

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	10.28	10.28	≤30	PASS
	6	10.72	10.72	≤30	PASS
	11	10.75	10.75	≤30	PASS
IEEE 802.11g	1	11.41	11.41	≤30	PASS
	6	11.73	11.73	≤30	PASS
	11	11.84	11.84	≤30	PASS
IEEE 802.11n_20	1	11.33	11.33	≤30	PASS
	6	11.24	11.24	≤30	PASS
	11	11.37	11.37	≤30	PASS

ISED EIRP

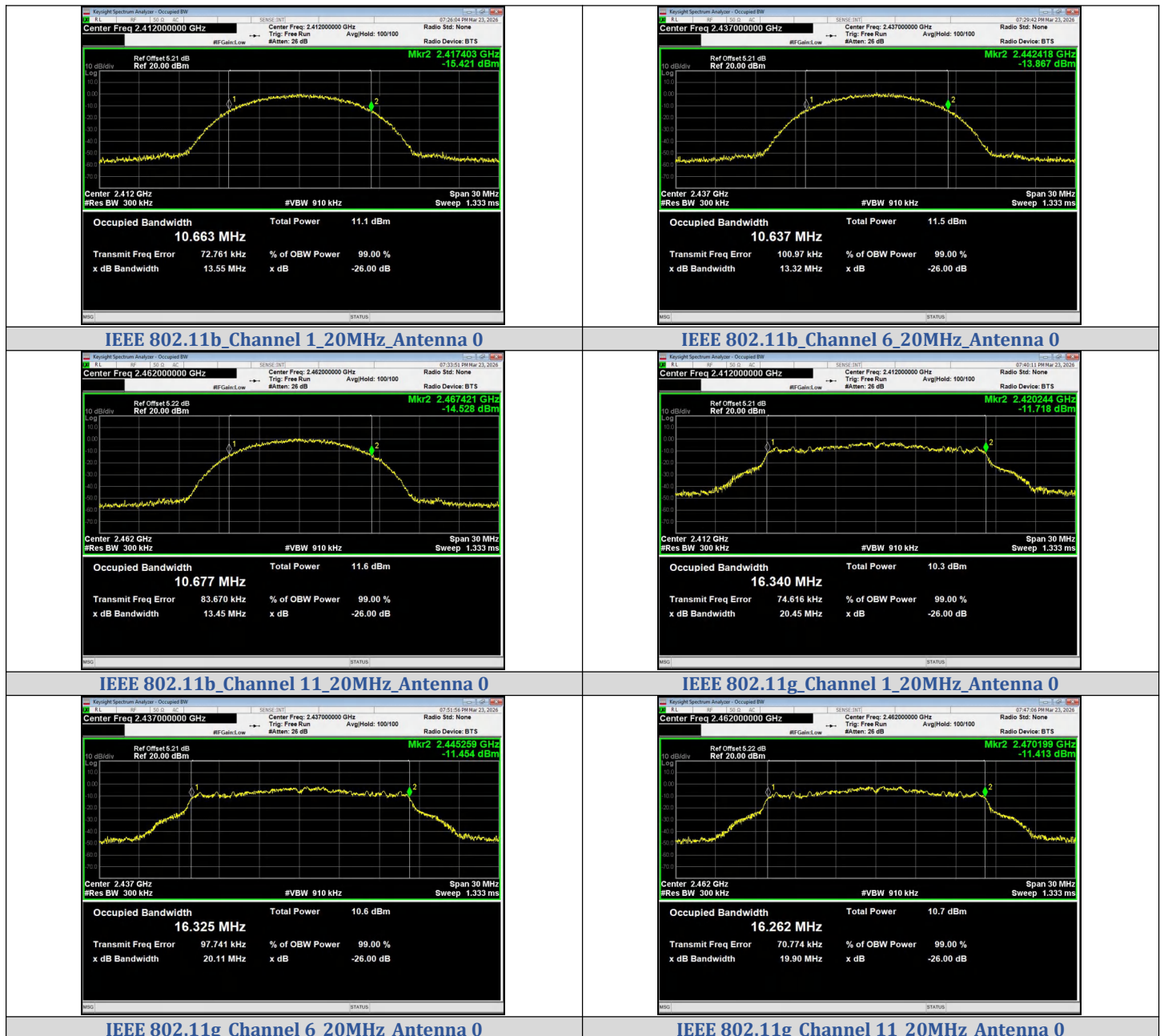
Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	14.28	≤36.02	PASS
	6	14.72	≤36.02	PASS
	11	14.75	≤36.02	PASS
IEEE 802.11g	1	15.41	≤36.02	PASS
	6	15.73	≤36.02	PASS
	11	15.84	≤36.02	PASS
IEEE 802.11n_20	1	15.33	≤36.02	PASS
	6	15.24	≤36.02	PASS
	11	15.37	≤36.02	PASS

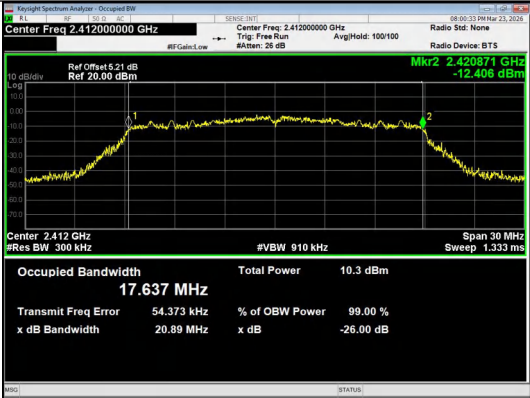
Note:

1.ANT Gain: 4 dBi, EIRP=Output Power+ANT Gain

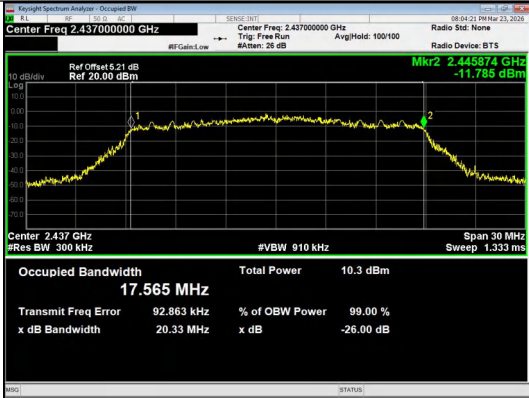
99% Bandwidth**Test Result**

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	0	2412	10.663
	6		2437	10.637
	11		2462	10.677
IEEE 802.11g	1		2412	16.340
	6		2437	16.325
	11		2462	16.262
IEEE 802.11n_20	1		2412	17.637
	6		2437	17.565
	11		2462	17.512

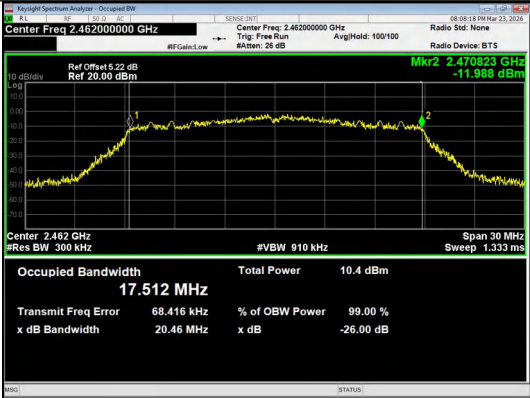
Test Graphs



IEEE 802.11n_Channel 1_20MHz_Antenna 0



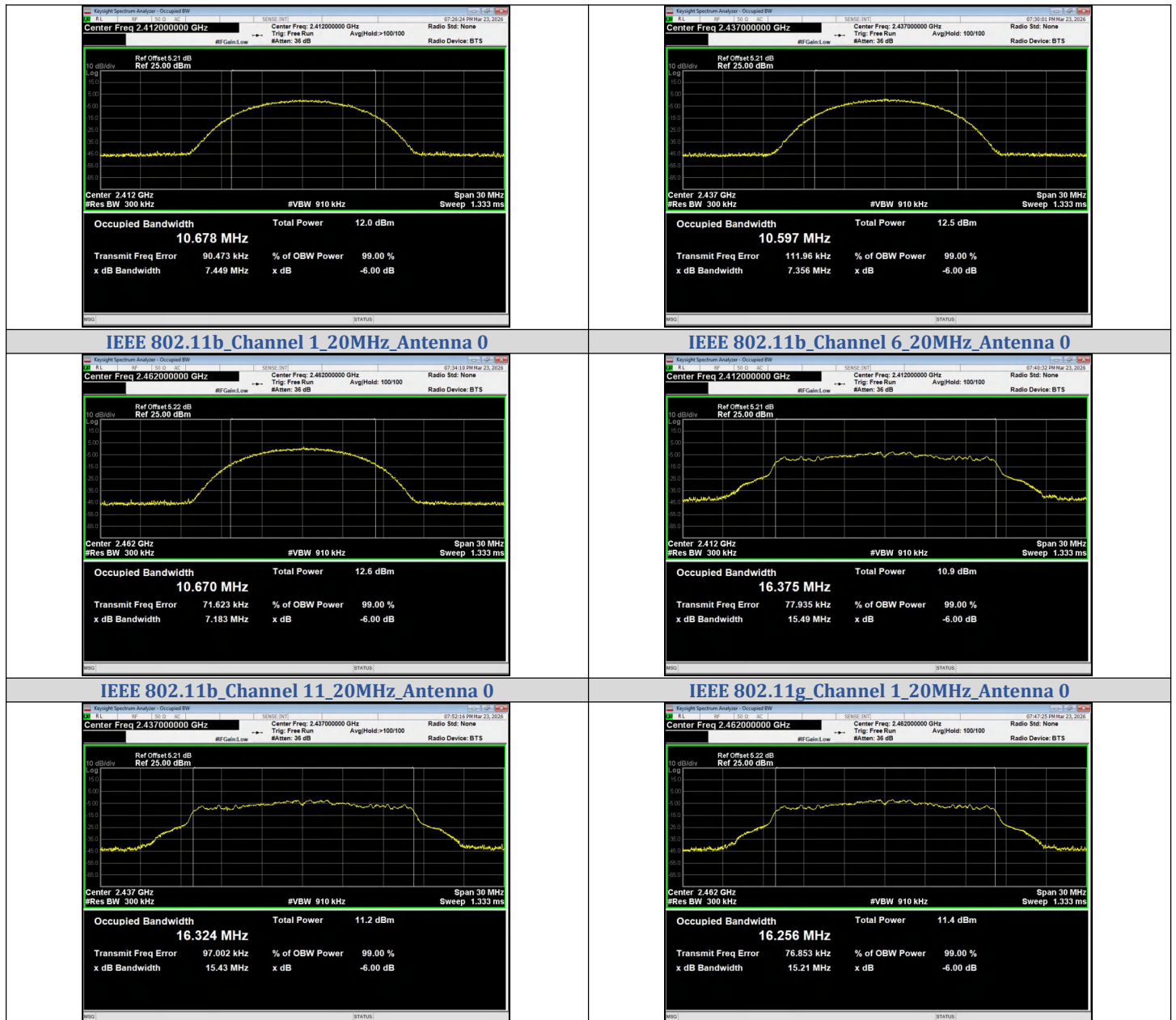
IEEE 802.11n_Channel 6_20MHz_Antenna 0



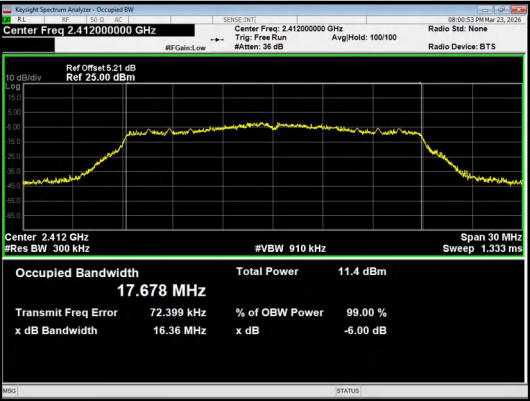
IEEE 802.11n_Channel 11_20MHz_Antenna 0

6dB Bandwidth**Test Result**

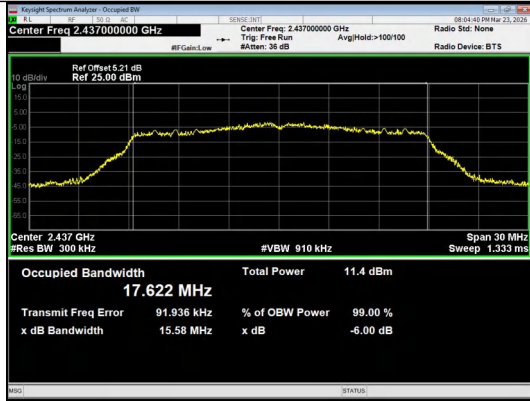
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	7.449	≥0.5	PASS
	6		2437	7.356		PASS
	11		2462	7.183		PASS
IEEE 802.11g	1		2412	15.49		PASS
	6		2437	15.43		PASS
	11		2462	15.21		PASS
IEEE 802.11n_20	1		2412	16.36		PASS
	6		2437	15.58		PASS
	11		2462	15.13		PASS

Test Graphs

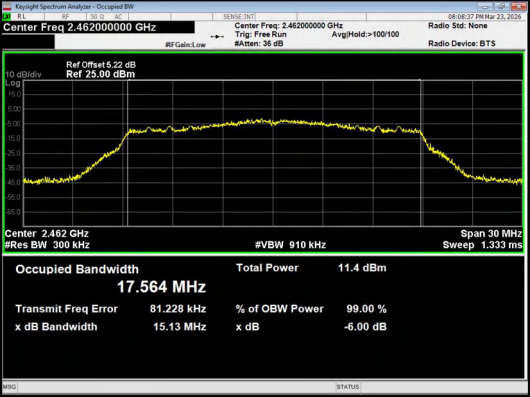
IEEE 802.11g_Channel 6_20MHz_Antenna 0



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

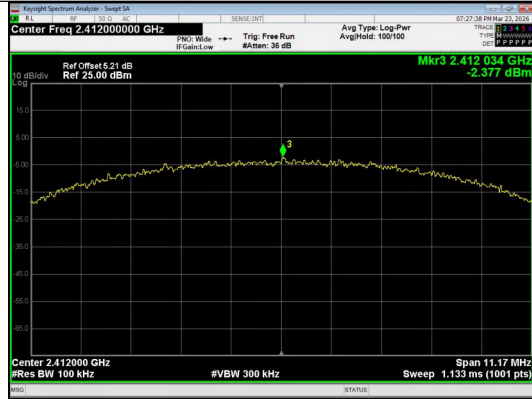
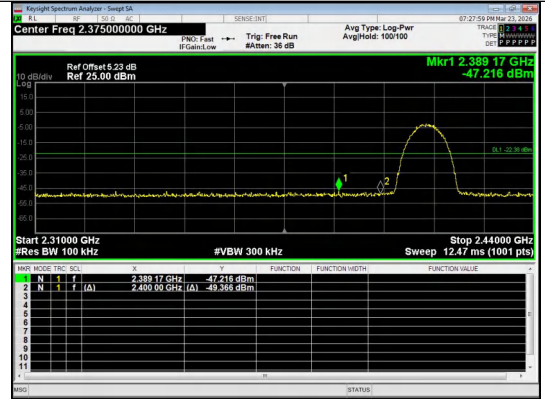
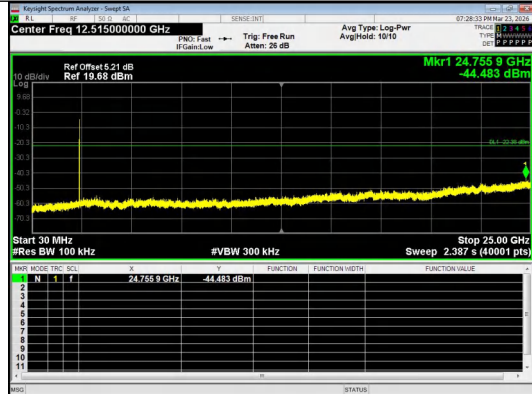
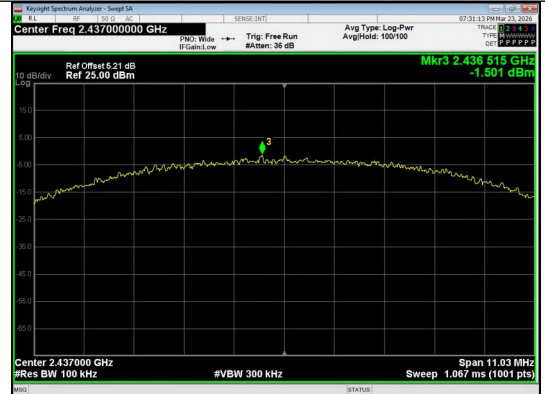
Conducted Spurious & Band Edge Emission

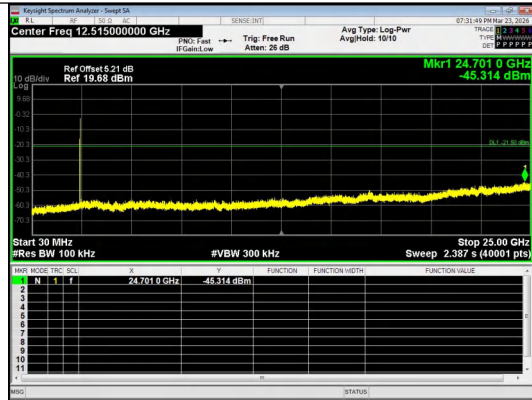
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	
IEEE 802.11b	1	0	2389.17	-47.216	-22.38	-24.836	PASS	
			2400.00	-49.366	-22.38	-26.986	PASS	
			24755.9	-44.483	-22.38	-22.103	PASS	
	6		24701.0	-45.314	-21.5	-23.814	PASS	
			11	2483.50	-49.786	-21.89	-27.896	PASS
				24688.5	-45.020	-21.89	-23.130	PASS
IEEE 802.11g	1			2396.97	-43.873	-25.69	-18.183	PASS
			2400.00	-45.868	-25.69	-20.178	PASS	
			24701.6	-44.405	-25.69	-18.715	PASS	
	6		24815.8	-44.776	-25.26	-19.516	PASS	
			11	2483.50	-49.080	-24.94	-24.140	PASS
				24815.2	-45.061	-24.94	-20.121	PASS
IEEE 802.11n_20	1			2398.01	-44.316	-26.05	-18.266	PASS
			2400.00	-44.566	-26.05	-18.516	PASS	
			24716.0	-45.001	-26.05	-18.951	PASS	
	6		24969.4	-45.333	-25.29	-20.043	PASS	
			11	2483.50	-49.252	-25.19	-24.062	PASS
				24582.4	-45.176	-25.19	-19.986	PASS

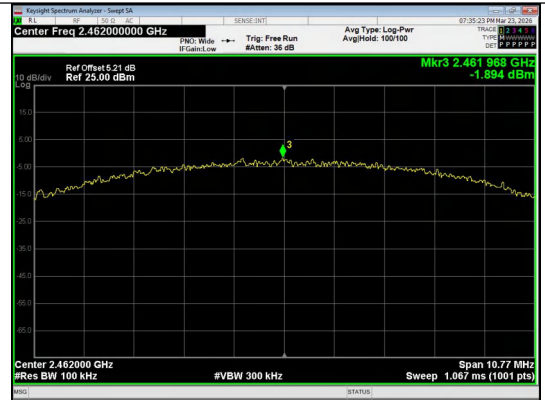
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

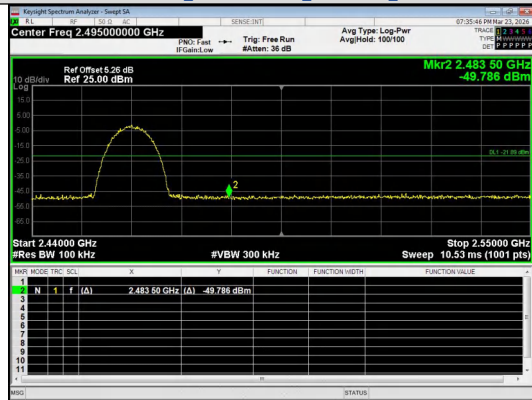
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 030.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



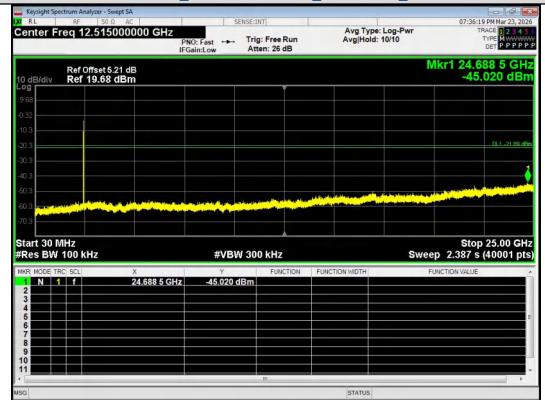
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



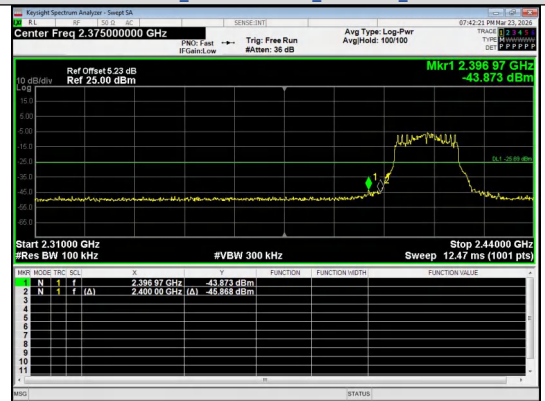
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



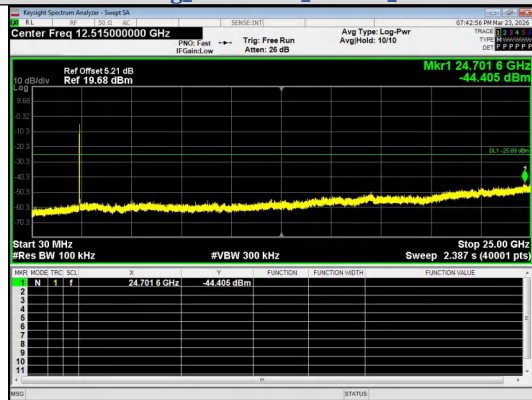
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



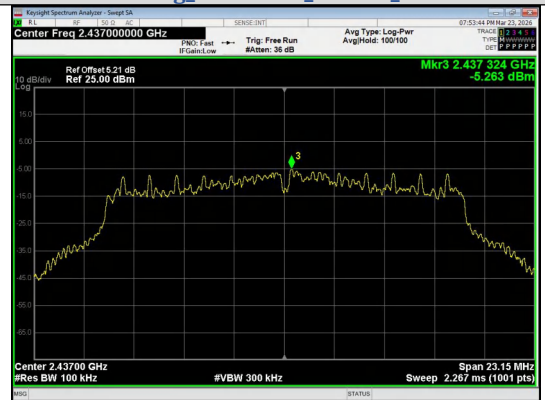
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



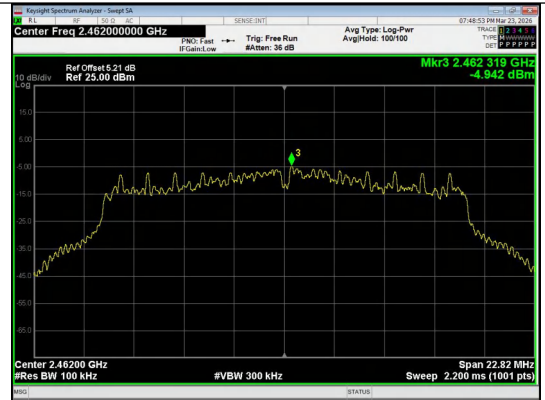
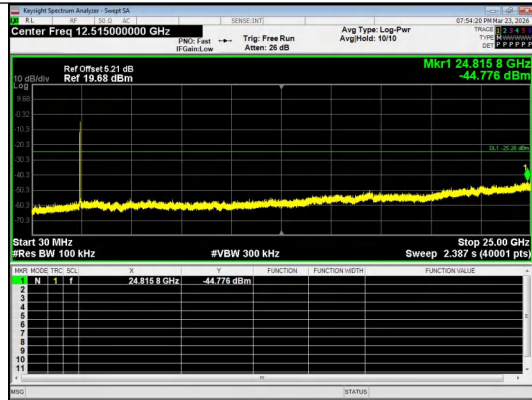
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



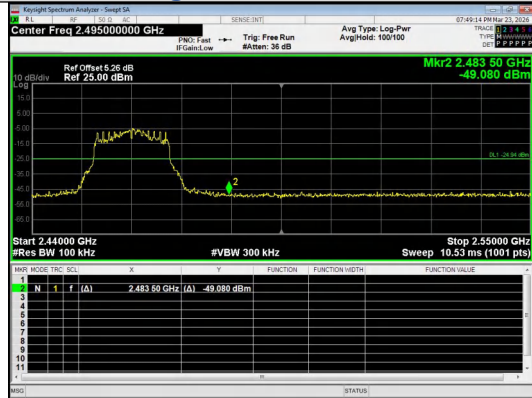
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0



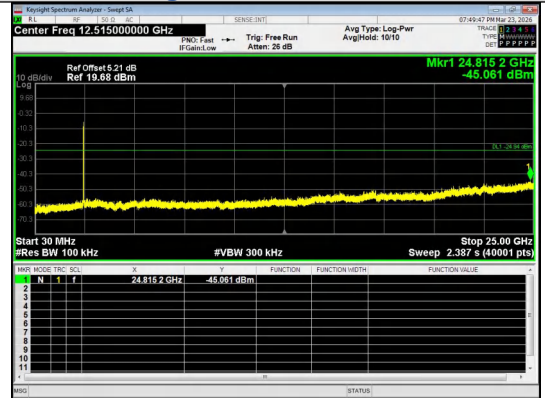
In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



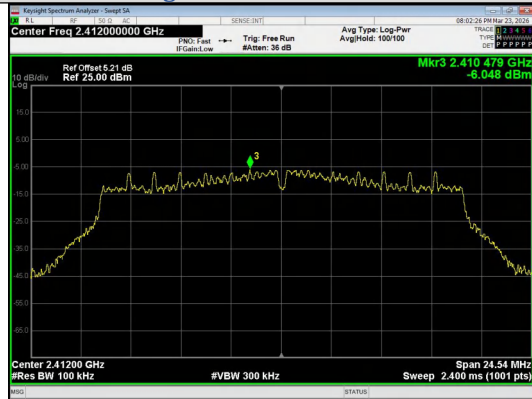
30.0 MHz - 25000.0 MHz
IEEE 802.11g Channel 6_20MHz_Antenna 0



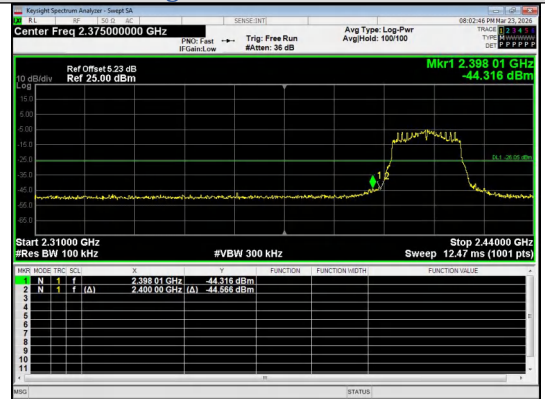
In-Band Reference Level
IEEE 802.11g Channel 11_20MHz_Antenna 0



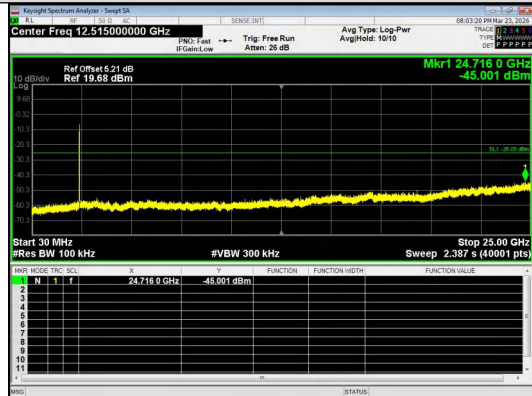
Out Of Band Emission
IEEE 802.11g Channel 11_20MHz_Antenna 0



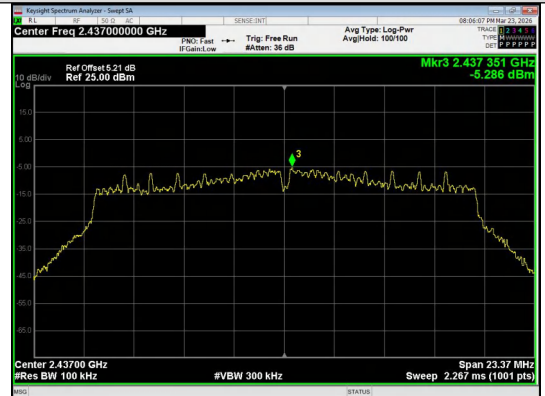
30.0 MHz - 25000.0 MHz
IEEE 802.11g Channel 11_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n Channel 1_20MHz_Antenna 0

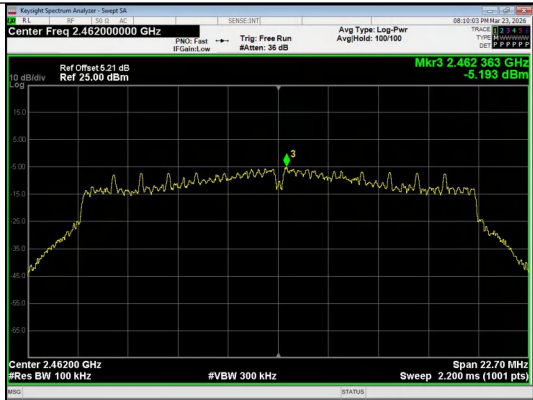
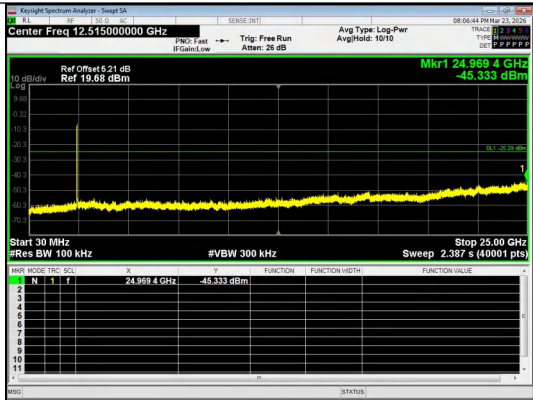


Out Of Band Emission
IEEE 802.11n Channel 1_20MHz_Antenna 0



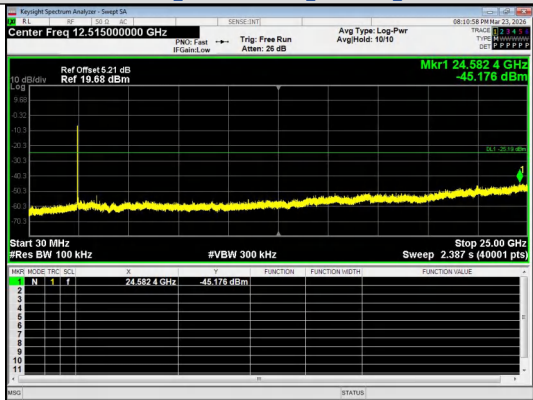
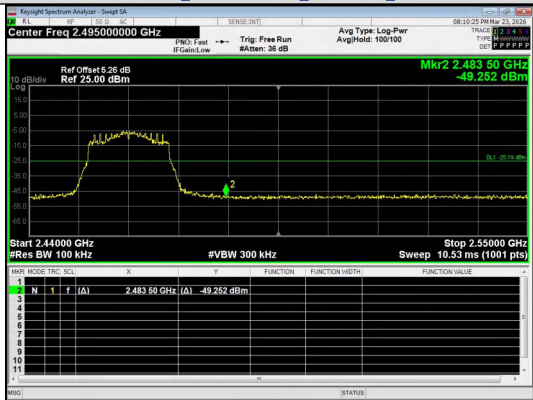
30.0 MHz - 25000.0 MHz
IEEE 802.11n Channel 1_20MHz_Antenna 0

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

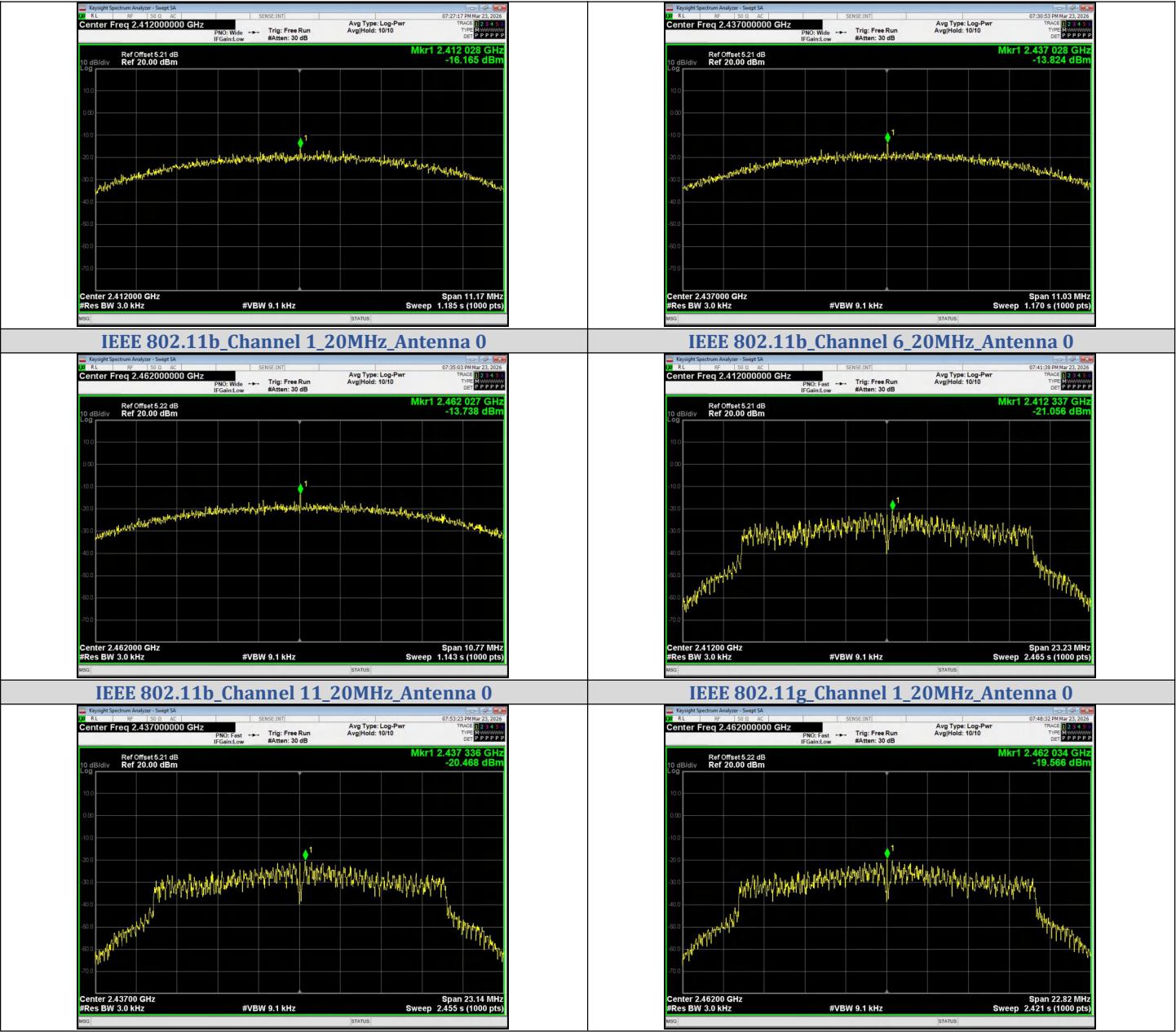
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0

Power Spectral Density

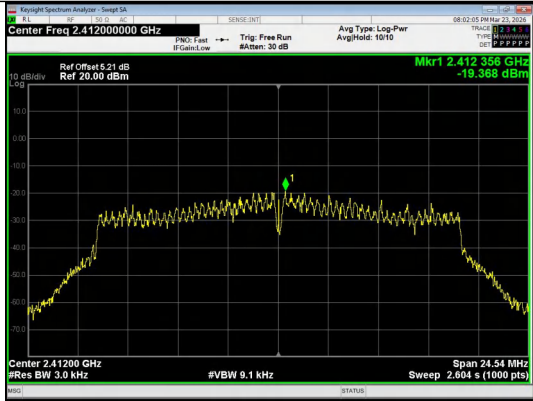
Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-16.160	≤8	PASS
	6	-13.820		PASS
	11	-13.740		PASS
IEEE 802.11g	1	-21.060		PASS
	6	-20.470		PASS
	11	-19.570		PASS
IEEE 802.11n_20	1	-19.370		PASS
	6	-19.430		PASS
	11	-18.630		PASS

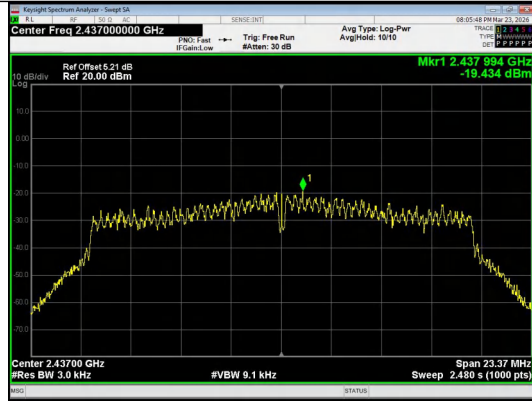
Test Graphs



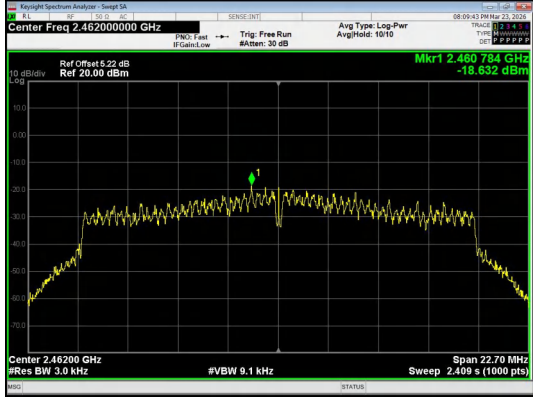
IEEE 802.11g_Channel 6_20MHz_Antenna 0



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

