

Appendix Test Data for WLAN(2.4G) (Conducted Measurement)

Product Name: Air WiFi Feeder

Trade Mark: PETLIBRO

Test Model: PLAF108

FCC ID: 2A3DE-PLAF108

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

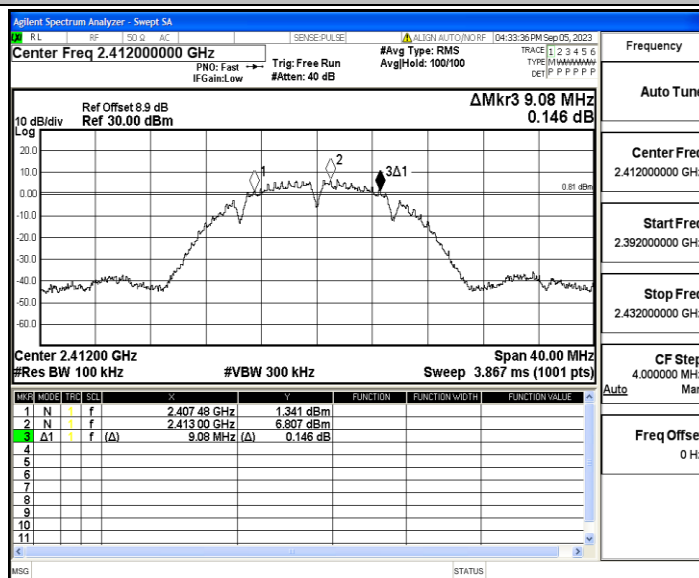
Appendix A: DTS Bandwidth

Test Result

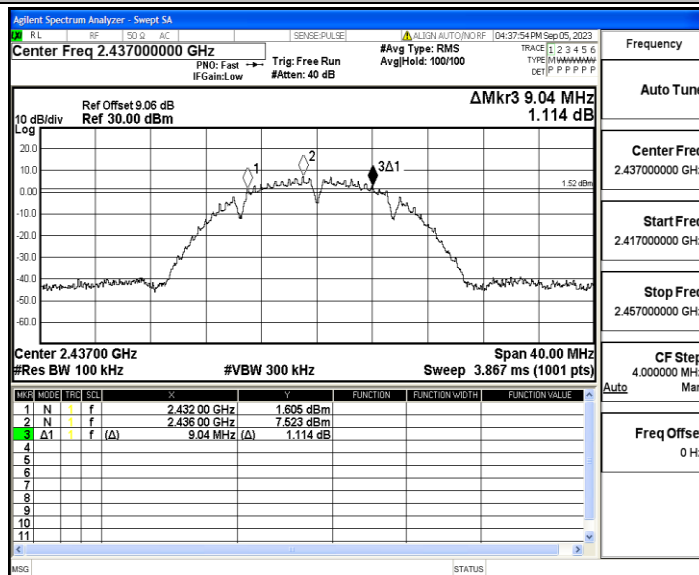
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.480	2416.560	0.5	PASS
		2437	9.040	2432.000	2441.040	0.5	PASS
		2462	9.560	2457.440	2467.000	0.5	PASS
11G	Ant1	2412	13.560	2404.440	2418.000	0.5	PASS
		2437	12.760	2431.720	2444.480	0.5	PASS
		2462	12.800	2455.680	2468.480	0.5	PASS
11N20SISO	Ant1	2412	14.680	2404.800	2419.480	0.5	PASS
		2437	14.040	2429.440	2443.480	0.5	PASS
		2462	13.880	2454.440	2468.320	0.5	PASS
11N40SISO	Ant1	2422	32.560	2404.480	2437.040	0.5	PASS
		2437	22.160	2424.440	2446.600	0.5	PASS
		2452	32.560	2434.480	2467.040	0.5	PASS

Test Graphs

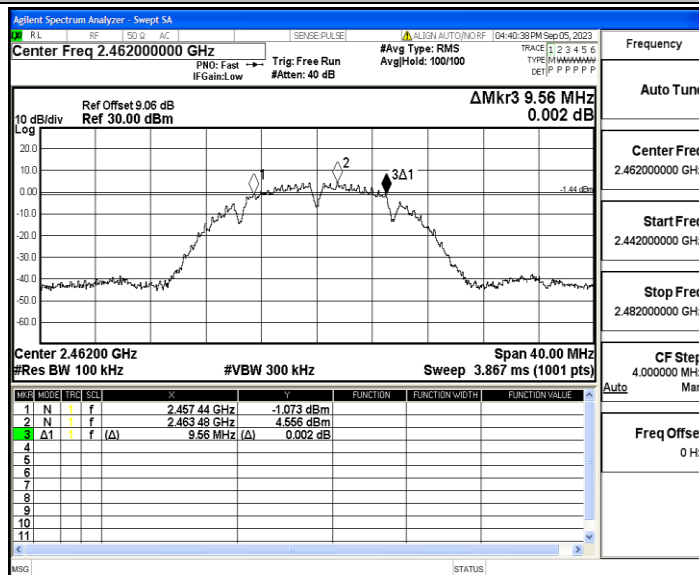
11B_Ant1_2412



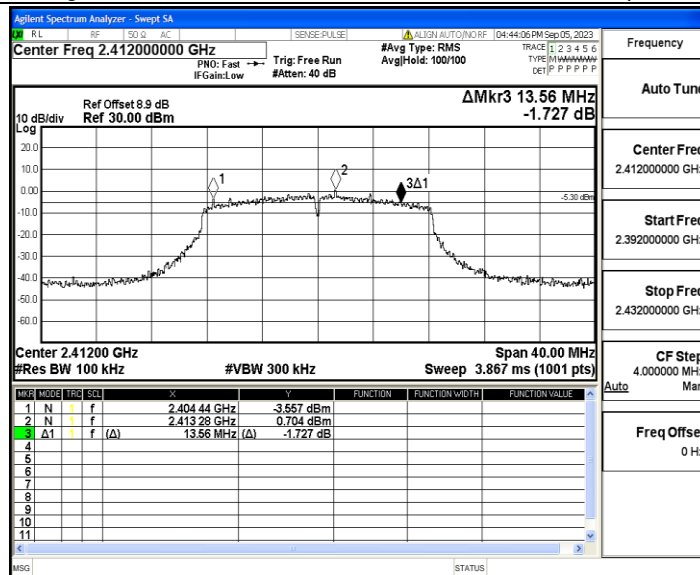
11B_Ant1_2437



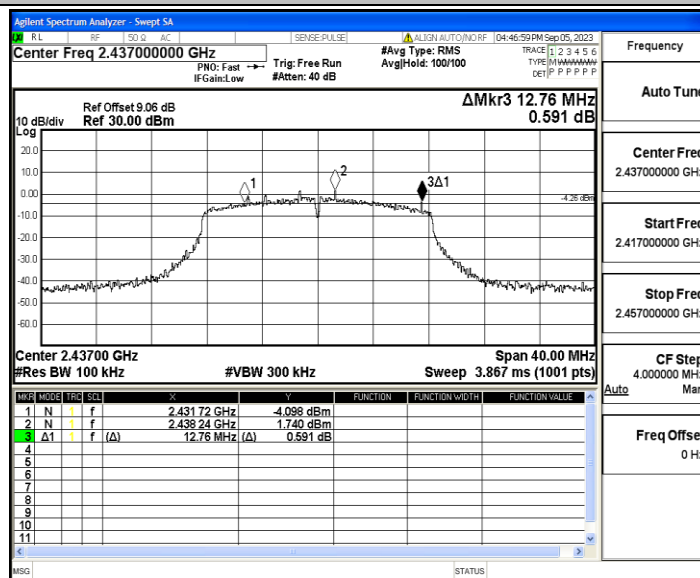
11B_Ant1_2462



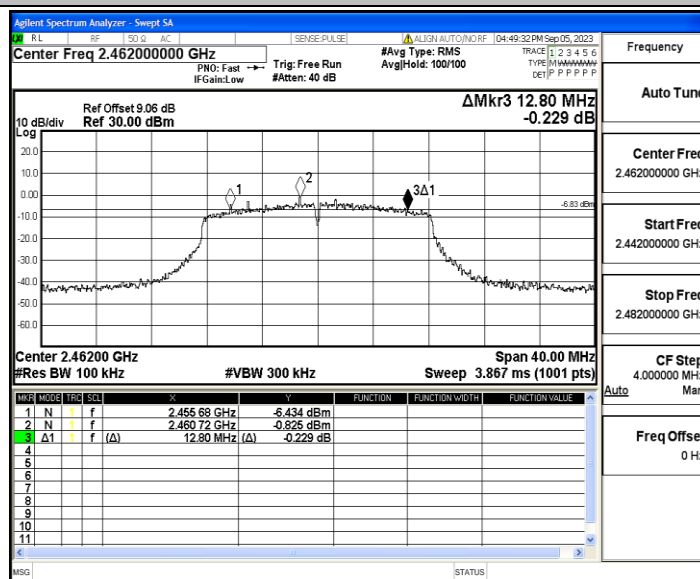
11G_Ant1_2412



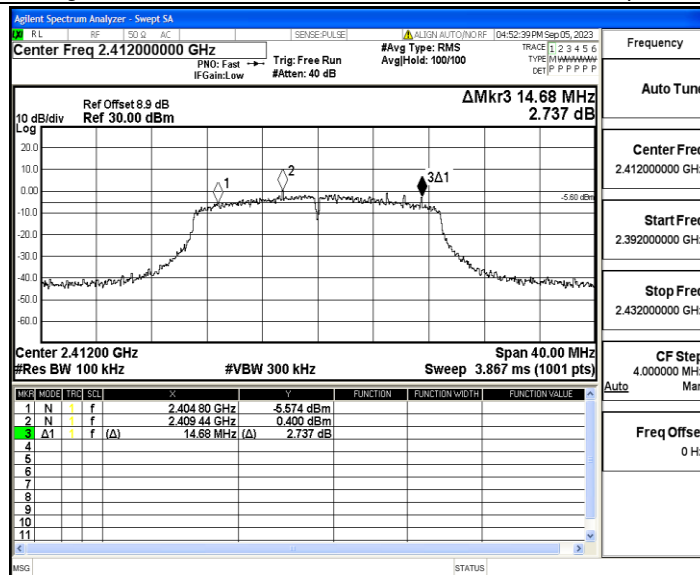
11G_Ant1_2437



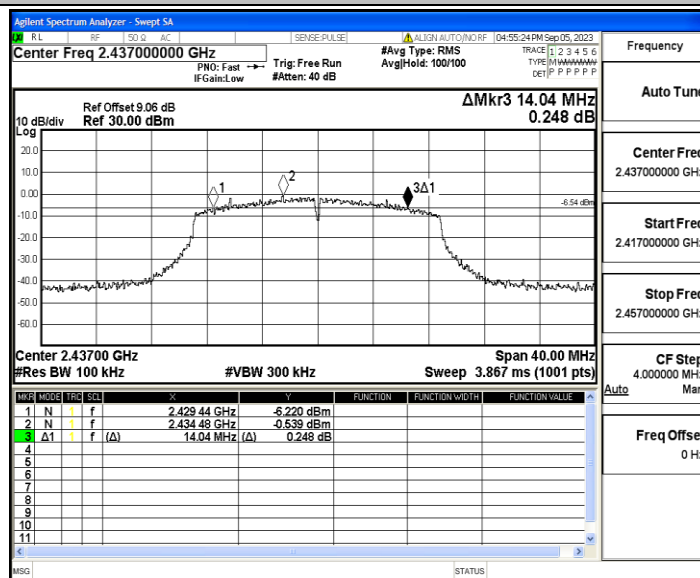
11G_Ant1_2462



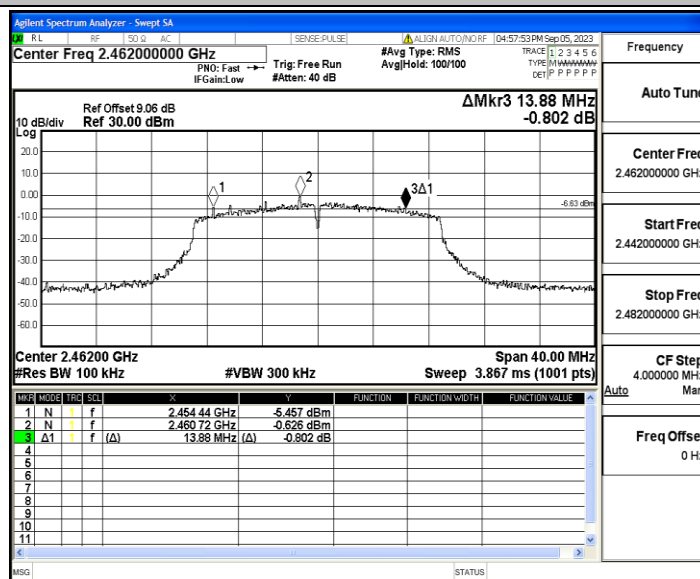
11N20SISO_Ant1_2412



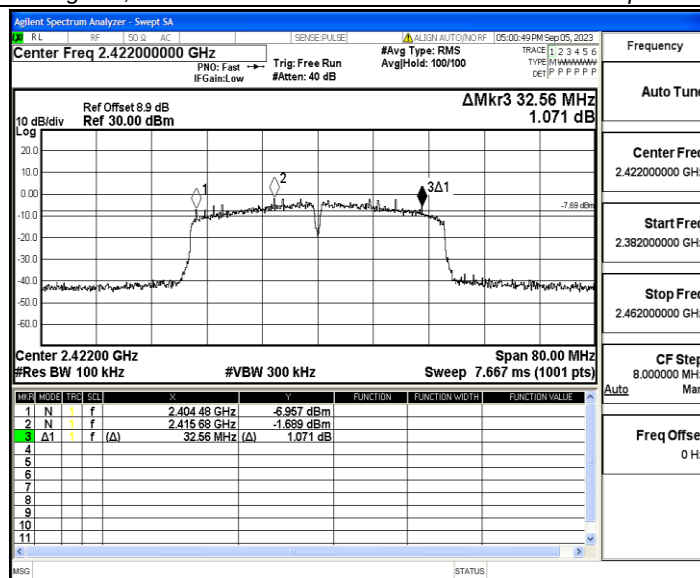
11N20SISO_Ant1_2437



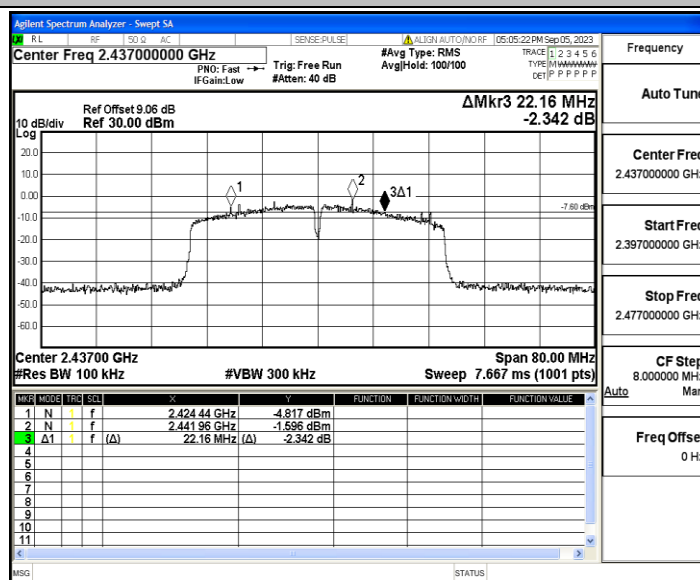
11N20SISO_Ant1_2462



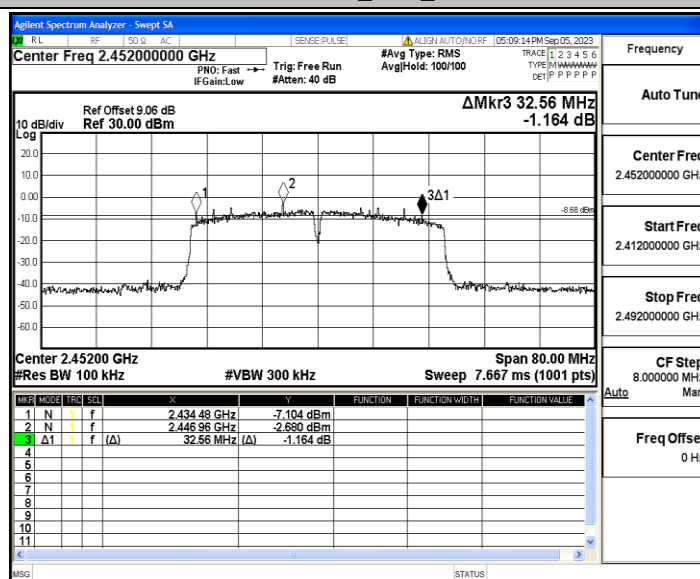
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



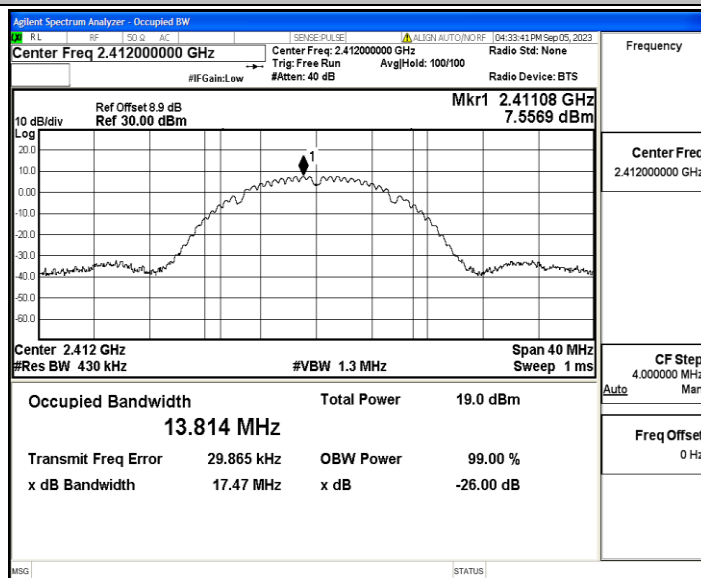
Appendix B: Occupied Channel Bandwidth

Test Result

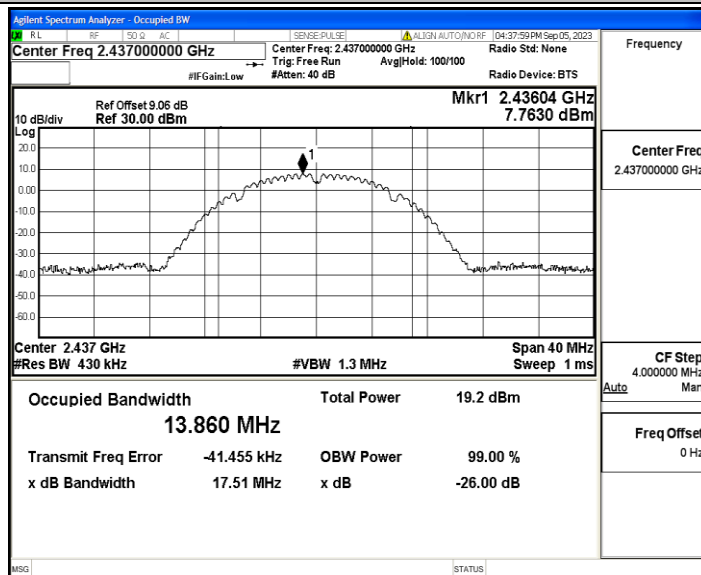
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.814	2405.1229	2418.9369	---	---
		2437	13.860	2430.0286	2443.8886	---	---
		2462	13.886	2455.0677	2468.9537	---	---
11G	Ant1	2412	16.410	2403.6960	2420.1060	---	---
		2437	16.394	2428.7167	2445.1107	---	---
		2462	16.450	2453.7562	2470.2062	---	---
11N20SISO	Ant1	2412	17.495	2403.1861	2420.6811	---	---
		2437	17.439	2428.1514	2445.5904	---	---
		2462	17.564	2453.1839	2470.7479	---	---
11N40SISO	Ant1	2422	35.283	2404.2354	2439.5184	---	---
		2437	35.021	2419.2317	2454.2527	---	---
		2452	35.489	2434.0750	2469.5640	---	---

Test Graphs

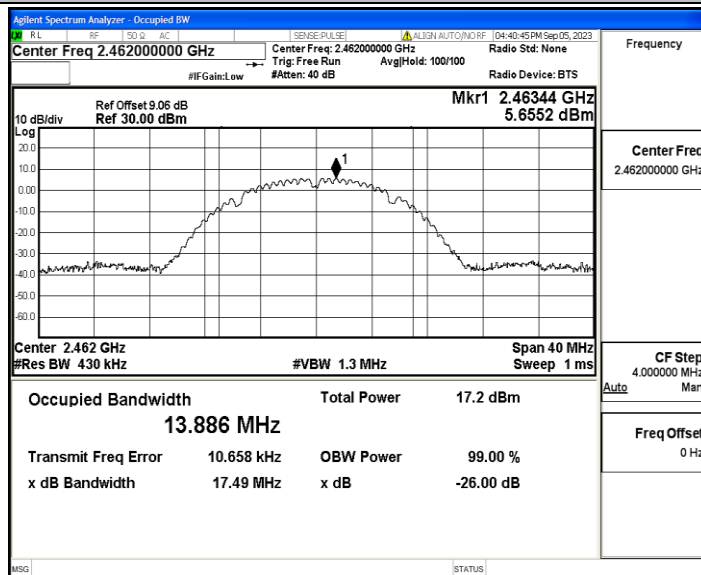
11B_Ant1_2412



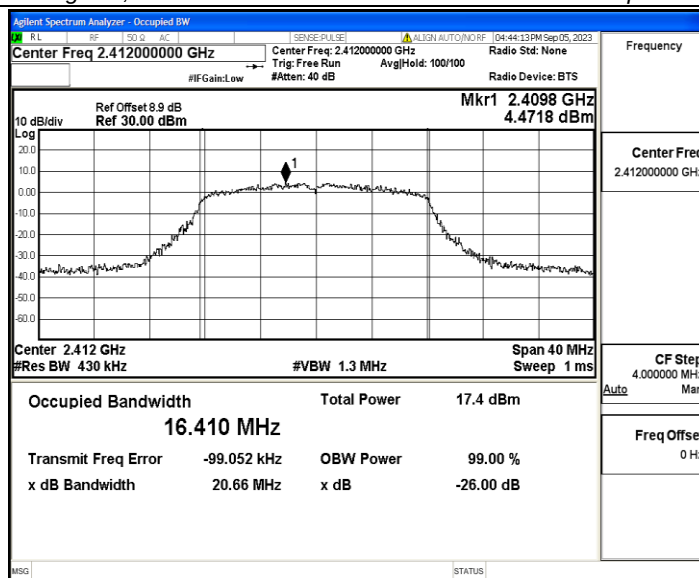
11B_Ant1_2437



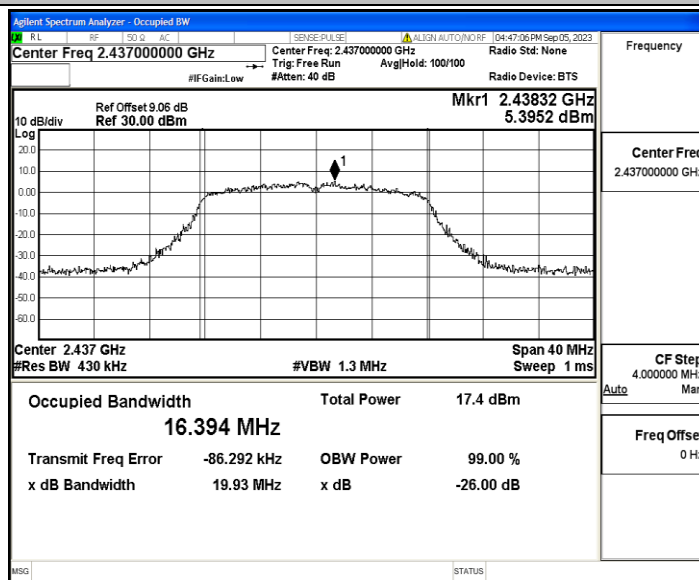
11B_Ant1_2462



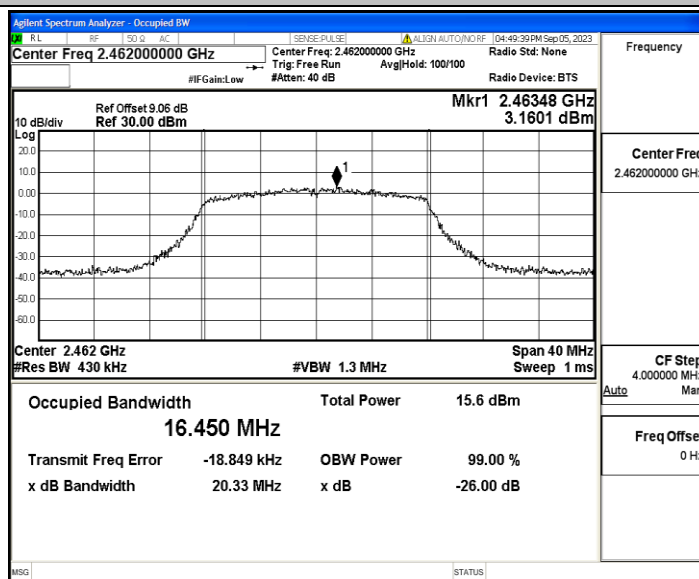
11G_Ant1_2412



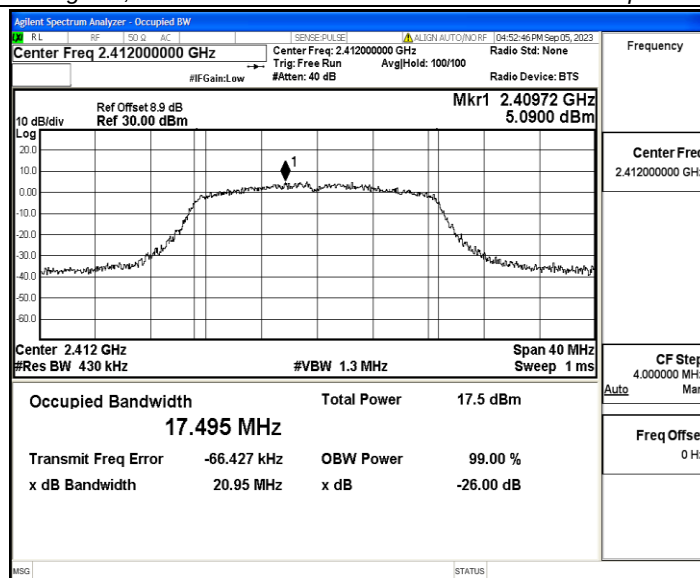
11G_Ant1_2437



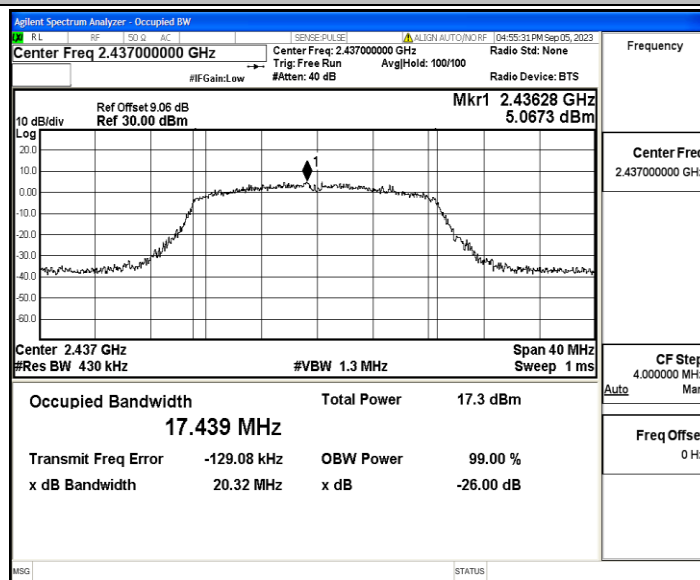
11G_Ant1_2462



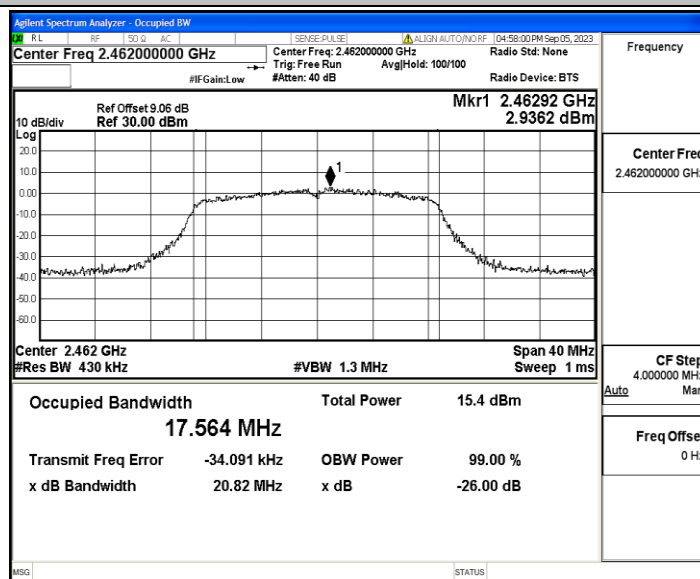
11N20SISO_Ant1_2412



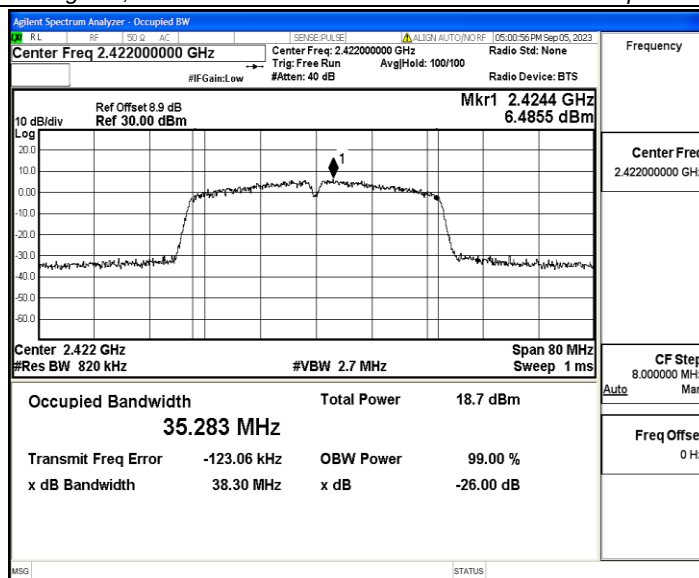
11N20SISO_Ant1_2437



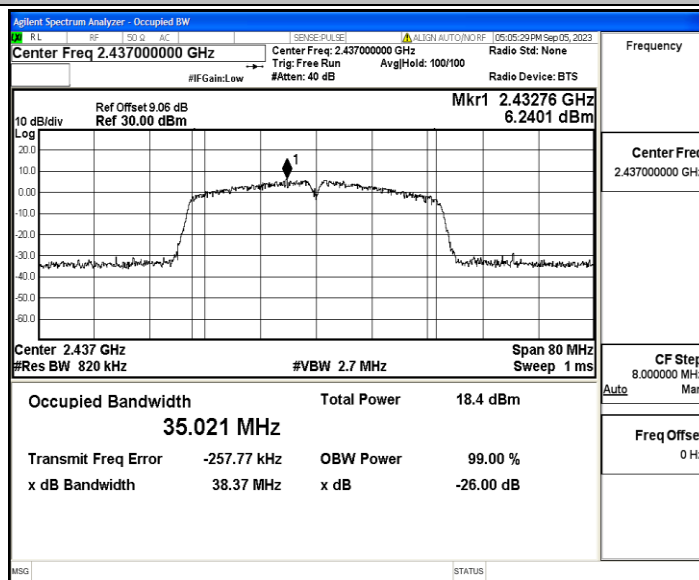
11N20SISO_Ant1_2462



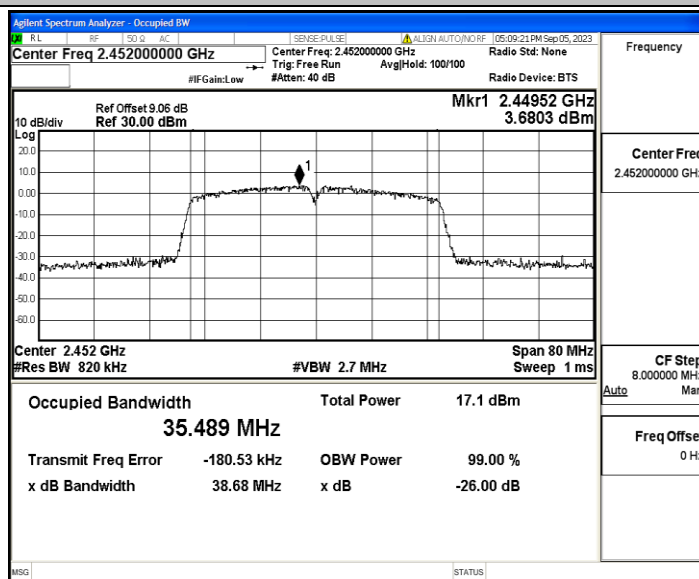
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.93	≤30.00	PASS
		2437	16.19	≤30.00	PASS
		2462	14.23	≤30.00	PASS
11G	Ant1	2412	12.35	≤30.00	PASS
		2437	12.60	≤30.00	PASS
		2462	10.50	≤30.00	PASS
11N20SISO	Ant1	2412	13.08	≤30.00	PASS
		2437	12.77	≤30.00	PASS
		2462	11.03	≤30.00	PASS
11N40SISO	Ant1	2422	11.65	≤30.00	PASS
		2437	11.28	≤30.00	PASS
		2452	11.42	≤30.00	PASS

Note: The Duty Cycle Factor is compensated in the test result.

Appendix D: Maximum power spectral density

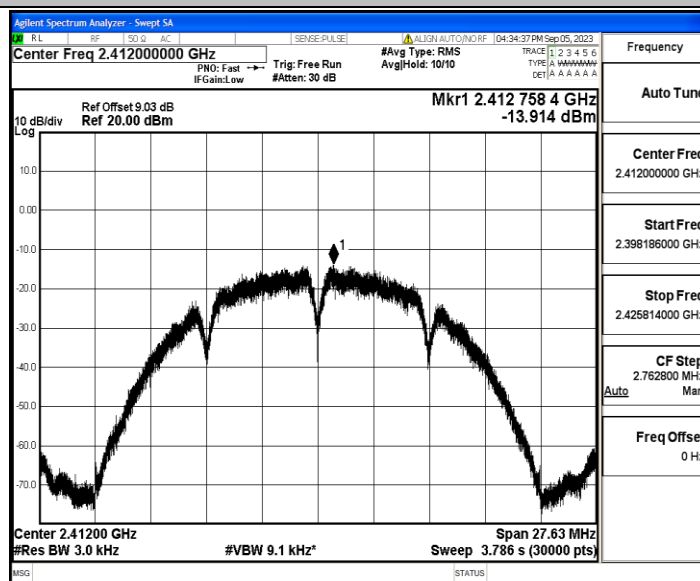
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.91	≤8.00	PASS
		2437	-12.69	≤8.00	PASS
		2462	-15.6	≤8.00	PASS
11G	Ant1	2412	-16.46	≤8.00	PASS
		2437	-16.16	≤8.00	PASS
		2462	-18.55	≤8.00	PASS
11N20SISO	Ant1	2412	-15.13	≤8.00	PASS
		2437	-16.02	≤8.00	PASS
		2462	-16.23	≤8.00	PASS
11N40SISO	Ant1	2422	-18.09	≤8.00	PASS
		2437	-17.13	≤8.00	PASS
		2452	-19.44	≤8.00	PASS

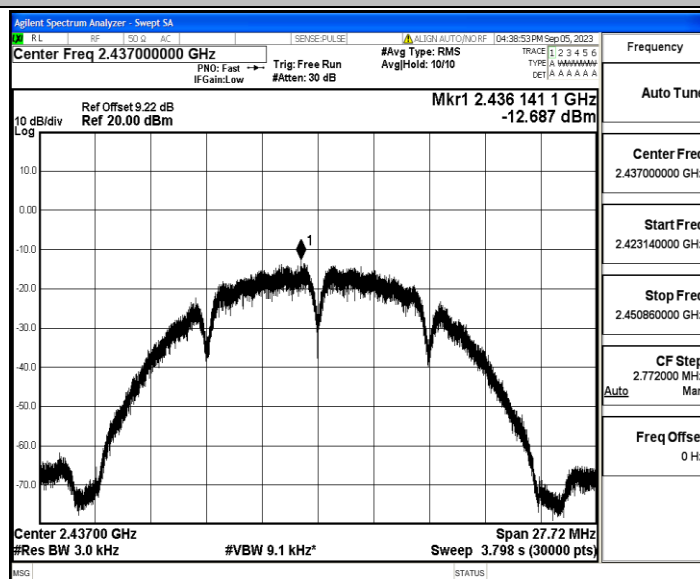
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

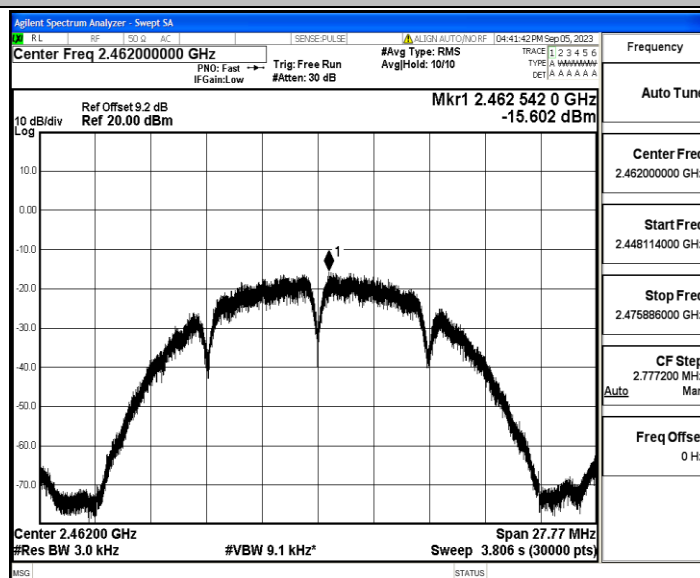
11B_Ant1_2412



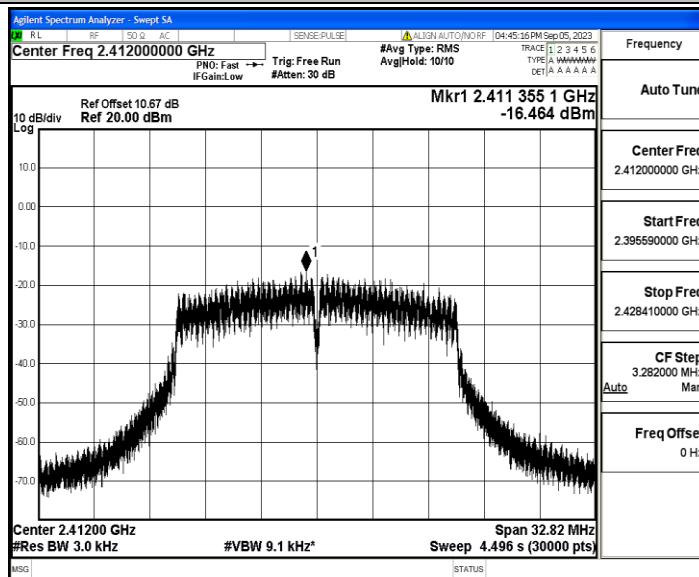
11B_Ant1_2437



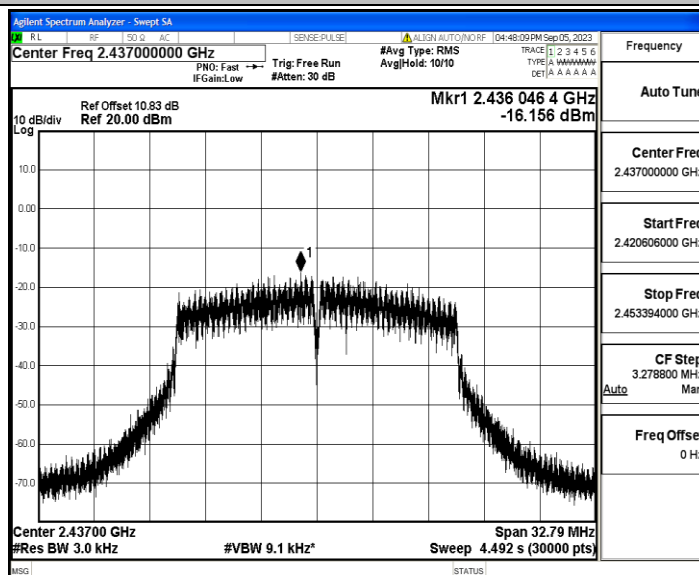
11B_Ant1_2462



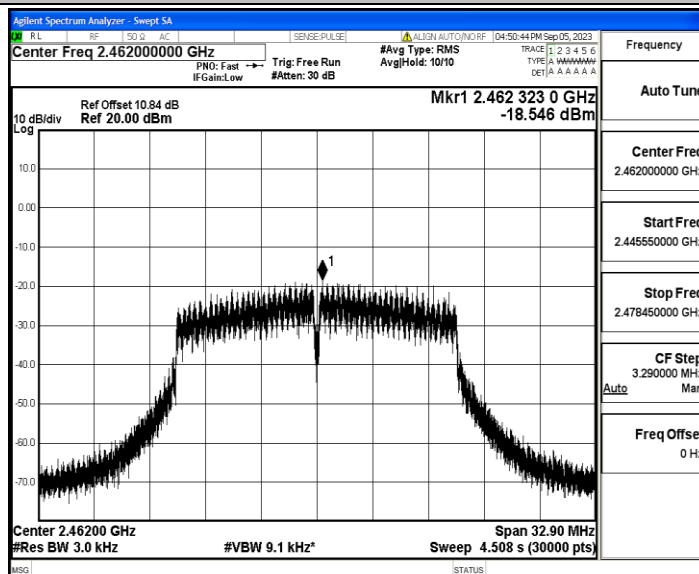
11G_Ant1_2412



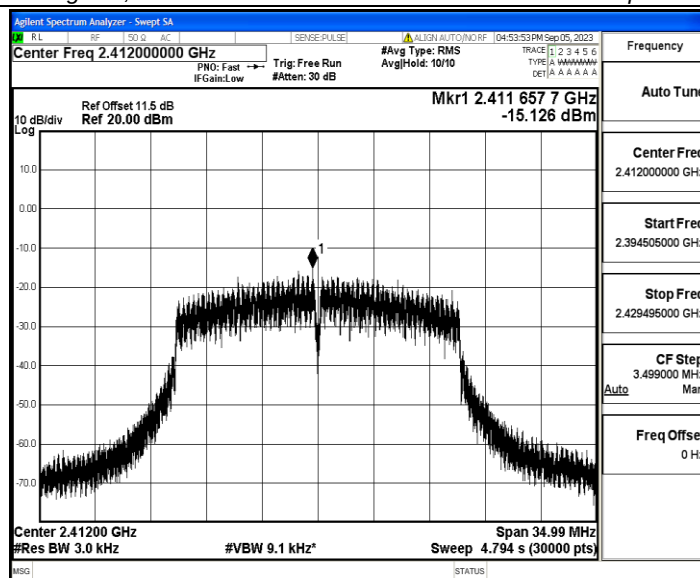
11G_Ant1_2437



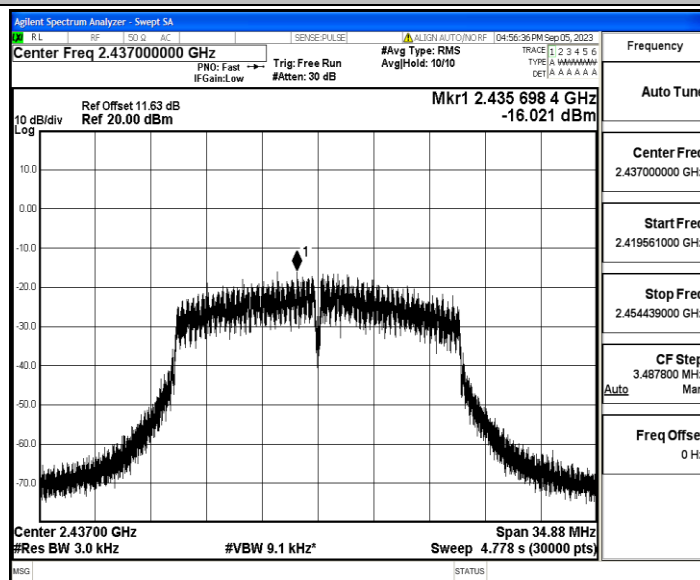
11G_Ant1_2462



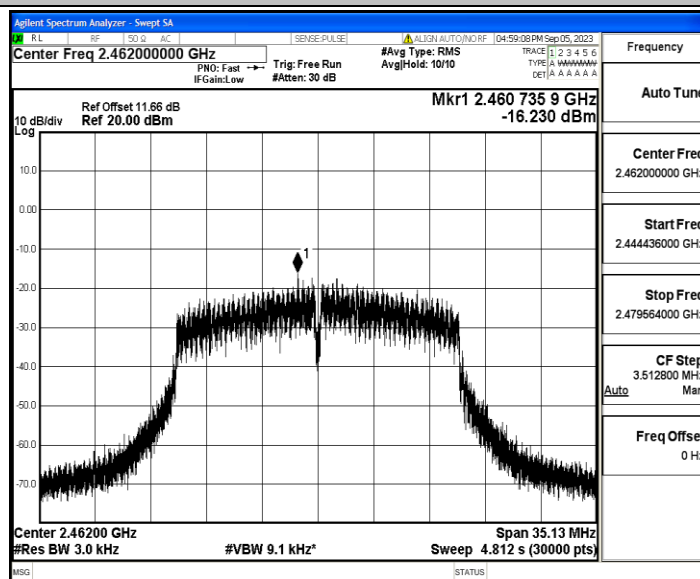
11N20SISO_Ant1_2412



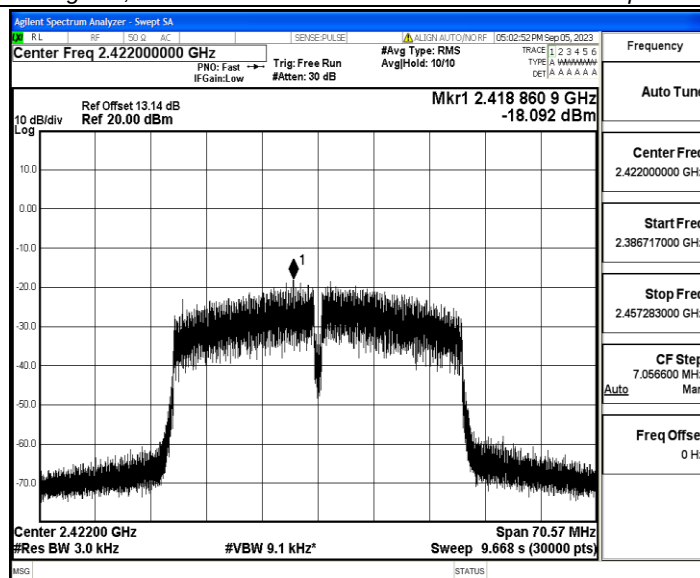
11N20SISO_Ant1_2437



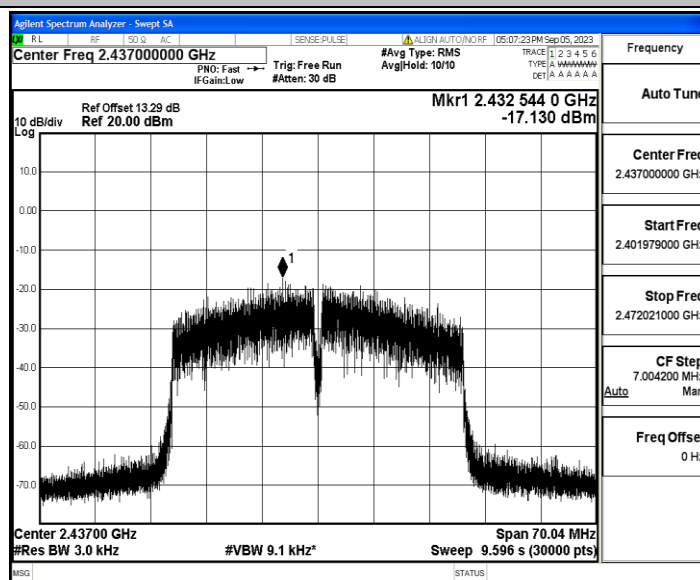
11N20SISO_Ant1_2462



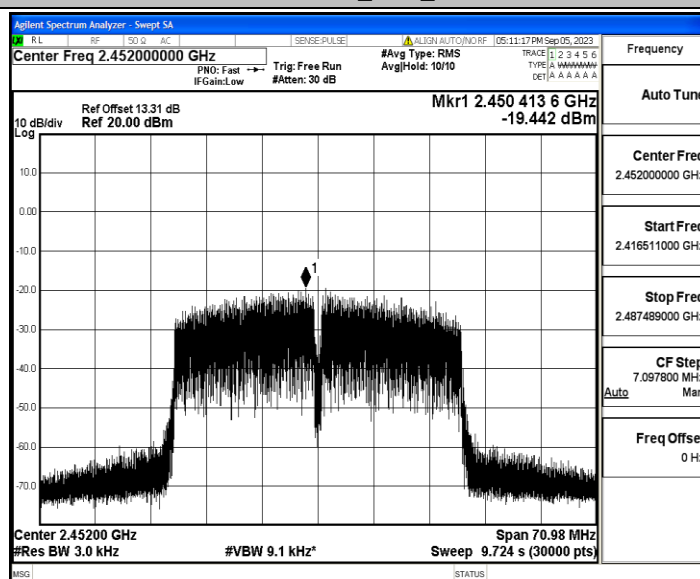
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



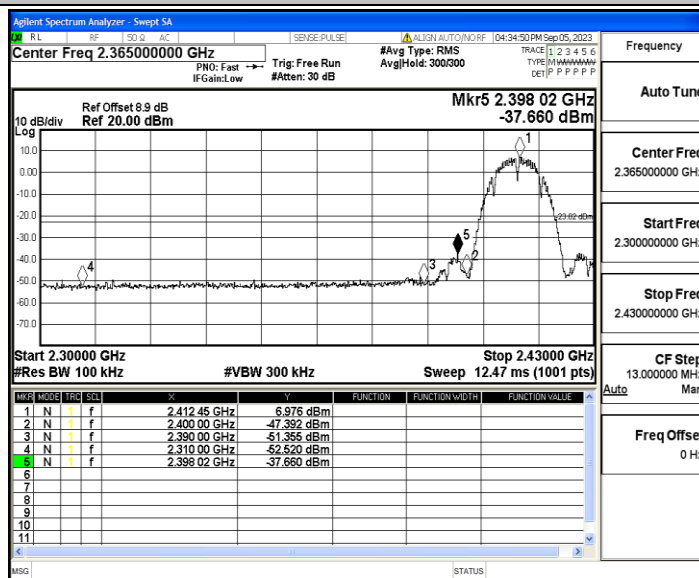
Appendix E: Band edge measurements

Test Result

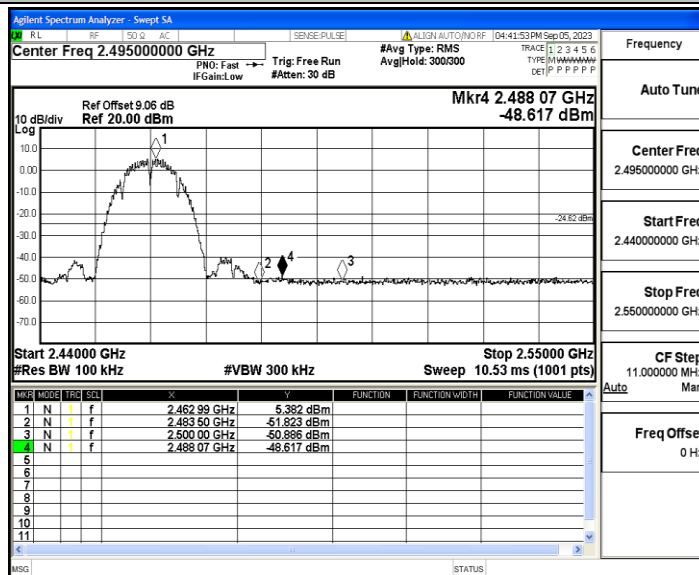
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.98	-37.66	≤ -23.02	PASS
		High	2462	5.38	-48.62	≤ -24.62	PASS
11G	Ant1	Low	2412	1.44	-39.86	≤ -28.56	PASS
		High	2462	0.09	-48.3	≤ -29.91	PASS
11N20SISO	Ant1	Low	2412	1.69	-37.39	≤ -28.31	PASS
		High	2462	-0.88	-48.23	≤ -30.88	PASS
11N40SISO	Ant1	Low	2422	-0.27	-42.15	≤ -30.27	PASS
		High	2452	-2.80	-45.55	≤ -32.8	PASS

Test Graphs

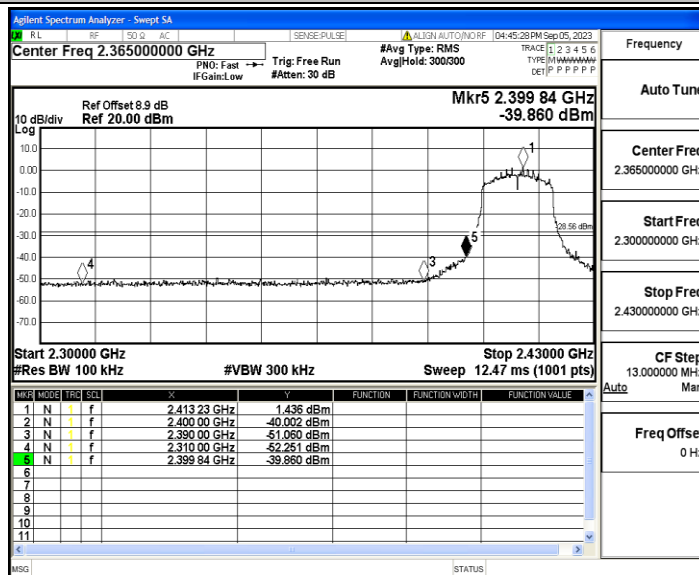
11B_Ant1_Low_2412



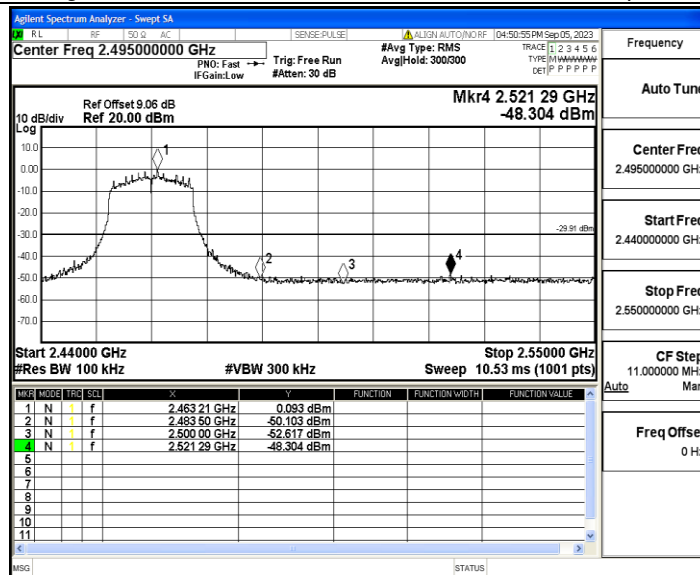
11B_Ant1_High_2462



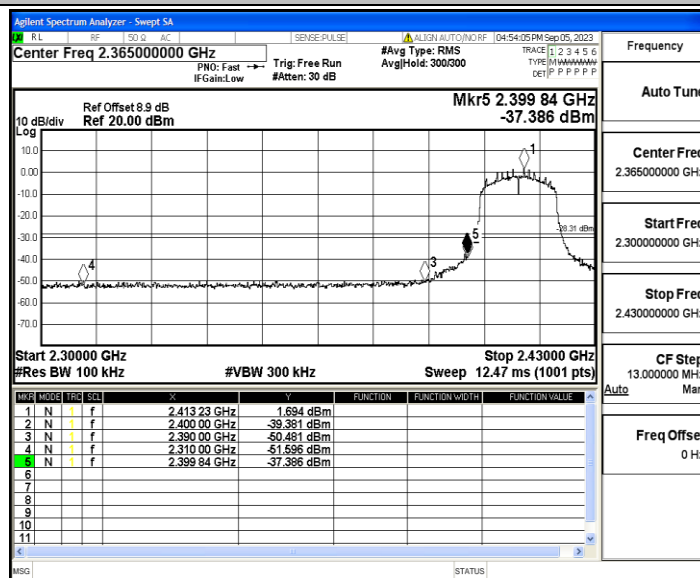
11G_Ant1_Low_2412



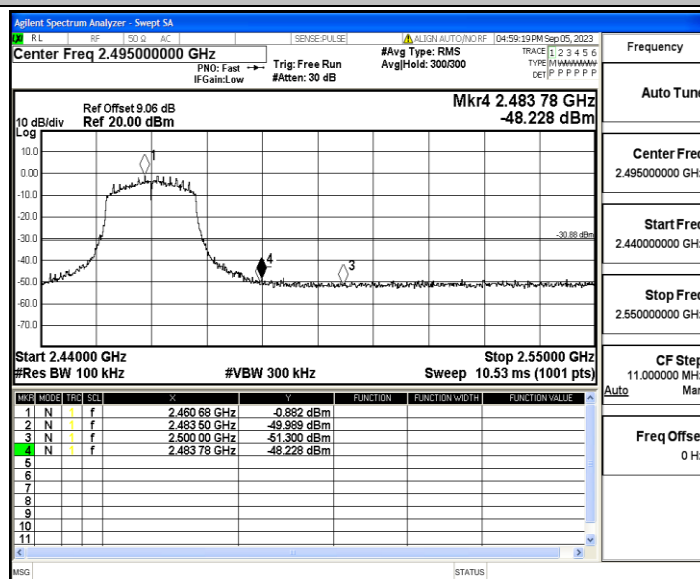
11G_Ant1_High_2462



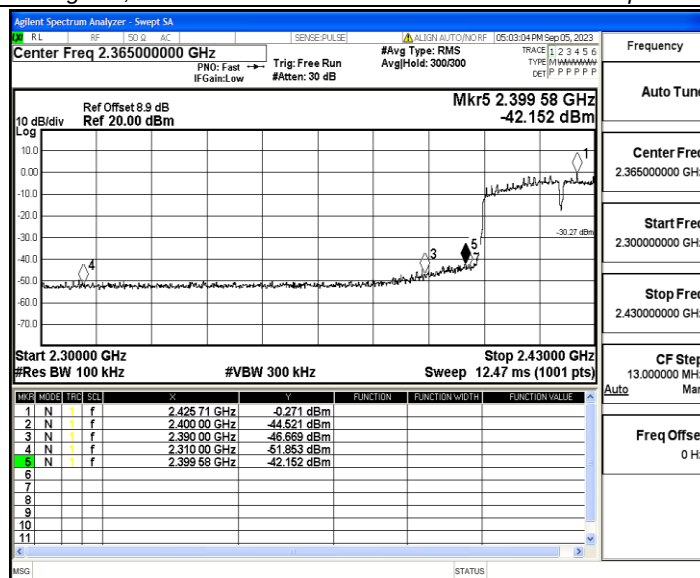
11N20SISO_Ant1_Low_2412



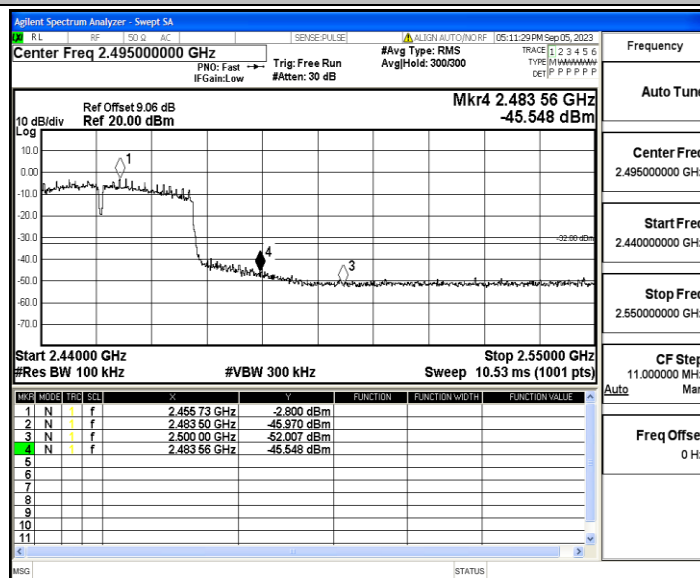
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



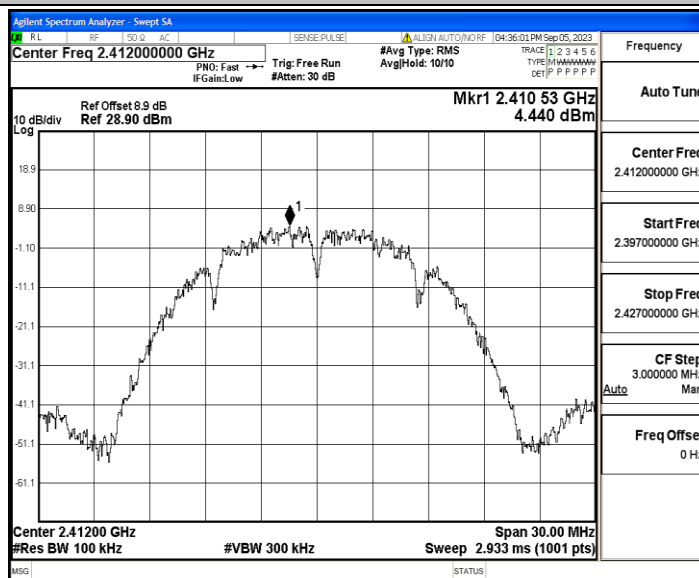
Appendix F: Conducted Spurious Emission

Test Result

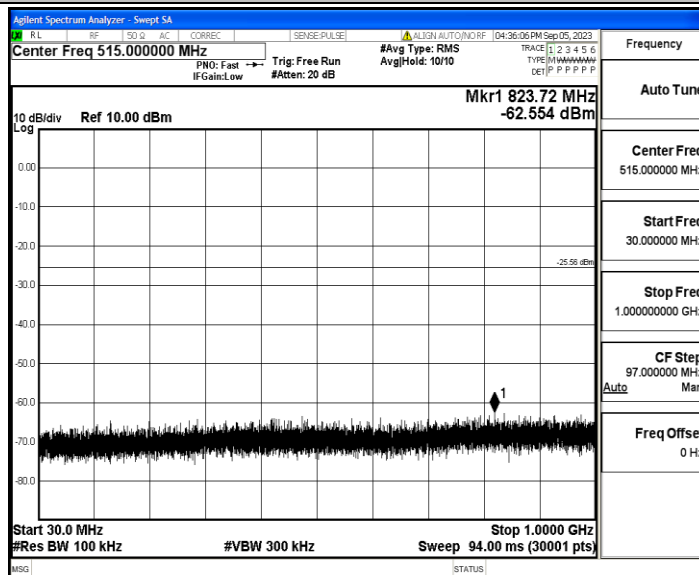
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.44	4.44	---	PASS
			30~1000	4.44	-62.55	≤-25.56	PASS
			1000~26500	4.44	-50.68	≤-25.56	PASS
		2437	Reference	6.03	6.03	---	PASS
			30~1000	6.03	-62.1	≤-23.97	PASS
			1000~26500	6.03	-49.51	≤-23.97	PASS
		2462	Reference	4.76	4.76	---	PASS
			30~1000	4.76	-62.18	≤-25.24	PASS
			1000~26500	4.76	-49.69	≤-25.24	PASS
11G	Ant1	2412	Reference	-2.30	-2.30	---	PASS
			30~1000	-2.30	-62.21	≤-32.3	PASS
			1000~26500	-2.30	-49.82	≤-32.3	PASS
		2437	Reference	-1.46	-1.46	---	PASS
			30~1000	-1.46	-61.6	≤-31.46	PASS
			1000~26500	-1.46	-48.97	≤-31.46	PASS
		2462	Reference	-3.80	-3.80	---	PASS
			30~1000	-3.80	-62.32	≤-33.8	PASS
			1000~26500	-3.80	-49.14	≤-33.8	PASS
11N20SISO	Ant1	2412	Reference	-1.37	-1.37	---	PASS
			30~1000	-1.37	-61.69	≤-31.37	PASS
			1000~26500	-1.37	-48.72	≤-31.37	PASS
		2437	Reference	-1.72	-1.72	---	PASS
			30~1000	-1.72	-61.95	≤-31.72	PASS
			1000~26500	-1.72	-48.86	≤-31.72	PASS
		2462	Reference	-3.92	-3.92	---	PASS
			30~1000	-3.92	-62.02	≤-33.92	PASS
			1000~26500	-3.92	-49.56	≤-33.92	PASS
11N40SISO	Ant1	2422	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-62.01	≤-30.01	PASS
			1000~26500	-0.01	-49.4	≤-30.01	PASS
		2437	Reference	-3.93	-3.93	---	PASS
			30~1000	-3.93	-61.08	≤-33.93	PASS
			1000~26500	-3.93	-49.41	≤-33.93	PASS
		2452	Reference	-6.22	-6.22	---	PASS
			30~1000	-6.22	-62.42	≤-36.22	PASS
			1000~26500	-6.22	-48.63	≤-36.22	PASS

Test Graphs

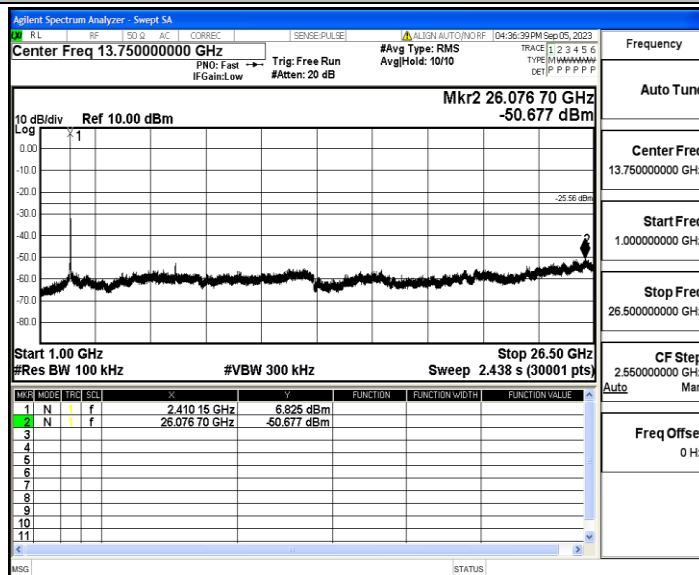
11B_Ant1_2412_0~Reference



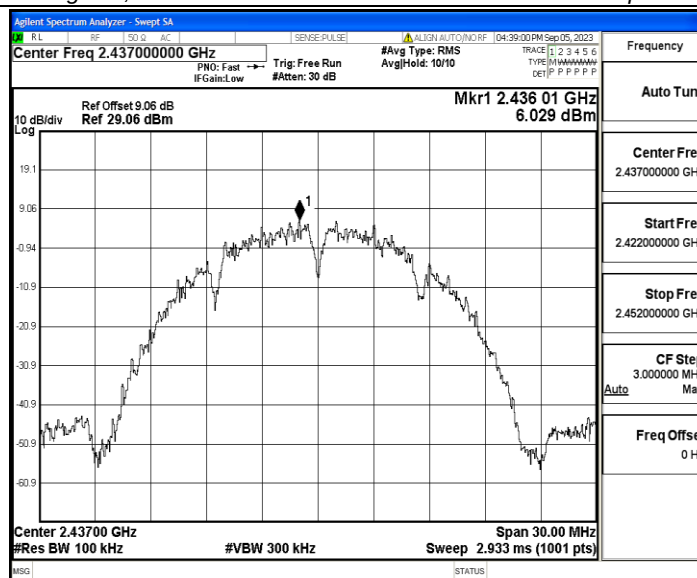
11B_Ant1_2412_30~1000



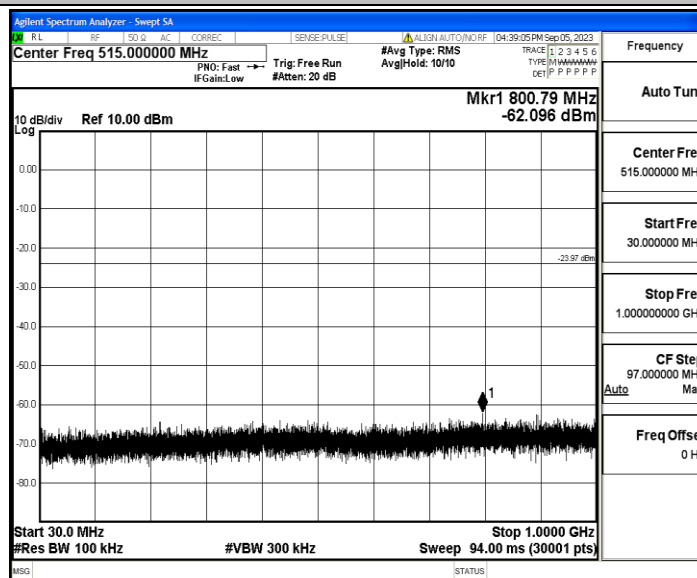
11B_Ant1_2412_1000~26500



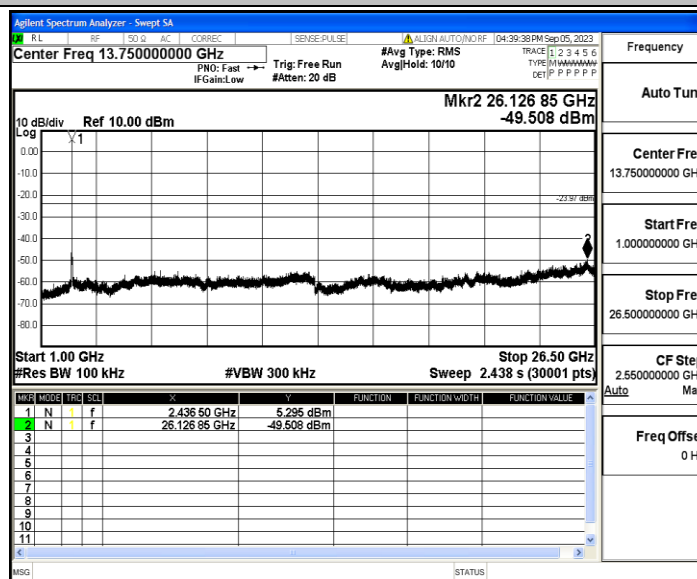
11B_Ant1_2437_0~Reference



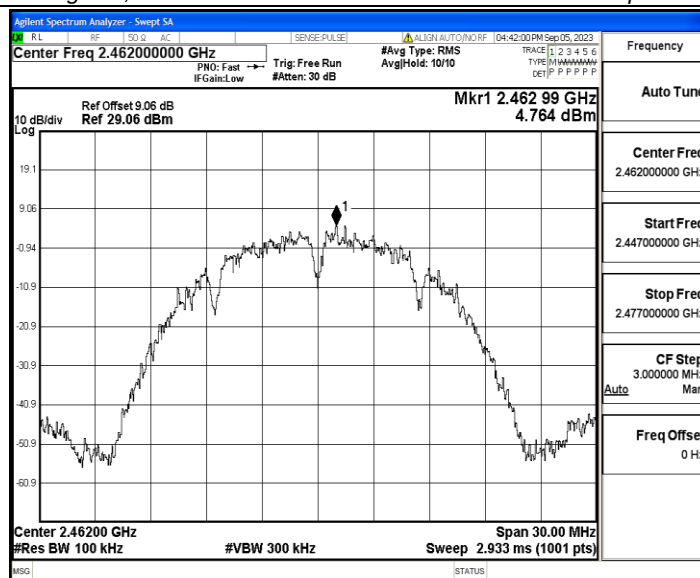
11B_Ant1_2437_30~1000



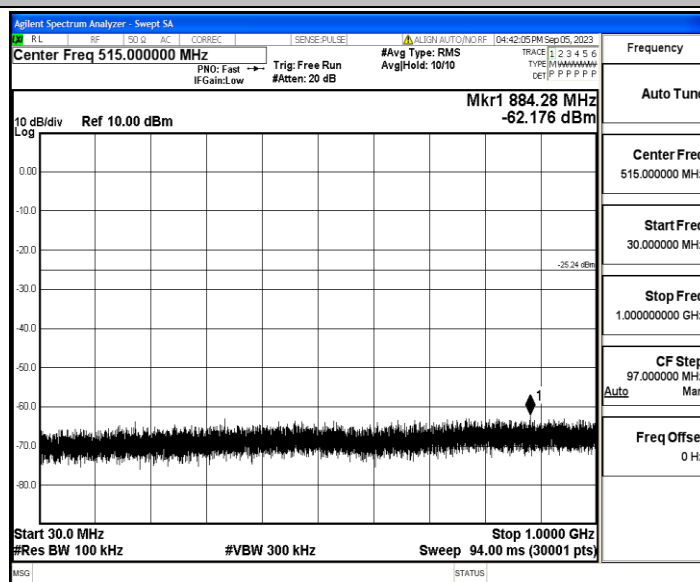
11B_Ant1_2437_1000~26500



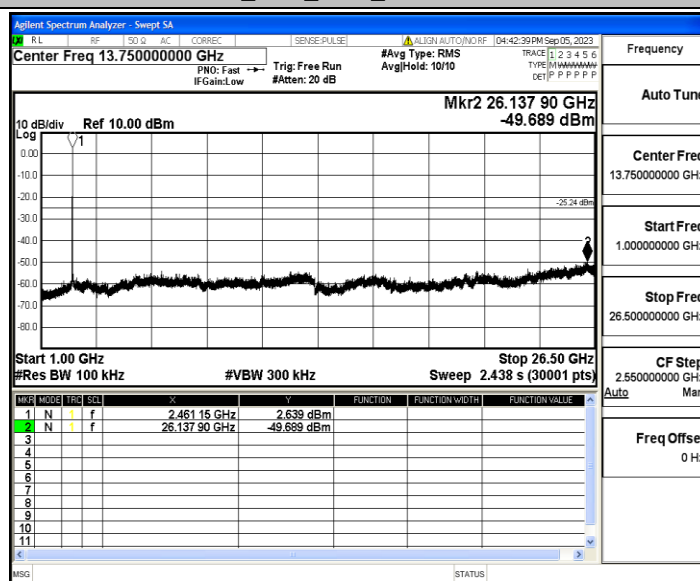
11B_Ant1_2462_0~Reference



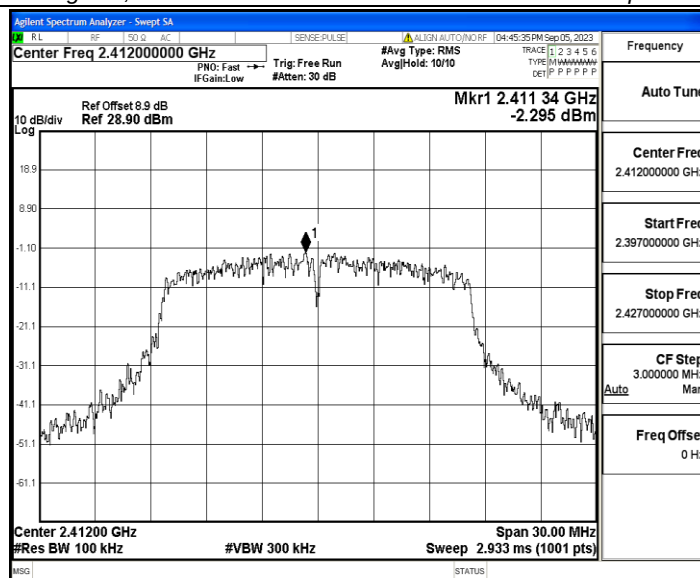
11B_Ant1_2462_30~1000



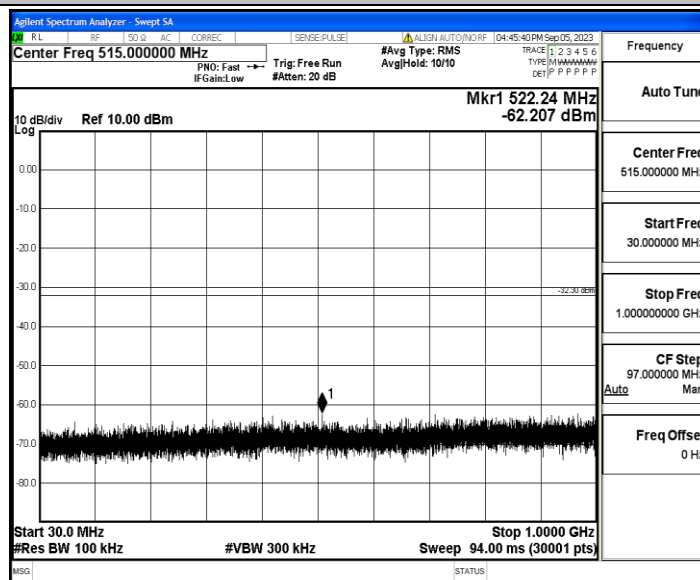
11B_Ant1_2462_1000~26500



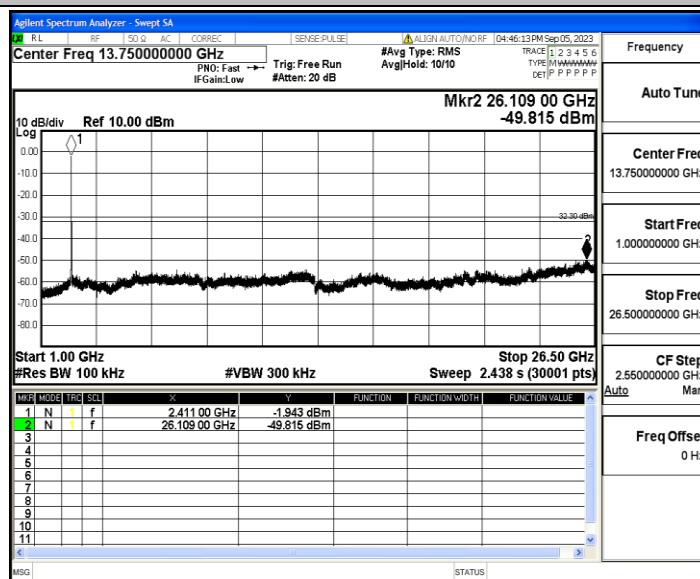
11G_Ant1_2412_0~Reference



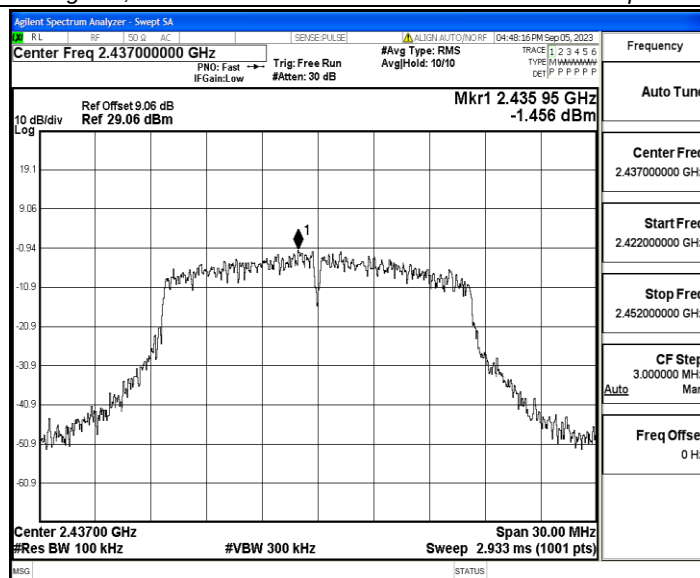
11G_Ant1_2412_30~1000



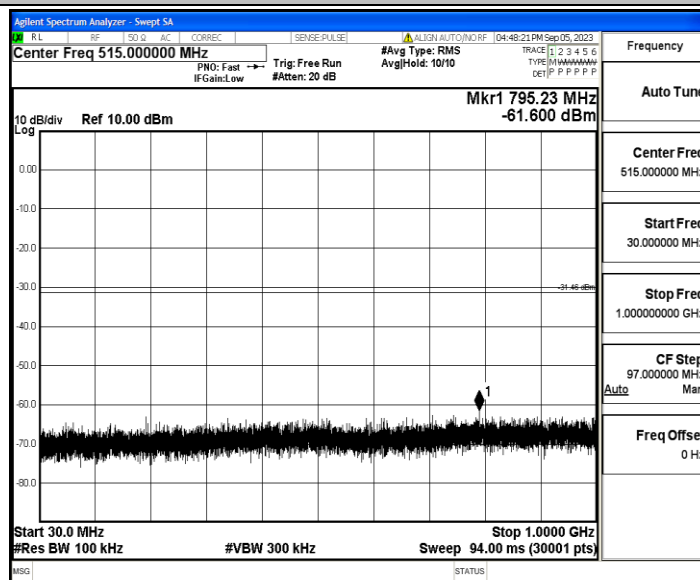
11G_Ant1_2412_1000~26500



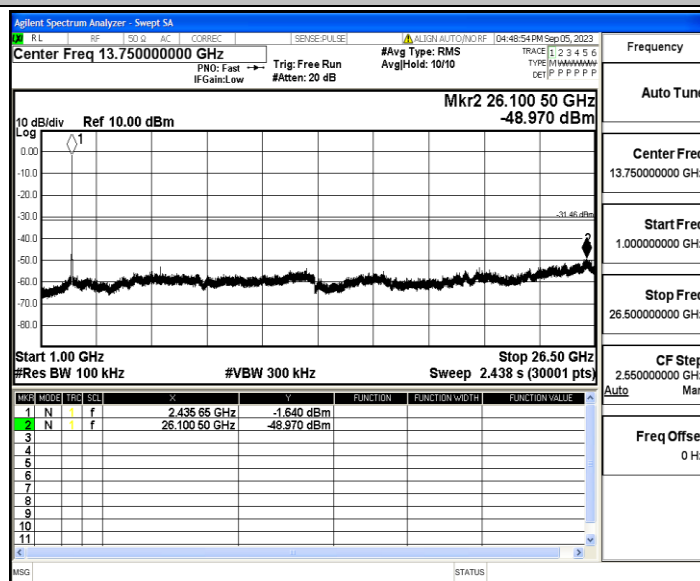
11G_Ant1_2437_0~Reference



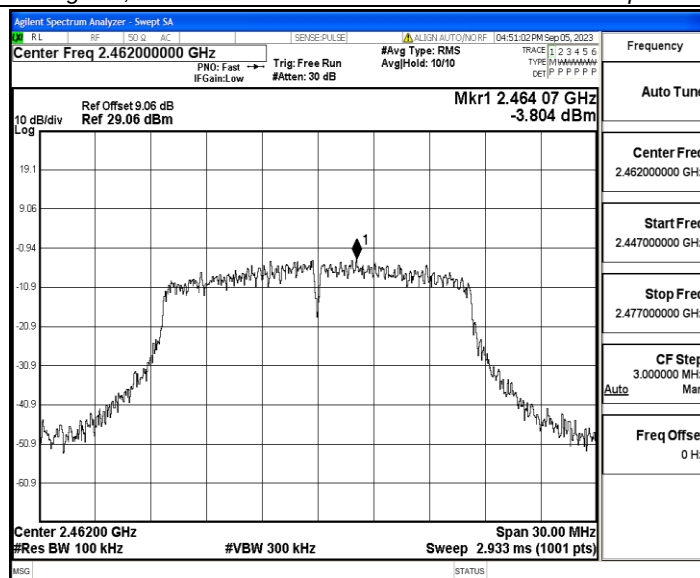
11G_Ant1_2437_30~1000



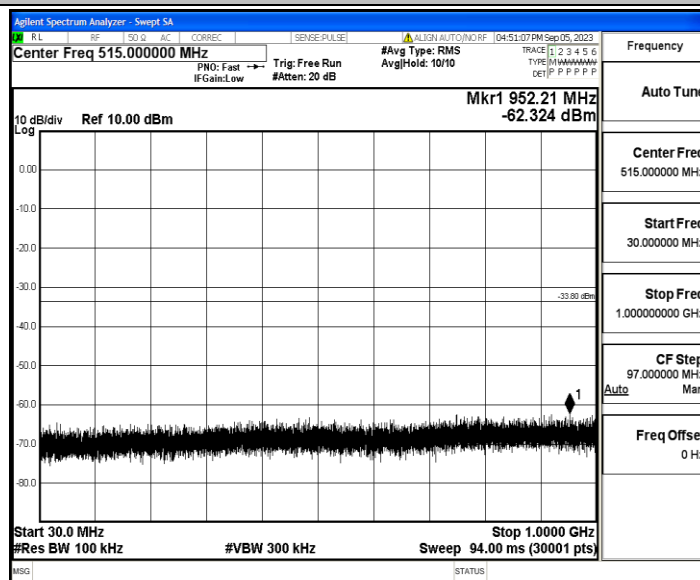
11G_Ant1_2437_1000~26500



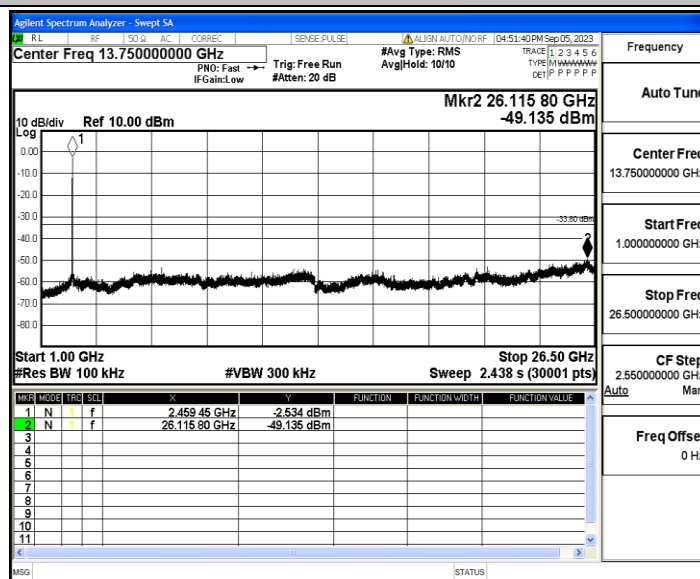
11G_Ant1_2462_0~Reference



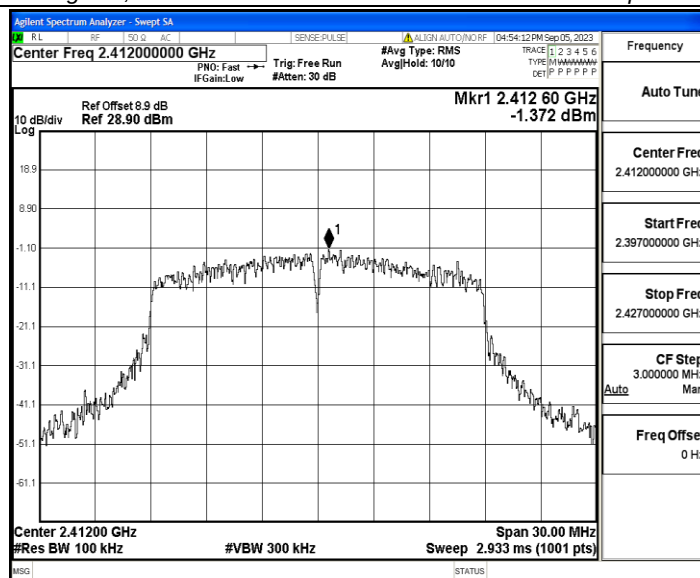
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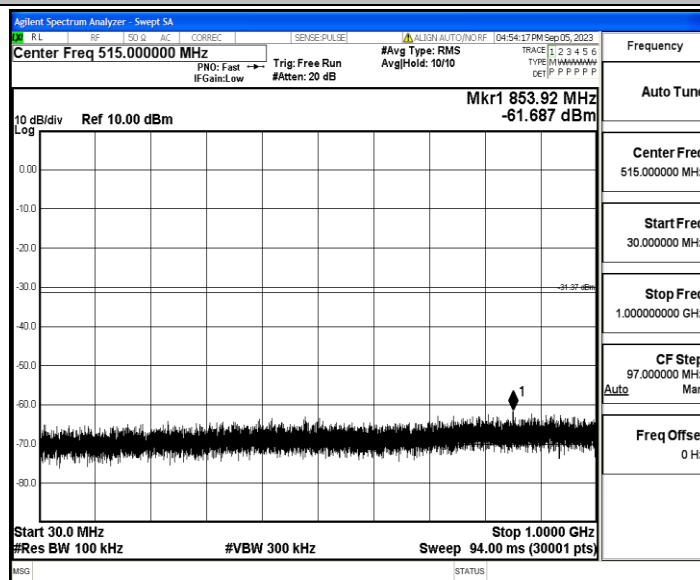
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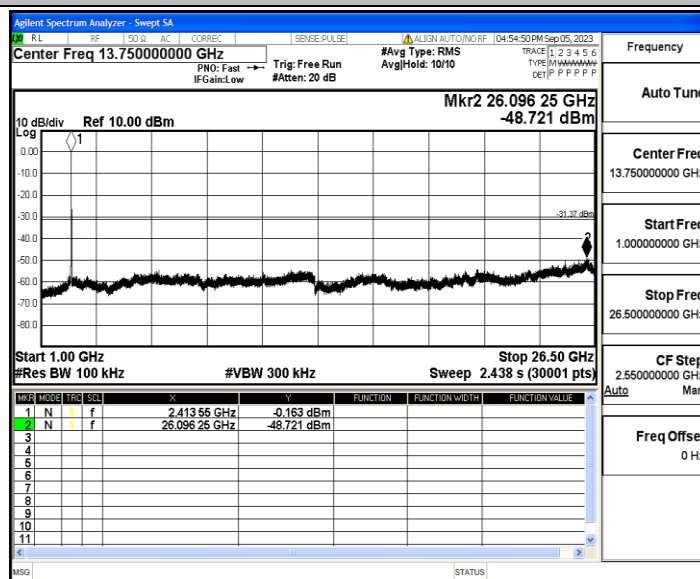
11N20SISO_Ant1_2412_0~Reference



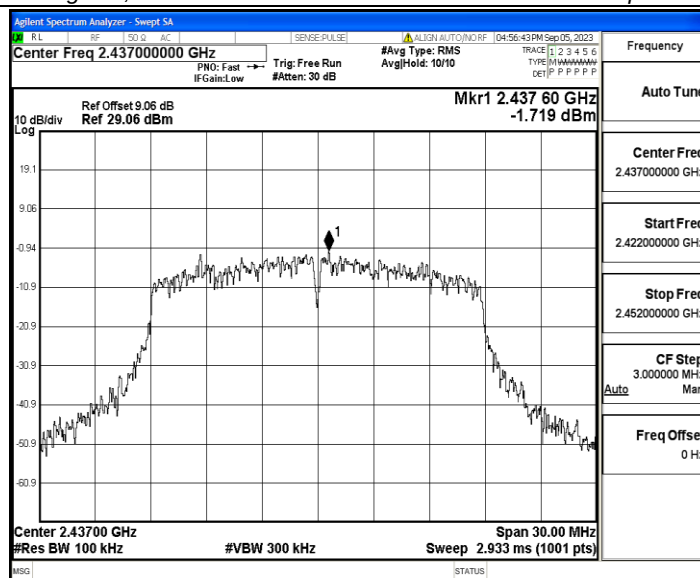
11N20SISO_Ant1_2412_30~1000



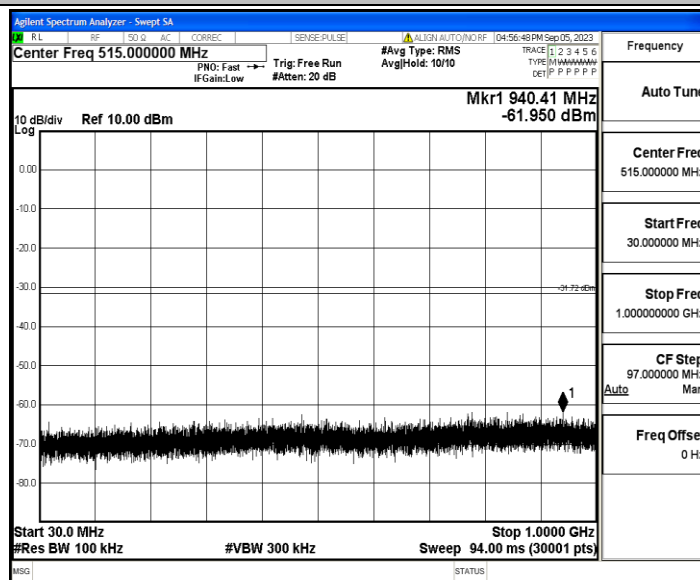
11N20SISO_Ant1_2412_1000~26500



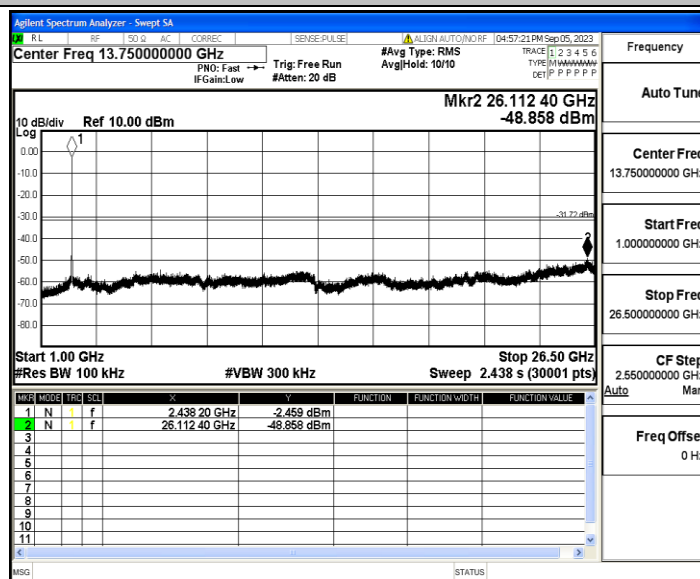
11N20SISO_Ant1_2437_0~Reference



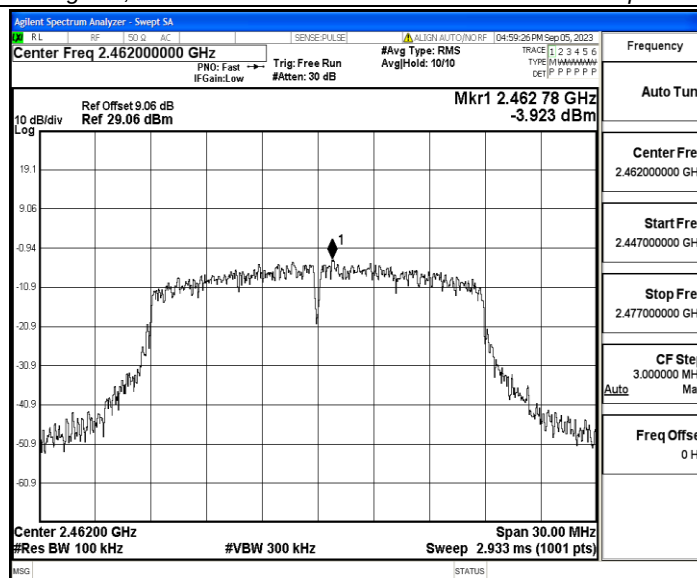
11N20SISO_Ant1_2437_30~1000



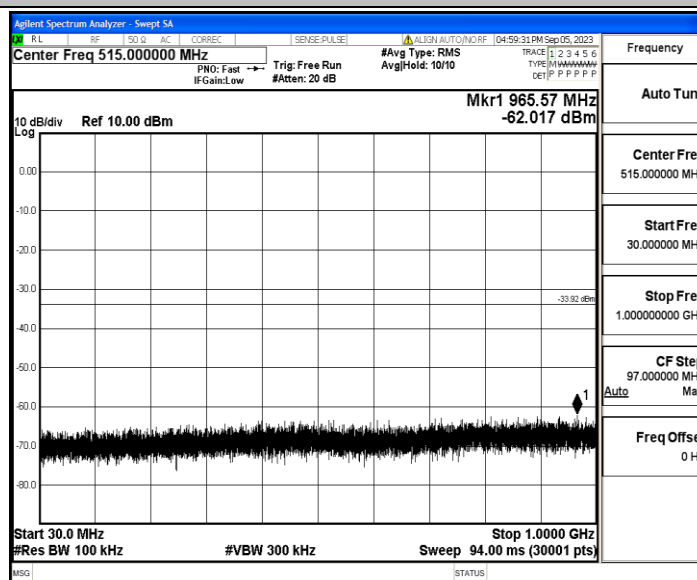
11N20SISO_Ant1_2437_1000~26500



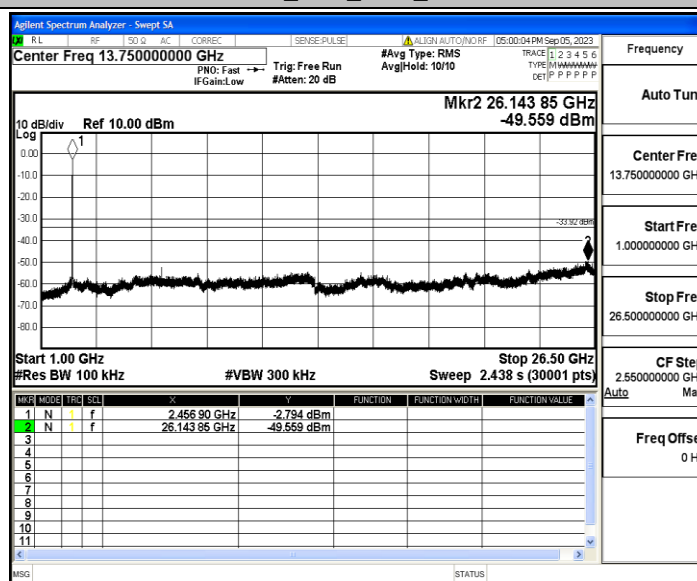
11N20SISO_Ant1_2462_0~Reference



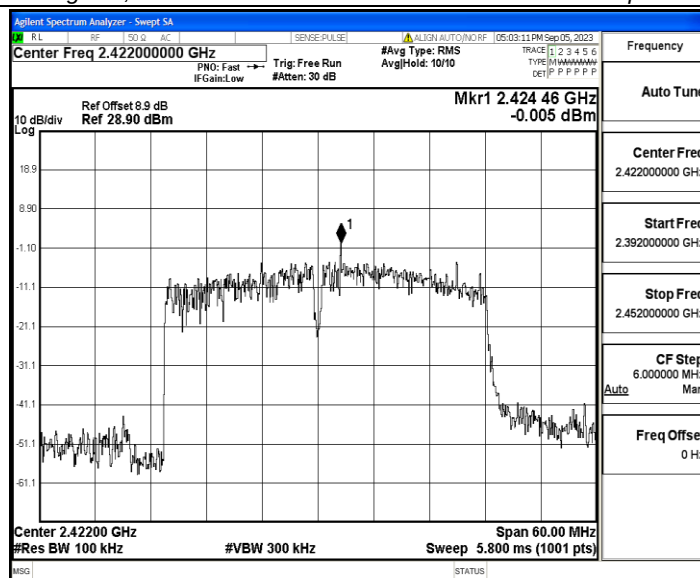
11N20SISO_Ant1_2462_30~1000



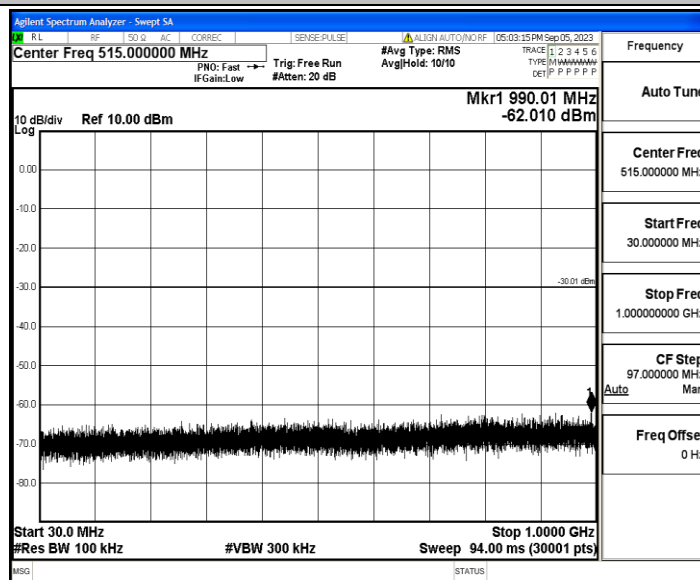
11N20SISO_Ant1_2462_1000~26500



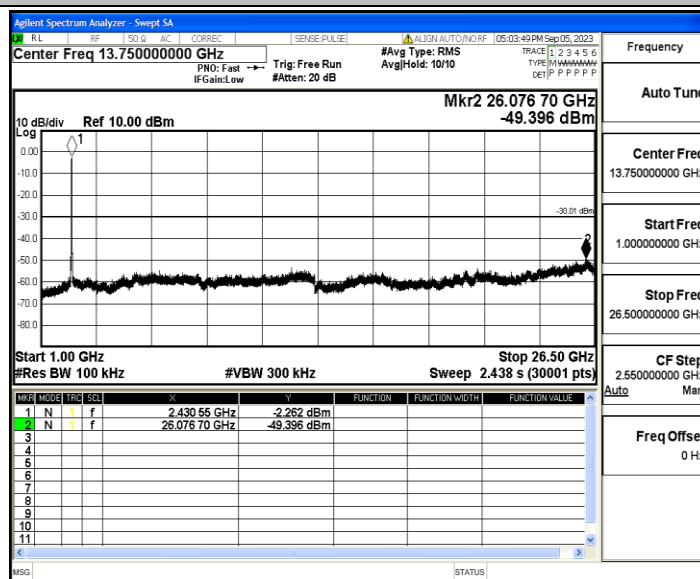
11N40SISO_Ant1_2422_0~Reference



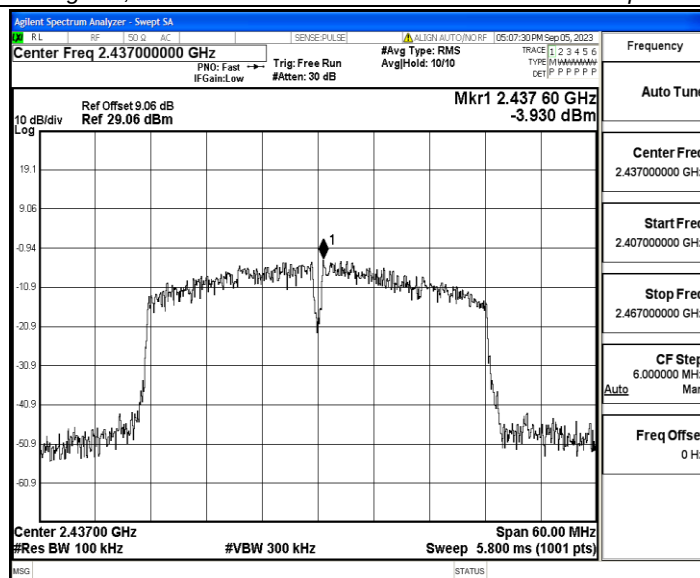
11N40SISO_Ant1_2422_30~1000



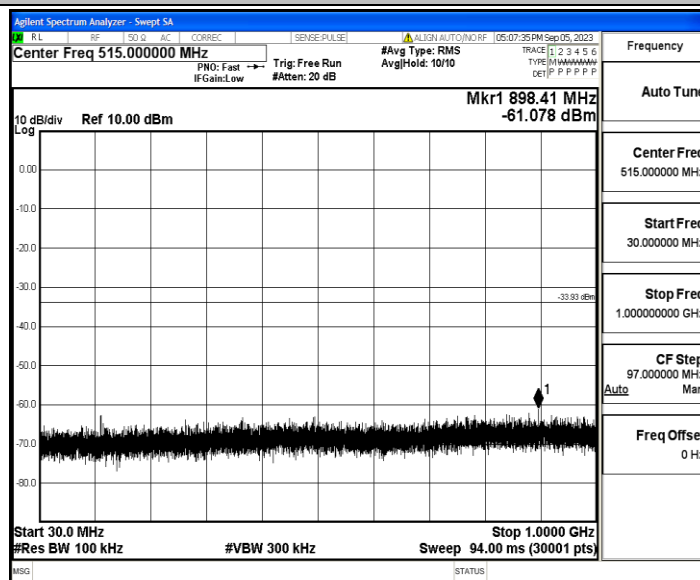
11N40SISO_Ant1_2422_1000~26500



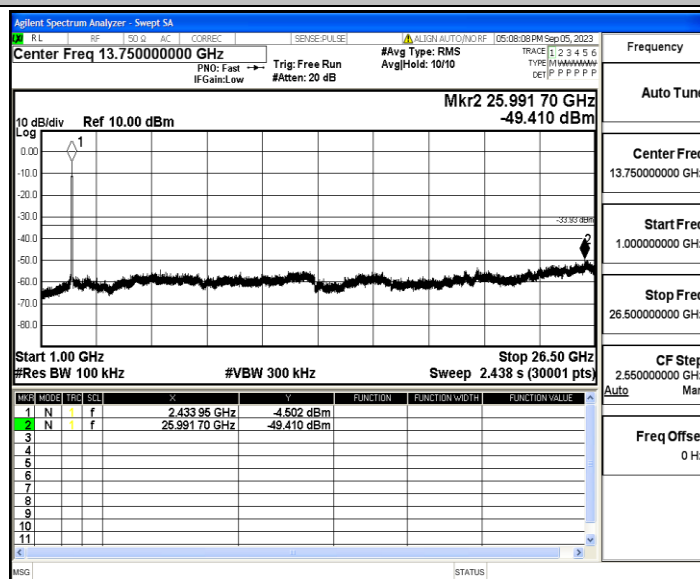
11N40SISO_Ant1_2437_0~Reference



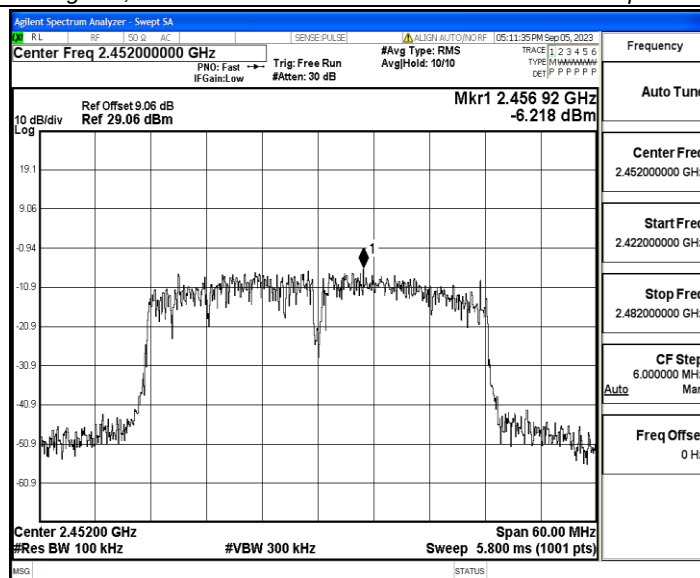
11N40SISO_Ant1_2437_30~1000



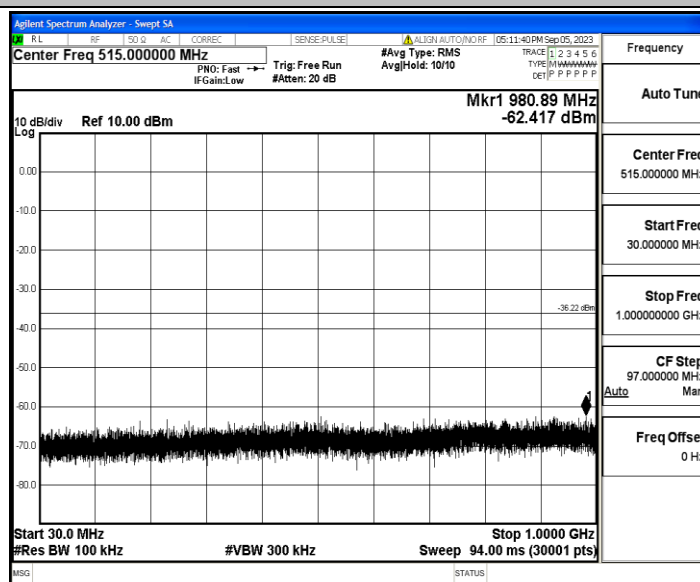
11N40SISO_Ant1_2437_1000~26500



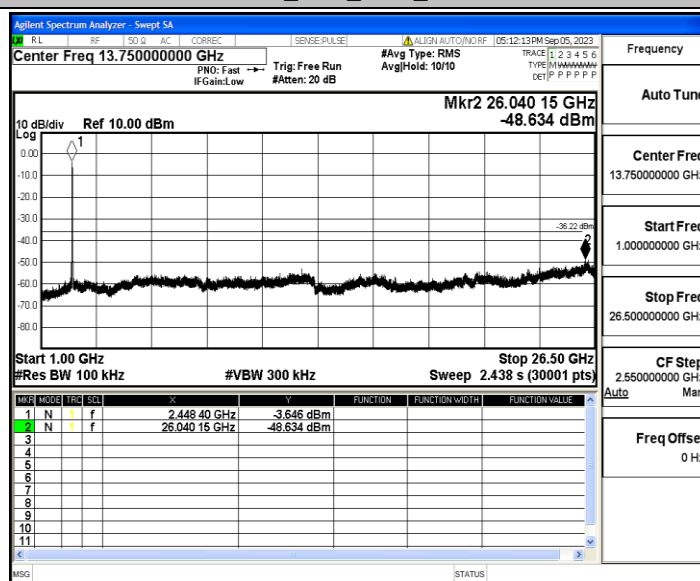
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



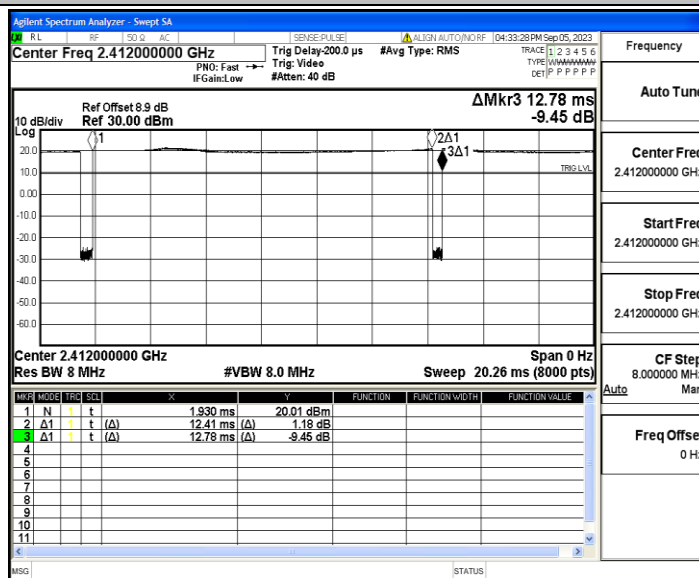
Appendix G: Duty Cycle

Test Result

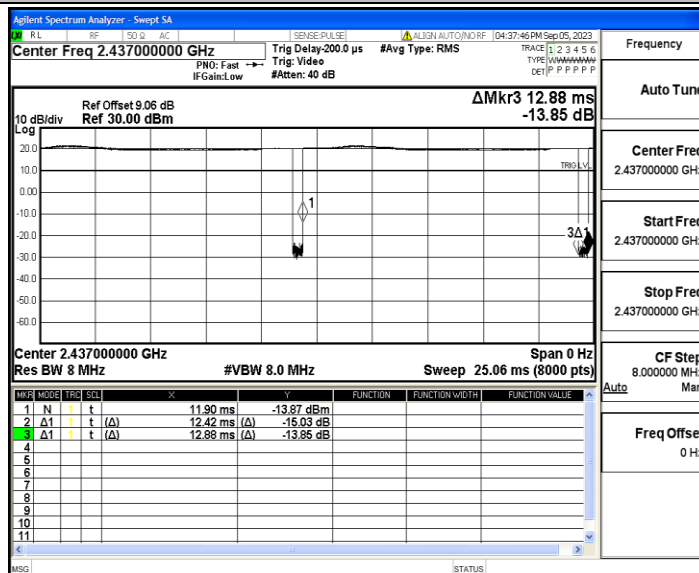
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
11B	Ant1	2412	12.41	12.78	97.10	0.08
		2437	12.42	12.88	96.43	0.08
		2462	12.42	12.84	96.73	0.08
11G	Ant1	2412	2.07	3.11	66.56	0.48
		2437	2.07	3.11	66.56	0.48
		2462	2.06	3.10	66.45	0.49
11N20SISO	Ant1	2412	1.92	3.49	55.01	0.52
		2437	1.93	3.49	55.30	0.52
		2462	1.92	3.49	55.01	0.52
11N40SISO	Ant1	2422	3.77	10.01	37.66	0.27
		2437	3.77	9.98	37.78	0.27
		2452	3.77	10.02	37.62	0.27

Test Graphs

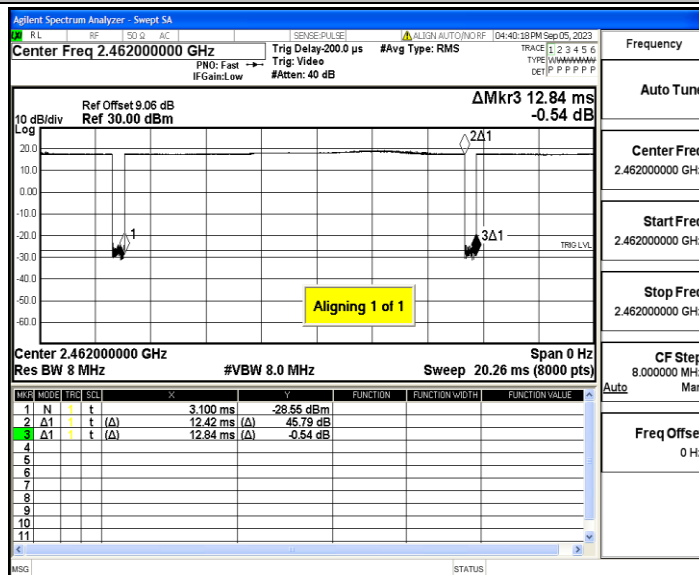
11B_Ant1_2412



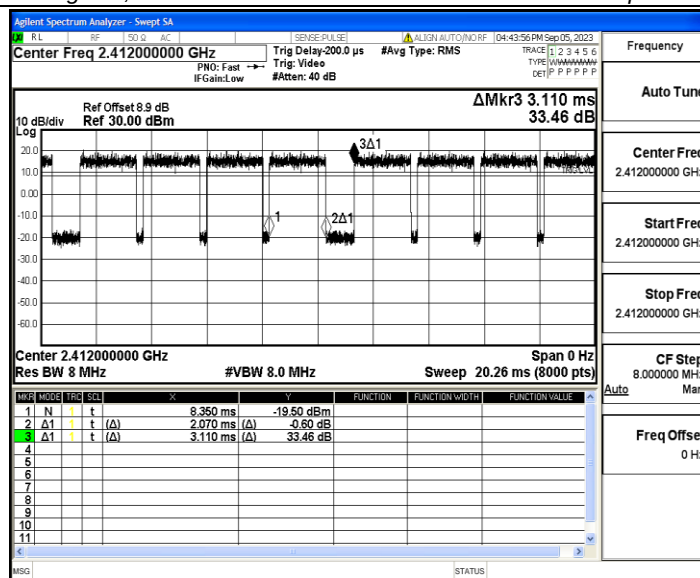
11B_Ant1_2437



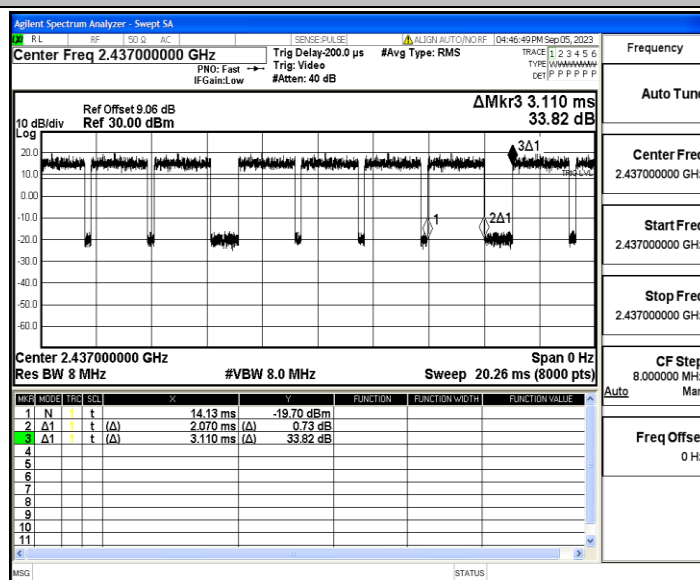
11B_Ant1_2462



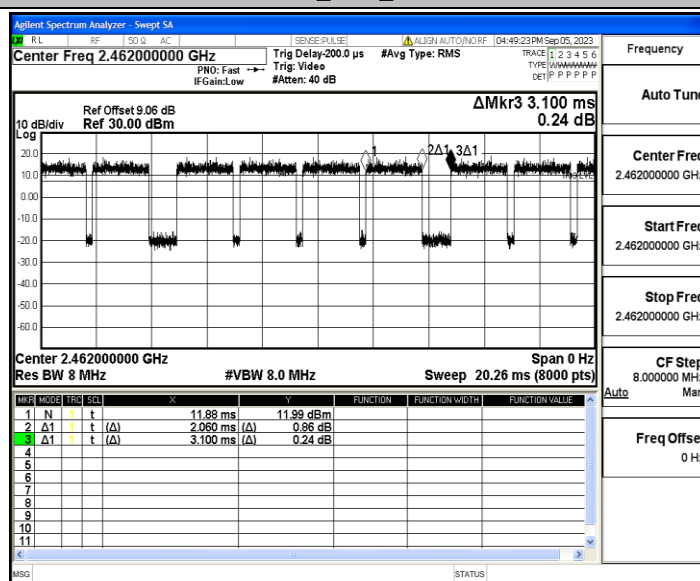
11G_Ant1_2412



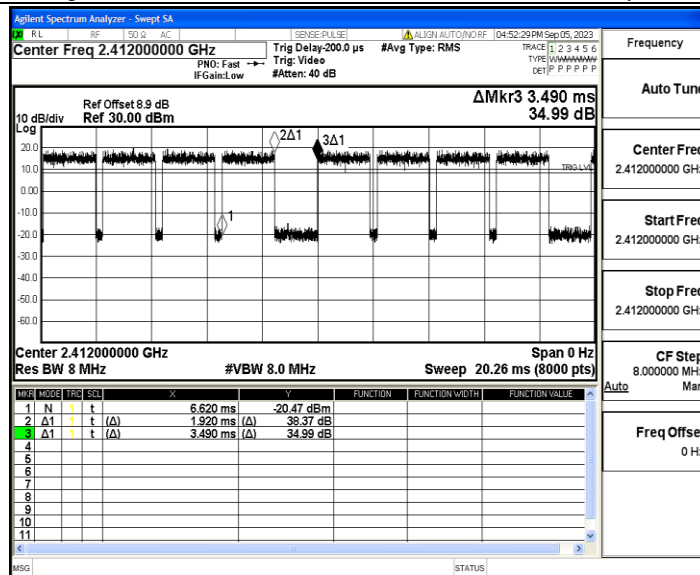
11G_Ant1_2437



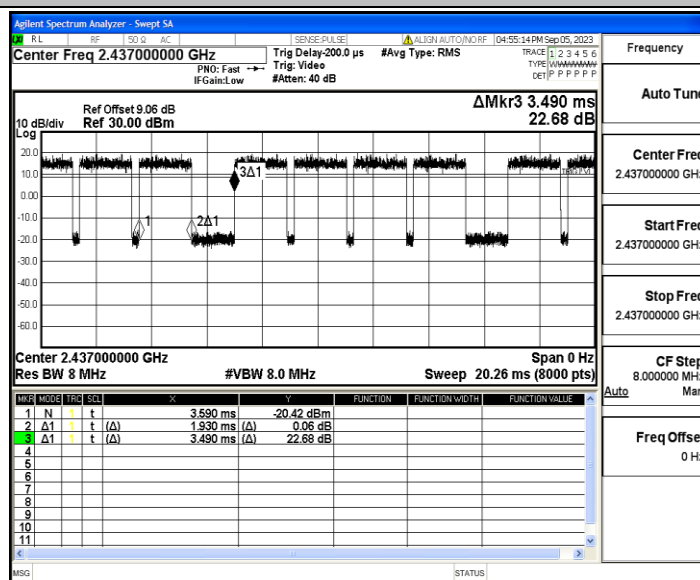
11G_Ant1_2462



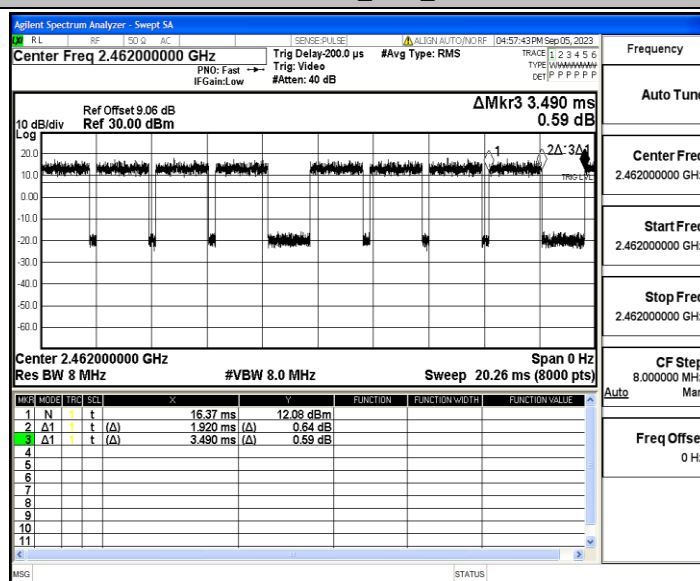
11N20SISO_Ant1_2412



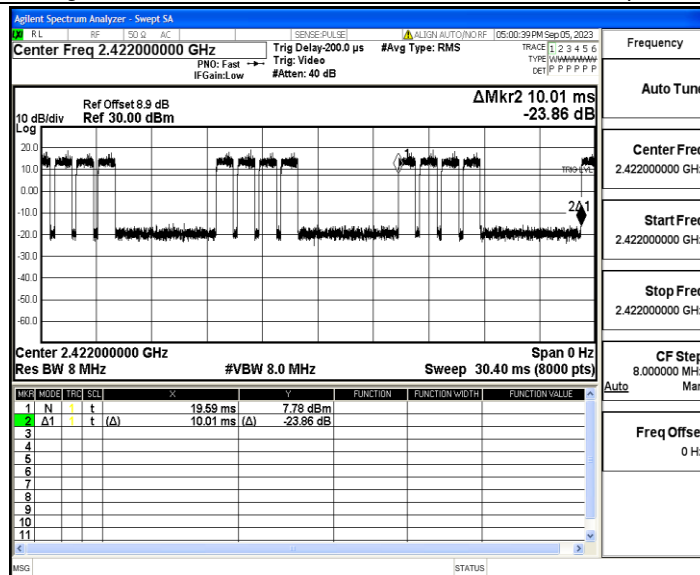
11N20SISO_Ant1_2437



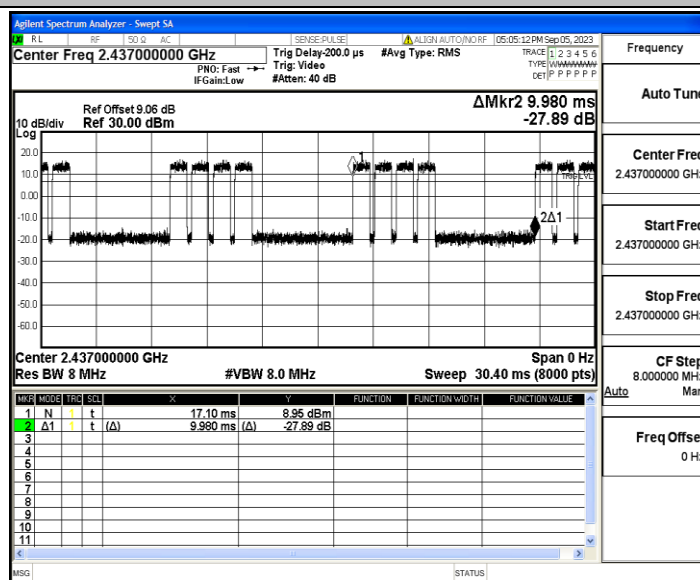
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

