

Appendix A Test Results of 2.4G WIFI

Conducted Output Power

Test Result

Conducted Output Power

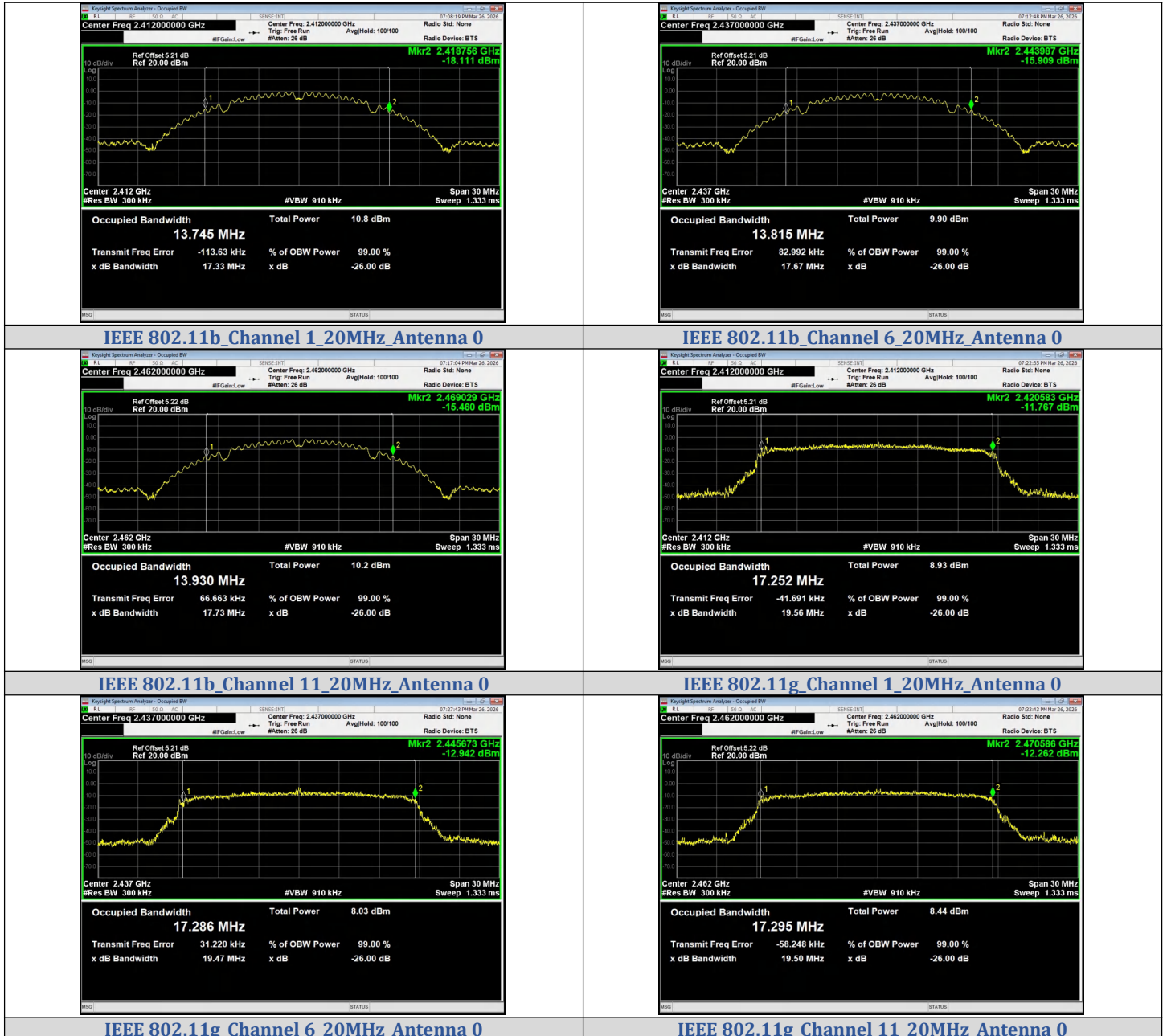
Mode	Channel	Ant. 0 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	10.13	10.01	≤30	PASS
	6	9.04	9.04	≤30	PASS
	11	9.32	9.32	≤30	PASS
IEEE 802.11g	1	10.05	10.05	≤30	PASS
	6	9.68	9.68	≤30	PASS
	11	9.78	10.13	≤30	PASS
IEEE 802.11n_20	1	10.02	10.02	≤30	PASS
	6	9.04	9.04	≤30	PASS
	11	9.44	9.44	≤30	PASS

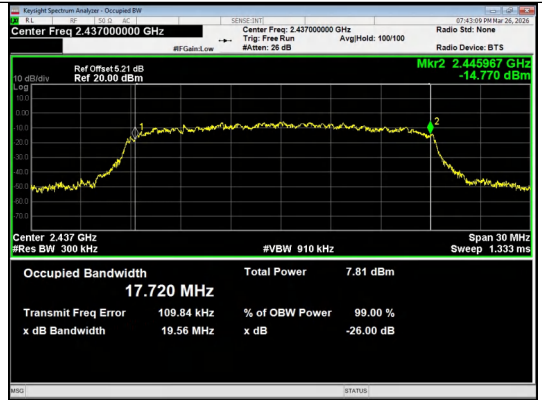
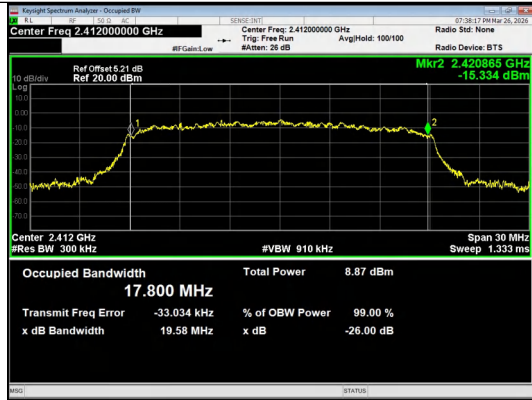
99% Bandwidth

Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	0	2412	13.745
	6		2437	13.815
	11		2462	13.930
IEEE 802.11g	1		2412	17.252
	6		2437	17.286
	11		2462	17.295
IEEE 802.11n_20	1		2412	17.800
	6		2437	17.720
	11		2462	17.806

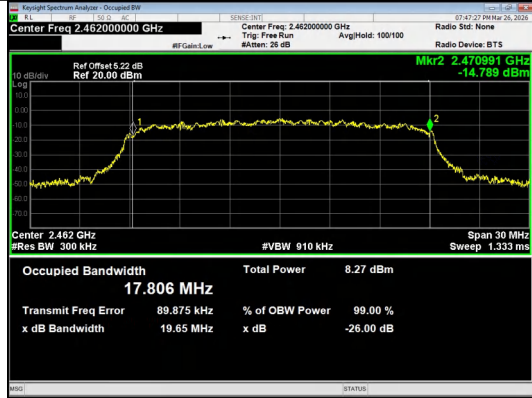
Test Graphs





IEEE 802.11n_Channel 1_20MHz_Antenna 0

IEEE 802.11n_Channel 6_20MHz_Antenna 0



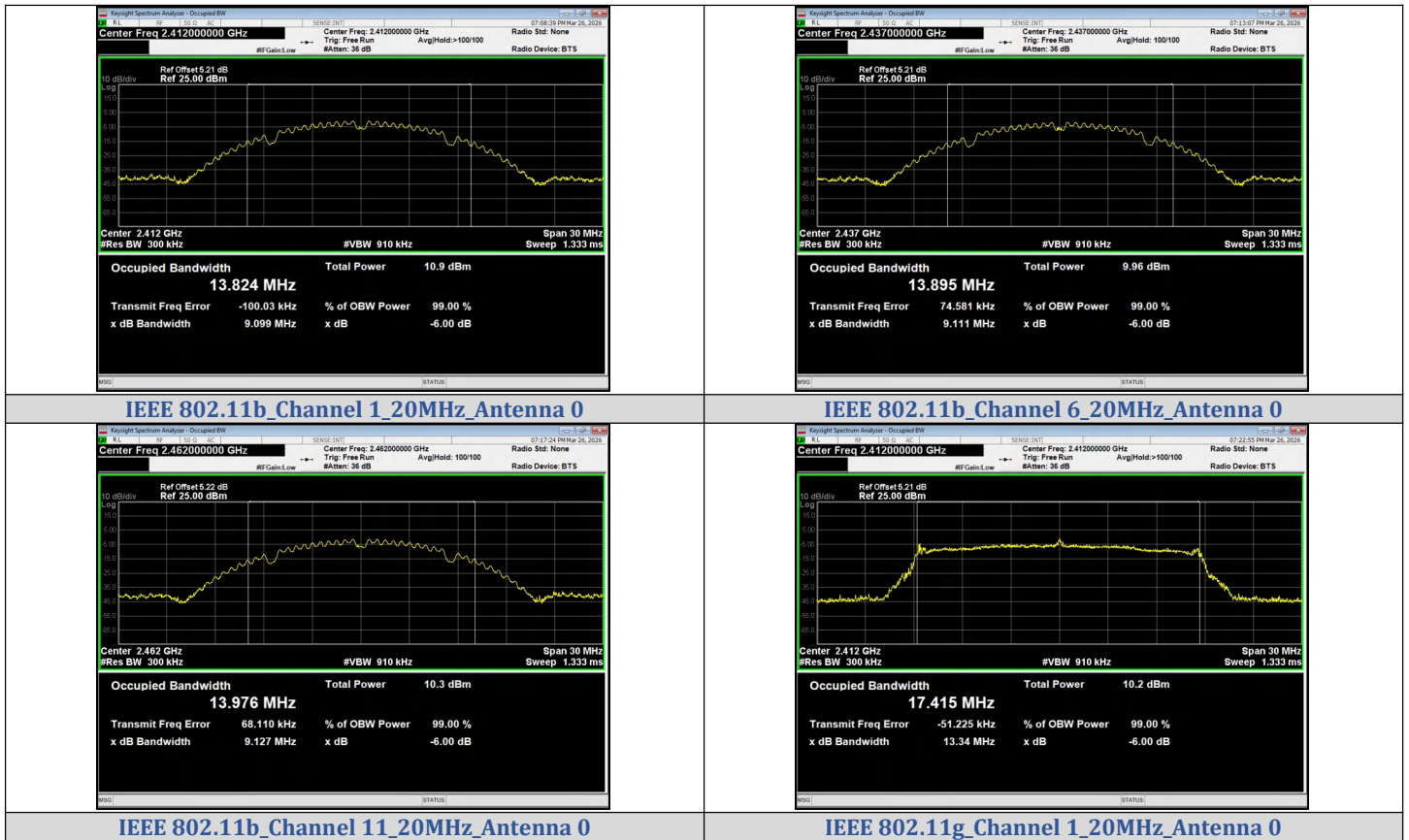
IEEE 802.11n_Channel 11_20MHz_Antenna 0

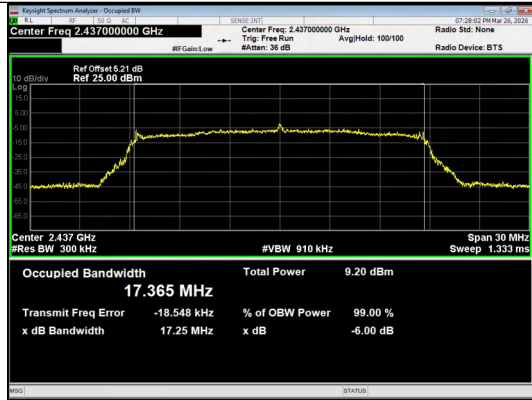
6dB Bandwidth

Test Result

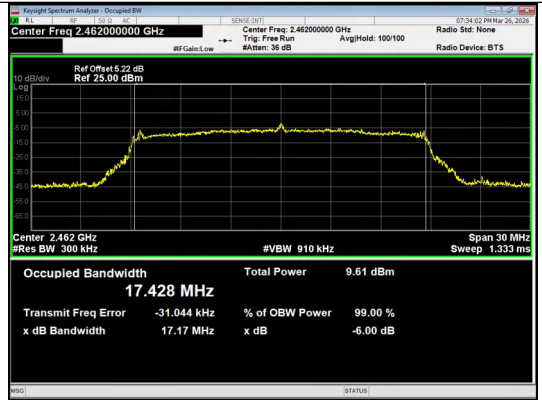
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	9.099	≥0.5	PASS
	6		2437	9.111		PASS
	11		2462	9.127		PASS
IEEE 802.11g	1		2412	13.34		PASS
	6		2437	17.25		PASS
	11		2462	17.17		PASS
IEEE 802.11n_20	1		2412	15.96		PASS
	6		2437	15.76		PASS
	11		2462	15.79		PASS

Test Graphs

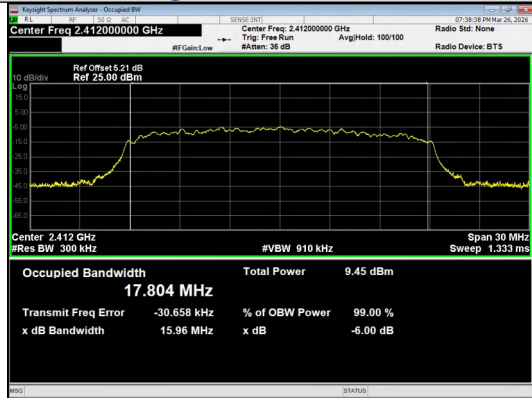




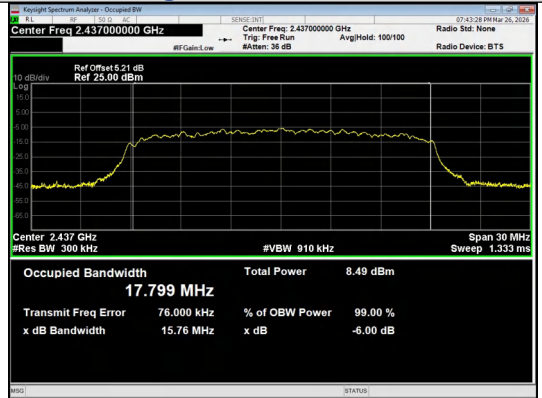
IEEE 802.11g_Channel 6_20MHz_Antenna 0



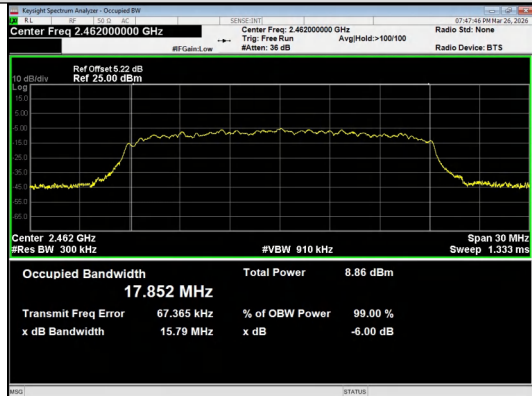
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0

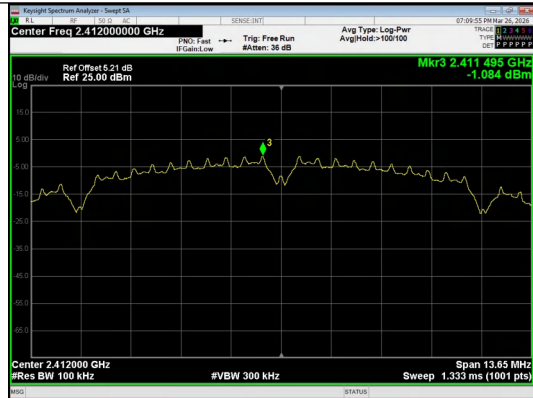
Conducted Spurious & Band Edge Emission

Test Result

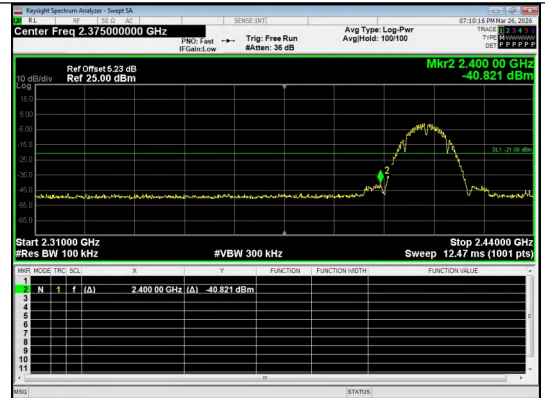
Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2400.00	-40.821	-21.08	-19.741	PASS
	6		24729.1	-45.278	-21.08	-24.198	PASS
			24822.7	-44.792	-22.16	-22.632	PASS
	11		2483.50	-49.601	-21.93	-27.671	PASS
			24753.4	-44.284	-21.93	-22.354	PASS
IEEE 802.11g	1		2398.53	-46.720	-25.62	-21.100	PASS
			2400.00	-46.723	-25.62	-21.103	PASS
	6		24719.7	-45.034	-25.62	-19.414	PASS
			24900.7	-44.753	-26.18	-18.573	PASS
	11		2483.50	-47.028	-25.48	-21.548	PASS
			24324.6	-44.701	-25.48	-19.221	PASS
IEEE 802.11n_20	1		2398.53	-45.864	-26.82	-19.044	PASS
			2400.00	-46.928	-26.82	-20.108	PASS
	6		24892.6	-44.884	-26.82	-18.064	PASS
			24493.1	-44.678	-27.69	-16.988	PASS
	11	2483.50	-48.834	-27.32	-21.514	PASS	
		24921.3	-44.932	-27.32	-17.612	PASS	

Note: input compensation coefficient (dB)= Cable Loss (dB)

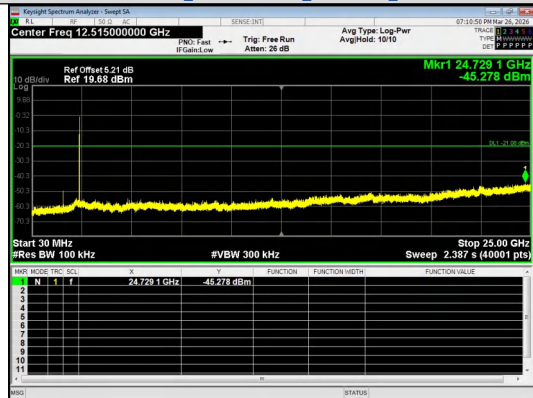
Test Graphs



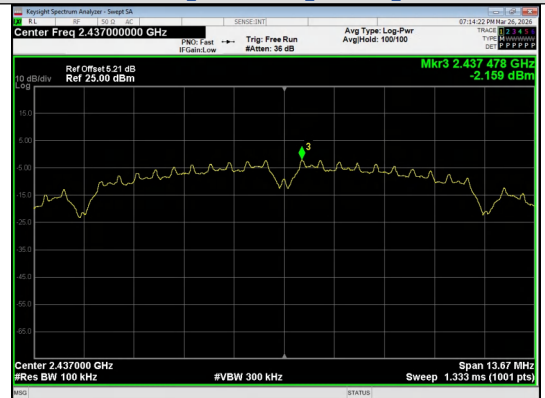
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



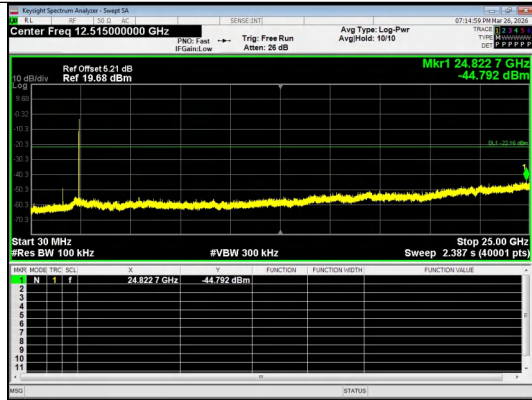
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



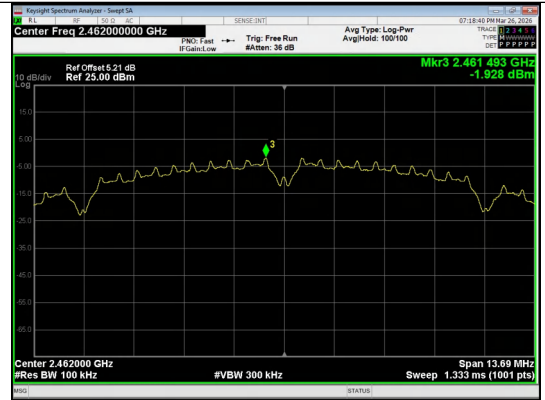
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



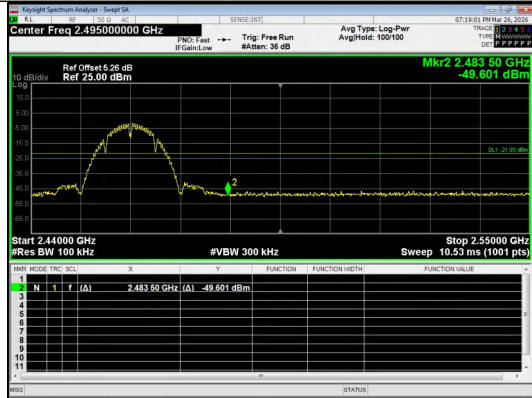
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



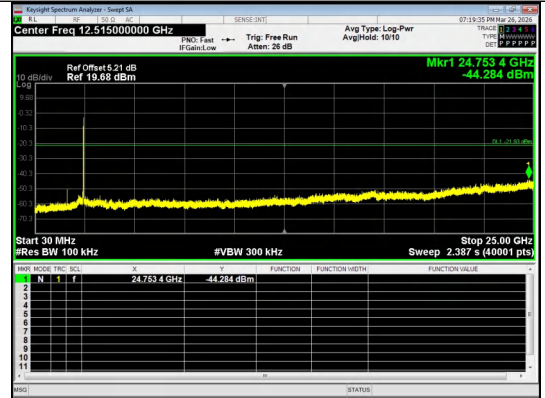
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



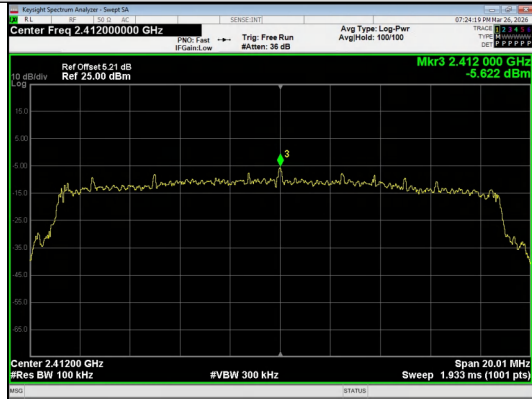
In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



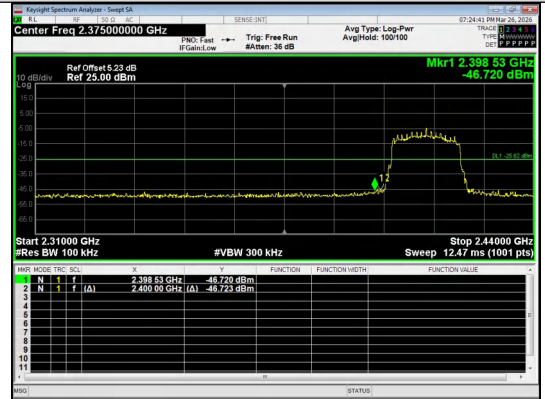
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



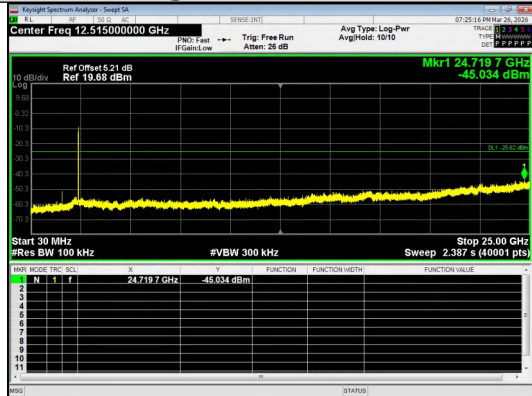
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



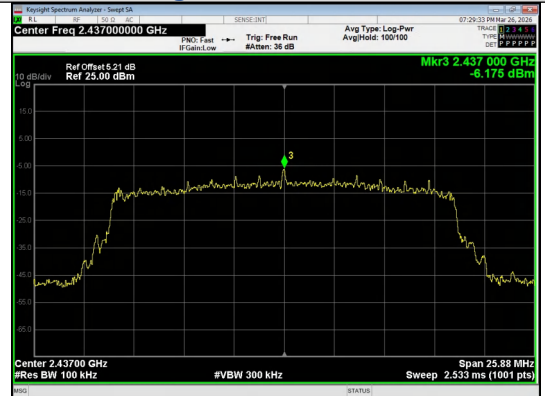
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



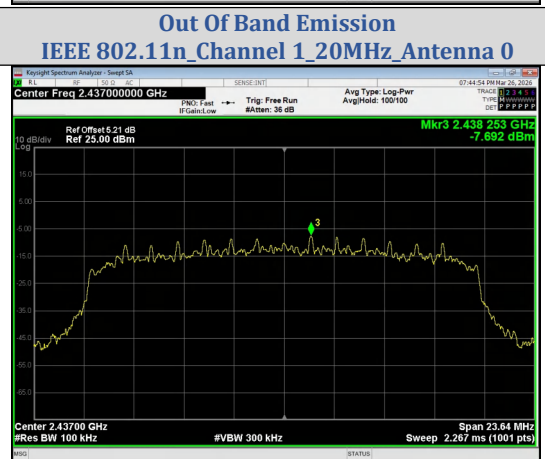
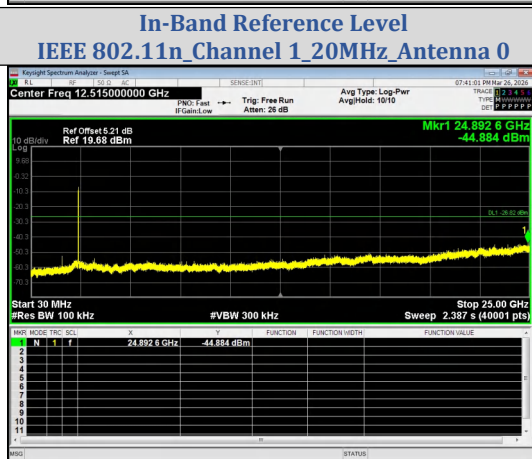
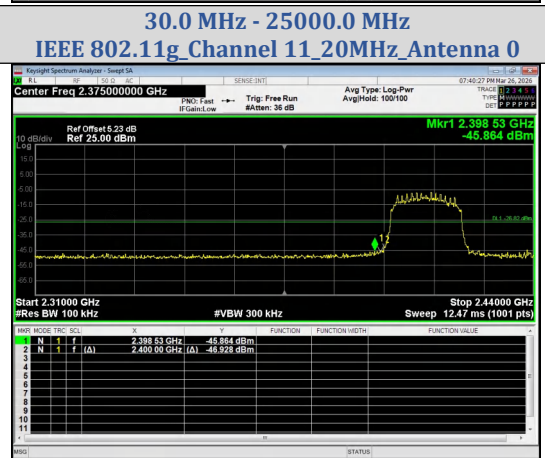
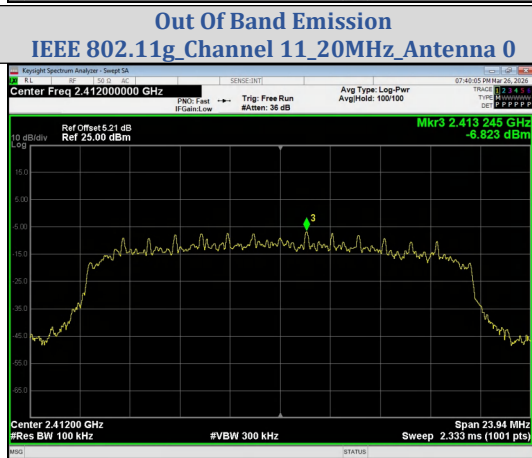
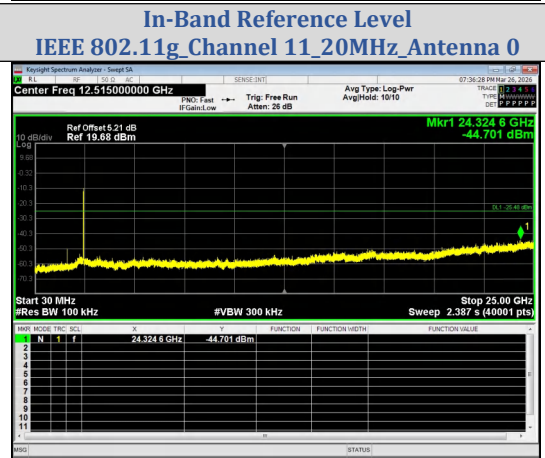
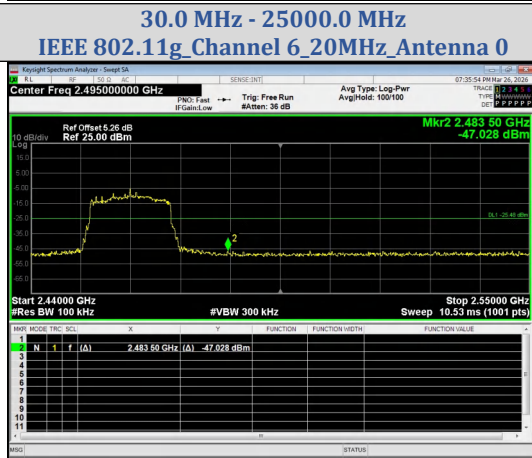
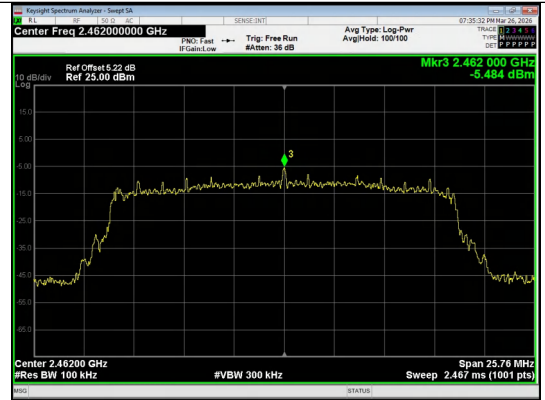
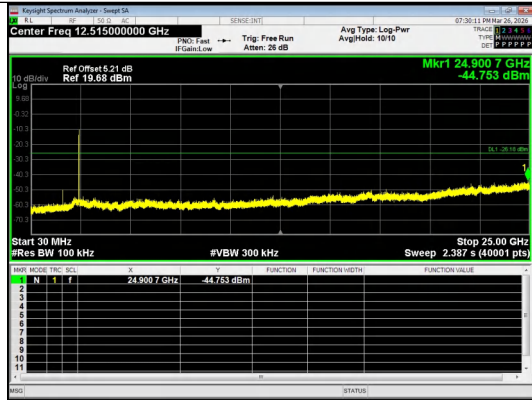
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0

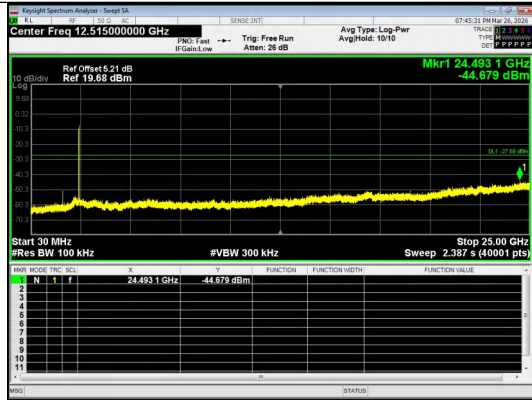


In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0

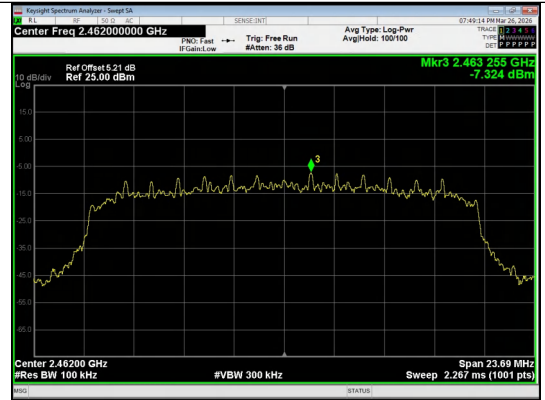


30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 1_20MHz_Antenna 0

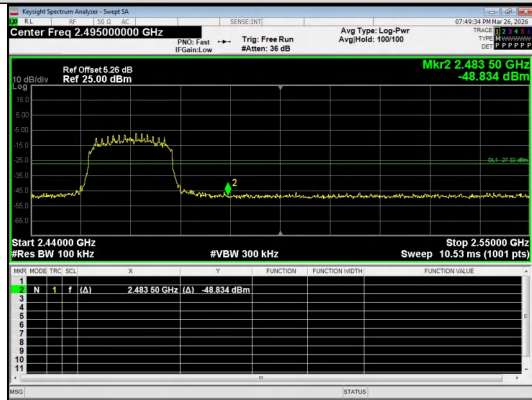
In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



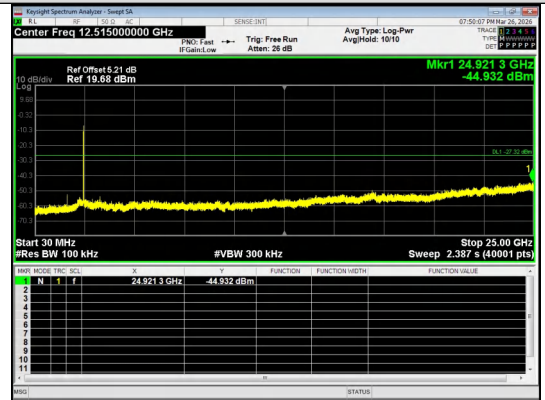
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



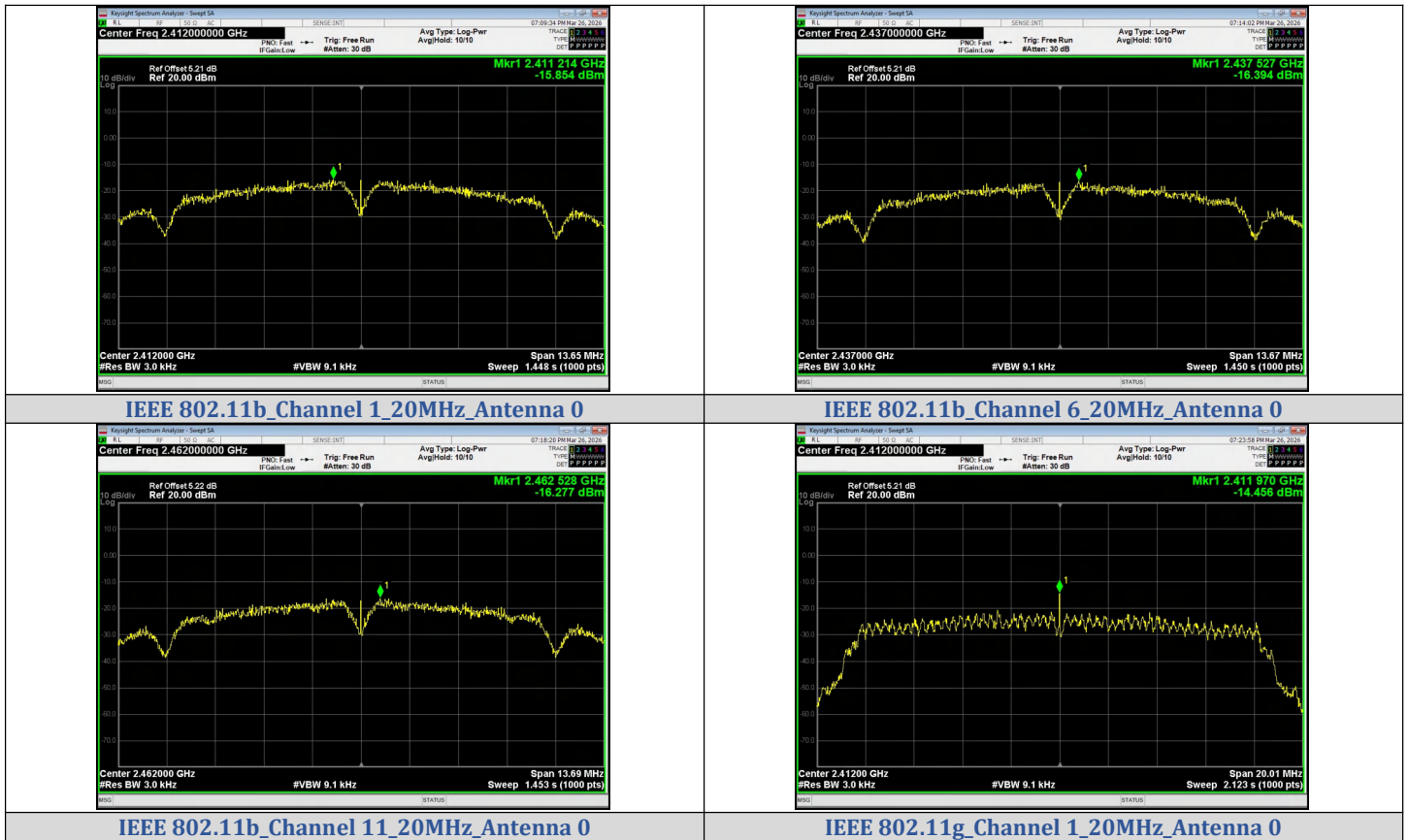
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0

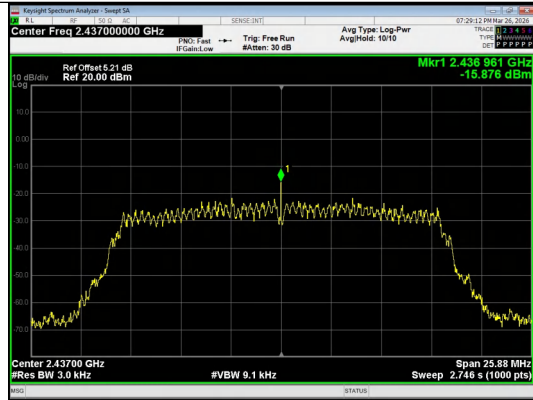
Power Spectral Density

Test Result

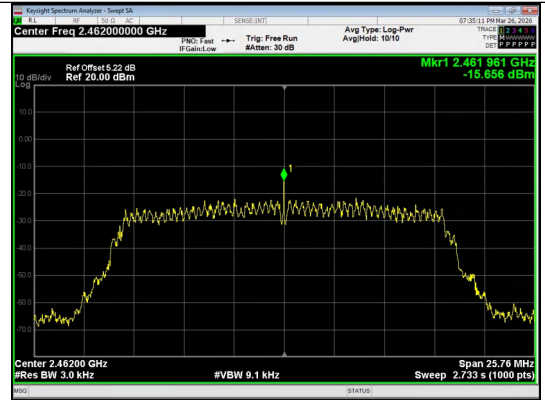
Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-15.850	≤8	PASS
	6	-16.390		PASS
	11	-16.280		PASS
IEEE 802.11g	1	-14.460		PASS
	6	-15.880		PASS
	11	-15.660		PASS
IEEE 802.11n_20	1	-16.740		PASS
	6	-17.910		PASS
	11	-17.680		PASS

Test Graphs

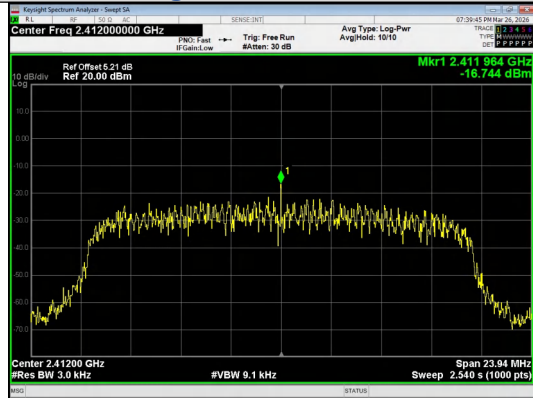




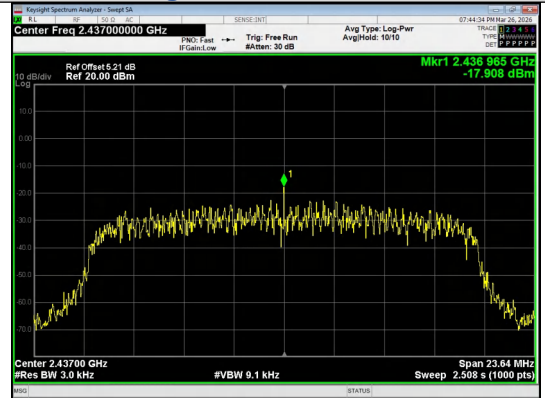
IEEE 802.11g_Channel 6_20MHz_Antenna 0



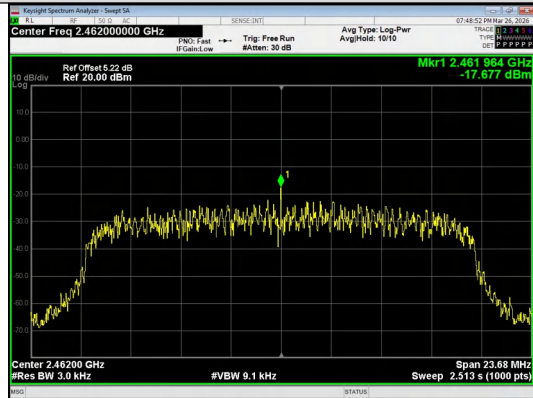
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0