

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BSUL-HN8145X6

Company : Shenzhen HUANET Technology CO., Ltd

EUT : Optical Network Terminal

Model Number : HN8145X6

Report No. : CTA25100900401

Reviewed By : Eric Wang

Appendix RF Test Data for 2.4GWIFI ANT1

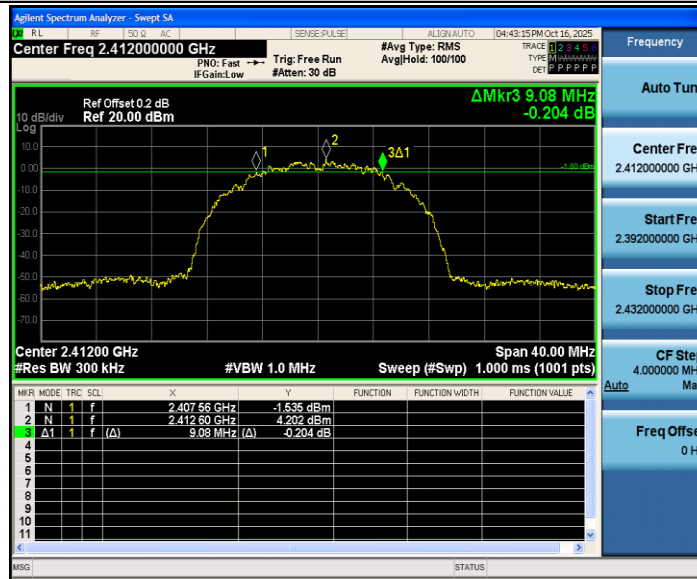
Appendix A: DTS Bandwidth

Test Result

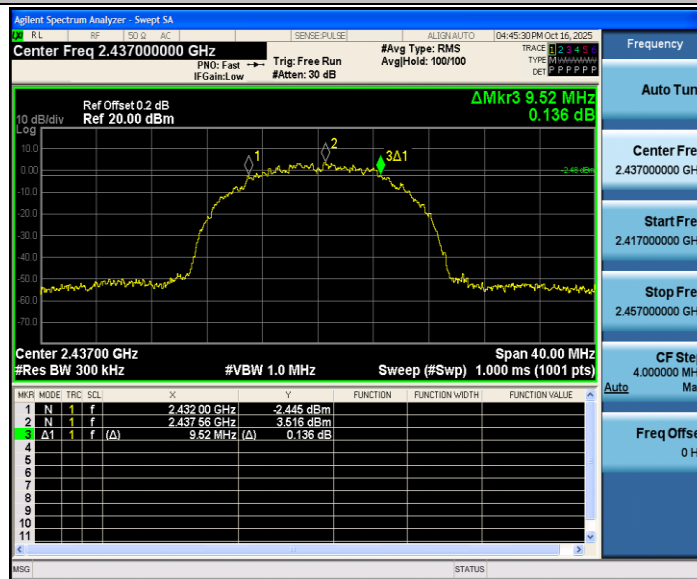
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.560	2416.640	0.5	PASS
		2437	9.520	2432.000	2441.520	0.5	PASS
		2462	8.680	2457.560	2466.240	0.5	PASS
11G	Ant1	2412	16.240	2403.960	2420.200	0.5	PASS
		2437	16.360	2428.920	2445.280	0.5	PASS
		2462	16.400	2453.840	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.360	2403.360	2420.720	0.5	PASS
		2437	17.400	2428.360	2445.760	0.5	PASS
		2462	17.360	2453.360	2470.720	0.5	PASS
11N40SISO	Ant1	2422	33.600	2405.680	2439.280	0.5	PASS
		2437	33.600	2420.520	2454.120	0.5	PASS
		2452	33.920	2435.200	2469.120	0.5	PASS

Test Graphs

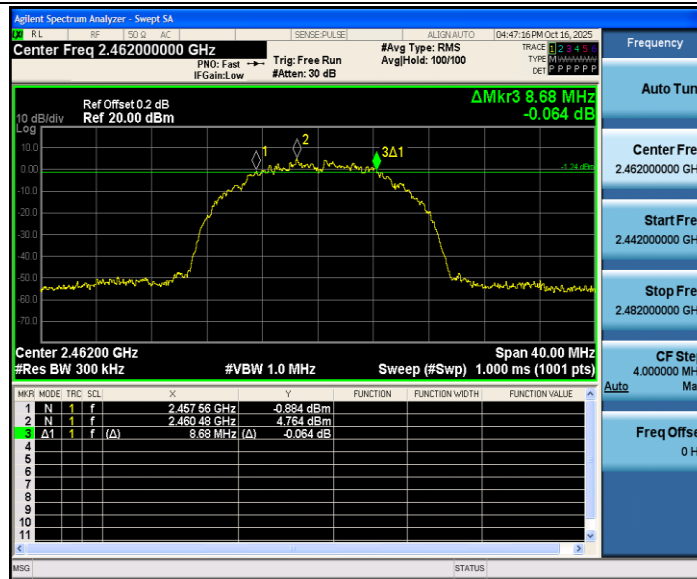
11B_Ant1_2412



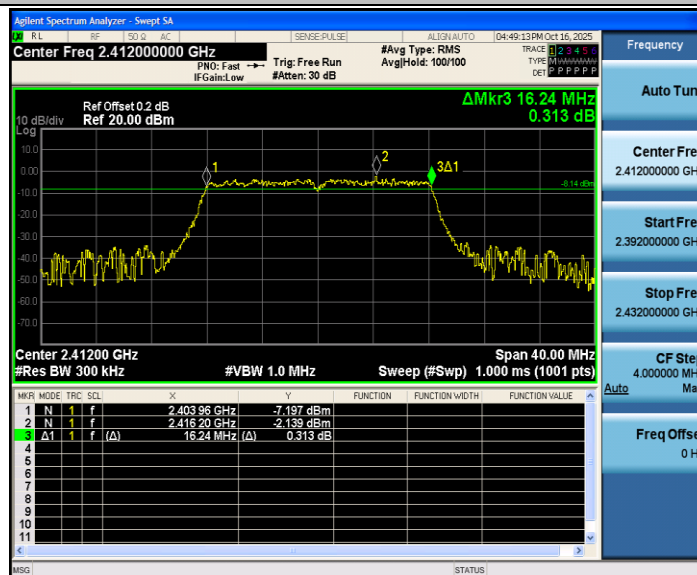
11B_Ant1_2437



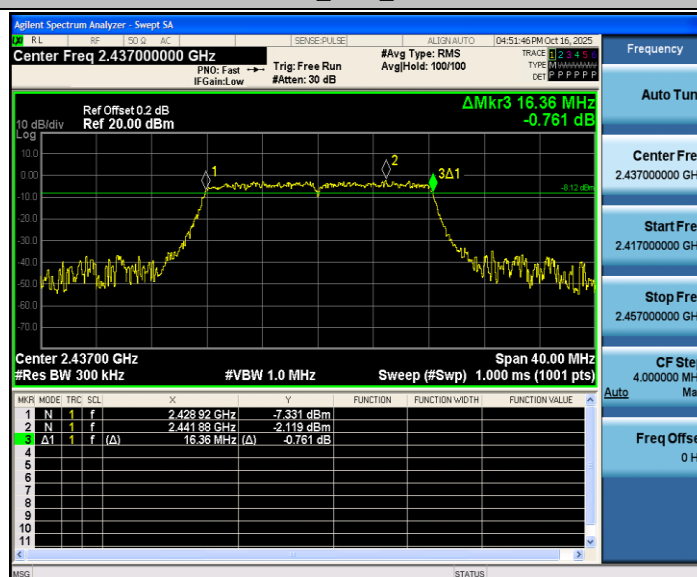
11B_Ant1_2462



11G_Ant1_2412



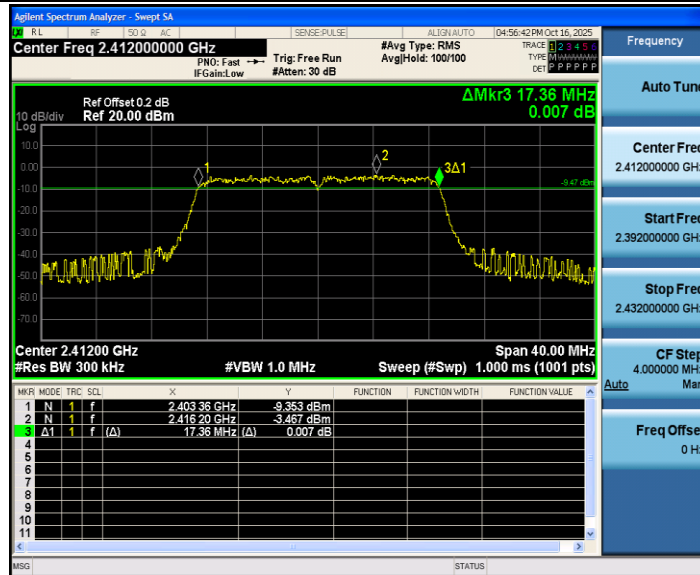
11G_Ant1_2437



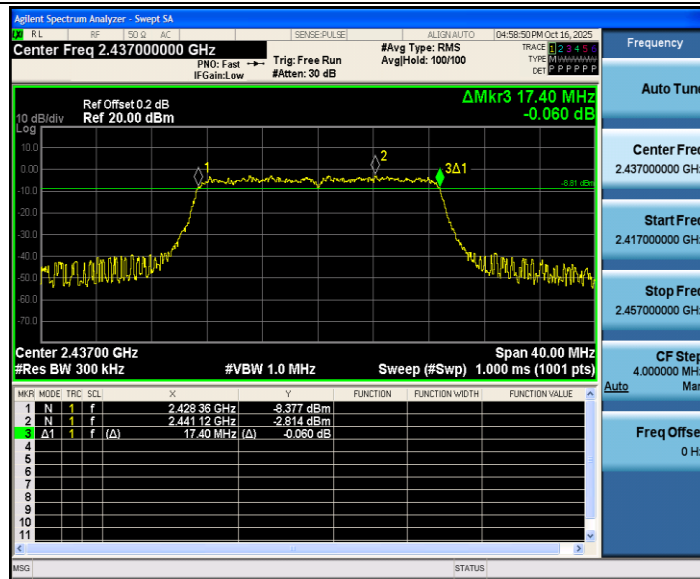
11G_Ant1_2462



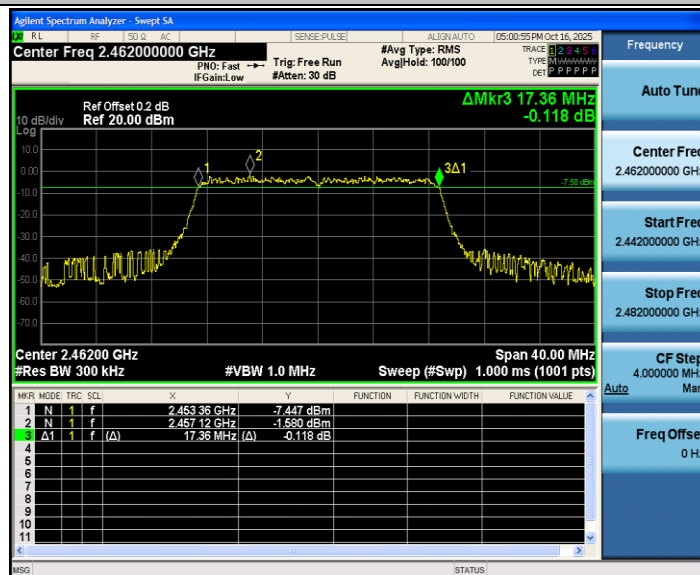
11N20SISO_Ant1_2412



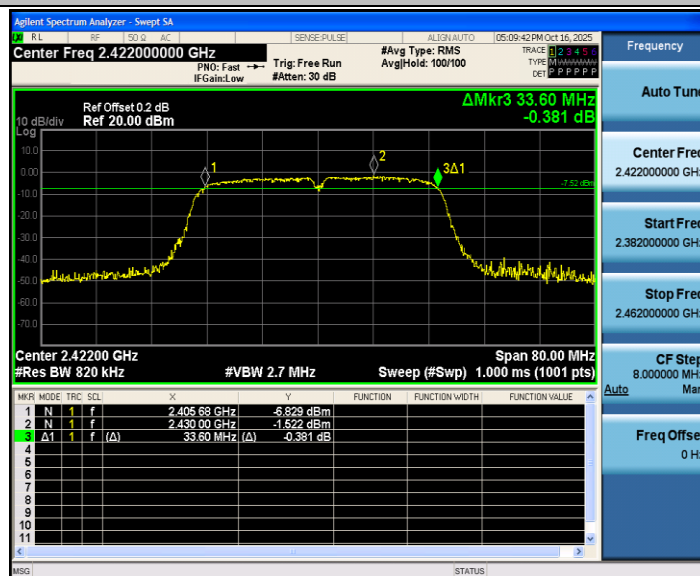
11N20SISO_Ant1_2437



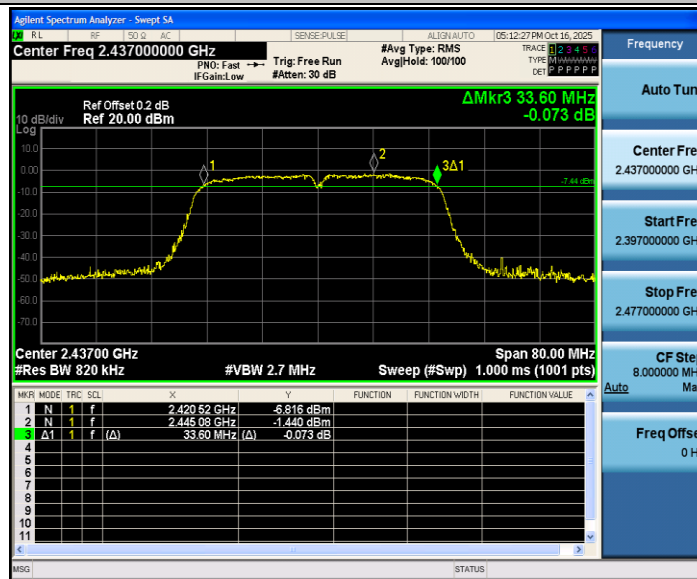
11N20SISO_Ant1_2462



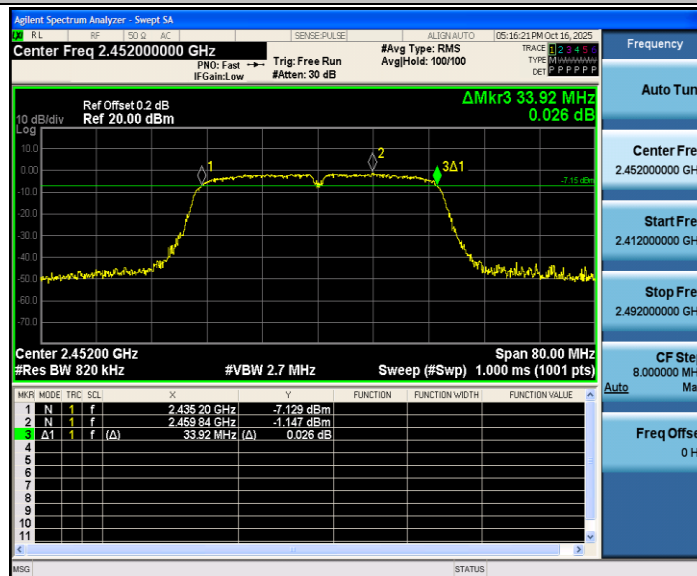
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



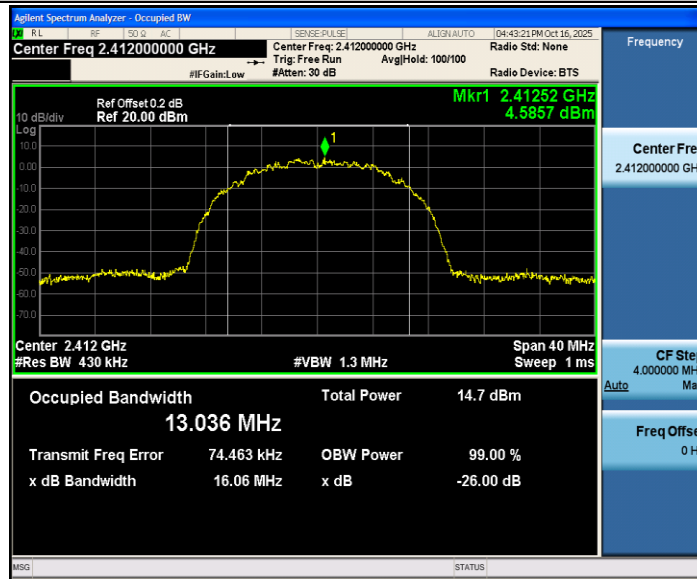
Appendix B: Occupied Channel Bandwidth

Test Result

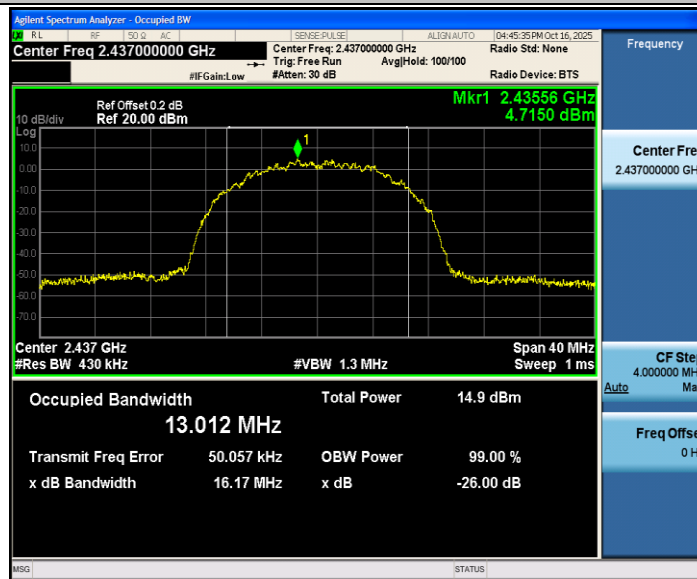
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.036	2405.5565	2418.5925	---	---
		2437	13.012	2430.5441	2443.5561	---	---
		2462	12.953	2455.5543	2468.5073	---	---
11G	Ant1	2412	16.591	2403.7692	2420.3602	---	---
		2437	16.620	2428.7335	2445.3535	---	---
		2462	16.600	2453.7320	2470.3320	---	---
11N20SISO	Ant1	2412	17.433	2403.3533	2420.7863	---	---
		2437	17.460	2428.3171	2445.7771	---	---
		2462	17.443	2453.3114	2470.7544	---	---
11N40SISO	Ant1	2422	34.765	2404.8587	2439.6237	---	---
		2437	34.814	2419.7504	2454.5644	---	---
		2452	34.819	2434.7487	2469.5677	---	---

Test Graphs

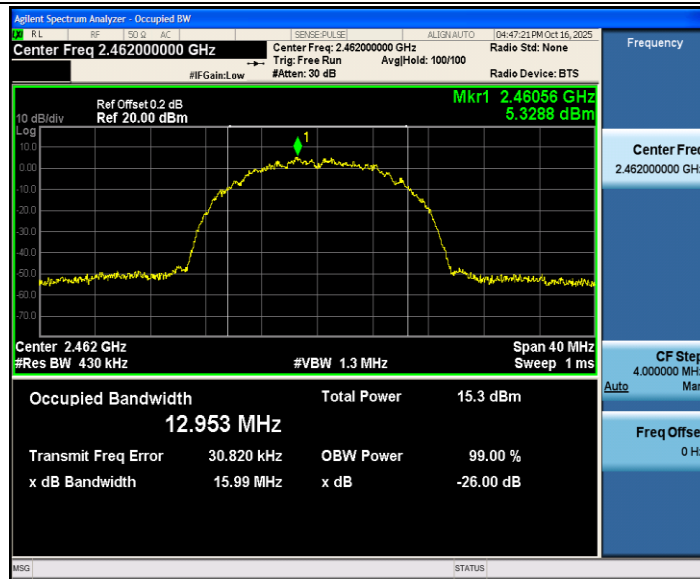
11B_Ant1_2412



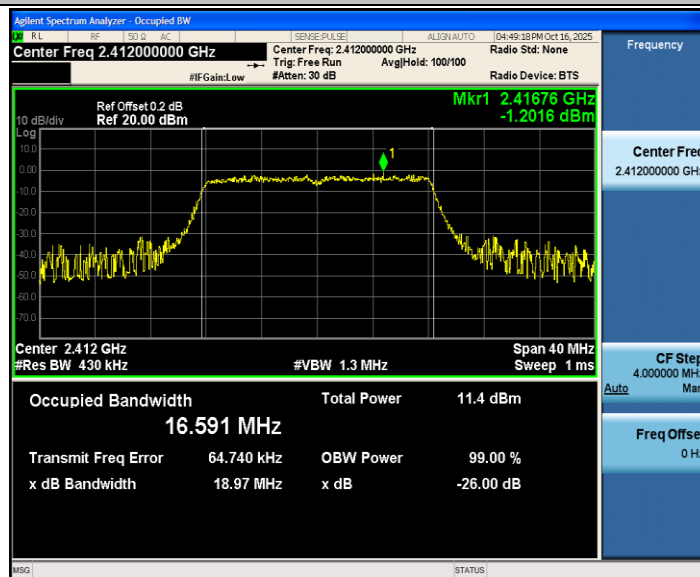
11B_Ant1_2437



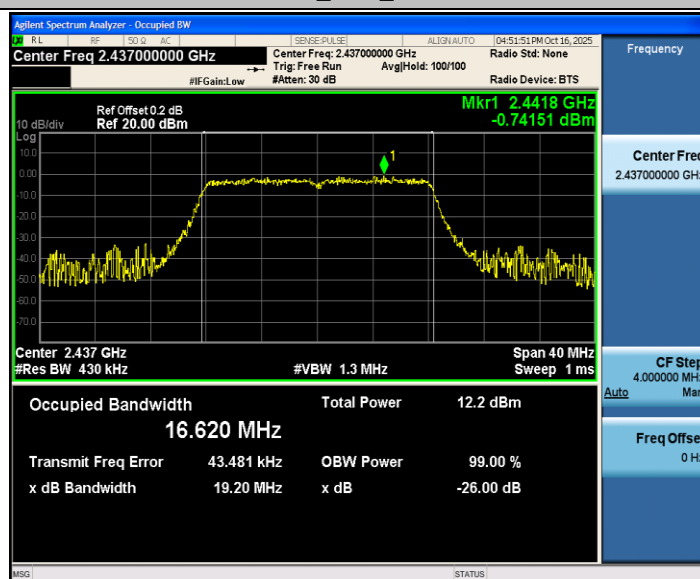
11B_Ant1_2462



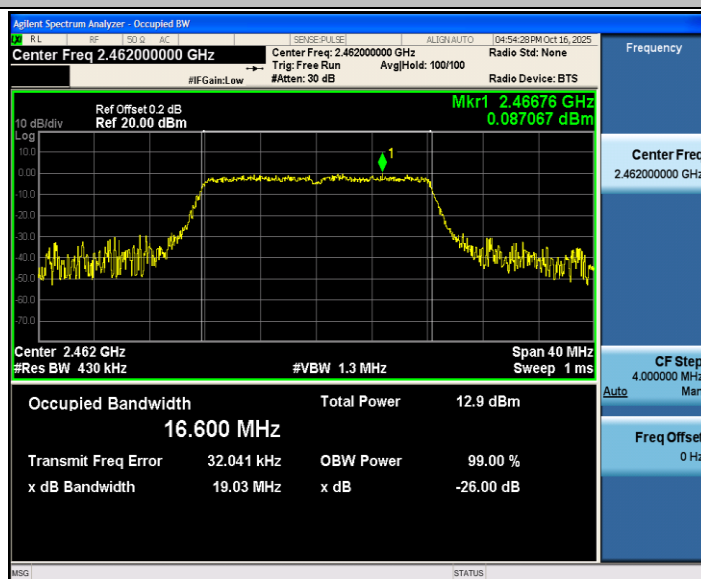
11G_Ant1_2412



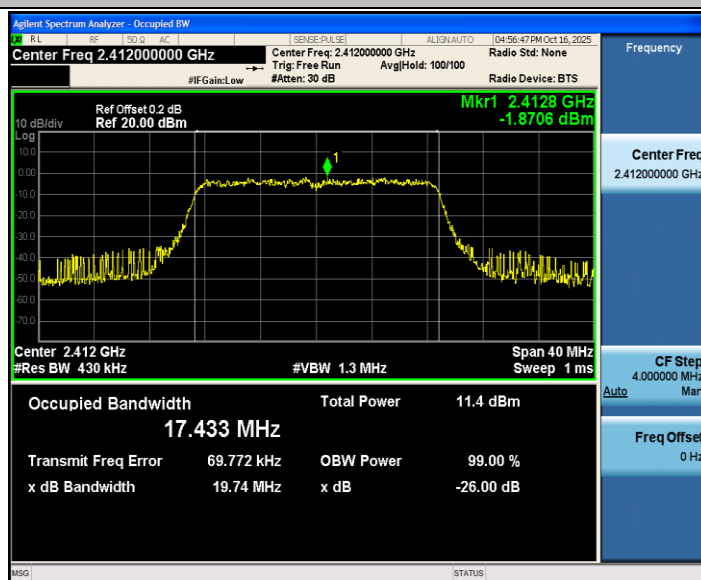
11G_Ant1_2437



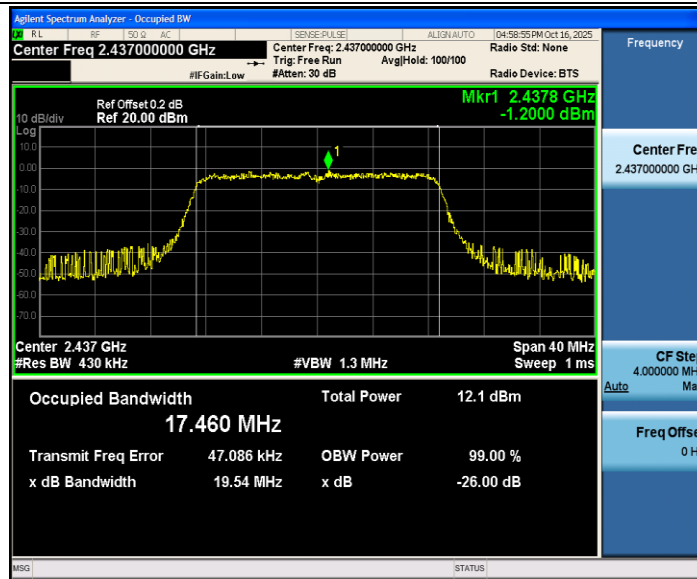
11G_Ant1_2462



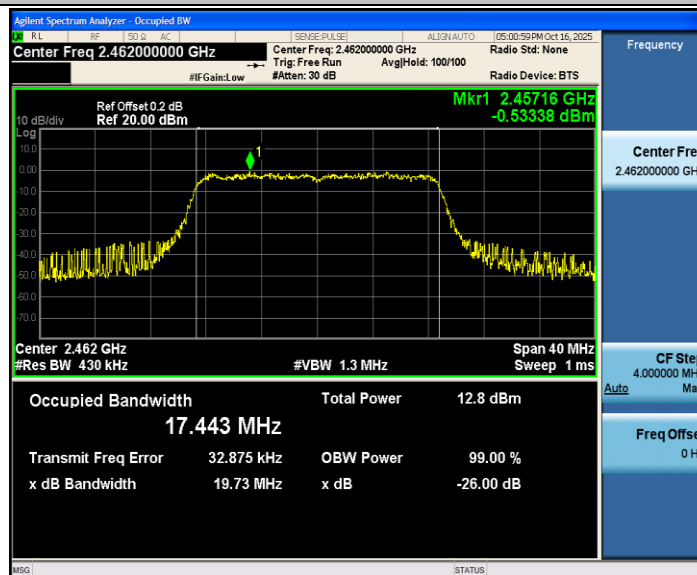
11N20SISO_Ant1_2412



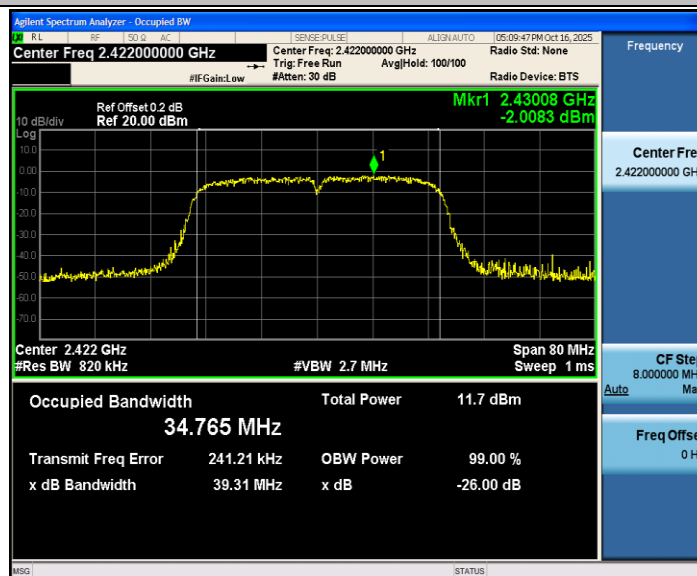
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.29	≤30.00	PASS
		2437	14.61	≤30.00	PASS
		2462	14.72	≤30.00	PASS
11G	Ant1	2412	12.29	≤30.00	PASS
		2437	12.86	≤30.00	PASS
		2462	13.57	≤30.00	PASS
11N20SISO	Ant1	2412	12.59	≤30.00	PASS
		2437	13.24	≤30.00	PASS
		2462	14.05	≤30.00	PASS
11N40SISO	Ant1	2422	11.99	≤30.00	PASS
		2437	12.07	≤30.00	PASS
		2452	12.52	≤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	-14.68	≤8.00	PASS
		2437	-14.95	≤8.00	PASS
		2462	-13.94	≤8.00	PASS
11G	Ant1	2412	-22.07	≤8.00	PASS
		2437	-21.48	≤8.00	PASS
		2462	-20.68	≤8.00	PASS
11N20SISO	Ant1	2412	-21.56	≤8.00	PASS
		2437	-21.36	≤8.00	PASS
		2462	-20.29	≤8.00	PASS
11N40SISO	Ant1	2422	-22.57	≤8.00	PASS
		2437	-22.27	≤8.00	PASS
		2452	-21.97	≤8.00	PASS

Test Graphs

11B_Ant1_2412



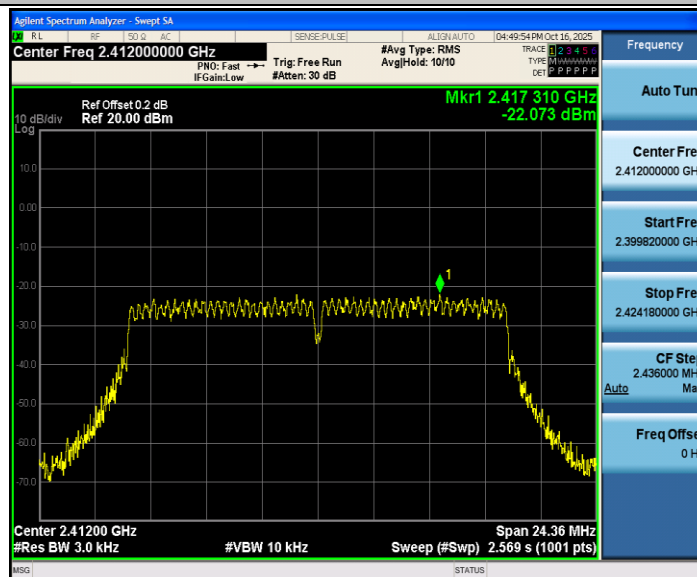
11B_Ant1_2437



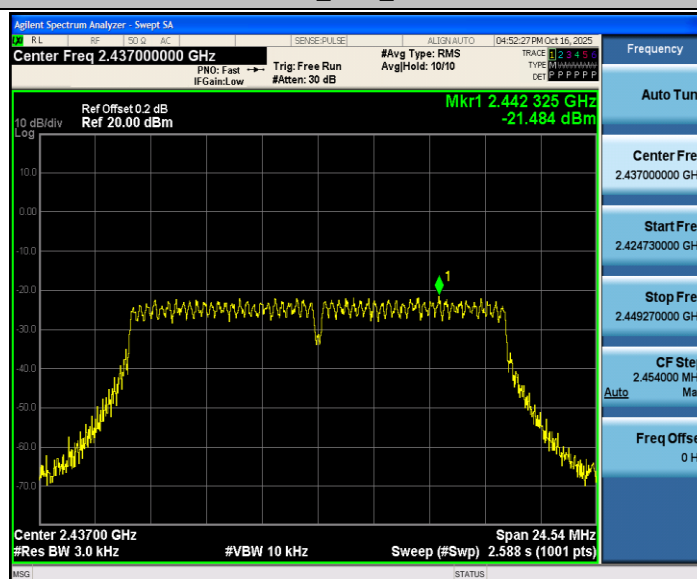
11B_Ant1_2462



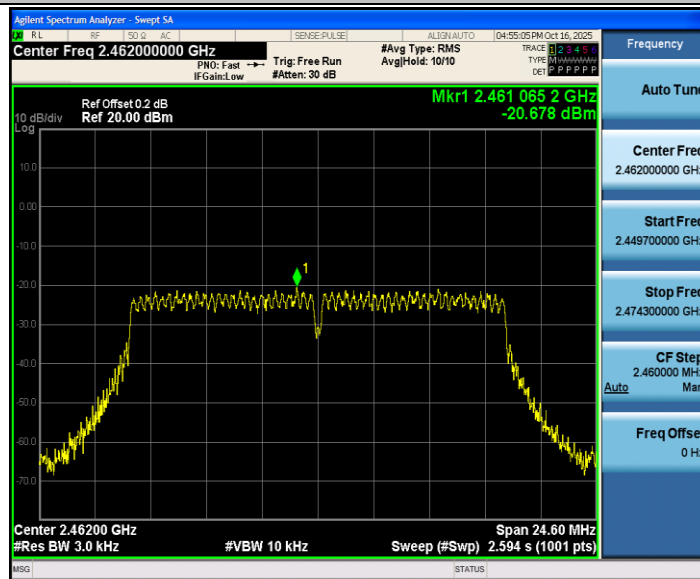
11G_Ant1_2412



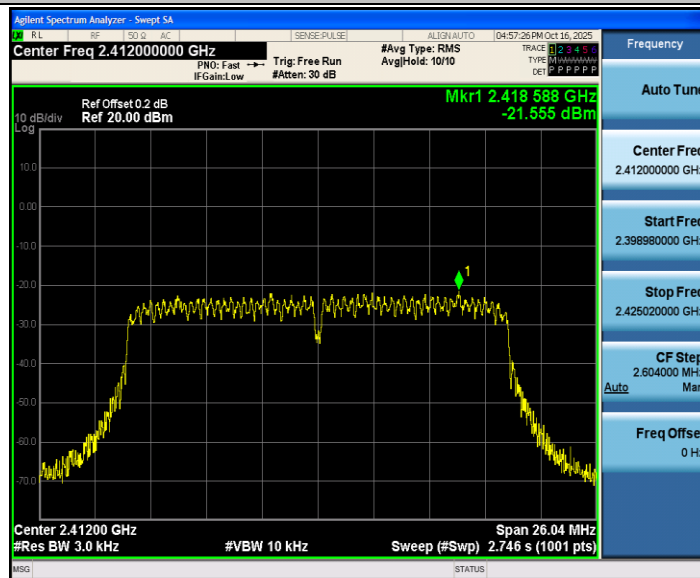
11G_Ant1_2437



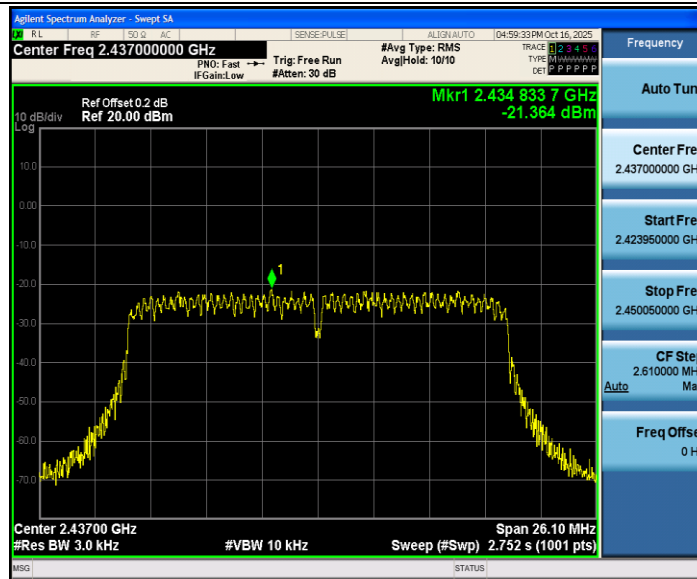
11G_Ant1_2462



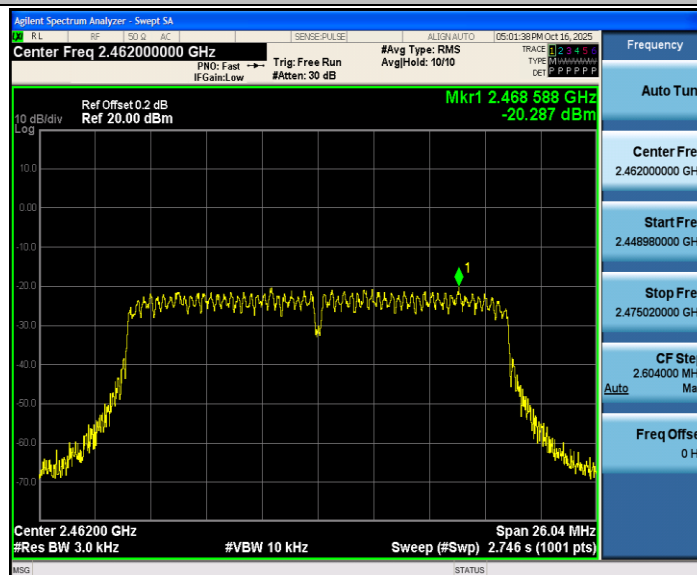
11N20SISO_Ant1_2412



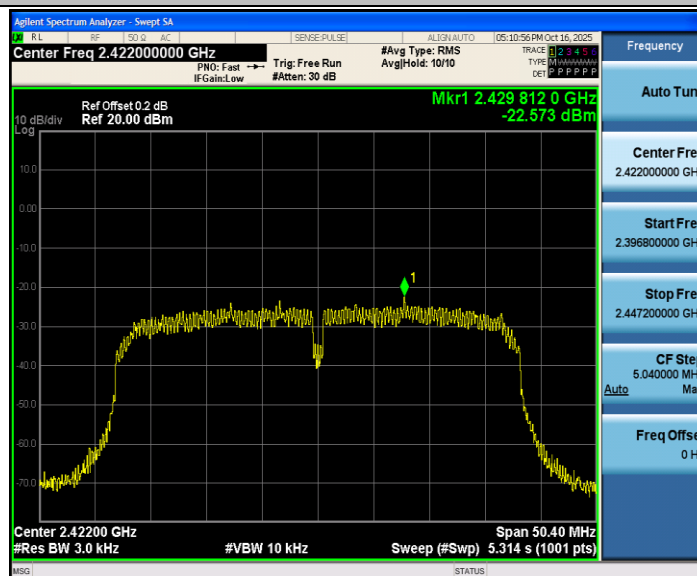
11N20SISO_Ant1_2437



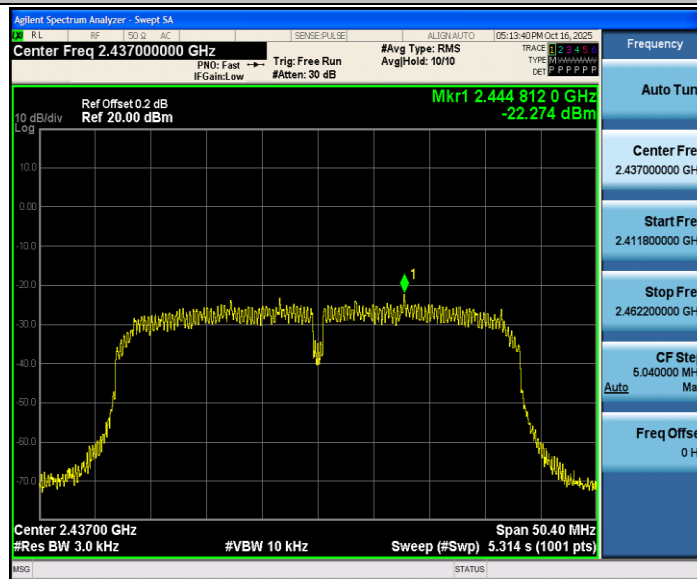
11N20SISO_Ant1_2462



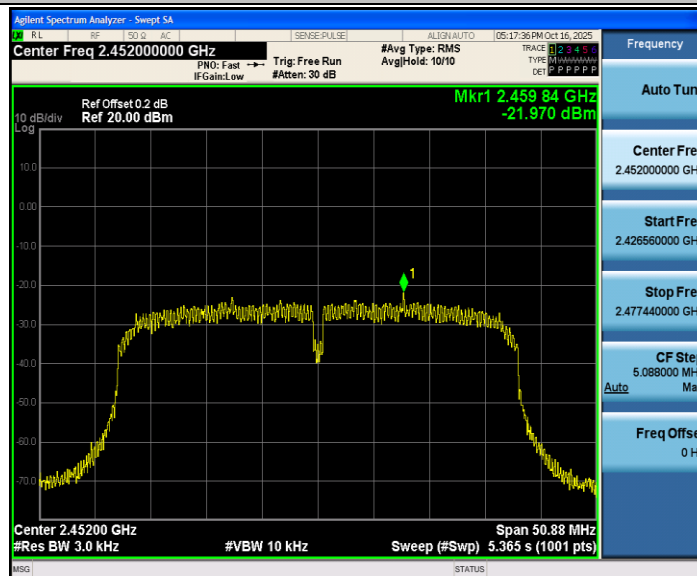
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



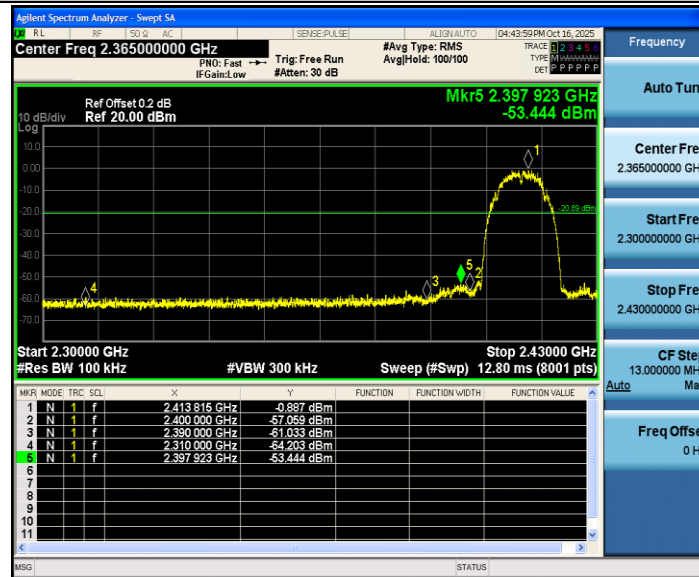
Appendix E: Band edge measurements

Test Result

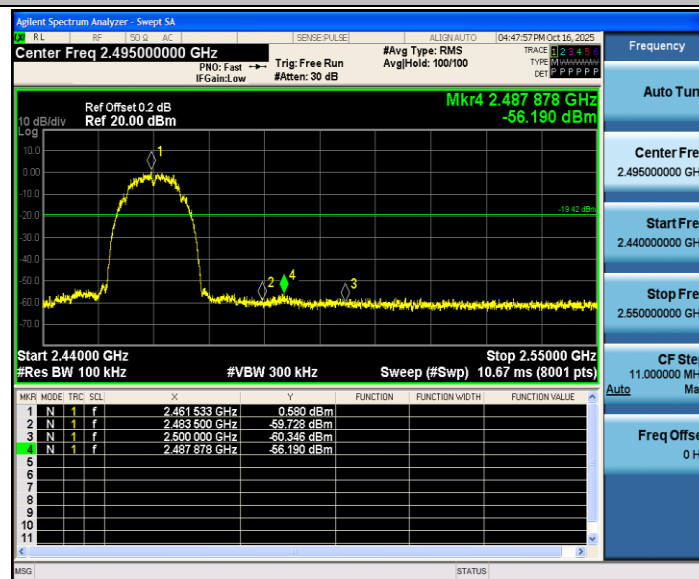
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-0.89	-53.44	≤-20.89	PASS
		High	2462	0.58	-56.19	≤-19.42	PASS
11G	Ant1	Low	2412	-7.89	-42	≤-27.89	PASS
		High	2462	-6.54	-49.81	≤-26.54	PASS
11N20SISO	Ant1	Low	2412	-8.07	-45.31	≤-28.07	PASS
		High	2462	-7.14	-53.86	≤-27.14	PASS
11N40SISO	Ant1	Low	2422	-10.79	-51.96	≤-30.79	PASS
		High	2452	-10.33	-53.79	≤-30.33	PASS

Test Graphs

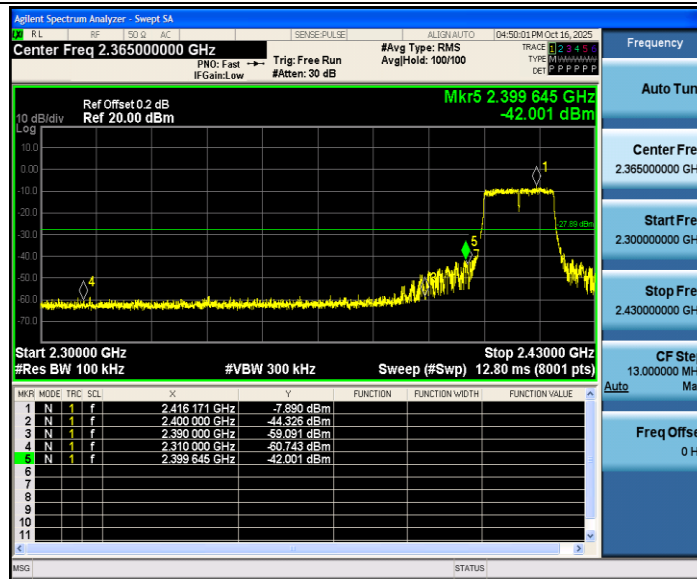
11B_Ant1_Low_2412



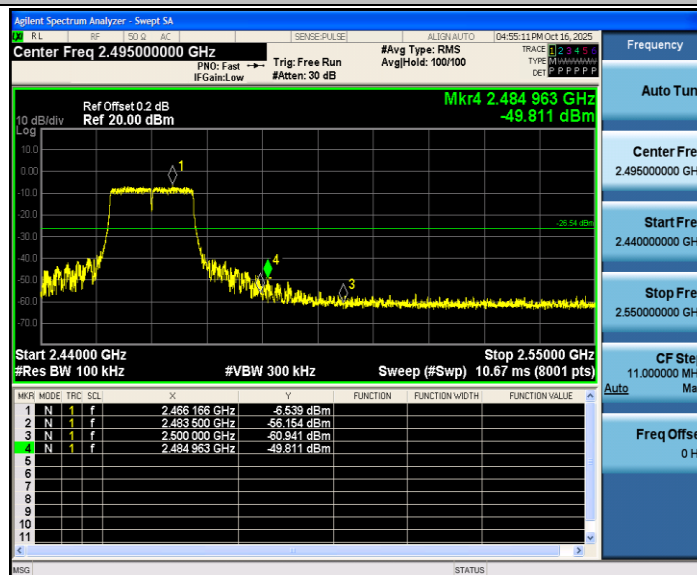
11B_Ant1_High_2462



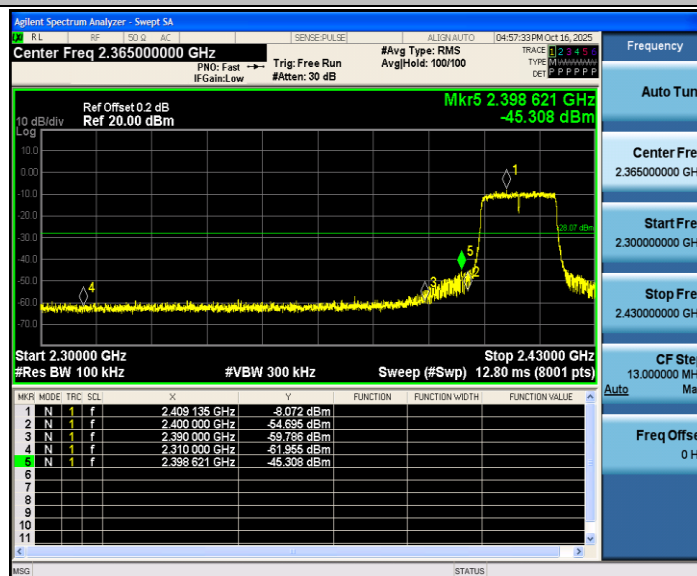
11G_Ant1_Low_2412



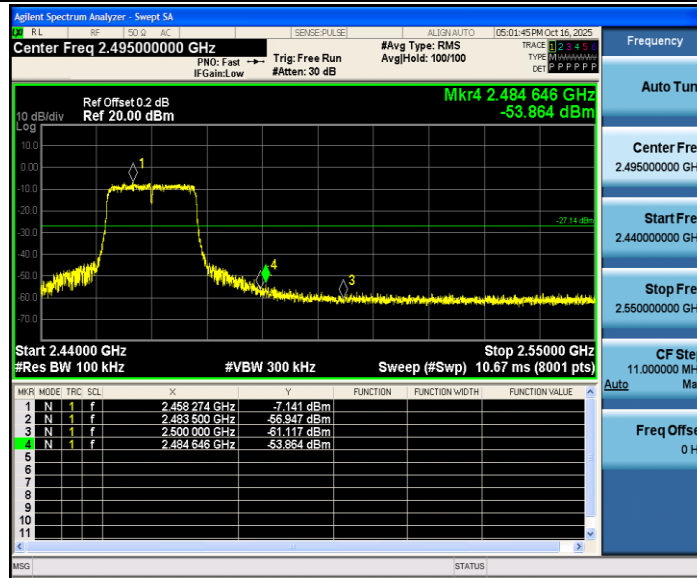
11G_Ant1_High_2462



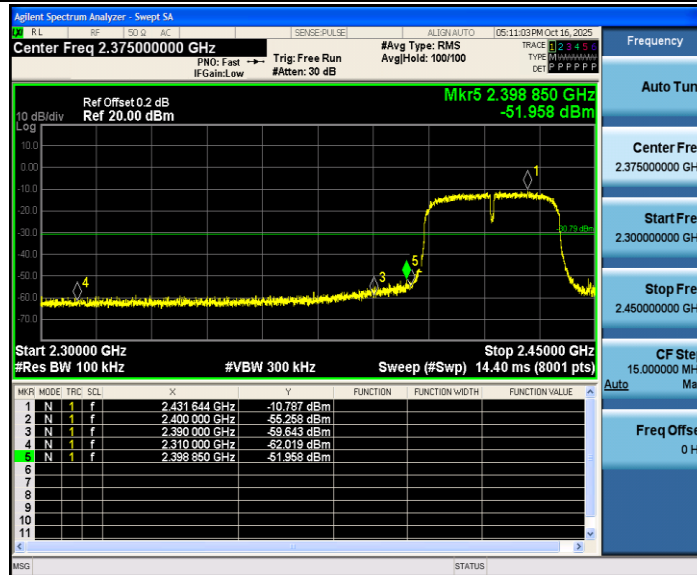
11N20SISO_Ant1_Low_2412



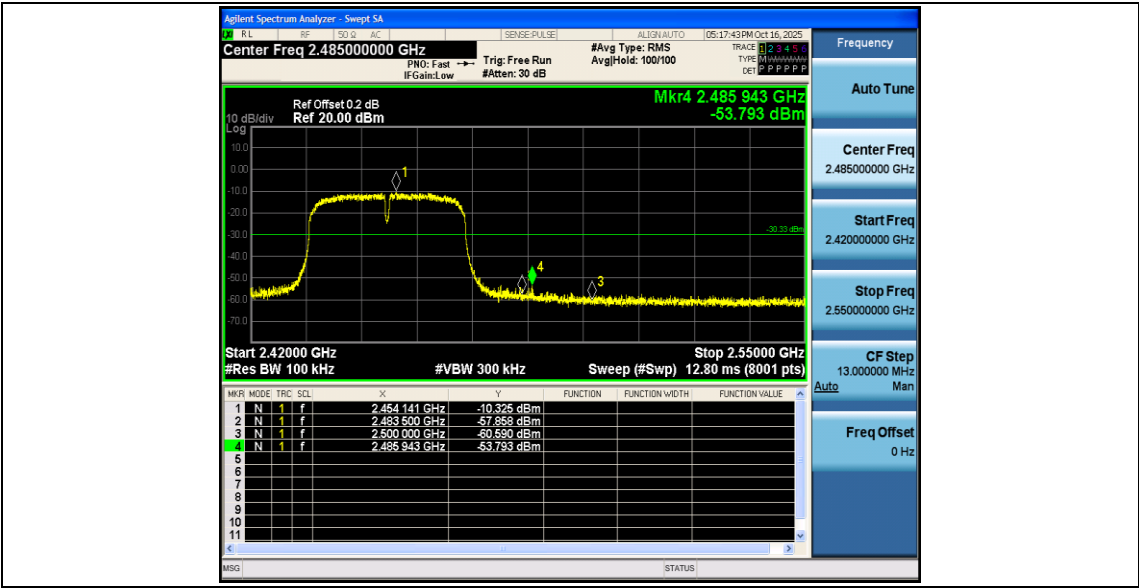
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



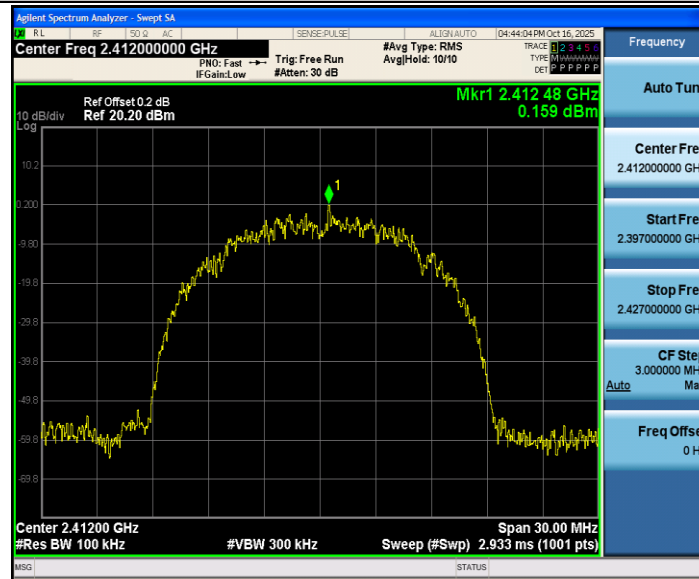
Appendix F: Conducted Spurious Emission

Test Result

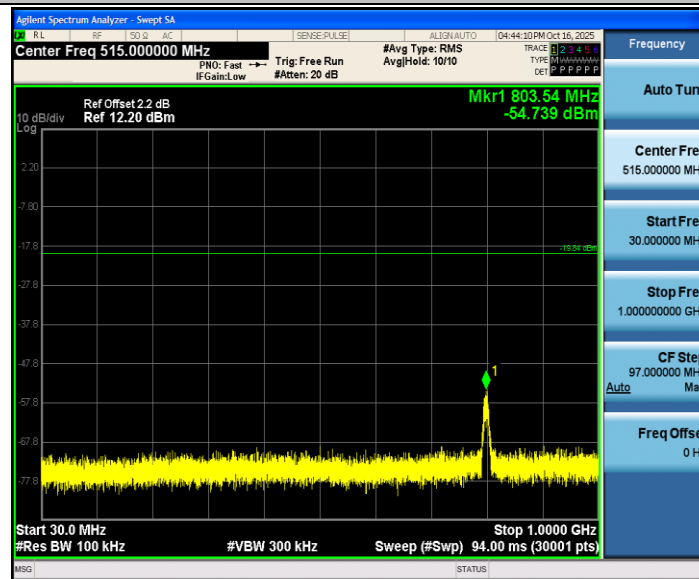
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.16	0.16	---	PASS
			30~1000	0.16	-54.74	≤-19.84	PASS
			1000~26500	0.16	-44.11	≤-19.84	PASS
		2437	Reference	-0.84	-0.84	---	PASS
			30~1000	-0.84	-56.44	≤-20.84	PASS
			1000~26500	-0.84	-44.58	≤-20.84	PASS
		2462	Reference	-1.05	-1.05	---	PASS
			30~1000	-1.05	-55.32	≤-21.05	PASS
			1000~26500	-1.05	-44.93	≤-21.05	PASS
11G	Ant1	2412	Reference	-8.50	-8.50	---	PASS
			30~1000	-8.50	-60.36	≤-28.5	PASS
			1000~26500	-8.50	-43.81	≤-28.5	PASS
		2437	Reference	-7.50	-7.50	---	PASS
			30~1000	-7.50	-60.25	≤-27.5	PASS
			1000~26500	-7.50	-44.25	≤-27.5	PASS
		2462	Reference	-7.05	-7.05	---	PASS
			30~1000	-7.05	-58.93	≤-27.05	PASS
			1000~26500	-7.05	-44.8	≤-27.05	PASS
11N20SISO	Ant1	2412	Reference	-8.58	-8.58	---	PASS
			30~1000	-8.58	-59.86	≤-28.58	PASS
			1000~26500	-8.58	-43.88	≤-28.58	PASS
		2437	Reference	-8.29	-8.29	---	PASS
			30~1000	-8.29	-60.13	≤-28.29	PASS
			1000~26500	-8.29	-38.18	≤-28.29	PASS
		2462	Reference	-7.54	-7.54	---	PASS
			30~1000	-7.54	-59.55	≤-27.54	PASS
			1000~26500	-7.54	-44.7	≤-27.54	PASS
11N40SISO	Ant1	2422	Reference	-11.40	-11.40	---	PASS
			30~1000	-11.40	-61.64	≤-31.4	PASS
			1000~26500	-11.40	-44.07	≤-31.4	PASS
		2437	Reference	-11.51	-11.51	---	PASS
			30~1000	-11.51	-62.45	≤-31.51	PASS
			1000~26500	-11.51	-44.13	≤-31.51	PASS
		2452	Reference	-11.11	-11.11	---	PASS
			30~1000	-11.11	-62.12	≤-31.11	PASS
			1000~26500	-11.11	-44.7	≤-31.11	PASS

Test Graphs

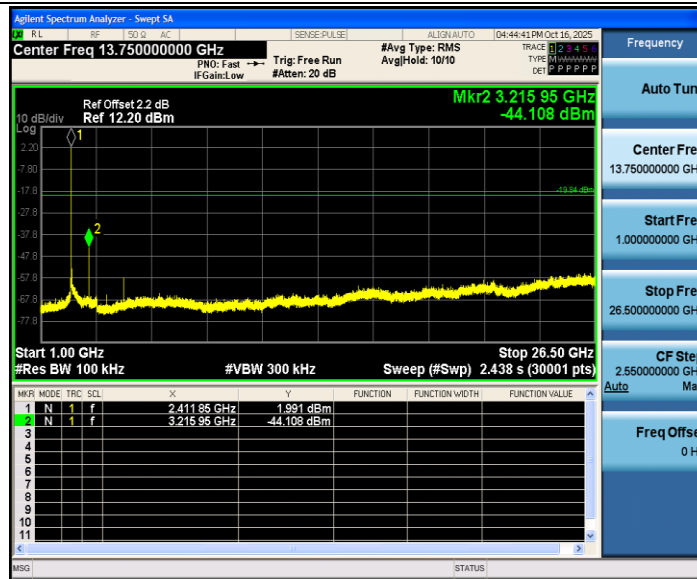
11B_Ant1_2412_0~Reference



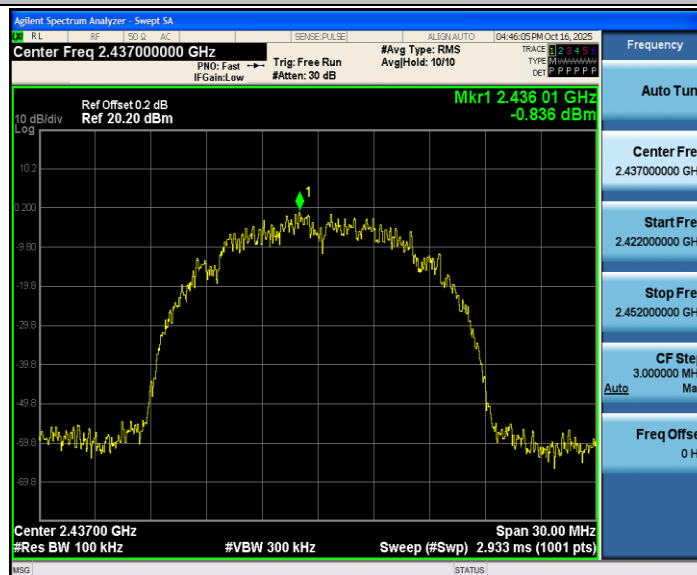
11B_Ant1_2412_30~1000



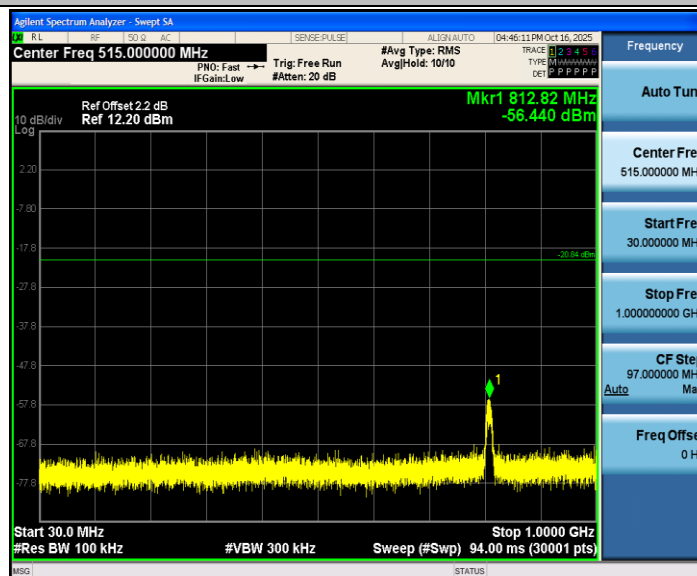
11B_Ant1_2412_1000~26500



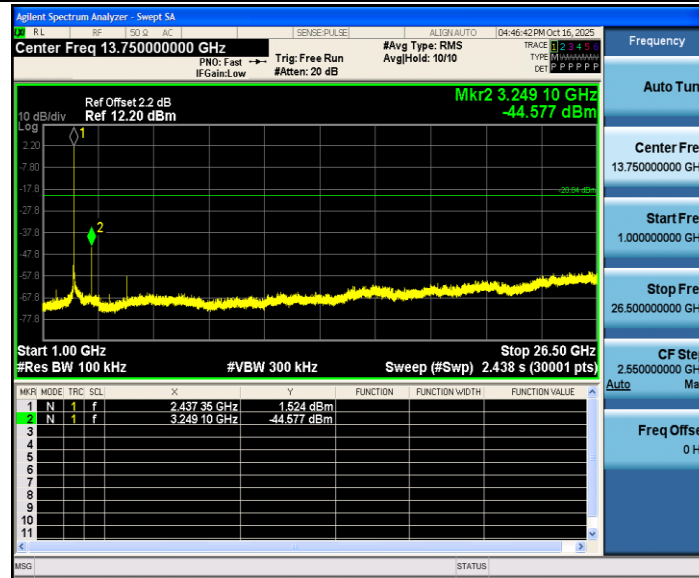
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



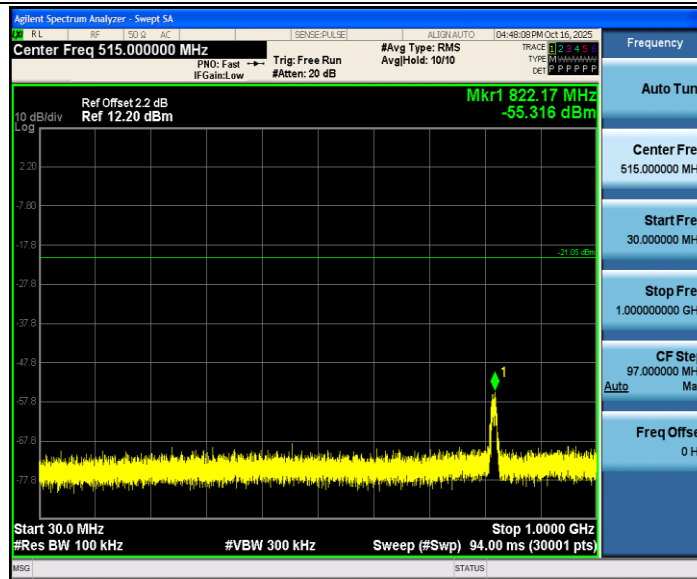
11B_Ant1_2437_1000~26500



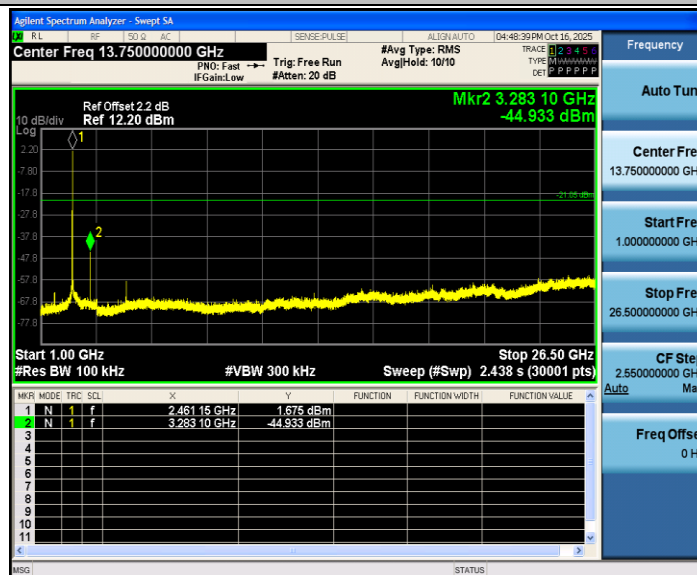
11B_Ant1_2462_0~Reference



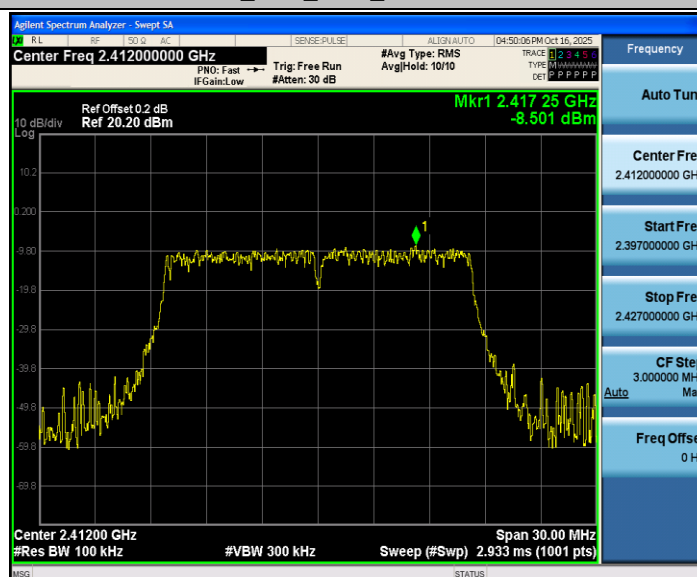
11B_Ant1_2462_30~1000



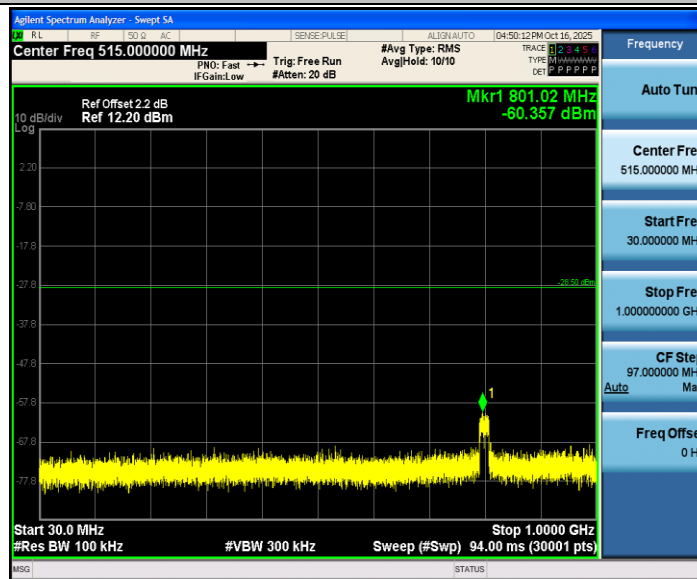
11B_Ant1_2462_1000~26500



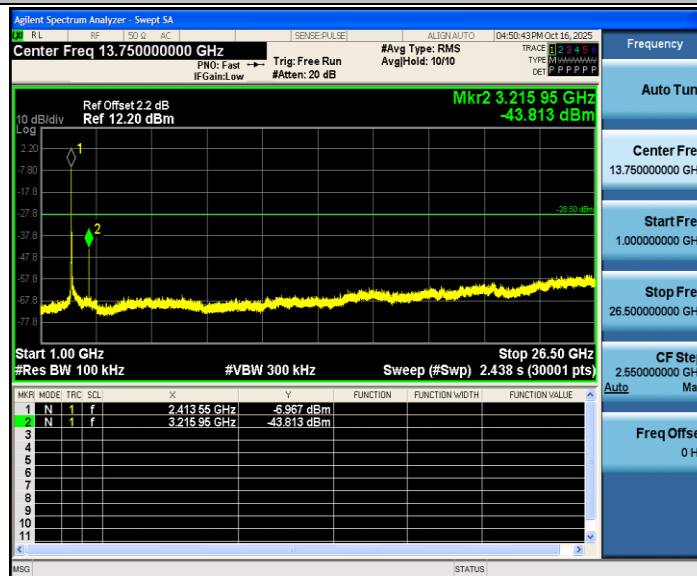
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



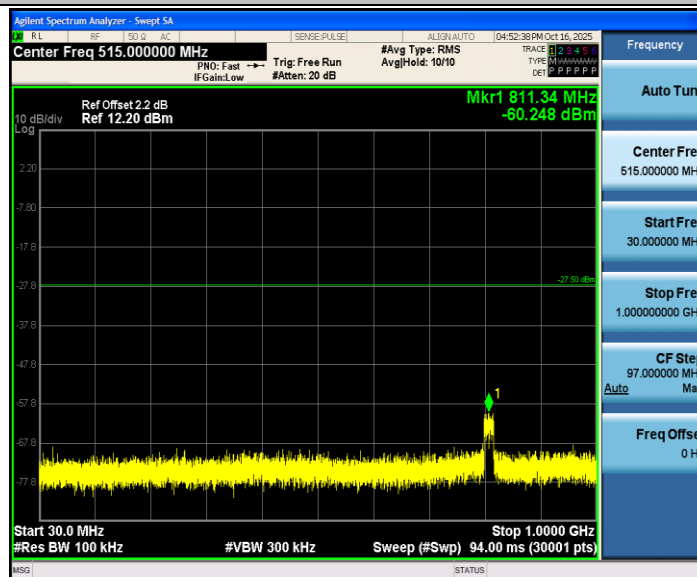
11G_Ant1_2412_1000~26500



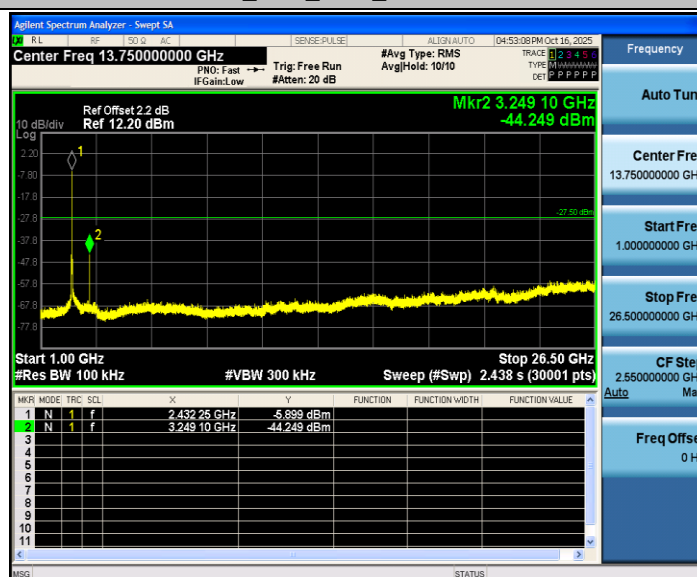
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



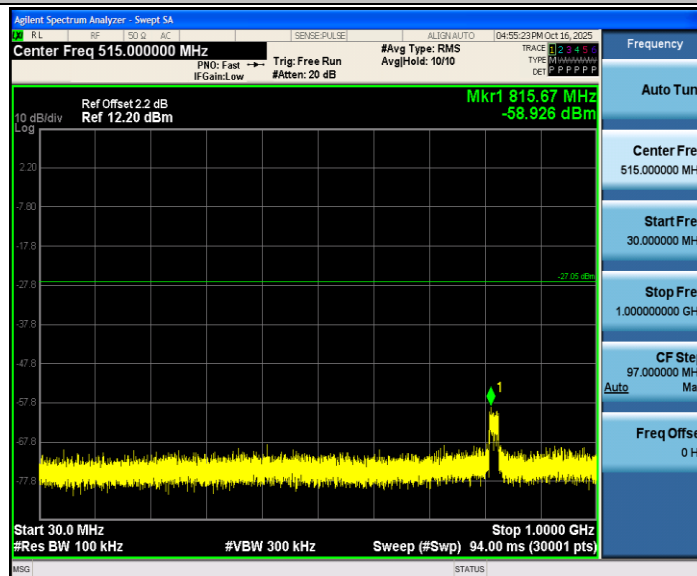
11G_Ant1_2437_1000~26500



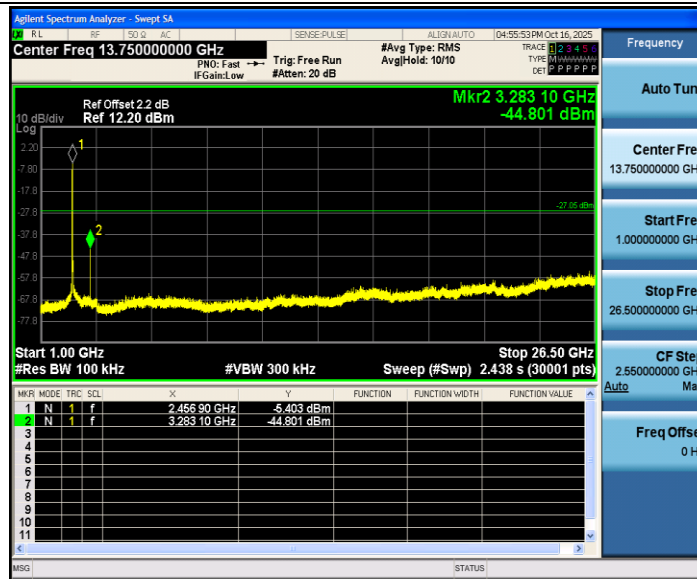
11G_Ant1_2462_0~Reference



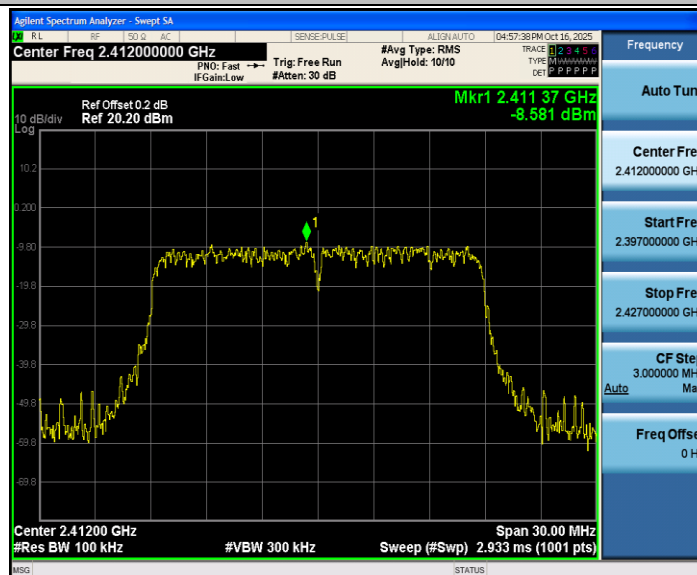
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

