

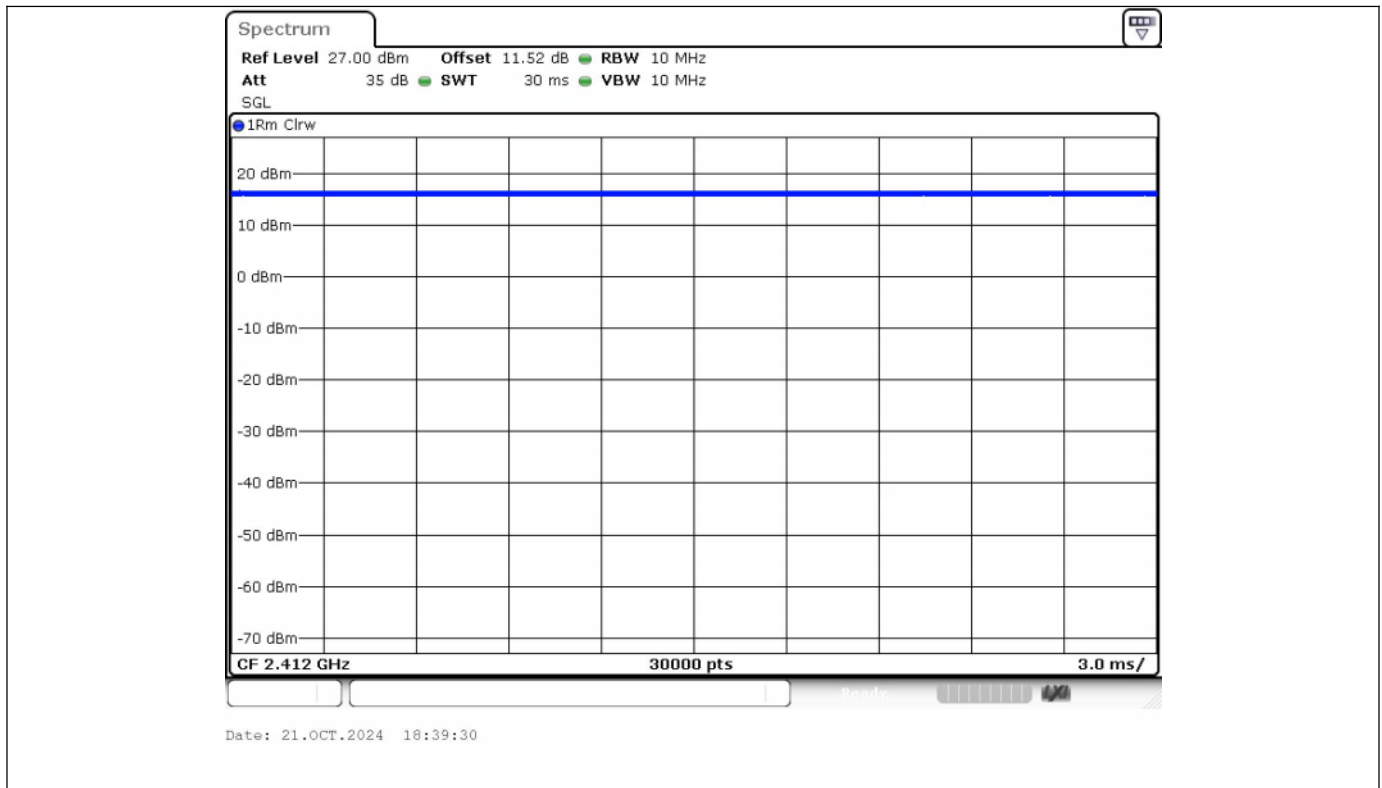
Appendix A

Report No.:	CISRR24101103801
FCC ID:	2BLPG-DX-WF24
Product Name:	WiFi module
Model No.:	DX-WF24
Test Engineer:	Mark Fu
Supervised by:	Rory Huang

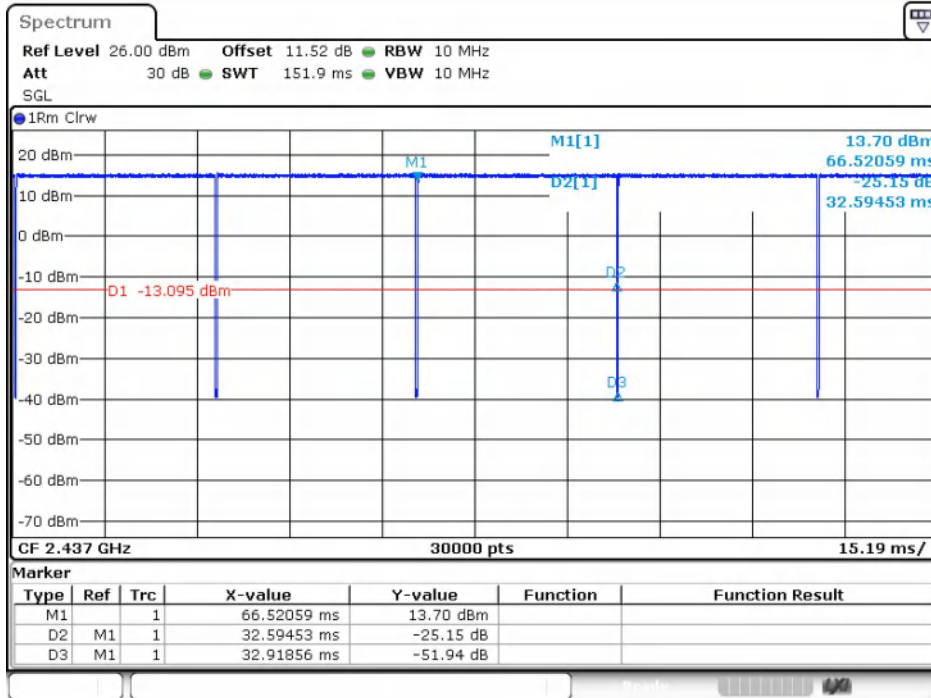
Test Result

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	30.000	30.000	100	1	0.0	0.03
		6		32.595	32.919	99.02	0.9902	0.0428	0.03
		11		32.589	32.919	99.00	0.9900	0.0436	0.03
IEEE 802.11g		1		5.441	5.492	99.06	0.9906	0.041	0.18
		6		5.441	5.492	99.06	0.9906	0.041	0.18
		11		5.441	5.492	99.06	0.9906	0.041	0.18
IEEE 802.11n_20	MCS 0	1		0.539	0.545	98.75	0.9875	0.0546	1.86
		6		0.538	0.545	98.75	0.9875	0.0546	1.86
		11		0.539	0.545	98.75	0.9875	0.0546	1.86

Test Graphs

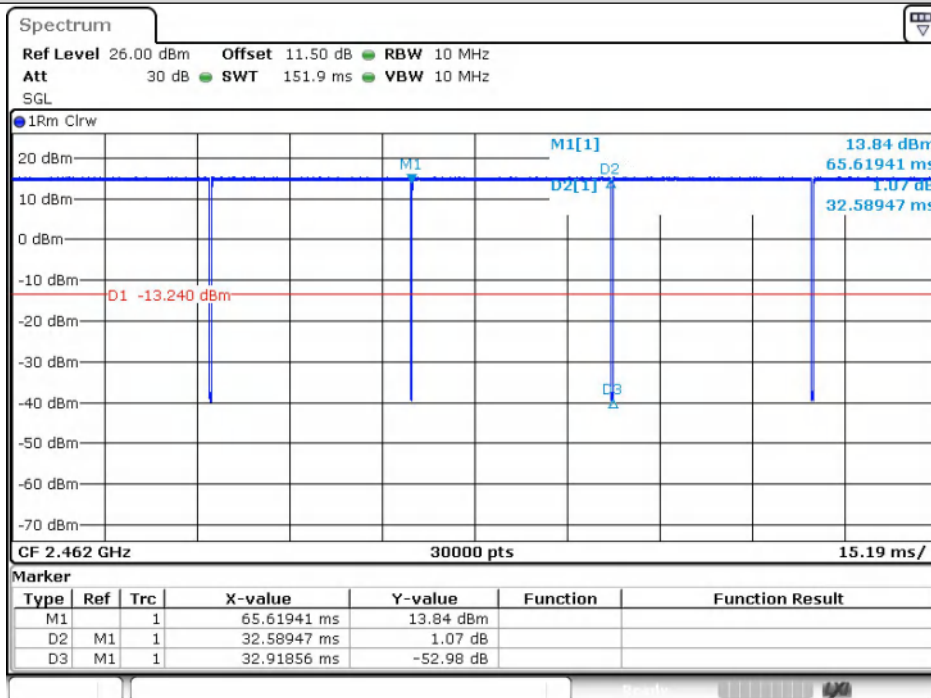


IEEE 802.11b_20MHz_Channel 1



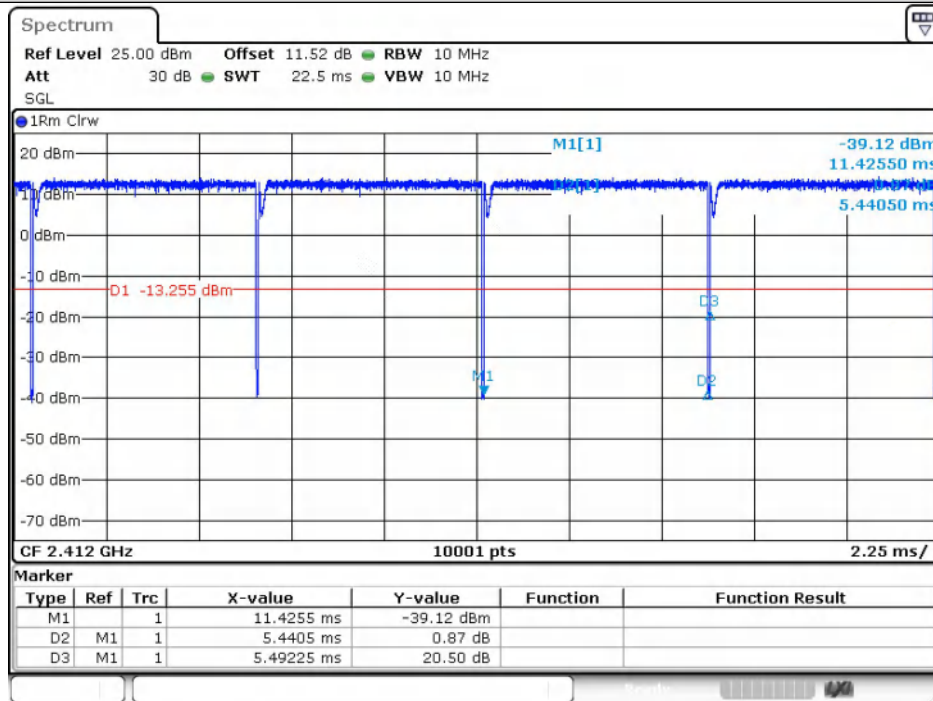
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IEEE 802.11b_20MHz_Channel 6



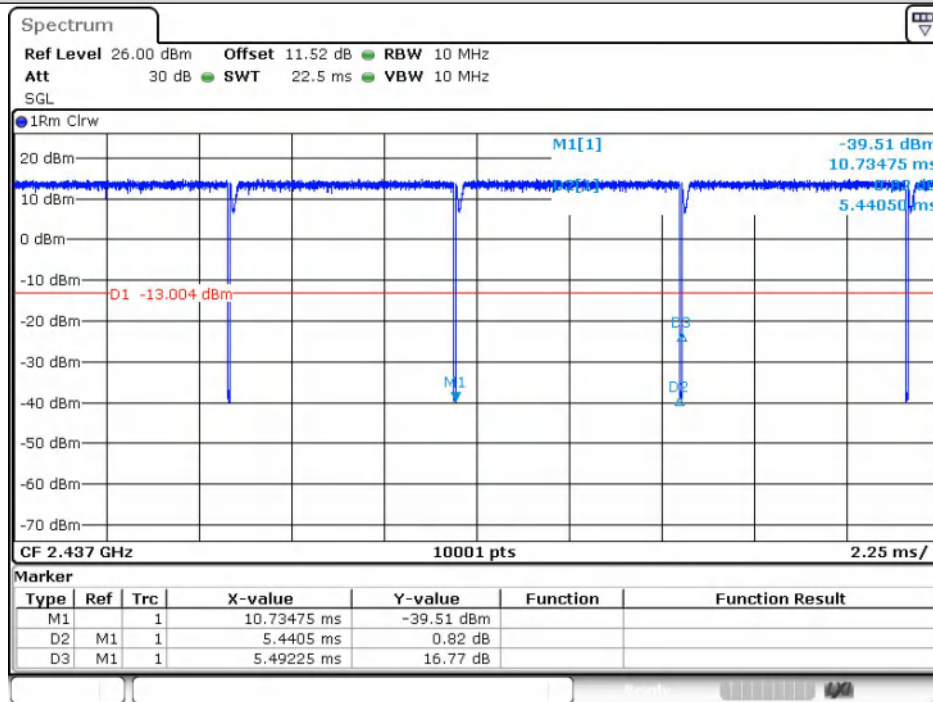
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IEEE 802.11b_20MHz_Channel 11



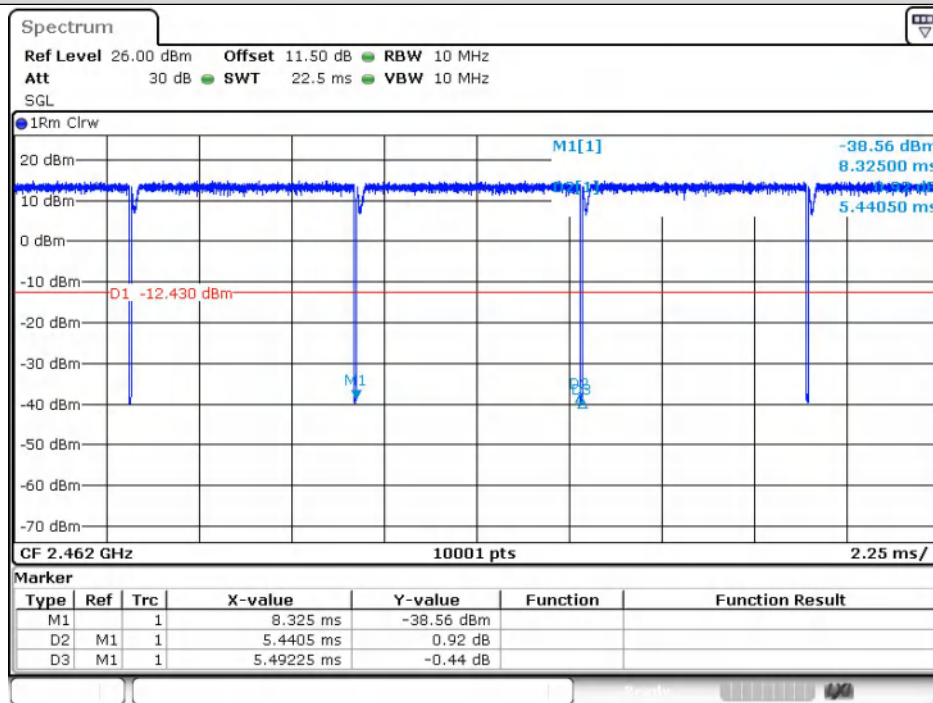
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IEEE 802.11g_20MHz_Channel 1



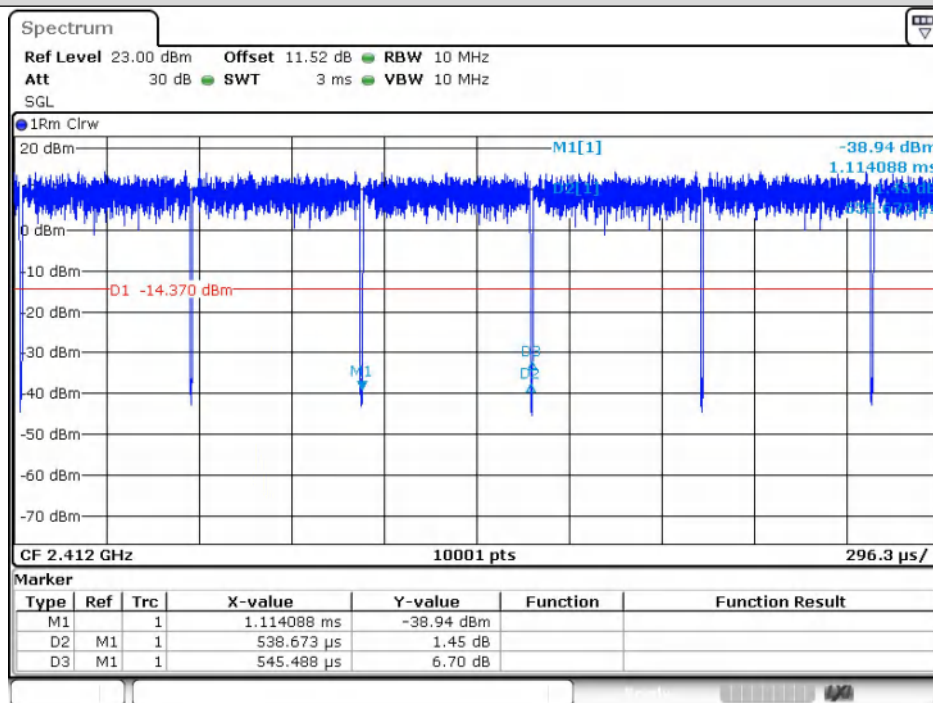
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IEEE 802.11g_20MHz_Channel 6



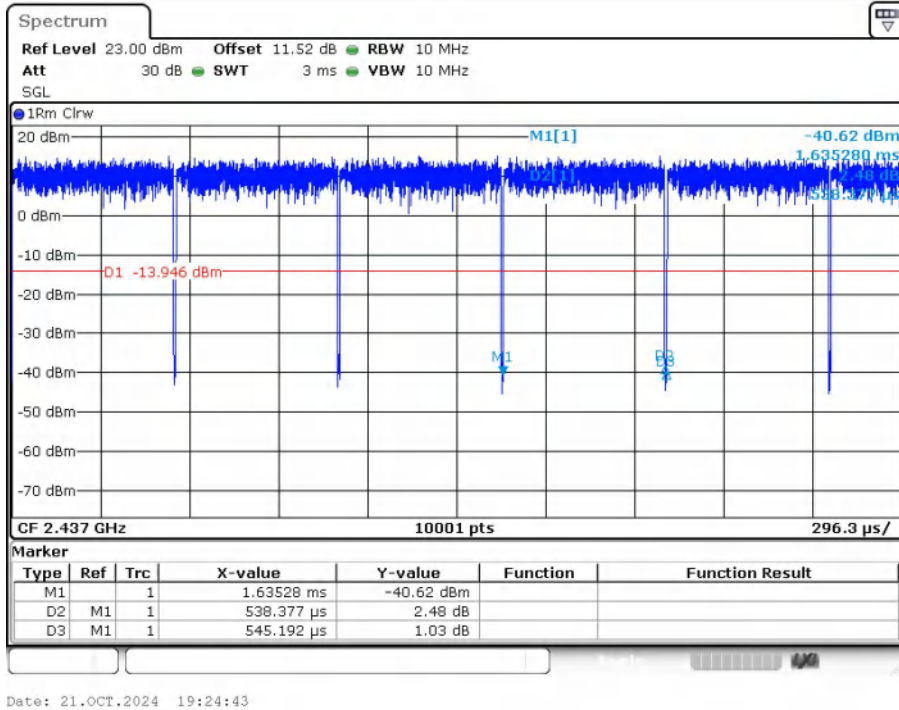
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IEEE 802.11g_20MHz_Channel 11

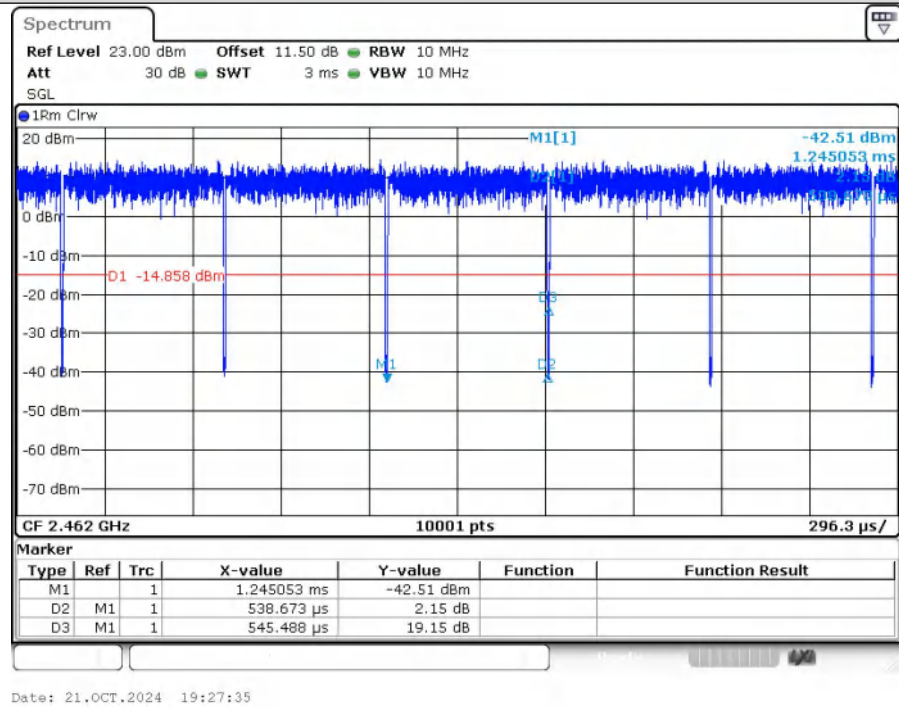


Date: 21.OCT.2024 19:21:36

IEEE 802.11n_20MHz_Channel 1



IEEE 802.11n_20MHz_Channel 6



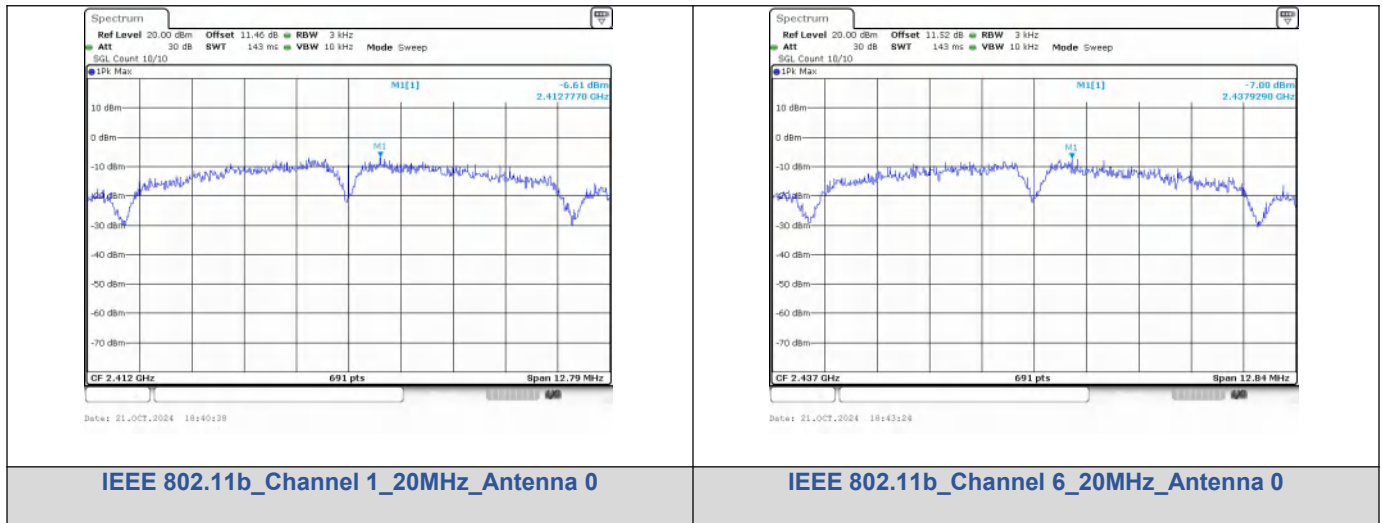
IEEE 802.11n_20MHz_Channel 11

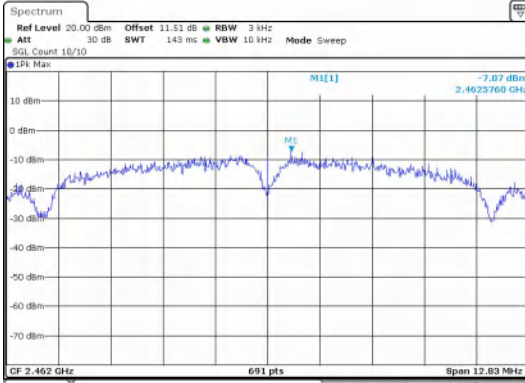
Power Spectral Density

Test Result

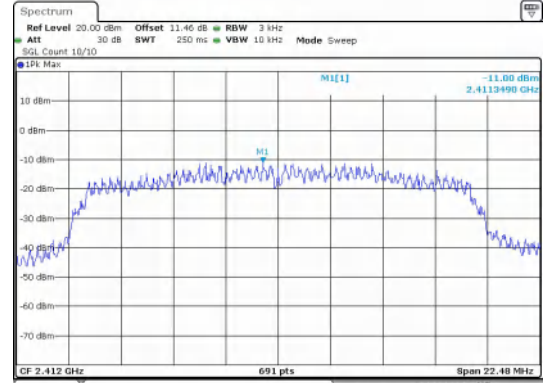
Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-6.61	≤8	PASS
	6	-7.00		PASS
	11	-7.07		PASS
IEEE 802.11g	1	-11.00		PASS
	6	-10.49		PASS
	11	-9.61		PASS
IEEE 802.11n_20	1	-12.38		PASS
	6	-11.61		PASS
	11	-12.57		PASS

Test Graphs

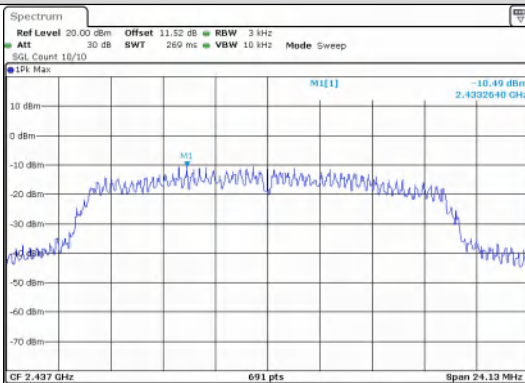




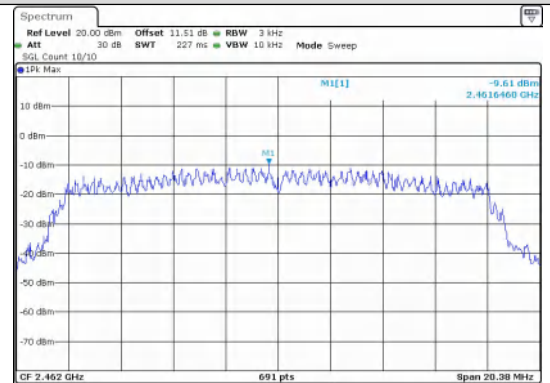
IEEE 802.11b_Channel 11_20MHz_Antenna 0



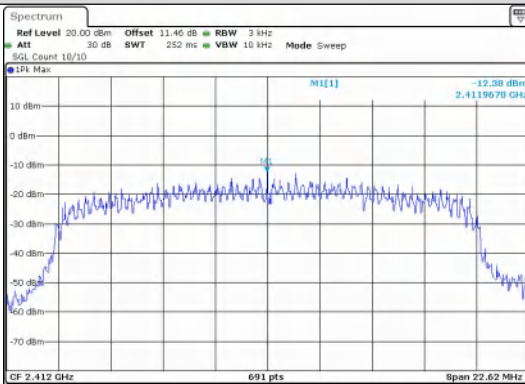
IEEE 802.11g_Channel 1_20MHz_Antenna 0



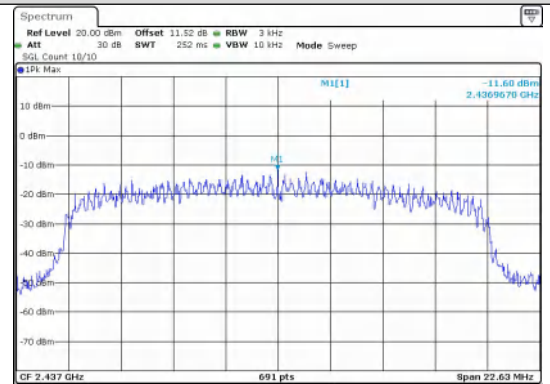
IEEE 802.11g_Channel 6_20MHz_Antenna 0



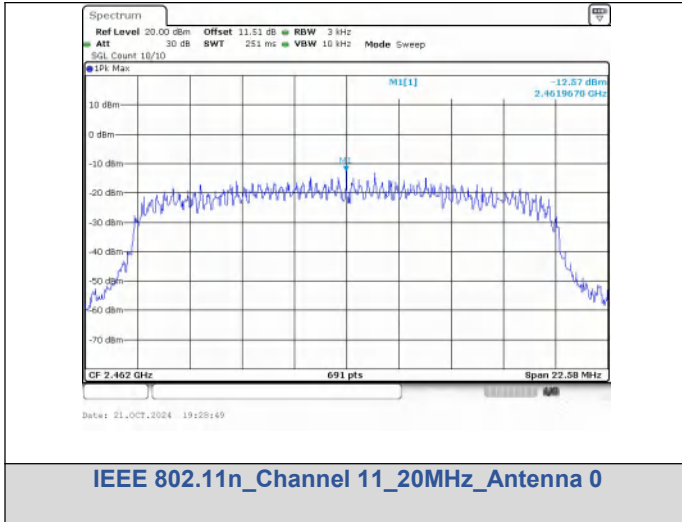
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



Conducted Peak Output Power

Test Result

Conducted Output Power

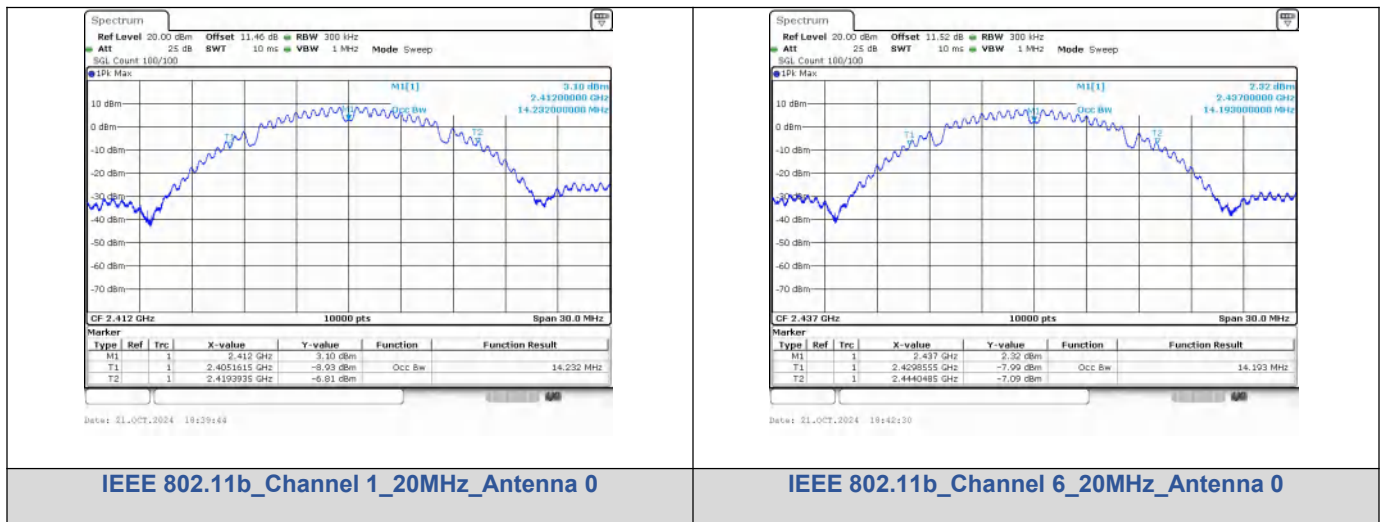
Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	19.08	≤30	PASS
	6	18.12	≤30	PASS
	11	18.07	≤30	PASS
IEEE 802.11g	1	18.81	≤30	PASS
	6	18.94	≤30	PASS
	11	18.49	≤30	PASS
IEEE 802.11n_20	1	18.87	≤30	PASS
	6	19.94	≤30	PASS
	11	18.76	≤30	PASS

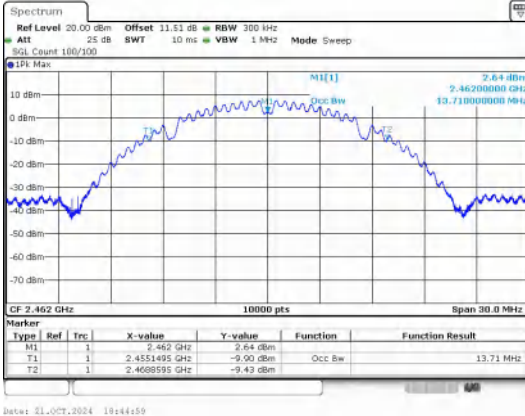
99% Bandwidth

Test Result

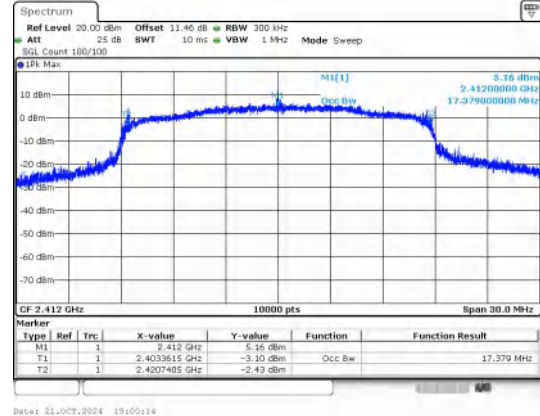
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	0	2412	14.232
	6		2437	14.193
	11		2462	13.710
IEEE 802.11g	1		2412	17.379
	6		2437	17.409
	11		2462	17.253
IEEE 802.11n_20	1		2412	17.724
	6		2437	17.709
	11		2462	17.751

Test Graphs

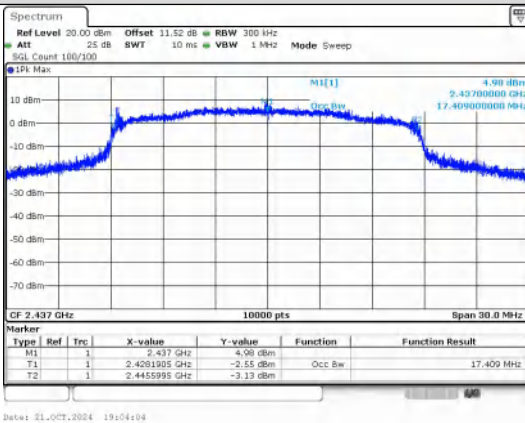




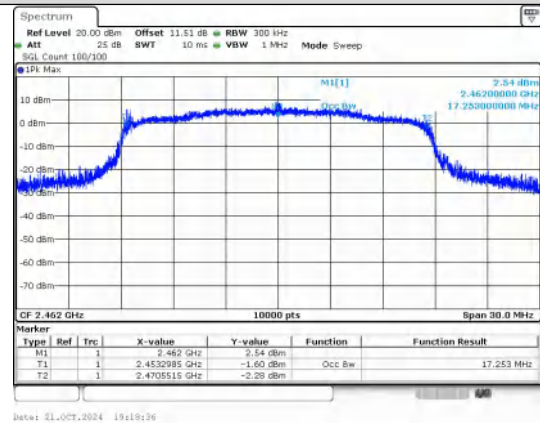
IEEE 802.11b_Channel 11_20MHz_Antenna 0



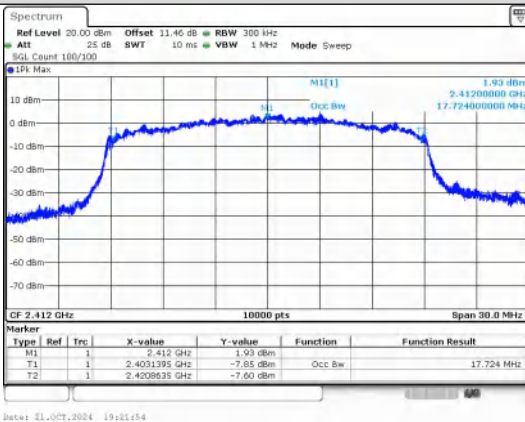
IEEE 802.11g_Channel 1_20MHz_Antenna 0



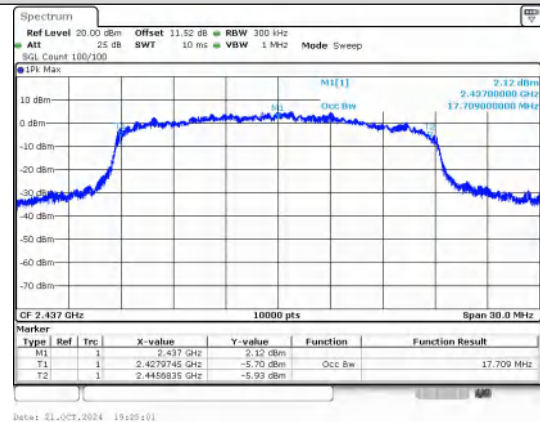
IEEE 802.11g_Channel 6_20MHz_Antenna 0



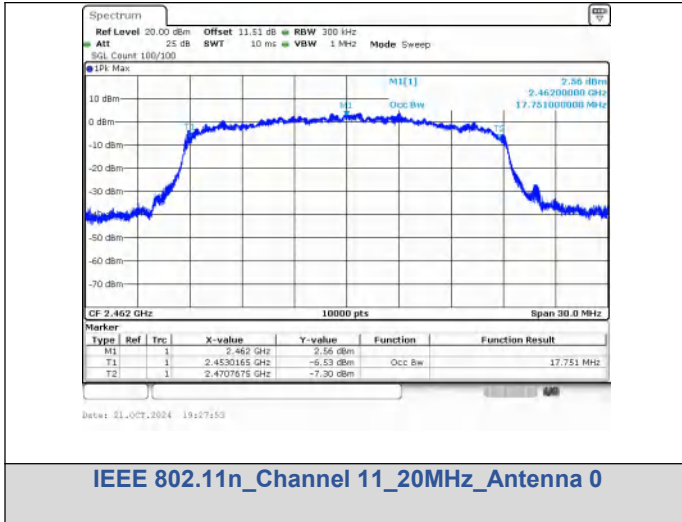
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0

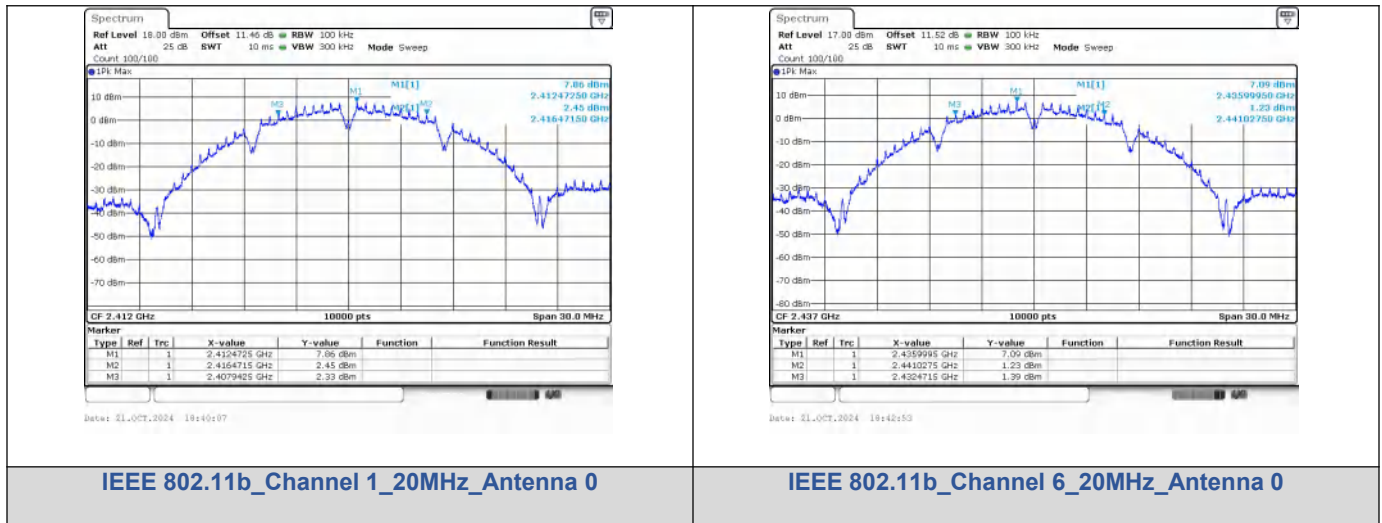


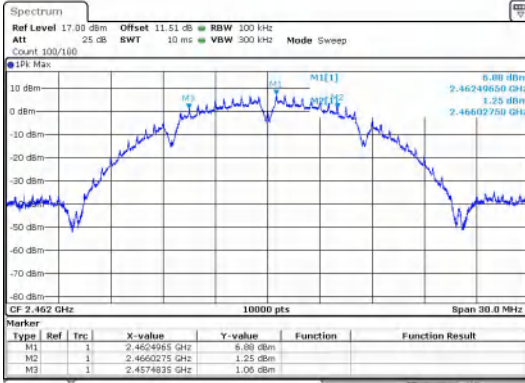
6dB Bandwidth

Test Result

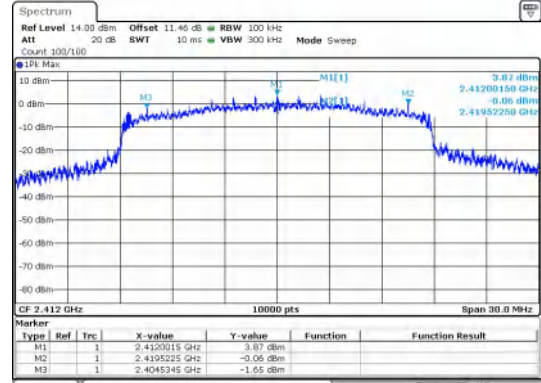
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	8.530	≥0.5	PASS
	6		2437	8.560		PASS
	11		2462	8.550		PASS
IEEE 802.11g	1		2412	14.99		PASS
	6		2437	16.09		PASS
	11		2462	13.59		PASS
IEEE 802.11n_20	1		2412	15.08		PASS
	6		2437	15.09		PASS
	11		2462	15.05		PASS

Test Graphs

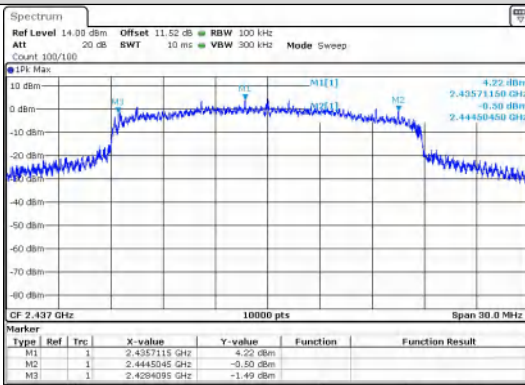




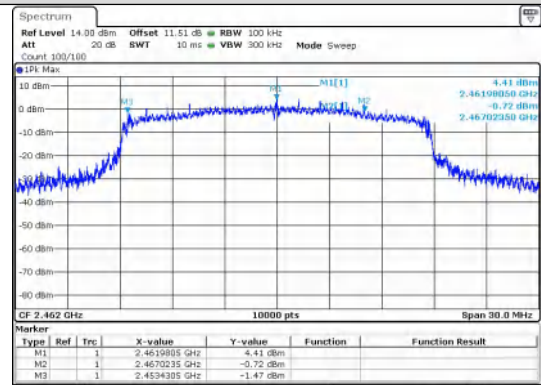
IEEE 802.11b_Channel 11_20MHz_Antenna 0



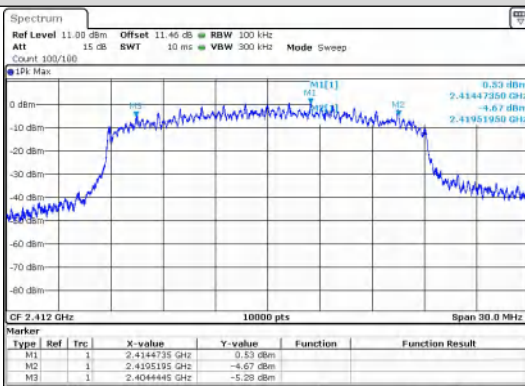
IEEE 802.11g_Channel 1_20MHz_Antenna 0



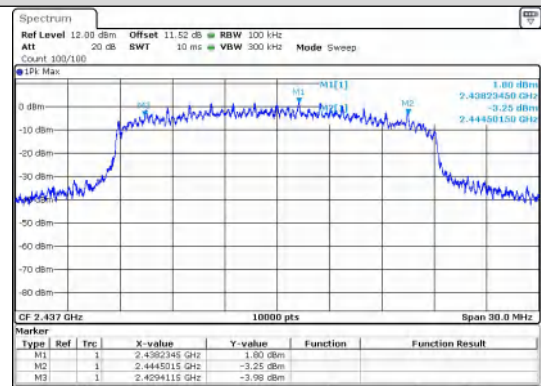
IEEE 802.11g_Channel 6_20MHz_Antenna 0



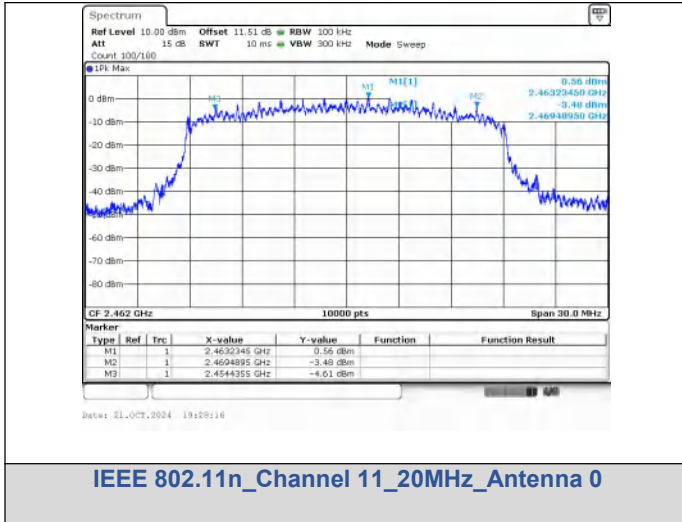
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0

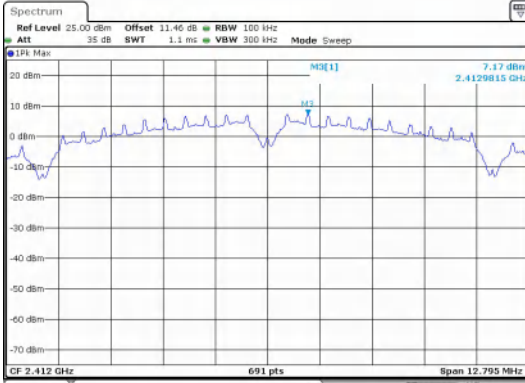


Conducted Out Of Band Emission

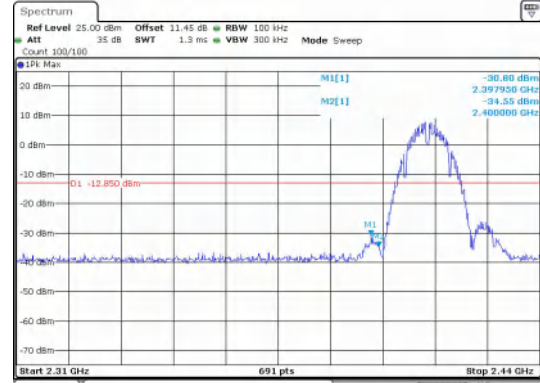
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2397.95	-30.803	-12.85	-17.953	PASS
			2400.00	-34.545	-12.85	-21.695	PASS
			6923.80	-42.893	-12.85	-30.043	PASS
	6		4873.76	-41.437	-12.75	-28.687	PASS
	11		2483.50	-38.149	-12.99	-25.159	PASS
			22041.5	-42.564	-12.99	-29.574	PASS
IEEE 802.11g	1		2398.52	-26.841	-15.98	-10.861	PASS
			2400.00	-27.238	-15.98	-11.258	PASS
			6890.50	-42.351	-15.98	-26.371	PASS
	6		6893.00	-43.089	-16.54	-26.549	PASS
	11		2483.50	-36.976	-15.52	-21.456	PASS
			6898.00	-42.827	-15.52	-27.307	PASS
IEEE 802.11n_20	1		2383.09	-36.808	-19.29	-17.518	PASS
			2400.00	-36.974	-19.29	-17.684	PASS
			22078.1	-42.826	-19.29	-23.536	PASS
	6		22091.4	-42.558	-18.15	-24.408	PASS
	11		2483.50	-38.418	-19.65	-18.768	PASS
			6890.51	-42.830	-19.65	-23.180	PASS

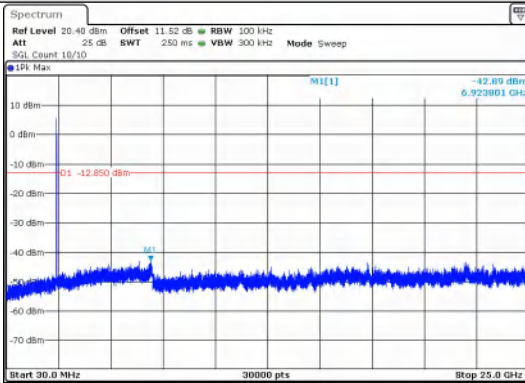
Test Graphs



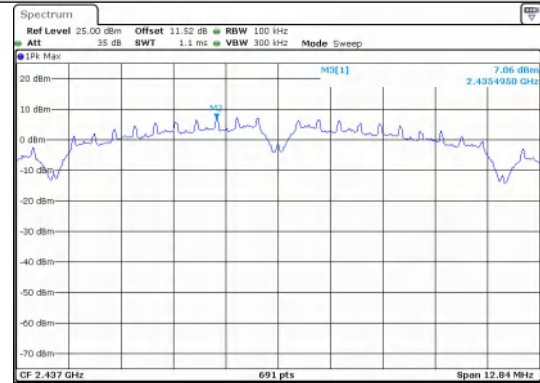
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



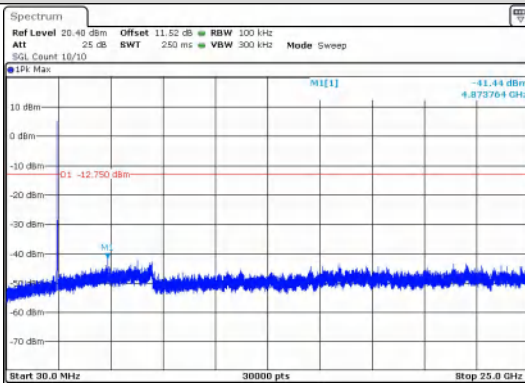
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



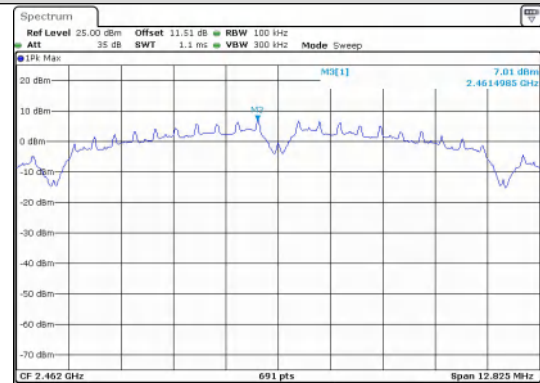
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



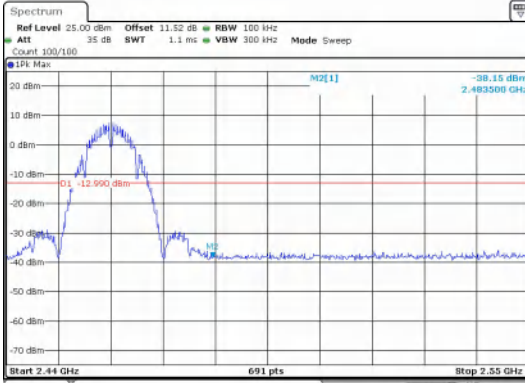
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



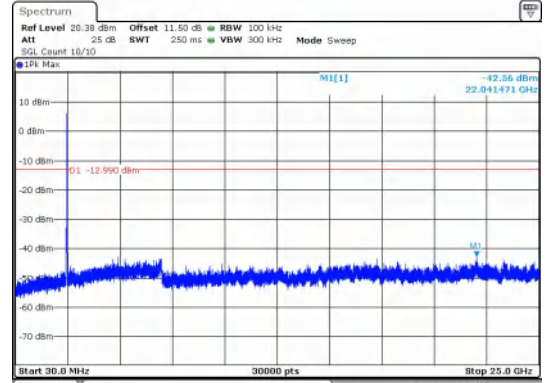
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



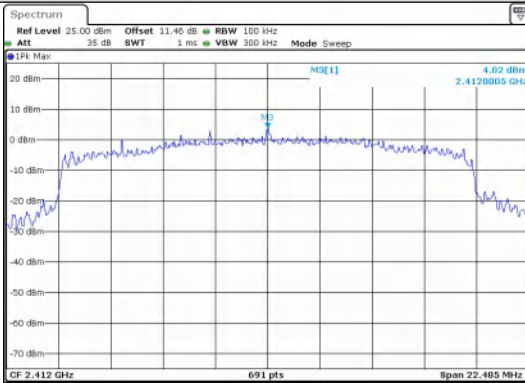
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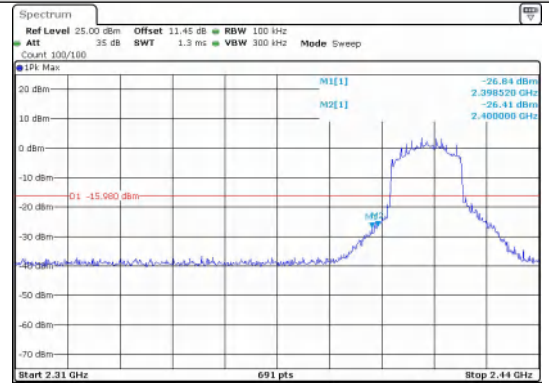
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Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0

30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



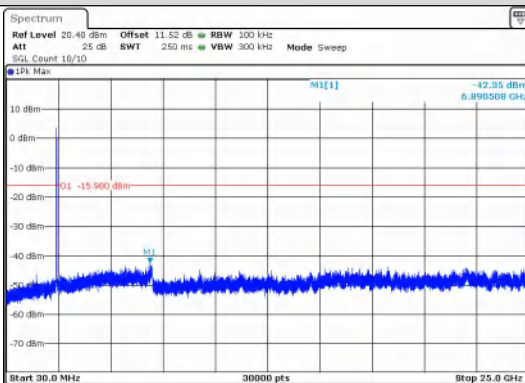
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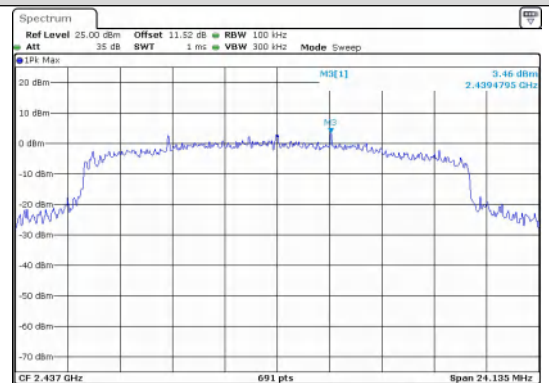
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In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0

Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



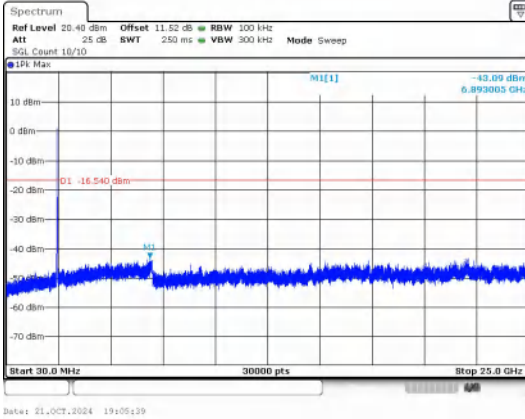
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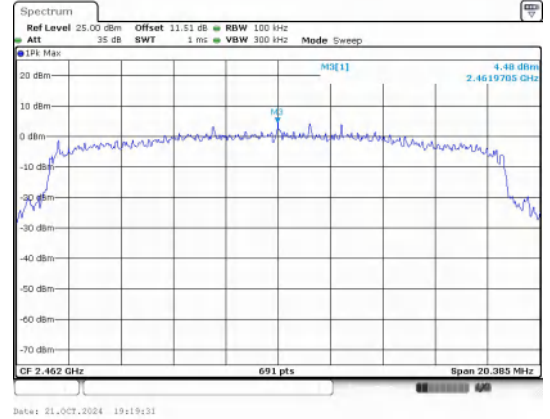
Date: 21.OCT.2024 19:05:15

30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0

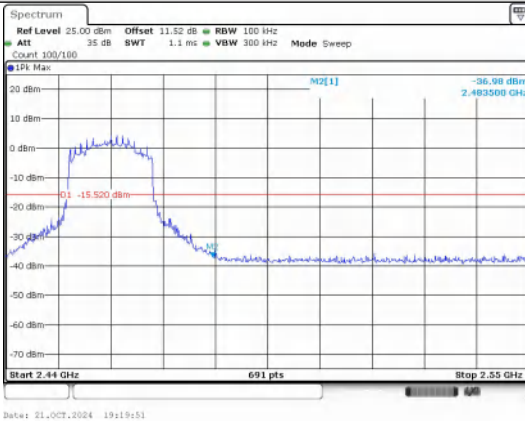
In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



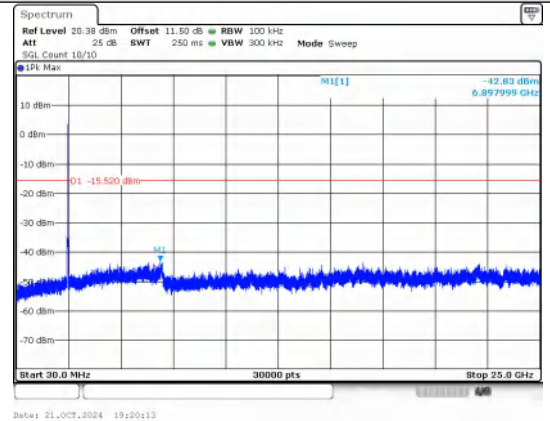
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 6_20MHz_Antenna 0



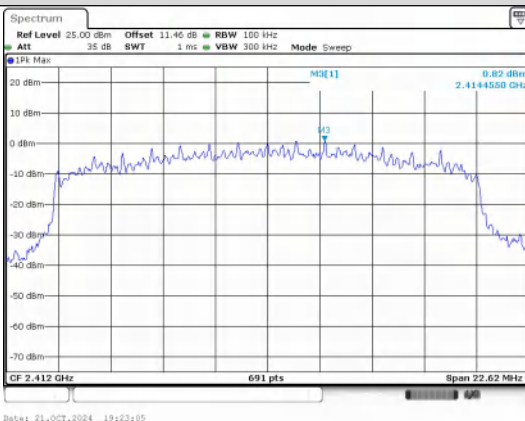
In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0



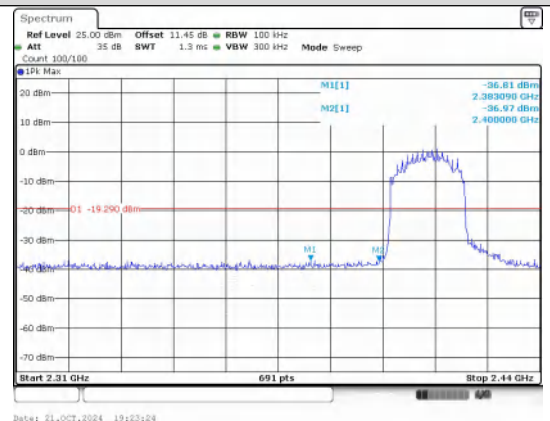
Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



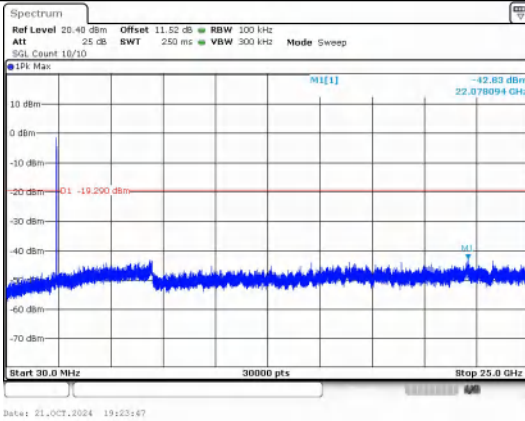
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 11_20MHz_Antenna 0



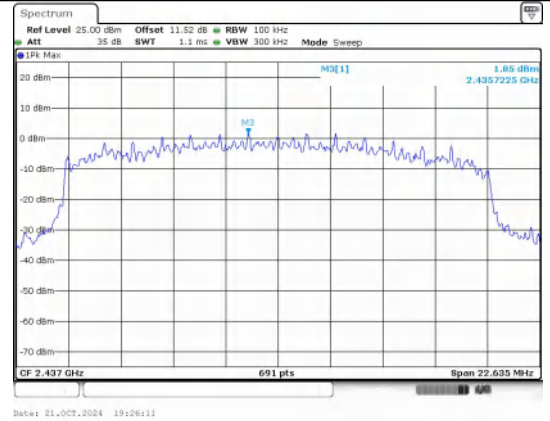
In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



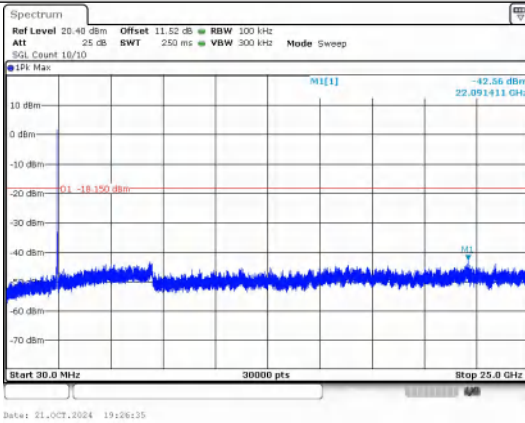
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



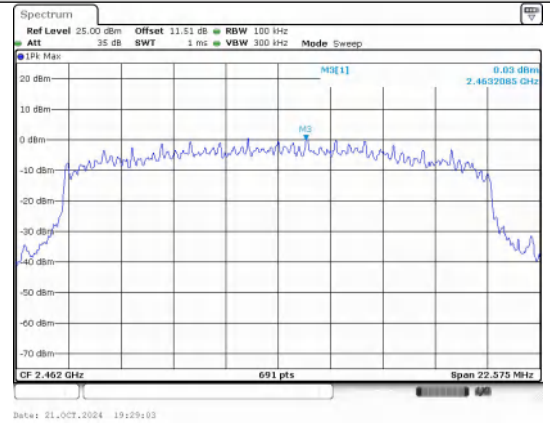
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 1_20MHz_Antenna 0



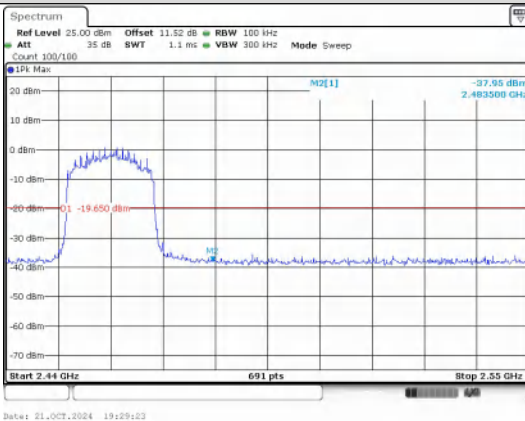
In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



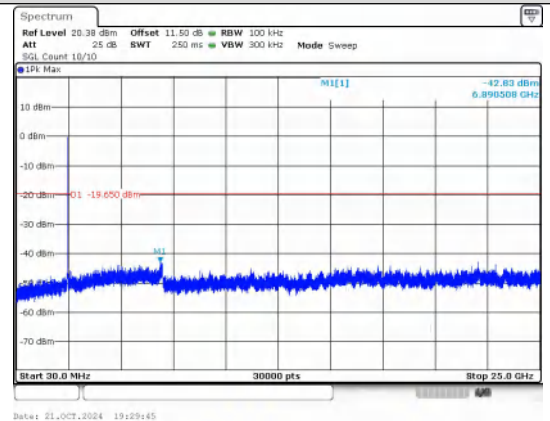
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



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