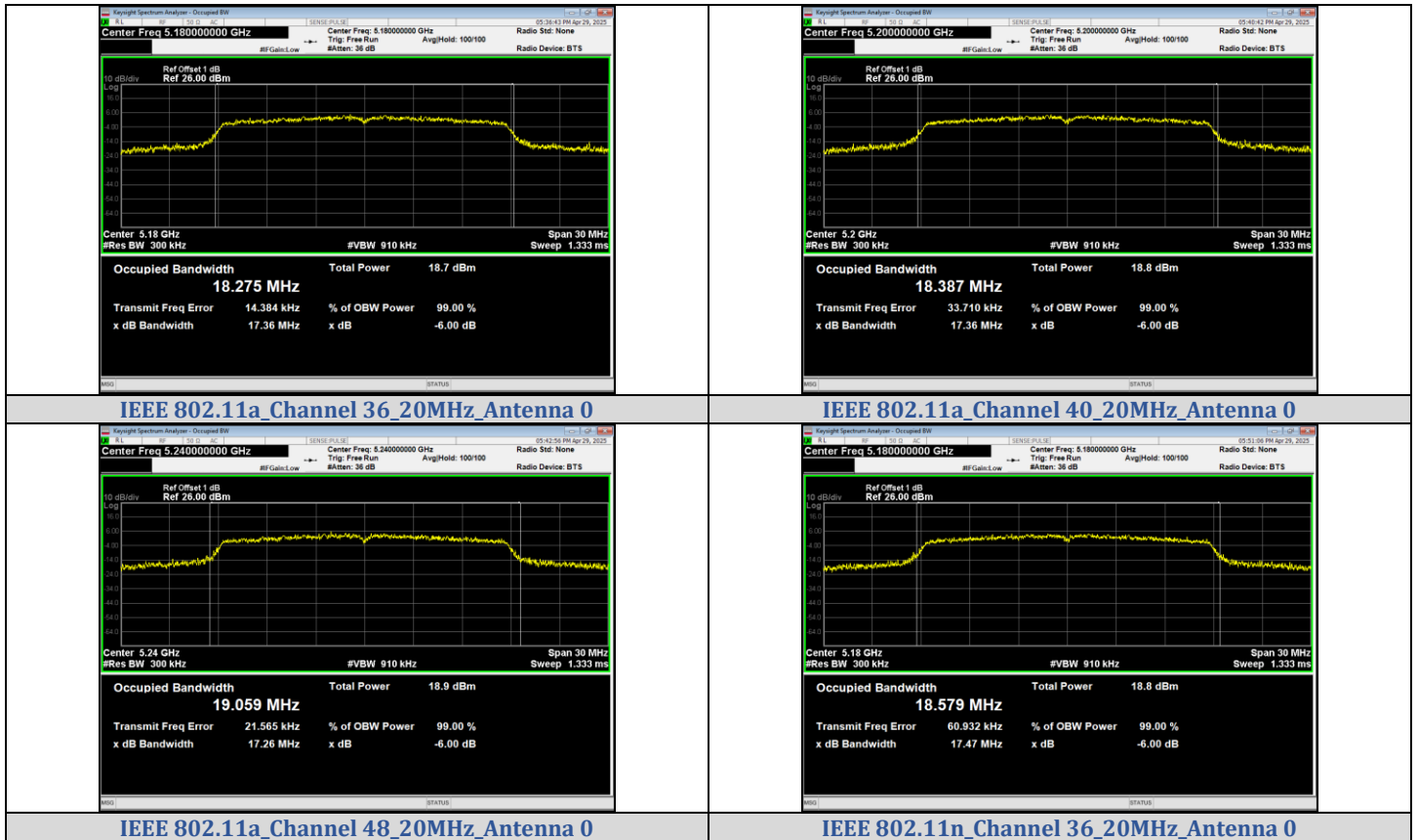


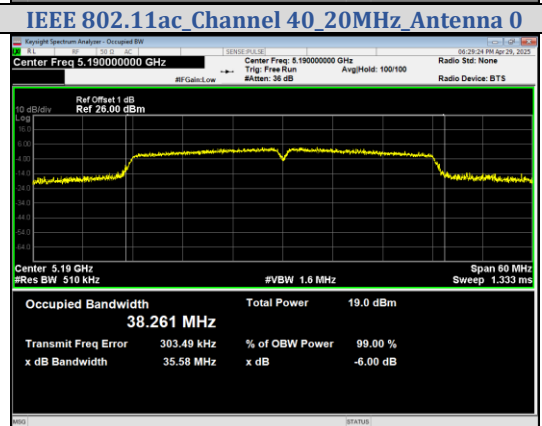
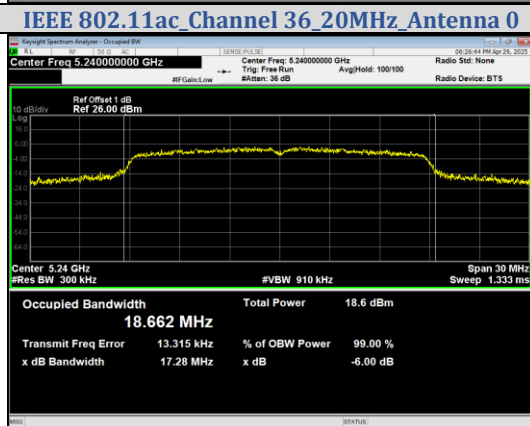
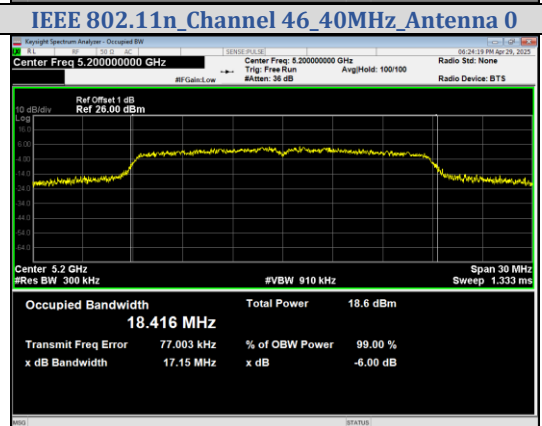
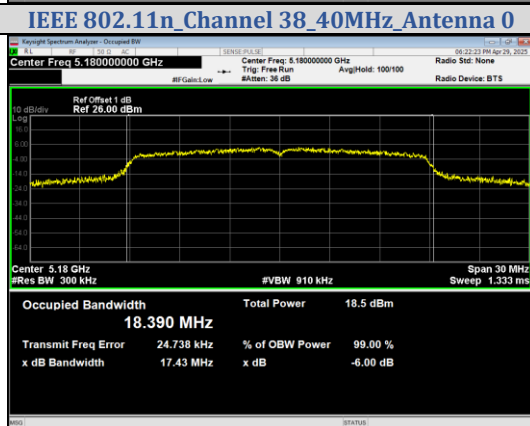
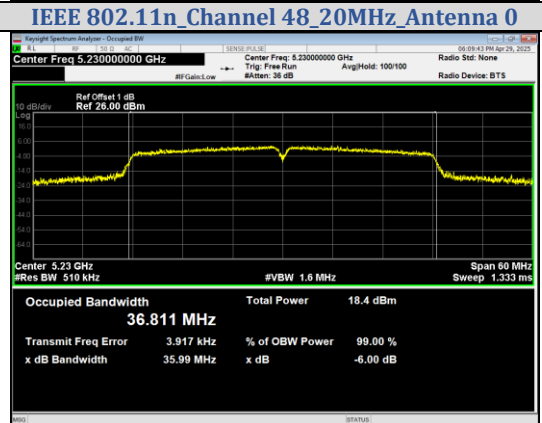
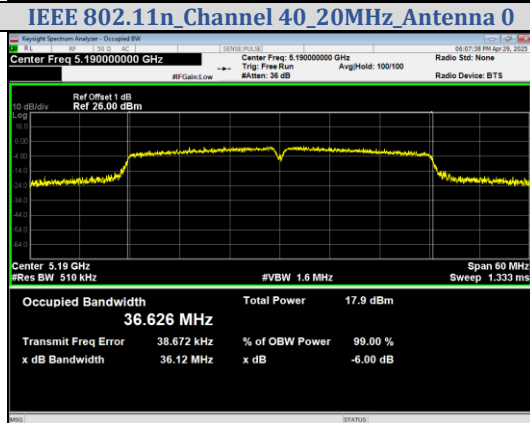
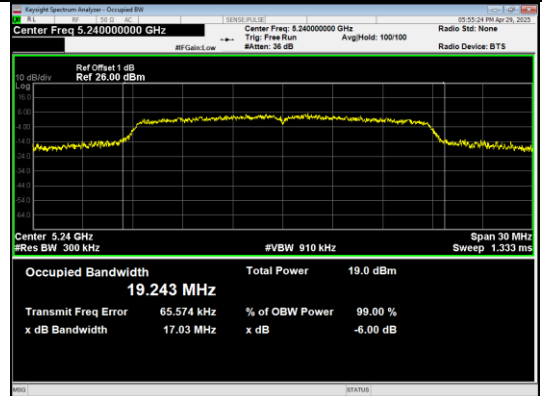
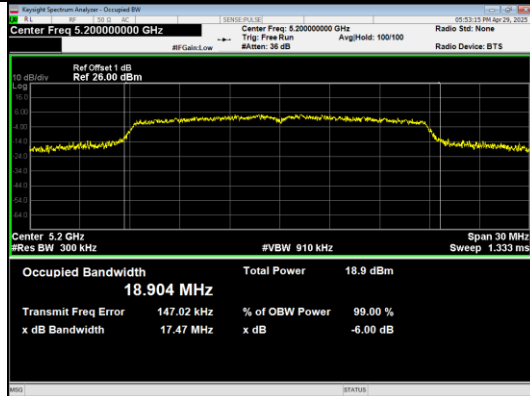
6dB Bandwidth

Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	36	0	5180	17.36	≥0.5	PASS
	40		5200	17.36		PASS
	48		5240	17.26		PASS
IEEE 802.11n_20	36		5180	17.47		PASS
	40		5200	17.47		PASS
	48		5240	17.03		PASS
IEEE 802.11n_40	38		5190	36.12		PASS
	46		5230	35.99		PASS
IEEE 802.11ac_20	36		5180	17.43		PASS
	40		5200	17.15		PASS
	48		5240	17.28		PASS
IEEE 802.11ac_40	38		5190	35.58		PASS
	46		5230	35.43		PASS
IEEE 802.11ac_80	42		5210	75.55		PASS

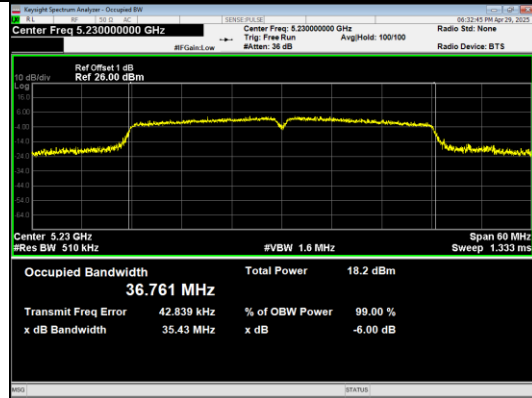
Test Graphs



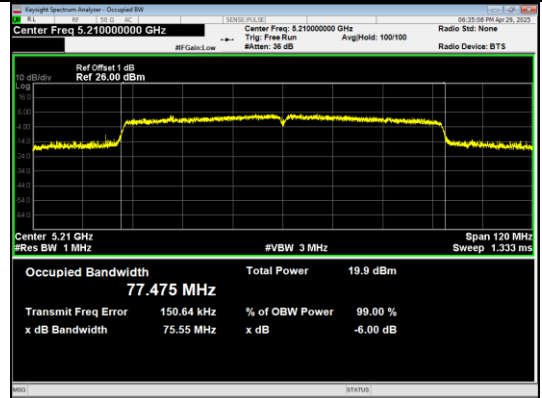


IEEE 802.11ac Channel 48_20MHz_Antenna 0

IEEE 802.11ac Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



IEEE 802.11ac_Channel 42_80MHz_Antenna 0

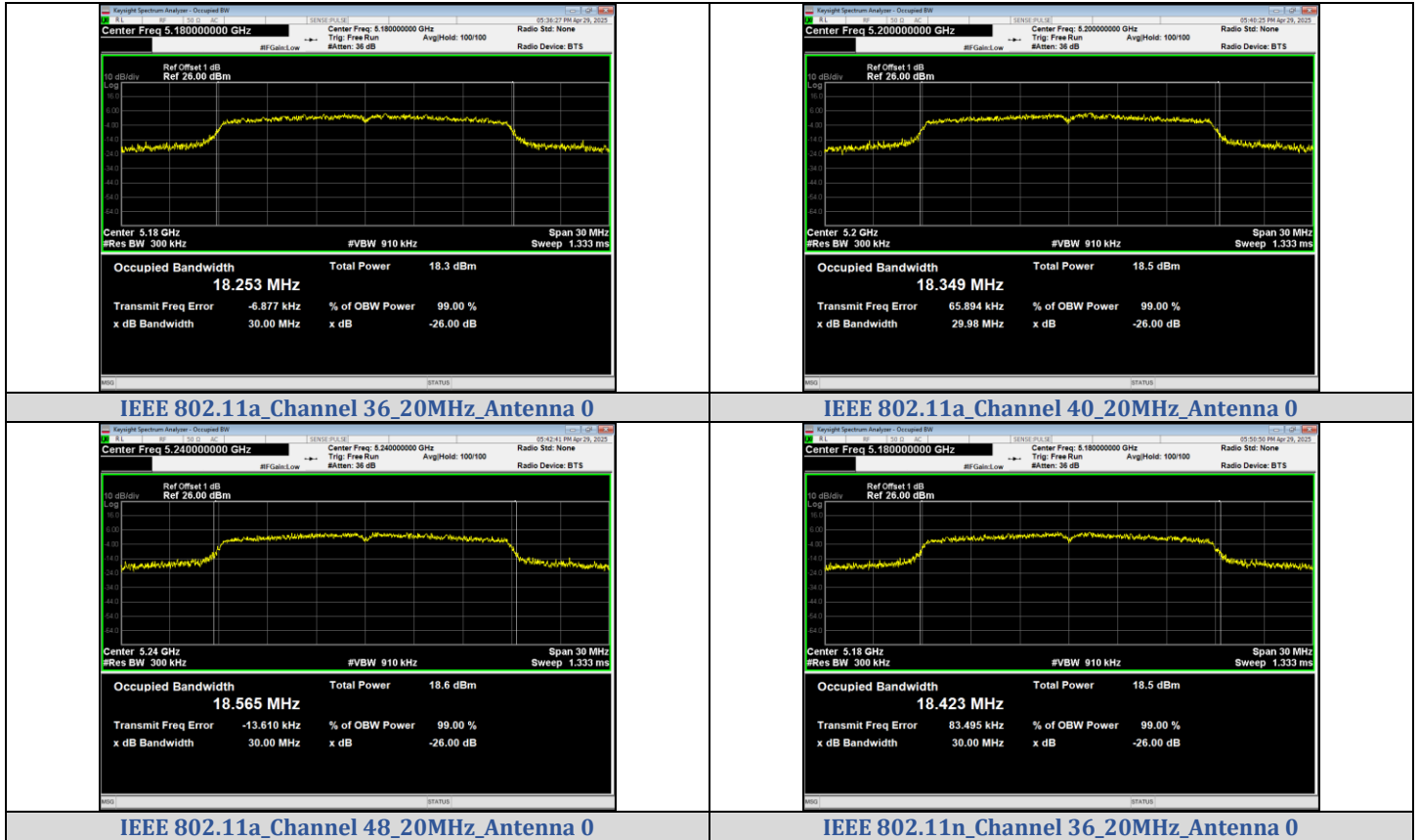


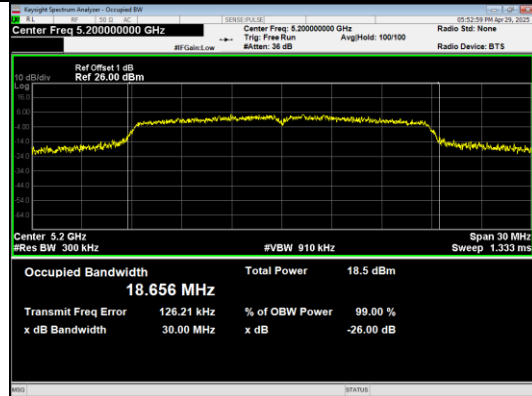
26dB Bandwidth

Test Result

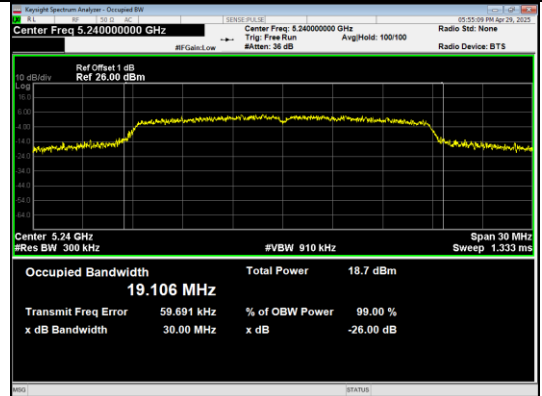
Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	36	0	5180	30.00	1.0
	40		5200	29.98	1.0
	48		5240	30.00	1.0
IEEE 802.11n_20	36		5180	30.00	1.0
	40		5200	30.00	1.0
	48		5240	30.00	1.0
IEEE 802.11n_40	38		5190	59.99	1.03
	46		5230	59.99	1.03
IEEE 802.11ac_20	36		5180	29.98	1.0
	40		5200	30.00	1.0
	48		5240	29.95	1.0
IEEE 802.11ac_40	38		5190	60.00	1.03
	46		5230	59.96	1.03
IEEE 802.11ac_80	42		5210	120.00	1.02

Test Graphs

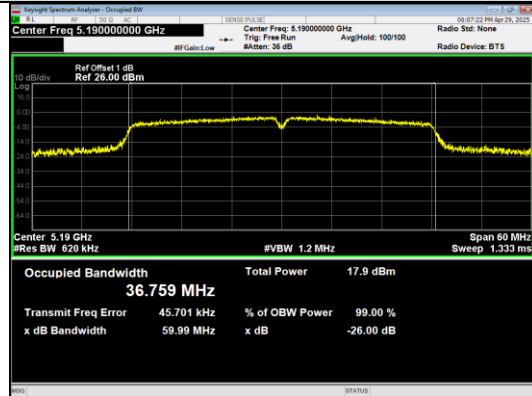




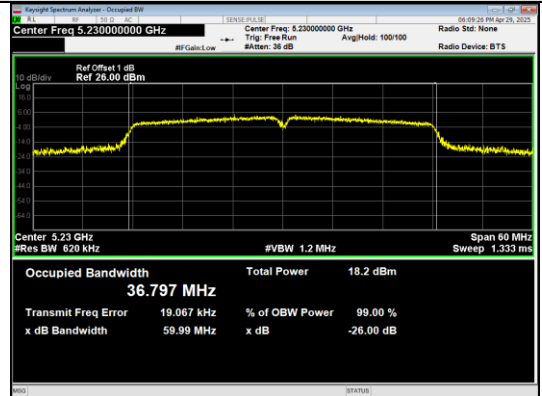
IEEE 802.11n_Channel 40_20MHz_Antenna 0



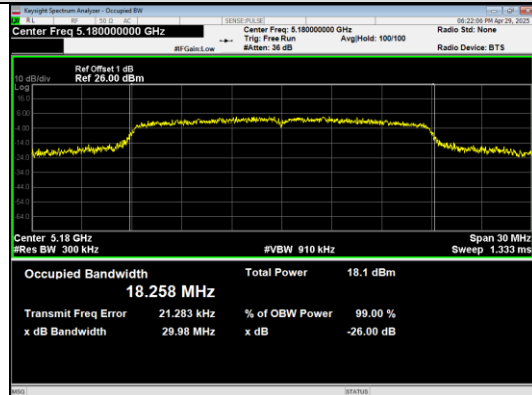
IEEE 802.11n_Channel 48_20MHz_Antenna 0



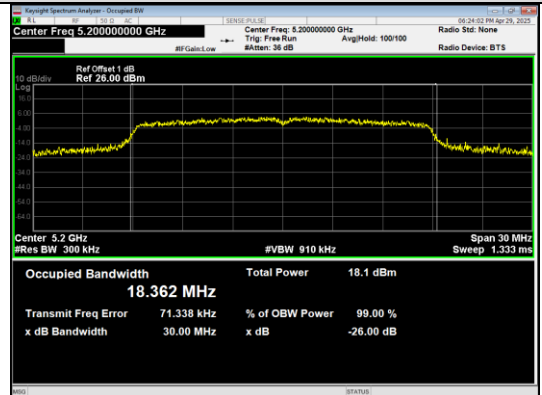
IEEE 802.11n_Channel 38_40MHz_Antenna 0



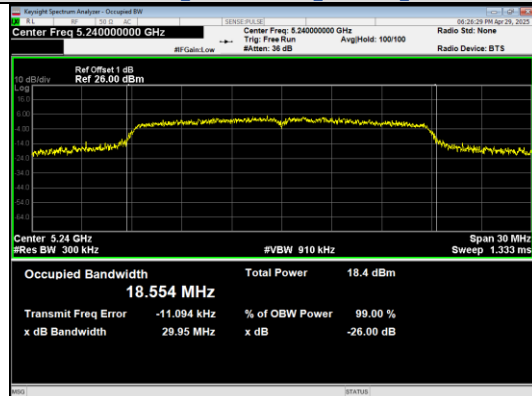
IEEE 802.11n_Channel 46_40MHz_Antenna 0



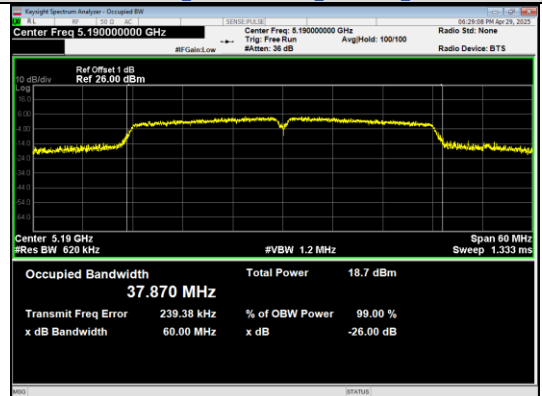
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



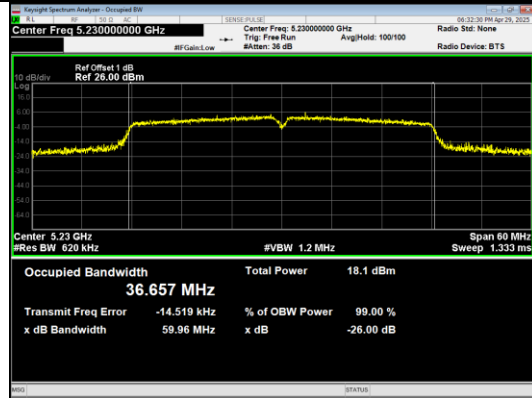
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



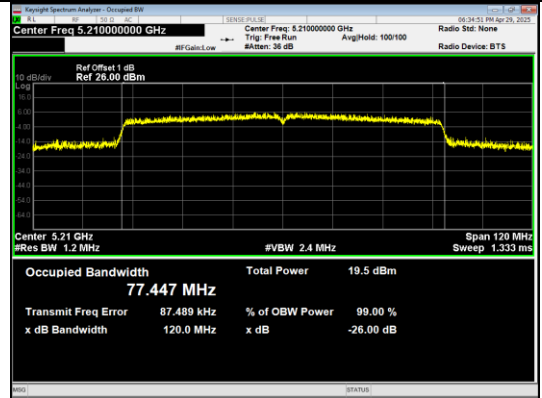
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



IEEE 802.11ac_Channel 42_80MHz_Antenna 0

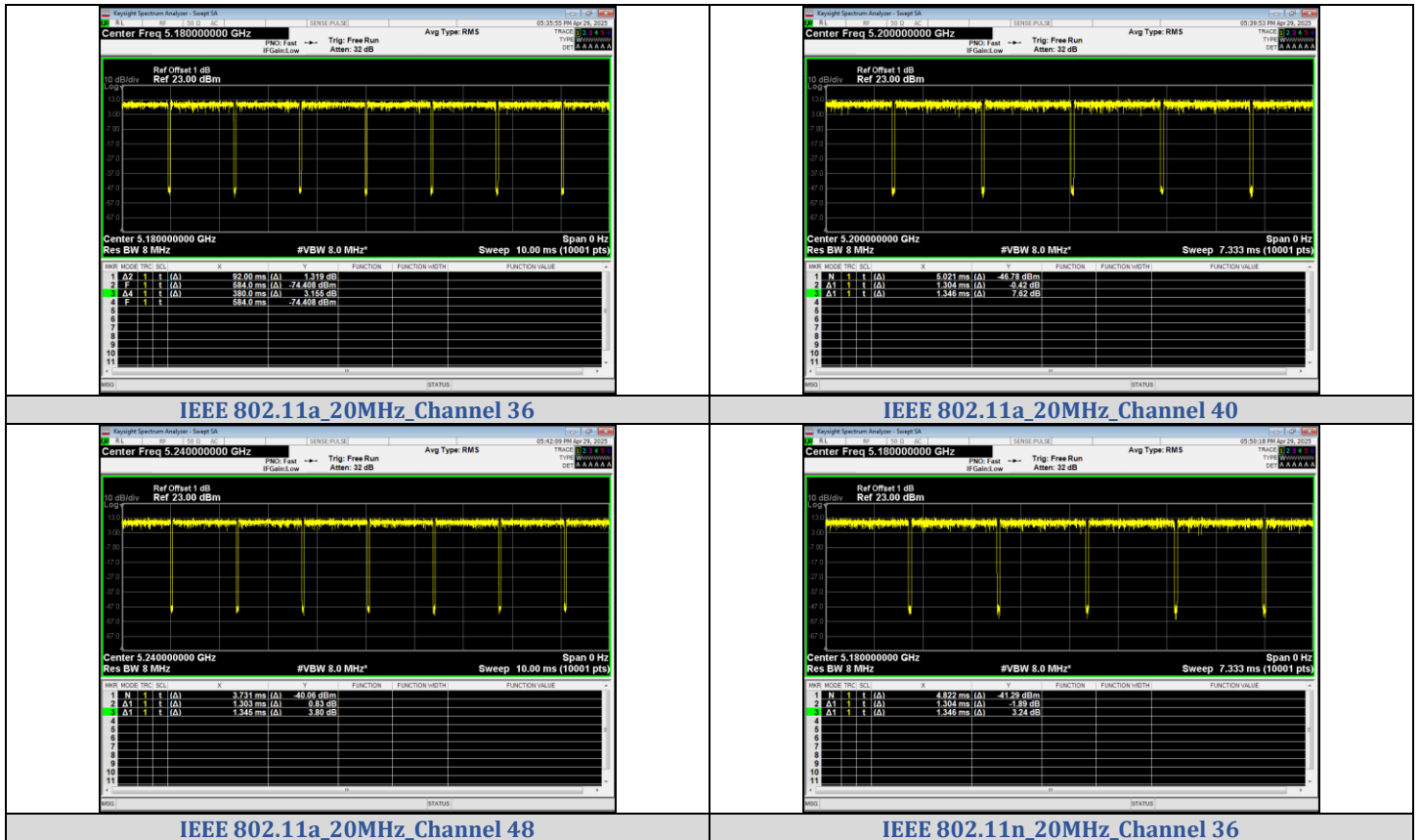


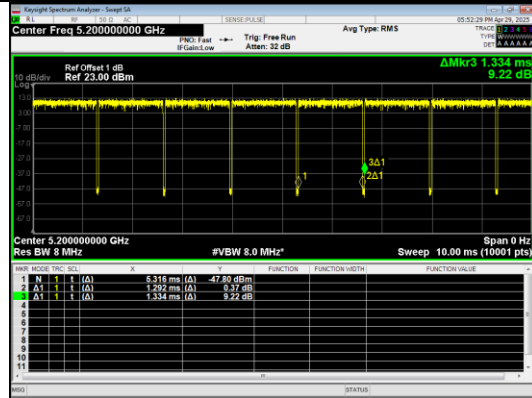
Duty Cycle

Test Result

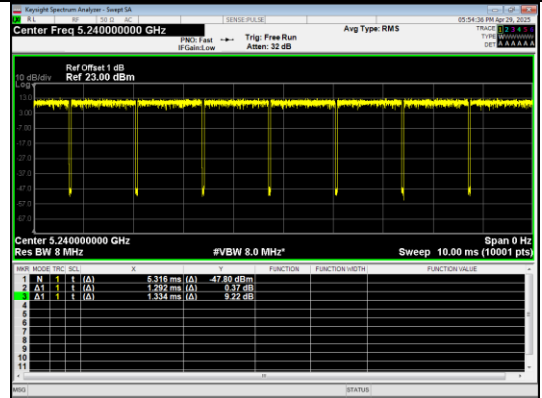
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11a	6	36	1	1.304	1.346	96.88	0.9688	0.1377	0.7669
		40		1.303	1.345	96.85	0.9685	0.139	0.7675
		48		1.304	1.345	96.95	0.9695	0.1345	0.7669
IEEE 802.11n_20	36	1.292		1.333	96.88	0.9688	0.1377	0.7740	
	40	1.292		1.334	96.85	0.9685	0.139	0.7740	
	48	1.292		1.334	96.85	0.9685	0.139	0.7740	
IEEE 802.11n_40	38	0.638		0.681	93.75	0.9375	0.2803	1.5674	
	46	0.638		0.680	93.75	0.9375	0.2803	1.5674	
IEEE 802.11ac_20	MCS 0	36		1.315	1.357	96.88	0.9688	0.1377	0.7605
		40		1.316	1.357	96.98	0.9698	0.1332	0.7599
		48		1.316	1.358	96.91	0.9691	0.1363	0.7599
IEEE 802.11ac_40		38		0.654	0.697	93.96	0.9396	0.2706	1.5291
		46		0.654	0.697	93.90	0.9390	0.2733	1.5291
IEEE 802.11ac_80		42		0.325	0.369	88.20	0.8820	0.5453	3.0769

Test Graphs

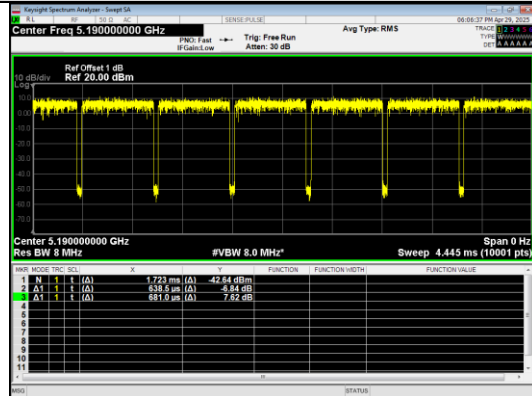




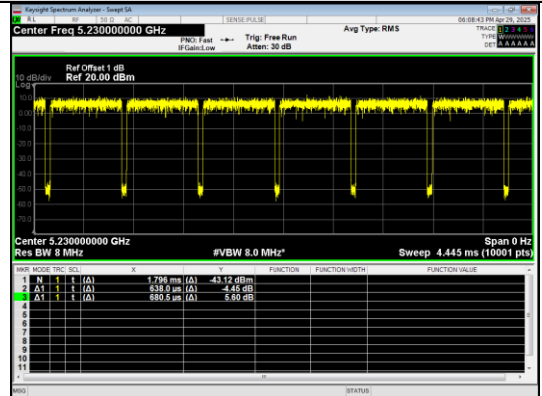
IEEE 802.11n_20MHz_Channel 40



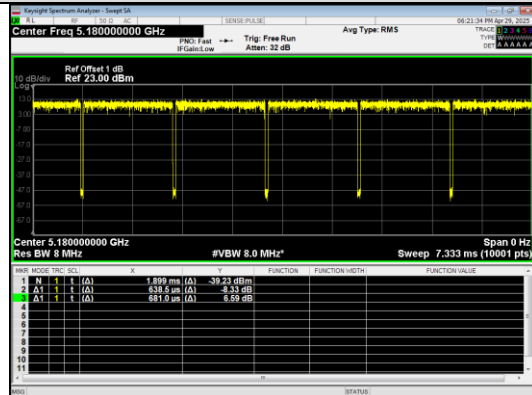
IEEE 802.11n_20MHz_Channel 48



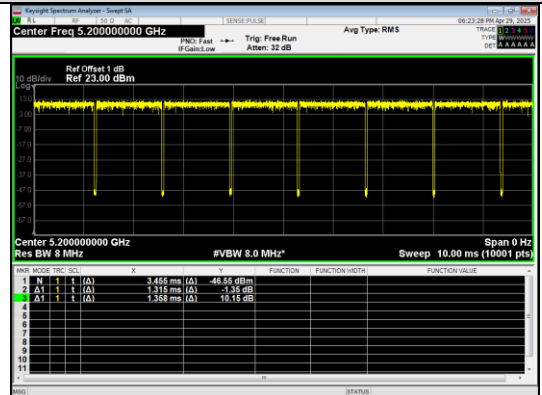
IEEE 802.11n_40MHz_Channel 38



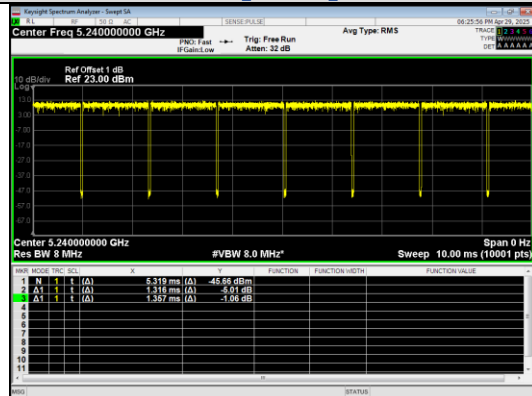
IEEE 802.11n_40MHz_Channel 46



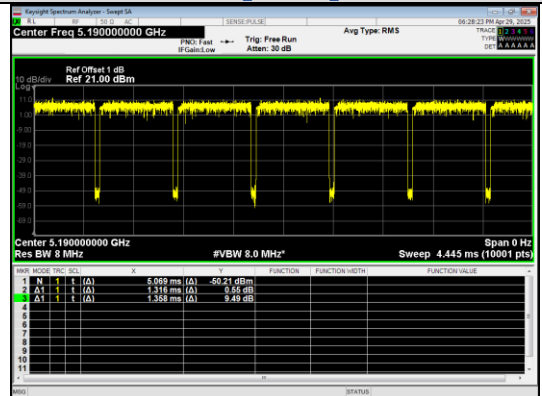
IEEE 802.11ac_20MHz_Channel 36



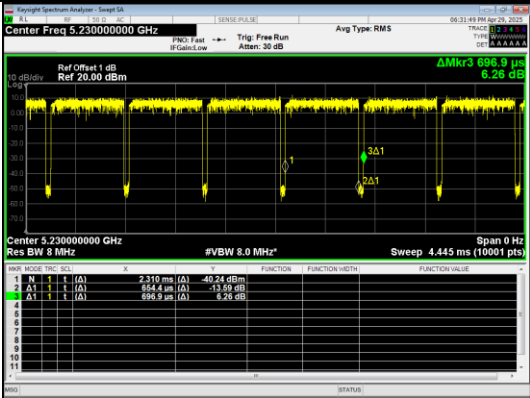
IEEE 802.11ac_20MHz_Channel 40



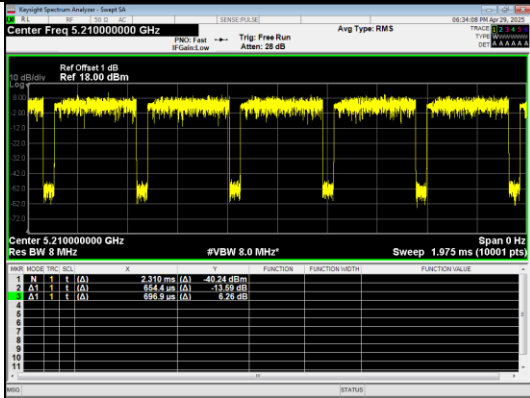
IEEE 802.11ac_20MHz_Channel 48



IEEE 802.11ac_40MHz_Channel 38



IEEE 802.11ac_40MHz_Channel 46



IEEE 802.11ac_80MHz_Channel 42

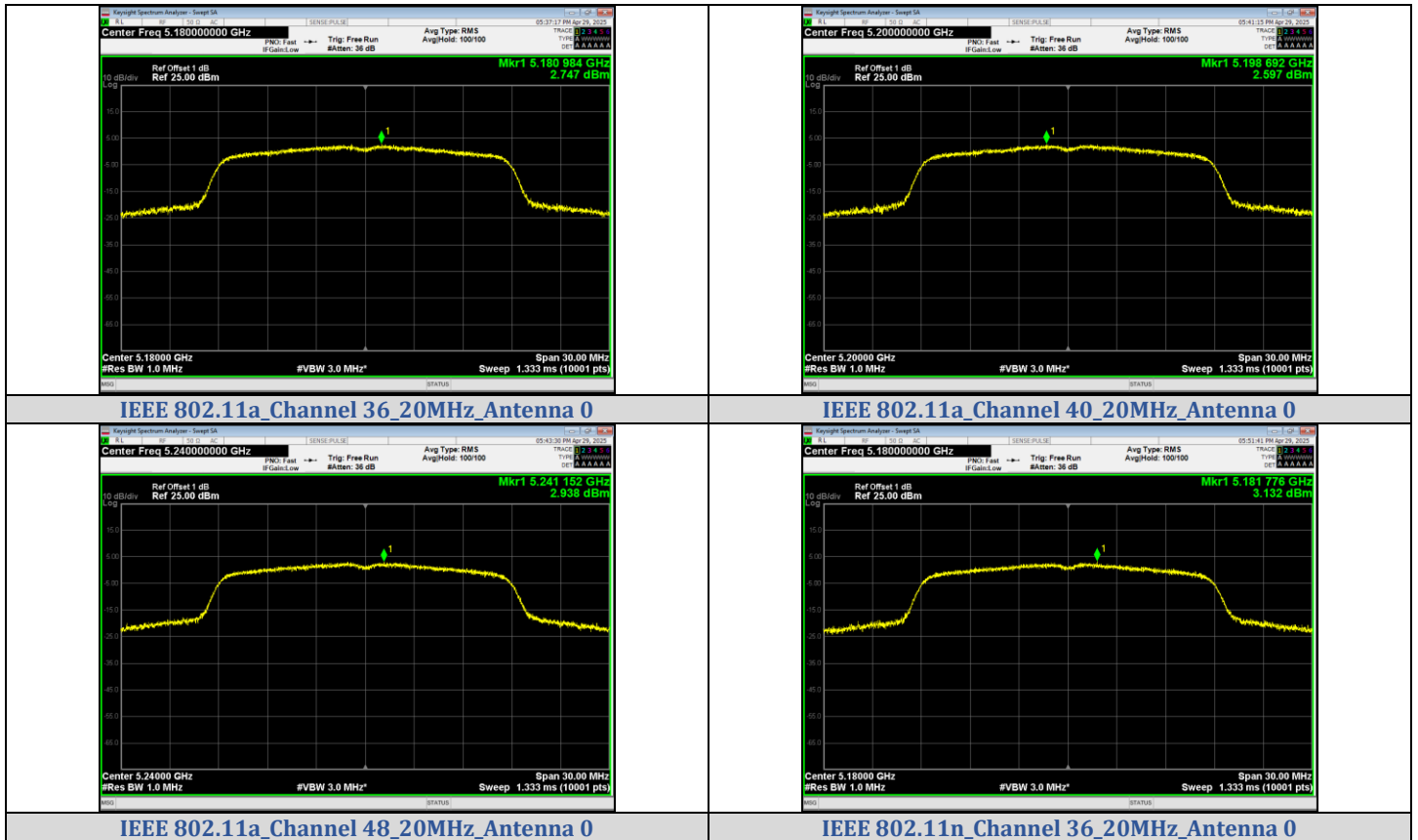


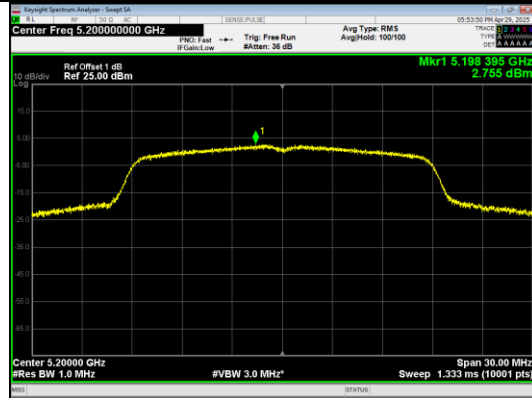
Peak Power Spectral Density

Test Result

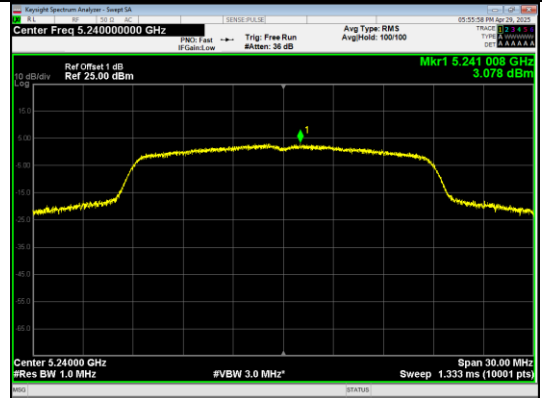
Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.5MHz)	Ant. 0 Corr'd PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	36	2.747	2.881	11	PASS
	40	2.597	2.732		PASS
	48	2.938	3.073		PASS
IEEE 802.11n_20	36	3.132	3.271		PASS
	40	2.755	2.894		PASS
	48	3.078	3.217		PASS
IEEE 802.11n_40	38	-0.808	-0.528		PASS
	46	-0.794	-0.514		PASS
IEEE 802.11ac_20	36	2.692	2.828		PASS
	40	2.364	2.5		PASS
	48	2.709	2.845		PASS
IEEE 802.11ac_40	38	0.127	0.4		PASS
	46	-0.572	-0.299		PASS
IEEE 802.11ac_80	42	-3.356	-2.811		PASS

Test Graphs

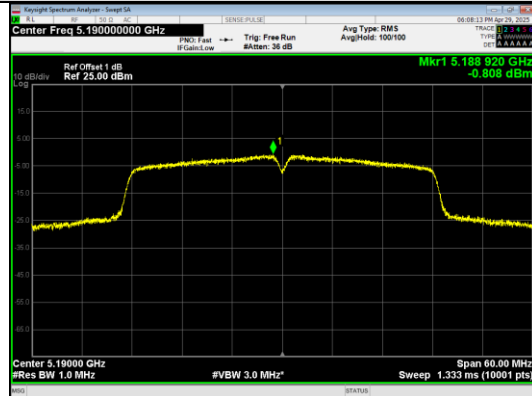




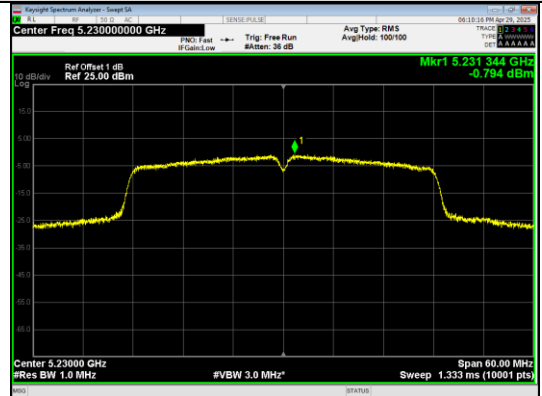
IEEE 802.11n_Channel 40_20MHz_Antenna 0



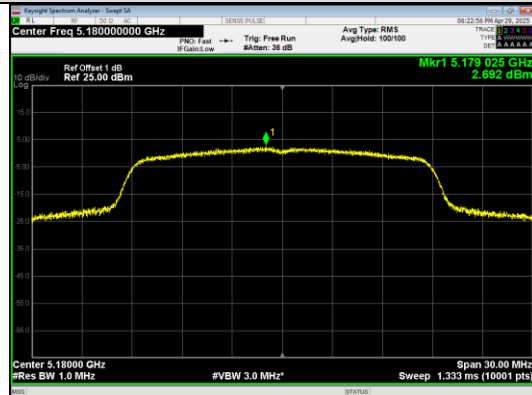
IEEE 802.11n_Channel 48_20MHz_Antenna 0



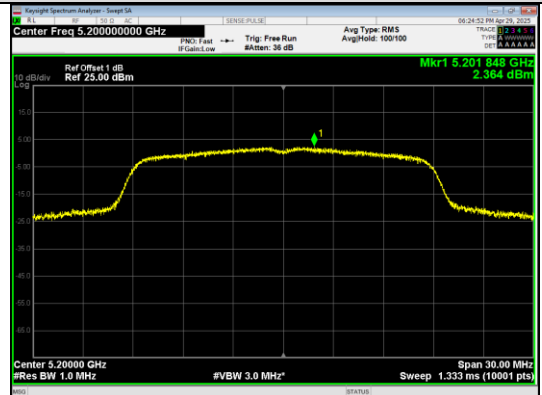
IEEE 802.11n_Channel 38_40MHz_Antenna 0



IEEE 802.11n_Channel 46_40MHz_Antenna 0



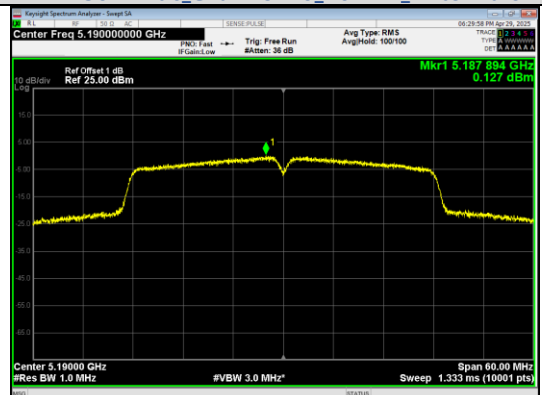
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



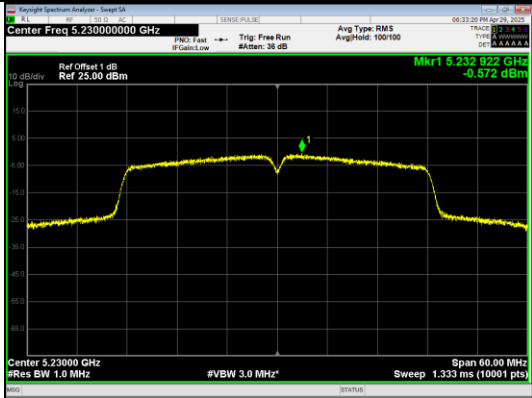
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



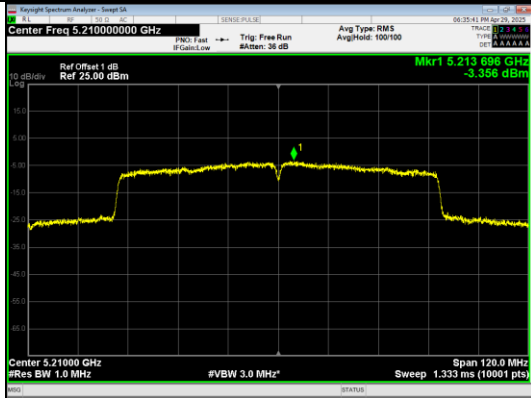
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



IEEE 802.11ac_Channel 38_40MHz_Antenna 0



IEEE 802.11ac_Channel 46_40MHz_Antenna 0



IEEE 802.11ac_Channel 42_80MHz_Antenna 0