

Appendix A:Test Results of 5GHz RLAN,part1

Conducted Output Power

Test Result

Conducted output power

Mode	Channel	Ant. 1 (dBm)	Corr'd Value Ant. 1 (dBm)	Limit (dBm)	Verdict
IEEE 802.11a	36	7.80	7.8	≤24	PASS
	40	7.92	7.92	≤24	PASS
	48	7.68	7.68	≤24	PASS
IEEE 802.11n_20	36	7.42	7.42	≤24	PASS
	40	7.71	7.71	≤24	PASS
	48	6.99	6.99	≤24	PASS
IEEE 802.11n_40	38	7.69	7.69	≤24	PASS
	46	7.76	7.76	≤24	PASS
IEEE 802.11ac_20	36	6.99	6.99	≤24	PASS
	40	6.85	6.85	≤24	PASS
	48	7.35	7.35	≤24	PASS
IEEE 802.11ac_40	38	6.73	6.73	≤24	PASS
	46	6.71	6.71	≤24	PASS
IEEE 802.11ac_80	42	6.81	6.81	≤24	PASS

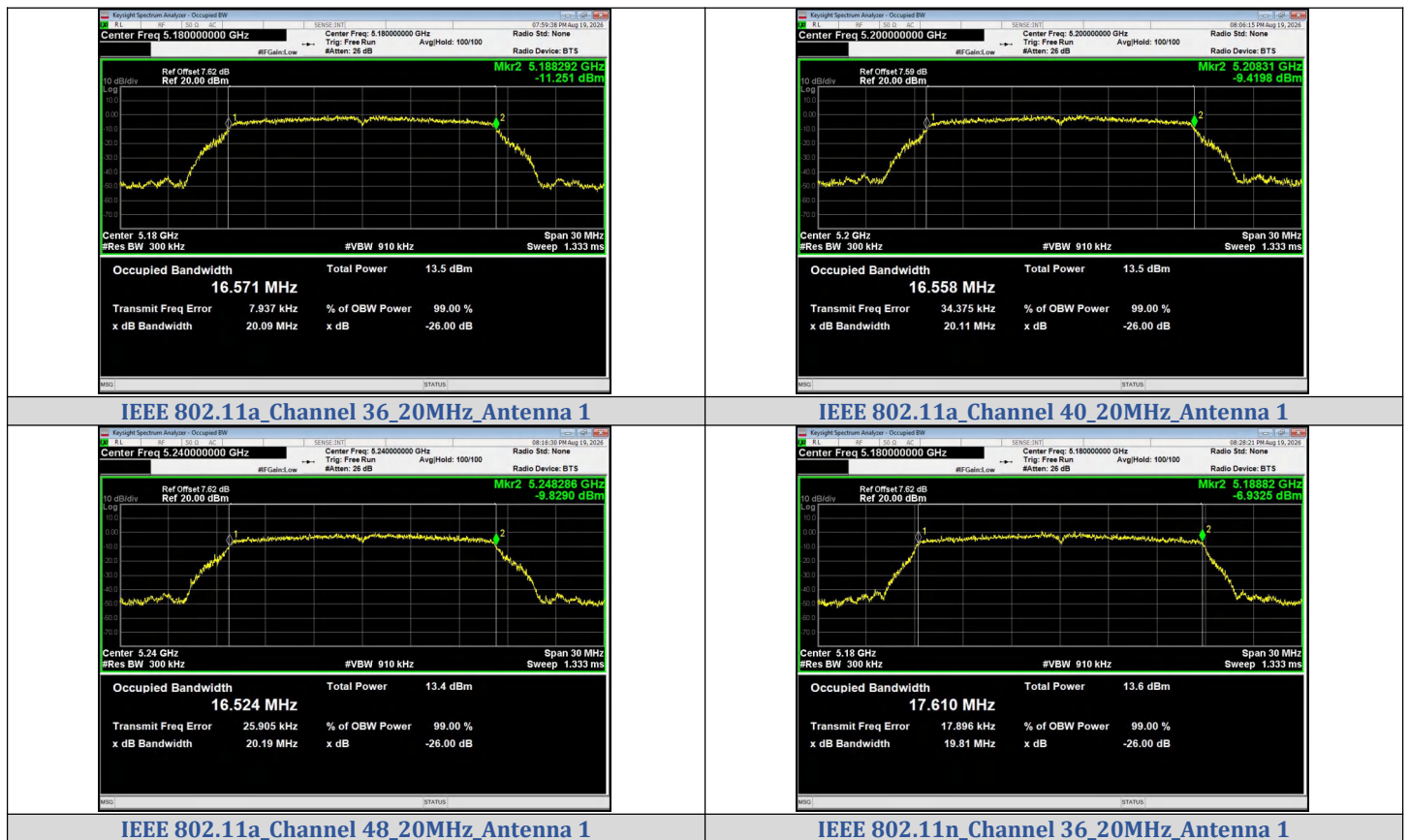
Note: Corrected Value = Antenna Power + Duty Cycle Factor.

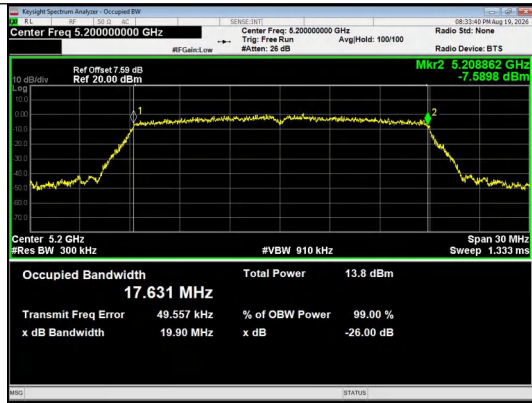
99% Bandwidth

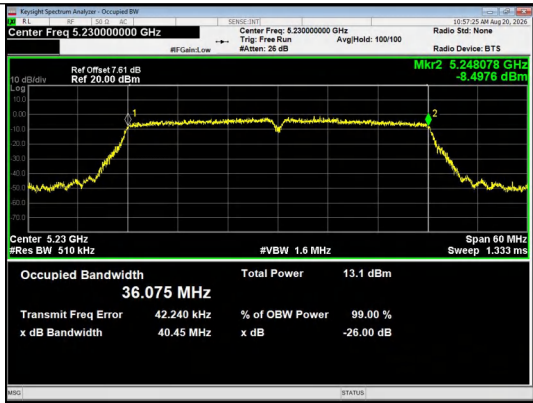
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	1	5180	16.57
	40		5200	16.56
	48		5240	16.52
IEEE 802.11n_20	36		5180	17.61
	40		5200	17.63
	48		5240	17.61
IEEE 802.11n_40	38		5190	36.09
	46		5230	36.00
IEEE 802.11ac_20	36		5180	17.62
	40		5200	17.63
	48		5240	17.65
IEEE 802.11ac_40	38		5190	36.12
	46		5230	36.08
IEEE 802.11ac_80	42		5210	75.72

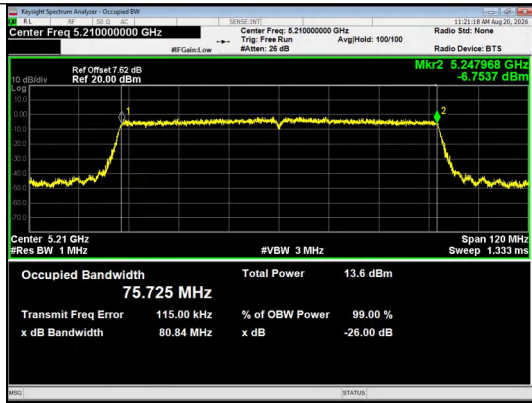
Test Graphs







IEEE 802.11ac_Channel 46_40MHz_Antenna 1



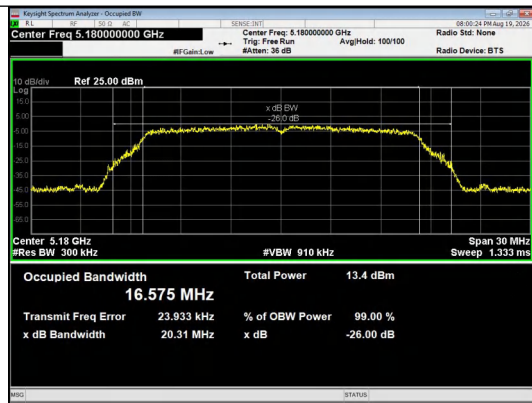
IEEE 802.11ac_Channel 42_80MHz_Antenna 1

26dB Bandwidth

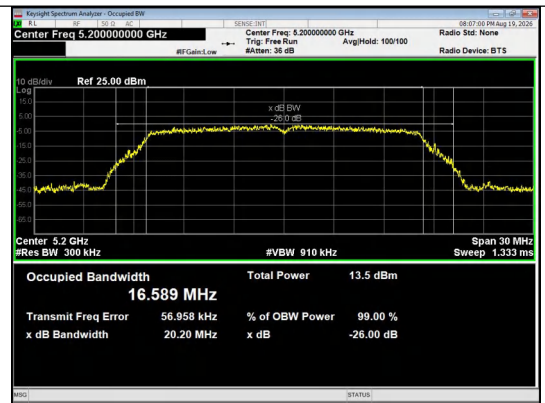
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	36	1	5180.0	20.31	1.09
	40		5200.0	20.20	1.1
	48		5240.0	19.95	1.1
IEEE 802.11n_20	36		5180.0	20.04	1.1
	40		5200.0	20.14	1.09
	48		5240.0	20.23	1.09
IEEE 802.11n_40	38		5190.0	40.50	1.05
	46		5230.0	40.26	1.04
IEEE 802.11ac_20	36		5180.0	20.51	1.09
	40		5200.0	20.40	1.08
	48		5240.0	20.28	1.09
IEEE 802.11ac_40	38		5190.0	40.71	1.03
	46		5230.0	40.26	1.04
IEEE 802.11ac_80	42		5210.0	80.75	1.02

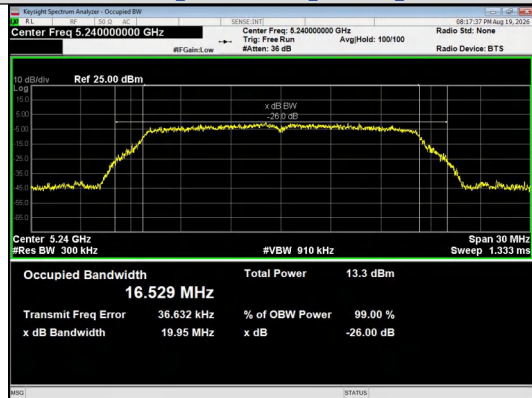
Test Graphs



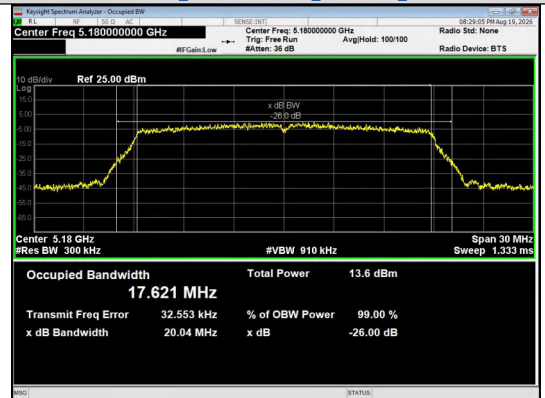
IEEE 802.11a_Channel 36_20MHz_Antenna 1



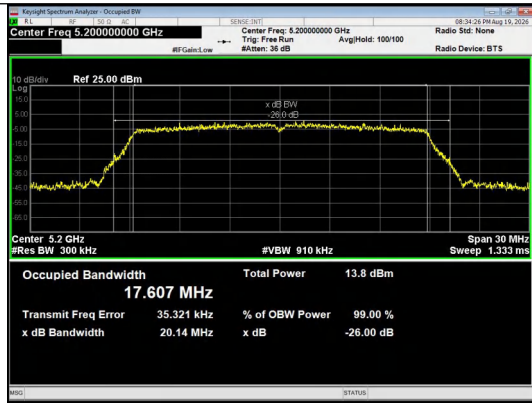
IEEE 802.11a_Channel 40_20MHz_Antenna 1



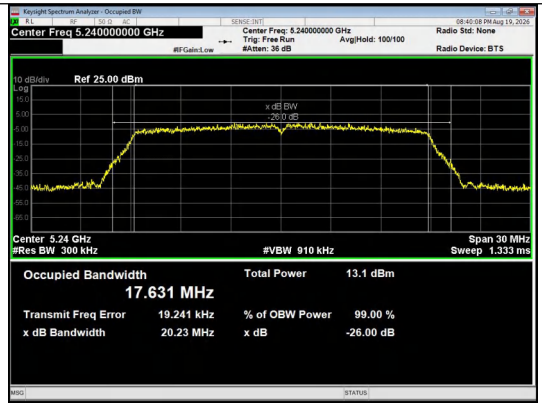
IEEE 802.11a_Channel 48_20MHz_Antenna 1



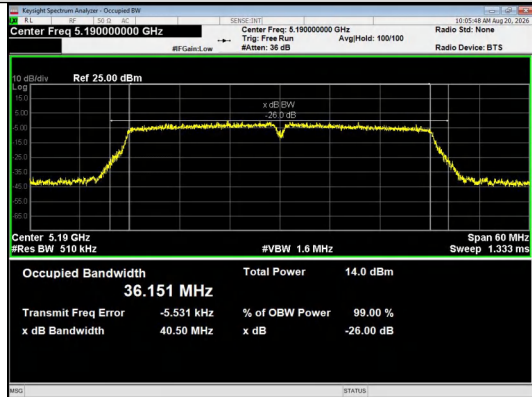
IEEE 802.11n_Channel 36_20MHz_Antenna 1



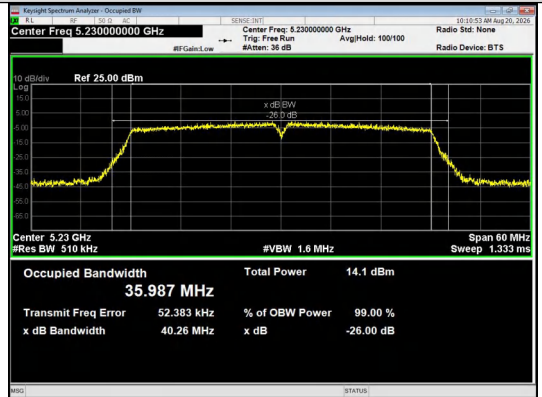
IEEE 802.11n Channel 40_20MHz_Antenna 1



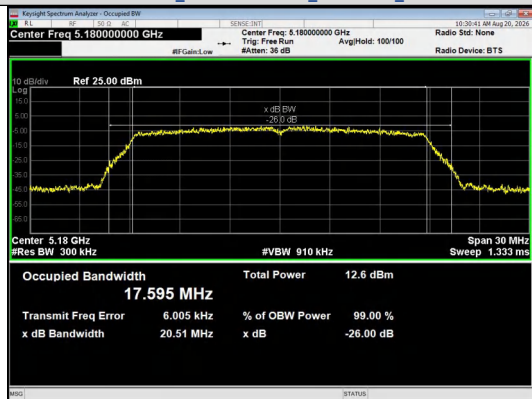
IEEE 802.11n Channel 48_20MHz_Antenna 1



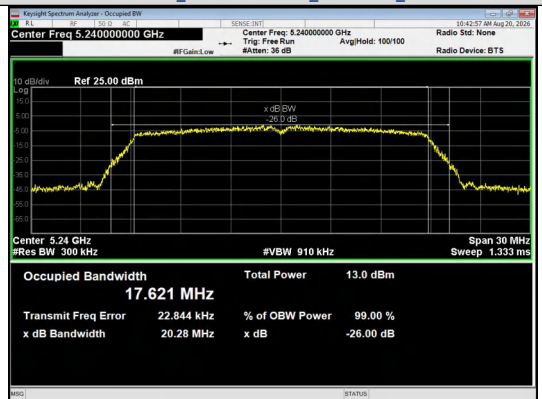
IEEE 802.11n Channel 38_40MHz_Antenna 1



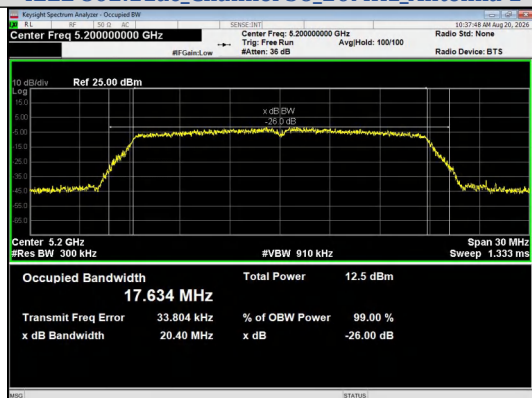
IEEE 802.11n Channel 46_40MHz_Antenna 1



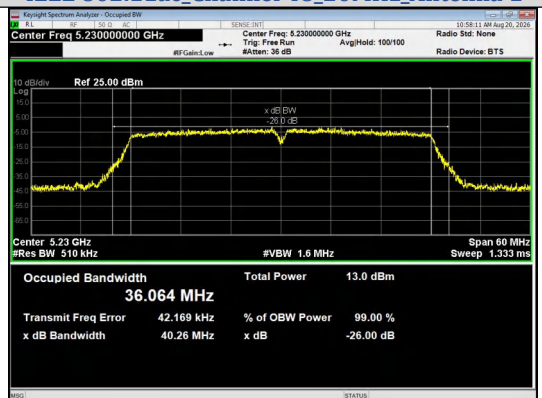
IEEE 802.11ac Channel 36_20MHz_Antenna 1



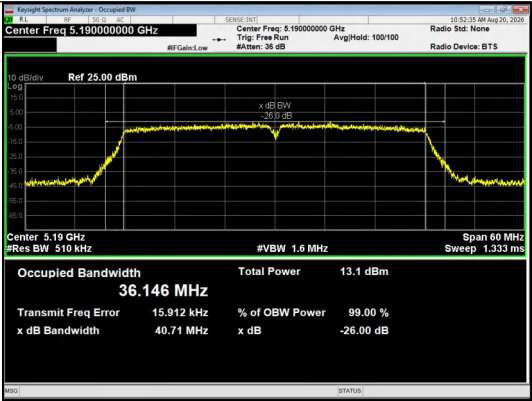
IEEE 802.11ac Channel 48_20MHz_Antenna 1



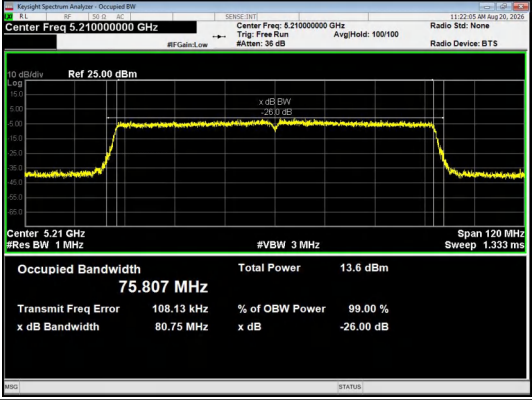
IEEE 802.11ac Channel 40_20MHz_Antenna 1



IEEE 802.11ac Channel 46_40MHz_Antenna 1



IEEE 802.11ac_Channel 38_40MHz_Antenna 1

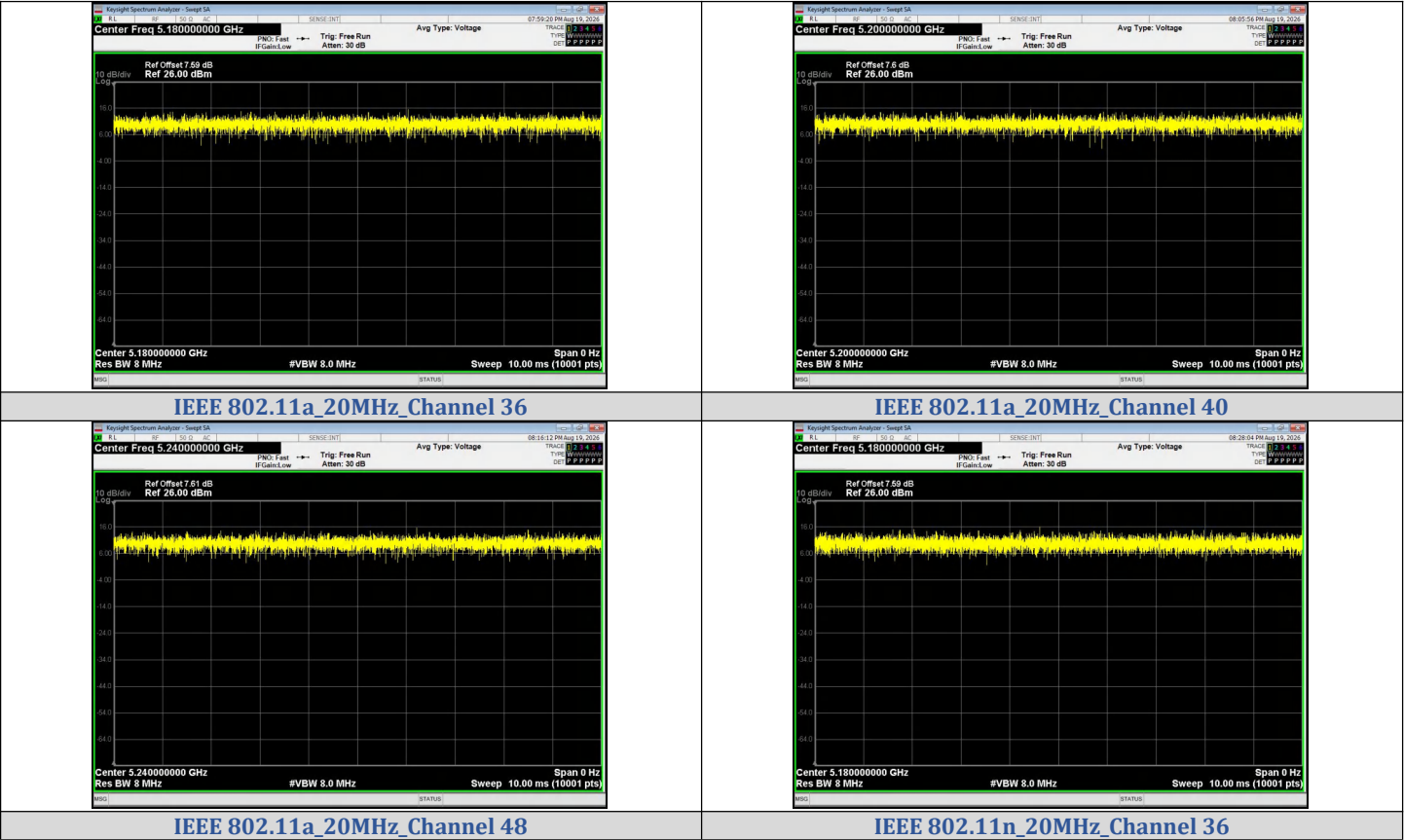


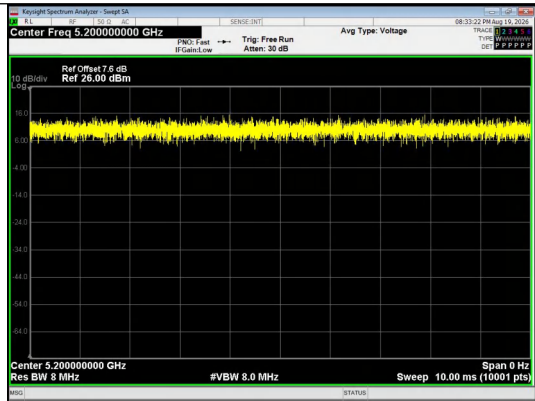
IEEE 802.11ac_Channel 42_80MHz_Antenna 1

Duty Cycle
Test Result

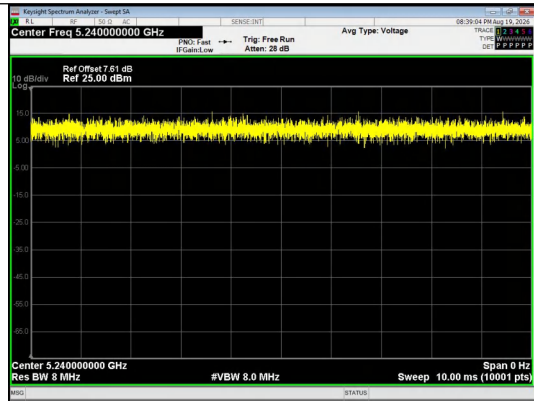
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11a	6	36	1	10.0000	10.000	100	1	0.0000	0.1000
		40		10.0000	10.000	100	1	0.0000	0.1000
		48		10.0000	10.000	100	1	0.0000	0.1000
IEEE 802.11n_20		36		10.0000	10.000	100	1	0.0000	0.1000
		40		10.0000	10.000	100	1	0.0000	0.1000
		48		10.0000	10.000	100	1	0.0000	0.1000
IEEE 802.11n_40		38		10.0000	10.000	100	1	0.0000	0.1000
		46		10.0000	10.000	100	1	0.0000	0.1000
IEEE 802.11ac_20	MCS 0	36		10.0000	10.000	100	1	0.0000	0.1000
		40		10.0000	10.000	100	1	0.0000	0.1000
		48		10.0000	10.000	100	1	0.0000	0.1000
IEEE 802.11ac_40		38		10.0000	10.000	100	1	0.0000	0.1000
		46		10.0000	10.000	100	1	0.0000	0.1000
IEEE 802.11ac_80		42		10.0000	10.000	100	1	0.0000	0.1000

Test Graphs

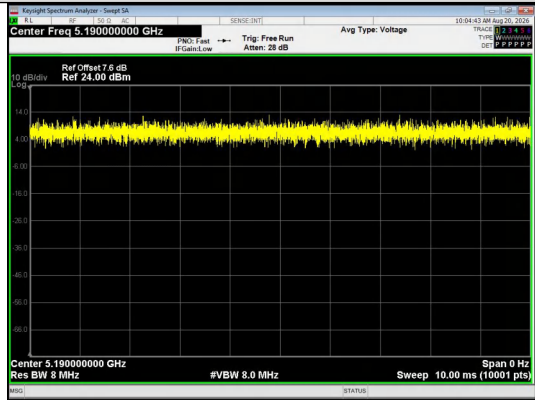




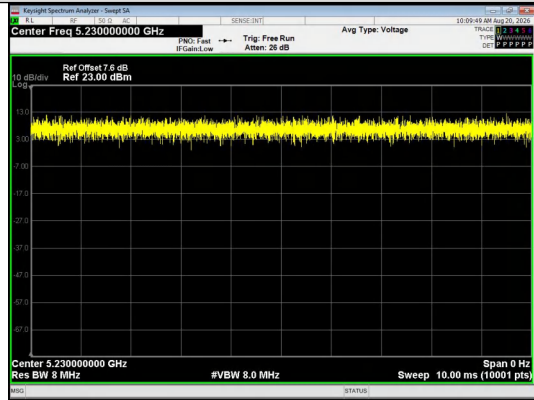
IEEE 802.11n 20MHz_Channel 40



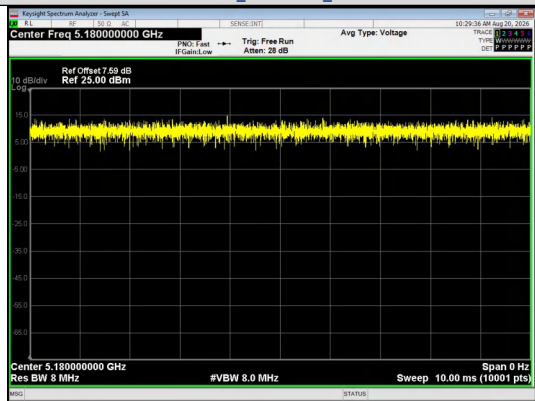
IEEE 802.11n 20MHz_Channel 48



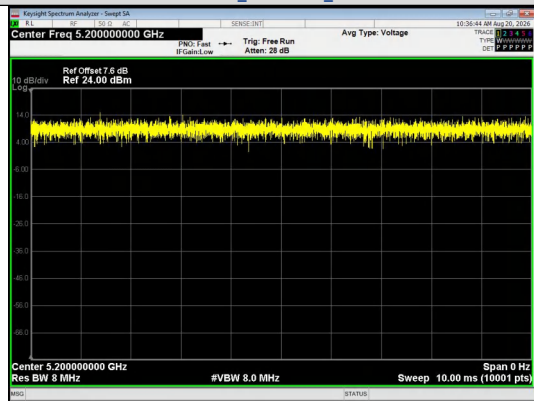
IEEE 802.11n 20MHz_Channel 38



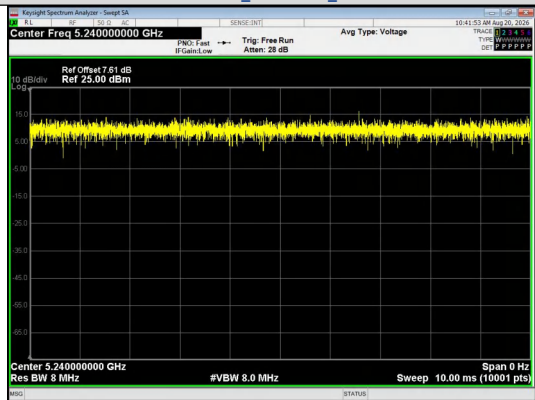
IEEE 802.11n 40MHz_Channel 46



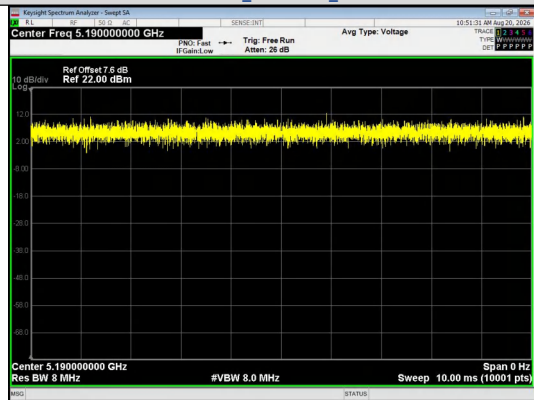
IEEE 802.11ac 20MHz_Channel 36



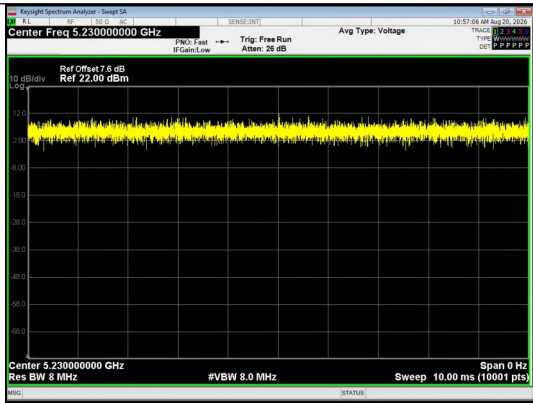
IEEE 802.11ac 20MHz_Channel 40



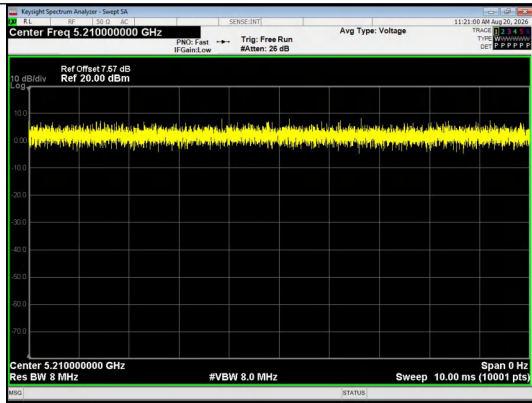
IEEE 802.11ac 20MHz_Channel 48



IEEE 802.11ac 40MHz_Channel 38



IEEE 802.11ac_40MHz_Channel 46



IEEE 802.11ac_80MHz_Channel 42

Power Spectral Density

Test Result

Mode	Channel	Ant. 1 Meas PSD (dBm/MHz)	Duty Cycle Factor	Ant. 1 Corr'd PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
IEEE 802.11a	36	-1.92	0.0	-1.919	-1.92	11	PASS
	40	-1.96	0.0	-1.956	-1.96		PASS
	48	-2.23	0.0	-2.225	-2.23		PASS
IEEE 802.11n_20	36	-2.51	0.0	-2.509	-2.51		PASS
	40	-2.29	0.0	-2.288	-2.29		PASS
	48	-2.80	0.0	-2.8	-2.80		PASS
IEEE 802.11n_40	38	-5.70	0.0	-5.696	-5.70		PASS
	46	-5.47	0.0	-5.467	-5.47		PASS
IEEE 802.11ac_20	36	-2.98	0.0	-2.981	-2.98		PASS
	40	-3.19	0.0	-3.194	-3.19		PASS
	48	-2.67	0.0	-2.667	-2.67		PASS
IEEE 802.11ac_40	38	-6.92	0.0	-6.925	-6.92		PASS
	46	-6.66	0.0	-6.663	-6.66		PASS
IEEE 802.11ac_80	42	-10.03	0.0	-10.03	-10.03		PASS

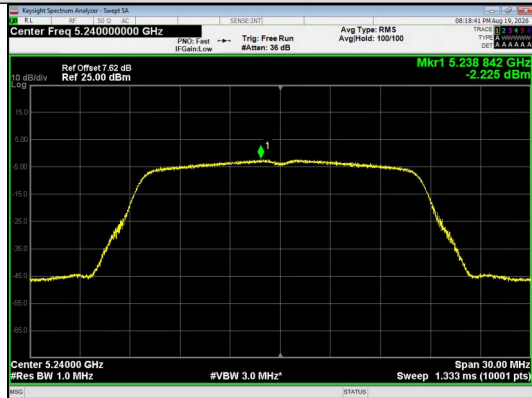
Test Graphs



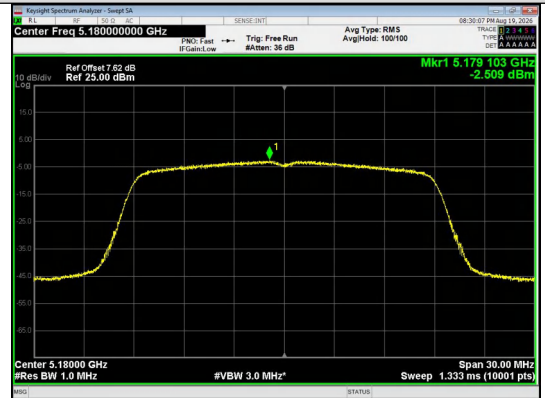
IEEE 802.11a Channel 36_20MHz_Antenna 1



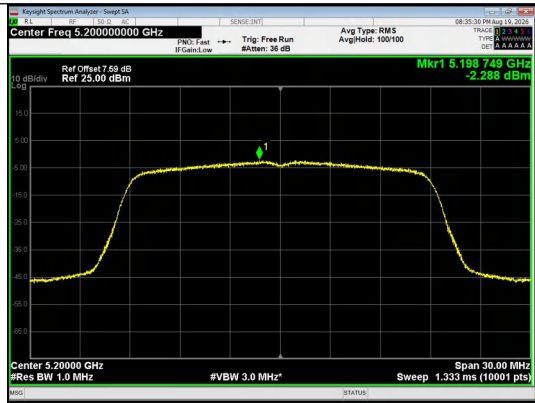
IEEE 802.11a Channel 40_20MHz_Antenna 1



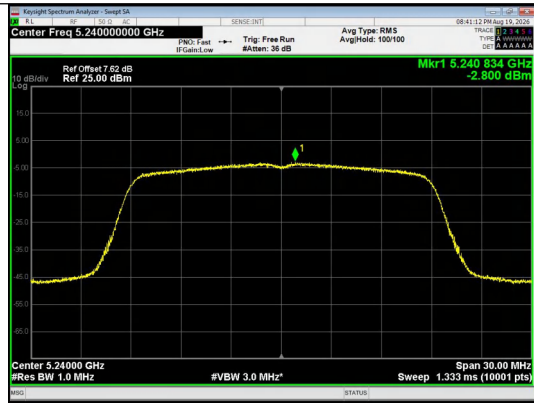
IEEE 802.11a Channel 48_20MHz_Antenna 1



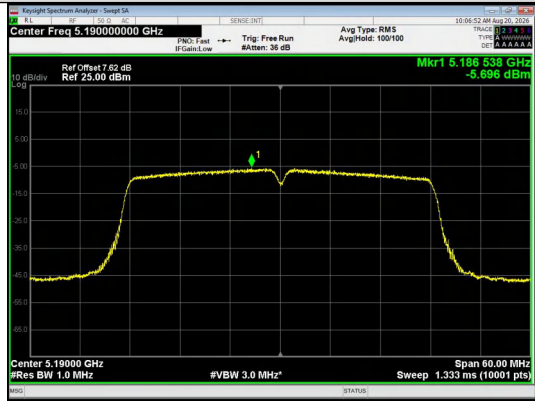
IEEE 802.11n Channel 36_20MHz_Antenna 1



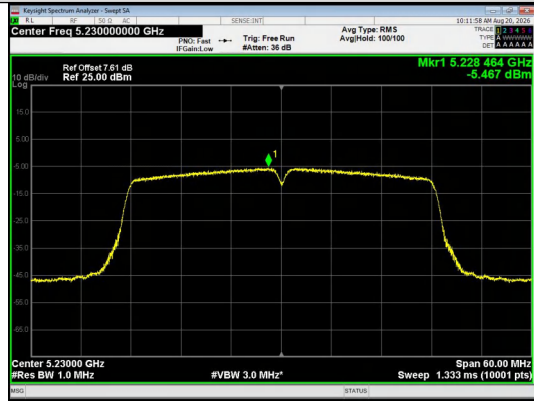
IEEE 802.11n Channel 40_20MHz_Antenna 1



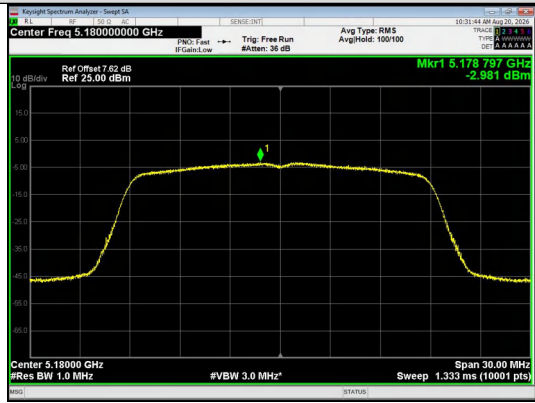
IEEE 802.11n Channel 48_20MHz_Antenna 1



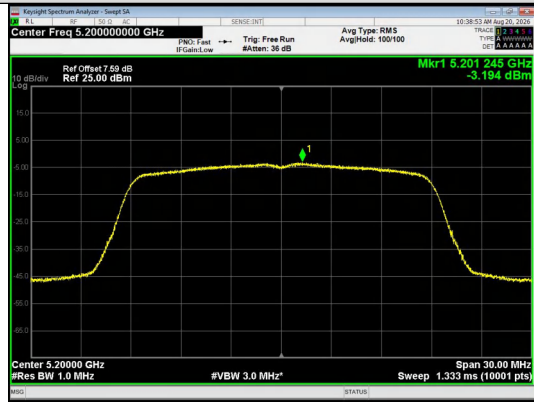
IEEE 802.11n Channel 38_40MHz_Antenna 1



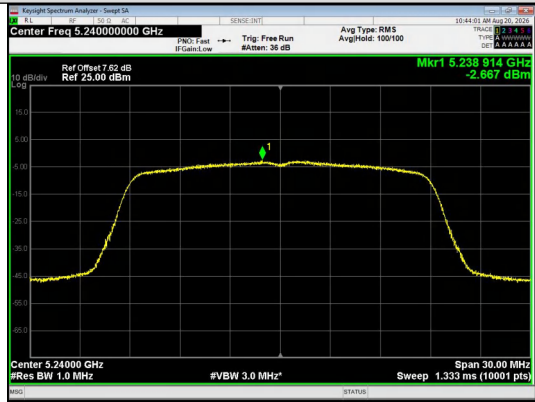
IEEE 802.11n Channel 46_40MHz_Antenna 1



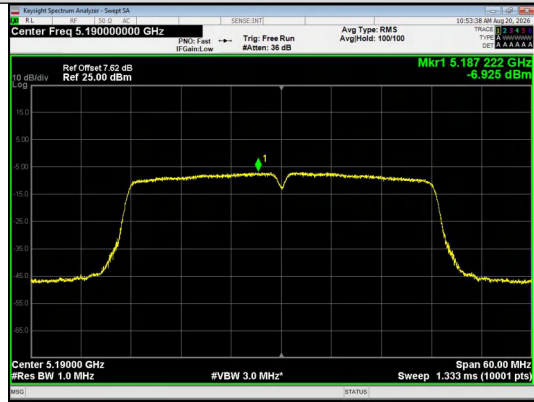
IEEE 802.11ac Channel 36_20MHz_Antenna 1



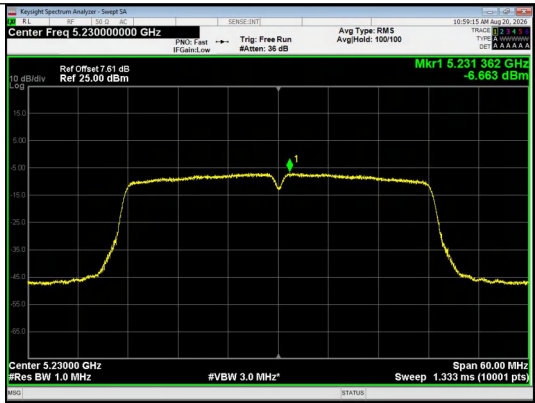
IEEE 802.11ac Channel 40_20MHz_Antenna 1



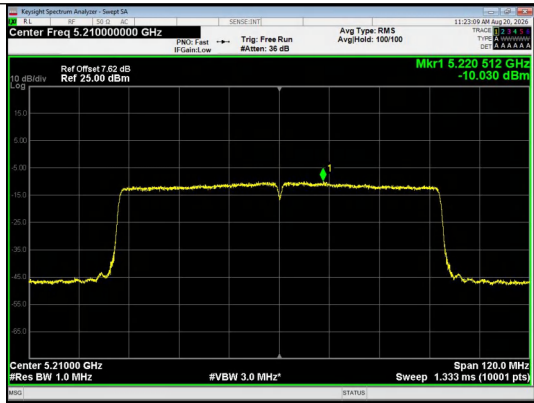
IEEE 802.11ac Channel 48_20MHz_Antenna 1



IEEE 802.11ac Channel 38_40MHz_Antenna 1



IEEE 802.11ac_Channel 46_40MHz_Antenna 1



IEEE 802.11ac_Channel 42_80MHz_Antenna 1