

Appendix Report

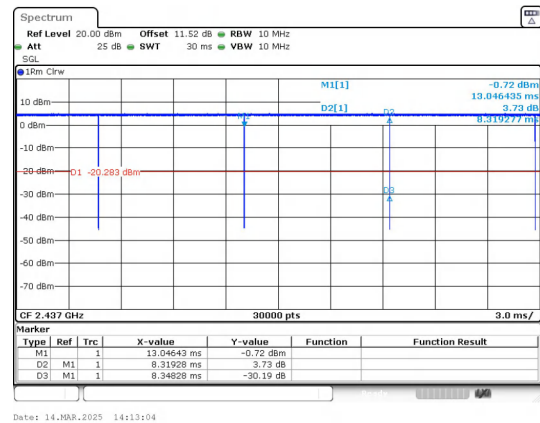
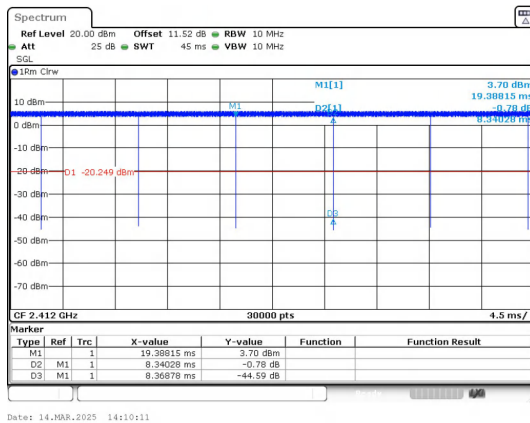
Report No.:	CISRR25031310207
Test Engineer:	Mark Fu
Supervised by:	Rory Huang

1) Duty Cycle

Test Result

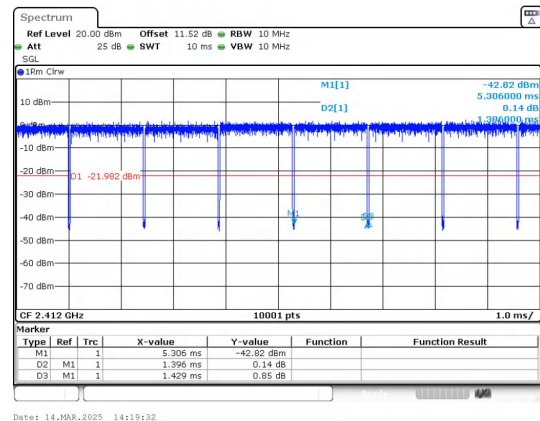
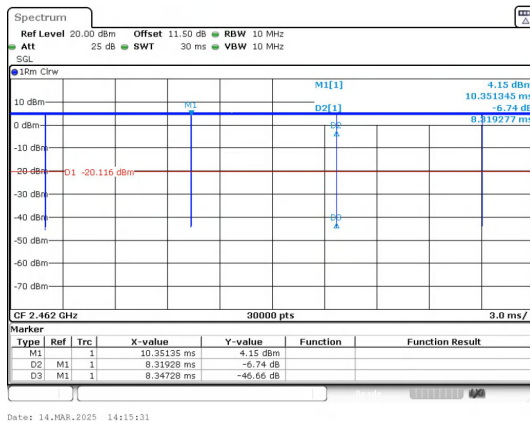
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	1	8.340	8.369	99.66	0.9966	0.0148	0.1199
		6		8.319	8.348	99.65	0.9965	0.0152	0.1202
		11		8.319	8.347	99.66	0.9966	0.0148	0.1202
IEEE 802.11g	1	1		1.396	1.429	97.69	0.9769	0.1015	0.7163
		6		1.396	1.429	97.69	0.9769	0.1015	0.7163
		11		1.395	1.429	97.62	0.9762	0.1046	0.7168
IEEE 802.11n_20	MCS 0	1		1.292	1.326	97.44	0.9744	0.1126	0.7740
		6		1.304	1.337	97.53	0.9753	0.1086	0.7669
		11		1.303	1.337	97.46	0.9746	0.1117	0.7675

Test Graphs



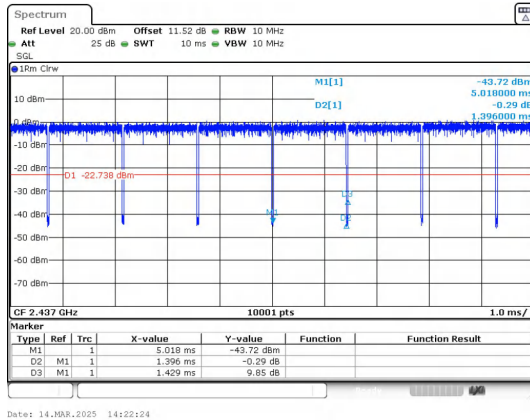
IEEE 802.11b_20MHz_Channel 1

IEEE 802.11b_20MHz_Channel 6

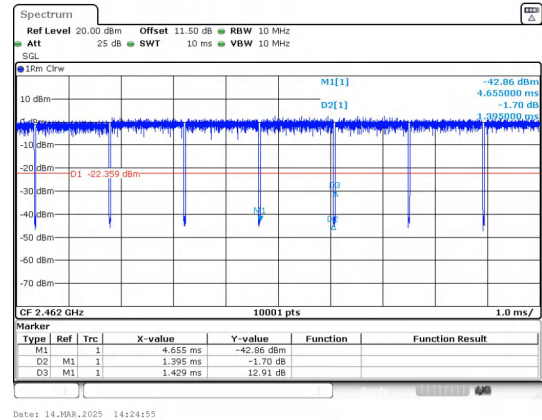


IEEE 802.11b_20MHz_Channel 11

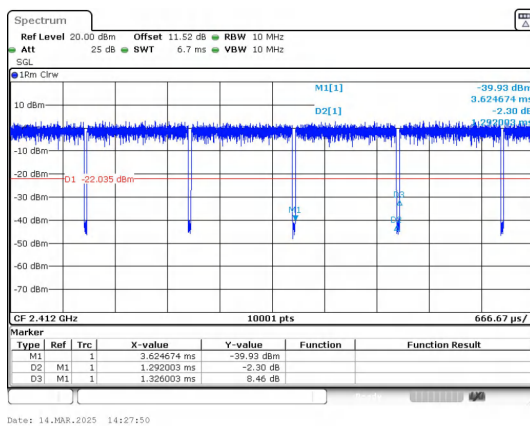
IEEE 802.11g_20MHz_Channel 1



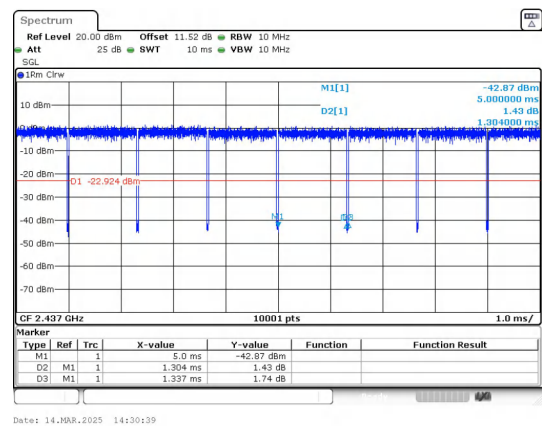
IEEE 802.11g_20MHz_Channel 6



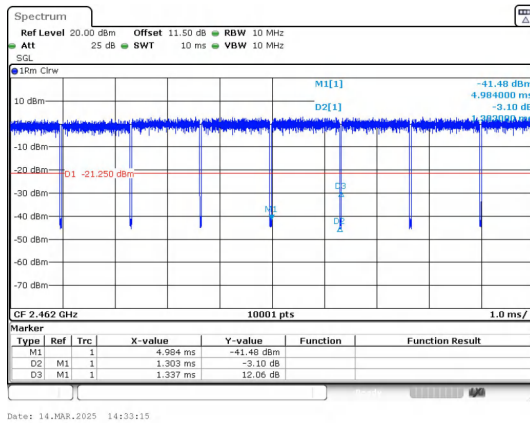
IEEE 802.11g_20MHz_Channel 11



IEEE 802.11n_20MHz_Channel 1



IEEE 802.11n_20MHz_Channel 6



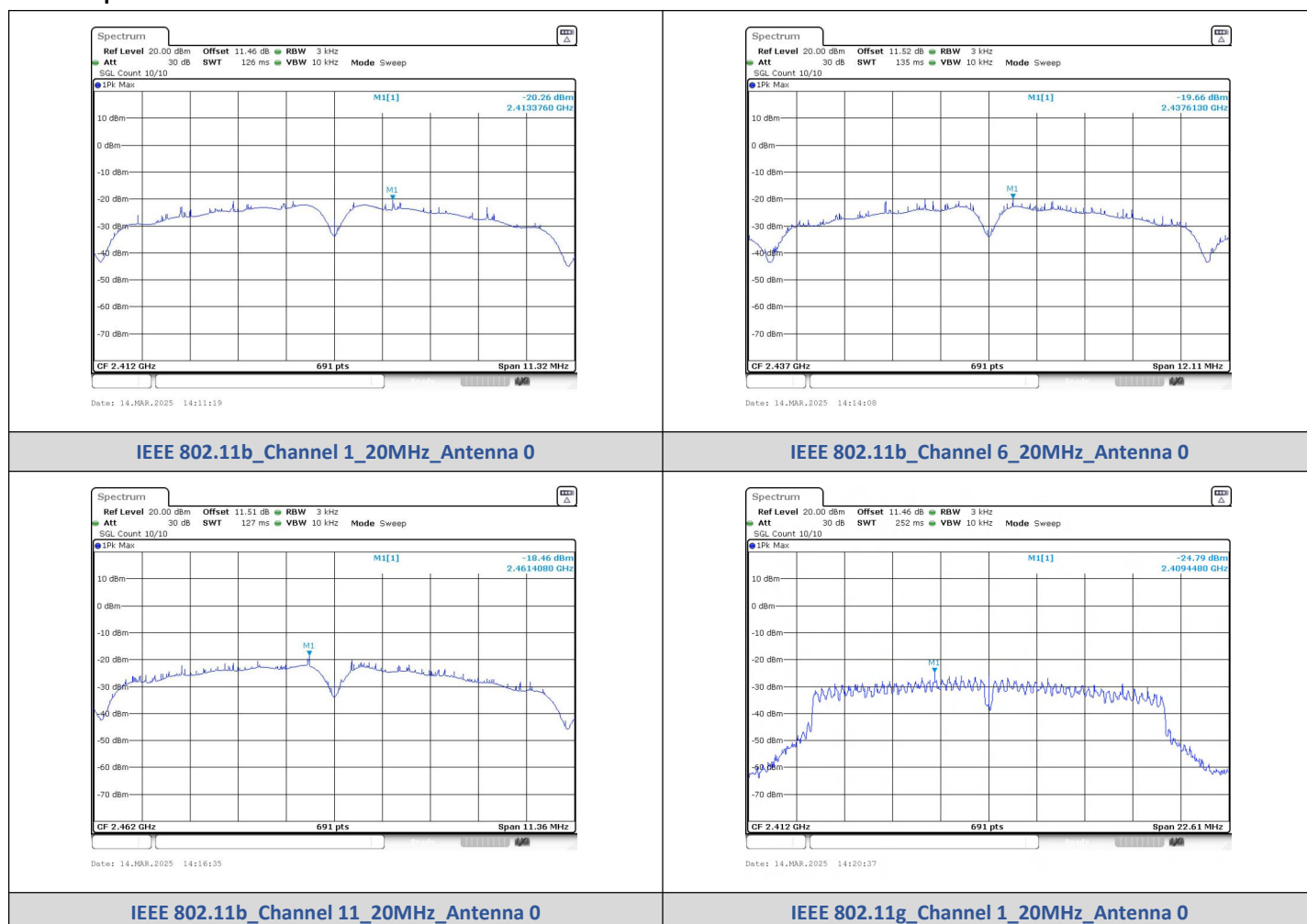
IEEE 802.11n_20MHz_Channel 11

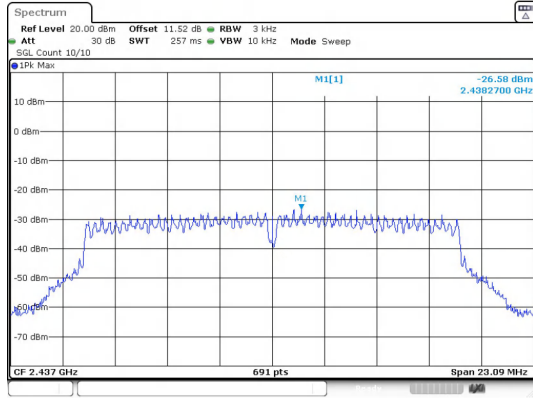
2) Power Spectral Density

Test Result

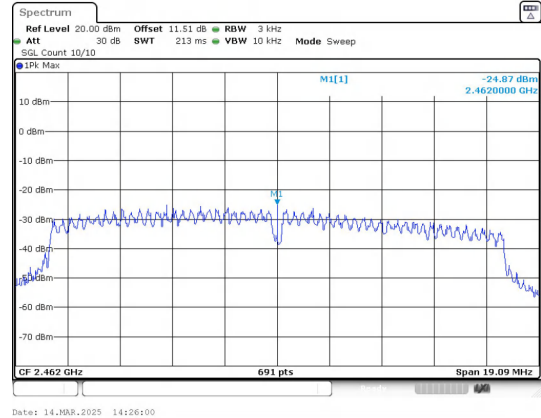
Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-20.260	≤8	PASS
	6	-19.660		PASS
	11	-18.460		PASS
IEEE 802.11g	1	-24.790		PASS
	6	-26.580		PASS
	11	-24.870		PASS
IEEE 802.11n_20	1	-24.290		PASS
	6	-26.380		PASS
	11	-24.760		PASS

Test Graphs

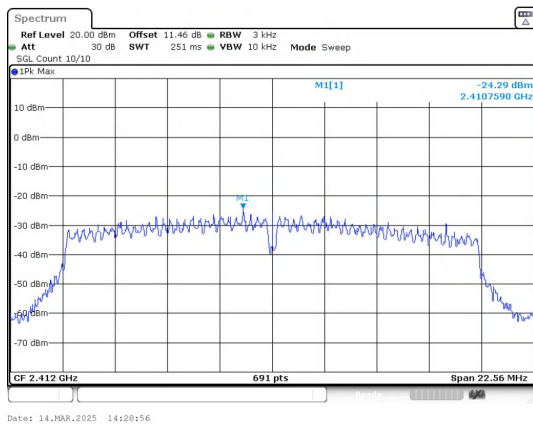




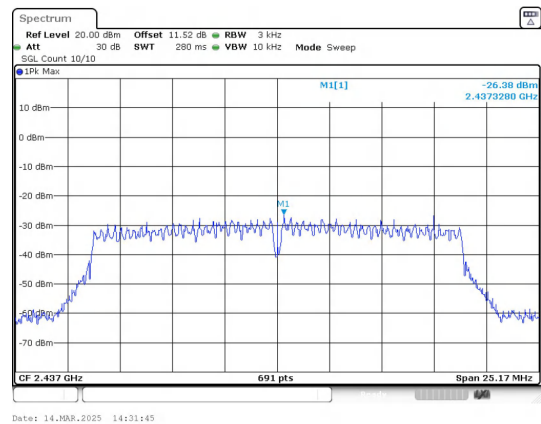
IEEE 802.11g_Channel 6_20MHz_Antenna 0



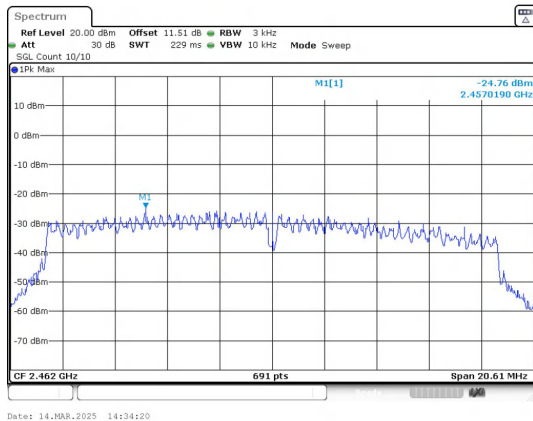
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0

3) Conducted Output Power

Test Result

Conducted Output Power

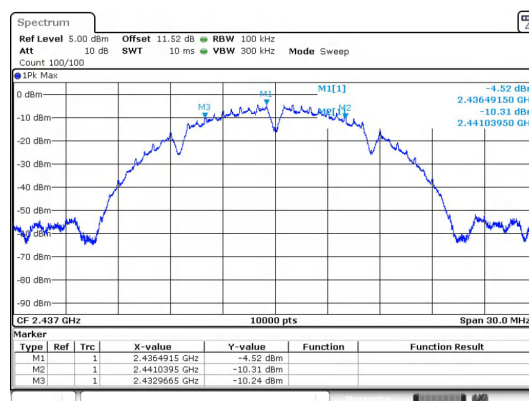
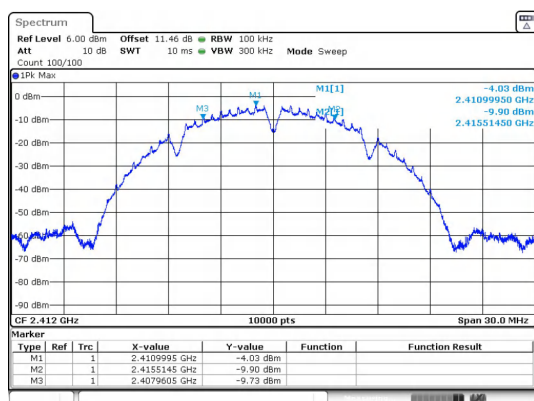
Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	8.13	≤ 30	PASS
	6	7.66	≤ 30	PASS
	11	8.10	≤ 30	PASS
IEEE 802.11g	1	8.26	≤ 30	PASS
	6	7.70	≤ 30	PASS
	11	8.41	≤ 30	PASS
IEEE 802.11n_20	1	8.21	≤ 30	PASS
	6	7.91	≤ 30	PASS
	11	8.68	≤ 30	PASS

4) 6dB Bandwidth

Test Result

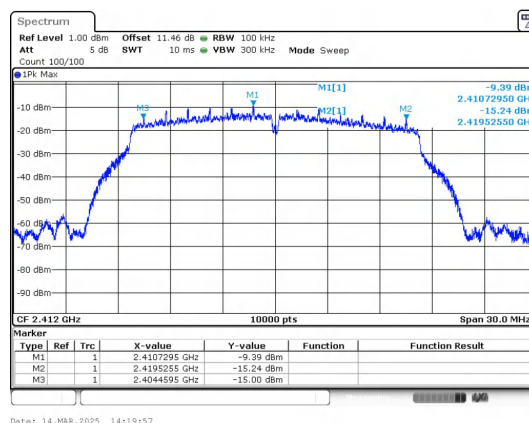
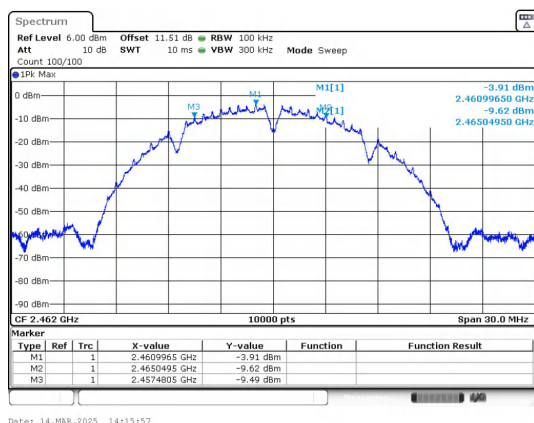
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	7.550	≥0.5	PASS
	6		2437	8.070		PASS
	11		2462	7.570		PASS
IEEE 802.11g	1		2412	15.07		PASS
	6		2437	15.39		PASS
	11		2462	12.73		PASS
IEEE 802.11n_20	1		2412	15.04		PASS
	6		2437	16.78		PASS
	11		2462	13.74		PASS

Test Graphs



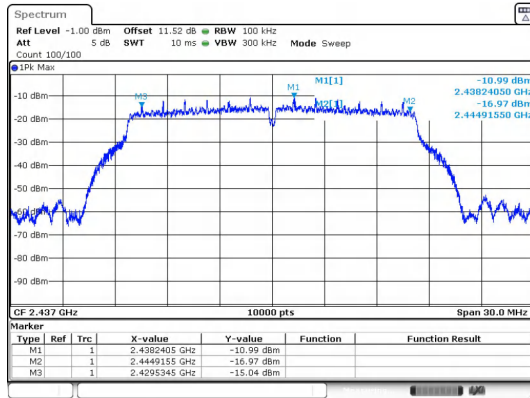
IEEE 802.11b_Channel 1_20MHz_Antenna 0

IEEE 802.11b_Channel 6_20MHz_Antenna 0

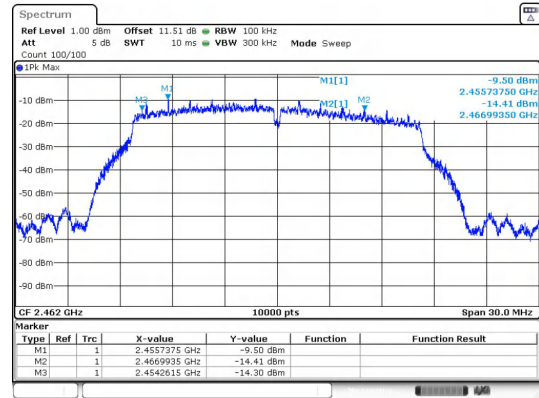


IEEE 802.11b_Channel 11_20MHz_Antenna 0

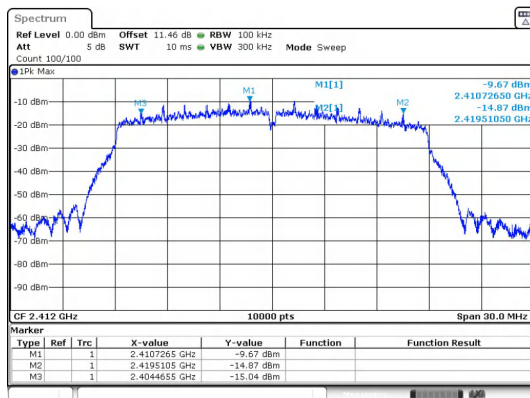
IEEE 802.11g_Channel 1_20MHz_Antenna 0



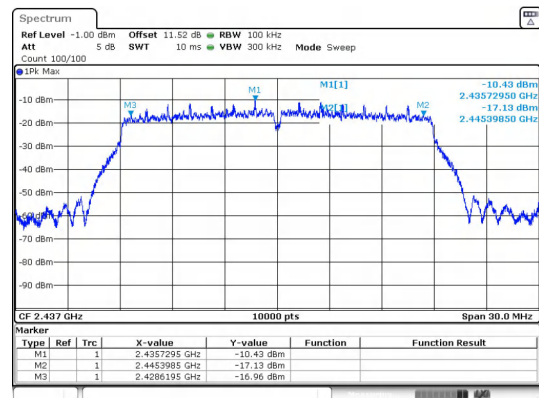
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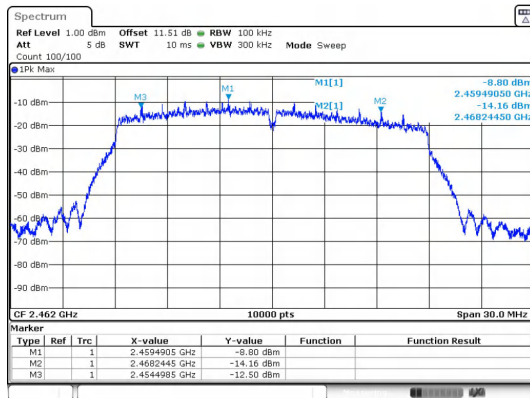
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



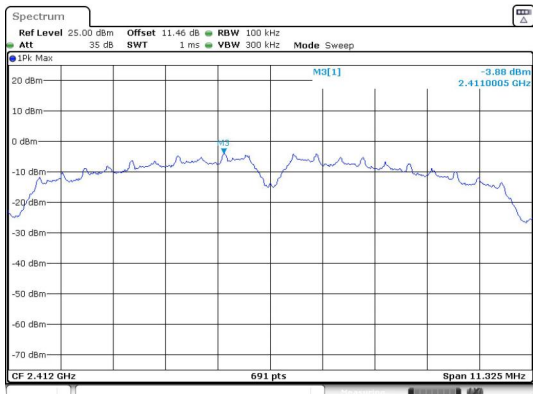
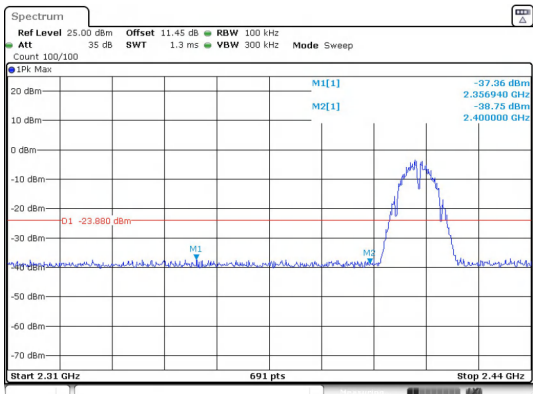
IEEE 802.11n_Channel 11_20MHz_Antenna 0

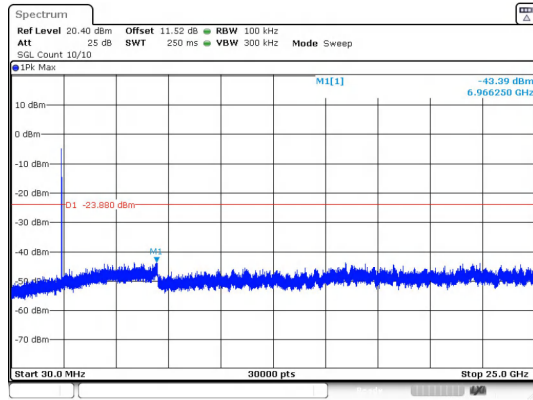
5) Conducted Out Of Band Emission

Test Result

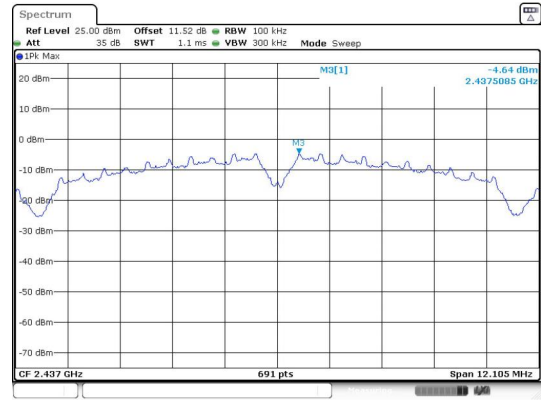
Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2356.94	-37.358	-23.88	-13.478	PASS
			2400.00	-38.750	-23.88	-14.870	PASS
			6966.20	-43.392	-23.88	-19.512	PASS
	6		6922.97	-42.920	-24.64	-18.280	PASS
	11		2483.50	-38.180	-24.0	-14.180	PASS
			6959.59	-42.602	-24.0	-18.602	PASS
IEEE 802.11g			1	2366.91	-36.559	-30.35	-6.209
	2400.00			-39.160	-30.35	-8.810	PASS
	6977.10			-43.153	-30.35	-12.803	PASS
	6		6896.33	-43.569	-30.77	-12.799	PASS
	11		2483.50	-38.210	-30.19	-8.020	PASS
			15997.1	-42.666	-30.19	-12.476	PASS
IEEE 802.11n_20			1	2366.91	-36.060	-29.8	-6.260
	2400.00			-39.170	-29.8	-9.370	PASS
	16326.7			-42.311	-29.8	-12.511	PASS
	6		6917.97	-41.974	-31.11	-10.864	PASS
	11		2483.50	-38.970	-28.6	-10.370	PASS
			6801.45	-43.450	-28.6	-14.850	PASS

Test Graphs

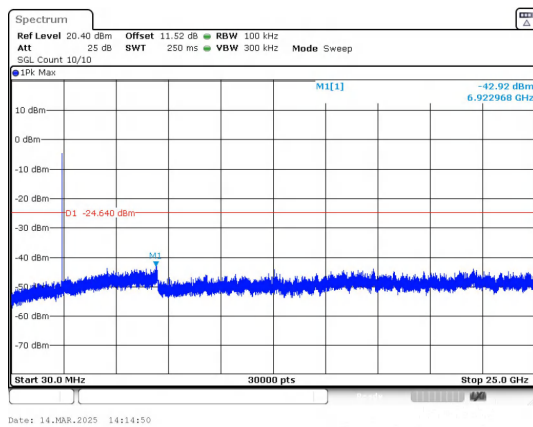
 In-Band Reference Level IEEE 802.11b_Channel 1_20MHz_Antenna 0	 Out Of Band Emission IEEE 802.11b_Channel 1_20MHz_Antenna 0
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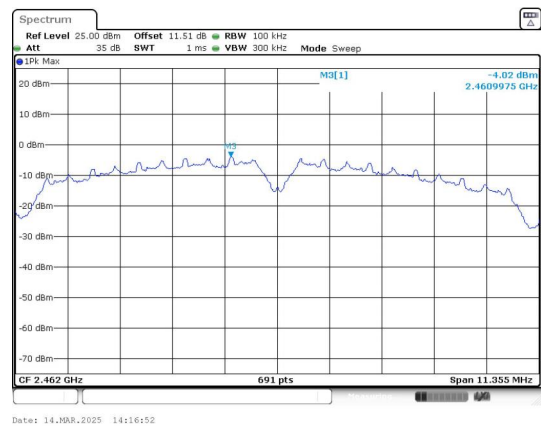
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



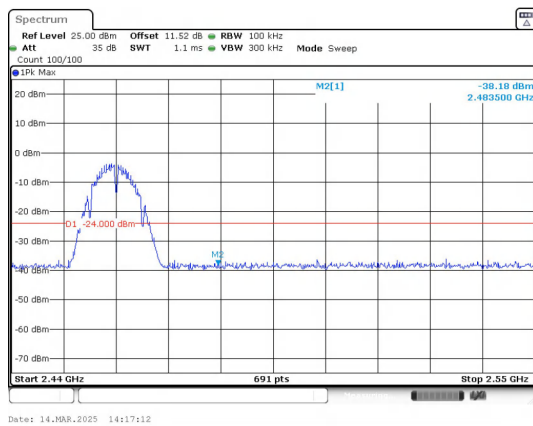
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



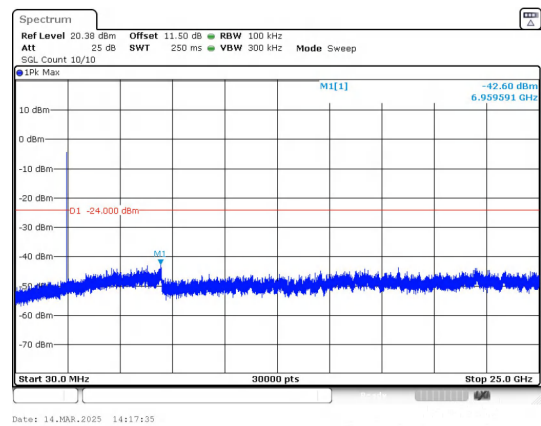
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



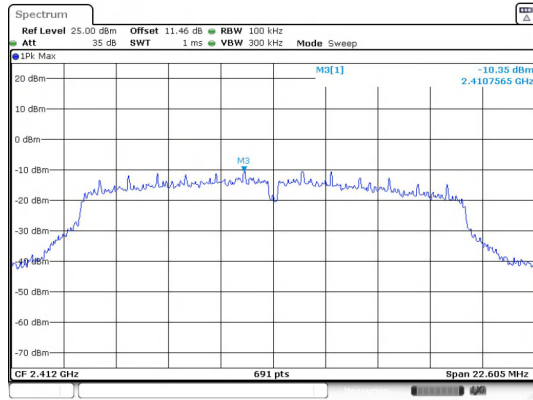
In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



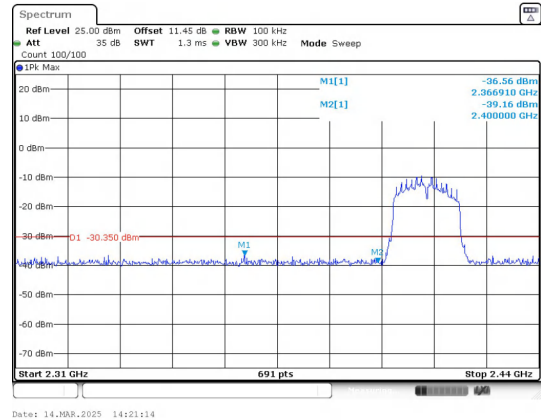
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



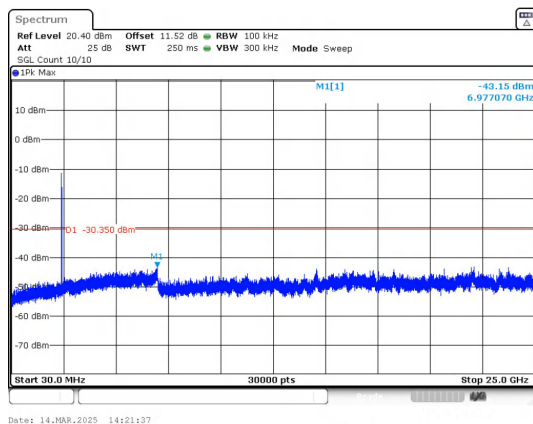
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IEEE 802.11b_Channel 11_20MHz_Antenna 0



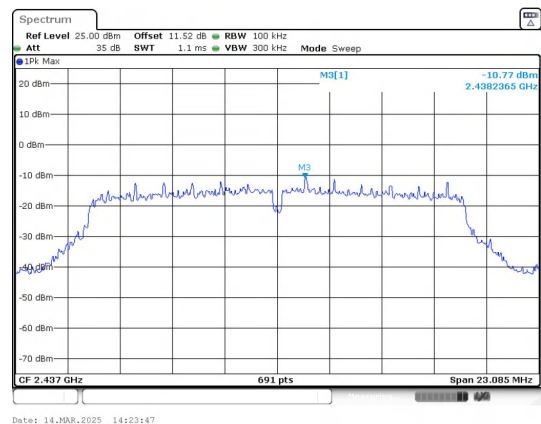
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



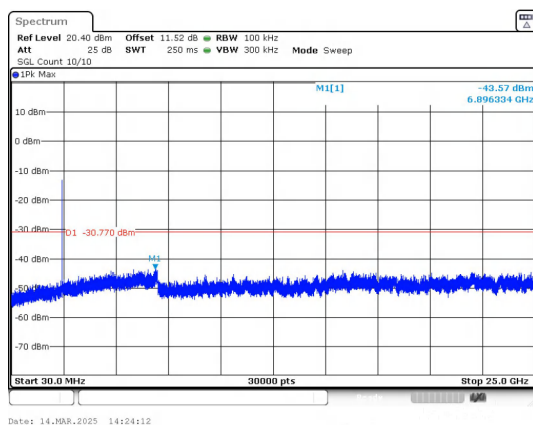
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IEEE 802.11g_Channel 1_20MHz_Antenna 0



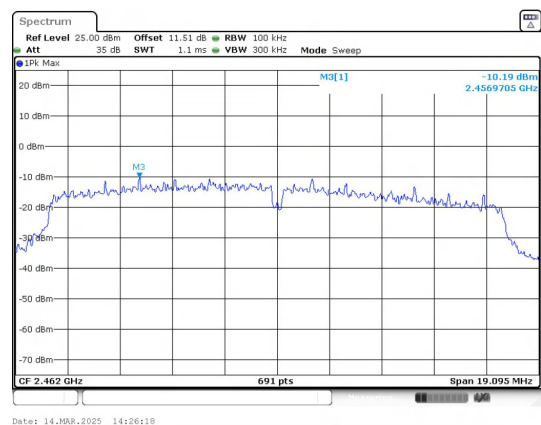
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IEEE 802.11g_Channel 1_20MHz_Antenna 0



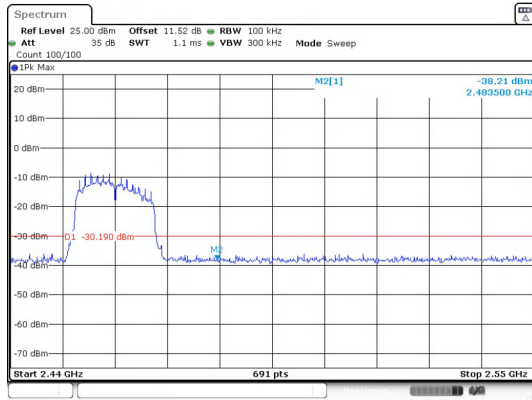
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IEEE 802.11g_Channel 6_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 6_20MHz_Antenna 0

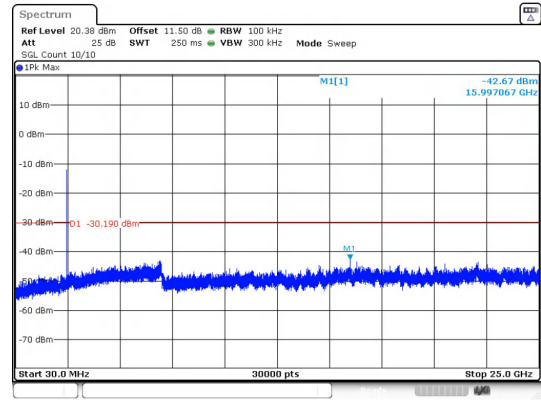


In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0



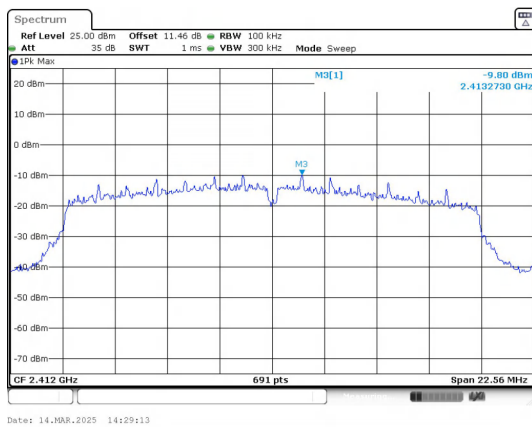
Out Of Band Emission

IEEE 802.11g_Channel 11_20MHz_Antenna 0



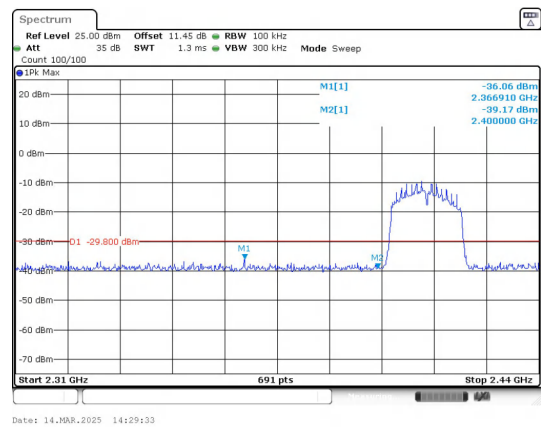
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IEEE 802.11g_Channel 11_20MHz_Antenna 0



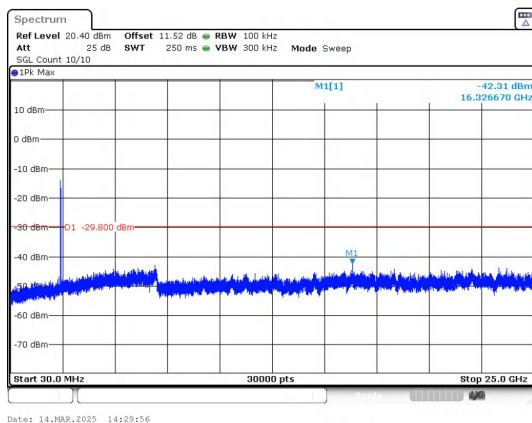
In-Band Reference Level

IEEE 802.11n_Channel 1_20MHz_Antenna 0



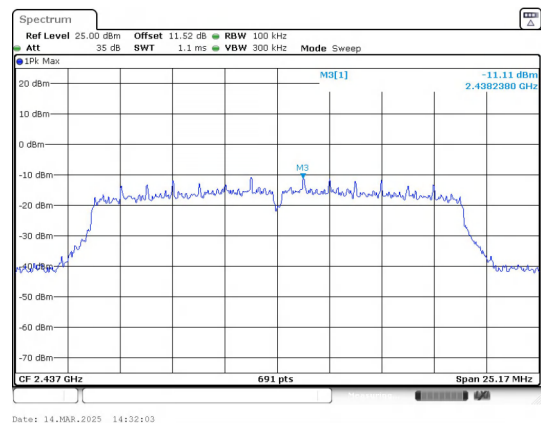
Out Of Band Emission

IEEE 802.11n_Channel 1_20MHz_Antenna 0



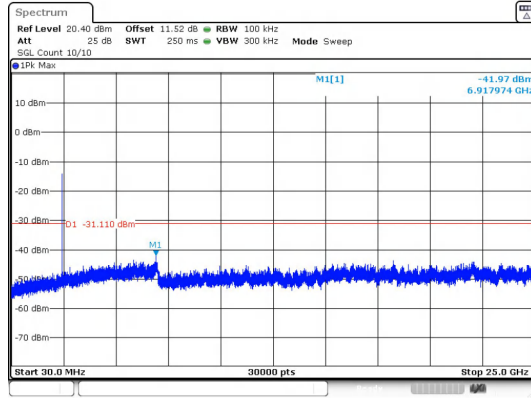
30.0 MHz - 25000.0 MHz

IEEE 802.11n_Channel 1_20MHz_Antenna 0

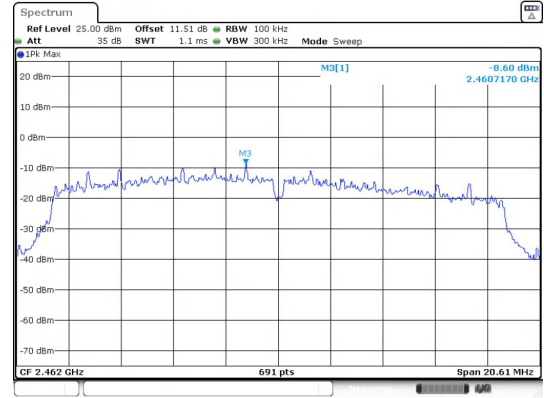


In-Band Reference Level

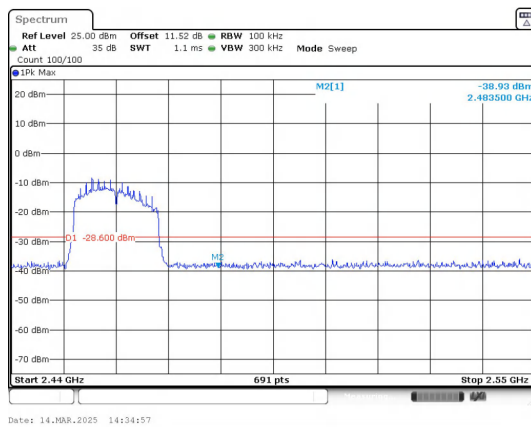
IEEE 802.11n_Channel 6_20MHz_Antenna 0



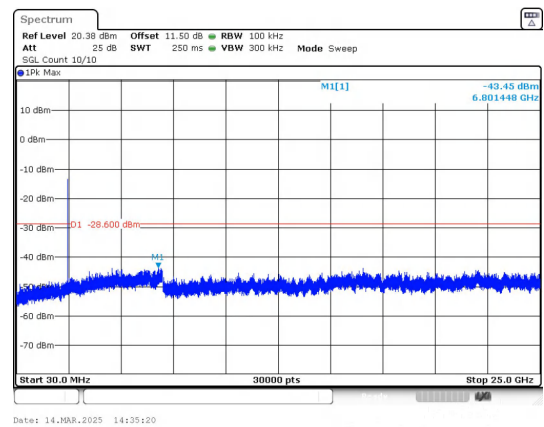
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



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