

Appendix Report

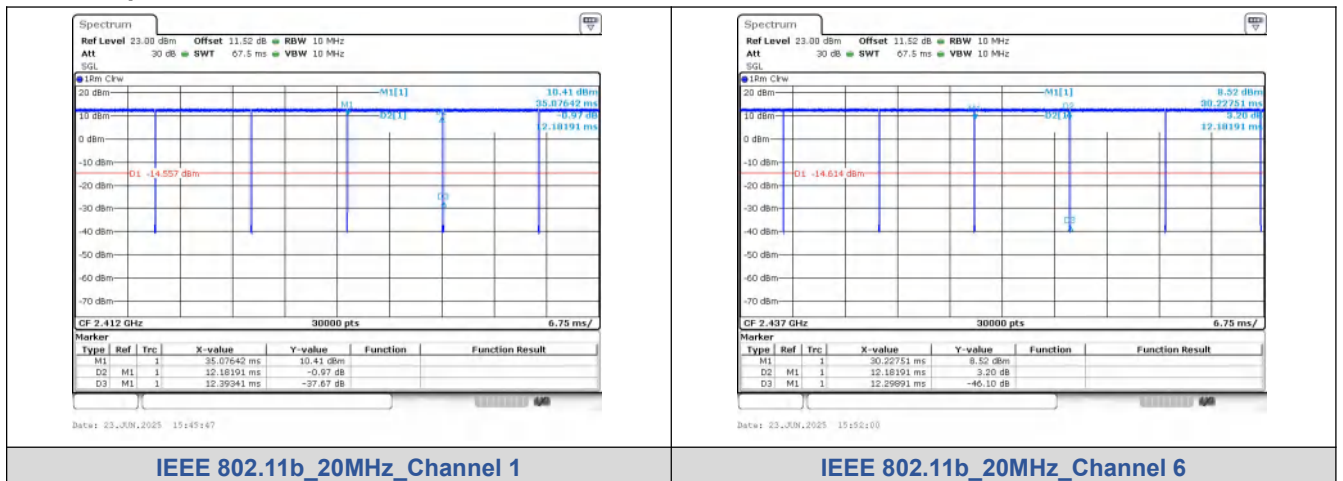
Project No.:	CISR250604017
Test Engineer:	James Wang
Supervised by:	Rory Huang

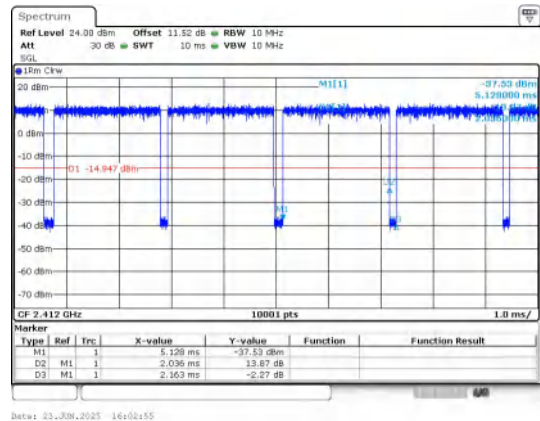
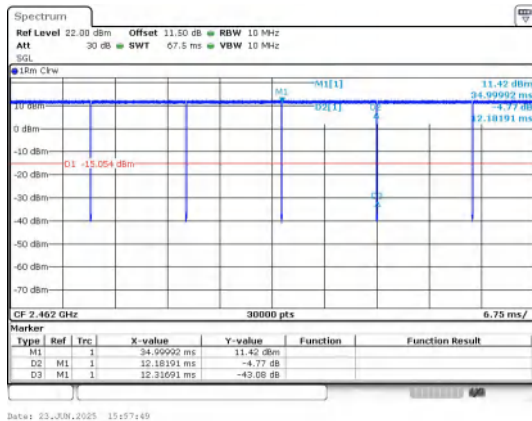
8.1. Duty Cycle

Test Result

Mode	Data rates	Channel	RU & Index	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	N/A	1	12.182	12.393	98.29	0.9829	0.0749	0.0821
		6			12.182	12.299	99.05	0.9905	0.0415	0.0821
		11			12.182	12.317	98.90	0.9890	0.048	0.0821
1		2.036			2.163	94.13	0.9413	0.2627	0.4912	
6		2.036			2.163	94.13	0.9413	0.2627	0.4912	
11		2.036			2.253	90.37	0.9037	0.4398	0.4912	
IEEE 802.11g	1	1.896			2.122	89.35	0.8935	0.4891	0.5274	
	6	1.896			2.358	80.41	0.8041	0.9469	0.5274	
	11	1.897			2.123	89.35	0.8935	0.4891	0.5271	
IEEE 802.11n_20	MCS 0	3			0.927	1.054	87.98	0.8798	0.5562	1.0787
		6			0.927	1.059	87.59	0.8759	0.5755	1.0787
		9			0.927	1.125	82.41	0.8241	0.8402	1.0787
IEEE 802.11n_40		1	1.466		1.683	87.11	0.8711	0.5993	0.6821	
		6	1.466		1.593	92.03	0.9203	0.3607	0.6821	
		11	1.466		1.589	92.26	0.9226	0.3499	0.6821	
IEEE 802.11ax_20		3	0.002		0.129	1.38	0.0138	18.6012	500.0000	
		6	0.764		0.955	80.04	0.8004	0.9669	1.3089	
		9	0.759		0.881	86.08	0.8608	0.651	1.3175	
IEEE 802.11ax_40										

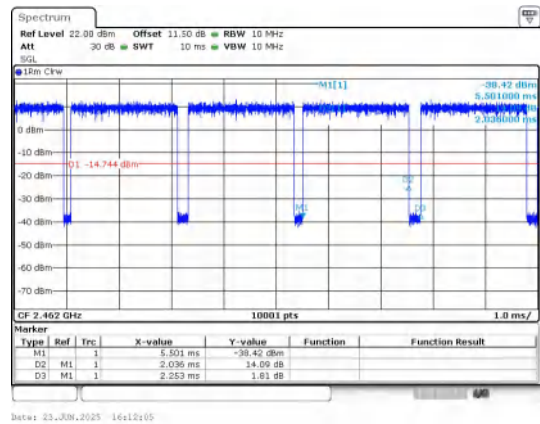
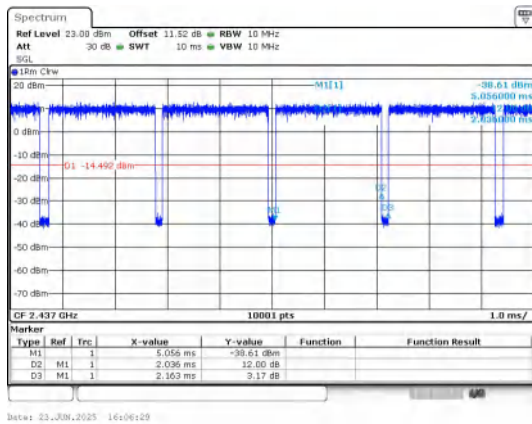
Test Graphs





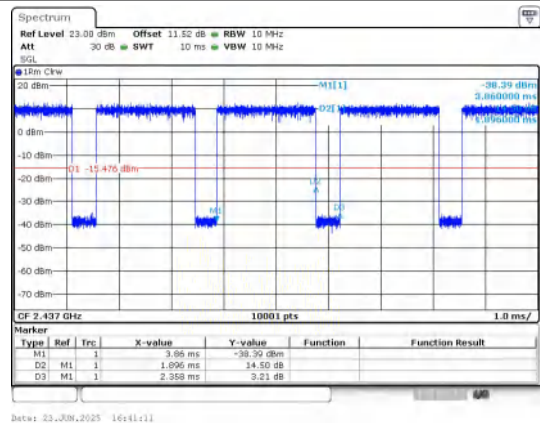
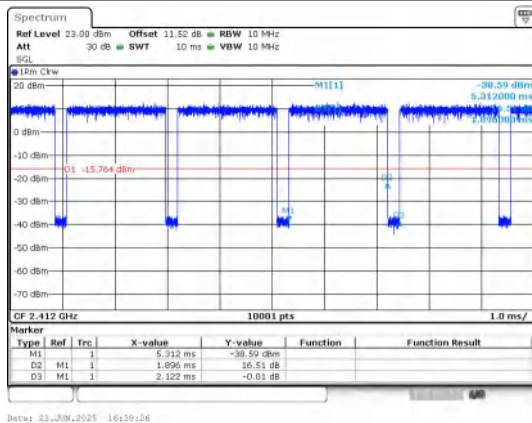
IEEE 802.11b_20MHz_Channel 11

IEEE 802.11g_20MHz_Channel 1



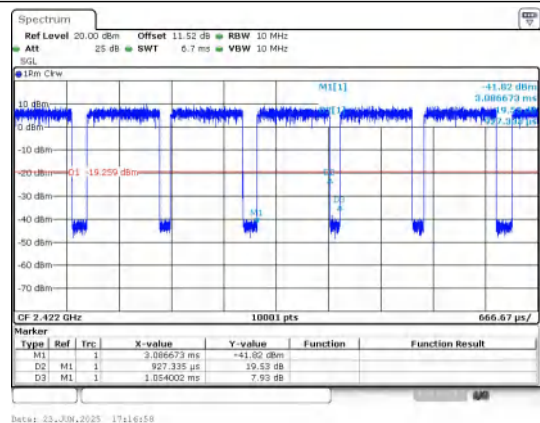
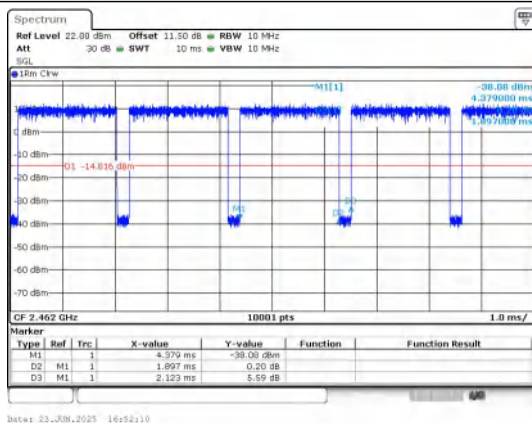
IEEE 802.11g_20MHz_Channel 6

IEEE 802.11g_20MHz_Channel 11

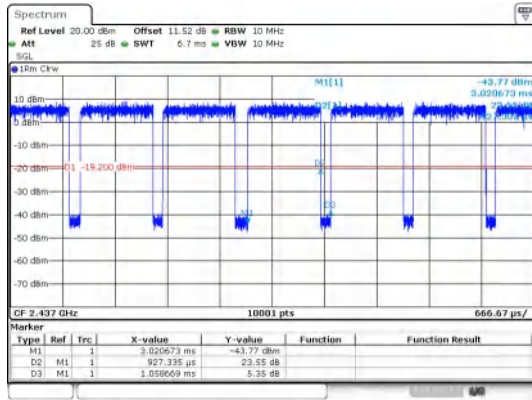


IEEE 802.11n_20MHz_Channel 1

IEEE 802.11n_20MHz_Channel 6

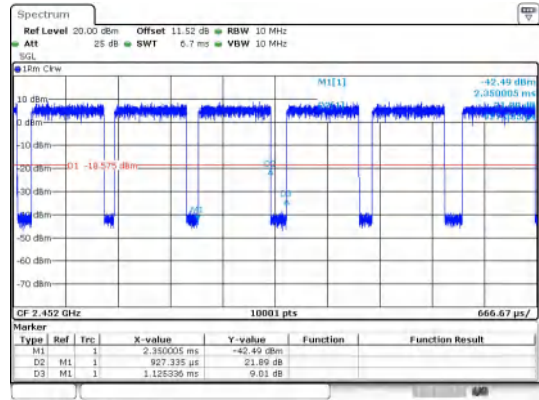


IEEE 802.11n_20MHz_Channel 11



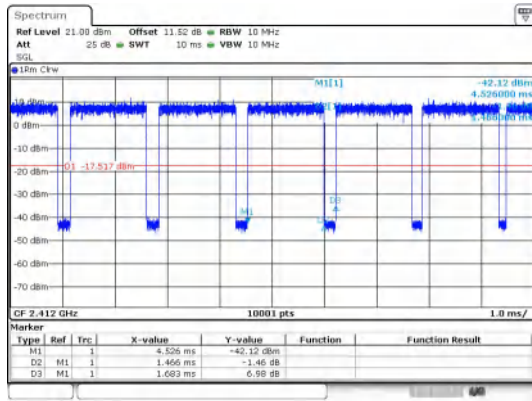
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IEEE 802.11n_40MHz_Channel 3



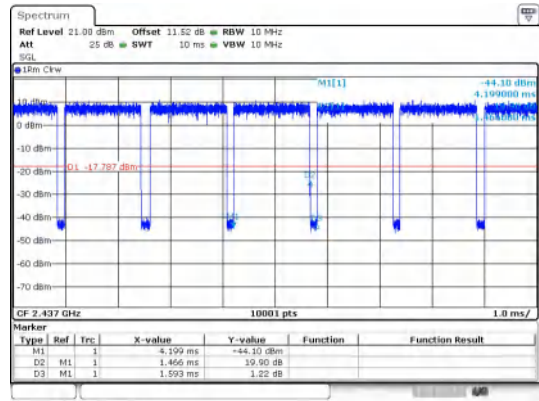
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IEEE 802.11n_40MHz_Channel 6



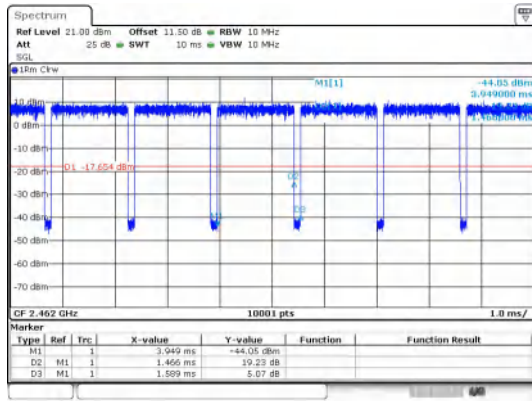
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IEEE 802.11n_40MHz_Channel 9



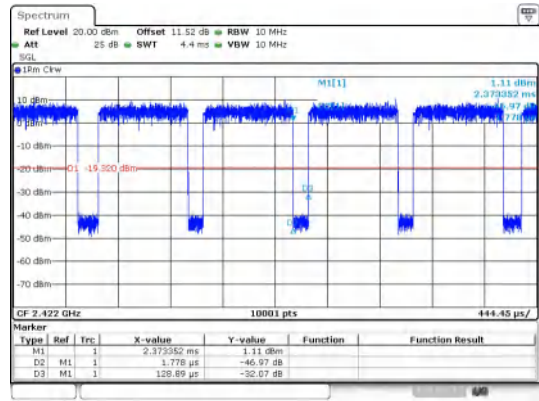
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IEEE 802.11ax_20MHz_Channel 1



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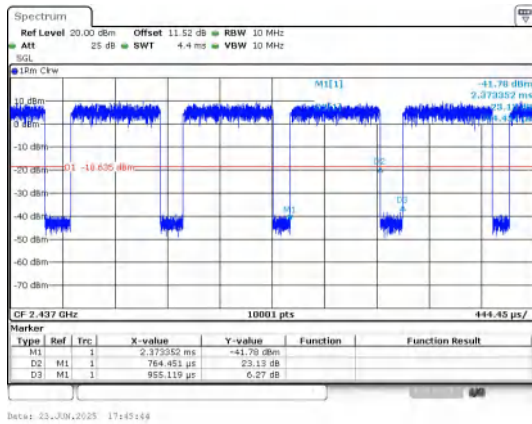
IEEE 802.11ax_20MHz_Channel 6



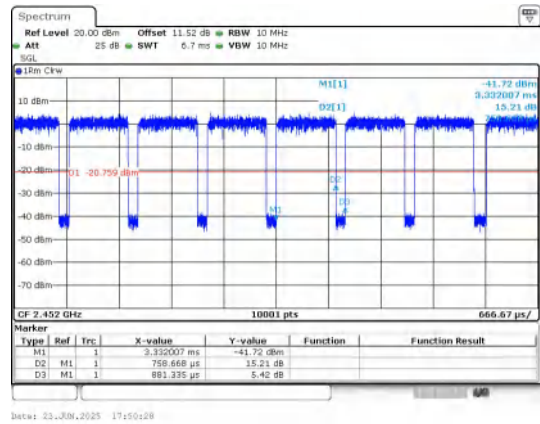
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IEEE 802.11ax_20MHz_Channel 11

IEEE 802.11ax_40MHz_Channel 3



IEEE 802.11ax_40MHz_Channel 6



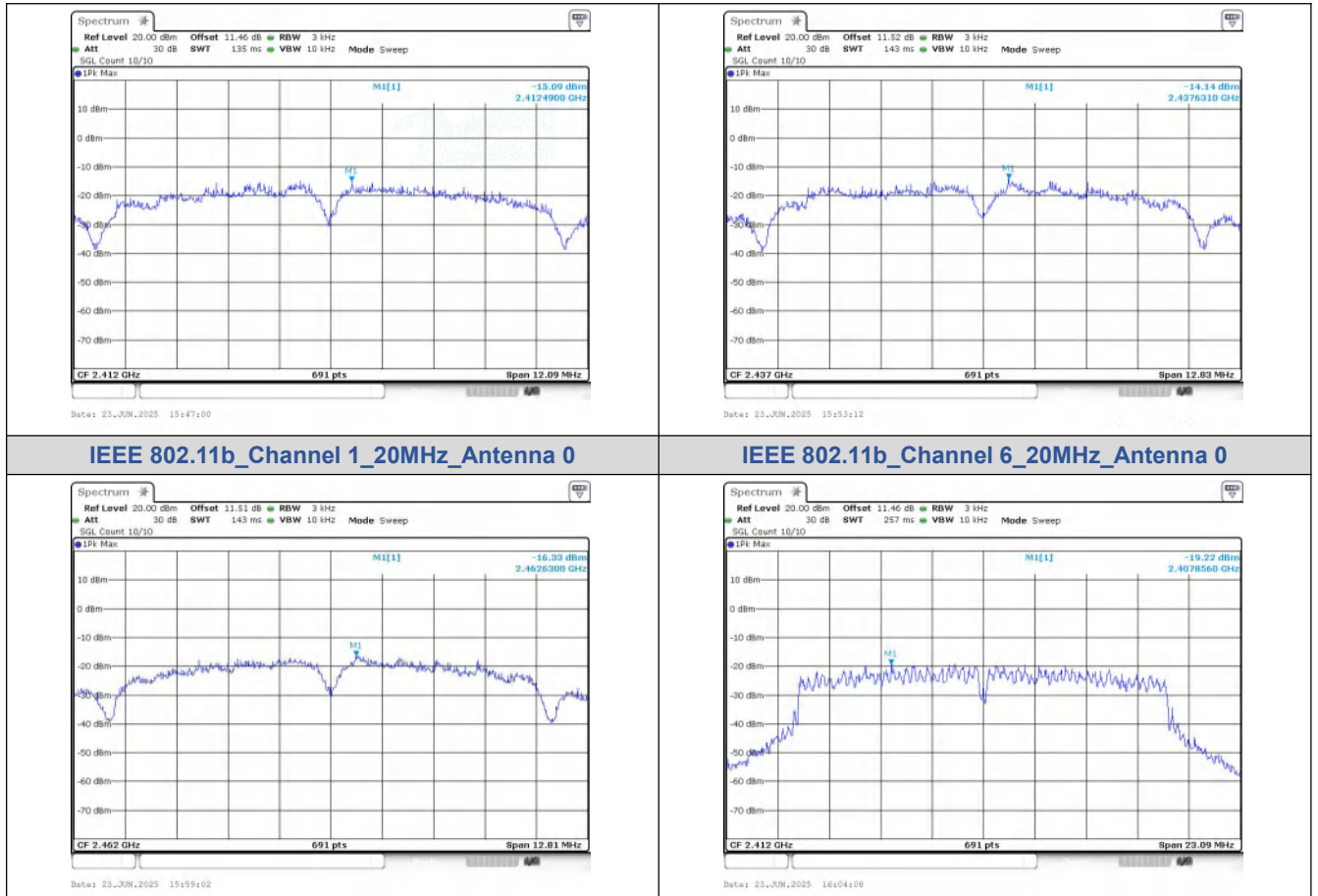
IEEE 802.11ax_40MHz_Channel 9

8.2. Power Spectral Density

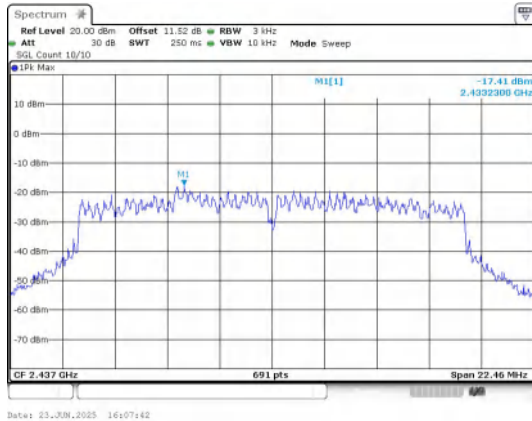
Test Result

Mode	Channel	RU & Index	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	N/A	-15.090	≤8	PASS
	6		-14.140		PASS
	11		-16.330		PASS
IEEE 802.11g	1		-19.220		PASS
	6		-17.410		PASS
	11		-19.060		PASS
IEEE 802.11n_20	1		-18.440		PASS
	6		-18.040		PASS
	11		-19.100		PASS
IEEE 802.11n_40	3		-23.330		PASS
	6		-19.480		PASS
	9		-23.210		PASS
IEEE 802.11ax_20	1	SU	-22.280		PASS
	6		-21.290		PASS
	11		-22.440		PASS
IEEE 802.11ax_40	3		-25.490		PASS
	6		-22.720		PASS
	9		-30.820		PASS

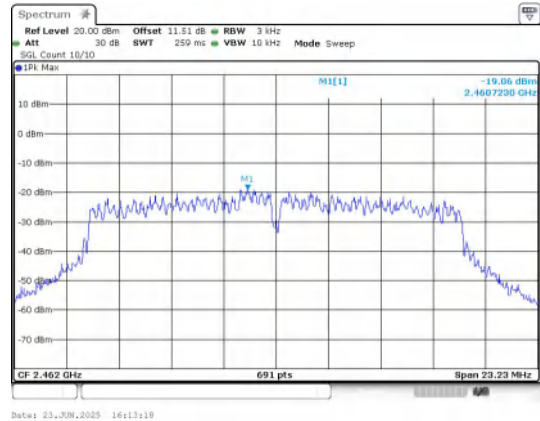
Test Graphs



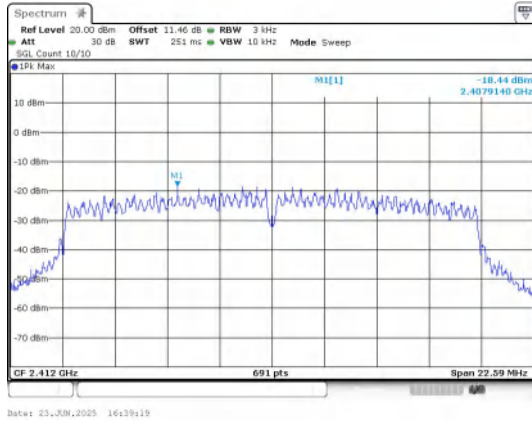
IEEE 802.11b_Channel 11_20MHz_Antenna 0



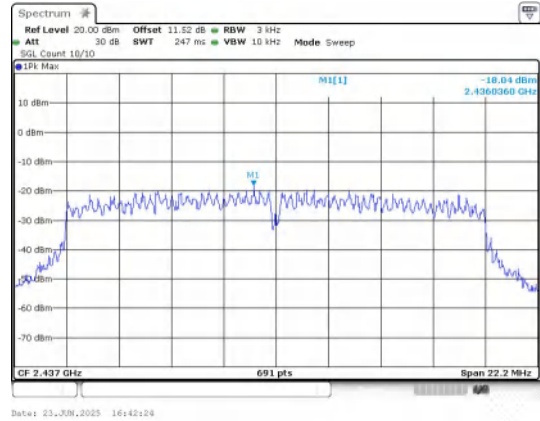
IEEE 802.11g_Channel 1_20MHz_Antenna 0



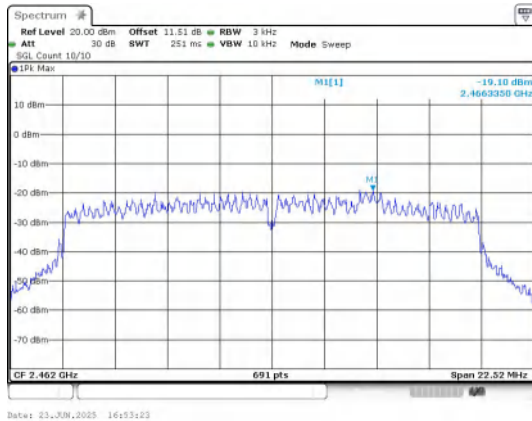
IEEE 802.11g_Channel 6_20MHz_Antenna 0



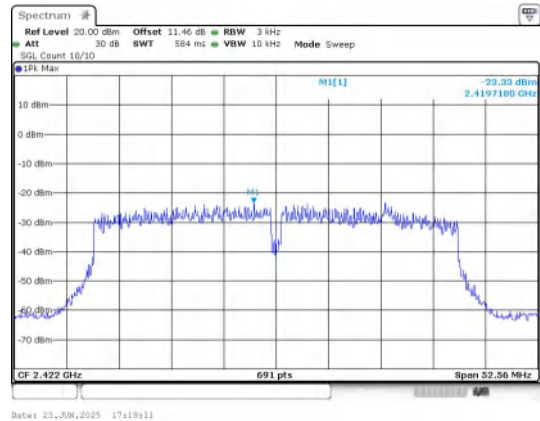
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0

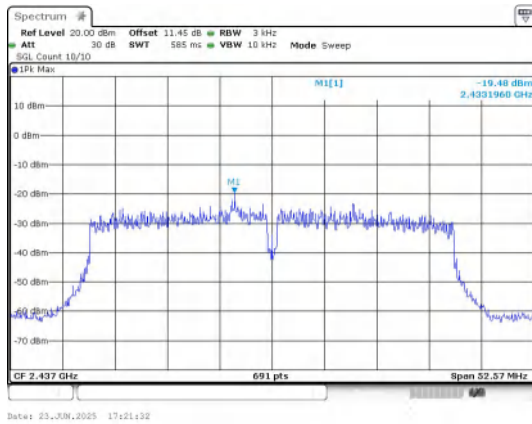


IEEE 802.11n_Channel 6_20MHz_Antenna 0

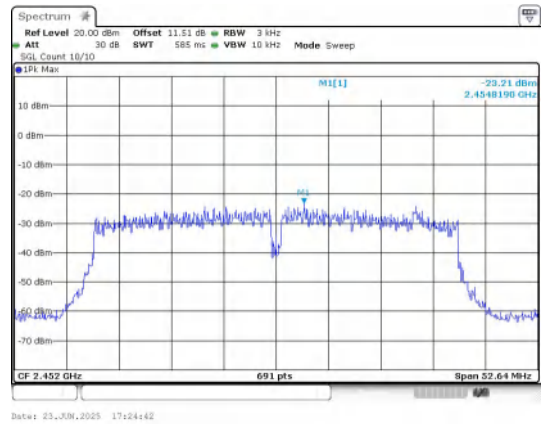


IEEE 802.11n_Channel 11_20MHz_Antenna 0

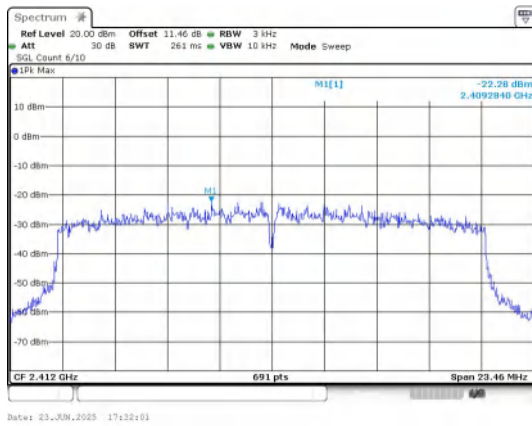
IEEE 802.11n_Channel 3_40MHz_Antenna 0



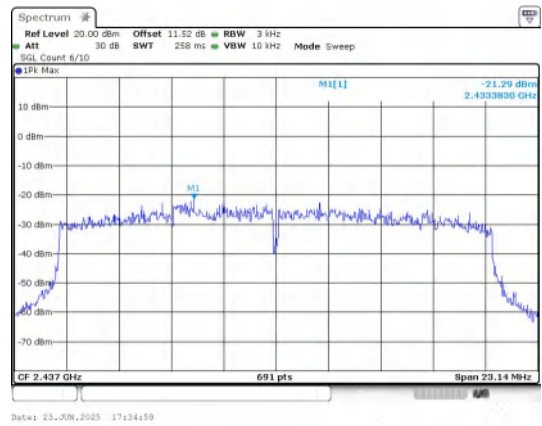
IEEE 802.11n_Channel 6_40MHz_Antenna 0



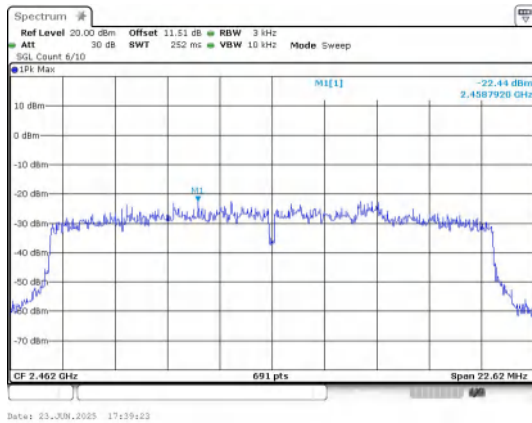
IEEE 802.11n_Channel 9_40MHz_Antenna 0



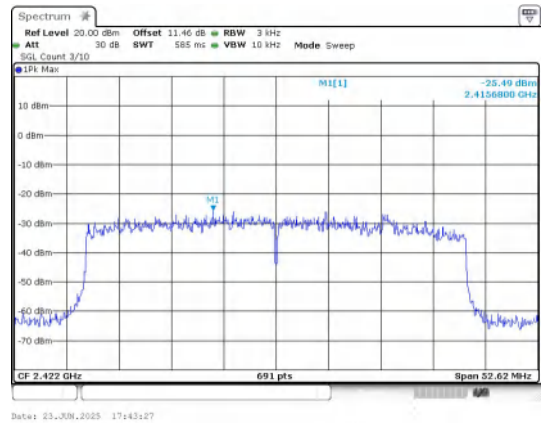
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



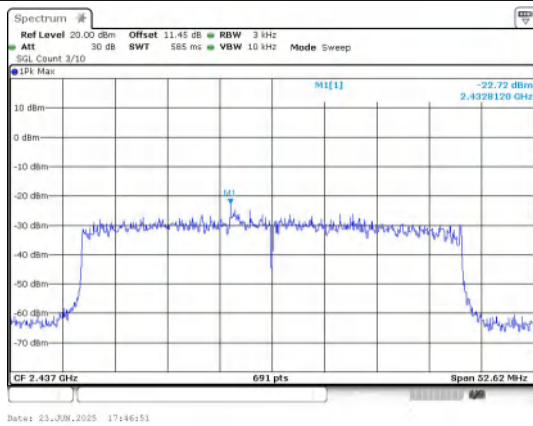
IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



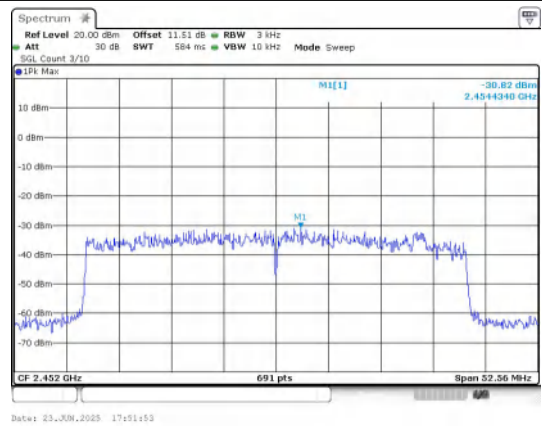
IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index
SU



IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index
SU

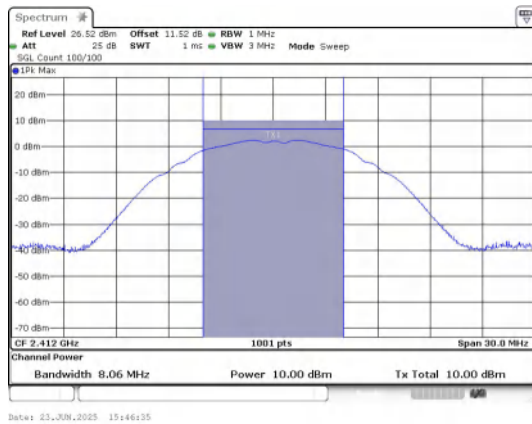
8.3. Conducted Output Power

Test Result

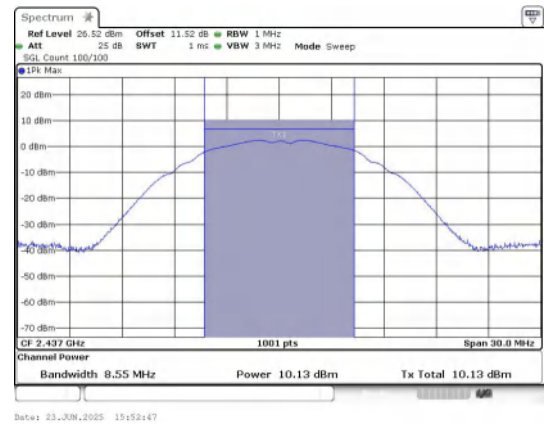
Conducted Output Power

Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	10.00	≤30	PASS
	6	10.13	≤30	PASS
	11	9.09	≤30	PASS
IEEE 802.11g	1	13.66	≤30	PASS
	6	13.60	≤30	PASS
	11	13.25	≤30	PASS
IEEE 802.11n_20	1	13.28	≤30	PASS
	6	13.27	≤30	PASS
	11	12.78	≤30	PASS
IEEE 802.11n_40	3	12.78	≤30	PASS
	6	12.29	≤30	PASS
	9	11.95	≤30	PASS
IEEE 802.11ax_20	1	12.31	≤30	PASS
	6	12.36	≤30	PASS
	11	11.81	≤30	PASS
IEEE 802.11ax_40	3	12.76	≤30	PASS
	6	13.08	≤30	PASS
	9	8.23	≤30	PASS

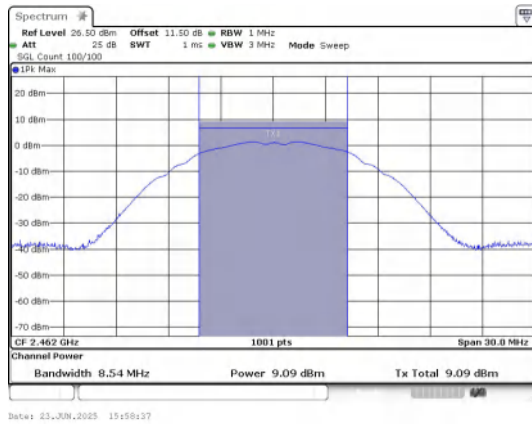
Test Graphs



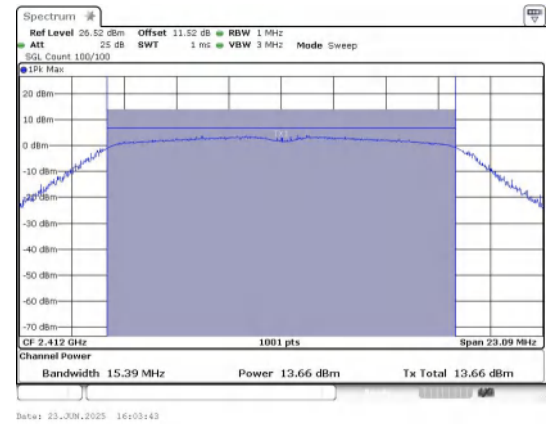
Conducted Output Power
IEEE 802.11b_Channel 1_Antenna 0



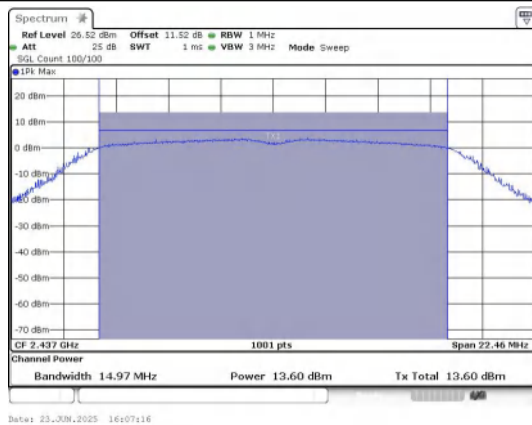
Conducted Output Power
IEEE 802.11b_Channel 6_Antenna 0



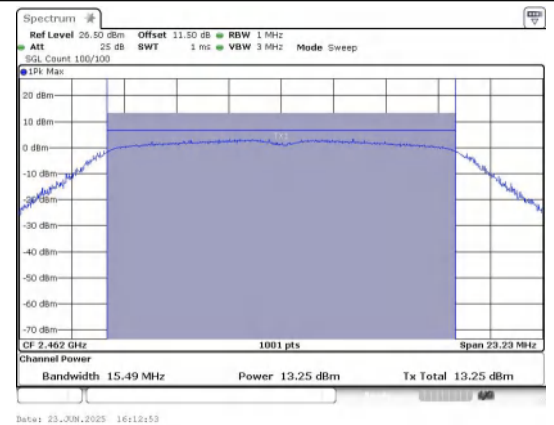
**Conducted Output Power
IEEE 802.11b_Channel 11_Antenna 0**



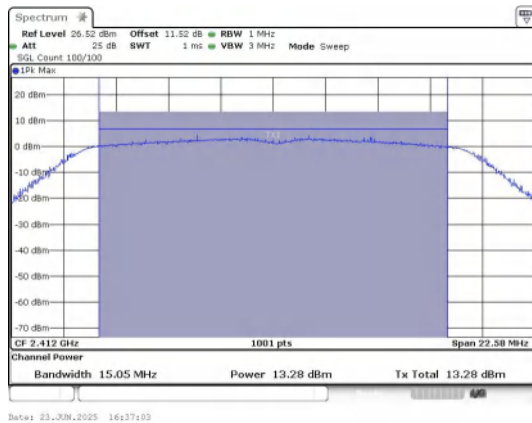
**Conducted Output Power
IEEE 802.11g_Channel 1_Antenna 0**



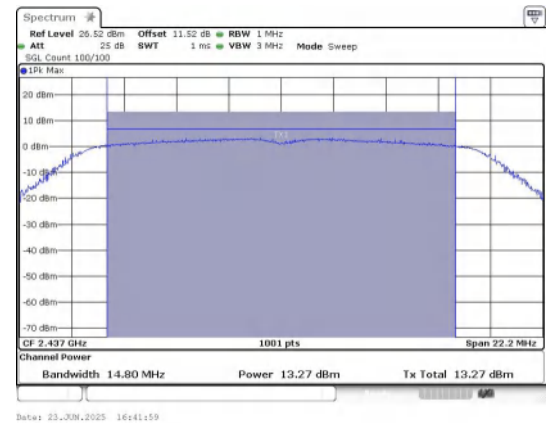
**Conducted Output Power
IEEE 802.11g_Channel 6_Antenna 0**



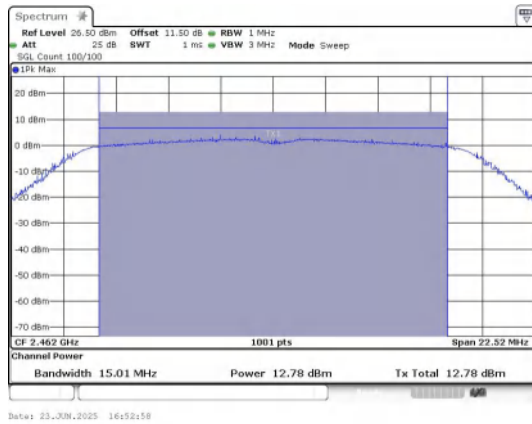
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IEEE 802.11g_Channel 11_Antenna 0**



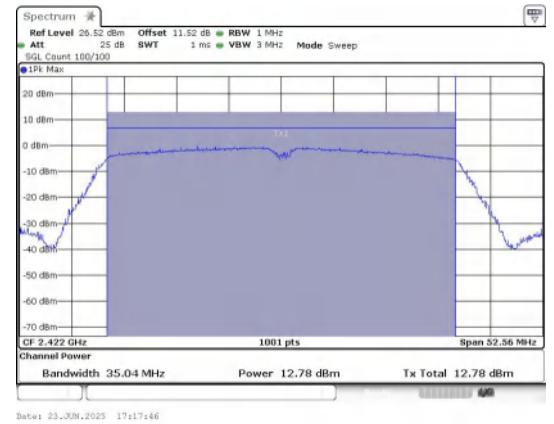
**Conducted Output Power
IEEE 802.11n_20_Channel 1_Antenna 0**



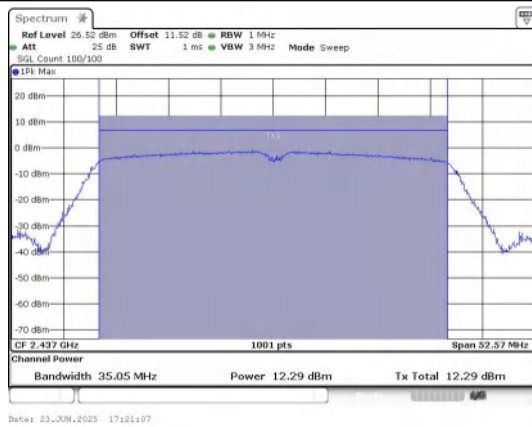
**Conducted Output Power
IEEE 802.11n_20_Channel 6_Antenna 0**



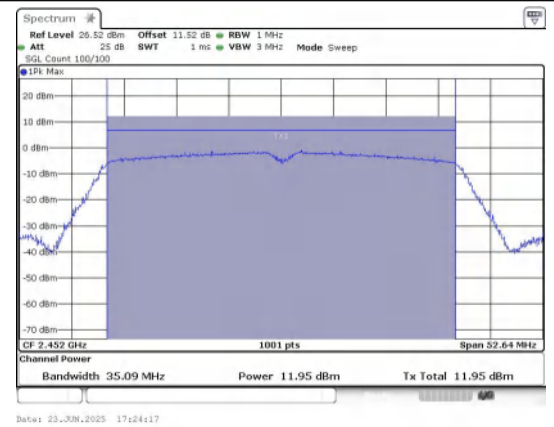
**Conducted Output Power
IEEE 802.11n_20_Channel 11_Antenna 0**



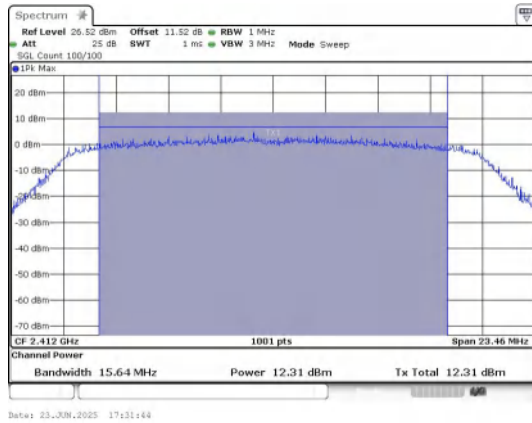
**Conducted Output Power
IEEE 802.11n_40_Channel 3_Antenna 0**



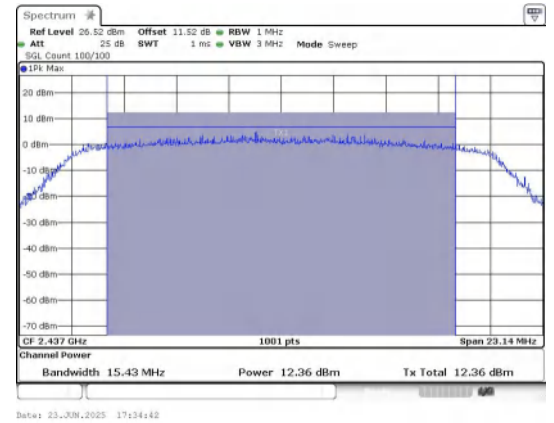
**Conducted Output Power
IEEE 802.11n_40_Channel 6_Antenna 0**



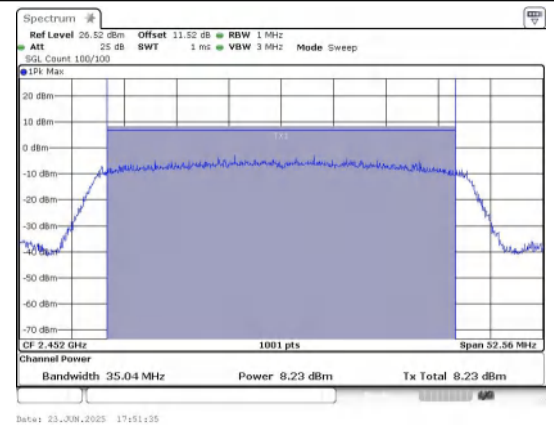
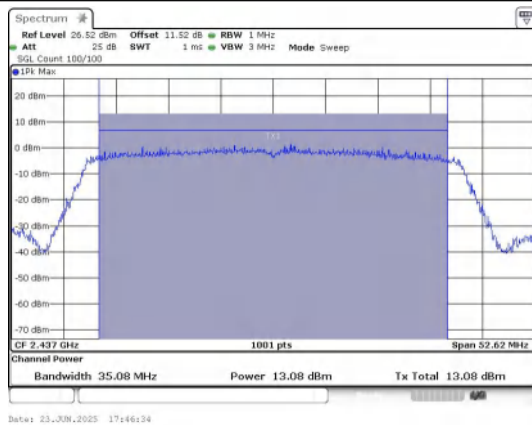
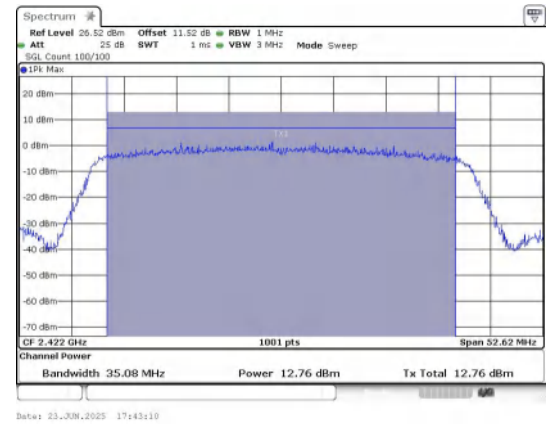
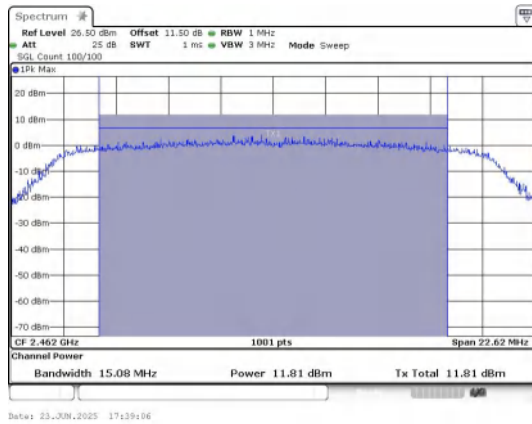
**Conducted Output Power
IEEE 802.11n_40_Channel 9_Antenna 0**



**Conducted Output Power
IEEE 802.11ax_20_Channel 1_Antenna 0_RU&Index SU**



**Conducted Output Power
IEEE 802.11ax_20_Channel 6_Antenna 0_RU&Index SU**

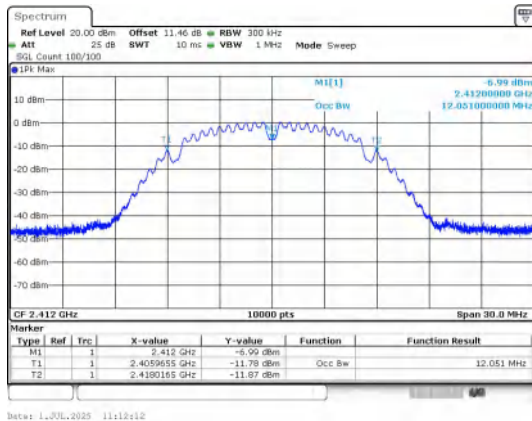


8.4. 99% Bandwidth

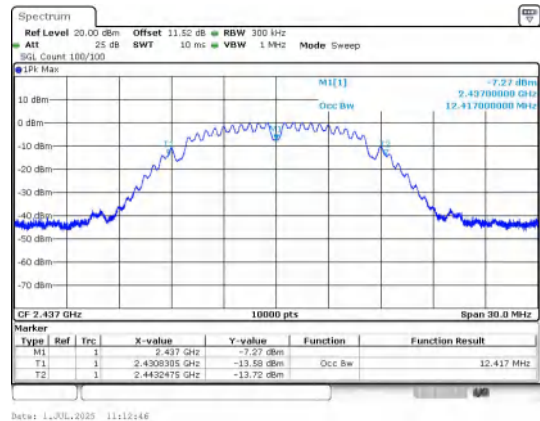
Test Result

Mode	Channel	RU & Index	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	N/A	0	2412	12.051
	6			2437	12.417
	11			2462	12.183
IEEE 802.11g	1			2412	16.656
	6			2437	16.935
	11			2462	16.797
IEEE 802.11n_20	1			2412	17.652
	6			2437	17.883
	11			2462	17.748
IEEE 802.11n_40	3			2422	35.832
	6			2437	36.294
	9			2452	35.712
IEEE 802.11ax_20	1	SU		2412	18.783
	6			2437	18.792
	11			2462	18.789
IEEE 802.11ax_40	3			2422	37.428
	6			2437	37.470
	9			2452	37.434

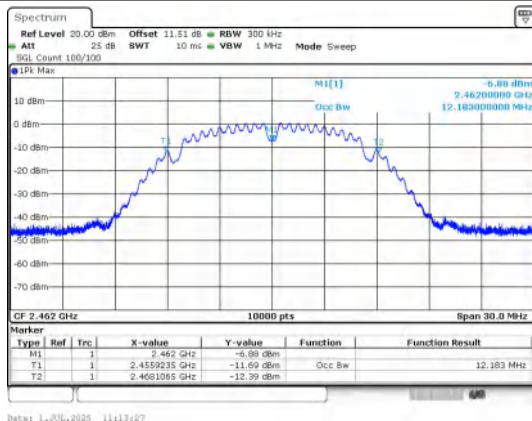
Test Graphs



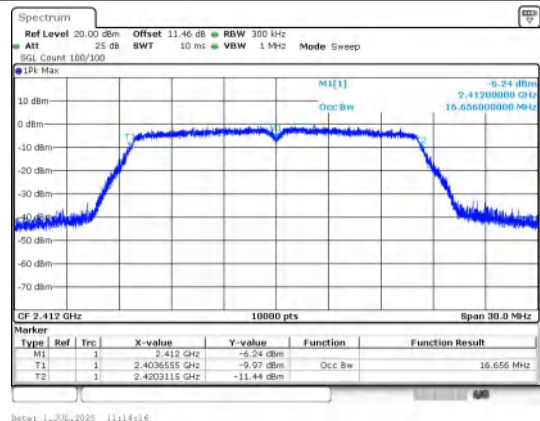
IEEE 802.11b_Channel 1_20MHz_Antenna 0



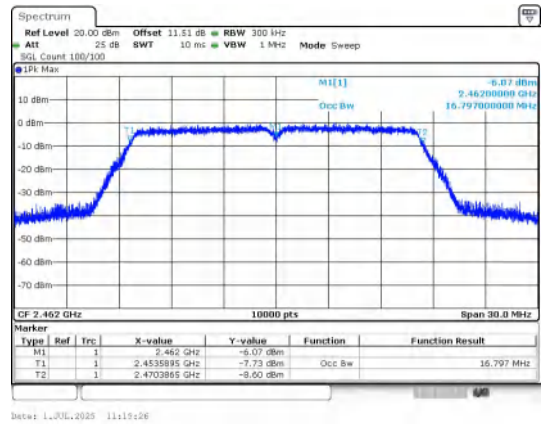
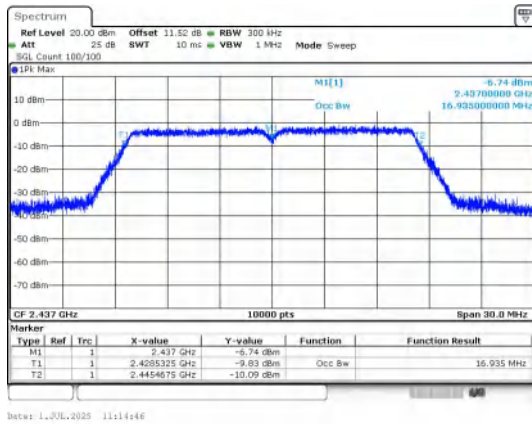
IEEE 802.11b_Channel 6_20MHz_Antenna 0



IEEE 802.11b_Channel 11_20MHz_Antenna 0

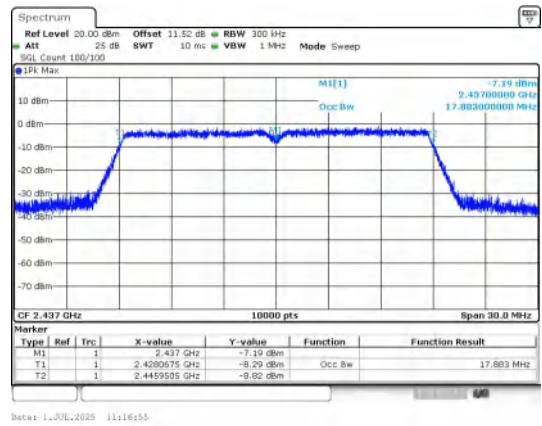
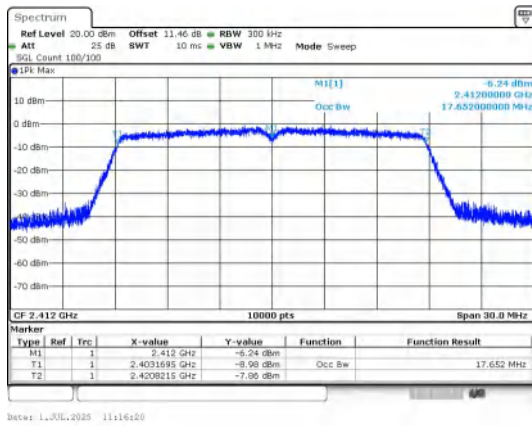


IEEE 802.11g_Channel 1_20MHz_Antenna 0



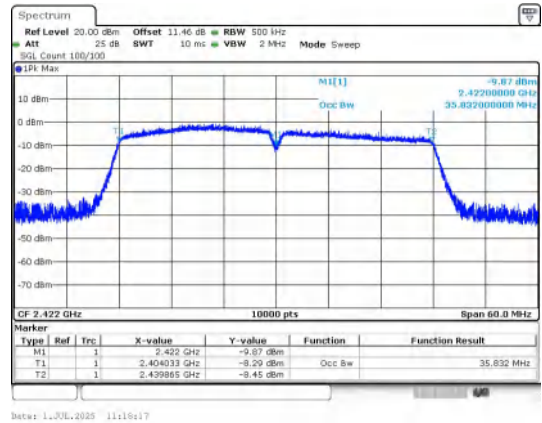
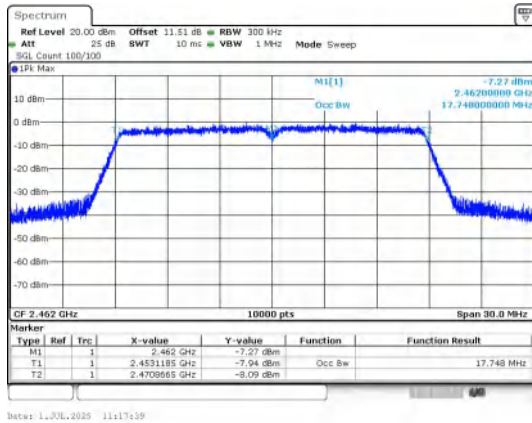
IEEE 802.11g_Channel 6_20MHz_Antenna 0

IEEE 802.11g_Channel 11_20MHz_Antenna 0



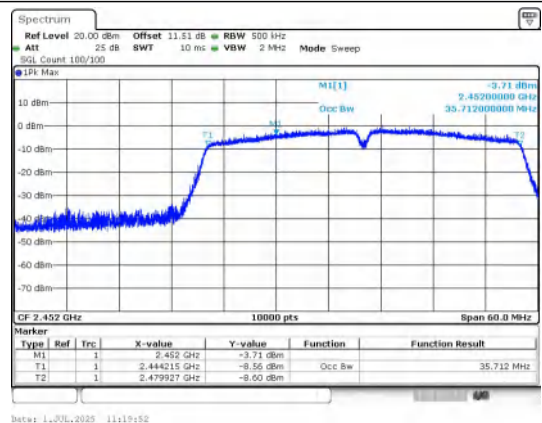
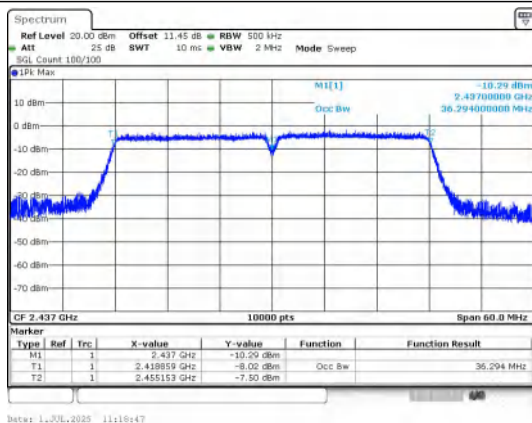
IEEE 802.11n_Channel 1_20MHz_Antenna 0

IEEE 802.11n_Channel 6_20MHz_Antenna 0

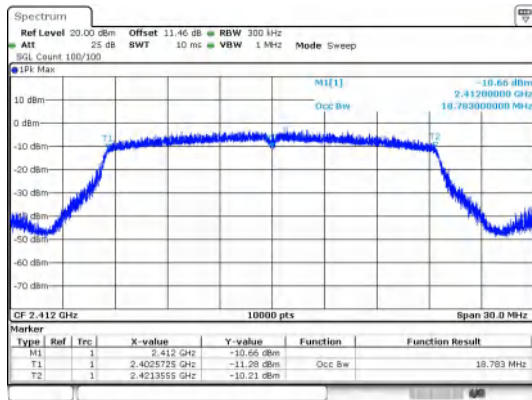


IEEE 802.11n_Channel 11_20MHz_Antenna 0

IEEE 802.11n_Channel 3_40MHz_Antenna 0

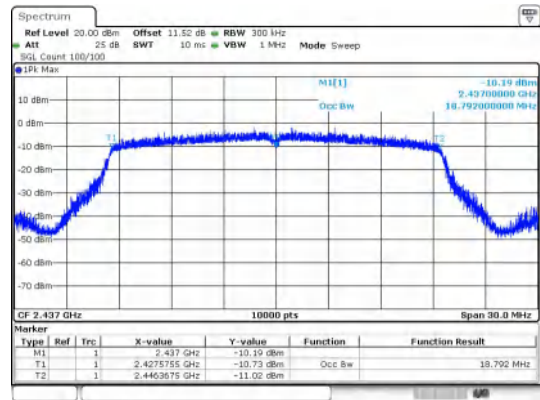


IEEE 802.11n_Channel 6_40MHz_Antenna 0



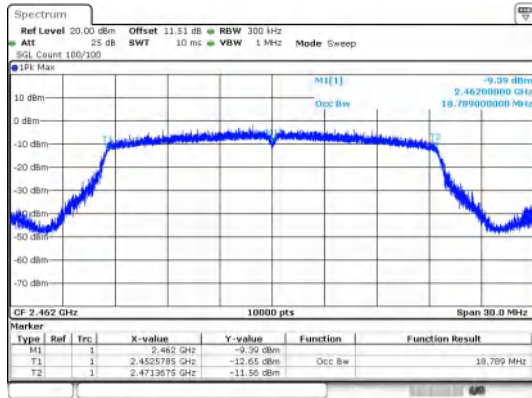
Date: 23_JUN,2025 17:30:56

IEEE 802.11n_Channel 9_40MHz_Antenna 0



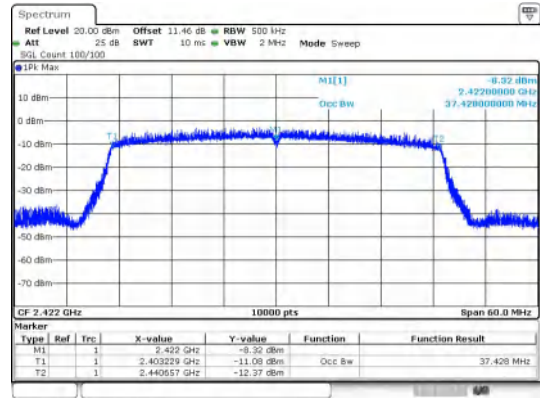
Date: 23_JUN,2025 17:33:54

IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



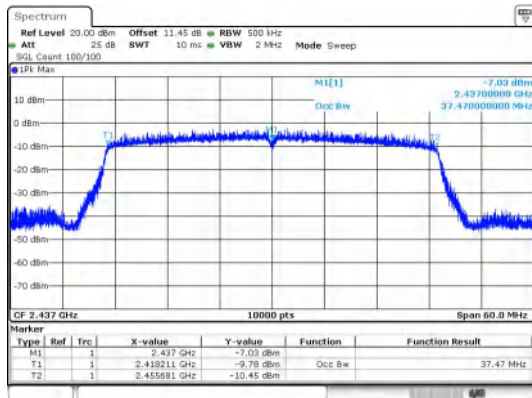
Date: 23_JUN,2025 17:30:18

IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



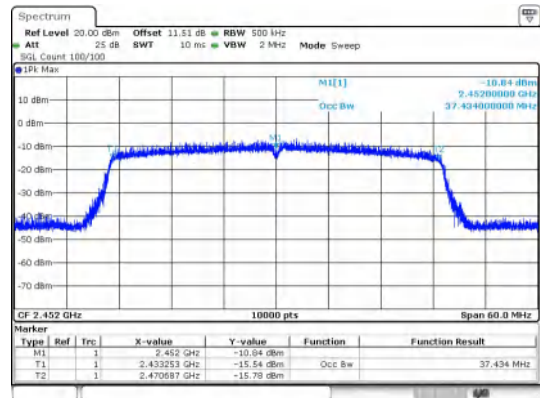
Date: 23_JUN,2025 17:33:02

IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



Date: 23_JUN,2025 17:48:07

IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



Date: 23_JUN,2025 17:50:48

IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index SU

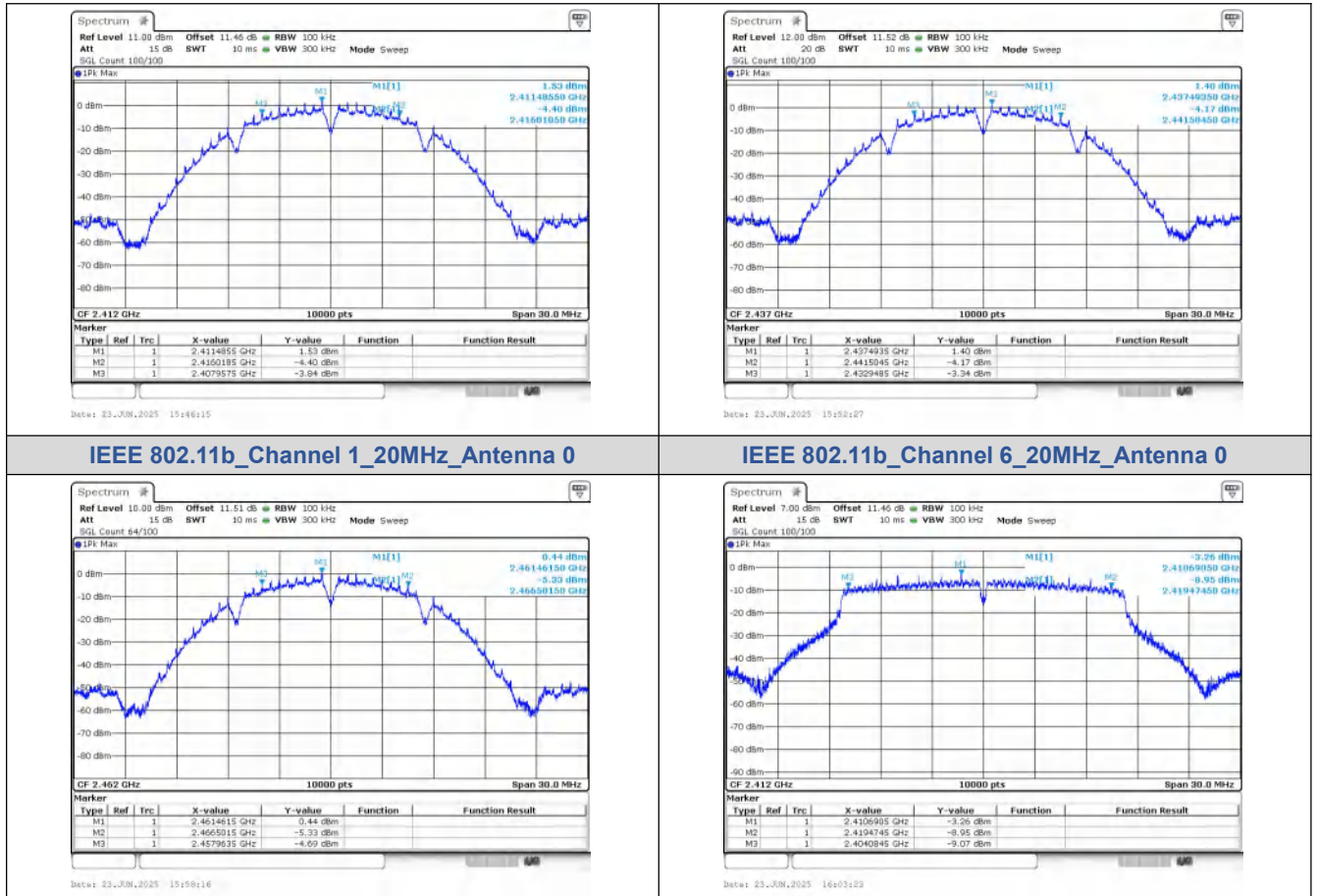
IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index SU

8.5. 6dB Bandwidth

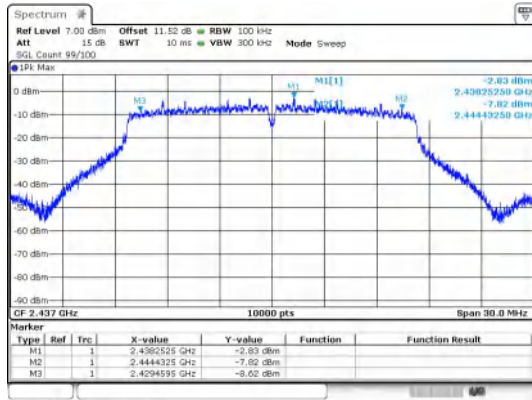
Test Result

Mode	Channel	RU & Index	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	N/A	0	2412	8.060	≥0.5	PASS
	6			2437	8.550		PASS
	11			2462	8.540		PASS
IEEE 802.11g	1			2412	15.39		PASS
	6			2437	14.97		PASS
	11			2462	15.49		PASS
IEEE 802.11n_20	1			2412	15.06		PASS
	6			2437	14.80		PASS
	11			2462	15.01		PASS
IEEE 802.11n_40	3			2422	35.04		PASS
	6			2437	35.05		PASS
	9			2452	35.09		PASS
IEEE 802.11ax_20	1	SU		2412	15.64		PASS
	6			2437	15.43		PASS
	11			2462	15.08		PASS
IEEE 802.11ax_40	3			2422	35.08		PASS
	6			2437	35.08		PASS
	9			2452	35.04		PASS

Test Graphs

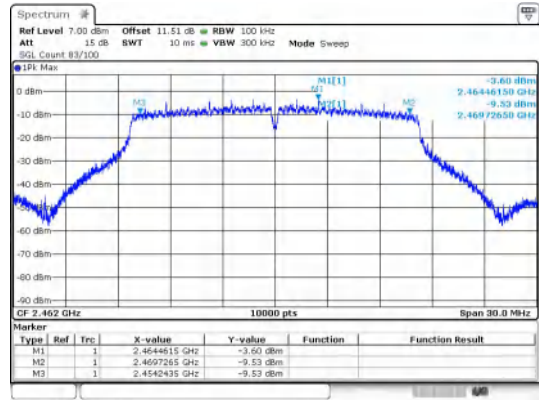


IEEE 802.11b_Channel 11_20MHz_Antenna 0



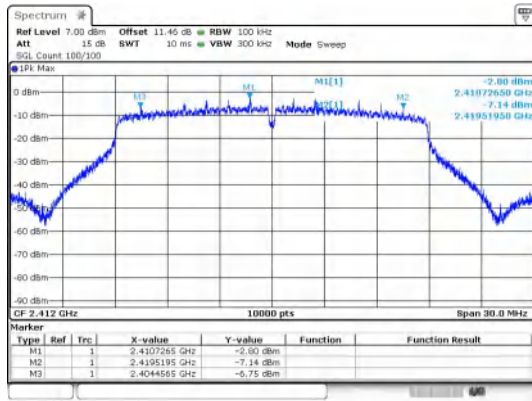
Date: 23_JUN,2025 16:06:56

IEEE 802.11g_Channel 1_20MHz_Antenna 0



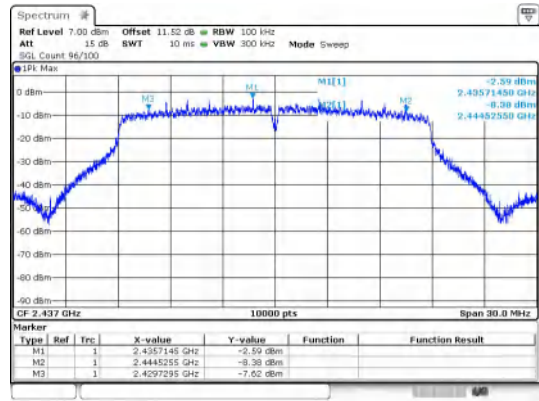
Date: 23_JUN,2025 16:11:33

IEEE 802.11g_Channel 6_20MHz_Antenna 0



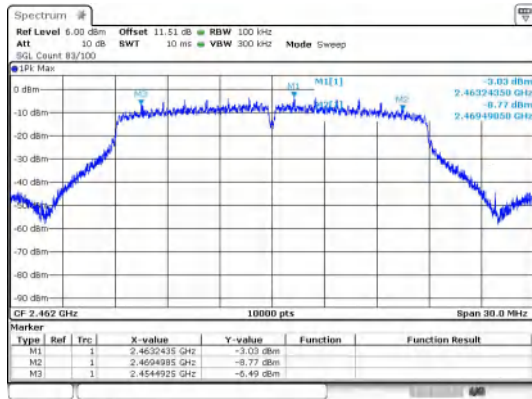
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IEEE 802.11g_Channel 11_20MHz_Antenna 0



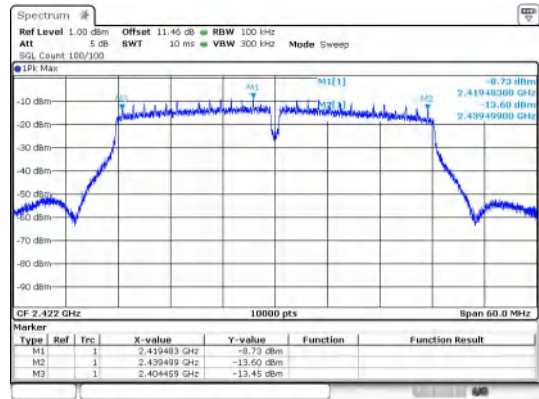
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IEEE 802.11n_Channel 1_20MHz_Antenna 0



Date: 23_JUN,2025 16:52:38

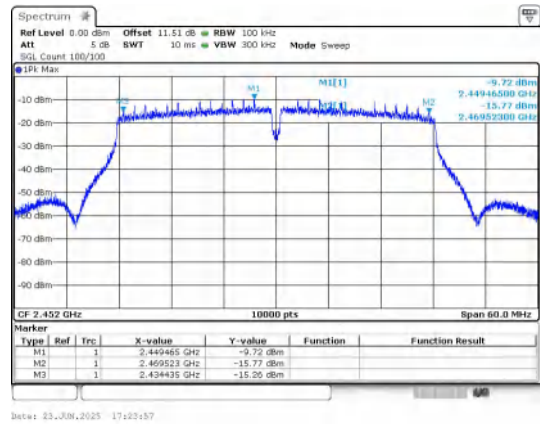
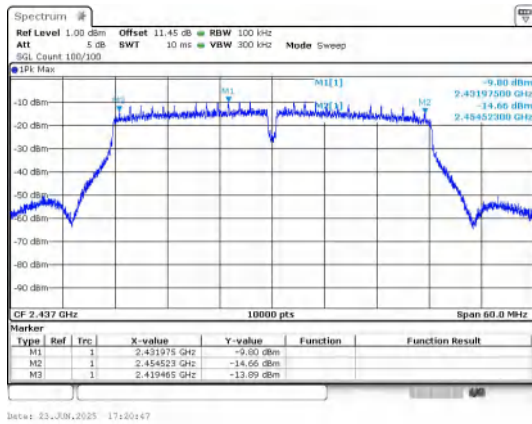
IEEE 802.11n_Channel 6_20MHz_Antenna 0



Date: 23_JUN,2025 17:17:28

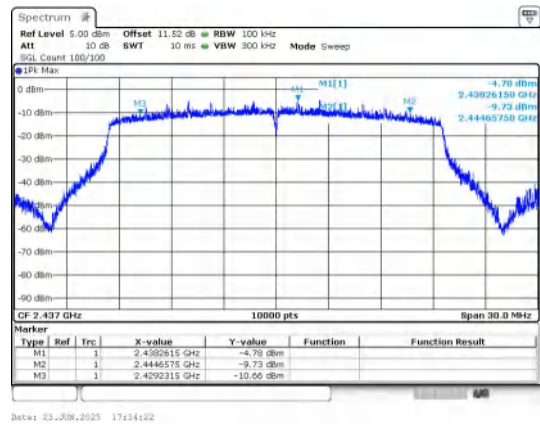
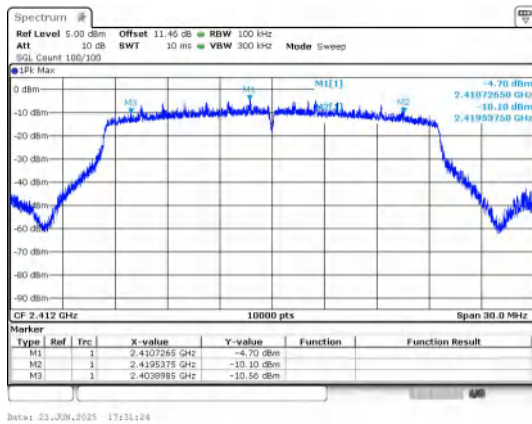
IEEE 802.11n_Channel 11_20MHz_Antenna 0

IEEE 802.11n_Channel 3_40MHz_Antenna 0



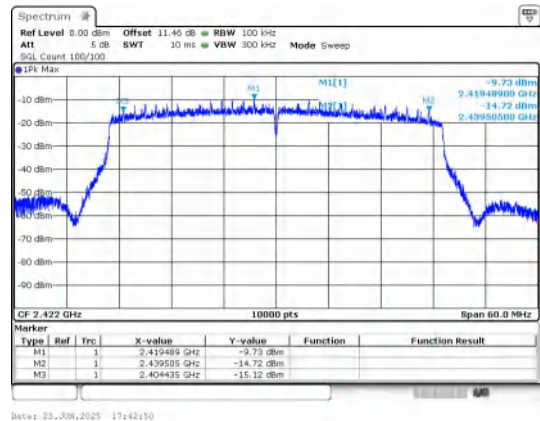
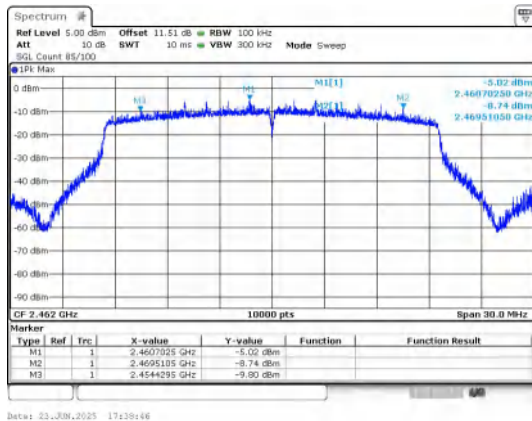
IEEE 802.11n_Channel 6_40MHz_Antenna 0

IEEE 802.11n_Channel 9_40MHz_Antenna 0



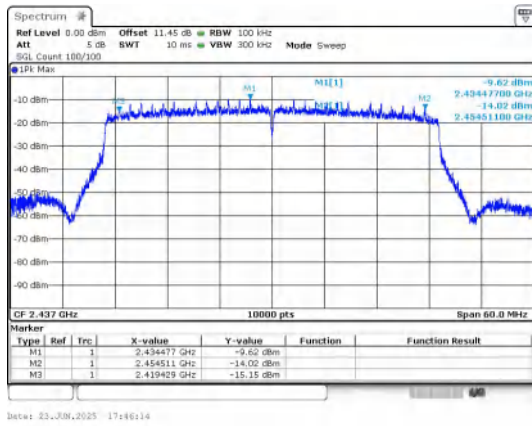
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU

IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU

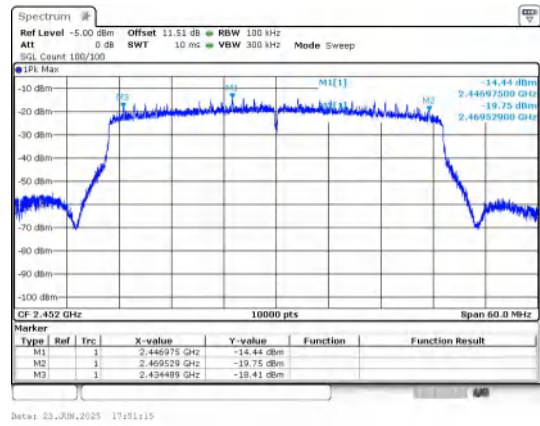


IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU

IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index
SU



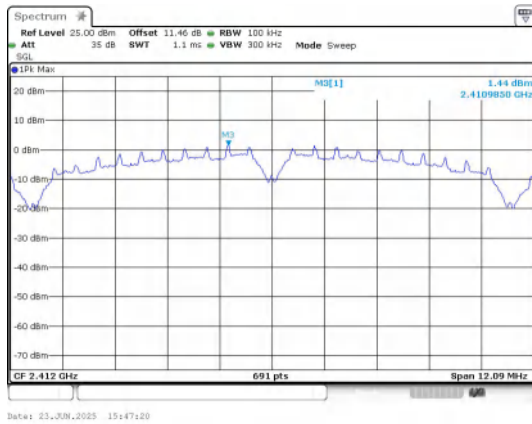
IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index
SU

8.6. Conducted Out Of Band Emission

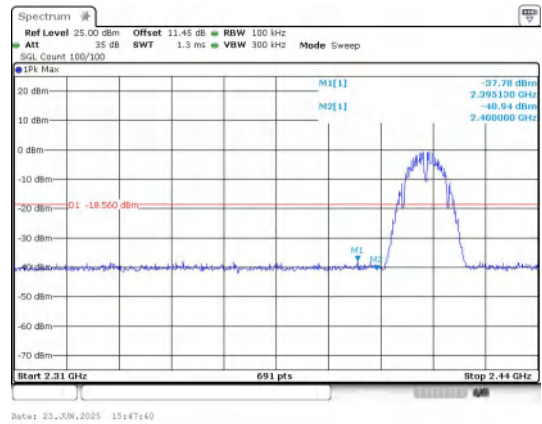
Test Result

Mode	Channel	RU & Index	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	
IEEE 802.11b	1	N/A	0	2395.13	-37.783	-18.56	-19.223	PASS	
				2400.00	-40.940	-18.56	-22.380	PASS	
				22108.9	-44.773	-18.56	-26.213	PASS	
	6			6896.33	-44.302	-18.47	-25.832	PASS	
				11	2483.50	-39.690	-20.01	-19.680	PASS
					6972.91	-43.765	-20.01	-23.755	PASS
IEEE 802.11g	1				2393.63	-37.892	-22.78	-15.112	PASS
				2400.00	-39.120	-22.78	-16.340	PASS	
				23752.7	-44.666	-22.78	-21.886	PASS	
	6			22022.3	-43.839	-23.07	-20.769	PASS	
				11	2483.50	-39.470	-23.42	-16.050	PASS
					18275.2	-43.811	-23.42	-20.391	PASS
IEEE 802.11n_20	1				2380.27	-37.909	-22.67	-15.239	PASS
				2400.00	-38.500	-22.67	-15.830	PASS	
				6917.10	-42.872	-22.67	-20.202	PASS	
	6			22059.8	-44.751	-22.8	-21.951	PASS	
				11	2483.50	-39.400	-23.45	-15.950	PASS
					5872.56	-43.663	-23.45	-20.213	PASS
IEEE 802.11n_40	3				2340.20	-38.327	-28.81	-9.517	PASS
				2400.00	-39.890	-28.81	-11.080	PASS	
				6929.60	-44.279	-28.81	-15.469	PASS	
	6			6327.85	-44.592	-29.08	-15.512	PASS	
				9	2483.50	-39.570	-29.48	-10.090	PASS
					21999.0	-44.385	-29.48	-14.905	PASS
IEEE 802.11ax_20	1	2393.81	-37.856		-24.52	-13.336	PASS		
		2400.00	-39.130	-24.52	-14.610	PASS			
		6951.30	-43.651	-24.52	-19.131	PASS			
	6	6926.30	-43.895	-24.44	-19.455	PASS			
		11	2483.50	-39.540	-25.94	-13.600	PASS		
			6336.17	-44.450	-25.94	-18.510	PASS		
IEEE 802.11ax_40	3		2384.78	-37.942	-29.34	-8.602	PASS		
		2400.00	-40.710	-29.34	-11.370	PASS			
		16793.6	-44.452	-29.34	-15.112	PASS			
	6	6966.25	-43.538	-28.94	-14.598	PASS			
		9	2483.50	-38.710	-34.04	-4.670	PASS		
			22098.1	-44.136	-34.04	-10.096	PASS		

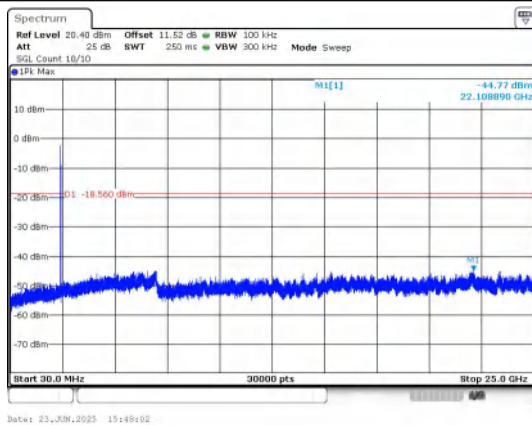
Test Graphs



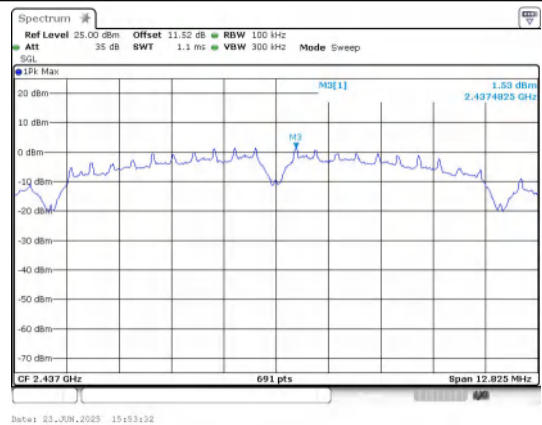
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



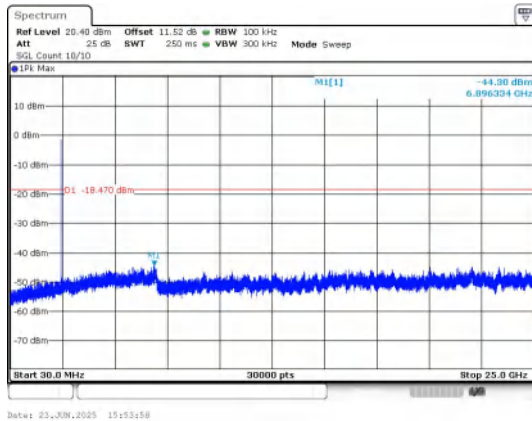
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



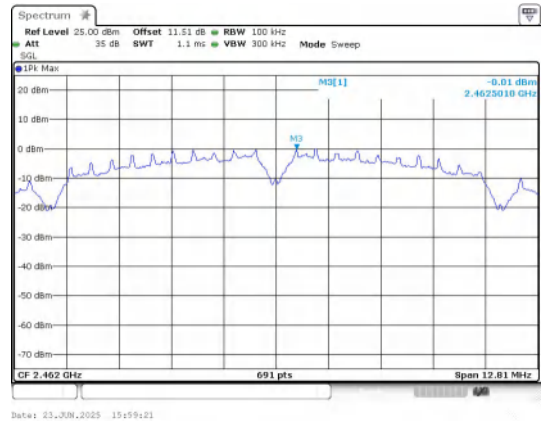
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



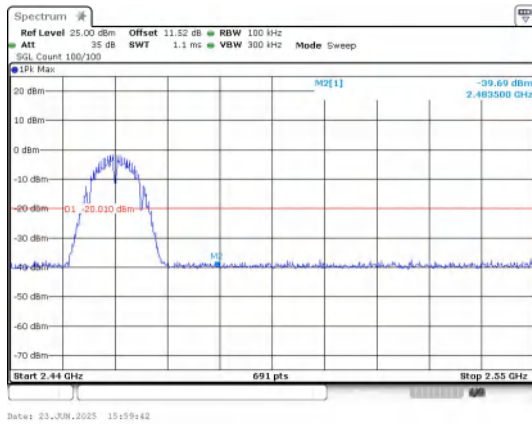
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



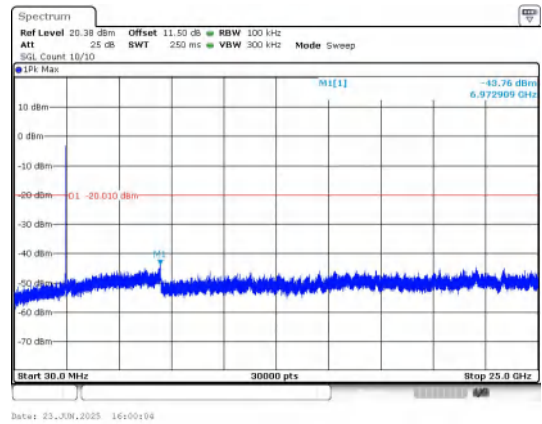
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IEEE 802.11b_Channel 6_20MHz_Antenna 0



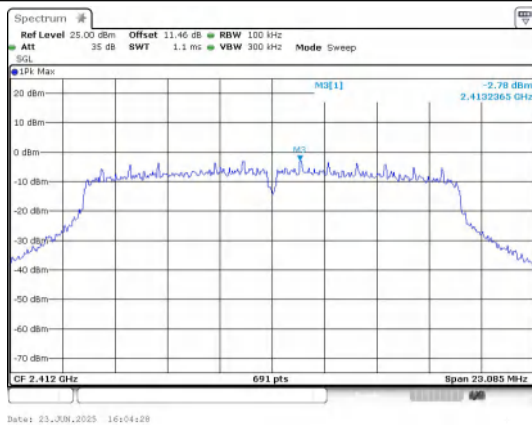
In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



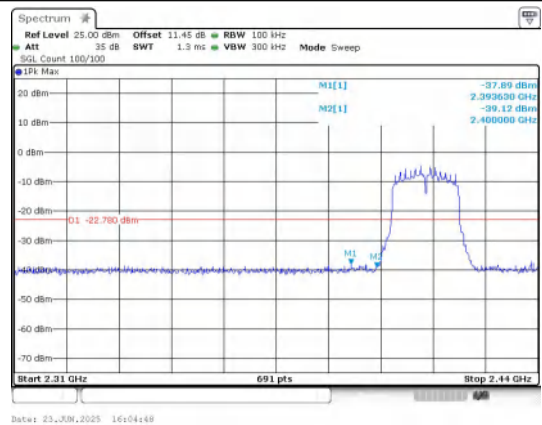
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



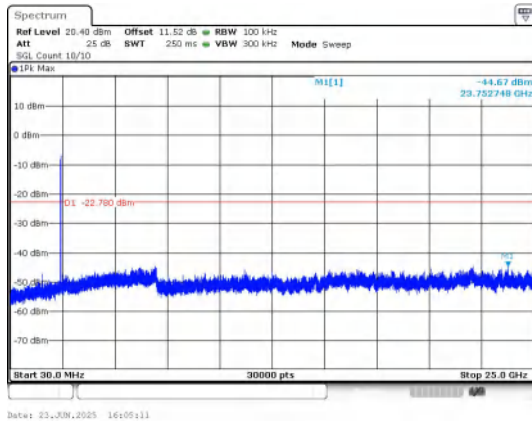
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



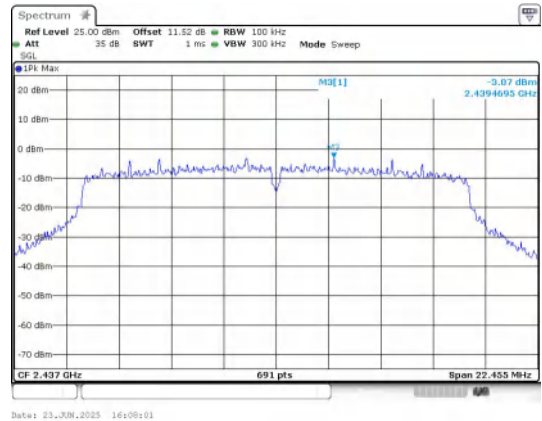
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



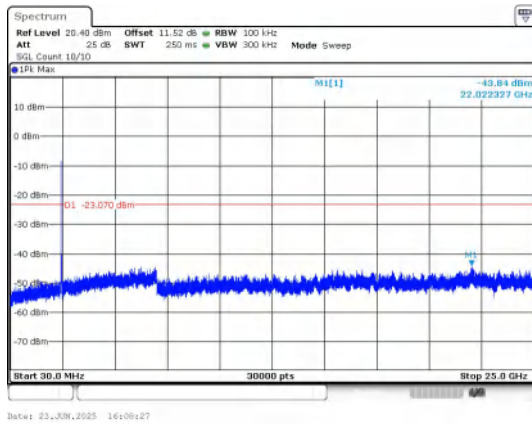
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



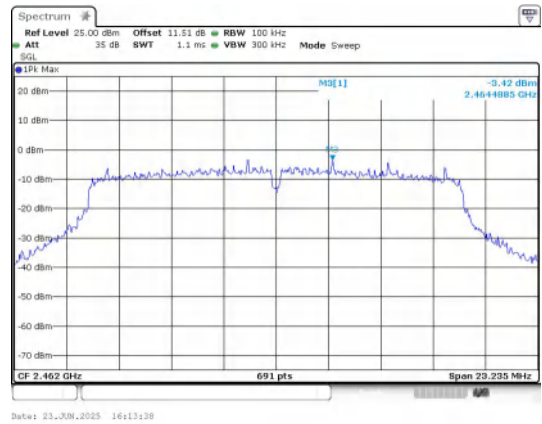
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0



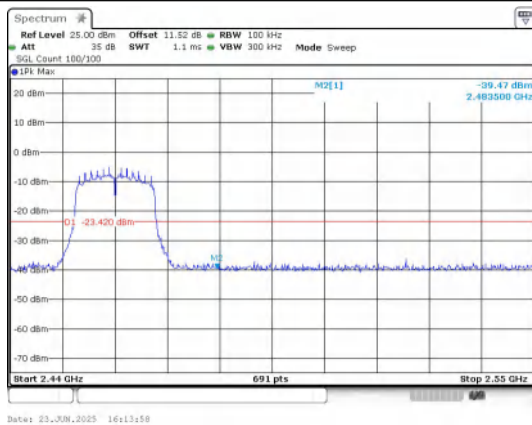
In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



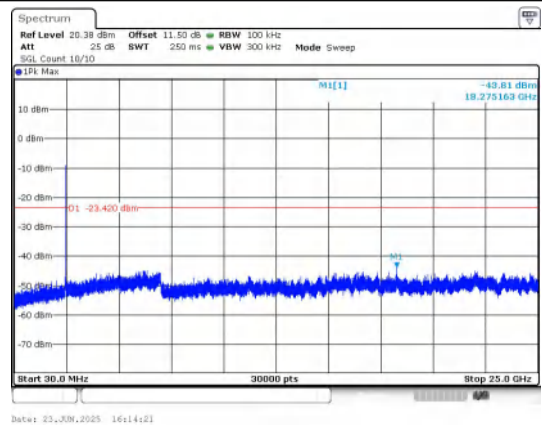
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 6_20MHz_Antenna 0



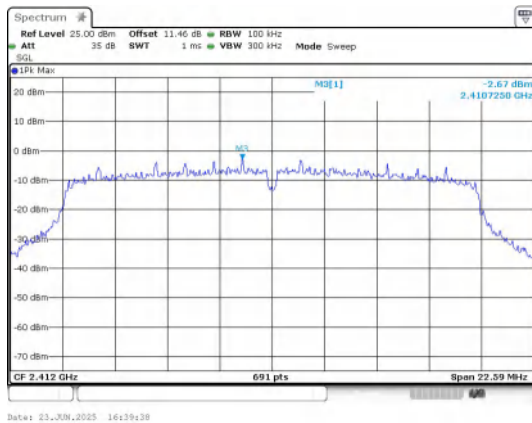
In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0



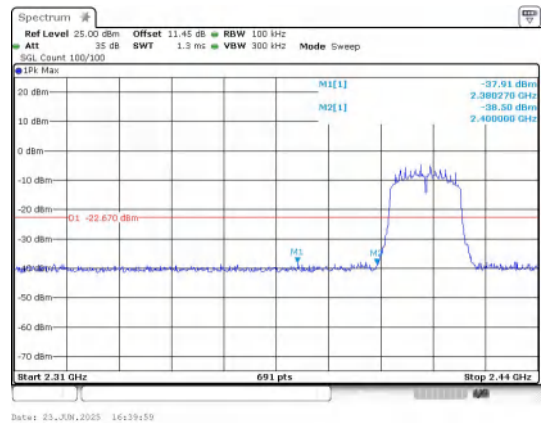
Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



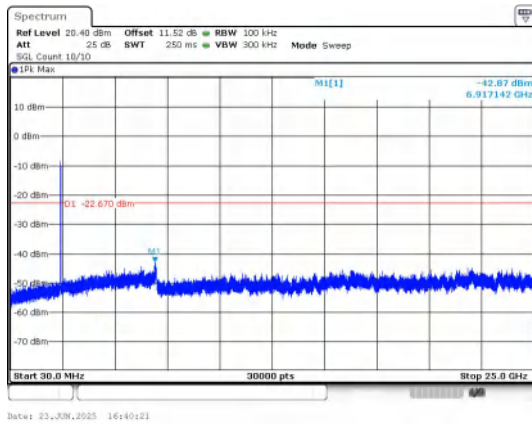
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IEEE 802.11g_Channel 11_20MHz_Antenna 0



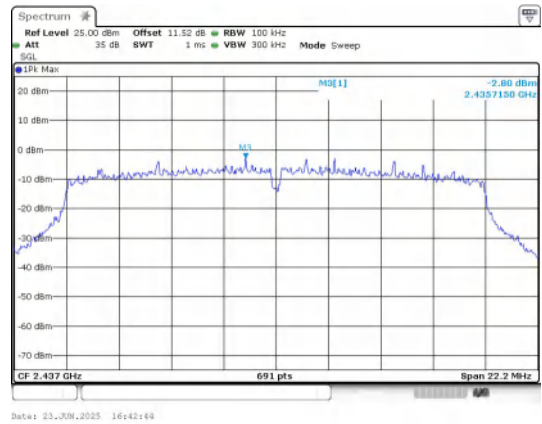
In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



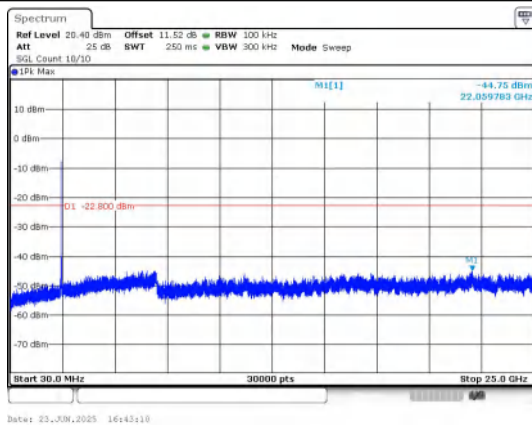
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



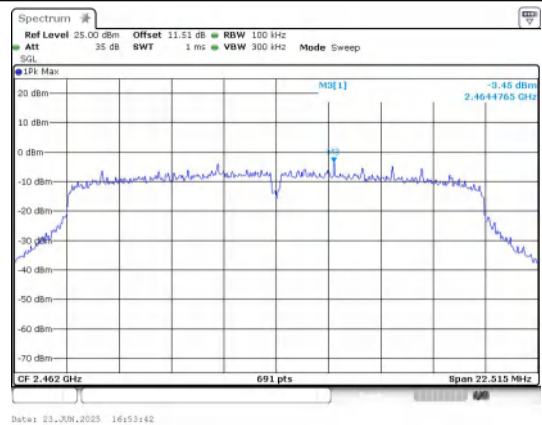
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IEEE 802.11n_Channel 1_20MHz_Antenna 0



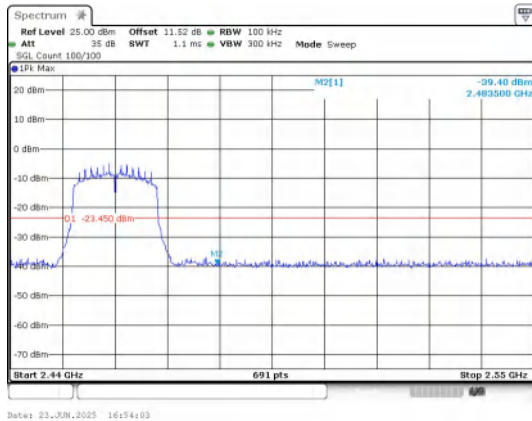
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IEEE 802.11n_Channel 6_20MHz_Antenna 0



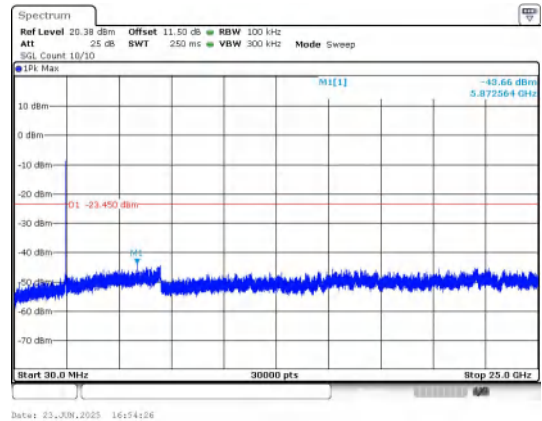
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



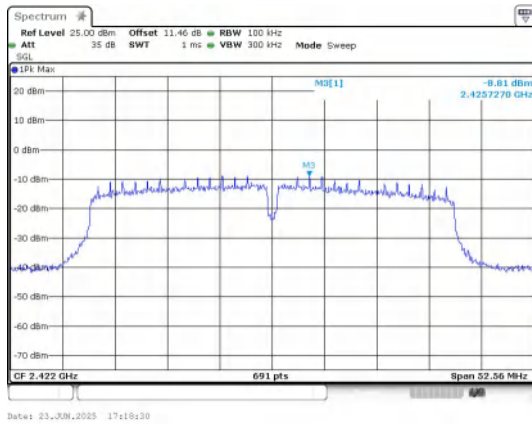
In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



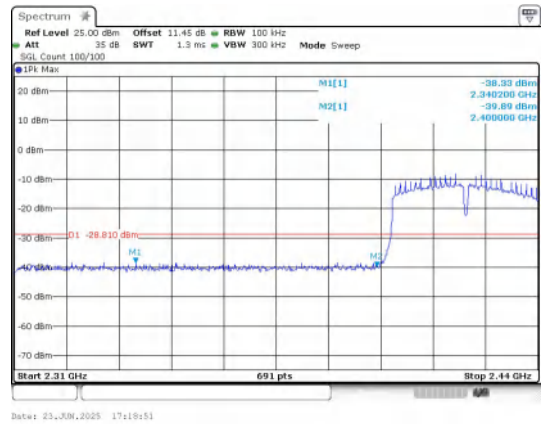
Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



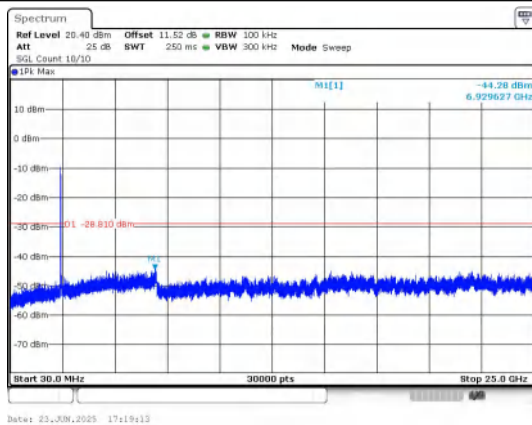
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0



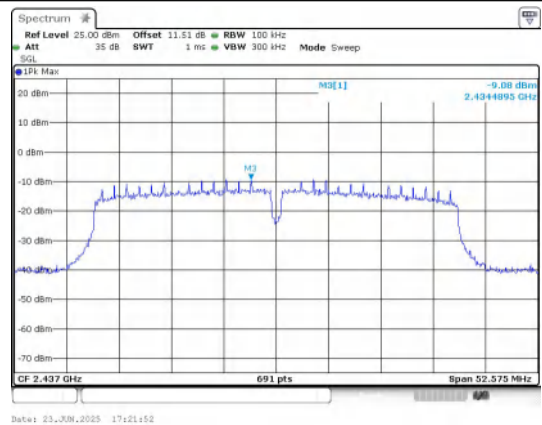
In-Band Reference Level
IEEE 802.11n_Channel 3_40MHz_Antenna 0



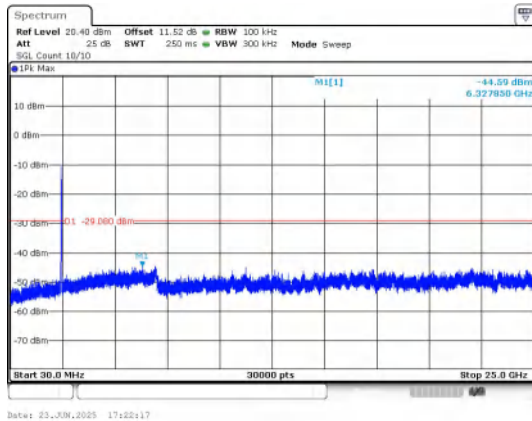
Out Of Band Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0



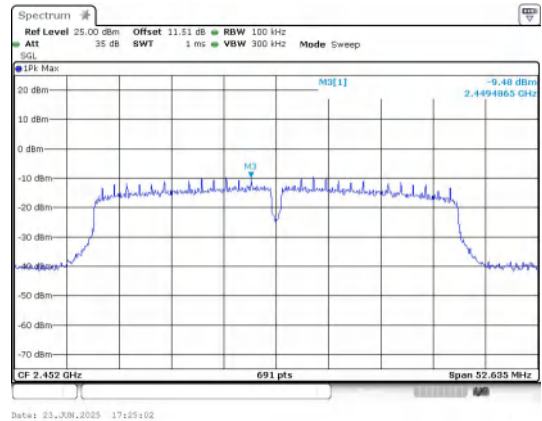
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IEEE 802.11n_Channel 3_40MHz_Antenna 0



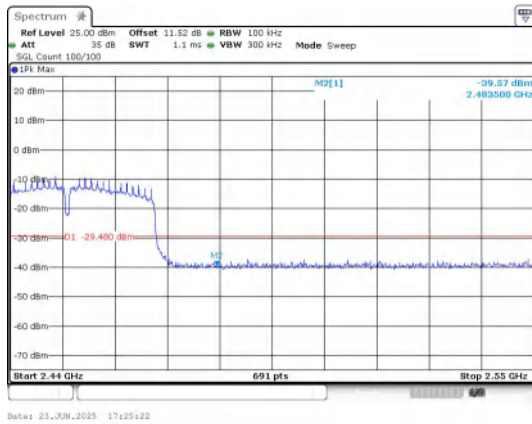
In-Band Reference Level
IEEE 802.11n_Channel 6_40MHz_Antenna 0



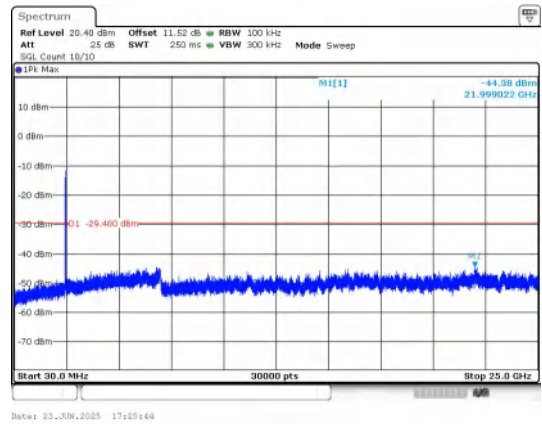
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_40MHz_Antenna 0



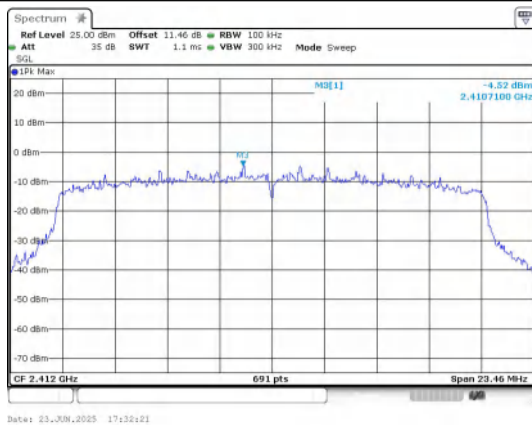
In-Band Reference Level
IEEE 802.11n_Channel 9_40MHz_Antenna 0



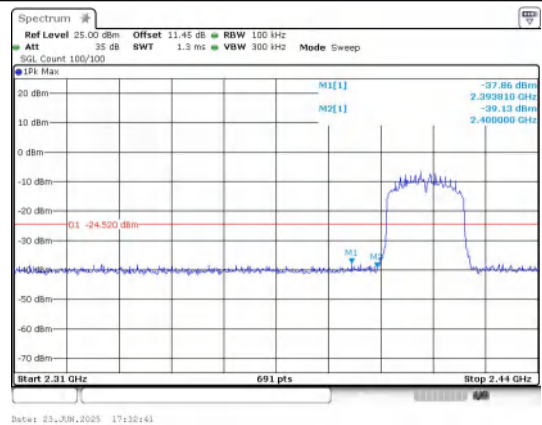
Out Of Band Emission
IEEE 802.11n_Channel 9_40MHz_Antenna 0



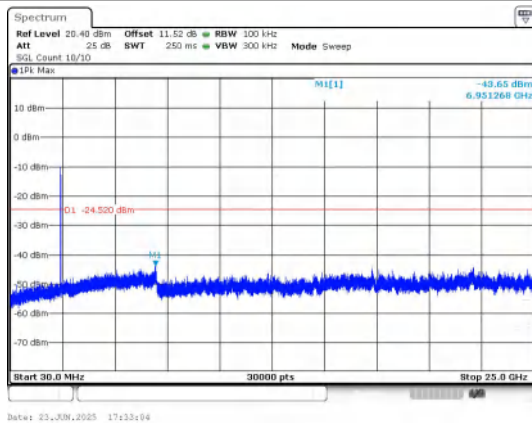
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 9_40MHz_Antenna 0



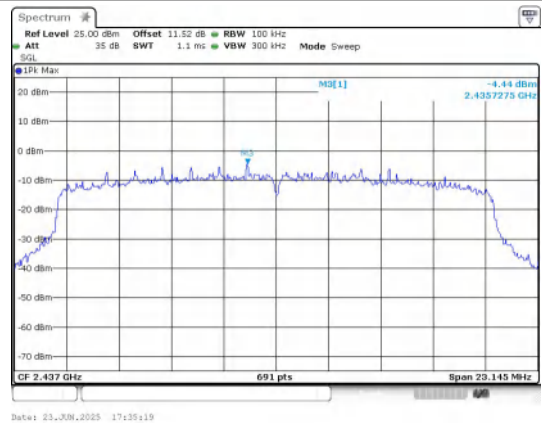
In-Band Reference Level
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



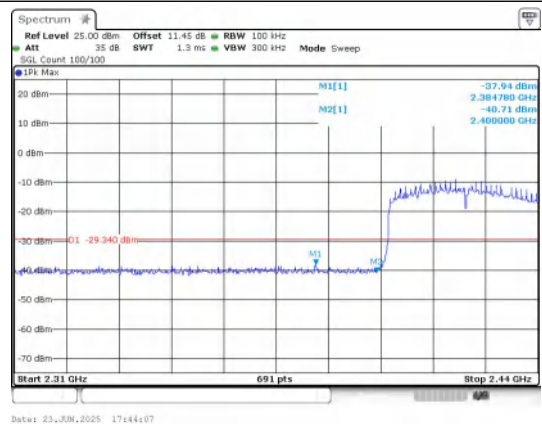
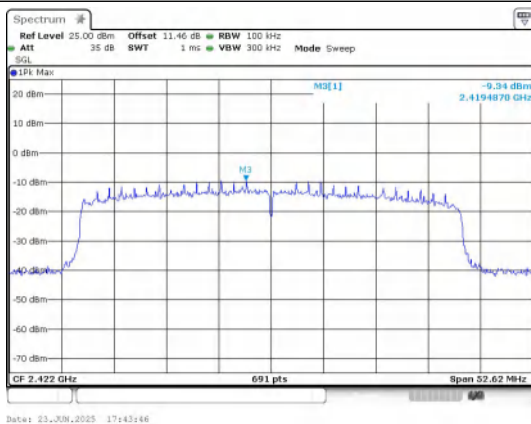
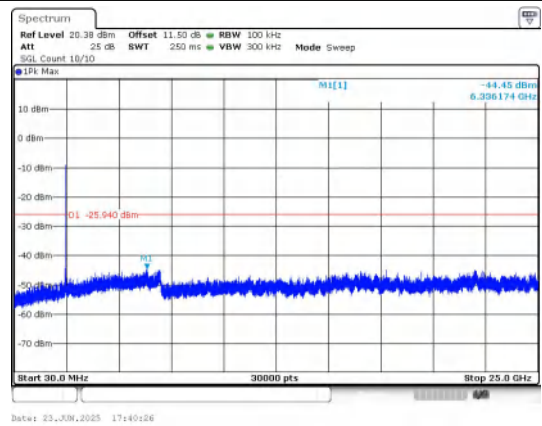
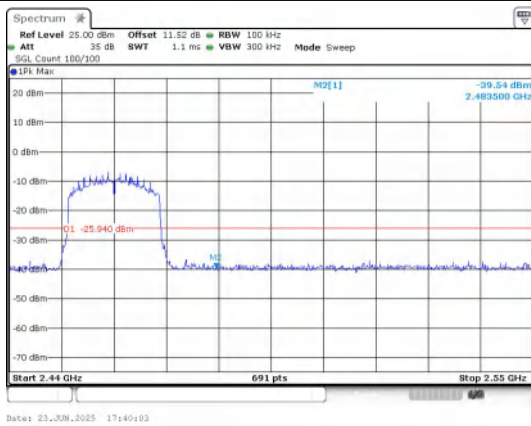
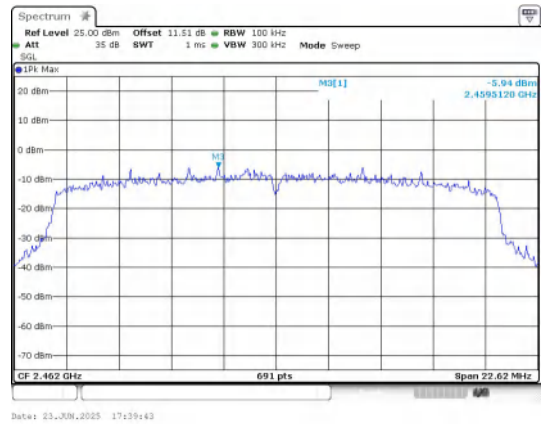
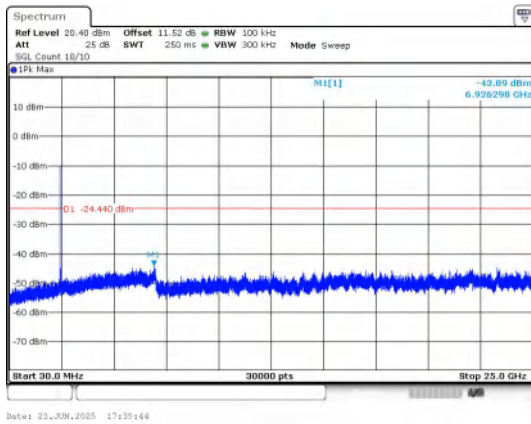
Out Of Band Emission
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU

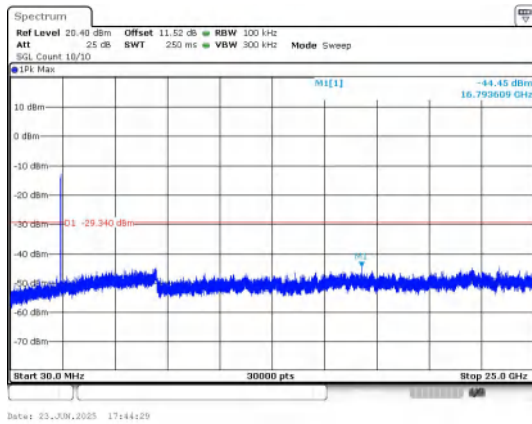


30.0 MHz - 25000.0 MHz
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU

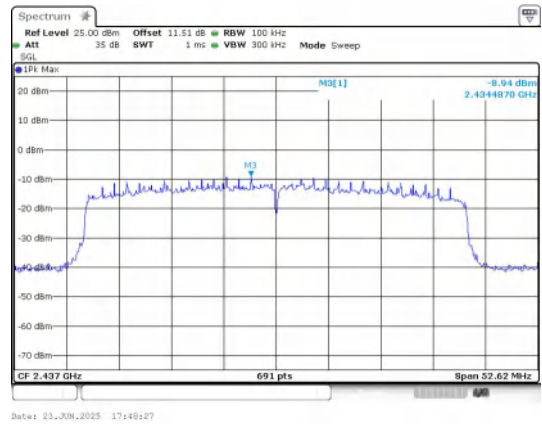


In-Band Reference Level
IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU

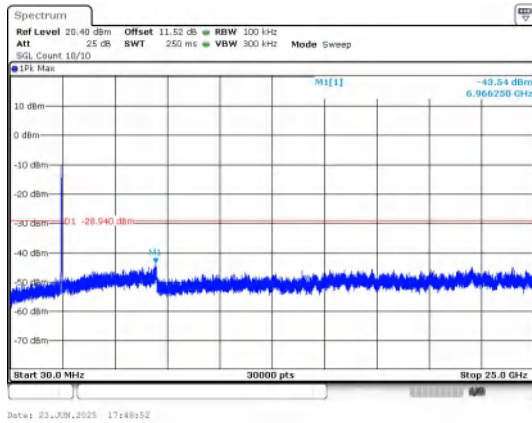




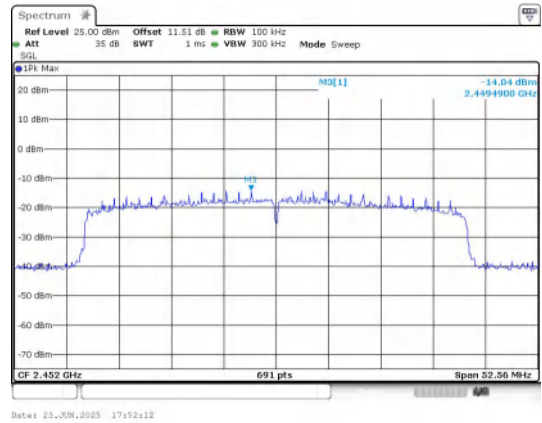
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IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



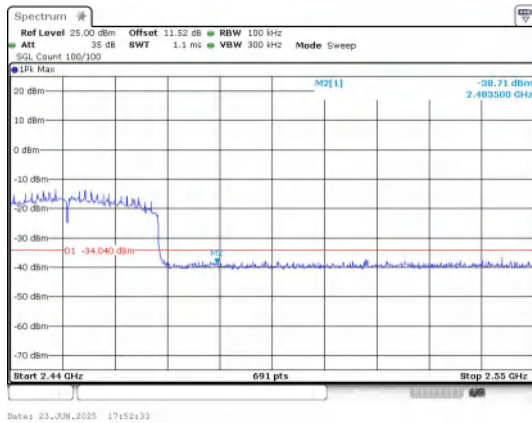
In-Band Reference Level
IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index SU



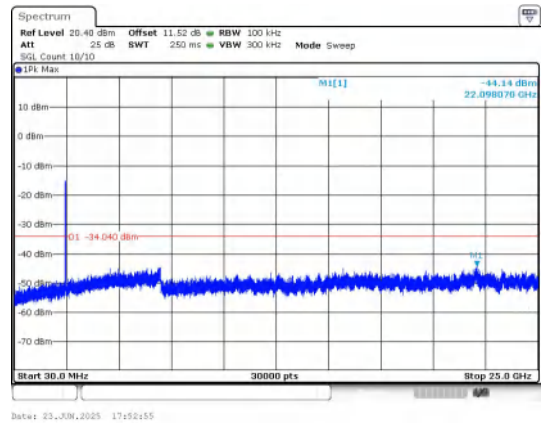
30.0 MHz - 25000.0 MHz
IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index SU



In-Band Reference Level
IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index SU



Out Of Band Emission
IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index SU



30.0 MHz - 25000.0 MHz
IEEE 802.11ax_Channel 9_40MHz_Antenna 0_RU&Index SU