

Appendix RF Test Data for 2.4GWIFI

FCC ID : 2A68FLP2PLUS

Company : Shenzhen Hingin Technology Co.,Ltd

EUT : LaserPecker LP2 Plus Safeguard

Model Number : LP2-PSG

Report No. : CTA25082501401

Reviewed By : Eric Wang

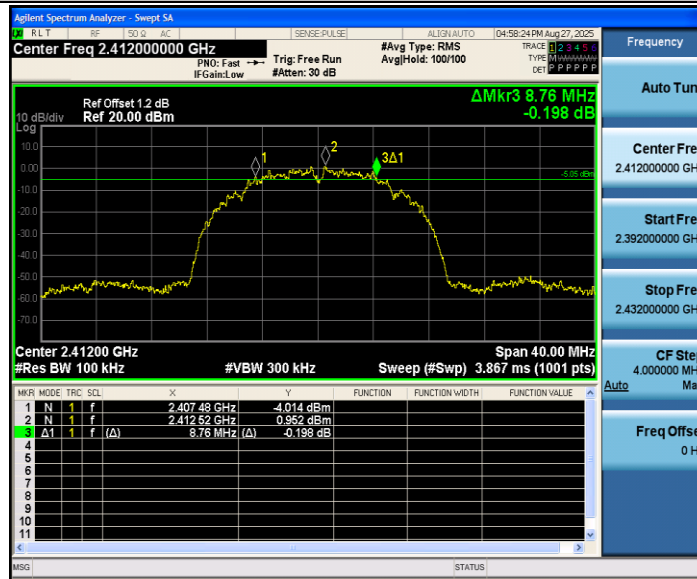
Appendix A: DTS Bandwidth

Test Result

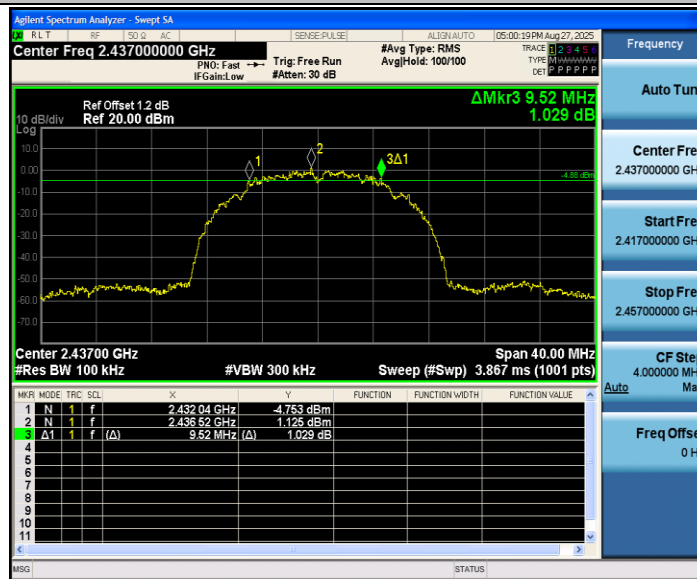
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.760	2407.480	2416.240	0.5	PASS
		2437	9.520	2432.040	2441.560	0.5	PASS
		2462	9.160	2457.040	2466.200	0.5	PASS
11G	Ant1	2412	16.520	2403.760	2420.280	0.5	PASS
		2437	16.520	2428.760	2445.280	0.5	PASS
		2462	16.520	2453.760	2470.280	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.240	2420.800	0.5	PASS
		2437	17.400	2428.400	2445.800	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	33.680	2405.360	2439.040	0.5	PASS
		2437	33.520	2420.360	2453.880	0.5	PASS
		2452	34.160	2435.120	2469.280	0.5	PASS

Test Graphs

11B_Ant1_2412



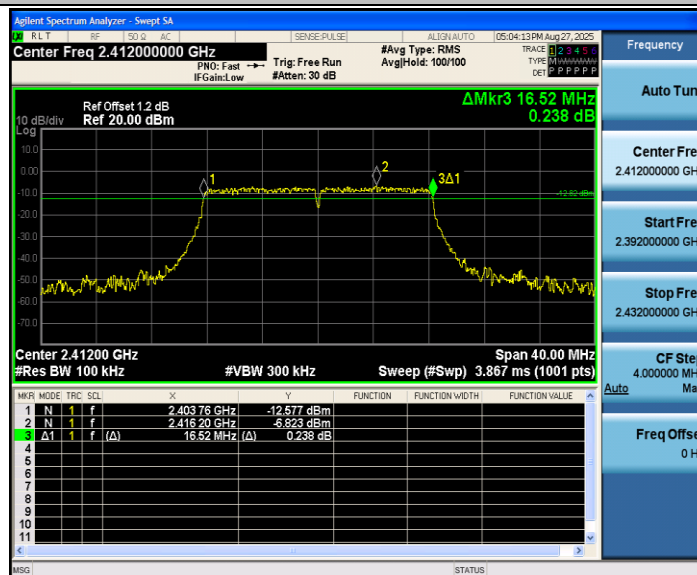
11B_Ant1_2437



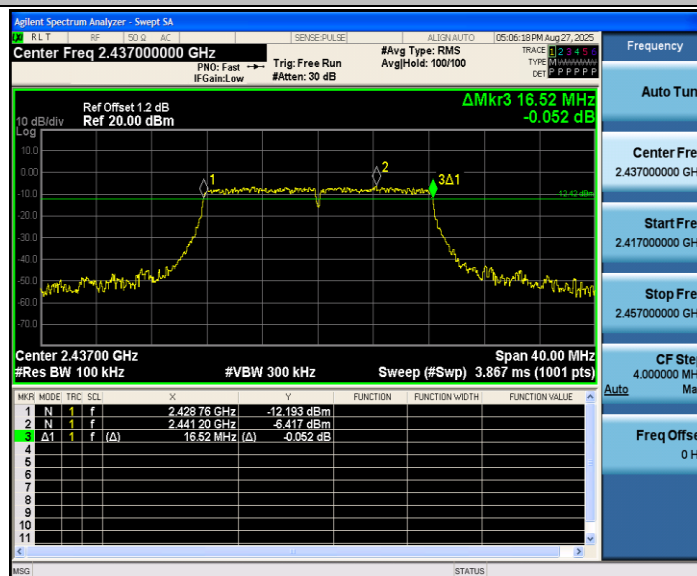
11B_Ant1_2462



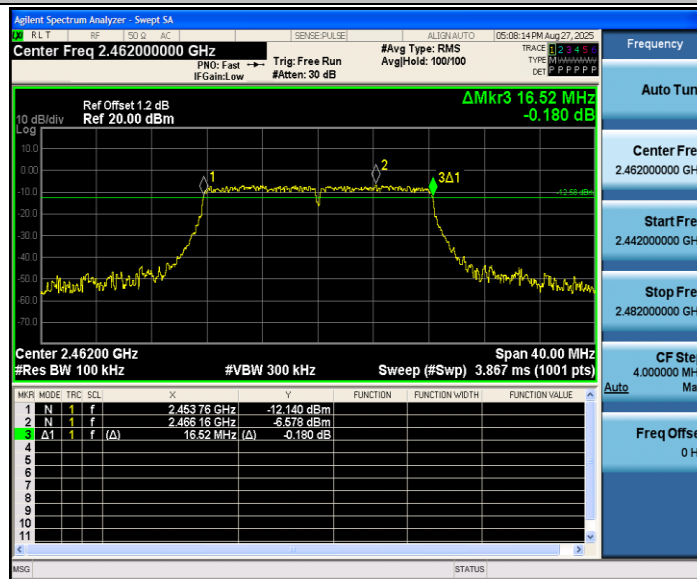
11G_Ant1_2412



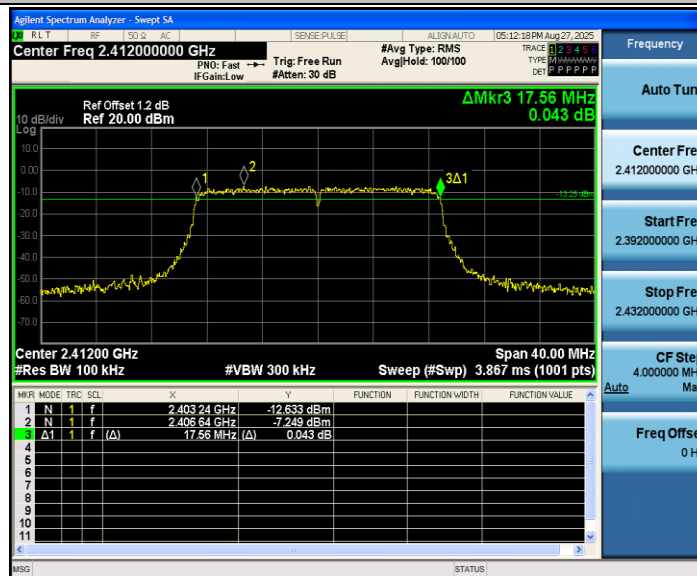
11G_Ant1_2437



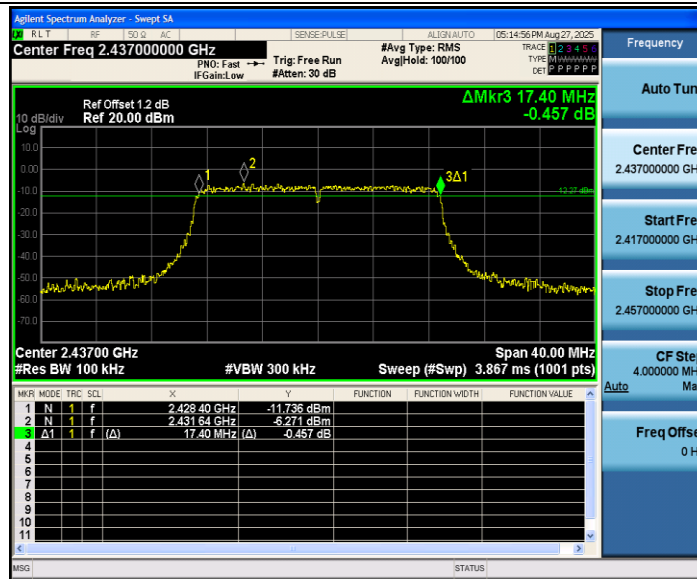
11G_Ant1_2462



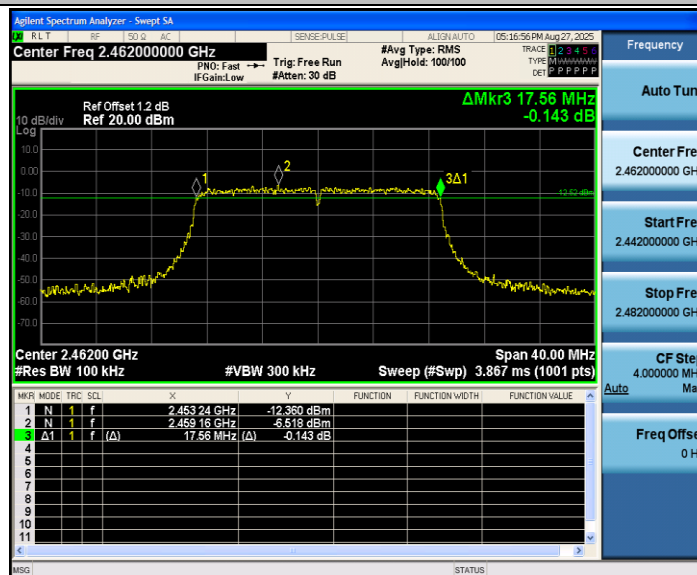
11N20SISO_Ant1_2412



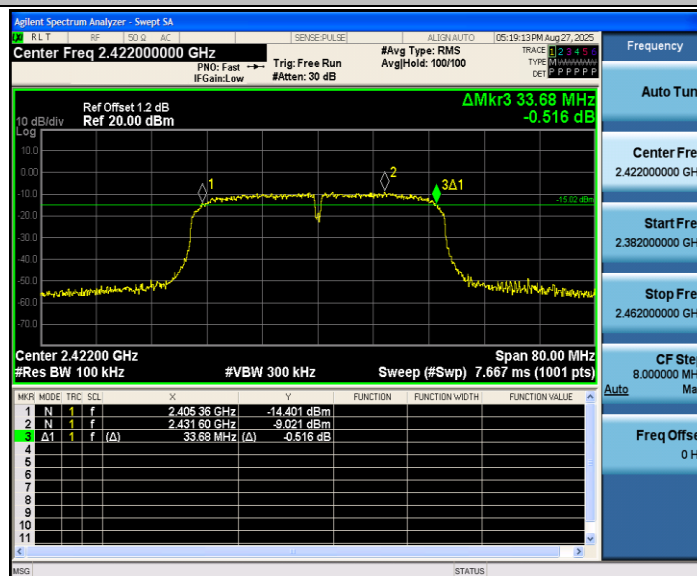
11N20SISO_Ant1_2437



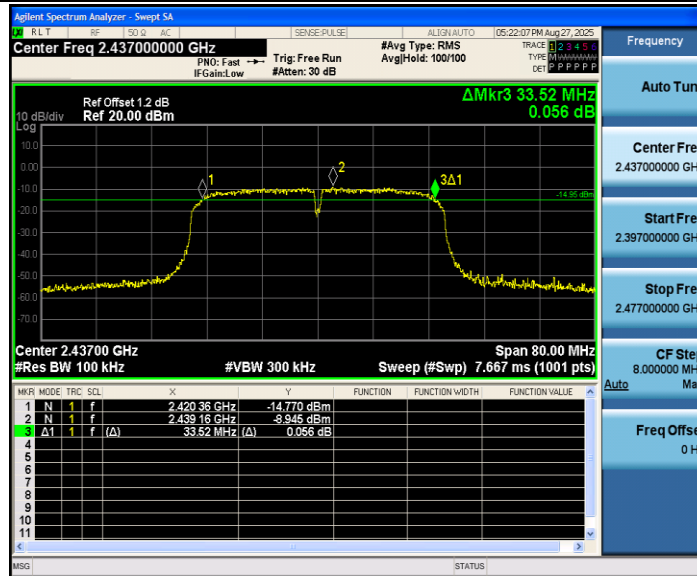
11N20SISO_Ant1_2462



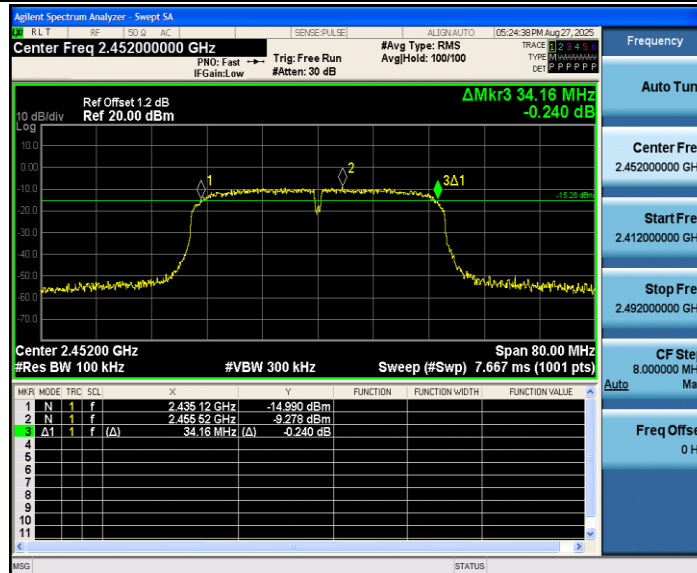
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



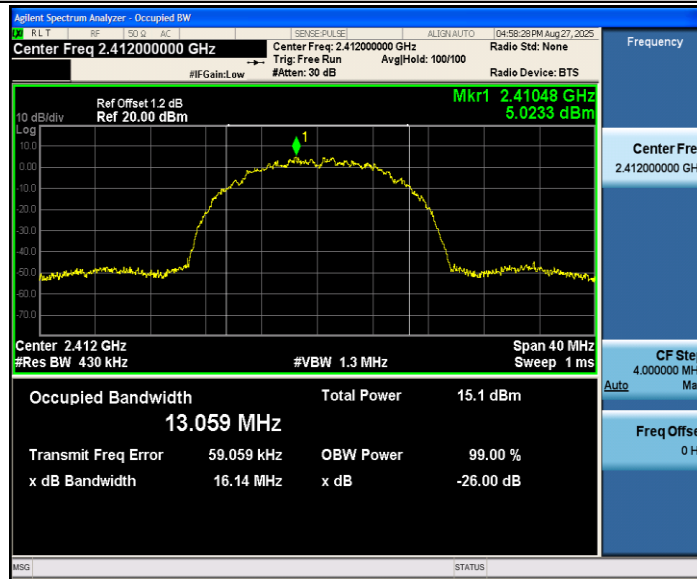
Appendix B: Occupied Channel Bandwidth

Test Result

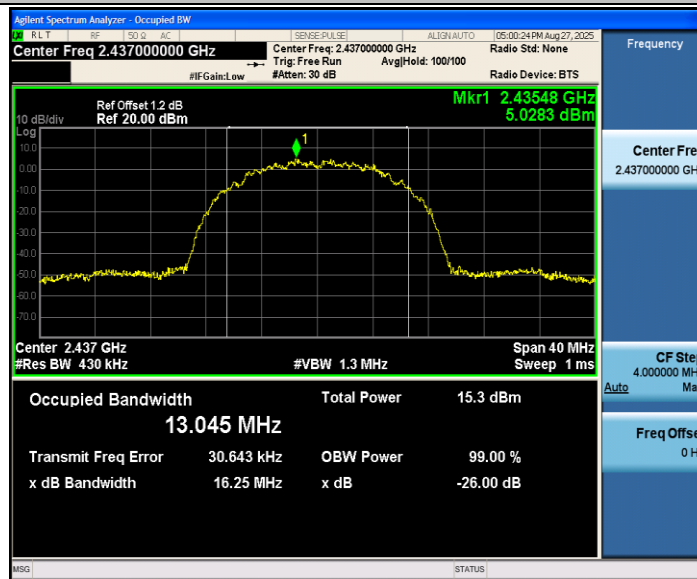
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.059	2405.5296	2418.5886	---	---
		2437	13.045	2430.5081	2443.5531	---	---
		2462	13.024	2455.5124	2468.5364	---	---
11G	Ant1	2412	16.562	2403.7742	2420.3362	---	---
		2437	16.549	2428.7638	2445.3128	---	---
		2462	16.593	2453.7271	2470.3201	---	---
11N20SISO	Ant1	2412	17.427	2403.3213	2420.7483	---	---
		2437	17.428	2428.3380	2445.7660	---	---
		2462	17.461	2453.3071	2470.7681	---	---
11N40SISO	Ant1	2422	34.767	2404.7695	2439.5365	---	---
		2437	34.788	2419.7627	2454.5507	---	---
		2452	34.834	2434.6856	2469.5196	---	---

Test Graphs

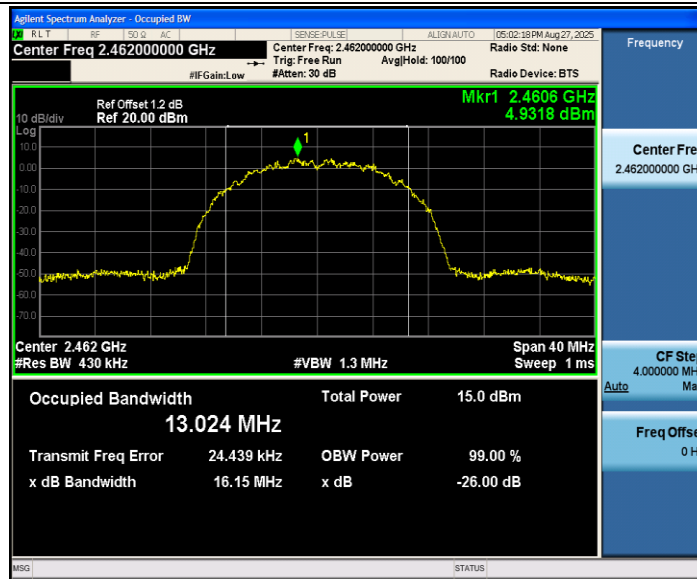
11B_Ant1_2412



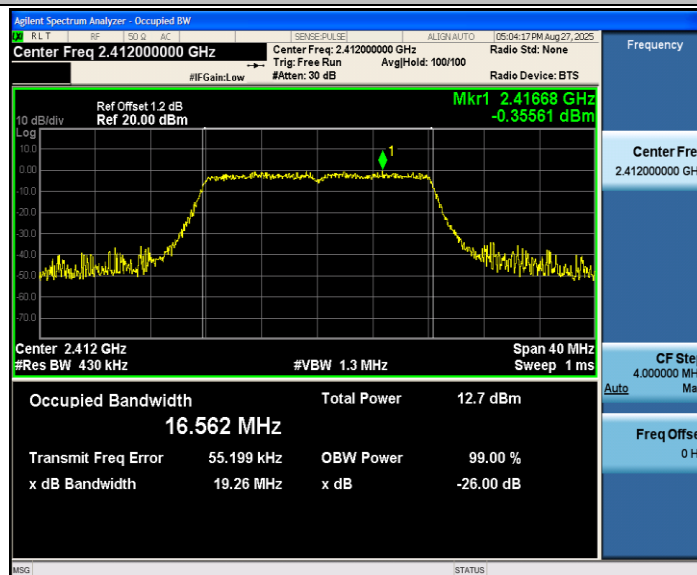
11B_Ant1_2437



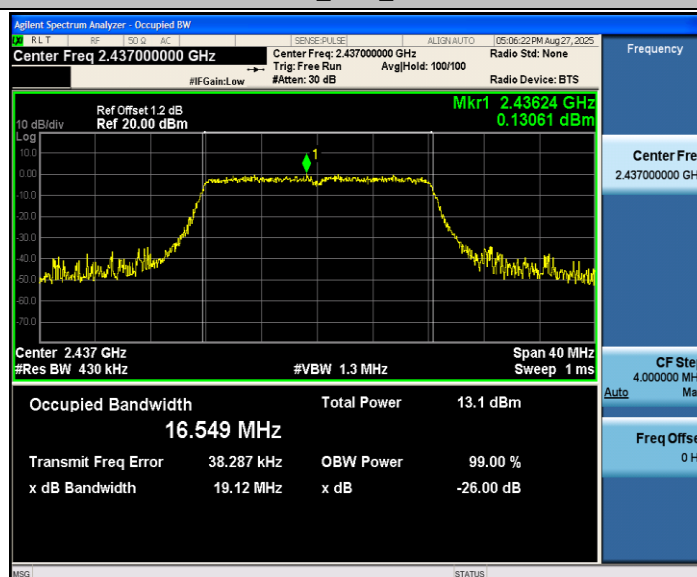
11B_Ant1_2462



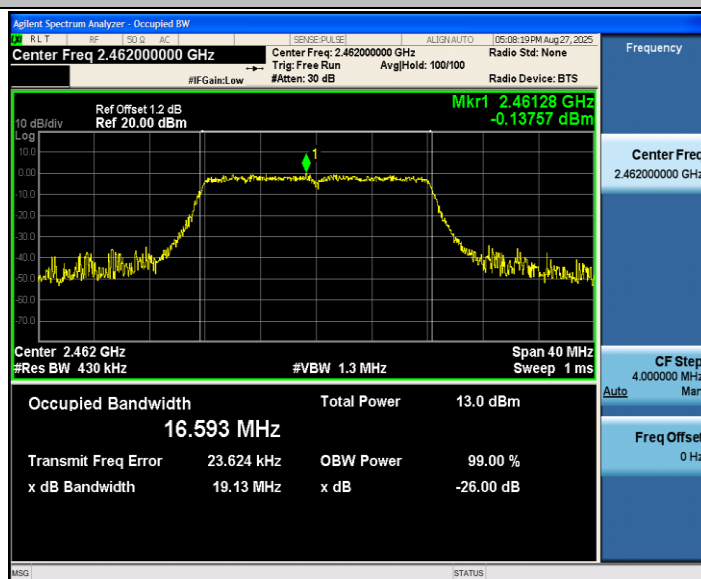
11G_Ant1_2412



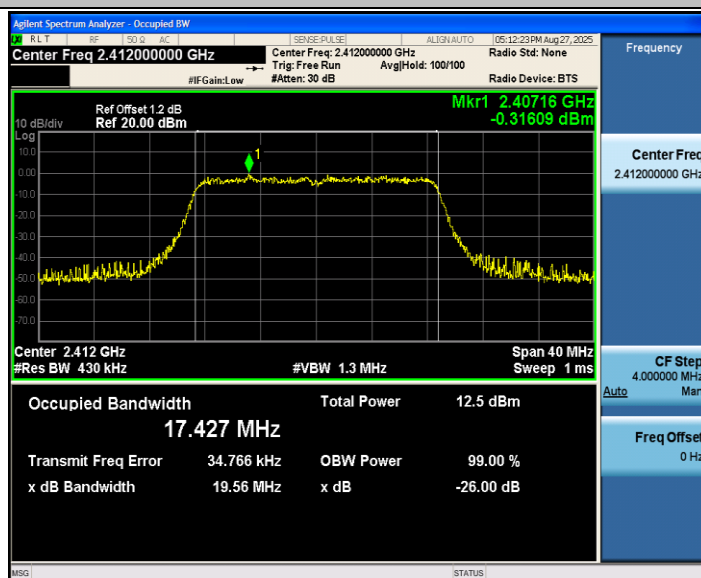
11G_Ant1_2437



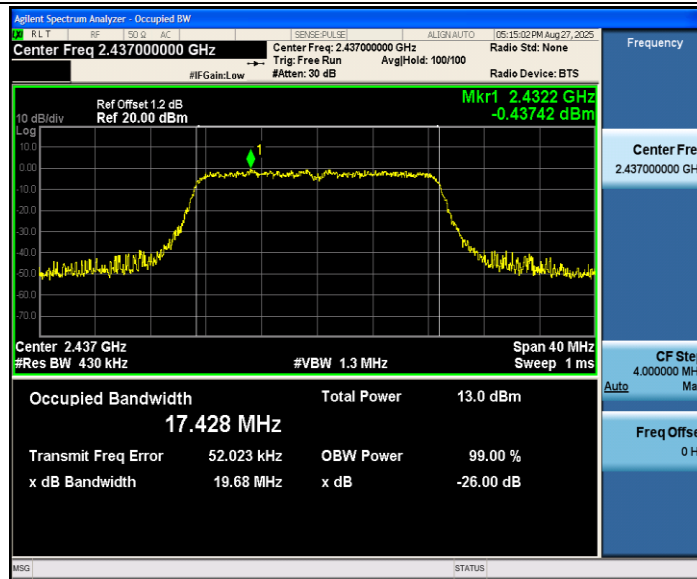
11G_Ant1_2462



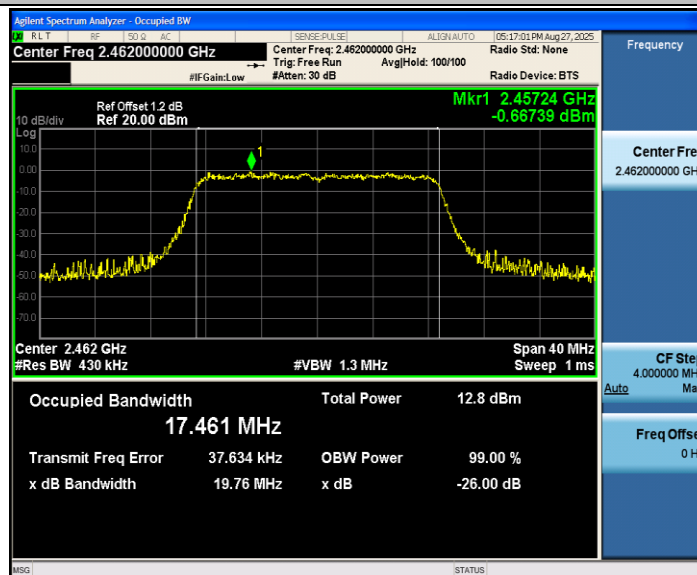
11N20SISO_Ant1_2412



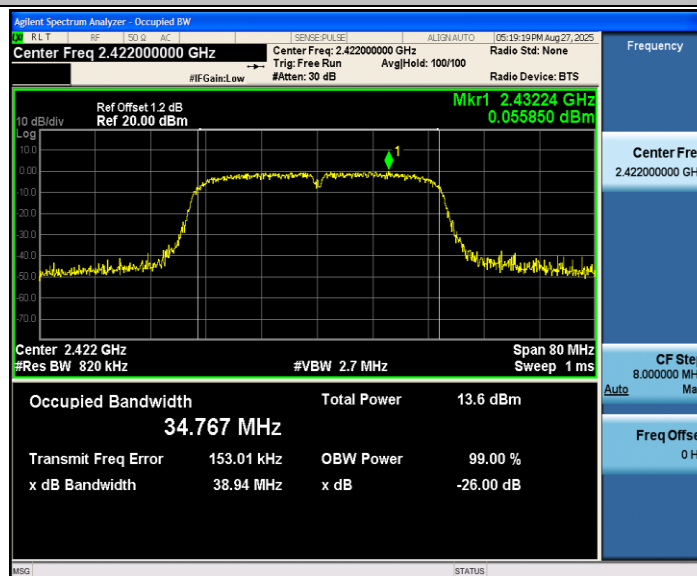
11N20SISO_Ant1_2437



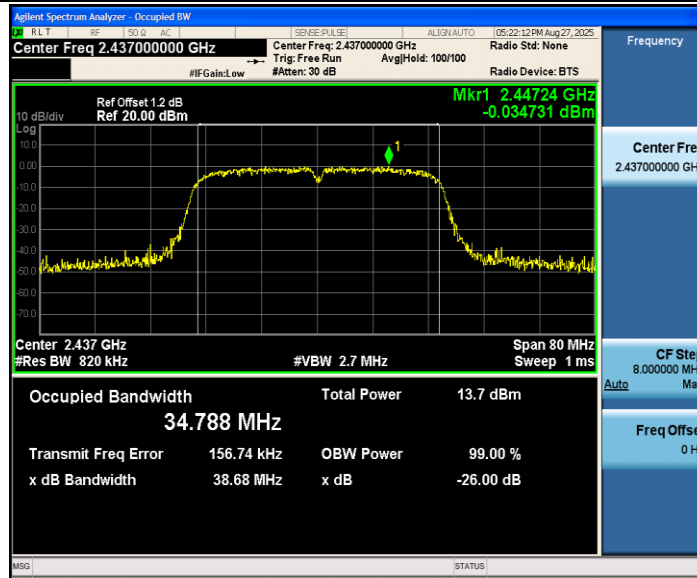
11N20SISO_Ant1_2462



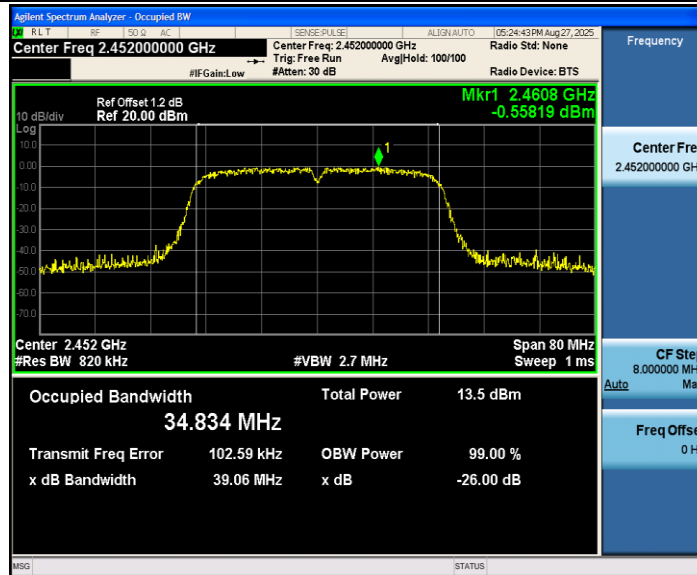
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.57	≤30.00	PASS
		2437	14.90	≤30.00	PASS
		2462	14.60	≤30.00	PASS
11G	Ant1	2412	13.51	≤30.00	PASS
		2437	13.91	≤30.00	PASS
		2462	13.73	≤30.00	PASS
11N20SISO	Ant1	2412	13.69	≤30.00	PASS
		2437	14.03	≤30.00	PASS
		2462	13.99	≤30.00	PASS
11N40SISO	Ant1	2422	13.86	≤30.00	PASS
		2437	13.92	≤30.00	PASS
		2452	13.97	≤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	-14.28	≤8.00	PASS
		2437	-14.40	≤8.00	PASS
		2462	-14.56	≤8.00	PASS
11G	Ant1	2412	-20.88	≤8.00	PASS
		2437	-20.52	≤8.00	PASS
		2462	-20.59	≤8.00	PASS
11N20SISO	Ant1	2412	-21.24	≤8.00	PASS
		2437	-20.22	≤8.00	PASS
		2462	-20.48	≤8.00	PASS
11N40SISO	Ant1	2422	-21.04	≤8.00	PASS
		2437	-20.62	≤8.00	PASS
		2452	-21.28	≤8.00	PASS

Test Graphs

11B_Ant1_2412



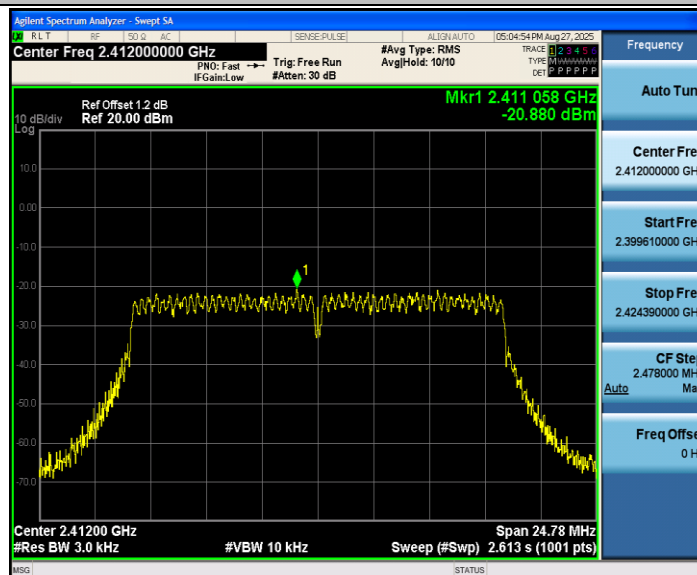
11B_Ant1_2437



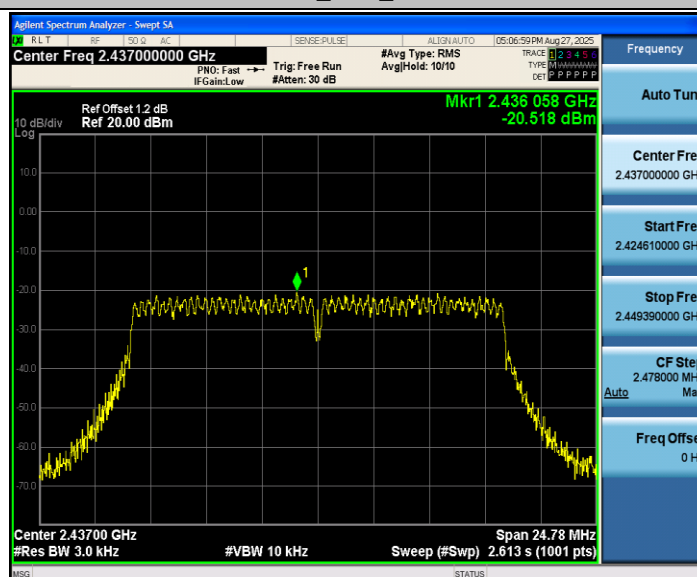
11B_Ant1_2462



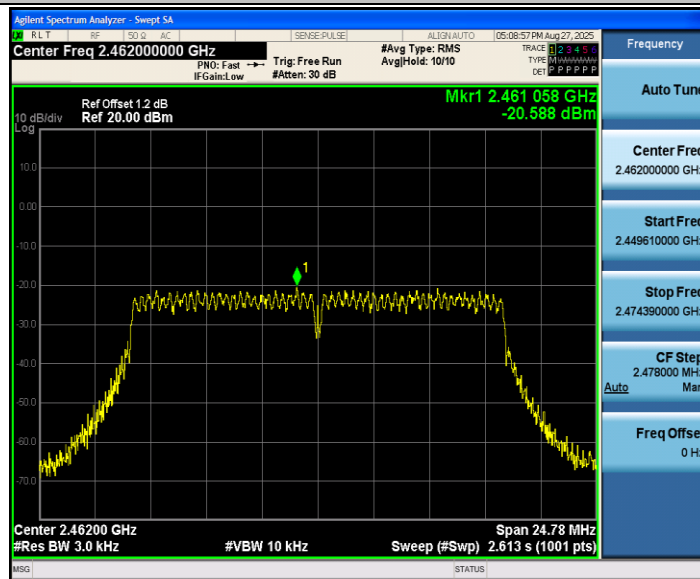
11G_Ant1_2412



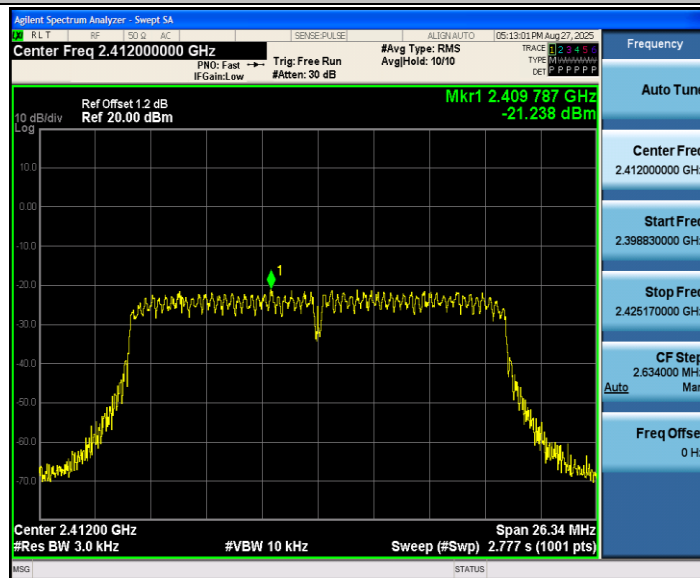
11G_Ant1_2437



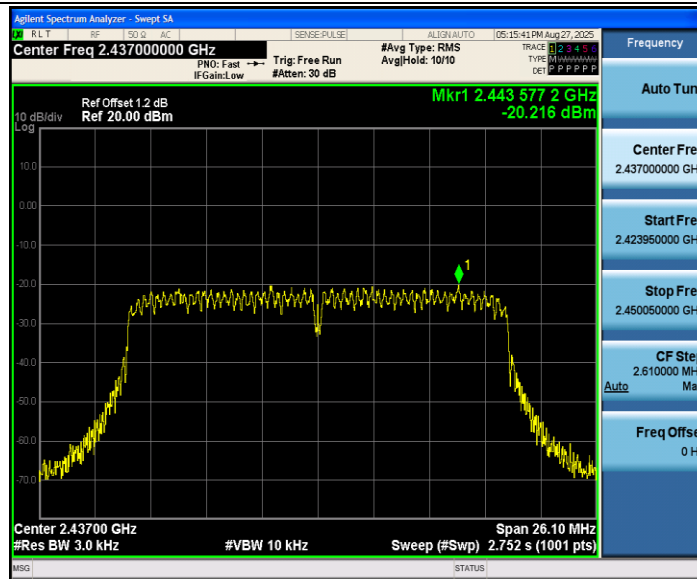
11G_Ant1_2462



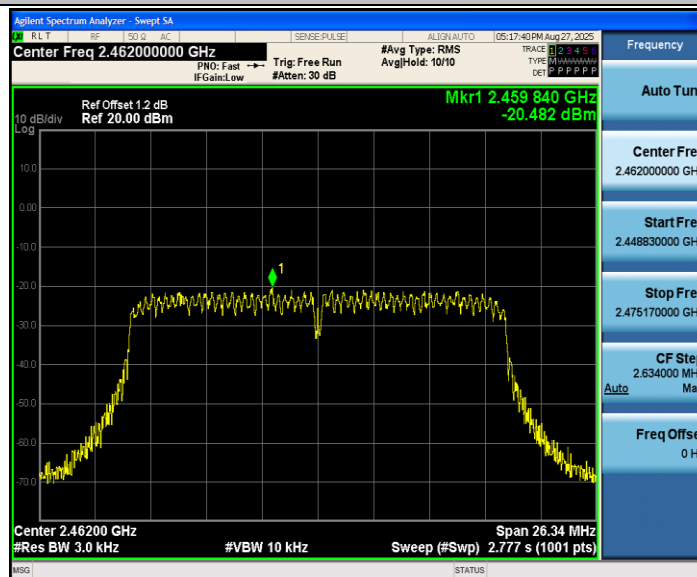
11N20SISO_Ant1_2412



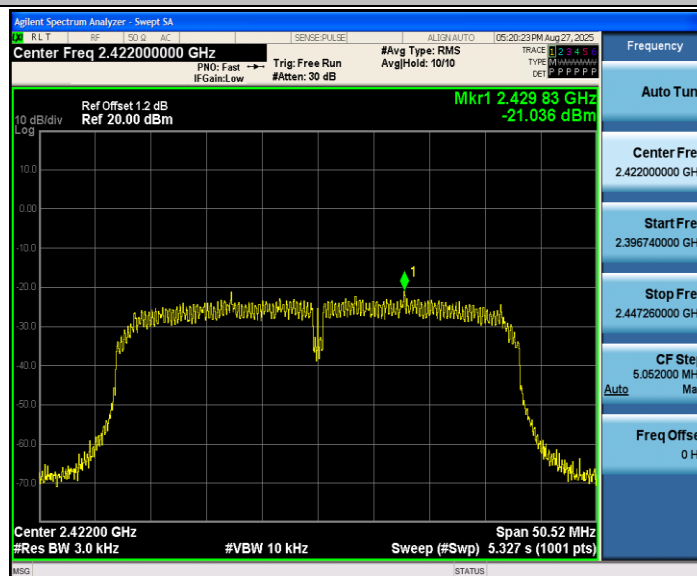
11N20SISO_Ant1_2437



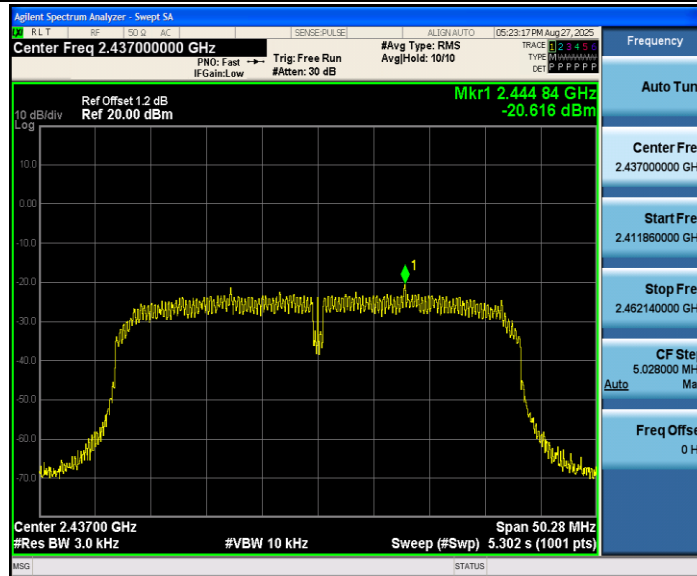
11N20SISO_Ant1_2462



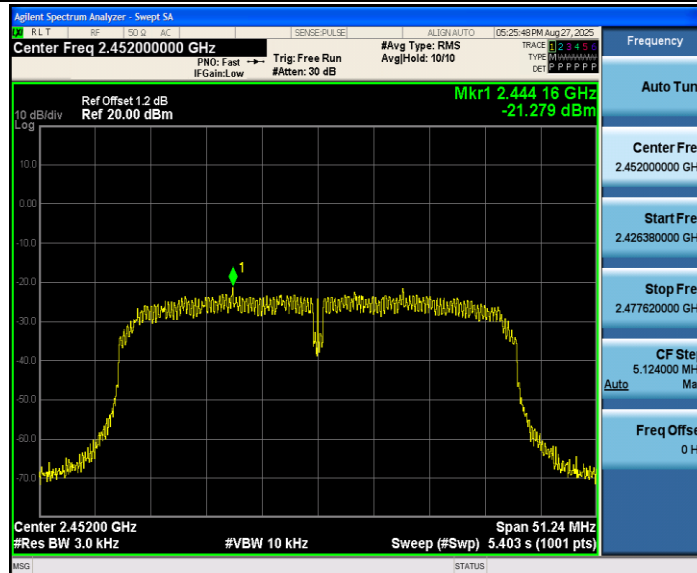
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



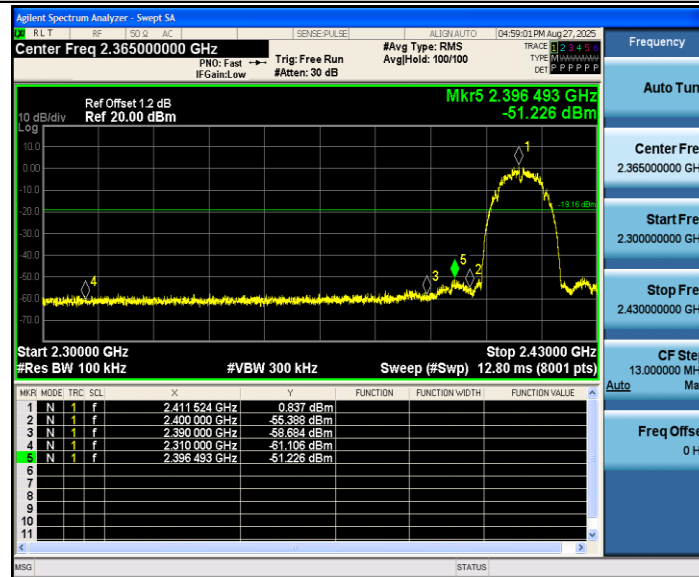
Appendix E: Band edge measurements

Test Result

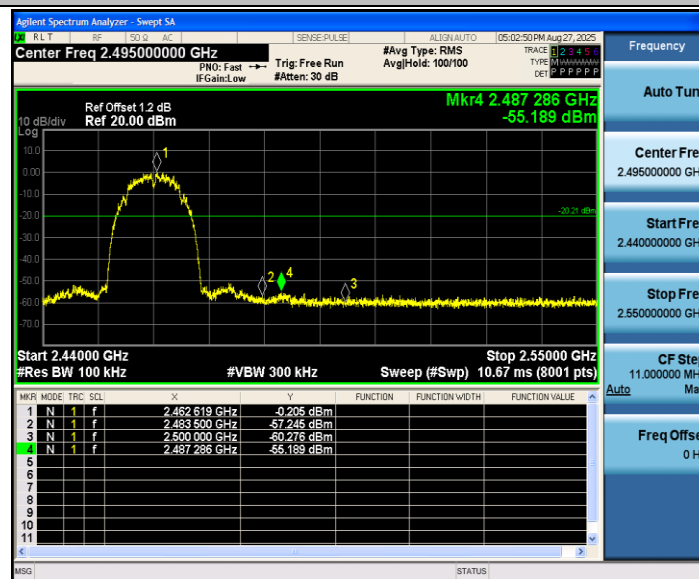
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	0.84	-51.23	≤-19.16	PASS
		High	2462	-0.21	-55.19	≤-20.21	PASS
11G	Ant1	Low	2412	-6.75	-46.02	≤-26.75	PASS
		High	2462	-6.95	-54.47	≤-26.95	PASS
11N20SISO	Ant1	Low	2412	-7.41	-48.43	≤-27.41	PASS
		High	2462	-6.66	-54.53	≤-26.66	PASS
11N40SISO	Ant1	Low	2422	-9.28	-49.86	≤-29.28	PASS
		High	2452	-9.12	-52.62	≤-29.12	PASS

Test Graphs

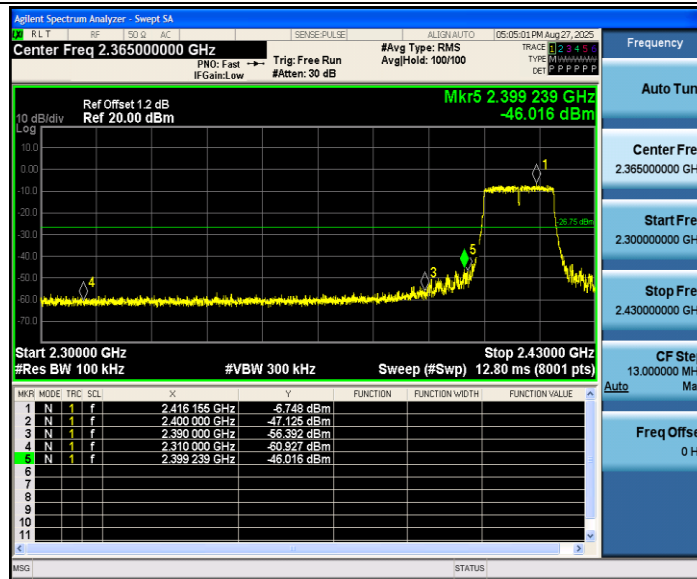
11B_Ant1_Low_2412



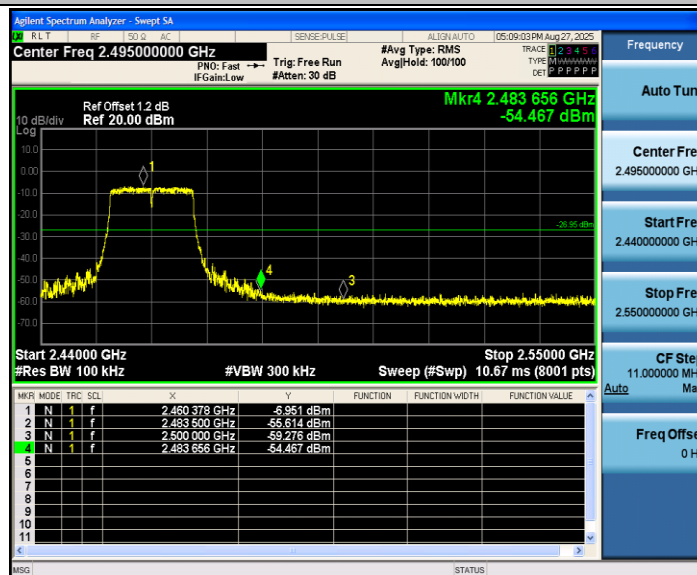
11B_Ant1_High_2462



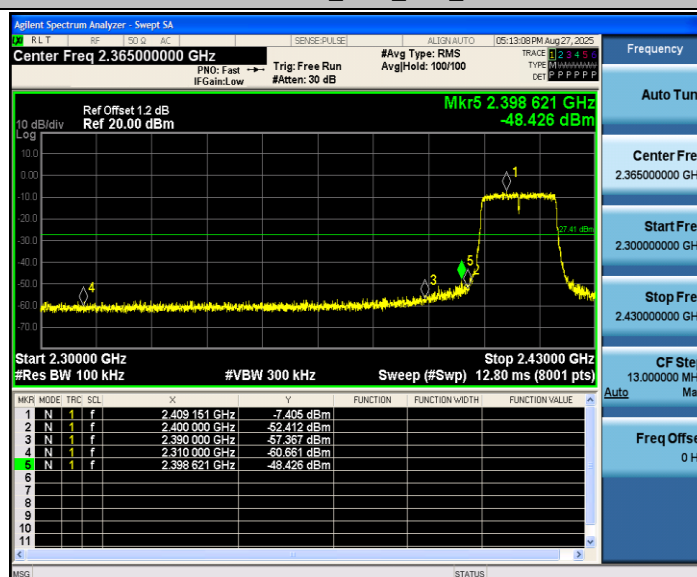
11G_Ant1_Low_2412



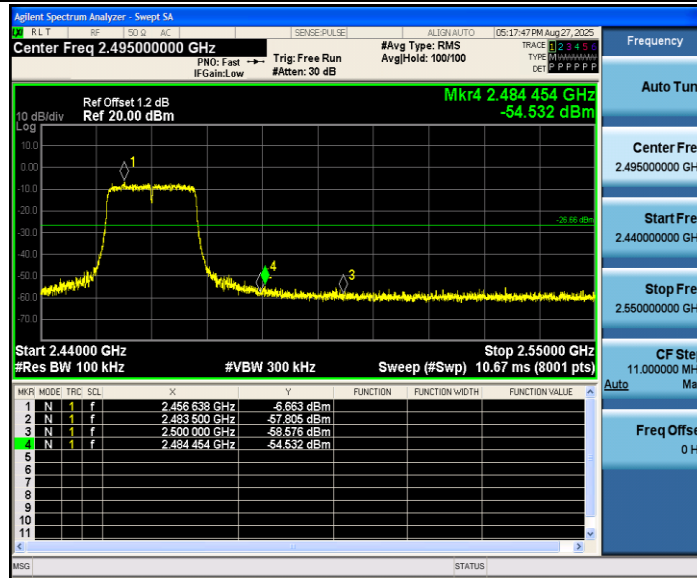
11G_Ant1_High_2462



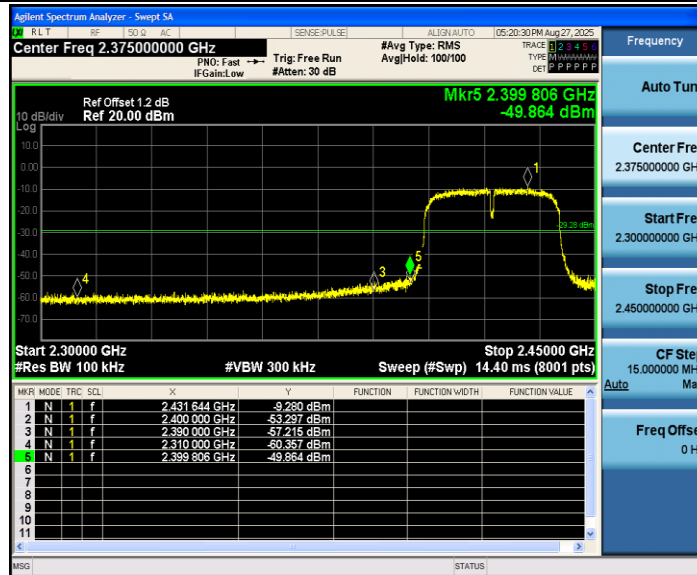
11N20SISO_Ant1_Low_2412



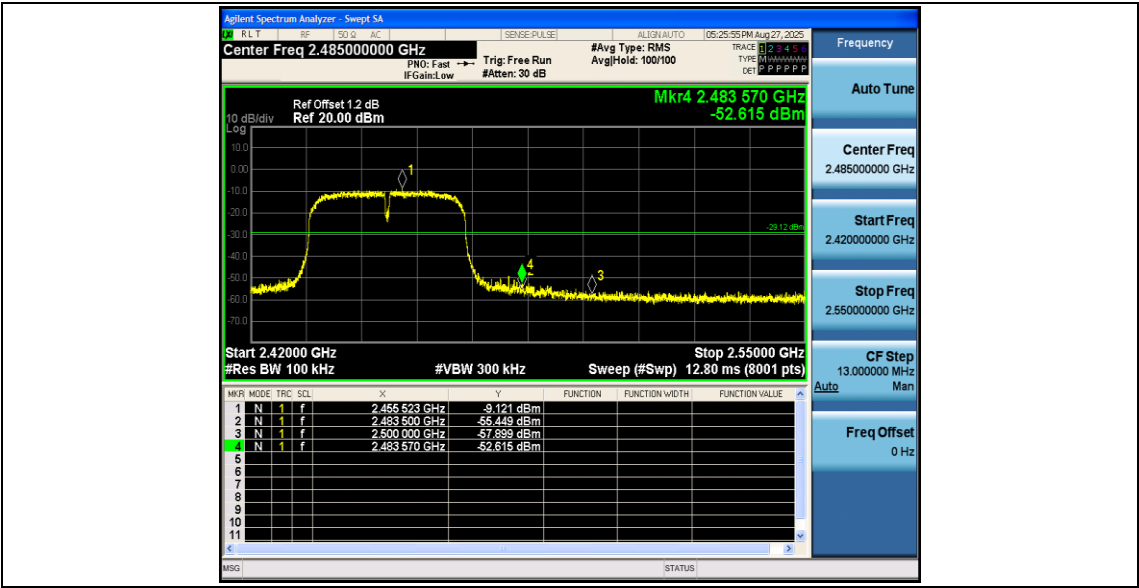
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



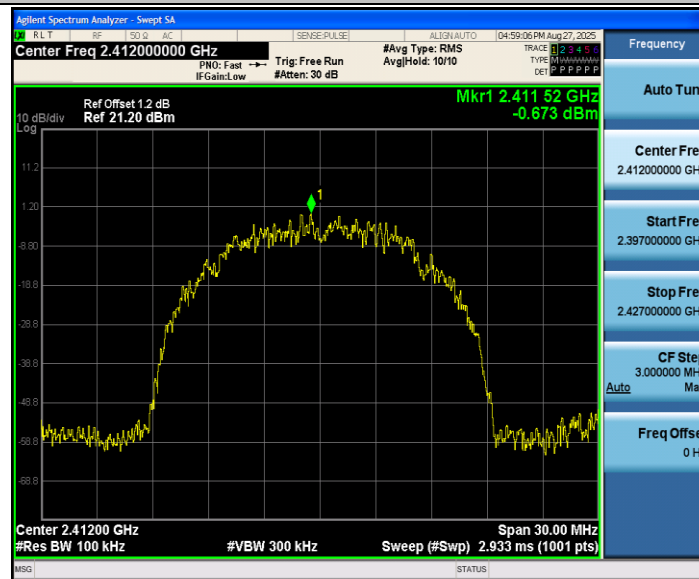
Appendix F: Conducted Spurious Emission

Test Result

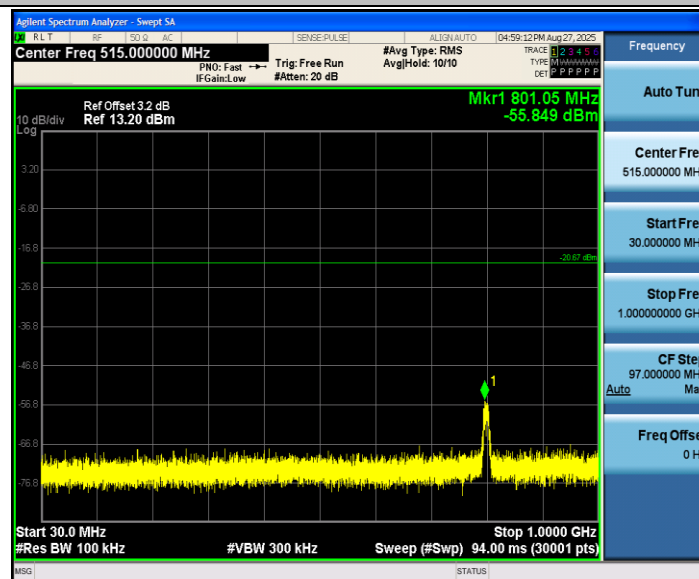
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-0.67	-0.67	---	PASS
			30~1000	-0.67	-55.85	≤-20.67	PASS
			1000~26500	-0.67	-43.23	≤-20.67	PASS
		2437	Reference	-1.29	-1.29	---	PASS
			30~1000	-1.29	-55.99	≤-21.29	PASS
			1000~26500	-1.29	-43.81	≤-21.29	PASS
		2462	Reference	0.81	0.81	---	PASS
			30~1000	0.81	-55.27	≤-19.19	PASS
			1000~26500	0.81	-44.03	≤-19.19	PASS
11G	Ant1	2412	Reference	-7.54	-7.54	---	PASS
			30~1000	-7.54	-59.76	≤-27.54	PASS
			1000~26500	-7.54	-42.97	≤-27.54	PASS
		2437	Reference	-7.03	-7.03	---	PASS
			30~1000	-7.03	-59.35	≤-27.03	PASS
			1000~26500	-7.03	-43.47	≤-27.03	PASS
		2462	Reference	-7.02	-7.02	---	PASS
			30~1000	-7.02	-59.29	≤-27.02	PASS
			1000~26500	-7.02	-44.17	≤-27.02	PASS
11N20SISO	Ant1	2412	Reference	-7.55	-7.55	---	PASS
			30~1000	-7.55	-59.56	≤-27.55	PASS
			1000~26500	-7.55	-42.86	≤-27.55	PASS
		2437	Reference	-7.49	-7.49	---	PASS
			30~1000	-7.49	-59.26	≤-27.49	PASS
			1000~26500	-7.49	-43.49	≤-27.49	PASS
		2462	Reference	-6.62	-6.62	---	PASS
			30~1000	-6.62	-59.65	≤-26.62	PASS
			1000~26500	-6.62	-44.16	≤-26.62	PASS
11N40SISO	Ant1	2422	Reference	-9.72	-9.72	---	PASS
			30~1000	-9.72	-60.86	≤-29.72	PASS
			1000~26500	-9.72	-43.38	≤-29.72	PASS
		2437	Reference	-9.61	-9.61	---	PASS
			30~1000	-9.61	-61.58	≤-29.61	PASS
			1000~26500	-9.61	-43.62	≤-29.61	PASS
		2452	Reference	-9.91	-9.91	---	PASS
			30~1000	-9.91	-61.25	≤-29.91	PASS
			1000~26500	-9.91	-43.89	≤-29.91	PASS

Test Graphs

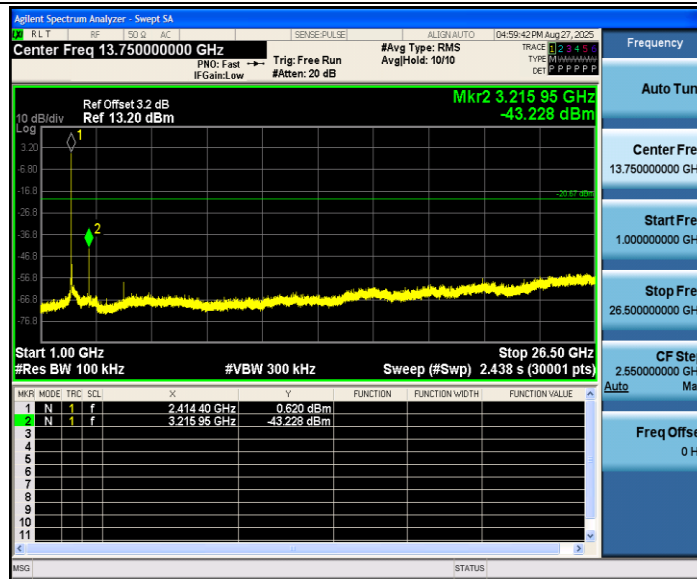
11B_Ant1_2412_0~Reference



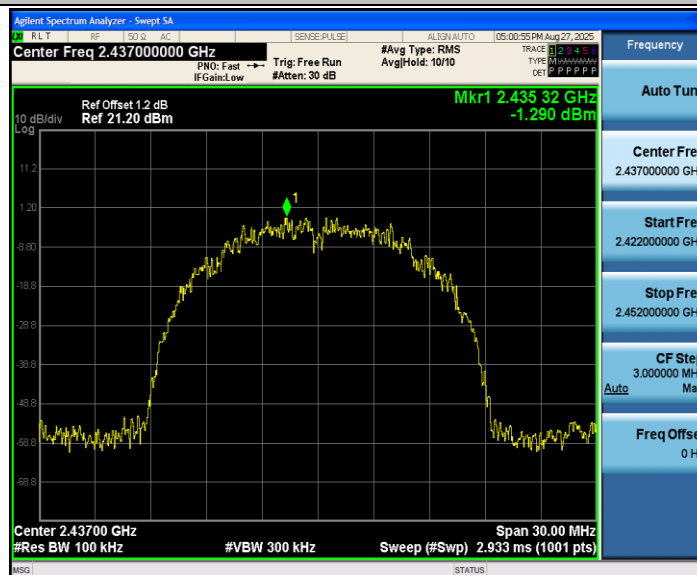
11B_Ant1_2412_30~1000



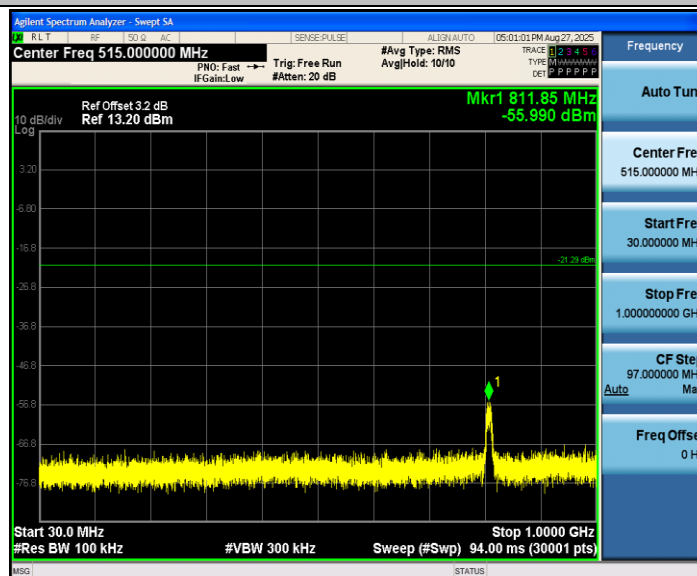
11B_Ant1_2412_1000~26500



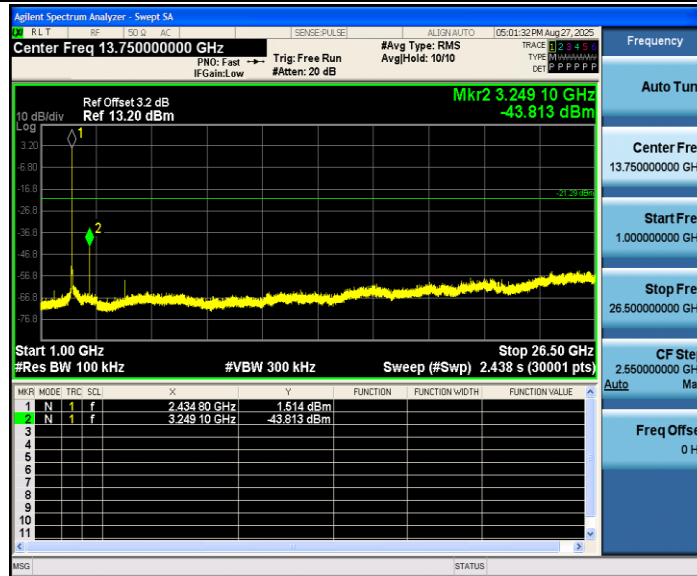
11B_Ant1_2437_0~Reference



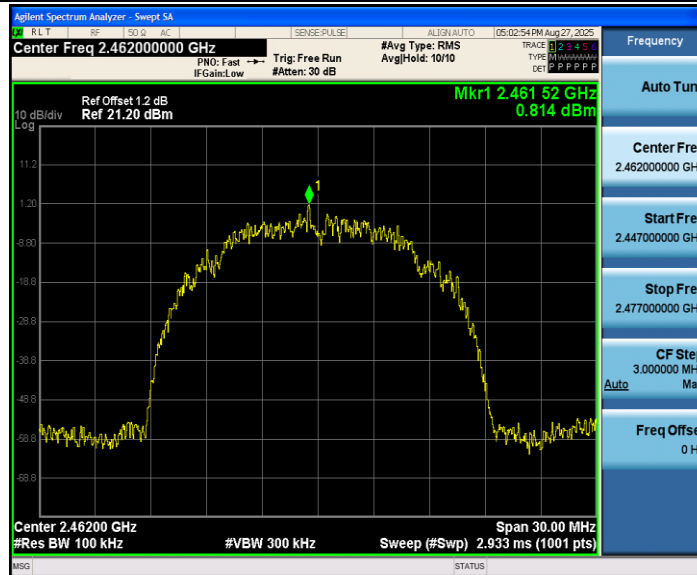
11B_Ant1_2437_30~1000



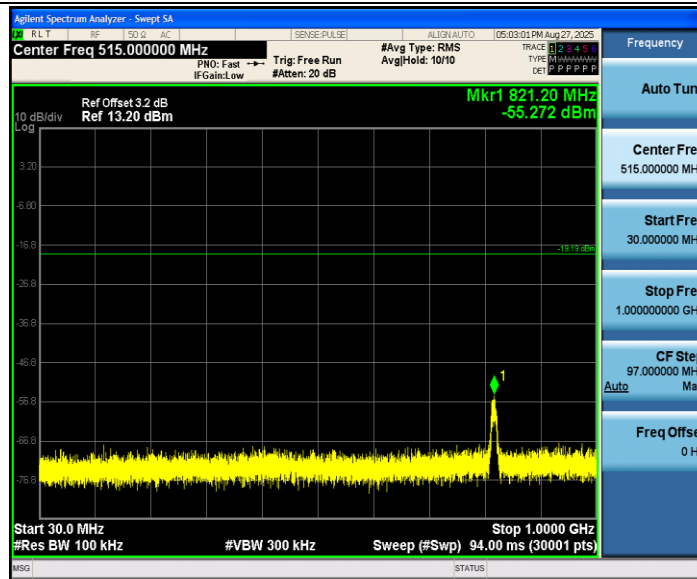
11B_Ant1_2437_1000~26500



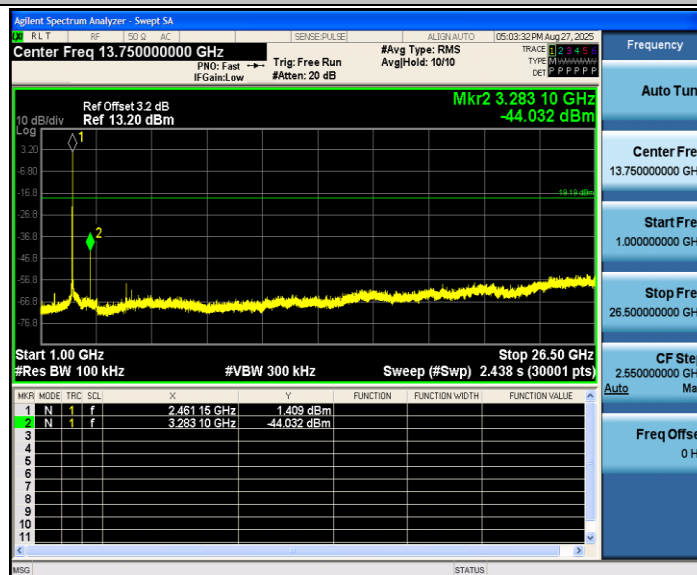
11B_Ant1_2462_0~Reference



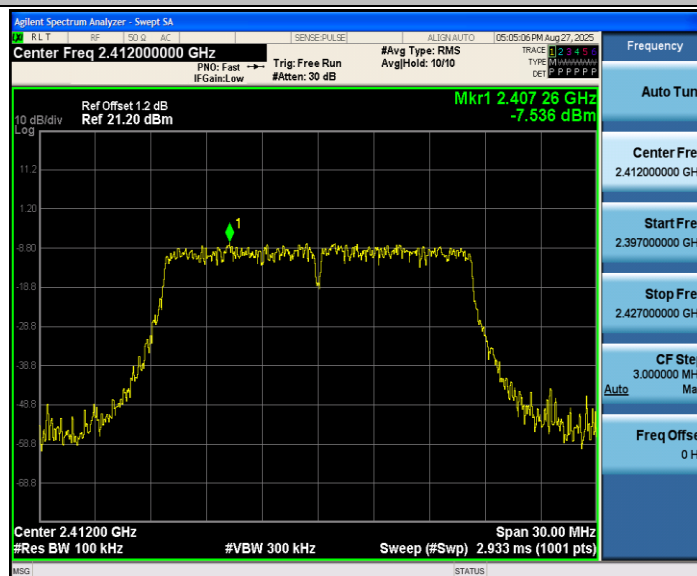
11B_Ant1_2462_30~1000



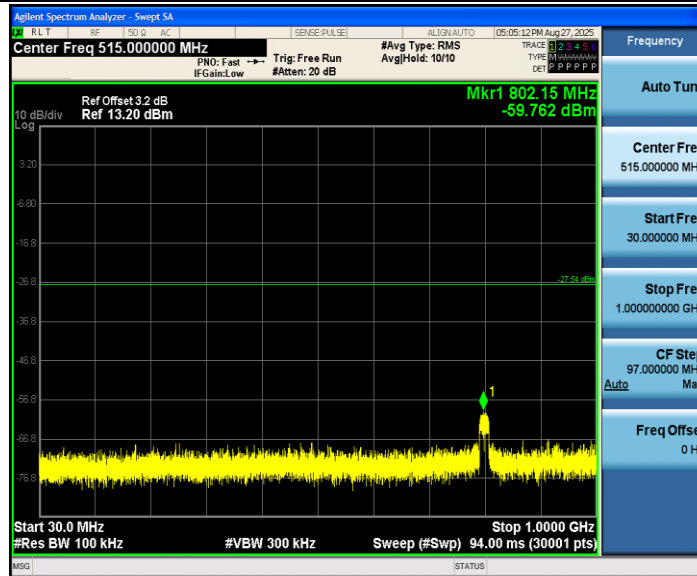
11B_Ant1_2462_1000~26500



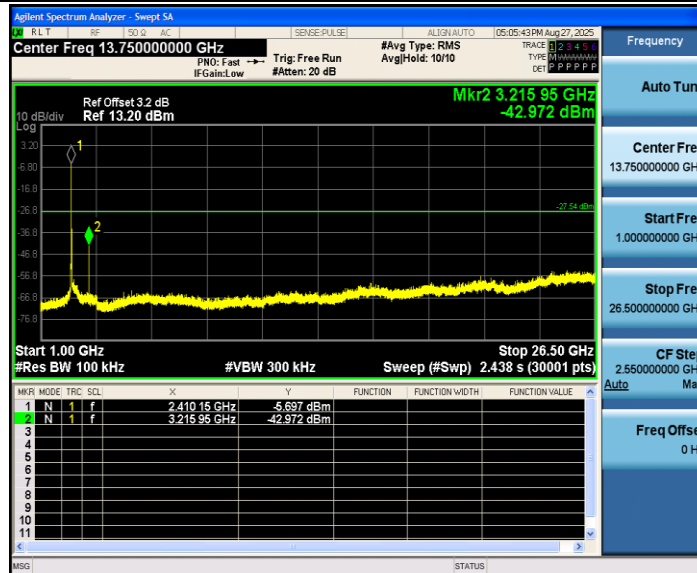
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



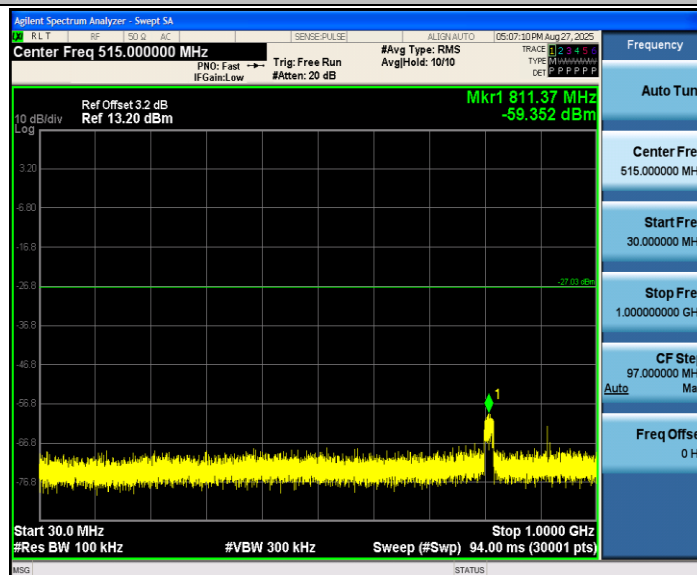
11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

