

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : R38YLCPK21

**Company : Yulong Computer Telecommunication
Scientific (Shenzhen) Co., Ltd**

EUT : Smart Phone

Model Number : K21

Report No. : CTA25091901816

Reviewed By : Eric Wang

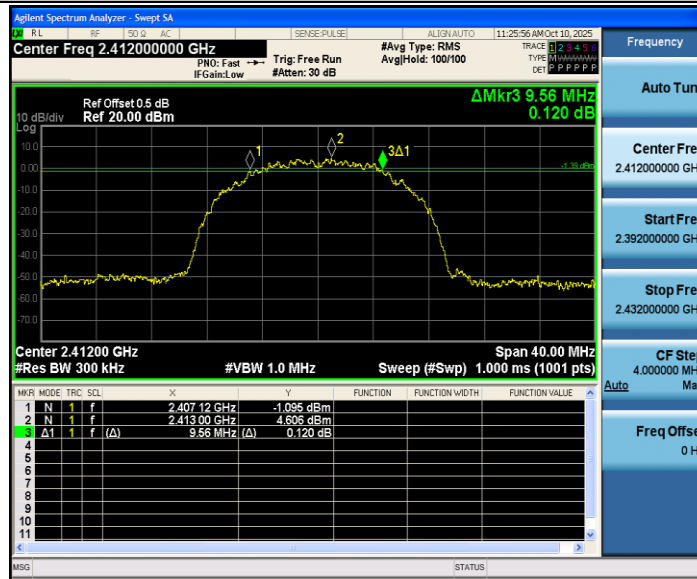
Appendix A: DTS Bandwidth

Test Result

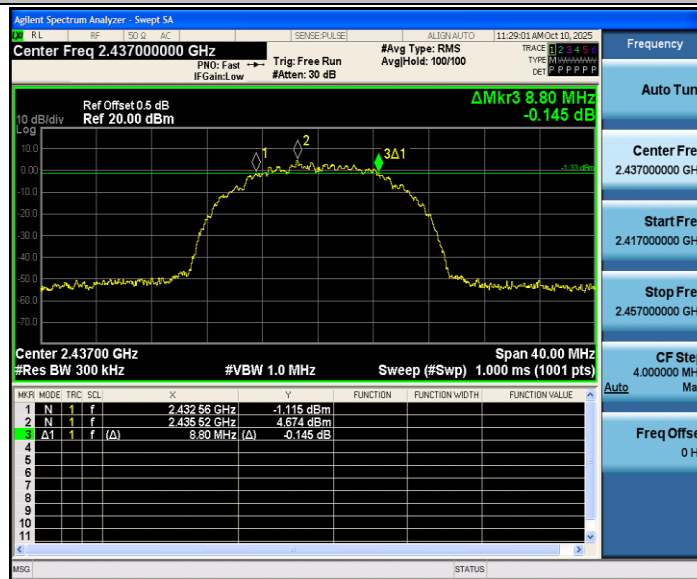
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.560	2407.120	2416.680	0.5	PASS
		2437	8.800	2432.560	2441.360	0.5	PASS
		2462	9.600	2457.000	2466.600	0.5	PASS
11G	Ant1	2412	16.440	2403.840	2420.280	0.5	PASS
		2437	16.280	2428.920	2445.200	0.5	PASS
		2462	16.360	2453.880	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.440	2403.320	2420.760	0.5	PASS
		2437	17.240	2428.440	2445.680	0.5	PASS
		2462	17.280	2453.440	2470.720	0.5	PASS
11N40SISO	Ant1	2422	34.160	2405.040	2439.200	0.5	PASS
		2437	33.840	2420.200	2454.040	0.5	PASS
		2452	33.760	2435.280	2469.040	0.5	PASS

Test Graphs

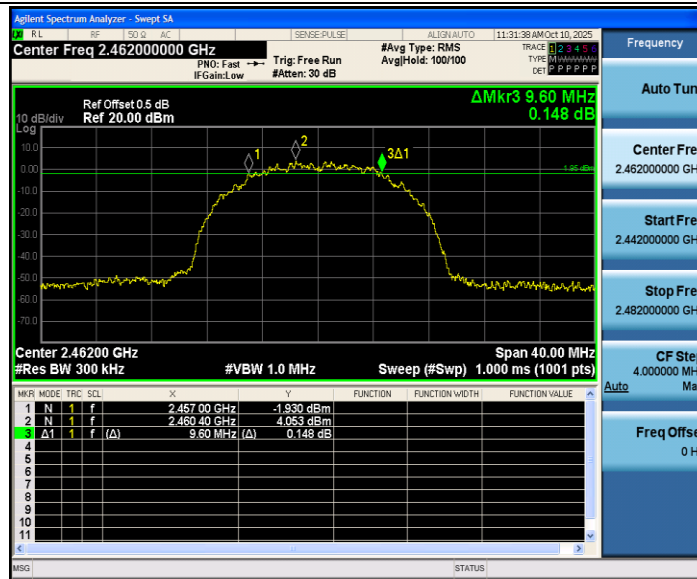
11B_Ant1_2412



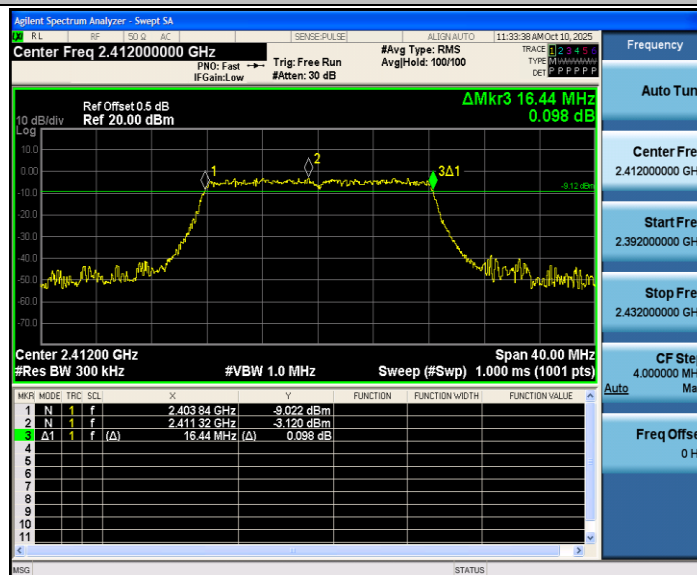
11B_Ant1_2437



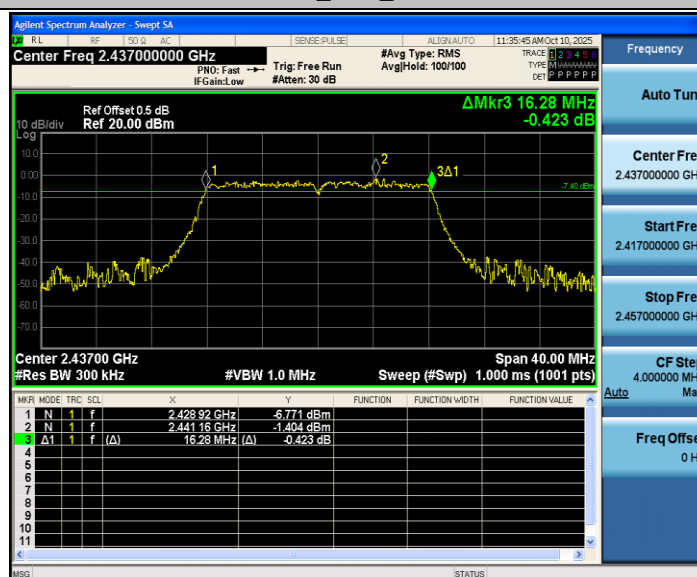
11B_Ant1_2462



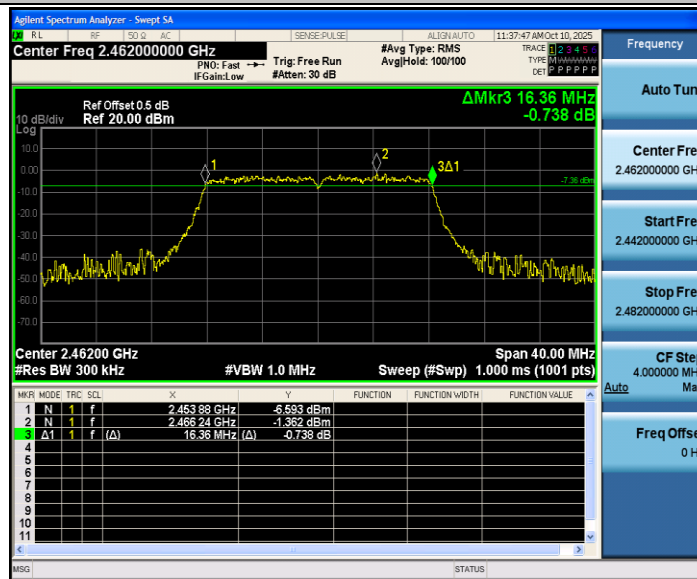
11G_Ant1_2412



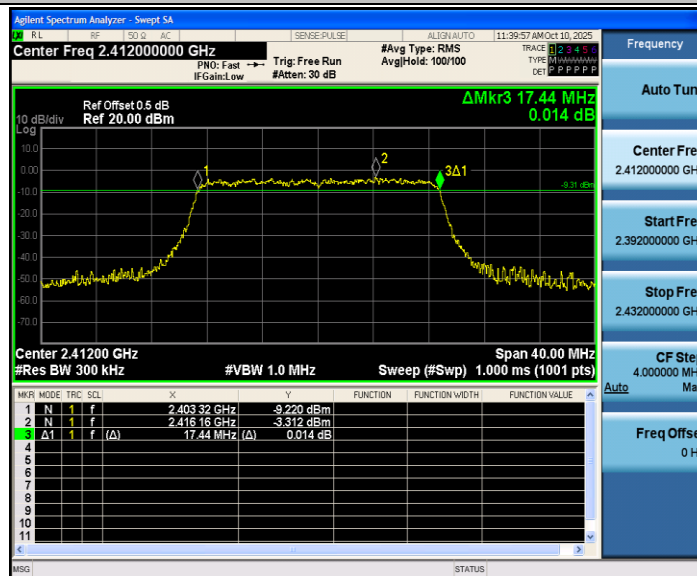
11G_Ant1_2437



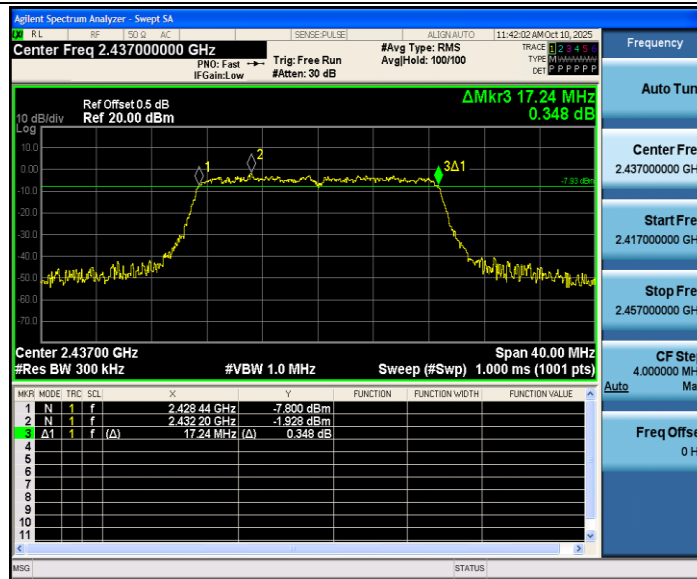
11G_Ant1_2462



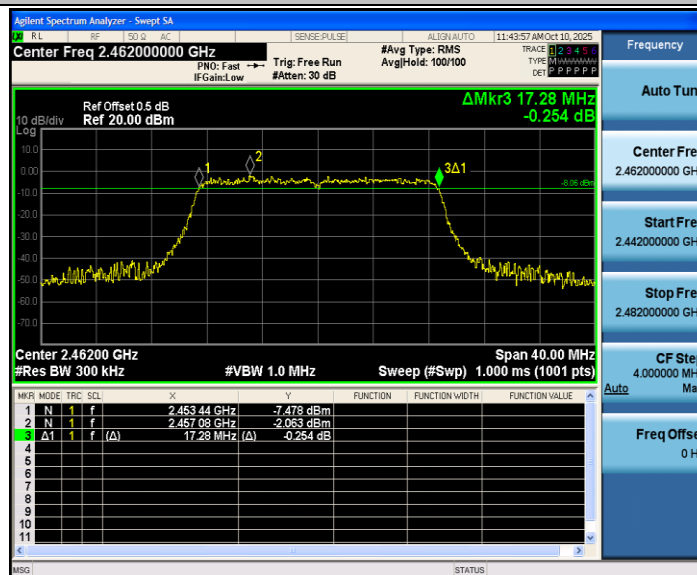
11N20SISO_Ant1_2412



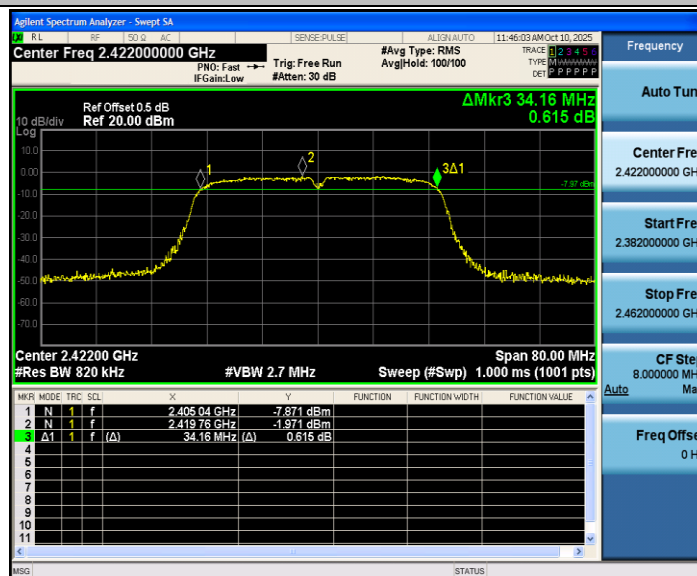
11N20SISO_Ant1_2437



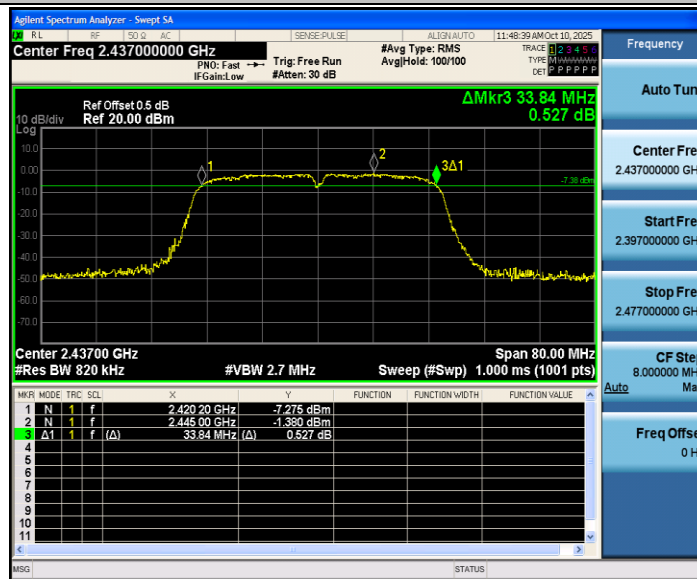
11N20SISO_Ant1_2462



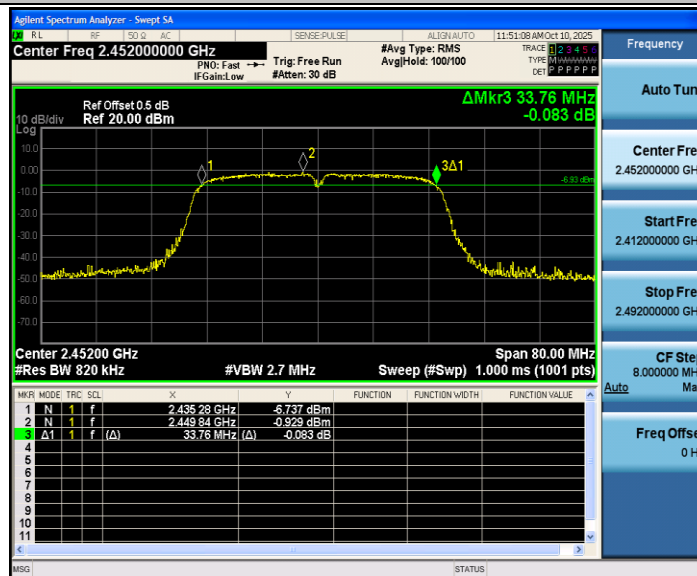
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



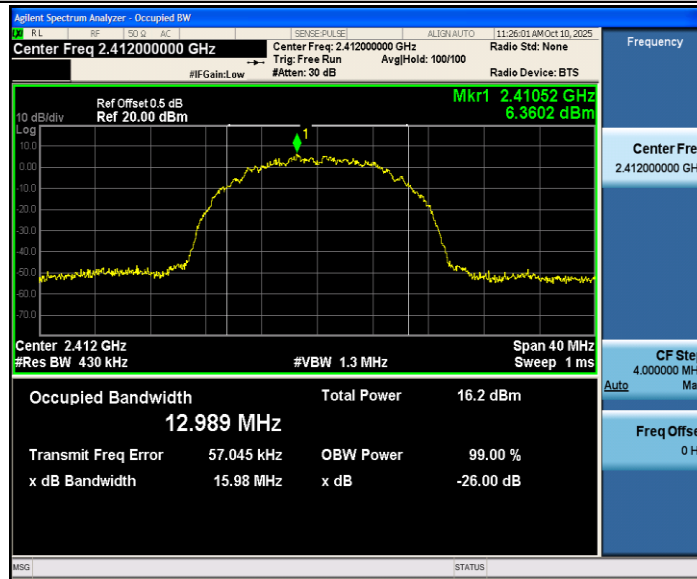
Appendix B: Occupied Channel Bandwidth

Test Result

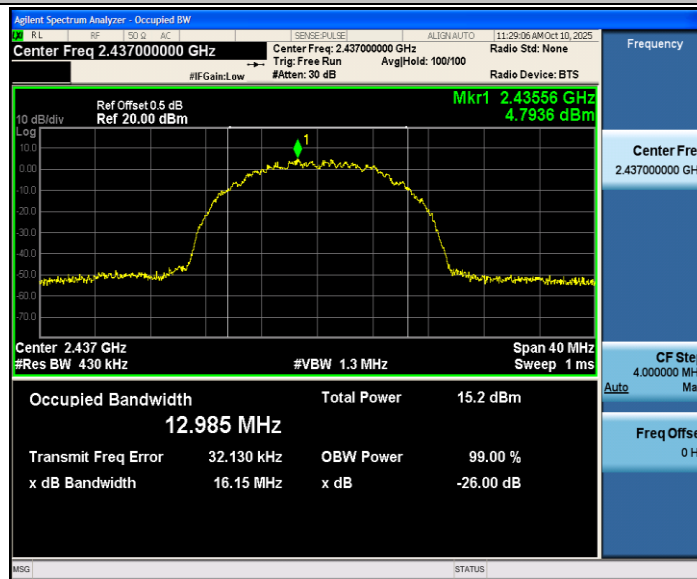
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.989	2405.5625	2418.5515	---	---
		2437	12.985	2430.5396	2443.5246	---	---
		2462	13.018	2455.4945	2468.5125	---	---
11G	Ant1	2412	16.580	2403.7478	2420.3278	---	---
		2437	16.550	2428.7609	2445.3109	---	---
		2462	16.563	2453.7508	2470.3138	---	---
11N20SISO	Ant1	2412	17.443	2403.3290	2420.7720	---	---
		2437	17.473	2428.2947	2445.7677	---	---
		2462	17.432	2453.3330	2470.7650	---	---
11N40SISO	Ant1	2422	34.787	2404.7668	2439.5538	---	---
		2437	34.786	2419.7382	2454.5242	---	---
		2452	34.808	2434.7084	2469.5164	---	---

Test Graphs

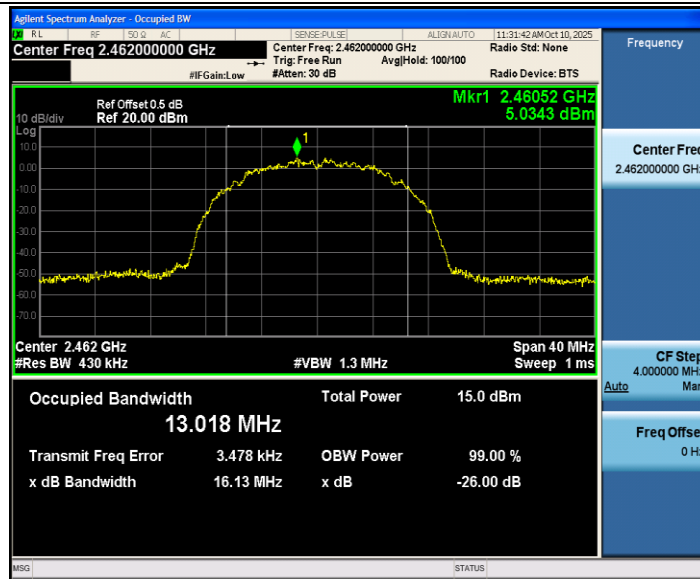
11B_Ant1_2412



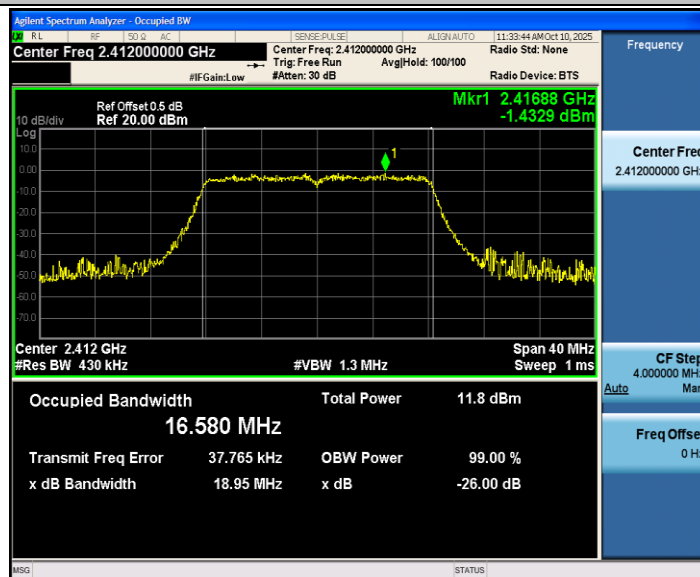
11B_Ant1_2437



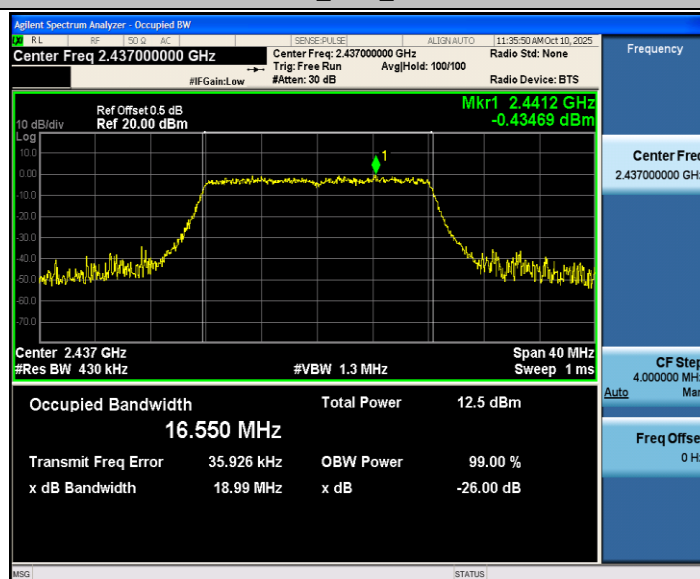
11B_Ant1_2462



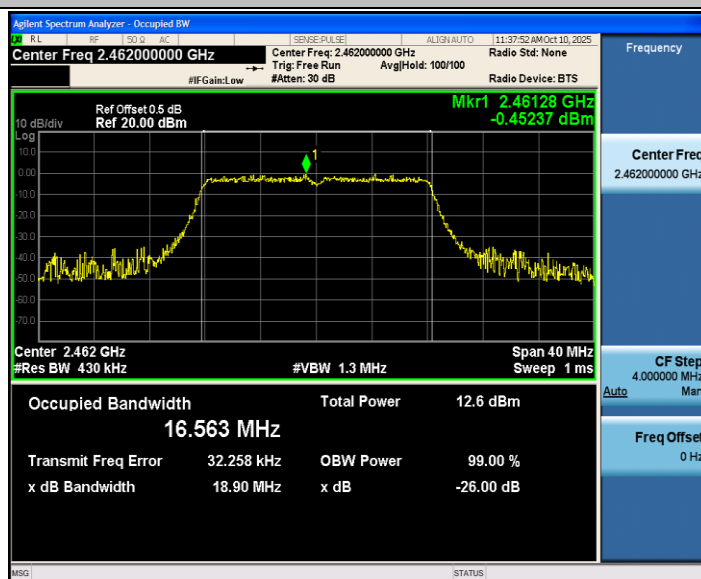
11G_Ant1_2412



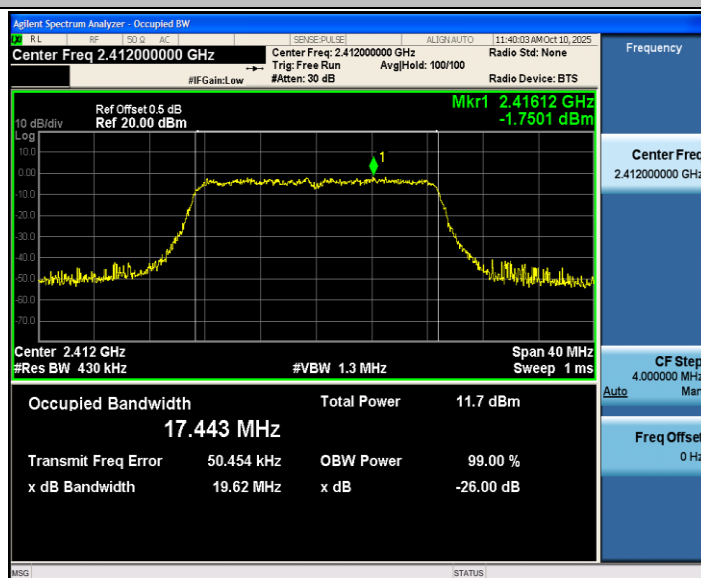
11G_Ant1_2437



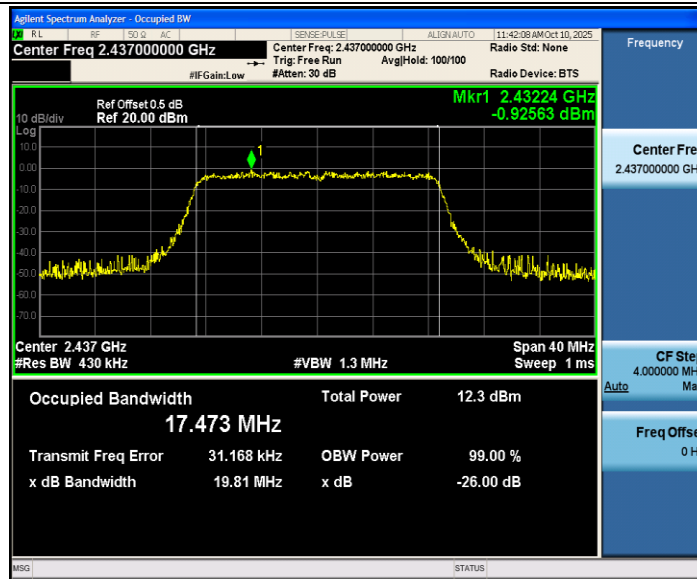
11G_Ant1_2462



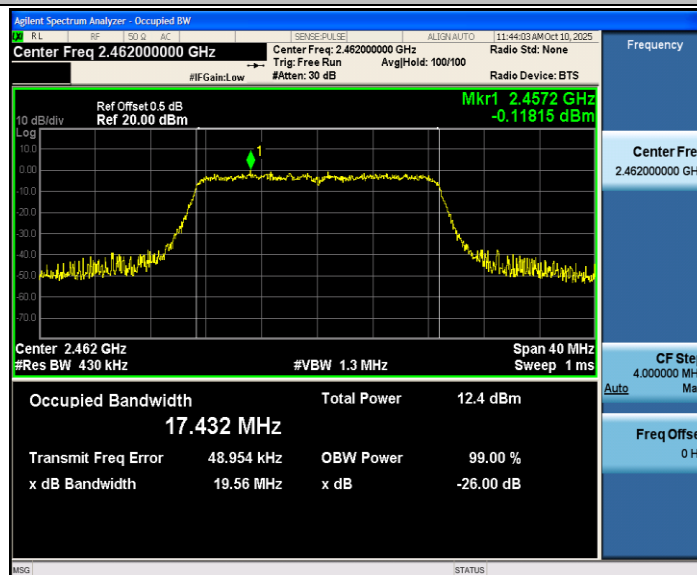
11N20SISO_Ant1_2412



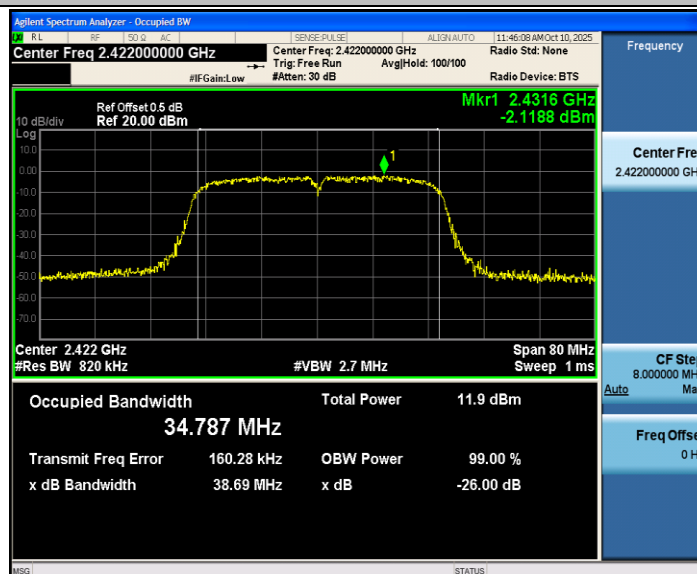
11N20SISO_Ant1_2437



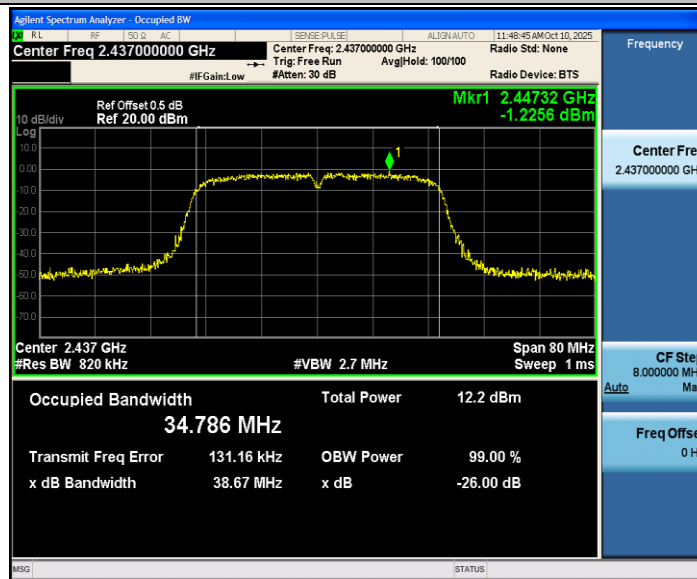
11N20SISO_Ant1_2462



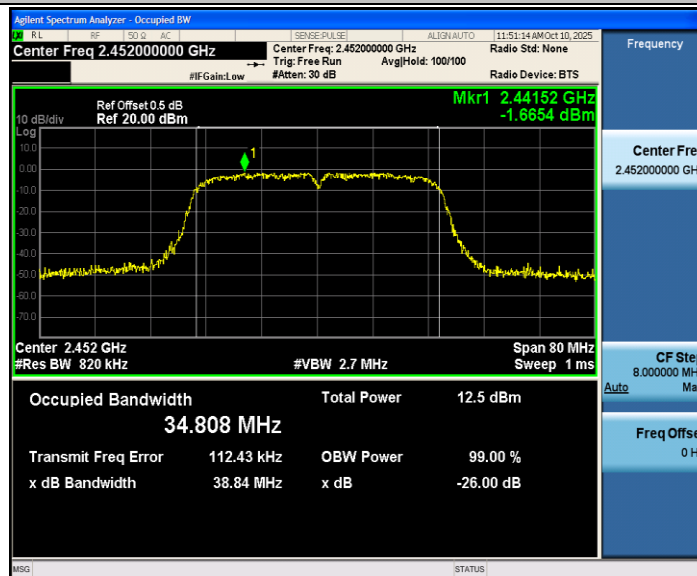
11N40SISO_Ant1_2422



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	14.67	≤30.00	PASS
		2437	14.68	≤30.00	PASS
		2462	14.76	≤30.00	PASS
11G	Ant1	2412	12.67	≤30.00	PASS
		2437	13.32	≤30.00	PASS
		2462	13.41	≤30.00	PASS
11N20SISO	Ant1	2412	12.89	≤30.00	PASS
		2437	13.51	≤30.00	PASS
		2462	13.64	≤30.00	PASS
11N40SISO	Ant1	2422	12.09	≤30.00	PASS
		2437	12.58	≤30.00	PASS
		2452	12.60	≤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	-15.12	≤8.00	PASS
		2437	-15.05	≤8.00	PASS
		2462	-14.29	≤8.00	PASS
11G	Ant1	2412	-21.88	≤8.00	PASS
		2437	-21.10	≤8.00	PASS
		2462	-21.12	≤8.00	PASS
11N20SISO	Ant1	2412	-21.62	≤8.00	PASS
		2437	-20.92	≤8.00	PASS
		2462	-20.62	≤8.00	PASS
11N40SISO	Ant1	2422	-22.60	≤8.00	PASS
		2437	-22.39	≤8.00	PASS
		2452	-22.68	≤8.00	PASS

Test Graphs

11B_Ant1_2412



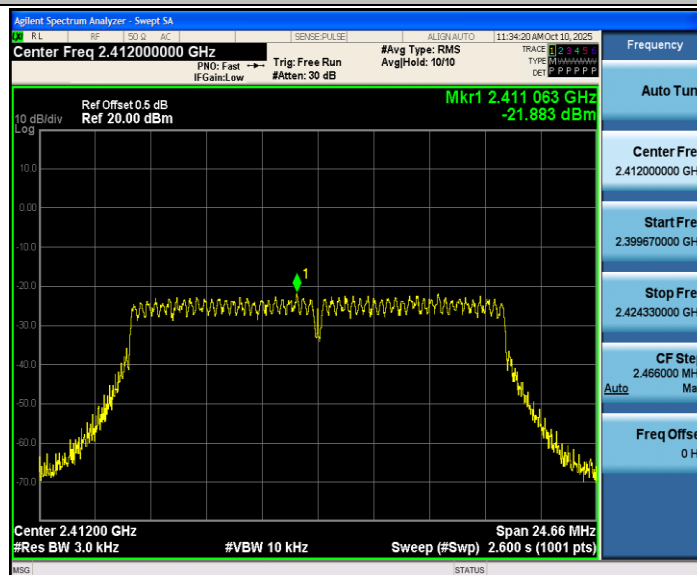
11B_Ant1_2437



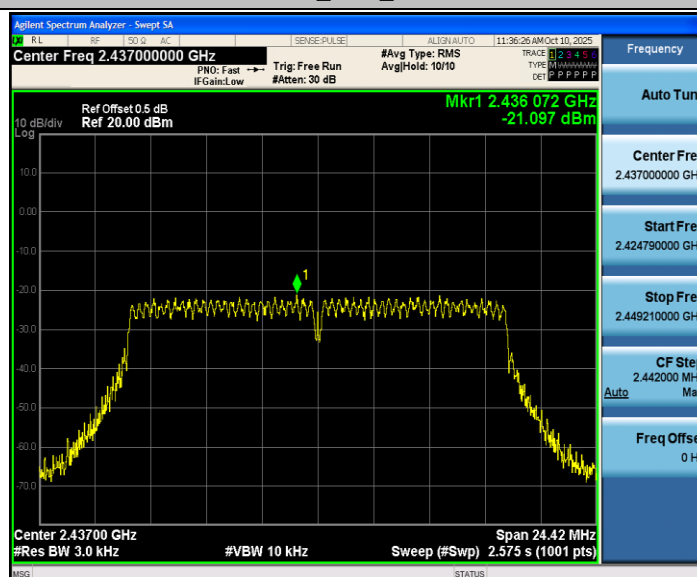
11B_Ant1_2462



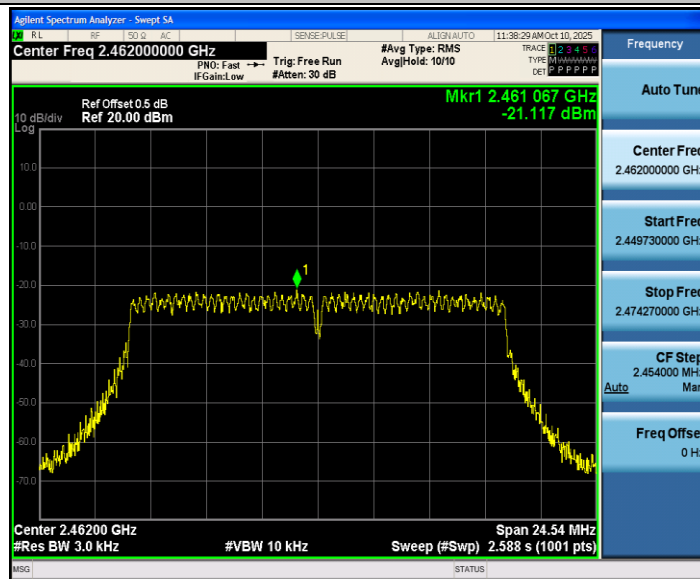
11G_Ant1_2412



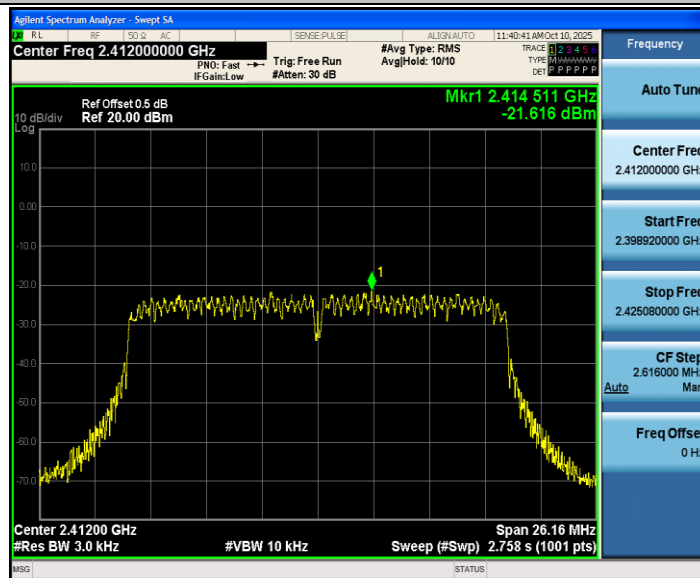
11G_Ant1_2437



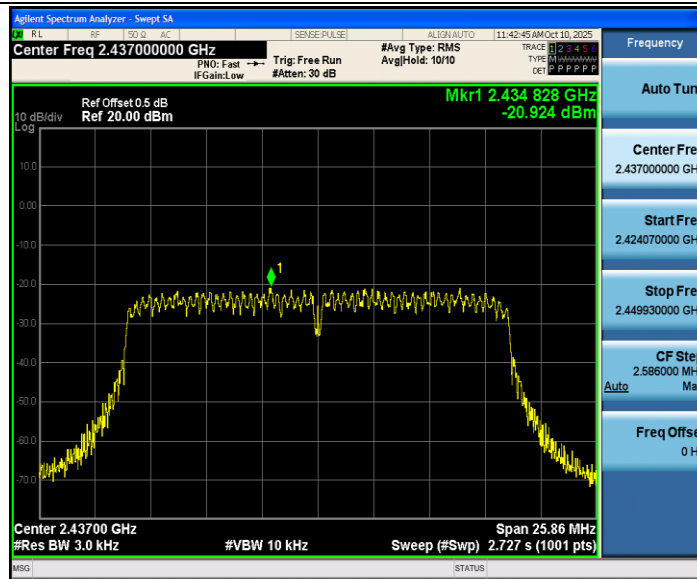
11G_Ant1_2462



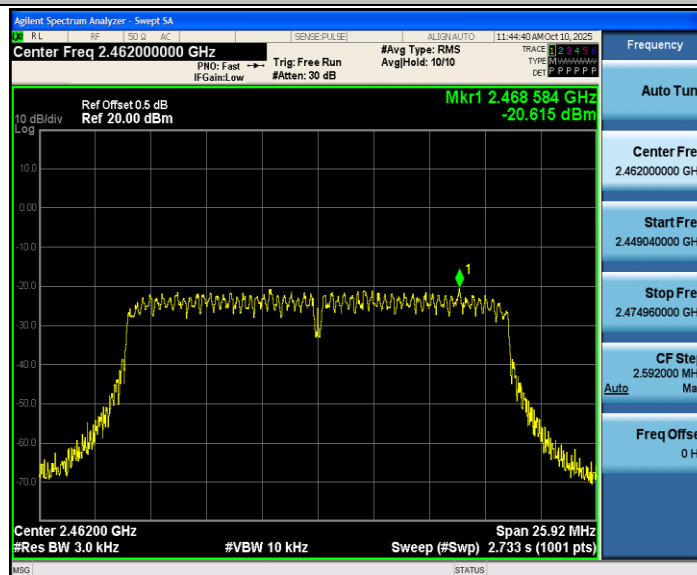
11N20SISO_Ant1_2412



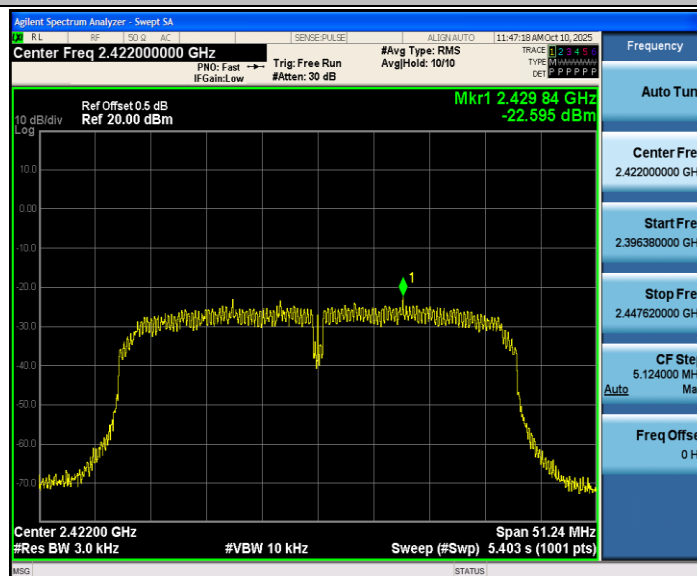
11N20SISO_Ant1_2437



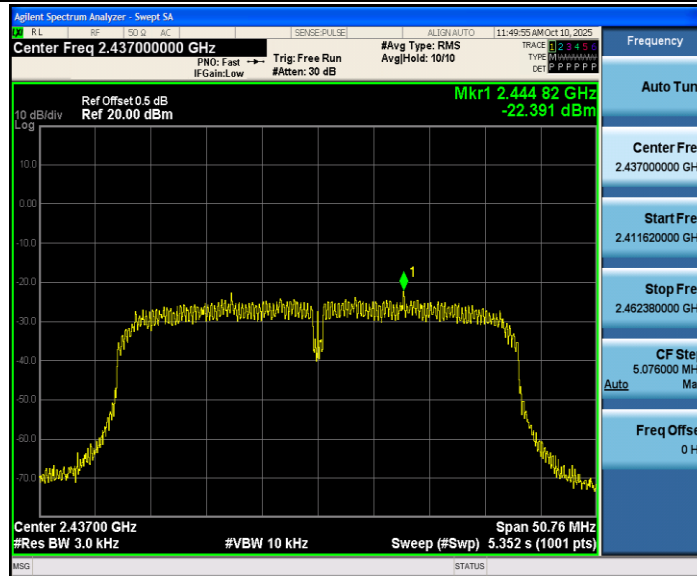
11N20SISO_Ant1_2462



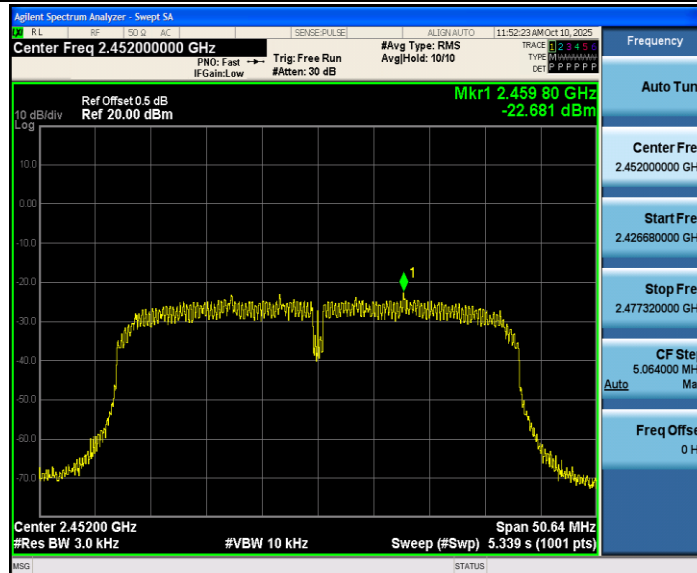
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



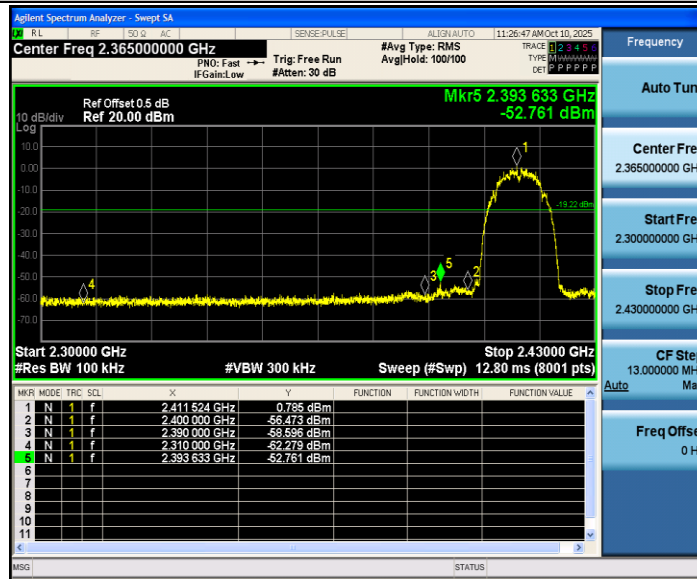
Appendix E: Band edge measurements

Test Result

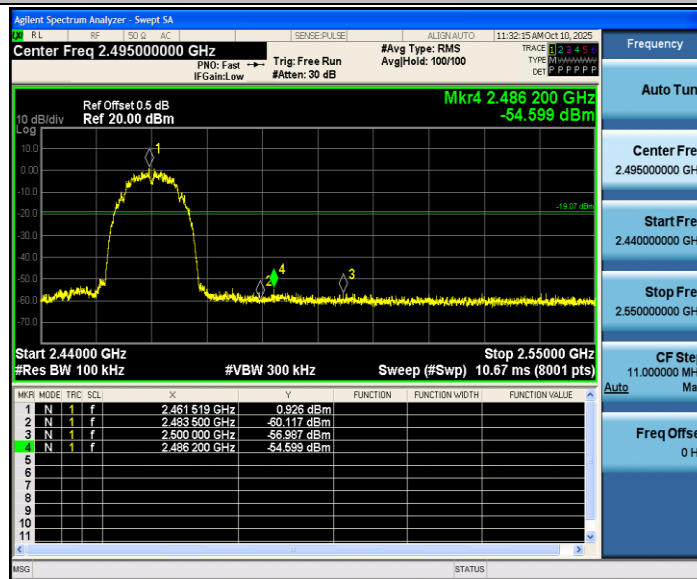
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	0.79	-52.76	≤-19.22	PASS
		High	2462	0.93	-54.6	≤-19.07	PASS
11G	Ant1	Low	2412	-7.92	-48.01	≤-27.92	PASS
		High	2462	-7.34	-54.43	≤-27.34	PASS
11N20SISO	Ant1	Low	2412	-8.26	-48.88	≤-28.26	PASS
		High	2462	-7.01	-55.55	≤-27.01	PASS
11N40SISO	Ant1	Low	2422	-11.12	-49.94	≤-31.12	PASS
		High	2452	-10.31	-53.94	≤-30.31	PASS

Test Graphs

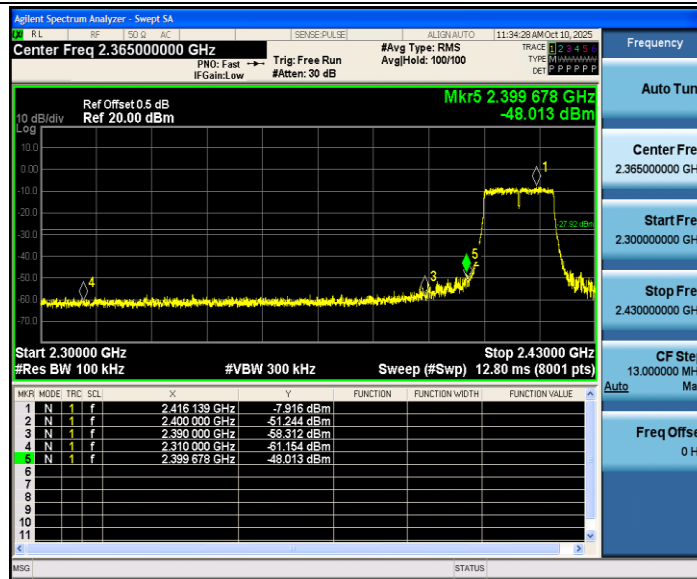
11B_Ant1_Low_2412



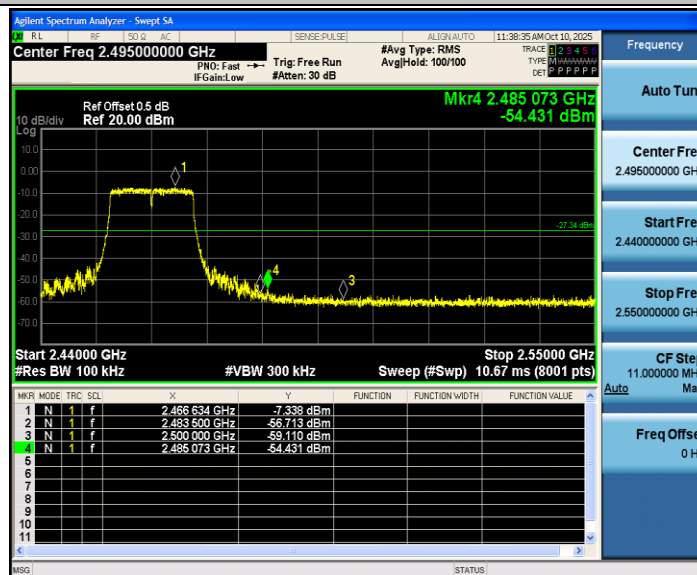
11B_Ant1_High_2462



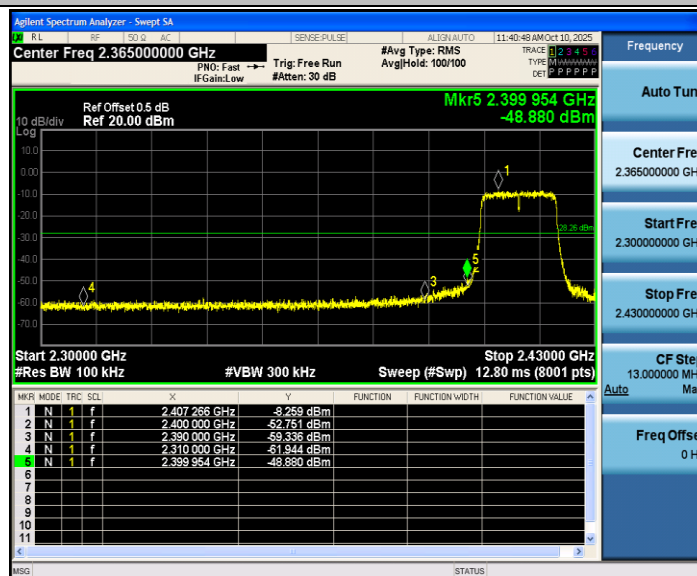
11G_Ant1_Low_2412



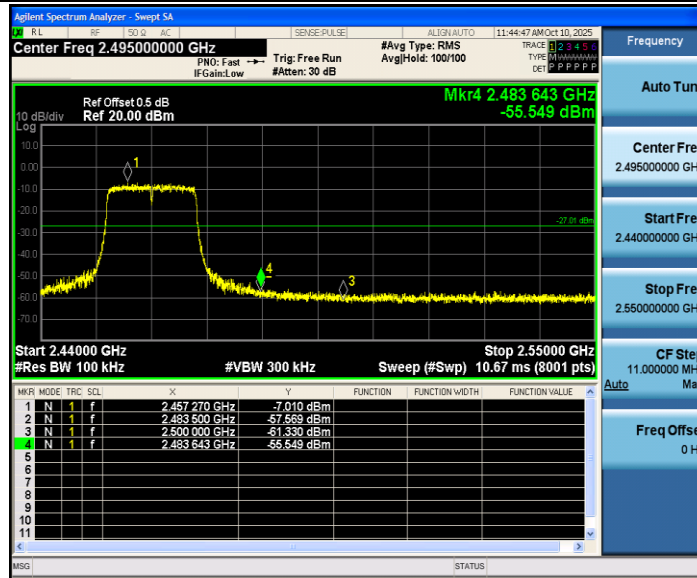
11G_Ant1_High_2462



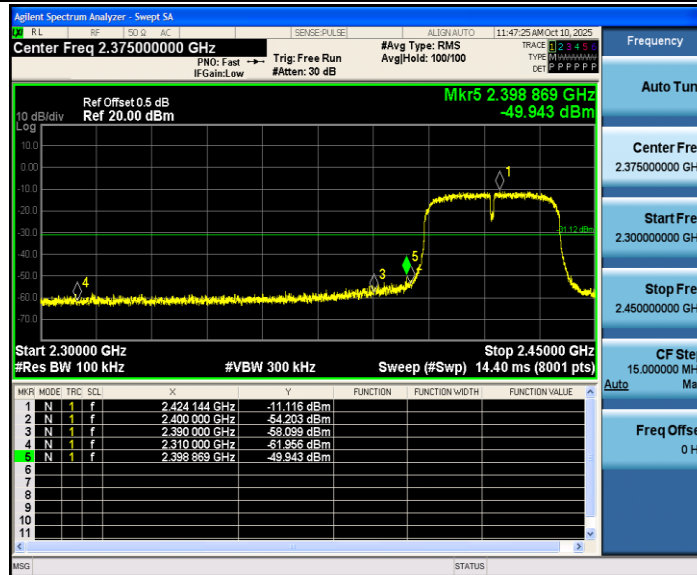
11N20SISO_Ant1_Low_2412



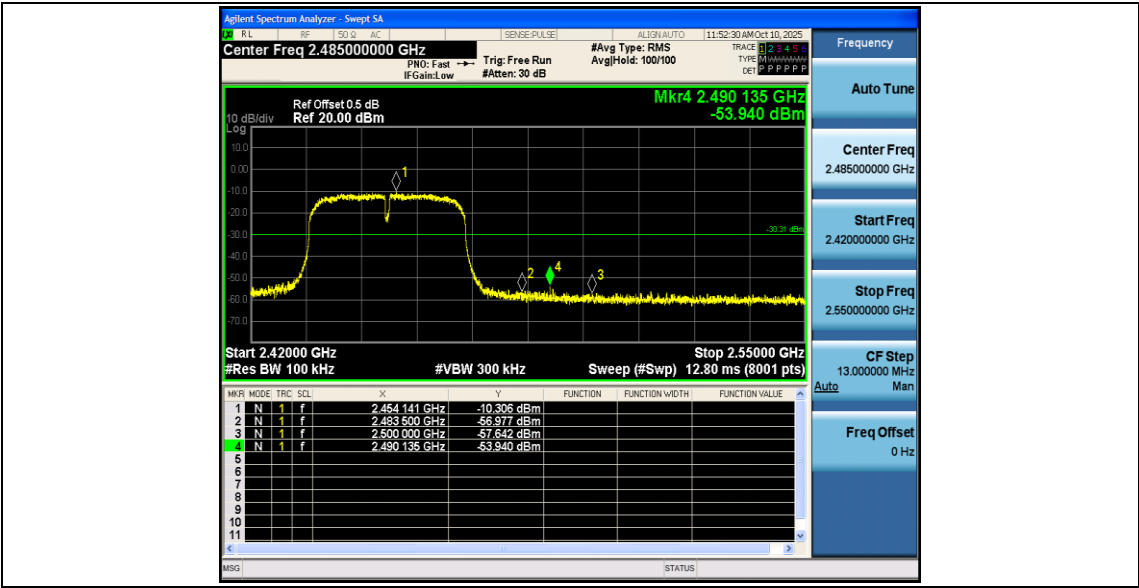
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

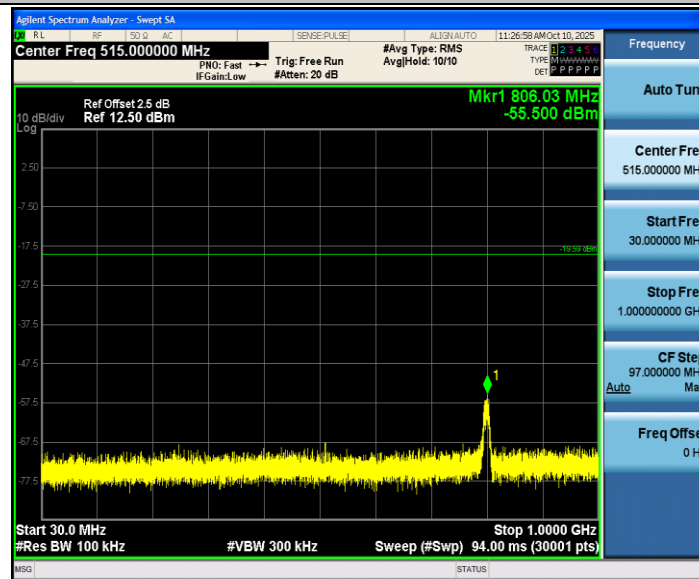
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.41	0.41	---	PASS
			30~1000	0.41	-55.5	≤-19.59	PASS
			1000~26500	0.41	-43.81	≤-19.59	PASS
		2437	Reference	0.48	0.48	---	PASS
			30~1000	0.48	-55.34	≤-19.52	PASS
			1000~26500	0.48	-44.39	≤-19.52	PASS
		2462	Reference	-0.89	-0.89	---	PASS
			30~1000	-0.89	-56.2	≤-20.89	PASS
			1000~26500	-0.89	-45.24	≤-20.89	PASS
11G	Ant1	2412	Reference	-8.26	-8.26	---	PASS
			30~1000	-8.26	-60.15	≤-28.26	PASS
			1000~26500	-8.26	-43.32	≤-28.26	PASS
		2437	Reference	-7.58	-7.58	---	PASS
			30~1000	-7.58	-60.24	≤-27.58	PASS
			1000~26500	-7.58	-44.06	≤-27.58	PASS
		2462	Reference	-7.93	-7.93	---	PASS
			30~1000	-7.93	-60.36	≤-27.93	PASS
			1000~26500	-7.93	-44.81	≤-27.93	PASS
11N20SISO	Ant1	2412	Reference	-7.84	-7.84	---	PASS
			30~1000	-7.84	-60.74	≤-27.84	PASS
			1000~26500	-7.84	-43.25	≤-27.84	PASS
		2437	Reference	-8.15	-8.15	---	PASS
			30~1000	-8.15	-60.06	≤-28.15	PASS
			1000~26500	-8.15	-44.1	≤-28.15	PASS
		2462	Reference	-7.40	-7.40	---	PASS
			30~1000	-7.40	-59.78	≤-27.4	PASS
			1000~26500	-7.40	-44.88	≤-27.4	PASS
11N40SISO	Ant1	2422	Reference	-11.30	-11.30	---	PASS
			30~1000	-11.30	-63.09	≤-31.3	PASS
			1000~26500	-11.30	-43.6	≤-31.3	PASS
		2437	Reference	-10.89	-10.89	---	PASS
			30~1000	-10.89	-60.5	≤-30.89	PASS
			1000~26500	-10.89	-44.04	≤-30.89	PASS
		2452	Reference	-10.94	-10.94	---	PASS
			30~1000	-10.94	-62.35	≤-30.94	PASS
			1000~26500	-10.94	-44.52	≤-30.94	PASS

Test Graphs

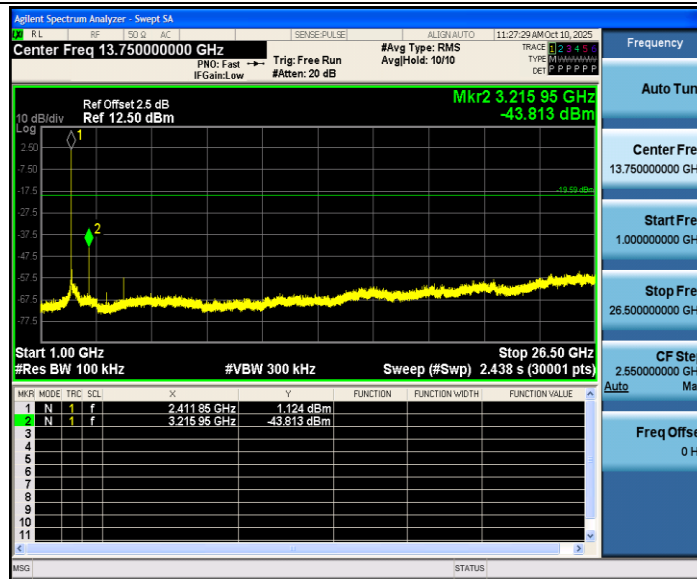
11B_Ant1_2412_0~Reference



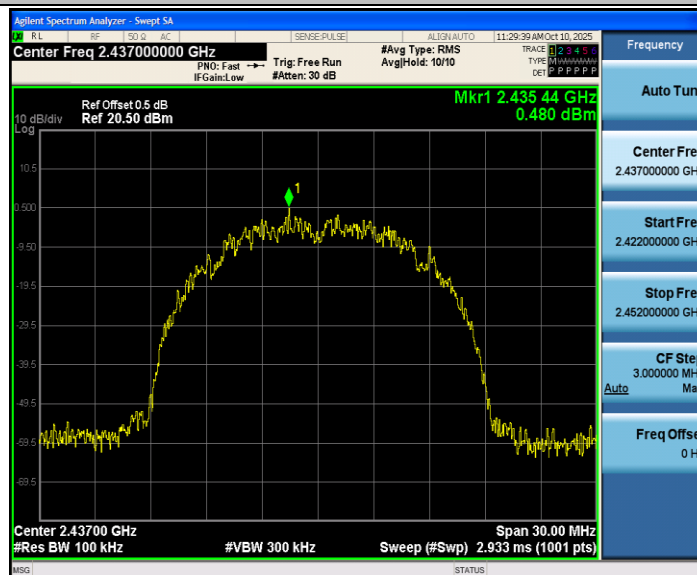
11B_Ant1_2412_30~1000



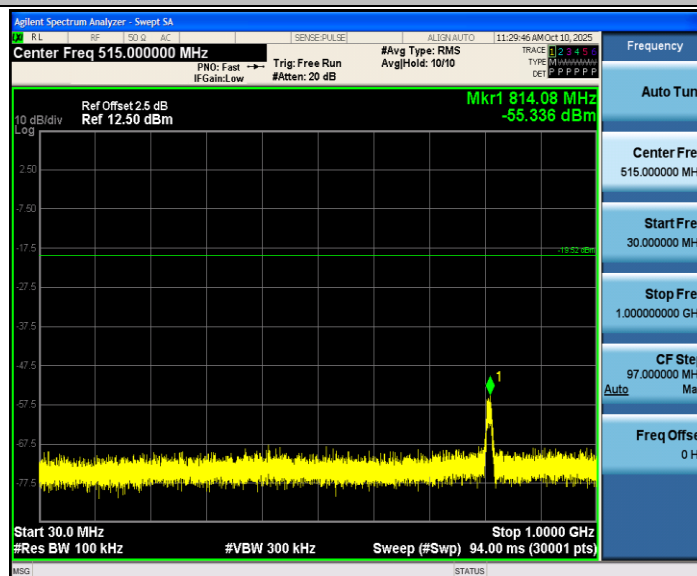
11B_Ant1_2412_1000~26500



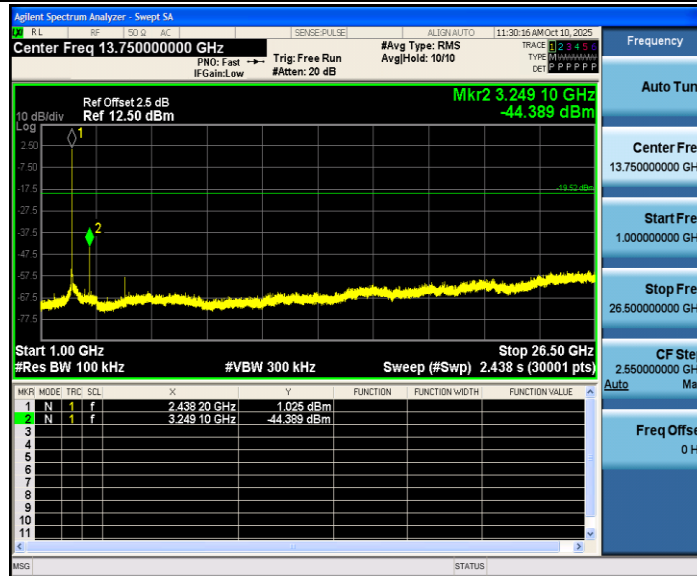
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



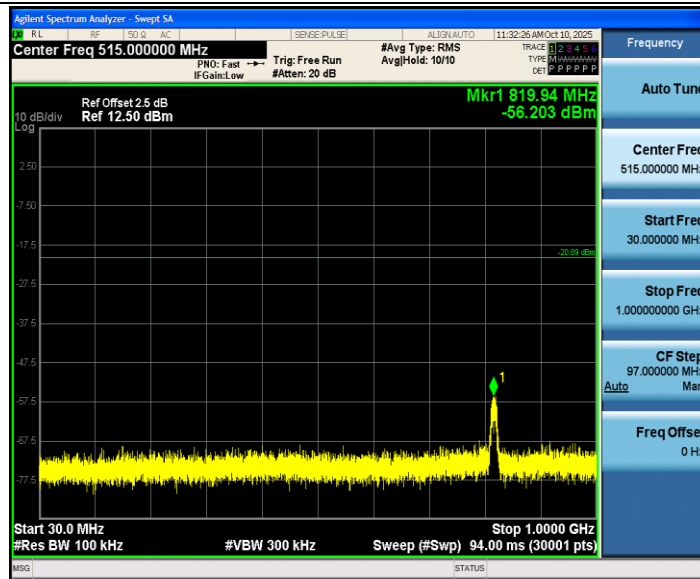
11B_Ant1_2437_1000~26500



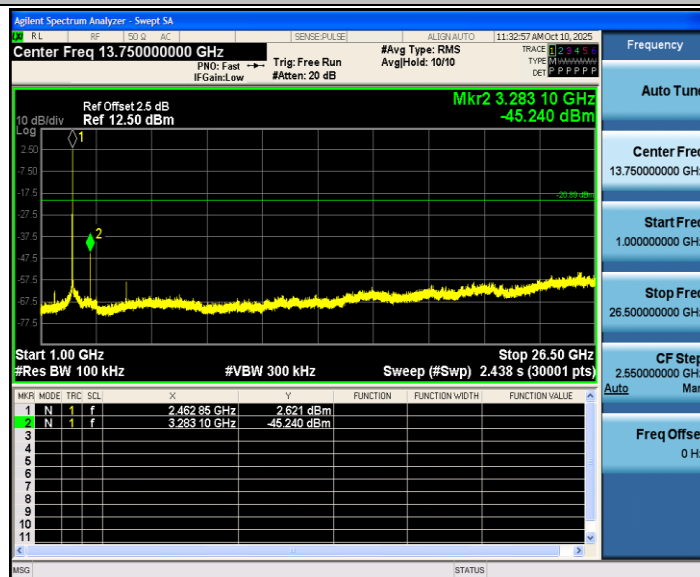
11B_Ant1_2462_0~Reference



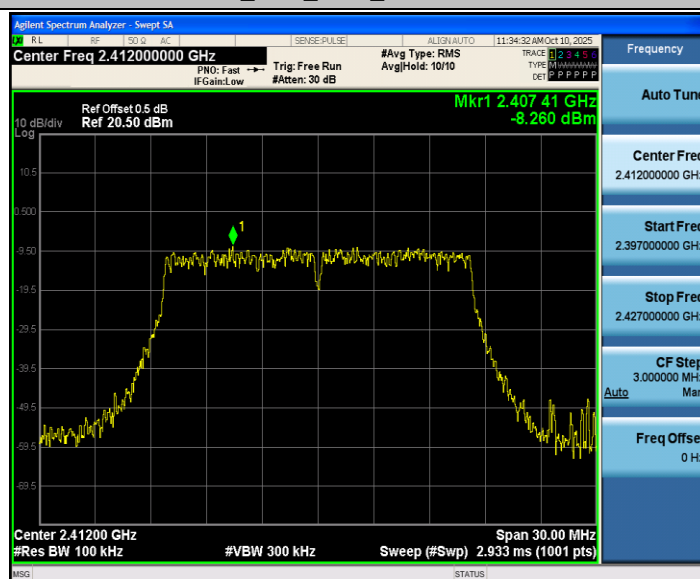
11B_Ant1_2462_30~1000



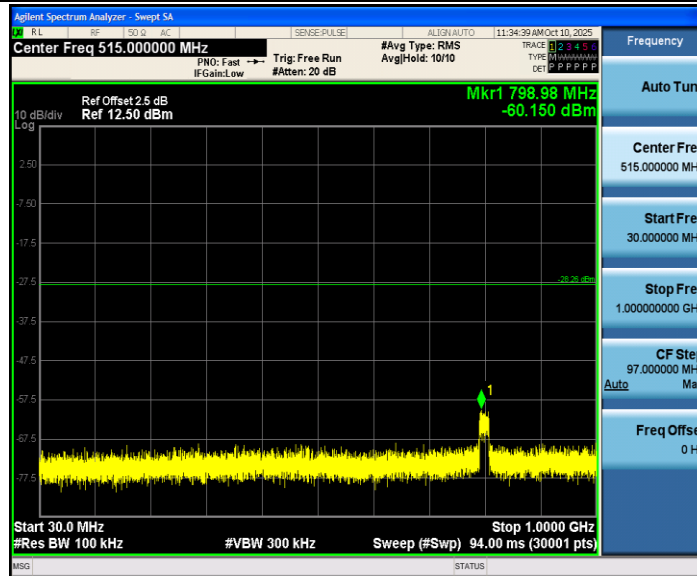
11B_Ant1_2462_1000~26500



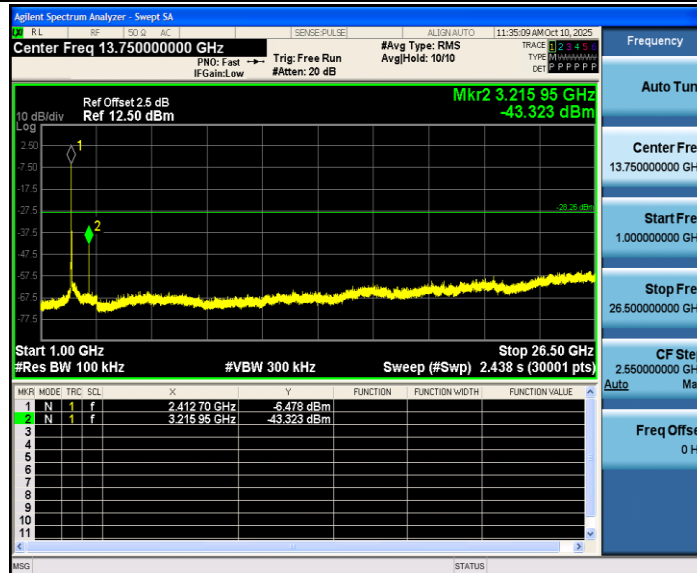
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



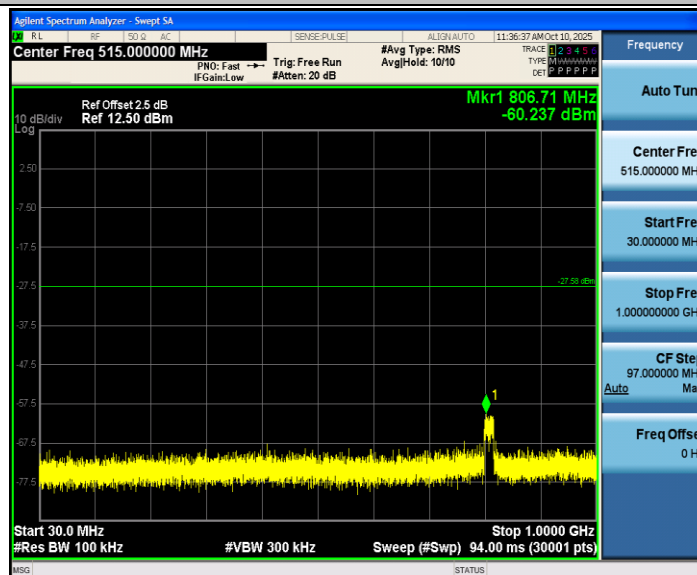
11G_Ant1_2412_1000~26500



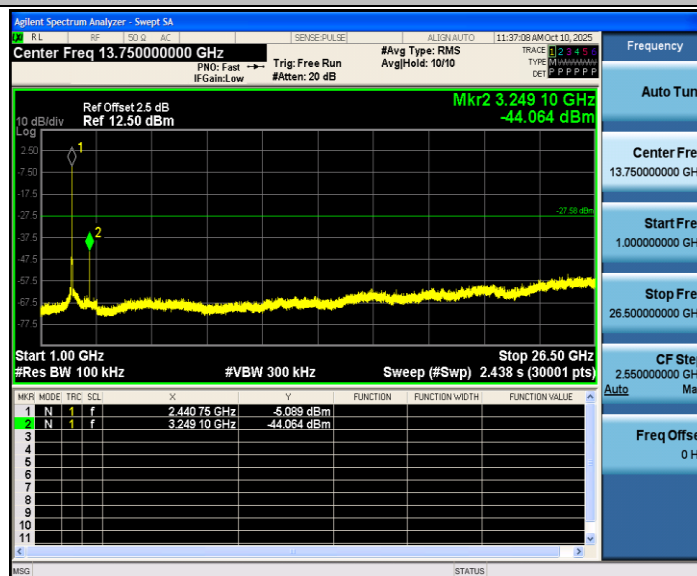
11G_Ant1_2437_0~Reference



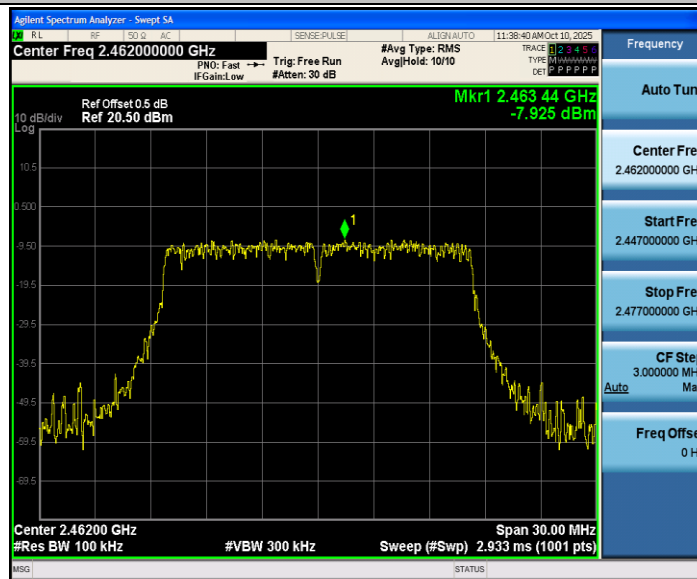
11G_Ant1_2437_30~1000



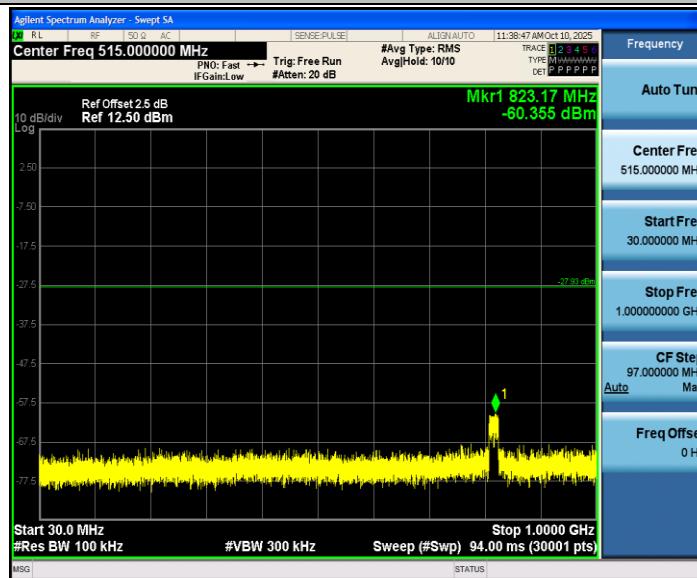
11G_Ant1_2437_1000~26500



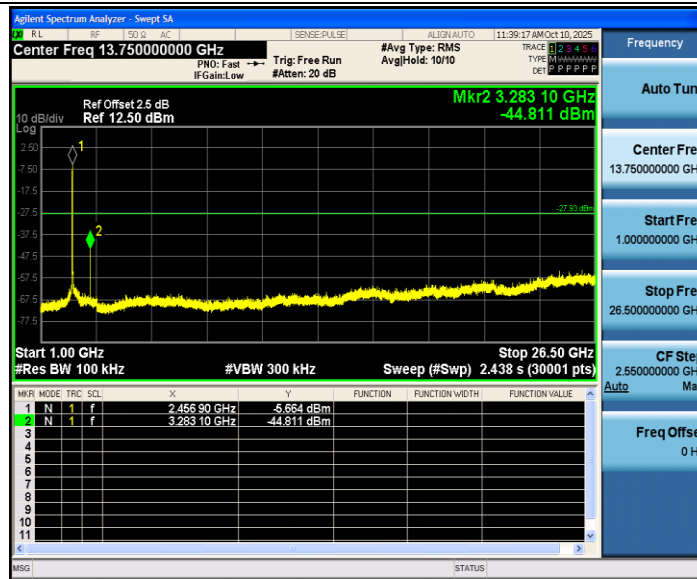
11G_Ant1_2462_0~Reference



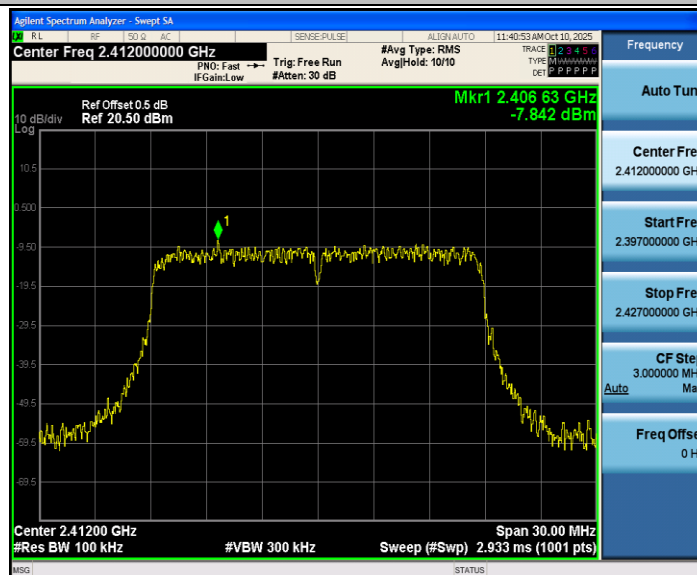
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

