

FCC Appendix RF Test Data

FCC ID : 2BP5V-8SA8P

Company : Dong Guan Zhen Ke Technology Co., LTD

EUT : Weather Station

Model Number : SA8 Plus

Report No. : CTA25061800503

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	2407.480	2417.040	0.5	PASS
		2437	8.560	2432.960	2441.520	0.5	PASS
		2462	9.200	2457.520	2466.720	0.5	PASS
11G	Ant1	2412	15.600	2404.000	2419.600	0.5	PASS
		2437	15.720	2429.440	2445.160	0.5	PASS
		2462	15.680	2453.840	2469.520	0.5	PASS
11N20SISO	Ant1	2412	15.800	2403.800	2419.600	0.5	PASS
		2437	16.080	2429.440	2445.520	0.5	PASS
		2462	16.160	2453.360	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.760	2404.080	2439.840	0.5	PASS
		2437	35.120	2419.480	2454.600	0.5	PASS
		2452	30.000	2434.480	2464.480	0.5	PASS

Test Graphs

11B_Ant1_2412



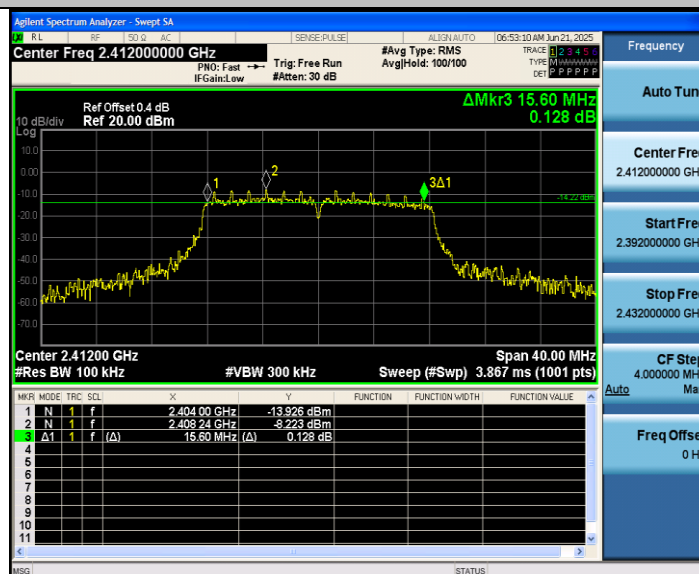
11B_Ant1_2437



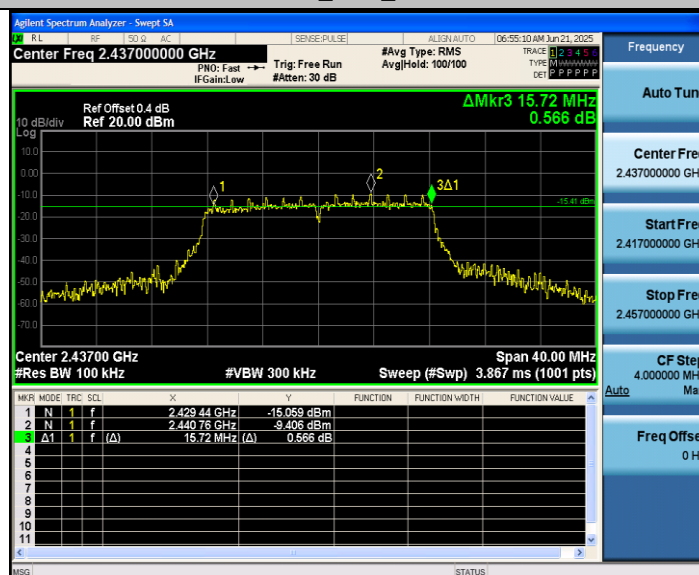
11B_Ant1_2462



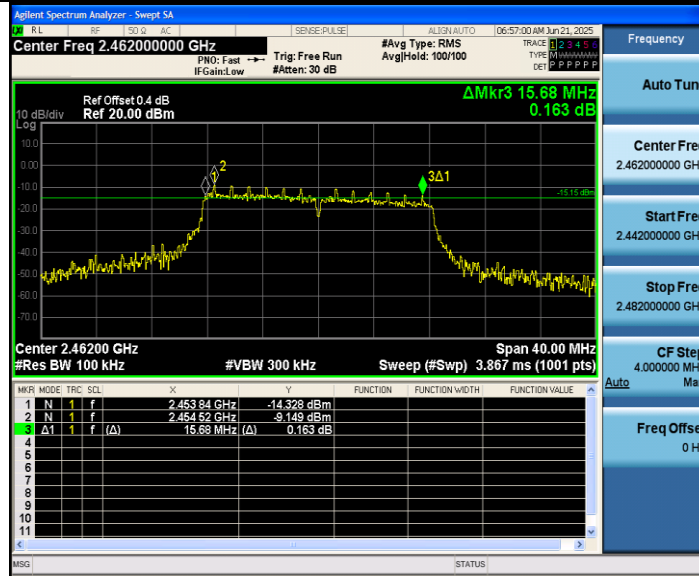
11G_Ant1_2412



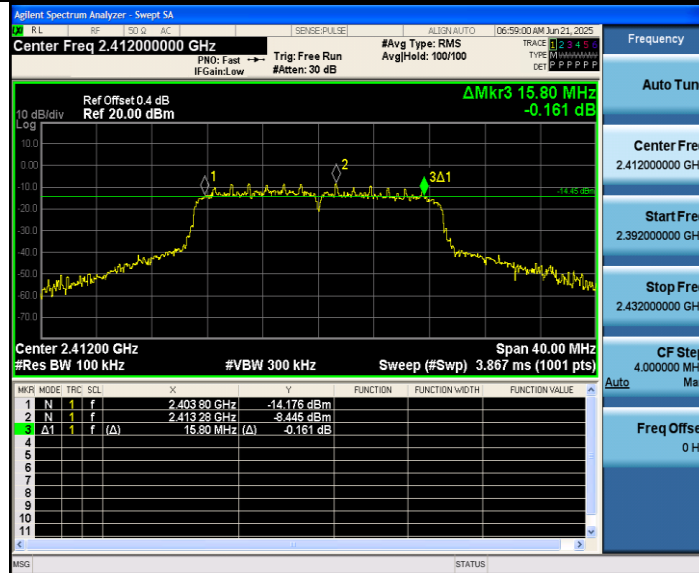
11G_Ant1_2437



11G_Ant1_2462



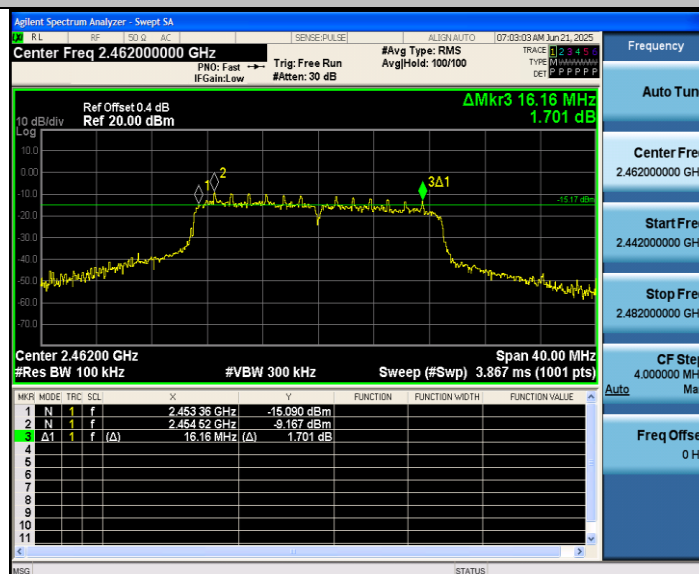
11N20SISO_Ant1_2412



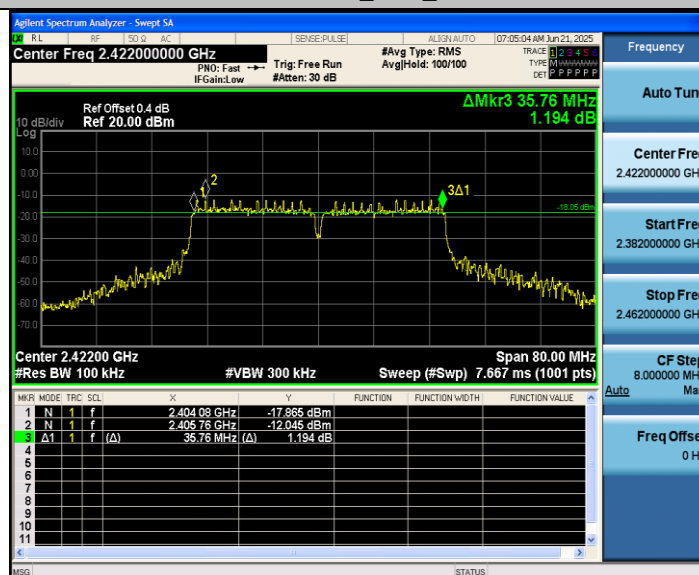
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



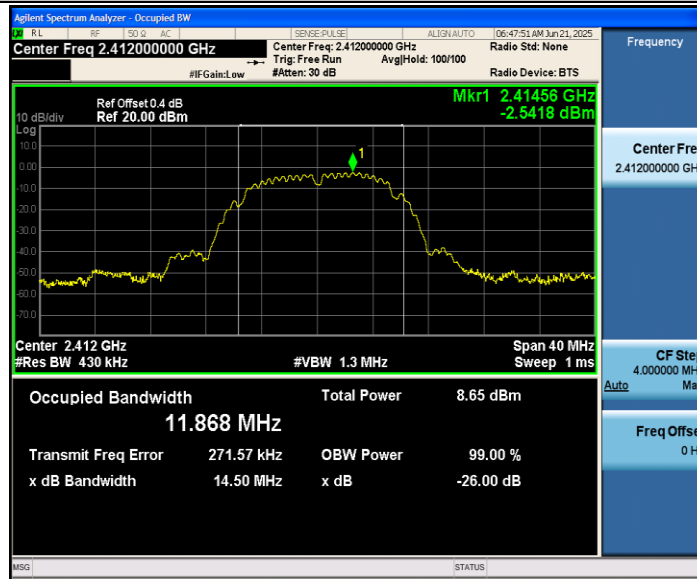
Appendix B: Occupied Channel Bandwidth

Test Result

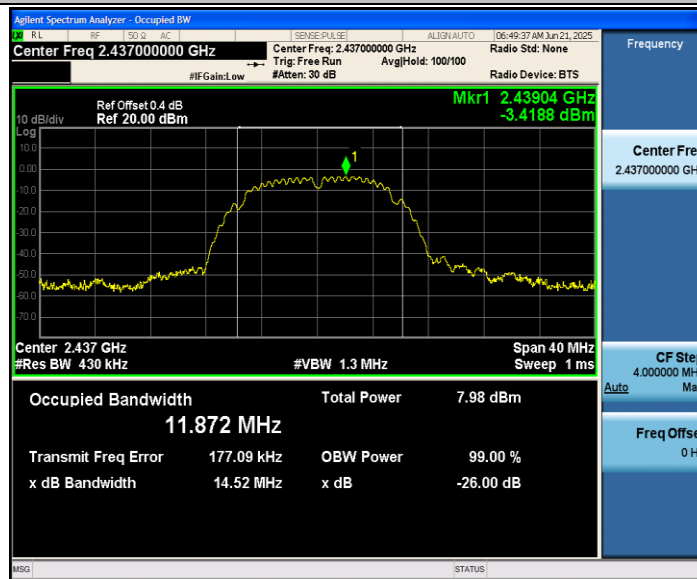
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.868	2406.3376	2418.2056	---	---
		2437	11.872	2431.2411	2443.1131	---	---
		2462	12.004	2456.1284	2468.1324	---	---
11G	Ant1	2412	16.627	2403.6546	2420.2816	---	---
		2437	16.614	2428.8206	2445.4346	---	---
		2462	16.687	2453.5279	2470.2149	---	---
11N20SISO	Ant1	2412	17.609	2403.2044	2420.8134	---	---
		2437	17.621	2428.3028	2445.9238	---	---
		2462	17.810	2452.9185	2470.7285	---	---
11N40SISO	Ant1	2422	36.499	2403.8406	2440.3396	---	---
		2437	36.110	2419.0413	2455.1513	---	---
		2452	35.668	2434.0395	2469.7075	---	---

Test Graphs

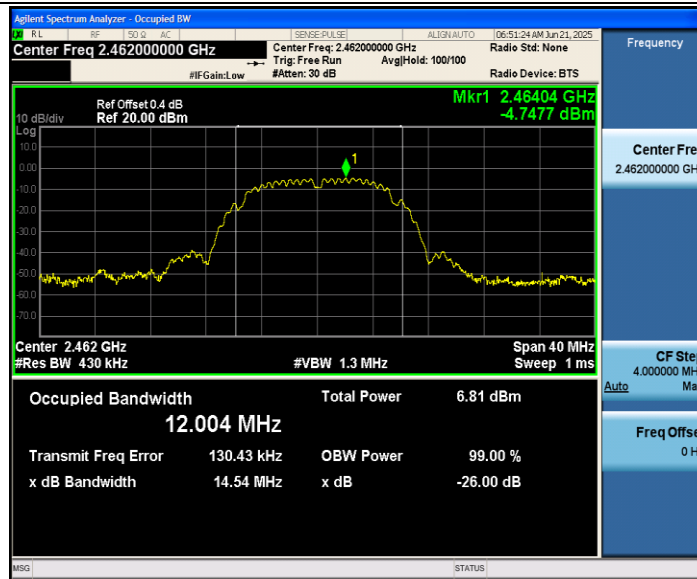
11B_Ant1_2412



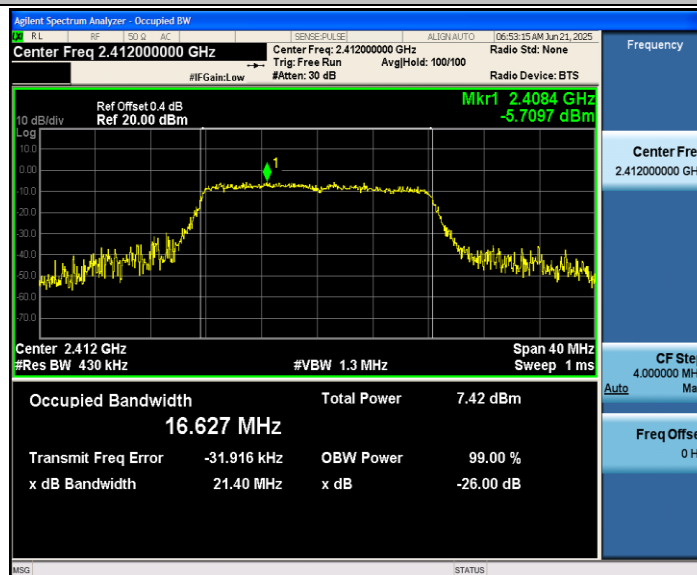
11B_Ant1_2437



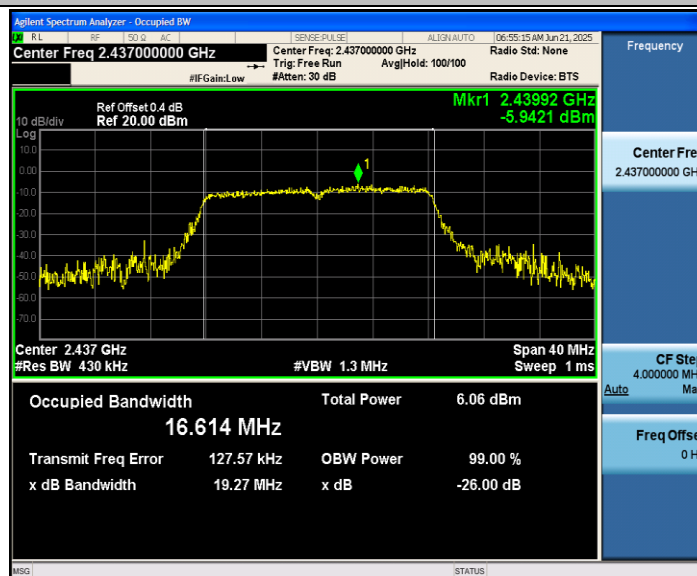
11B_Ant1_2462



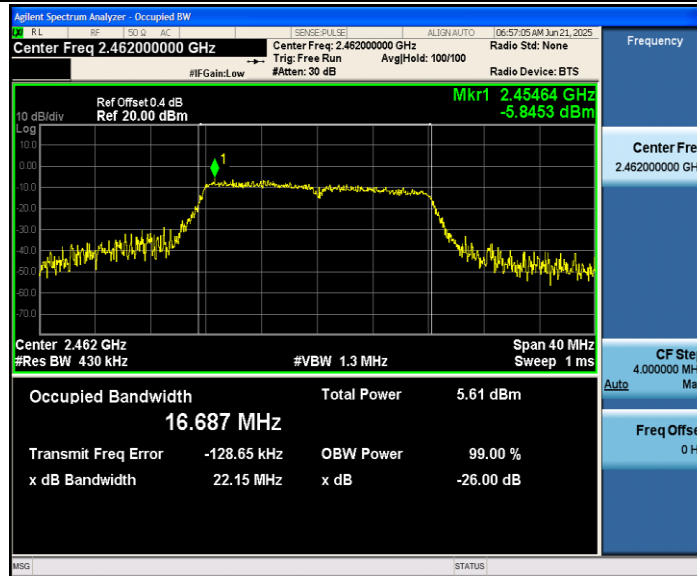
11G_Ant1_2412



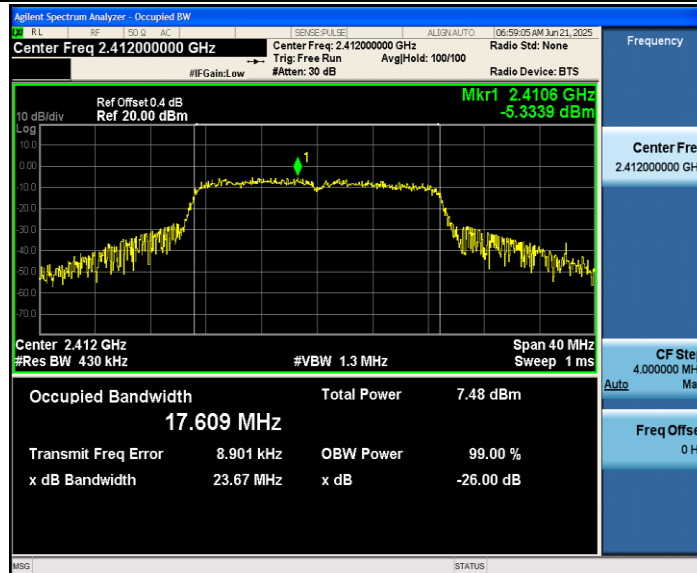
11G_Ant1_2437



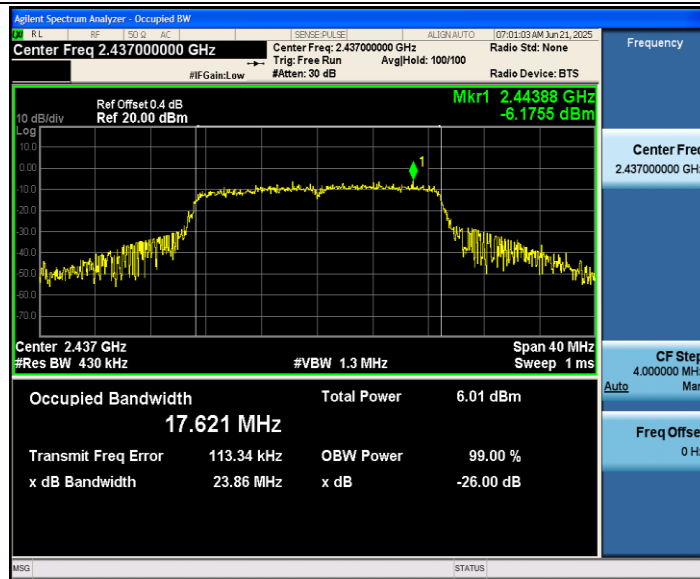
11G_Ant1_2462



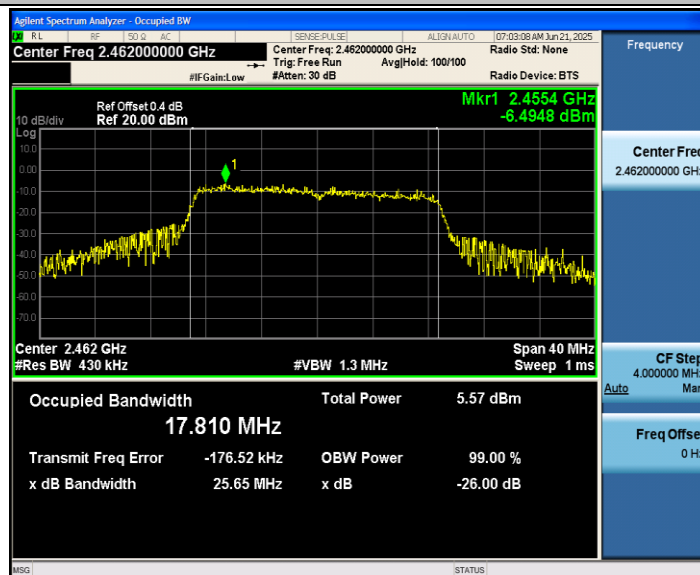
11N20SISO_Ant1_2412



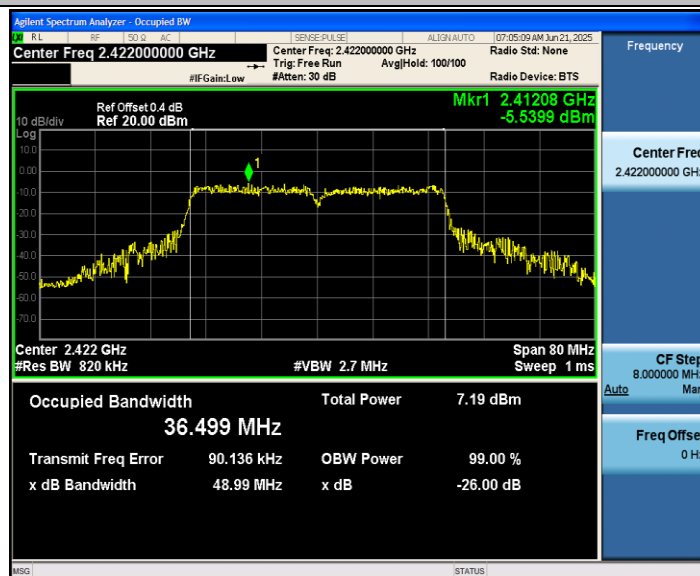
11N20SISO_Ant1_2437



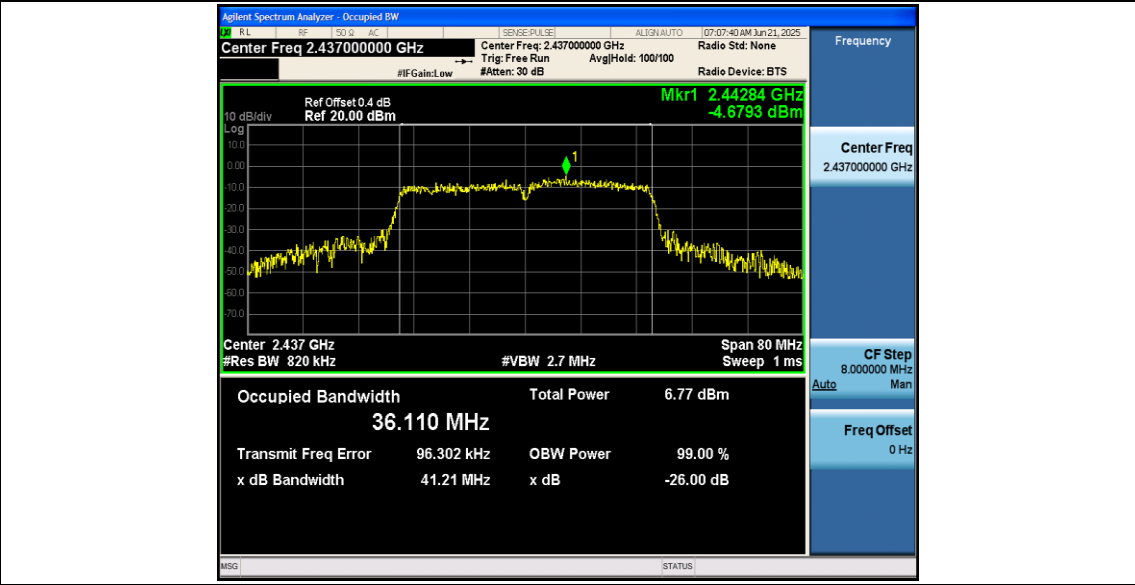
11N20SISO_Ant1_2462



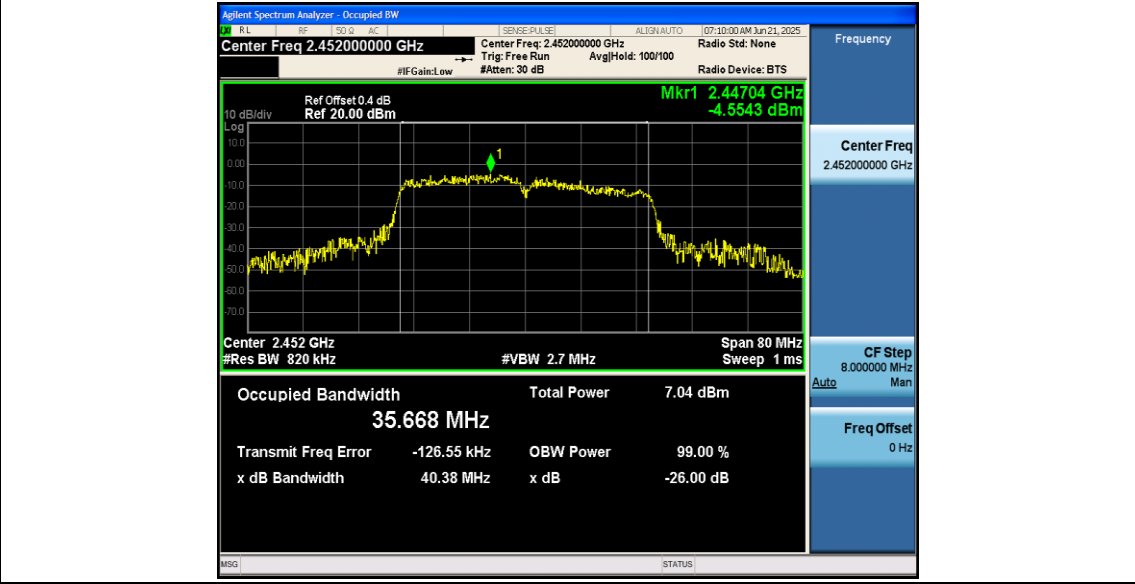
11N40SISO_Ant1_2422



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	8.55	≤30.00	PASS
		2437	7.66	≤30.00	PASS
		2462	6.65	≤30.00	PASS
11G	Ant1	2412	8.08	≤30.00	PASS
		2437	6.92	≤30.00	PASS
		2462	6.21	≤30.00	PASS
11N20SISO	Ant1	2412	7.96	≤30.00	PASS
		2437	6.64	≤30.00	PASS
		2462	6.00	≤30.00	PASS
11N40SISO	Ant1	2422	7.27	≤30.00	PASS
		2437	7.02	≤30.00	PASS
		2452	6.90	≤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	-16.61	≤8.00	PASS
		2437	-17.96	≤8.00	PASS
		2462	-18.54	≤8.00	PASS
11G	Ant1	2412	-23.78	≤8.00	PASS
		2437	-24.64	≤8.00	PASS
		2462	-26.09	≤8.00	PASS
11N20SISO	Ant1	2412	-24.10	≤8.00	PASS
		2437	-25.06	≤8.00	PASS
		2462	-25.83	≤8.00	PASS
11N40SISO	Ant1	2422	-28.23	≤8.00	PASS
		2437	-27.75	≤8.00	PASS
		2452	-26.96	≤8.00	PASS

Test Graphs

11B_Ant1_2412



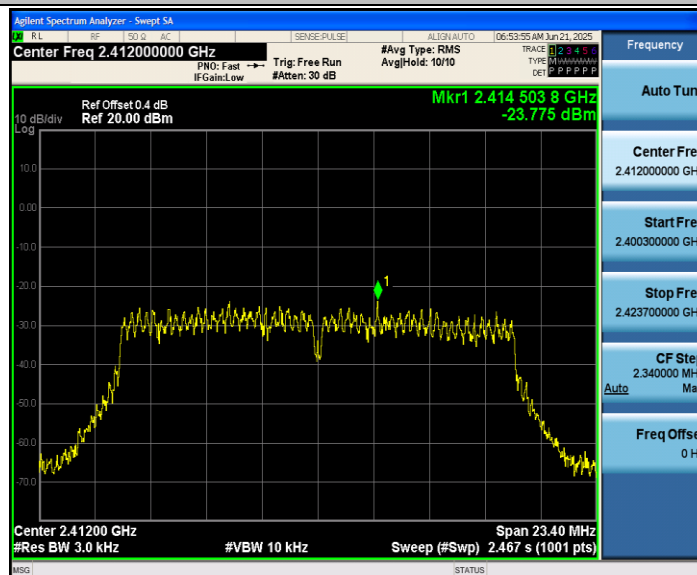
11B_Ant1_2437



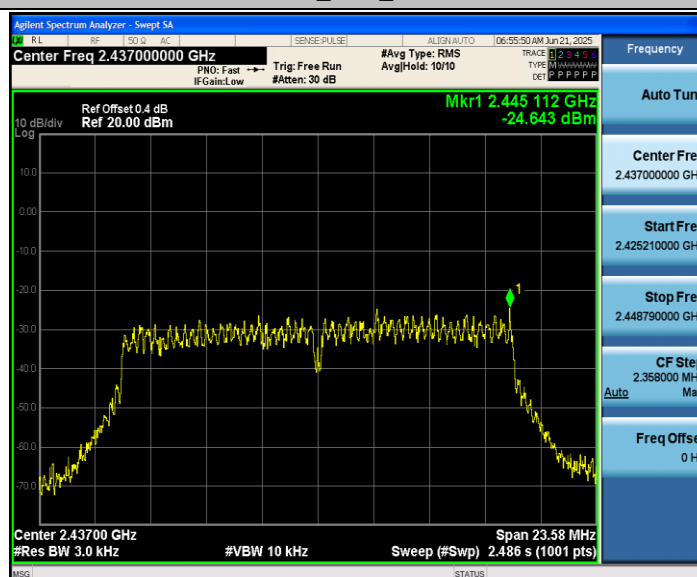
11B_Ant1_2462



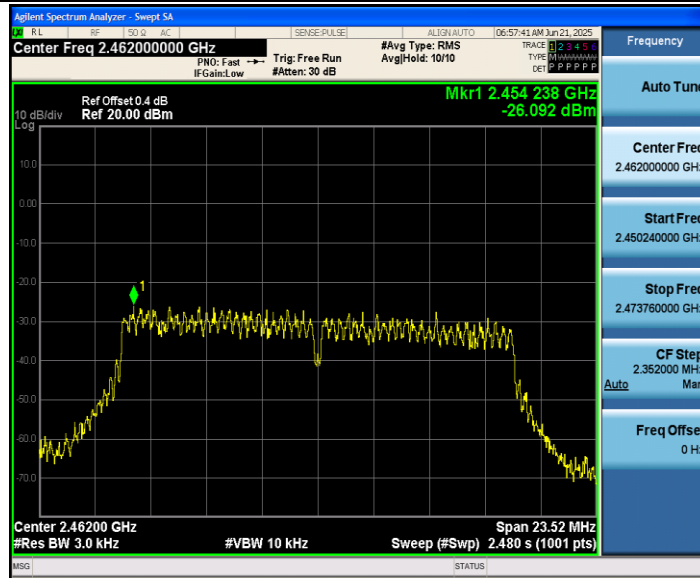
11G_Ant1_2412



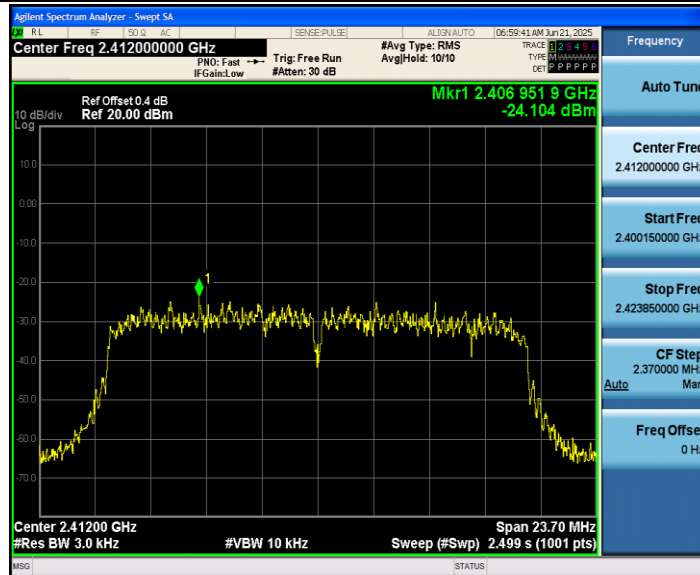
11G_Ant1_2437



11G_Ant1_2462



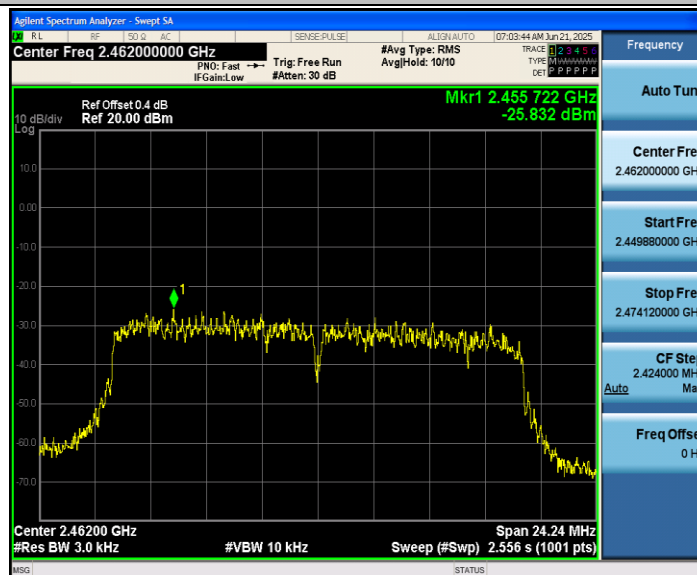
11N20SISO_Ant1_2412



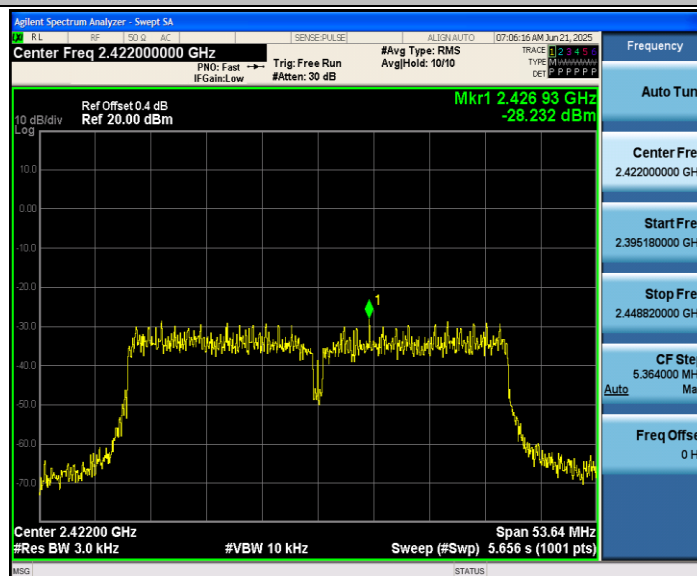
11N20SISO_Ant1_2437



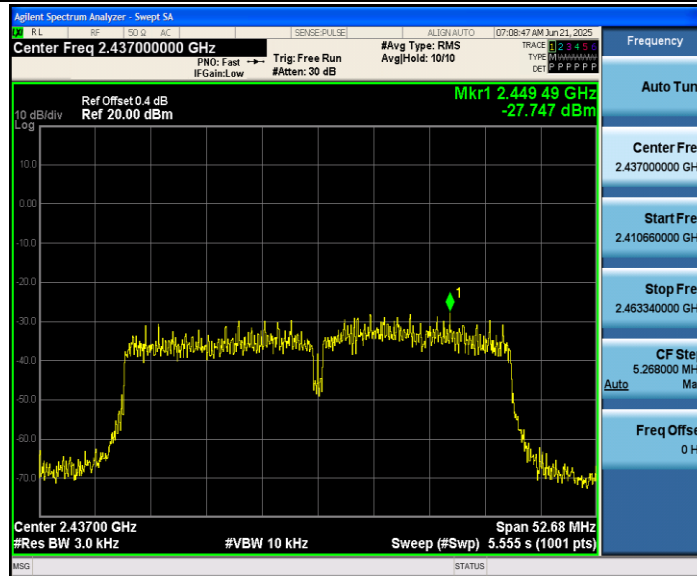
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



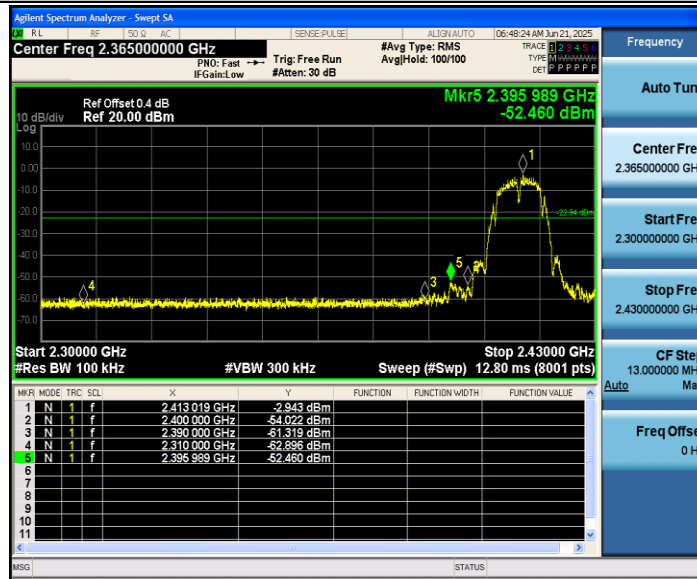
Appendix E: Band edge measurements

Test Result

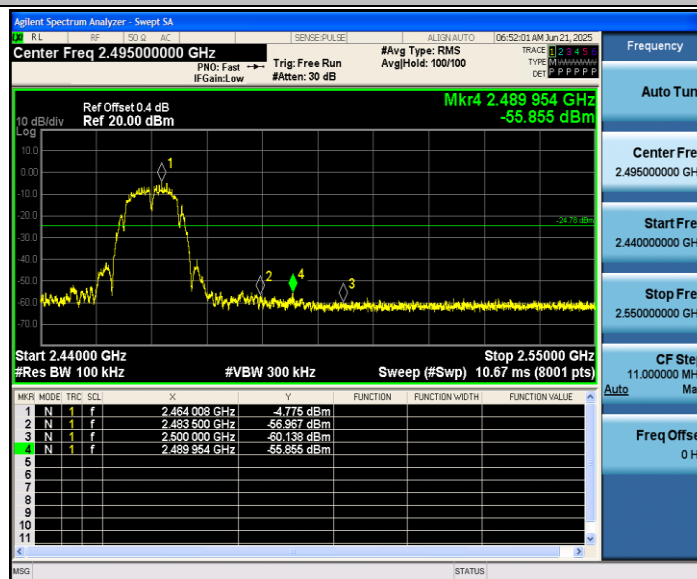
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-2.94	-52.46	≤-22.94	PASS
		High	2462	-4.78	-55.86	≤-24.78	PASS
11G	Ant1	Low	2412	-8.41	-40.78	≤-28.41	PASS
		High	2462	-9.12	-54.2	≤-29.12	PASS
11N20SISO	Ant1	Low	2412	-8.28	-41.49	≤-28.28	PASS
		High	2462	-9.15	-54.83	≤-29.15	PASS
11N40SISO	Ant1	Low	2422	-11.89	-43.09	≤-31.89	PASS
		High	2452	-10.61	-48.56	≤-30.61	PASS

Test Graphs

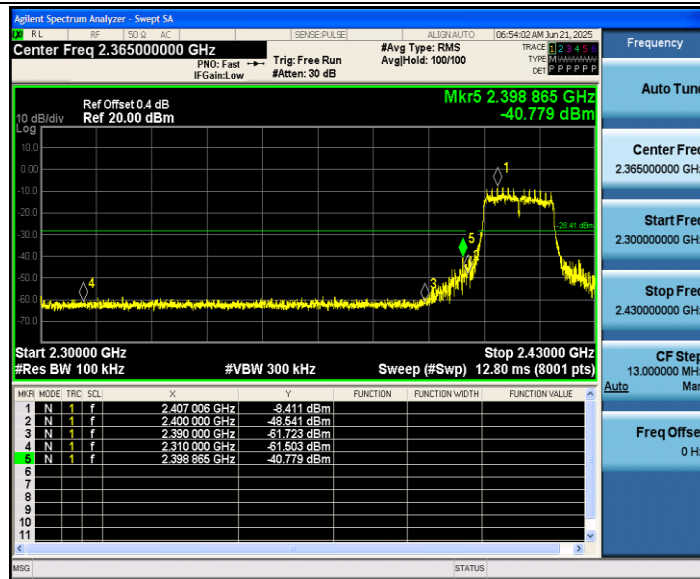
11B_Ant1_Low_2412



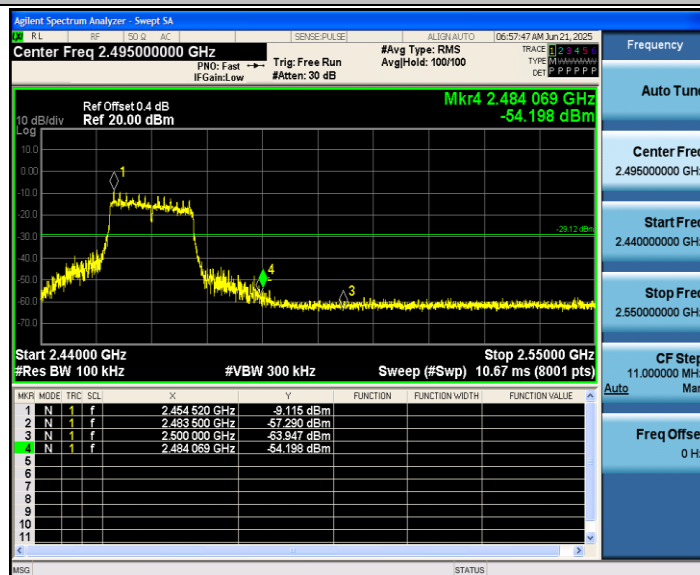
11B_Ant1_High_2462



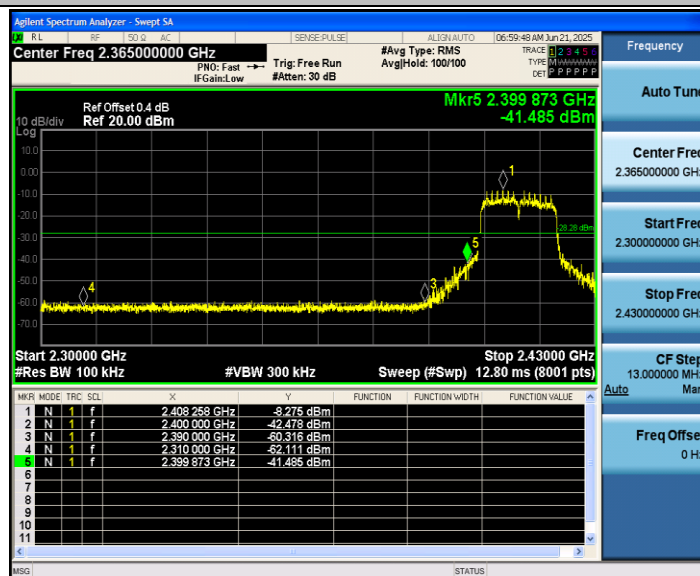
11G_Ant1_Low_2412



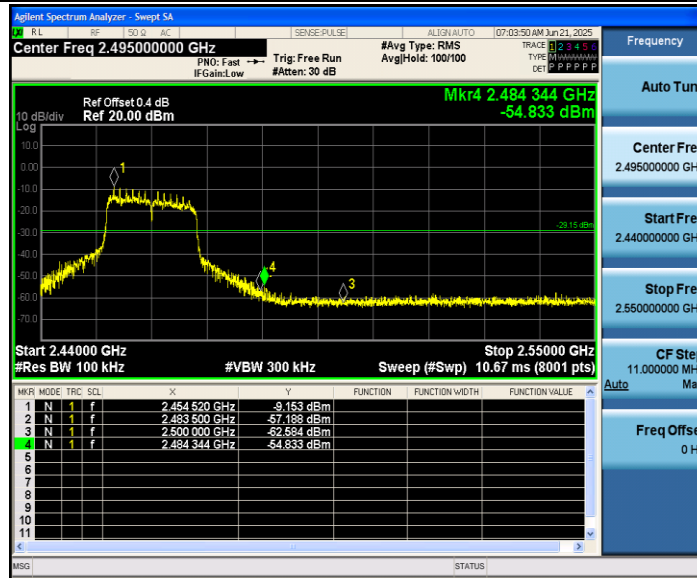
11G_Ant1_High_2462



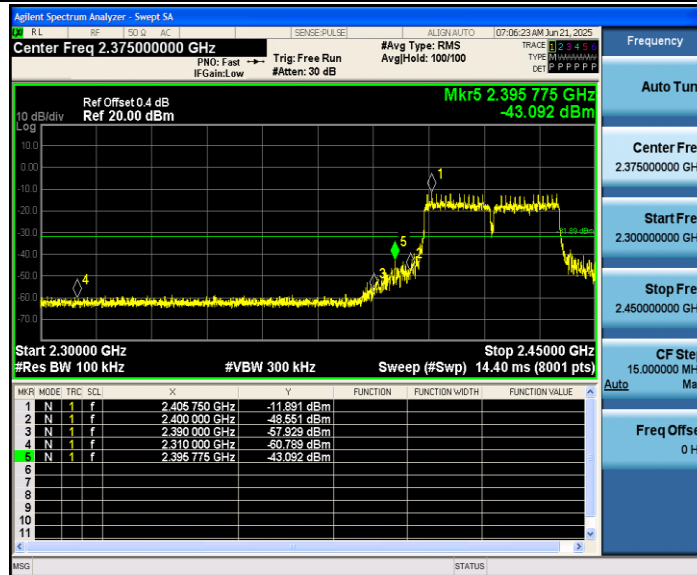
11N20SISO_Ant1_Low_2412



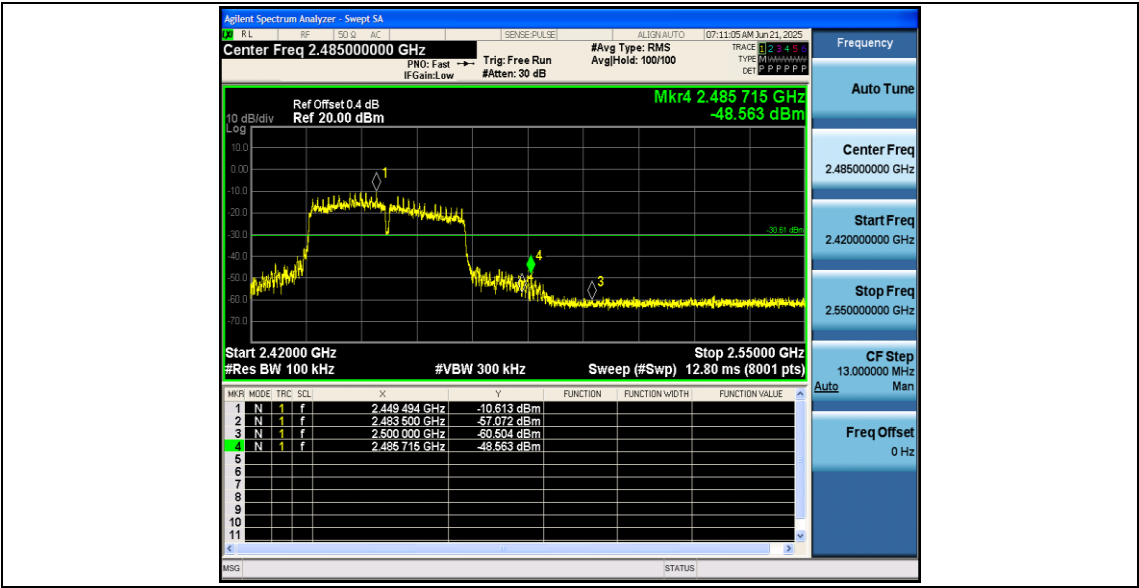
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

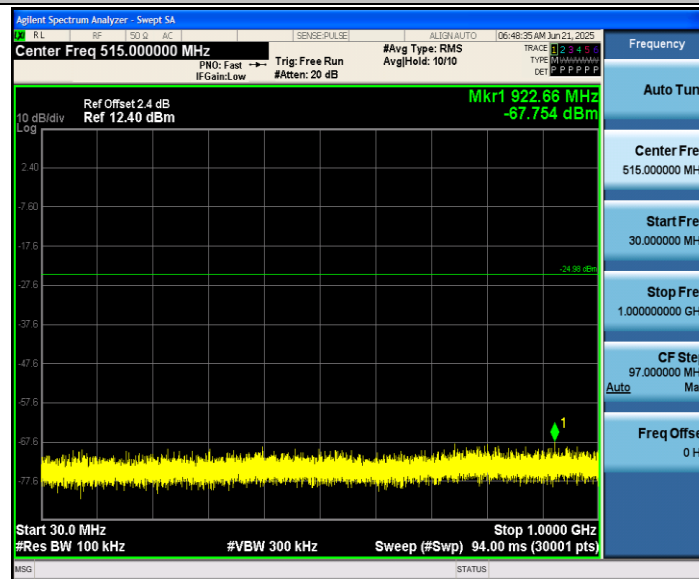
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-4.98	-4.98	---	PASS
			30~1000	-4.98	-67.75	≤-24.98	PASS
			1000~26500	-4.98	-48.29	≤-24.98	PASS
		2437	Reference	-5.00	-5.00	---	PASS
			30~1000	-5.00	-64.13	≤-25	PASS
			1000~26500	-5.00	-46.51	≤-25	PASS
		2462	Reference	-4.89	-4.89	---	PASS
			30~1000	-4.89	-67.51	≤-24.89	PASS
			1000~26500	-4.89	-41.27	≤-24.89	PASS
11G	Ant1	2412	Reference	-9.04	-9.04	---	PASS
			30~1000	-9.04	-67.97	≤-29.04	PASS
			1000~26500	-9.04	-55.63	≤-29.04	PASS
		2437	Reference	-9.91	-9.91	---	PASS
			30~1000	-9.91	-67.81	≤-29.91	PASS
			1000~26500	-9.91	-55.21	≤-29.91	PASS
		2462	Reference	-10.85	-10.85	---	PASS
			30~1000	-10.85	-68.05	≤-30.85	PASS
			1000~26500	-10.85	-50.78	≤-30.85	PASS
11N20SISO	Ant1	2412	Reference	-8.48	-8.48	---	PASS
			30~1000	-8.48	-67.69	≤-28.48	PASS
			1000~26500	-8.48	-47.97	≤-28.48	PASS
		2437	Reference	-9.81	-9.81	---	PASS
			30~1000	-9.81	-67.99	≤-29.81	PASS
			1000~26500	-9.81	-50.57	≤-29.81	PASS
		2462	Reference	-10.06	-10.06	---	PASS
			30~1000	-10.06	-68.01	≤-30.06	PASS
			1000~26500	-10.06	-53.94	≤-30.06	PASS
11N40SISO	Ant1	2422	Reference	-12.39	-12.39	---	PASS
			30~1000	-12.39	-67.08	≤-32.39	PASS
			1000~26500	-12.39	-55.28	≤-32.39	PASS
		2437	Reference	-11.87	-11.87	---	PASS
			30~1000	-11.87	-67.71	≤-31.87	PASS
			1000~26500	-11.87	-53.5	≤-31.87	PASS
		2452	Reference	-11.60	-11.60	---	PASS
			30~1000	-11.60	-68.58	≤-31.6	PASS
			1000~26500	-11.60	-47.42	≤-31.6	PASS

Test Graphs

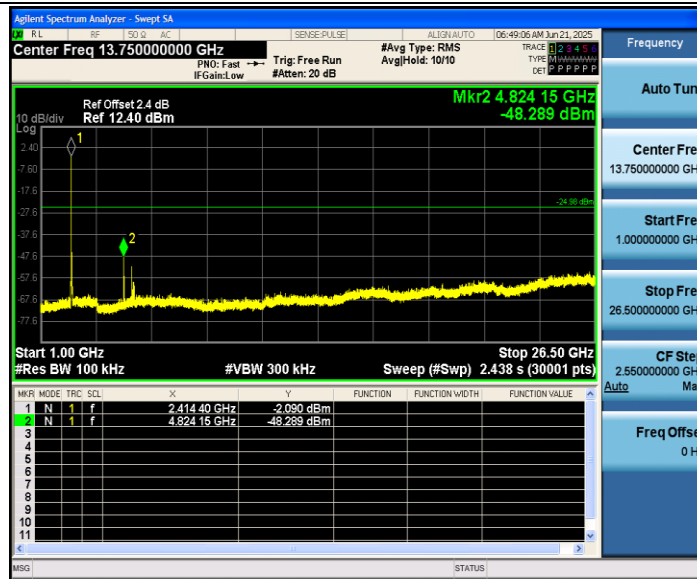
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



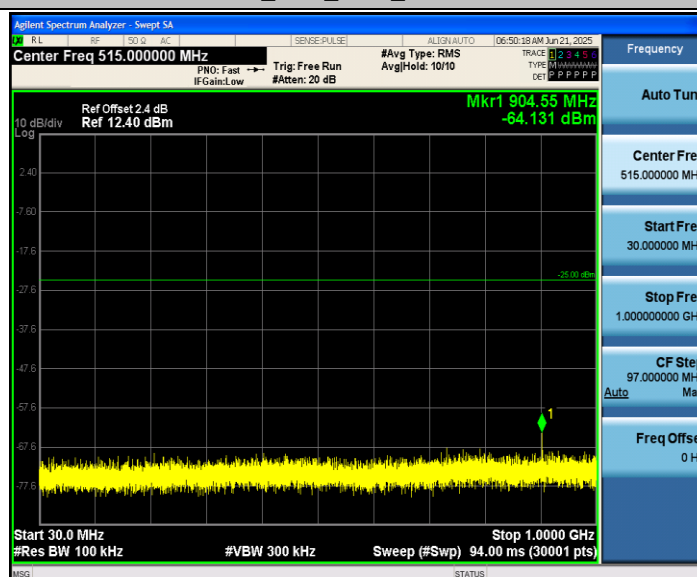
11B_Ant1_2412_1000~26500



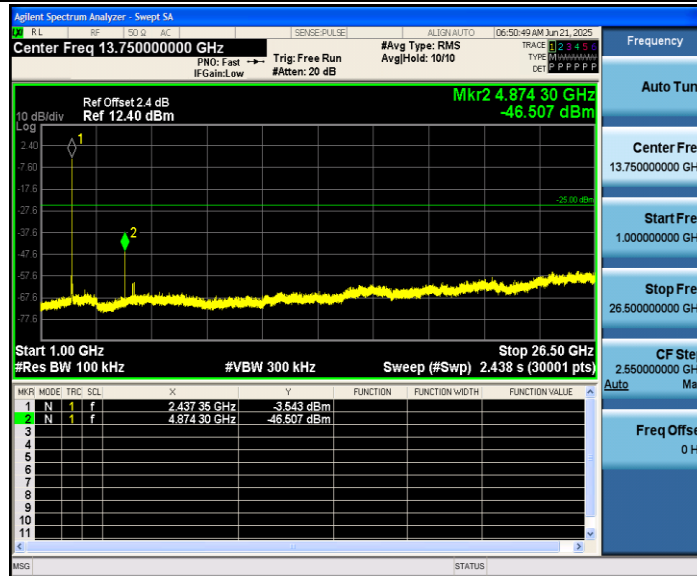
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



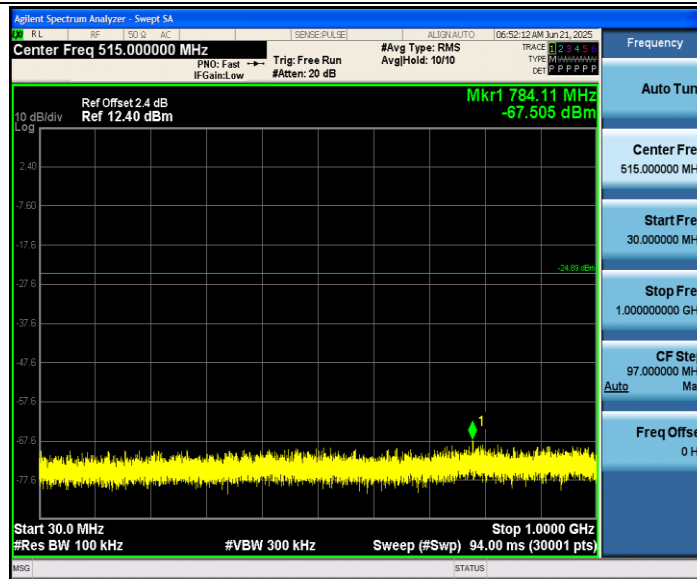
11B_Ant1_2437_1000~26500



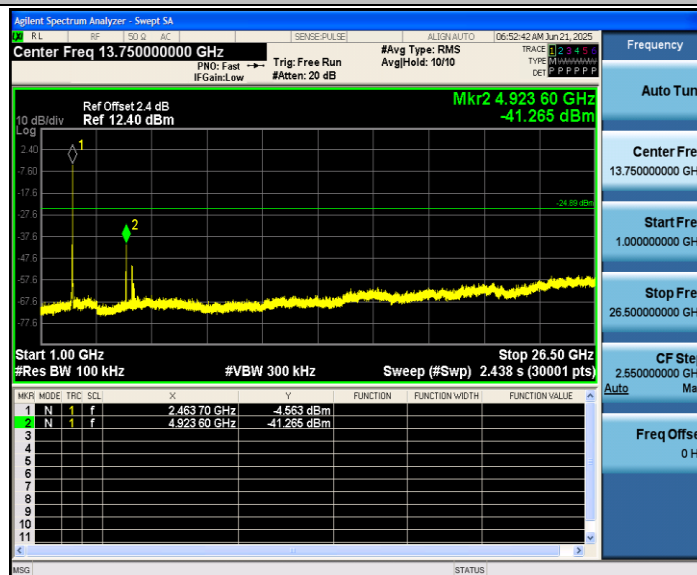
11B_Ant1_2462_0~Reference



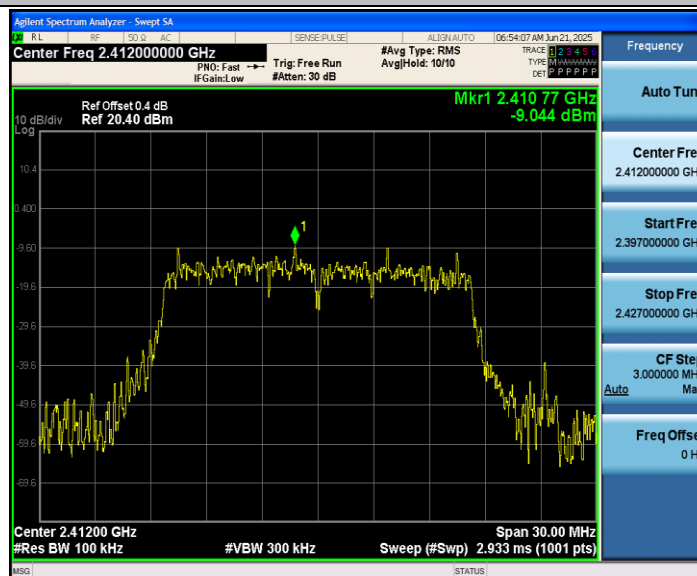
11B_Ant1_2462_30~1000



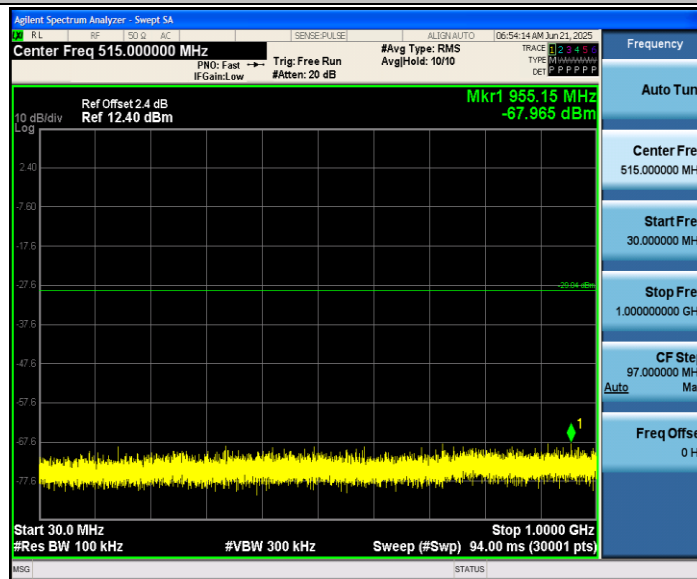
11B_Ant1_2462_1000~26500



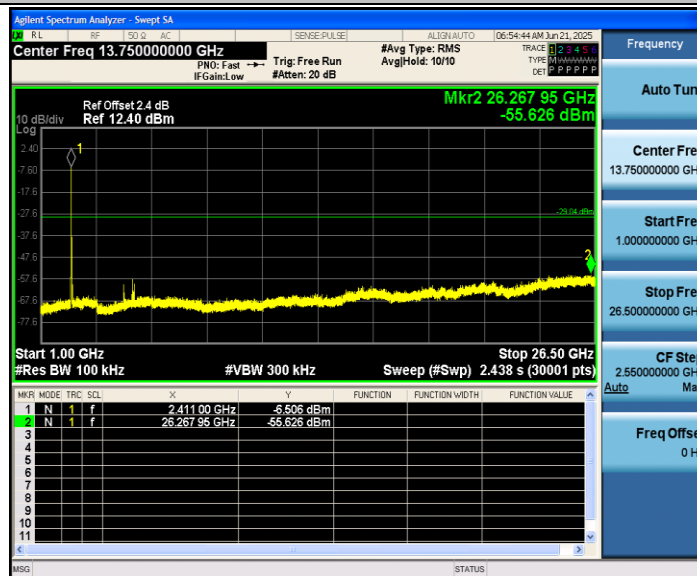
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



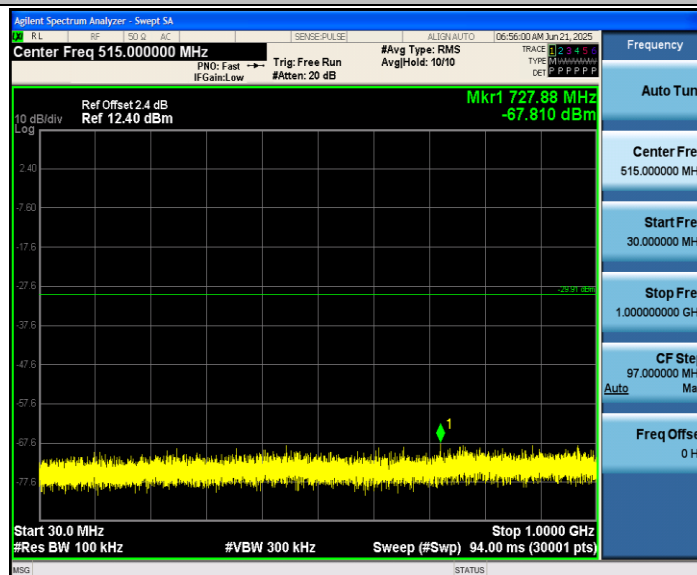
11G_Ant1_2412_1000~26500



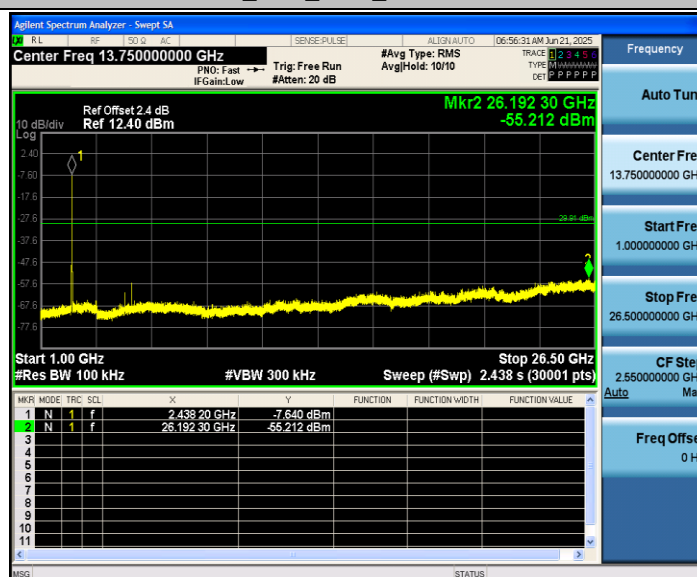
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



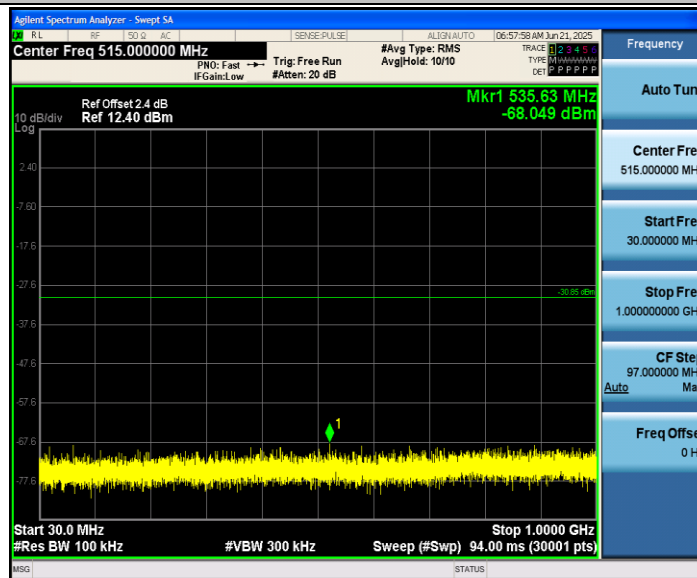
11G_Ant1_2437_1000~26500



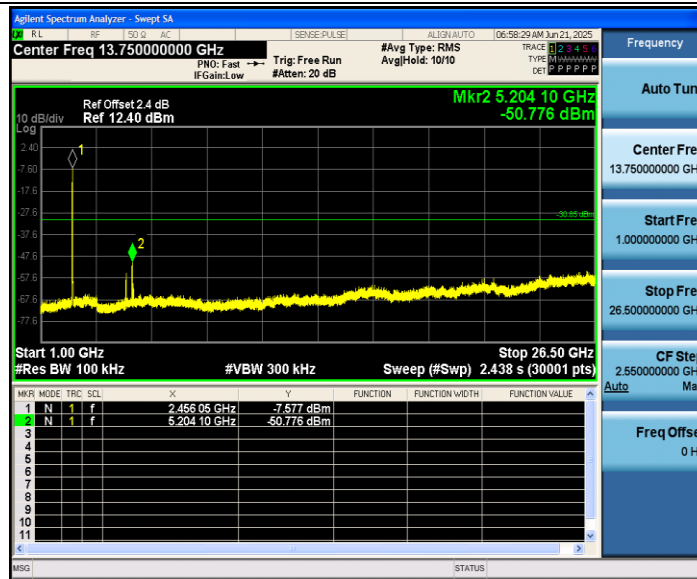
11G_Ant1_2462_0~Reference



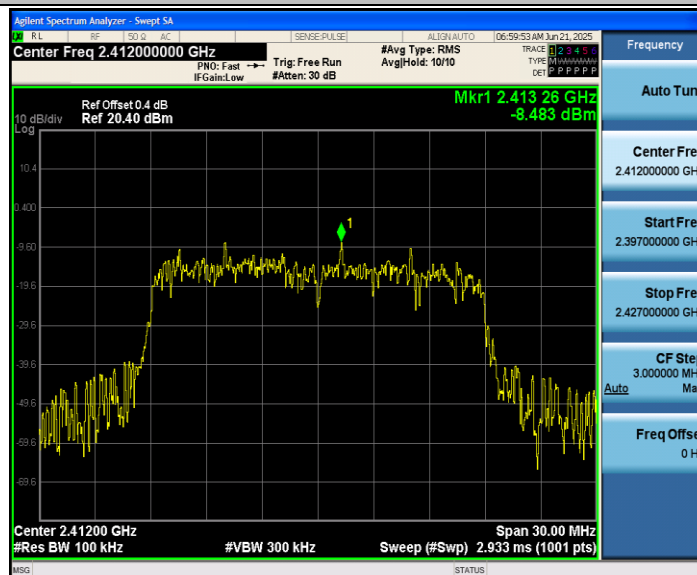
11G_Ant1_2462_30~1000



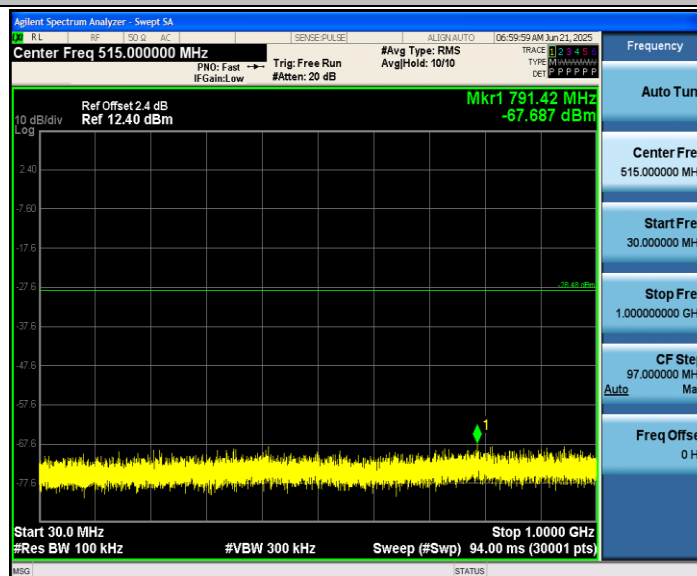
11G_Ant1_2462_1000~26500



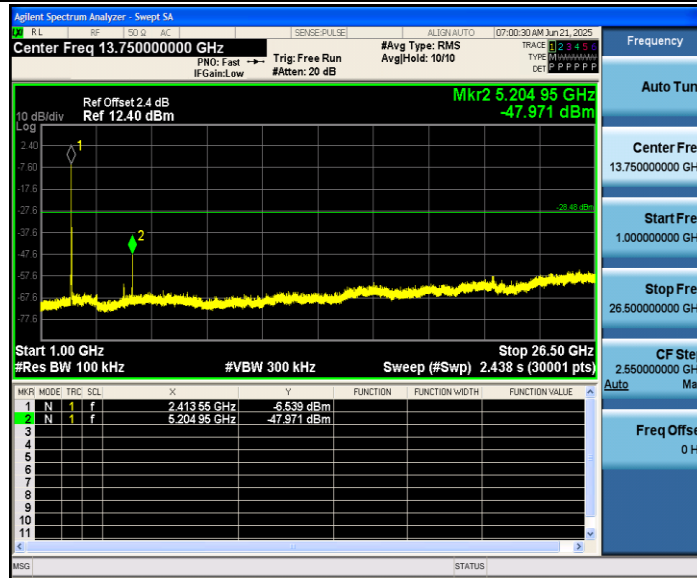
11N20SISO_Ant1_2412_0~Reference



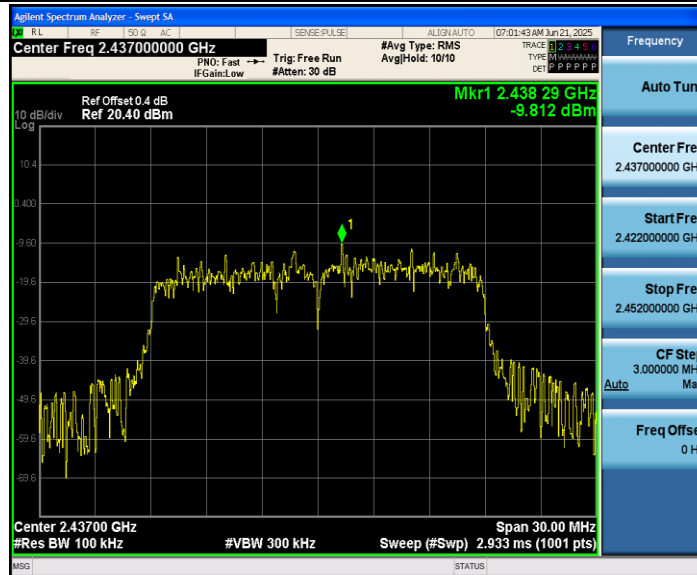
11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000