

Appendix FCC Test Data
Applicant: <u>Shenzhen Zhongshou Bussiness Machine Co., Ltd.</u>
Report No. : <u>NCT24046391XE</u>
EUT: <u>POS</u>
M/N: <u>HX-3500</u>
Standard: <u>FCC PART 15 C 15.247</u>
Test Power Supply: <u>DC 12V/5A from adapter input AC 120V/60Hz</u>
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, <u>101.325</u> kPa
Test Date: <u>Nov. 01, 2024 ~ Nov. 05, 2024</u> Test Engineer: <u>Keven Wu</u>

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.040	2406.960	2417.000	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	10.080	2456.960	2467.040	0.5	PASS
11G	Ant1	2412	16.000	2404.160	2420.160	0.5	PASS
		2437	16.280	2428.880	2445.160	0.5	PASS
		2462	15.920	2453.920	2469.840	0.5	PASS
11N20SISO	Ant1	2412	16.640	2403.480	2420.120	0.5	PASS
		2437	16.040	2428.840	2444.880	0.5	PASS
		2462	16.640	2453.480	2470.120	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.400	2439.520	0.5	PASS
		2437	35.120	2419.400	2454.520	0.5	PASS
		2452	35.040	2434.480	2469.520	0.5	PASS

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



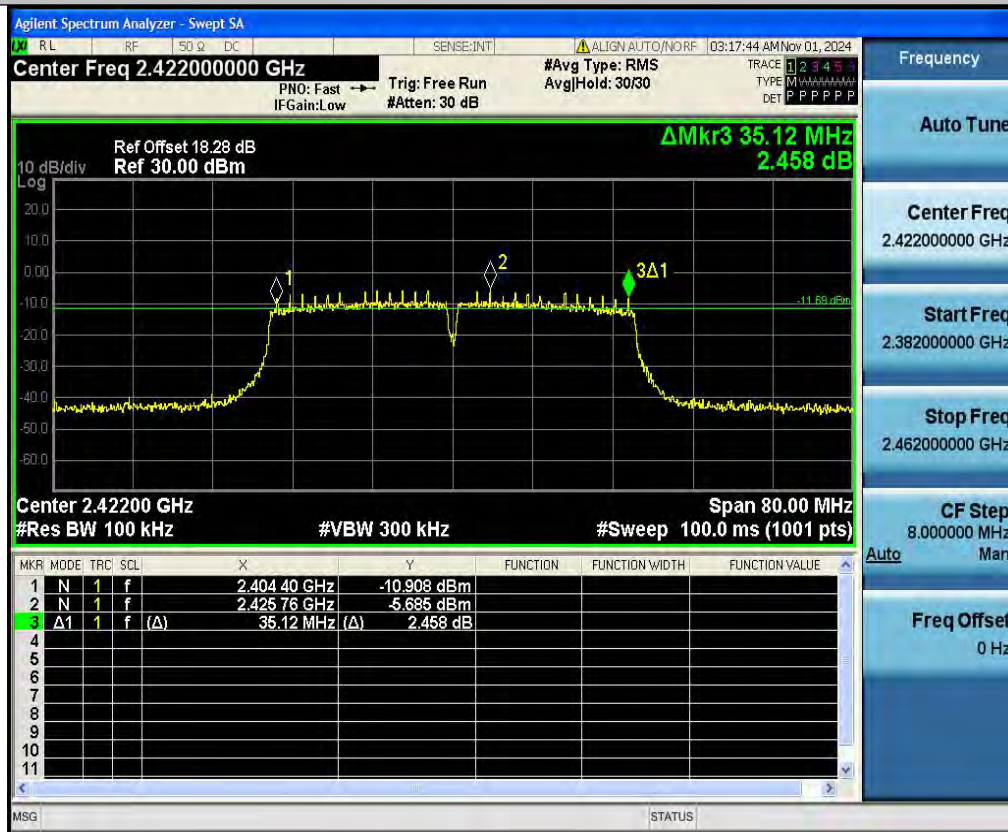
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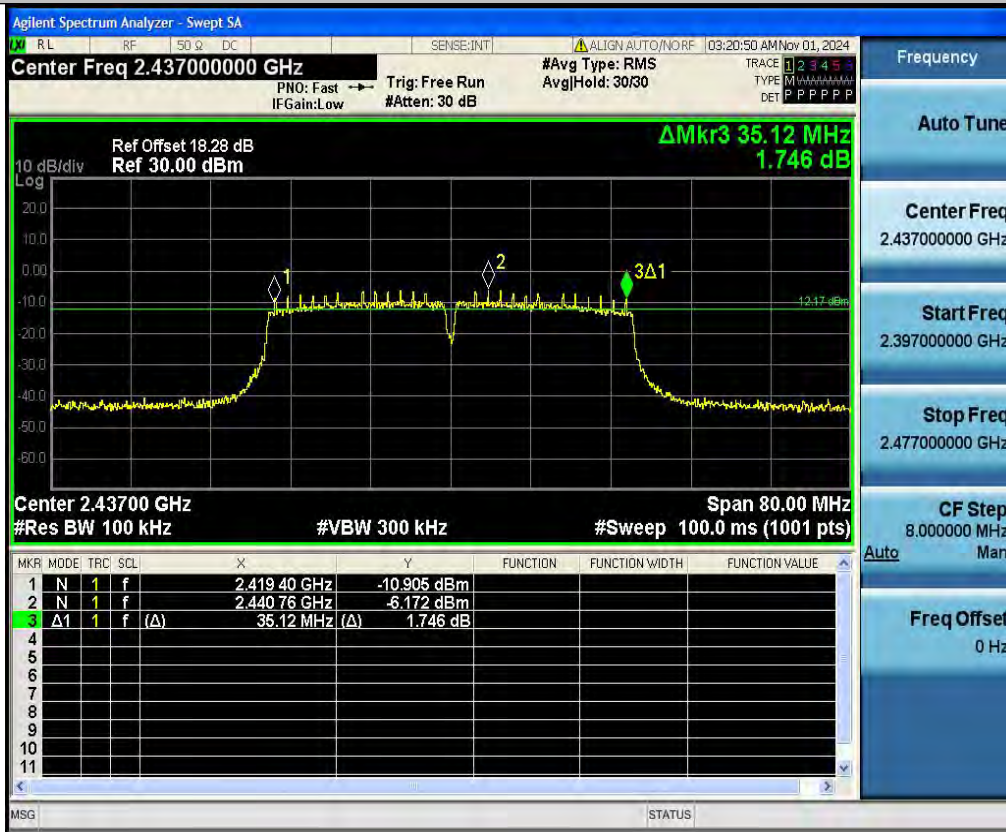
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.736	2404.5935	2419.3295	---	---
		2437	14.736	2429.5889	2444.3249	---	---
		2462	14.736	2454.5777	2469.3137	---	---
11G	Ant1	2412	16.417	2403.7396	2420.1566	---	---
		2437	16.484	2428.7471	2445.2311	---	---
		2462	16.491	2453.6805	2470.1715	---	---
11N20SISO	Ant1	2412	17.588	2403.1552	2420.7432	---	---
		2437	17.664	2428.1365	2445.8005	---	---
		2462	17.711	2453.1081	2470.8191	---	---
11N40SISO	Ant1	2422	36.060	2403.9719	2440.0319	---	---
		2437	36.085	2418.9054	2454.9904	---	---
		2452	36.160	2433.8439	2470.0039	---	---

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

TestMode	Antenna	Channel	Set Power	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	---	13.71	≤30.00	PASS
		2437	---	12.80	≤30.00	PASS
		2462	---	12.63	≤30.00	PASS
11G	Ant1	2412	---	15.97	≤30.00	PASS
		2437	---	14.80	≤30.00	PASS
		2462	---	14.15	≤30.00	PASS
11N20SISO	Ant1	2412	---	15.85	≤30.00	PASS
		2437	---	17.73	≤30.00	PASS
		2462	---	13.49	≤30.00	PASS
11N40SISO	Ant1	2422	---	16.13	≤30.00	PASS
		2437	---	15.64	≤30.00	PASS
		2452	---	14.85	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.6	≤8.00	PASS
		2437	-11.2	≤8.00	PASS
		2462	-12.18	≤8.00	PASS
11G	Ant1	2412	-15.75	≤8.00	PASS
		2437	-17.93	≤8.00	PASS
		2462	-18.8	≤8.00	PASS
11N20SISO	Ant1	2412	-14.86	≤8.00	PASS
		2437	-13.9	≤8.00	PASS
		2462	-18.98	≤8.00	PASS
11N40SISO	Ant1	2422	-18.84	≤8.00	PASS
		2437	-19.88	≤8.00	PASS
		2452	-20.22	≤8.00	PASS

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

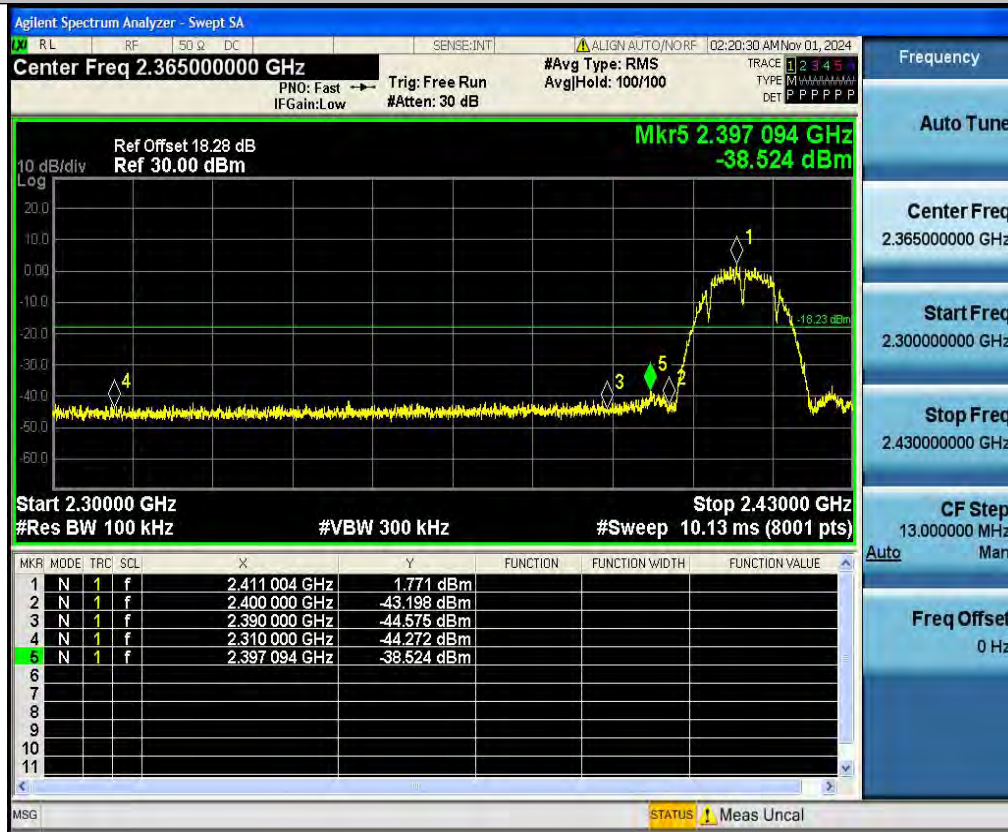


Appendix E: Band edge measurements

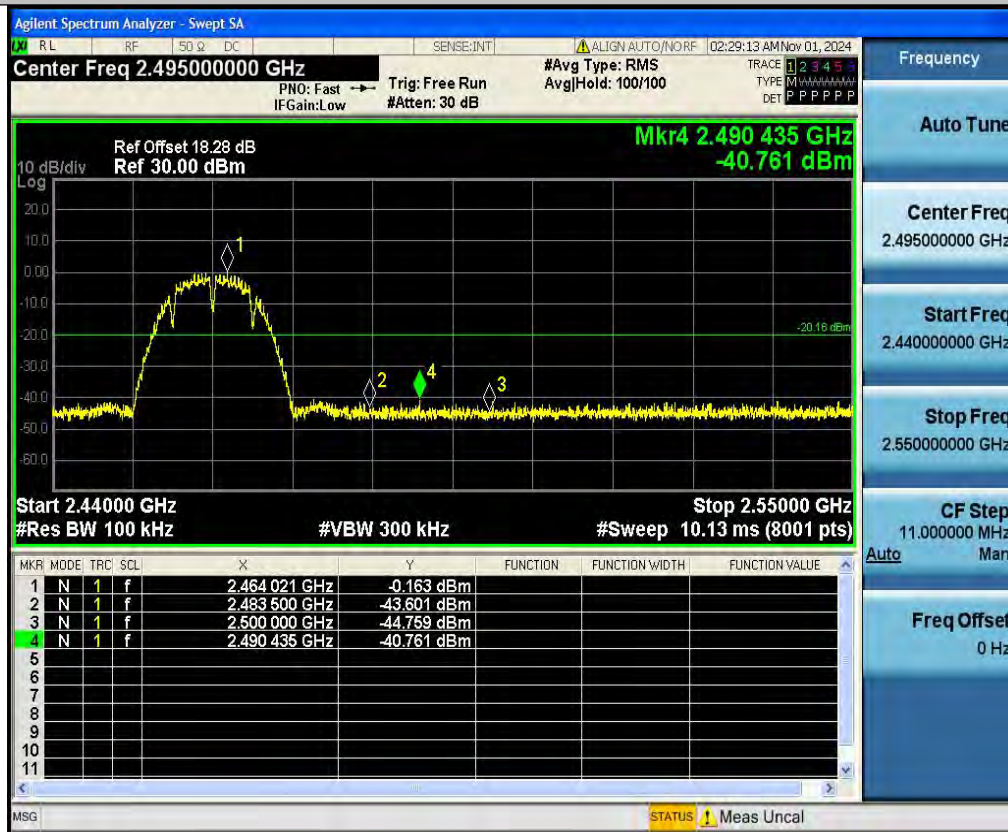
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.77	-38.52	≤-18.23	PASS
		High	2462	-0.16	-40.76	≤-20.16	PASS
11G	Ant1	Low	2412	-2.23	-39.55	≤-22.23	PASS
		High	2462	-4.16	-40.64	≤-24.16	PASS
11N20SISO	Ant1	Low	2412	-2.84	-37.36	≤-22.84	PASS
		High	2462	-5.21	-41.22	≤-25.21	PASS
11N40SISO	Ant1	Low	2422	-5.66	-40.61	≤-25.66	PASS
		High	2452	-6.62	-41.43	≤-26.62	PASS

11B_Ant1_Low_2412



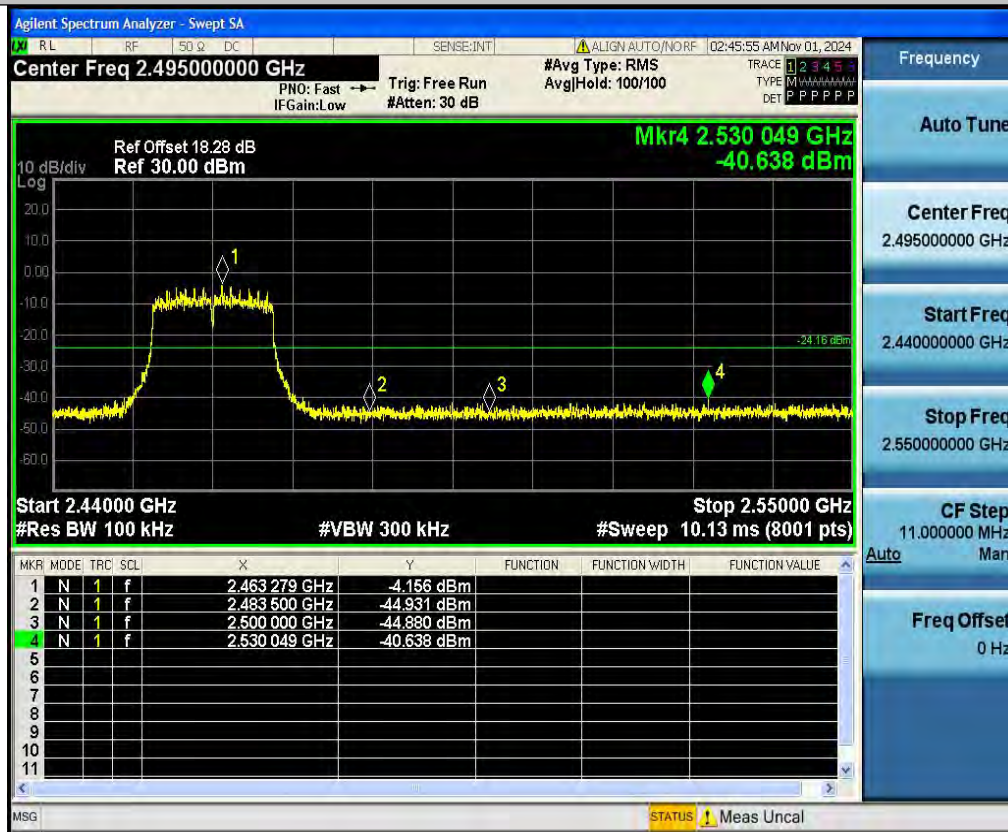
11B_Ant1_High_2462



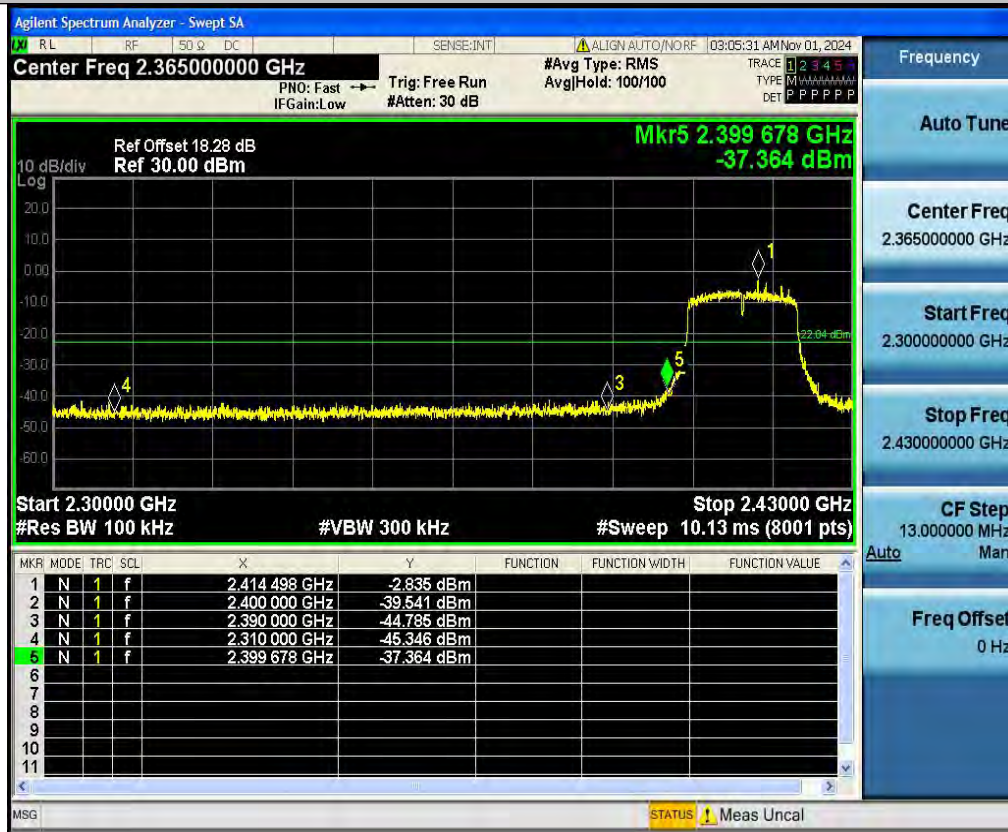
11G_Ant1_Low_2412



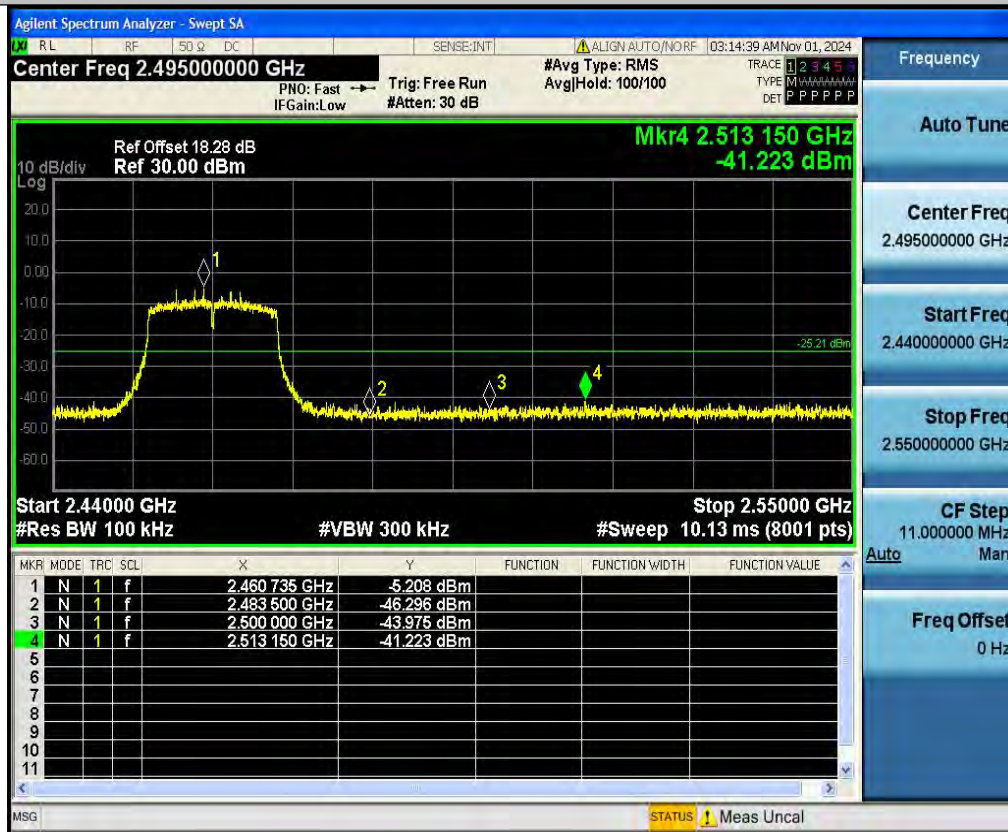
11G_Ant1_High_2462



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	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	0.68	0.68	---	PASS
			30~1000	0.68	-52.91	≤-19.32	PASS
			1000~26500	0.68	-42.29	≤-19.32	PASS
		2437	Reference	-0.50	-0.50	---	PASS
			30~1000	-0.50	-52.4	≤-20.5	PASS
			1000~26500	-0.50	-43.15	≤-20.5	PASS
		2462	Reference	-0.96	-0.96	---	PASS
			30~1000	-0.96	-52.27	≤-20.96	PASS
			1000~26500	-0.96	-42.85	≤-20.96	PASS
11G	Ant1	2412	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-52.9	≤-24.31	PASS
			1000~26500	-4.31	-42.28	≤-24.31	PASS
		2437	Reference	-4.36	-4.36	---	PASS
			30~1000	-4.36	-52.4	≤-24.36	PASS
			1000~26500	-4.36	-43	≤-24.36	PASS
		2462	Reference	-6.24	-6.24	---	PASS
			30~1000	-6.24	-52.1	≤-26.24	PASS
			1000~26500	-6.24	-42.82	≤-26.24	PASS
11N20SISO	Ant1	2412	Reference	-5.85	-5.85	---	PASS
			30~1000	-5.85	-52.37	≤-25.85	PASS
			1000~26500	-5.85	-42.37	≤-25.85	PASS
		2437	Reference	-1.54	-1.54	---	PASS
			30~1000	-1.54	-52.47	≤-21.54	PASS
			1000~26500	-1.54	-42.7	≤-21.54	PASS
		2462	Reference	-7.75	-7.75	---	PASS
			30~1000	-7.75	-52.18	≤-27.75	PASS
			1000~26500	-7.75	-43.21	≤-27.75	PASS
11N40SISO	Ant1	2422	Reference	-5.96	-5.96	---	PASS
			30~1000	-5.96	-52.02	≤-25.96	PASS
			1000~26500	-5.96	-41.76	≤-25.96	PASS
		2437	Reference	-8.48	-8.48	---	PASS
			30~1000	-8.48	-52.76	≤-28.48	PASS
			1000~26500	-8.48	-42.83	≤-28.48	PASS
		2452	Reference	-9.04	-9.04	---	PASS
			30~1000	-9.04	-52.23	≤-29.04	PASS
			1000~26500	-9.04	-43.01	≤-29.04	PASS

11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



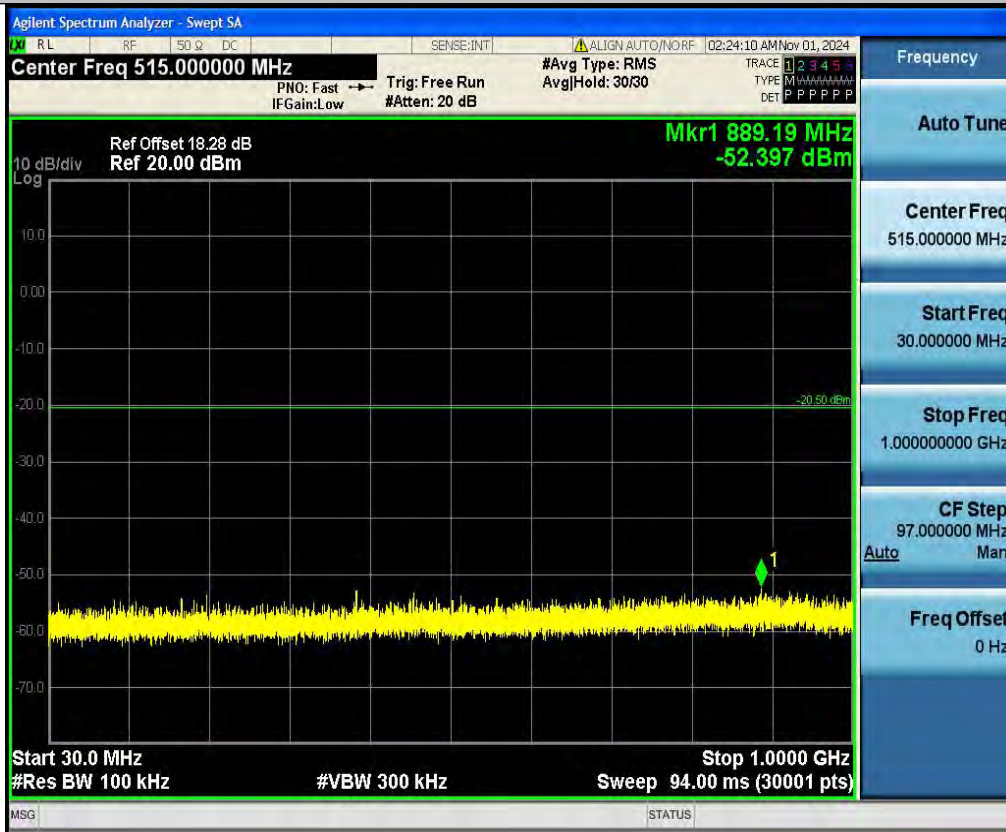
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



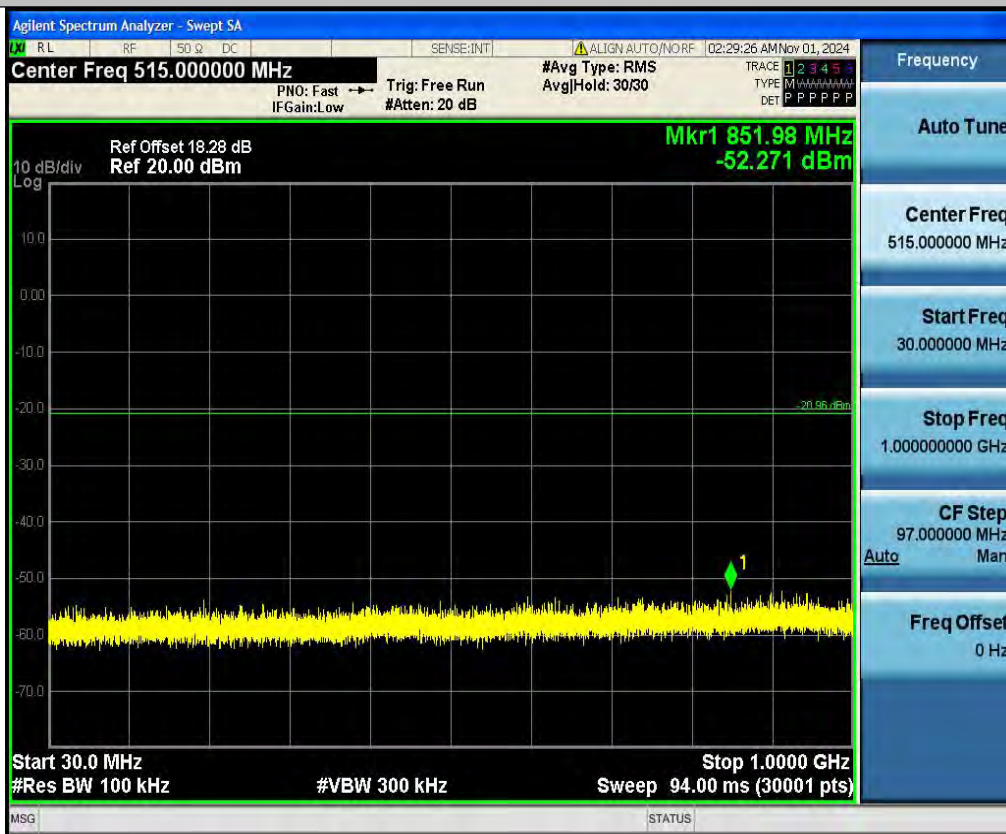
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



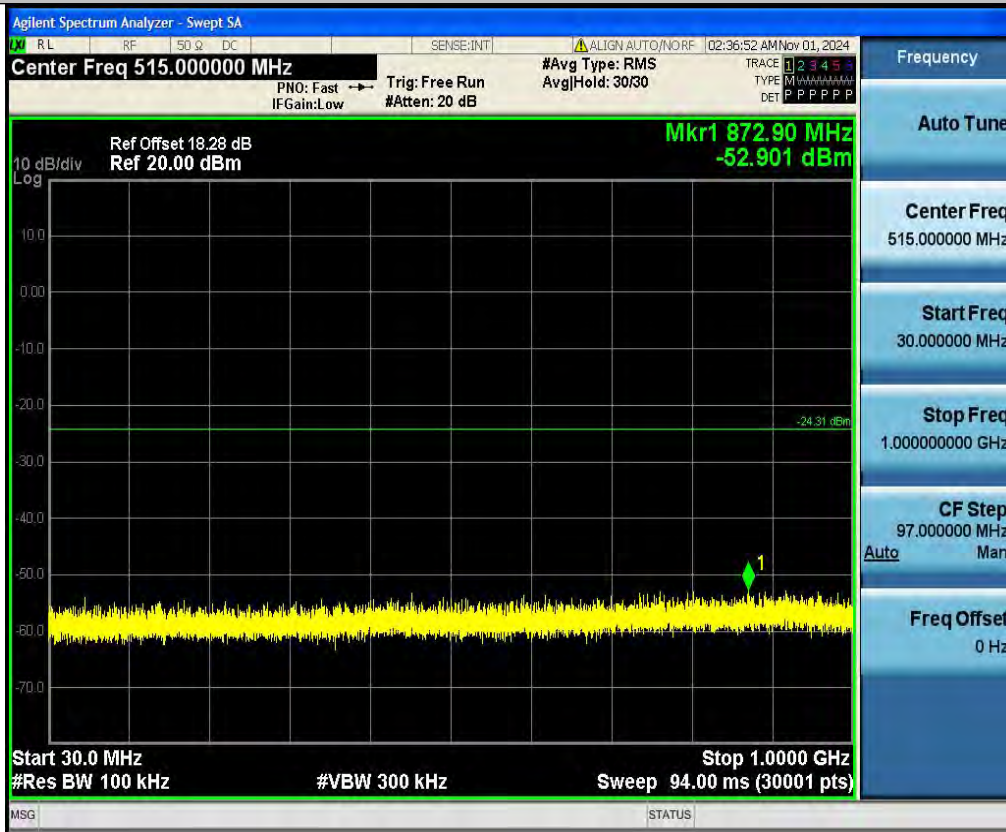
11B_Ant1_2462_1000~26500



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



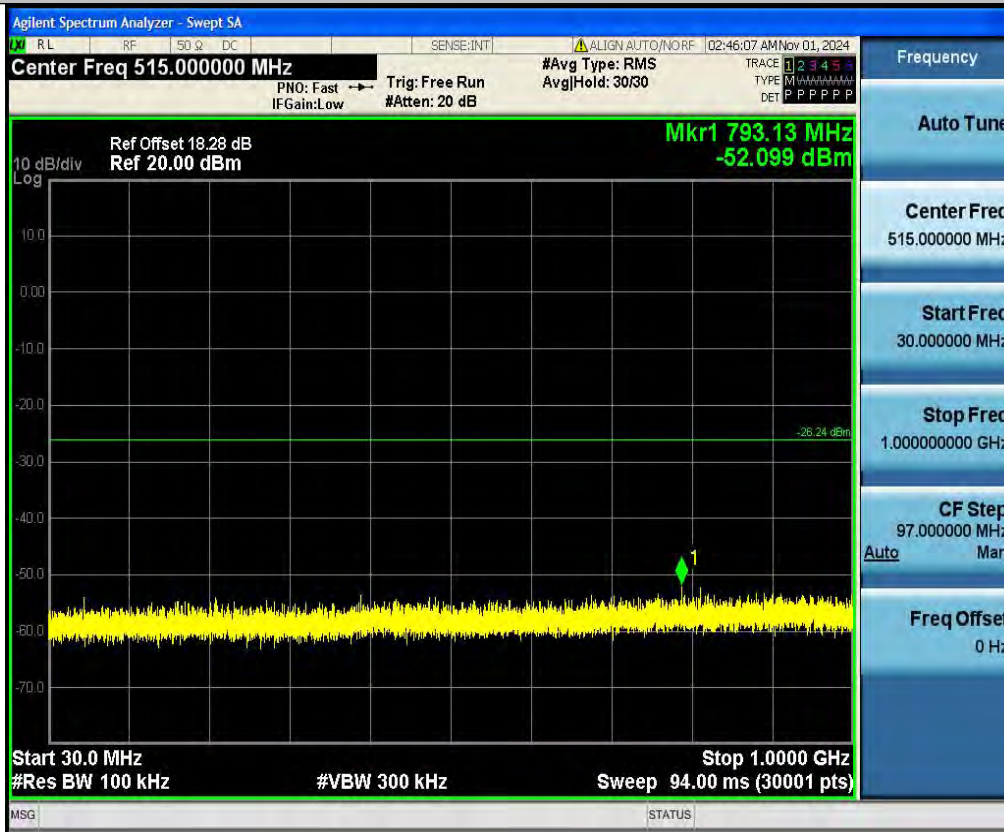
11G_Ant1_2437_1000~26500



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



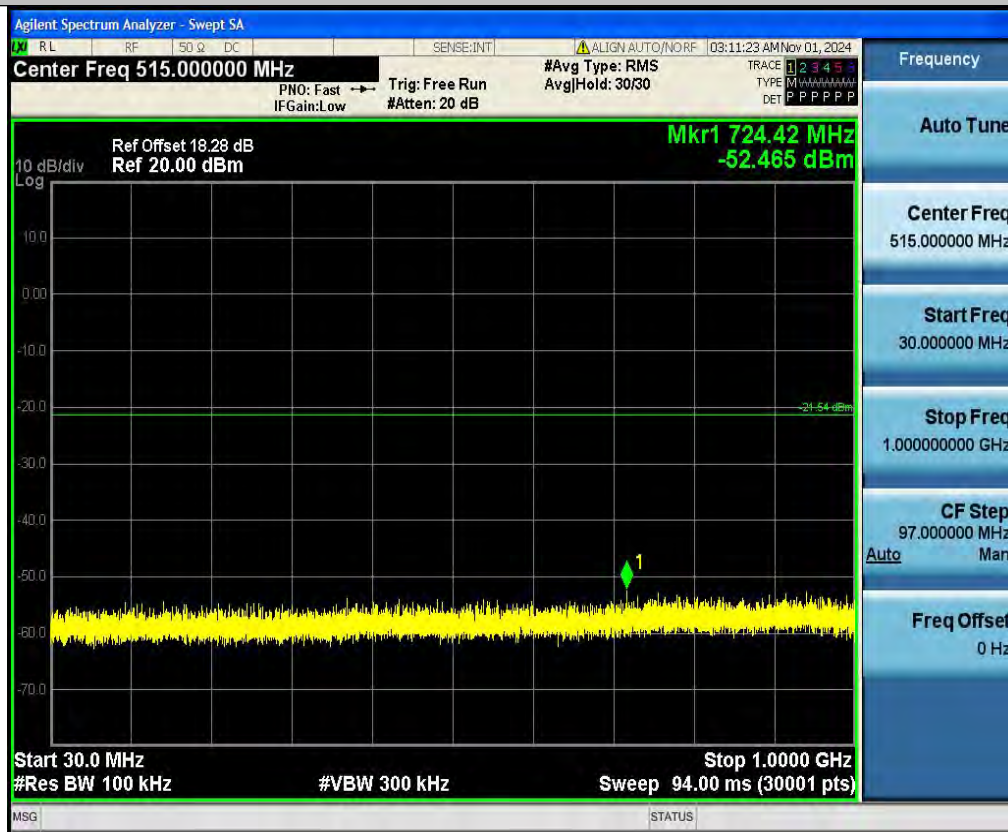
11N20SISO_Ant1_2412_1000~26500



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



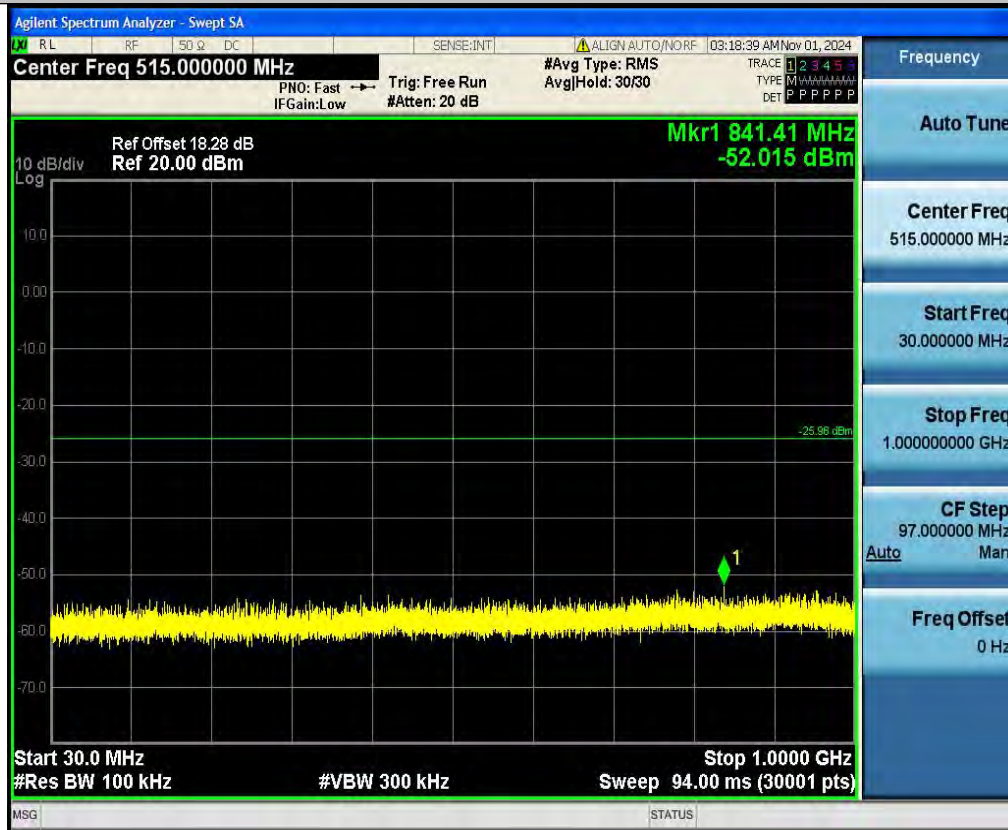
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



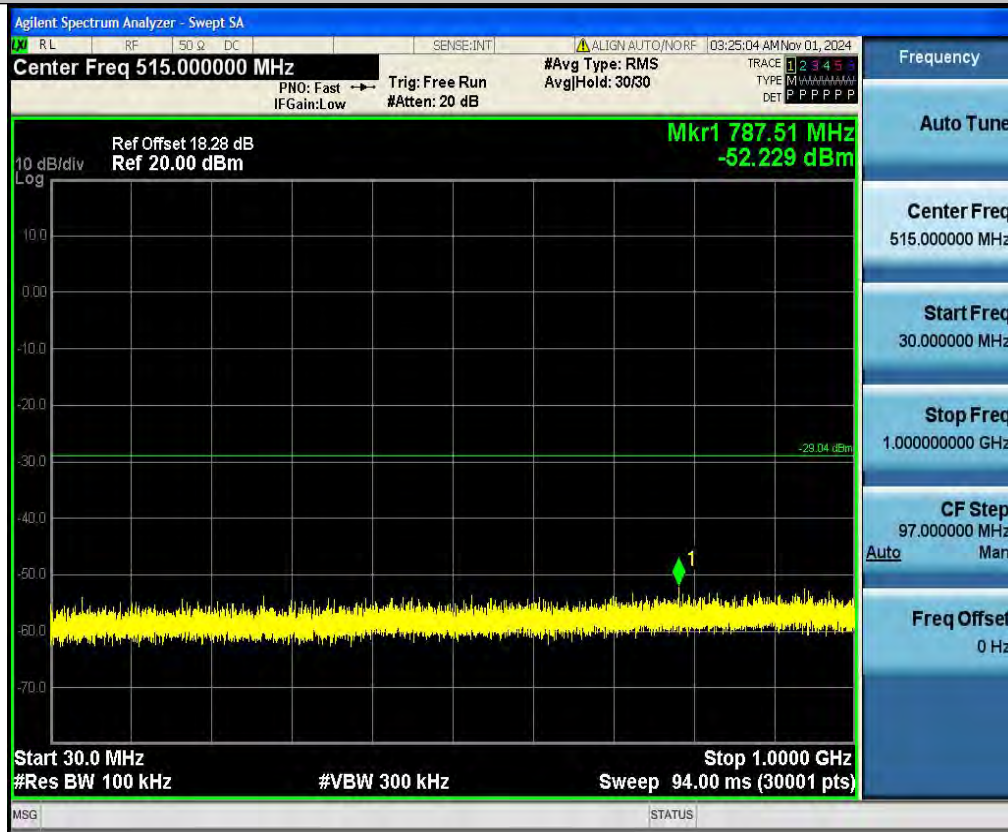
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

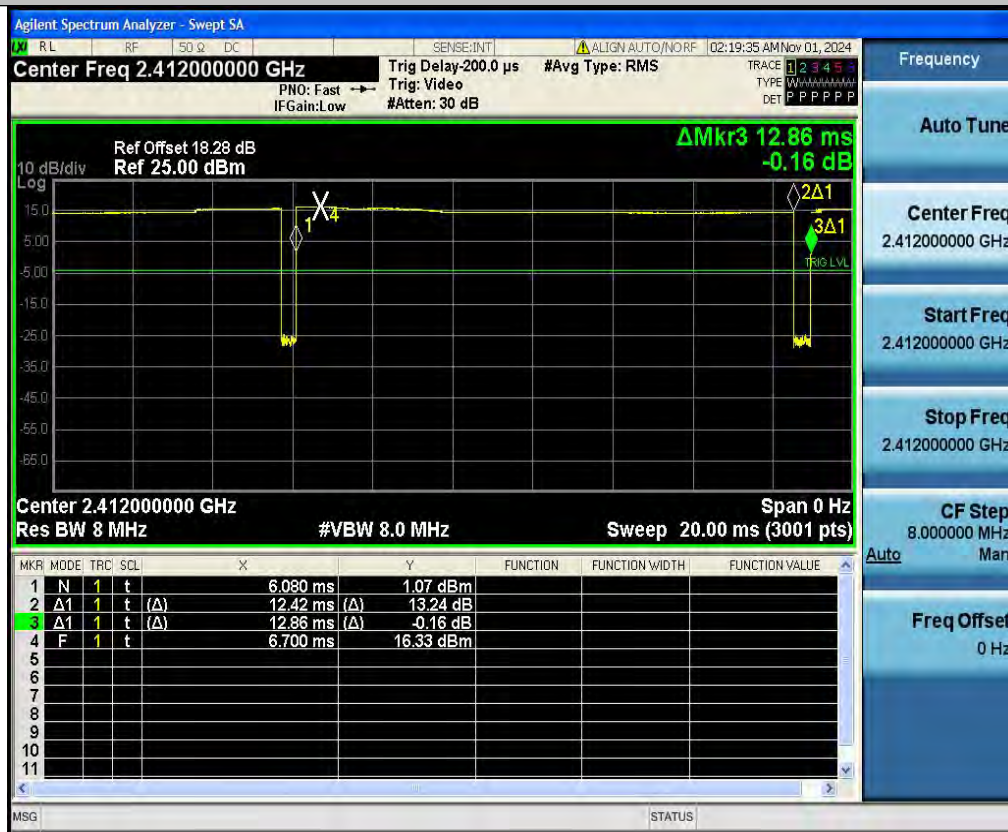


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	12.42	12.86	96.58	---	---
		2437	12.42	12.81	96.96	---	---
		2462	20.00	20.00	100.00	---	---
11G	Ant1	2412	0.25	0.48	52.08	---	---
		2437	0.25	0.47	53.19	---	---
		2462	0.25	0.48	52.08	---	---
11N20SISO	Ant1	2412	1.92	2.15	89.30	---	---
		2437	1.92	2.12	90.57	---	---
		2462	1.92	2.12	90.57	---	---
11N40SISO	Ant1	2422	0.95	1.17	81.20	---	---
		2437	0.95	1.15	82.61	---	---
		2452	0.94	1.17	80.34	---	---

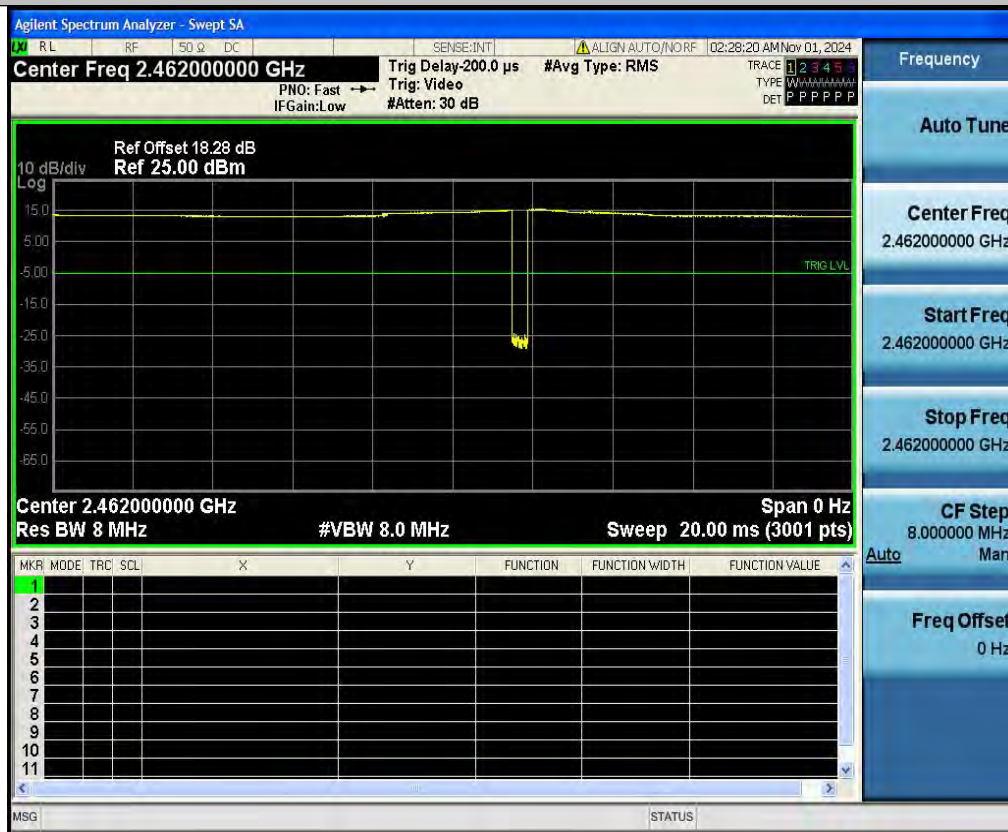
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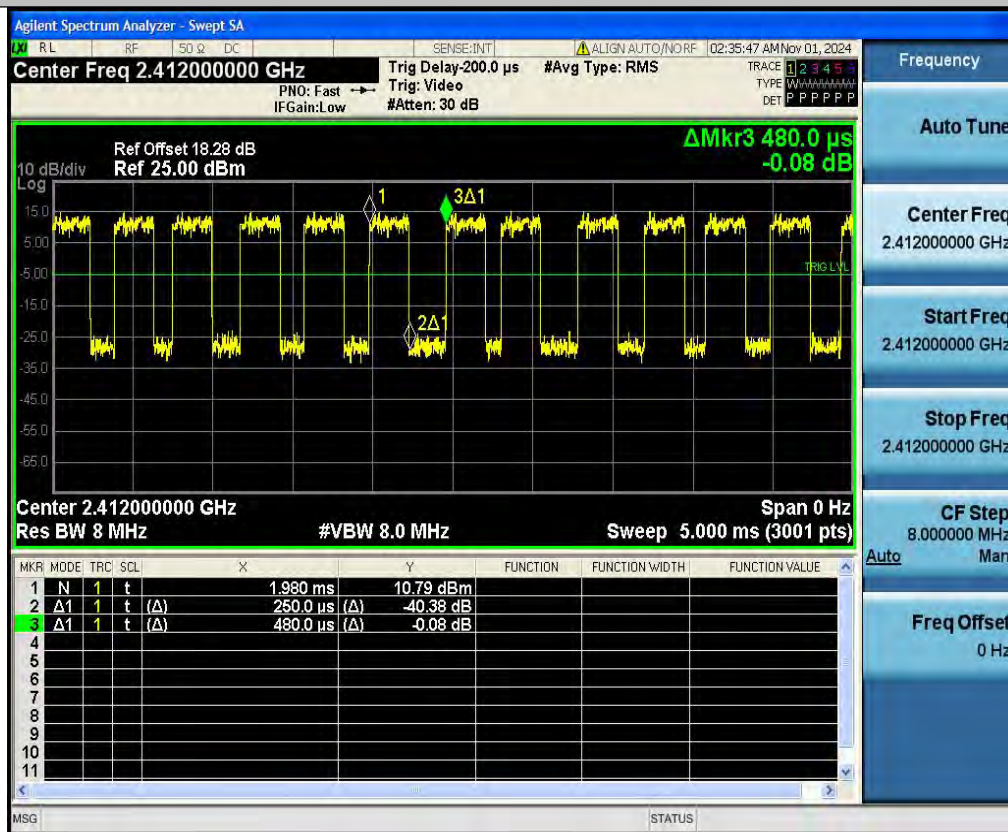
11B_Ant1_2437



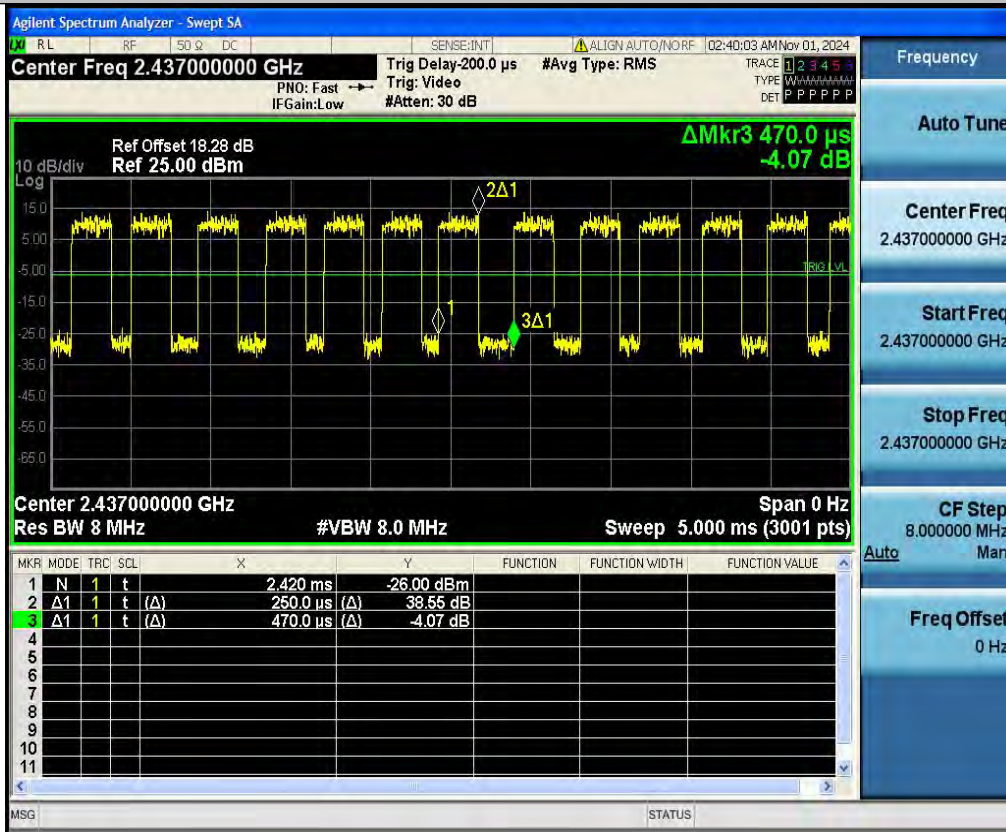
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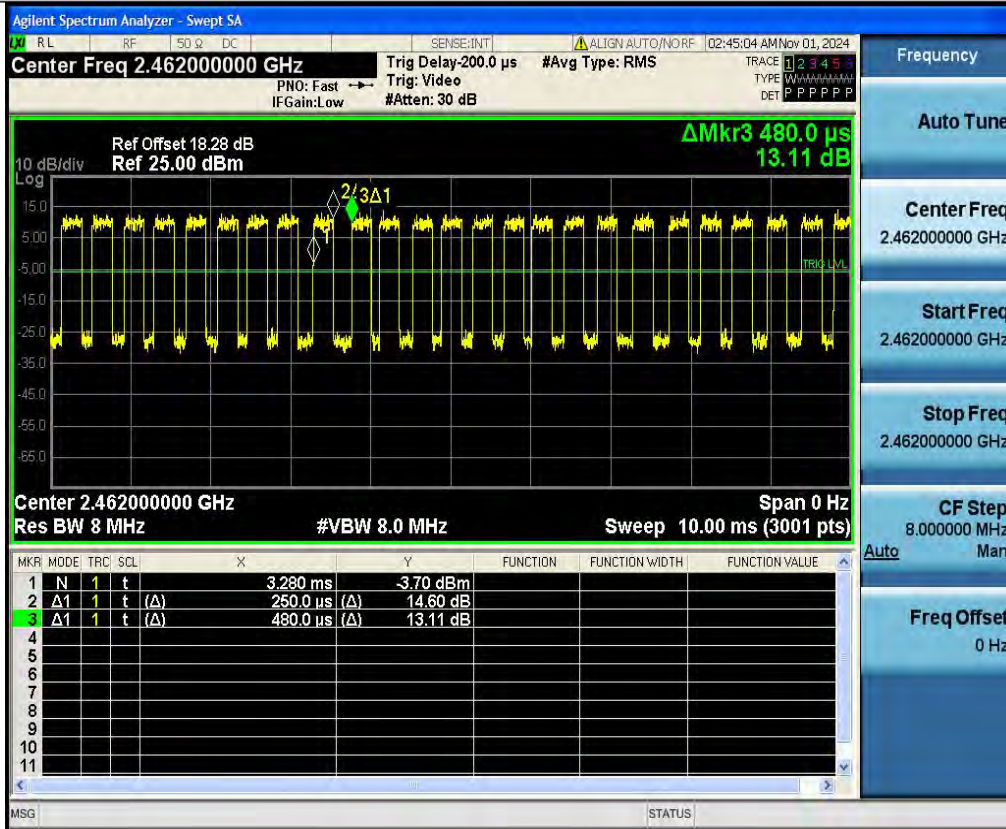
11G_Ant1_2412



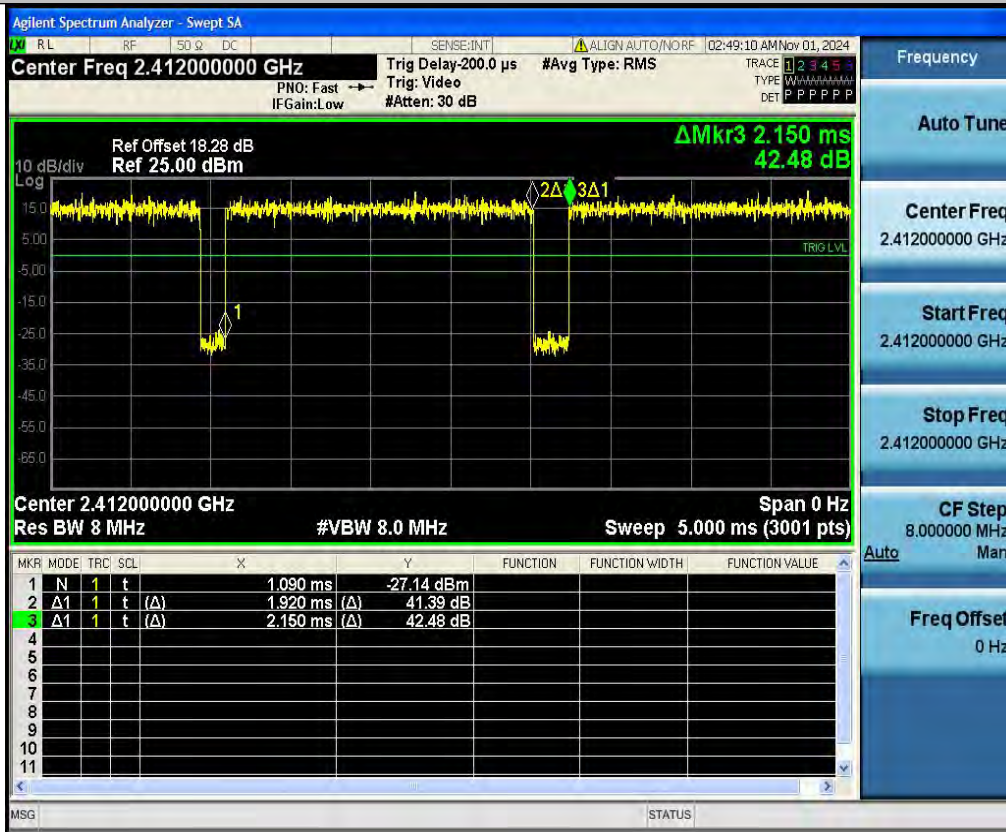
11G_Ant1_2437



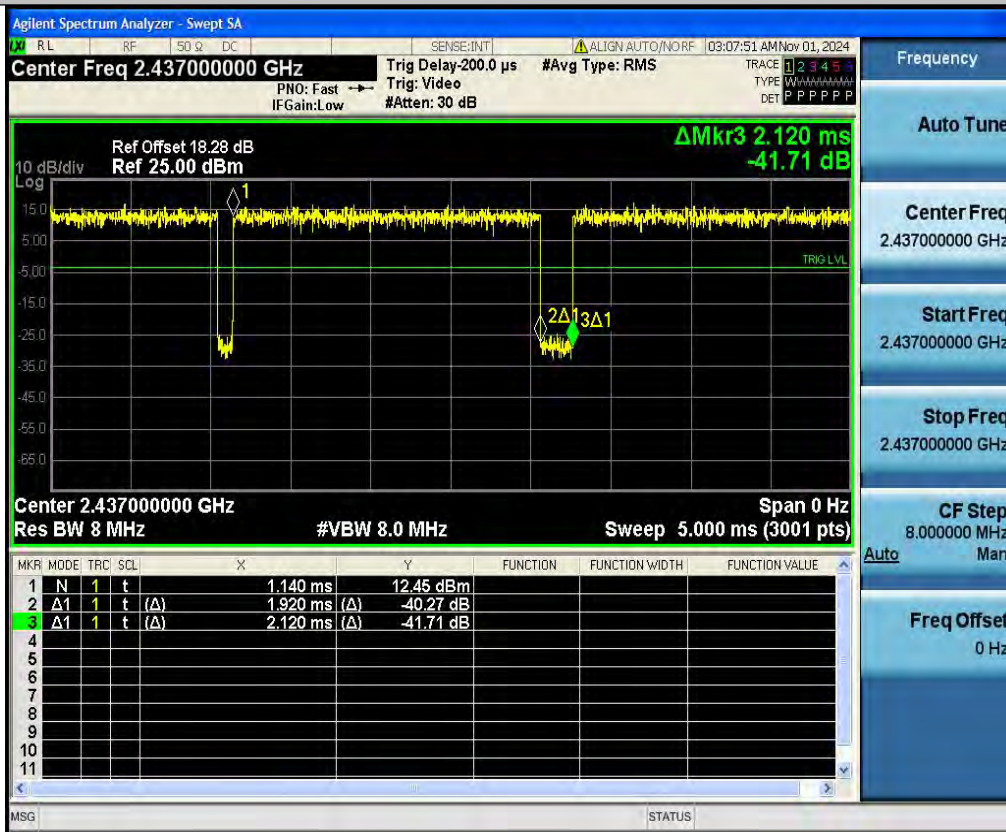
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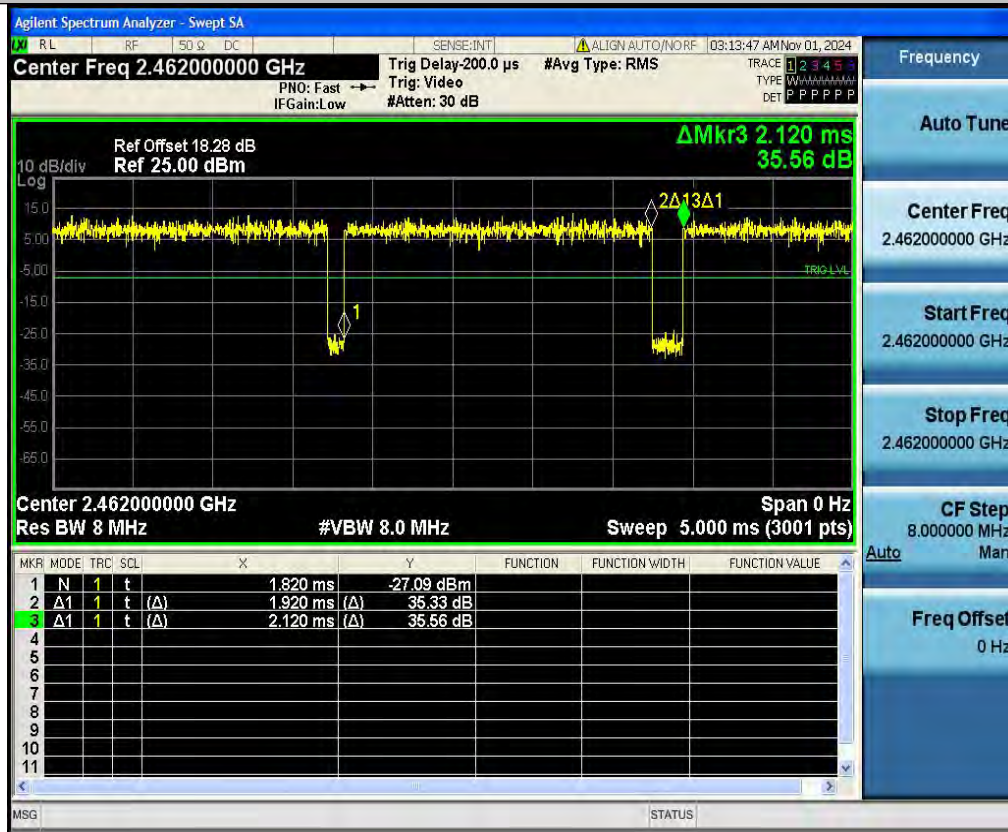
11N20SISO_Ant1_2412



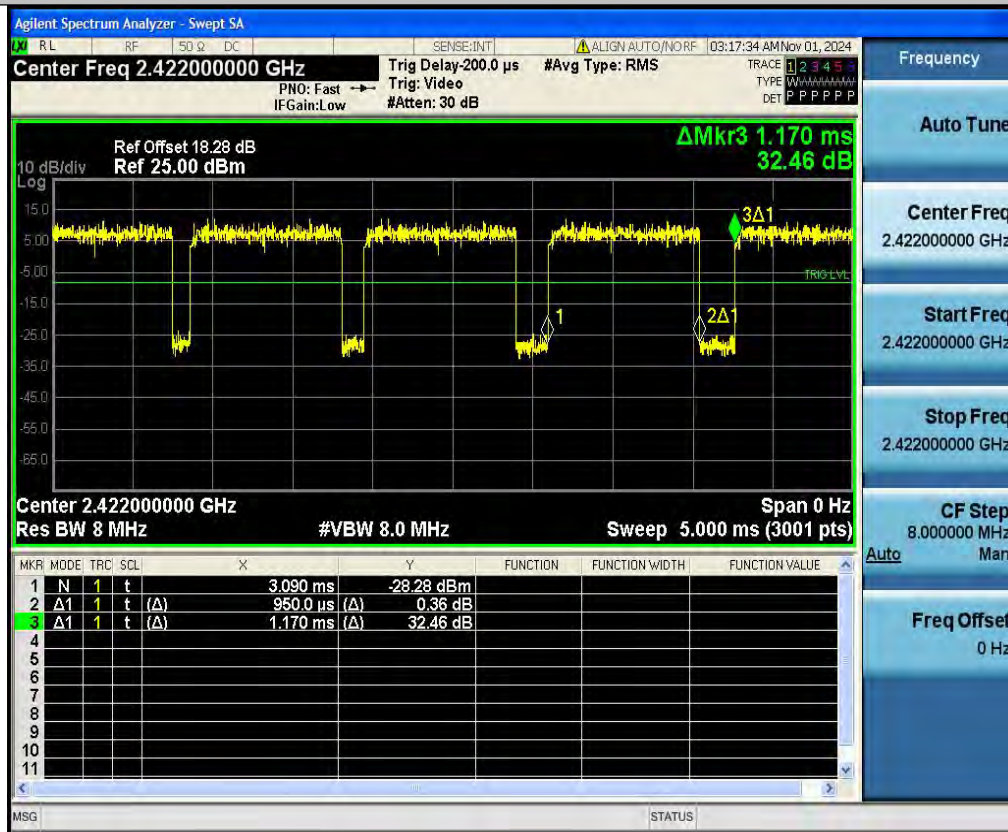
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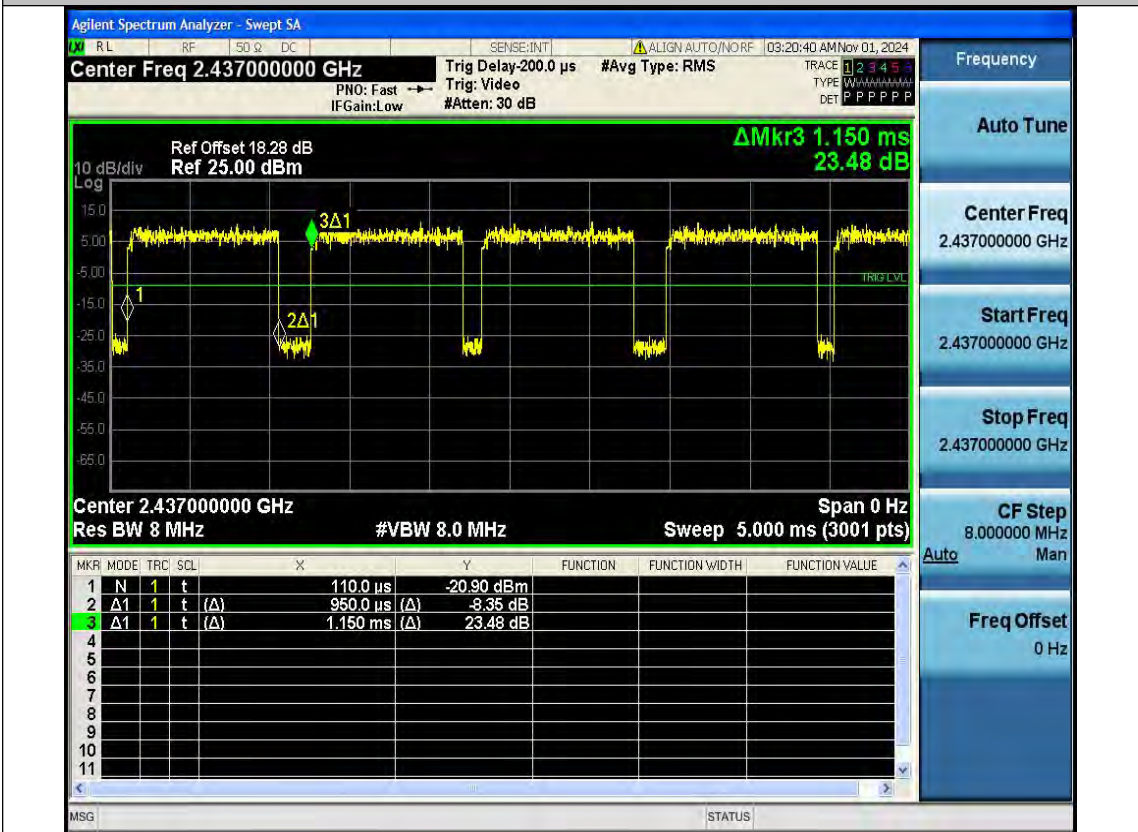
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

