

Appendix Report

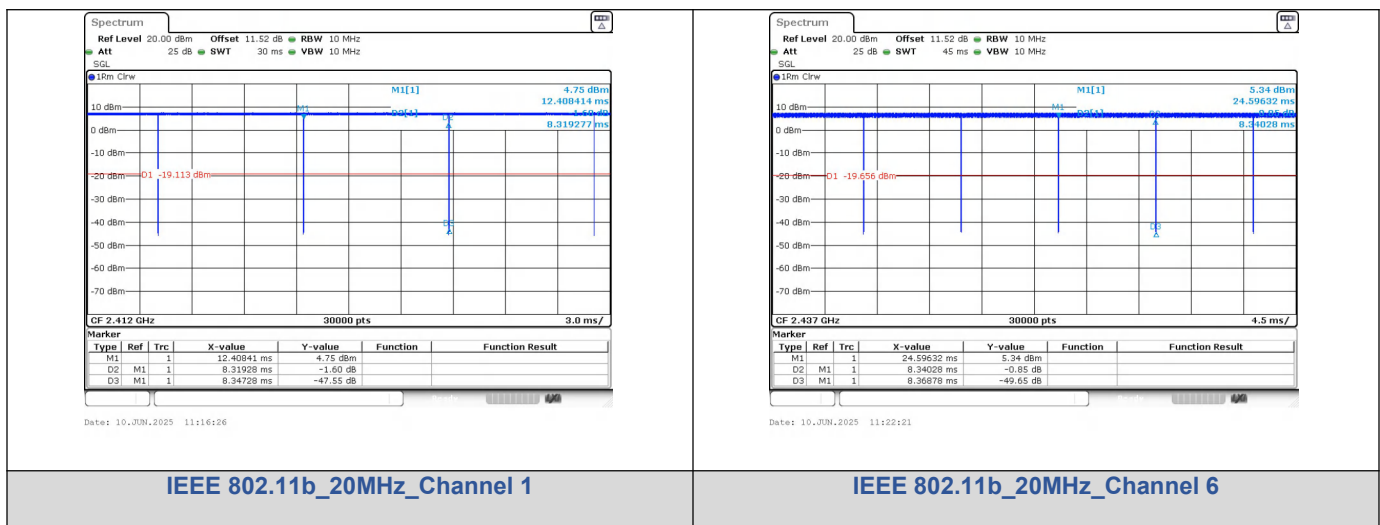
Project No.:	CISR250606036
Test Engineer:	James Wang
Supervised by:	Rory Huang

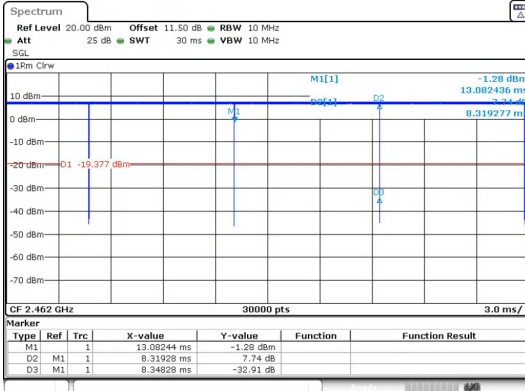
Duty Cycle

Test Result

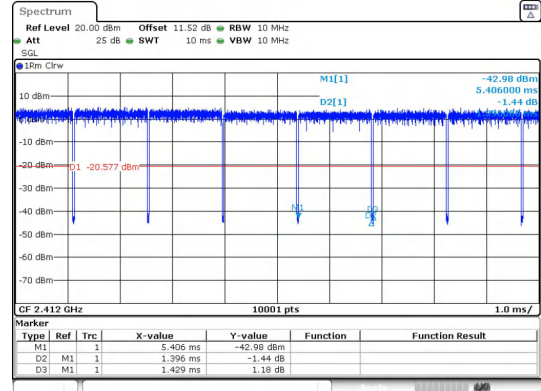
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	1	8.319	8.347	99.66	0.9966	0.0148	0.1202
		6		8.340	8.369	99.66	0.9966	0.0148	0.1199
		11		8.319	8.348	99.65	0.9965	0.0152	0.1202
IEEE 802.11g	1	1		1.396	1.429	97.69	0.9769	0.1015	0.7163
		6		1.396	1.430	97.62	0.9762	0.1046	0.7163
		11		1.396	1.429	97.69	0.9769	0.1015	0.7163
IEEE 802.11n_20	MCS 0	1		1.304	1.337	97.53	0.9753	0.1086	0.7669
		6		1.293	1.327	97.44	0.9744	0.1126	0.7734
		11		1.293	1.327	97.44	0.9744	0.1126	0.7734
IEEE 802.11n_40	MCS 0	3		0.650	0.684	94.94	0.9494	0.2255	1.5385
		6		0.650	0.684	94.94	0.9494	0.2255	1.5385
		9		0.650	0.684	95.00	0.9500	0.2228	1.5385

Test Graphs





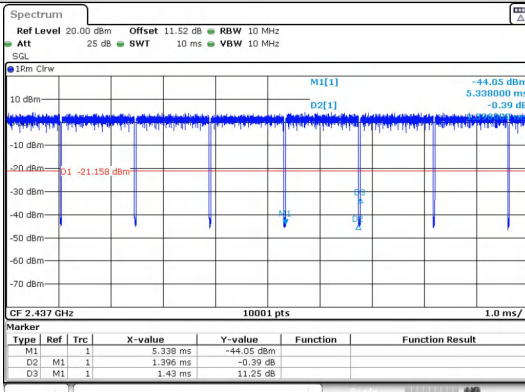
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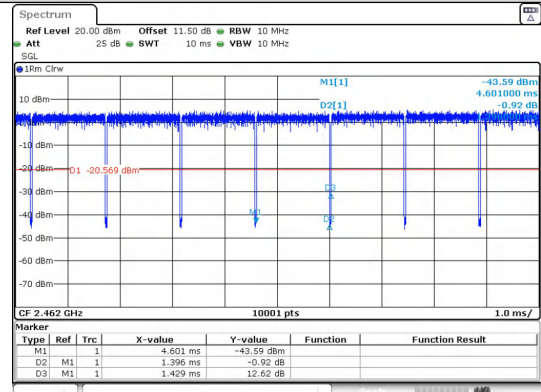
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IEEE 802.11b_20MHz_Channel 11

IEEE 802.11g_20MHz_Channel 1



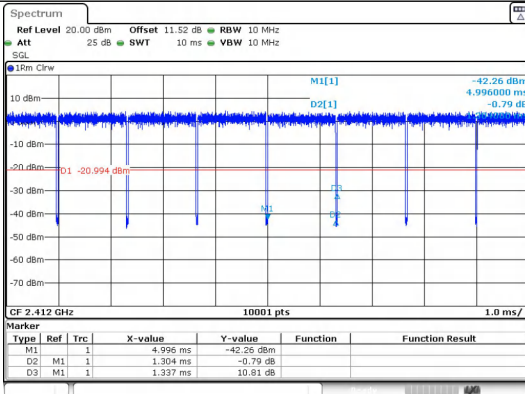
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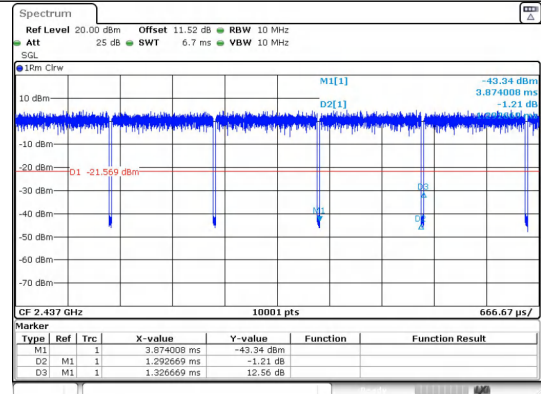
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IEEE 802.11g_20MHz_Channel 6

IEEE 802.11g_20MHz_Channel 11



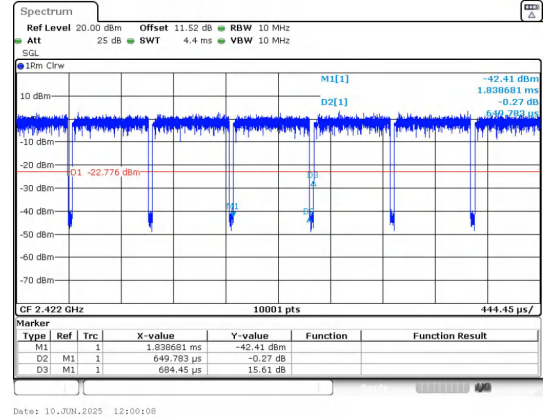
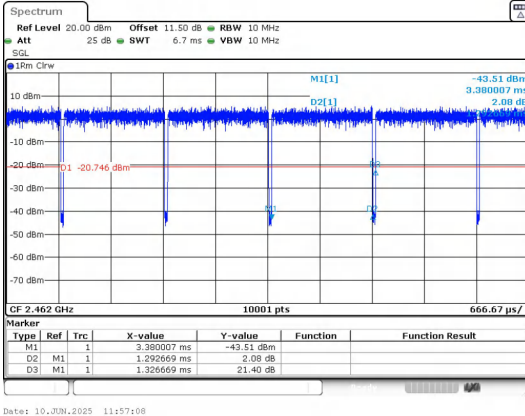
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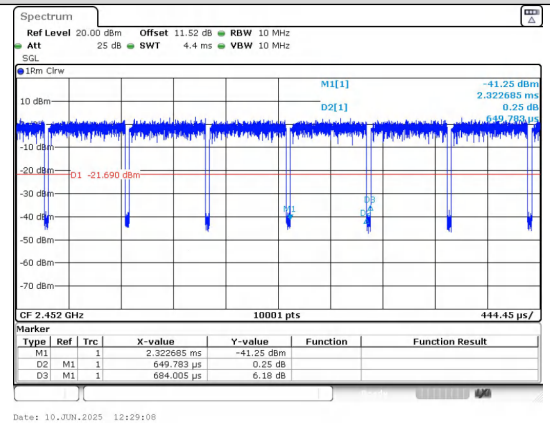
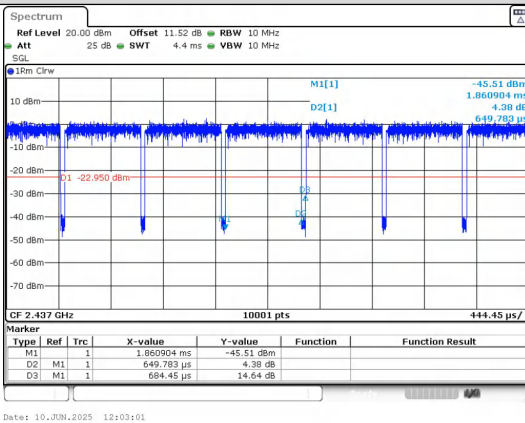
IEEE 802.11n_20MHz_Channel 1

IEEE 802.11n_20MHz_Channel 6



IEEE 802.11n_20MHz_Channel 11

IEEE 802.11n_40MHz_Channel 3



IEEE 802.11n_40MHz_Channel 6

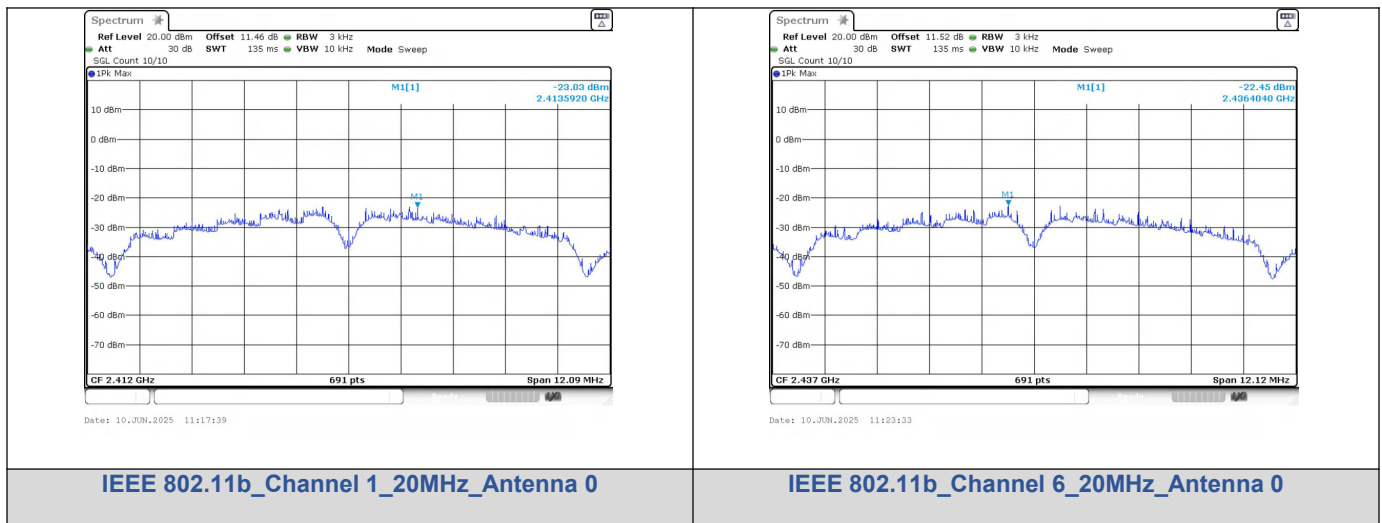
IEEE 802.11n_40MHz_Channel 9

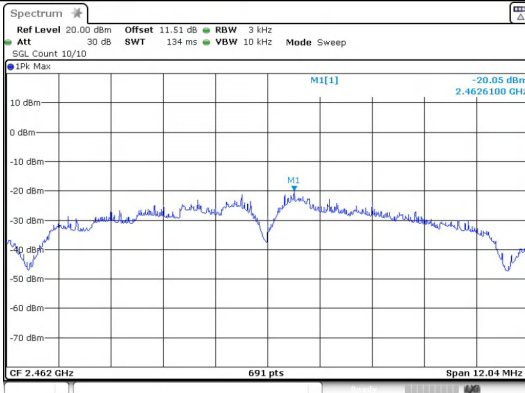
Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-23.030	≤8	PASS
	6	-22.450		PASS
	11	-20.050		PASS
IEEE 802.11g	1	-26.950		PASS
	6	-27.920		PASS
	11	-25.840		PASS
IEEE 802.11n_20	1	-29.300		PASS
	6	-28.440		PASS
	11	-27.670		PASS
IEEE 802.11n_40	3	-31.180		PASS
	6	-31.510		PASS
	9	-31.300		PASS

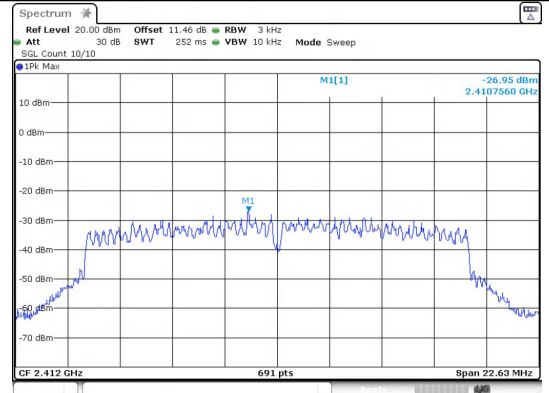
Test Graphs





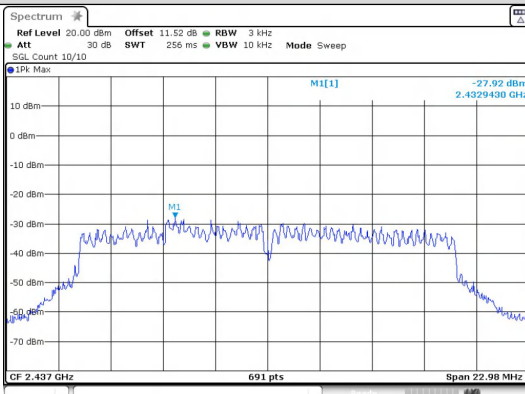
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IEEE 802.11b_Channel 11_20MHz_Antenna 0



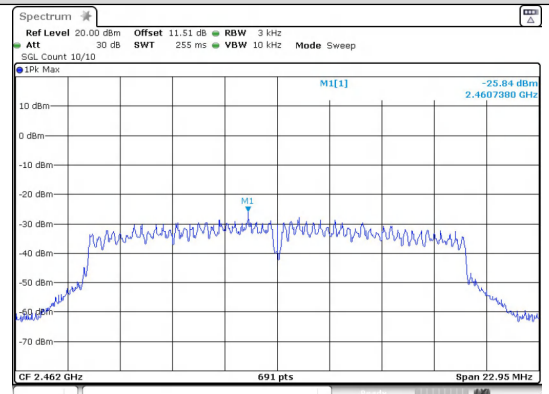
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IEEE 802.11g_Channel 1_20MHz_Antenna 0



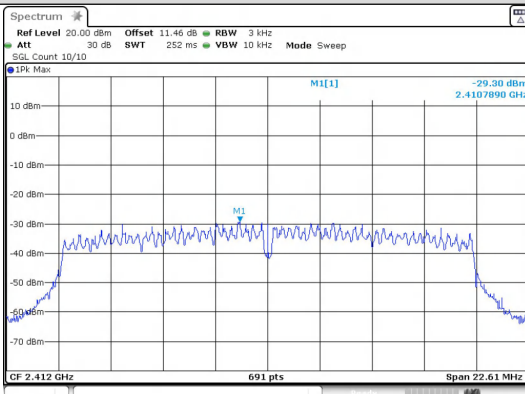
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IEEE 802.11g_Channel 6_20MHz_Antenna 0



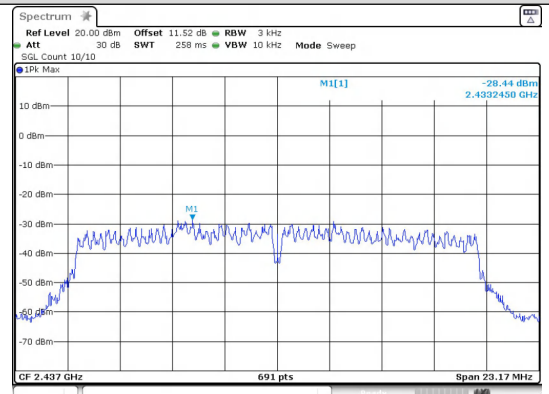
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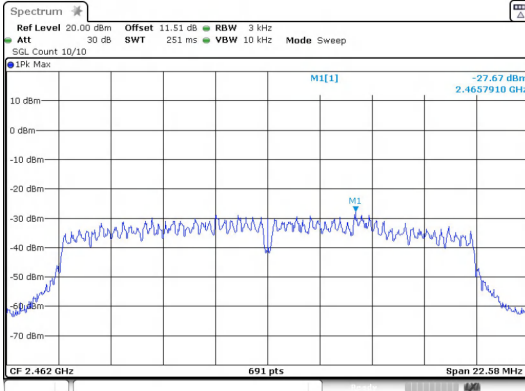
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IEEE 802.11n_Channel 1_20MHz_Antenna 0

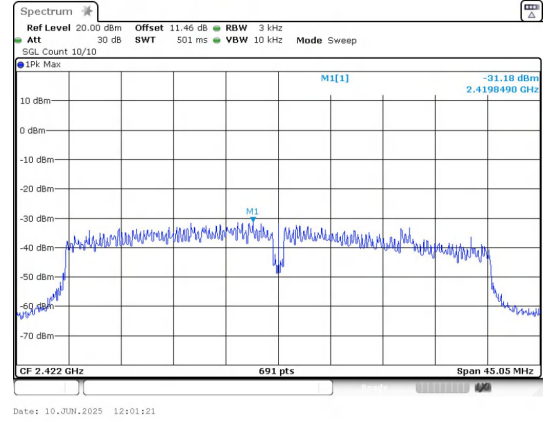


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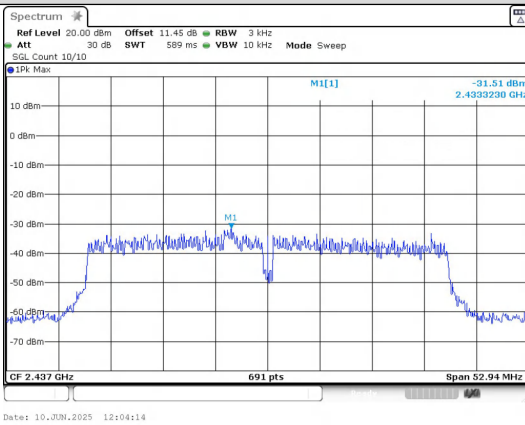
IEEE 802.11n_Channel 6_20MHz_Antenna 0



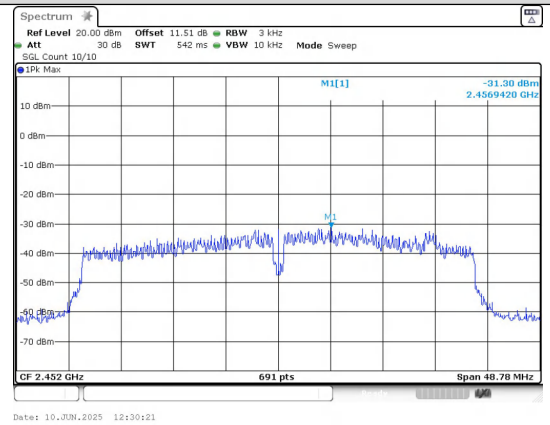
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



IEEE 802.11n_Channel 9_40MHz_Antenna 0

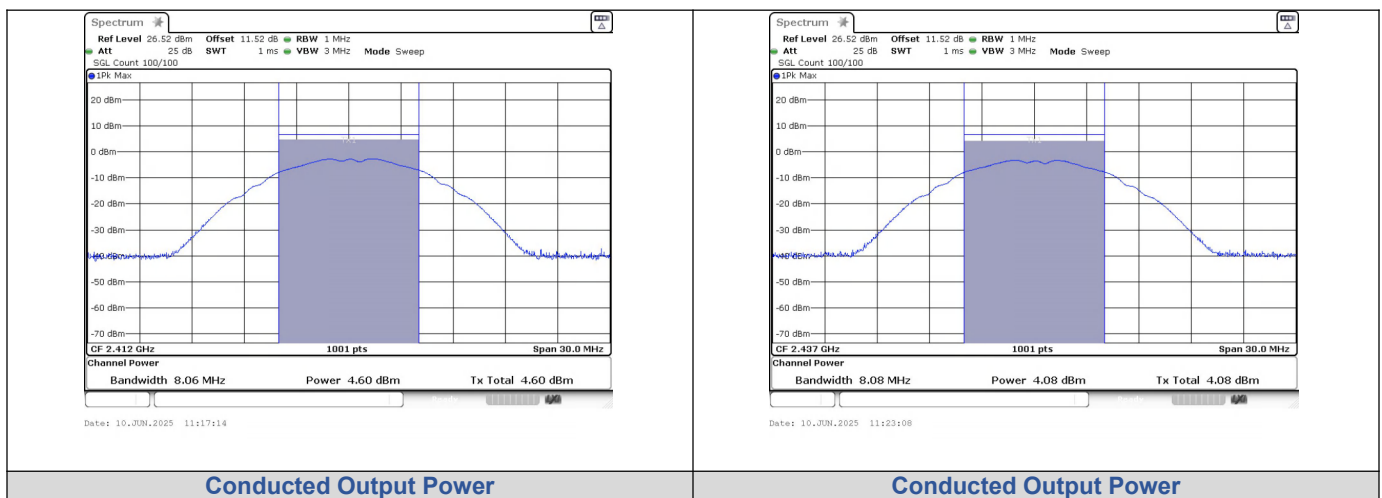
Conducted Output Power

Test Result

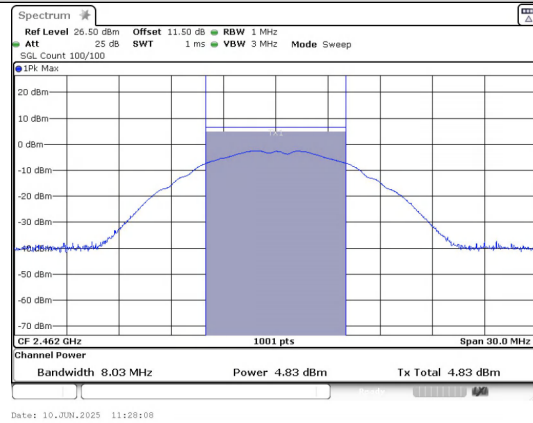
Conducted Output Power

Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	4.60	≤30	PASS
	6	4.08	≤30	PASS
	11	4.83	≤30	PASS
IEEE 802.11g	1	5.52	≤30	PASS
	6	5.13	≤30	PASS
	11	5.88	≤30	PASS
IEEE 802.11n_20	1	4.88	≤30	PASS
	6	4.48	≤30	PASS
	11	5.01	≤30	PASS
IEEE 802.11n_40	3	4.55	≤30	PASS
	6	4.69	≤30	PASS
	9	4.87	≤30	PASS

Test Graphs

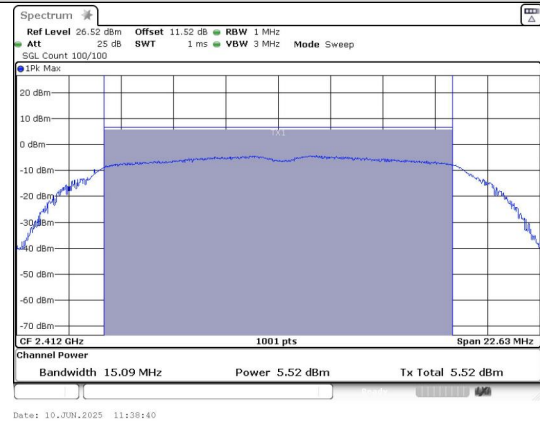


IEEE 802.11b_Channel 1_Antenna 0



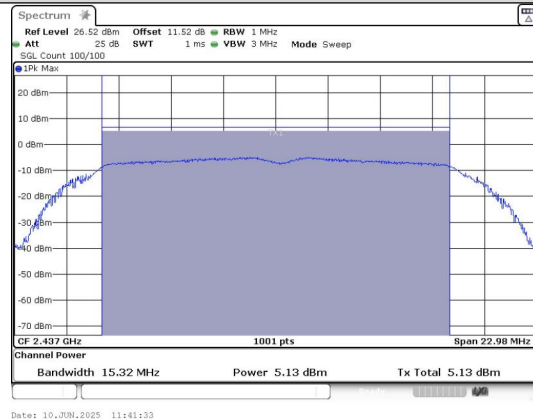
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IEEE 802.11b_Channel 6_Antenna 0



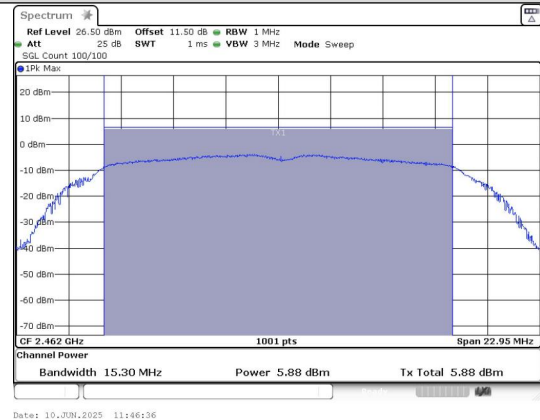
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Conducted Output Power IEEE 802.11b_Channel 11_Antenna 0



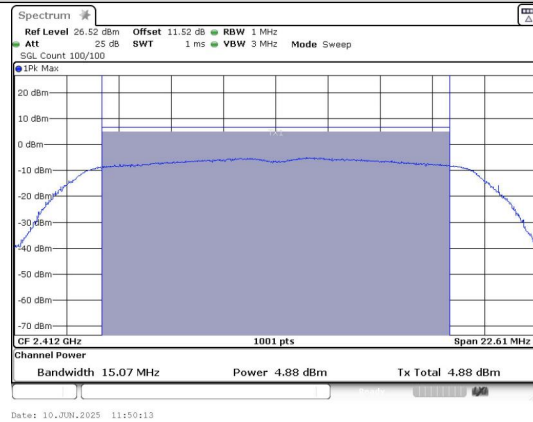
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Conducted Output Power IEEE 802.11g_Channel 1_Antenna 0



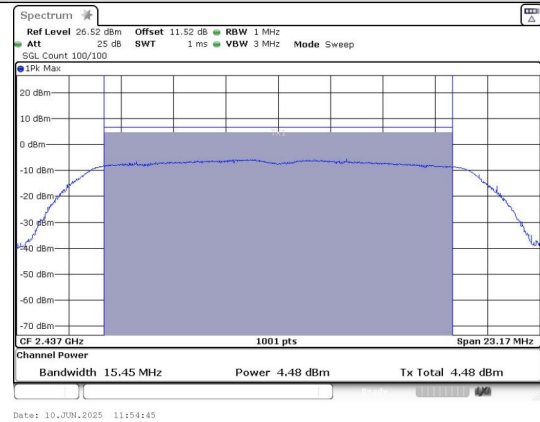
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Conducted Output Power IEEE 802.11g_Channel 6_Antenna 0



Date: 10 JUN 2025 11:50:13

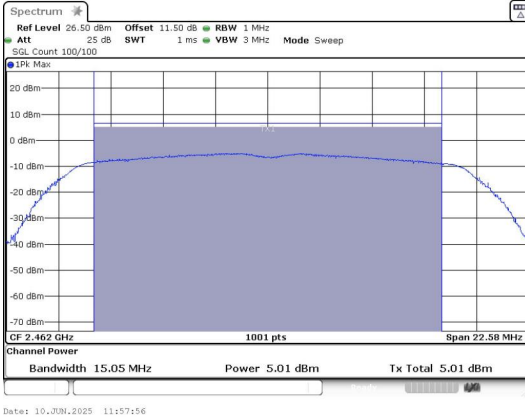
Conducted Output Power IEEE 802.11g_Channel 11_Antenna 0



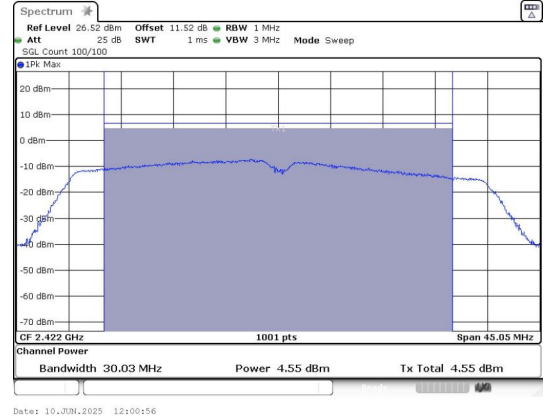
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Conducted Output Power IEEE 802.11n_20_Channel 1_Antenna 0

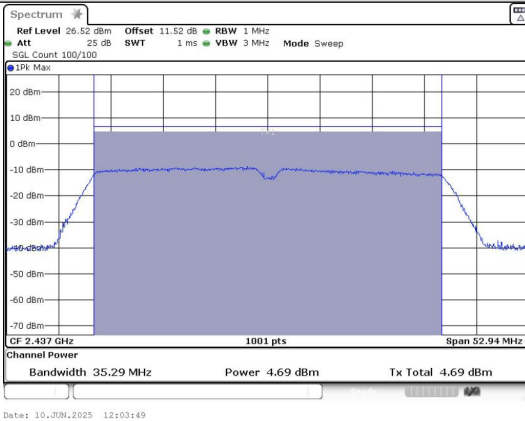
Conducted Output Power IEEE 802.11n_20_Channel 6_Antenna 0



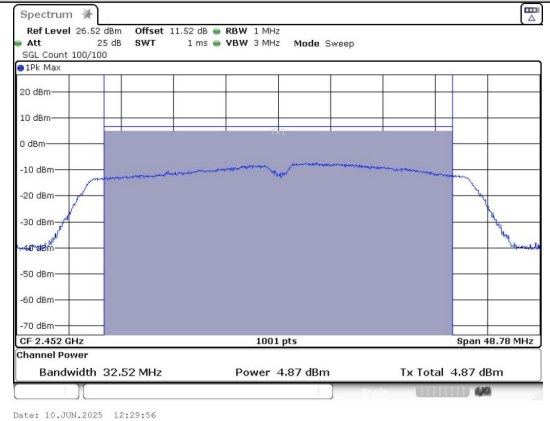
Conducted Output Power
IEEE 802.11n_20_Channel 11_Antenna 0



Conducted Output Power
IEEE 802.11n_40_Channel 3_Antenna 0



Conducted Output Power
IEEE 802.11n_40_Channel 6_Antenna 0



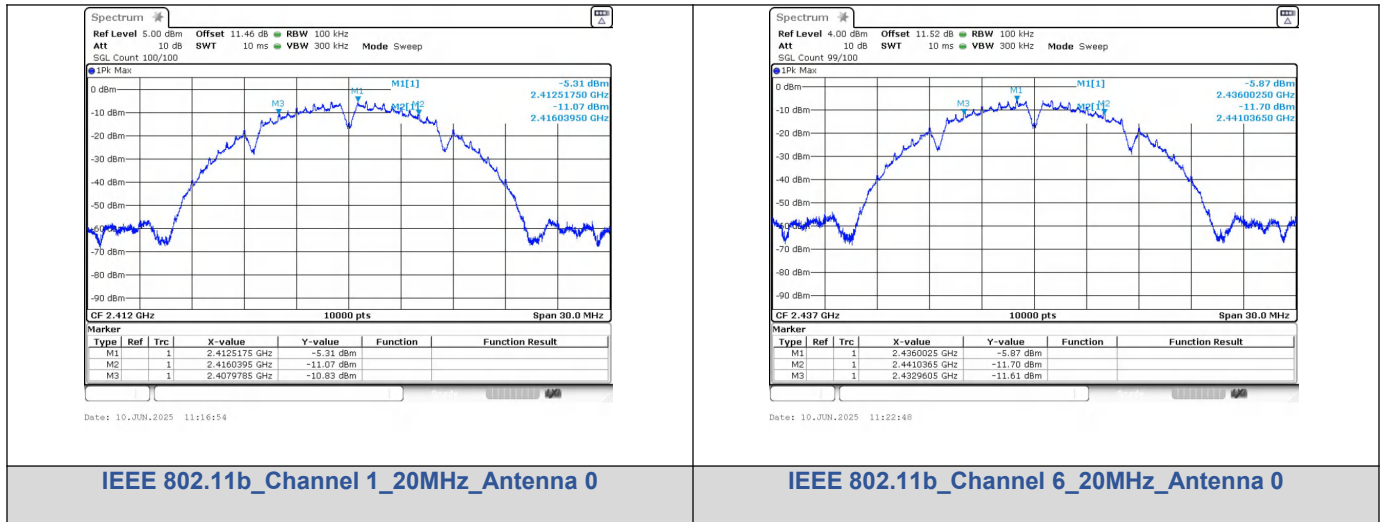
Conducted Output Power
IEEE 802.11n_40_Channel 9_Antenna 0

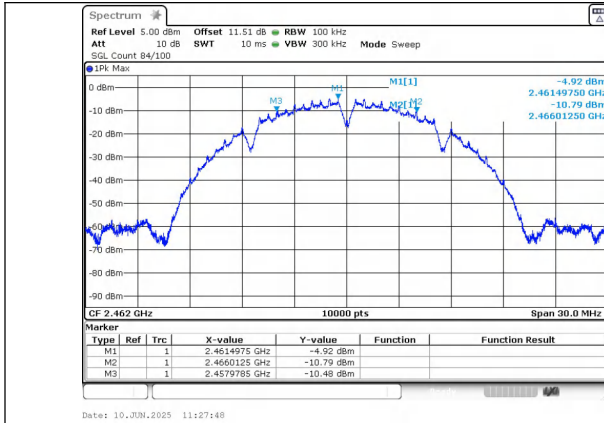
6dB Bandwidth

Test Result

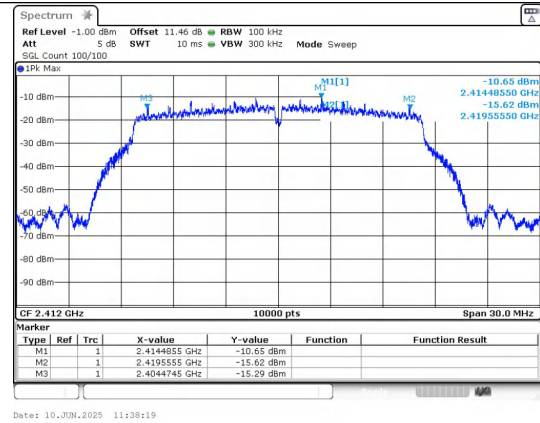
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	8.060	≥0.5	PASS
	6		2437	8.080		PASS
	11		2462	8.030		PASS
IEEE 802.11g	1		2412	15.09		PASS
	6		2437	15.32		PASS
	11		2462	15.30		PASS
IEEE 802.11n_20	1		2412	15.07		PASS
	6		2437	15.45		PASS
	11		2462	15.05		PASS
IEEE 802.11n_40	3		2422	30.03		PASS
	6		2437	35.29		PASS
	9		2452	32.52		PASS

Test Graphs

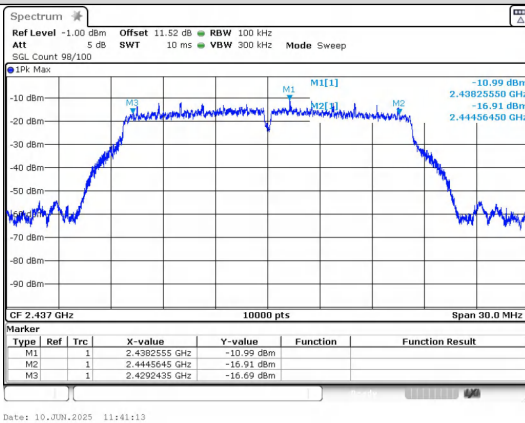




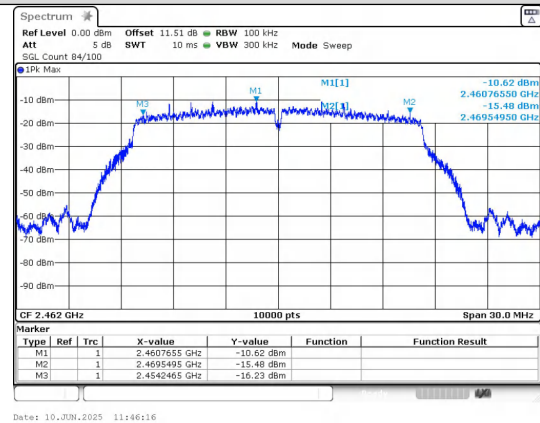
IEEE 802.11b_Channel 11_20MHz_Antenna 0



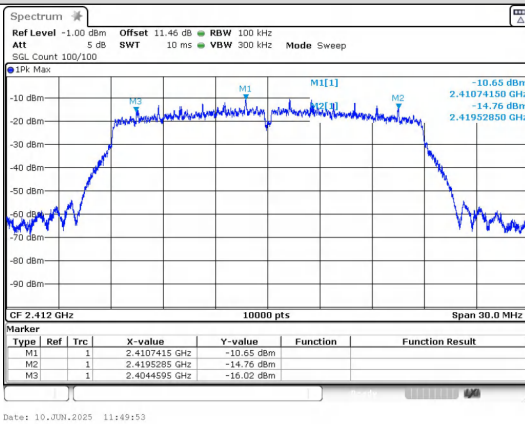
IEEE 802.11g_Channel 1_20MHz_Antenna 0



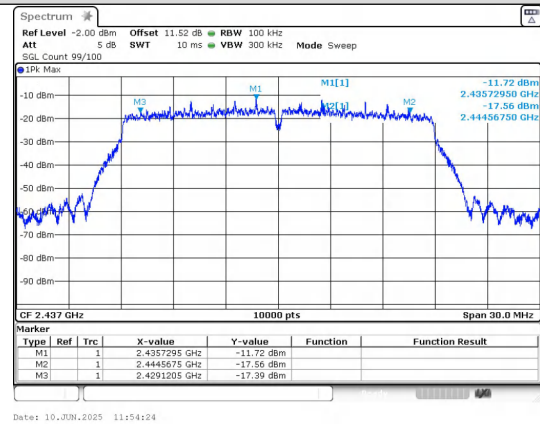
IEEE 802.11g_Channel 6_20MHz_Antenna 0



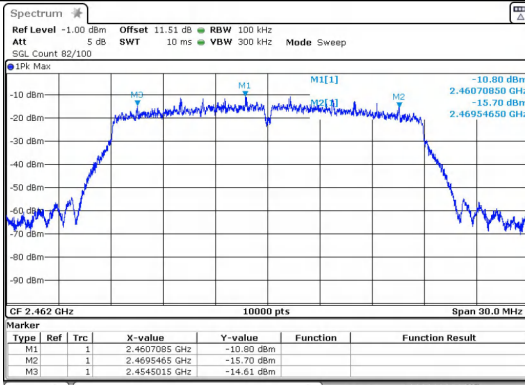
IEEE 802.11g_Channel 11_20MHz_Antenna 0



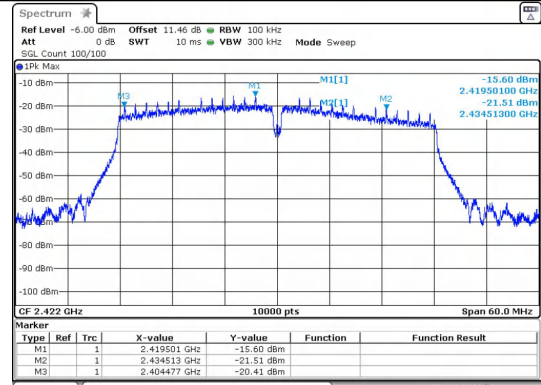
IEEE 802.11n_Channel 1_20MHz_Antenna 0



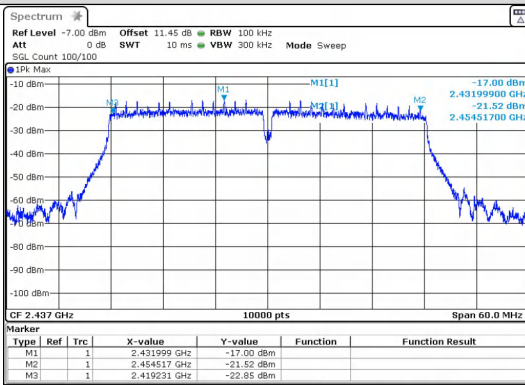
IEEE 802.11n_Channel 6_20MHz_Antenna 0



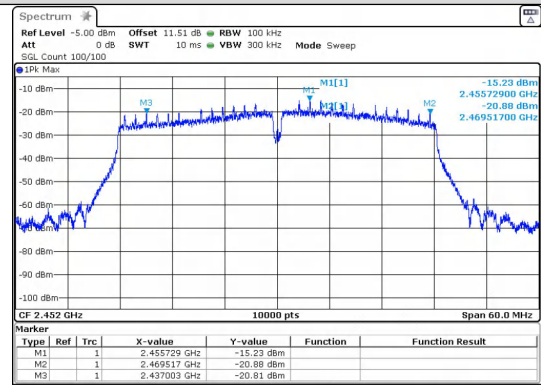
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



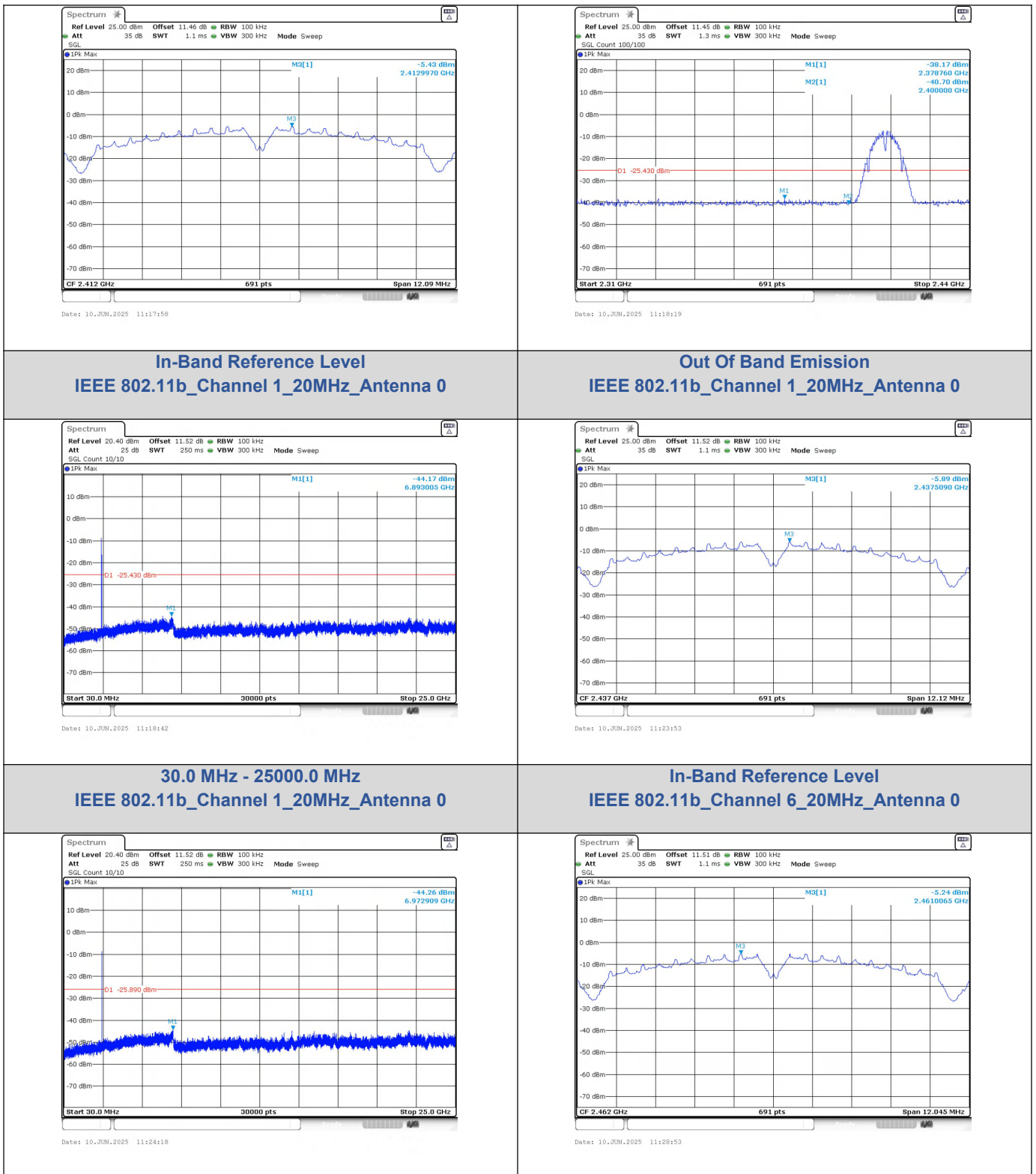
IEEE 802.11n_Channel 9_40MHz_Antenna 0

Conducted Out Of Band Emission

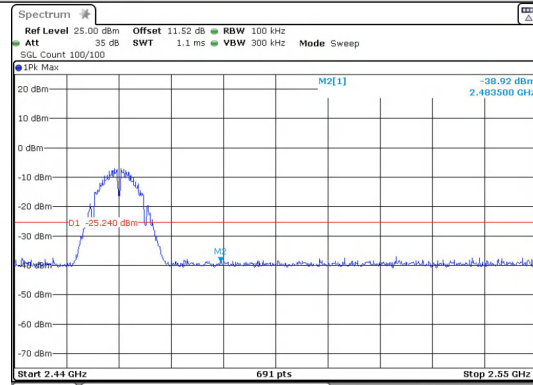
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2378.76	-38.170	-25.43	-12.740	PASS
			2400.00	-40.700	-25.43	-15.270	PASS
			6893.00	-44.170	-25.43	-18.740	PASS
	6		6972.91	-44.264	-25.89	-18.374	PASS
	11		2483.50	-38.920	-25.24	-13.680	PASS
			22029.8	-44.547	-25.24	-19.307	PASS
IEEE 802.11g	1		2375.56	-37.449	-30.27	-7.179	PASS
			2400.00	-40.860	-30.27	-10.590	PASS
			22087.2	-44.277	-30.27	-14.007	PASS
	6		6189.68	-43.895	-31.33	-12.565	PASS
	11		2483.50	-39.580	-29.86	-9.720	PASS
			22078.9	-44.242	-29.86	-14.382	PASS
IEEE 802.11n_20	1		2318.94	-37.593	-30.86	-6.733	PASS
			2400.00	-40.680	-30.86	-9.820	PASS
			6908.00	-44.361	-30.86	-13.501	PASS
	6		6970.41	-43.652	-31.46	-12.192	PASS
	11		2483.50	-40.230	-30.69	-9.540	PASS
			6932.96	-44.261	-30.69	-13.571	PASS
IEEE 802.11n_40	3		2366.35	-37.511	-32.94	-4.571	PASS
			2400.00	-40.300	-32.94	-7.360	PASS
			6843.10	-43.939	-32.94	-10.999	PASS
	6		6907.15	-44.222	-36.67	-7.552	PASS
	9		2483.50	-40.300	-33.13	-7.170	PASS
			6962.09	-44.454	-33.13	-11.324	PASS

Test Graphs

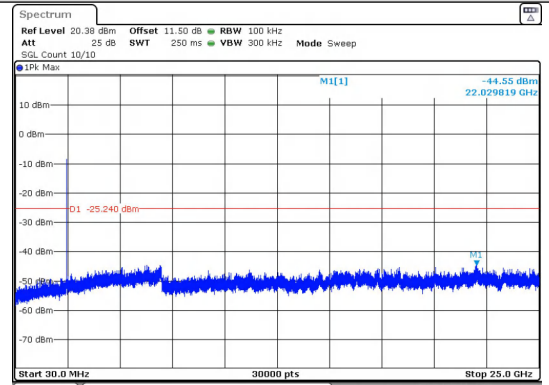


30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



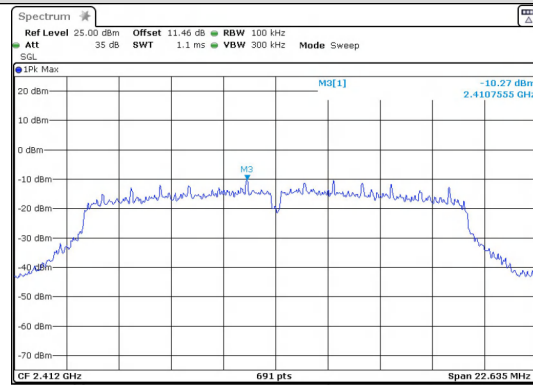
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In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



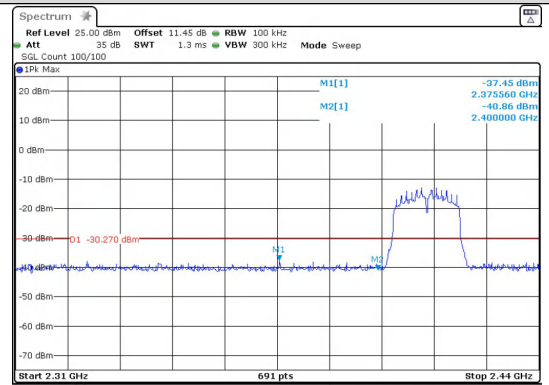
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Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



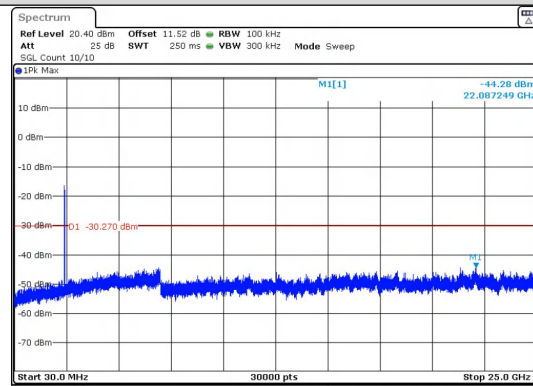
Date: 10 JUN 2025 11:39:25

30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



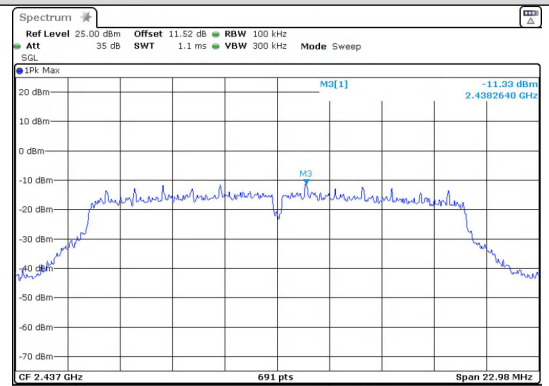
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In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



Date: 10 JUN 2025 11:40:08

Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0

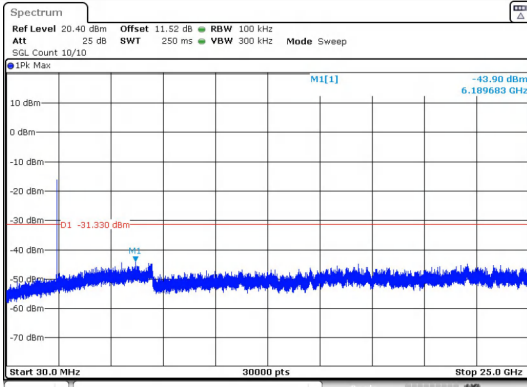


Date: 10 JUN 2025 11:42:18

30.0 MHz - 25000.0 MHz

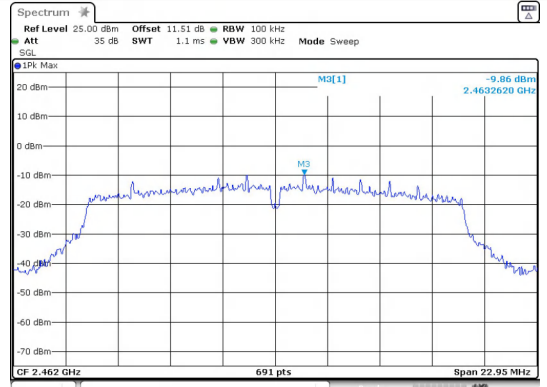
In-Band Reference Level

IEEE 802.11g_Channel 1_20MHz_Antenna 0



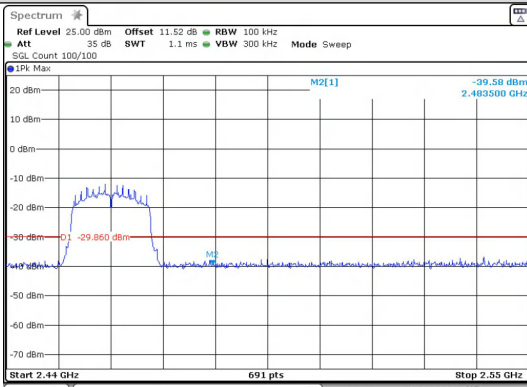
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IEEE 802.11g_Channel 6_20MHz_Antenna 0



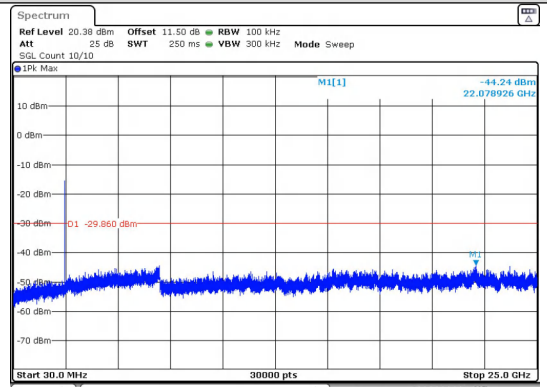
Date: 10 JUN 2025 11:47:21

30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 6_20MHz_Antenna 0



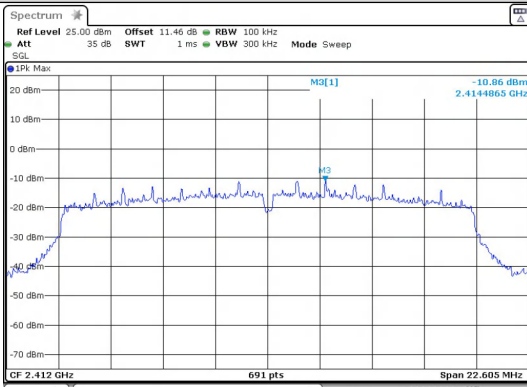
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In-Band Reference Level IEEE 802.11g_Channel 11_20MHz_Antenna 0



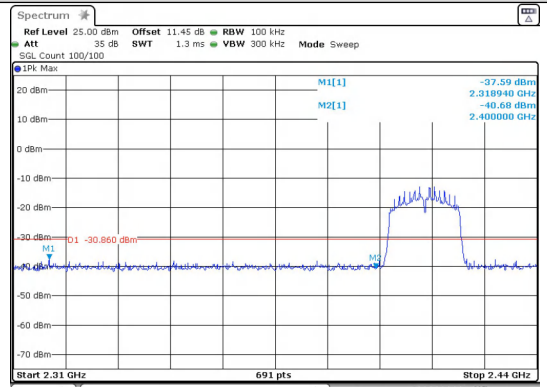
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Out Of Band Emission IEEE 802.11g_Channel 11_20MHz_Antenna 0



Date: 10 JUN 2025 11:50:58

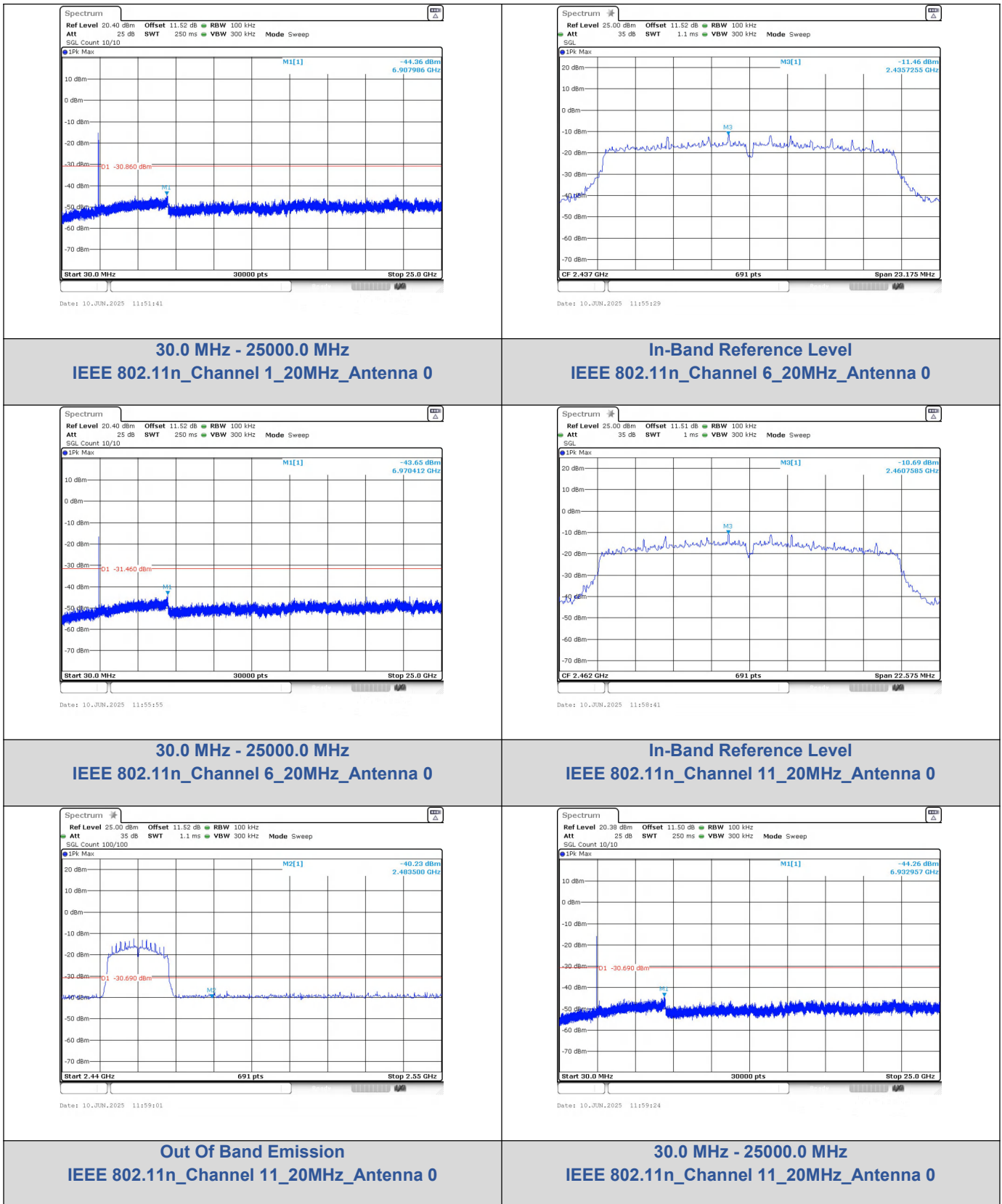
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 11_20MHz_Antenna 0

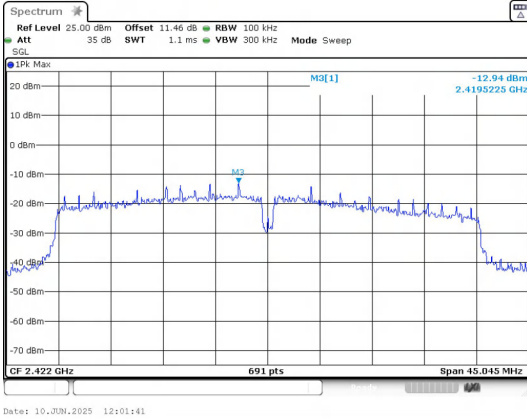


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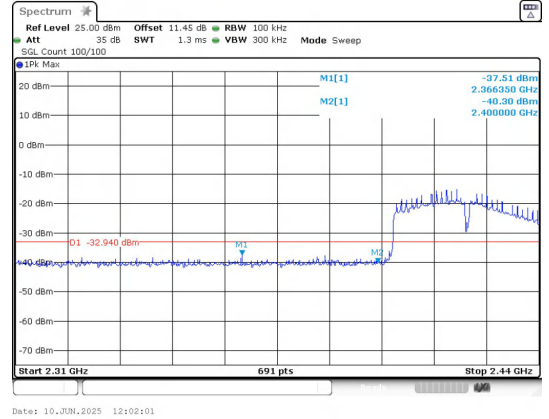
In-Band Reference Level IEEE 802.11n_Channel 1_20MHz_Antenna 0

Out Of Band Emission IEEE 802.11n_Channel 1_20MHz_Antenna 0

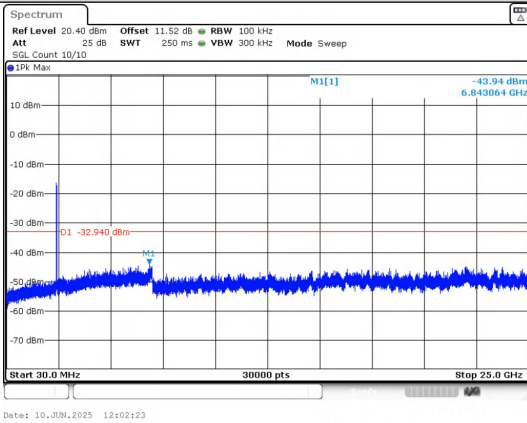




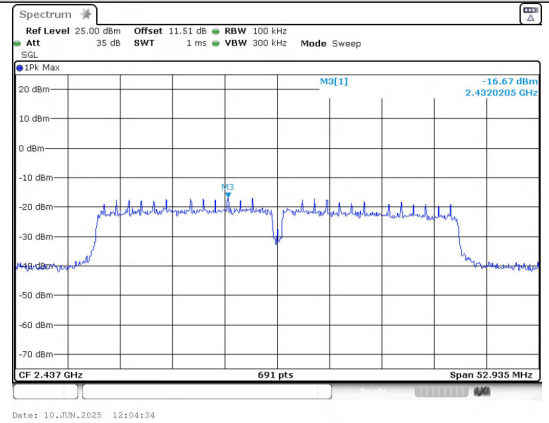
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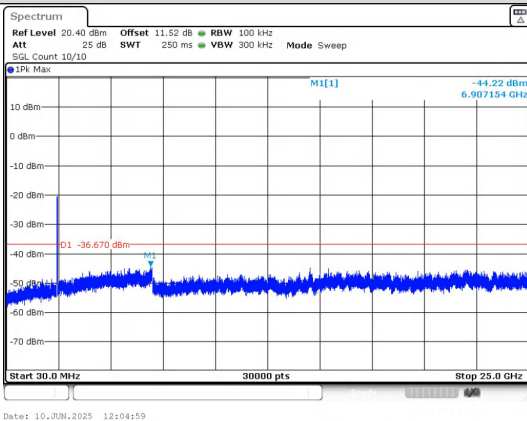
Out Of Band Emission
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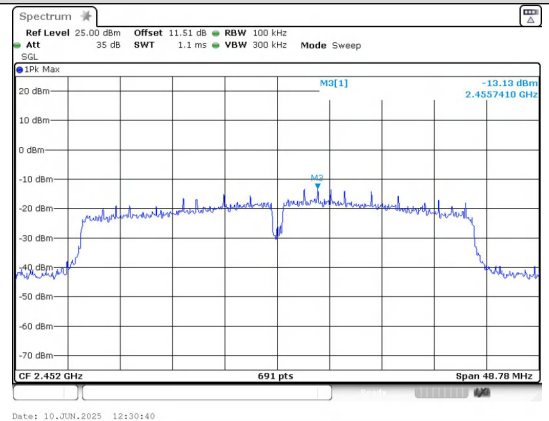
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 3_40MHz_Antenna 0



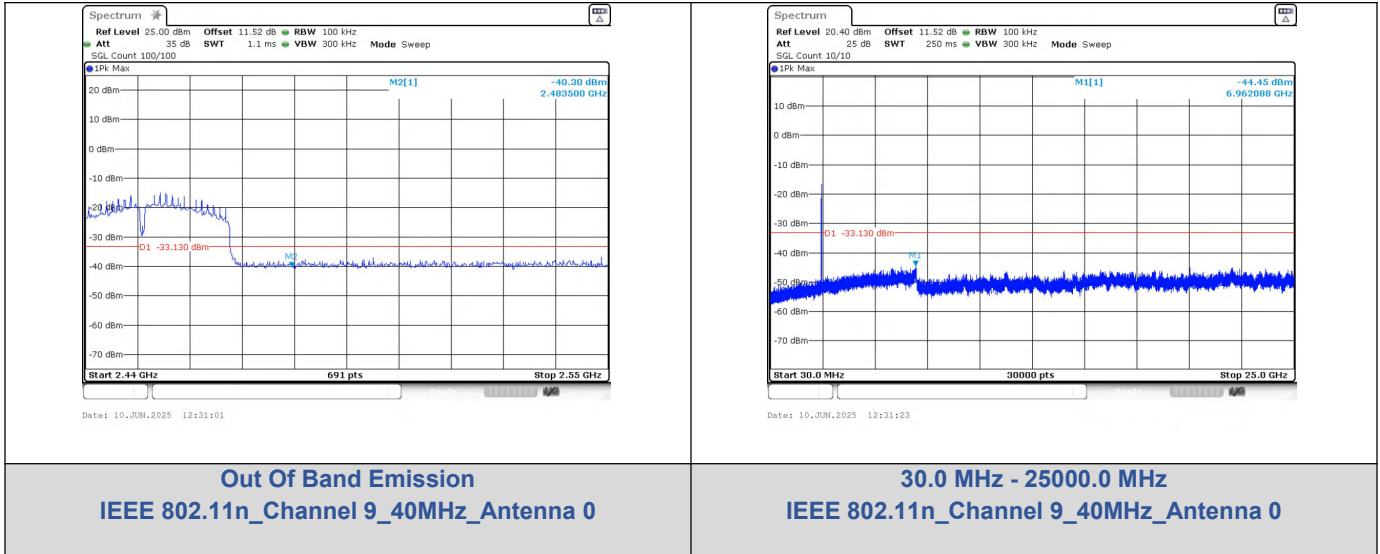
In-Band Reference Level
IEEE 802.11n_Channel 6_40MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_40MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 9_40MHz_Antenna 0



-----End of the report-----