

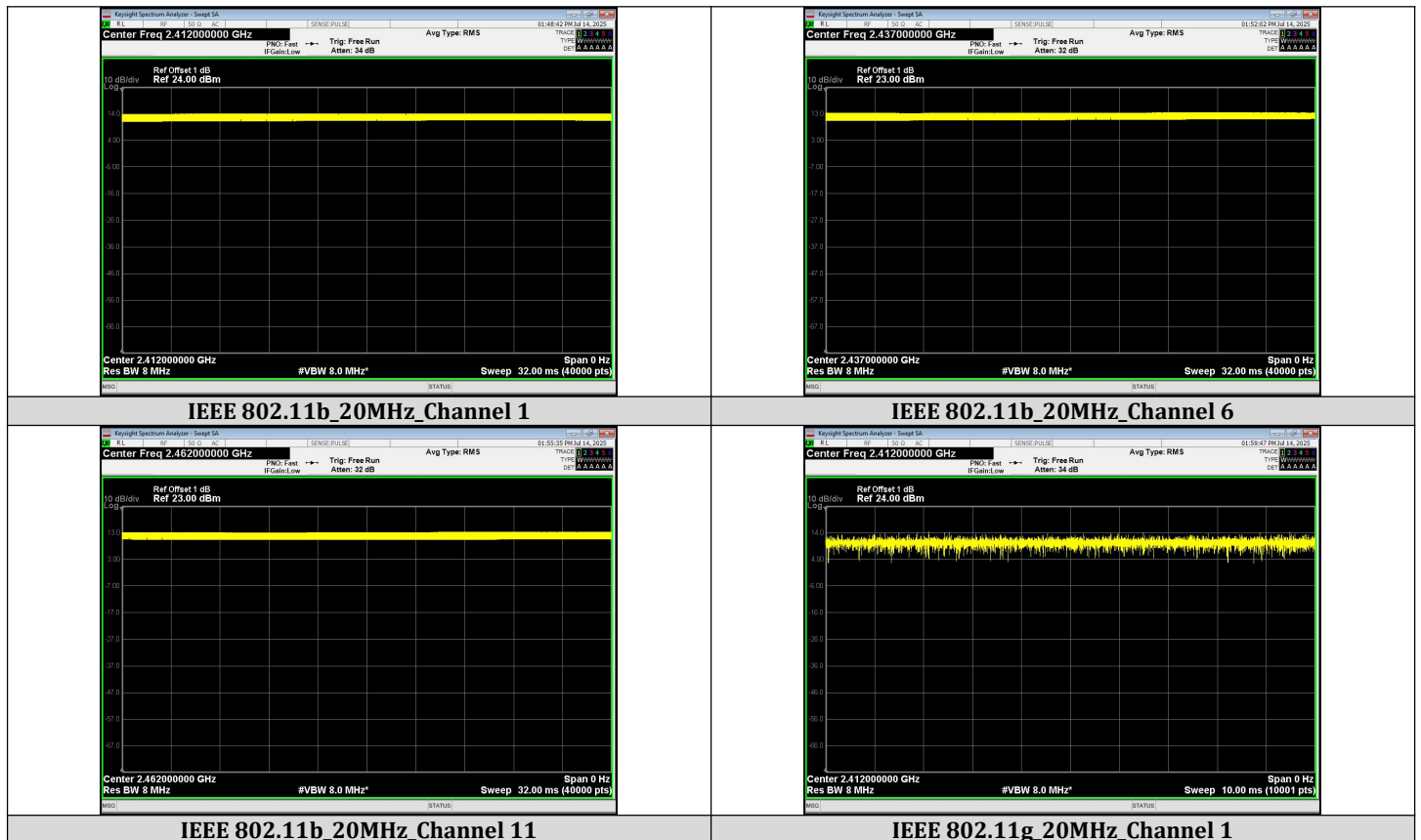
Appendix RF test data for WIFI2.4G



Duty Cycle Test Result

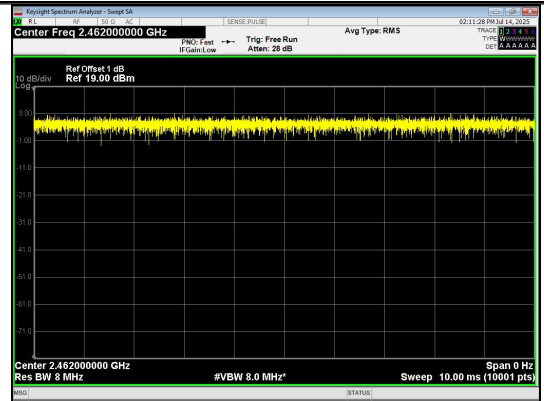
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	1	32.000	32.000	100	1	0.0	0.0312
		6		32.000	32.000	100	1	0.0	0.0312
		11		32.000	32.000	100	1	0.0	0.0312
IEEE 802.11g		1		10.000	10.000	100	1	0.0	0.1000
		6		10.000	10.000	100	1	0.0	0.1000
		11		10.000	10.000	100	1	0.0	0.1000
IEEE 802.11n_20	MCS 0	1		10.000	10.000	100	1	0.0	0.1000
		6		10.000	10.000	100	1	0.0	0.1000
		11		10.000	10.000	100	1	0.0	0.1000
IEEE 802.11n_40		3		10.000	10.000	100	1	0.0	0.1000
		6		10.000	10.000	100	1	0.0	0.1000
		9		10.000	10.000	100	1	0.0	0.1000

Test Graphs

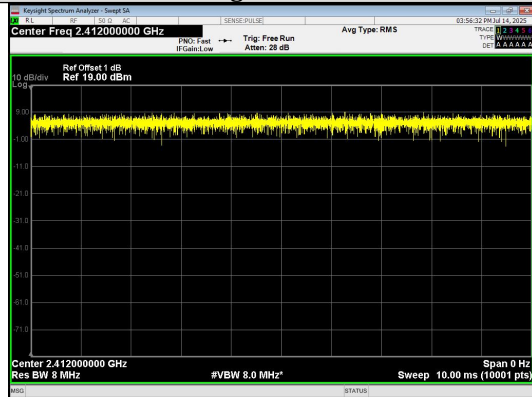




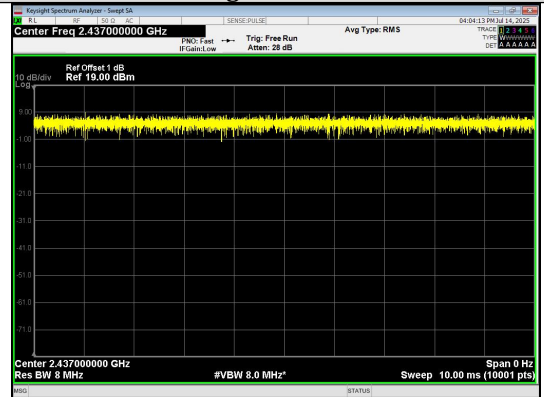
IEEE 802.11g_20MHz_Channel 6



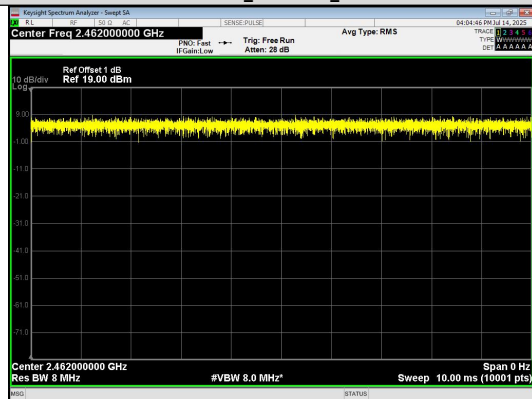
IEEE 802.11g_20MHz_Channel 11



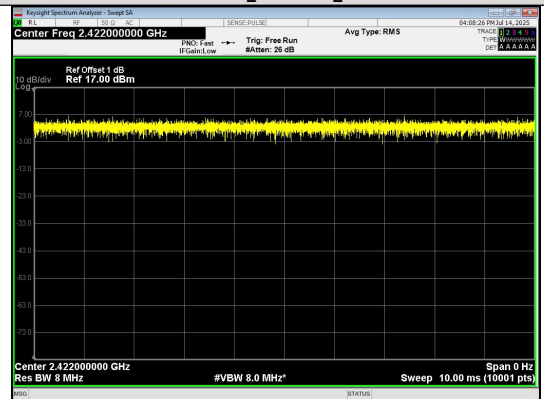
IEEE 802.11n_20MHz_Channel 1



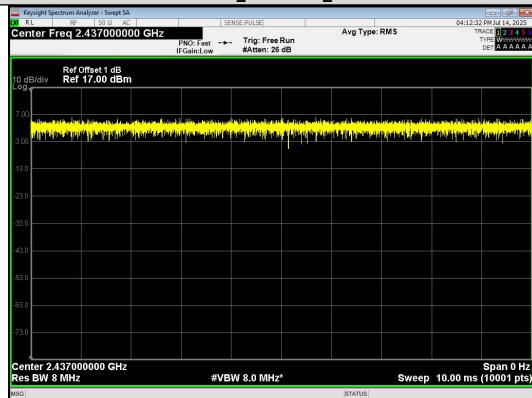
IEEE 802.11n_20MHz_Channel 6



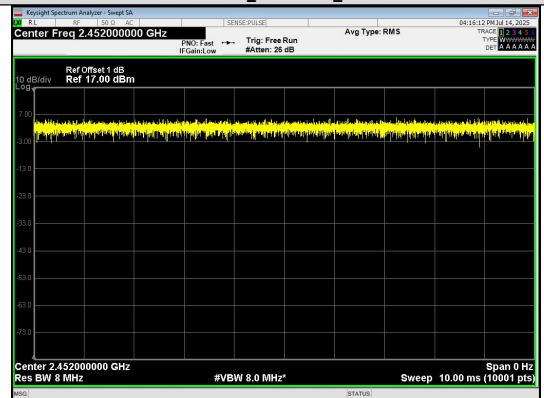
IEEE 802.11n_20MHz_Channel 11



IEEE 802.11n_40MHz_Channel 3



IEEE 802.11n_40MHz_Channel 6



IEEE 802.11n_40MHz_Channel 9

Conducted Output Power

Test Result

Conducted Output Power

Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	15.72	≤30	PASS
	6	15.06	≤30	PASS
	11	15.24	≤30	PASS
IEEE 802.11g	1	15.43	≤30	PASS
	6	15.12	≤30	PASS
	11	14.93	≤30	PASS
IEEE 802.11n_20	1	15.06	≤30	PASS
	6	15.09	≤30	PASS
	11	15.16	≤30	PASS
IEEE 802.11n_40	3	15.53	≤30	PASS
	6	15.55	≤30	PASS
	9	15.30	≤30	PASS

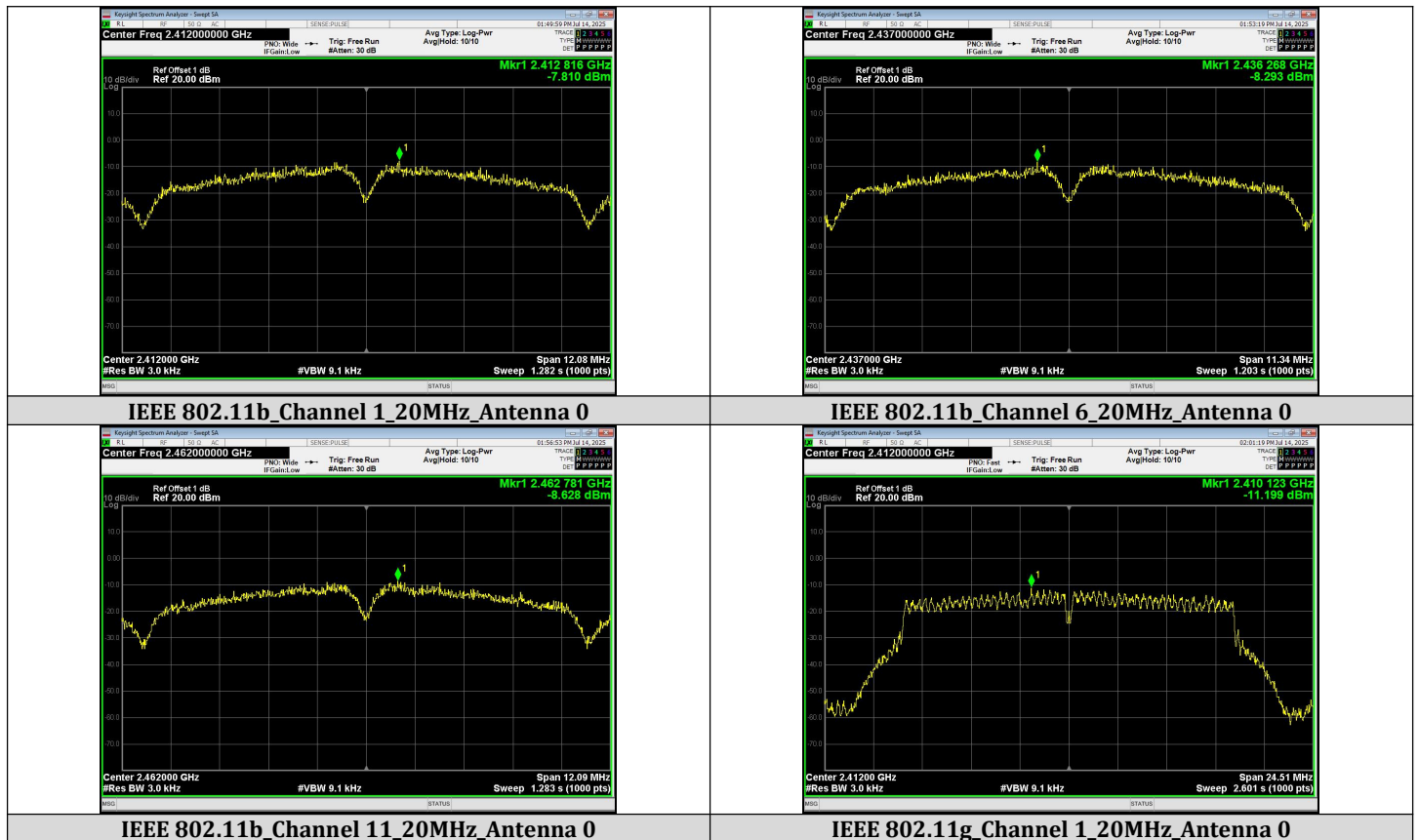


Power Spectral Density

Test Result

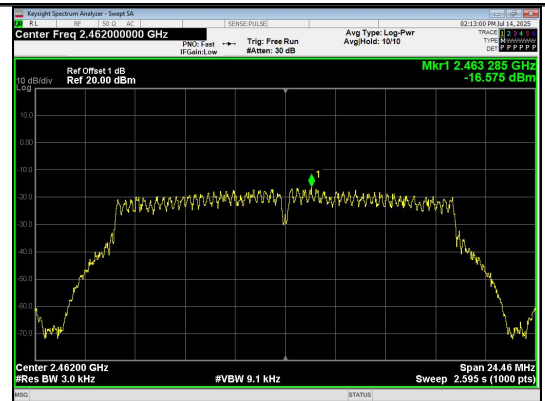
Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-7.810	≤8	PASS
	6	-8.290		PASS
	11	-8.630		PASS
IEEE 802.11g	1	-11.200		PASS
	6	-12.030		PASS
	11	-16.570		PASS
IEEE 802.11n_20	1	-16.900		PASS
	6	-16.410		PASS
	11	-16.640		PASS
IEEE 802.11n_40	3	-17.920		PASS
	6	-18.690		PASS
	9	-18.250		PASS

Test Graphs

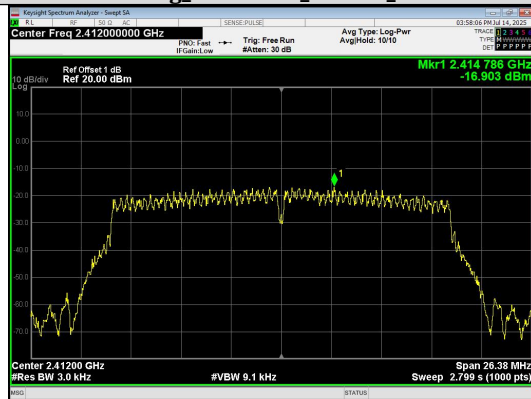




IEEE 802.11g_Channel 6_20MHz_Antenna 0



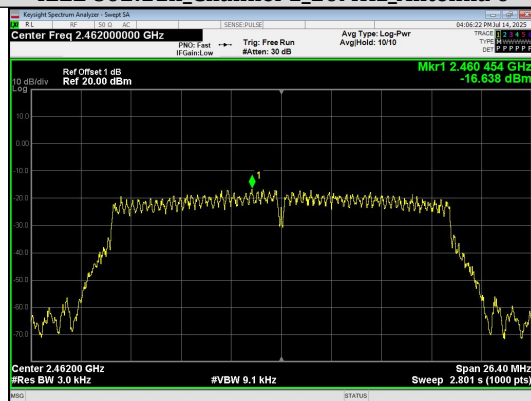
IEEE 802.11g_Channel 11_20MHz_Antenna 0



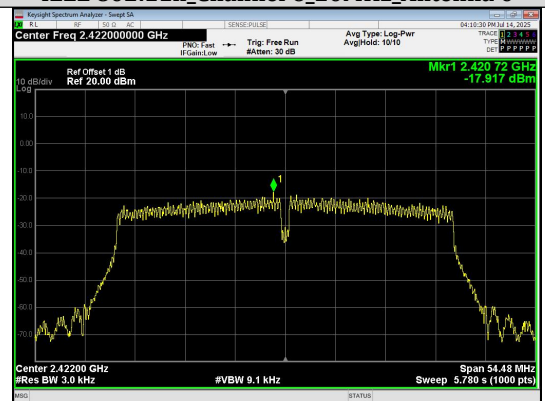
IEEE 802.11g_Channel 11_20MHz_Antenna 0



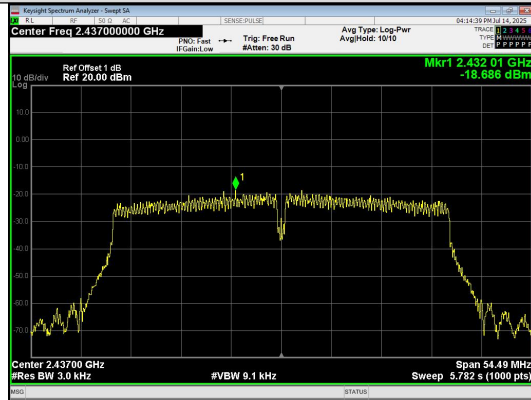
IEEE 802.11g_Channel 11_20MHz_Antenna 0



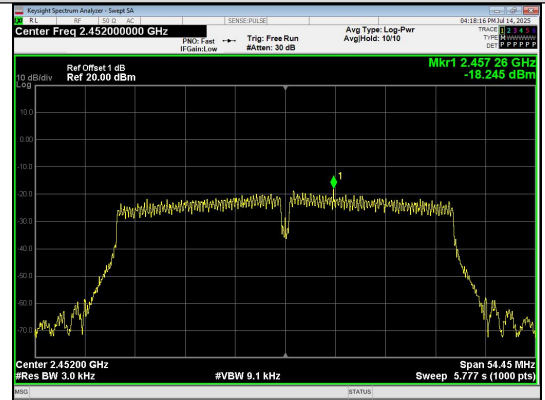
IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0



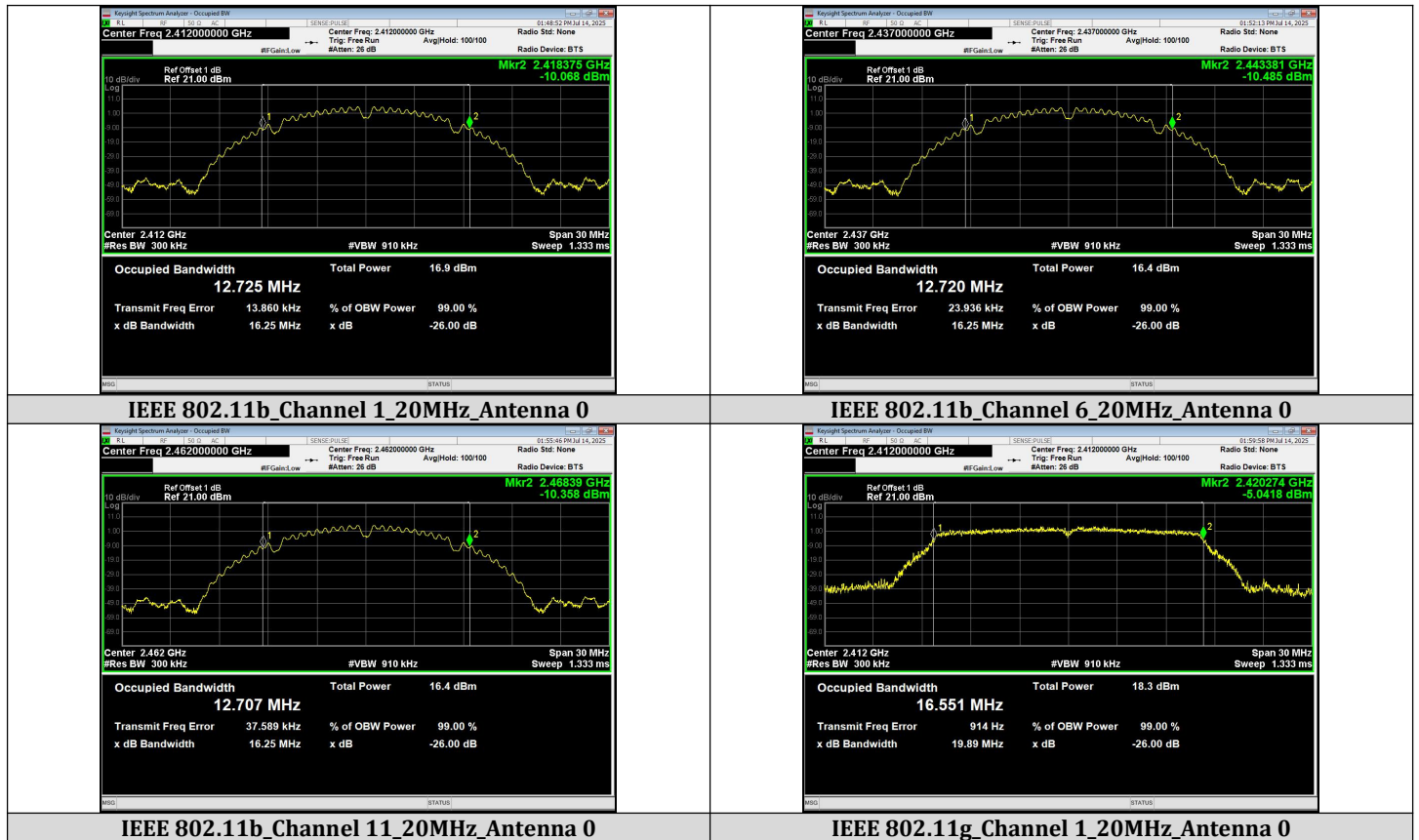
IEEE 802.11n_Channel 3_40MHz_Antenna 0

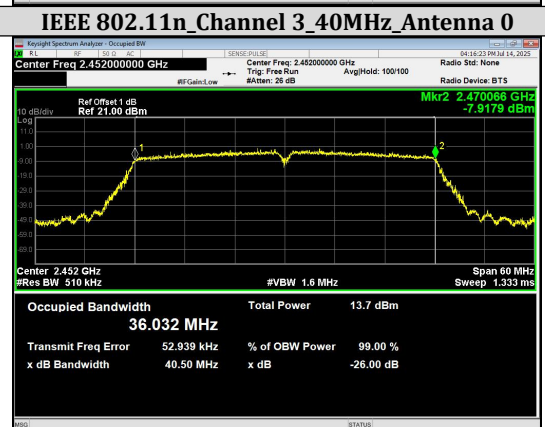
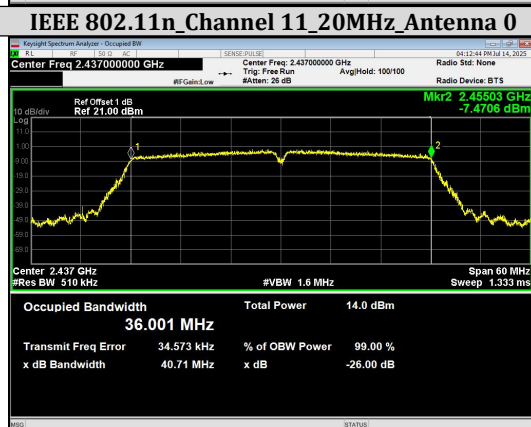
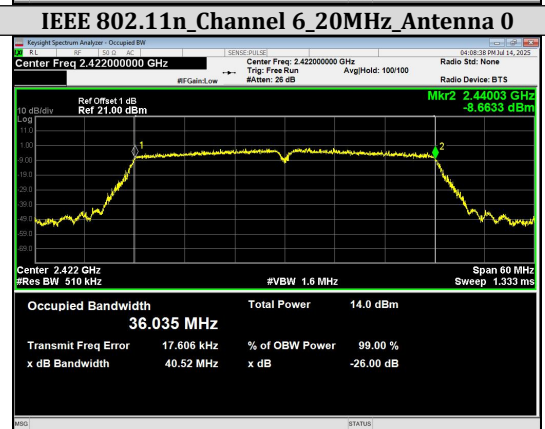
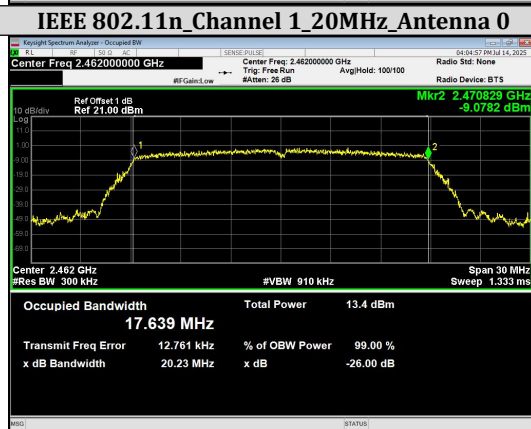
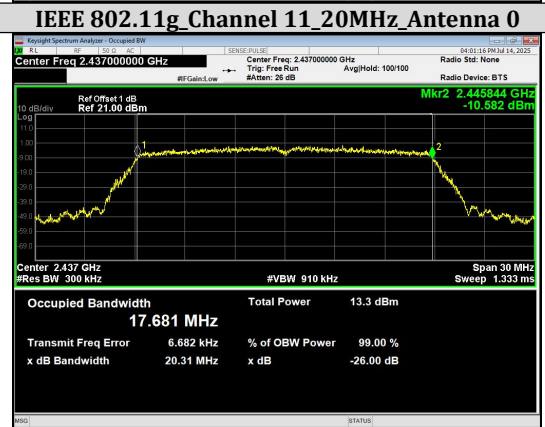
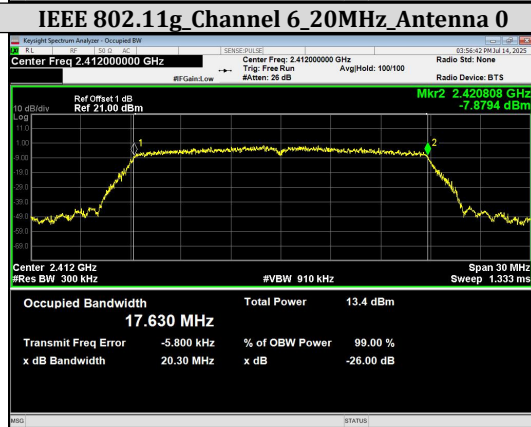
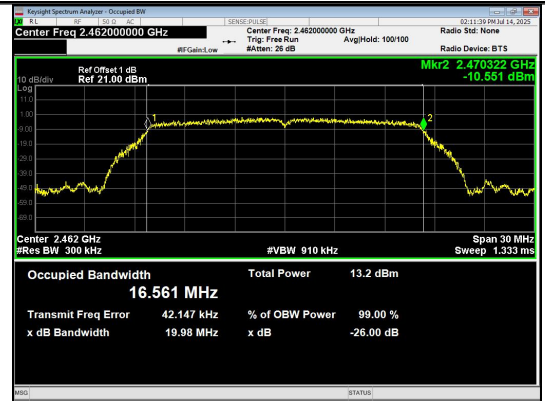
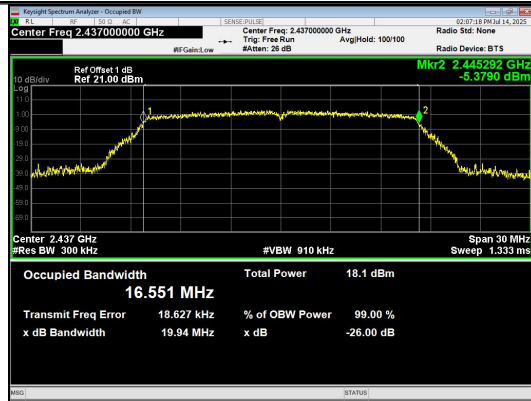
IEEE 802.11n_Channel 6_40MHz_Antenna 0

IEEE 802.11n_Channel 9_40MHz_Antenna 0

**99% Bandwidth****Test Result**

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	0	2412	12.725
	6		2437	12.720
	11		2462	12.707
IEEE 802.11g	1		2412	16.551
	6		2437	16.551
	11		2462	16.561
IEEE 802.11n_20	1		2412	17.630
	6		2437	17.681
	11		2462	17.639
IEEE 802.11n_40	3		2422	36.035
	6		2437	36.001
	9		2452	36.032

Test Graphs



IEEE 802.11n_Channel 6_40MHz_Antenna 0

IEEE 802.11n_Channel 9_40MHz_Antenna 0

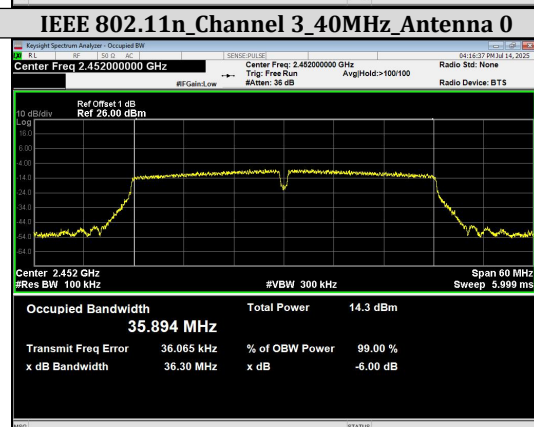
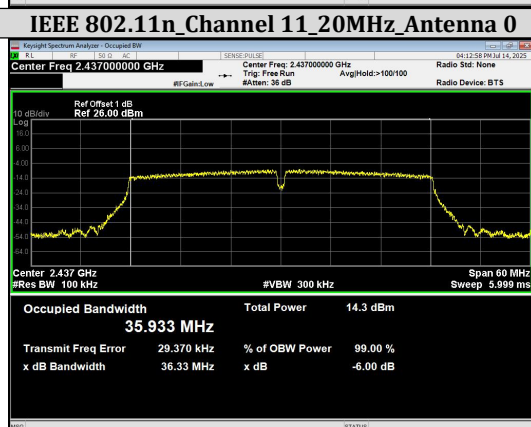
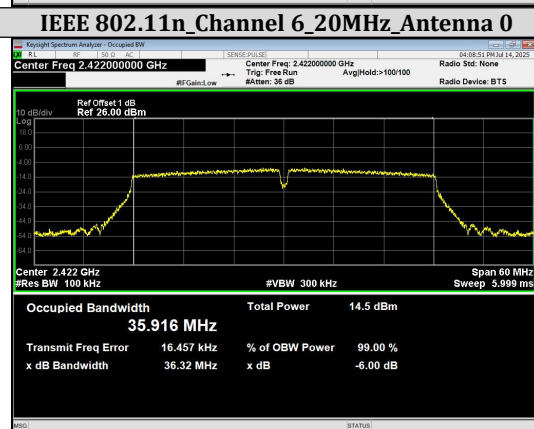
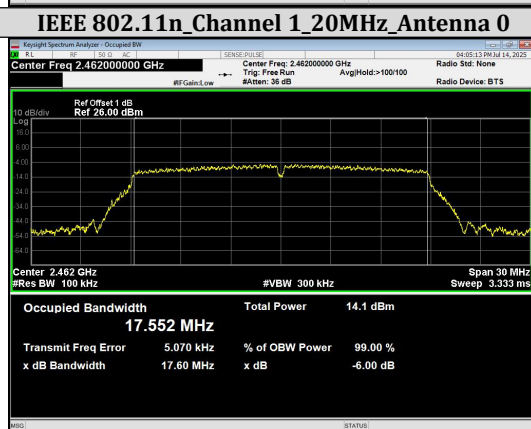
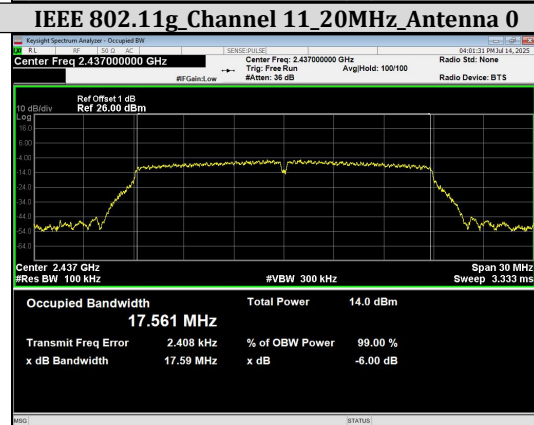
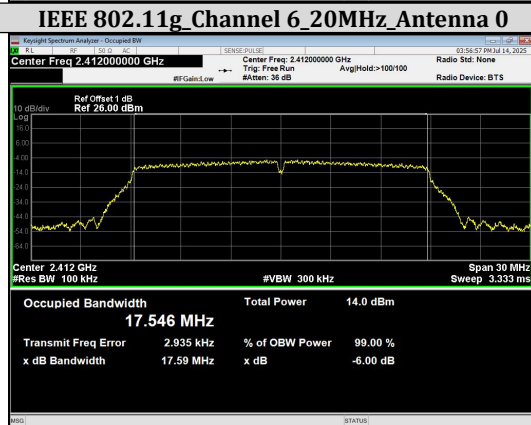
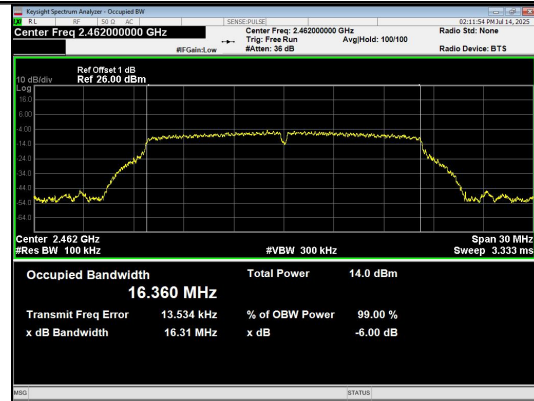
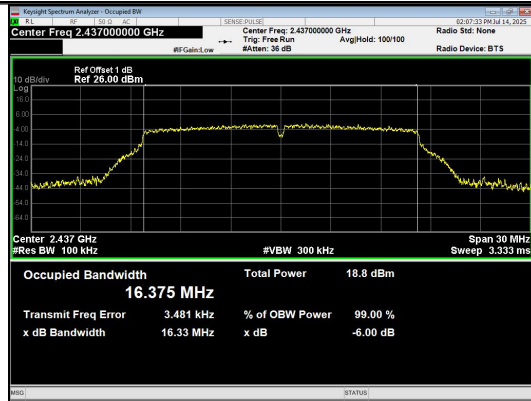
6dB Bandwidth

Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	8.050	≥0.5	PASS
	6		2437	7.560		PASS
	11		2462	8.060		PASS
IEEE 802.11g	1		2412	16.34		PASS
	6		2437	16.33		PASS
	11		2462	16.31		PASS
IEEE 802.11n_20	1		2412	17.59		PASS
	6		2437	17.59		PASS
	11		2462	17.60		PASS
IEEE 802.11n_40	3		2422	36.32		PASS
	6		2437	36.33		PASS
	9		2452	36.30		PASS

Test Graphs



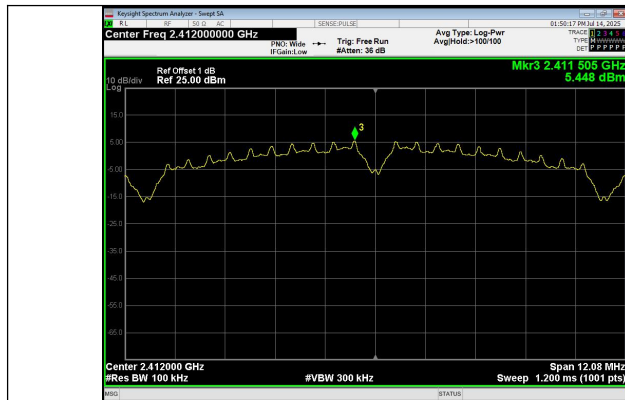


IEEE 802.11n_Channel 6_40MHz_Antenna 0

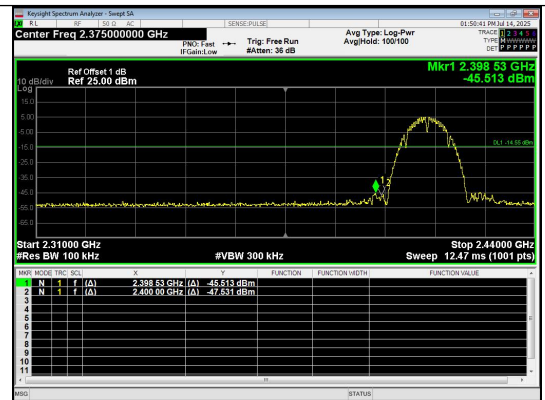
IEEE 802.11n_Channel 9_40MHz_Antenna 0

**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 802.11b	1	0	2398.53	-45.513	-14.55	-30.963	PASS	
			2400.00	-47.530	-14.55	-32.980	PASS	
	6		24323.9	-39.847	-14.55	-25.297	PASS	
	11		24988.1	-39.264	-15.4	-23.864	PASS	
	11		2483.50	-52.770	-15.08	-37.690	PASS	
			24962.5	-39.785	-15.08	-24.705	PASS	
IEEE 802.11g	1		2398.79	-37.768	-19.86	-17.908	PASS	
			2400.00	-38.030	-19.86	-18.170	PASS	
	6		24965.7	-39.459	-19.86	-19.599	PASS	
	11		24328.9	-39.870	-20.13	-19.740	PASS	
			2483.50	-52.060	-25.28	-26.780	PASS	
	11		24947.6	-39.963	-25.28	-14.683	PASS	
IEEE 802.11n_20	1		2398.92	-47.544	-24.97	-22.575	PASS	
			2400.00	-48.220	-24.97	-23.250	PASS	
	6		24418.8	-39.150	-24.97	-14.180	PASS	
	11		24962.5	-39.559	-25.16	-14.399	PASS	
			2483.50	-52.790	-25.16	-27.630	PASS	
	11		24993.1	-38.658	-25.16	-13.498	PASS	
IEEE 802.11n_40	3		2397.62	-48.068	-27.84	-20.228	PASS	
			2400.00	-50.450	-27.84	-22.610	PASS	
	6		24977.5	-40.139	-27.84	-12.299	PASS	
	9		24992.5	-39.316	-27.88	-11.436	PASS	
			2483.50	-52.130	-27.83	-24.300	PASS	
	9		24980.0	-39.298	-27.83	-11.468	PASS	

Test Graphs

In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0