

FCC Appendix RF Test Data for 2.4GWIFI

Company: : Jiangxi Kufei Intelligent Technology Co., Ltd.

EUT : Drone

Model Number : Manta5SE

FCC ID : 2BSIZ-MANTA5SE

Report No. : CTA25091001102

Reviewed By : Eric Wang

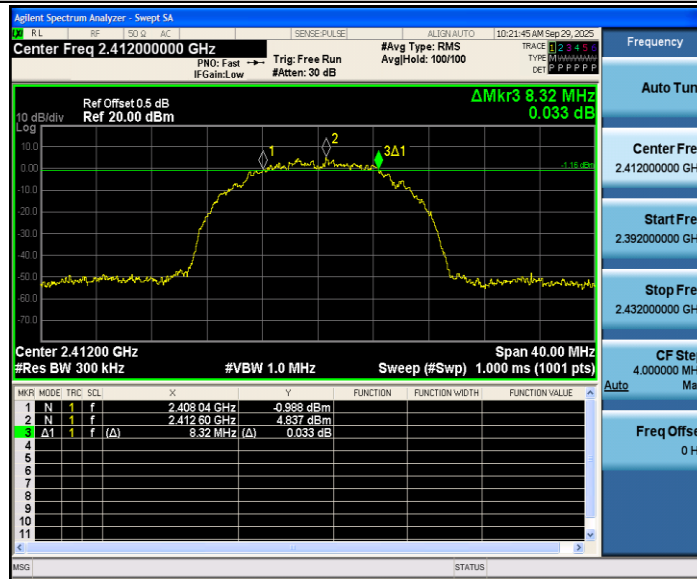
Appendix A: DTS Bandwidth

Test Result

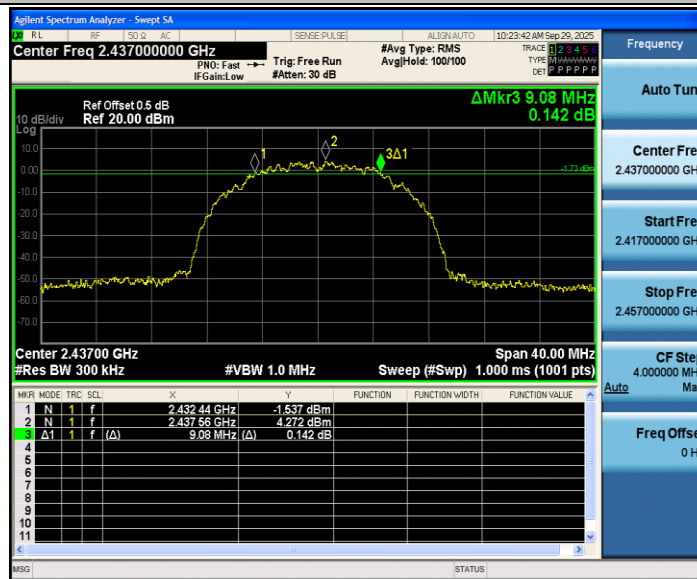
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.320	2408.040	2416.360	0.5	PASS
		2437	9.080	2432.440	2441.520	0.5	PASS
		2462	8.800	2457.600	2466.400	0.5	PASS
11G	Ant1	2412	16.240	2403.920	2420.160	0.5	PASS
		2437	16.320	2428.880	2445.200	0.5	PASS
		2462	16.320	2453.920	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.360	2403.360	2420.720	0.5	PASS
		2437	17.240	2428.400	2445.640	0.5	PASS
		2462	17.360	2453.360	2470.720	0.5	PASS

Test Graphs

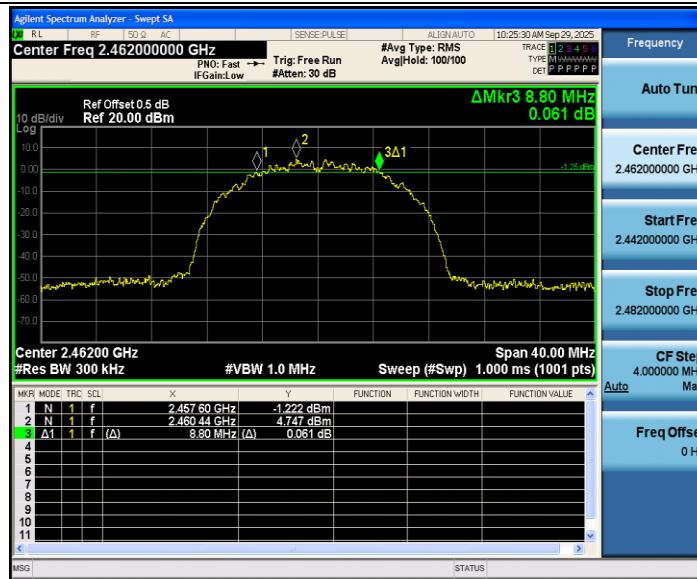
11B_Ant1_2412



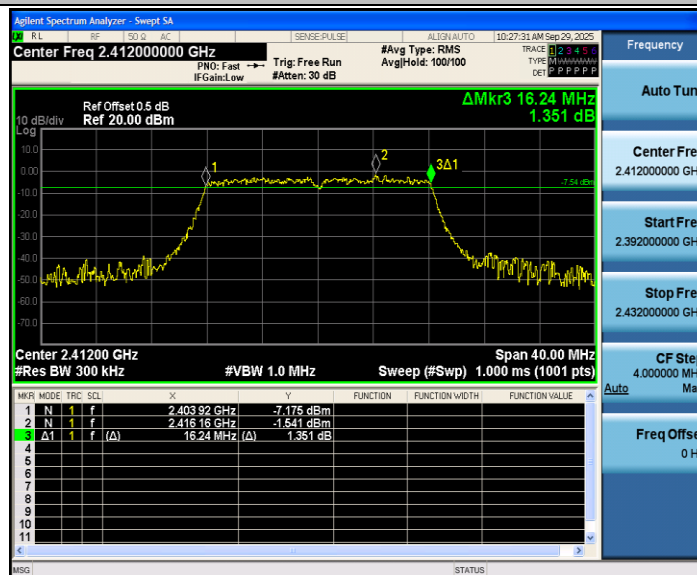
11B_Ant1_2437



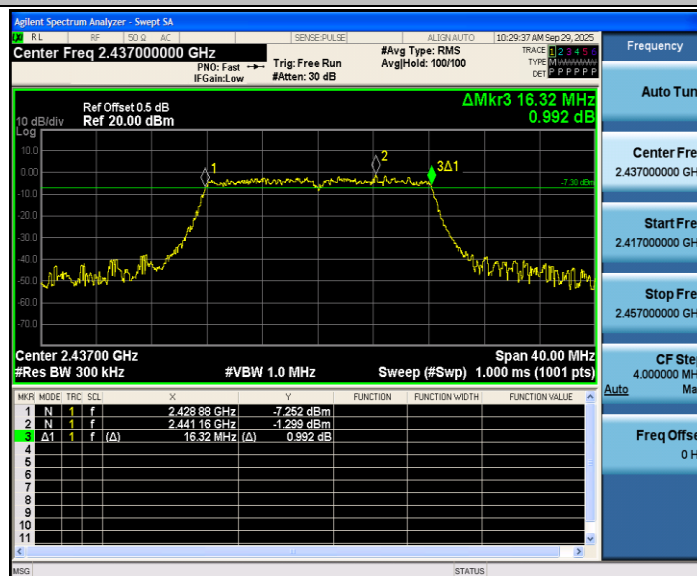
11B_Ant1_2462



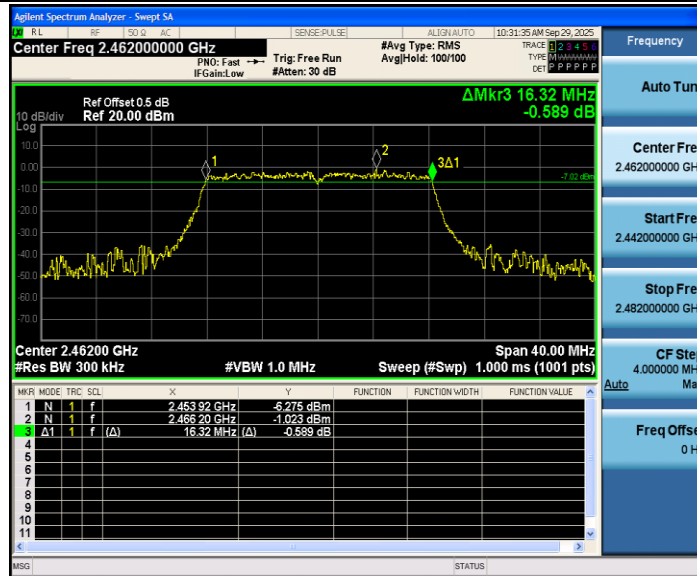
11G_Ant1_2412



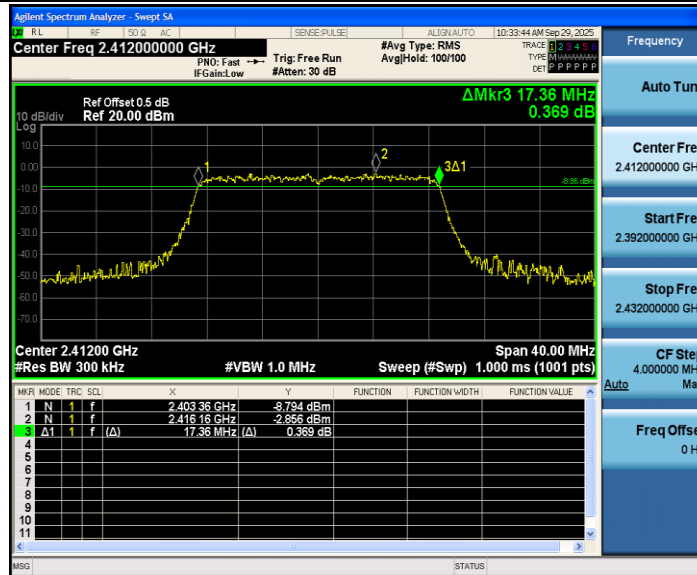
11G_Ant1_2437



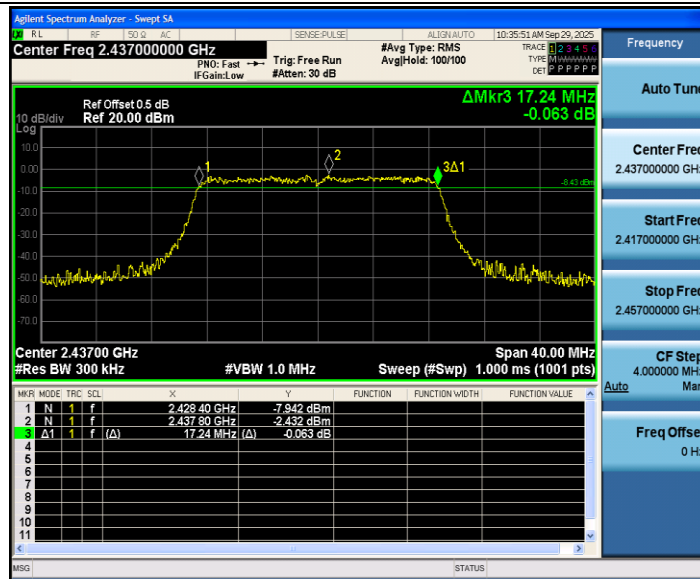
11G_Ant1_2462



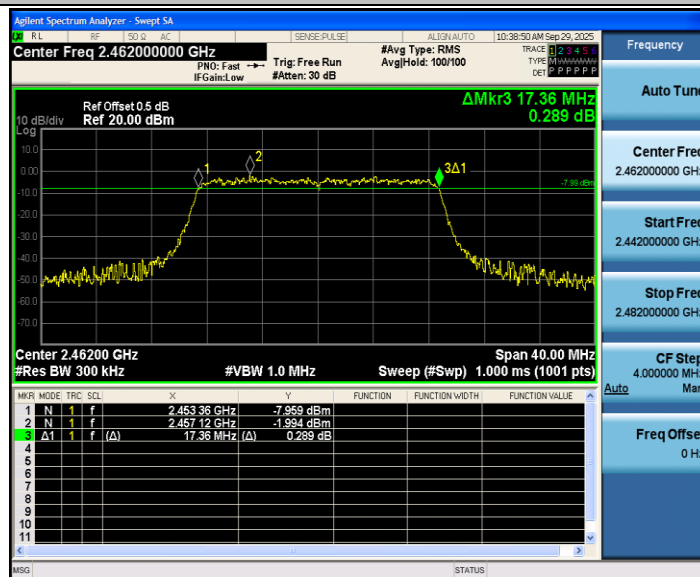
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



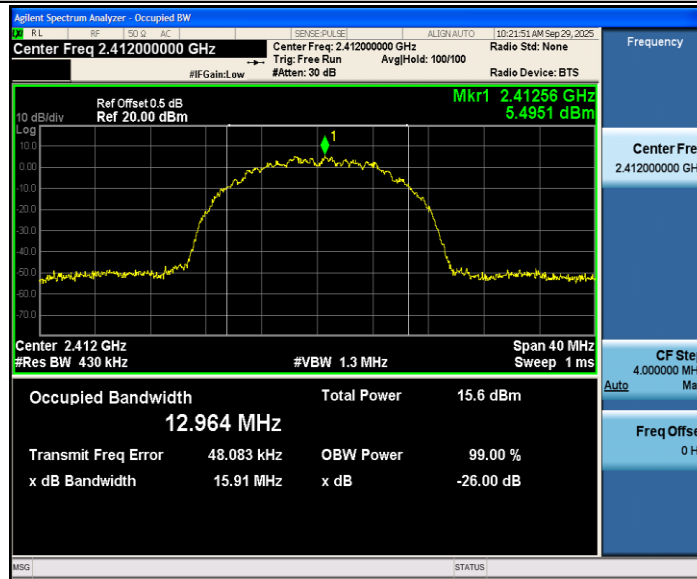
Appendix B: Occupied Channel Bandwidth

Test Result

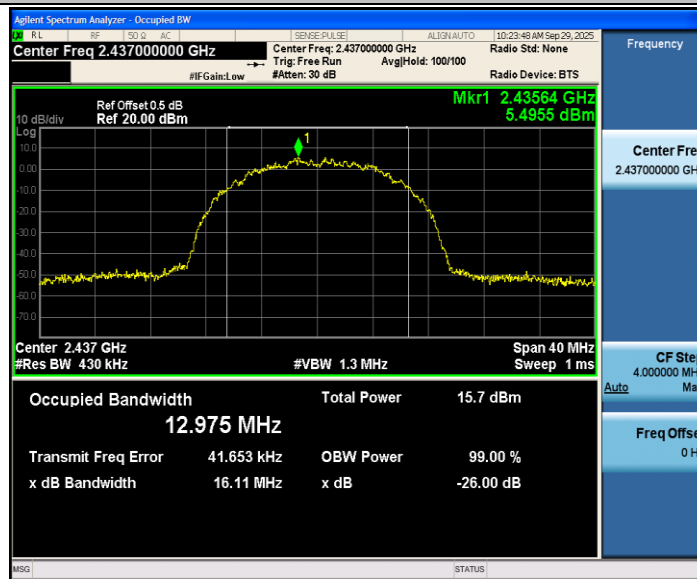
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.964	2405.5661	2418.5301	---	---
		2437	12.975	2430.5542	2443.5292	---	---
		2462	13.009	2455.5077	2468.5167	---	---
11G	Ant1	2412	16.558	2403.7787	2420.3367	---	---
		2437	16.563	2428.7437	2445.3067	---	---
		2462	16.593	2453.7351	2470.3281	---	---
11N20SISO	Ant1	2412	17.459	2403.3283	2420.7873	---	---
		2437	17.441	2428.3197	2445.7607	---	---
		2462	17.444	2453.3173	2470.7613	---	---

Test Graphs

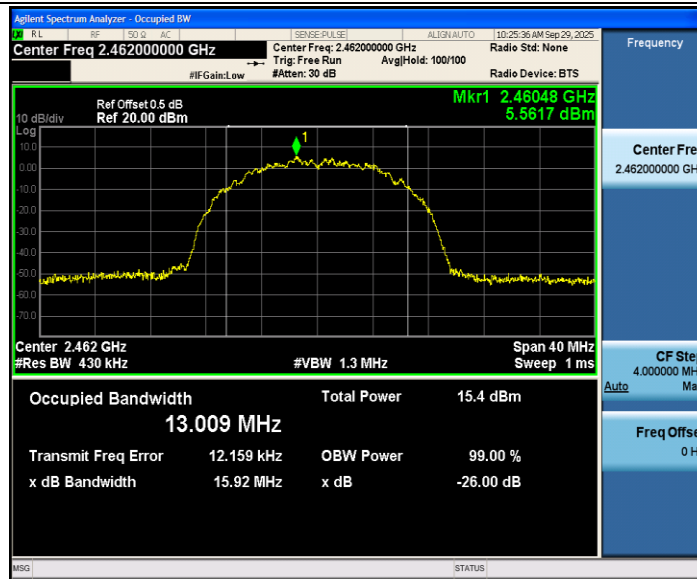
11B_Ant1_2412



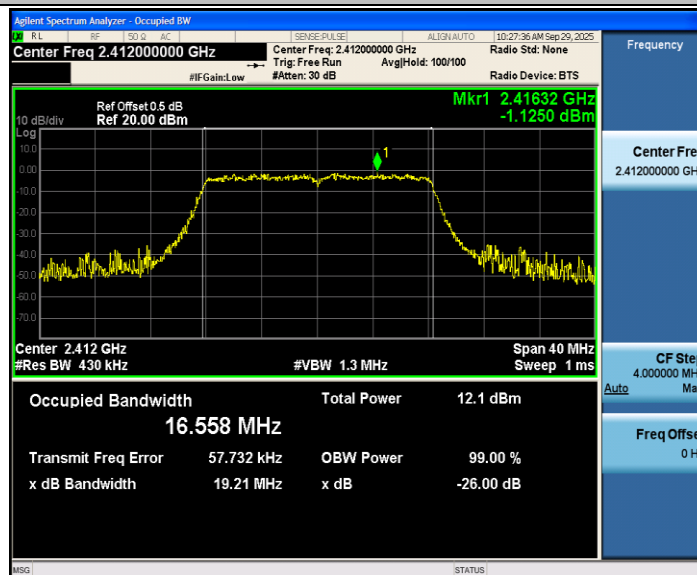
11B_Ant1_2437



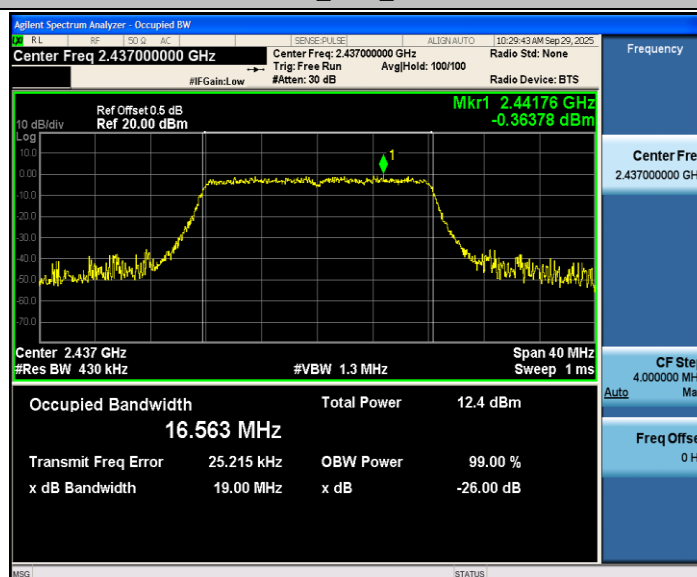
11B_Ant1_2462



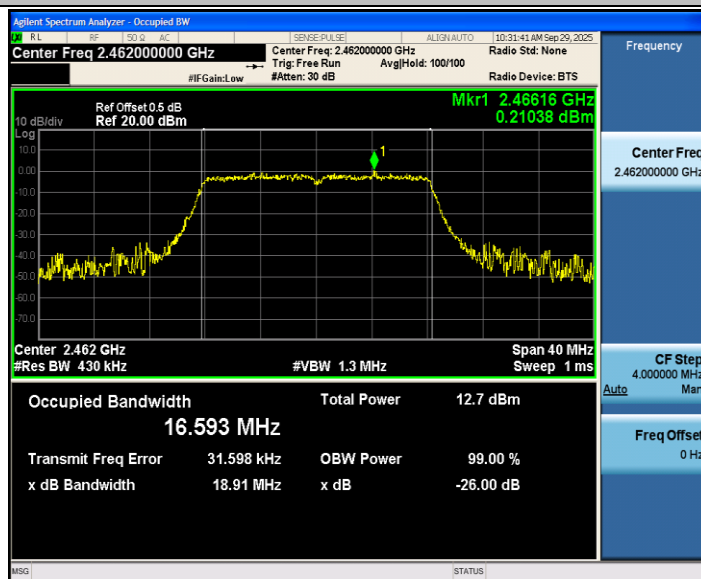
11G_Ant1_2412



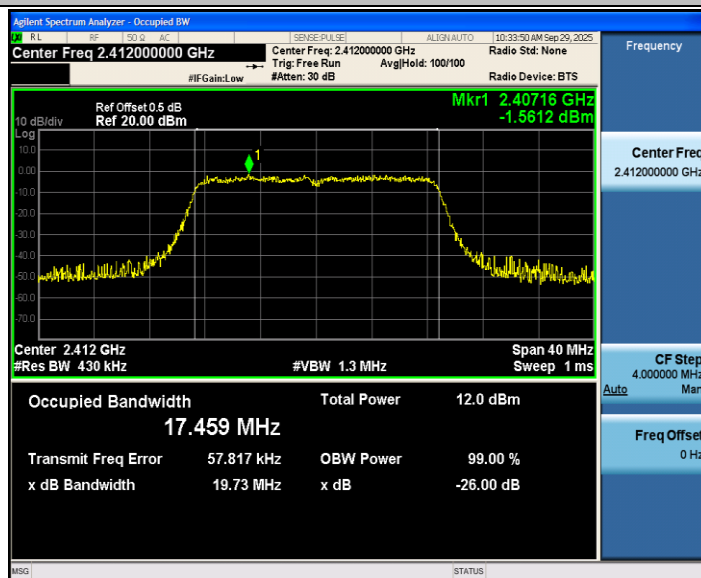
11G_Ant1_2437



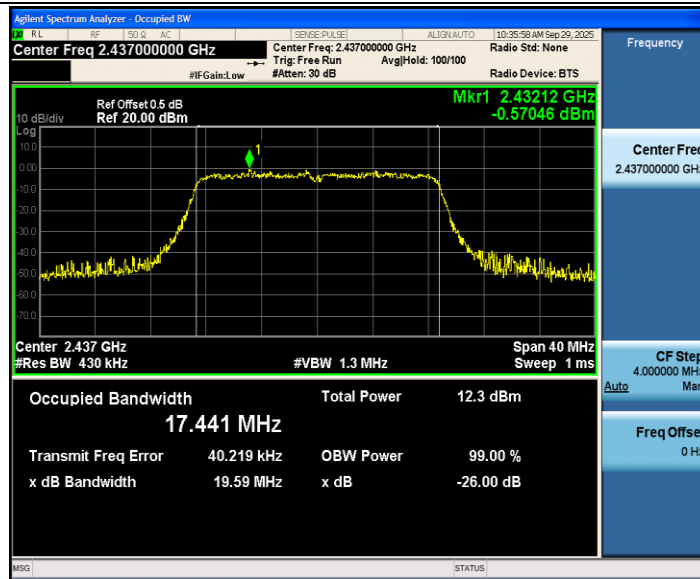
11G_Ant1_2462



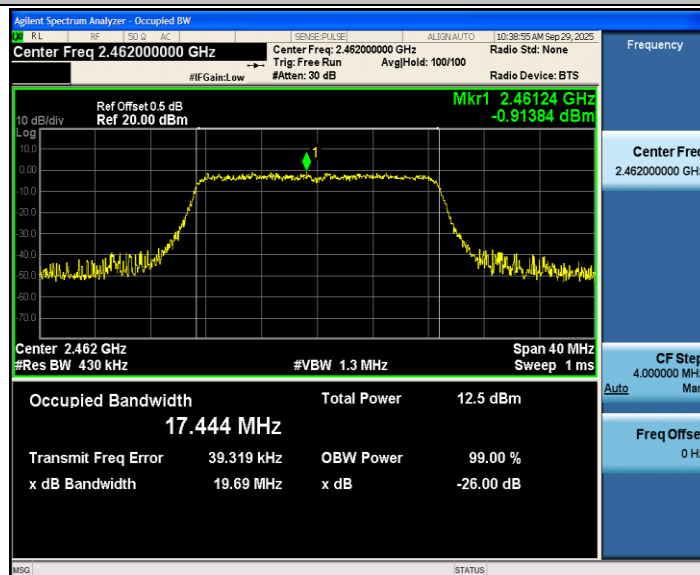
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



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	14.78	≤30.00	PASS
		2437	15.19	≤30.00	PASS
		2462	14.88	≤30.00	PASS
11G	Ant1	2412	12.95	≤30.00	PASS
		2437	13.15	≤30.00	PASS
		2462	13.50	≤30.00	PASS
11N20SISO	Ant1	2412	13.15	≤30.00	PASS
		2437	13.52	≤30.00	PASS
		2462	13.73	≤30.00	PASS

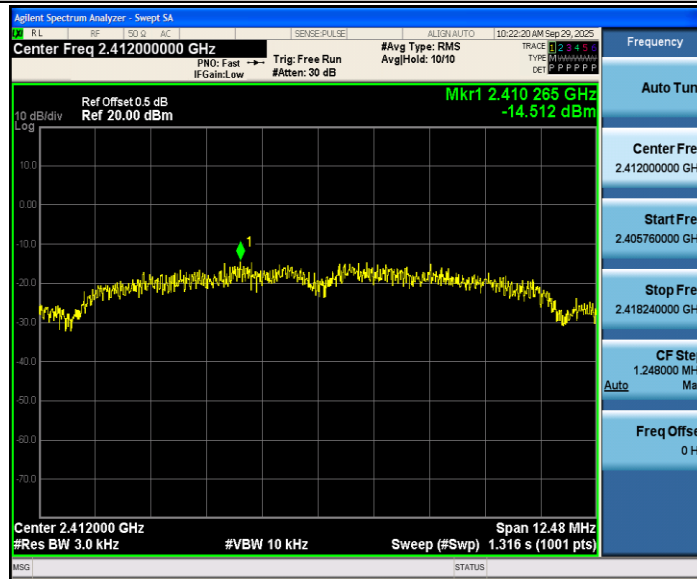
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.51	≤8.00	PASS
		2437	-14.27	≤8.00	PASS
		2462	-14.35	≤8.00	PASS
11G	Ant1	2412	-21.57	≤8.00	PASS
		2437	-21.13	≤8.00	PASS
		2462	-20.84	≤8.00	PASS
11N20SISO	Ant1	2412	-21.10	≤8.00	PASS
		2437	-20.97	≤8.00	PASS
		2462	-20.87	≤8.00	PASS

Test Graphs

11B_Ant1_2412



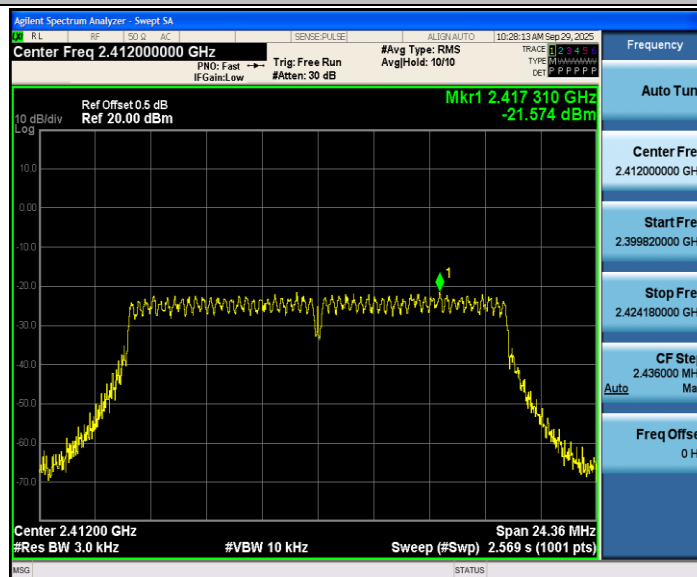
11B_Ant1_2437



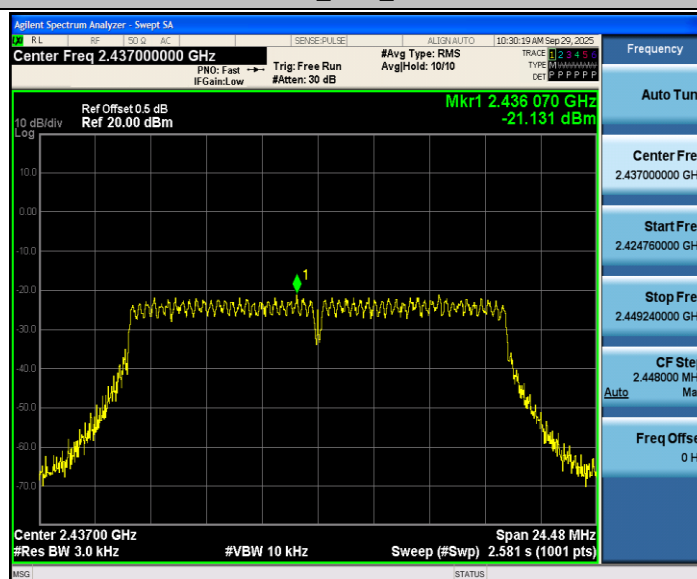
11B_Ant1_2462



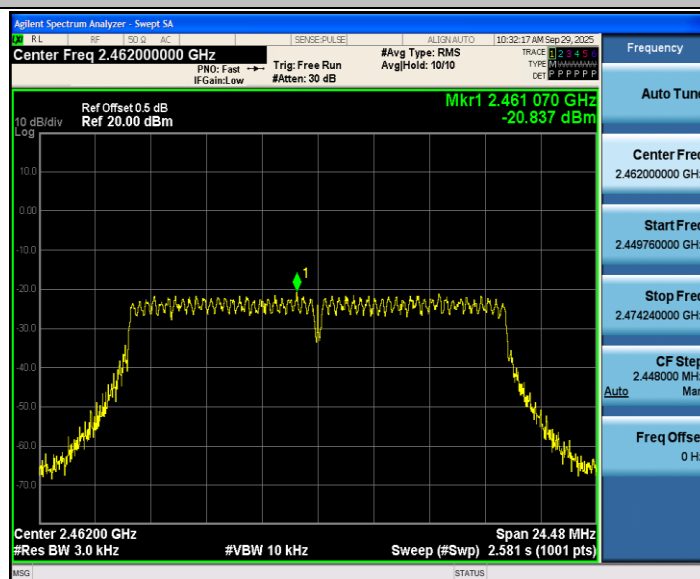
11G_Ant1_2412



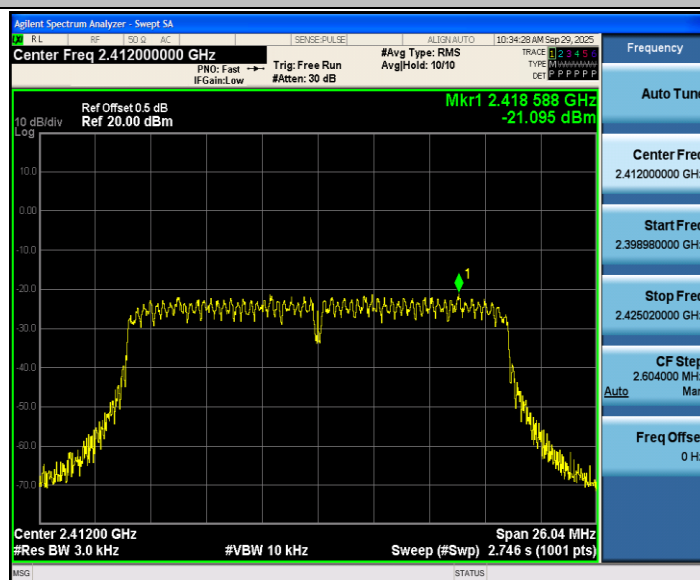
11G_Ant1_2437



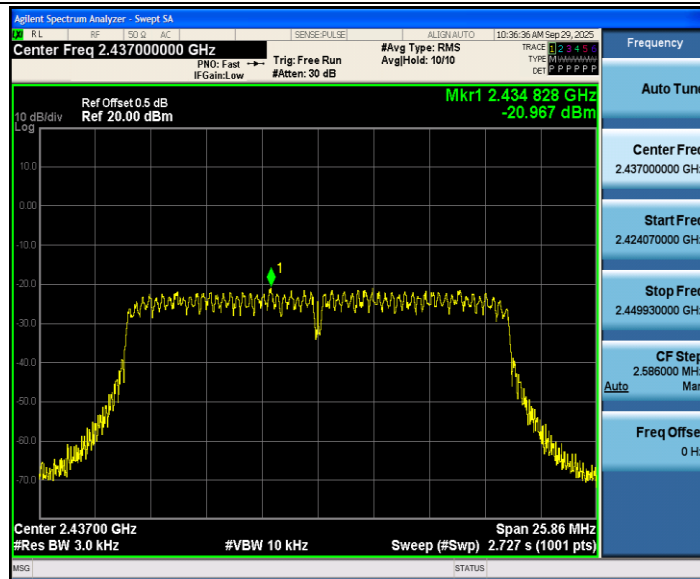
11G_Ant1_2462



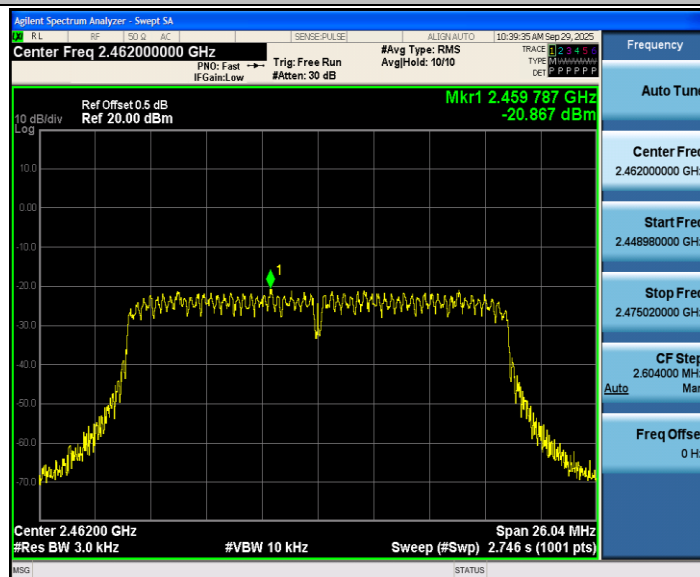
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



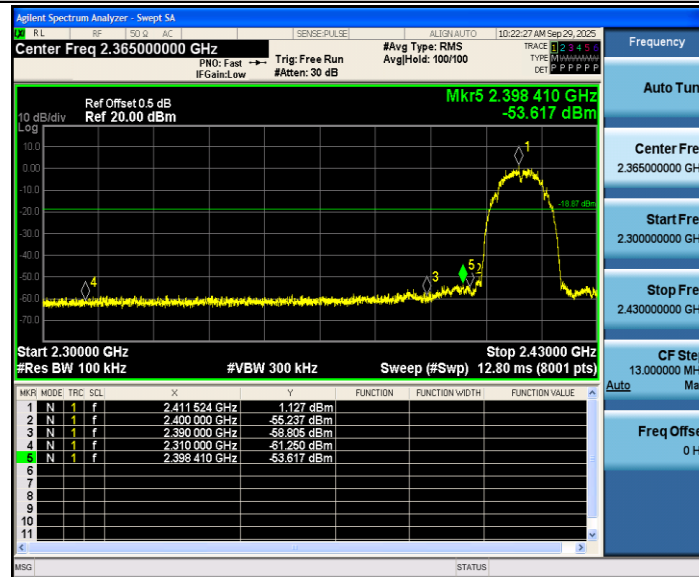
Appendix E: Band edge measurements

Test Result

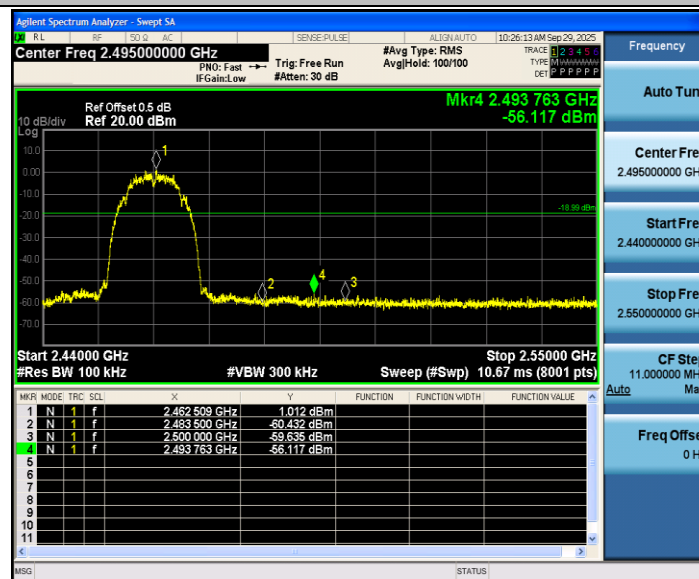
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.13	-53.62	≤-18.87	PASS
		High	2462	1.01	-56.12	≤-18.99	PASS
11G	Ant1	Low	2412	-7.24	-46.73	≤-27.24	PASS
		High	2462	-7.24	-54.05	≤-27.24	PASS
11N20SISO	Ant1	Low	2412	-7.51	-49.69	≤-27.51	PASS
		High	2462	-6.60	-54.18	≤-26.6	PASS

Test Graphs

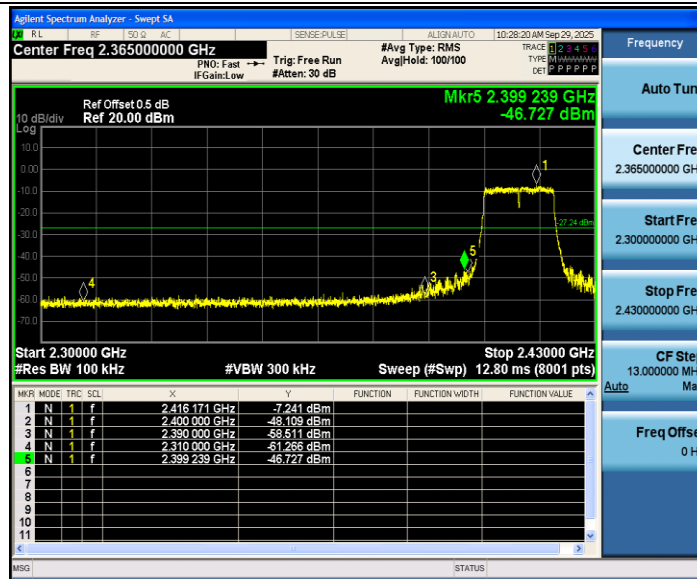
11B_Ant1_Low_2412



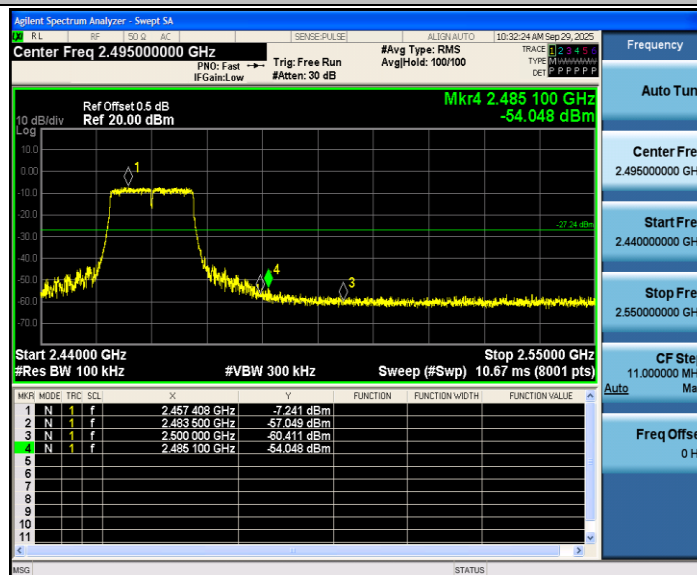
11B_Ant1_High_2462



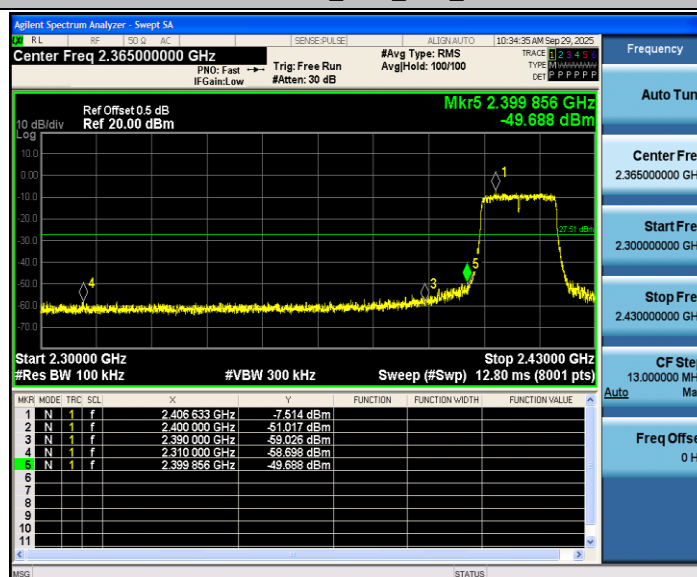
11G_Ant1_Low_2412



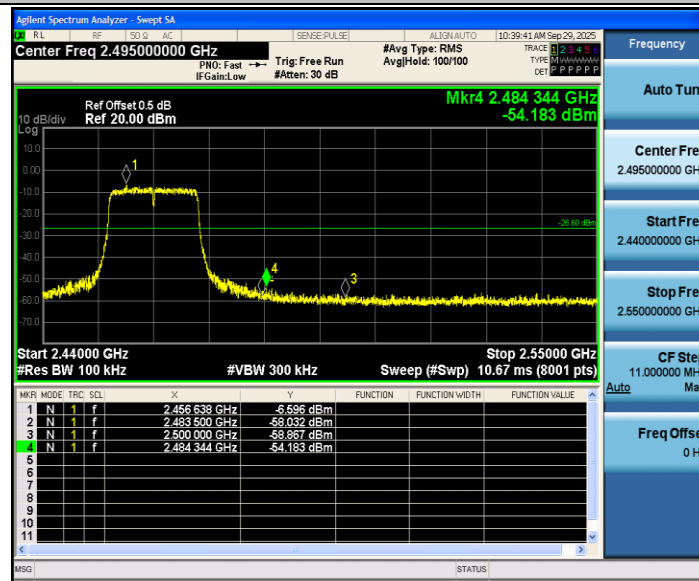
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

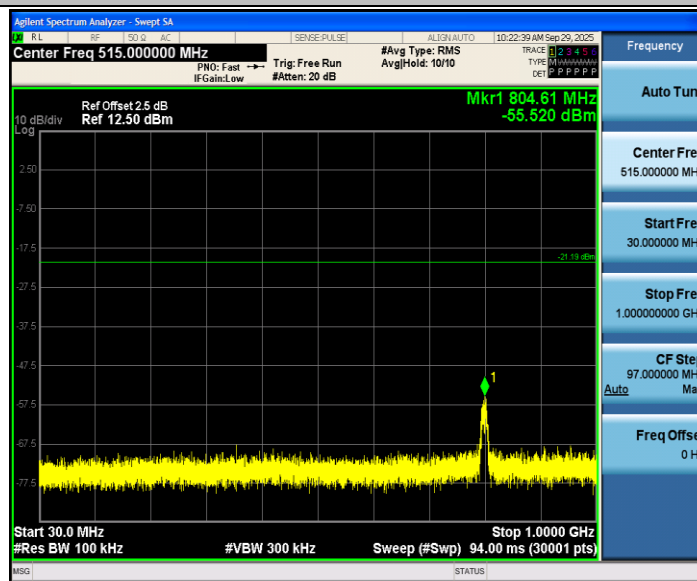
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-55.52	≤-21.19	PASS
			1000~26500	-1.19	-43.71	≤-21.19	PASS
		2437	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-55.8	≤-20.17	PASS
			1000~26500	-0.17	-44.36	≤-20.17	PASS
		2462	Reference	0.70	0.70	---	PASS
			30~1000	0.70	-55.81	≤-19.3	PASS
			1000~26500	0.70	-45.27	≤-19.3	PASS
11G	Ant1	2412	Reference	-7.91	-7.91	---	PASS
			30~1000	-7.91	-59.26	≤-27.91	PASS
			1000~26500	-7.91	-43.49	≤-27.91	PASS
		2437	Reference	-7.83	-7.83	---	PASS
			30~1000	-7.83	-59.54	≤-27.83	PASS
			1000~26500	-7.83	-44.16	≤-27.83	PASS
		2462	Reference	-7.59	-7.59	---	PASS
			30~1000	-7.59	-59.09	≤-27.59	PASS
			1000~26500	-7.59	-44.74	≤-27.59	PASS
11N20SISO	Ant1	2412	Reference	-8.55	-8.55	---	PASS
			30~1000	-8.55	-60.03	≤-28.55	PASS
			1000~26500	-8.55	-43.5	≤-28.55	PASS
		2437	Reference	-7.17	-7.17	---	PASS
			30~1000	-7.17	-60.35	≤-27.17	PASS
			1000~26500	-7.17	-44.14	≤-27.17	PASS
		2462	Reference	-8.01	-8.01	---	PASS
			30~1000	-8.01	-60.6	≤-28.01	PASS
			1000~26500	-8.01	-44.88	≤-28.01	PASS

Test Graphs

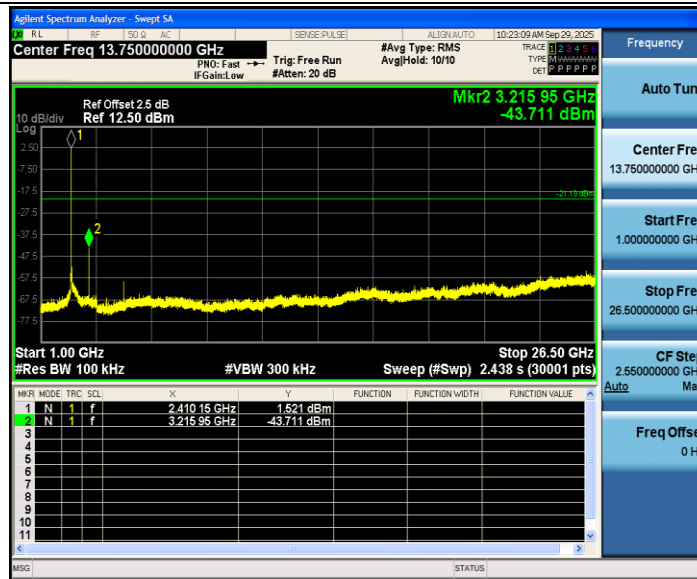
11B_Ant1_2412_0~Reference



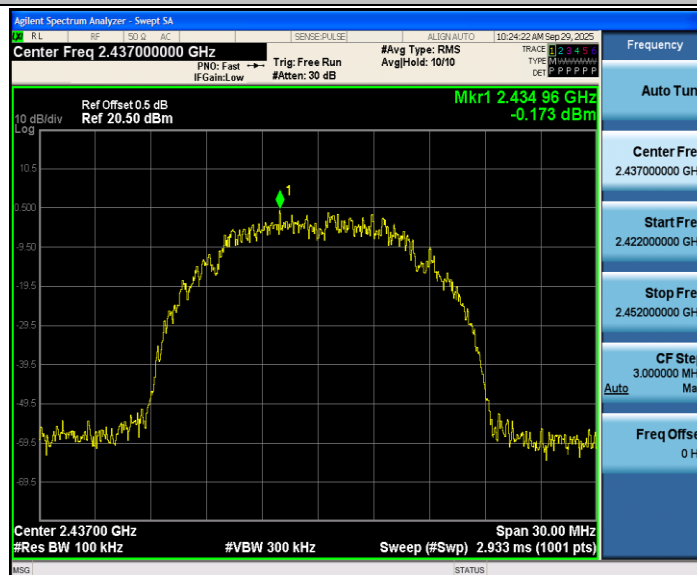
11B_Ant1_2412_30~1000



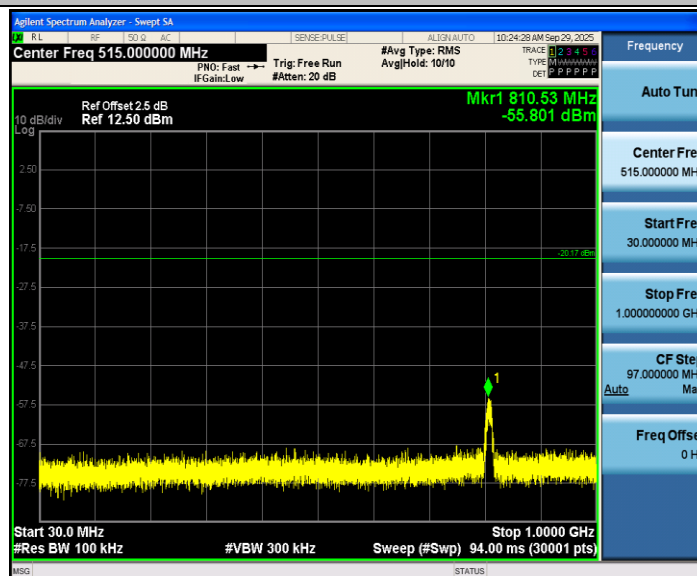
11B_Ant1_2412_1000~26500



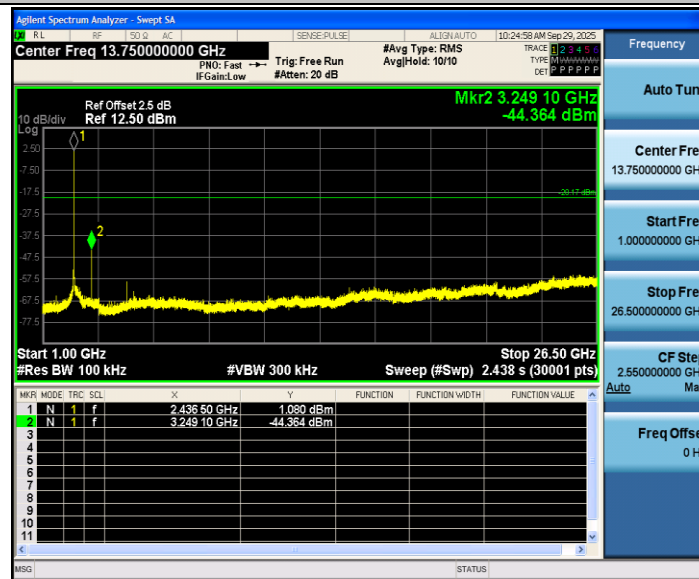
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



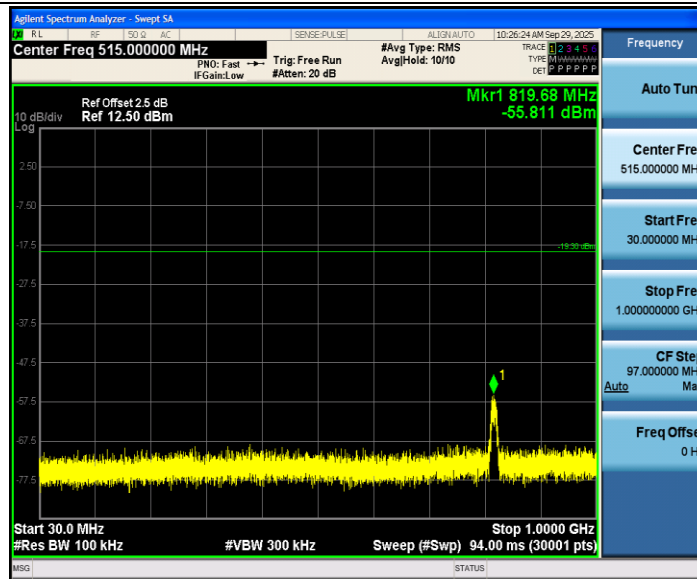
11B_Ant1_2437_1000~26500



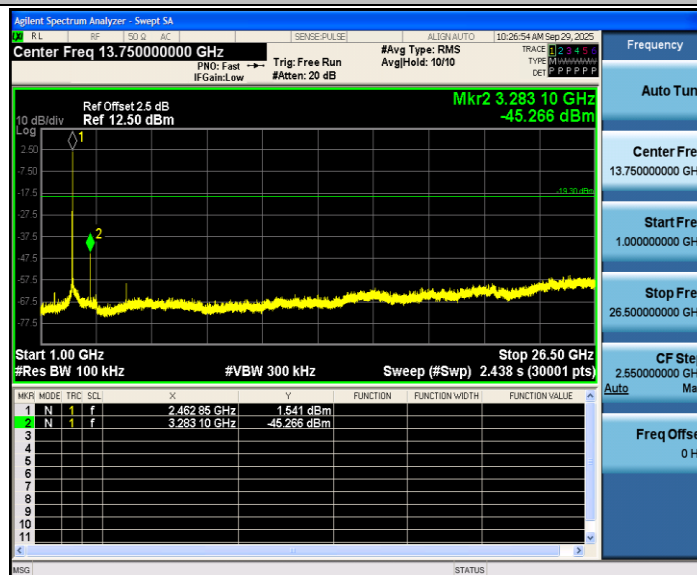
11B_Ant1_2462_0~Reference



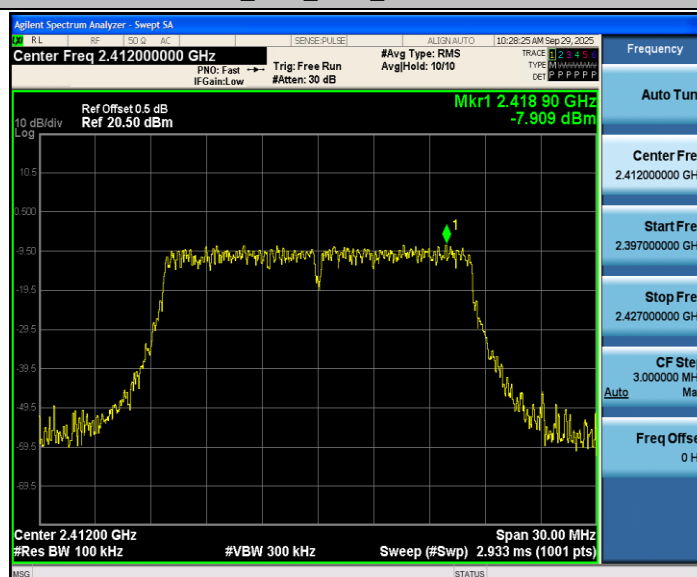
11B_Ant1_2462_30~1000



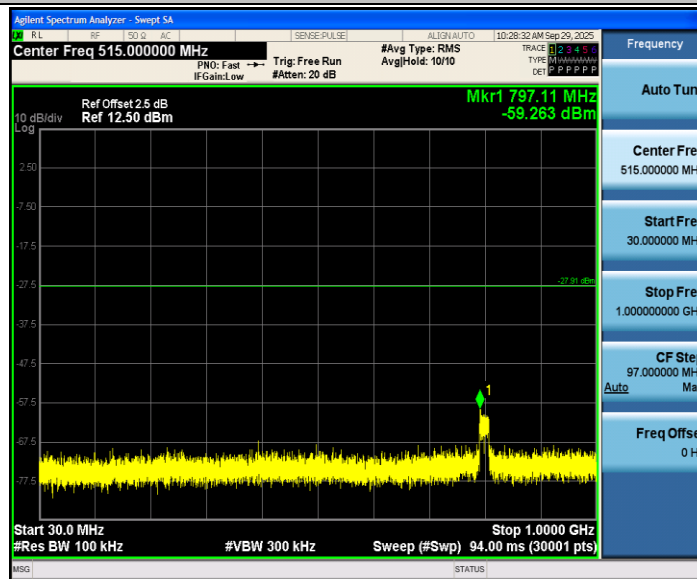
11B_Ant1_2462_1000~26500



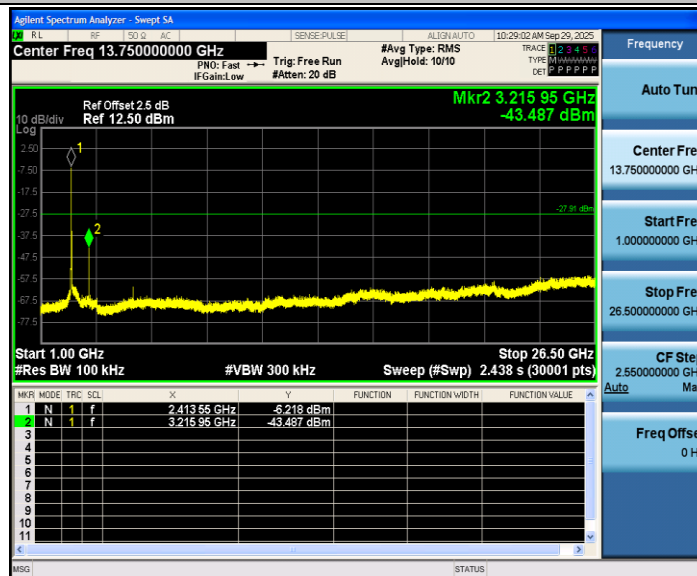
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



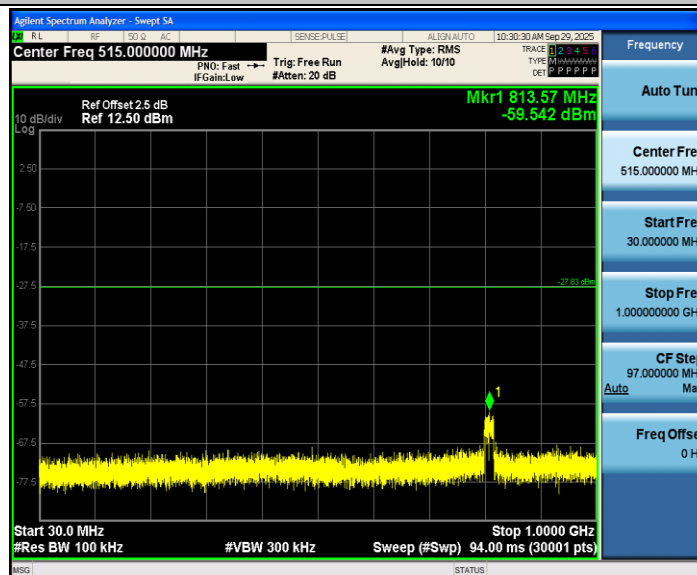
11G_Ant1_2412_1000~26500



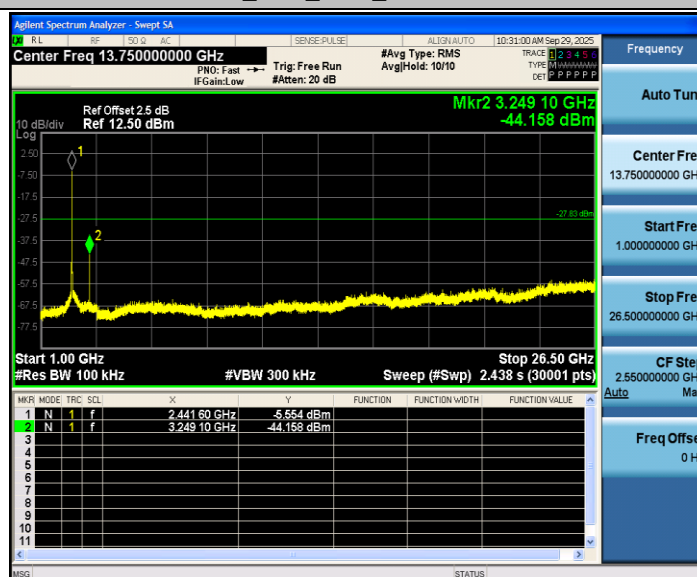
11G_Ant1_2437_0~Reference



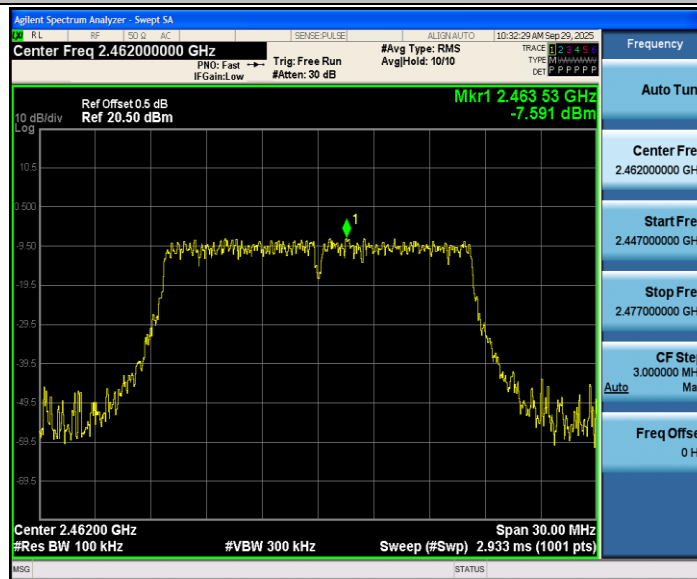
11G_Ant1_2437_30~1000



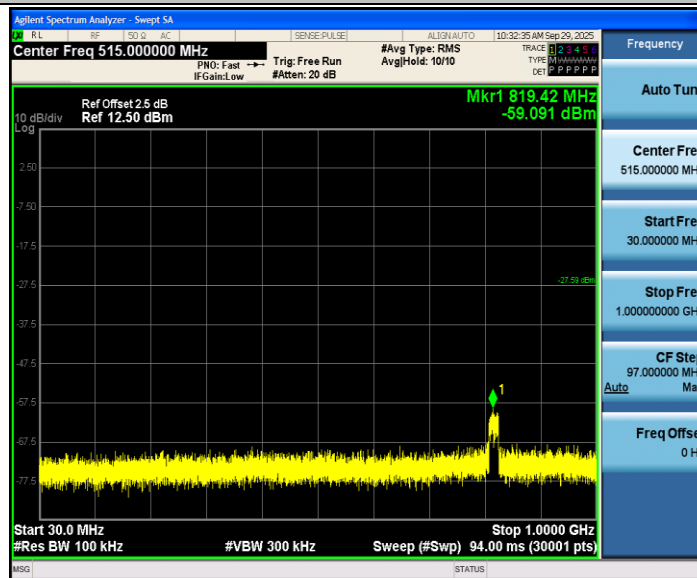
11G_Ant1_2437_1000~26500



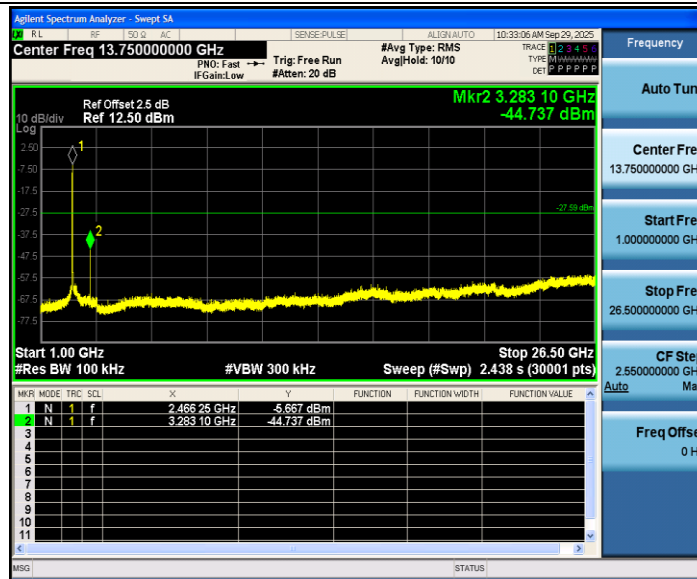
11G_Ant1_2462_0~Reference



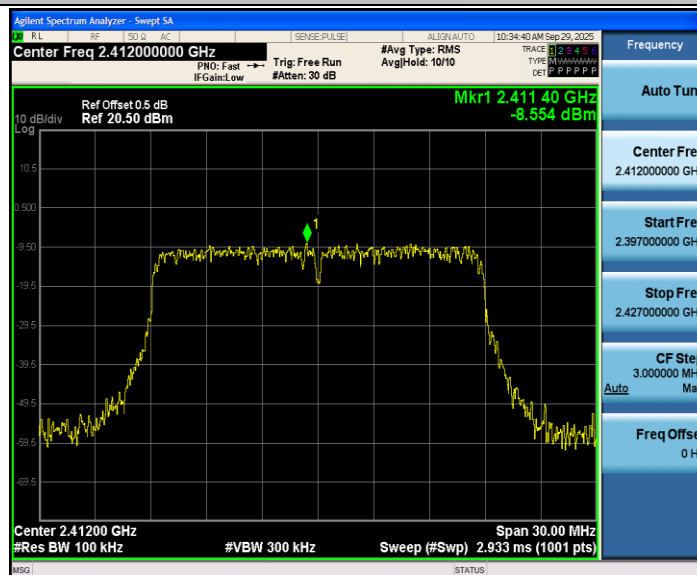
11G_Ant1_2462_30~1000



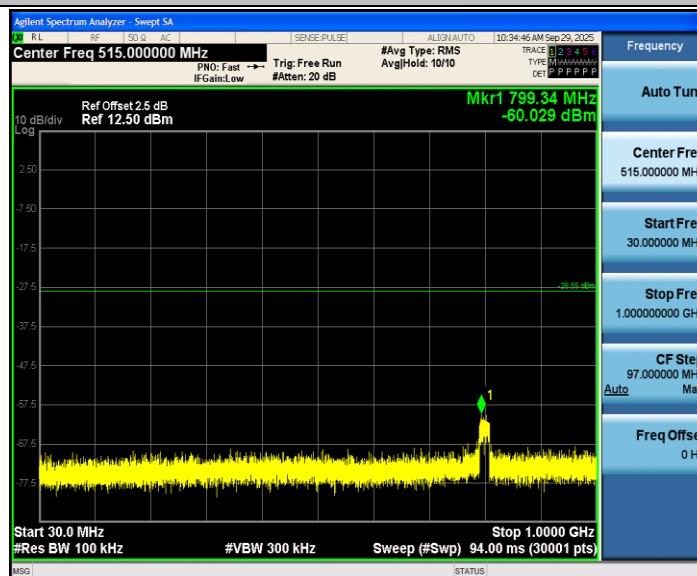
11G_Ant1_2462_1000~26500



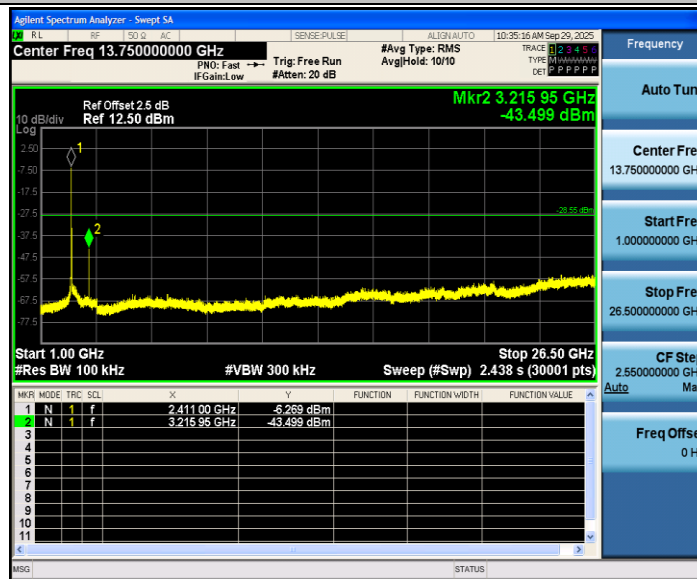
11N20SISO_Ant1_2412_0~Reference



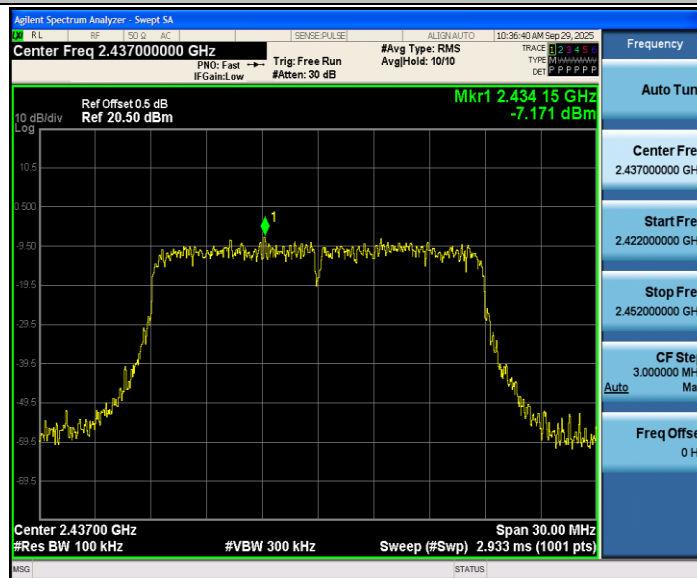
11N20SISO_Ant1_2412_30~1000



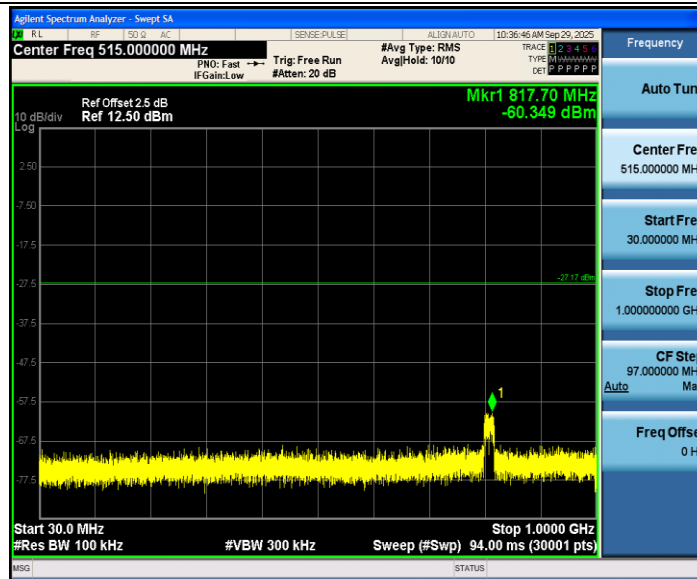
11N20SISO_Ant1_2412_1000~26500



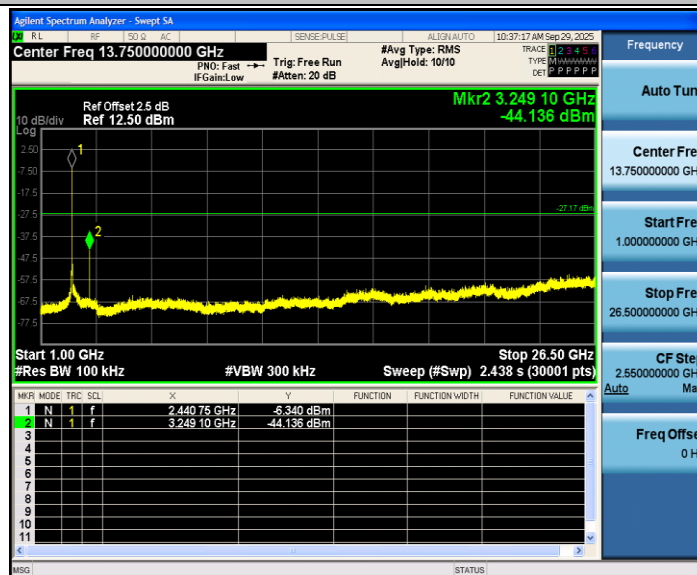
11N20SISO_Ant1_2437_0~Reference



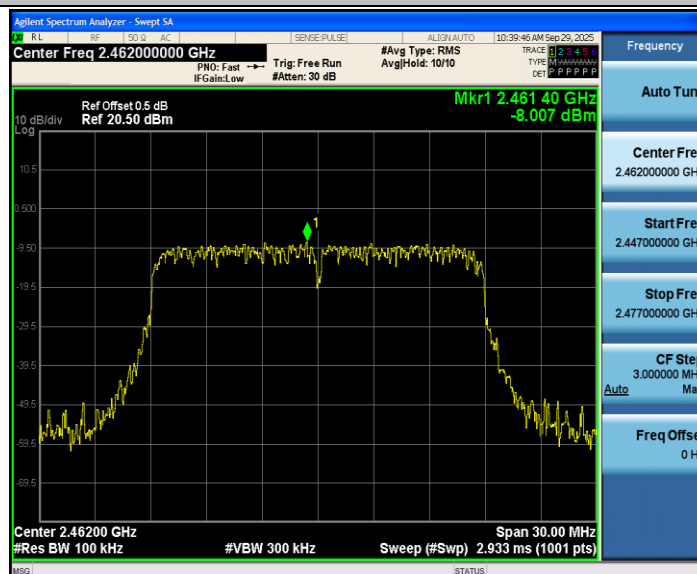
11N20SISO_Ant1_2437_30~1000



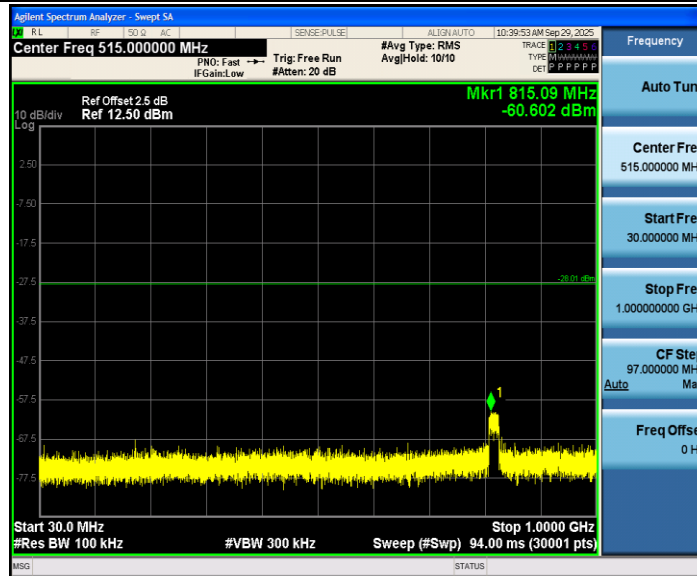
11N20SISO_Ant1_2437_1000~26500



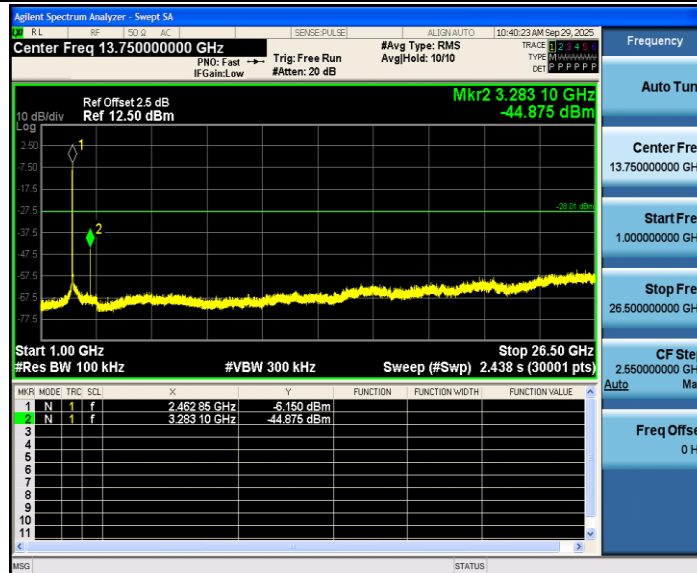
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



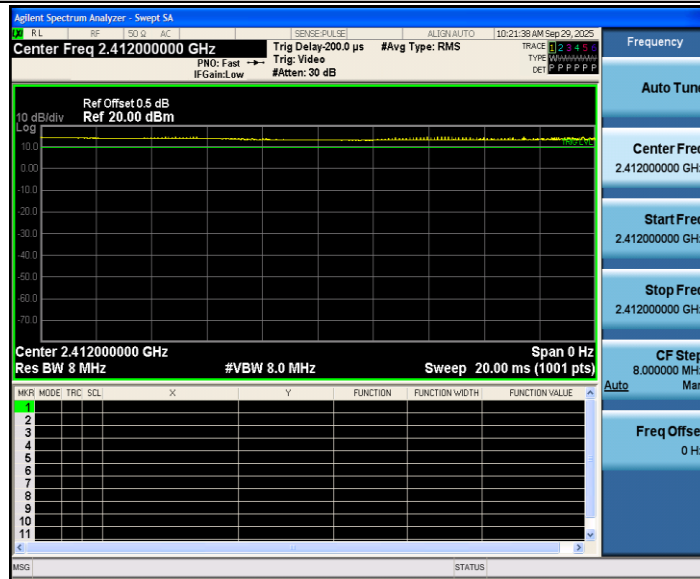
Appendix G: Duty Cycle

Test Result

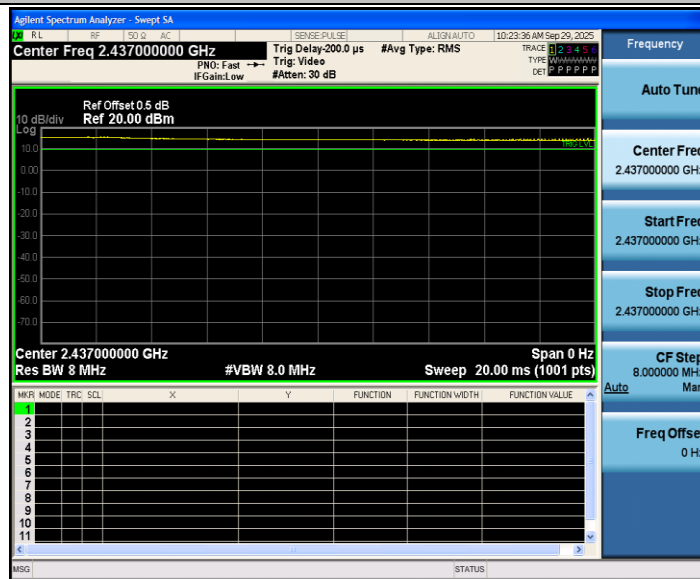
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	20.00	20.00	100.00
		2437	20.00	20.00	100.00
		2462	20.00	20.00	100.00
11G	Ant1	2412	20.00	20.00	100.00
		2437	20.00	20.00	100.00
		2462	20.00	20.00	100.00
11N20SISO	Ant1	2412	20.00	20.00	100.00
		2437	20.00	20.00	100.00
		2462	20.00	20.00	100.00

Test Graphs

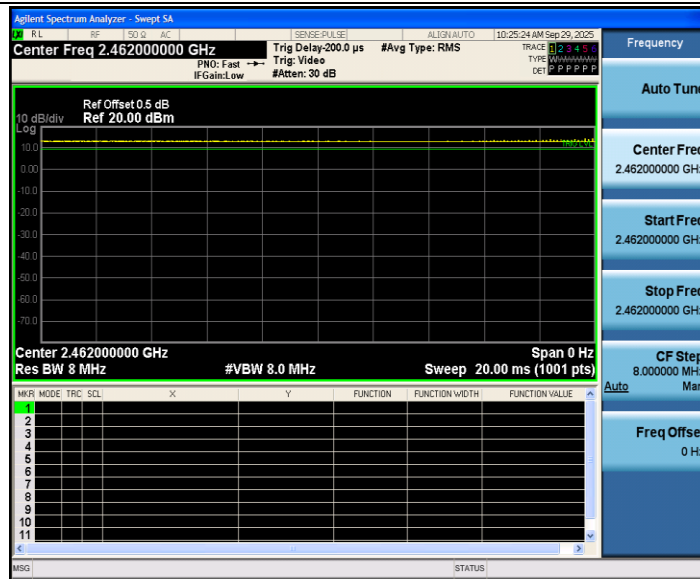
11B_Ant1_2412



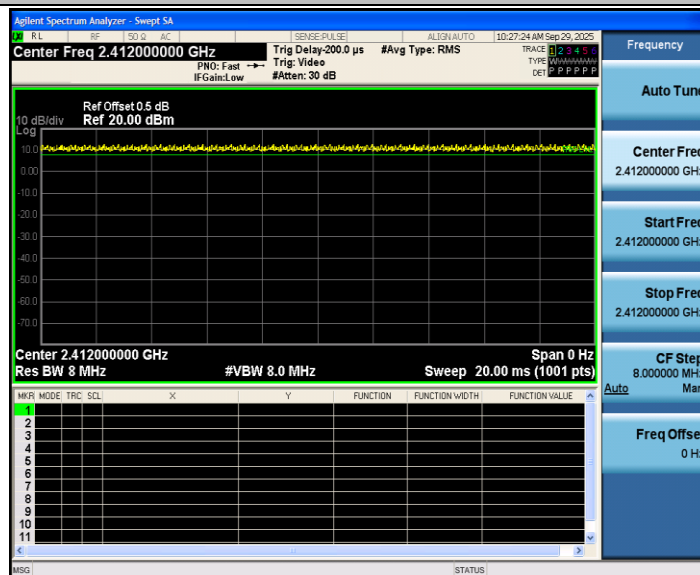
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437

