

FCC Appendix RF Test Data for 2.4GWIFI

FCC ID : 2BF3Z-E09

Company : Shenzhen Taiyang Technology Co., Ltd

EUT : AI Smart Glasses

Model Number : E09

Report No. : CTA26052501203

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

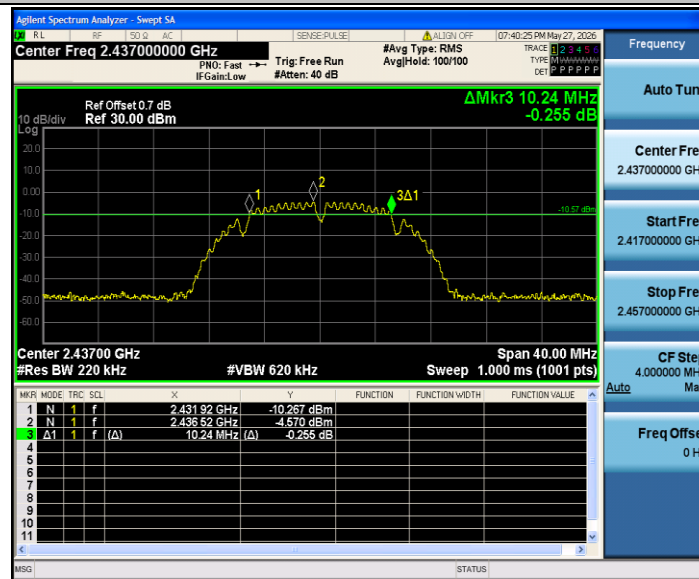
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.960	2417.160	0.5	PASS
		2437	10.240	2431.920	2442.160	0.5	PASS
		2462	10.160	2456.960	2467.120	0.5	PASS
11G	Ant1	2412	15.360	2404.280	2419.640	0.5	PASS
		2437	15.520	2429.280	2444.800	0.5	PASS
		2462	15.440	2454.360	2469.800	0.5	PASS
11N20SISO	Ant1	2412	16.520	2404.080	2420.600	0.5	PASS
		2437	17.160	2428.640	2445.800	0.5	PASS
		2462	16.320	2453.640	2469.960	0.5	PASS

Test Graphs

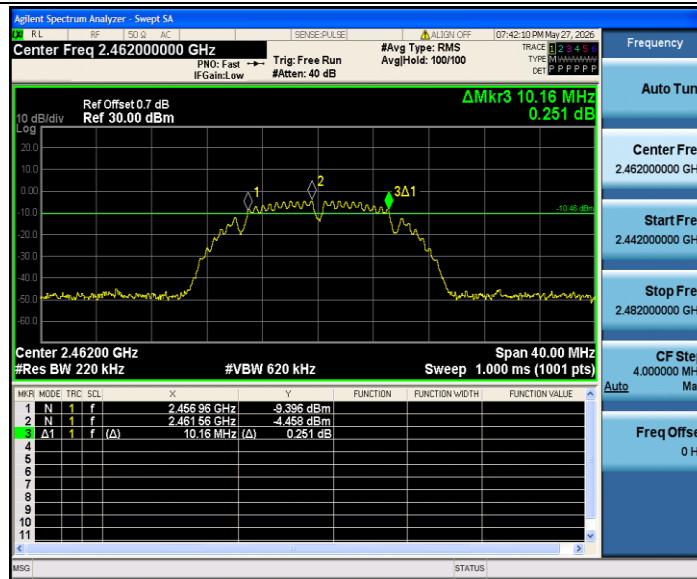
11B_Ant1_2412



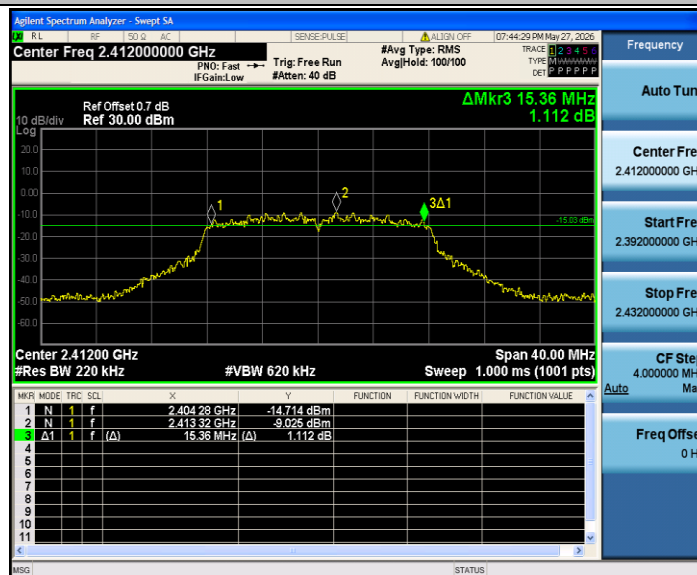
11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



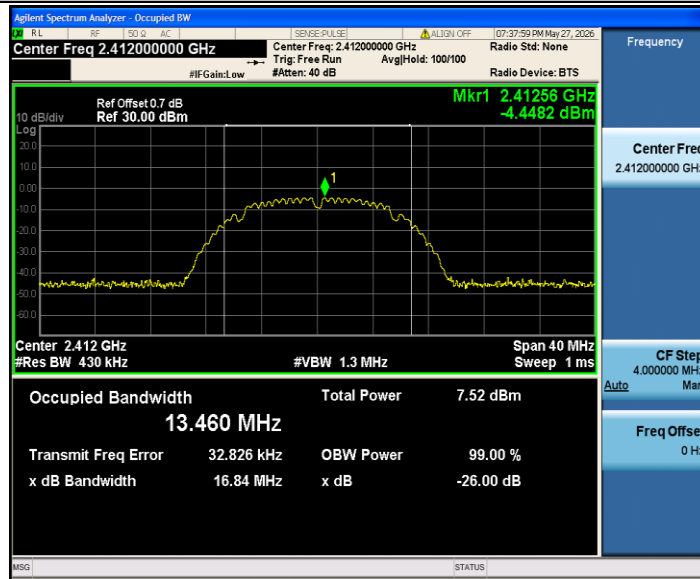
Appendix B: Occupied Channel Bandwidth

Test Result

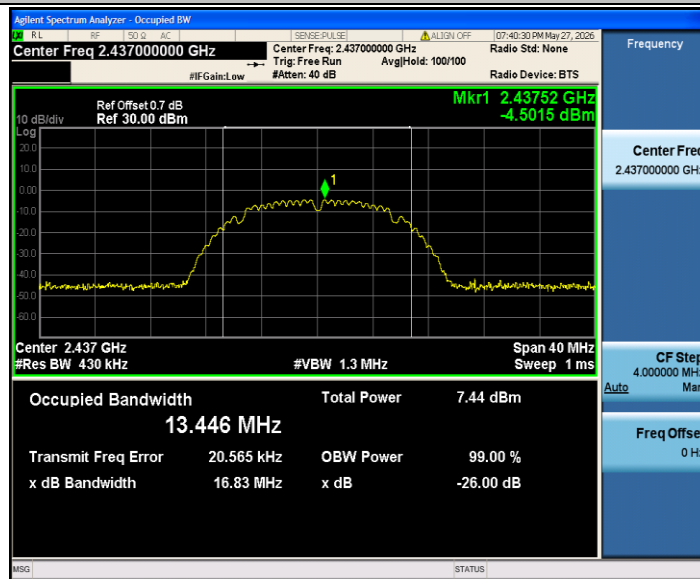
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.460	2405.3028	2418.7628	---	---
		2437	13.446	2430.2976	2443.7436	---	---
		2462	13.462	2455.2903	2468.7523	---	---
11G	Ant1	2412	16.892	2403.6263	2420.5183	---	---
		2437	16.796	2428.6477	2445.4437	---	---
		2462	16.883	2453.6172	2470.5002	---	---
11N20SISO	Ant1	2412	17.980	2403.0298	2421.0098	---	---
		2437	17.936	2428.0629	2445.9989	---	---
		2462	17.886	2453.0889	2470.9749	---	---

Test Graphs

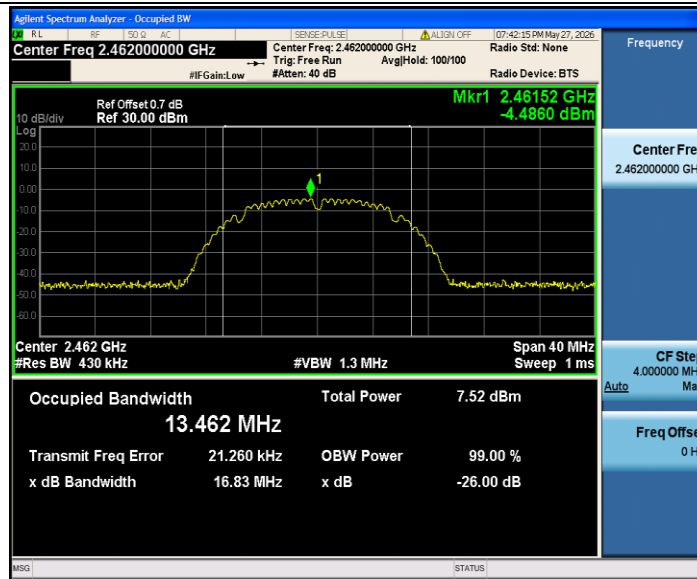
11B_Ant1_2412



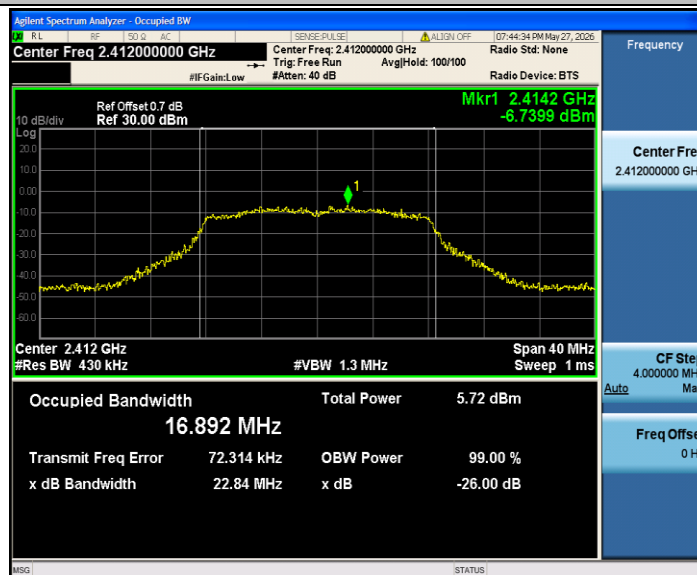
11B_Ant1_2437



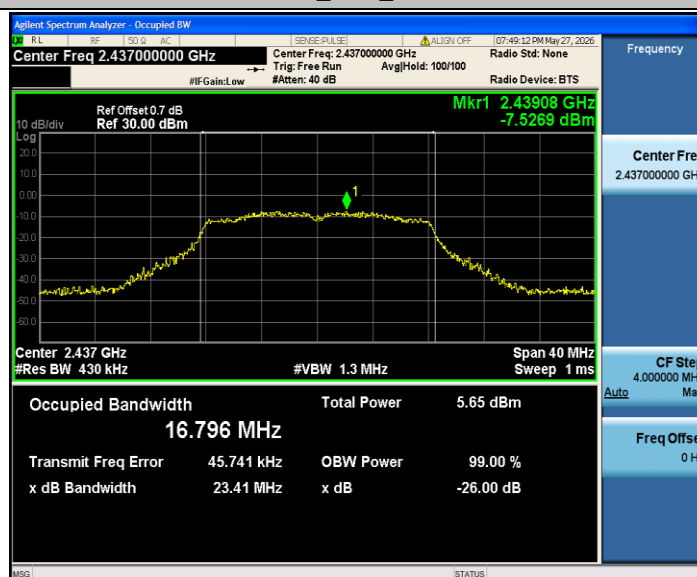
11B_Ant1_2462



11G_Ant1_2412



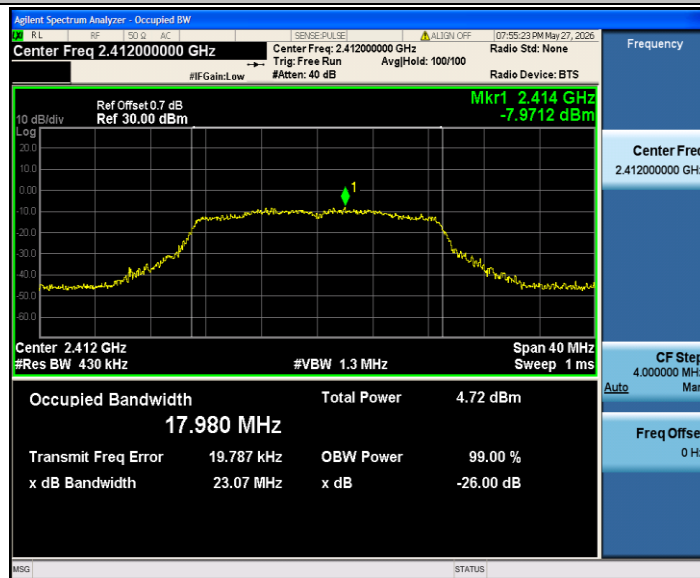
11G_Ant1_2437



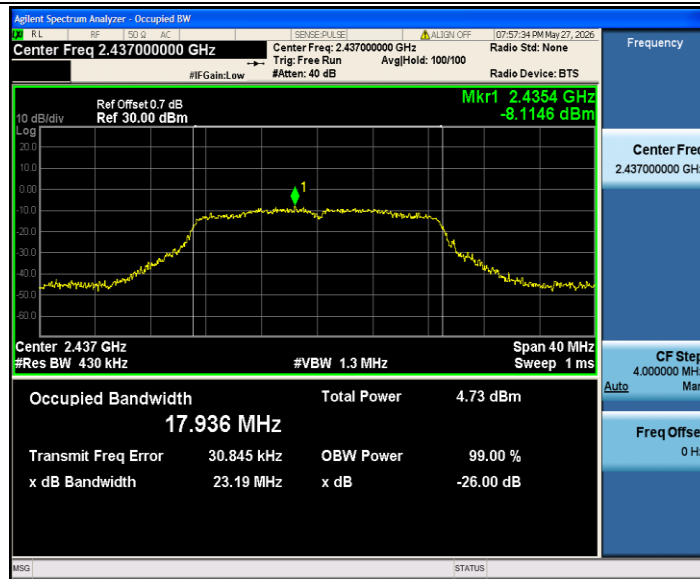
11G_Ant1_2462



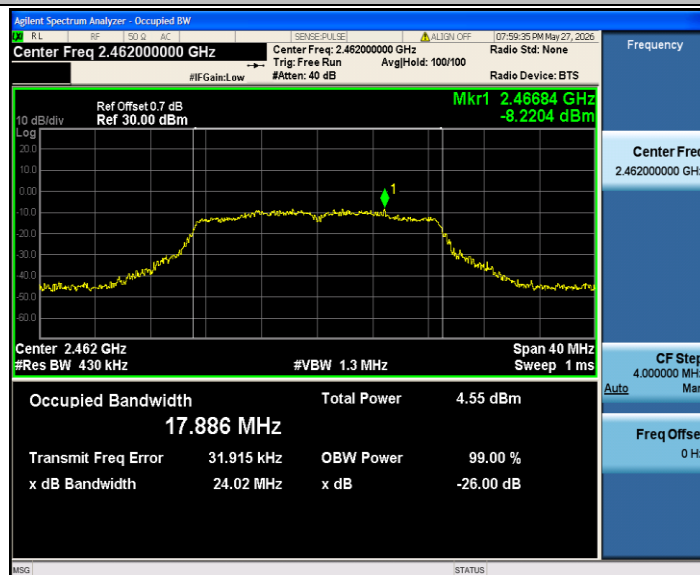
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	7.19	≤30.00	PASS
		2437	7.07	≤30.00	PASS
		2462	7.17	≤30.00	PASS
11G	Ant1	2412	6.53	≤30.00	PASS
		2437	6.42	≤30.00	PASS
		2462	6.16	≤30.00	PASS
11N20SISO	Ant1	2412	5.43	≤30.00	PASS
		2437	5.59	≤30.00	PASS
		2462	5.25	≤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	-18.41	≤8.00	PASS
		2437	-19.49	≤8.00	PASS
		2462	-18.51	≤8.00	PASS
11G	Ant1	2412	-24.07	≤8.00	PASS
		2437	-24.74	≤8.00	PASS
		2462	-25.32	≤8.00	PASS
11N20SISO	Ant1	2412	-25.65	≤8.00	PASS
		2437	-26.55	≤8.00	PASS
		2462	-26.11	≤8.00	PASS

Test Graphs

11B_Ant1_2412



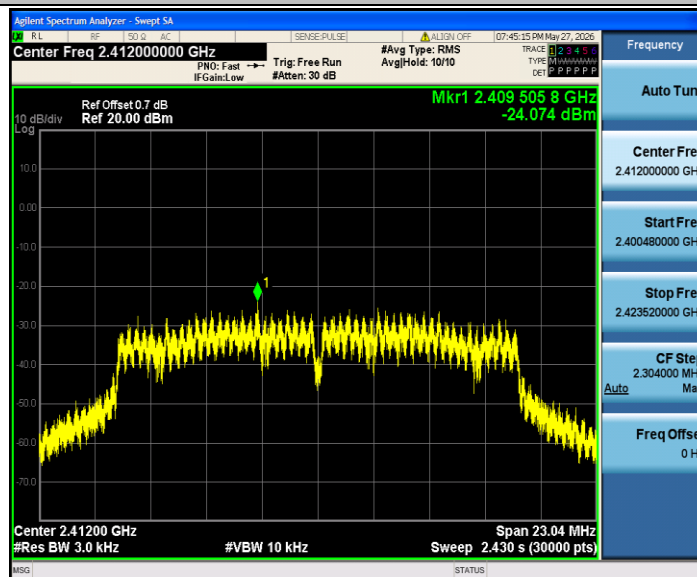
11B_Ant1_2437



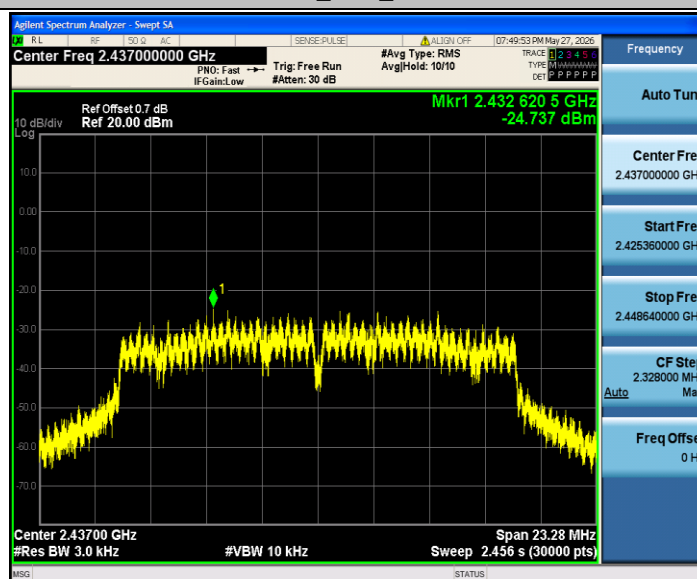
11B_Ant1_2462



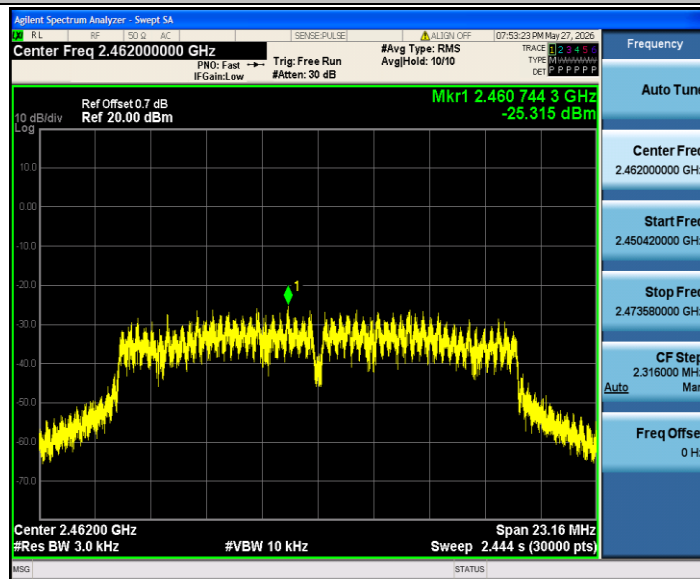
11G_Ant1_2412



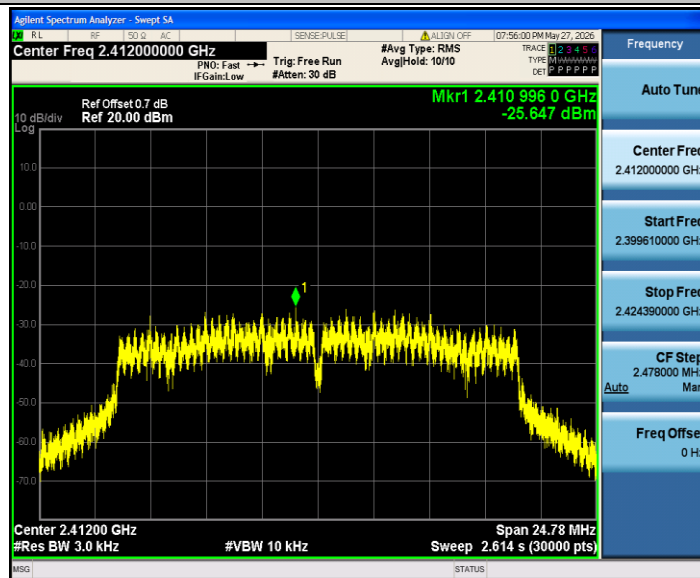
11G_Ant1_2437



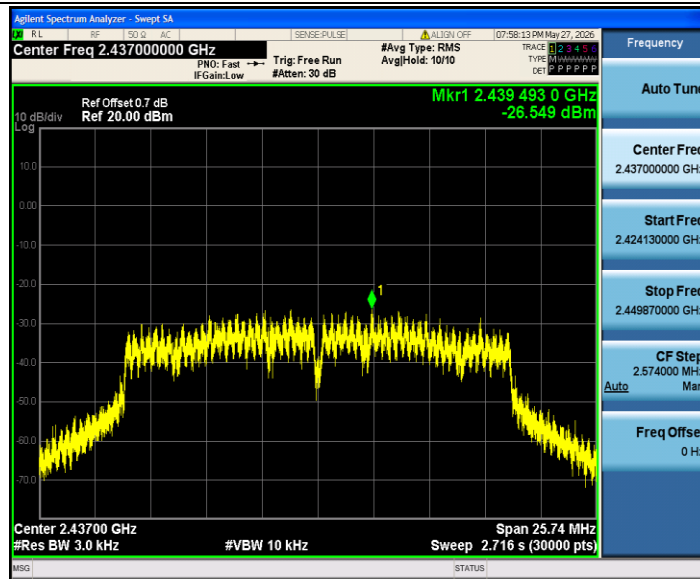
11G_Ant1_2462



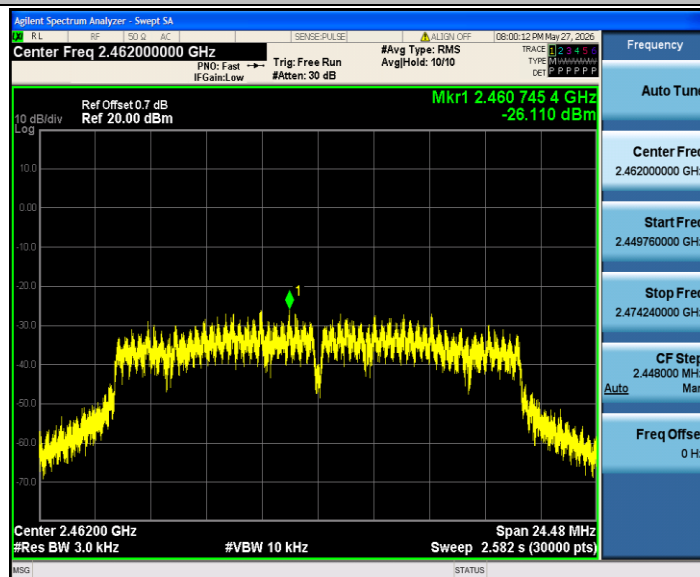
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



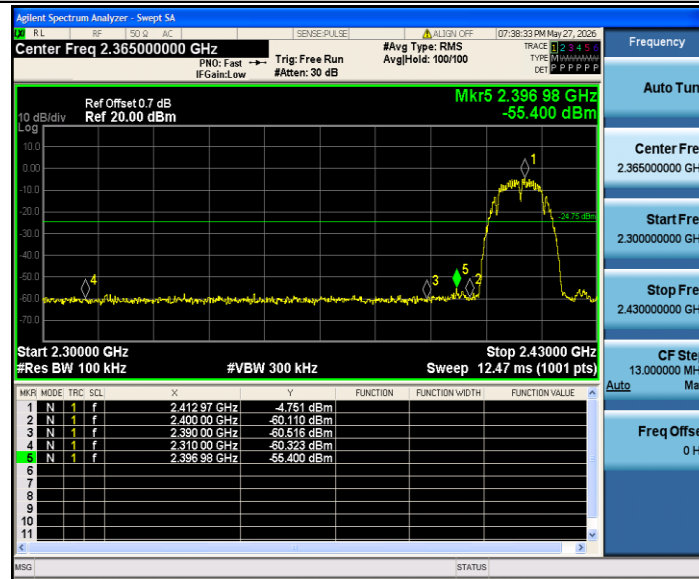
Appendix E: Band edge measurements

Test Result

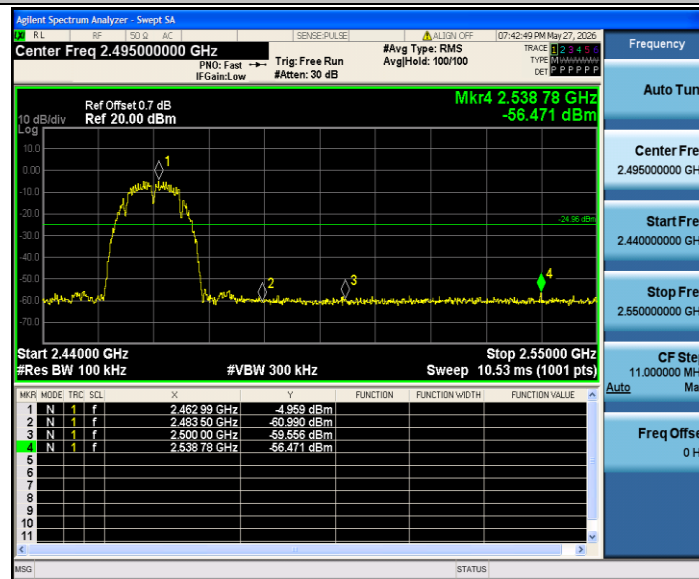
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-4.75	-55.4	≤-24.75	PASS
		High	2462	-4.96	-56.47	≤-24.96	PASS
11G	Ant1	Low	2412	-10.18	-40.45	≤-30.18	PASS
		High	2462	-10.23	-56.63	≤-30.23	PASS
11N20SISO	Ant1	Low	2412	-10.94	-40.56	≤-30.94	PASS
		High	2462	-11.27	-57.65	≤-31.27	PASS

Test Graphs

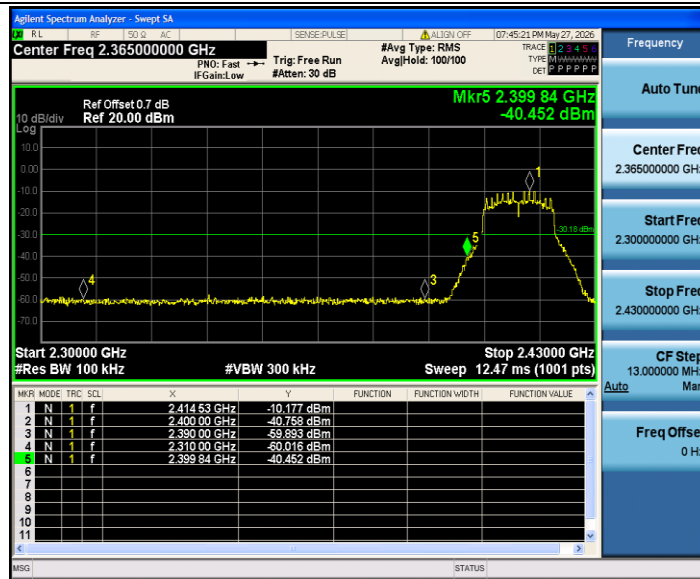
11B_Ant1_Low_2412



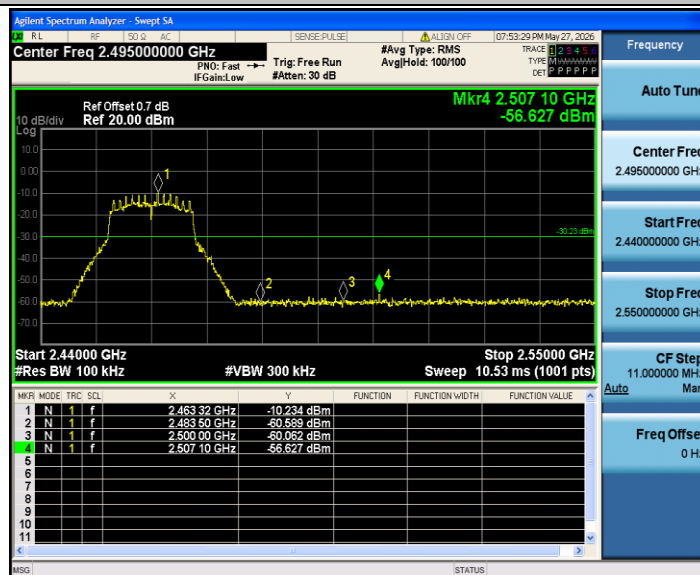
11B_Ant1_High_2462



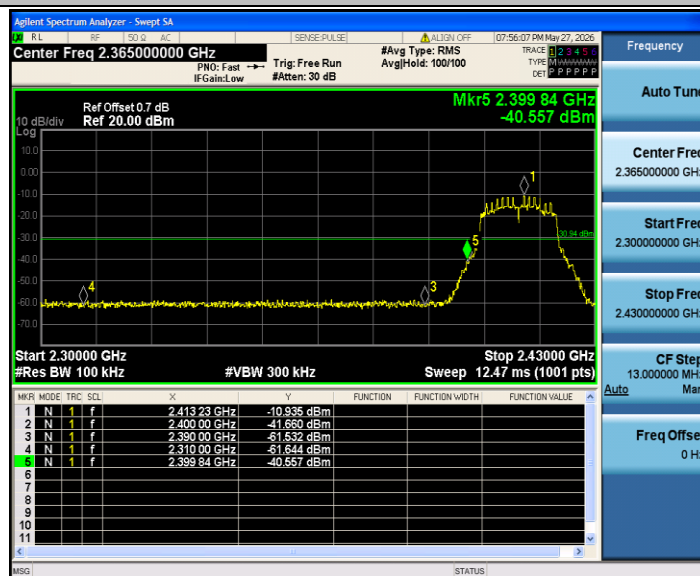
11G_Ant1_Low_2412



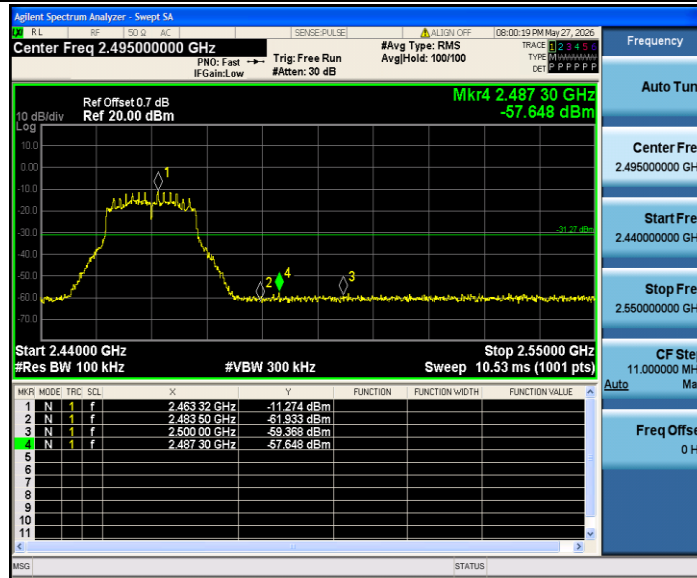
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

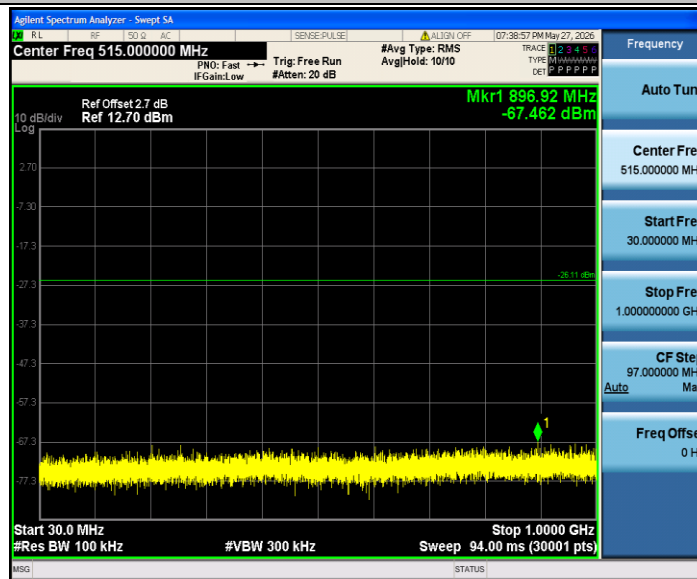
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-6.11	-6.11	---	PASS
			30~1000	-6.11	-67.46	≤-26.11	PASS
			1000~26500	-6.11	-55.03	≤-26.11	PASS
		2437	Reference	-5.43	-5.43	---	PASS
			30~1000	-5.43	-67.8	≤-25.43	PASS
			1000~26500	-5.43	-55.1	≤-25.43	PASS
		2462	Reference	-5.27	-5.27	---	PASS
			30~1000	-5.27	-67.39	≤-25.27	PASS
			1000~26500	-5.27	-54.74	≤-25.27	PASS
11G	Ant1	2412	Reference	-9.84	-9.84	---	PASS
			30~1000	-9.84	-67.48	≤-29.84	PASS
			1000~26500	-9.84	-53.96	≤-29.84	PASS
		2437	Reference	-10.23	-10.23	---	PASS
			30~1000	-10.23	-67.67	≤-30.23	PASS
			1000~26500	-10.23	-54.7	≤-30.23	PASS
		2462	Reference	-10.77	-10.77	---	PASS
			30~1000	-10.77	-68.17	≤-30.77	PASS
			1000~26500	-10.77	-55.12	≤-30.77	PASS
11N20SISO	Ant1	2412	Reference	-11.74	-11.74	---	PASS
			30~1000	-11.74	-67.63	≤-31.74	PASS
			1000~26500	-11.74	-54.14	≤-31.74	PASS
		2437	Reference	-11.62	-11.62	---	PASS
			30~1000	-11.62	-67.96	≤-31.62	PASS
			1000~26500	-11.62	-54.39	≤-31.62	PASS
		2462	Reference	-11.80	-11.80	---	PASS
			30~1000	-11.80	-67.69	≤-31.8	PASS
			1000~26500	-11.80	-54.95	≤-31.8	PASS

Test Graphs

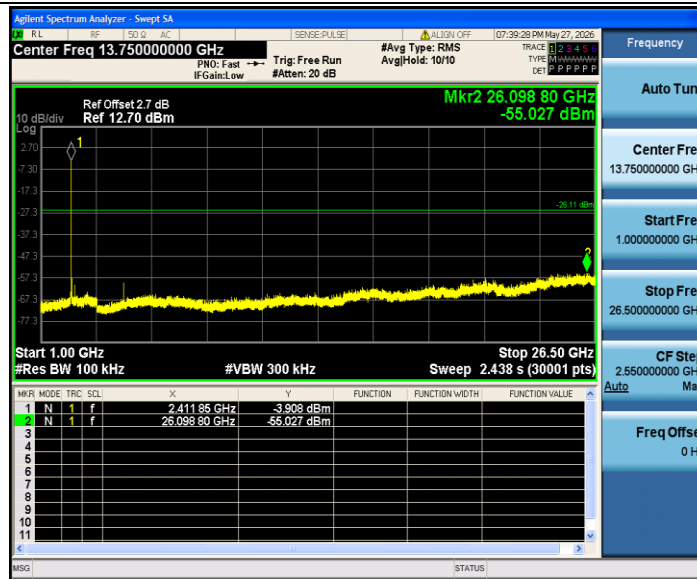
11B_Ant1_2412_0~Reference



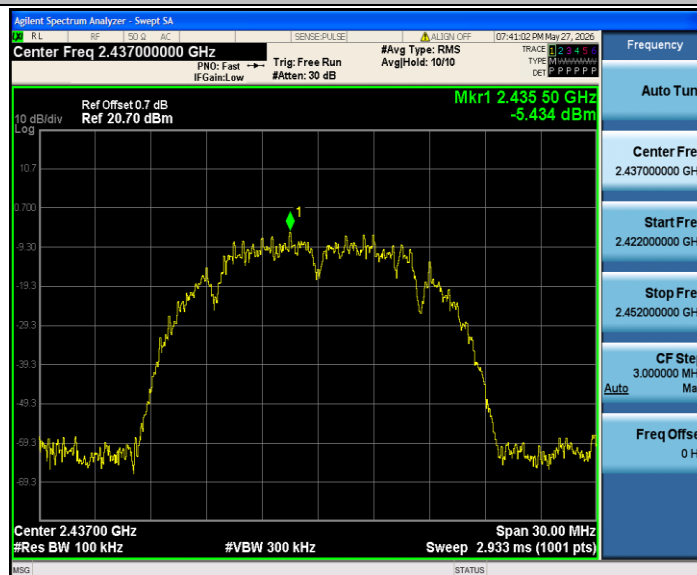
11B_Ant1_2412_30~1000



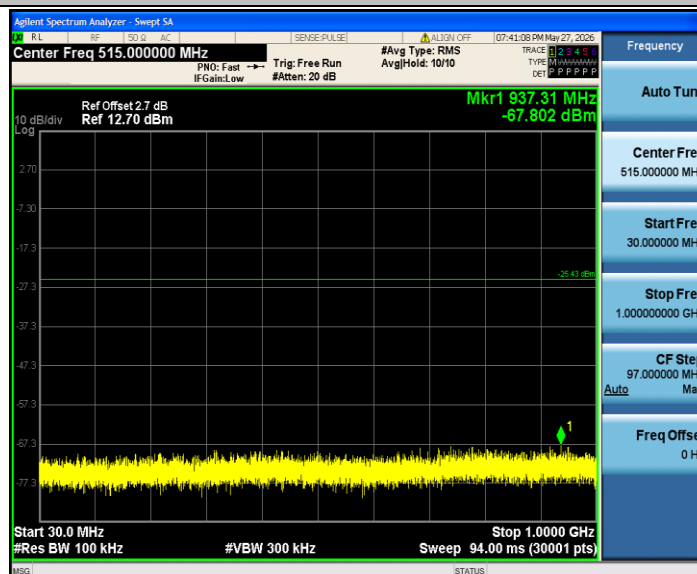
11B_Ant1_2412_1000~26500



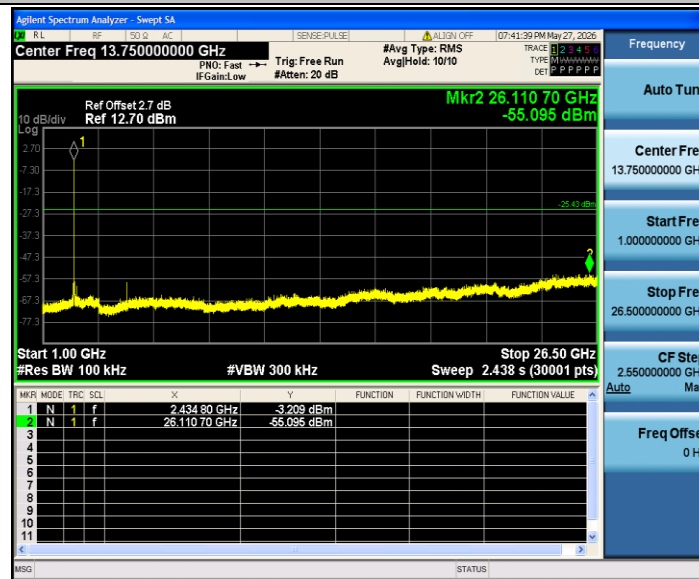
11B_Ant1_2437_0~Reference



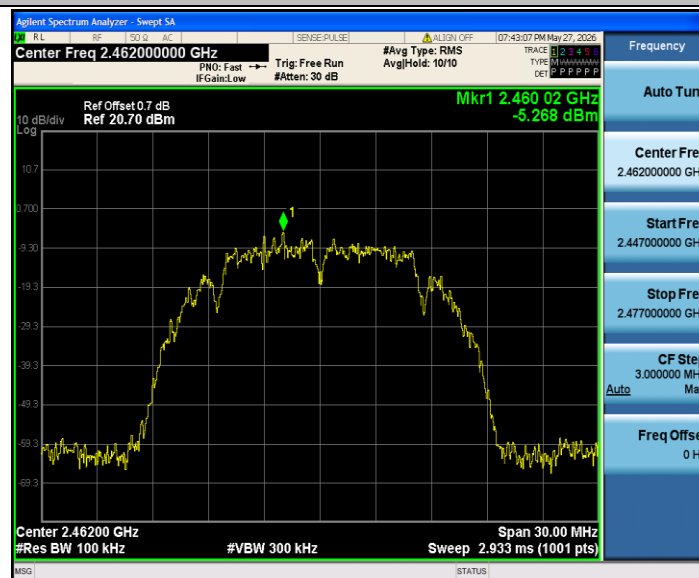
11B_Ant1_2437_30~1000



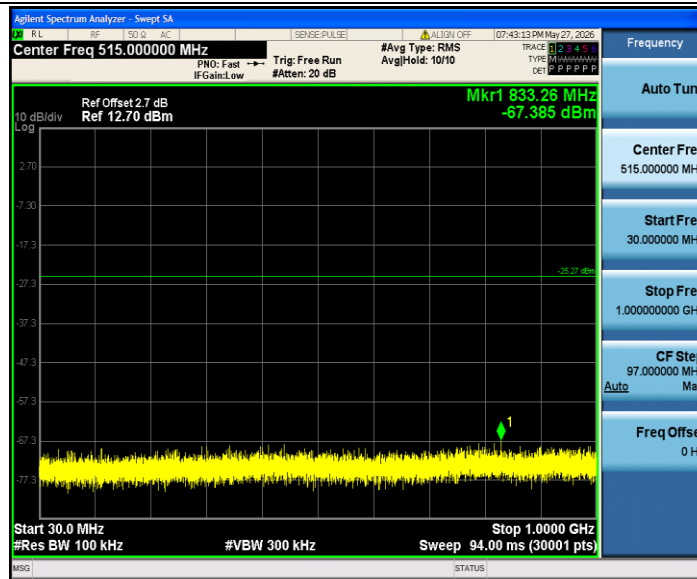
11B_Ant1_2437_1000~26500



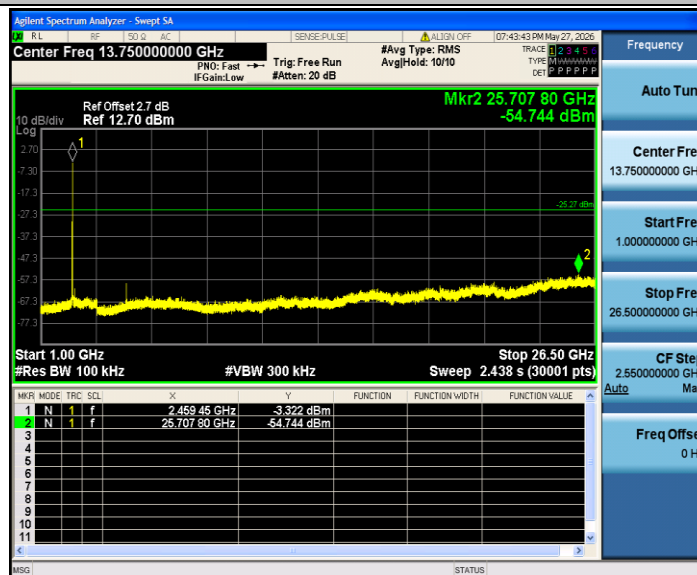
11B_Ant1_2462_0~Reference



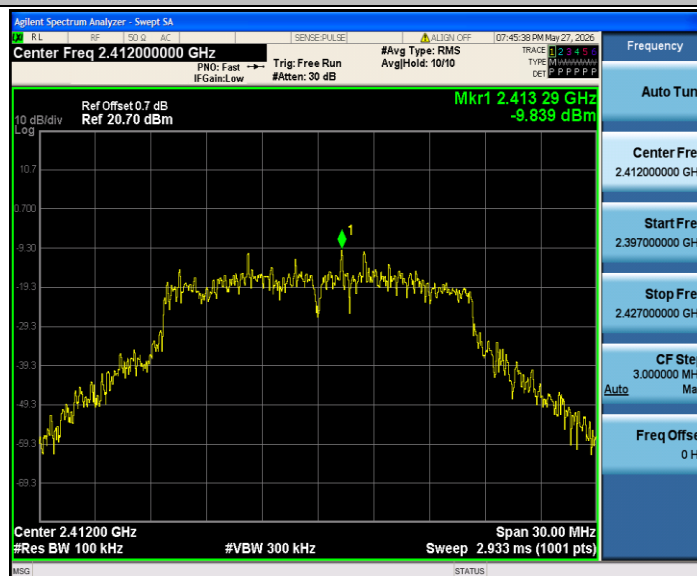
11B_Ant1_2462_30~1000



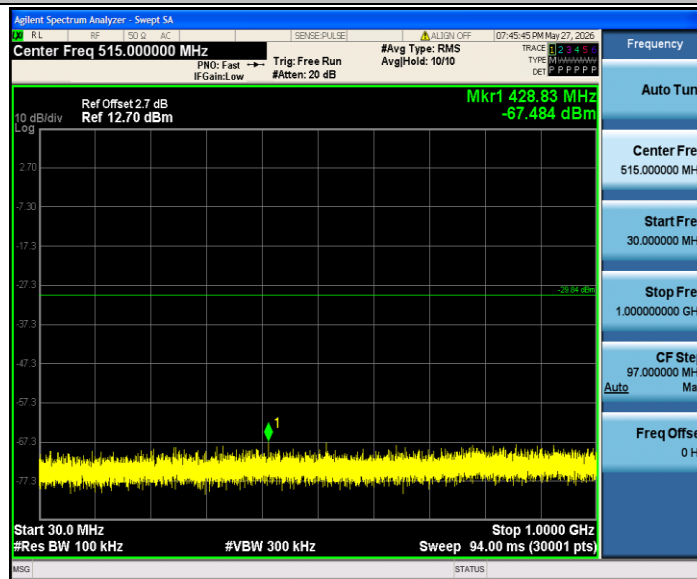
11B_Ant1_2462_1000~26500



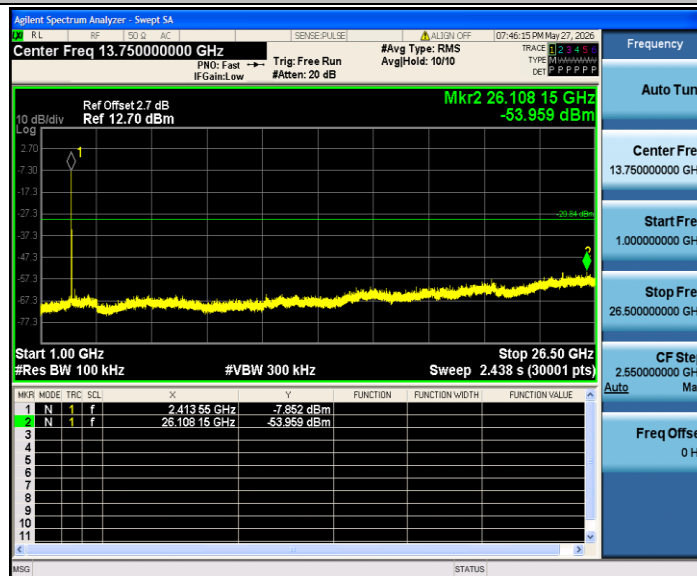
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



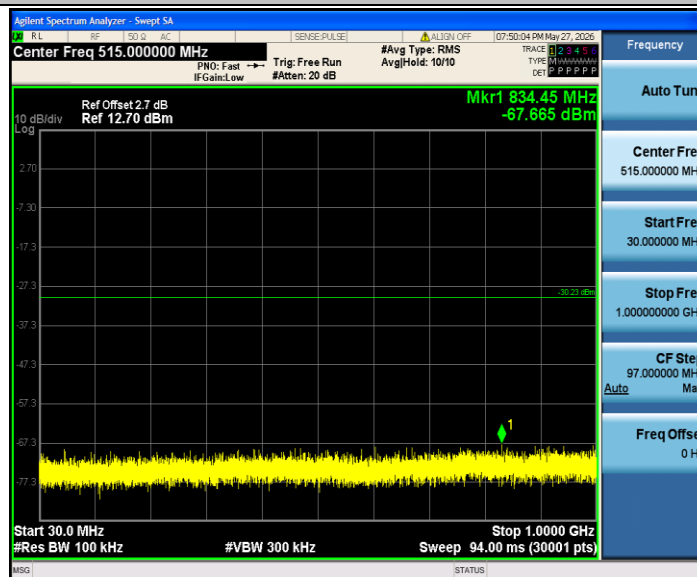
11G_Ant1_2412_1000~26500



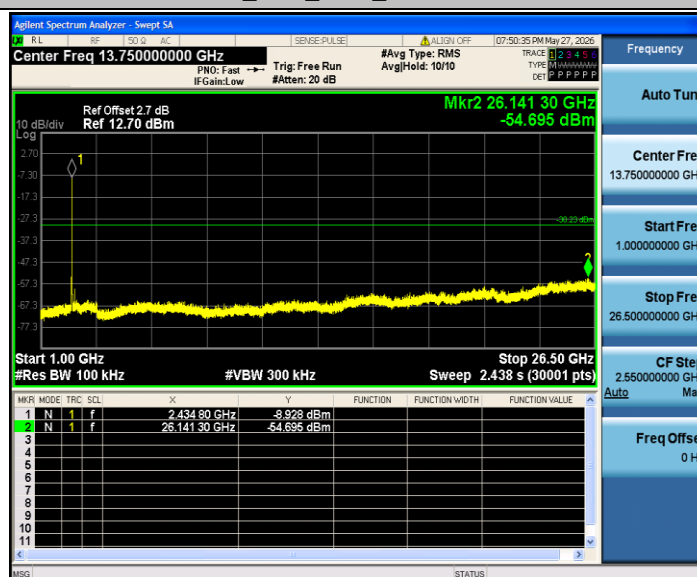
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



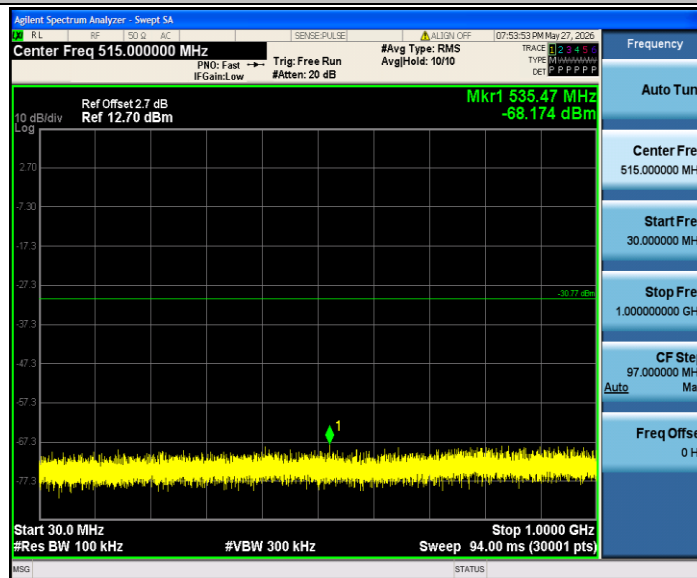
11G_Ant1_2437_1000~26500



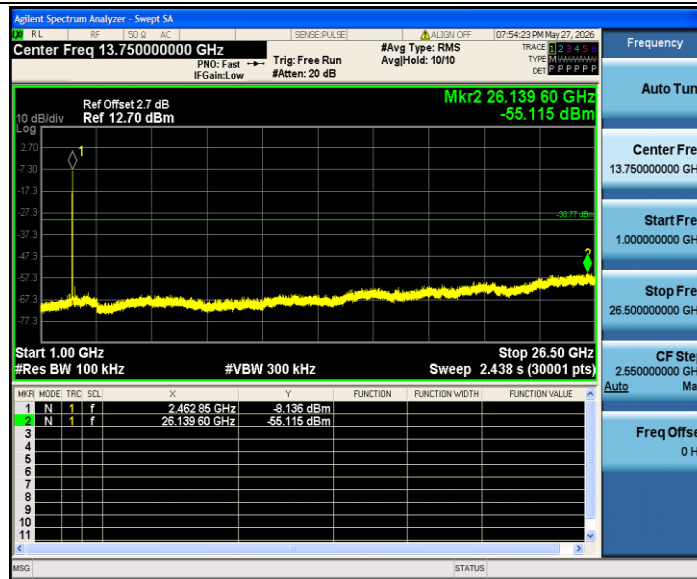
11G_Ant1_2462_0~Reference



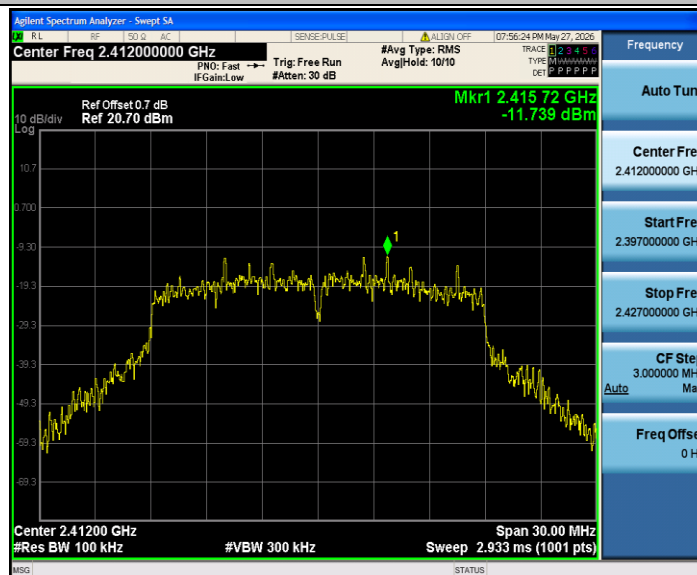
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

