

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BYEV-ORIGOT108

Company : SHENZHEN DANFOO TECHNOLOGY CO.,LTD.

EUT : Smart Bee Box

Model Number : ORIGO T108

Report No. : CTA26062401107

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	9.400	2407.280	2416.680	0.5	PASS
		2437	10.120	2432.160	2442.280	0.5	PASS
		2462	9.400	2456.840	2466.240	0.5	PASS
11G	Ant1	2412	16.560	2403.760	2420.320	0.5	PASS
		2437	16.360	2428.840	2445.200	0.5	PASS
		2462	16.520	2453.760	2470.280	0.5	PASS
11N20SISO	Ant1	2412	17.640	2403.240	2420.880	0.5	PASS
		2437	17.680	2428.200	2445.880	0.5	PASS
		2462	17.680	2453.240	2470.920	0.5	PASS
11N40SISO	Ant1	2422	35.360	2404.720	2440.080	0.5	PASS
		2437	36.080	2419.160	2455.240	0.5	PASS
		2452	36.080	2434.160	2470.240	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



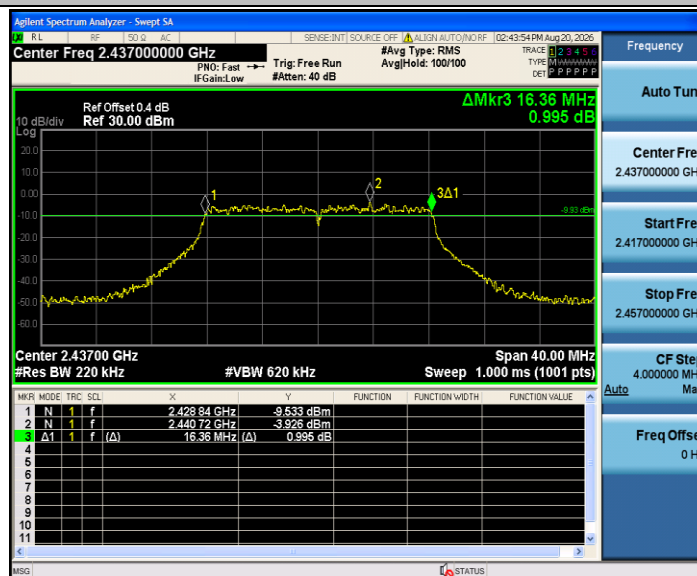
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



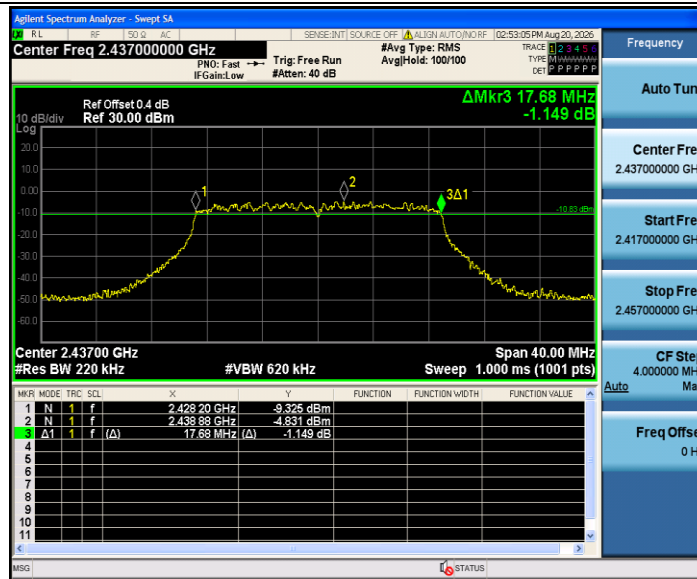
11G_Ant1_2462



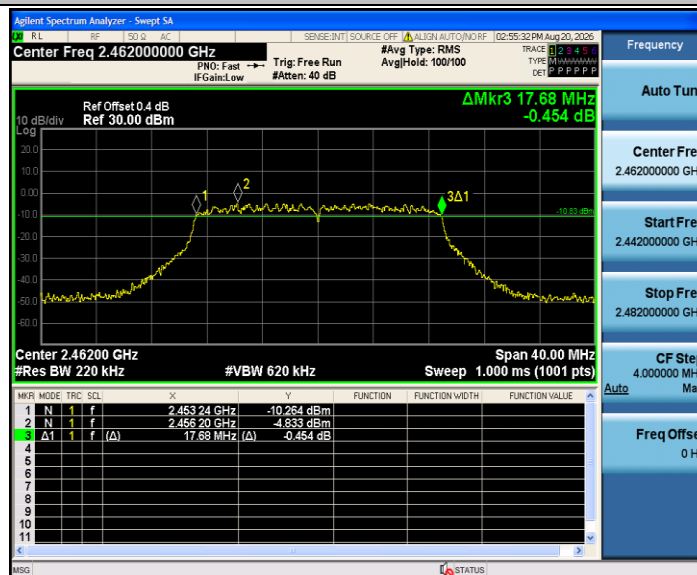
11N20SISO_Ant1_2412



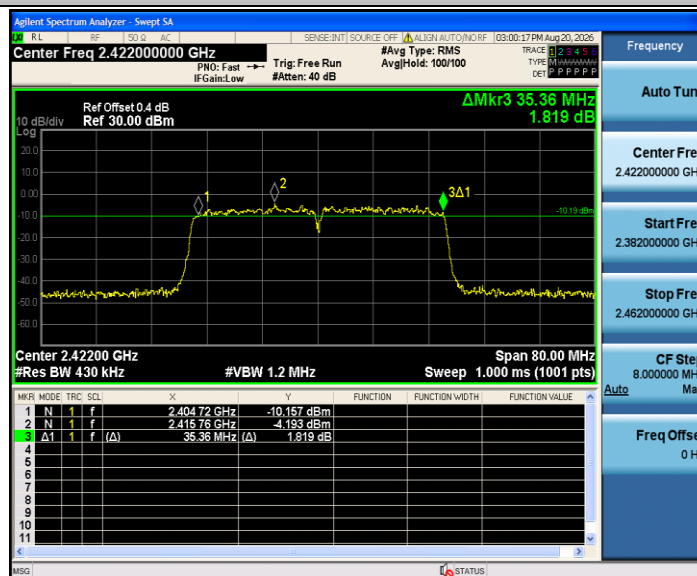
11N20SISO_Ant1_2437



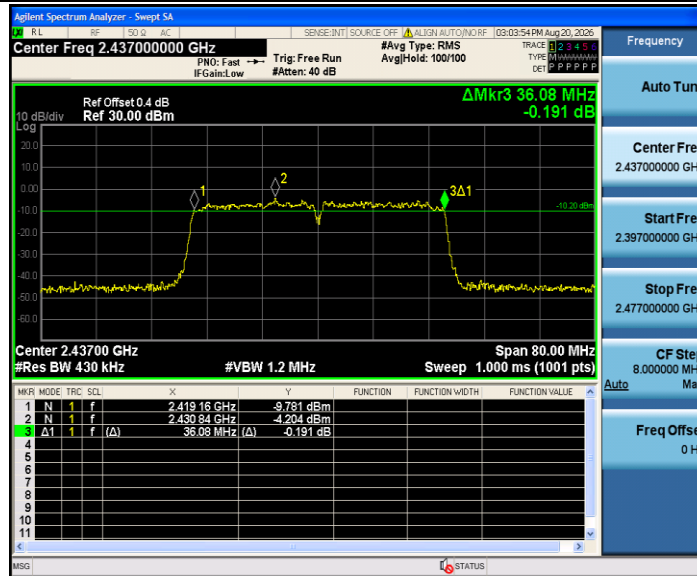
11N20SISO_Ant1_2462



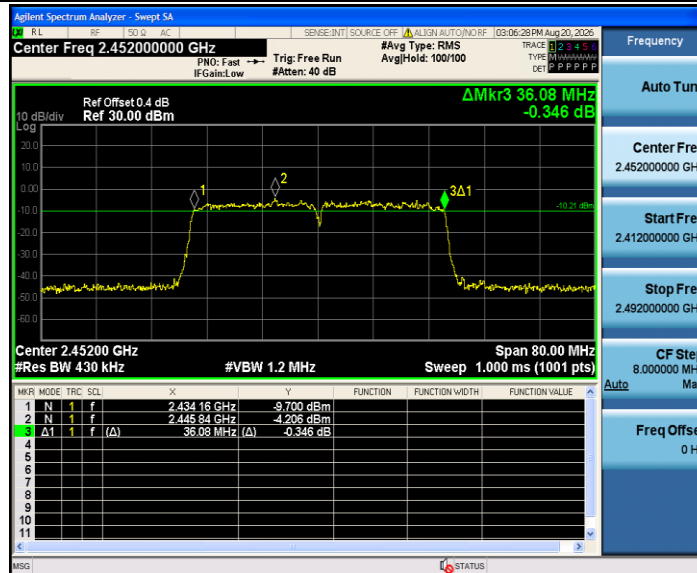
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



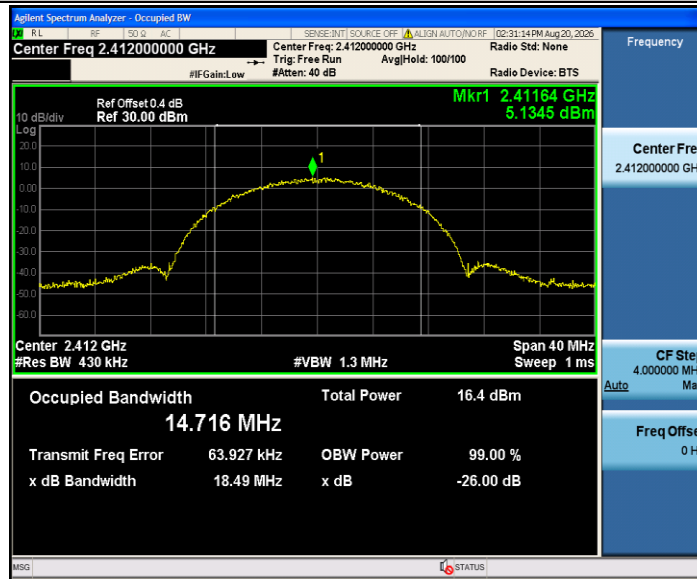
Appendix B: Occupied Channel Bandwidth

Test Result

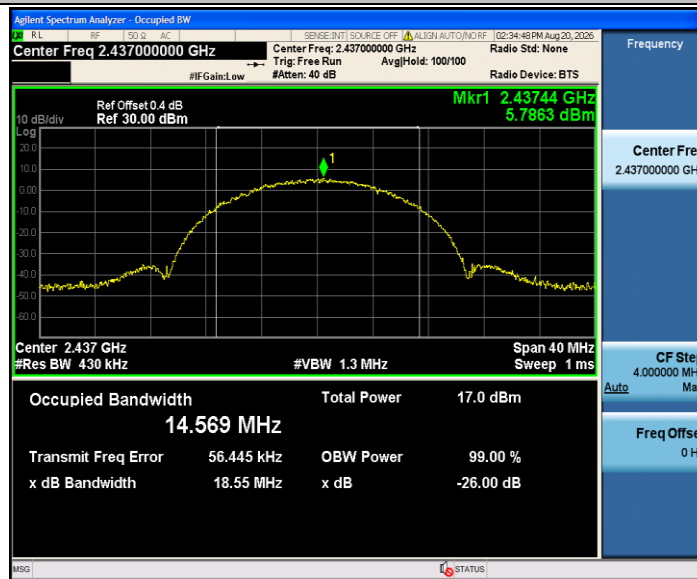
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.716	2404.7059	2419.4219	---	---
		2437	14.569	2429.7719	2444.3409	---	---
		2462	14.623	2454.7051	2469.3281	---	---
11G	Ant1	2412	16.995	2403.5047	2420.4997	---	---
		2437	16.972	2428.5142	2445.4862	---	---
		2462	16.957	2453.5107	2470.4677	---	---
11N20SISO	Ant1	2412	18.021	2403.0594	2421.0804	---	---
		2437	18.023	2428.0545	2446.0775	---	---
		2462	18.003	2453.0473	2471.0503	---	---
11N40SISO	Ant1	2422	36.021	2404.1425	2440.1635	---	---
		2437	35.989	2419.1307	2455.1197	---	---
		2452	36.035	2434.1264	2470.1614	---	---

Test Graphs

11B_Ant1_2412



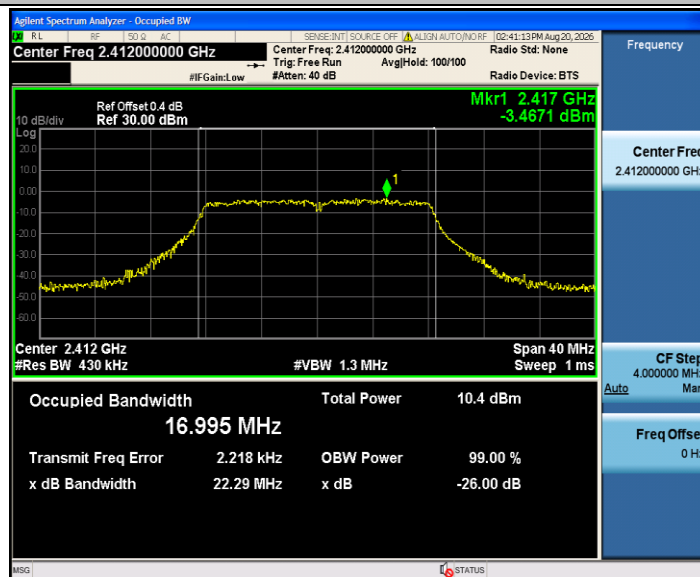
11B_Ant1_2437



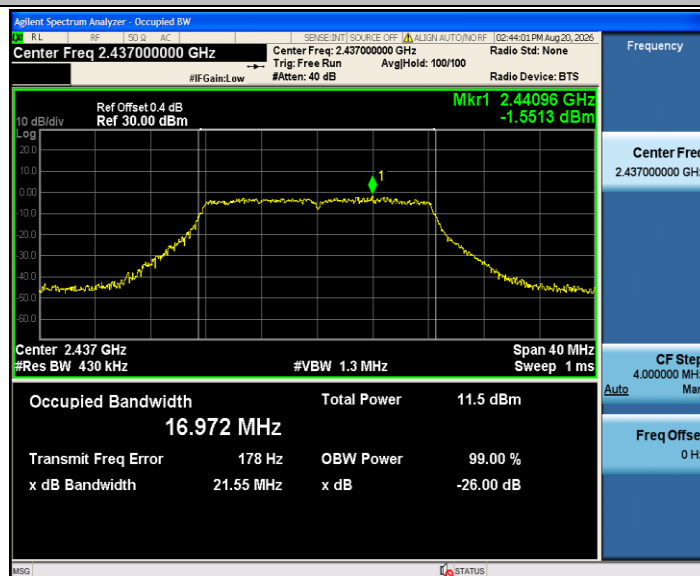
11B_Ant1_2462



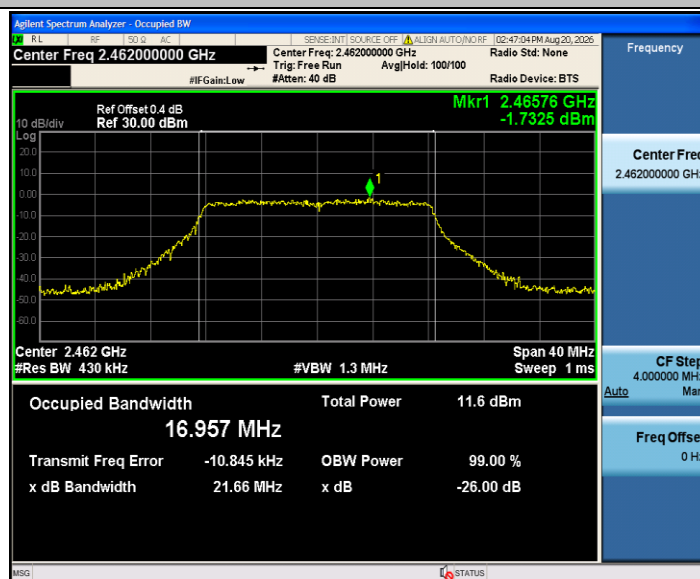
11G_Ant1_2412



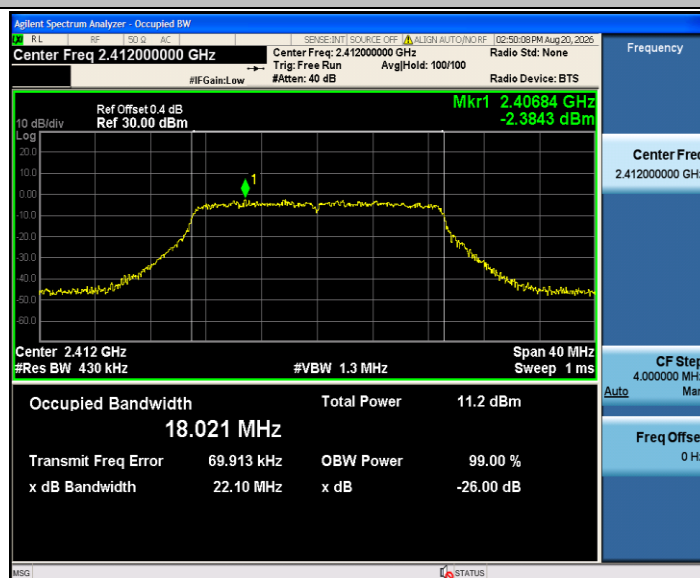
11G_Ant1_2437



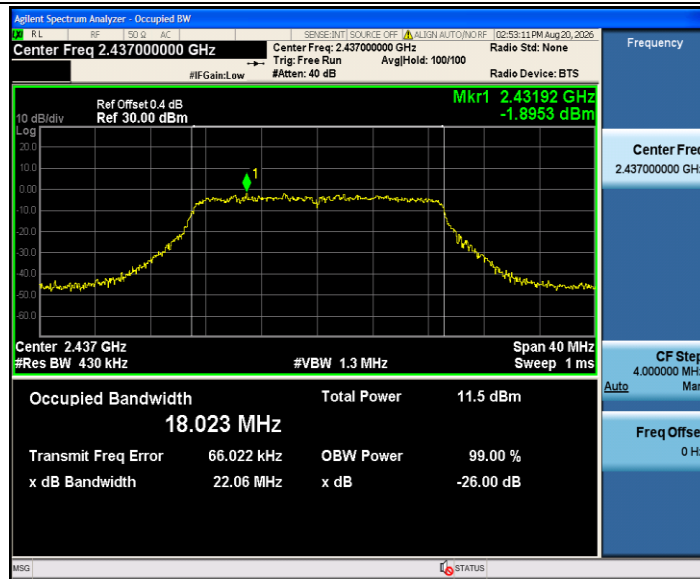
11G_Ant1_2462



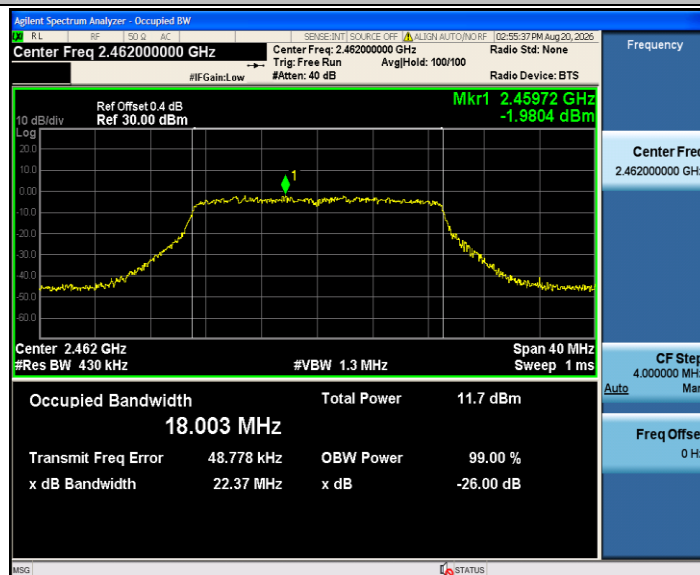
11N20SISO_Ant1_2412



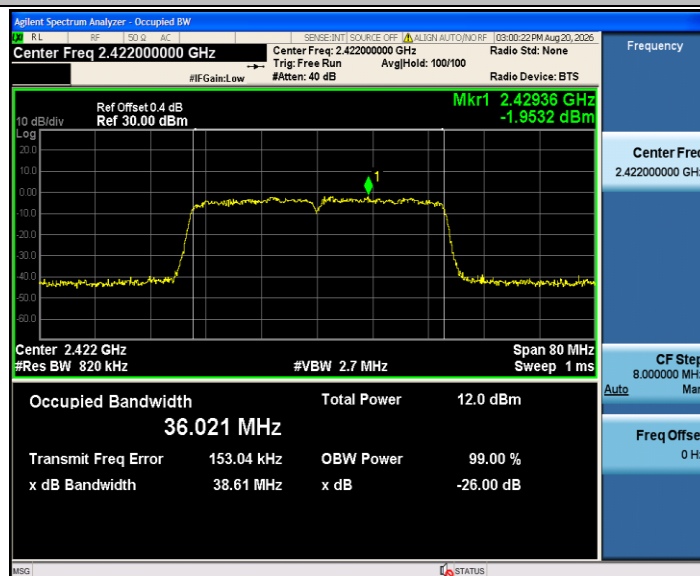
11N20SISO_Ant1_2437



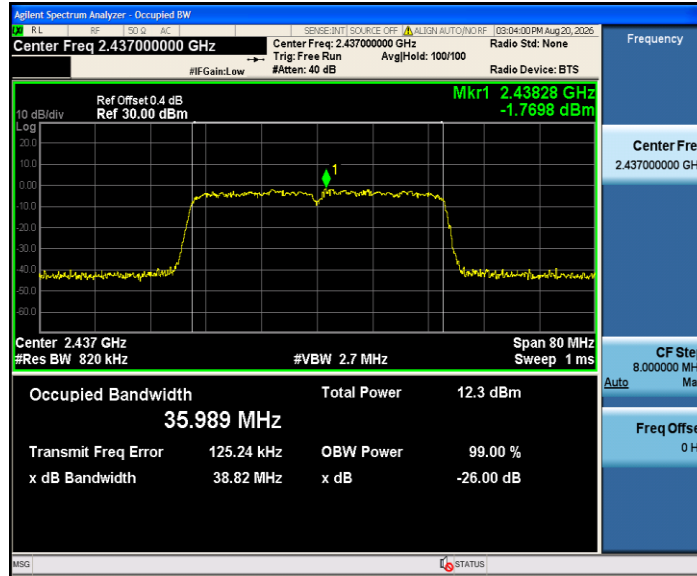
11N20SISO_Ant1_2462



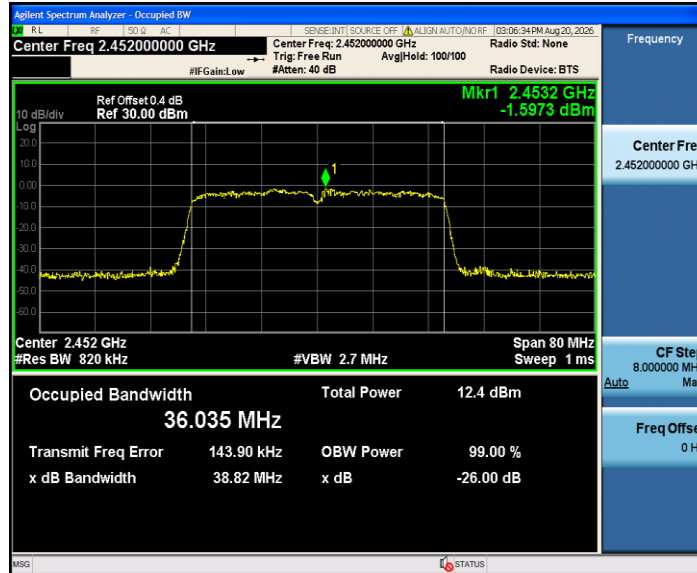
11N40SISO_Ant1_2422



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	15.40	≤30.00	PASS
		2437	15.99	≤30.00	PASS
		2462	14.98	≤30.00	PASS
11G	Ant1	2412	10.99	≤30.00	PASS
		2437	12.27	≤30.00	PASS
		2462	12.39	≤30.00	PASS
11N20SISO	Ant1	2412	11.97	≤30.00	PASS
		2437	12.40	≤30.00	PASS
		2462	12.47	≤30.00	PASS
11N40SISO	Ant1	2422	12.08	≤30.00	PASS
		2437	12.39	≤30.00	PASS
		2452	12.47	≤30.00	PASS

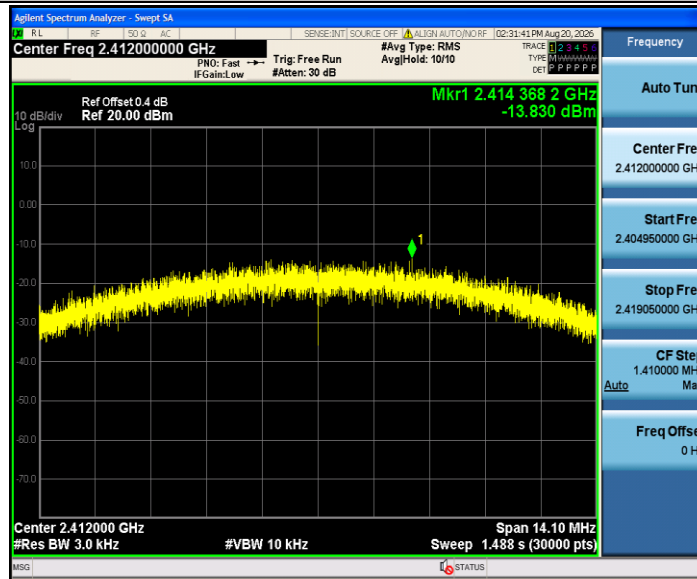
Appendix D: Maximum power spectral density

Test Result

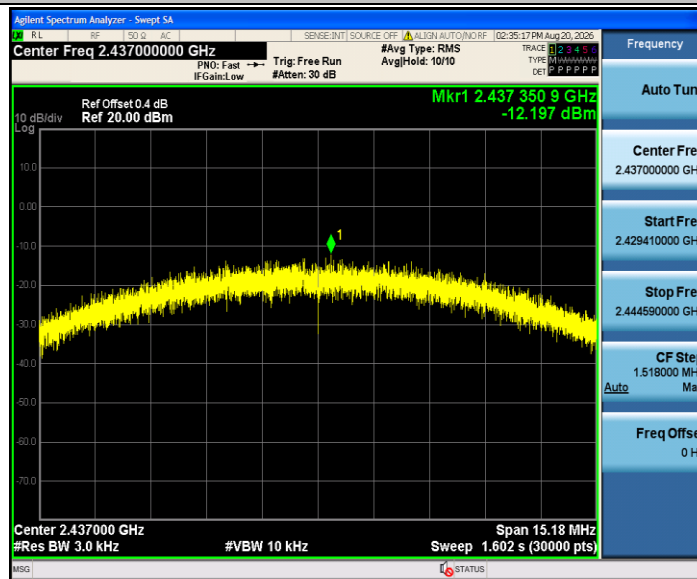
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.83	≤8.00	PASS
		2437	-12.20	≤8.00	PASS
		2462	-13.48	≤8.00	PASS
11G	Ant1	2412	-22.27	≤8.00	PASS
		2437	-21.04	≤8.00	PASS
		2462	-21.01	≤8.00	PASS
11N20SISO	Ant1	2412	-21.81	≤8.00	PASS
		2437	-21.55	≤8.00	PASS
		2462	-20.93	≤8.00	PASS
11N40SISO	Ant1	2422	-23.18	≤8.00	PASS
		2437	-23.54	≤8.00	PASS
		2452	-22.67	≤8.00	PASS

Test Graphs

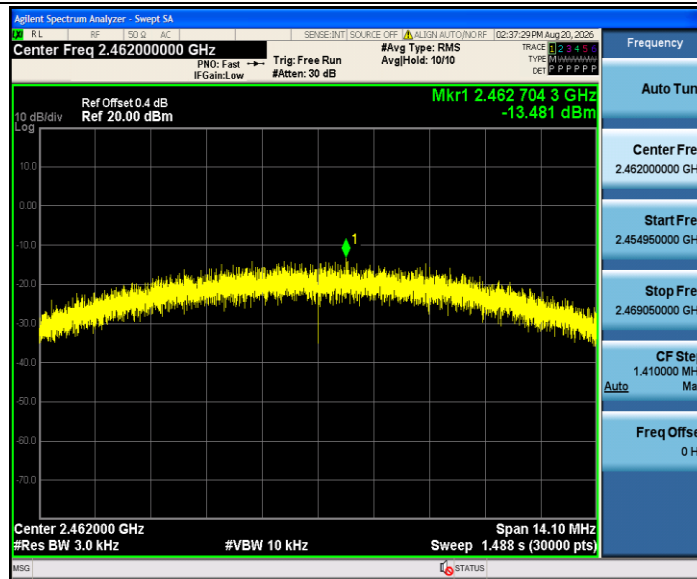
11B_Ant1_2412



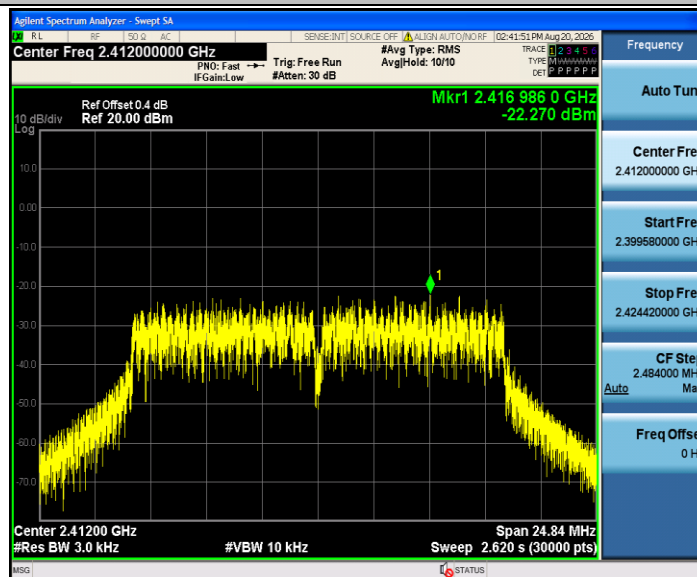
11B_Ant1_2437



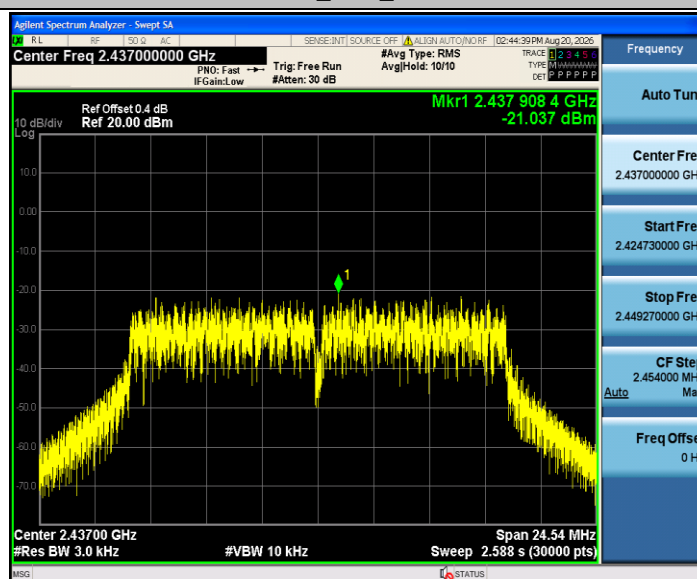
11B_Ant1_2462



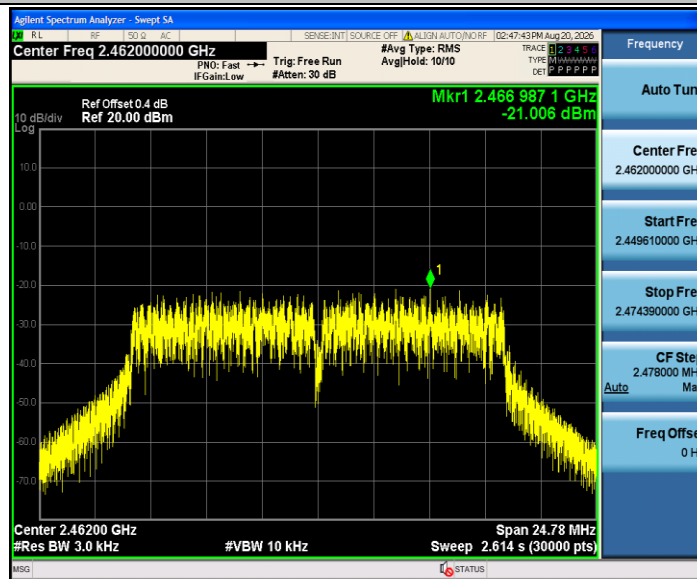
11G_Ant1_2412



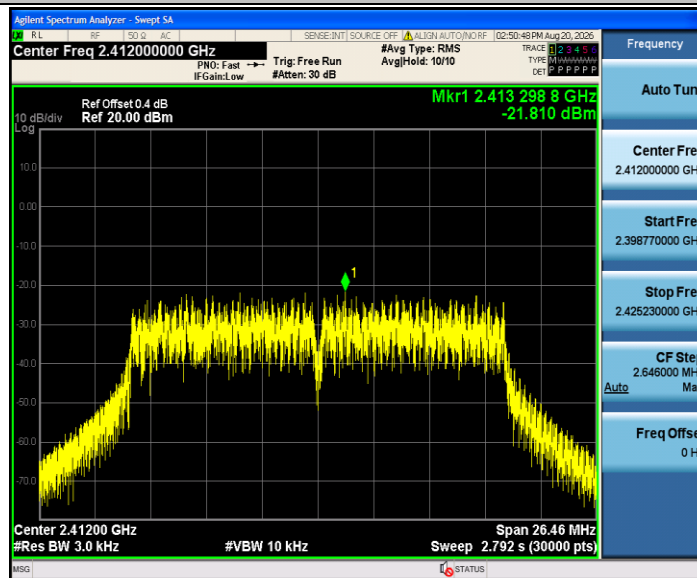
11G_Ant1_2437



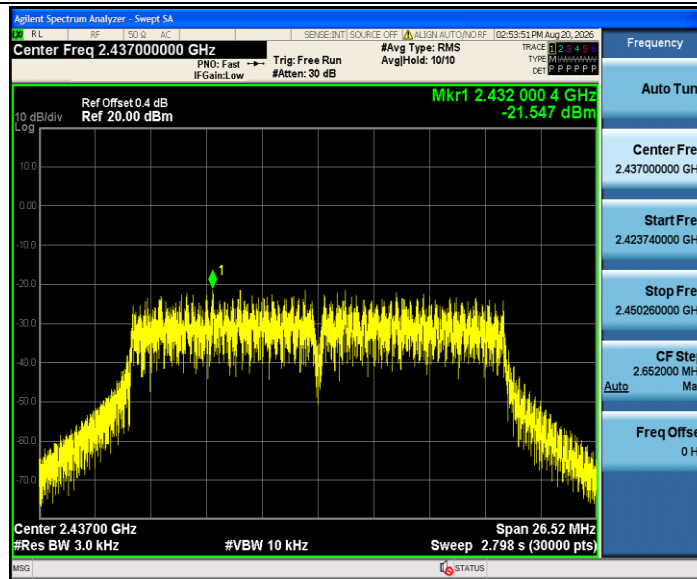
11G_Ant1_2462



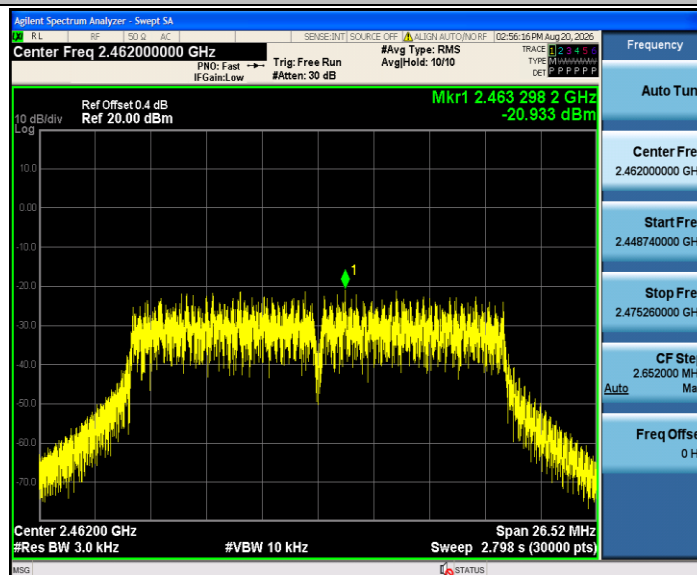
11N20SISO_Ant1_2412



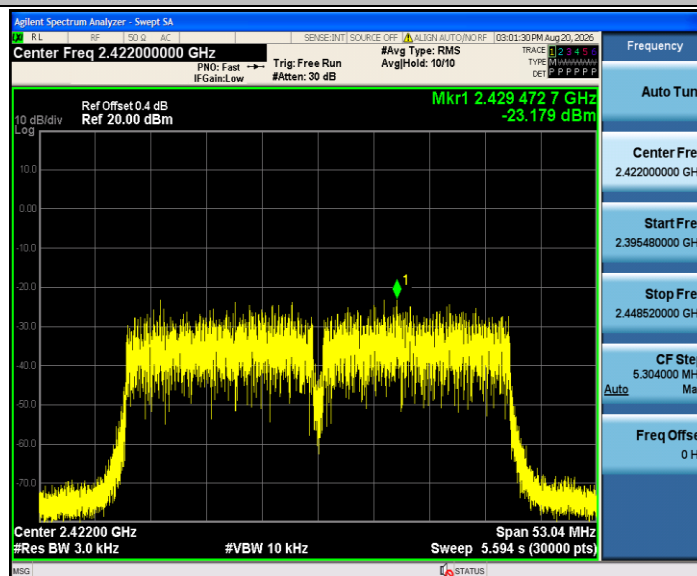
11N20SISO_Ant1_2437



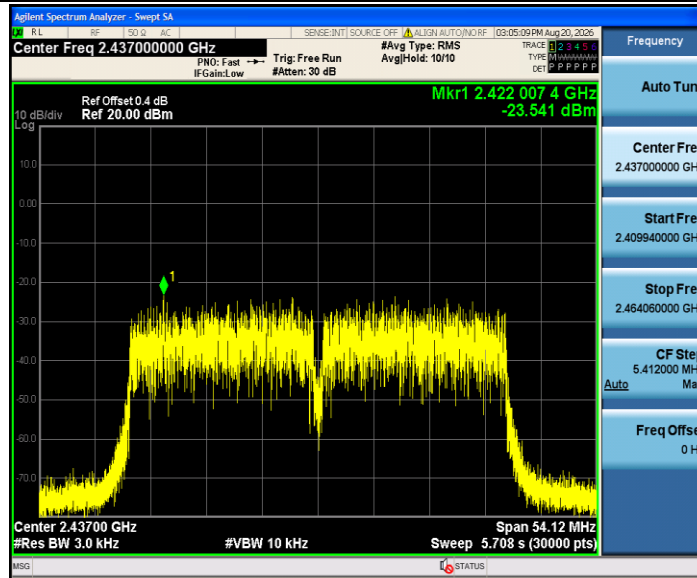
11N20SISO_Ant1_2462



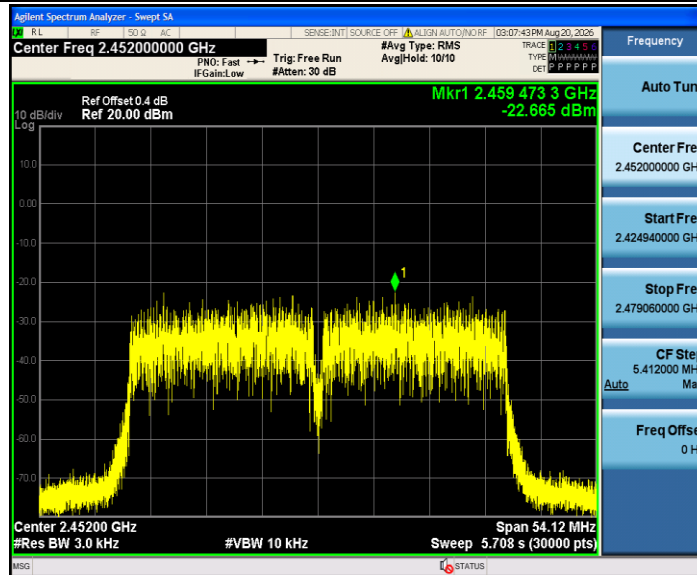
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



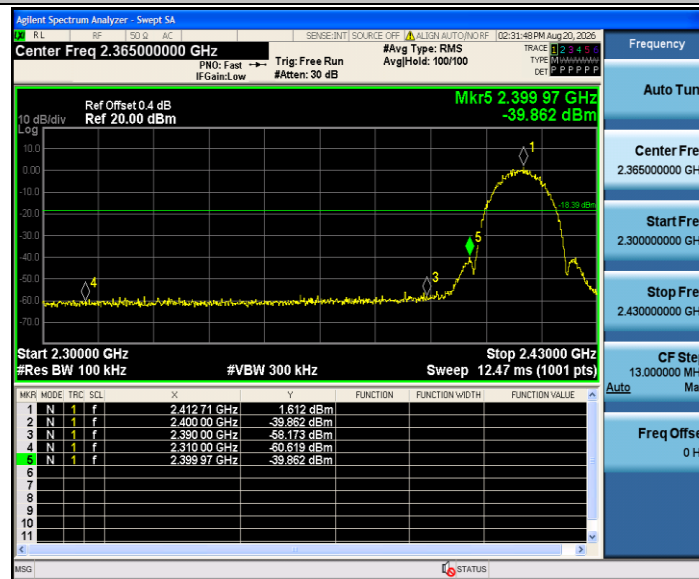
Appendix E: Band edge measurements

Test Result

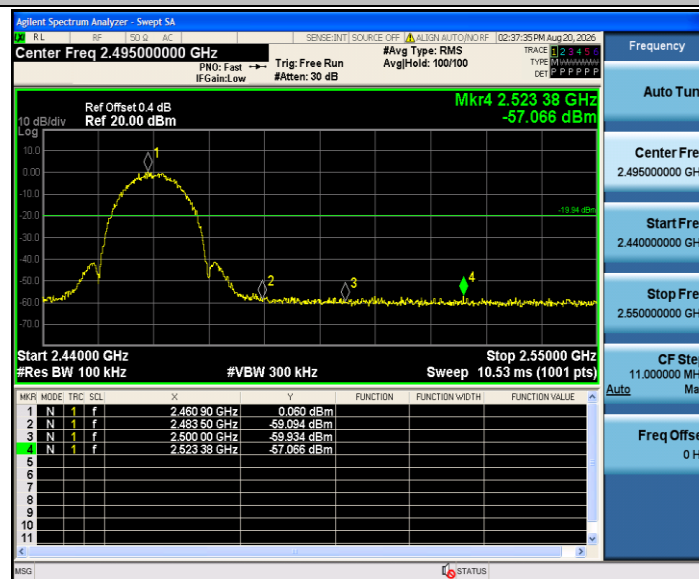
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.61	-39.86	≤-18.39	PASS
		High	2462	0.06	-57.07	≤-19.94	PASS
11G	Ant1	Low	2412	-6.96	-42.04	≤-26.96	PASS
		High	2462	-5.60	-52.96	≤-25.6	PASS
11N20SISO	Ant1	Low	2412	-6.35	-43.4	≤-26.35	PASS
		High	2462	-5.42	-57.32	≤-25.42	PASS
11N40SISO	Ant1	Low	2422	-8.72	-53.16	≤-28.72	PASS
		High	2452	-8.38	-53.81	≤-28.38	PASS

Test Graphs

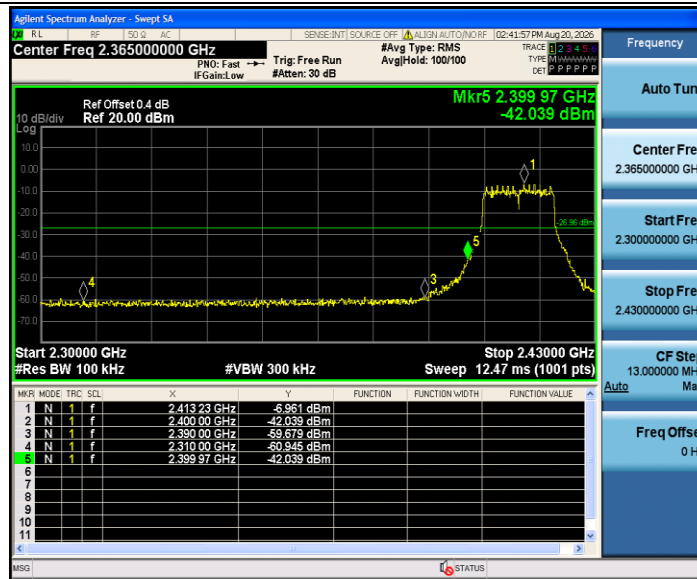
11B_Ant1_Low_2412



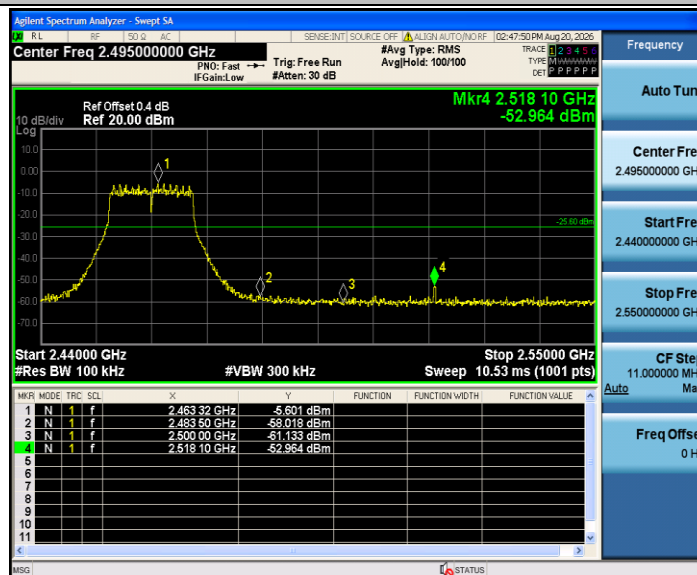
11B_Ant1_High_2462



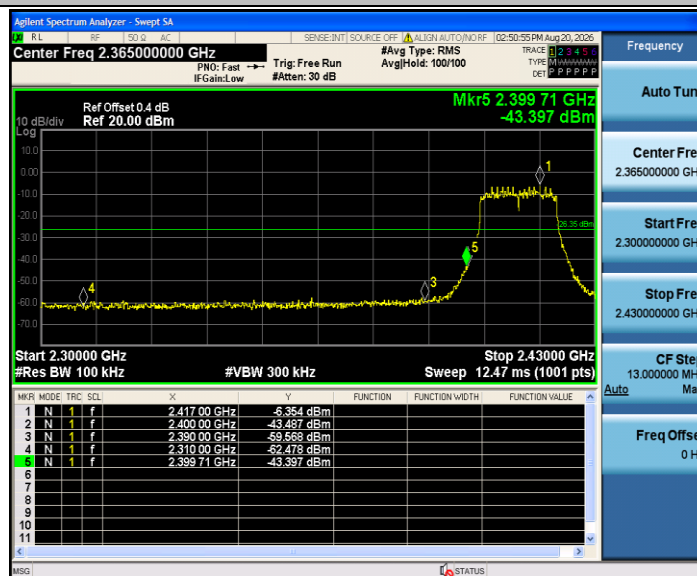
11G_Ant1_Low_2412



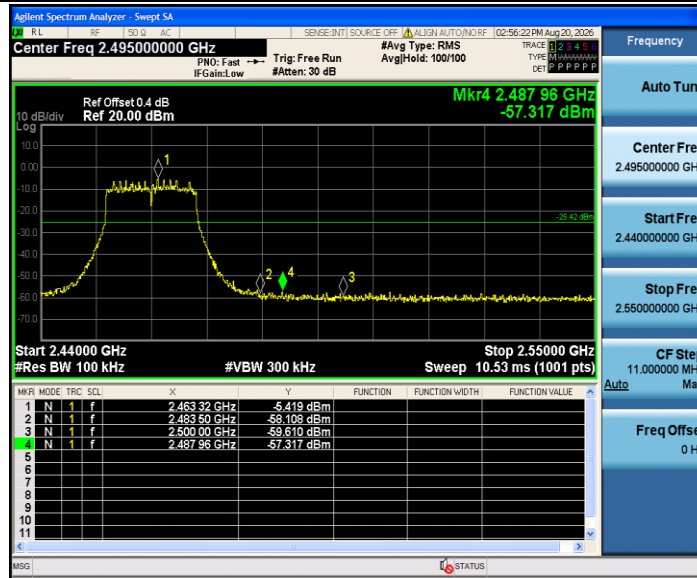
11G_Ant1_High_2462



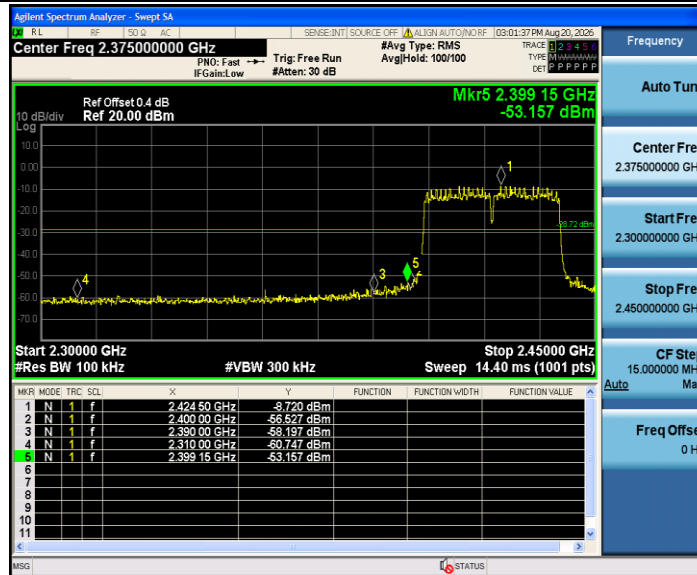
11N20SISO_Ant1_Low_2412



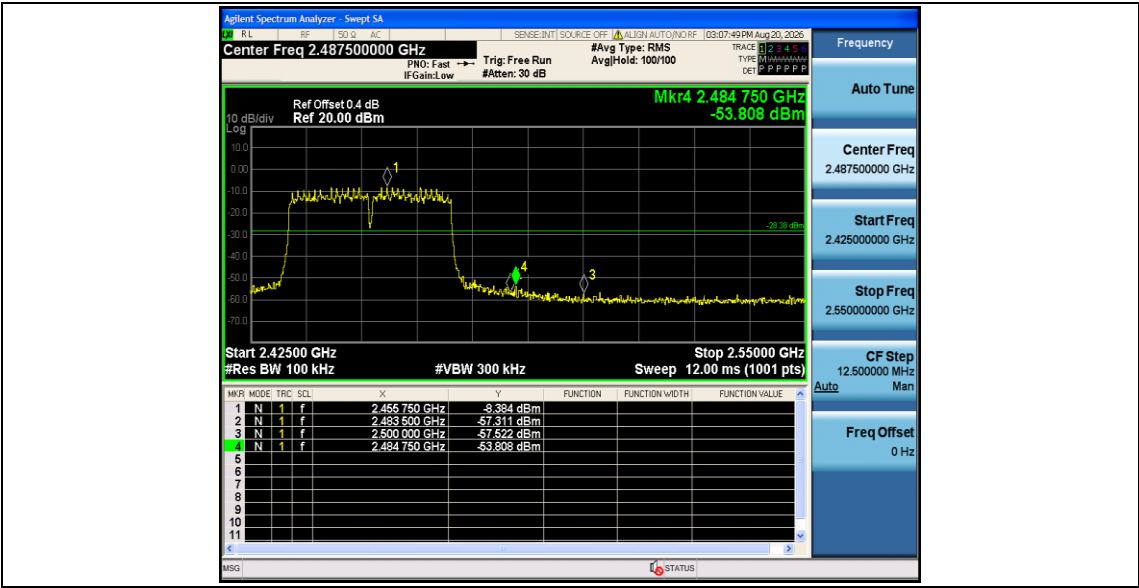
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

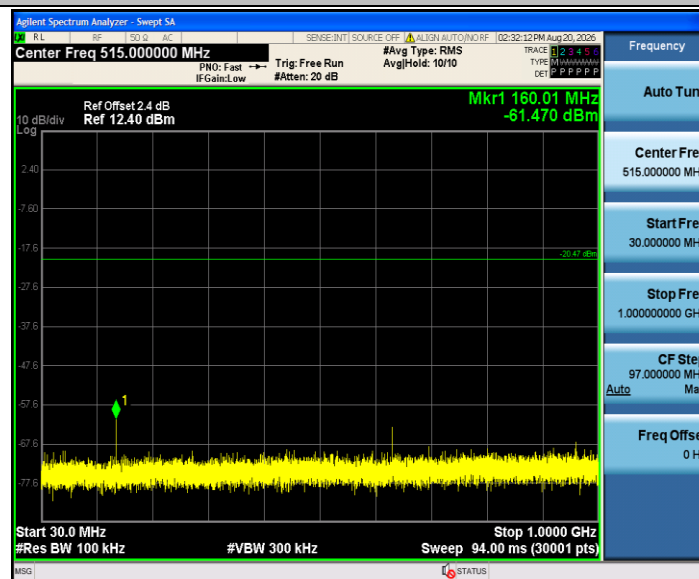
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-0.47	-0.47	---	PASS
			30~1000	-0.47	-61.47	≤-20.47	PASS
			1000~26500	-0.47	-46.73	≤-20.47	PASS
		2437	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-60.36	≤-20.35	PASS
			1000~26500	-0.35	-46.41	≤-20.35	PASS
		2462	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-60.03	≤-21.11	PASS
			1000~26500	-1.11	-47.06	≤-21.11	PASS
11G	Ant1	2412	Reference	-6.83	-6.83	---	PASS
			30~1000	-6.83	-61.71	≤-26.83	PASS
			1000~26500	-6.83	-45.52	≤-26.83	PASS
		2437	Reference	-5.85	-5.85	---	PASS
			30~1000	-5.85	-58.69	≤-25.85	PASS
			1000~26500	-5.85	-47.25	≤-25.85	PASS
		2462	Reference	-6.61	-6.61	---	PASS
			30~1000	-6.61	-59.1	≤-26.61	PASS
			1000~26500	-6.61	-46.3	≤-26.61	PASS
11N20SISO	Ant1	2412	Reference	-6.47	-6.47	---	PASS
			30~1000	-6.47	-58.58	≤-26.47	PASS
			1000~26500	-6.47	-46.98	≤-26.47	PASS
		2437	Reference	-6.65	-6.65	---	PASS
			30~1000	-6.65	-58.59	≤-26.65	PASS
			1000~26500	-6.65	-46.72	≤-26.65	PASS
		2462	Reference	-6.30	-6.30	---	PASS
			30~1000	-6.30	-58.68	≤-26.3	PASS
			1000~26500	-6.30	-46.31	≤-26.3	PASS
11N40SISO	Ant1	2422	Reference	-9.30	-9.30	---	PASS
			30~1000	-9.30	-57.69	≤-29.3	PASS
			1000~26500	-9.30	-46.6	≤-29.3	PASS
		2437	Reference	-8.67	-8.67	---	PASS
			30~1000	-8.67	-59	≤-28.67	PASS
			1000~26500	-8.67	-46.16	≤-28.67	PASS
		2452	Reference	-8.50	-8.50	---	PASS
			30~1000	-8.50	-58.48	≤-28.5	PASS
			1000~26500	-8.50	-45.99	≤-28.5	PASS

Test Graphs

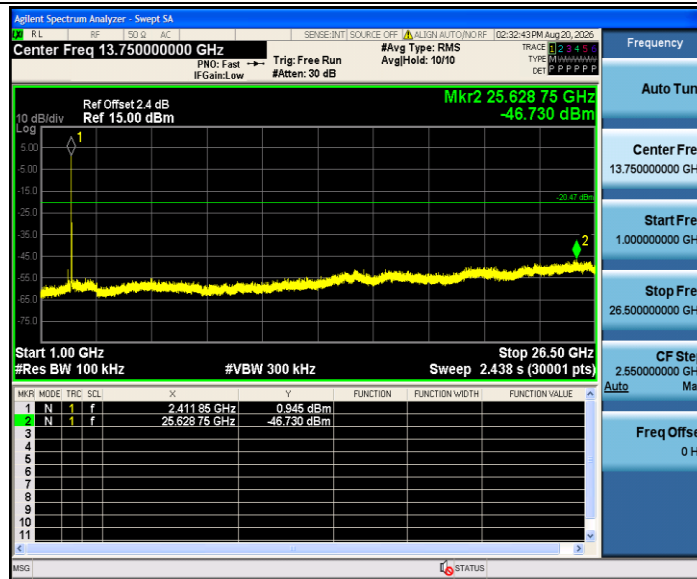
11B_Ant1_2412_0~Reference



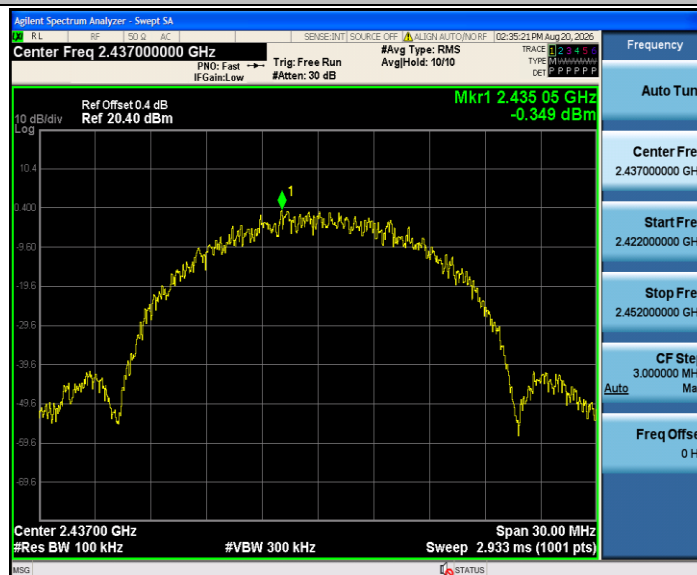
11B_Ant1_2412_30~1000



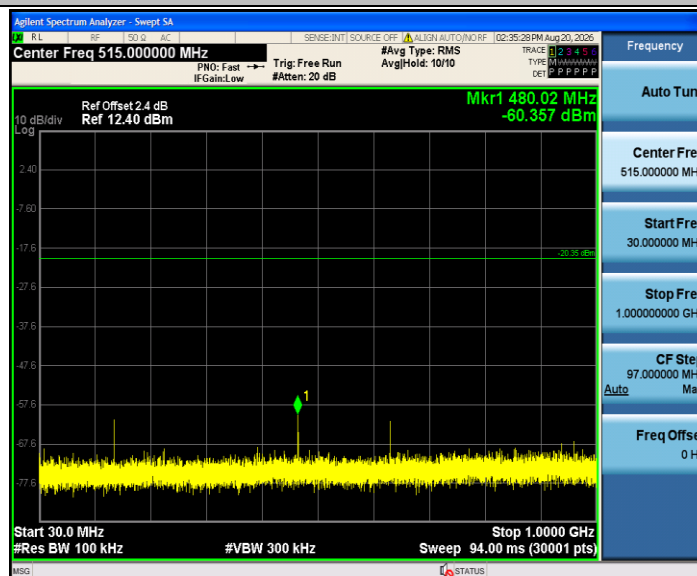
11B_Ant1_2412_1000~26500



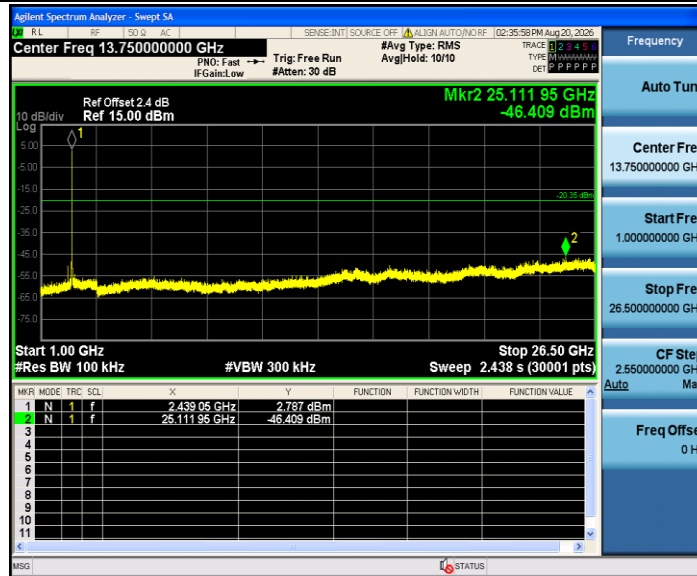
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



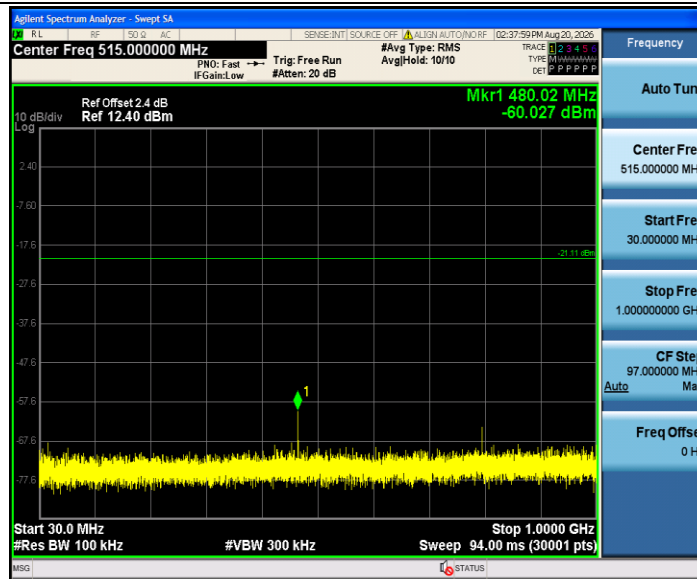
11B_Ant1_2437_1000~26500



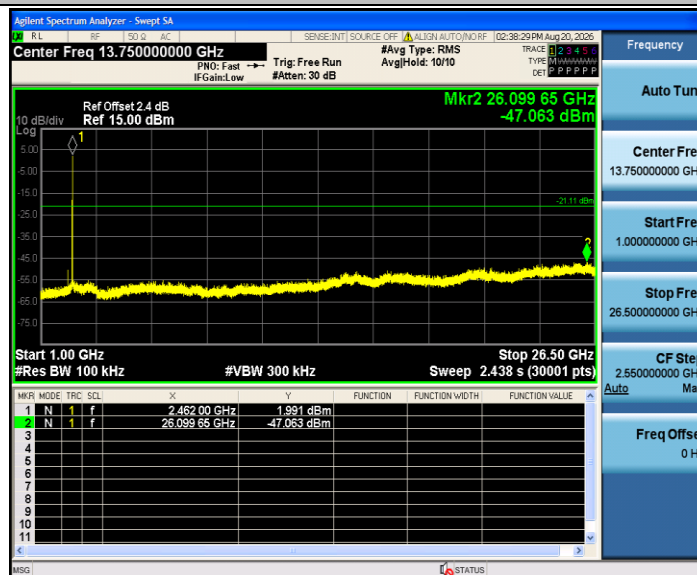
11B_Ant1_2462_0~Reference



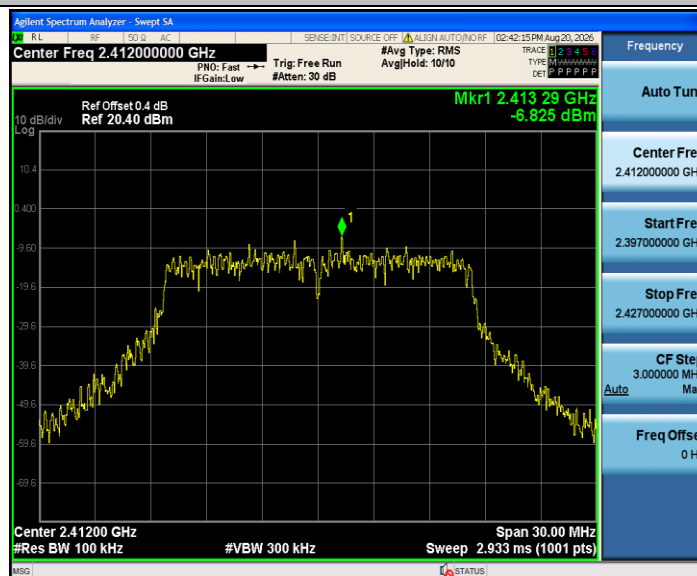
11B_Ant1_2462_30~1000



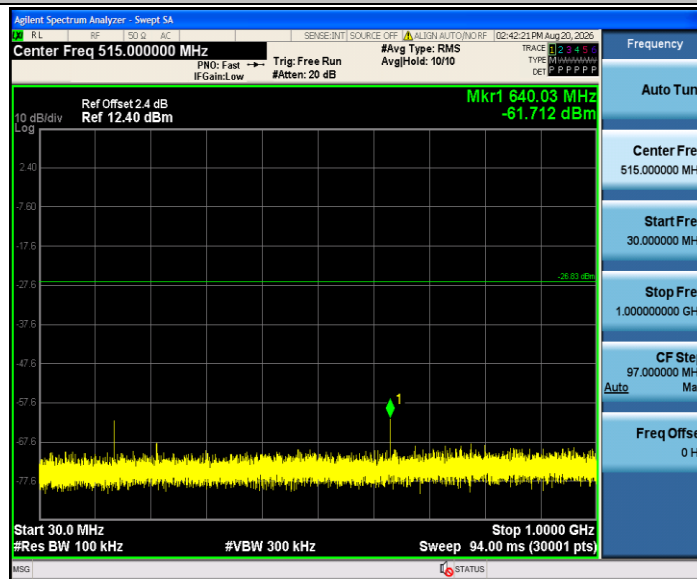
11B_Ant1_2462_1000~26500



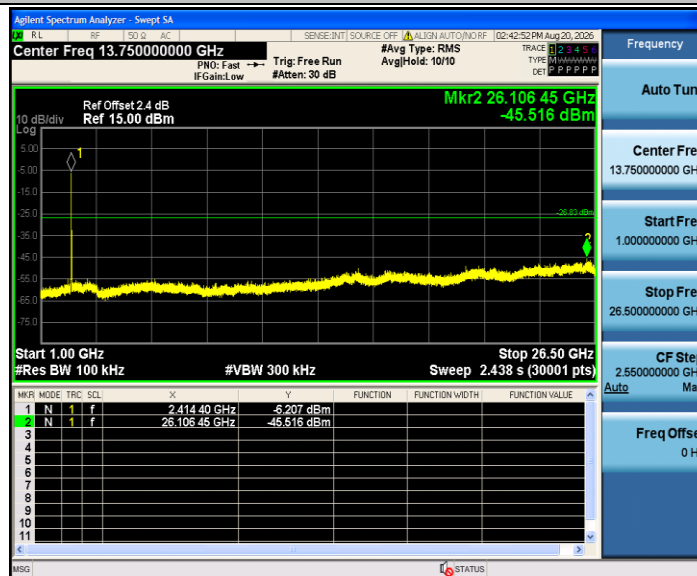
11G_Ant1_2412_0~Reference



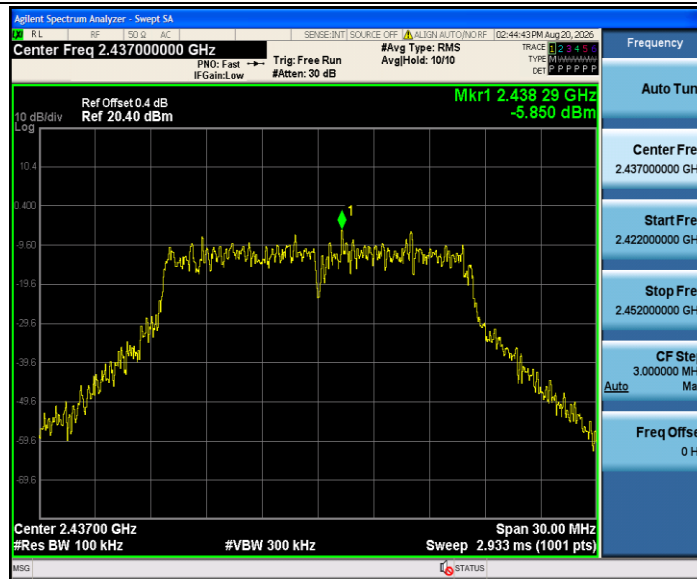
11G_Ant1_2412_30~1000



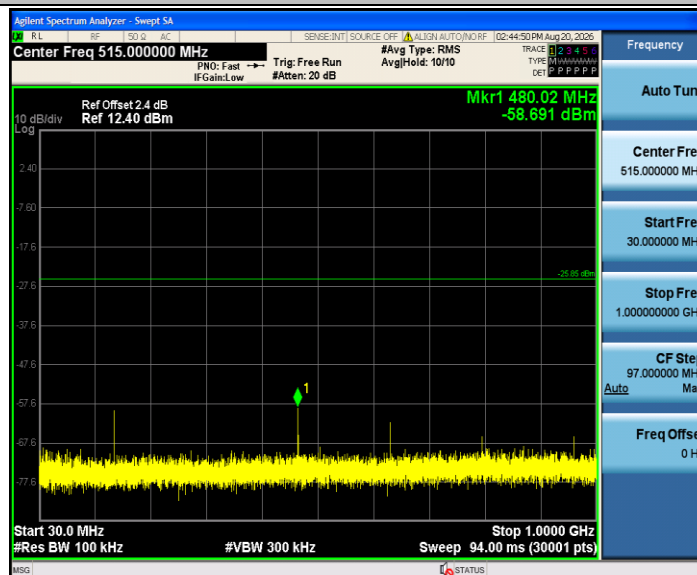
11G_Ant1_2412_1000~26500



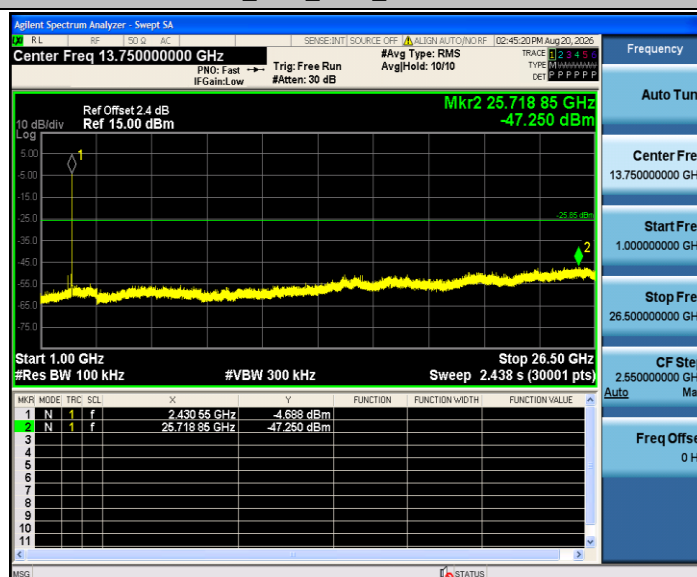
11G_Ant1_2437_0~Reference



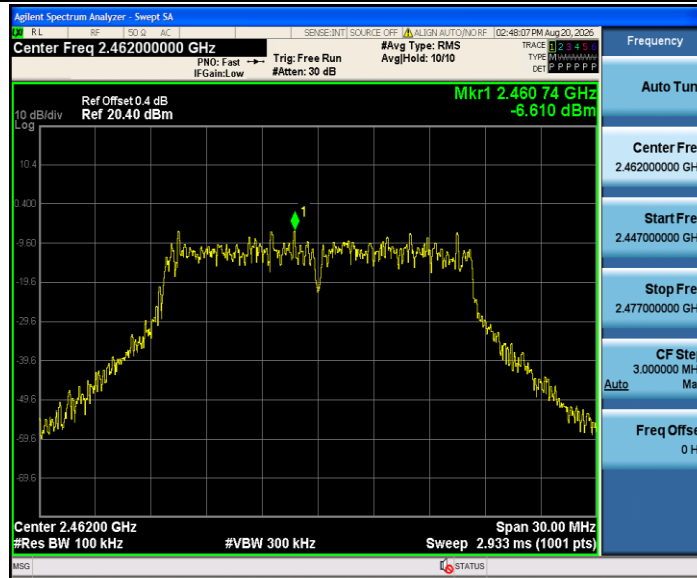
11G_Ant1_2437_30~1000



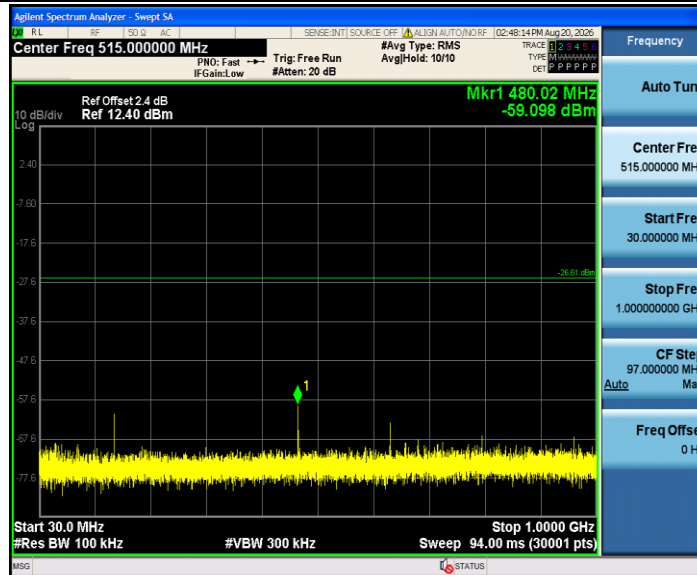
11G_Ant1_2437_1000~26500



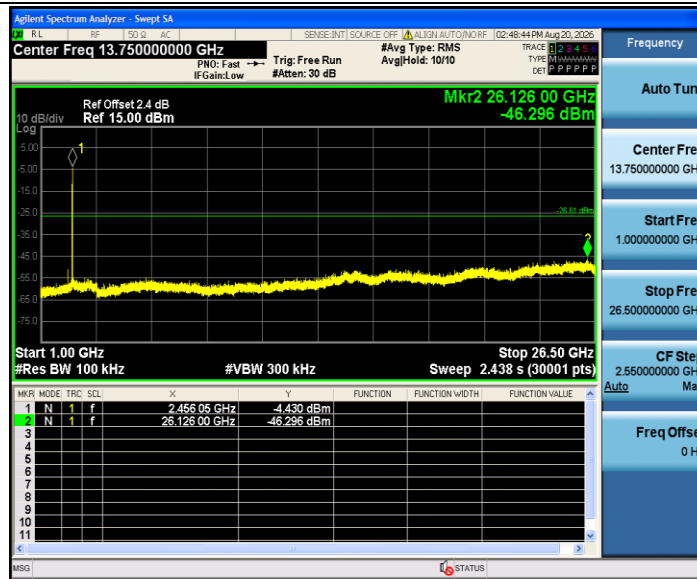
11G_Ant1_2462_0~Reference



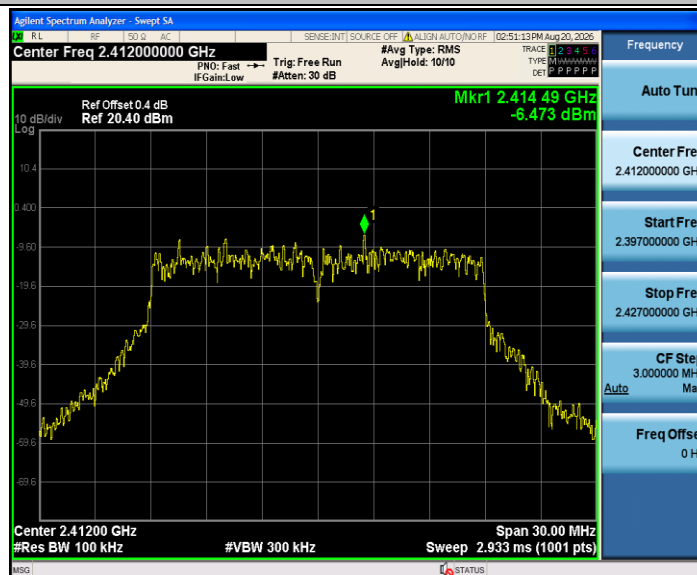
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

