

Appendix A _ Conducted Test Data

1. Conducted Output Power

Test Result

Conducted AVG output power

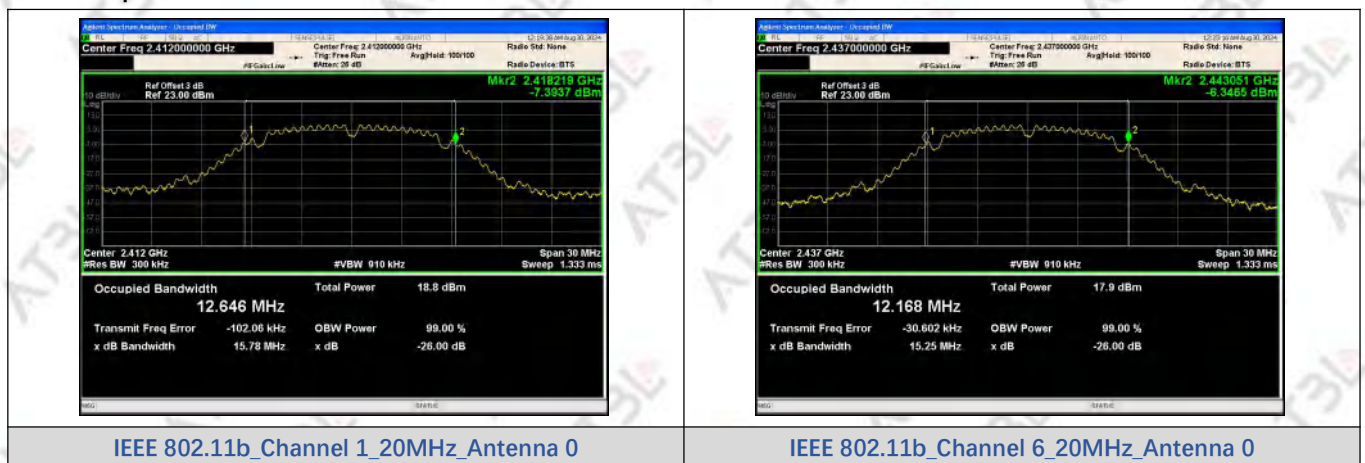
Mode	Channel	Ant. 0 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	16.926	N/A	≤30	PASS
	6	15.241	N/A	≤30	PASS
	11	16.118	N/A	≤30	PASS
IEEE 802.11g	1	14.912	N/A	≤30	PASS
	6	13.232	N/A	≤30	PASS
	11	14.156	N/A	≤30	PASS
IEEE 802.11n_20	1	12.029	N/A	≤30	PASS
	6	12.13	N/A	≤30	PASS
	11	13.094	N/A	≤30	PASS
IEEE 802.11n_40	3	11.482	N/A	≤30	PASS
	6	11.808	N/A	≤30	PASS
	9	12.721	N/A	≤30	PASS
IEEE 802.11ax_20	1	12.866	N/A	≤30	PASS
	6	12.201	N/A	≤30	PASS
	11	13.144	N/A	≤30	PASS
IEEE 802.11ax_40	3	11.519	N/A	≤30	PASS
	6	11.843	N/A	≤30	PASS
	9	12.74	N/A	≤30	PASS

2.99% Bandwidth

Test Result

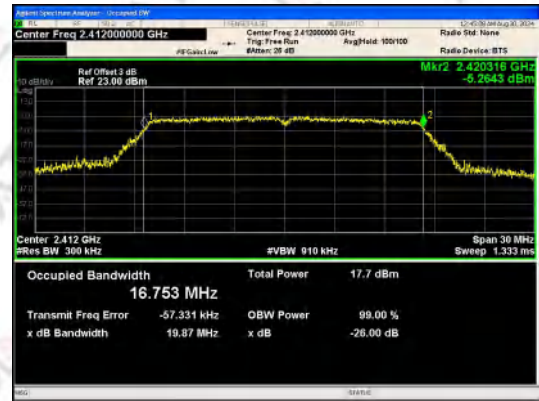
Mode	Channel	RU & Index	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	N/A	0	2412	12.646
	6			2437	12.168
	11			2462	12.635
IEEE 802.11g	1			2412	16.753
	6			2437	16.375
	11			2462	16.662
IEEE 802.11n_20	1			2412	17.763
	6			2437	17.498
	11			2462	17.704
IEEE 802.11n_40	3			2422	36.083
	6			2437	35.526
	9			2452	36.291
IEEE 802.11ax_20	1	SU		2412	17.738
	6			2437	17.489
	11			2462	17.712
IEEE 802.11ax_40	3			2422	36.025
	6			2437	35.537
	9			2452	36.258

Test Graphs

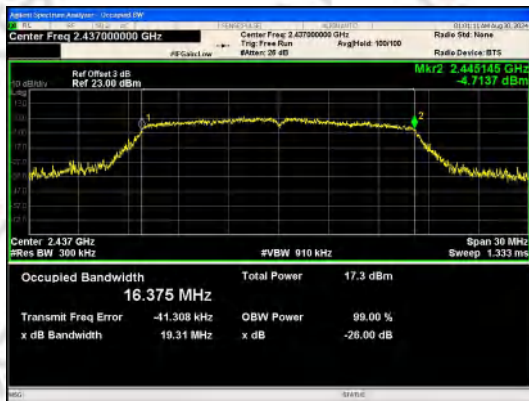




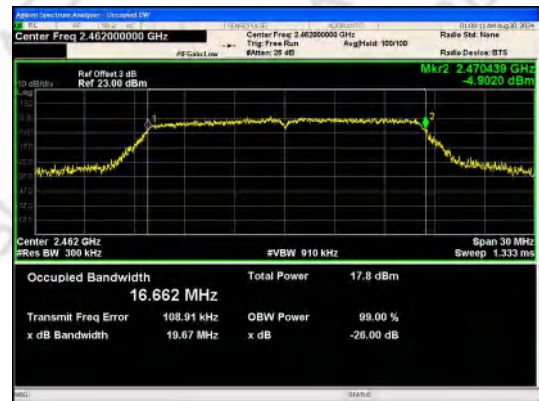
IEEE 802.11b_Channel 11_20MHz_Antenna 0



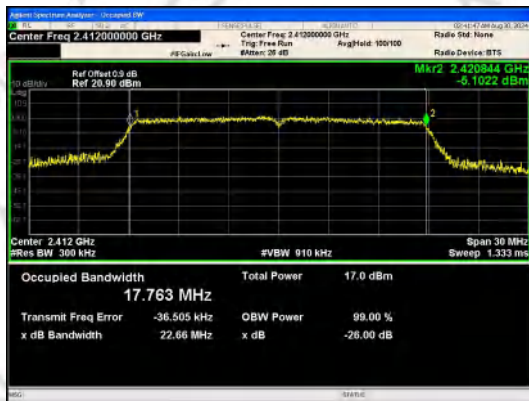
IEEE 802.11g_Channel 1_20MHz_Antenna 0



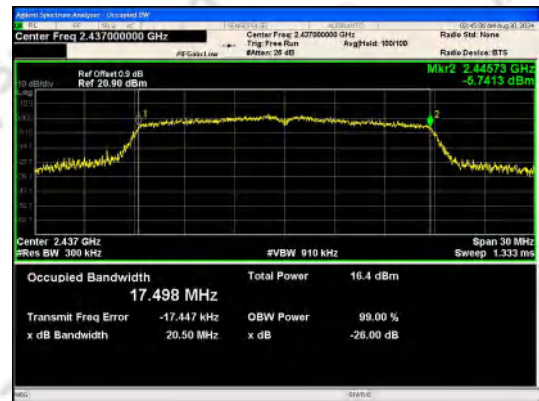
IEEE 802.11g_Channel 6_20MHz_Antenna 0



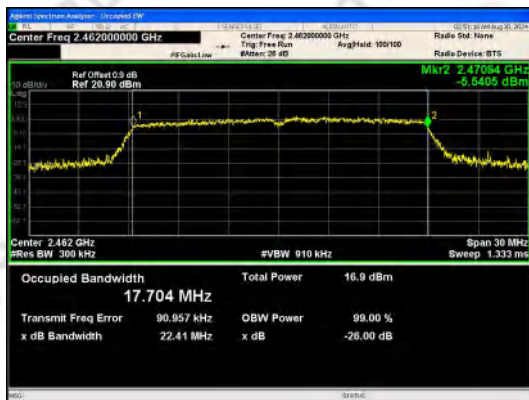
IEEE 802.11g_Channel 11_20MHz_Antenna 0



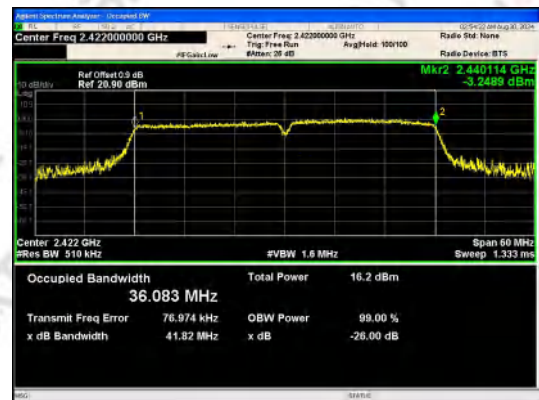
IEEE 802.11n_Channel 1_20MHz_Antenna 0



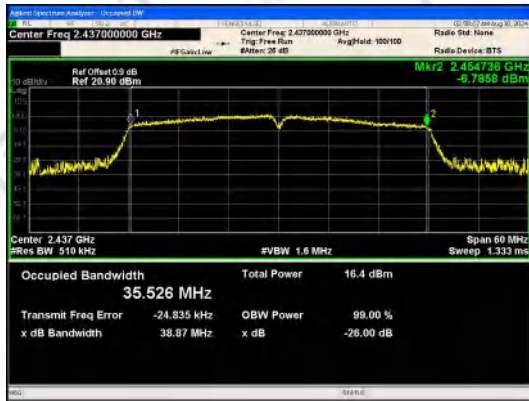
IEEE 802.11n_Channel 6_20MHz_Antenna 0



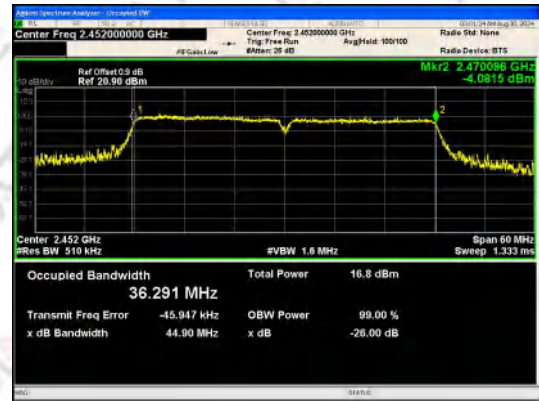
IEEE 802.11n_Channel 11_20MHz_Antenna 0



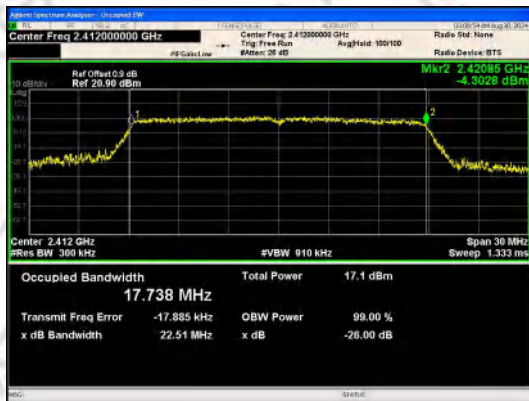
IEEE 802.11n_Channel 3_40MHz_Antenna 0



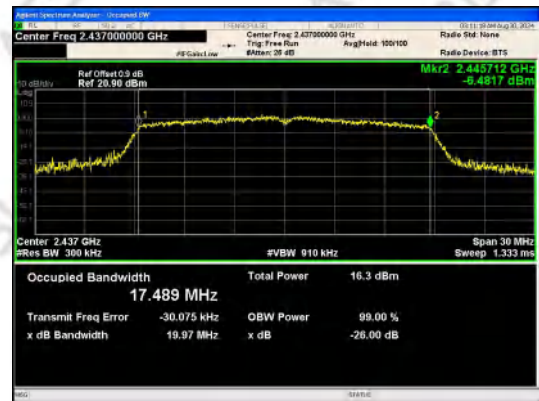
IEEE 802.11n_Channel 6_40MHz_Antenna 0



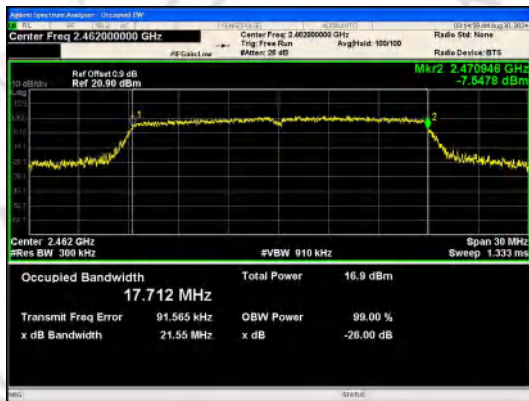
IEEE 802.11n_Channel 9_40MHz_Antenna 0



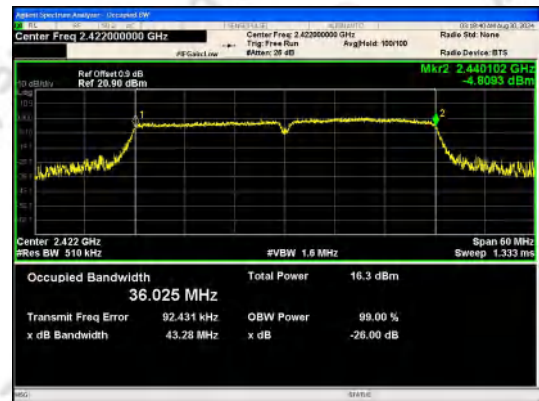
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



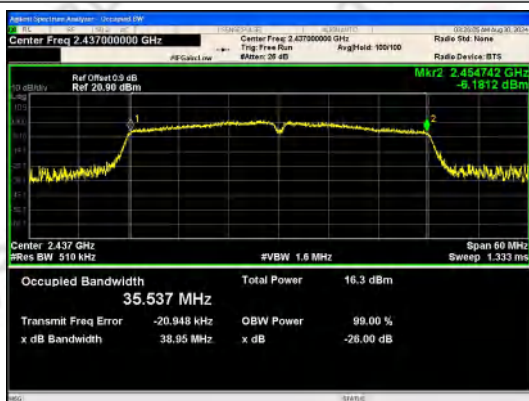
IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



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

3.6dB Bandwidth

Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	10.16	0.5	PASS
	6		2437	10.27		PASS
	11		2462	10.16		PASS
IEEE 802.11g	1		2412	16.34		PASS
	6		2437	14.40		PASS
	11		2462	14.04		PASS
IEEE 802.11n_20	1		2412	15.41		PASS
	6		2437	16.51		PASS
	11		2462	15.08		PASS
IEEE 802.11n_40	3		2422	35.02		PASS
	6		2437	34.49		PASS
	10		2457	35.31		PASS
IEEE 802.11ax_20	1		2412	15.10		PASS
	6		2437	16.12		PASS
	11		2462	15.04		PASS
IEEE 802.11ax_40	3		2422	35.42		PASS
	6		2437	36.56		PASS
	10		2457	35.11		PASS

Test Graphs



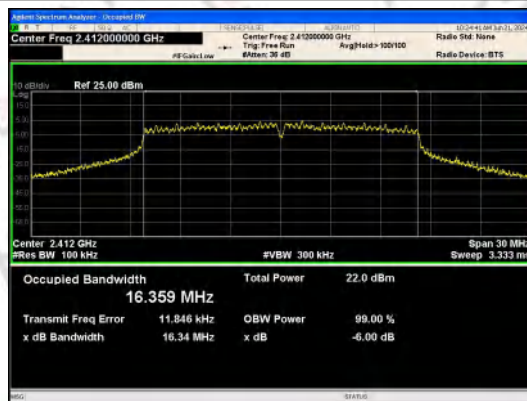
IEEE 802.11b_Channel 1_20MHz_Antenna 0



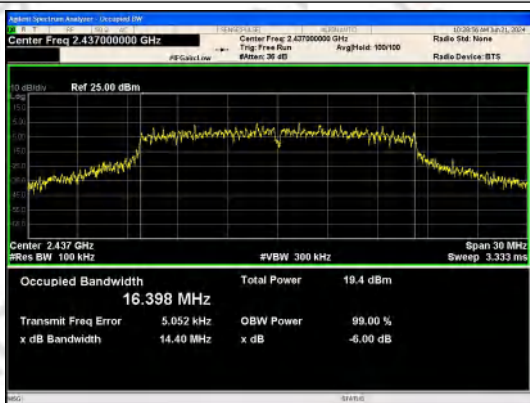
IEEE 802.11b_Channel 6_20MHz_Antenna 0



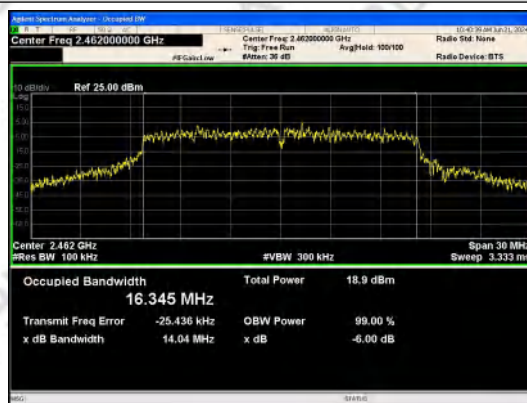
IEEE 802.11b_Channel 11_20MHz_Antenna 0



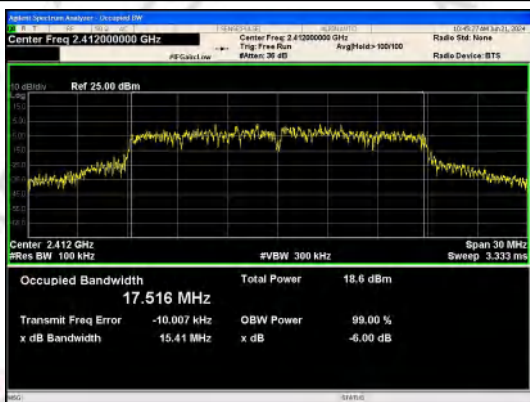
IEEE 802.11g_Channel 1_20MHz_Antenna 0



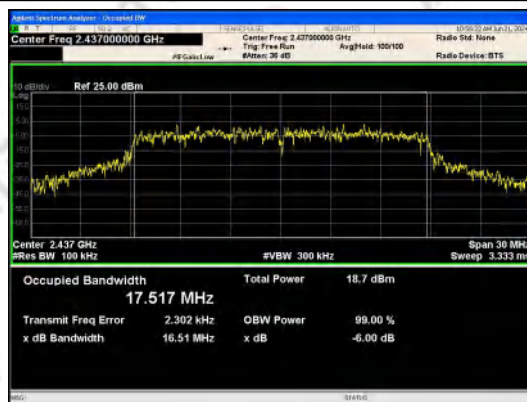
IEEE 802.11g_Channel 6_20MHz_Antenna 0



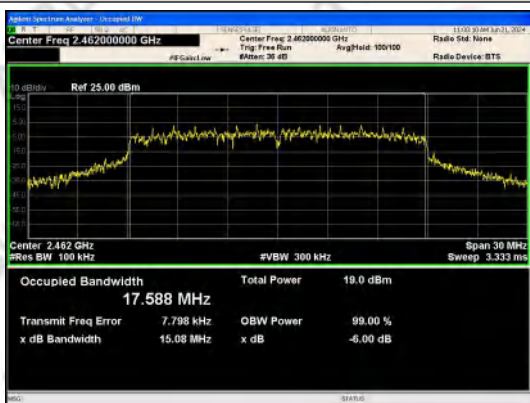
IEEE 802.11g_Channel 11_20MHz_Antenna 0



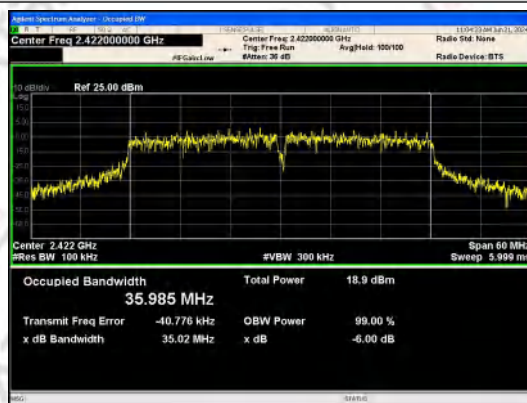
IEEE 802.11n_Channel 1_20MHz_Antenna 0



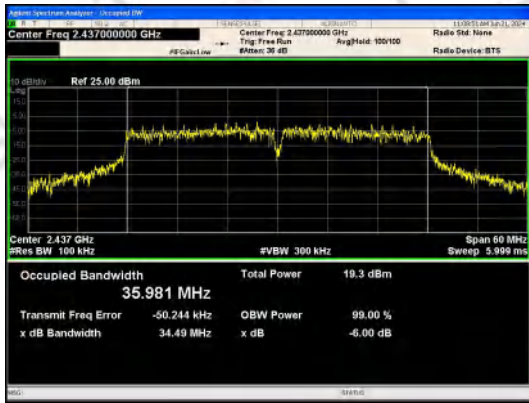
IEEE 802.11n_Channel 6_20MHz_Antenna 0



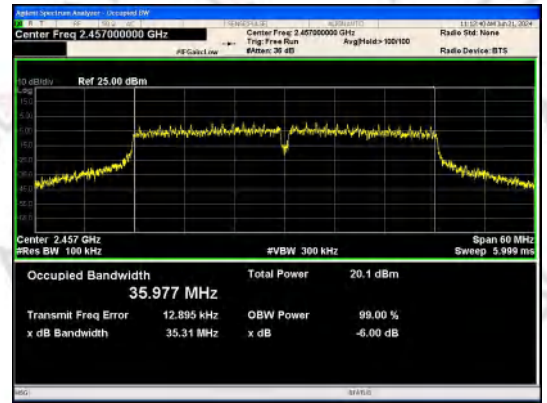
IEEE 802.11n_Channel 11_20MHz_Antenna 0



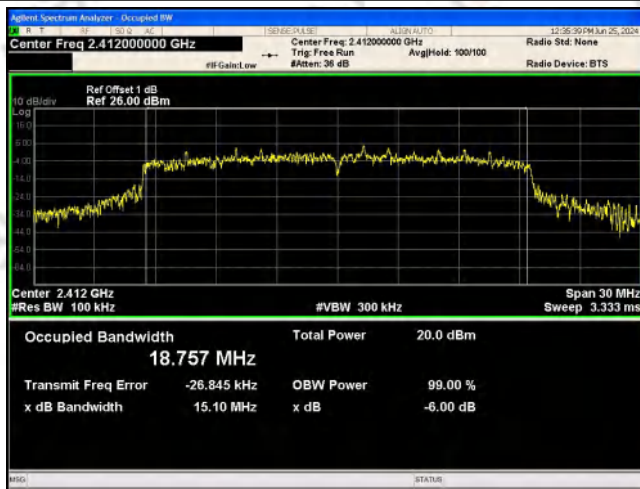
IEEE 802.11n_Channel 3_40MHz_Antenna 0



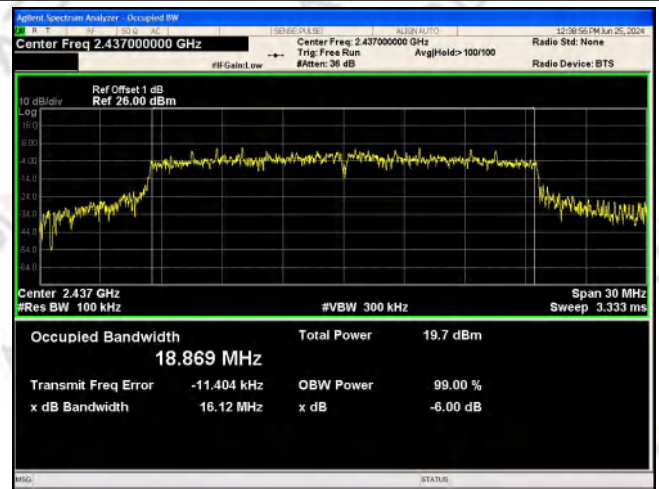
IEEE 802.11n_Channel 6_40MHz_Antenna 0



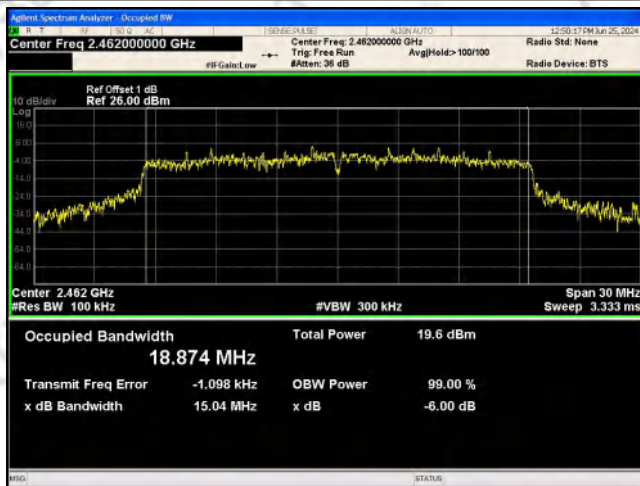
IEEE 802.11n_Channel 10_40MHz_Antenna 0



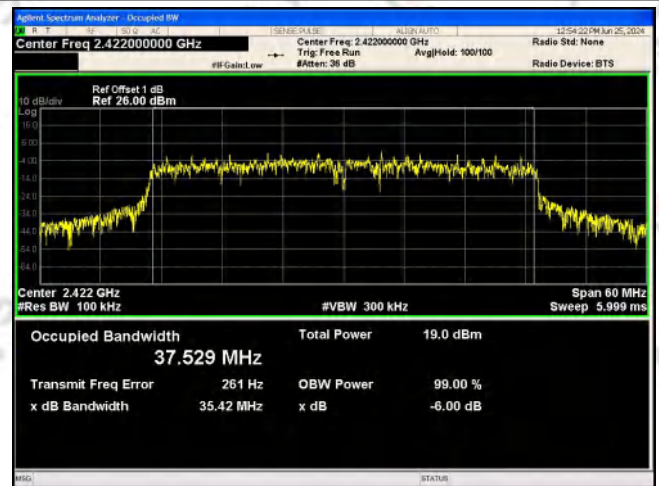
IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



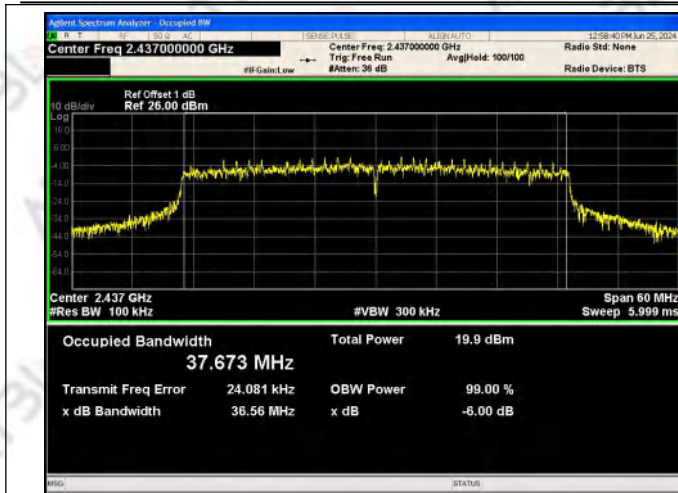
IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



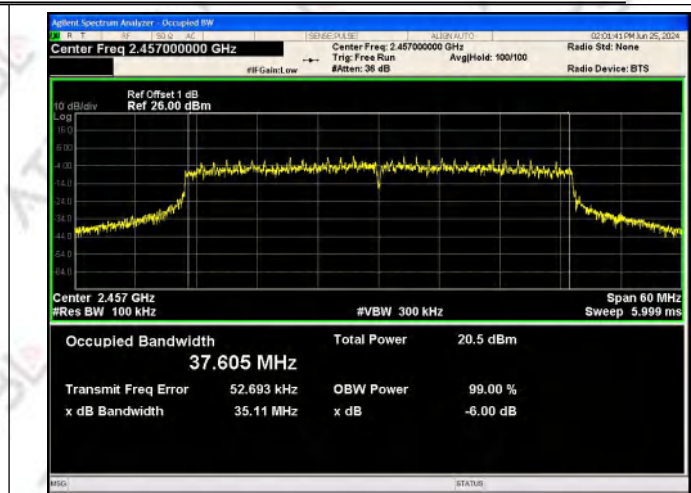
IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



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 10_40MHz_Antenna 0_RU&Index SU

4. Conducted Out Of Band Emission

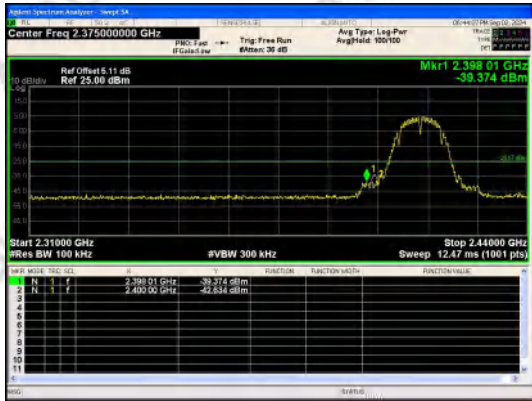
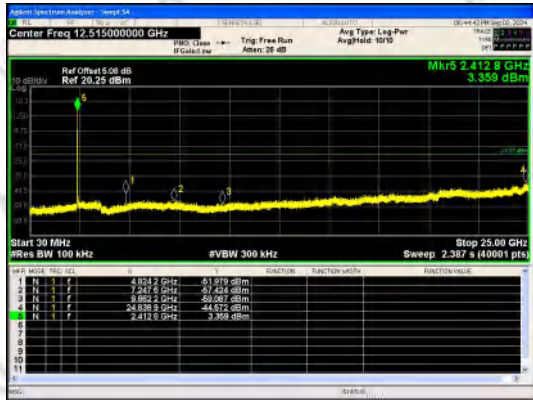
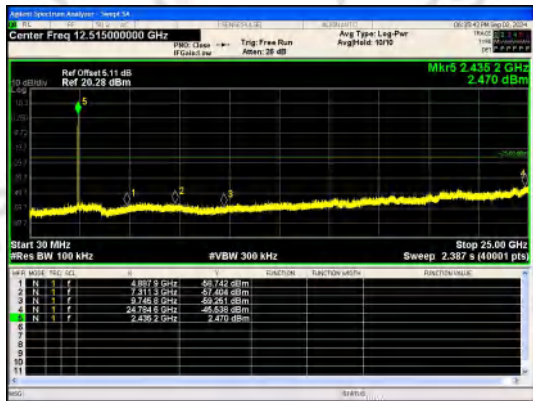
Test Result

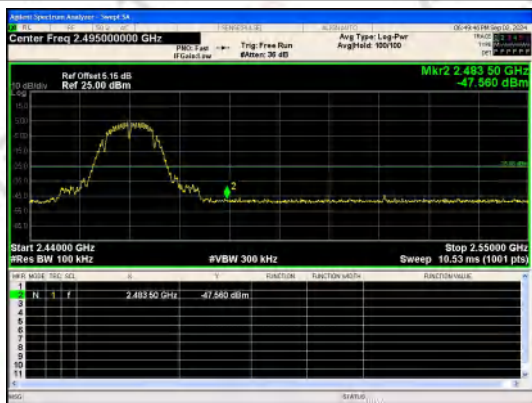
Mode	Channel	RU & Index	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	N/A	0	2398.01	-39.374	-25.57	-13.804	PASS
				2400.00	-42.634	-25.57	-17.064	PASS
				4824.20	-51.979	-25.57	-26.409	PASS
				7247.60	-57.425	-25.57	-31.855	PASS
				9662.20	-59.087	-25.57	-33.517	PASS
				24838.9	-44.572	-25.57	-19.002	PASS
	6			4887.91	-58.742	-25.68	-33.062	PASS
				7311.25	-57.404	-25.68	-31.724	PASS
				9745.83	-59.251	-25.68	-33.571	PASS
				24784.6	-45.538	-25.68	-19.858	PASS
	11			2483.50	-47.560	-25.86	-21.700	PASS
				4924.12	-53.619	-25.86	-27.759	PASS
				7377.42	-57.094	-25.86	-31.234	PASS
				9844.46	-58.761	-25.86	-32.901	PASS
24934.5	-44.840			-25.86	-18.980	PASS		
IEEE 802.11g	1			2398.53	-34.493	-29.31	-5.183	PASS
				2400.00	-35.300	-29.31	-5.990	PASS
				4809.90	-58.898	-29.31	-29.588	PASS
				7243.20	-57.858	-29.31	-28.548	PASS
				9654.70	-59.132	-29.31	-29.822	PASS
				24925.1	-44.218	-29.31	-14.908	PASS
	6			4877.30	-58.111	-28.97	-29.142	PASS
				7320.62	-57.057	-28.97	-28.087	PASS
				9766.43	-58.228	-28.97	-29.258	PASS
				24770.9	-44.541	-28.97	-15.571	PASS
	11			2483.50	-47.799	-29.77	-18.029	PASS
				4914.76	-58.697	-29.77	-28.927	PASS
				7398.65	-57.161	-29.77	-27.391	PASS
				9864.43	-58.229	-29.77	-28.459	PASS
24909.5	-44.471			-29.77	-14.701	PASS		
IEEE 802.11n_20	1			2398.92	-30.404	-29.13	-1.274	PASS
				2400.00	-30.941	-29.13	-1.811	PASS
				4833.00	-58.739	-29.13	-29.609	PASS
				7255.70	-58.461	-29.13	-29.331	PASS
				9656.60	-58.767	-29.13	-29.637	PASS
				24943.2	-44.791	-29.13	-15.661	PASS
	6			4872.93	-57.701	-28.17	-29.531	PASS

	11	SU	7329.98	-57.764	-28.17	-29.594	PASS	
			9743.33	-59.206	-28.17	-31.036	PASS	
			24966.3	-43.487	-28.17	-15.317	PASS	
			2483.50	-44.263	-28.63	-15.633	PASS	
			4932.86	-57.643	-28.63	-29.013	PASS	
			7371.80	-58.033	-28.63	-29.403	PASS	
			9837.59	-58.061	-28.63	-29.431	PASS	
			24928.8	-44.823	-28.63	-16.193	PASS	
IEEE 802.11n_40	3		2396.19	-34.666	-32.08	-2.586	PASS	
			2400.00	-36.193	-32.08	-4.113	PASS	
			4828.00	-56.941	-32.08	-24.861	PASS	
			7247.00	-55.733	-32.08	-23.653	PASS	
	6		9653.40	-59.372	-32.08	-27.292	PASS	
			24747.8	-44.926	-32.08	-12.846	PASS	
			4849.21	-57.855	-30.99	-26.865	PASS	
			7339.97	-55.963	-30.99	-24.973	PASS	
			9753.32	-58.749	-30.99	-27.759	PASS	
			24858.9	-43.723	-30.99	-12.733	PASS	
			2483.50	-41.285	-30.98	-10.305	PASS	
			4911.64	-57.480	-30.98	-26.500	PASS	
	9		7327.48	-56.916	-30.98	-25.936	PASS	
			9843.83	-58.104	-30.98	-27.124	PASS	
			24863.9	-44.957	-30.98	-13.977	PASS	
			IEEE 802.11ax_20	1	2398.27	-29.956	-28.58	-1.376
2400.00					-31.290	-28.58	-2.710	PASS
4828.00					-58.843	-28.58	-30.263	PASS
7225.10					-56.790	-28.58	-28.210	PASS
6				9645.30	-59.578	-28.58	-30.998	PASS
	24885.8			-44.915	-28.58	-16.335	PASS	
	4873.56			-56.798	-28.34	-28.458	PASS	
	7305.01			-58.251	-28.34	-29.911	PASS	
	9728.35			-58.696	-28.34	-30.356	PASS	
	24925.7			-44.866	-28.34	-16.526	PASS	
	2483.50			-44.389	-28.9	-15.489	PASS	
	4939.10			-58.394	-28.9	-29.494	PASS	
11	7387.41		-56.853	-28.9	-27.953	PASS		
	9863.19		-58.886	-28.9	-29.986	PASS		
	24805.9		-44.722	-28.9	-15.822	PASS		
	IEEE 802.11ax_40		3	2396.19	-34.764	-32.01	-2.755	PASS
				2400.00	-35.278	-32.01	-3.268	PASS
		4841.70		-57.831	-32.01	-25.821	PASS	
		7272.50		-57.116	-32.01	-25.106	PASS	
		6	9667.20	-58.555	-32.01	-26.545	PASS	
24760.9			-44.121	-32.01	-12.111	PASS		
		4894.16	-58.691	-30.98	-27.711	PASS		

9	7336.22	-56.554	-30.98	-25.574	PASS
	9717.11	-57.102	-30.98	-26.122	PASS
	24892.0	-44.787	-30.98	-13.807	PASS
	2483.50	-43.013	-31.0	-12.013	PASS
	4940.35	-58.531	-31.0	-27.531	PASS
	7376.80	-57.127	-31.0	-26.127	PASS
	9808.25	-58.431	-31.0	-27.431	PASS
	24877.0	-44.211	-31.0	-13.211	PASS

Test Graphs



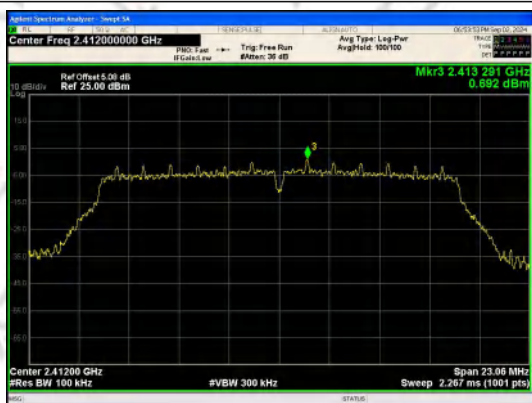
Out Of Band Emission

IEEE 802.11b_Channel 11_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz

IEEE 802.11b_Channel 11_20MHz_Antenna 0



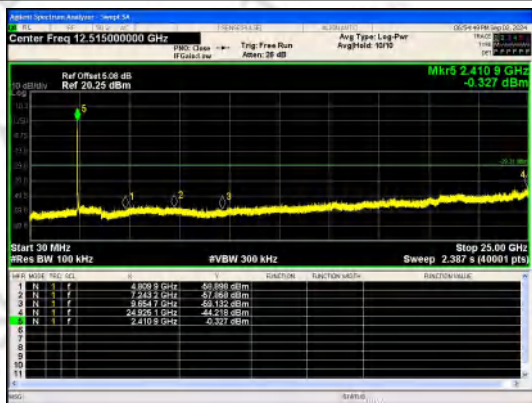
In-Band Reference Level

IEEE 802.11g_Channel 1_20MHz_Antenna 0



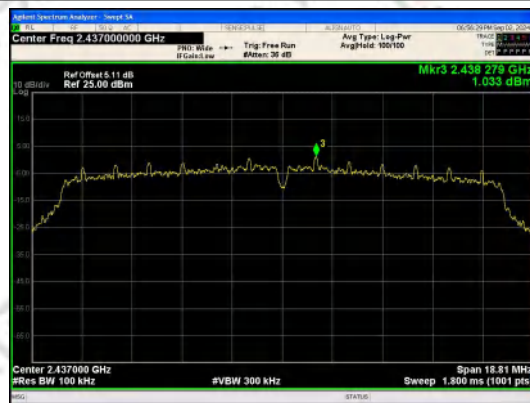
Out Of Band Emission

IEEE 802.11g_Channel 1_20MHz_Antenna 0



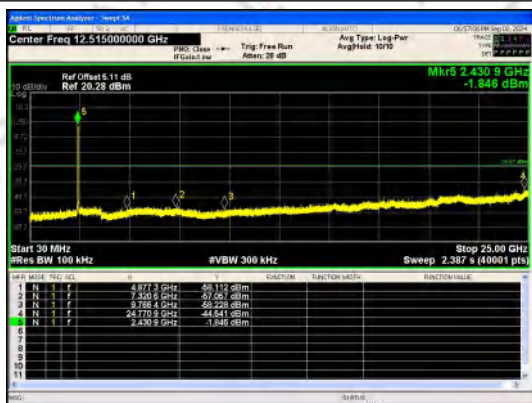
30.0 MHz - 25000.0 MHz

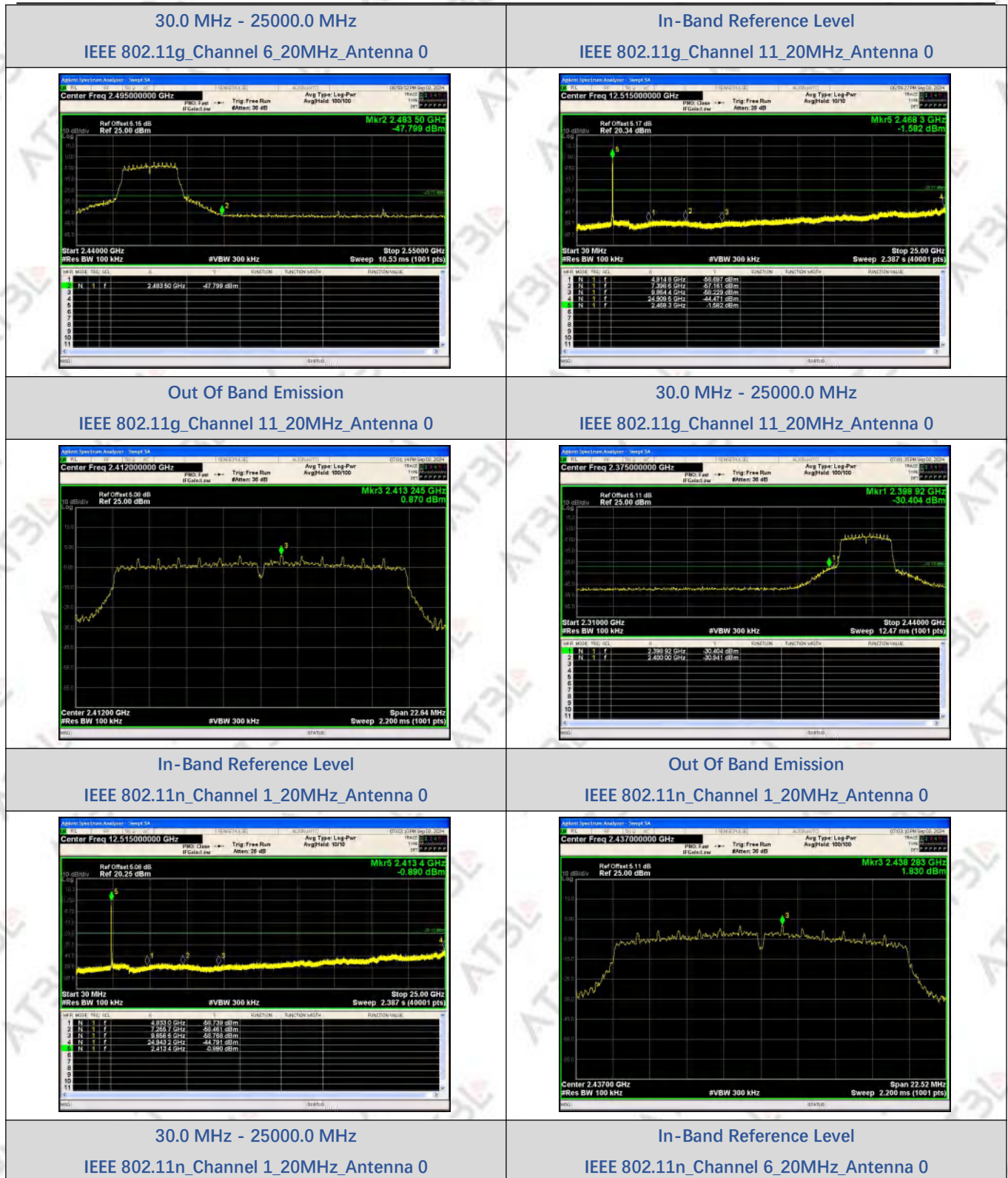
IEEE 802.11g_Channel 1_20MHz_Antenna 0

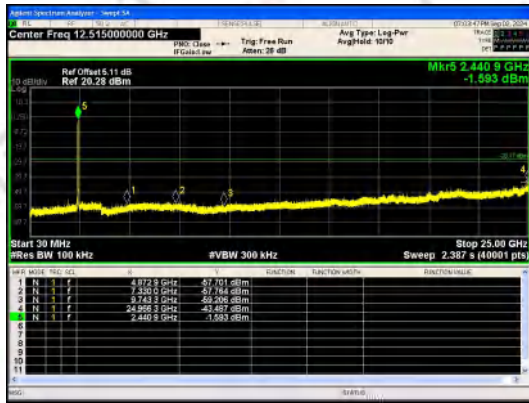


In-Band Reference Level

IEEE 802.11g_Channel 6_20MHz_Antenna 0







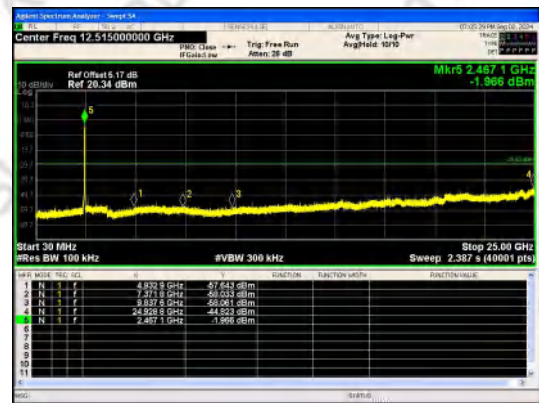
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



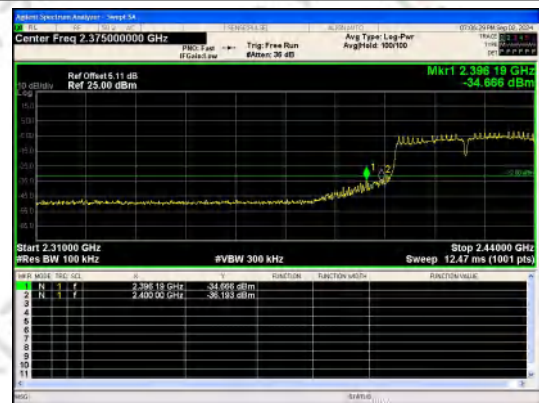
Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



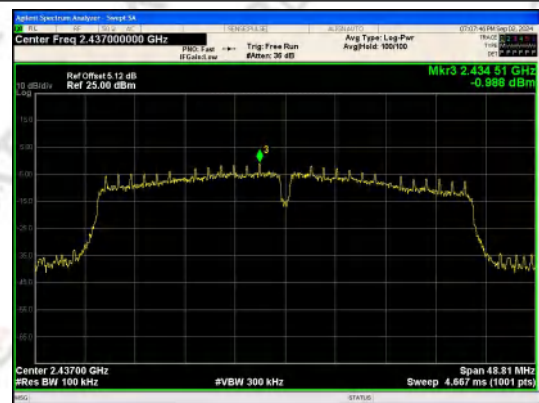
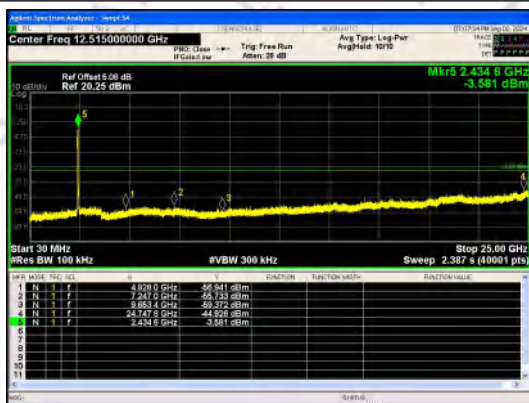
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0

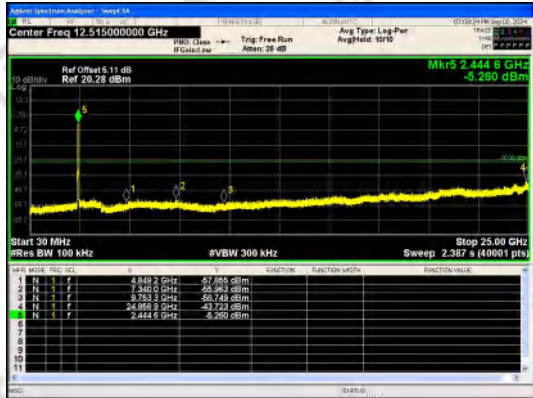
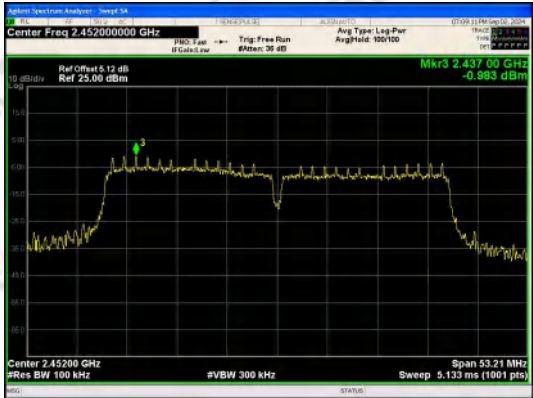
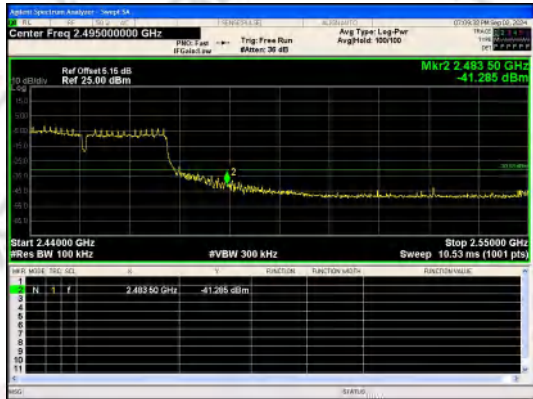
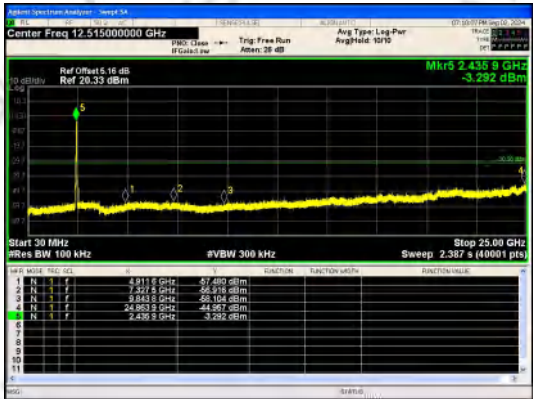


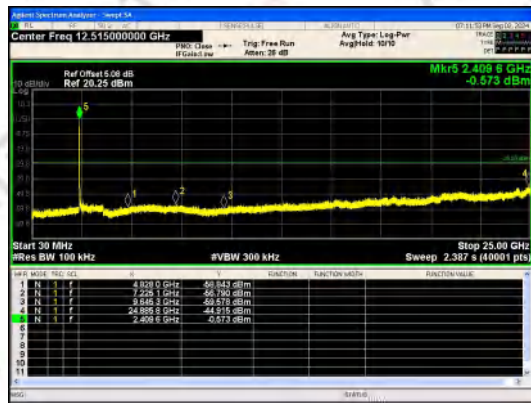
In-Band Reference Level
IEEE 802.11n_Channel 3_40MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0



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 
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



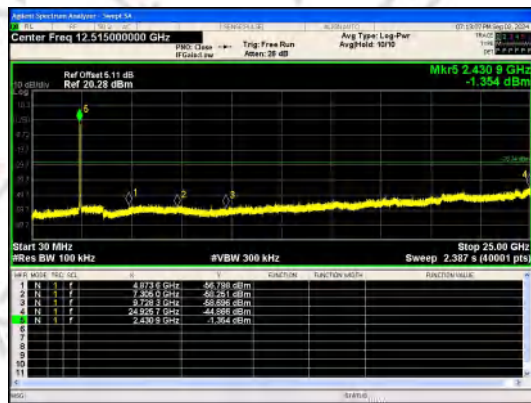
30.0 MHz - 25000.0 MHz

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



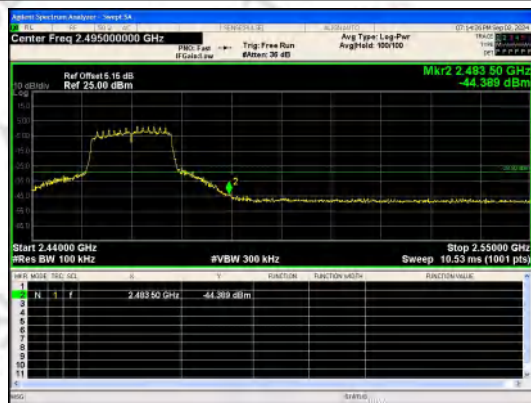
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IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



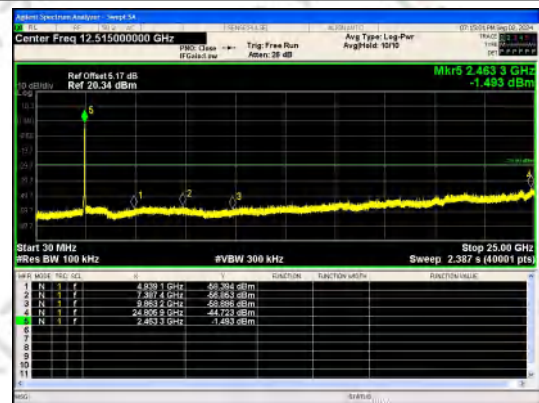
In-Band Reference Level

IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



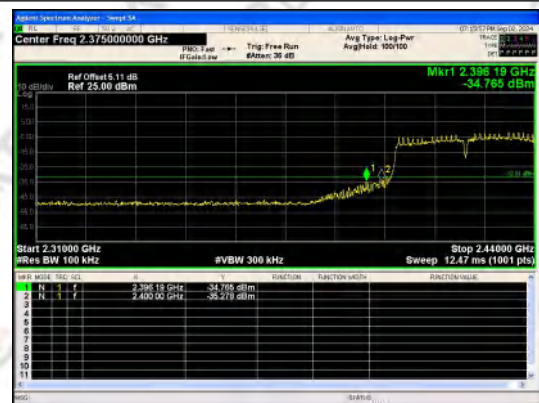
Out Of Band Emission

IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



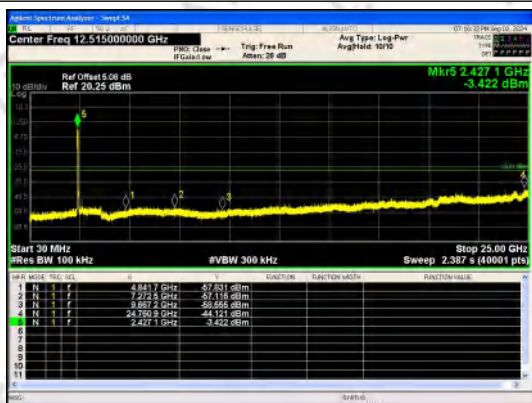
30.0 MHz - 25000.0 MHz

IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



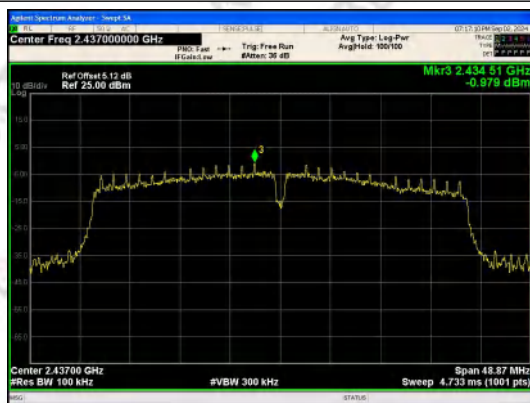
In-Band Reference Level

IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



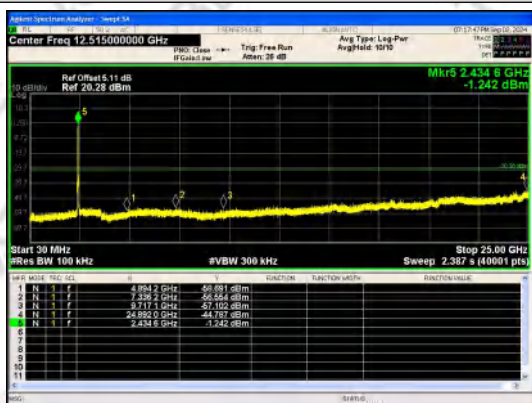
Out Of Band Emission

IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



30.0 MHz - 25000.0 MHz

IEEE 802.11ax_Channel 3_40MHz_Antenna 0_RU&Index SU



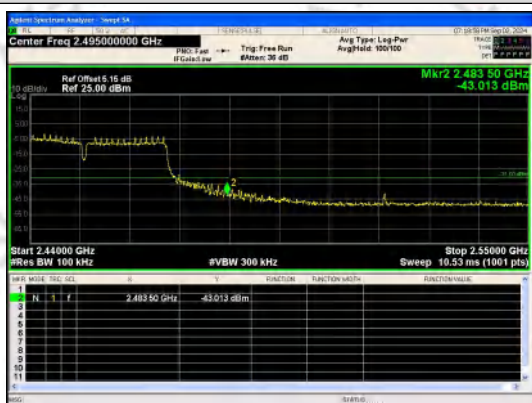
In-Band Reference Level

IEEE 802.11ax_Channel 6_40MHz_Antenna 0_RU&Index SU



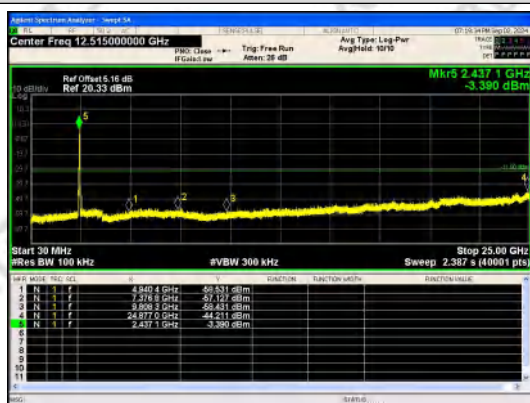
30.0 MHz - 25000.0 MHz

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

5.Duty Cycle

Test Result

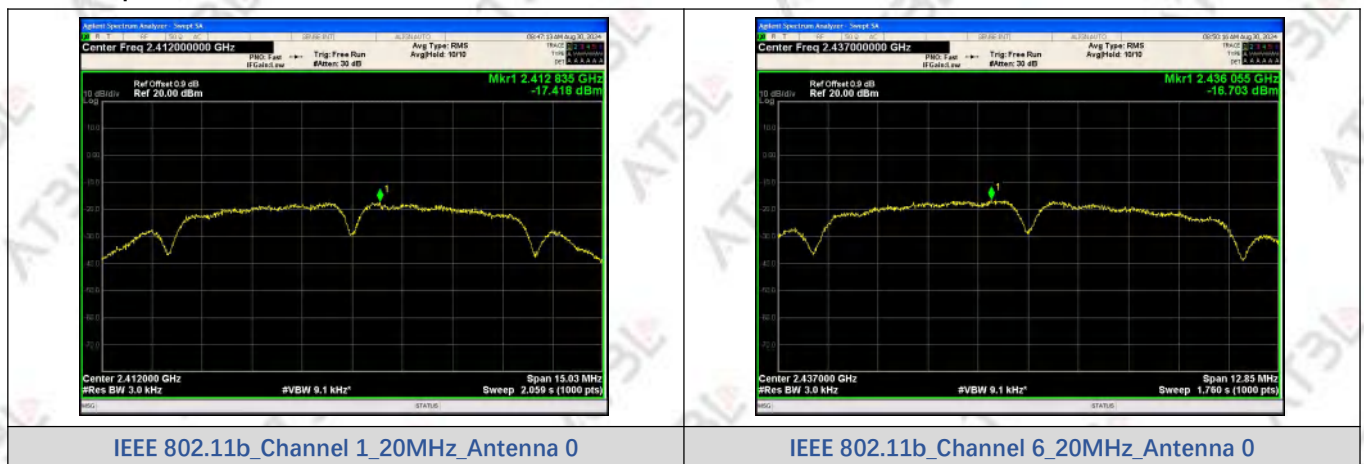
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)
IEEE 802.11b	1	1	0	16.416	16.448	99.81	0.9981	0.0
		6		16.418	16.448	99.82	0.9982	0.0
		11		16.418	16.449	99.81	0.9981	0.0
IEEE 802.11g	6	1		2.735	2.768	98.84	0.9884	0.0507
		6		2.734	2.767	98.81	0.9881	0.052
		11		2.735	2.768	98.84	0.9884	0.0507
IEEE 802.11n_20	MCS 0	1		2.541	2.575	98.68	0.9868	0.0577
		6		2.541	2.575	98.68	0.9868	0.0577
		11		2.542	2.575	98.72	0.9872	0.0559
IEEE 802.11n_40	MCS 0	3		2.531	2.575	98.68	0.9868	0.0031
		6		2.41	1.83	99.68	0.9968	0.0
		10		2.61	2.06	99.72	0.9972	0.0
IEEE 802.11ax_20	MCS 0	1		2.52	2.54	99.92	0.9868	0.0
		6		1.56	1.84	99.30	0.9868	0.0
		11		2.10	2.13	99.06	0.9872	0.0
IEEE 802.11ax_40	MCS 0	3		2.16	1.64	99.08	0.9868	0.0
		6		1.86	1.69	99.70	0.9968	0.0
		10		2.60	1.98	99.28	0.9972	0.0

6.Power Spectral Density

Test Result

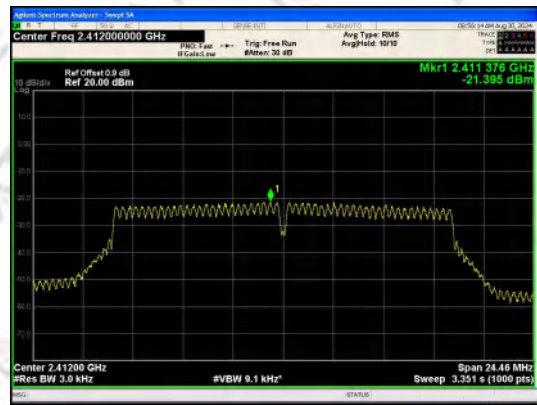
Mode	Channel	RU & Index	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	N/A	-17.418	<8	PASS
	6		-16.703		PASS
	11		-16.282		PASS
IEEE 802.11g	1		-21.395		PASS
	6		-19.821		PASS
	11		-19.549		PASS
IEEE 802.11n_20	1		-21.961		PASS
	6		-20.628		PASS
	11		-20.933		PASS
IEEE 802.11n_40	3		-24.037		PASS
	6		-24.030		PASS
	9		-24.685		PASS
IEEE 802.11ax_20	1	SU	-22.084		PASS
	6		-20.497		PASS
	11		-20.762		PASS
IEEE 802.11ax_40	3		-24.273		PASS
	6		-24.071		PASS
	9		-24.648		PASS

Test Graphs

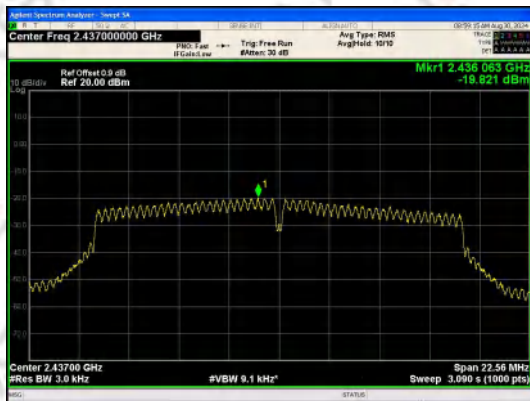




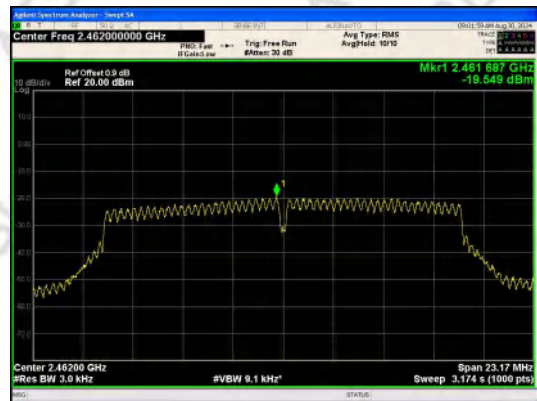
IEEE 802.11b_Channel 11_20MHz_Antenna 0



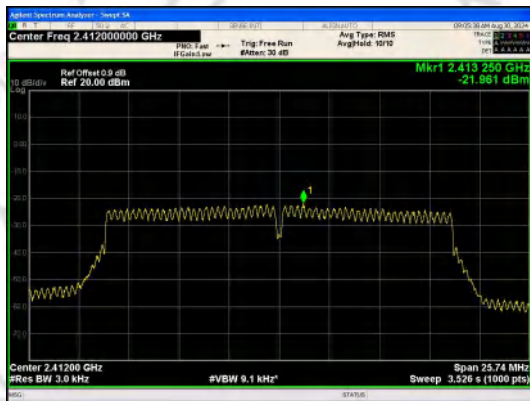
IEEE 802.11g_Channel 1_20MHz_Antenna 0



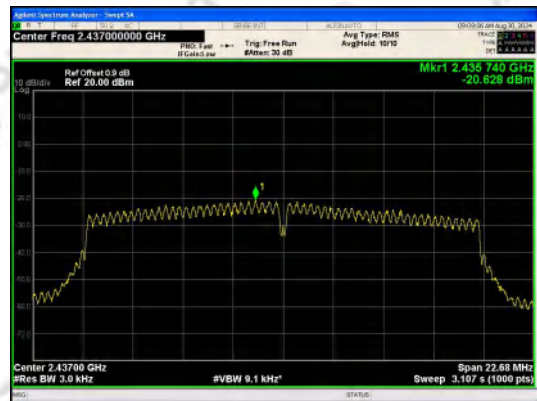
IEEE 802.11g_Channel 6_20MHz_Antenna 0



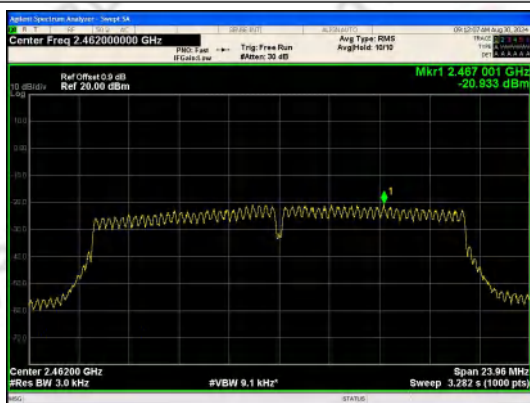
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



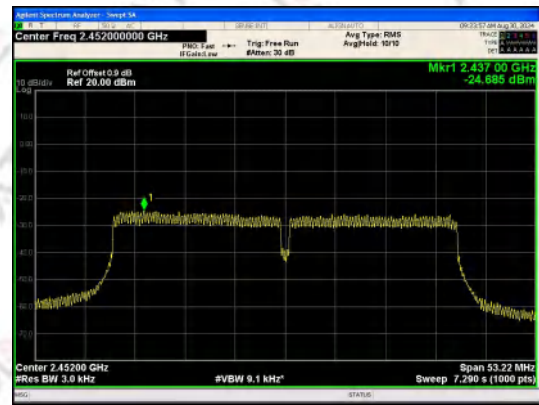
IEEE 802.11n_Channel 11_20MHz_Antenna 0



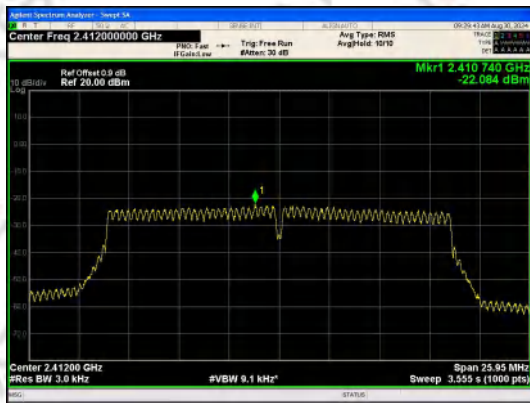
IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



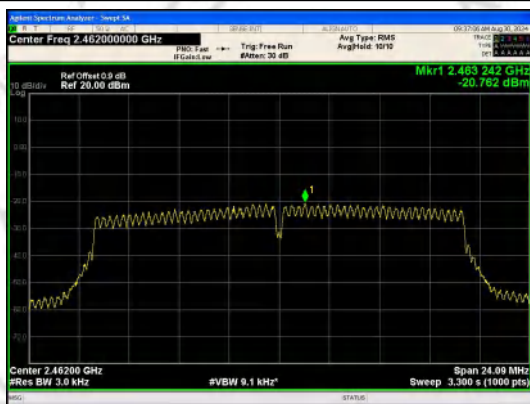
IEEE 802.11n_Channel 9_40MHz_Antenna 0



IEEE 802.11ax_Channel 1_20MHz_Antenna 0_RU&Index SU



IEEE 802.11ax_Channel 6_20MHz_Antenna 0_RU&Index SU



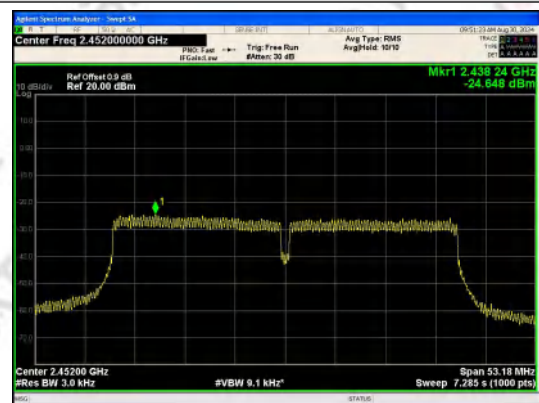
IEEE 802.11ax_Channel 11_20MHz_Antenna 0_RU&Index SU



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

*****END OF APPENDIX A*****