Appendix A

Report No.:	CISRR24040804701
FCC ID:	2BFQ8-YIIOT-T23
Product Name:	camera
Model No.:	YIIOT-T23
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

Conducted Peak Output Power

Test Result

Conducted peak output power

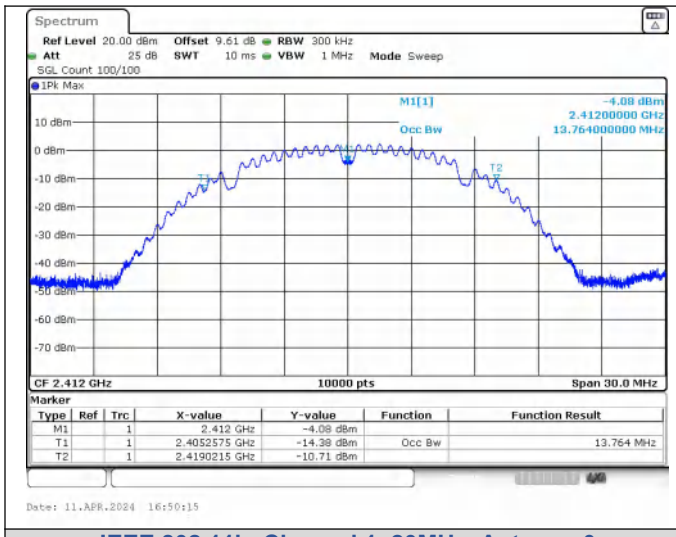
Mode	Channel	RU & Index	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	N/A	13.57	30	PASS
	6		10.32	30	PASS
	11		12.42	30	PASS
IEEE 802.11g	1		12.58	30	PASS
	6		13.85	30	PASS
	11		13.43	30	PASS
IEEE 802.11n_20	1		10.92	30	PASS
	6		13.81	30	PASS
	11		12.68	30	PASS
IEEE 802.11n_40	3		13.16	30	PASS
	6		14.68	30	PASS
	9		11.32	30	PASS

99% Bandwidth

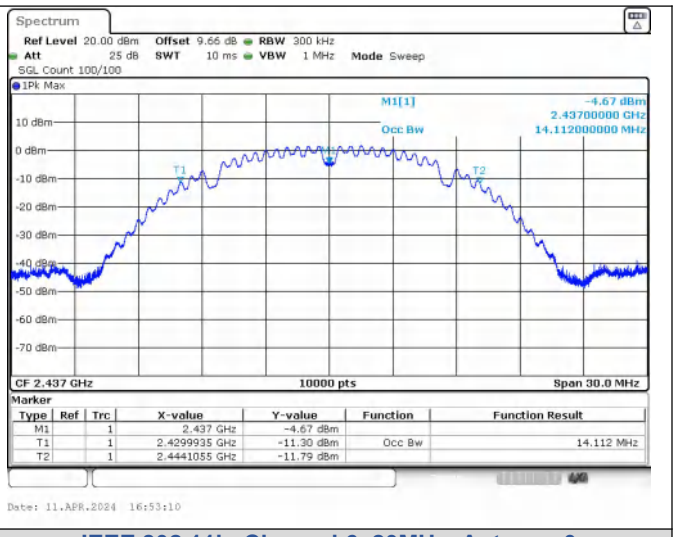
Test Result

Mode	Channel	Ant.	99% BW (MHz)
IEEE 802.11b	1	0	13.760
	6		14.110
	11		14.040
IEEE 802.11g	1		16.330
	6		16.290
	11		16.380
IEEE 802.11n_20	1		17.430
	6		17.390
	11		17.500
IEEE 802.11n_40	3		35.350
	6		35.140
	9		35.460

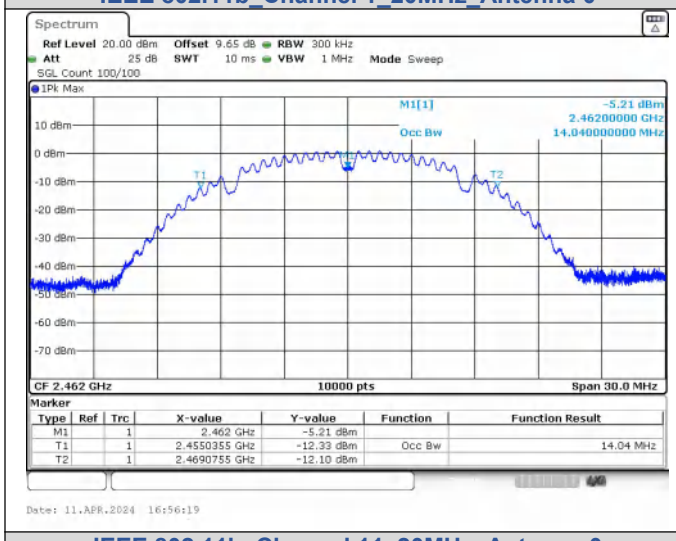
Test Graphs



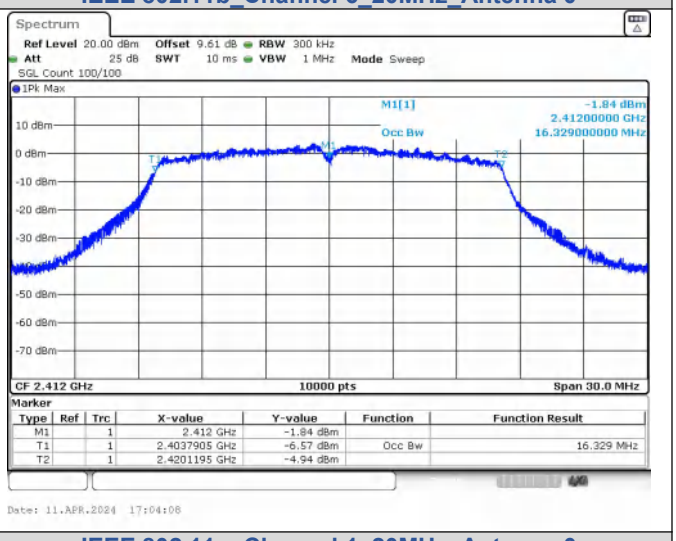
IEEE 802.11b_Channel 1_20MHz_Antenna 0



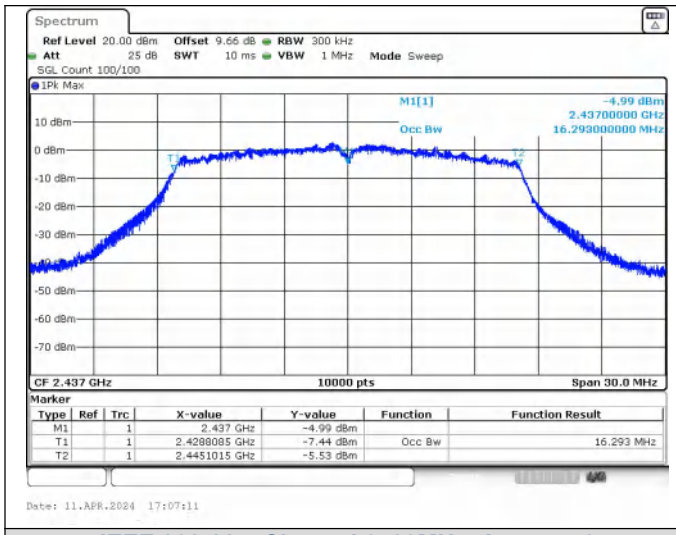
IEEE 802.11b_Channel 6_20MHz_Antenna 0



IEEE 802.11b_Channel 11_20MHz_Antenna 0



IEEE 802.11g_Channel 1_20MHz_Antenna 0



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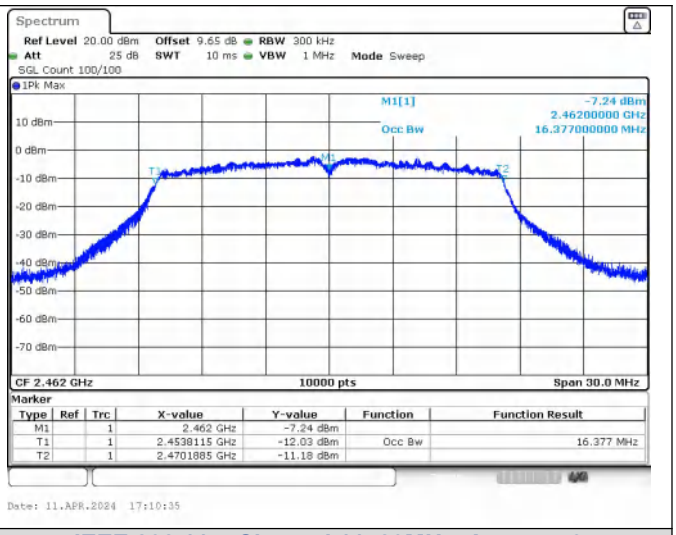

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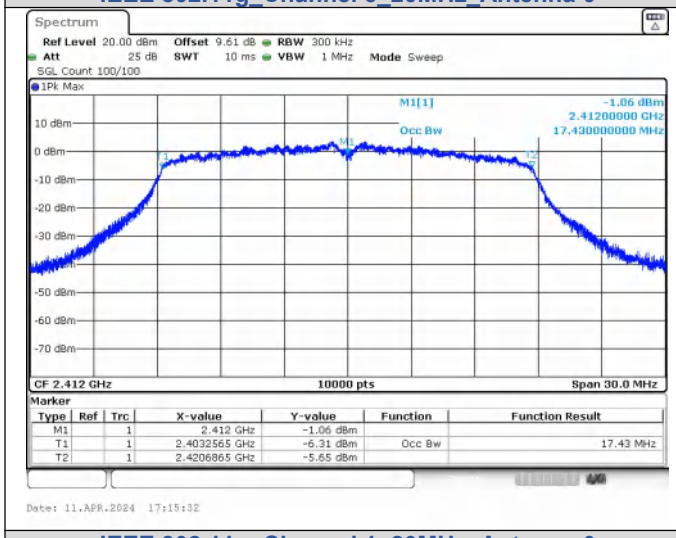
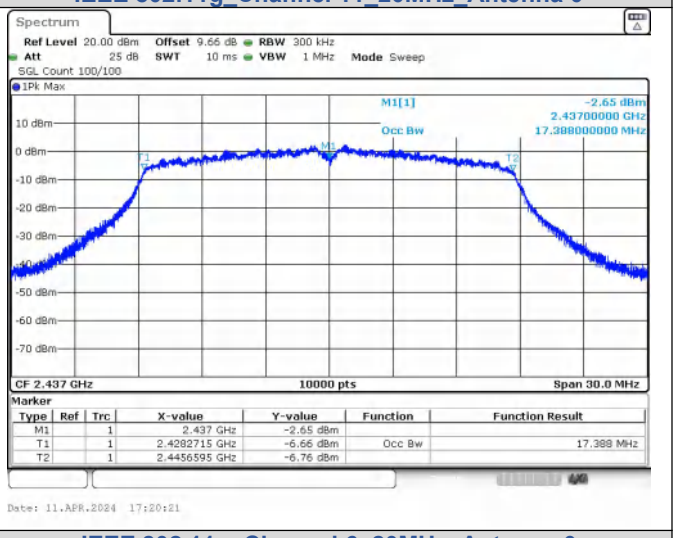


IEEE 802.11n_Channel 1_20MHz_Antenna 0



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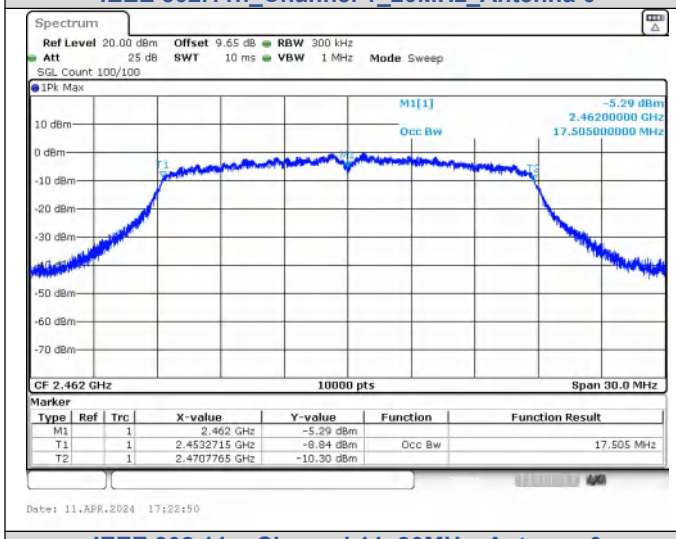
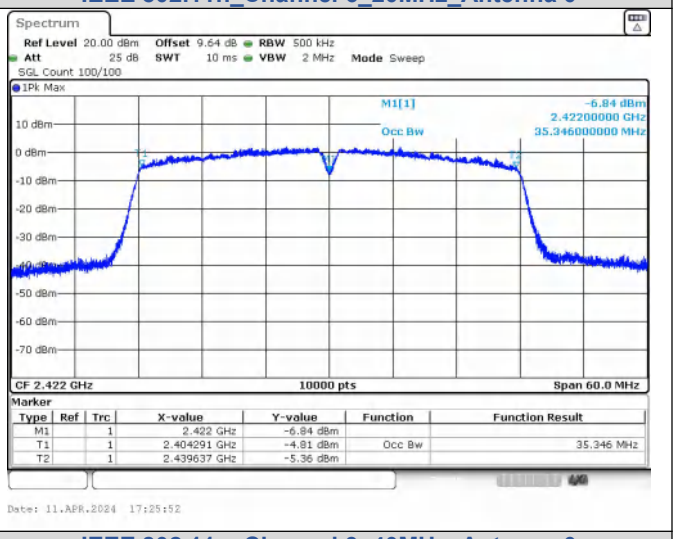
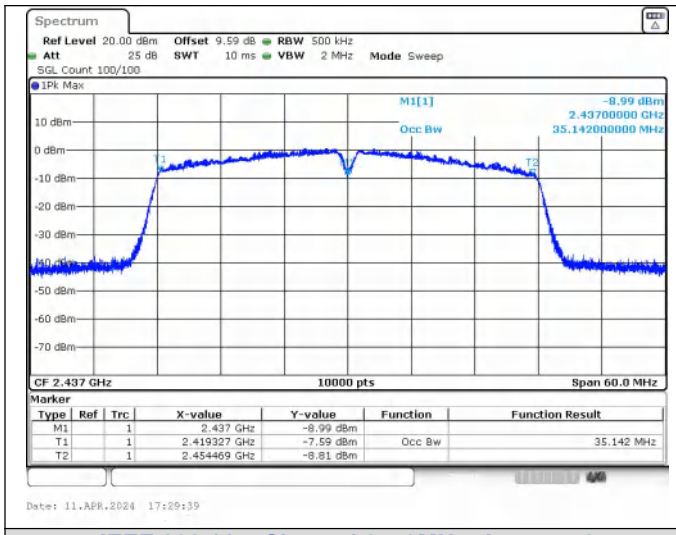


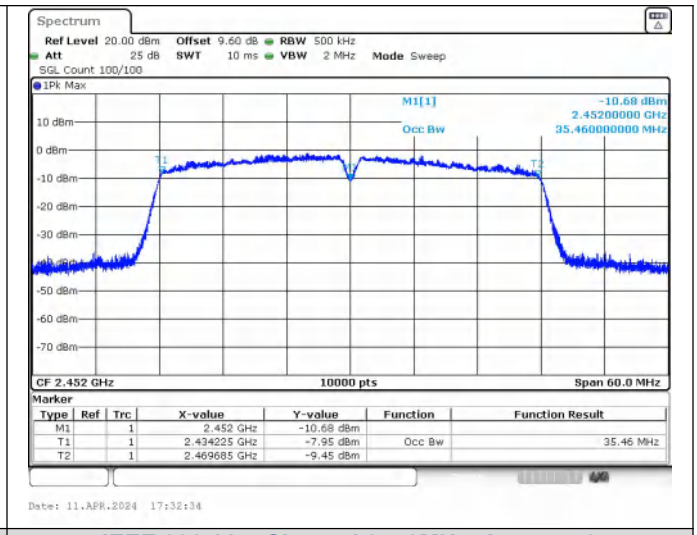
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



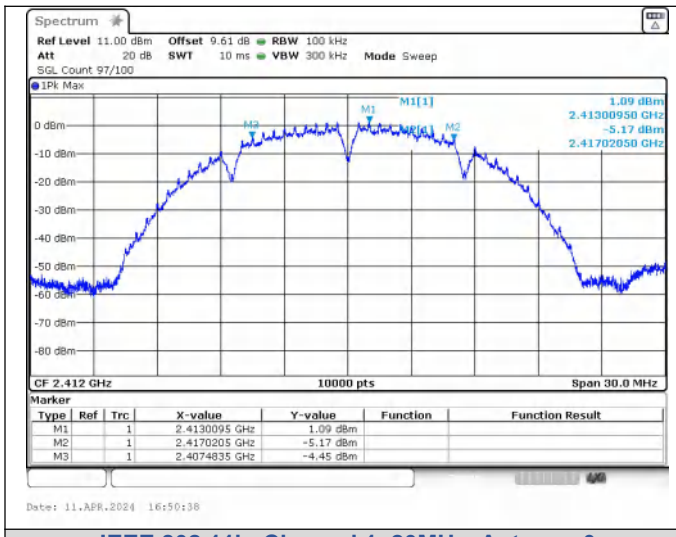
IEEE 802.11n_Channel 9_40MHz_Antenna 0

6dB Bandwidth

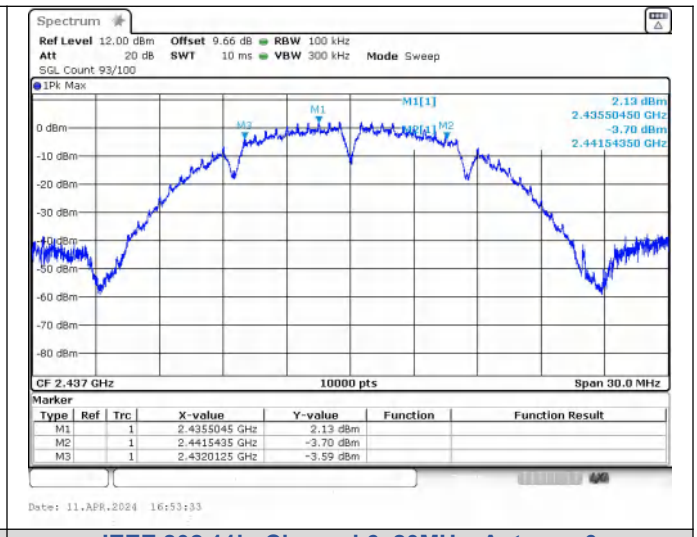
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	9.540	0.5	PASS
	6		2437	9.530		PASS
	11		2462	10.00		PASS
IEEE 802.11g	1		2412	16.05		PASS
	6		2437	16.02		PASS
	11		2462	16.29		PASS
IEEE 802.11n_20	1		2412	16.78		PASS
	6		2437	15.88		PASS
	11		2462	16.75		PASS
IEEE 802.11n_40	3		2422	34.36		PASS
	6		2437	30.40		PASS
	9		2452	34.42		PASS

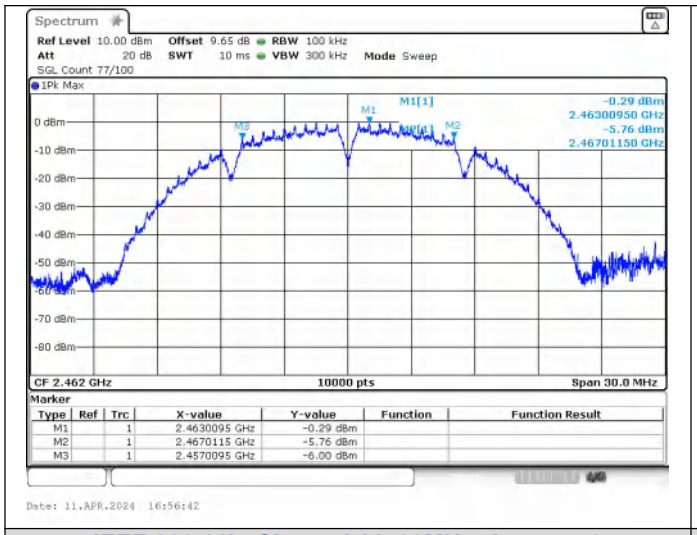
Test Graphs



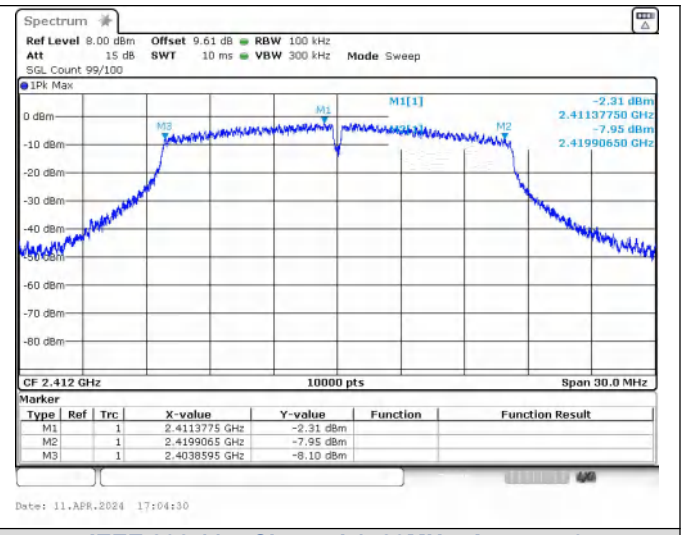
IEEE 802.11b_Channel 1_20MHz_Antenna 0



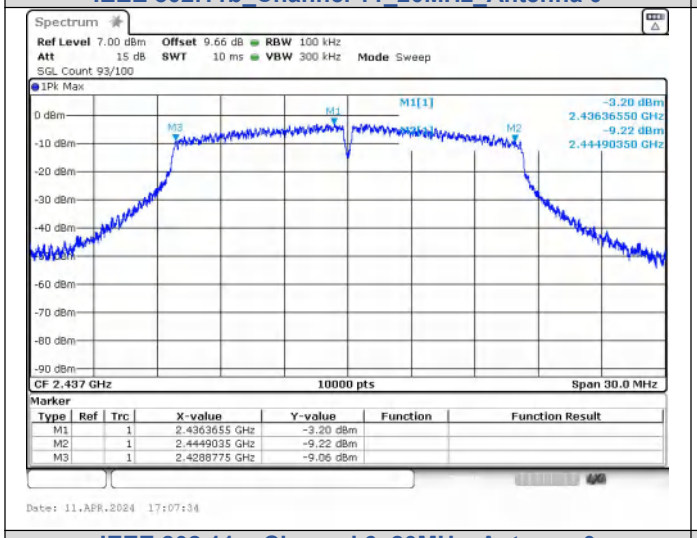
IEEE 802.11b_Channel 6_20MHz_Antenna 0



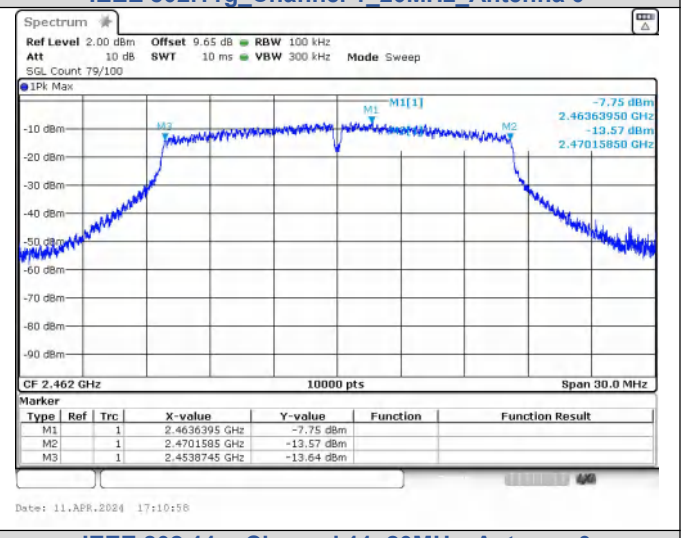
IEEE 802.11b_Channel 11_20MHz_Antenna 0



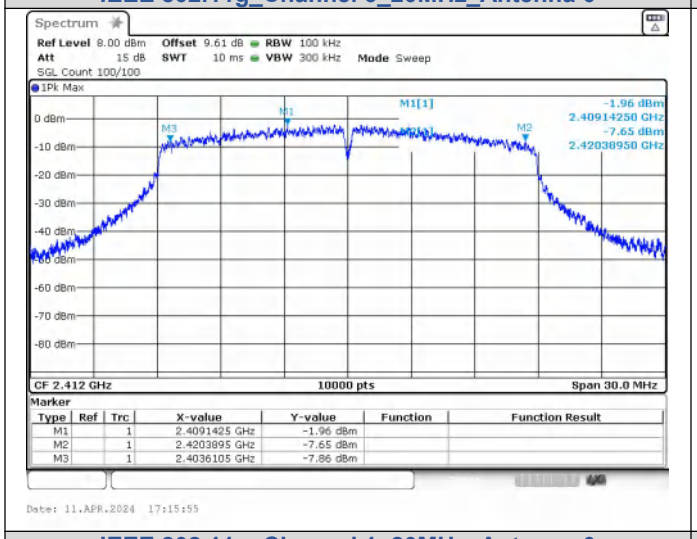
IEEE 802.11g_Channel 1_20MHz_Antenna 0



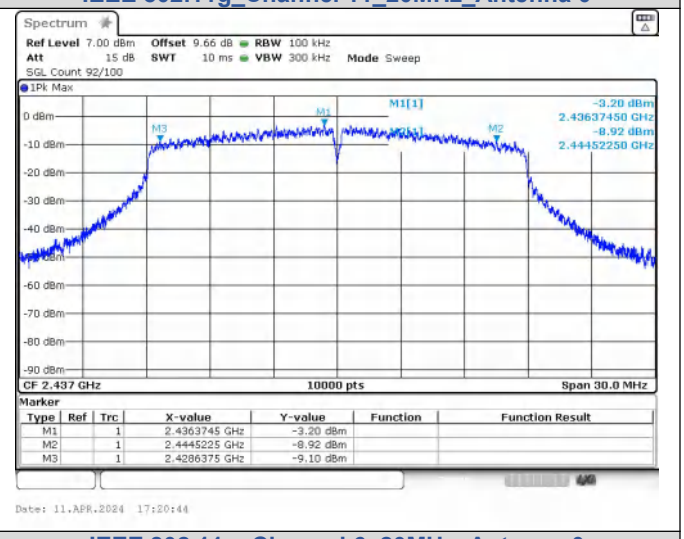
IEEE 802.11g_Channel 6_20MHz_Antenna 0



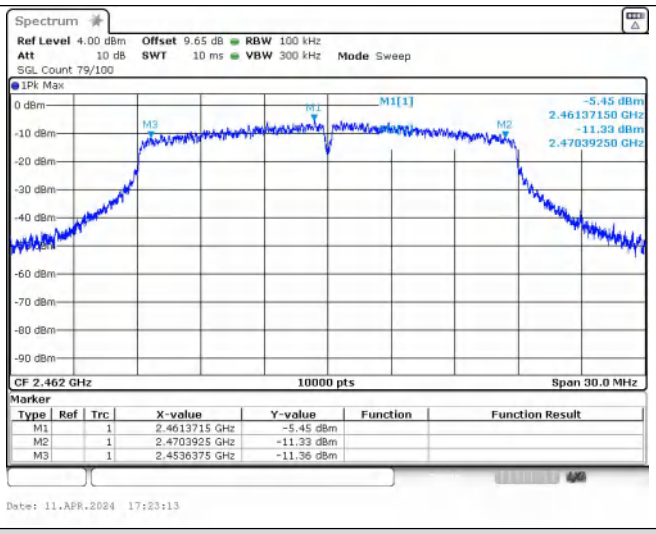
IEEE 802.11g_Channel 11_20MHz_Antenna 0



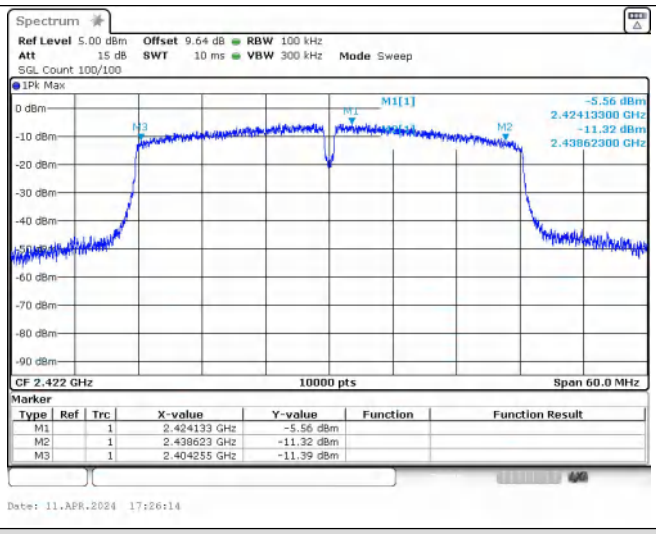
IEEE 802.11n_Channel 1_20MHz_Antenna 0



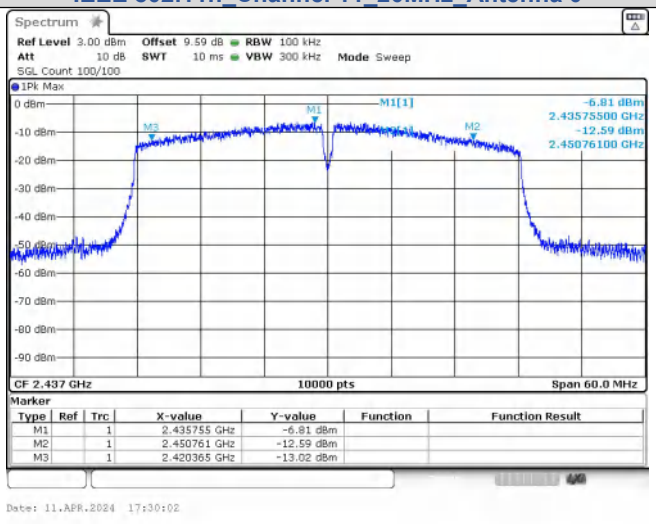
IEEE 802.11n_Channel 6_20MHz_Antenna 0



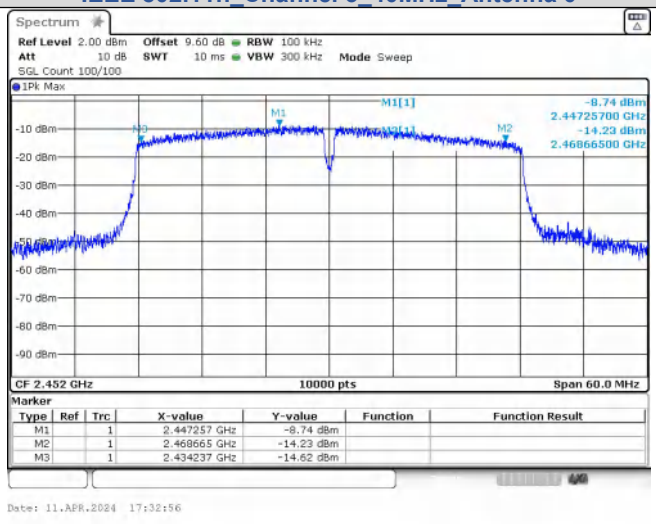
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



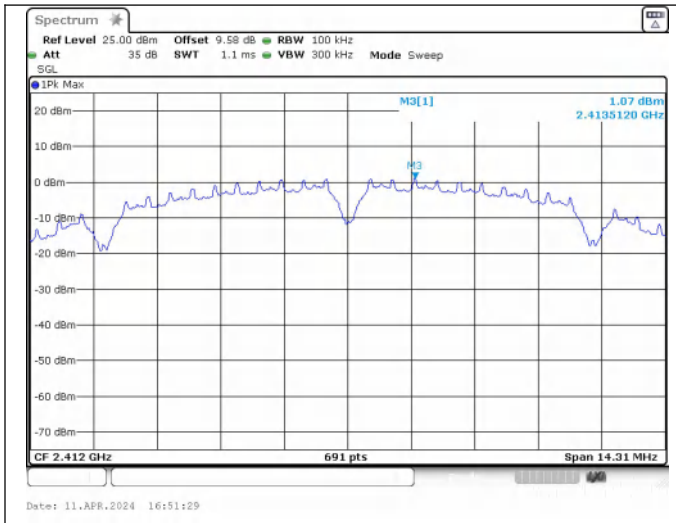
IEEE 802.11n_Channel 9_40MHz_Antenna 0

Conducted Out Of Band Emission

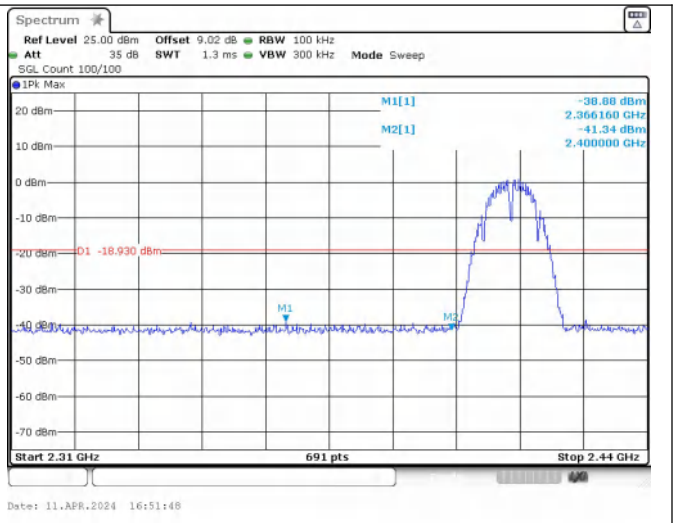
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2400.00	-41.344	-18.93	-22.414	PASS
			2366.16	-38.884	-18.93	-19.954	PASS
			22079.8	-38.713	-18.93	-19.783	PASS
	6		16776.1	-39.687	-18.16	-21.527	PASS
	11		2483.50	-40.470	-20.45	-20.020	PASS
			20088.8	-39.398	-20.45	-18.948	PASS
IEEE 802.11g	1		2400.00	-37.733	-22.23	-15.503	PASS
			18268.5	-38.619	-22.23	-16.389	PASS
	6		16560.6	-39.801	-23.06	-16.741	PASS
	11		2483.50	-40.194	-27.8	-12.394	PASS
			16564.7	-38.971	-27.8	-11.171	PASS
IEEE 802.11n_20	1		2400.00	-37.295	-21.83	-15.465	PASS
			16618.8	-39.616	-21.83	-17.786	PASS
	6		16263.4	-38.304	-23.12	-15.184	PASS
	11		2483.50	-39.032	-25.66	-13.372	PASS
			22029.8	-39.049	-25.66	-13.389	PASS
IEEE 802.11n_40	3		2400.00	-40.695	-25.29	-15.405	PASS
			2340.38	-38.783	-25.29	-13.493	PASS
			16296.7	-39.472	-25.29	-14.182	PASS
	6		15963.8	-39.118	-26.5	-12.618	PASS
	9		2483.50	-40.338	-28.63	-11.708	PASS
			15909.7	-38.357	-28.63	-9.727	PASS

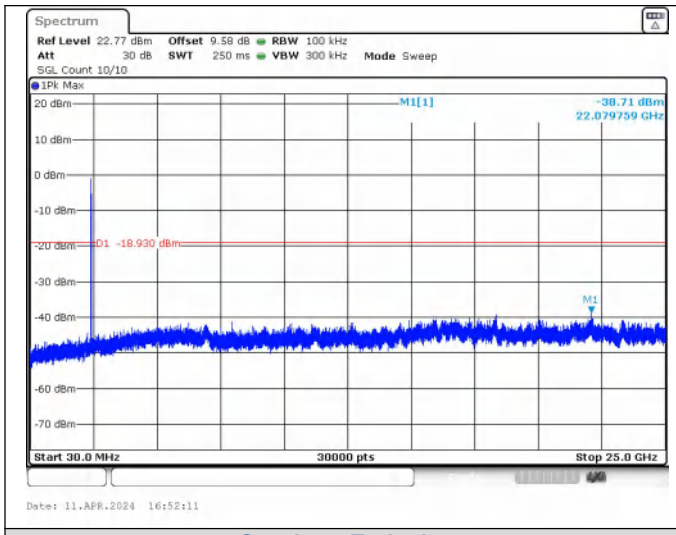
Test Graphs



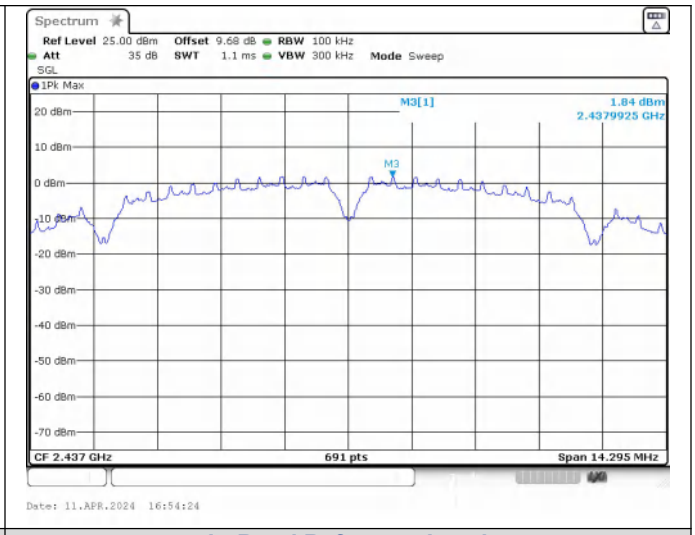
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



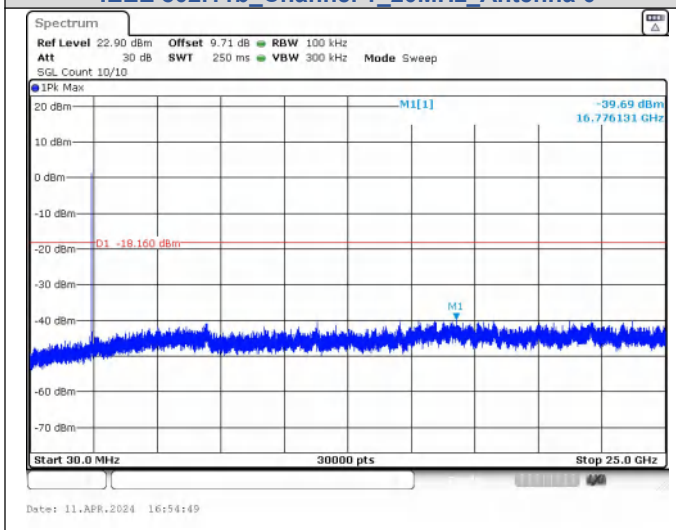
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



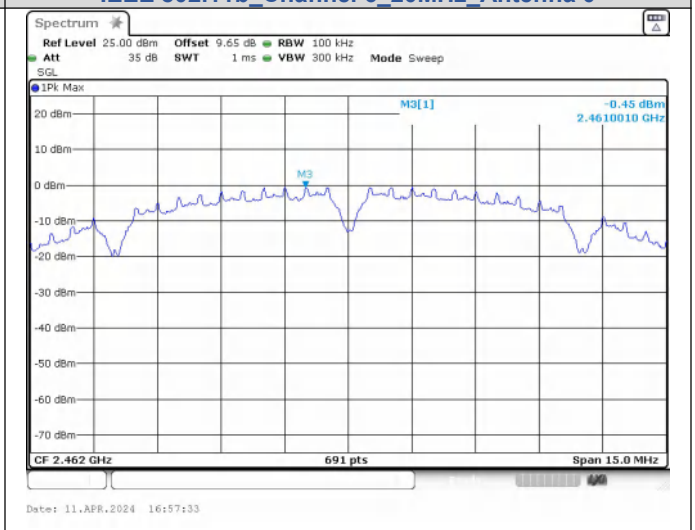
Spurious Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



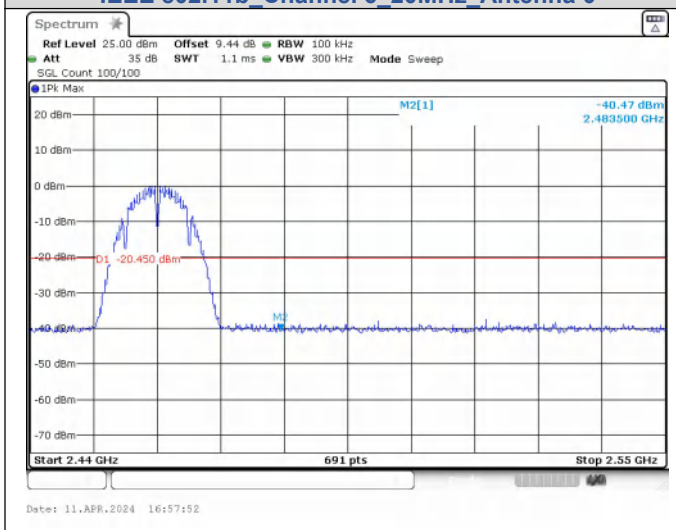
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



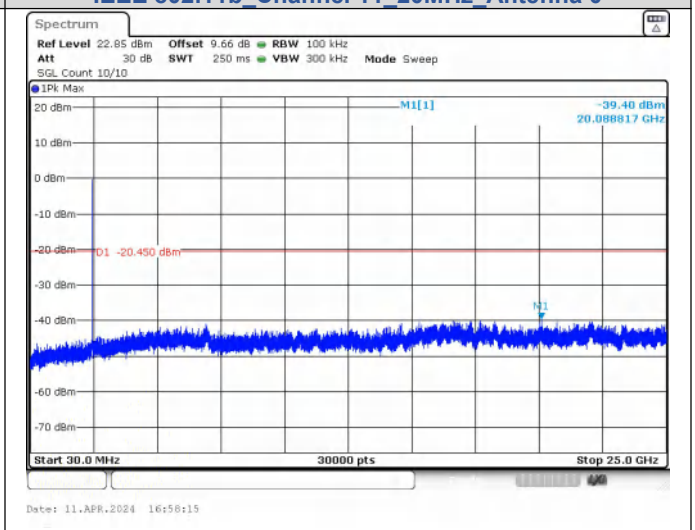
Spurious Emissions
IEEE 802.11b_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0

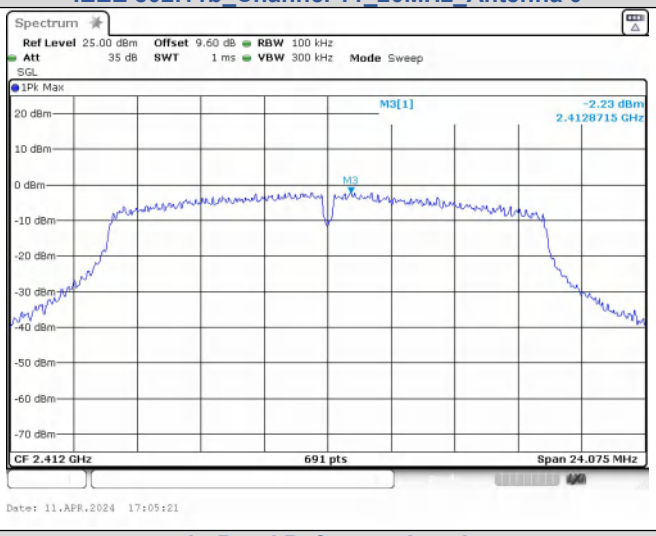


Out Of Band Emission

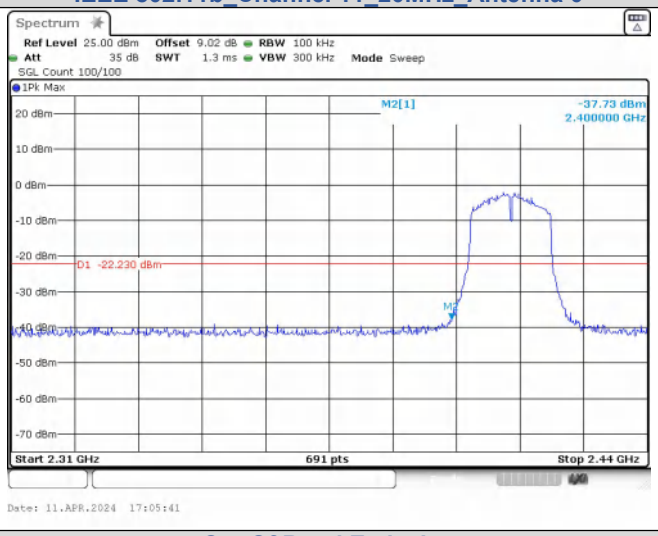


Spurious Emission

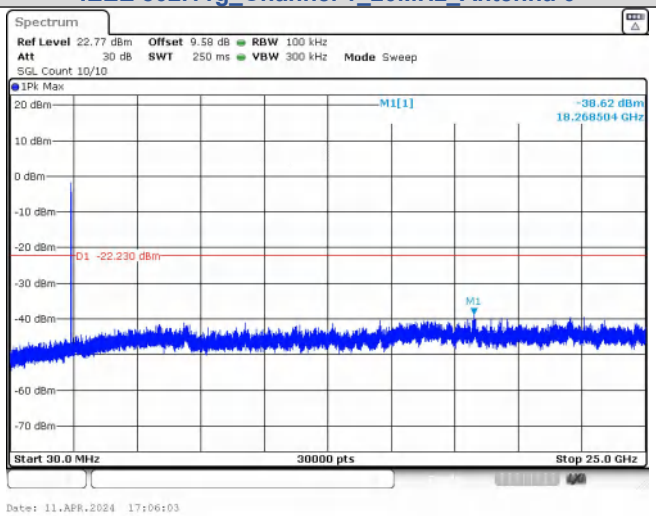
IEEE 802.11b_Channel 11_20MHz_Antenna 0



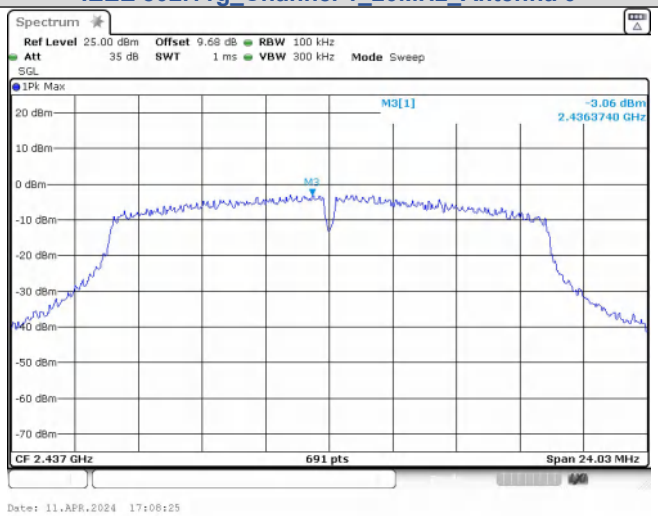
IEEE 802.11b_Channel 11_20MHz_Antenna 0



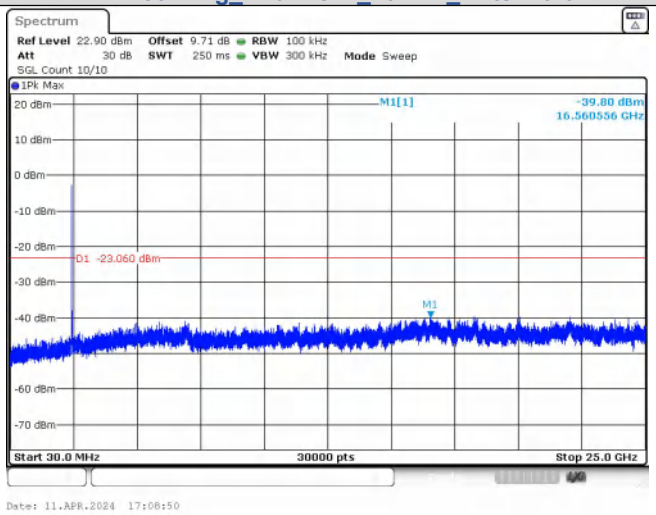
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



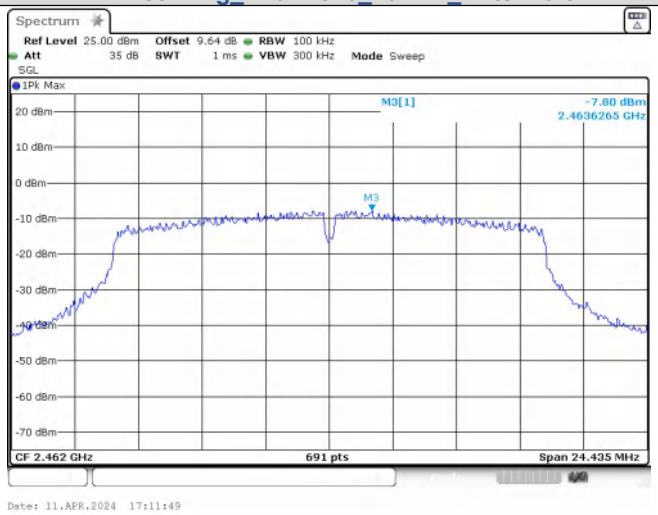
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



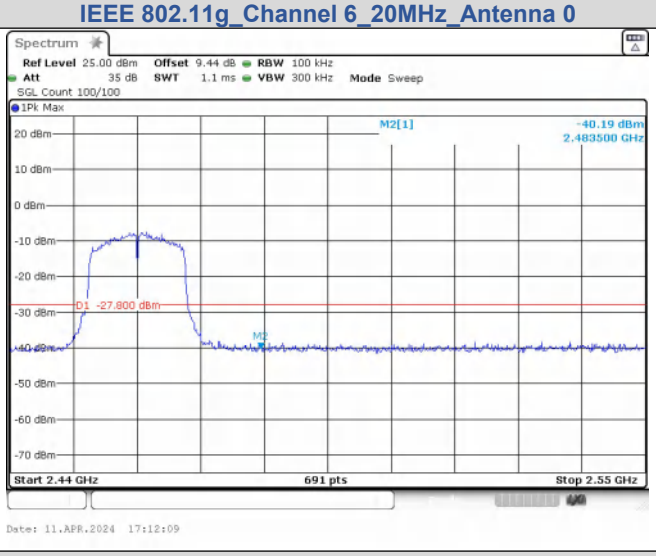
Spurious Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



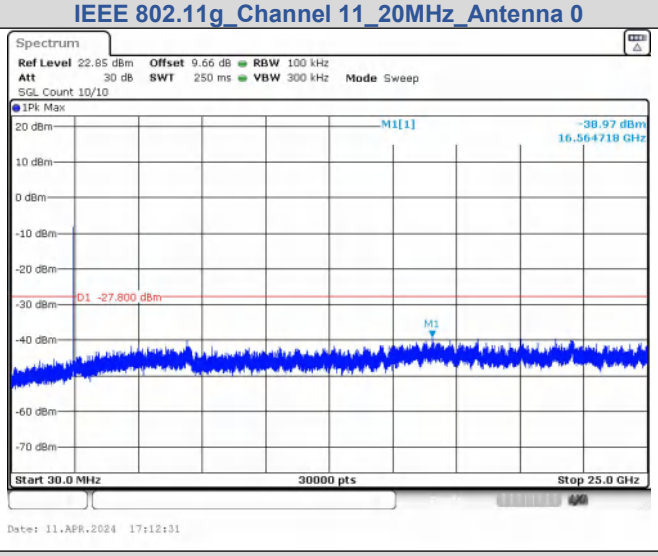
In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



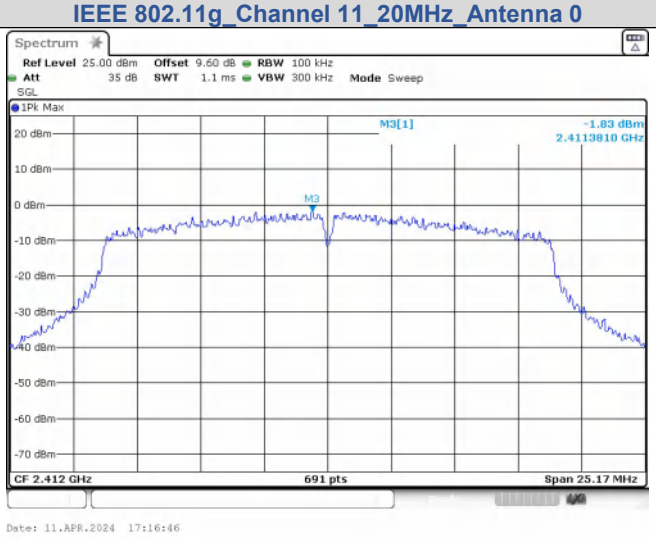
Spurious Emissions
IEEE 802.11g_Channel 6_20MHz_Antenna 0



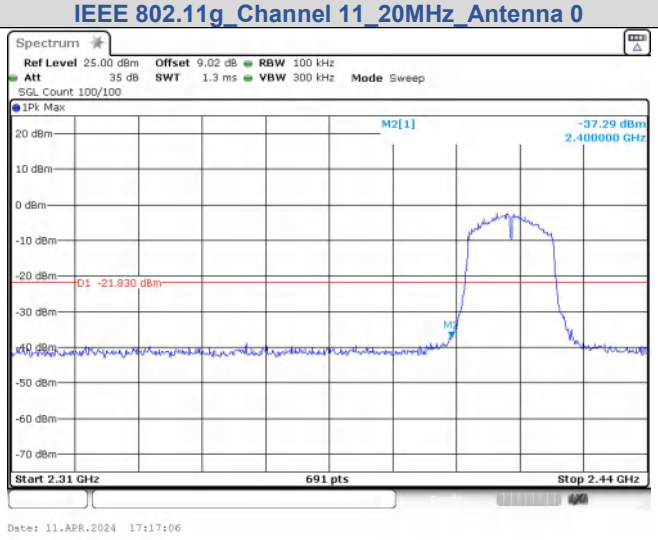
In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0

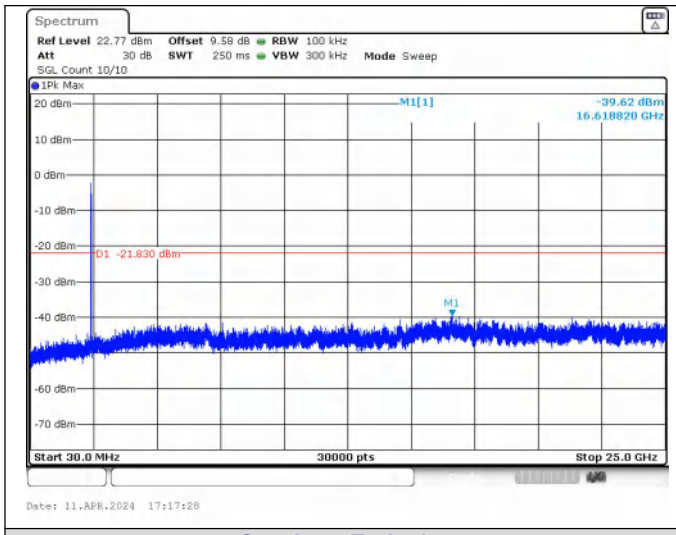


Spurious Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0

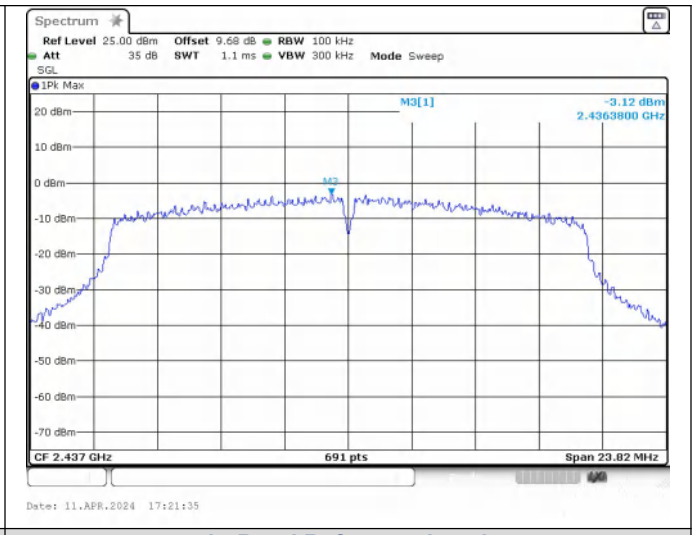


In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0

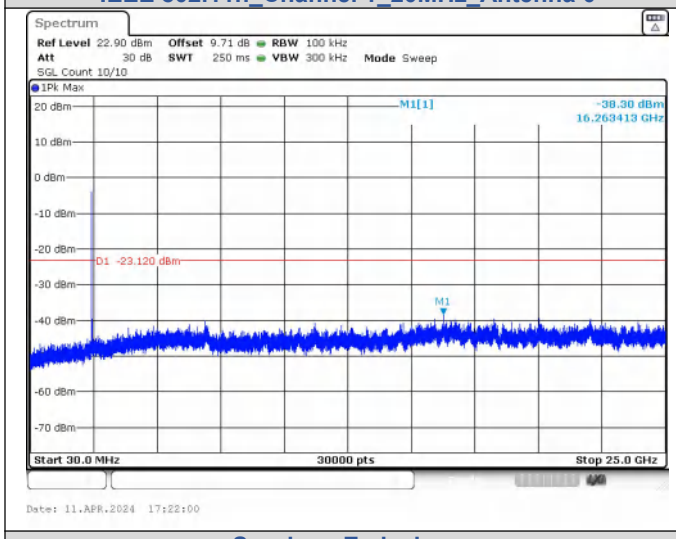
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



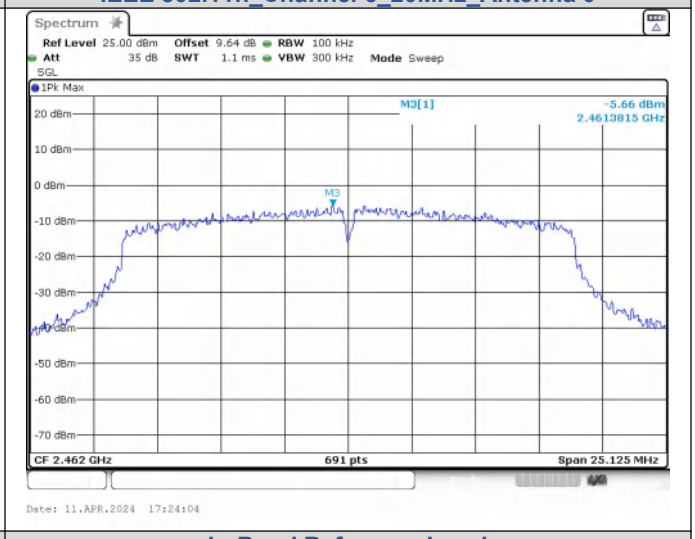
Spurious Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



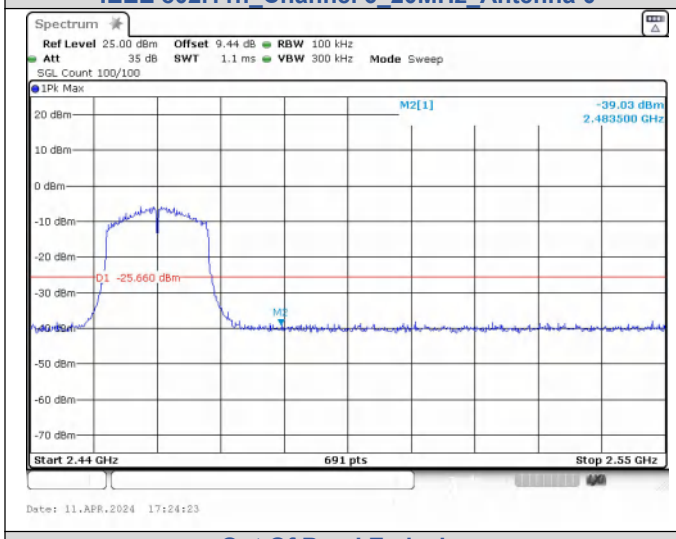
In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



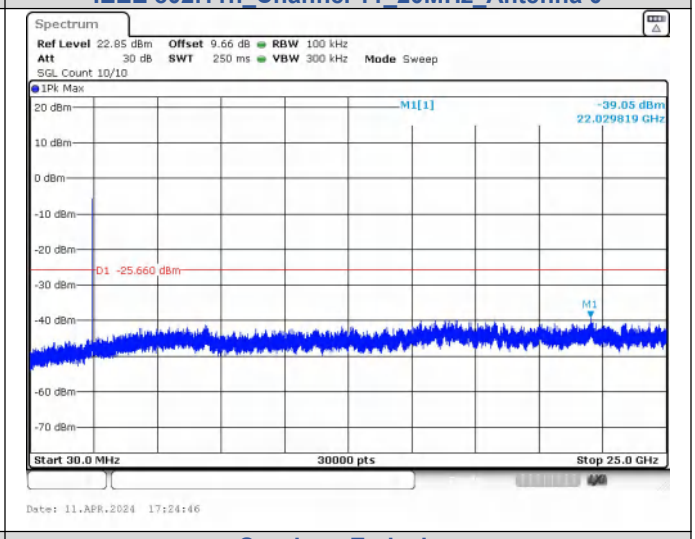
Spurious Emissions
IEEE 802.11n_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0

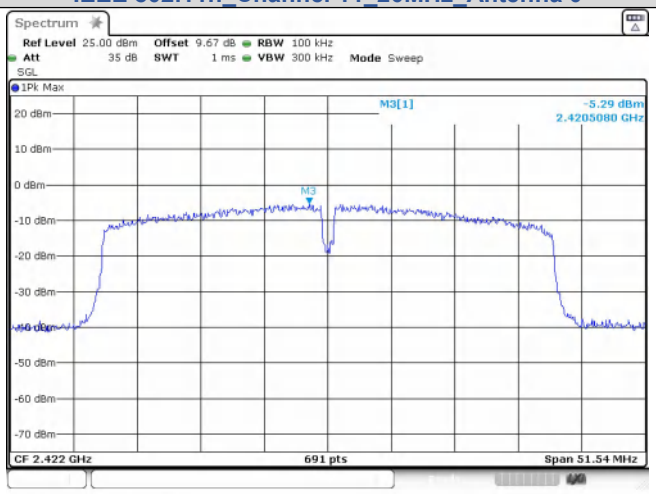


Out Of Band Emission

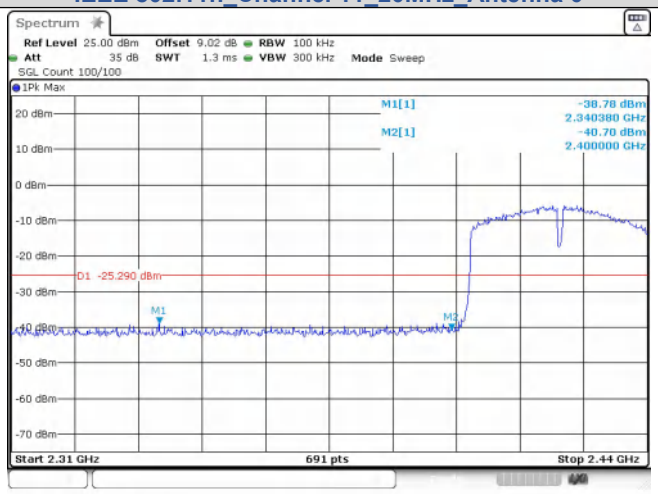


Spurious Emission

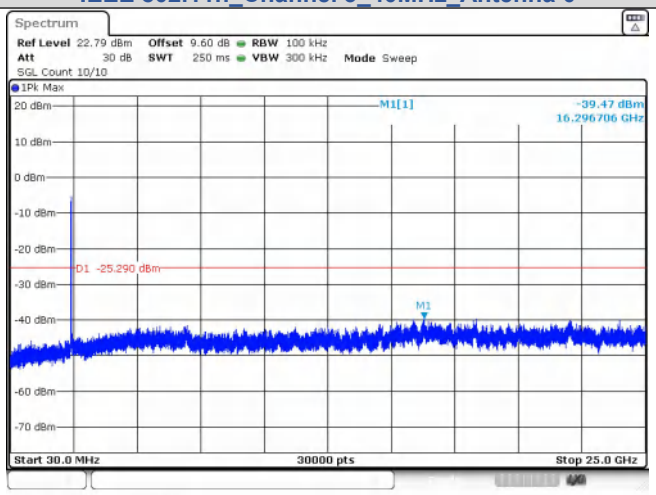
IEEE 802.11n_Channel 11_20MHz_Antenna 0



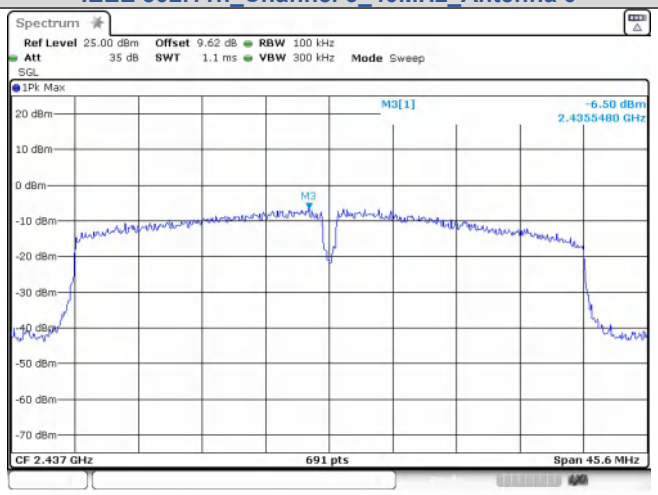
IEEE 802.11n_Channel 11_20MHz_Antenna 0



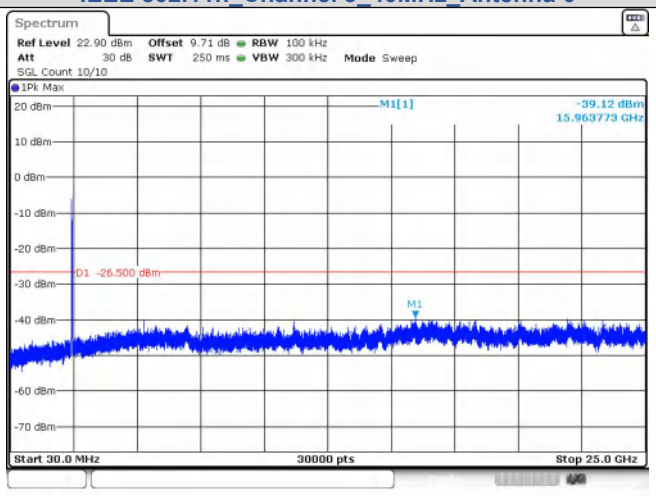
In-Band Reference Level
IEEE 802.11n_Channel 3_40MHz_Antenna 0



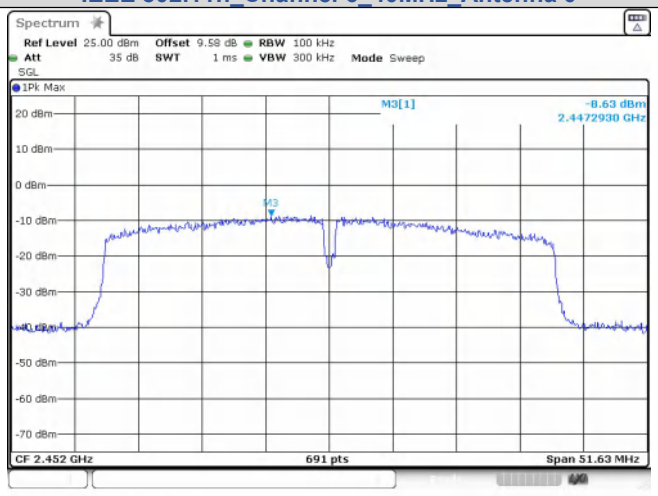
Out Of Band Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0

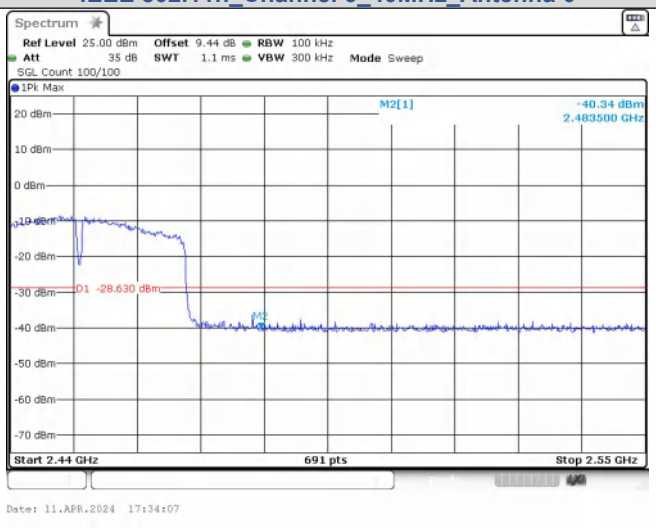
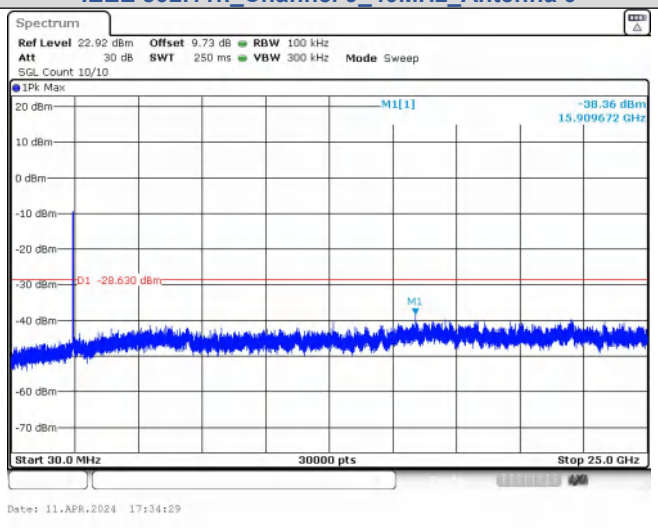


Spurious Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 6_40MHz_Antenna 0



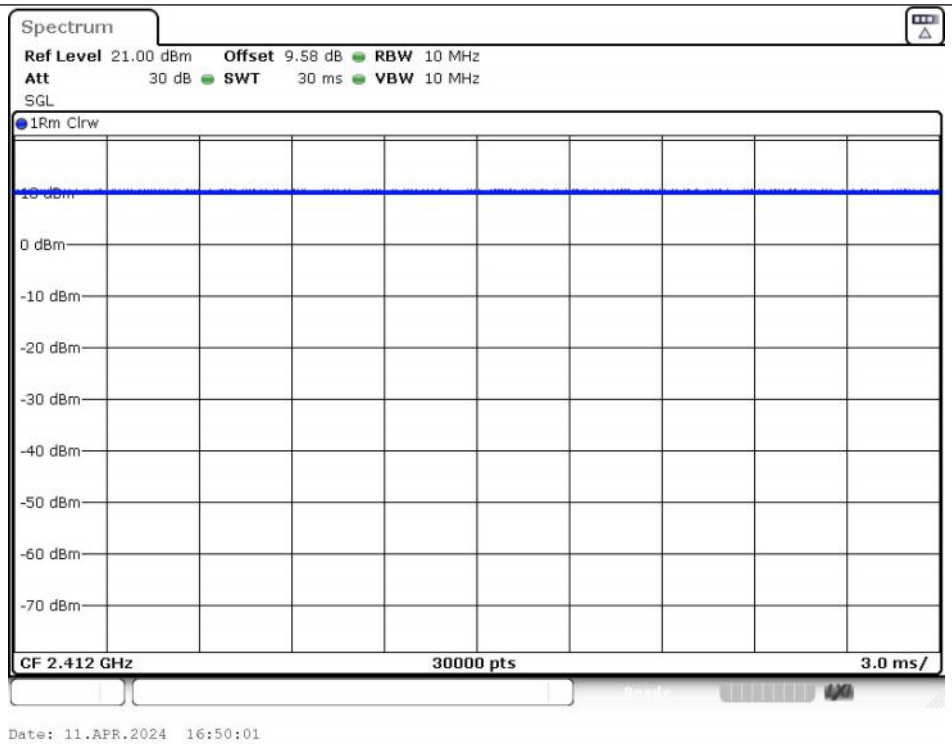
Spurious Emissions IEEE 802.11n_Channel 6_40MHz_Antenna 0	In-Band Reference Level IEEE 802.11n_Channel 9_40MHz_Antenna 0
	
Out Of Band Emission IEEE 802.11n_Channel 9_40MHz_Antenna 0	Spurious Emission IEEE 802.11n_Channel 9_40MHz_Antenna 0

Duty Cycle

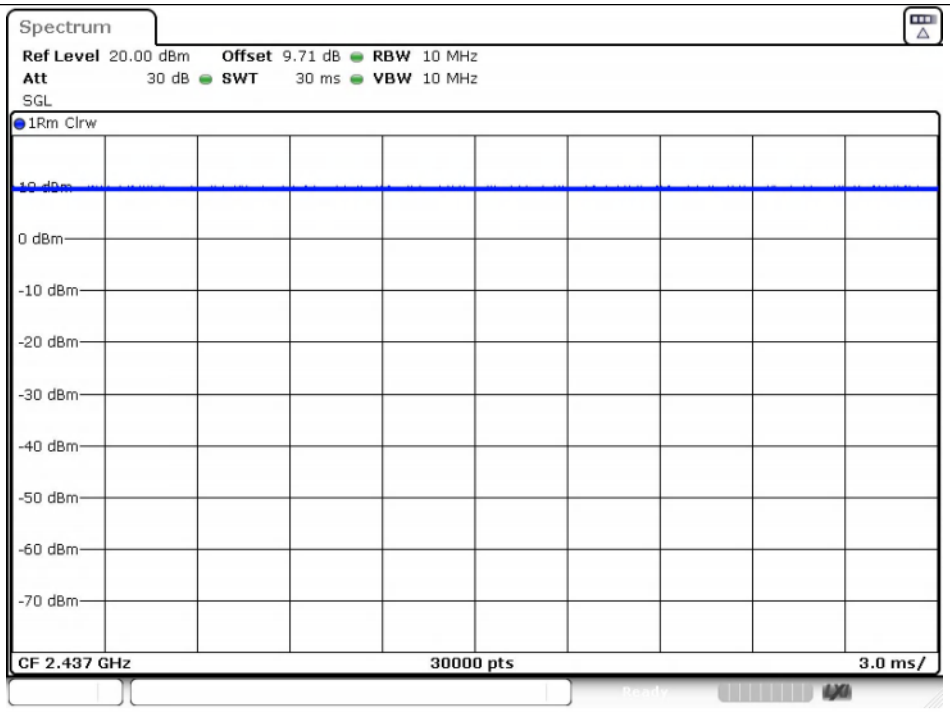
Test Result

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	30.000	30.000	100	1	0.0	0.01
		6		30.000	30.000	100	1	0.0	0.01
		11		30.000	30.000	100	1	0.0	0.01
IEEE 802.11g		1		10.000	10.000	100	1	0.0	0.01
		6		10.000	10.000	100	1	0.0	0.01
		11		10.000	10.000	100	1	0.0	0.01
IEEE 802.11n_20	MCS 0	1		10.000	10.000	100	1	0.0	0.01
		6		10.000	10.000	100	1	0.0	0.01
		11		10.000	10.000	100	1	0.0	0.01
IEEE 802.11n_40		3		10.000	10.000	100	1	0.0	0.01
		6		10.000	10.000	100	1	0.0	0.01
		9		10.000	10.000	100	1	0.0	0.01

Test Graphs

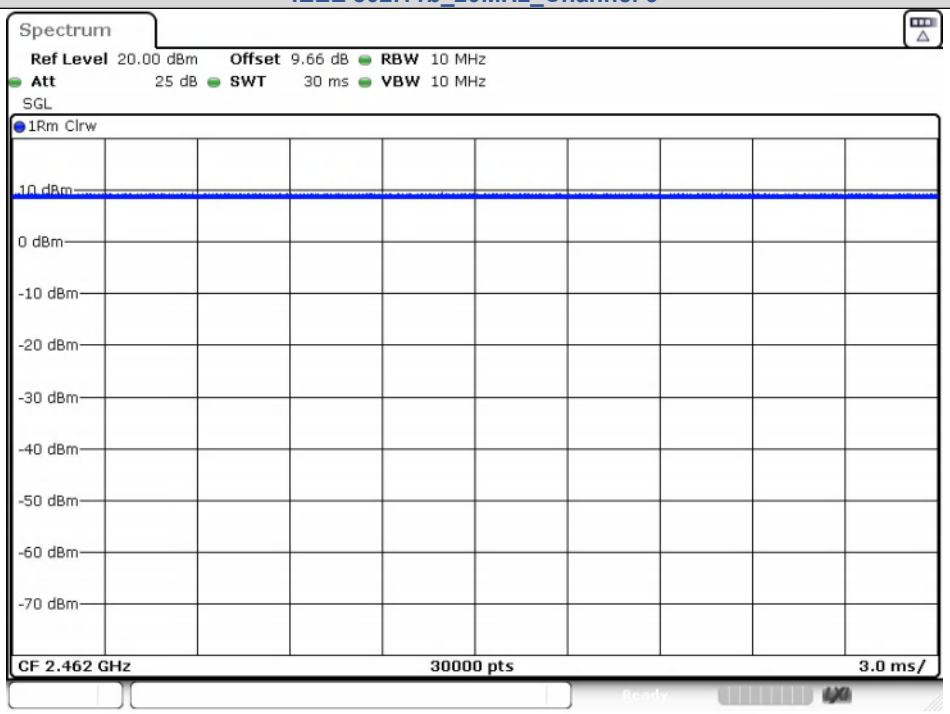


IEEE 802.11b_20MHz_Channel 1



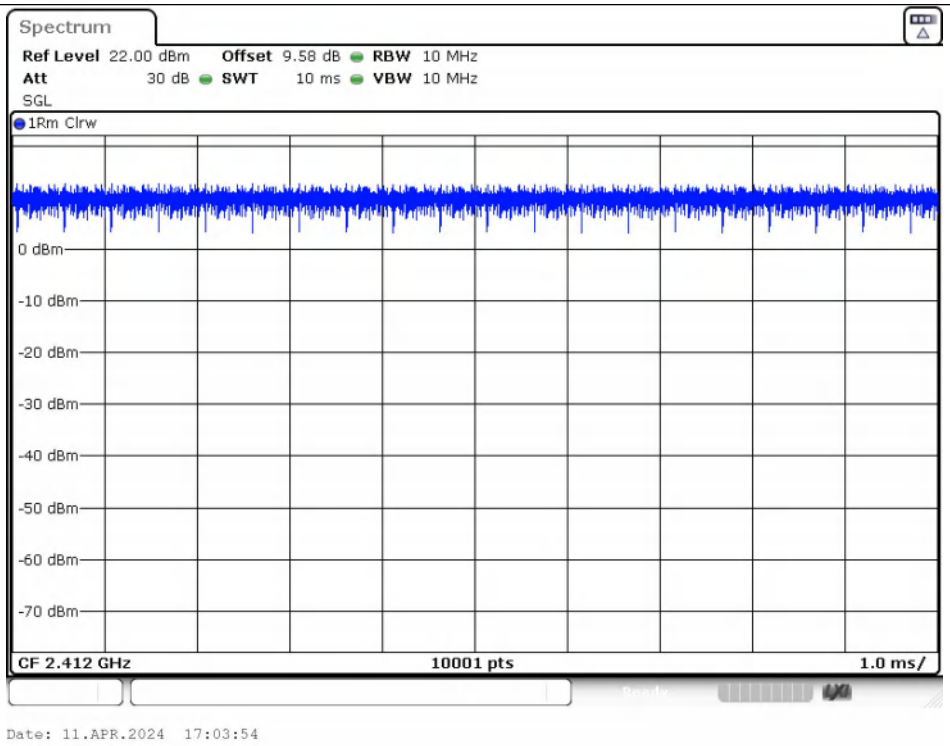
Date: 11.APR.2024 16:52:56

IEEE 802.11b_20MHz_Channel 6

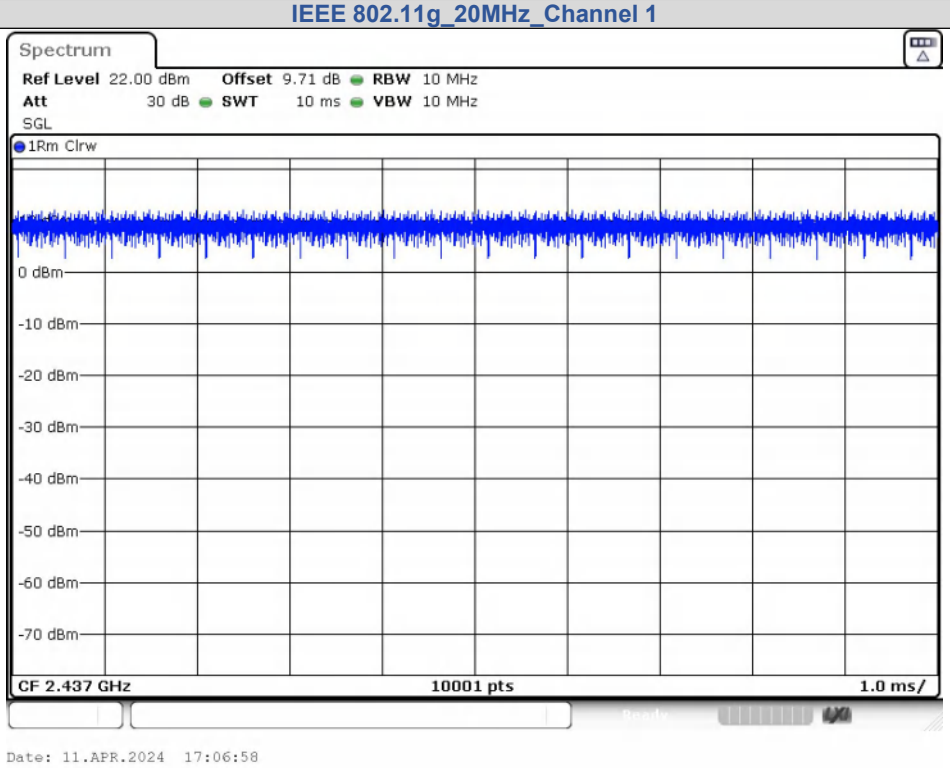


Date: 11.APR.2024 16:56:06

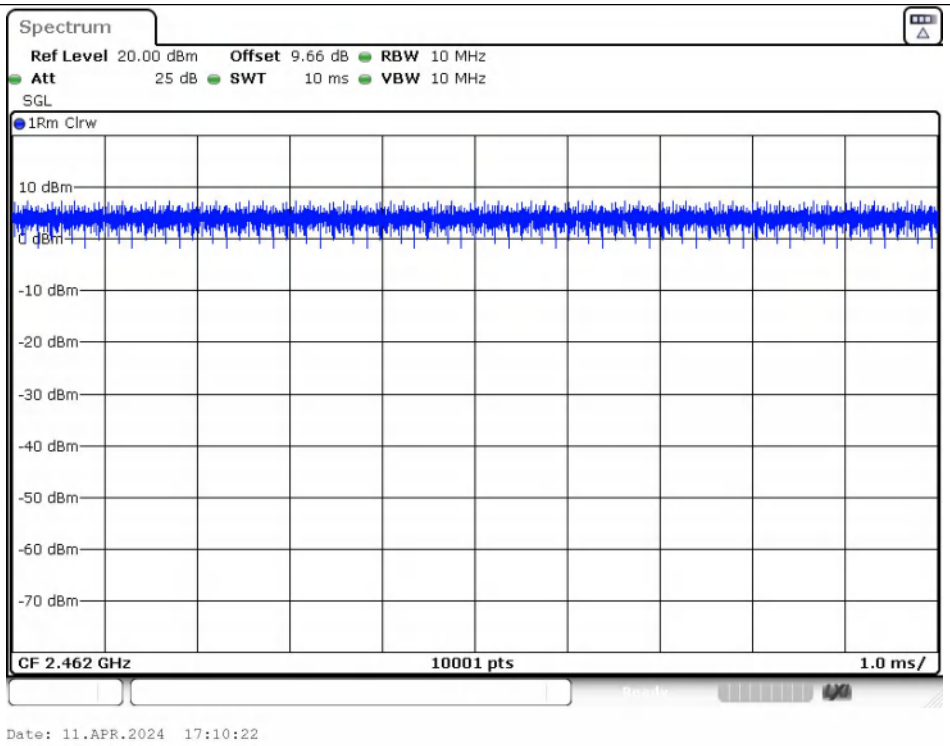
IEEE 802.11b_20MHz_Channel 11



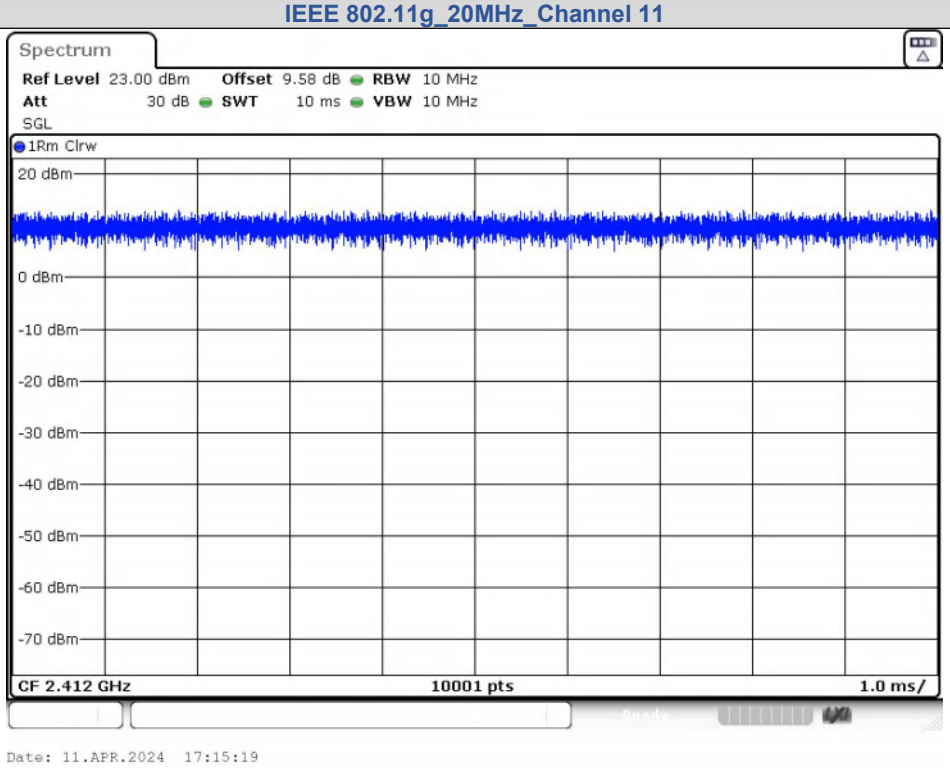
IEEE 802.11g_20MHz_Channel 1



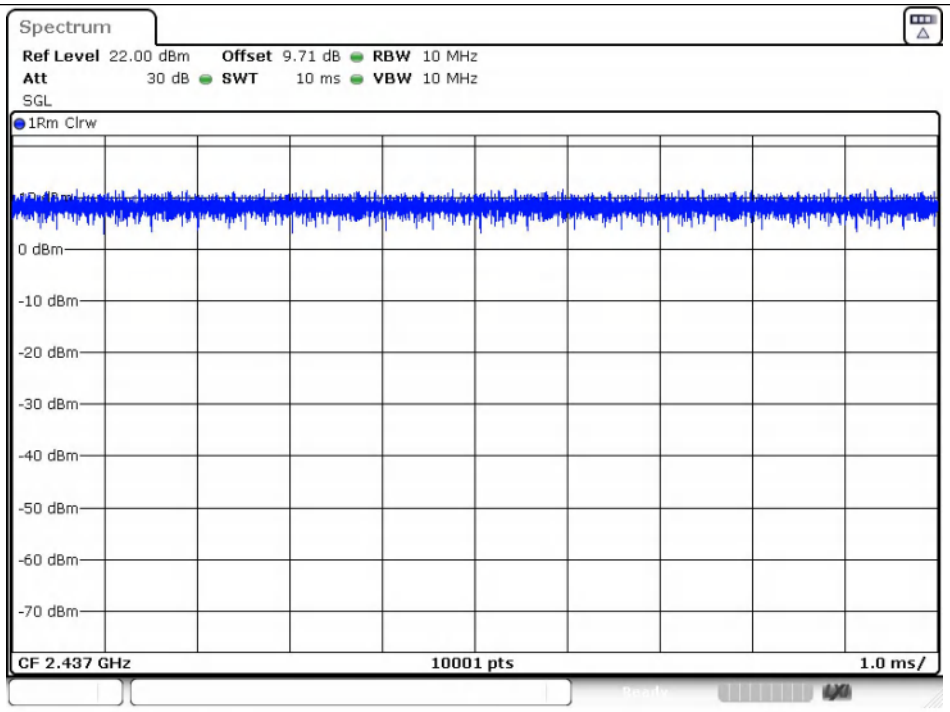
IEEE 802.11g_20MHz_Channel 6



IEEE 802.11g_20MHz_Channel 11



IEEE 802.11n_20MHz_Channel 1



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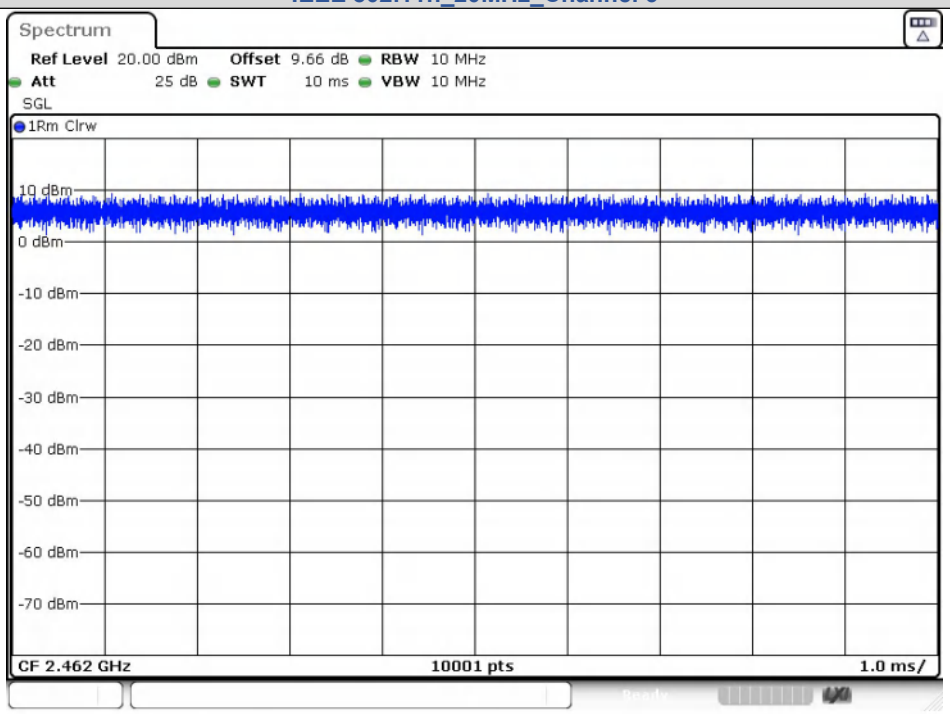
IEEE 802.11n_20MHz_Channel 6



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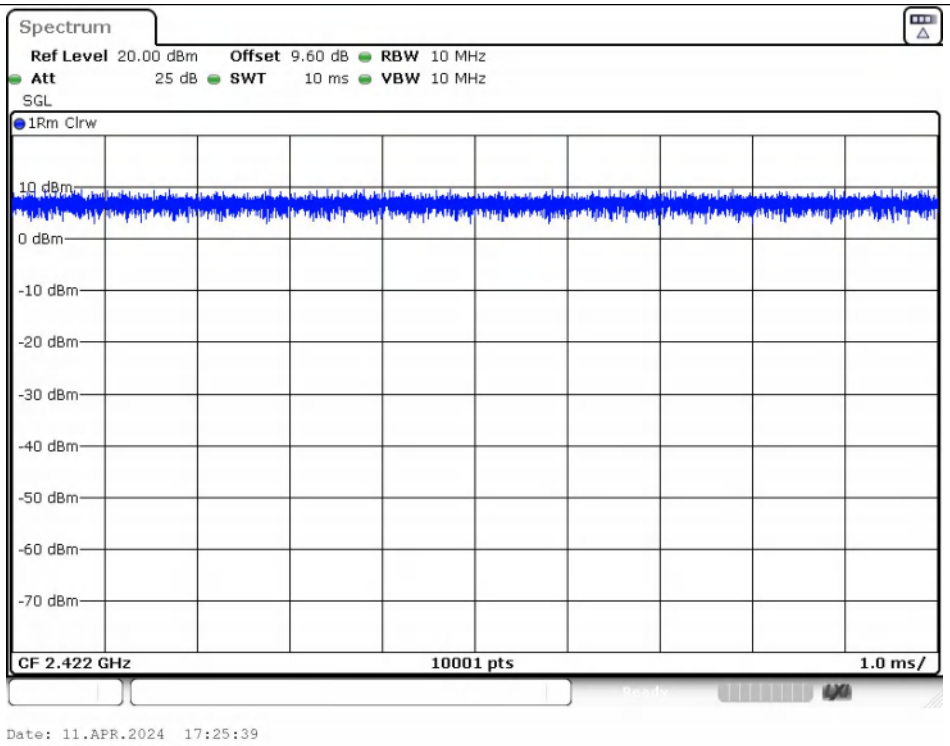
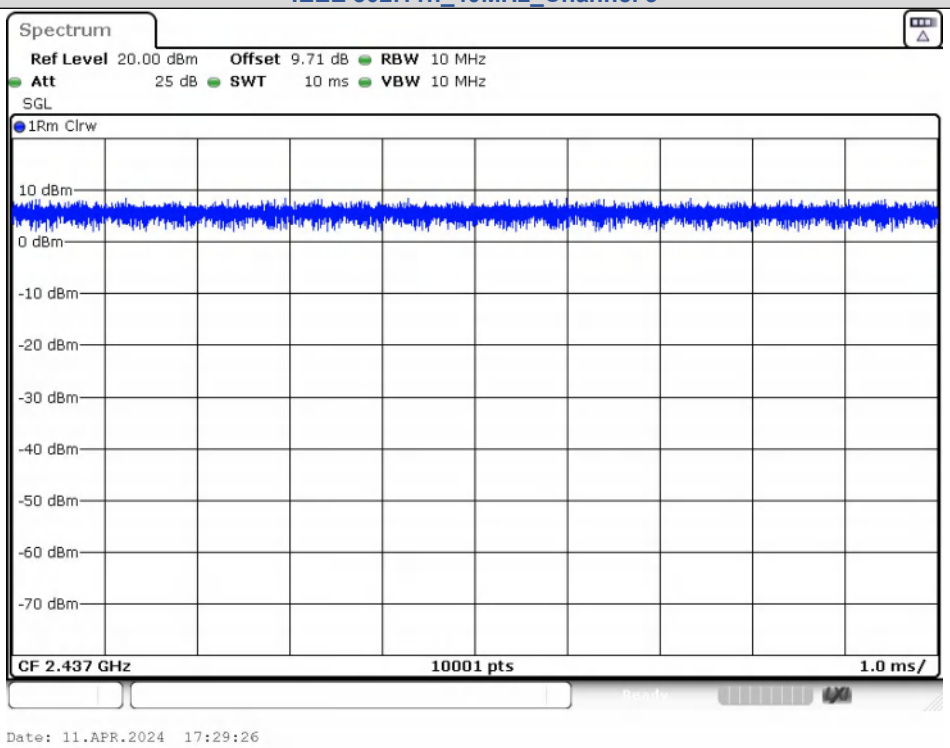
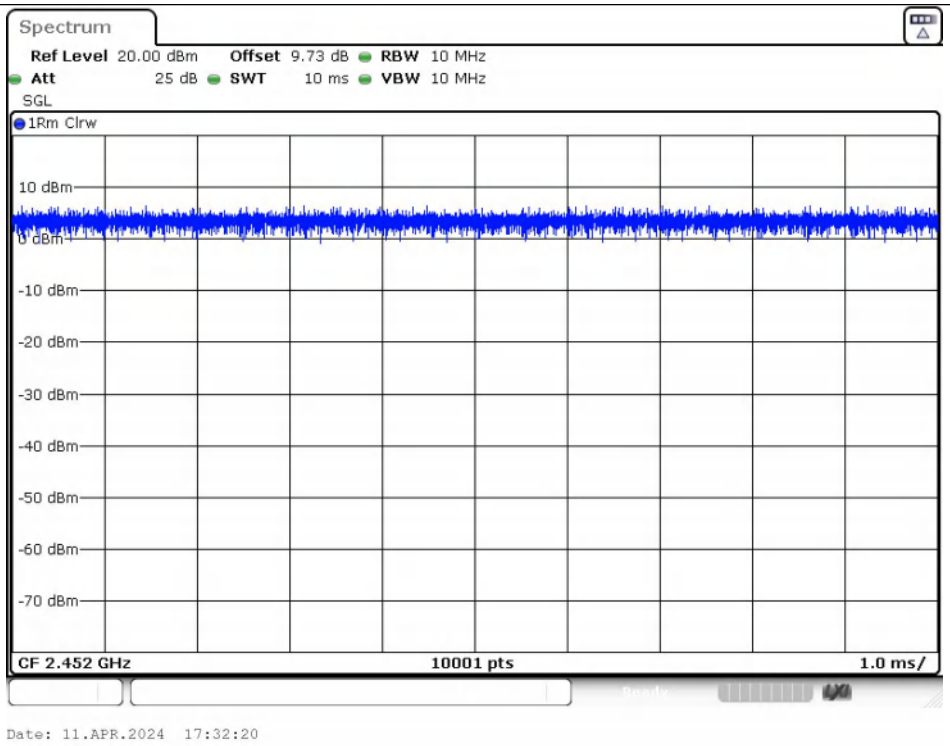
IEEE 802.11n_20MHz_Channel 11



IEEE 802.11n_40MHz_Channel 3



IEEE 802.11n_40MHz_Channel 6



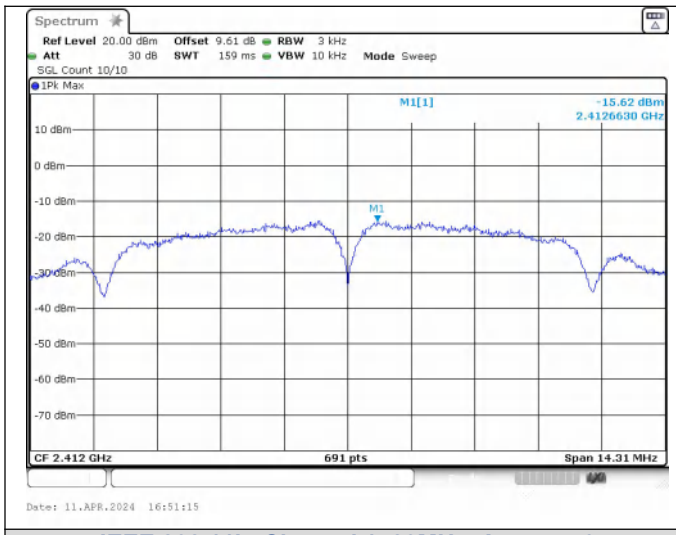
IEEE 802.11n_40MHz_Channel 9

Power Spectral Density

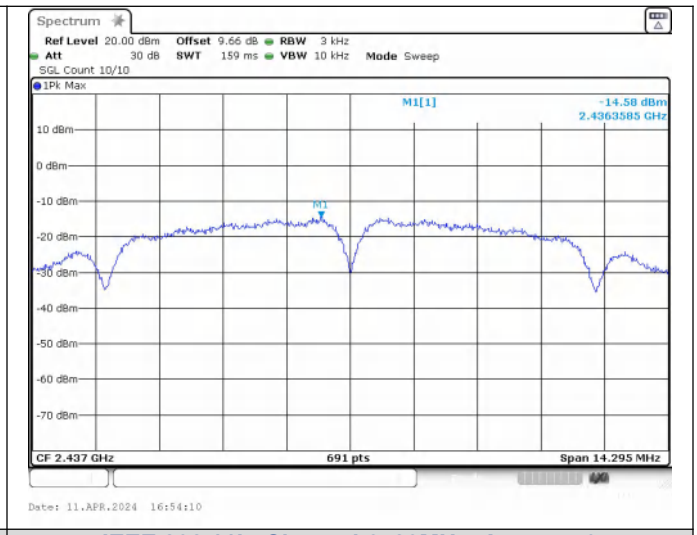
Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-15.619	8	PASS
	6	-14.583		PASS
	11	-16.808		PASS
IEEE 802.11g	1	-16.267		PASS
	6	-17.134		PASS
	11	-22.134		PASS
IEEE 802.11n_20	1	-15.745		PASS
	6	-16.963		PASS
	11	-19.861		PASS
IEEE 802.11n_40	3	-17.287		PASS
	6	-18.847		PASS
	9	-20.444		PASS

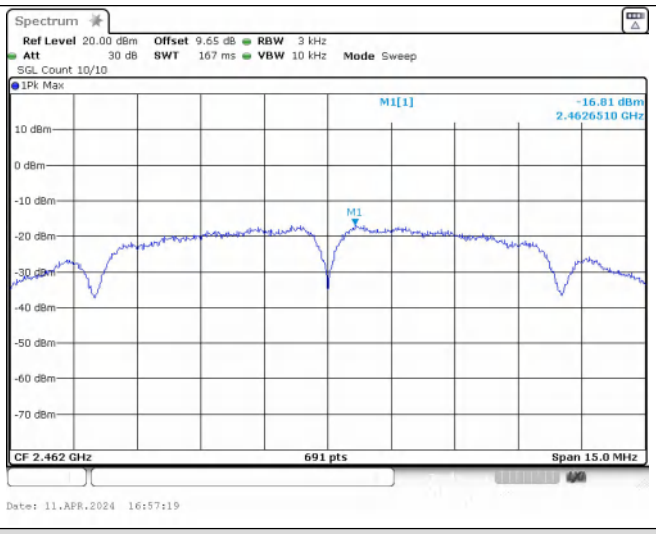
Test Graphs



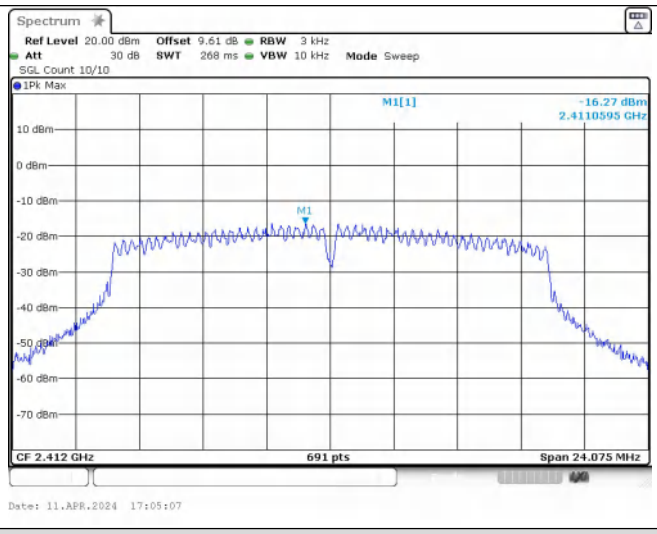
IEEE 802.11b_Channel 1_20MHz_Antenna 0



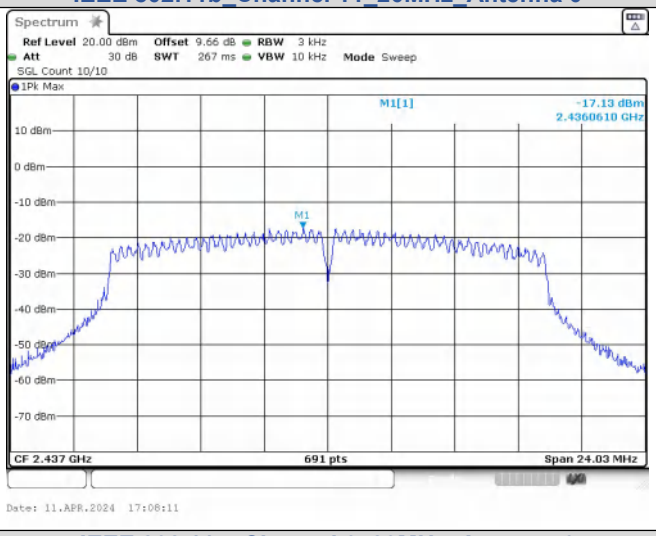
IEEE 802.11b_Channel 6_20MHz_Antenna 0



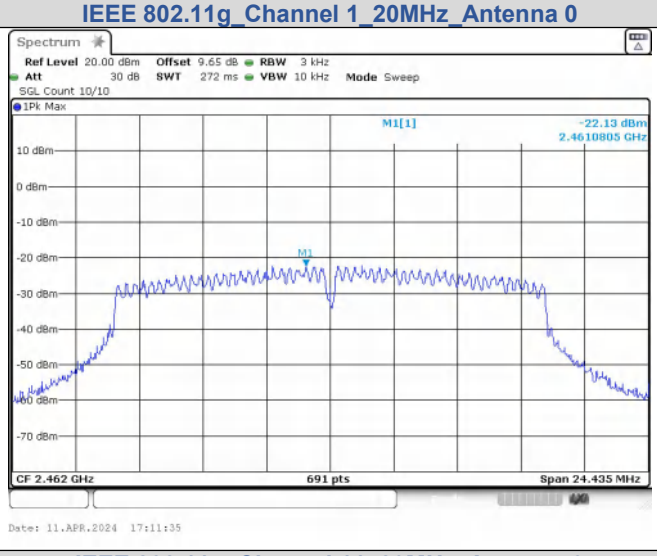
IEEE 802.11b_Channel 11_20MHz_Antenna 0



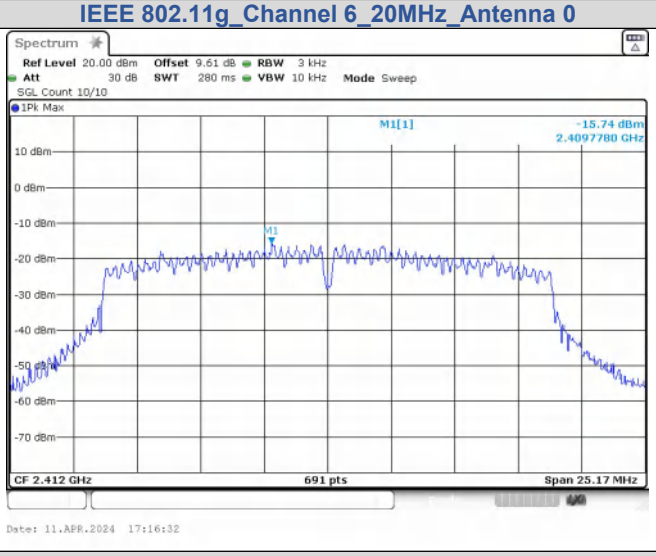
IEEE 802.11g_Channel 1_20MHz_Antenna 0



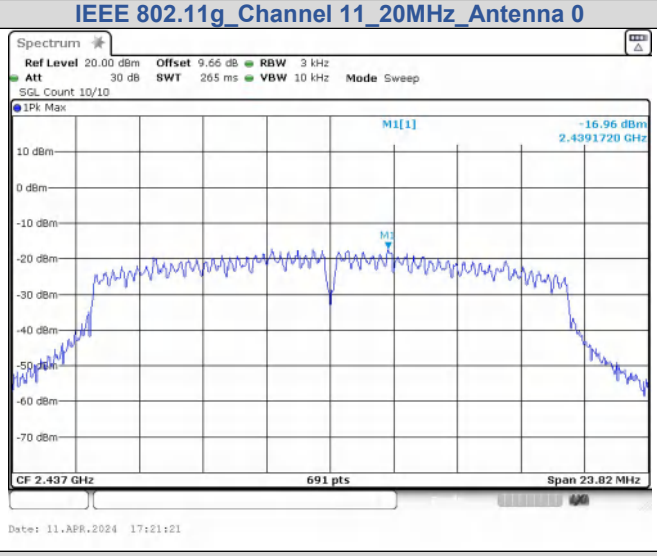
IEEE 802.11g_Channel 6_20MHz_Antenna 0



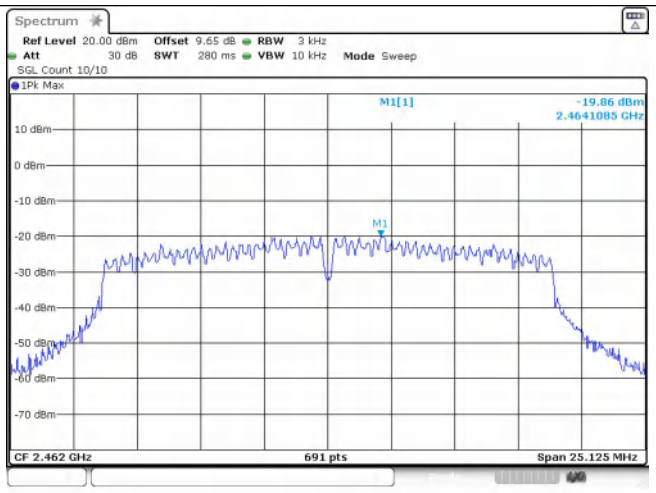
IEEE 802.11g_Channel 11_20MHz_Antenna 0



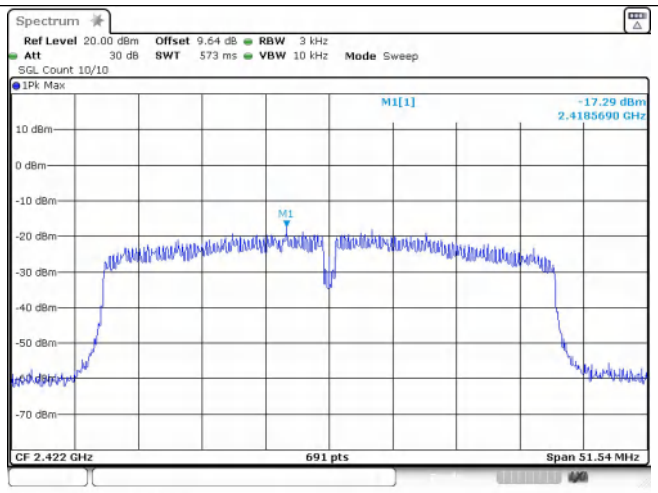
IEEE 802.11n_Channel 1_20MHz_Antenna 0



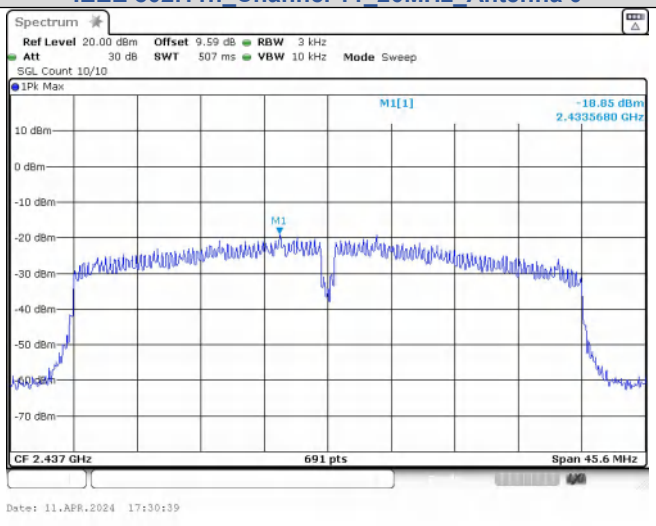
IEEE 802.11n_Channel 6_20MHz_Antenna 0



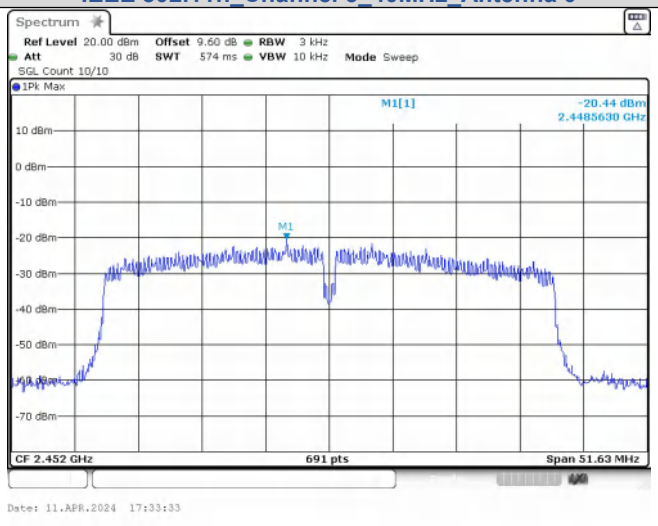
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



IEEE 802.11n_Channel 9_40MHz_Antenna 0