

FCC Appendix RF Test Data for 2.4GWIFI

Company: : Hangzhou Pebby Intelligent Technology Co., Ltd

EUT : Pebby AI toy

Model Number : PBDGW001

FCC ID : 2BS3U-PBDGW001

Report No. : CTA25092202402

Reviewed By : Eric Wang

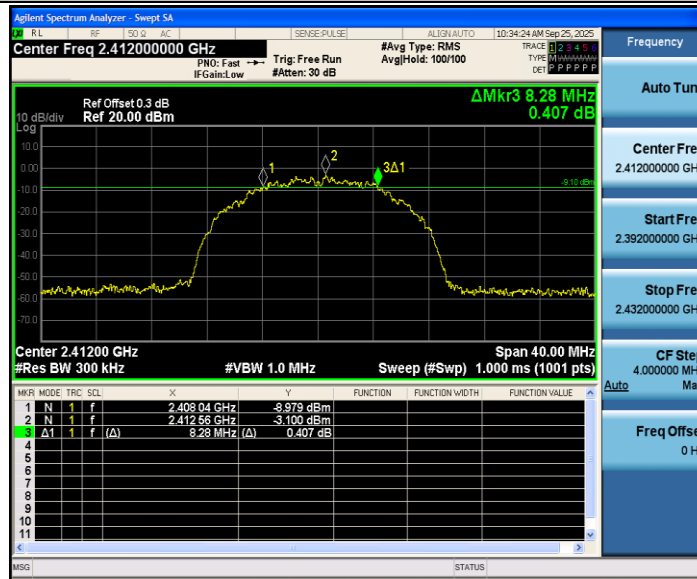
Appendix A: DTS Bandwidth

Test Result

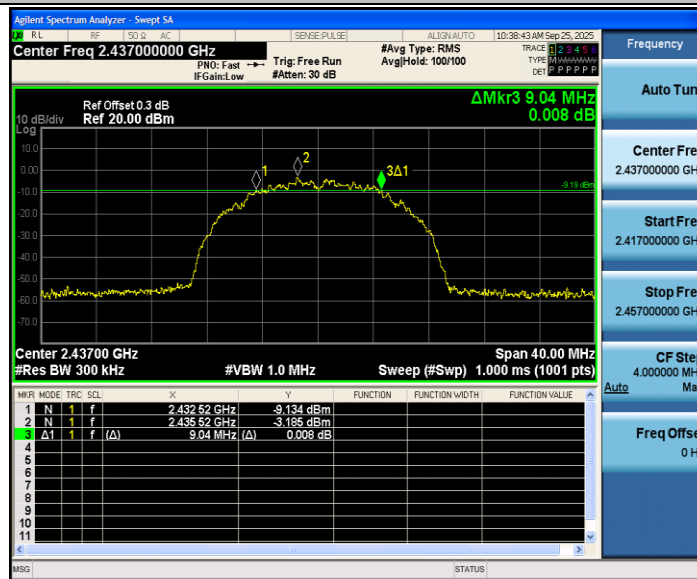
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.280	2408.040	2416.320	0.5	PASS
		2437	9.040	2432.520	2441.560	0.5	PASS
		2462	8.760	2457.560	2466.320	0.5	PASS
11G	Ant1	2412	16.320	2403.880	2420.200	0.5	PASS
		2437	16.360	2428.880	2445.240	0.5	PASS
		2462	16.320	2453.920	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.400	2420.680	0.5	PASS
		2437	17.360	2428.360	2445.720	0.5	PASS
		2462	17.200	2453.400	2470.600	0.5	PASS
11N40SISO	Ant1	2422	33.920	2405.360	2439.280	0.5	PASS
		2437	33.840	2420.280	2454.120	0.5	PASS
		2452	34.000	2435.200	2469.200	0.5	PASS

Test Graphs

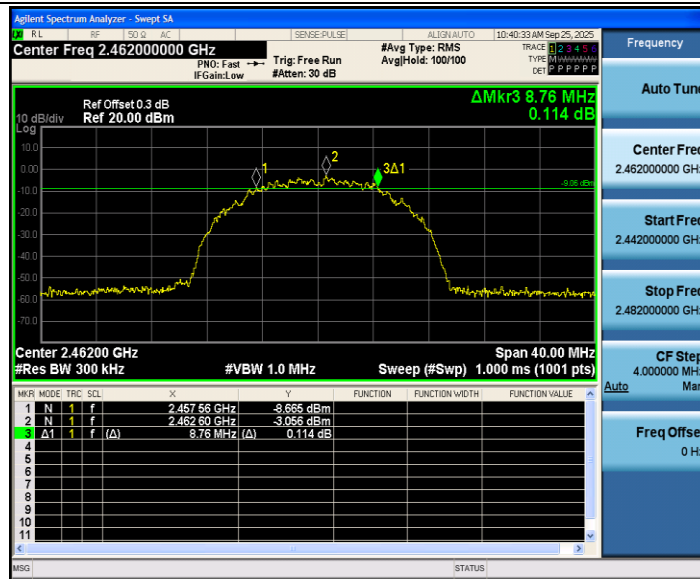
11B_Ant1_2412



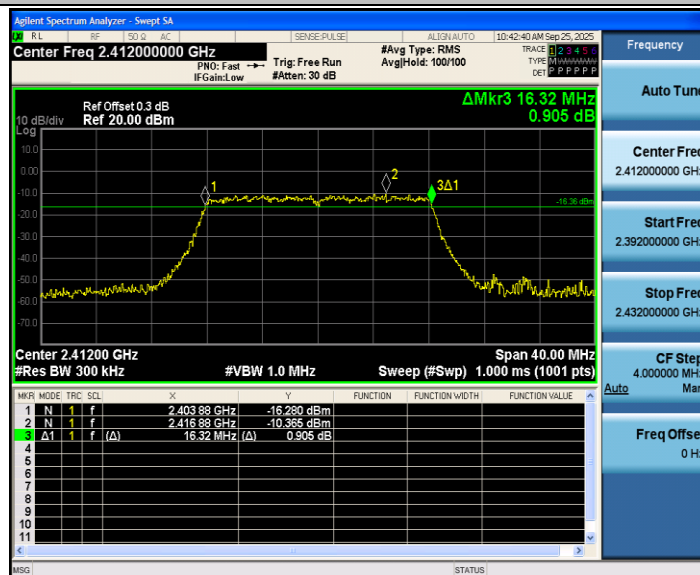
11B_Ant1_2437



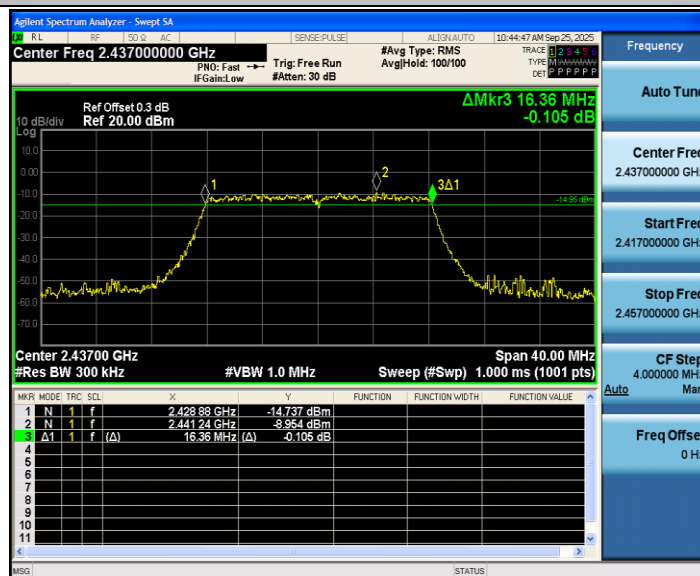
11B_Ant1_2462



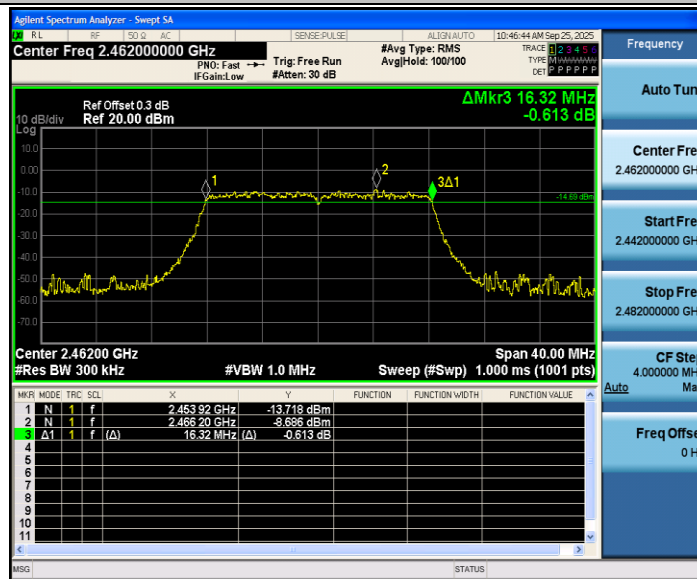
11G_Ant1_2412



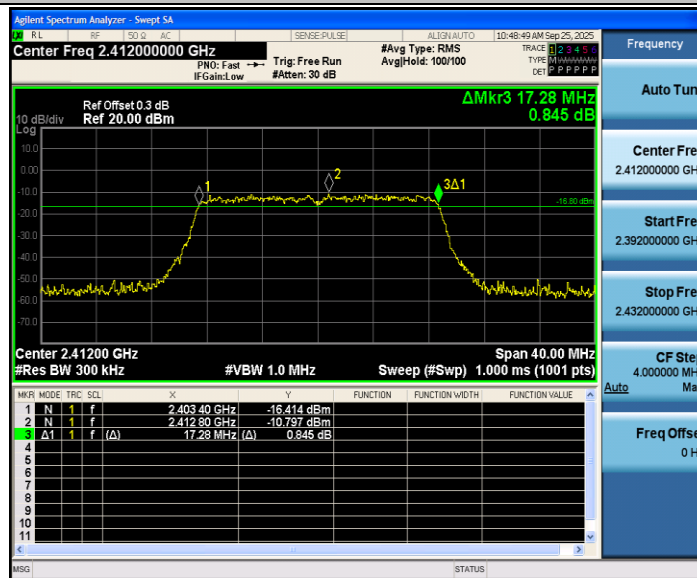
11G_Ant1_2437



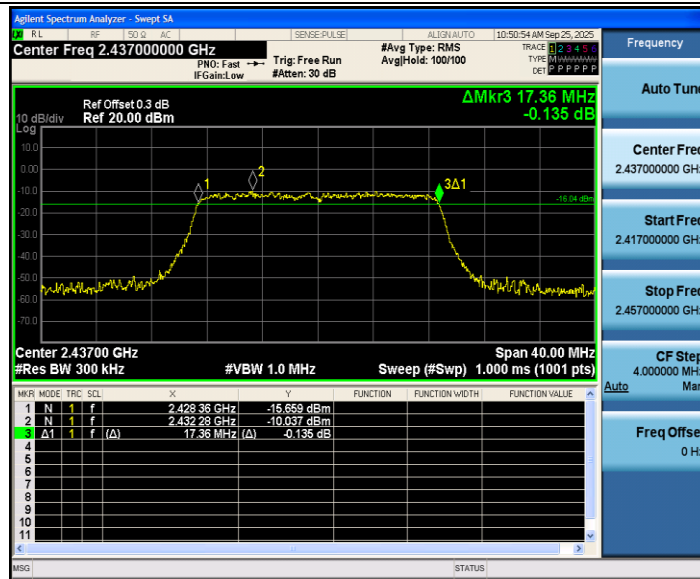
11G_Ant1_2462



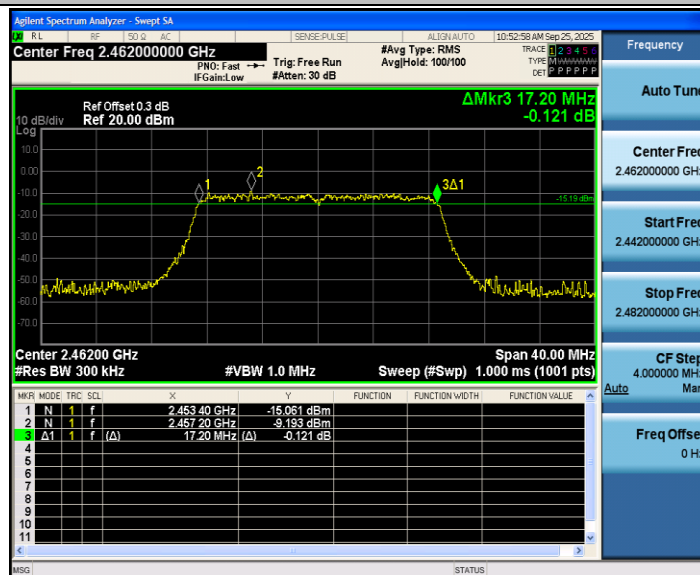
11N20SISO_Ant1_2412



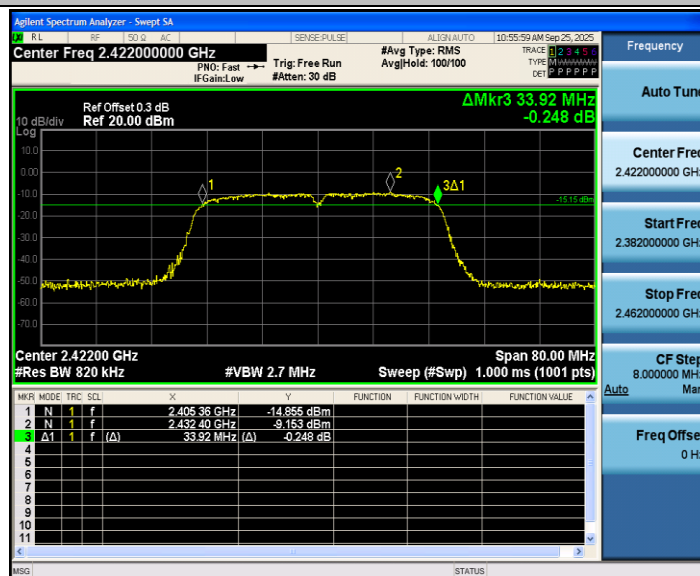
11N20SISO_Ant1_2437



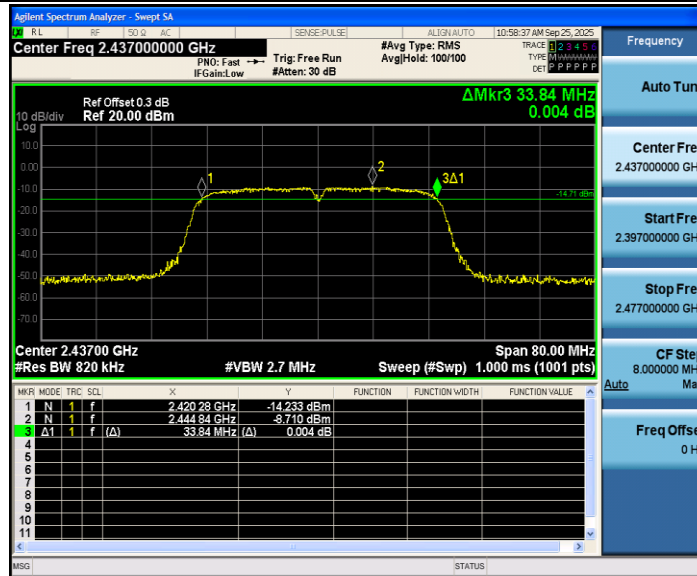
11N20SISO_Ant1_2462



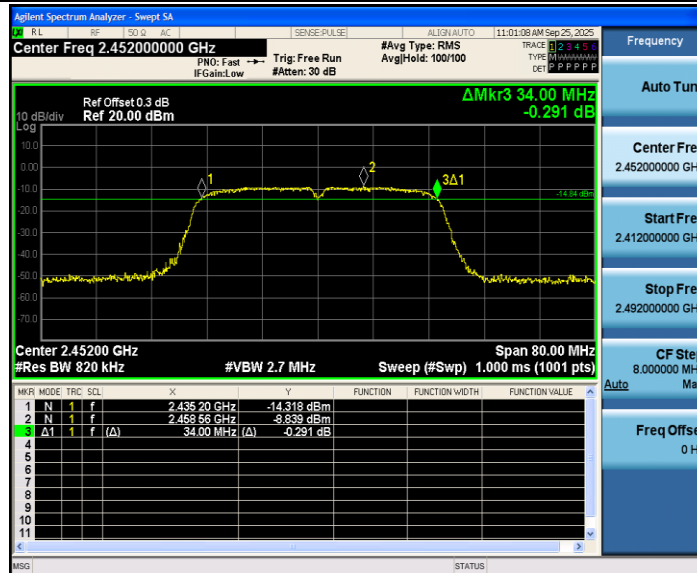
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



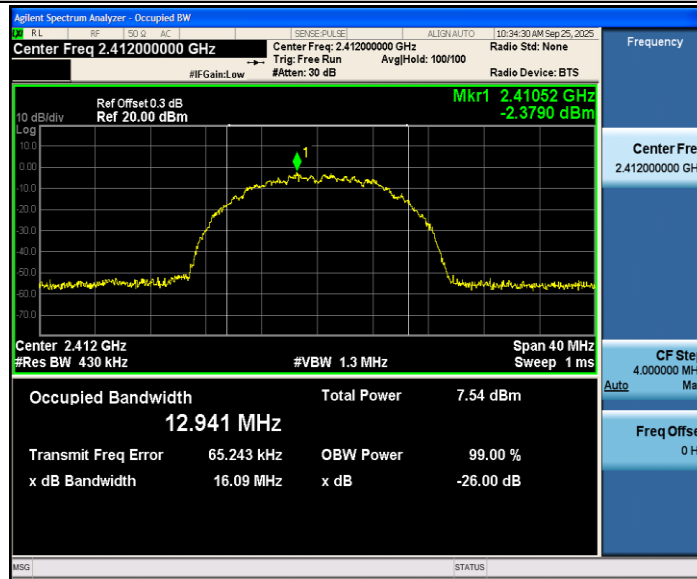
Appendix B: Occupied Channel Bandwidth

Test Result

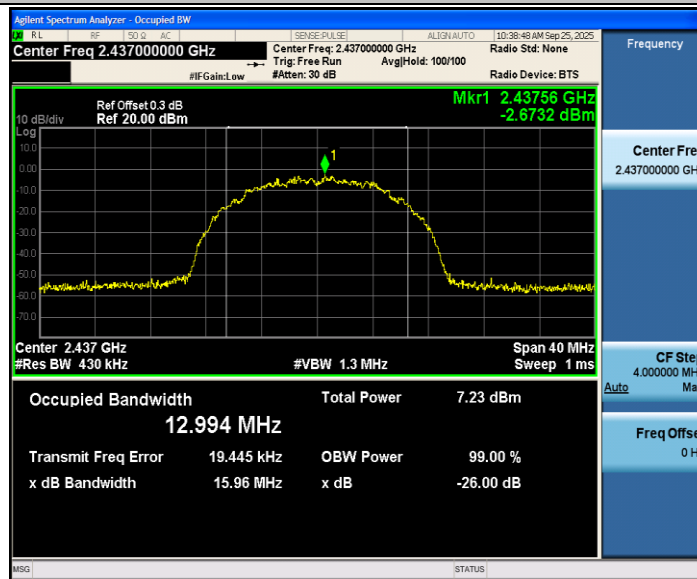
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.941	2405.5947	2418.5357	---	---
		2437	12.994	2430.5225	2443.5165	---	---
		2462	13.019	2455.5152	2468.5342	---	---
11G	Ant1	2412	16.583	2403.7480	2420.3310	---	---
		2437	16.576	2428.7498	2445.3258	---	---
		2462	16.559	2453.7596	2470.3186	---	---
11N20SISO	Ant1	2412	17.462	2403.3173	2420.7793	---	---
		2437	17.464	2428.3147	2445.7787	---	---
		2462	17.441	2453.3108	2470.7518	---	---
11N40SISO	Ant1	2422	34.836	2404.7041	2439.5401	---	---
		2437	34.807	2419.7494	2454.5564	---	---
		2452	34.797	2434.7055	2469.5025	---	---

Test Graphs

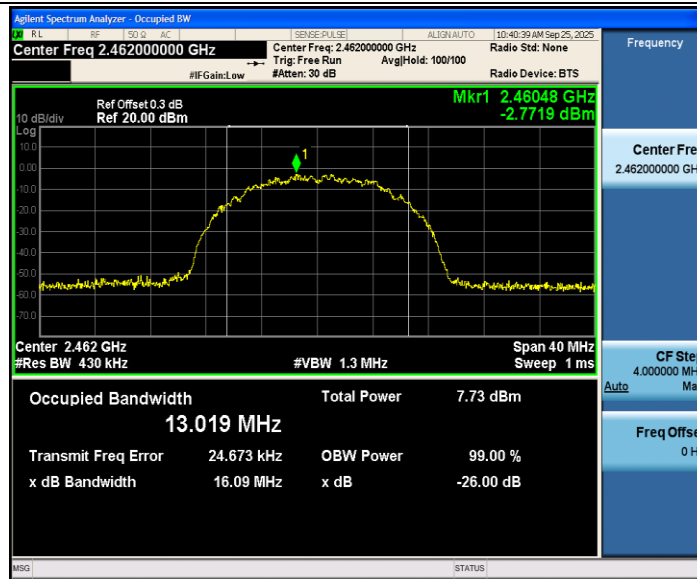
11B_Ant1_2412



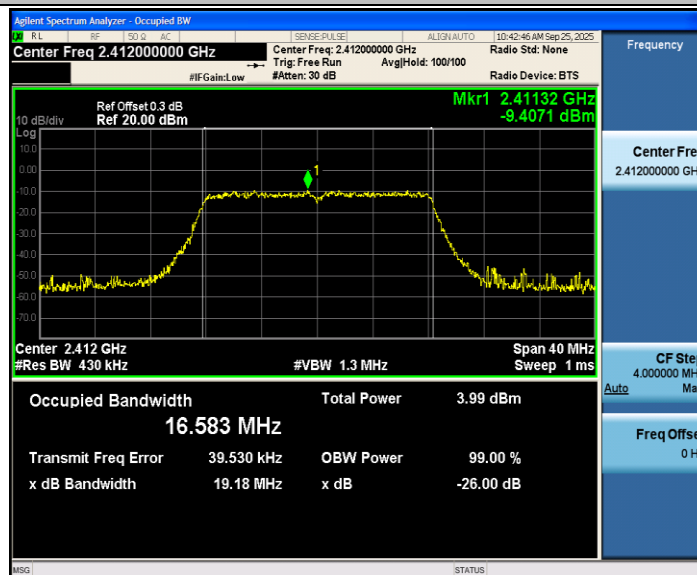
11B_Ant1_2437



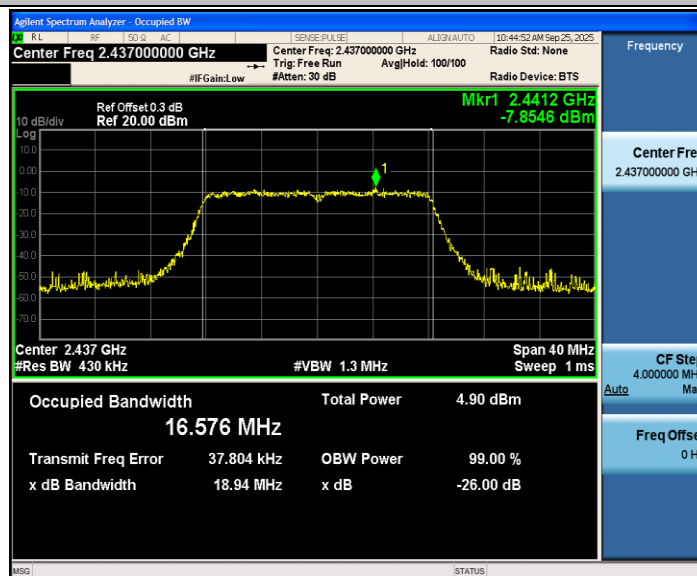
11B_Ant1_2462



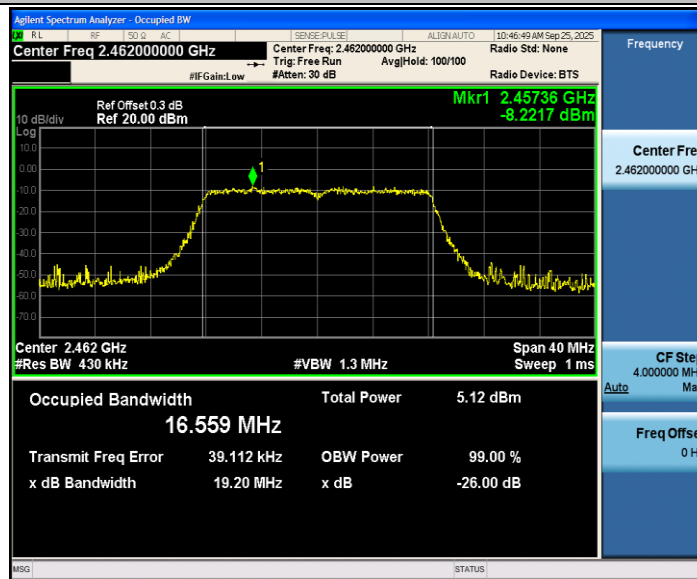
11G_Ant1_2412



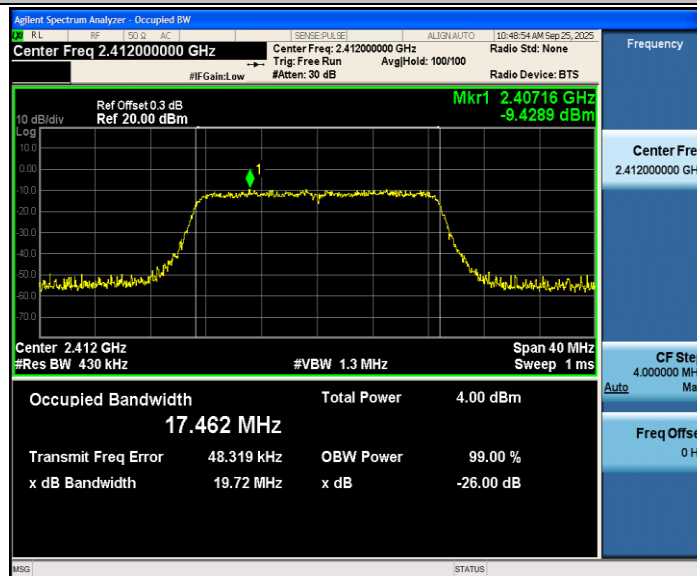
11G_Ant1_2437



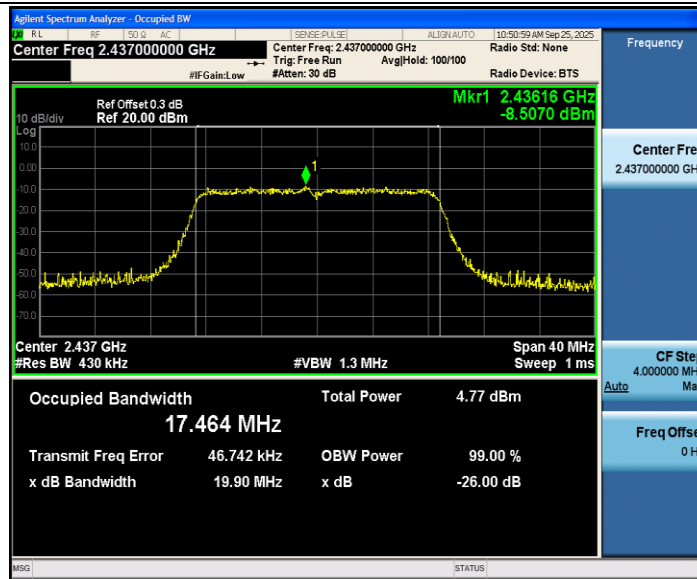
11G_Ant1_2462



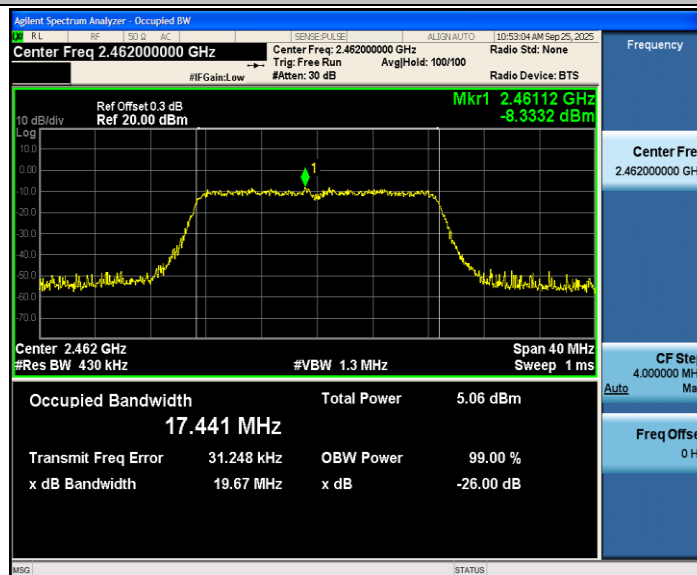
11N20SISO_Ant1_2412



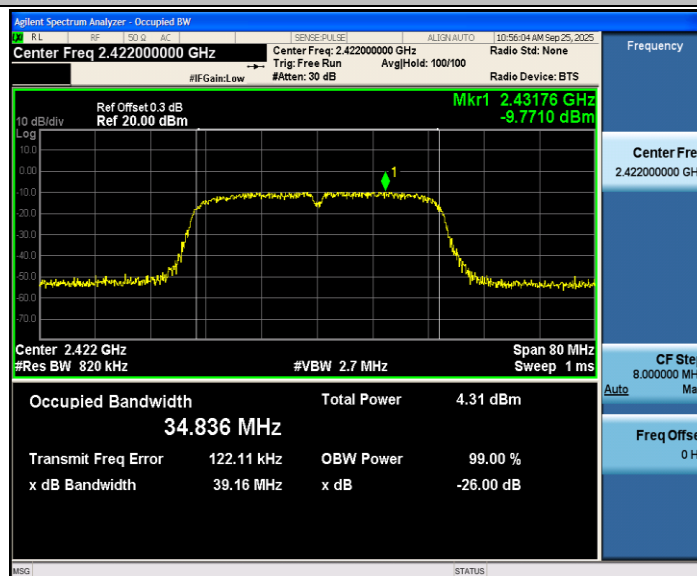
11N20SISO_Ant1_2437



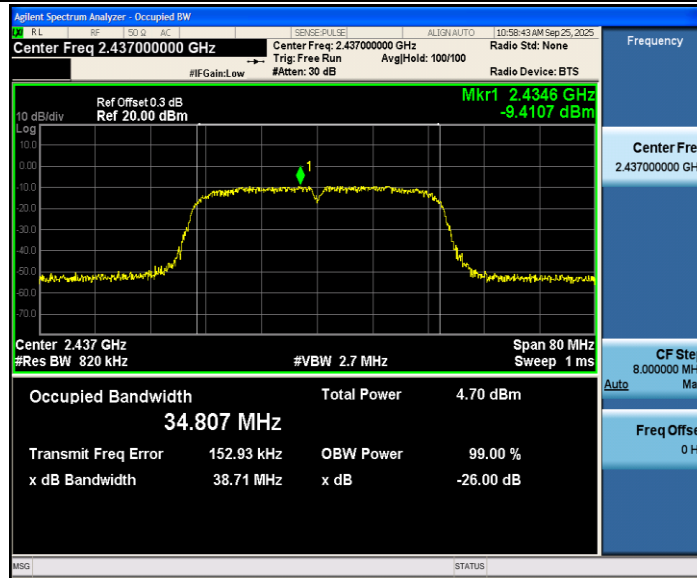
11N20SISO_Ant1_2462



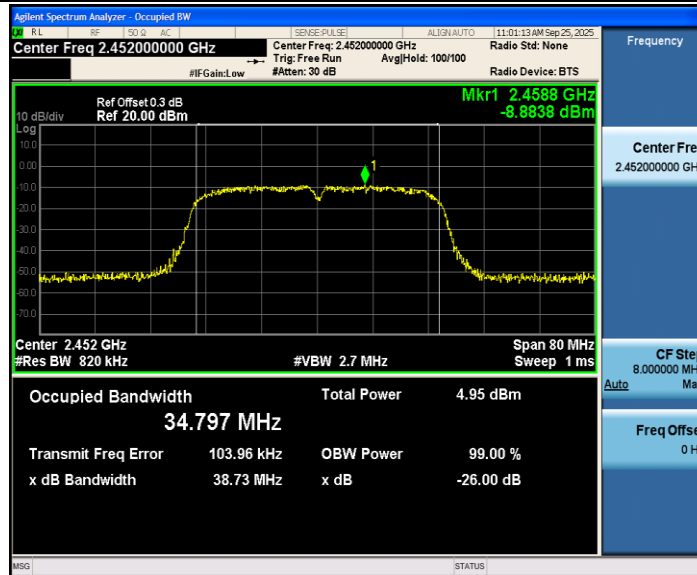
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Maximum Peak conducted output power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	6.93	≤30.00	PASS
		2437	6.82	≤30.00	PASS
		2462	7.24	≤30.00	PASS
11G	Ant1	2412	4.75	≤30.00	PASS
		2437	5.63	≤30.00	PASS
		2462	5.93	≤30.00	PASS
11N20SISO	Ant1	2412	5.23	≤30.00	PASS
		2437	6.02	≤30.00	PASS
		2462	6.22	≤30.00	PASS
11N40SISO	Ant1	2422	4.57	≤30.00	PASS
		2437	4.95	≤30.00	PASS
		2452	5.13	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-21.84	≤8.00	PASS
		2437	-22.60	≤8.00	PASS
		2462	-21.53	≤8.00	PASS
11G	Ant1	2412	-29.62	≤8.00	PASS
		2437	-28.71	≤8.00	PASS
		2462	-28.49	≤8.00	PASS
11N20SISO	Ant1	2412	-29.37	≤8.00	PASS
		2437	-28.50	≤8.00	PASS
		2462	-28.37	≤8.00	PASS
11N40SISO	Ant1	2422	-30.73	≤8.00	PASS
		2437	-30.17	≤8.00	PASS
		2452	-29.82	≤8.00	PASS

Test Graphs

11B_Ant1_2412



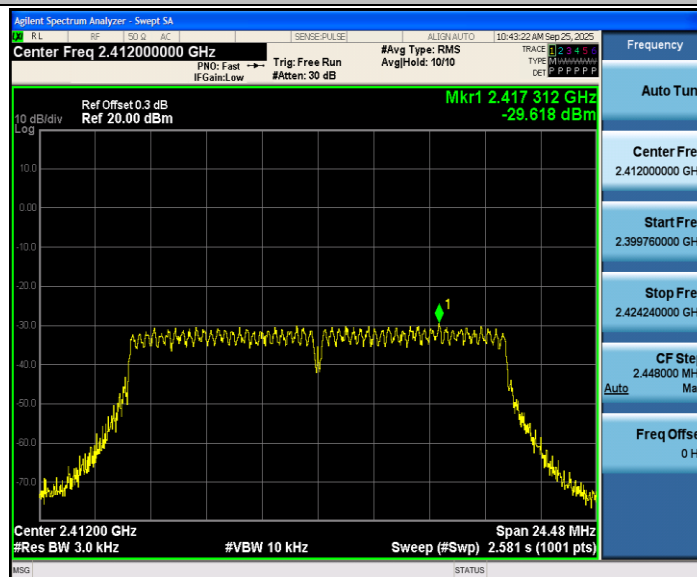
11B_Ant1_2437



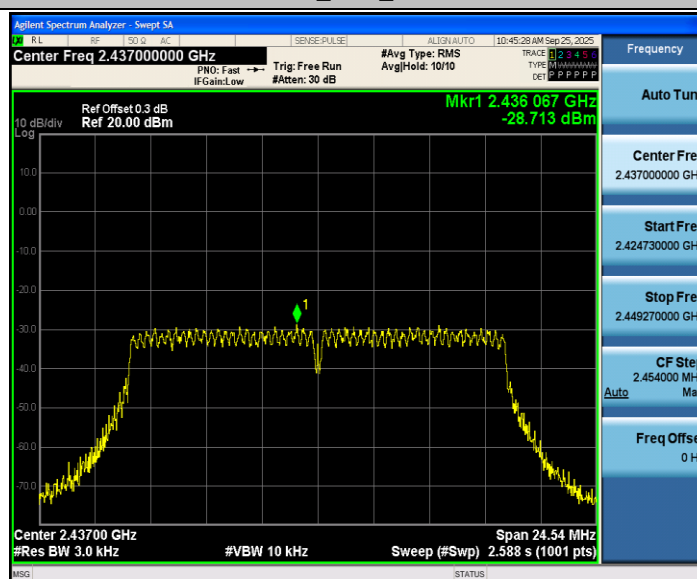
11B_Ant1_2462



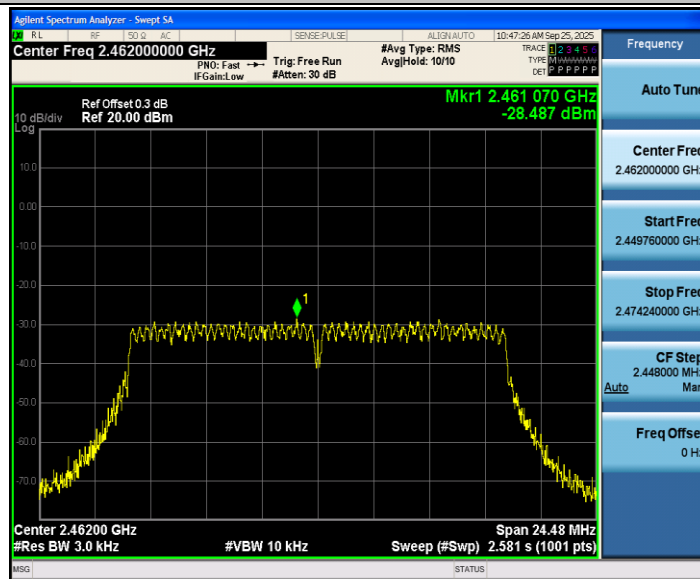
11G_Ant1_2412



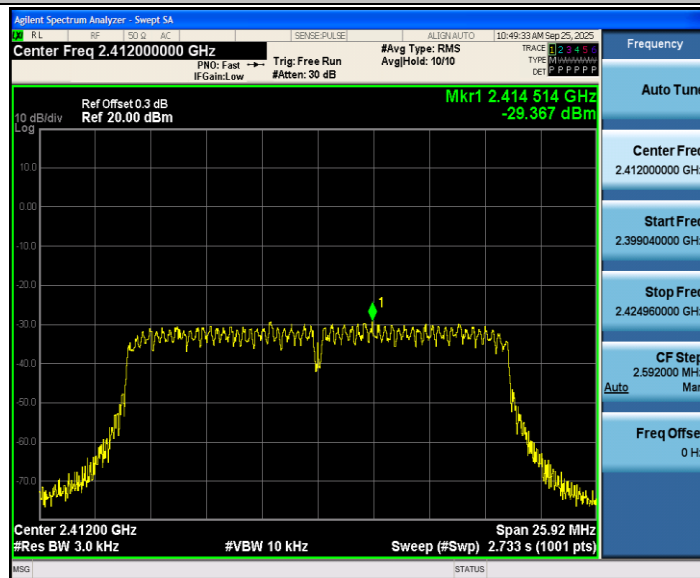
11G_Ant1_2437



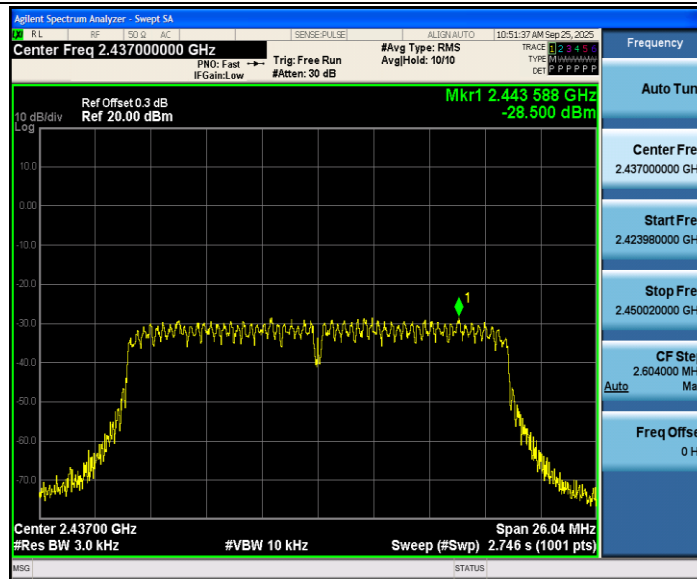
11G_Ant1_2462



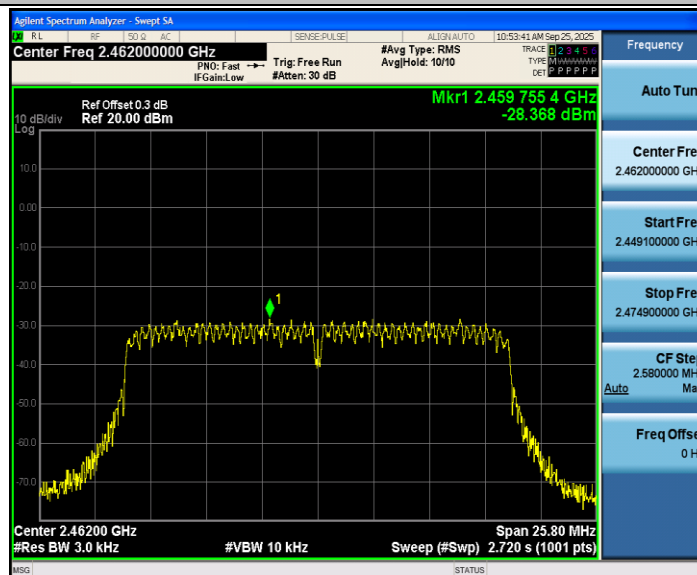
11N20SISO_Ant1_2412



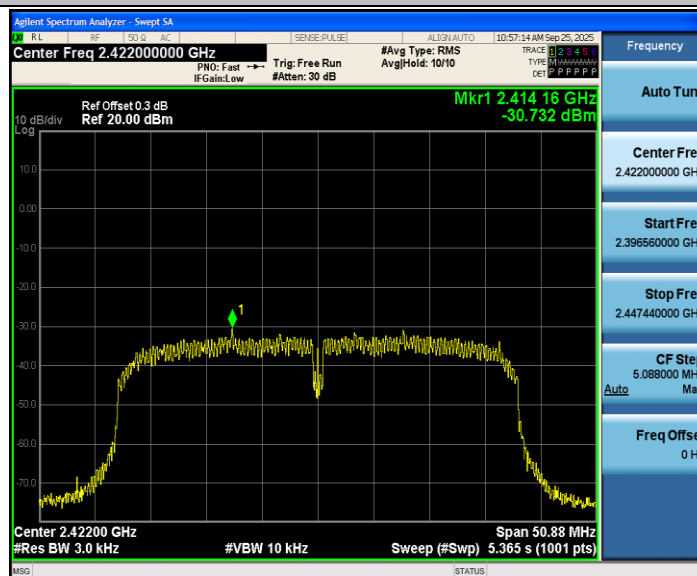
11N20SISO_Ant1_2437



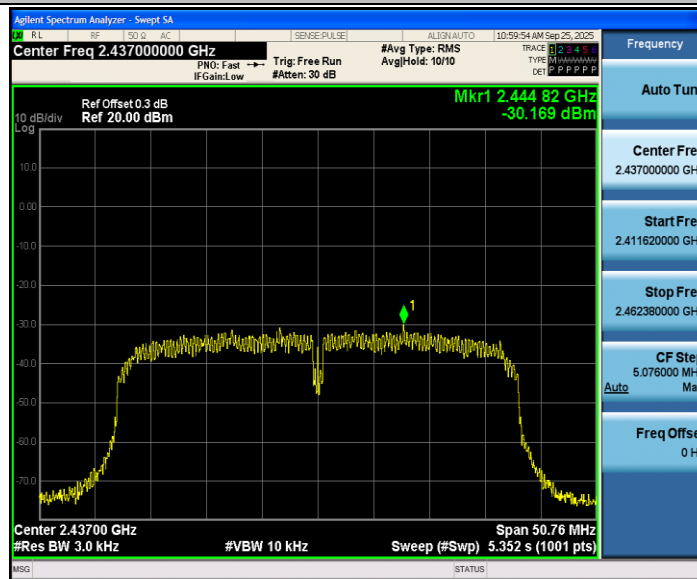
11N20SISO_Ant1_2462



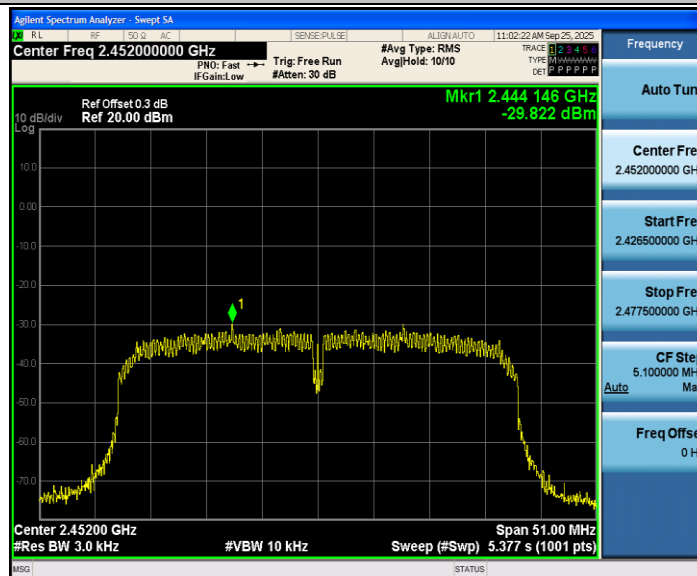
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



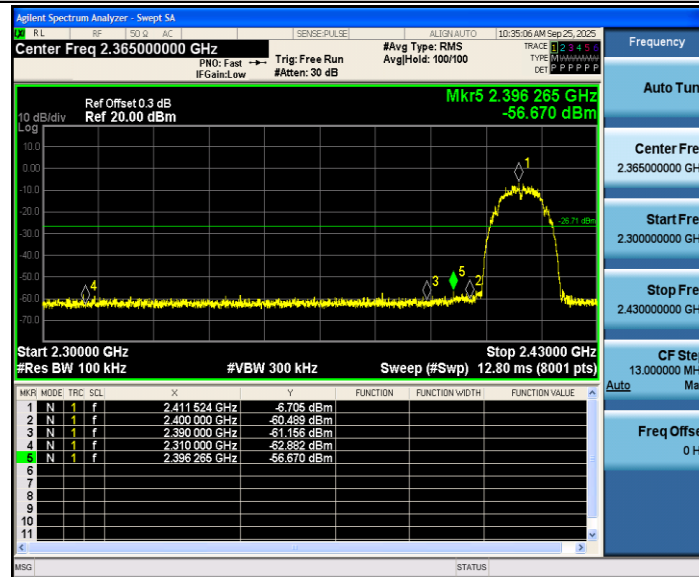
Appendix E: Band edge measurements

Test Result

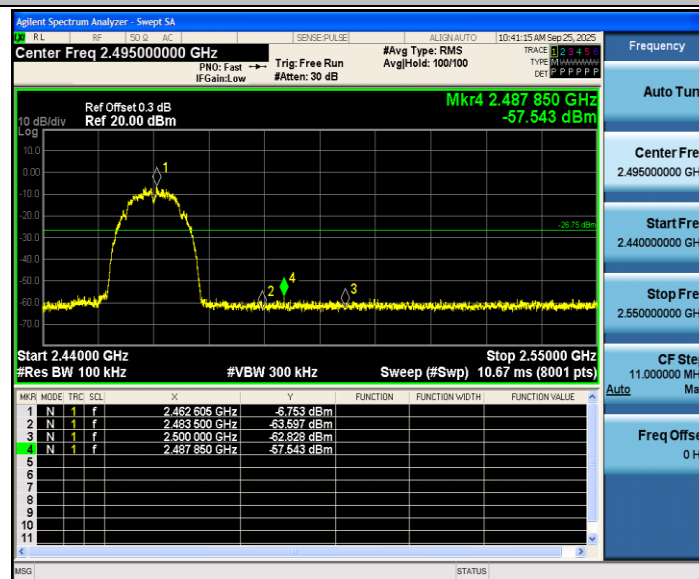
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-6.71	-56.67	≤-26.71	PASS
		High	2462	-6.75	-57.54	≤-26.75	PASS
11G	Ant1	Low	2412	-15.36	-55.96	≤-35.36	PASS
		High	2462	-14.83	-57.91	≤-34.83	PASS
11N20SISO	Ant1	Low	2412	-15.65	-56.39	≤-35.65	PASS
		High	2462	-15.18	-58.18	≤-35.18	PASS
11N40SISO	Ant1	Low	2422	-18.89	-57.17	≤-38.89	PASS
		High	2452	-18.23	-57.72	≤-38.23	PASS

Test Graphs

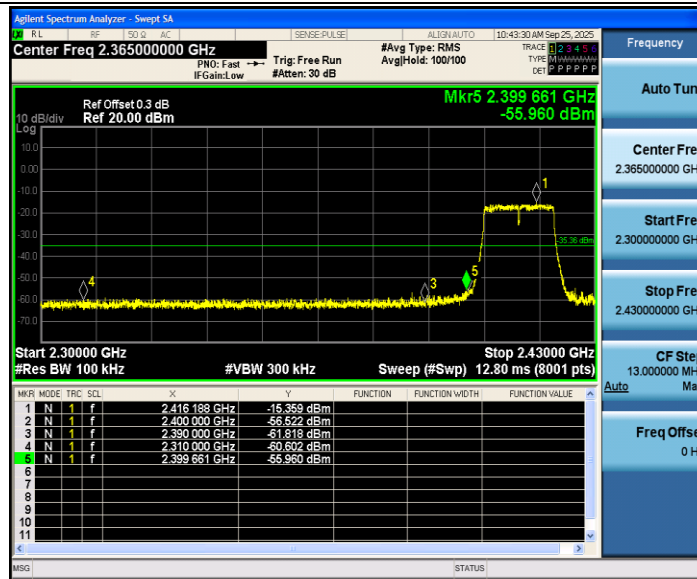
11B_Ant1_Low_2412



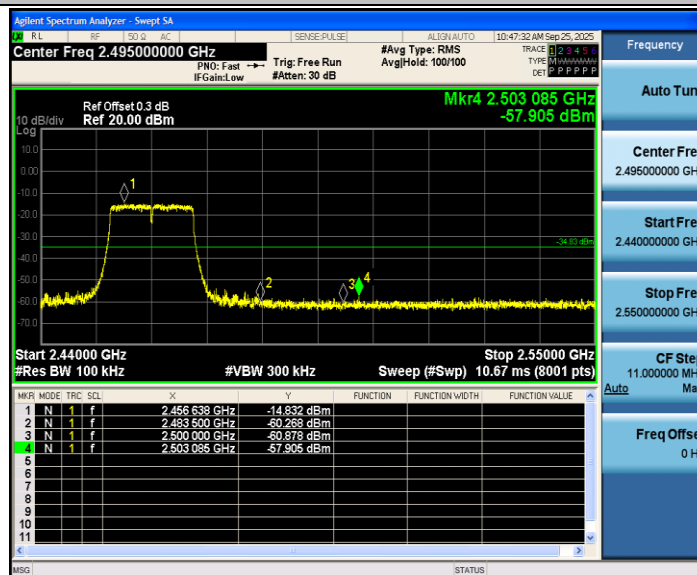
11B_Ant1_High_2462



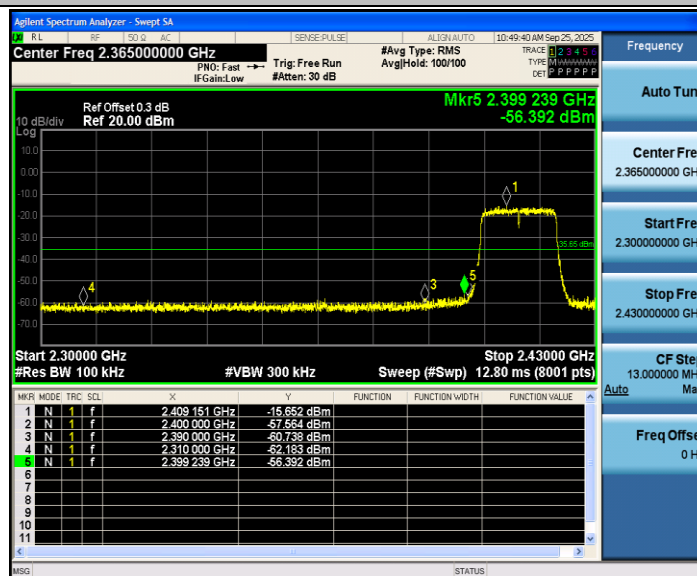
11G_Ant1_Low_2412



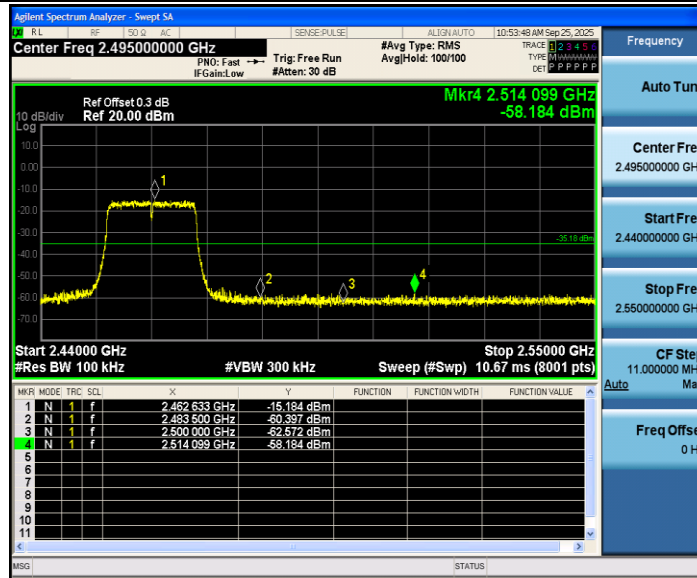
11G_Ant1_High_2462



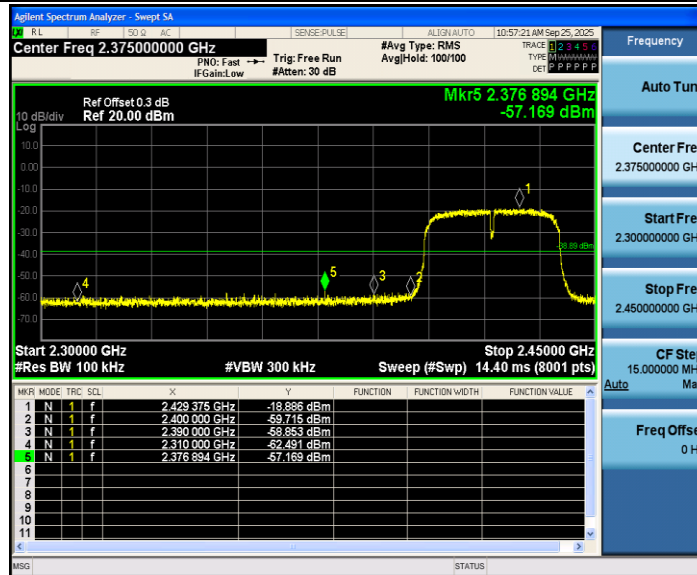
11N20SISO_Ant1_Low_2412



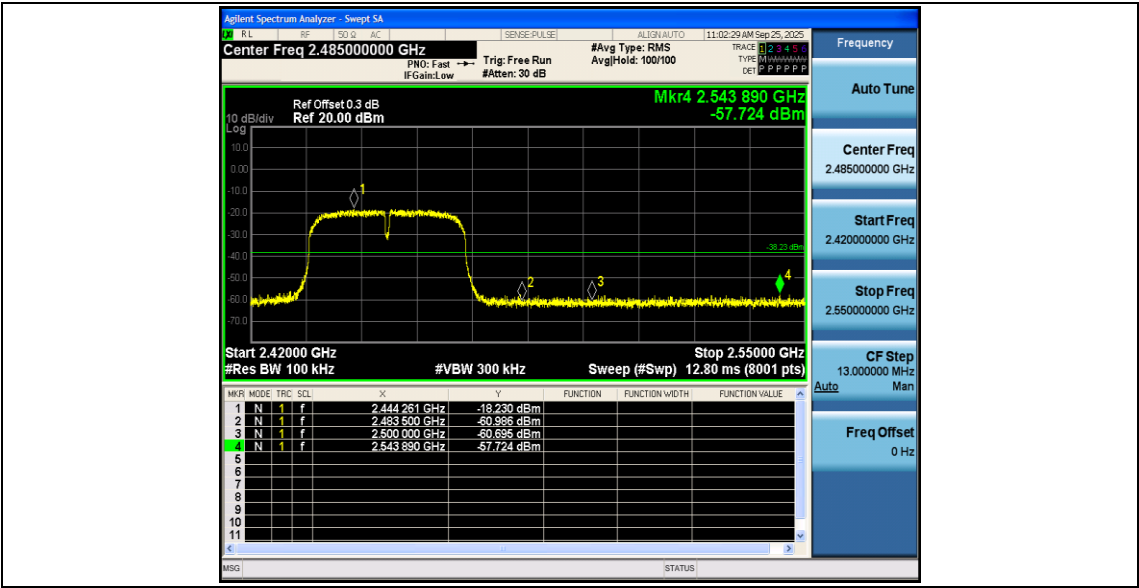
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



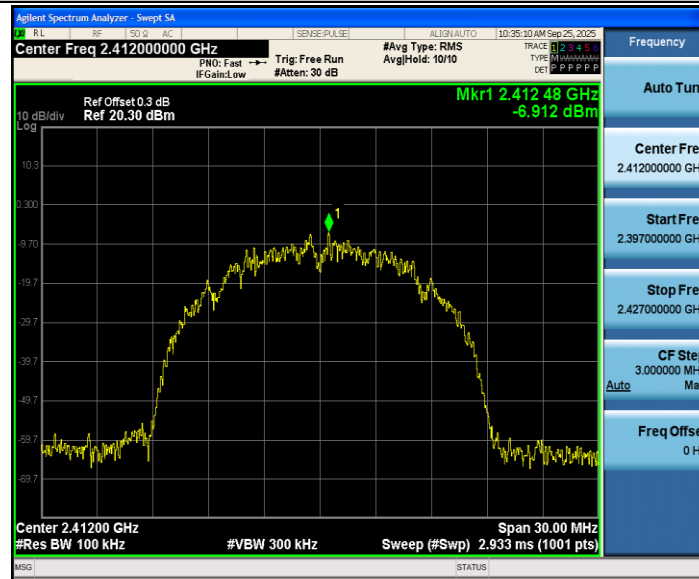
Appendix F: Conducted Spurious Emission

Test Result

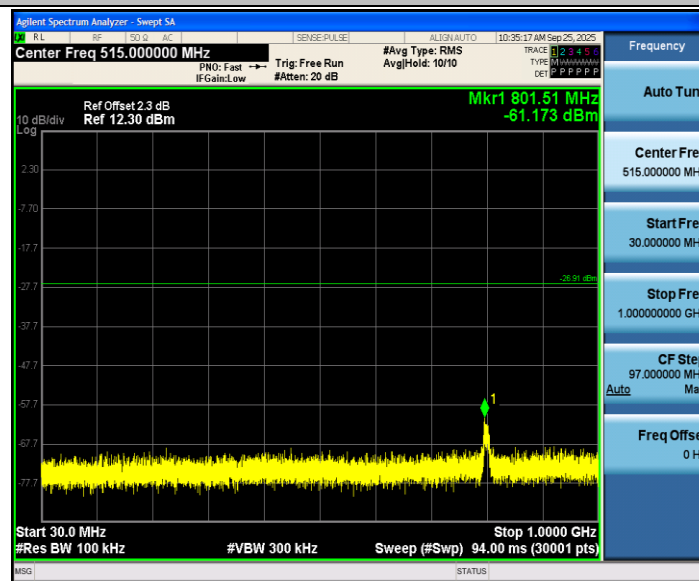
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-6.91	-6.91	---	PASS
			30~1000	-6.91	-61.17	≤-26.91	PASS
			1000~26500	-6.91	-44.12	≤-26.91	PASS
		2437	Reference	-7.24	-7.24	---	PASS
			30~1000	-7.24	-60.49	≤-27.24	PASS
			1000~26500	-7.24	-44.89	≤-27.24	PASS
		2462	Reference	-6.62	-6.62	---	PASS
			30~1000	-6.62	-61.37	≤-26.62	PASS
			1000~26500	-6.62	-45.37	≤-26.62	PASS
11G	Ant1	2412	Reference	-16.06	-16.06	---	PASS
			30~1000	-16.06	-64.31	≤-36.06	PASS
			1000~26500	-16.06	-44.13	≤-36.06	PASS
		2437	Reference	-15.44	-15.44	---	PASS
			30~1000	-15.44	-64	≤-35.44	PASS
			1000~26500	-15.44	-44.71	≤-35.44	PASS
		2462	Reference	-15.02	-15.02	---	PASS
			30~1000	-15.02	-63.91	≤-35.02	PASS
			1000~26500	-15.02	-45.38	≤-35.02	PASS
11N20SISO	Ant1	2412	Reference	-15.93	-15.93	---	PASS
			30~1000	-15.93	-64.51	≤-35.93	PASS
			1000~26500	-15.93	-44.22	≤-35.93	PASS
		2437	Reference	-15.65	-15.65	---	PASS
			30~1000	-15.65	-64.38	≤-35.65	PASS
			1000~26500	-15.65	-44.5	≤-35.65	PASS
		2462	Reference	-15.09	-15.09	---	PASS
			30~1000	-15.09	-64.19	≤-35.09	PASS
			1000~26500	-15.09	-45.32	≤-35.09	PASS
11N40SISO	Ant1	2422	Reference	-19.06	-19.06	---	PASS
			30~1000	-19.06	-65.83	≤-39.06	PASS
			1000~26500	-19.06	-44.43	≤-39.06	PASS
		2437	Reference	-18.62	-18.62	---	PASS
			30~1000	-18.62	-65.93	≤-38.62	PASS
			1000~26500	-18.62	-44.77	≤-38.62	PASS
		2452	Reference	-18.64	-18.64	---	PASS
			30~1000	-18.64	-65.96	≤-38.64	PASS
			1000~26500	-18.64	-45.17	≤-38.64	PASS

Test Graphs

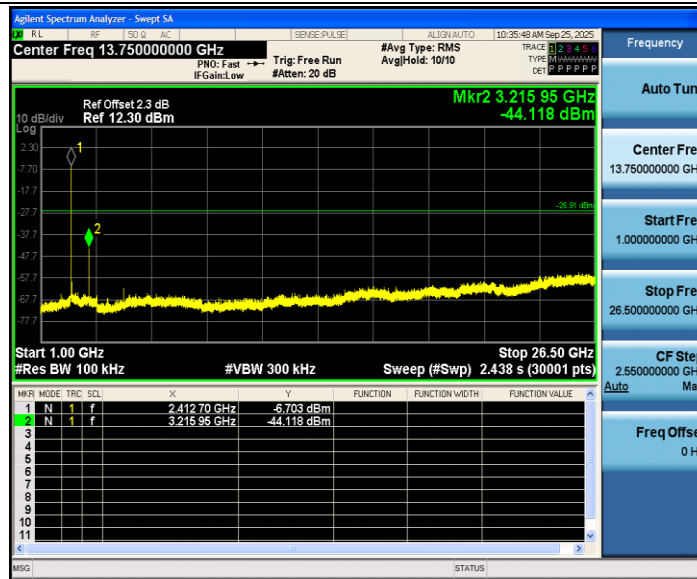
11B_Ant1_2412_0~Reference



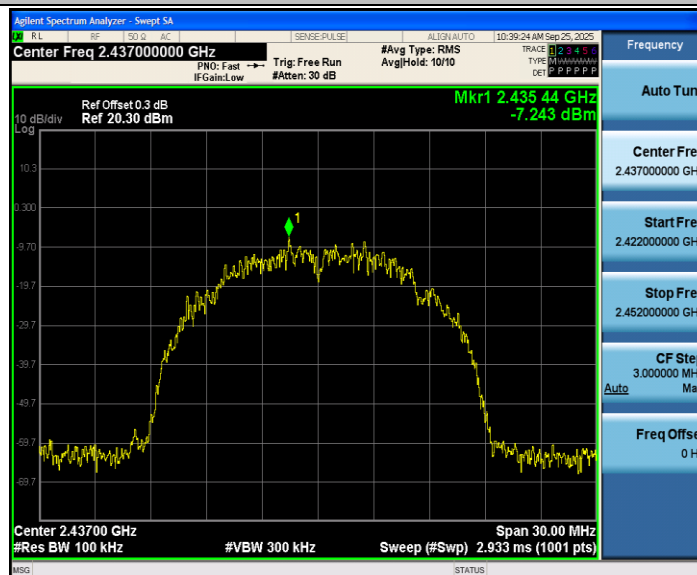
11B_Ant1_2412_30~1000



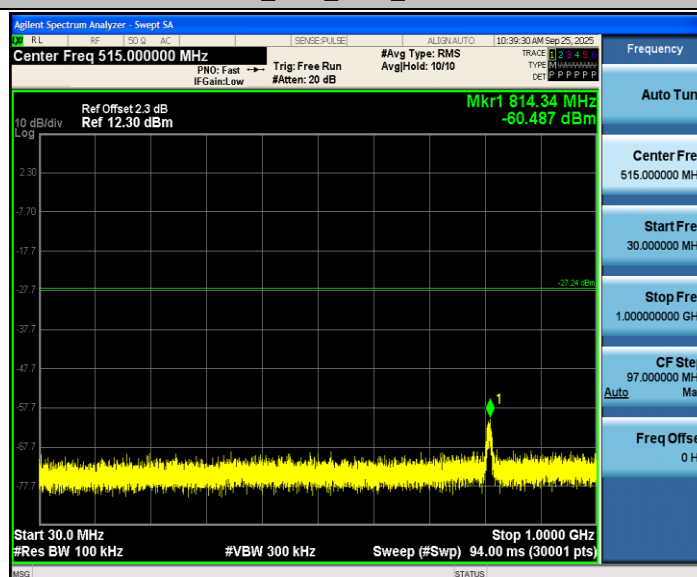
11B_Ant1_2412_1000~26500



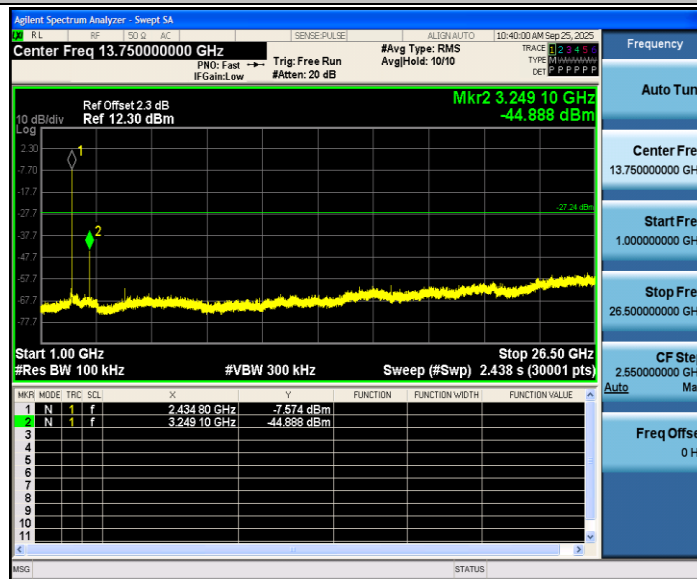
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



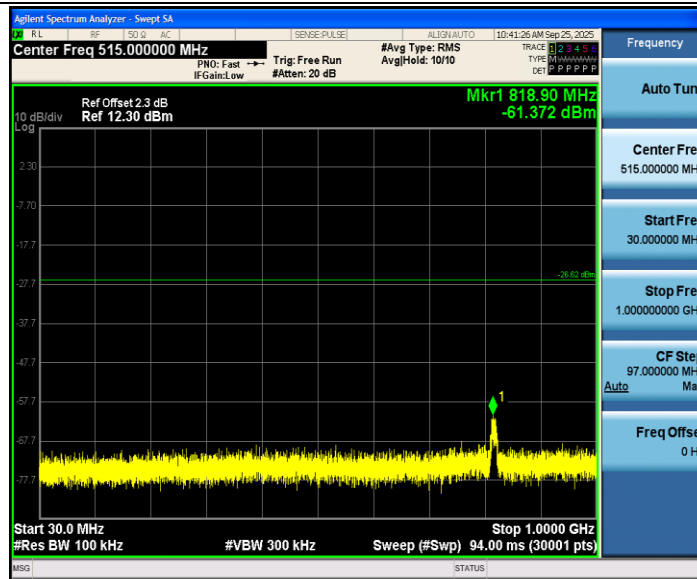
11B_Ant1_2437_1000~26500



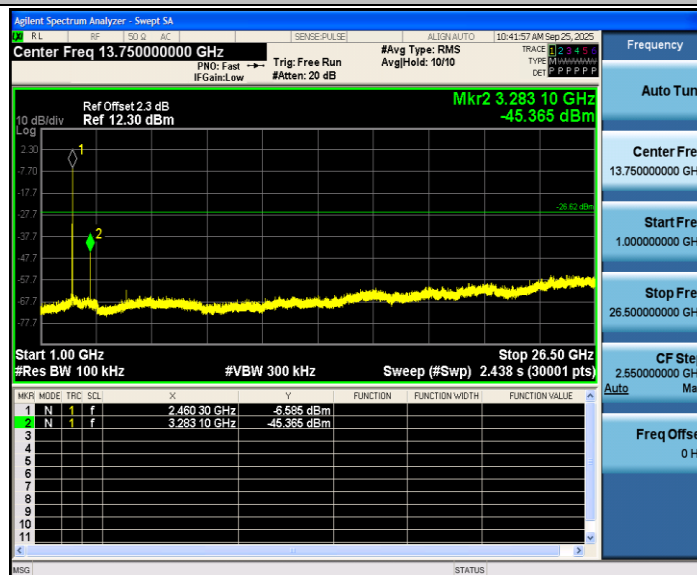
11B_Ant1_2462_0~Reference



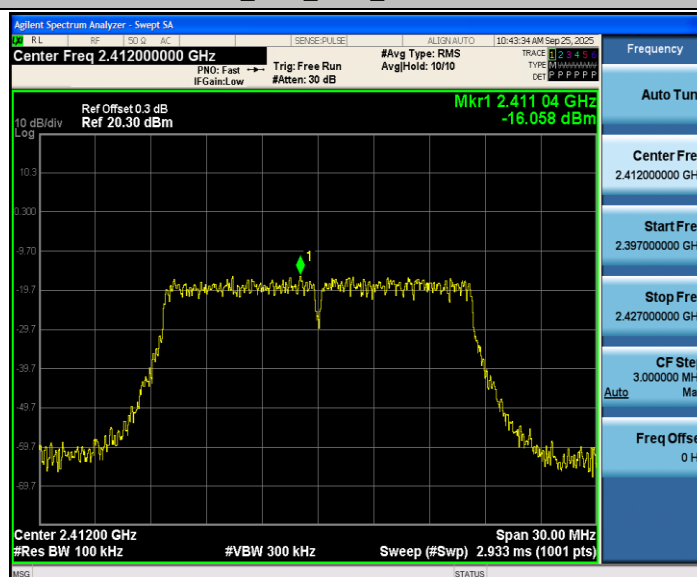
11B_Ant1_2462_30~1000



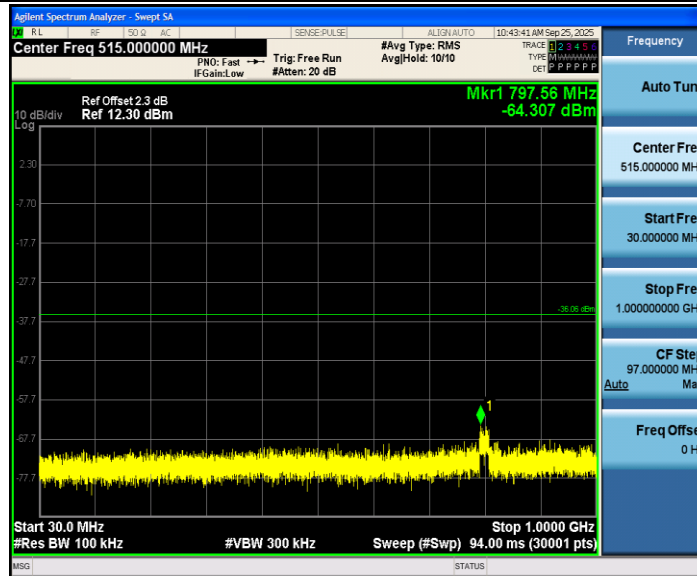
11B_Ant1_2462_1000~26500



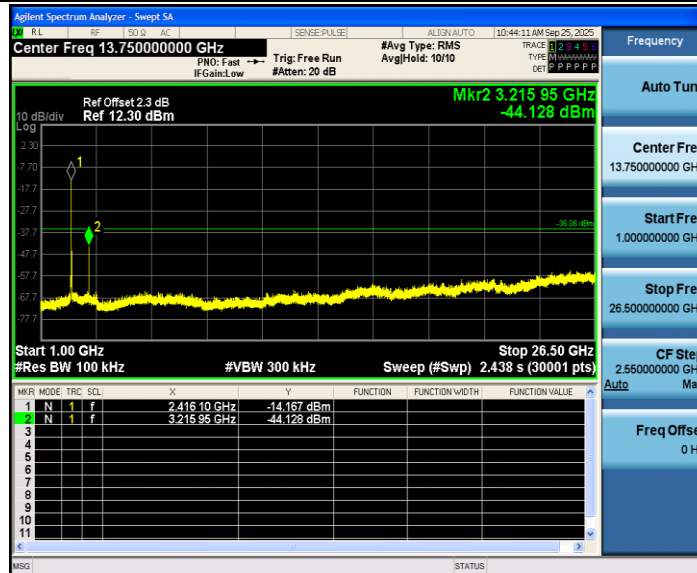
11G_Ant1_2412_0~Reference



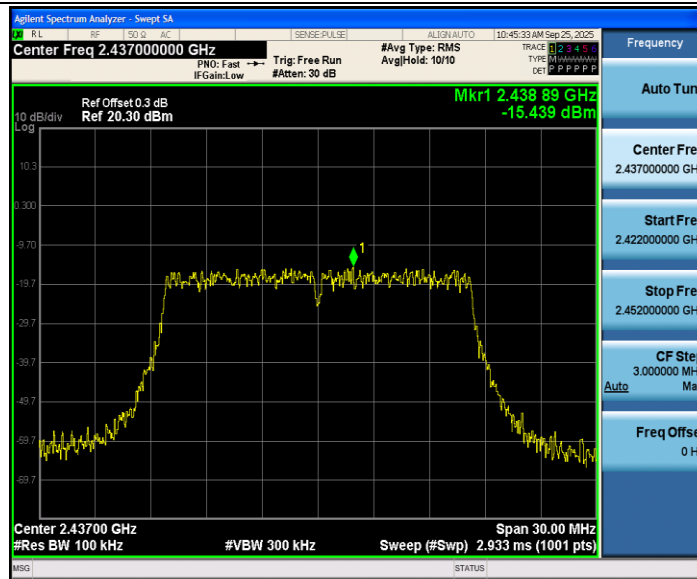
11G_Ant1_2412_30~1000



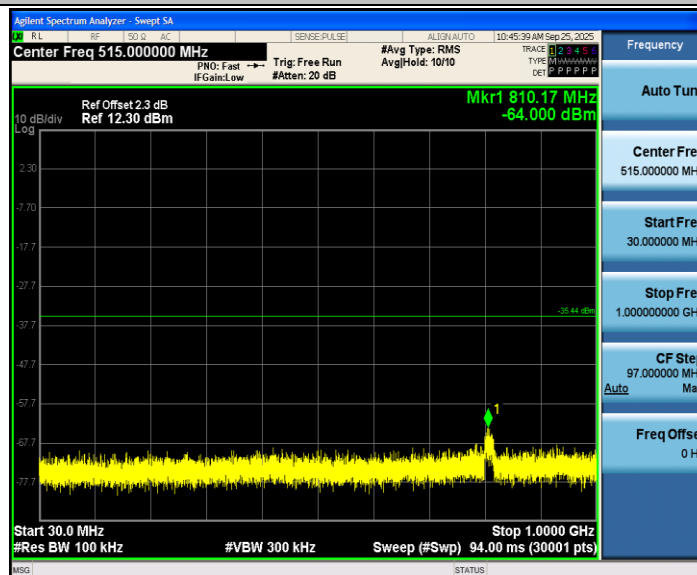
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

