

FCC Appendix RF Test Data

FCC ID : 2BQTY-S1

Company : SHENZHEN XINLINK TIMESTECHNOLOGY CO., LTD.

EUT : Mobile Surveillance Robot

Model Number : Magic S1

Report No. : CTA25070800102

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	8.120	2408.440	2416.560	0.5	PASS
		2437	9.040	2432.960	2442.000	0.5	PASS
		2462	9.080	2457.000	2466.080	0.5	PASS
11G	Ant1	2412	13.160	2407.000	2420.160	0.5	PASS
		2437	15.920	2428.840	2444.760	0.5	PASS
		2462	15.680	2454.480	2470.160	0.5	PASS
11N20SISO	Ant1	2412	13.240	2407.000	2420.240	0.5	PASS
		2437	16.160	2428.400	2444.560	0.5	PASS
		2462	15.720	2454.480	2470.200	0.5	PASS
11N40SISO	Ant1	2422	23.760	2410.720	2434.480	0.5	PASS
		2437	35.200	2419.320	2454.520	0.5	PASS
		2452	35.600	2434.480	2470.080	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



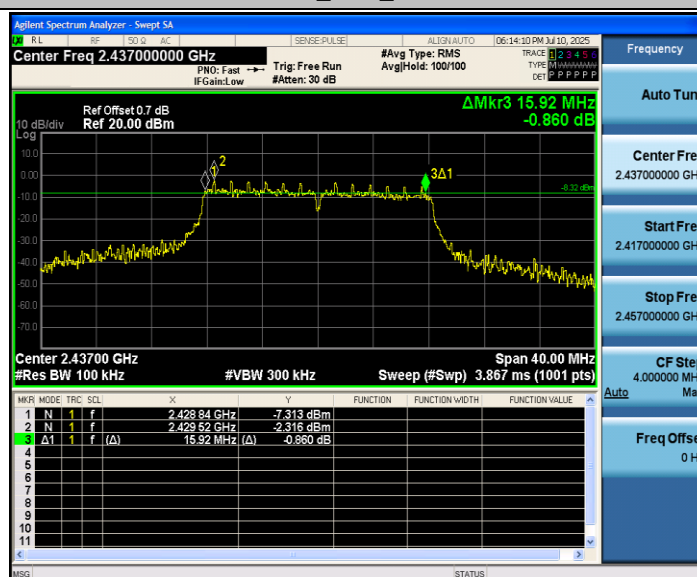
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



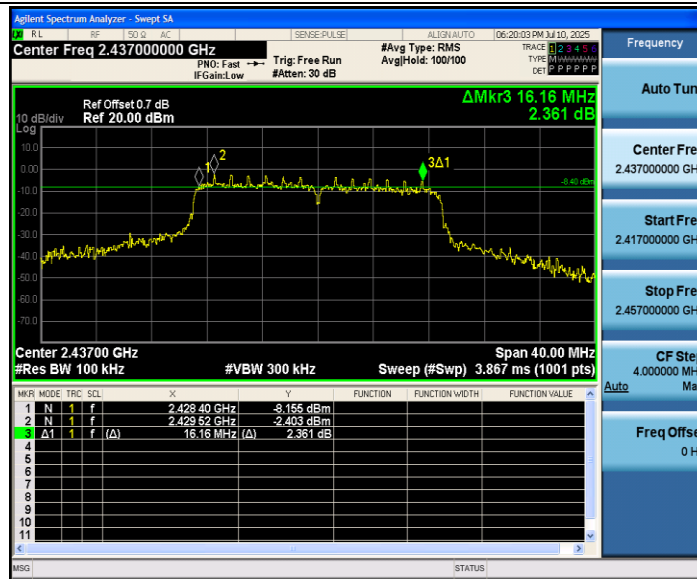
11G_Ant1_2462



11N20SISO_Ant1_2412



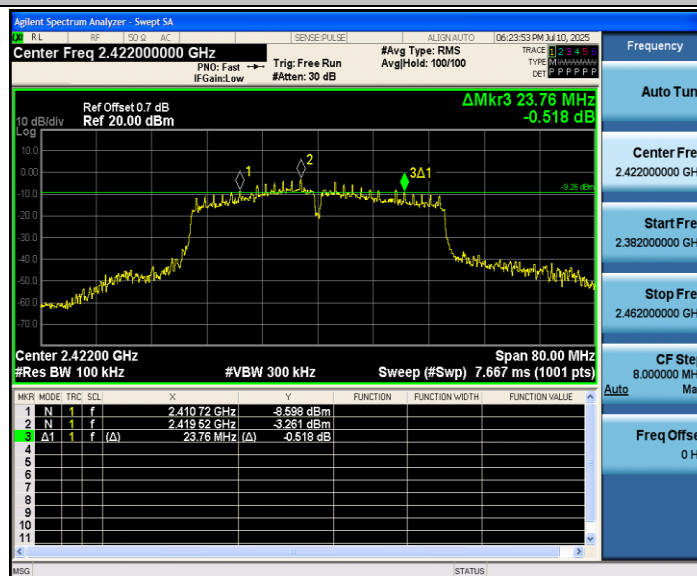
11N20SISO_Ant1_2437



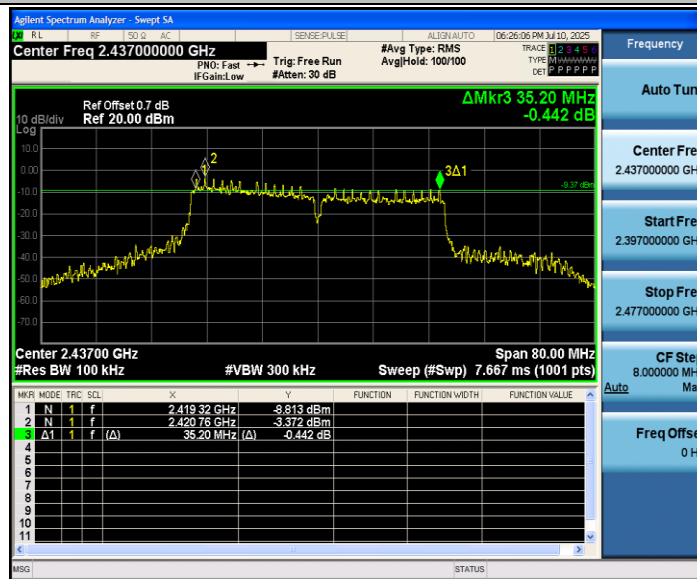
11N20SISO_Ant1_2462



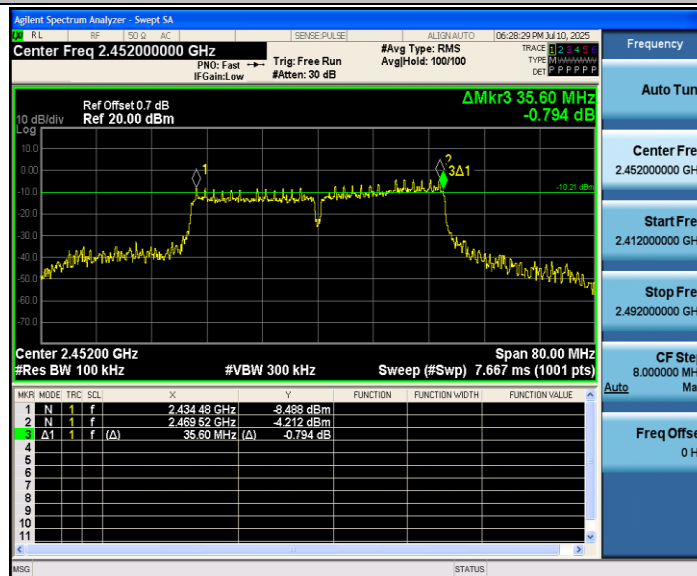
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix B: Occupied Channel Bandwidth

Test Result

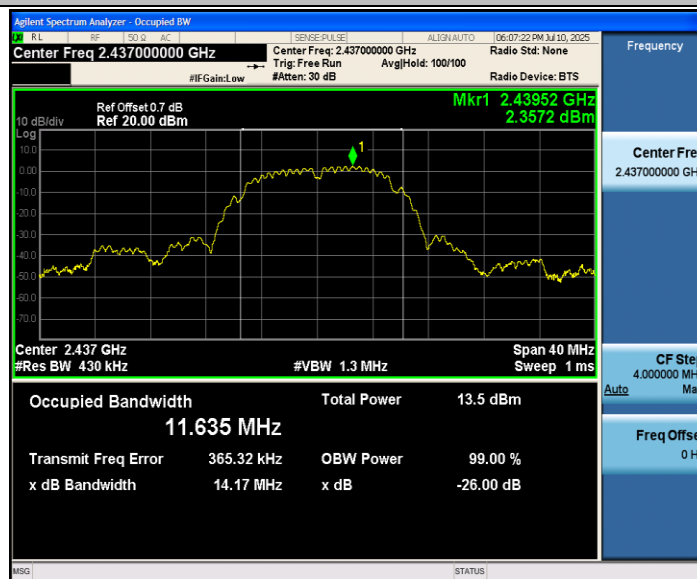
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.051	2406.8551	2418.9061	---	---
		2437	11.635	2431.5478	2443.1828	---	---
		2462	11.741	2455.9697	2467.7107	---	---
11G	Ant1	2412	16.744	2404.0277	2420.7717	---	---
		2437	16.750	2428.5429	2445.2929	---	---
		2462	16.535	2453.9123	2470.4473	---	---
11N20SISO	Ant1	2412	17.649	2403.5416	2421.1906	---	---
		2437	17.849	2427.9570	2445.8060	---	---
		2462	17.510	2453.4261	2470.9361	---	---
11N40SISO	Ant1	2422	35.303	2404.5055	2439.8085	---	---
		2437	36.575	2418.5342	2455.1092	---	---
		2452	36.537	2433.9358	2470.4728	---	---

Test Graphs

11B_Ant1_2412



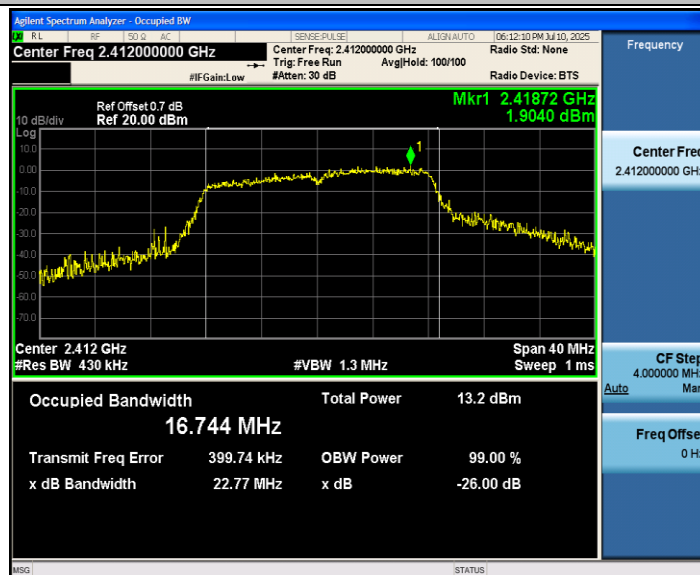
11B_Ant1_2437



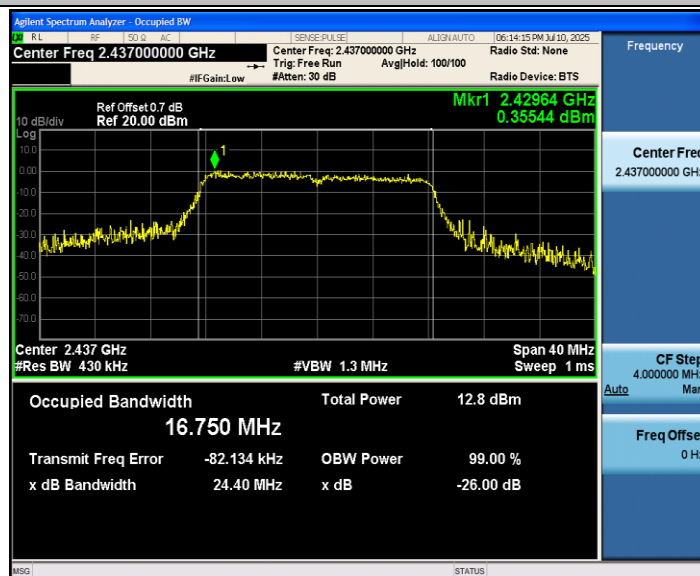
11B_Ant1_2462



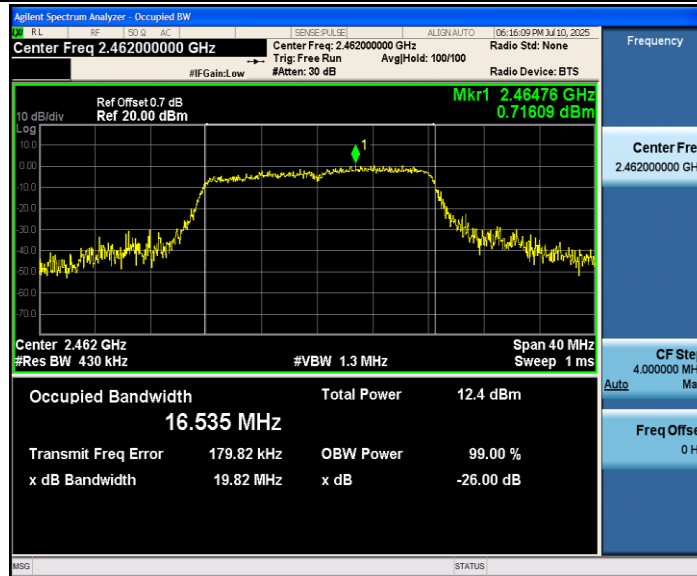
11G_Ant1_2412



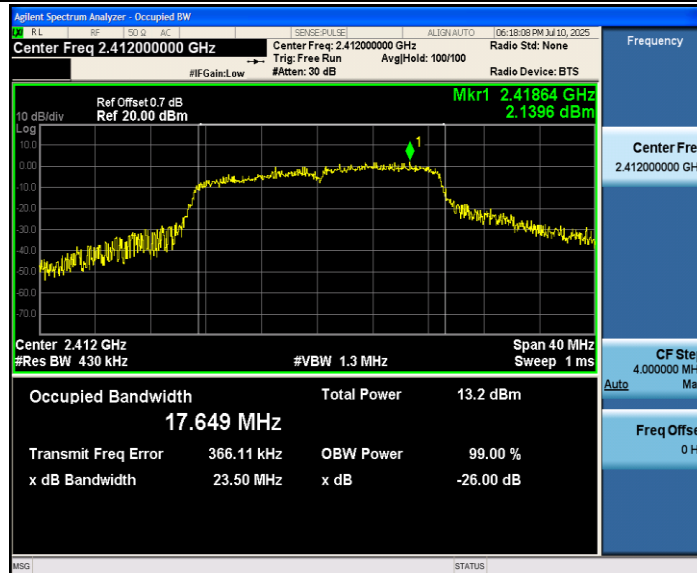
11G_Ant1_2437



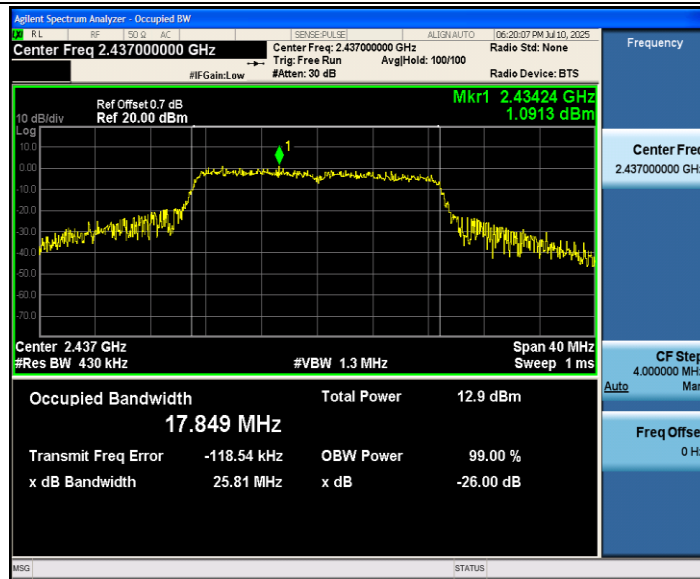
11G_Ant1_2462



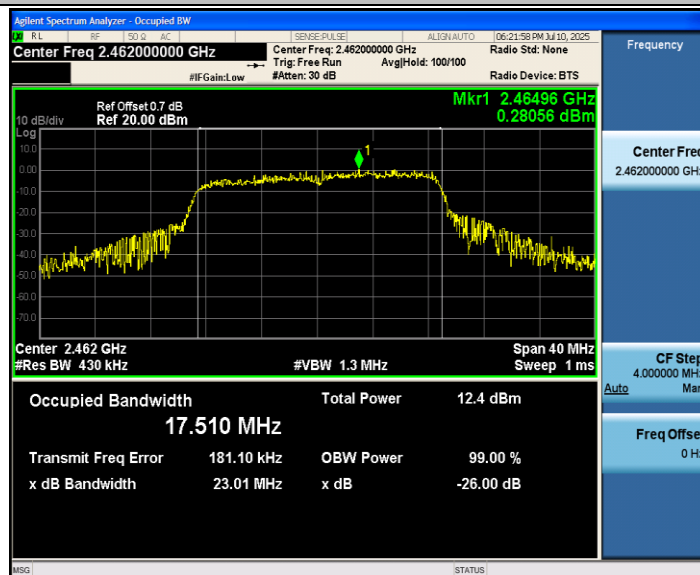
11N20SISO_Ant1_2412



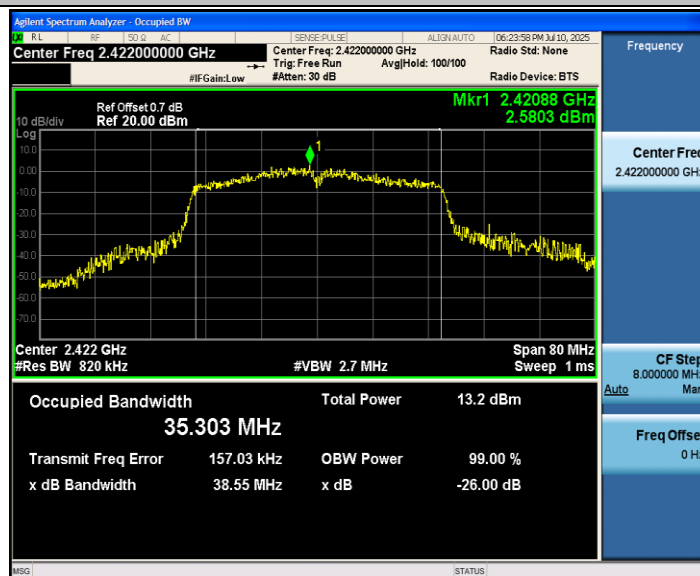
11N20SISO_Ant1_2437



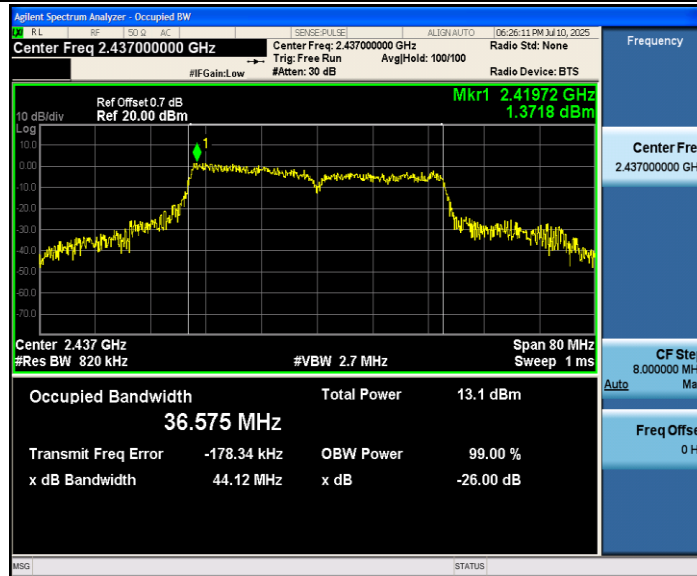
11N20SISO_Ant1_2462



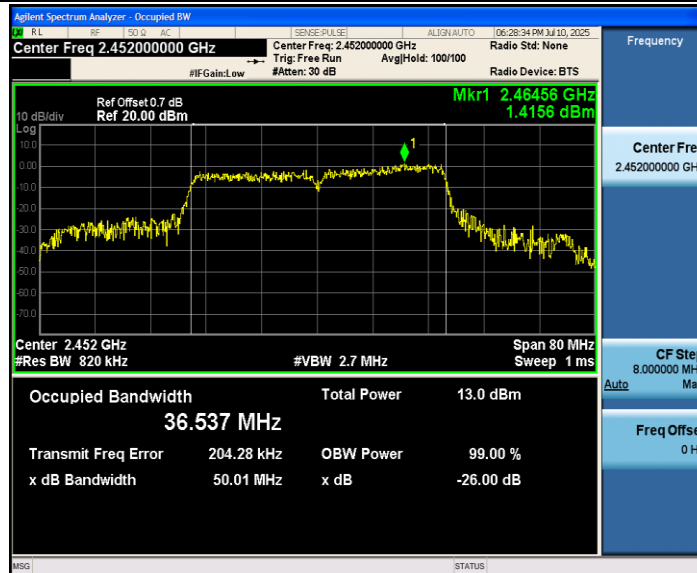
11N40SISO_Ant1_2422



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	14.61	≤30.00	PASS
		2437	13.30	≤30.00	PASS
		2462	14.52	≤30.00	PASS
11G	Ant1	2412	13.62	≤30.00	PASS
		2437	13.44	≤30.00	PASS
		2462	13.23	≤30.00	PASS
11N20SISO	Ant1	2412	13.40	≤30.00	PASS
		2437	13.27	≤30.00	PASS
		2462	12.91	≤30.00	PASS
11N40SISO	Ant1	2422	12.66	≤30.00	PASS
		2437	13.20	≤30.00	PASS
		2452	13.15	≤30.00	PASS

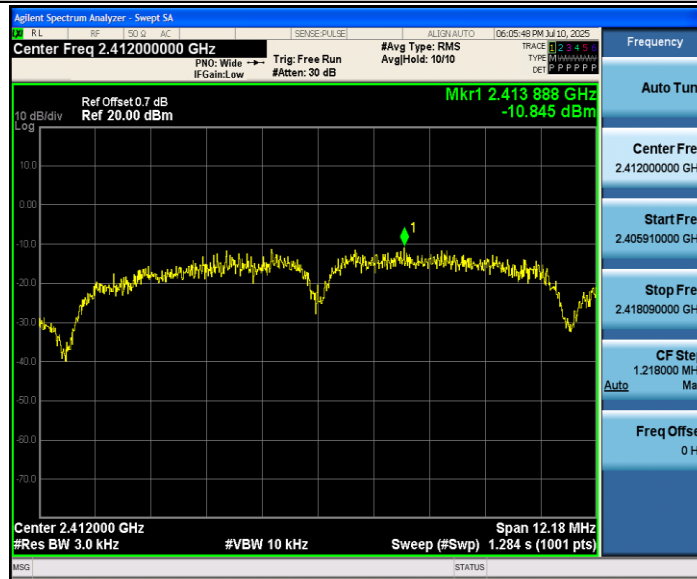
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.85	≤8.00	PASS
		2437	-11.56	≤8.00	PASS
		2462	-10.46	≤8.00	PASS
11G	Ant1	2412	-17.82	≤8.00	PASS
		2437	-18.63	≤8.00	PASS
		2462	-18.83	≤8.00	PASS
11N20SISO	Ant1	2412	-17.73	≤8.00	PASS
		2437	-18.33	≤8.00	PASS
		2462	-18.74	≤8.00	PASS
11N40SISO	Ant1	2422	-19.14	≤8.00	PASS
		2437	-20.51	≤8.00	PASS
		2452	-19.65	≤8.00	PASS

Test Graphs

11B_Ant1_2412



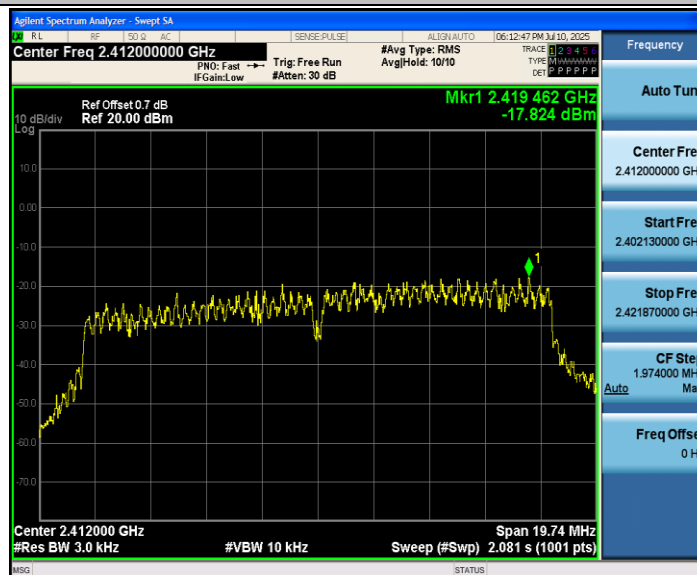
11B_Ant1_2437



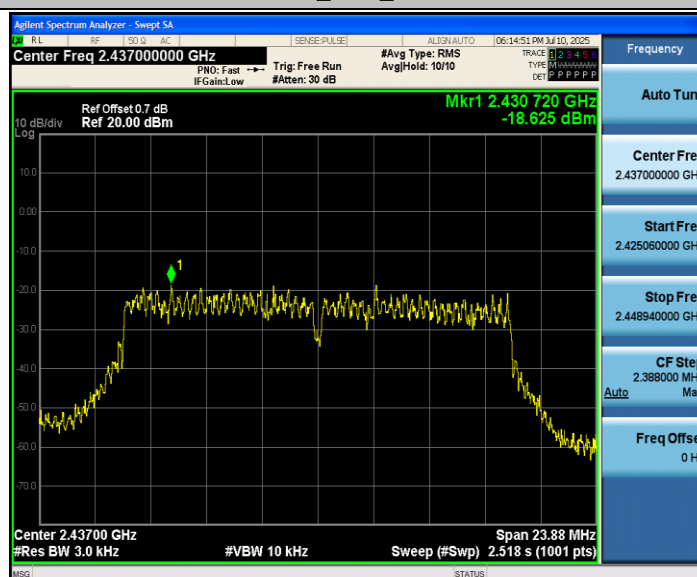
11B_Ant1_2462



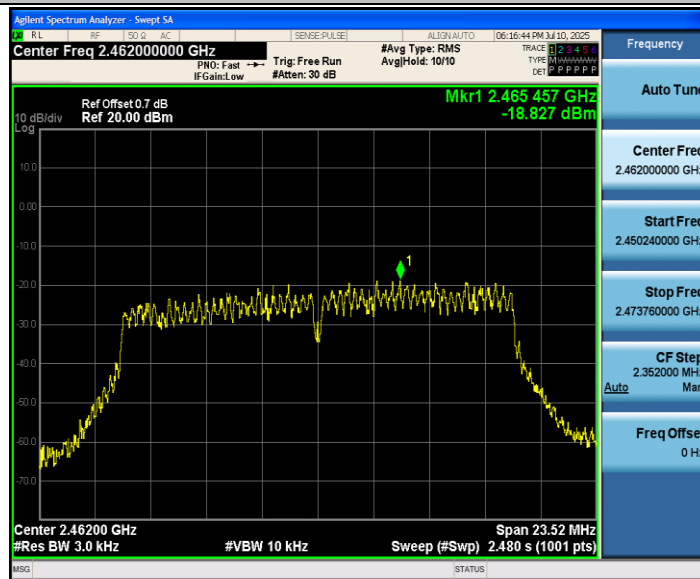
11G_Ant1_2412



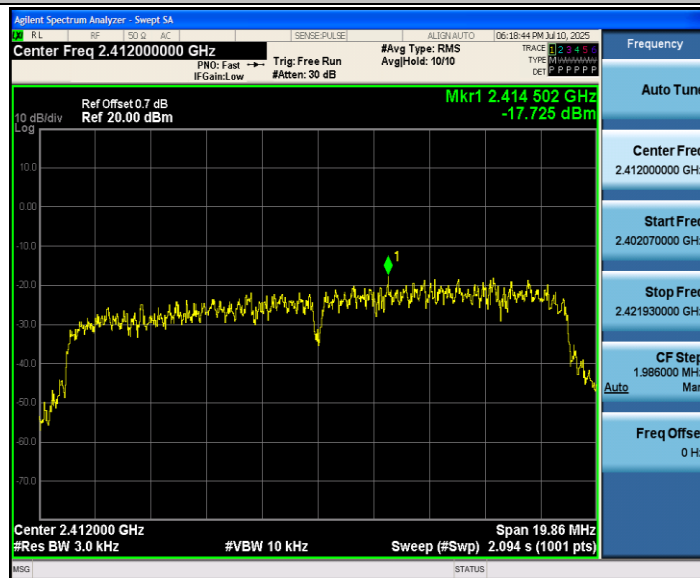
11G_Ant1_2437



11G_Ant1_2462



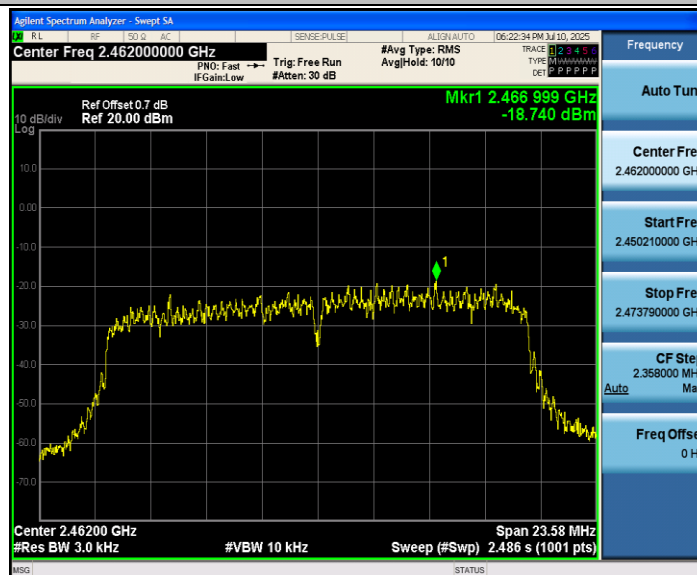
11N20SISO_Ant1_2412



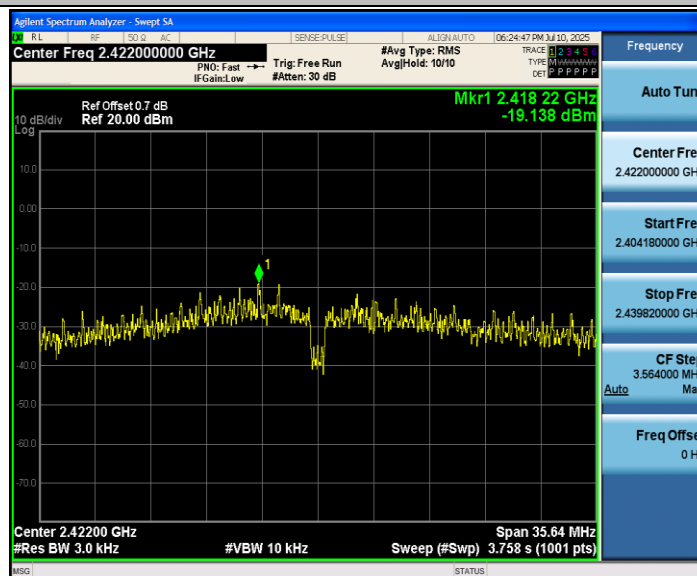
11N20SISO_Ant1_2437



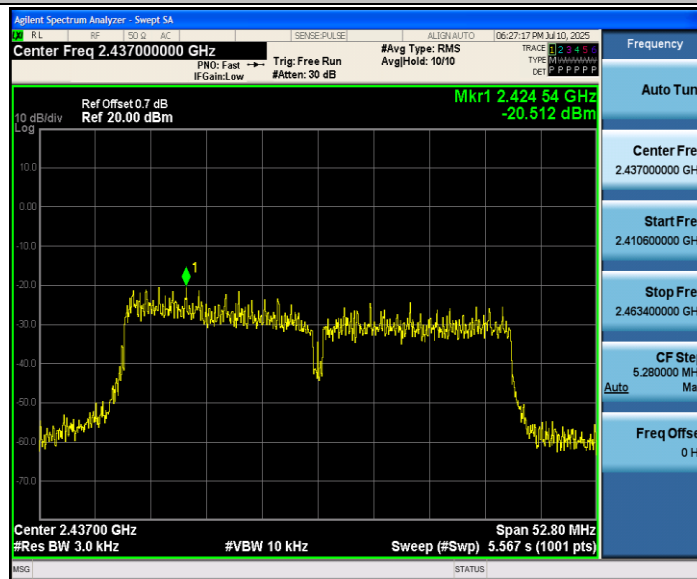
11N20SISO_Ant1_2462



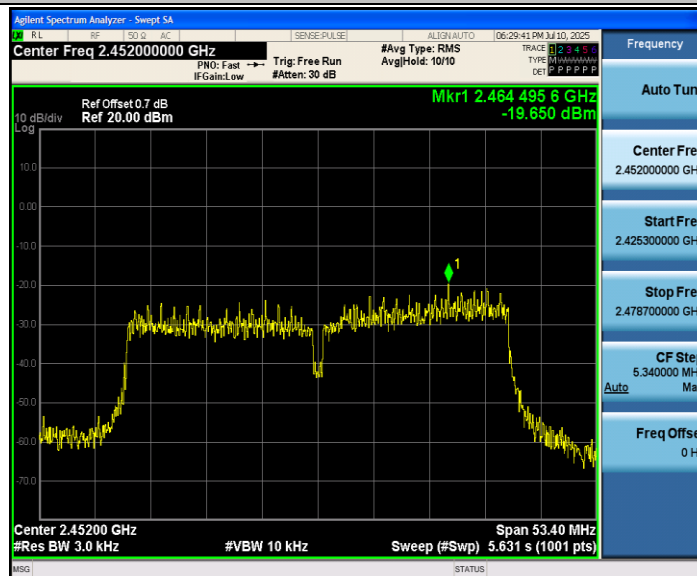
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

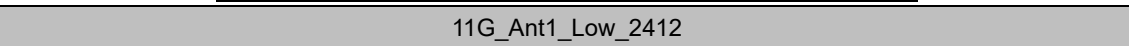
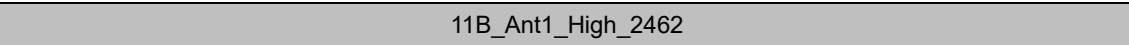


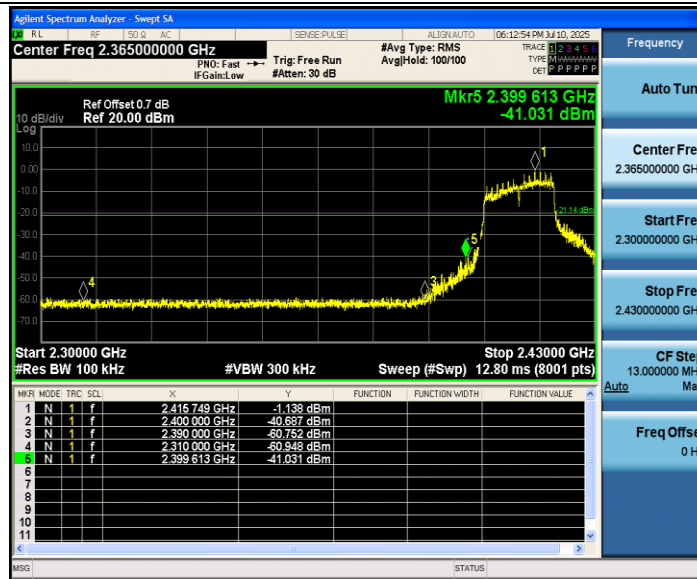
Appendix E: Band edge measurements

Test Result

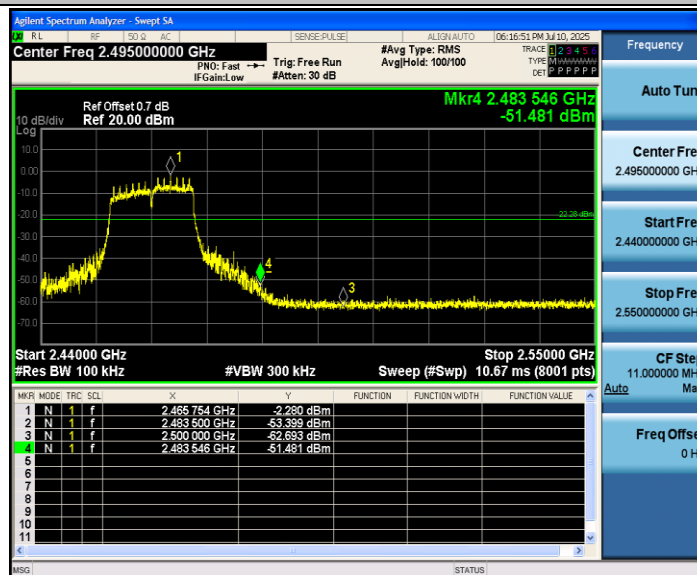
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.55	-40.27	≤-16.45	PASS
		High	2462	1.47	-53.18	≤-18.53	PASS
11G	Ant1	Low	2412	-1.14	-41.03	≤-21.14	PASS
		High	2462	-2.28	-51.48	≤-22.28	PASS
11N20SISO	Ant1	Low	2412	-1.28	-38.76	≤-21.28	PASS
		High	2462	-2.29	-49.93	≤-22.29	PASS
11N40SISO	Ant1	Low	2422	-3.25	-43.26	≤-23.25	PASS
		High	2452	-4.01	-42.16	≤-24.01	PASS

11B_Ant1_Low_2412

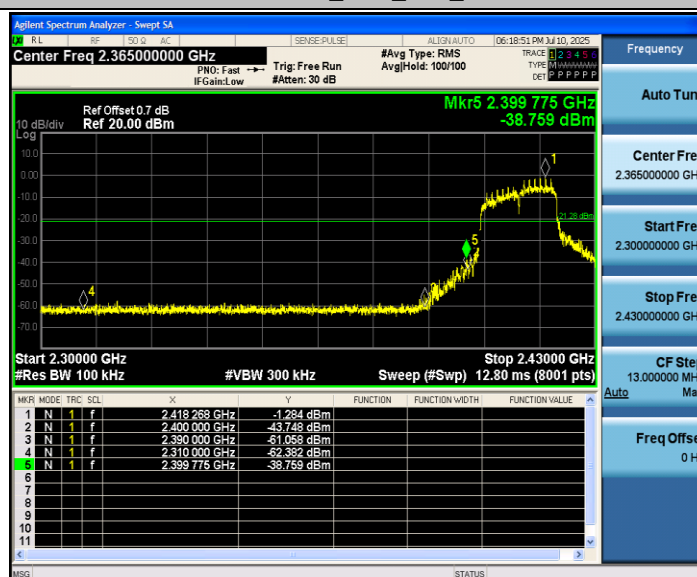




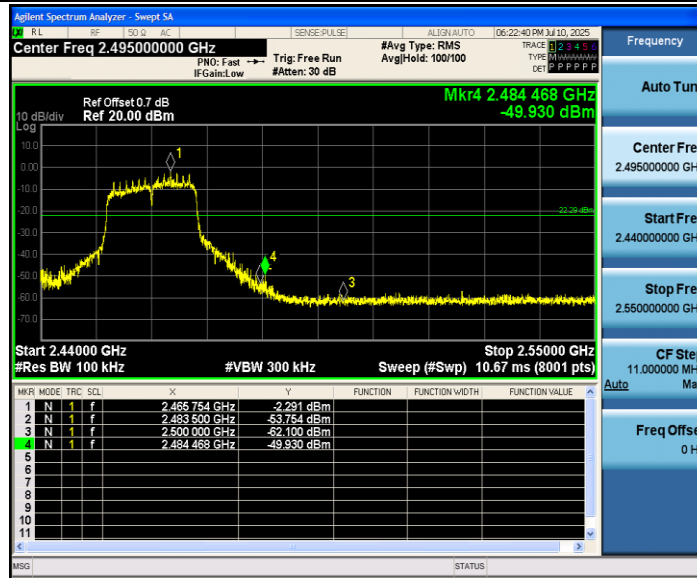
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



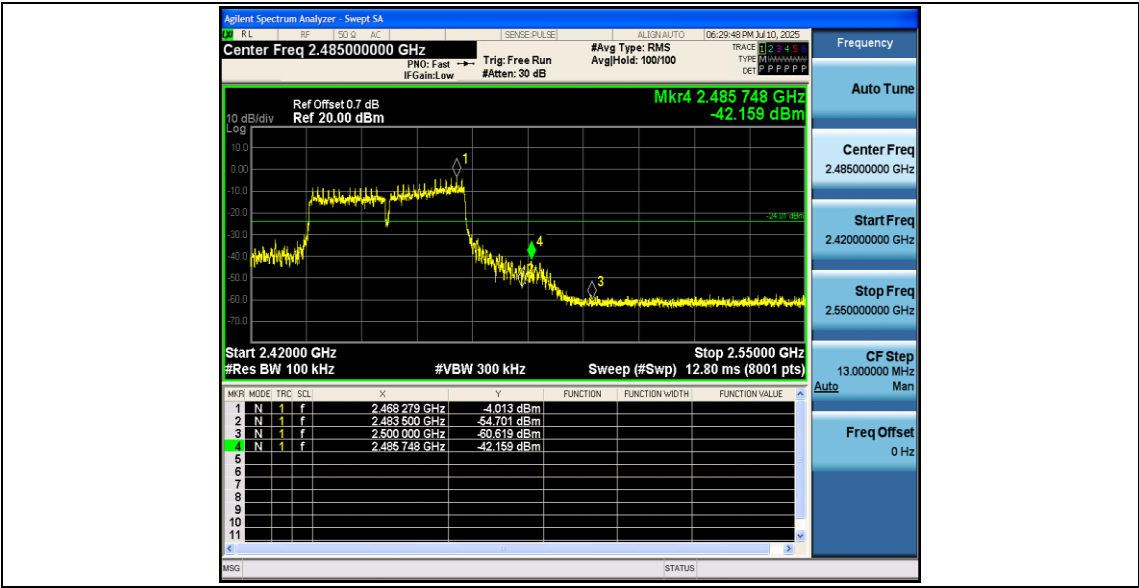
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



Appendix F: Conducted Spurious Emission

Test Result

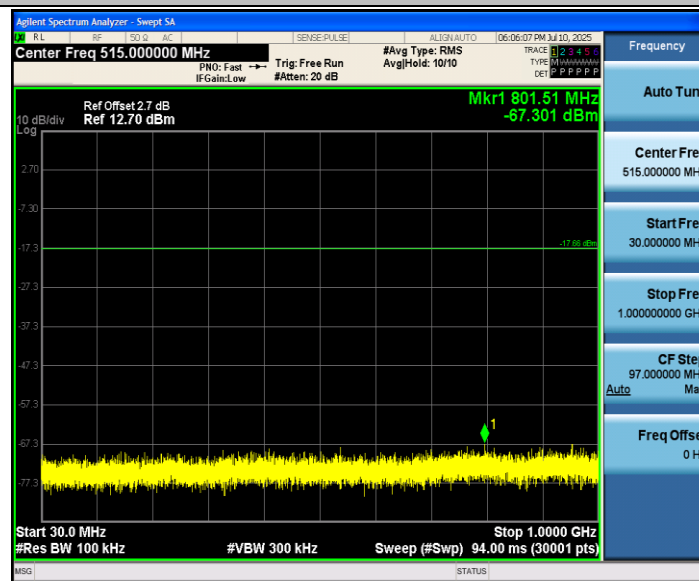
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.34	2.34	---	PASS
			30~1000	2.34	-67.3	≤-17.66	PASS
			1000~26500	2.34	-40.79	≤-17.66	PASS
		2437	Reference	0.12	0.12	---	PASS
			30~1000	0.12	-67.48	≤-19.88	PASS
			1000~26500	0.12	-40.58	≤-19.88	PASS
		2462	Reference	1.61	1.61	---	PASS
			30~1000	1.61	-66.18	≤-18.39	PASS
			1000~26500	1.61	-42.51	≤-18.39	PASS
11G	Ant1	2412	Reference	-1.93	-1.93	---	PASS
			30~1000	-1.93	-67.78	≤-21.93	PASS
			1000~26500	-1.93	-52.34	≤-21.93	PASS
		2437	Reference	-3.39	-3.39	---	PASS
			30~1000	-3.39	-67.84	≤-23.39	PASS
			1000~26500	-3.39	-45.35	≤-23.39	PASS
		2462	Reference	-3.18	-3.18	---	PASS
			30~1000	-3.18	-67.34	≤-23.18	PASS
			1000~26500	-3.18	-44.98	≤-23.18	PASS
11N20SISO	Ant1	2412	Reference	-1.80	-1.80	---	PASS
			30~1000	-1.80	-67.56	≤-21.8	PASS
			1000~26500	-1.80	-46.37	≤-21.8	PASS
		2437	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-67.79	≤-23.65	PASS
			1000~26500	-3.65	-49.44	≤-23.65	PASS
		2462	Reference	-2.41	-2.41	---	PASS
			30~1000	-2.41	-67.68	≤-22.41	PASS
			1000~26500	-2.41	-44.09	≤-22.41	PASS
11N40SISO	Ant1	2422	Reference	-4.33	-4.33	---	PASS
			30~1000	-4.33	-66.76	≤-24.33	PASS
			1000~26500	-4.33	-47.74	≤-24.33	PASS
		2437	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-67.97	≤-23.65	PASS
			1000~26500	-3.65	-46.97	≤-23.65	PASS
		2452	Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-67.46	≤-24.44	PASS
			1000~26500	-4.44	-47.6	≤-24.44	PASS

Test Graphs

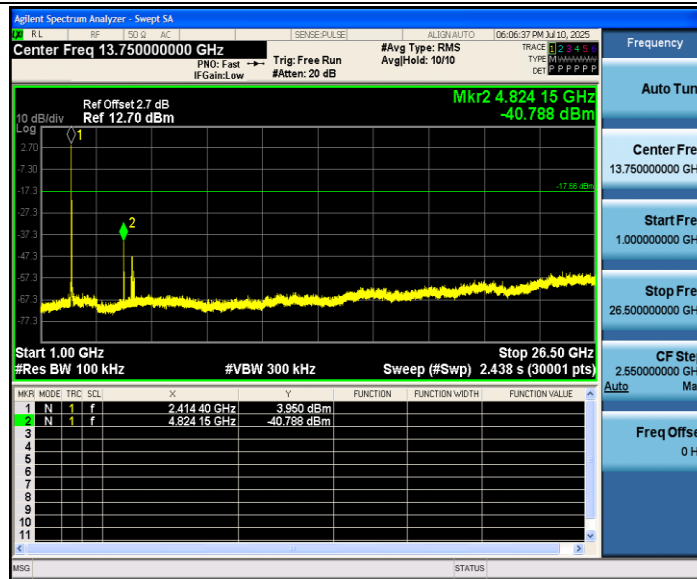
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



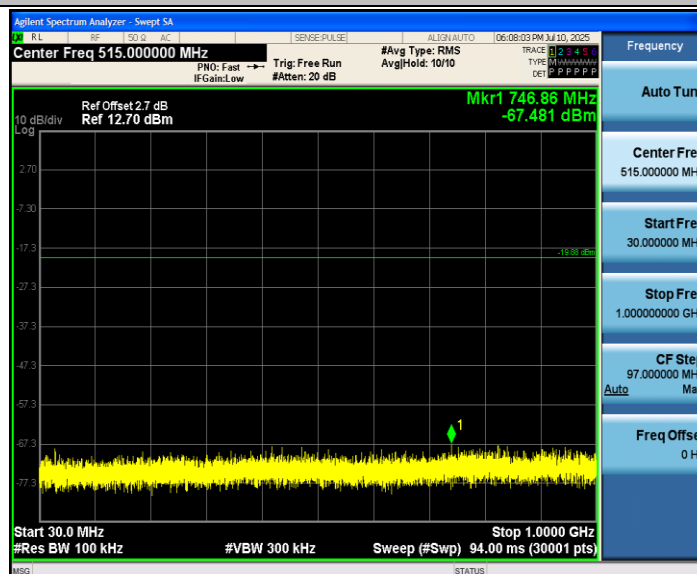
11B_Ant1_2412_1000~26500



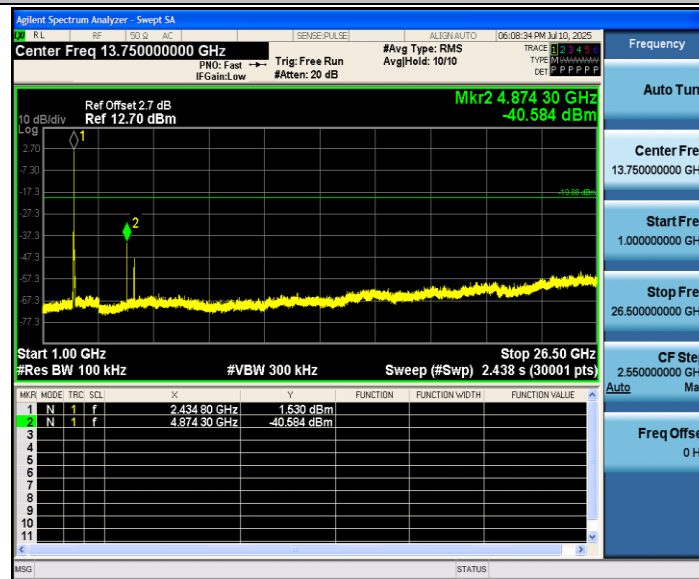
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



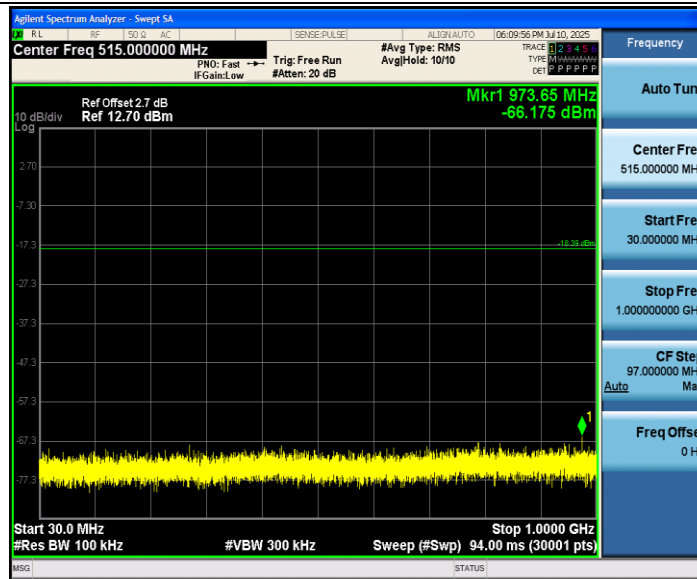
11B_Ant1_2437_1000~26500



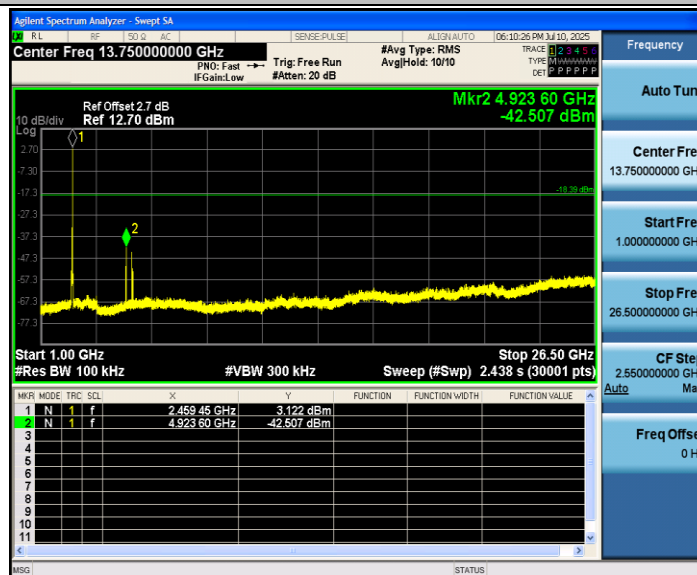
11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



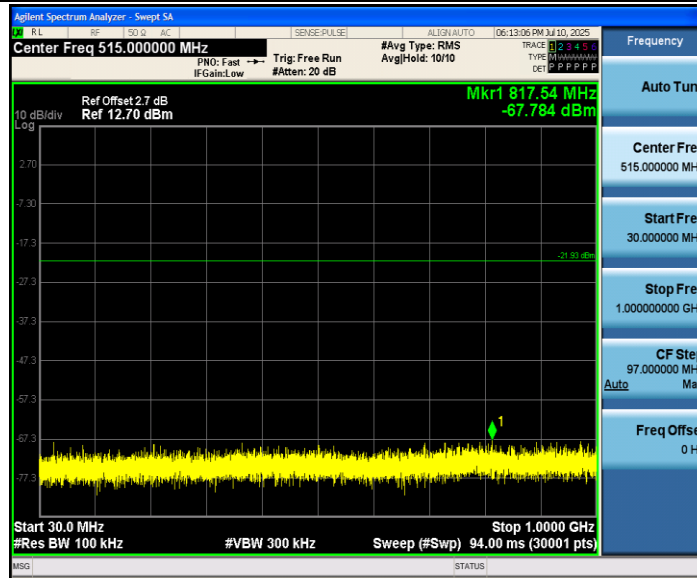
11B_Ant1_2462_1000~26500



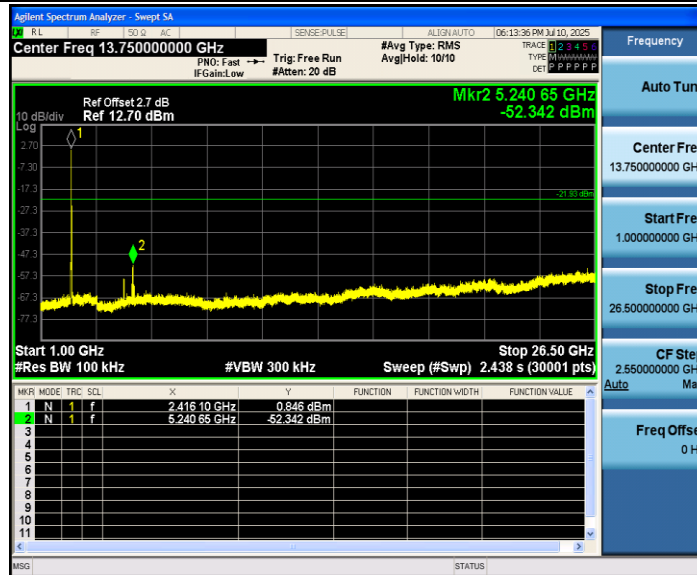
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



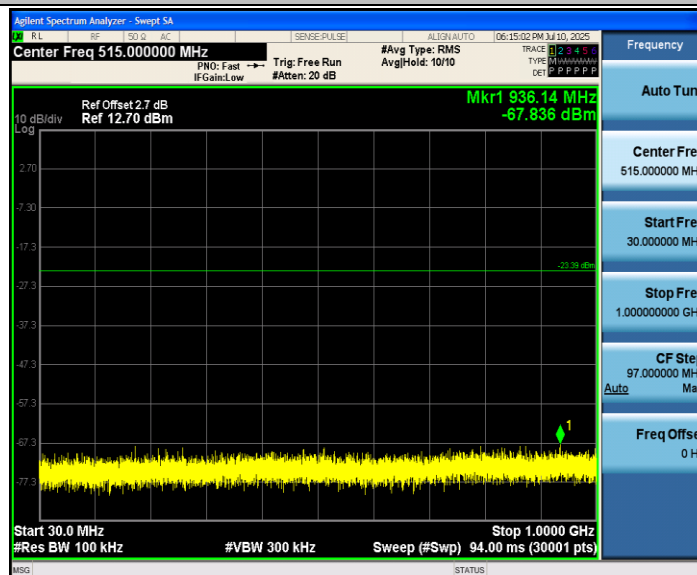
11G_Ant1_2412_1000~26500



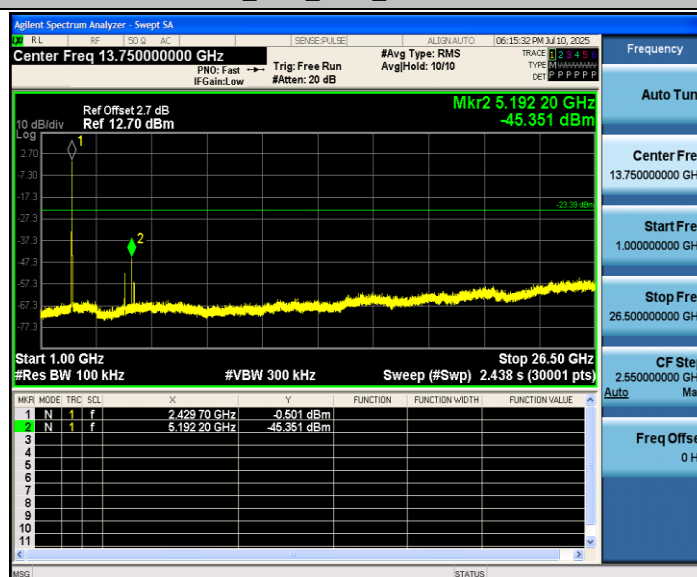
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



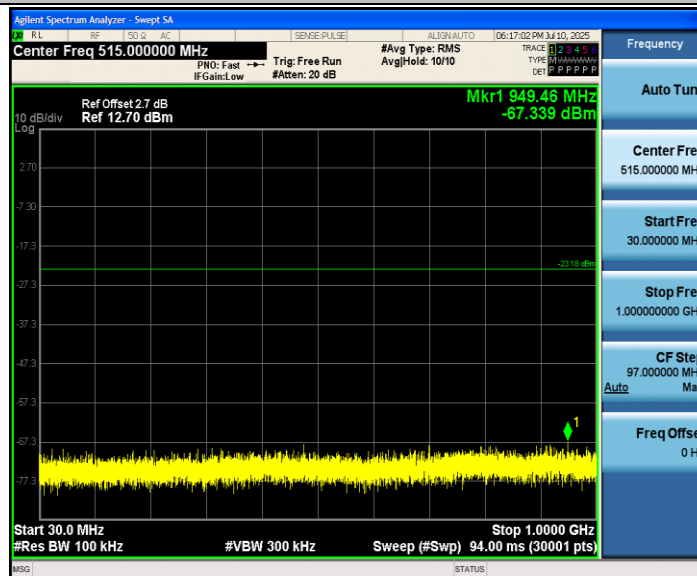
11G_Ant1_2437_1000~26500



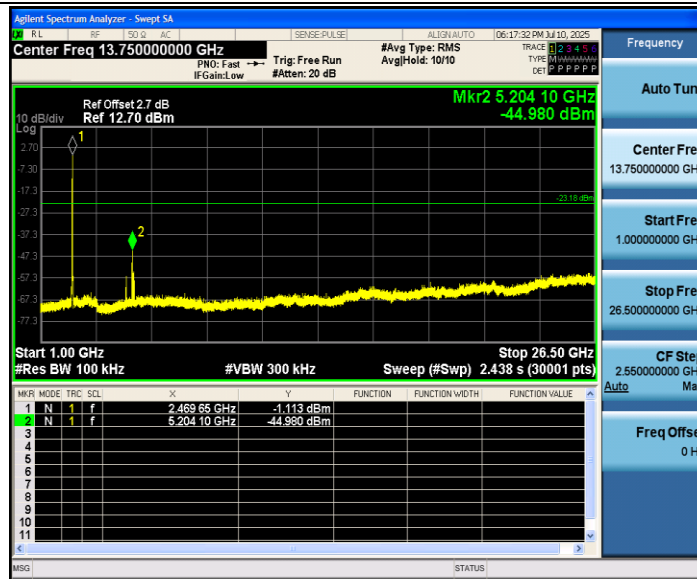
11G_Ant1_2462_0~Reference



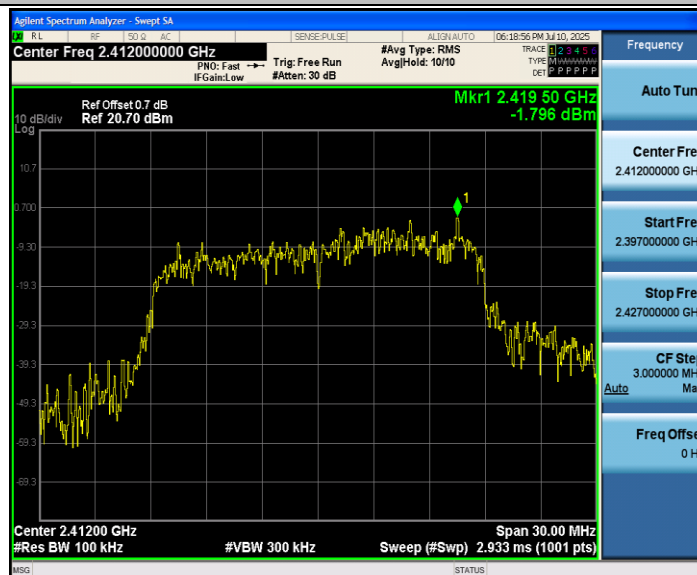
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

