

ANT1

Frequency Stability

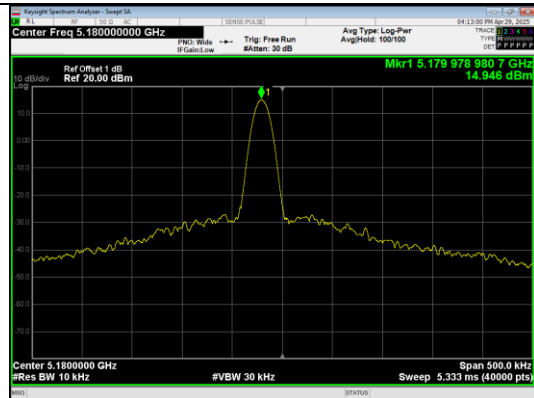
Test Result

Condition	Mode	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	36	5180.0	5179.978981	-4.06	Within authorized band	PASS
		40	5200.0	5199.978368	-4.16		PASS
		48	5240.0	5239.981918	-3.45		PASS
	IEEE 802.11n_20	36	5180.0	5179.980581	-3.75		PASS
		40	5200.0	5199.982493	-3.37		PASS
		48	5240.0	5239.982418	-3.36		PASS
	IEEE 802.11n_40	38	5190.0	5190.000094	0.02		PASS
		46	5230.0	5229.984256	-3.01		PASS
	IEEE 802.11ac_20	36	5180.0	5179.986668	-2.57		PASS
		40	5200.0	5199.989131	-2.09		PASS
		48	5240.0	5239.990031	-1.9		PASS
	IEEE 802.11ac_40	38	5190.0	5189.977756	-4.29		PASS
		46	5230.0	5229.979606	-3.9		PASS
	IEEE 802.11ac_80	42	5210.0	5209.982031	-3.45		PASS

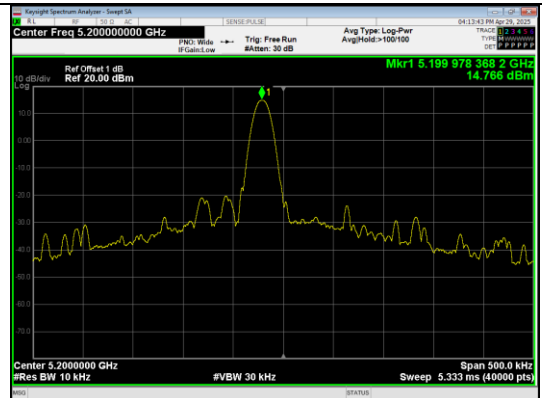
Test Graphs

NT/NV

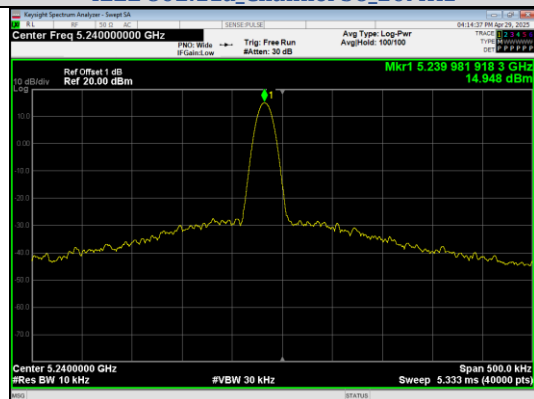
IEEE 802.11a



NT/NV_Antenna 1
IEEE 802.11a_Channel 36_20MHz

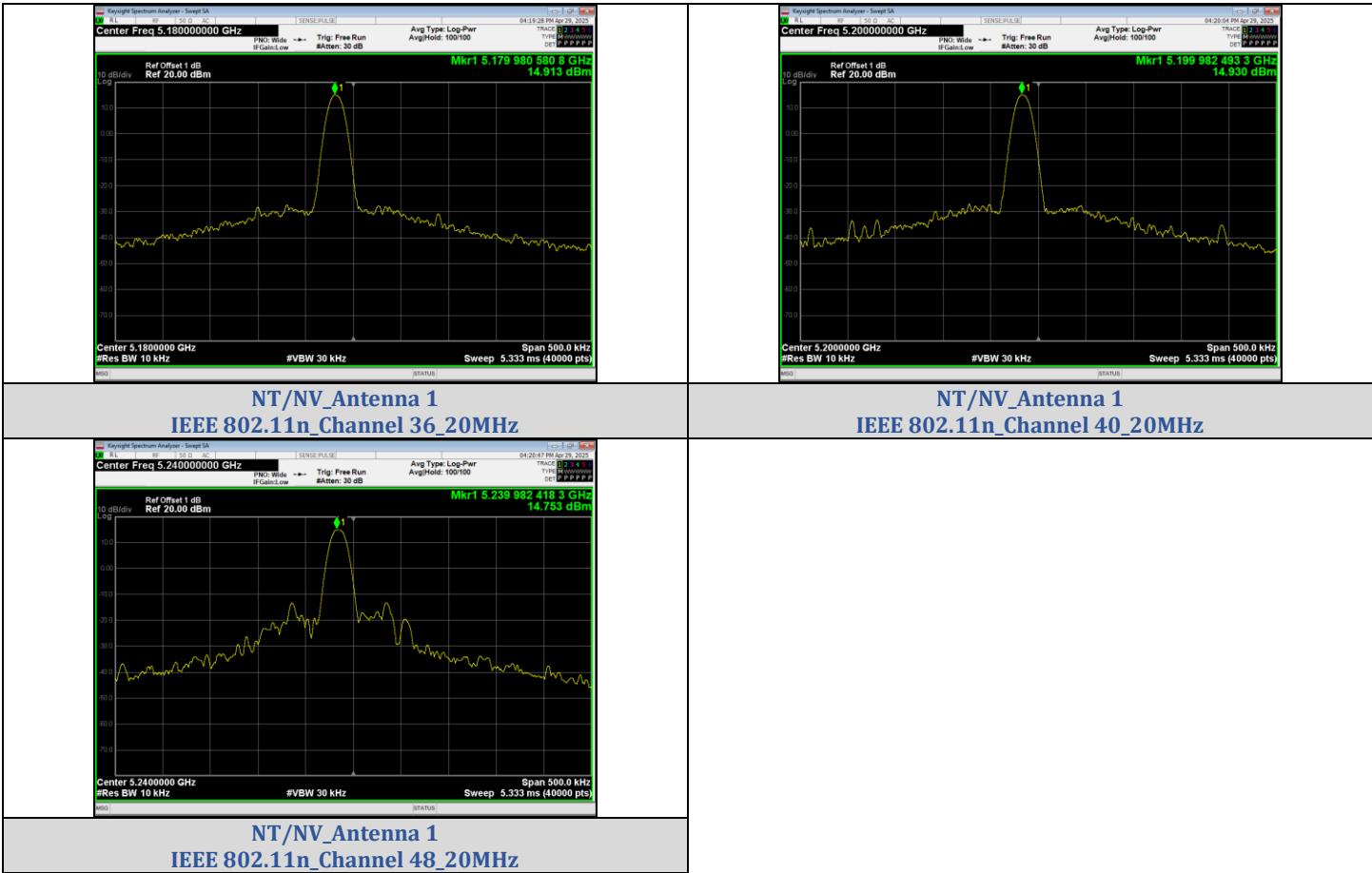


NT/NV_Antenna 1
IEEE 802.11a_Channel 40_20MHz

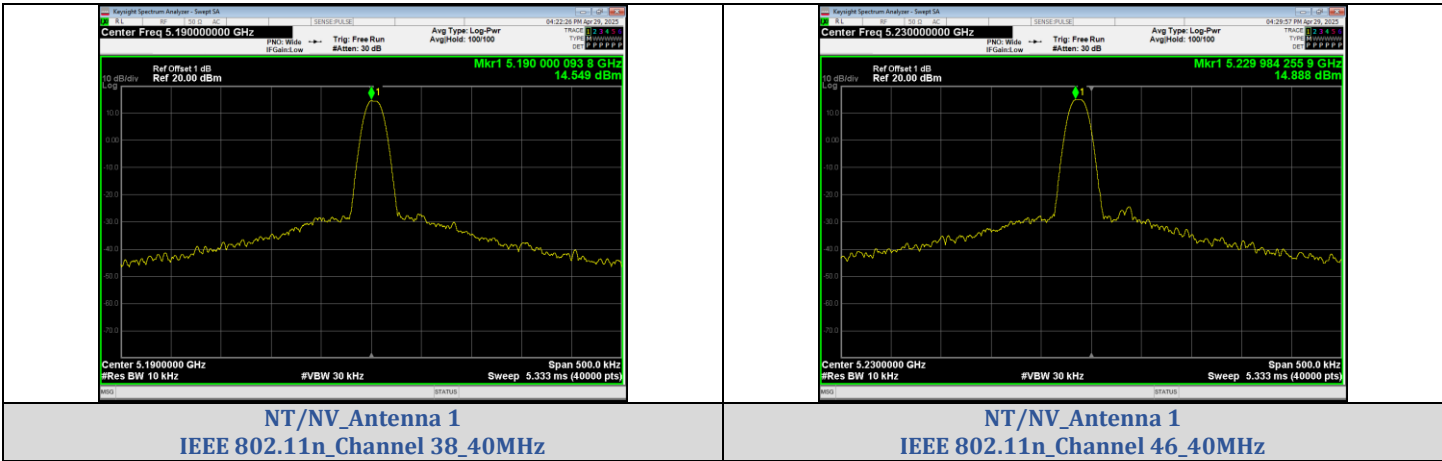


NT/NV_Antenna 1
IEEE 802.11a_Channel 48_20MHz

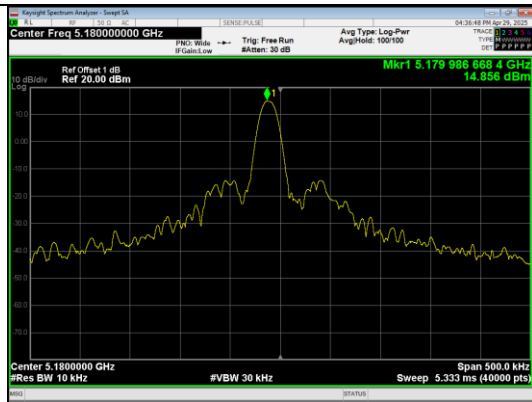
IEEE 802.11n_20



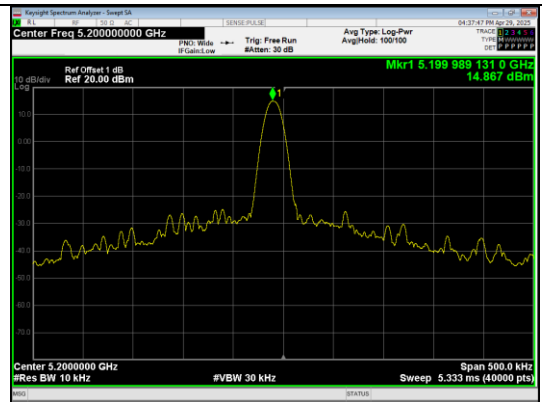
IEEE 802.11n_40



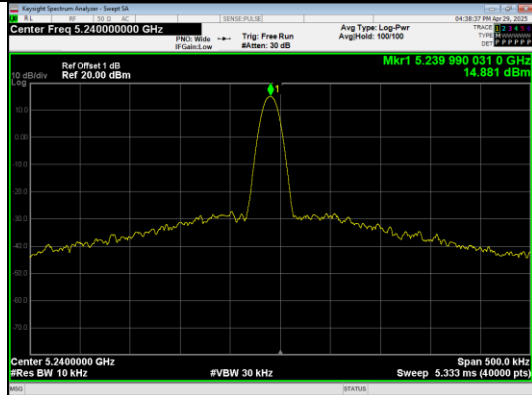
IEEE 802.11ac_20



NT/NV_Antenna 1
IEEE 802.11ac_Channel 36_20MHz

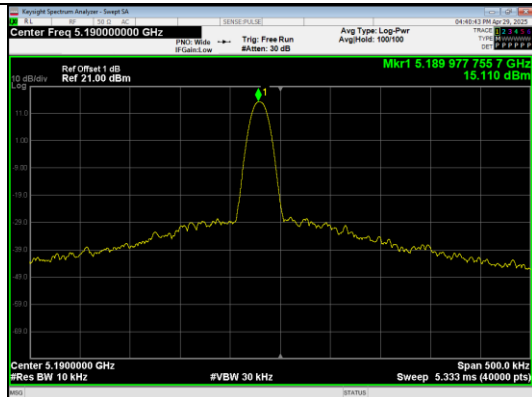


NT/NV_Antenna 1
IEEE 802.11ac_Channel 40_20MHz

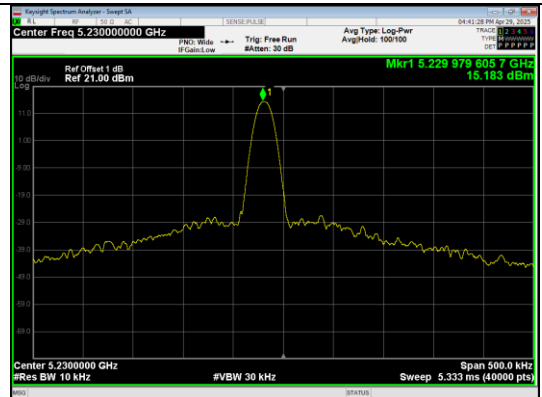


NT/NV_Antenna 1
IEEE 802.11ac_Channel 48_20MHz

IEEE 802.11ac_40

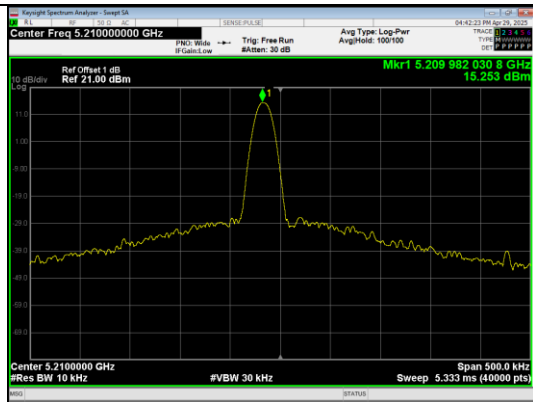


NT/NV_Antenna 1
IEEE 802.11ac_Channel 38_40MHz



NT/NV_Antenna 1
IEEE 802.11ac_Channel 46_40MHz

IEEE 802.11ac_80



NT/NV_Antenna 1
IEEE 802.11ac_Channel 42_80MHz

ANT2

Frequency Stability

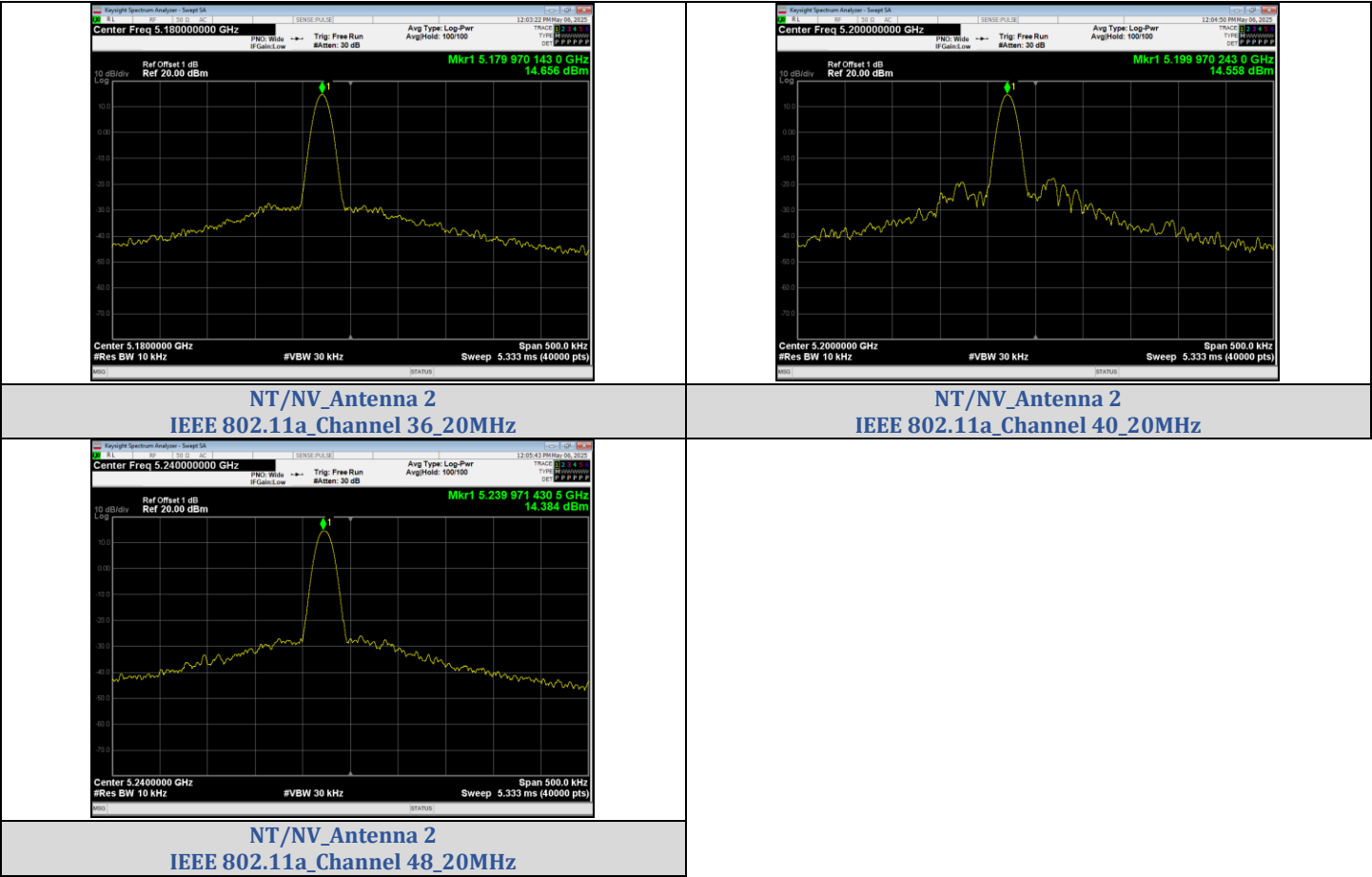
Test Result

Condition	Mode	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	36	5180.0	5179.970143	-5.76	Within authorized band	PASS
		40	5200.0	5199.970243	-5.72		PASS
		48	5240.0	5239.971431	-5.45		PASS
	IEEE 802.11n_20	36	5180.0	5179.980318	-3.8		PASS
		40	5200.0	5199.988068	-2.29		PASS
		48	5240.0	5239.987793	-2.33		PASS
	IEEE 802.11n_40	38	5190.0	5189.986856	-2.53		PASS
		46	5230.0	5229.989831	-1.94		PASS
	IEEE 802.11ac_20	36	5180.0	5179.998706	-0.25		PASS
		40	5200.0	5200.003644	0.7		PASS
		48	5240.0	5240.004194	0.8		PASS
	IEEE 802.11ac_40	38	5190.0	5190.002156	0.42		PASS
	IEEE 802.11ac_80	46	5230.0	5230.003519	0.67		PASS
		42	5210.0	5210.004031	0.77		PASS

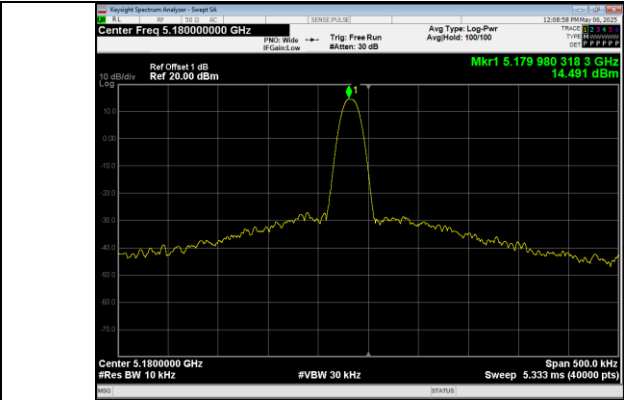
Test Graphs

NT/NV

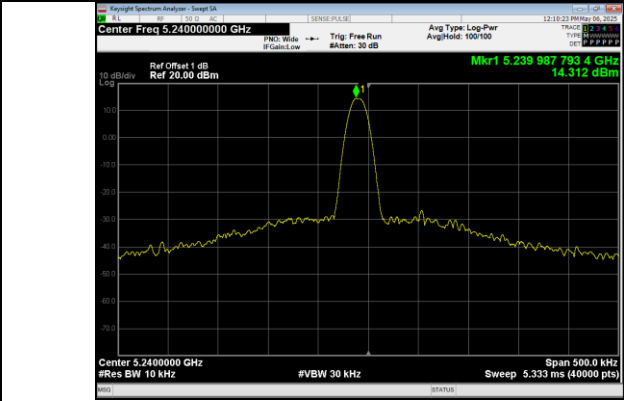
IEEE 802.11a



IEEE 802.11n_20

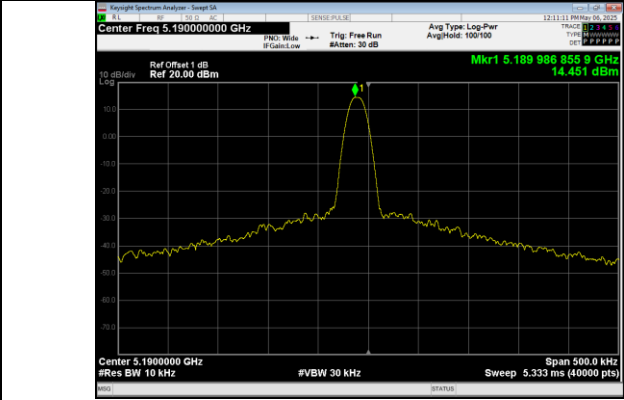


NT/NV_Antenna 2
IEEE 802.11n_Channel 36_20MHz



NT/NV_Antenna 2
IEEE 802.11n_Channel 48_20MHz

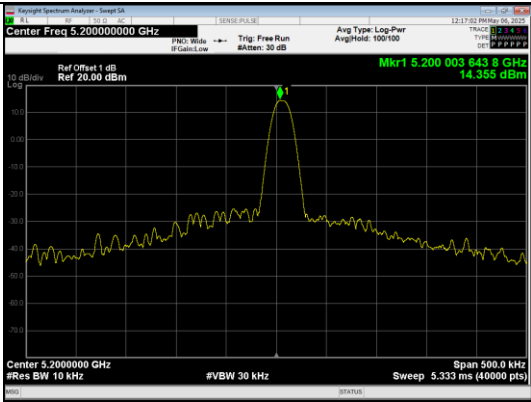
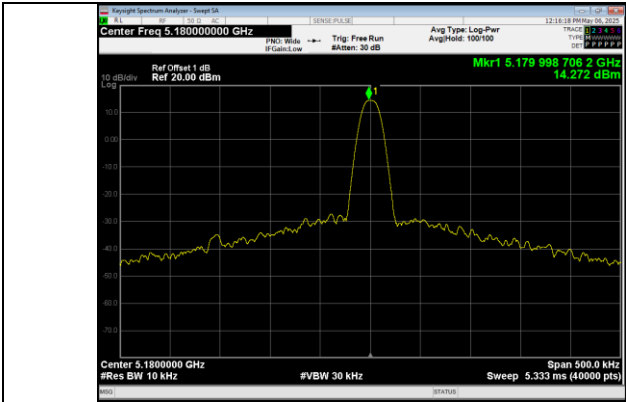
IEEE 802.11n_40



NT/NV_Antenna 2
IEEE 802.11n_Channel 38_40MHz

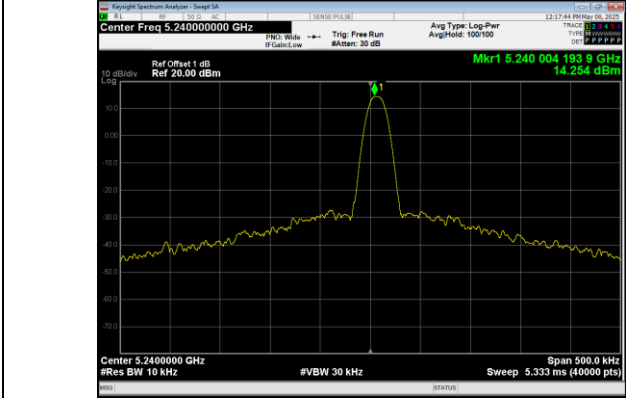
NT/NV_Antenna 2
IEEE 802.11n_Channel 46_40MHz

IEEE 802.11ac_20



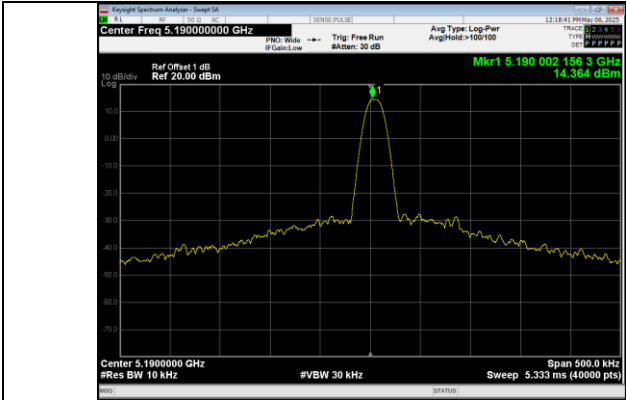
NT/NV_Antenna 2
IEEE 802.11ac_Channel 36_20MHz

NT/NV_Antenna 2
IEEE 802.11ac_Channel 40_20MHz

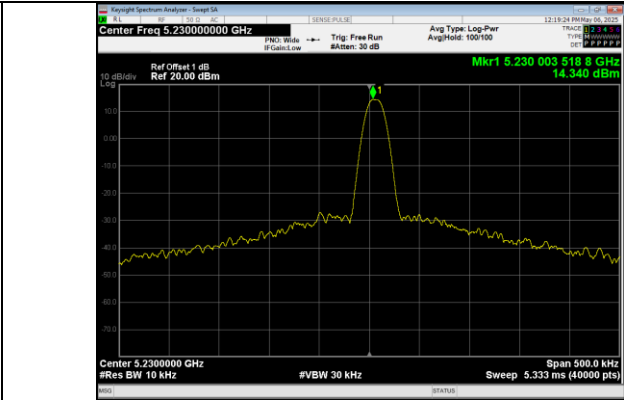


NT/NV_Antenna 2
IEEE 802.11ac_Channel 48_20MHz

IEEE 802.11ac_40

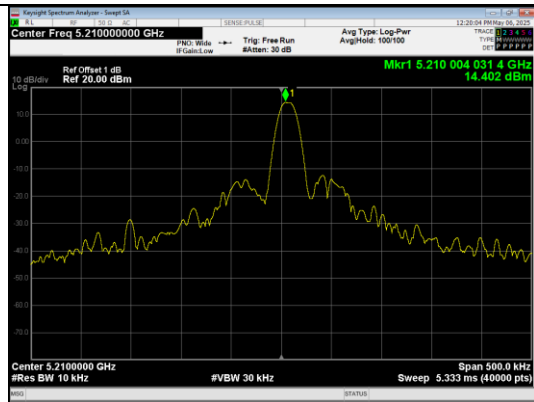


NT/NV_Antenna 2
IEEE 802.11ac_Channel 38_40MHz



NT/NV_Antenna 2
IEEE 802.11ac_Channel 46_40MHz

IEEE 802.11ac_80



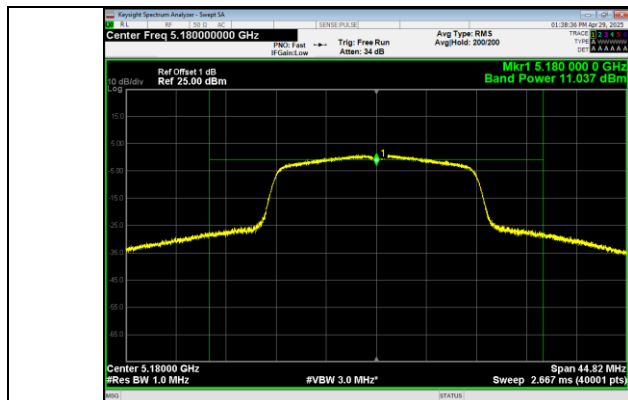
NT/NV_Antenna 2
IEEE 802.11ac_Channel 42_80MHz

ANT1

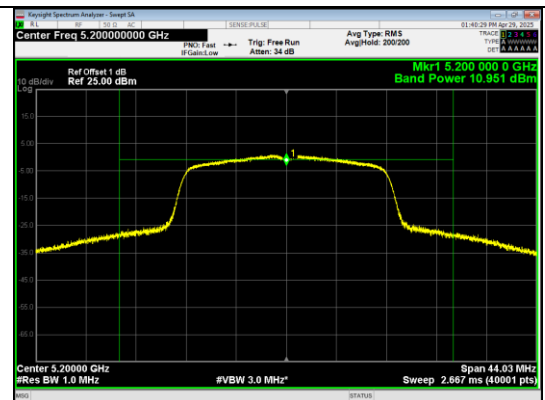
Conducted Output Power

Conducted output power

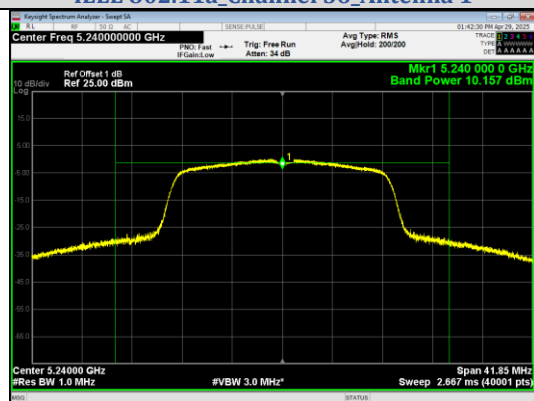
Mode	Channel	Ant. 1 (dBm)	Corr'd Value Ant. 1 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	11.037	11.18	≤24	PASS
	40	10.951	11.09	≤24	PASS
	48	10.157	10.3	≤24	PASS
IEEE 802.11n_20	36	10.713	10.85	≤24	PASS
	40	10.599	10.74	≤24	PASS
	48	10.244	10.38	≤24	PASS
IEEE 802.11n_40	38	10.454	10.73	≤24	PASS
	46	10.034	10.31	≤24	PASS
IEEE 802.11ac_20	36	10.635	10.77	≤24	PASS
	40	10.538	10.68	≤24	PASS
	48	10.073	10.21	≤24	PASS
IEEE 802.11ac_40	38	10.358	10.63	≤24	PASS
	46	10.077	10.35	≤24	PASS
IEEE 802.11ac_80	42	10.040	10.59	≤24	PASS



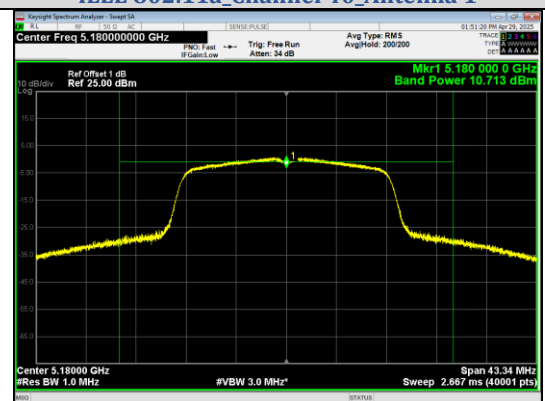
Conducted AVG output power
IEEE 802.11a_Channel 36_Antenna 1



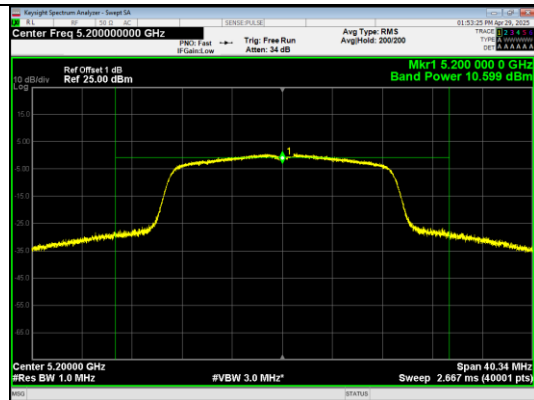
Conducted AVG output power
IEEE 802.11a_Channel 40_Antenna 1



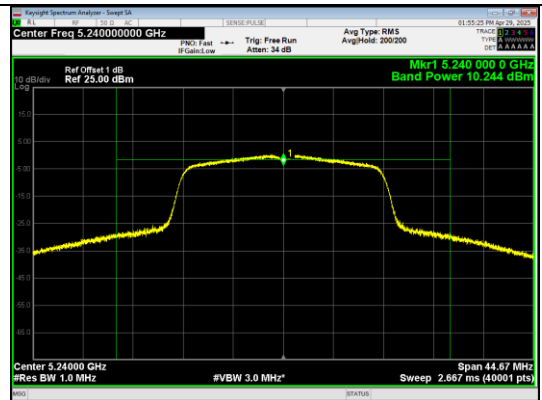
Conducted AVG output power
IEEE 802.11a_Channel 48_Antenna 1



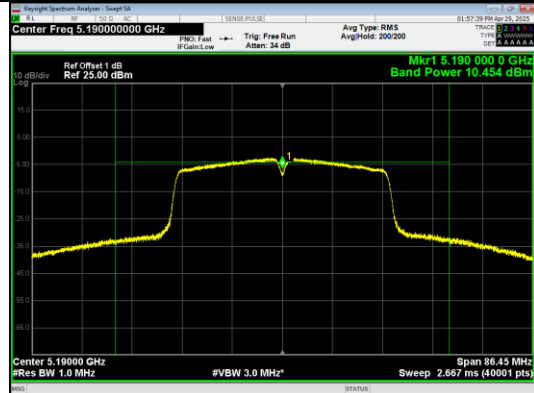
Conducted AVG output power
IEEE 802.11n_20_Channel 36_Antenna 1



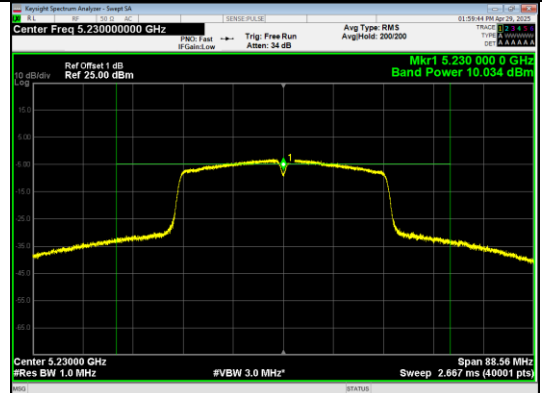
Conducted AVG output power
IEEE 802.11n_20_Channel 40_Antenna 1



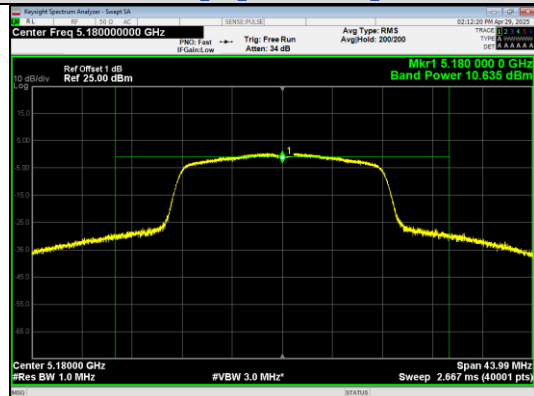
Conducted AVG output power
IEEE 802.11n_20_Channel 48_Antenna 1



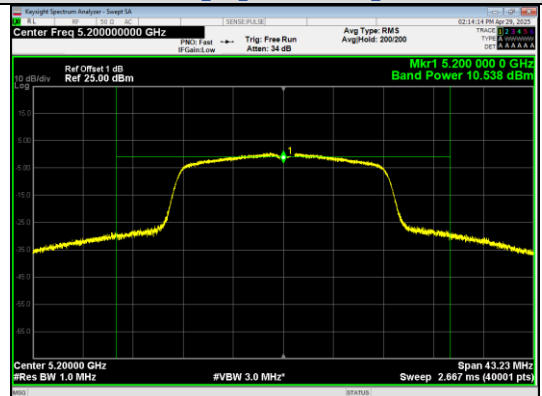
Conducted AVG output power
IEEE 802.11n_40_Channel 38_Antenna 1



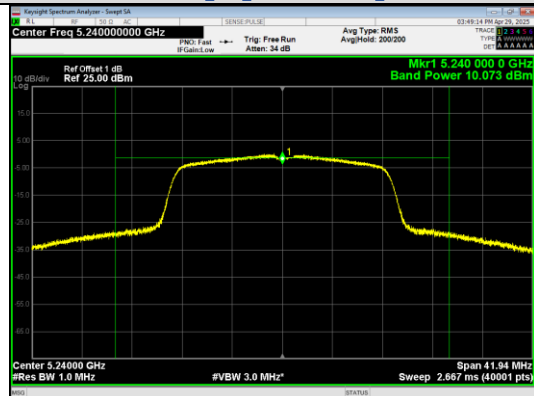
Conducted AVG output power
IEEE 802.11n_40_Channel 46_Antenna 1



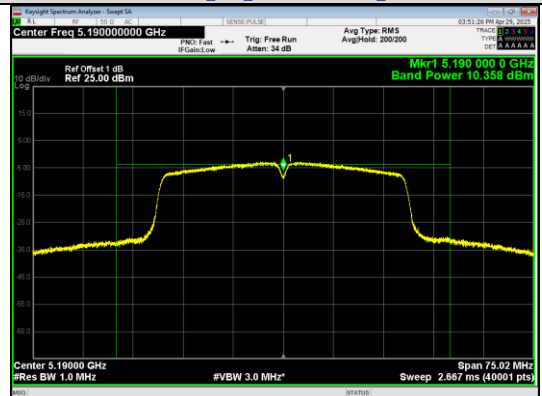
Conducted AVG output power
IEEE 802.11ac_20_Channel 36_Antenna 1



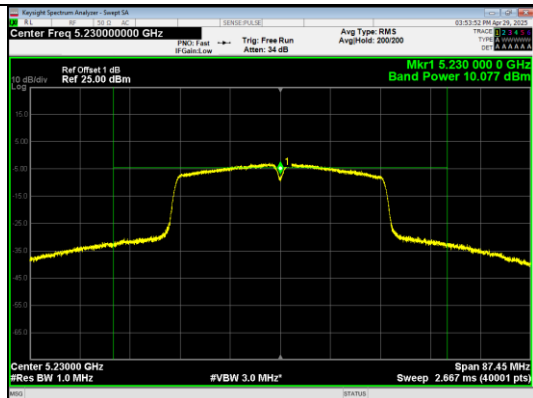
Conducted AVG output power
IEEE 802.11ac_20_Channel 40_Antenna 1



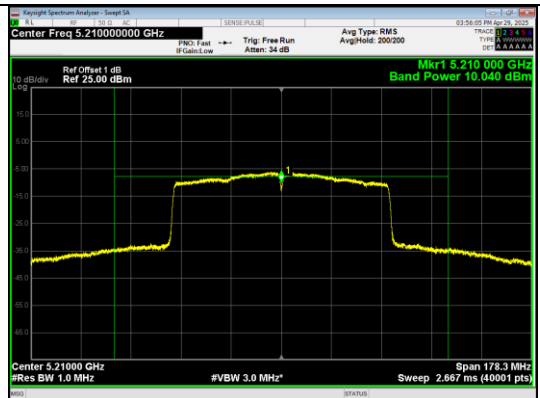
Conducted AVG output power
IEEE 802.11ac_40_Channel 48_Antenna 1



Conducted AVG output power
IEEE 802.11ac_40_Channel 38_Antenna 1



Conducted AVG output power
IEEE 802.11ac_40_Channel 46_Antenna 1



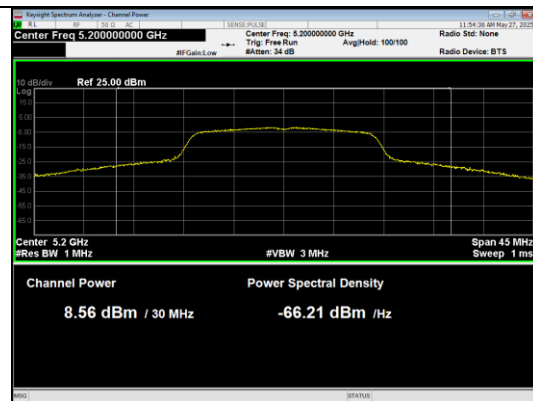
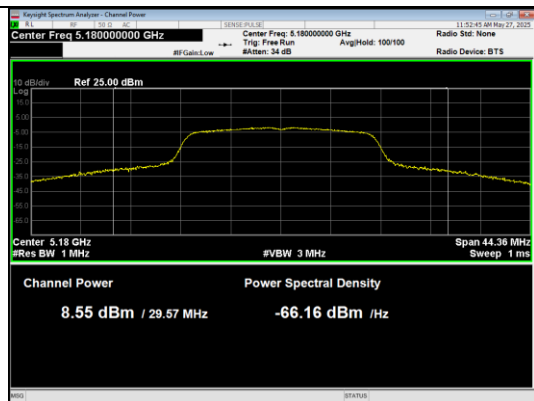
Conducted AVG output power
IEEE 802.11ac_80_Channel 42_Antenna 1

ANT2

Conducted Output Power

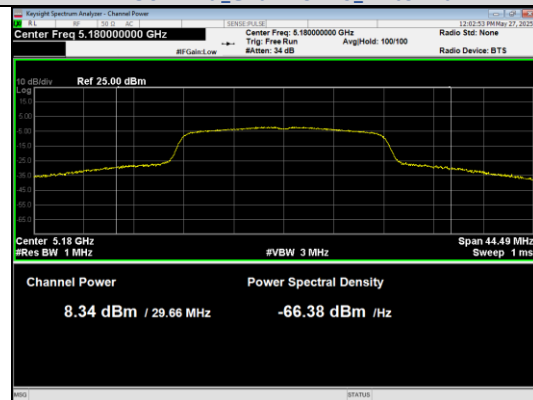
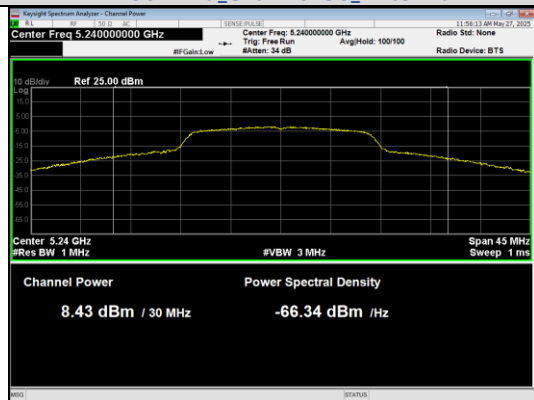
Conducted output power

Mode	Channel	Ant. 2 (dBm)	Corr'd Value Ant. 2 (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	8.55	8.55	≤24	PASS
	40	8.56	8.56	≤24	PASS
	48	8.43	8.43	≤24	PASS
IEEE 802.11n_20	36	8.34	8.34	≤24	PASS
	40	10.48	10.48	≤24	PASS
	48	8.51	8.51	≤24	PASS
IEEE 802.11n_40	38	8.08	8.08	≤24	PASS
	46	7.00	7.0	≤24	PASS
IEEE 802.11ac_20	36	8.08	8.08	≤24	PASS
	40	7.97	7.97	≤24	PASS
	48	8.07	8.07	≤24	PASS
IEEE 802.11ac_40	38	7.96	7.96	≤24	PASS
	46	6.32	6.32	≤24	PASS
IEEE 802.11ac_80	42	6.57	6.57	≤24	PASS



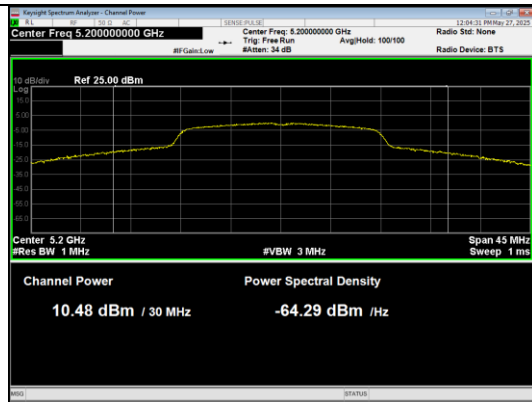
Conducted AVG output power
IEEE 802.11a_Channel 36_Antenna 2

Conducted AVG output power
IEEE 802.11a_Channel 40_Antenna 2

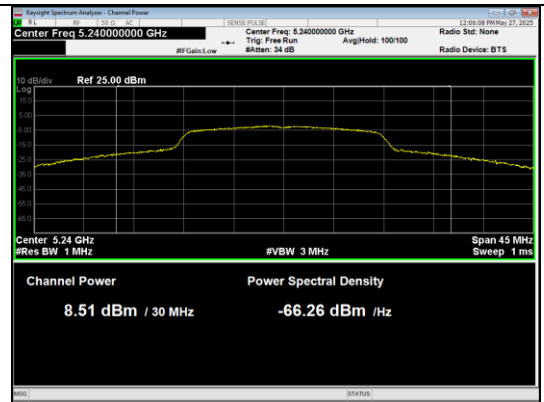


Conducted AVG output power
IEEE 802.11a_Channel 48_Antenna 2

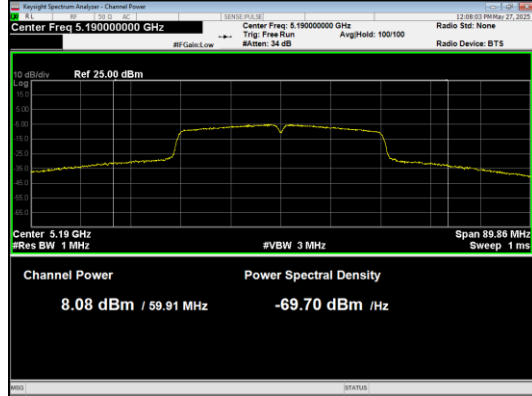
Conducted AVG output power
IEEE 802.11n_20_Channel 36_Antenna 2



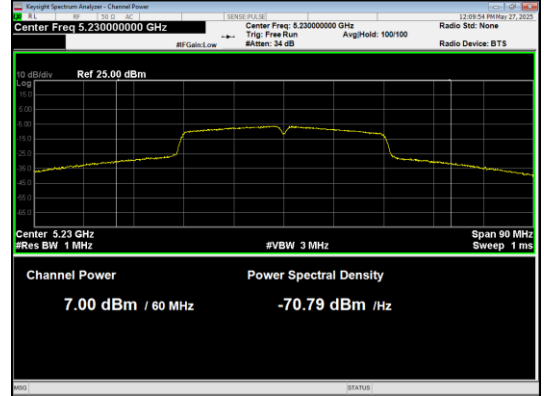
Conducted AVG output power
IEEE 802.11n_20_Channel 40_Antenna 2



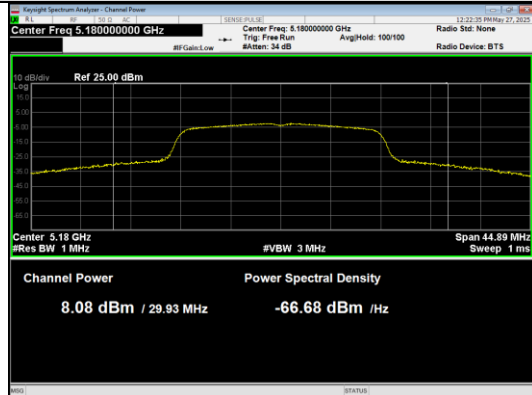
Conducted AVG output power
IEEE 802.11n_20_Channel 48_Antenna 2



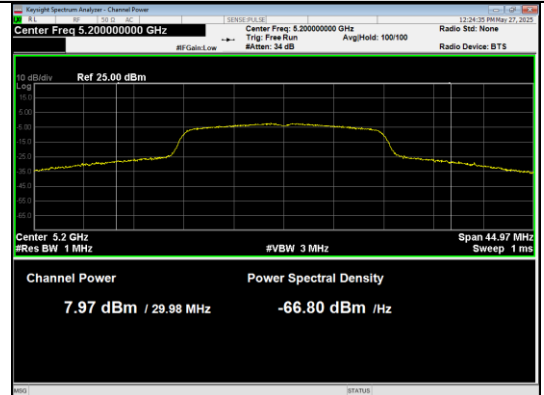
Conducted AVG output power
IEEE 802.11n_40_Channel 38_Antenna 2



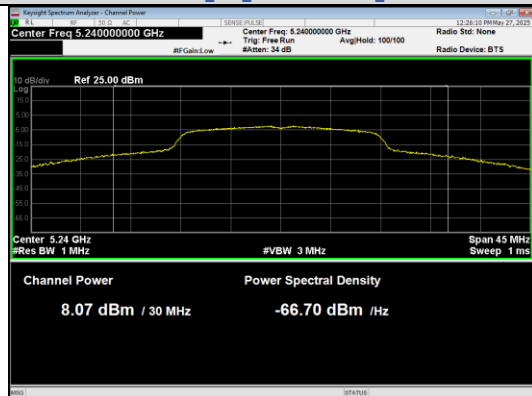
Conducted AVG output power
IEEE 802.11n_40_Channel 46_Antenna 2



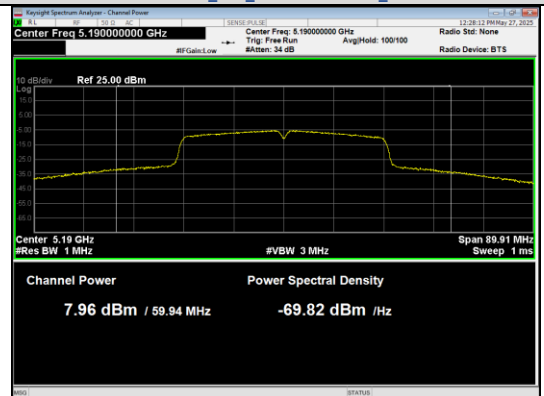
Conducted AVG output power
IEEE 802.11ac_20_Channel 36_Antenna 2



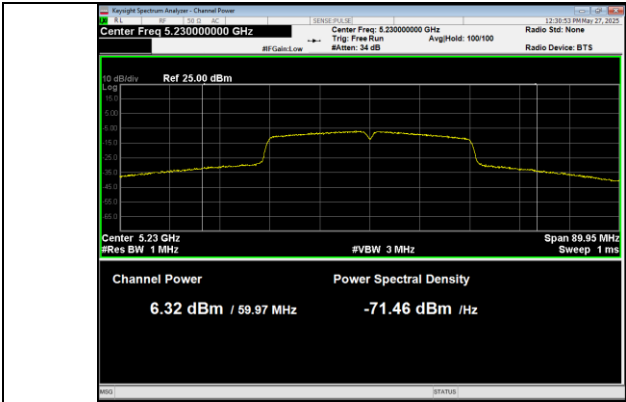
Conducted AVG output power
IEEE 802.11ac_20_Channel 40_Antenna 2



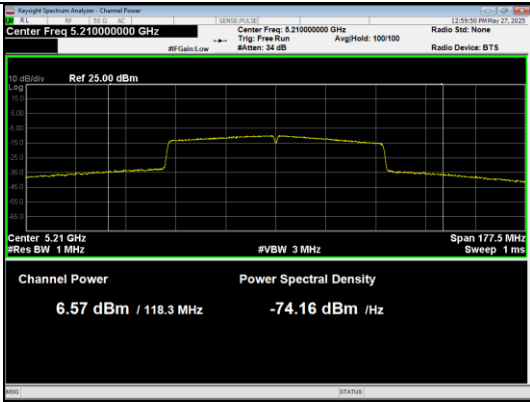
Conducted AVG output power
IEEE 802.11ac_20_Channel 48_Antenna 2



Conducted AVG output power
IEEE 802.11ac_40_Channel 38_Antenna 2



Conducted AVG output power
IEEE 802.11ac_40_Channel 46_Antenna 2



Conducted AVG output power
IEEE 802.11ac_80_Channel 42_Antenna 2

MIMO

Mode	Channel	Corr'd Value Ant. 1 (dBm)	Corr'd Value Ant. 2 (dBm)	MIMO (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	11.18	8.55	13.07	≤24	PASS
	40	11.09	8.56	13.02	≤24	PASS
	48	10.3	8.43	12.48	≤24	PASS
IEEE 802.11n_20	36	10.85	8.34	12.78	≤24	PASS
	40	10.74	10.48	13.62	≤24	PASS
	48	10.38	8.51	12.56	≤24	PASS
IEEE 802.11n_40	38	10.73	8.08	12.61	≤24	PASS
	46	10.31	7.0	11.97	≤24	PASS
IEEE 802.11ac_20	36	10.77	8.08	12.64	≤24	PASS
	40	10.68	7.97	12.54	≤24	PASS
	48	10.21	8.07	12.28	≤24	PASS
IEEE 802.11ac_40	38	10.63	7.96	12.51	≤24	PASS
	46	10.35	6.32	11.80	≤24	PASS
IEEE 802.11ac_80	42	10.59	6.57	12.04	≤24	PASS

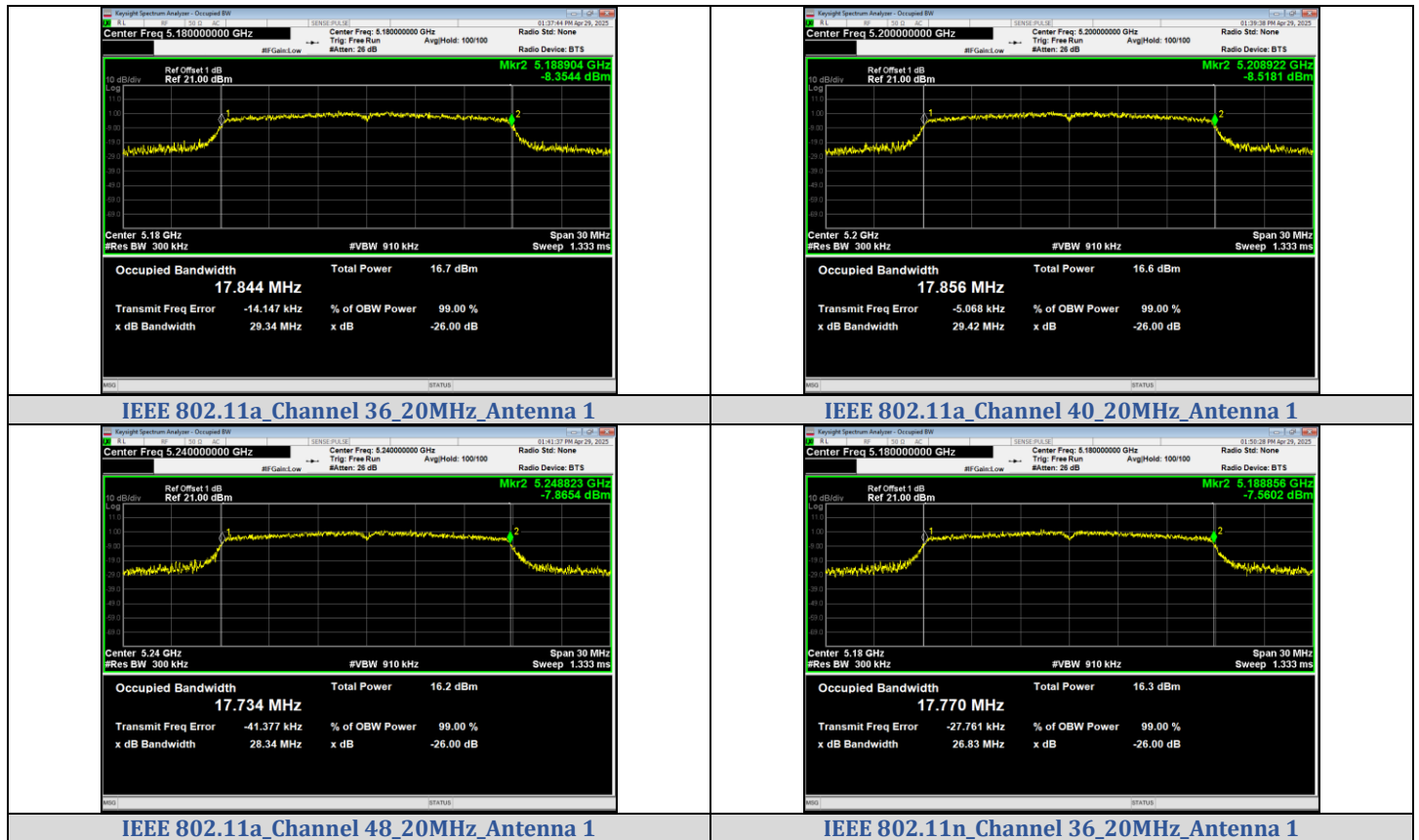
ANT1

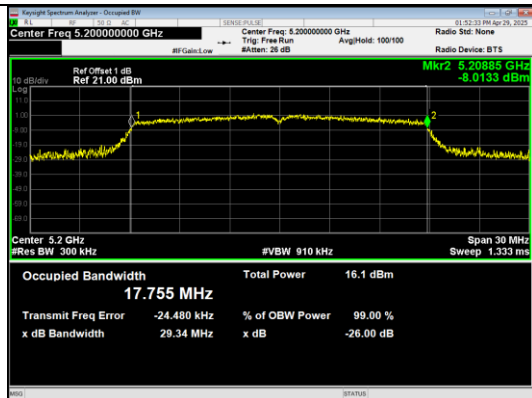
99% Bandwidth

Test Result

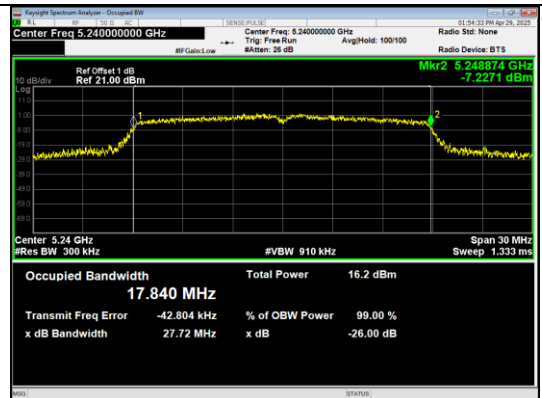
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	5180	17.844
	40	5200	17.856
	48	5240	17.734
IEEE 802.11n_20	36	5180	17.770
	40	5200	17.755
	48	5240	17.840
IEEE 802.11n_40	38	5190	36.191
	46	5230	36.212
IEEE 802.11ac_20	36	5180	17.818
	40	5200	17.753
	48	5240	17.806
IEEE 802.11ac_40	38	5190	36.145
	46	5230	36.208
IEEE 802.11ac_80	42	5210	75.598

Test Graphs

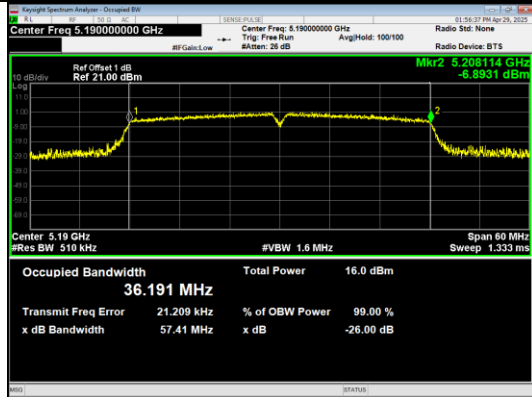




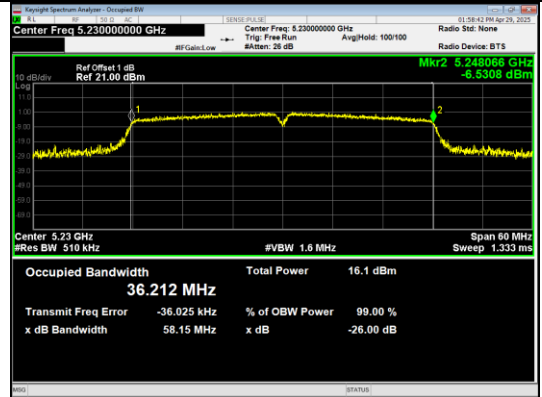
IEEE 802.11n_Channel 40_20MHz_Antenna 1



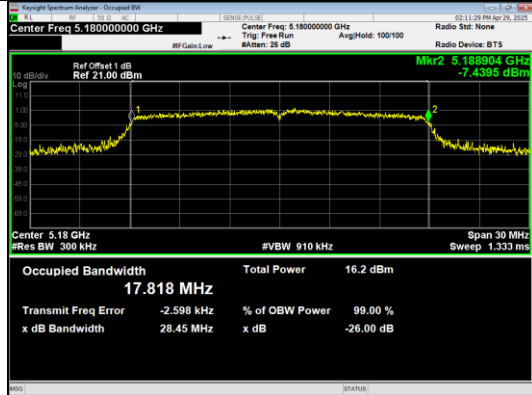
IEEE 802.11n_Channel 48_20MHz_Antenna 1



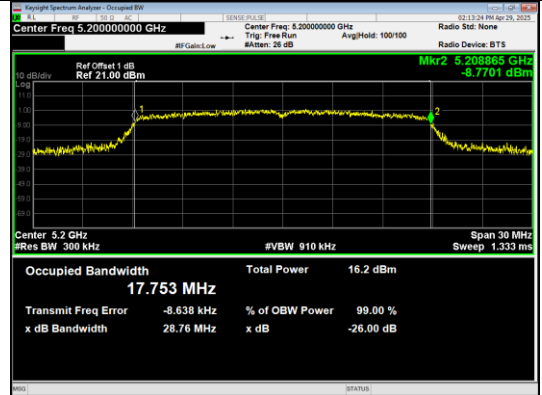
IEEE 802.11n_Channel 38_40MHz_Antenna 1



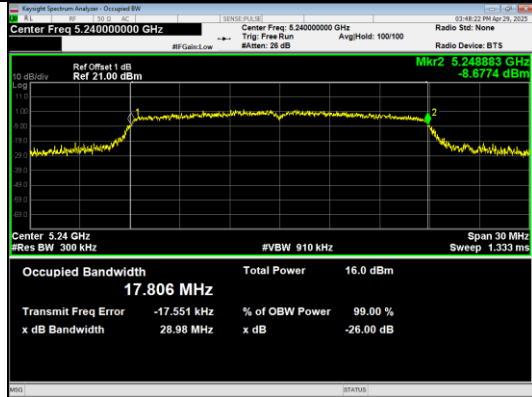
IEEE 802.11n_Channel 46_40MHz_Antenna 1



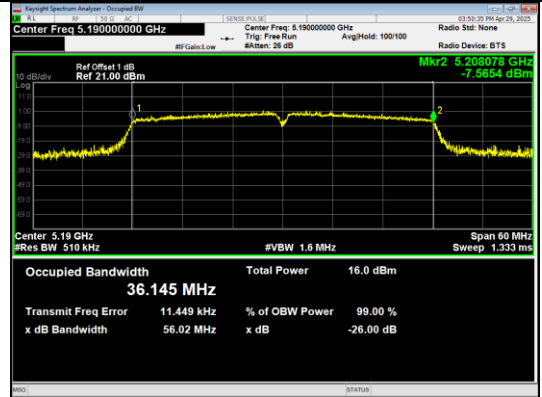
IEEE 802.11n_Channel 46_40MHz_Antenna 1



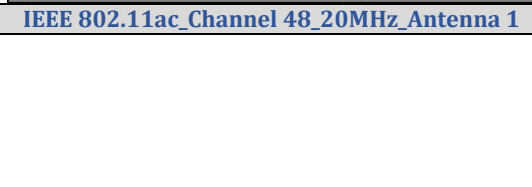
IEEE 802.11n_Channel 46_40MHz_Antenna 1



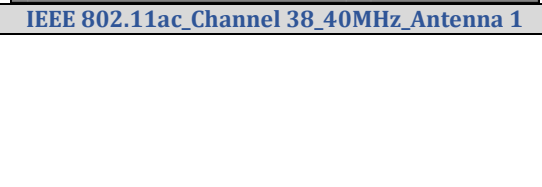
IEEE 802.11ac_Channel 36_20MHz_Antenna 1



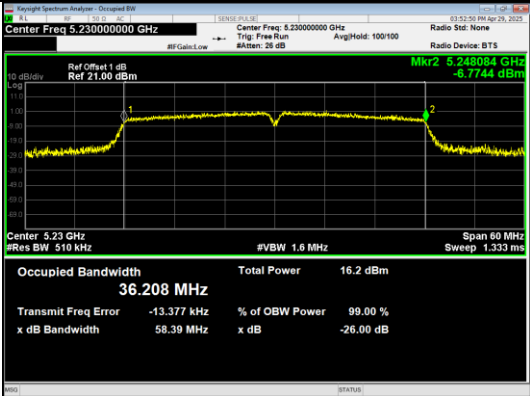
IEEE 802.11ac_Channel 40_20MHz_Antenna 1



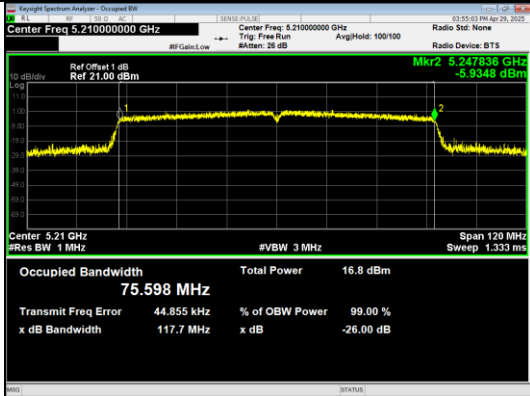
IEEE 802.11ac_Channel 48_20MHz_Antenna 1



IEEE 802.11ac_Channel 38_40MHz_Antenna 1



IEEE 802.11ac_Channel 46_40MHz_Antenna 1



IEEE 802.11ac_Channel 42_80MHz_Antenna 1

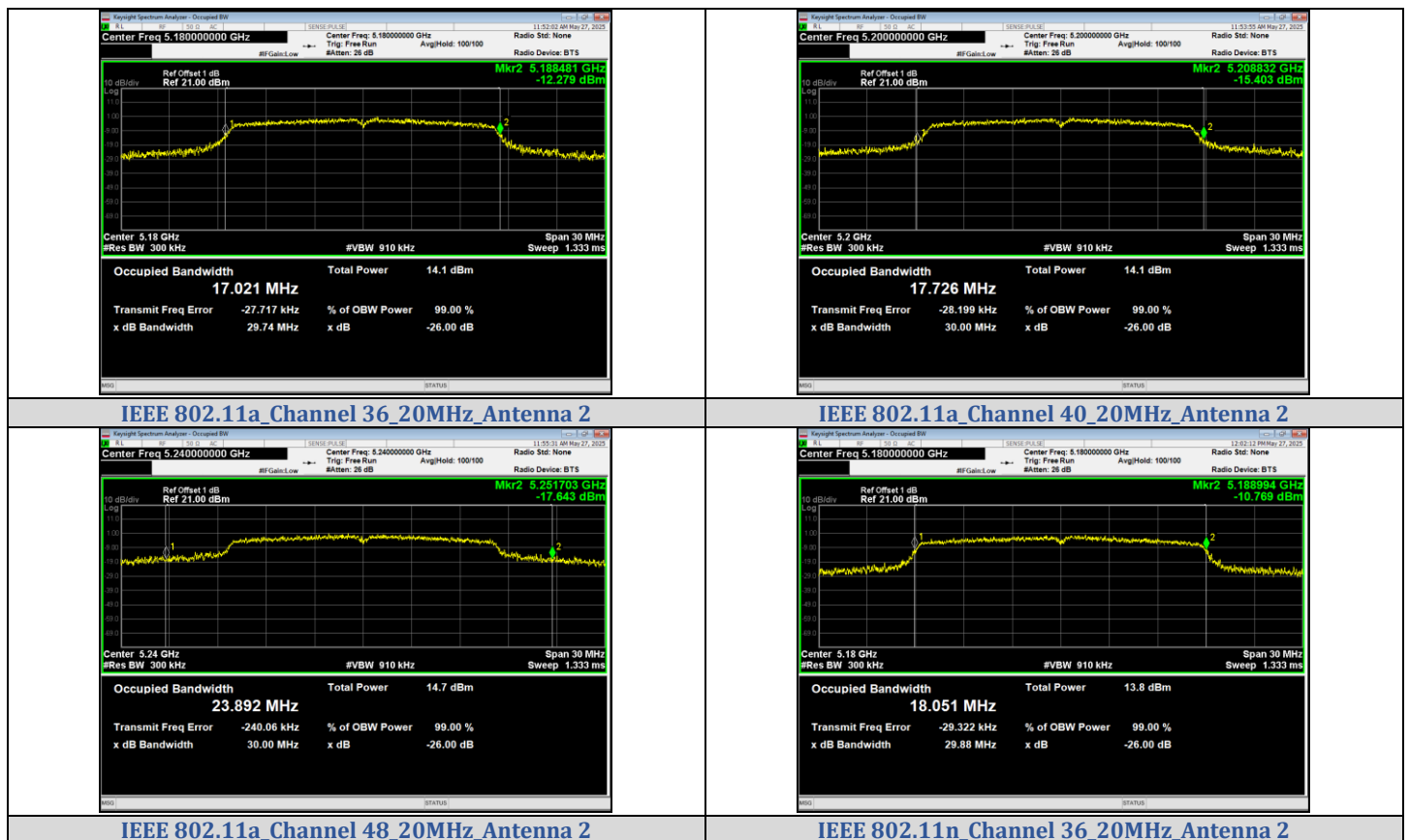
ANT2

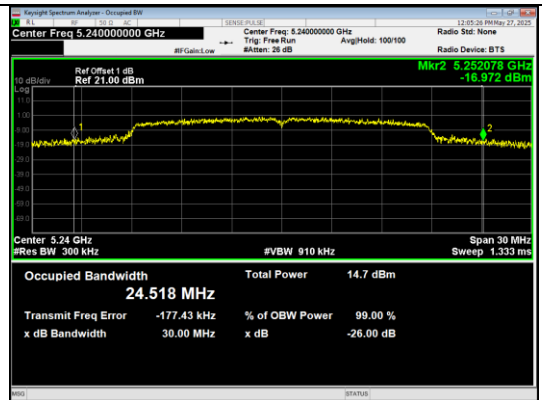
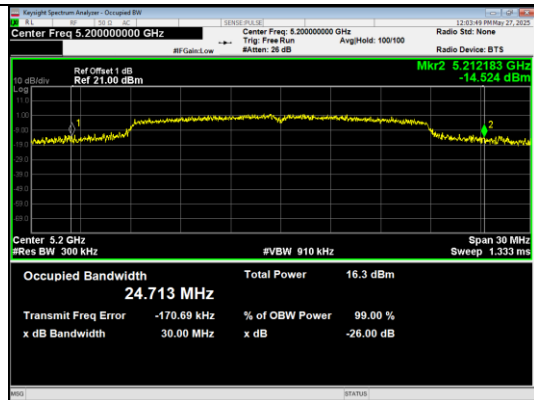
99% Bandwidth

Test Result

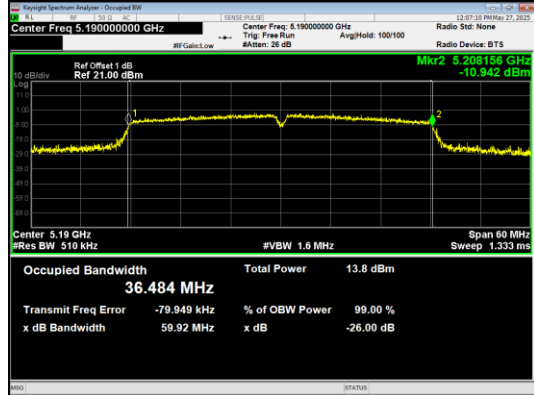
Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	5180	17.021
	40	5200	17.726
	48	5240	23.892
IEEE 802.11n_20	36	5180	18.051
	40	5200	24.713
	48	5240	24.518
IEEE 802.11n_40	38	5190	36.484
	46	5230	37.226
IEEE 802.11ac_20	36	5180	17.943
	40	5200	18.319
	48	5240	24.489
IEEE 802.11ac_40	38	5190	36.429
	46	5230	36.626
IEEE 802.11ac_80	42	5210	75.990

Test Graphs

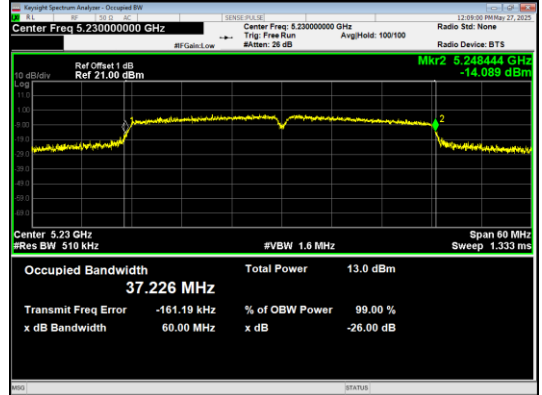




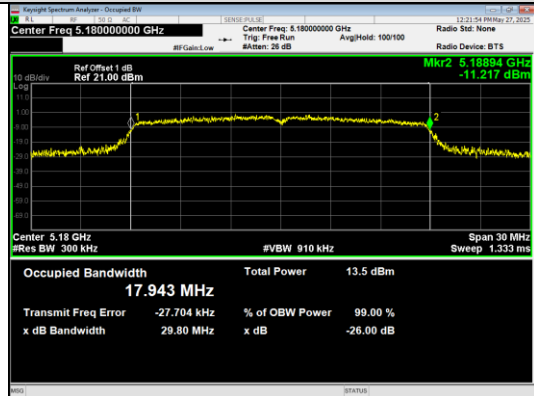
IEEE 802.11n_Channel 40_20MHz_Antenna 2



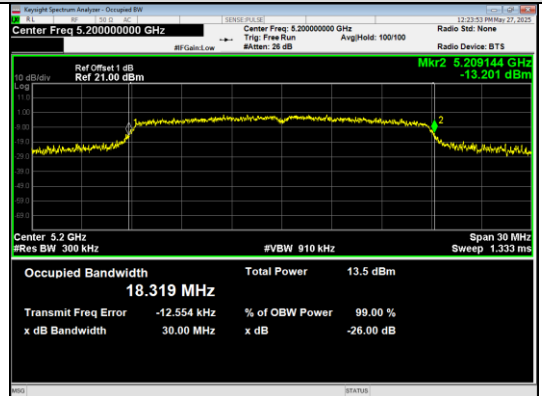
IEEE 802.11n_Channel 48_20MHz_Antenna 2



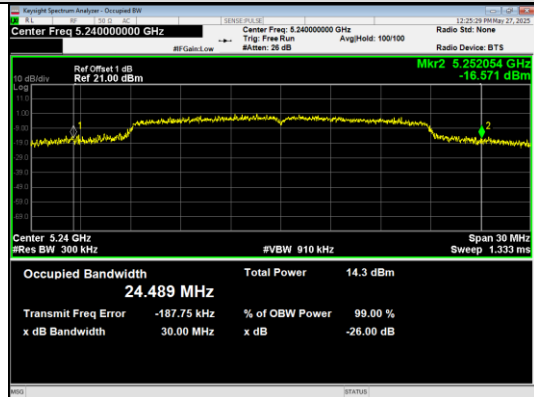
IEEE 802.11n_Channel 38_40MHz_Antenna 2



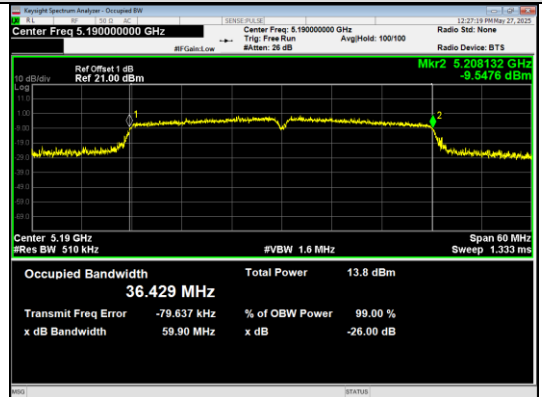
IEEE 802.11n_Channel 46_40MHz_Antenna 2



IEEE 802.11ac_Channel 36_20MHz_Antenna 2

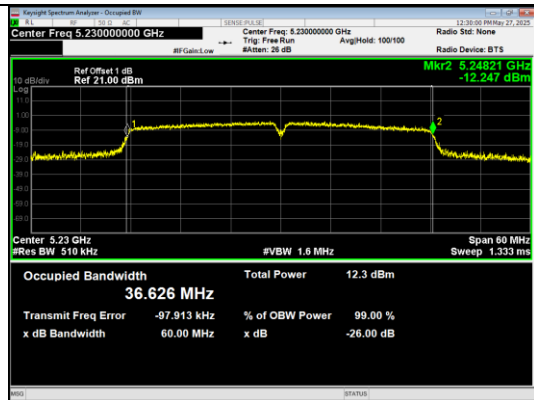


IEEE 802.11ac_Channel 40_20MHz_Antenna 2

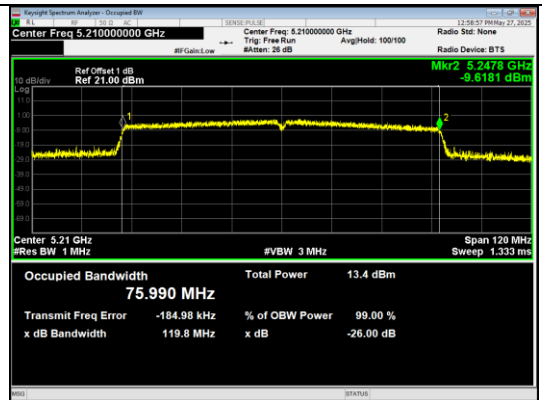


IEEE 802.11ac_Channel 48_20MHz_Antenna 2

IEEE 802.11ac_Channel 38_40MHz_Antenna 2



IEEE 802.11ac_Channel 46_40MHz_Antenna 2



IEEE 802.11ac_Channel 42_80MHz_Antenna 2

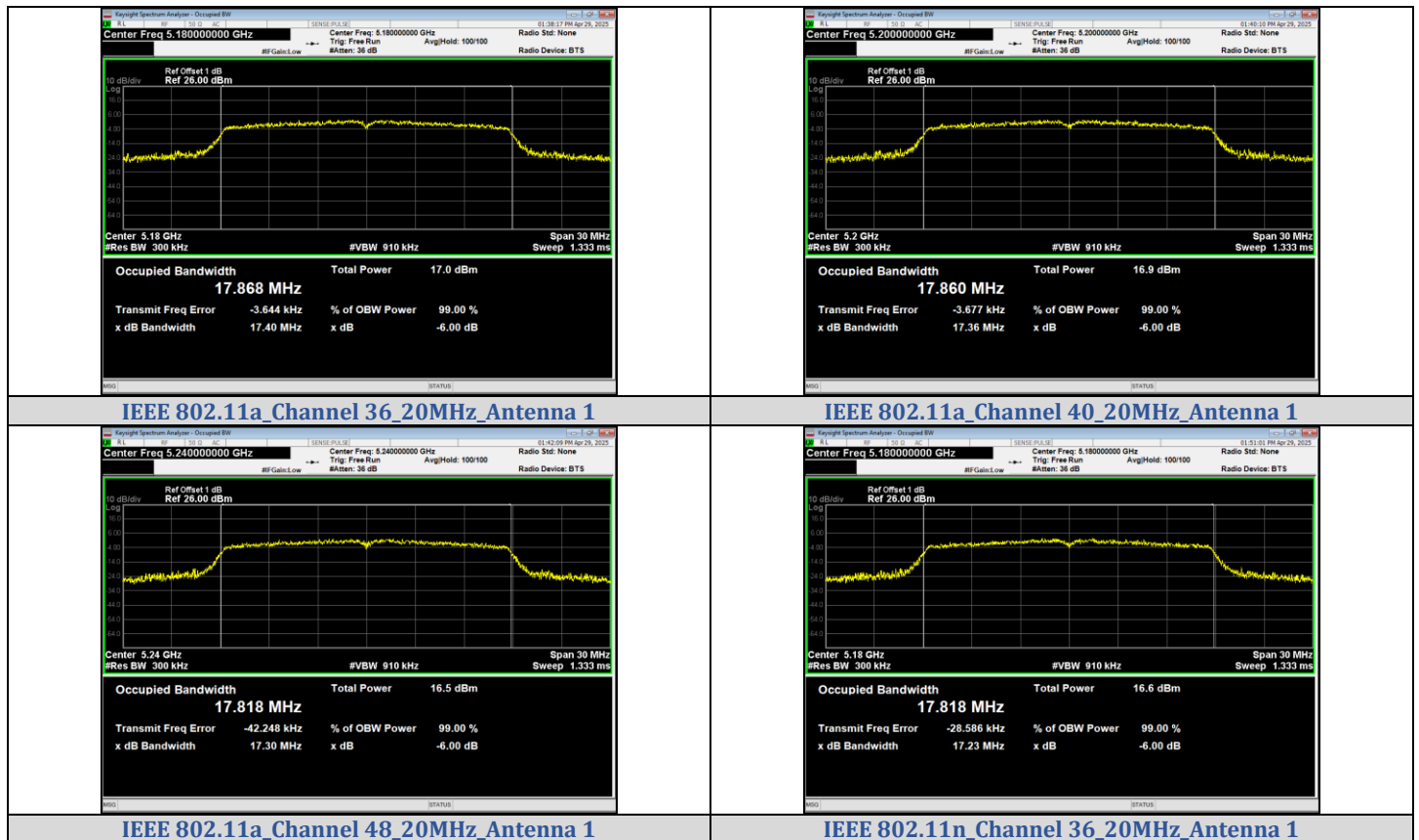
ANT1

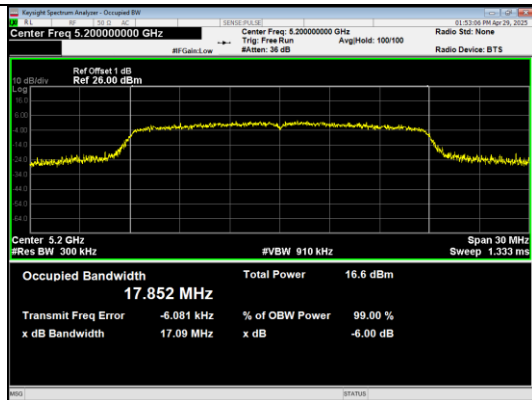
6dB Bandwidth

Test Result

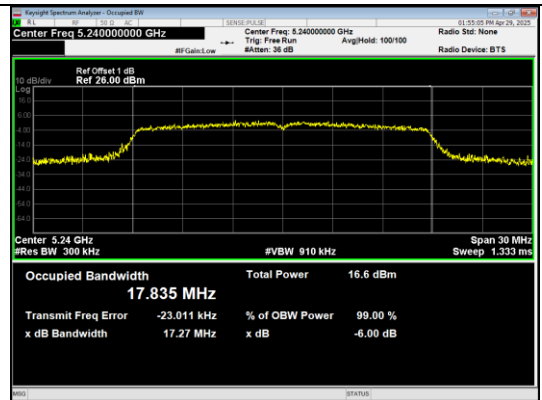
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	36	5180	17.40	≥0.5	PASS
	40	5200	17.36		PASS
	48	5240	17.30		PASS
IEEE 802.11n_20	36	5180	17.23		PASS
	40	5200	17.09		PASS
	48	5240	17.27		PASS
IEEE 802.11n_40	38	5190	35.51		PASS
	46	5230	35.24		PASS
IEEE 802.11ac_20	36	5180	17.39		PASS
	40	5200	17.34		PASS
	48	5240	17.27		PASS
IEEE 802.11ac_40	38	5190	35.36		PASS
	46	5230	35.28		PASS
IEEE 802.11ac_80	42	5210	75.46		PASS

Test Graphs

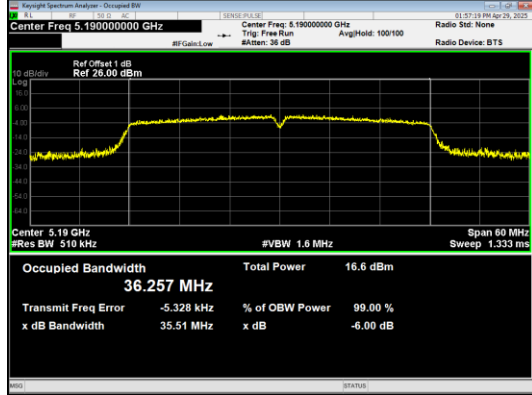




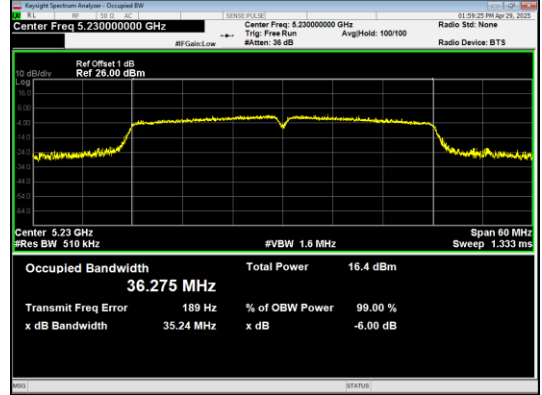
IEEE 802.11n_Channel 40_20MHz_Antenna 1



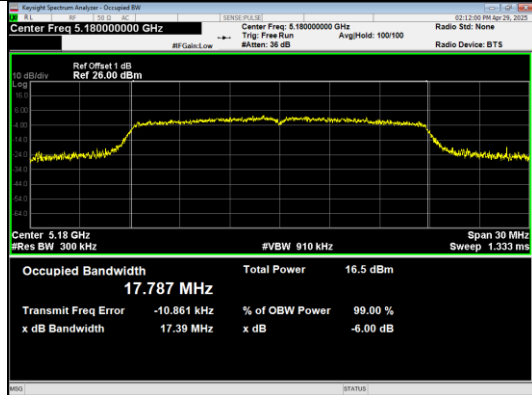
IEEE 802.11n_Channel 48_20MHz_Antenna 1



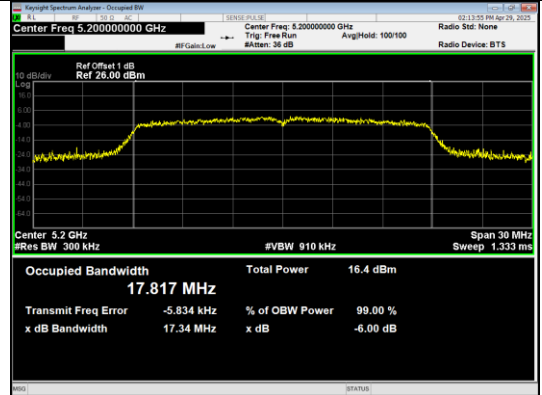
IEEE 802.11n_Channel 38_40MHz_Antenna 1



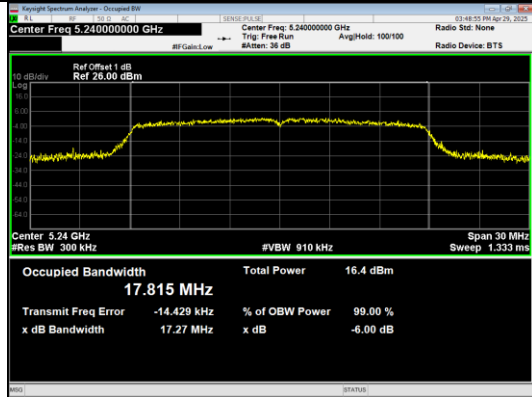
IEEE 802.11n_Channel 46_40MHz_Antenna 1



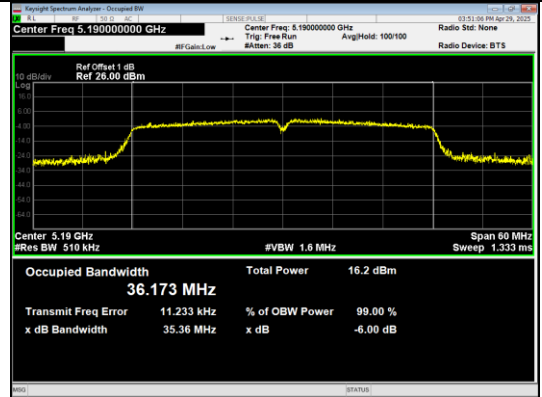
IEEE 802.11ac_Channel 36_20MHz_Antenna 1



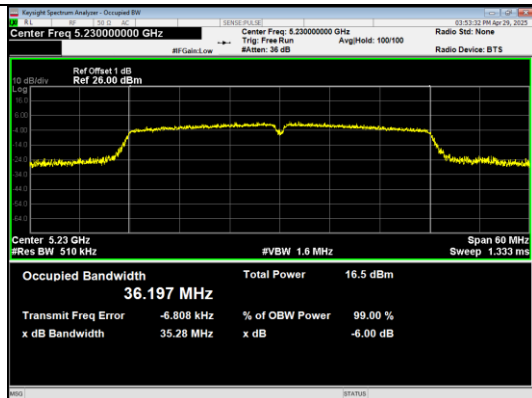
IEEE 802.11ac_Channel 40_20MHz_Antenna 1



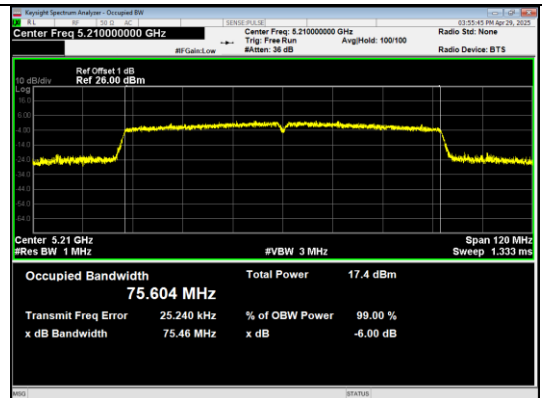
IEEE 802.11ac_Channel 48_20MHz_Antenna 1



IEEE 802.11ac_Channel 38_40MHz_Antenna 1



IEEE 802.11ac_Channel 46_40MHz_Antenna 1



IEEE 802.11ac_Channel 42_80MHz_Antenna 1

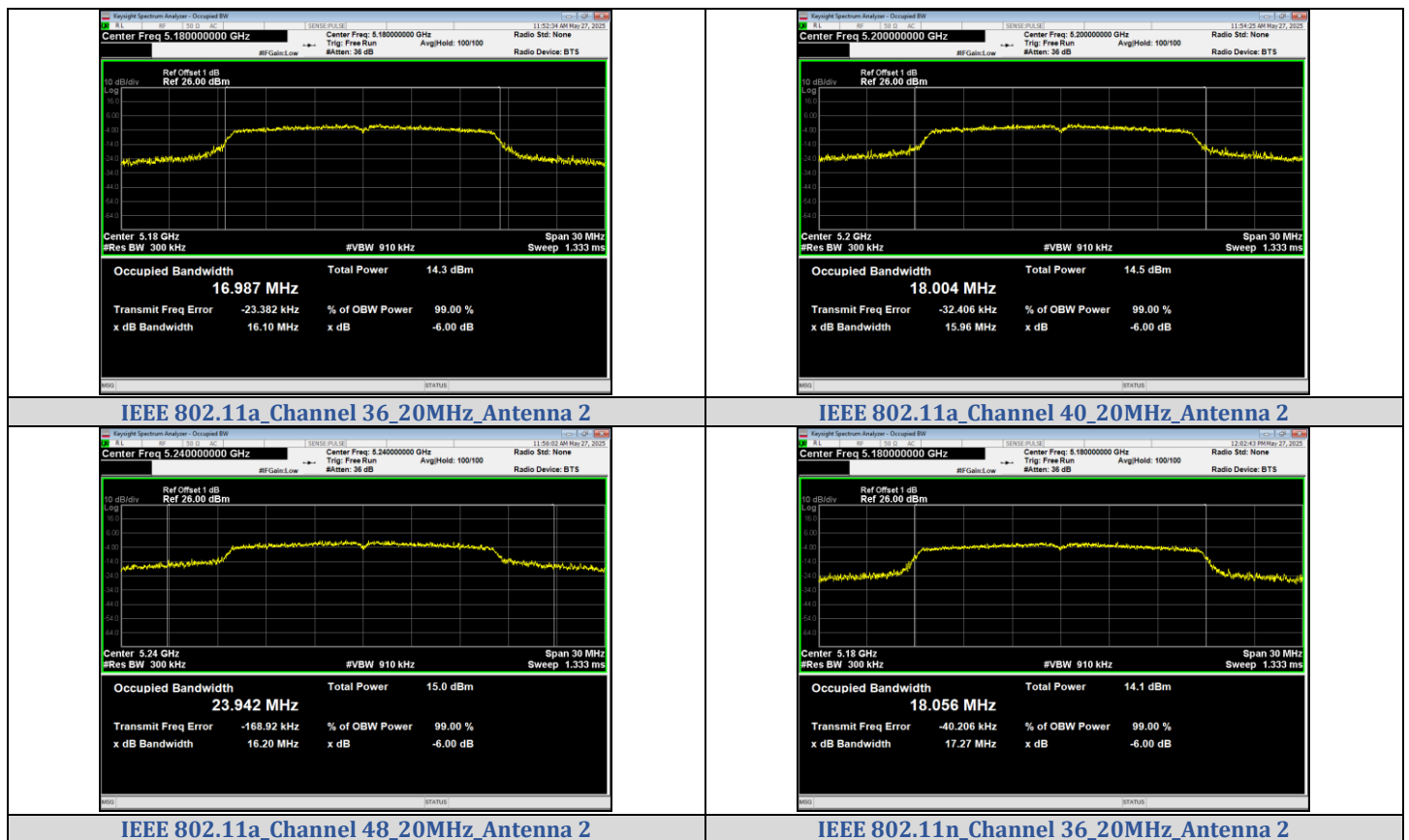
ANT2

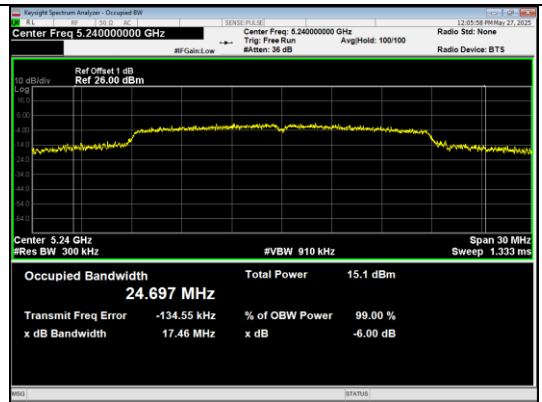
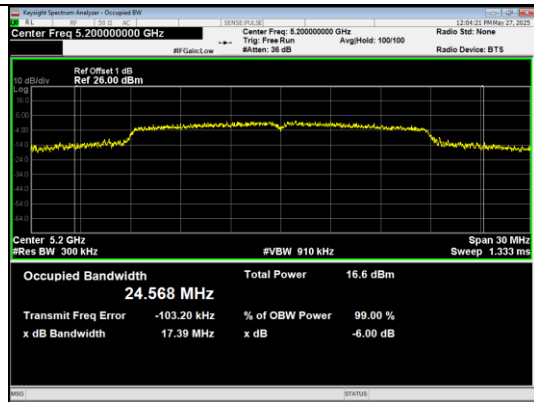
6dB Bandwidth

Test Result

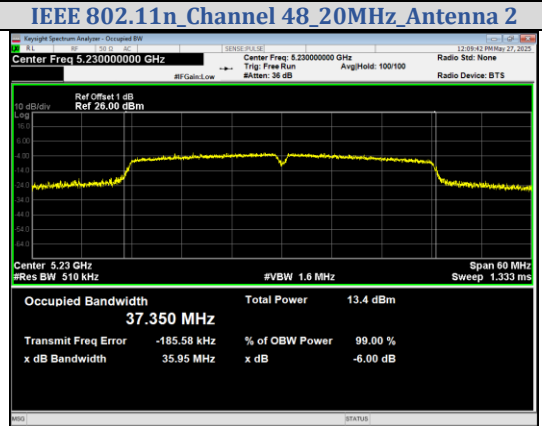
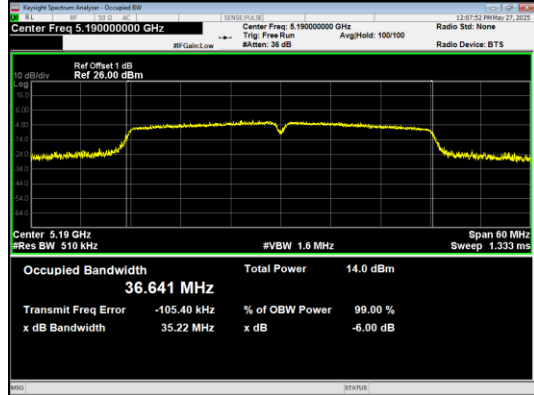
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	36	5180	16.10	≥0.5	PASS
	40	5200	15.96		PASS
	48	5240	16.20		PASS
IEEE 802.11n_20	36	5180	17.27		PASS
	40	5200	17.39		PASS
	48	5240	17.46		PASS
IEEE 802.11n_40	38	5190	35.22		PASS
	46	5230	35.95		PASS
IEEE 802.11ac_20	36	5180	17.17		PASS
	40	5200	17.23		PASS
	48	5240	17.45		PASS
IEEE 802.11ac_40	38	5190	35.32		PASS
	46	5230	35.26		PASS
IEEE 802.11ac_80	42	5210	75.43		PASS

Test Graphs

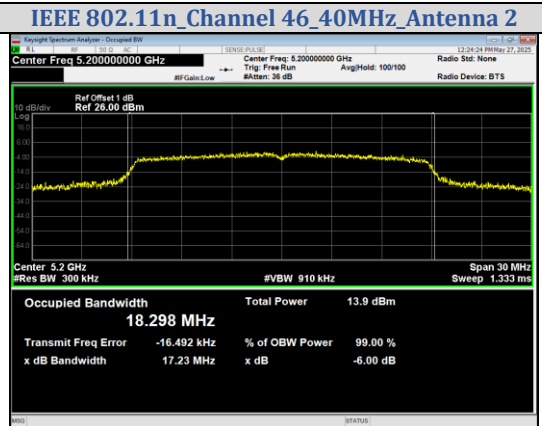
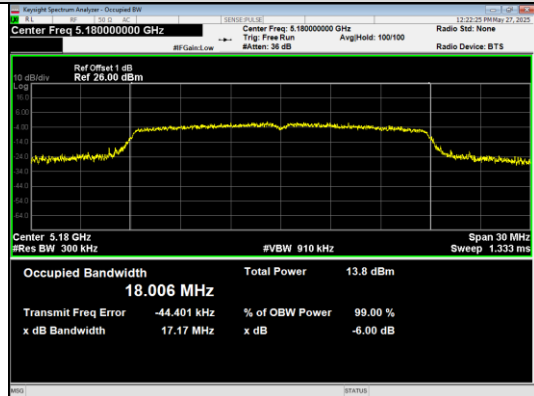




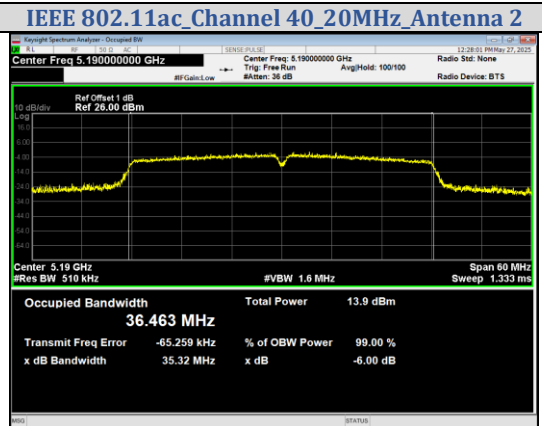
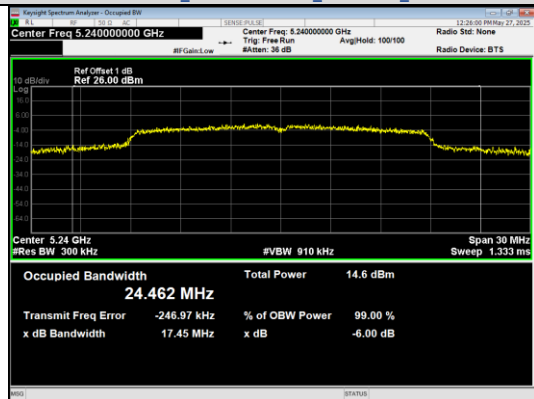
IEEE 802.11n_Channel 40_20MHz_Antenna 2



IEEE 802.11n_Channel 38_40MHz_Antenna 2

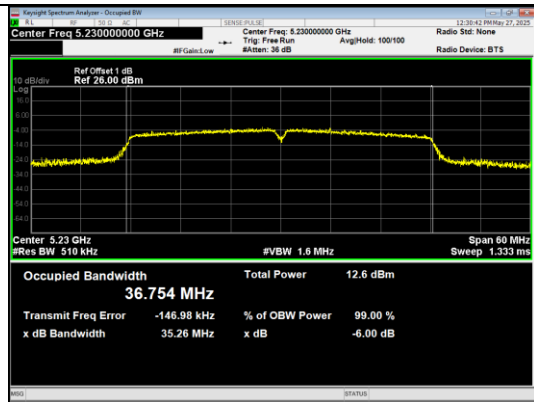


IEEE 802.11ac_Channel 36_20MHz_Antenna 2

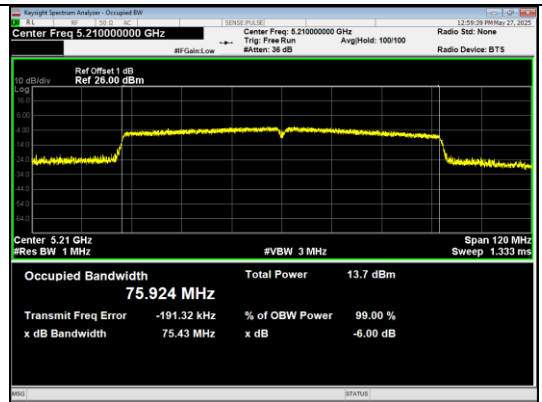


IEEE 802.11ac_Channel 48_20MHz_Antenna 2

IEEE 802.11ac_Channel 38_40MHz_Antenna 2



IEEE 802.11ac_Channel 46_40MHz_Antenna 2



IEEE 802.11ac_Channel 42_80MHz_Antenna 2

ANT1

26dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	36	5180	29.88	1.0
	40	5200	29.35	1.02
	48	5240	27.90	1.08
IEEE 802.11n_20	36	5180	28.89	1.04
	40	5200	26.89	1.12
	48	5240	29.78	1.01
IEEE 802.11n_40	38	5190	57.63	1.02
	46	5230	59.04	1.03
IEEE 802.11ac_20	36	5180	29.33	1.02
	40	5200	28.82	1.04
	48	5240	27.96	1.07
IEEE 802.11ac_40	38	5190	50.01	1.02
	46	5230	58.30	1.05
IEEE 802.11ac_80	42	5210	118.84	1.01

Test Graphs

