

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

Product Name: SLEEP SOUND MACHINE

Trade Mark: N/A

Test Model: S2 Pro

FCC ID: 2AZ9T-S2PRO

Environmental Conditions

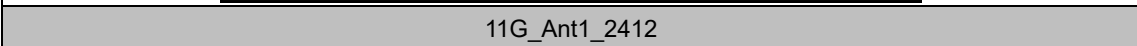
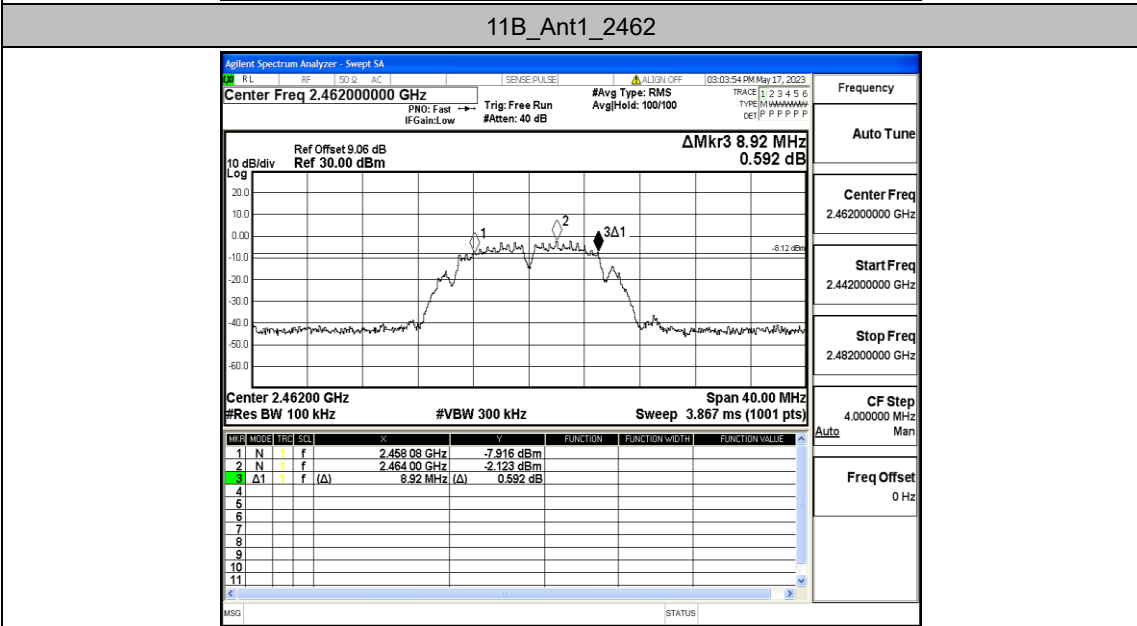
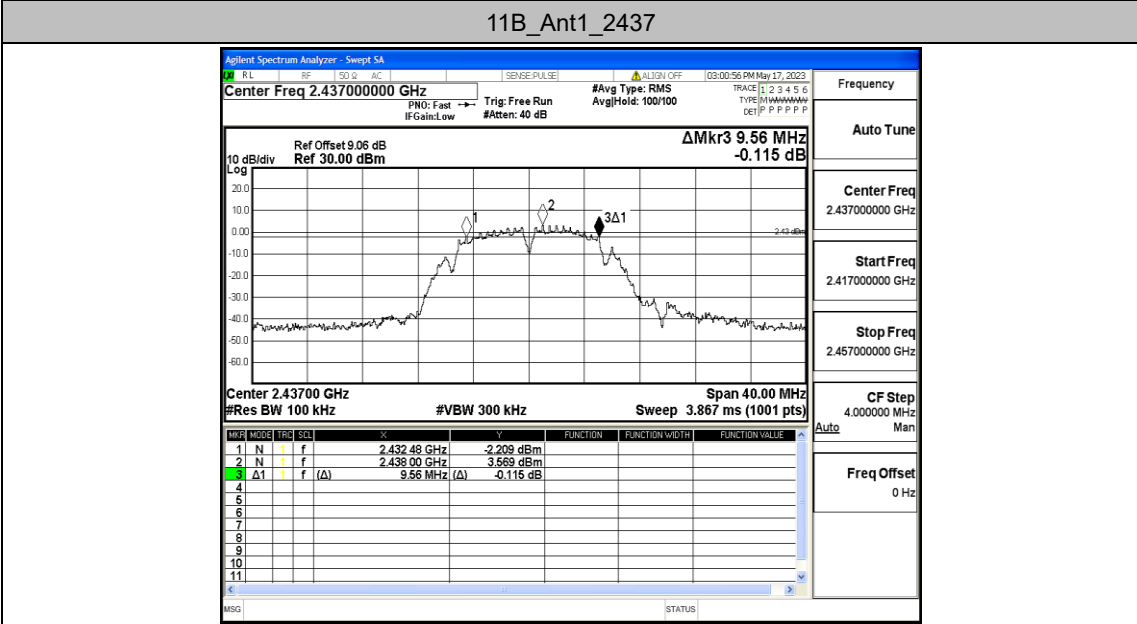
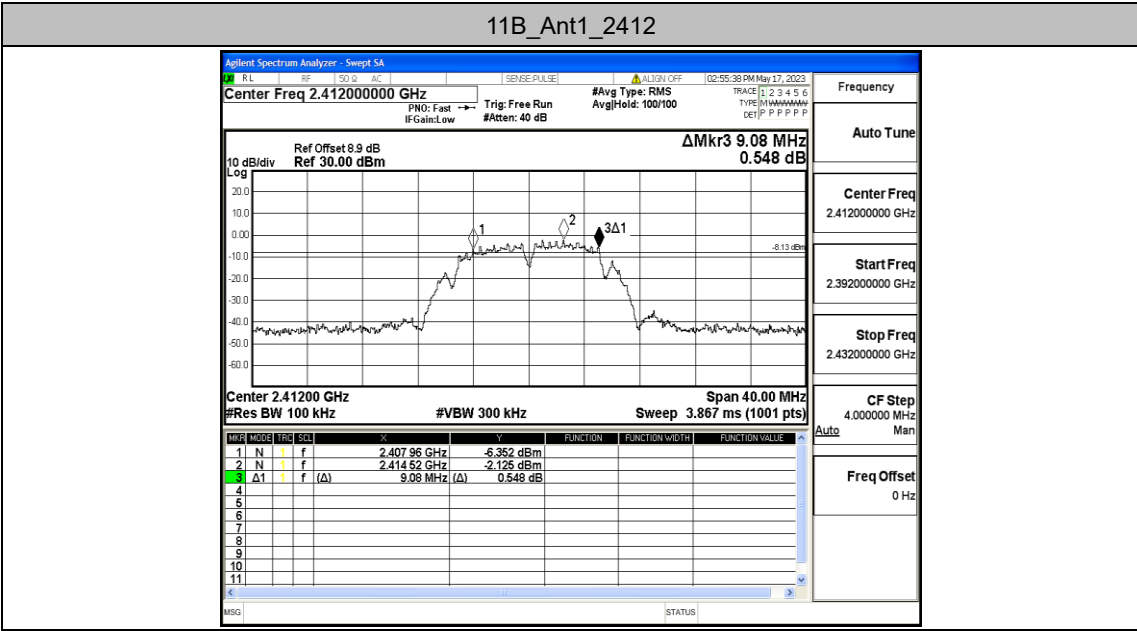
Temperature:	23.5℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

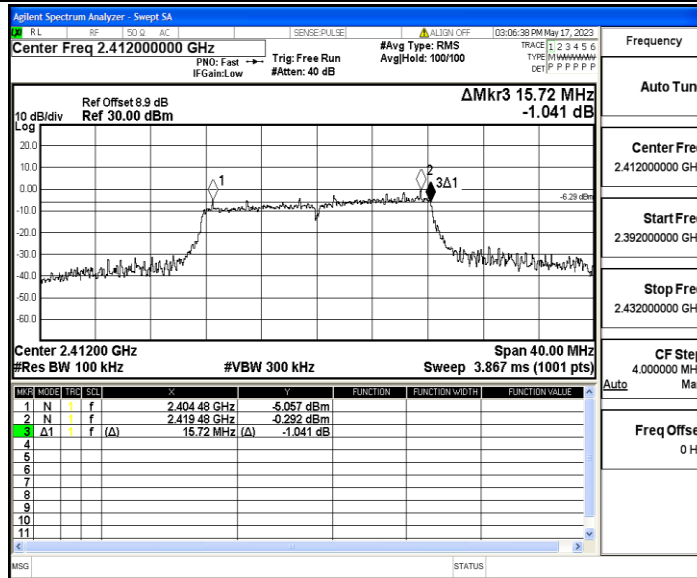
Appendix A: DTS Bandwidth

Test Result

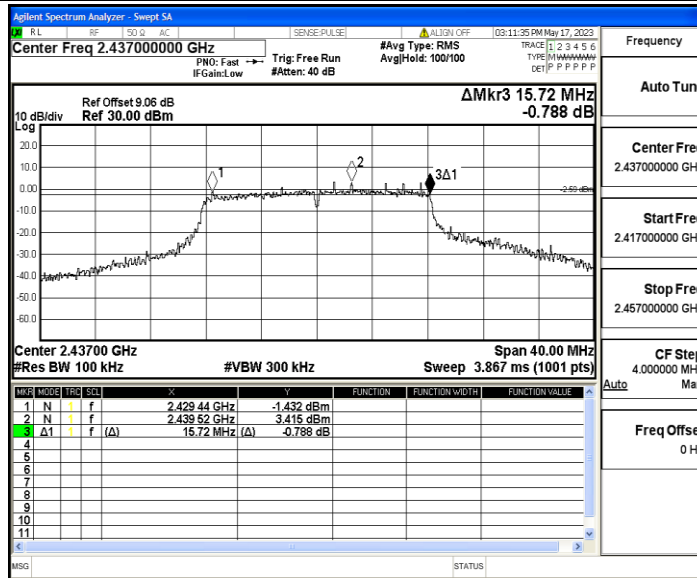
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.960	2417.040	0.5	PASS
		2437	9.560	2432.480	2442.040	0.5	PASS
		2462	8.920	2458.080	2467.000	0.5	PASS
11G	Ant1	2412	15.720	2404.480	2420.200	0.5	PASS
		2437	15.720	2429.440	2445.160	0.5	PASS
		2462	15.320	2454.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	16.040	2404.520	2420.560	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	16.080	2453.480	2469.560	0.5	PASS
11N40SISO	Ant1	2422	26.240	2413.280	2439.520	0.5	PASS
		2437	20.080	2421.960	2442.040	0.5	PASS
		2452	35.680	2433.840	2469.520	0.5	PASS

Test Graphs

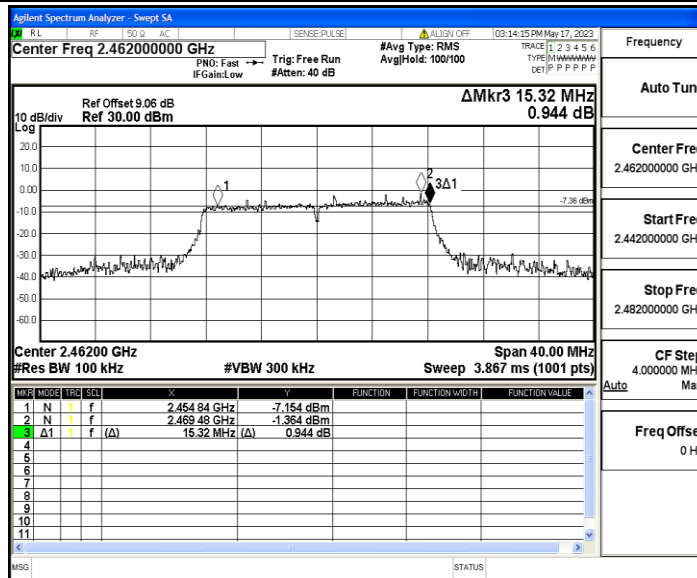




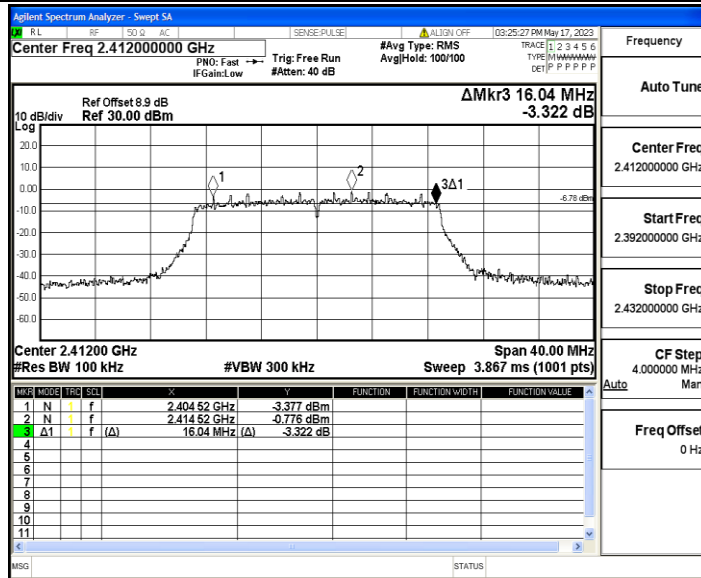
11G_Ant1_2437



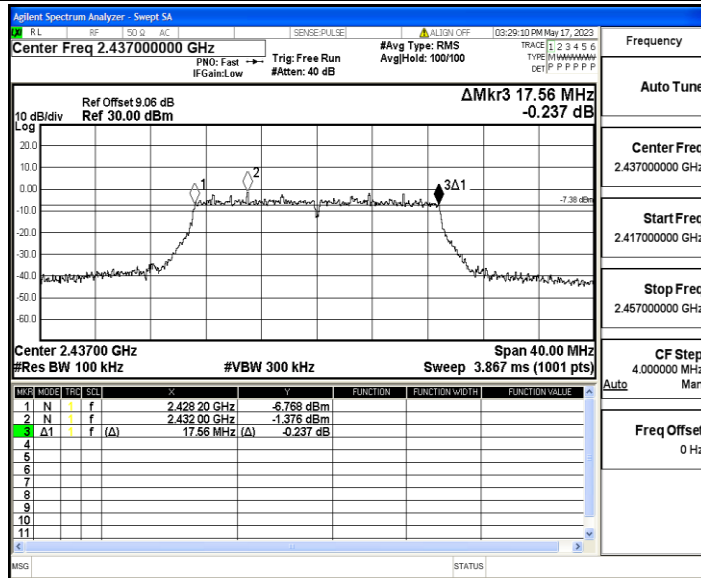
11G_Ant1_2462



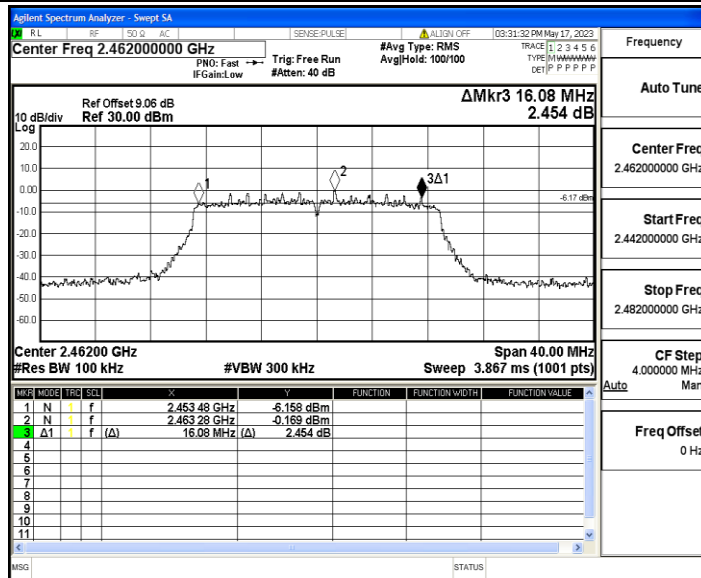
11N20SISO_Ant1_2412



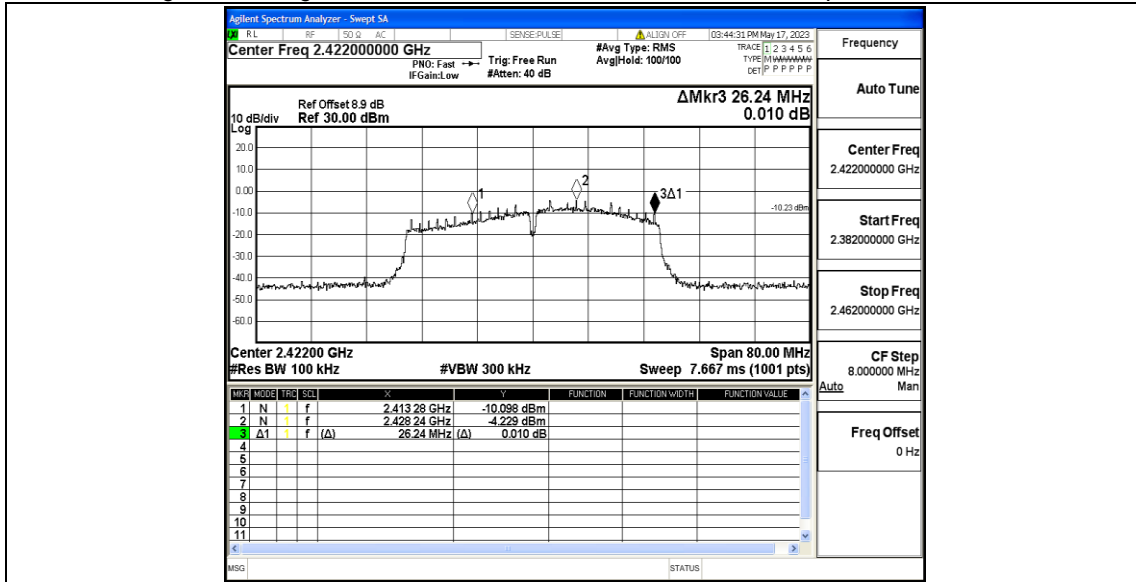
11N20SISO_Ant1_2437



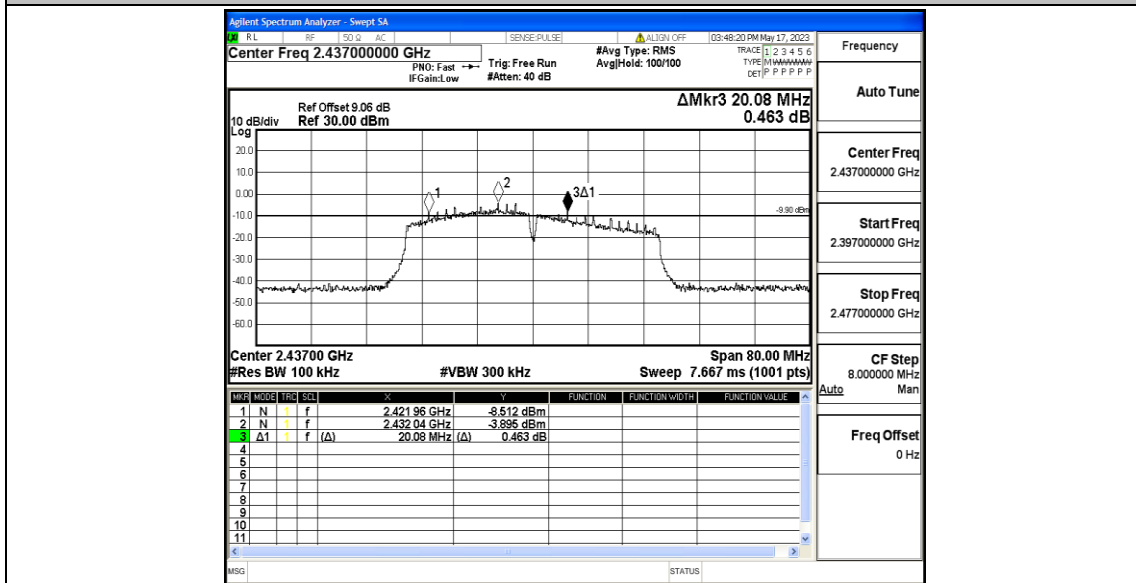
11N20SISO_Ant1_2462



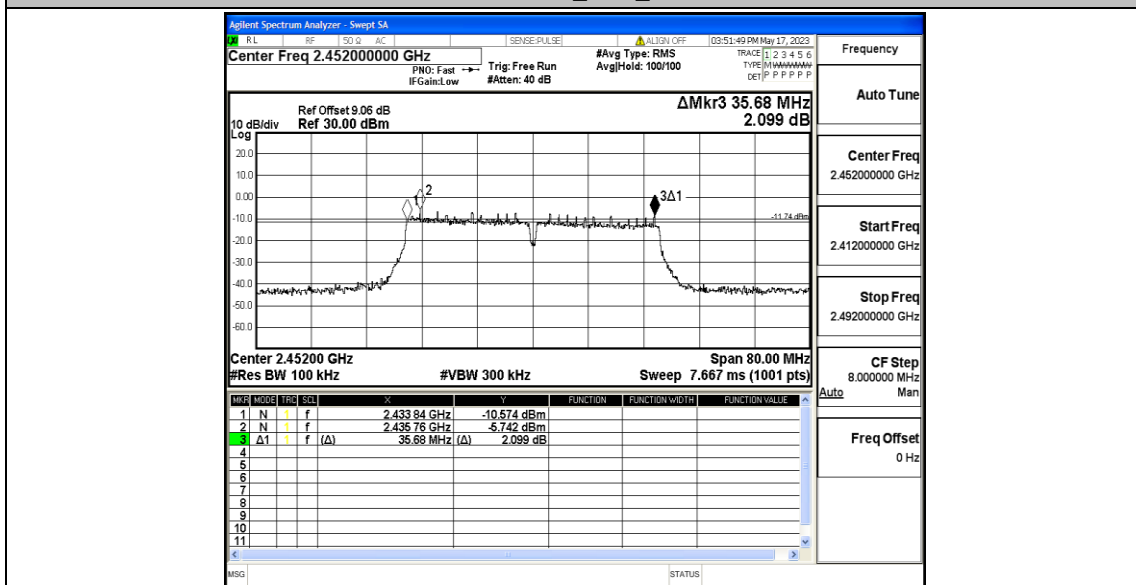
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

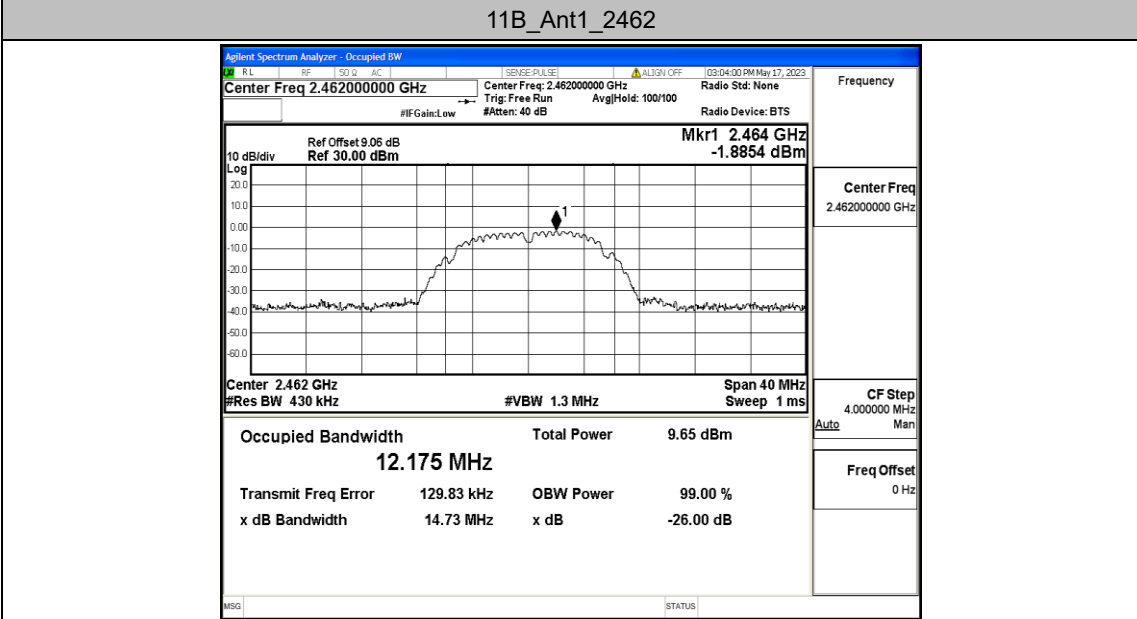
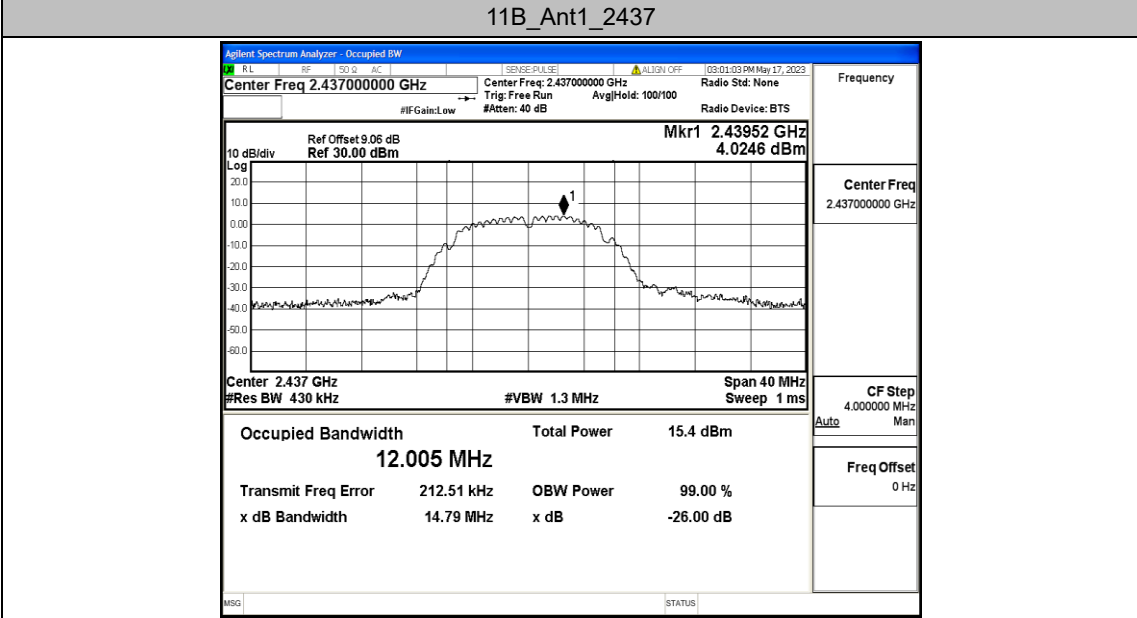
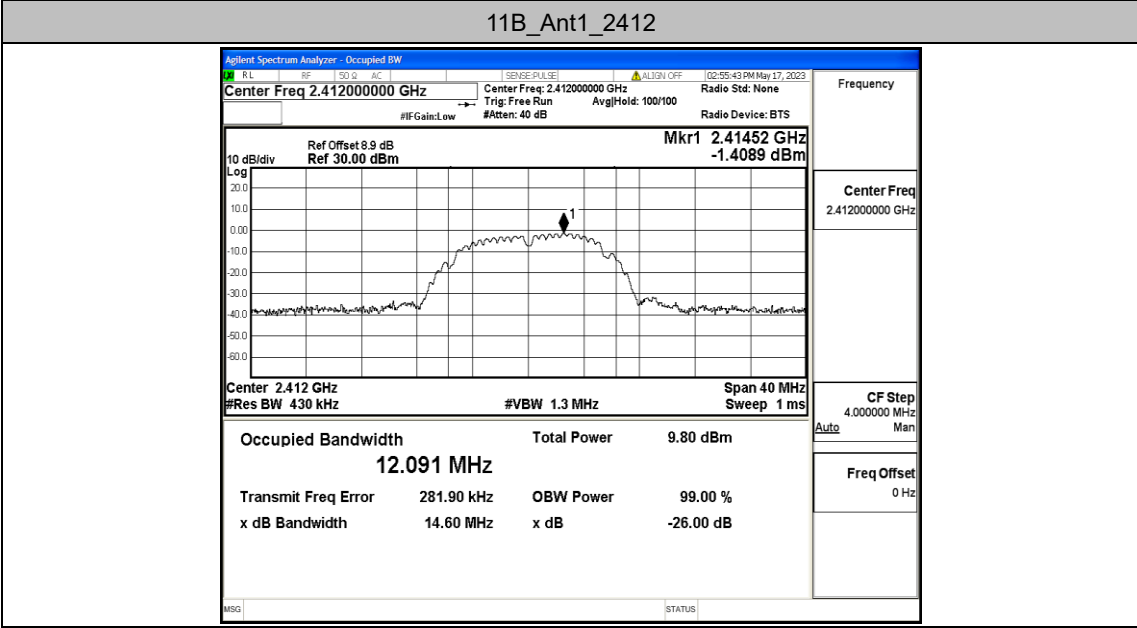


Appendix B: Occupied Channel Bandwidth

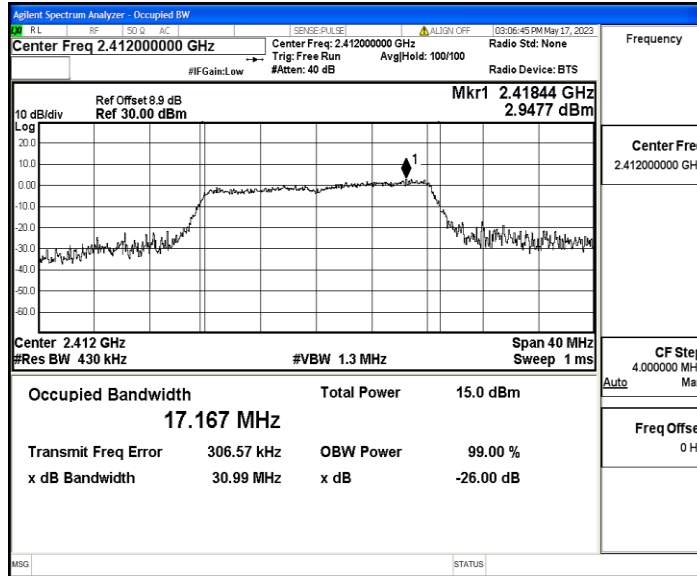
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.091	2406.2364	2418.3274	---	---
		2437	12.005	2431.2100	2443.2150	---	---
		2462	12.175	2456.0423	2468.2173	---	---
11G	Ant1	2412	17.167	2403.7231	2420.8901	---	---
		2437	16.910	2428.7779	2445.6879	---	---
		2462	17.130	2453.5521	2470.6821	---	---
11N20SISO	Ant1	2412	17.869	2403.2036	2421.0726	---	---
		2437	18.043	2427.9817	2446.0247	---	---
		2462	17.842	2453.0796	2470.9216	---	---
11N40SISO	Ant1	2422	35.439	2404.5664	2440.0054	---	---
		2437	35.417	2419.1025	2454.5195	---	---
		2452	36.907	2433.4741	2470.3811	---	---

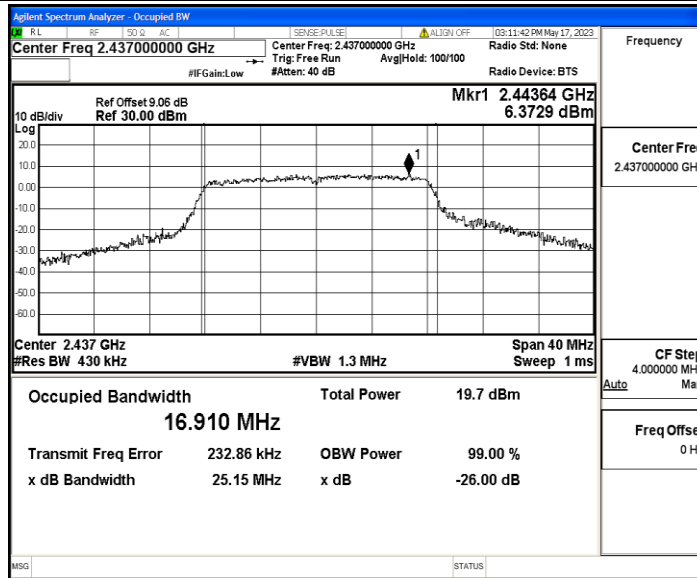
Test Graphs



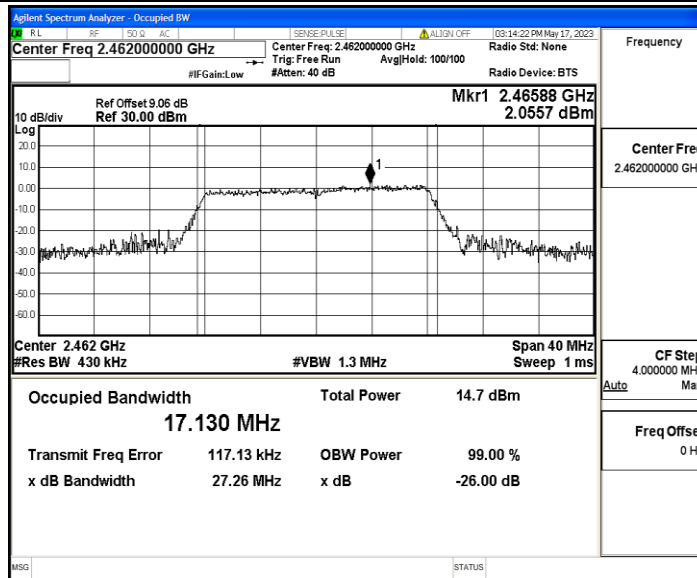
11G_Ant1_2412



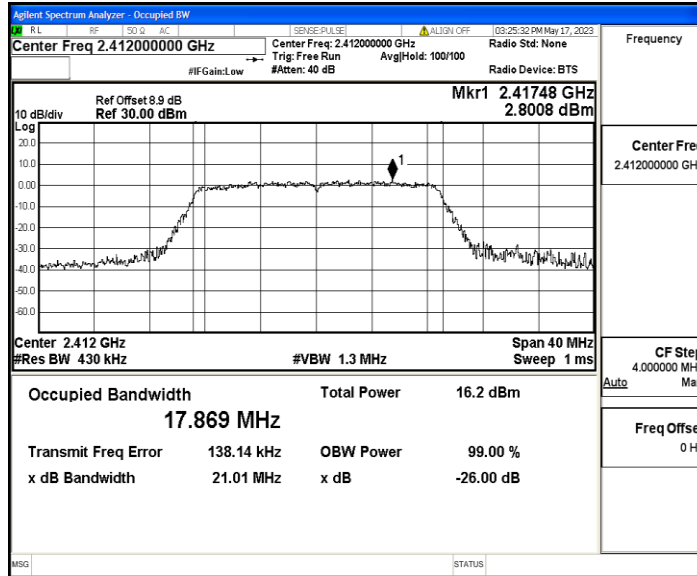
11G_Ant1_2437



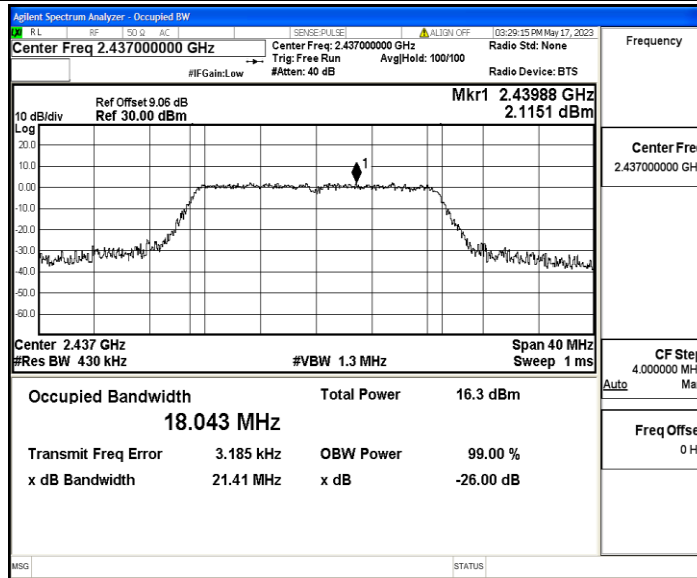
11G_Ant1_2462



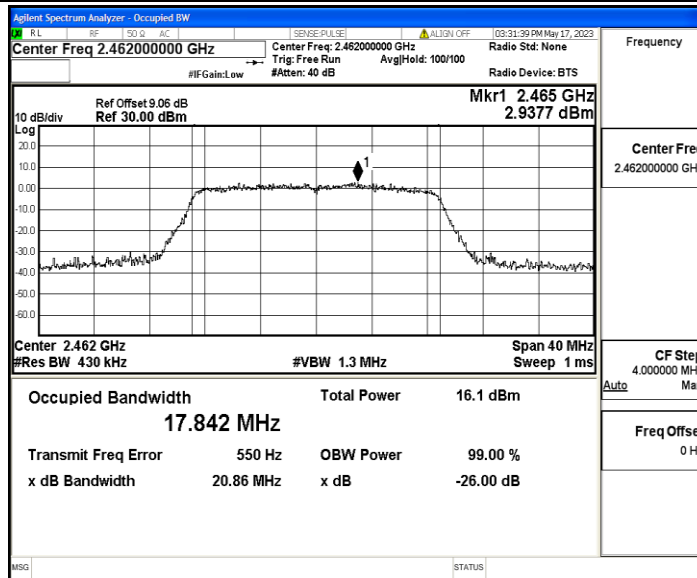
11N20SISO_Ant1_2412



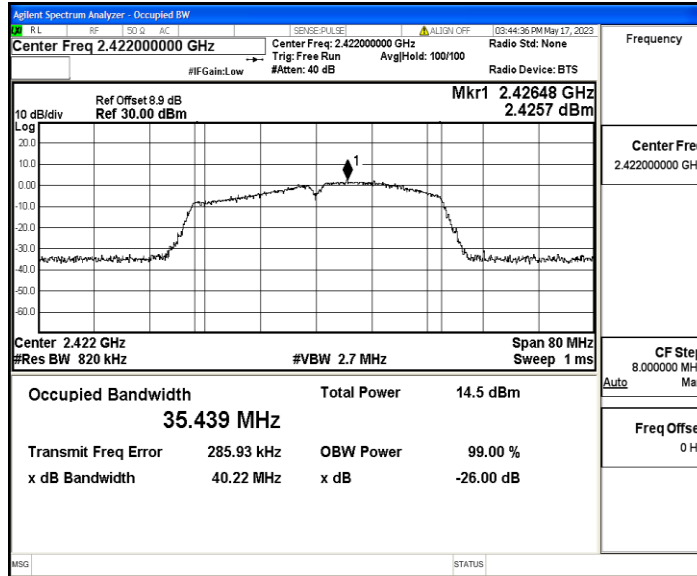
11N20SISO_Ant1_2437



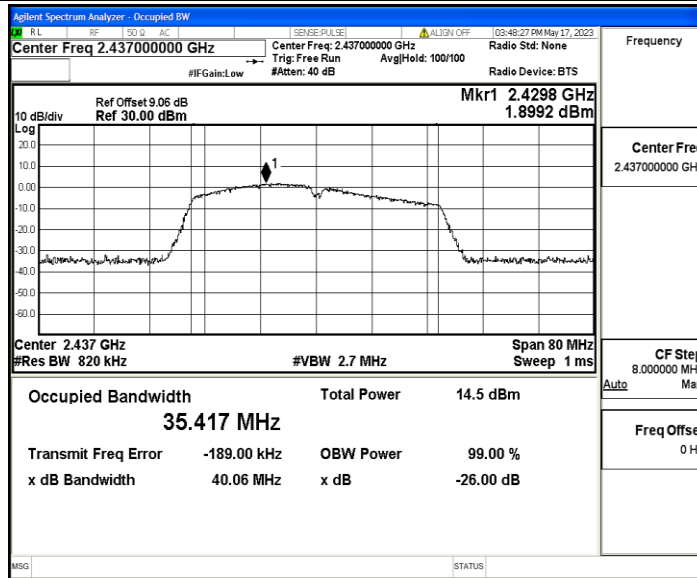
11N20SISO_Ant1_2462



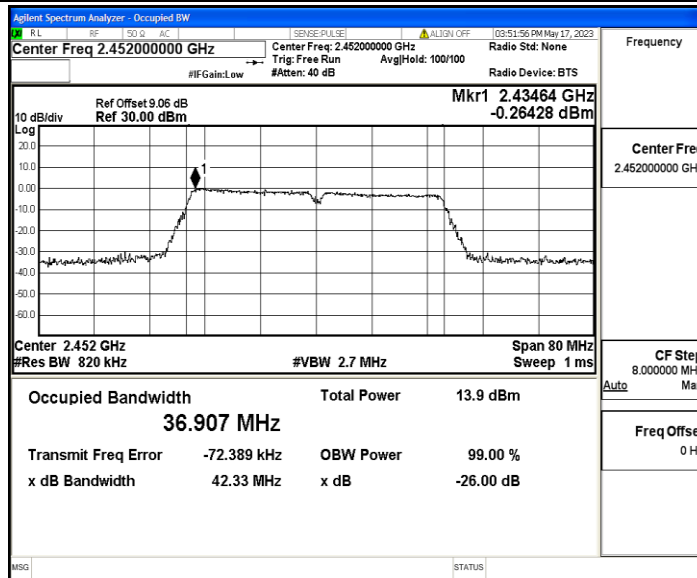
11N40SISO_Ant1_2422



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	6.85	≤30.00	PASS
		2437	12.45	≤30.00	PASS
		2462	6.63	≤30.00	PASS
11G	Ant1	2412	9.05	≤30.00	PASS
		2437	13.64	≤30.00	PASS
		2462	8.76	≤30.00	PASS
11N20SISO	Ant1	2412	10.41	≤30.00	PASS
		2437	10.05	≤30.00	PASS
		2462	10.37	≤30.00	PASS
11N40SISO	Ant1	2422	7.61	≤30.00	PASS
		2437	7.61	≤30.00	PASS
		2452	7.05	≤30.00	PASS

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

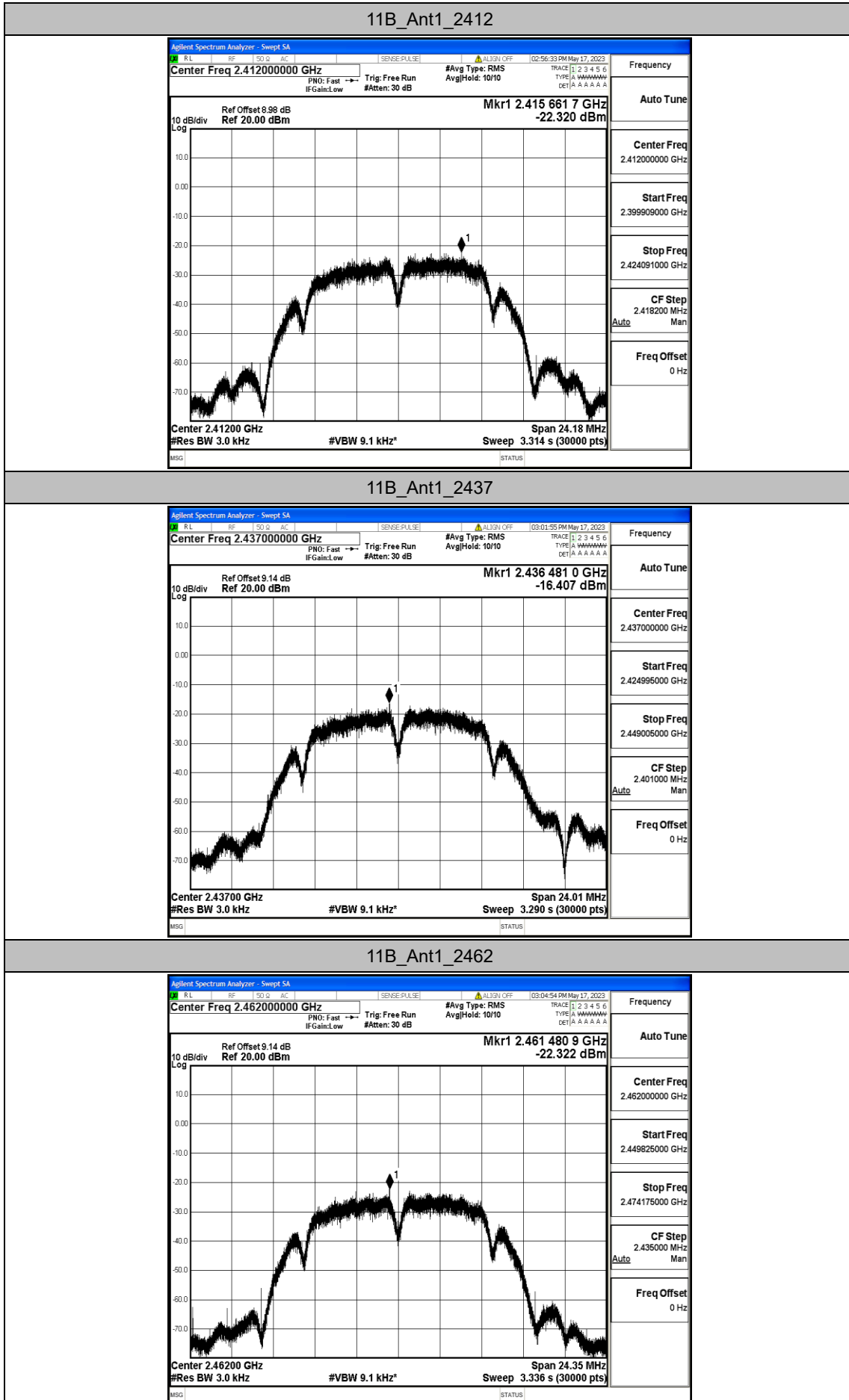
Appendix D: Maximum power spectral density

Test Result

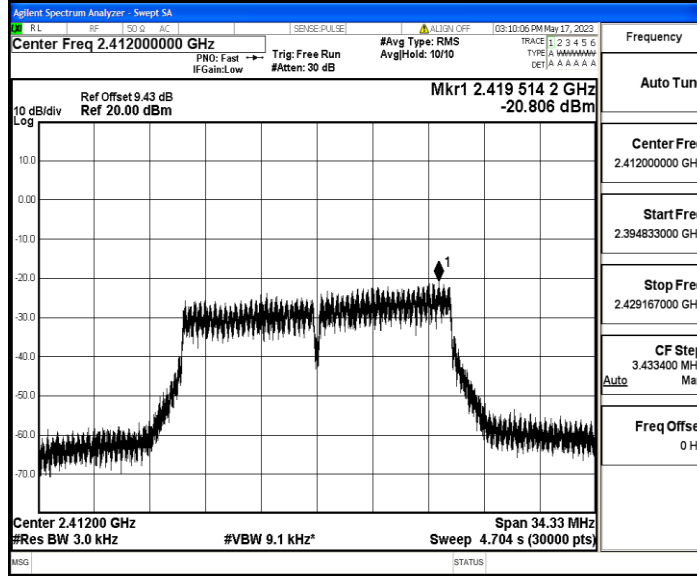
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-22.32	≤8.00	PASS
		2437	-16.41	≤8.00	PASS
		2462	-22.32	≤8.00	PASS
11G	Ant1	2412	-20.81	≤8.00	PASS
		2437	-18.15	≤8.00	PASS
		2462	-22.61	≤8.00	PASS
11N20SISO	Ant1	2412	-19.83	≤8.00	PASS
		2437	-22.17	≤8.00	PASS
		2462	-19.84	≤8.00	PASS
11N40SISO	Ant1	2422	-25.32	≤8.00	PASS
		2437	-24.37	≤8.00	PASS
		2452	-26.55	≤8.00	PASS

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

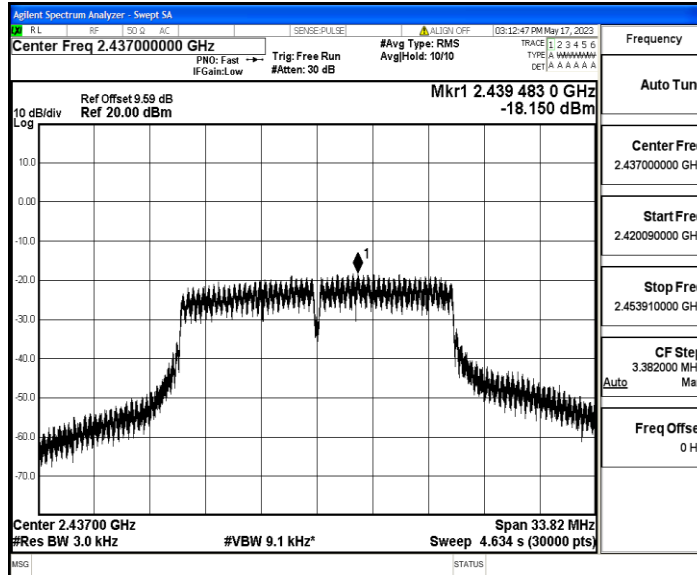
Test Graphs



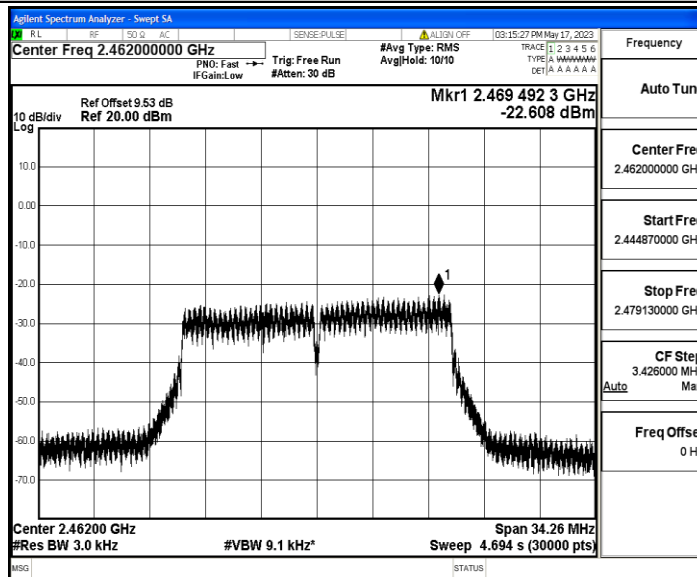
11G_Ant1_2412



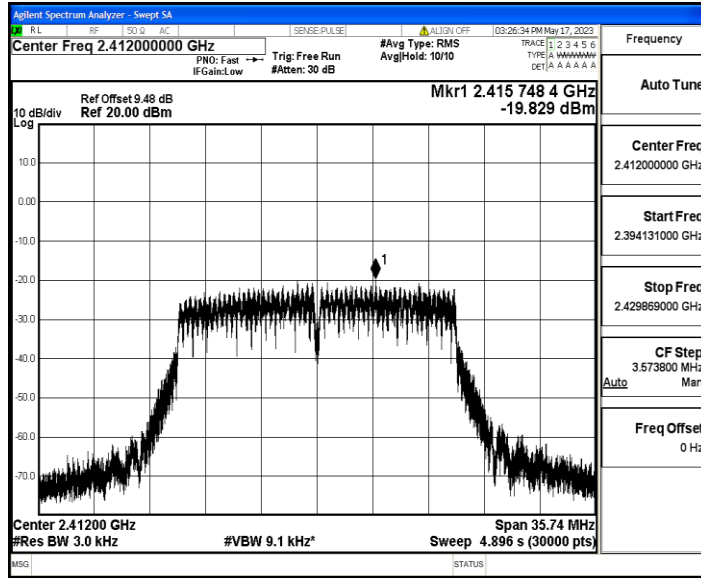
11G_Ant1_2437



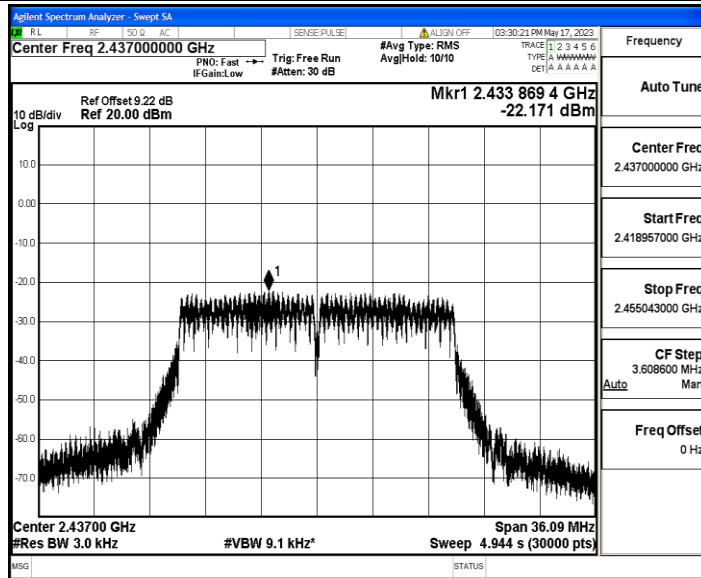
11G_Ant1_2462



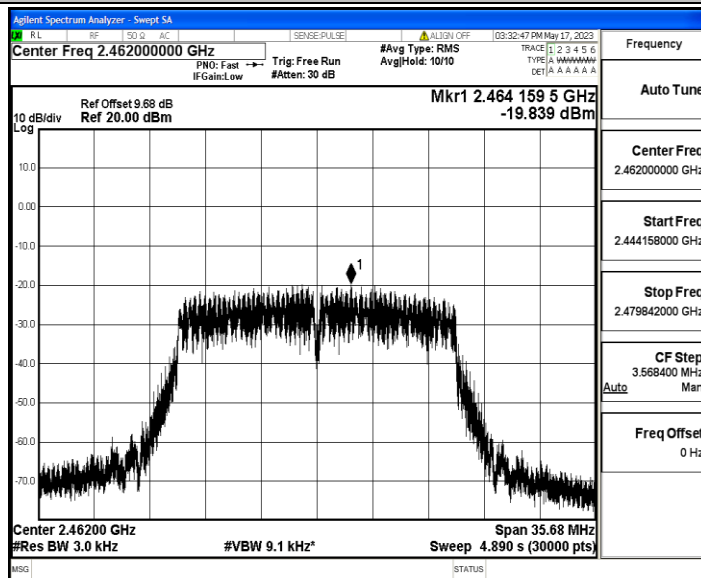
11N20SISO_Ant1_2412



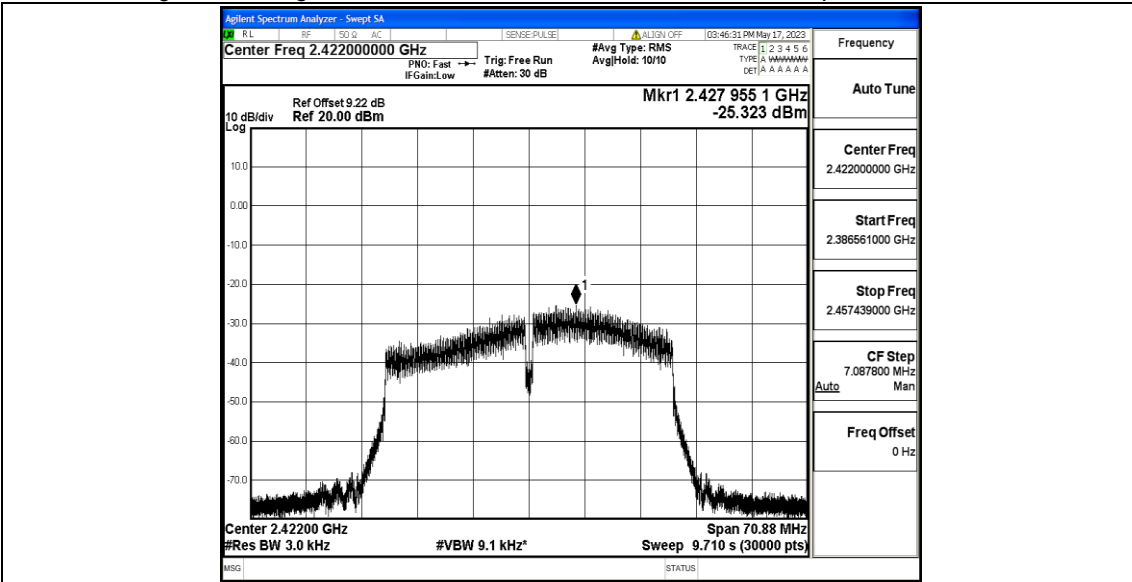
11N20SISO_Ant1_2437



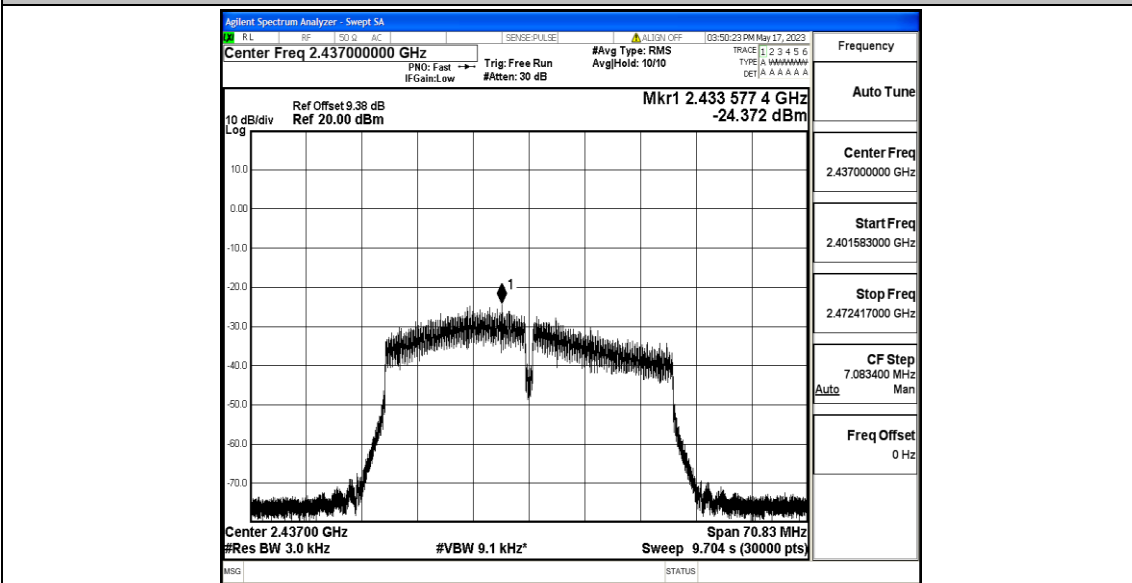
11N20SISO_Ant1_2462



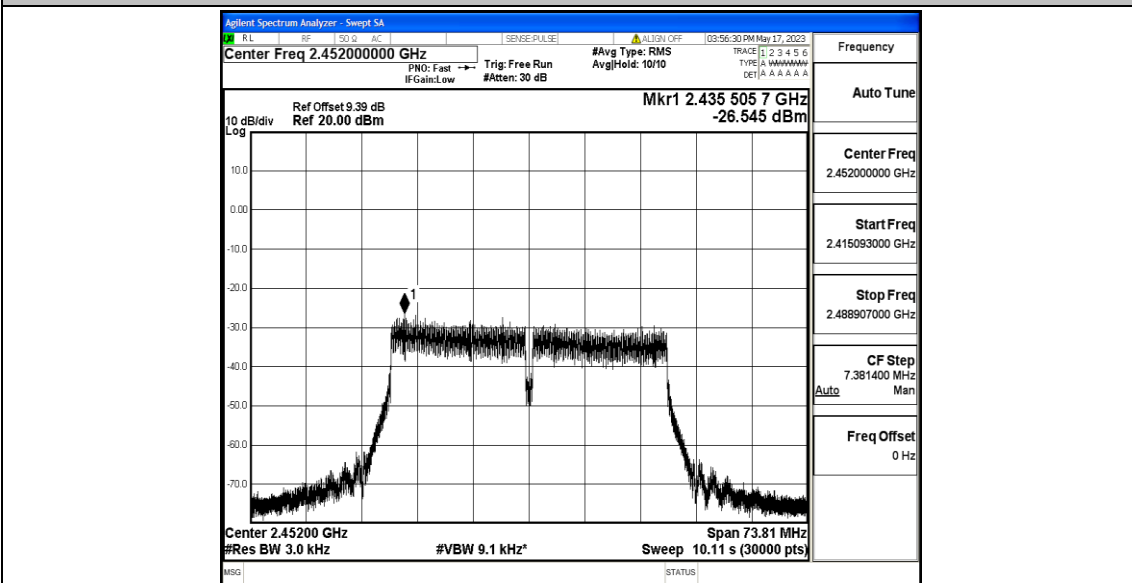
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



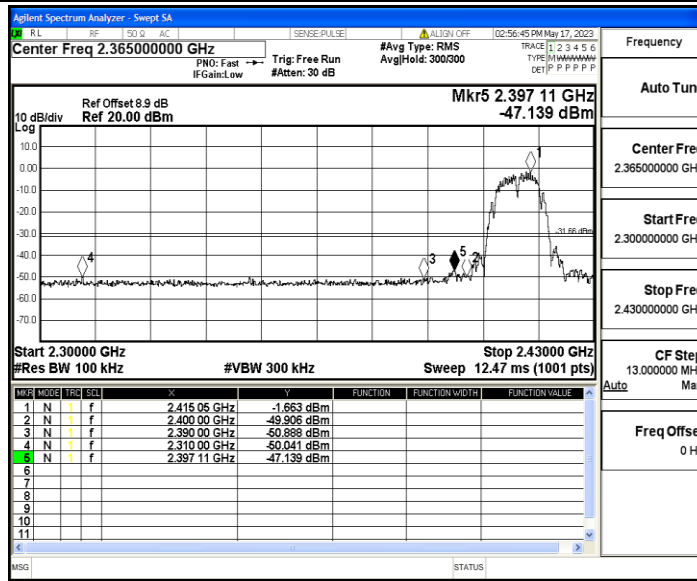
Appendix E: Band edge measurements

Test Result

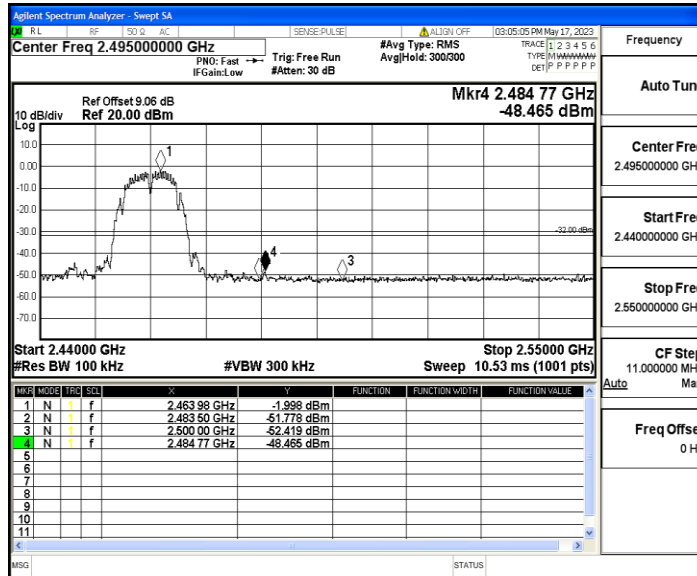
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	-1.66	-47.14	≤-31.66	PASS
		High	2462	-2.00	-48.47	≤-32	PASS
11G	Ant1	Low	2412	-1.04	-31.05	≤-31.04	PASS
		High	2462	-2.28	-36.88	≤-32.28	PASS
11N20SISO	Ant1	Low	2412	-0.02	-40.66	≤-30.02	PASS
		High	2462	-0.47	-49.27	≤-30.47	PASS
11N40SISO	Ant1	Low	2422	-3.88	-44.54	≤-33.88	PASS
		High	2452	-6.92	-49.33	≤-36.92	PASS

Test Graphs

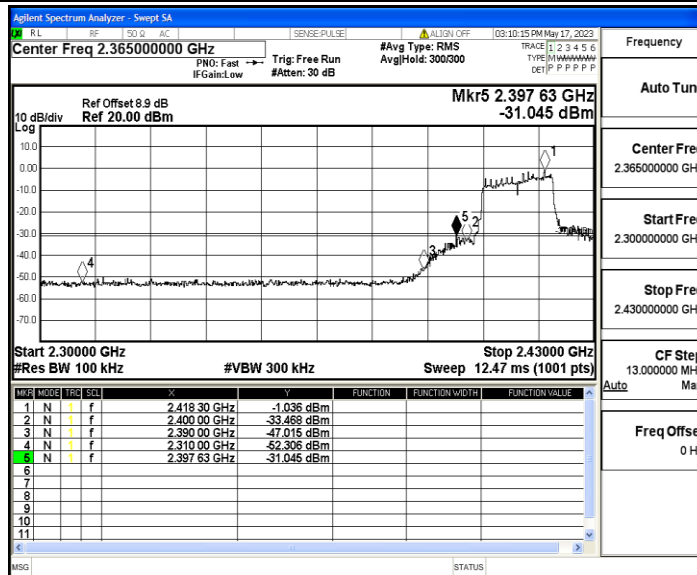
11B_Ant1_Low_2412



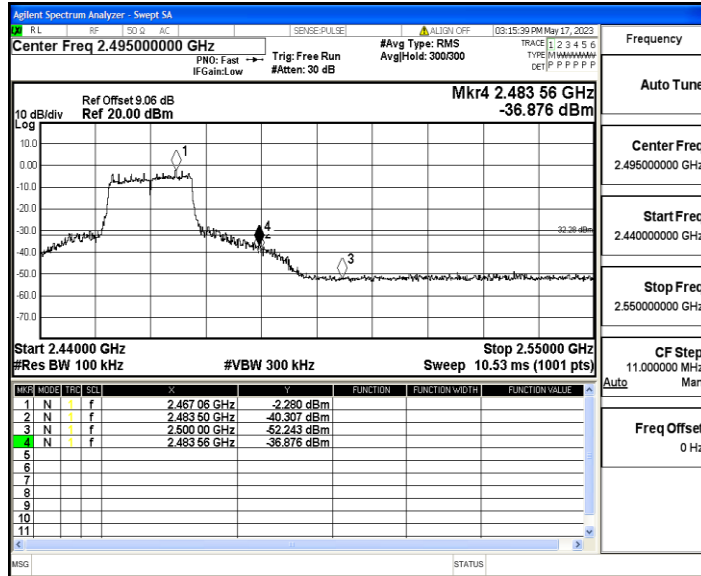
11B_Ant1_High_2462



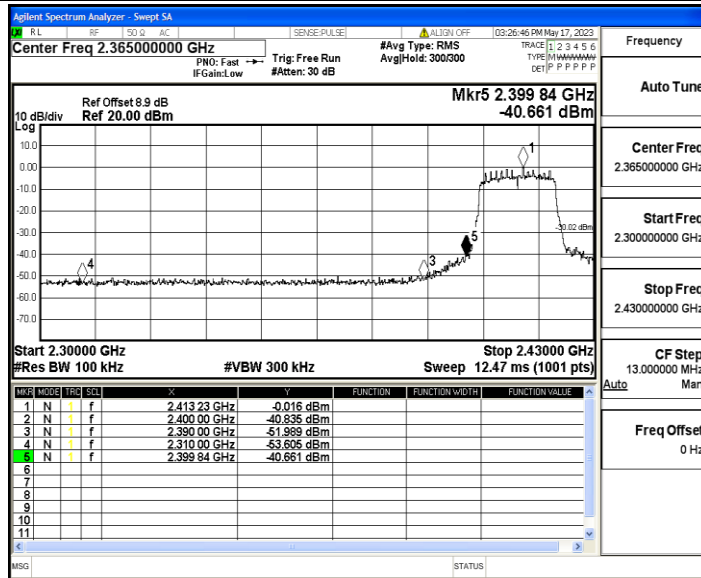
11G_Ant1_Low_2412



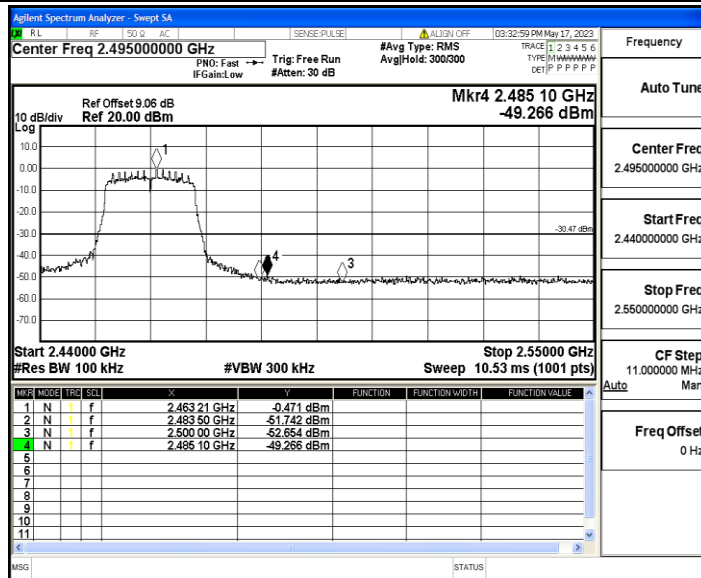
11G_Ant1_High_2462



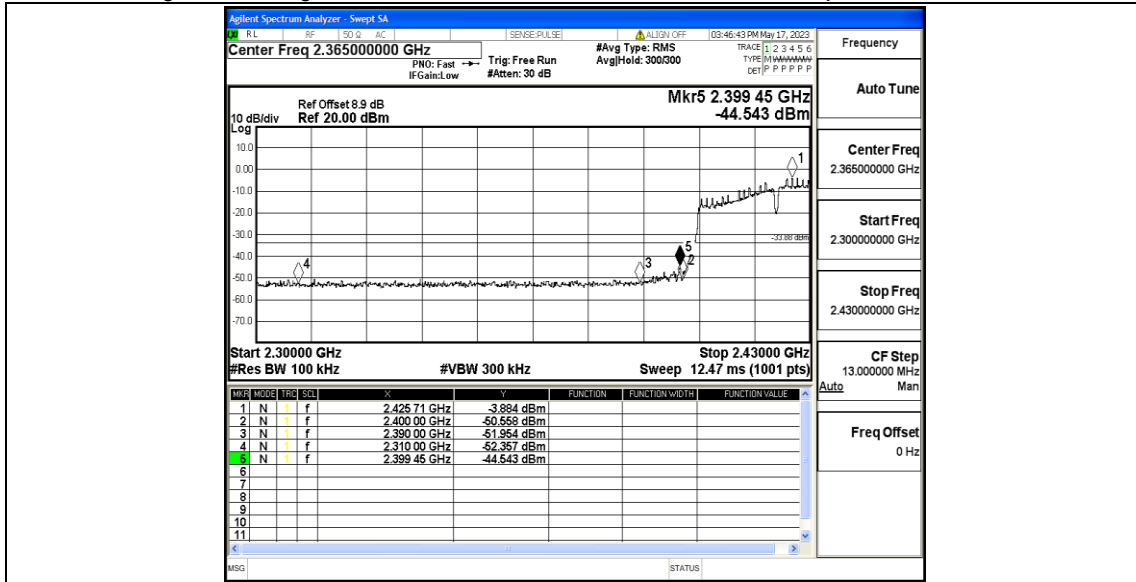
11N20SISO_Ant1_Low_2412



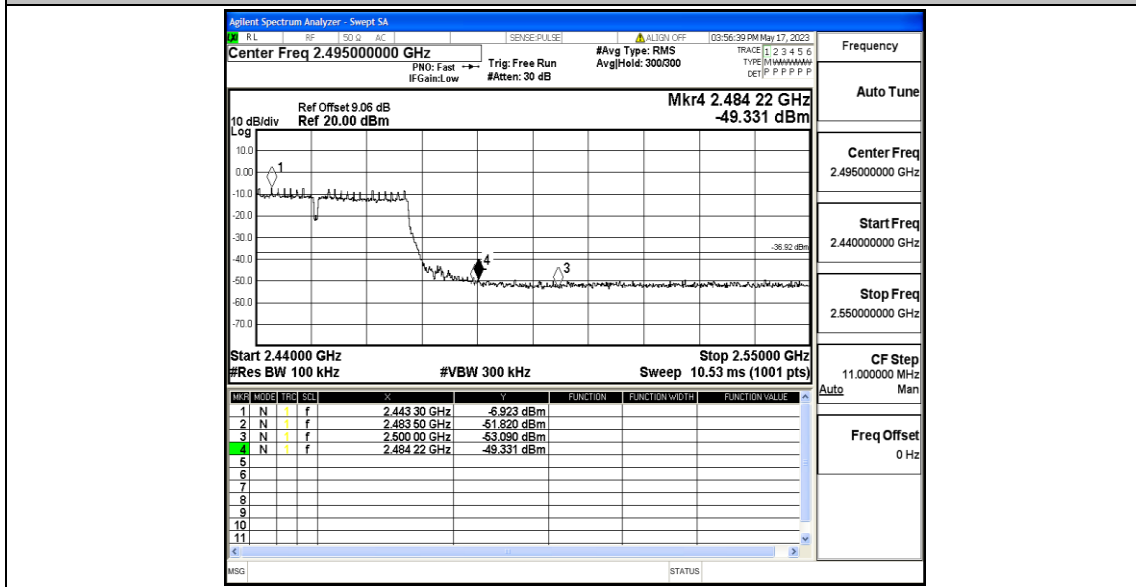
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



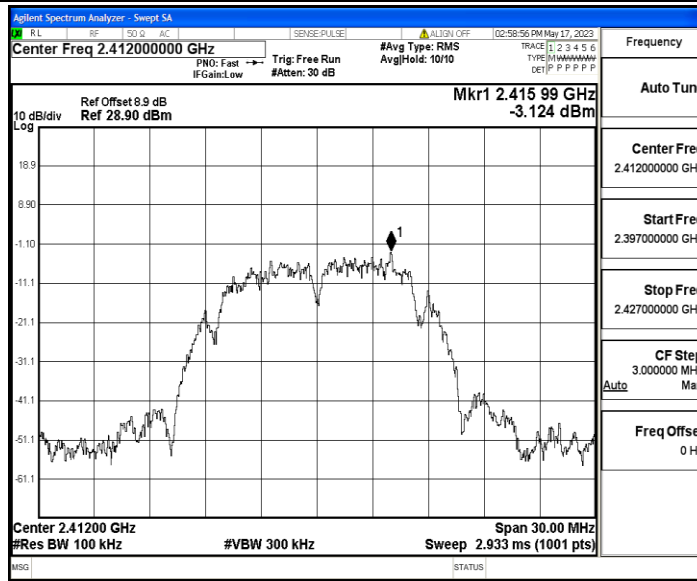
Appendix F: Conducted Spurious Emission

Test Result

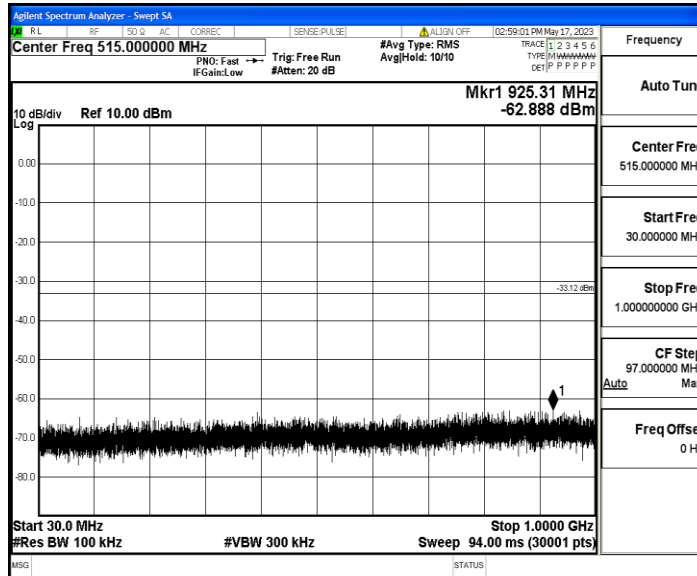
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	-3.12	-3.12	---	PASS
			30~1000	-3.12	-62.89	≤-33.12	PASS
			1000~26500	-3.12	-49.87	≤-33.12	PASS
		2437	Reference	3.53	3.53	---	PASS
			30~1000	3.53	-63.06	≤-26.47	PASS
			1000~26500	3.53	-50.31	≤-26.47	PASS
		2462	Reference	-4.06	-4.06	---	PASS
			30~1000	-4.06	-63.06	≤-34.06	PASS
			1000~26500	-4.06	-50.1	≤-34.06	PASS
11G	Ant1	2412	Reference	-1.67	-1.67	---	PASS
			30~1000	-1.67	-63.05	≤-31.67	PASS
			1000~26500	-1.67	-50.28	≤-31.67	PASS
		2437	Reference	1.53	1.53	---	PASS
			30~1000	1.53	-62.95	≤-28.47	PASS
			1000~26500	1.53	-50.65	≤-28.47	PASS
		2462	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-62.86	≤-33.65	PASS
			1000~26500	-3.65	-49.43	≤-33.65	PASS
11N20SISO	Ant1	2412	Reference	-1.88	-1.88	---	PASS
			30~1000	-1.88	-62.33	≤-31.88	PASS
			1000~26500	-1.88	-50.43	≤-31.88	PASS
		2437	Reference	-3.42	-3.42	---	PASS
			30~1000	-3.42	-62.93	≤-33.42	PASS
			1000~26500	-3.42	-50.31	≤-33.42	PASS
		2462	Reference	-1.79	-1.79	---	PASS
			30~1000	-1.79	-62.99	≤-31.79	PASS
			1000~26500	-1.79	-45.72	≤-31.79	PASS
11N40SISO	Ant1	2422	Reference	-6.44	-6.44	---	PASS
			30~1000	-6.44	-62.39	≤-36.44	PASS
			1000~26500	-6.44	-50.99	≤-36.44	PASS
		2437	Reference	-3.83	-3.83	---	PASS
			30~1000	-3.83	-62.61	≤-33.83	PASS
			1000~26500	-3.83	-49.83	≤-33.83	PASS
		2452	Reference	-5.81	-5.81	---	PASS
			30~1000	-5.81	-61.7	≤-35.81	PASS
			1000~26500	-5.81	-49.56	≤-35.81	PASS

Test Graphs

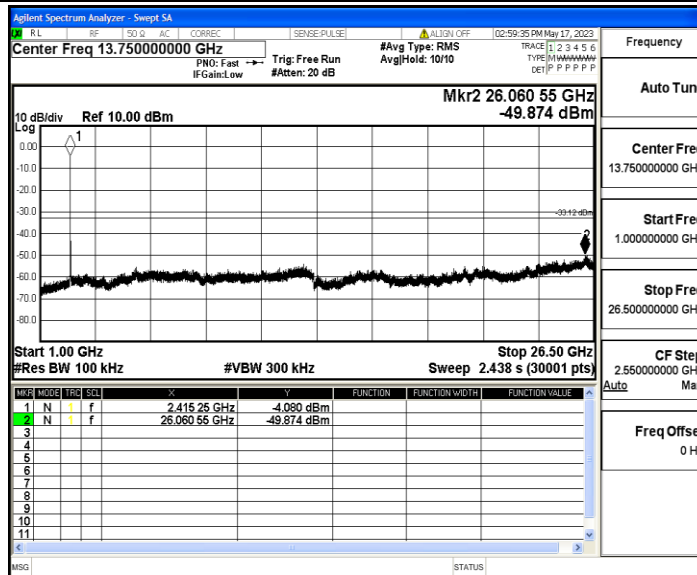
11B_Ant1_2412_0~Reference



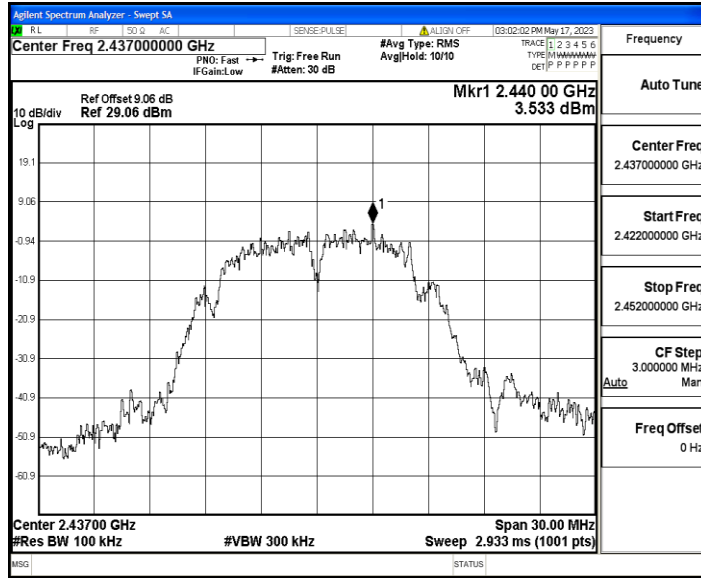
11B_Ant1_2412_30~1000



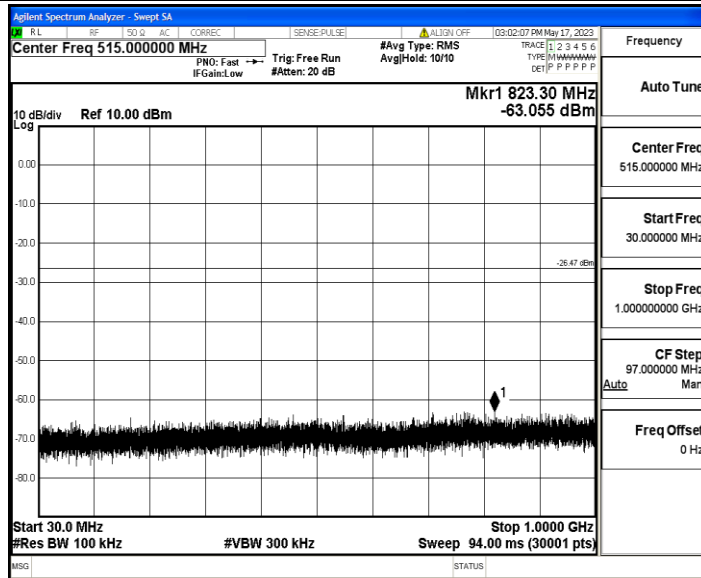
11B_Ant1_2412_1000~26500



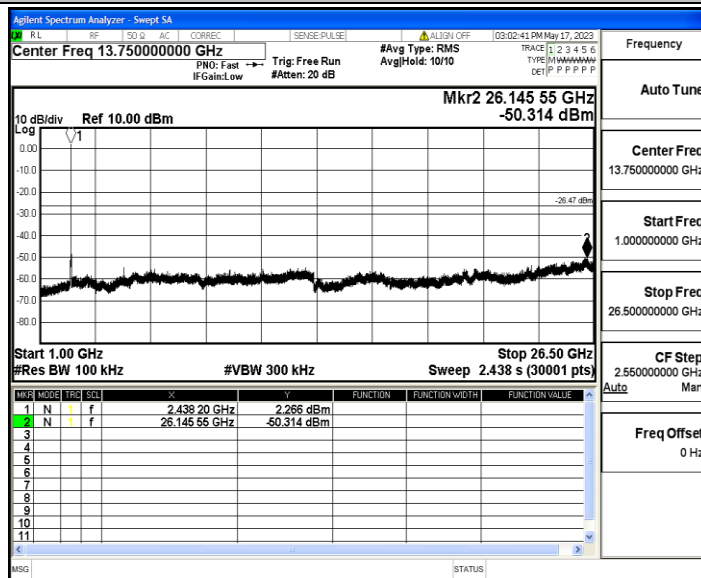
11B_Ant1_2437_0~Reference



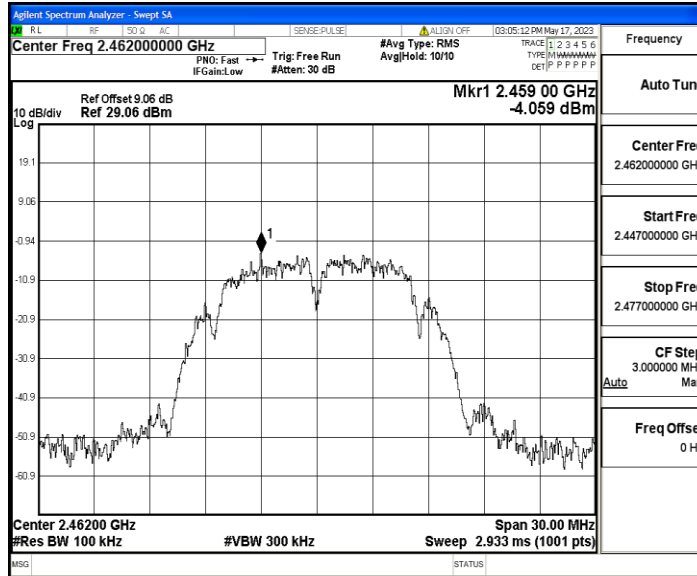
11B_Ant1_2437_30~1000



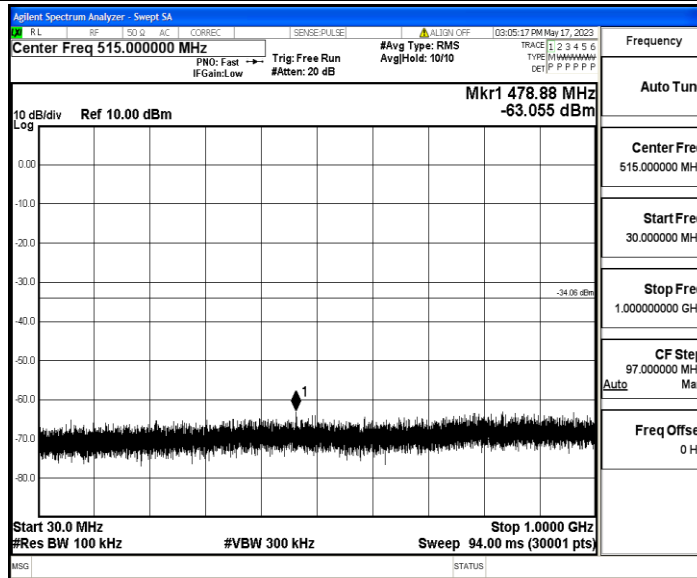
11B_Ant1_2437_1000~26500



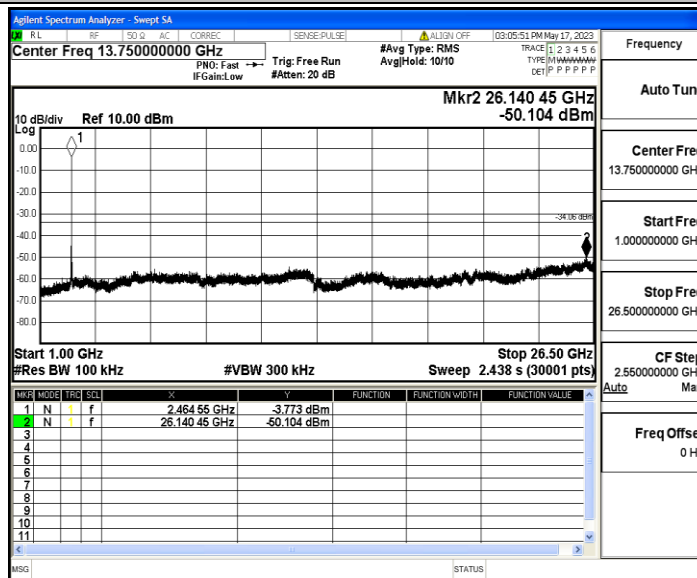
11B_Ant1_2462_0~Reference



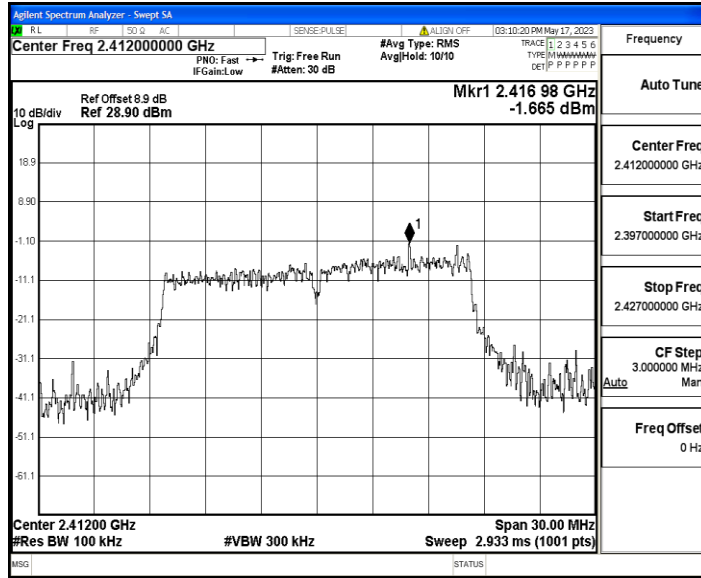
11B_Ant1_2462_30~1000



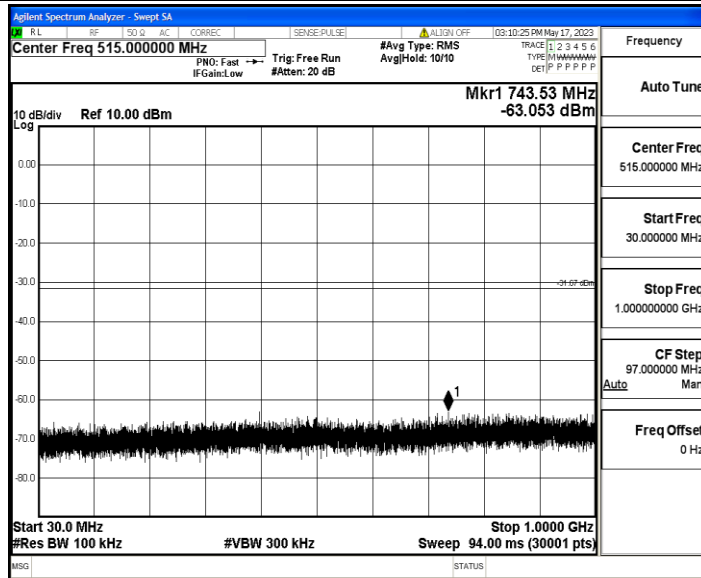
11B_Ant1_2462_1000~26500



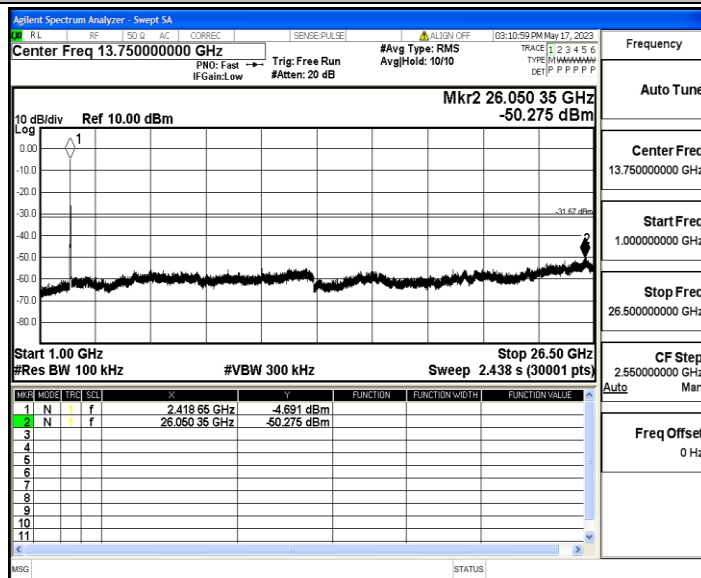
11G_Ant1_2412_0~Reference



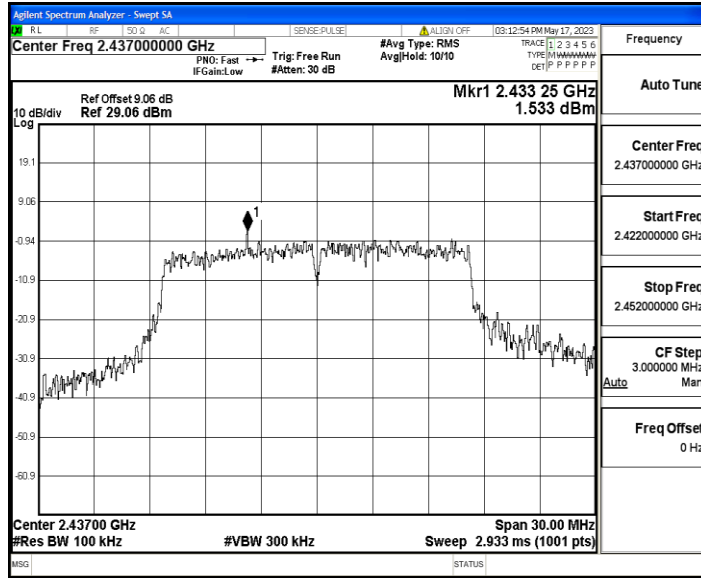
11G_Ant1_2412_30~1000



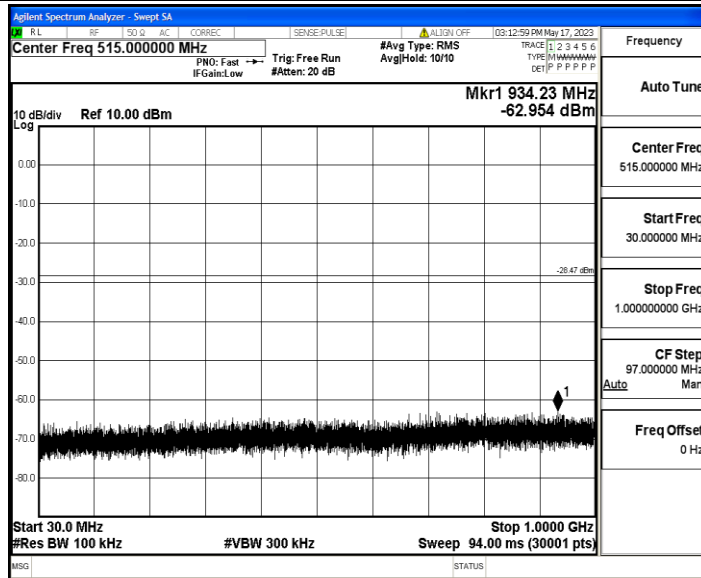
11G_Ant1_2412_1000~26500



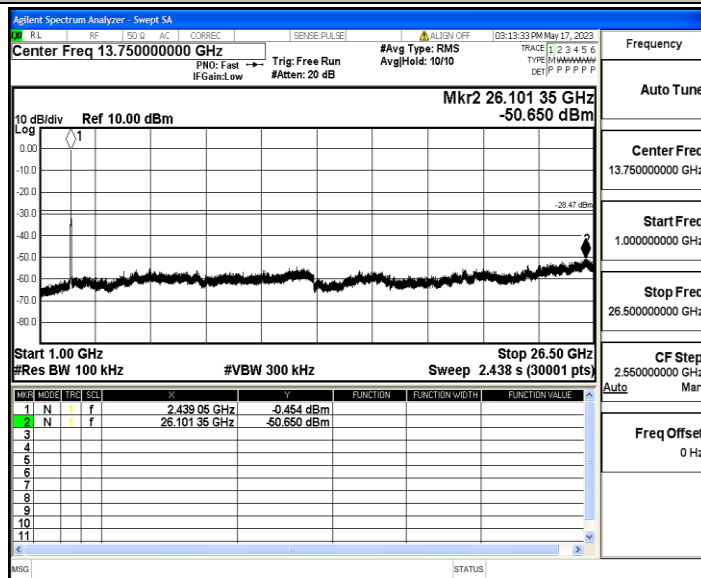
11G_Ant1_2437_0~Reference



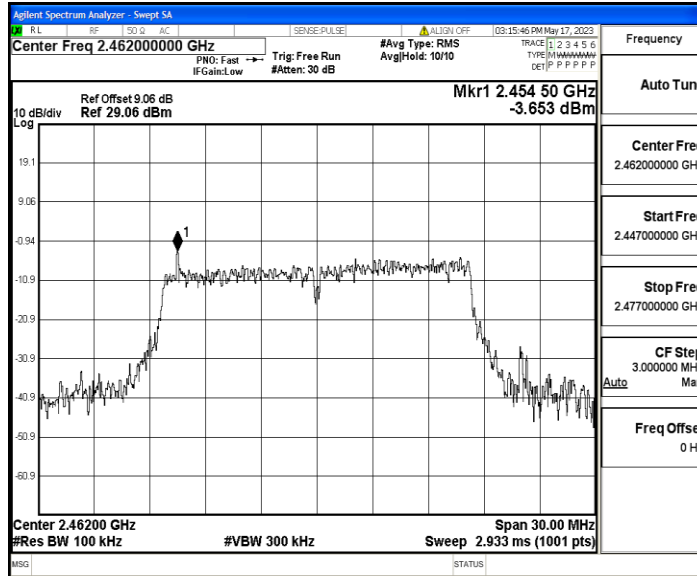
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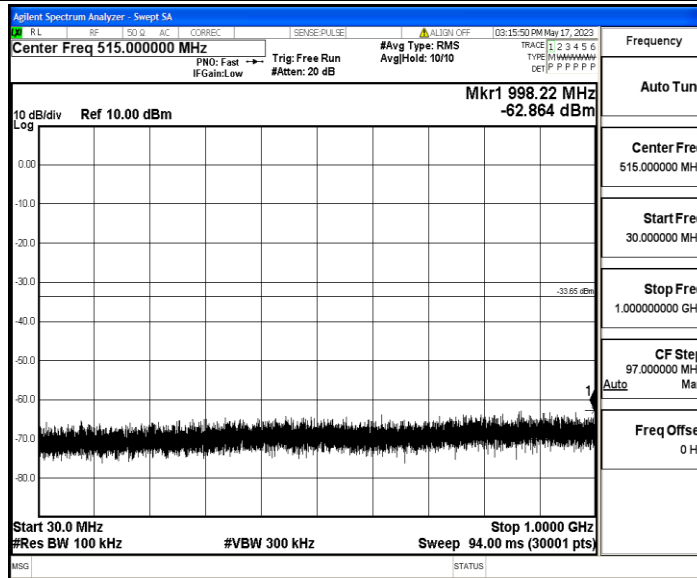
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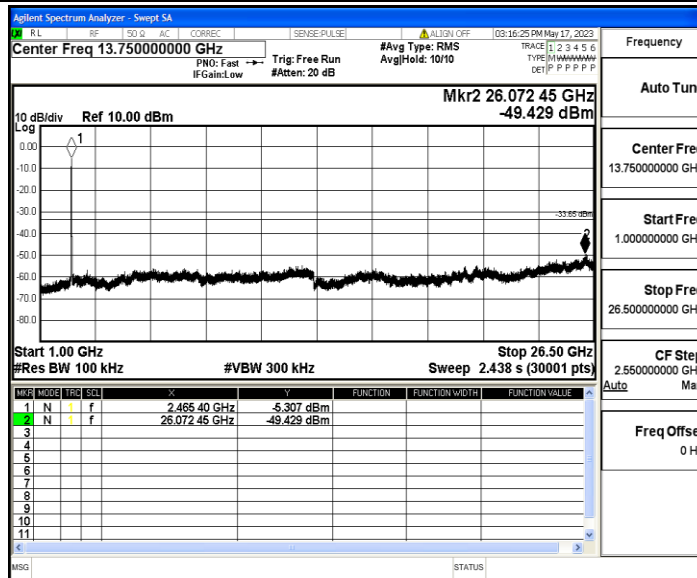
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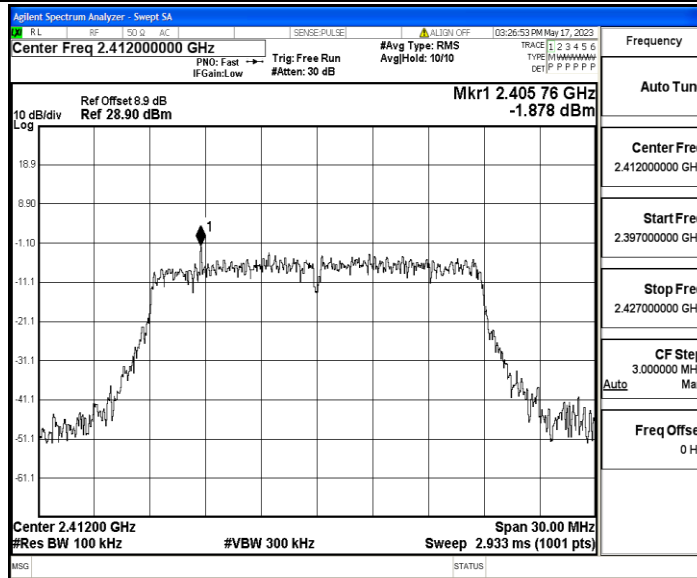
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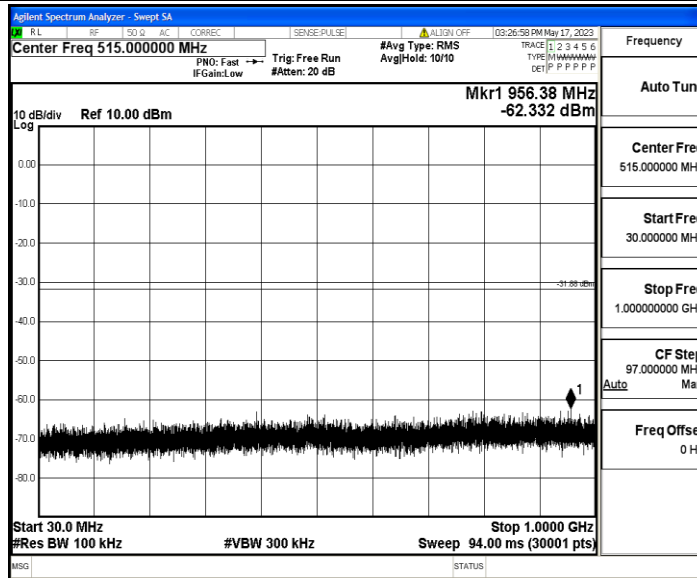
11G_Ant1_2462_1000~26500



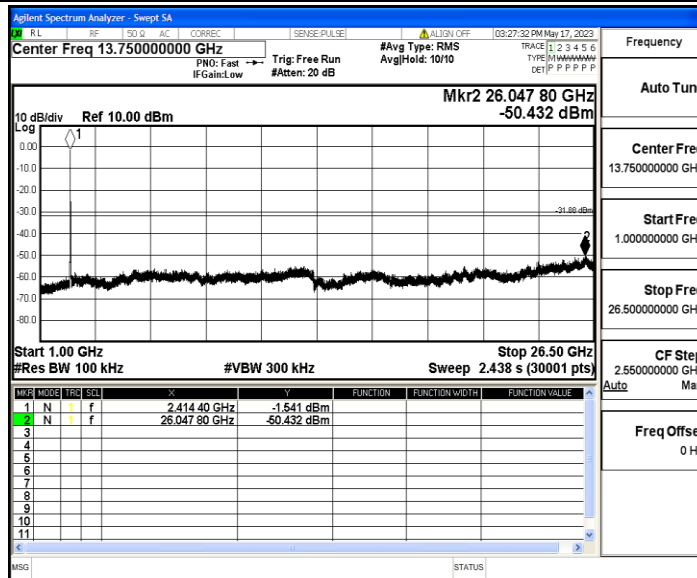
11N20SISO_Ant1_2412_0~Reference



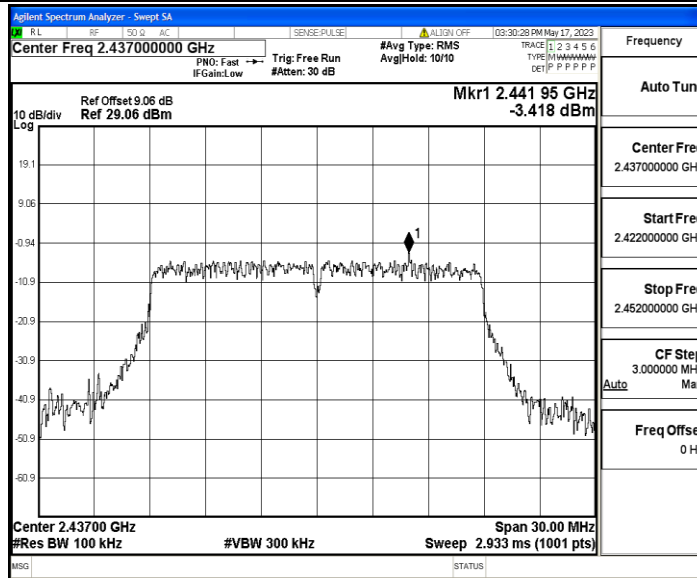
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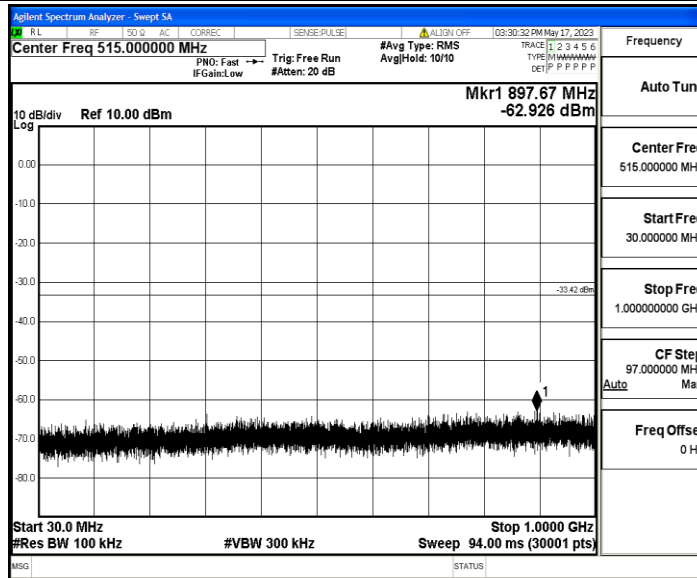
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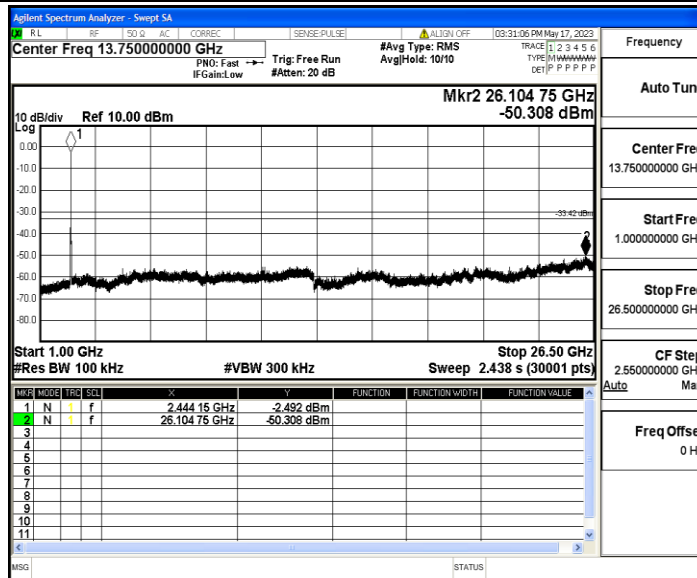
11N20SISO_Ant1_2437_0~Reference



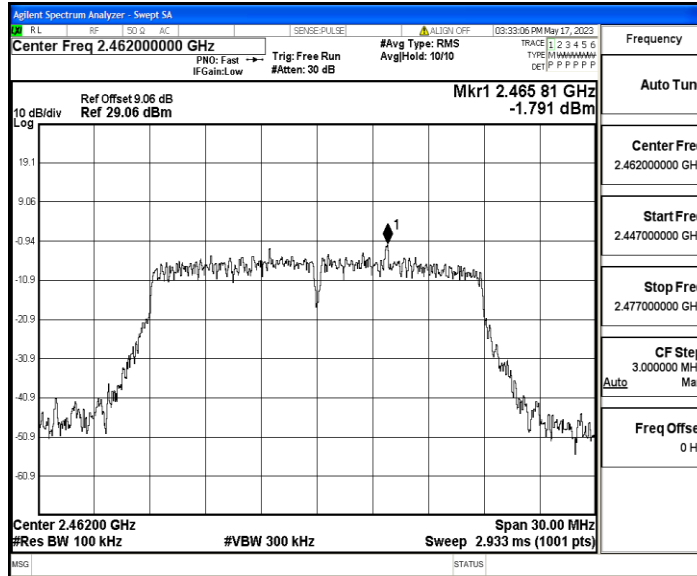
11N20SISO_Ant1_2437_30~1000



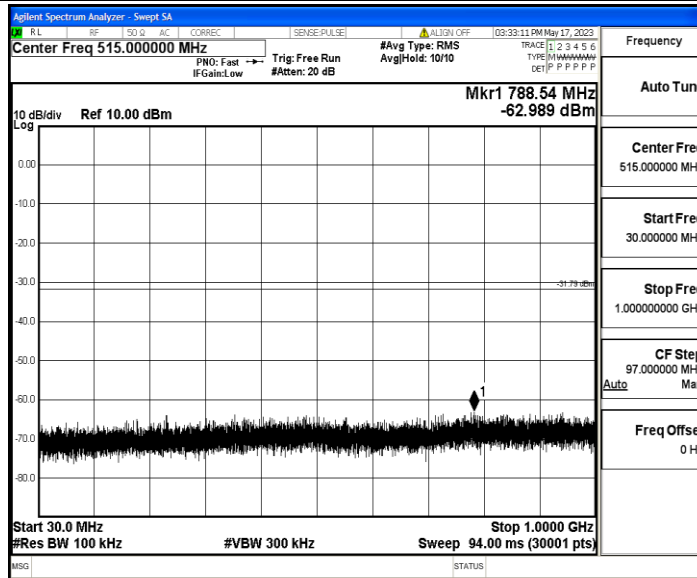
11N20SISO_Ant1_2437_1000~26500



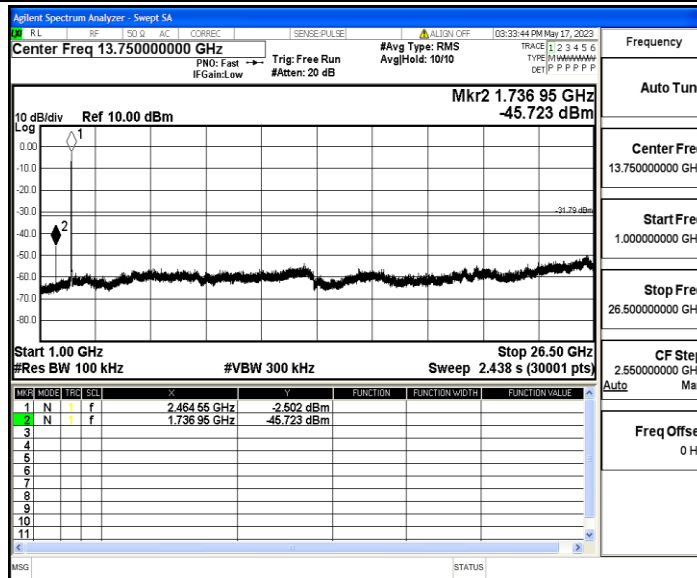
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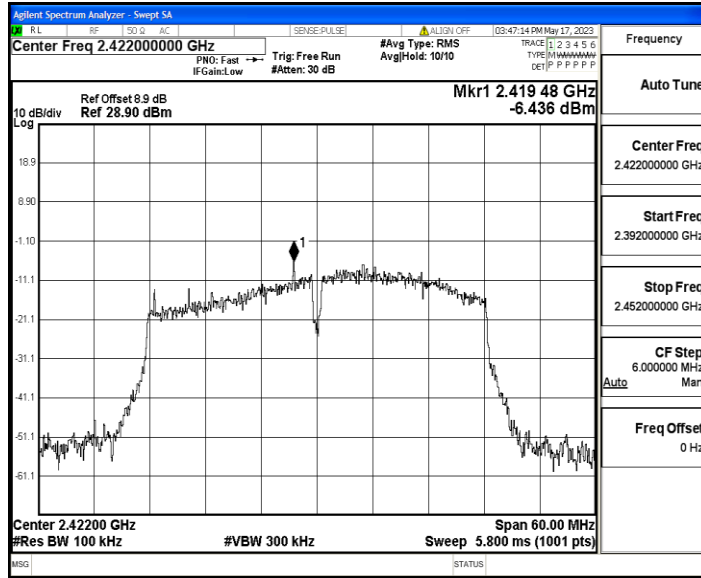
11N20SISO_Ant1_2462_30~1000



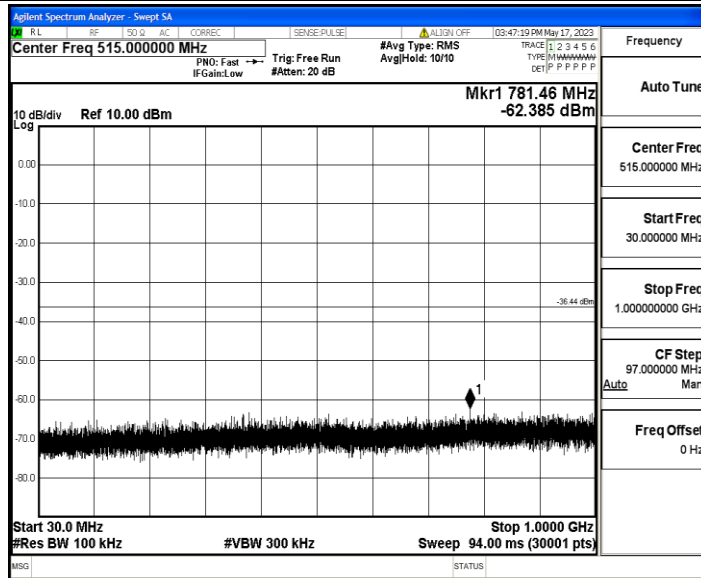
11N20SISO_Ant1_2462_1000~26500



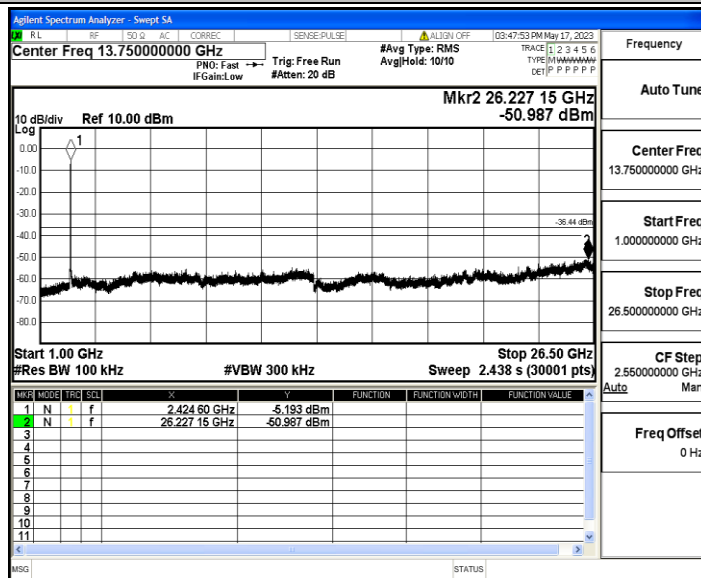
11N40SISO_Ant1_2422_0~Reference



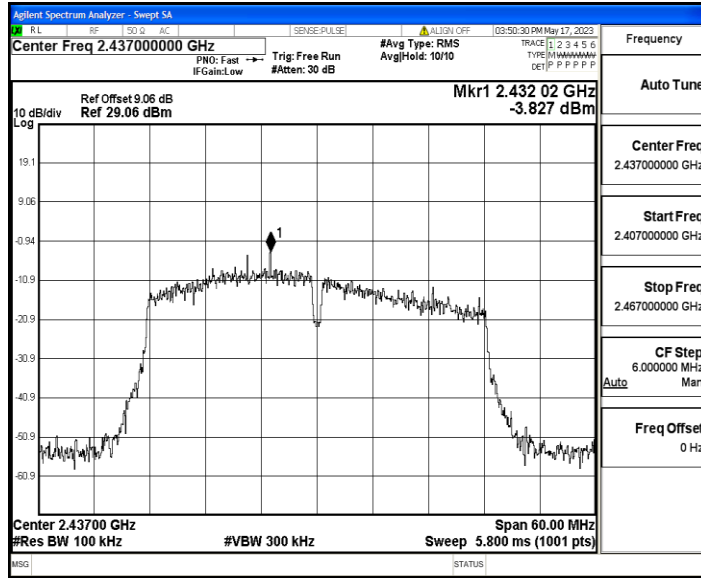
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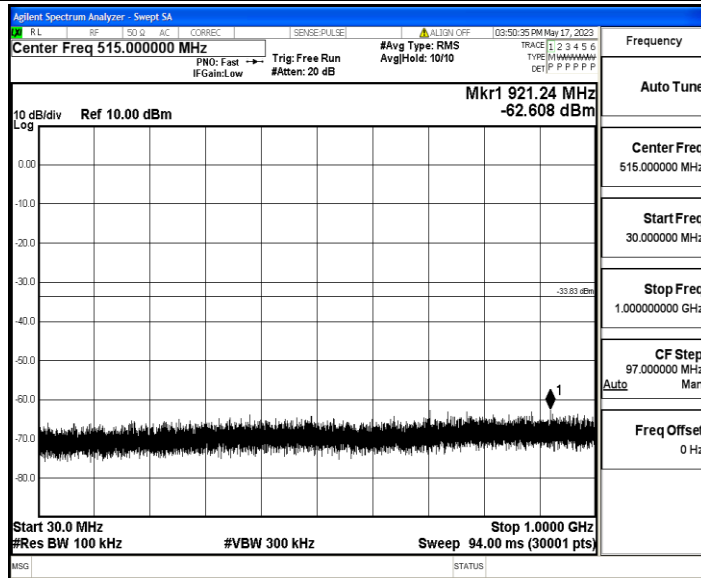
11N40SISO_Ant1_2422_1000~26500



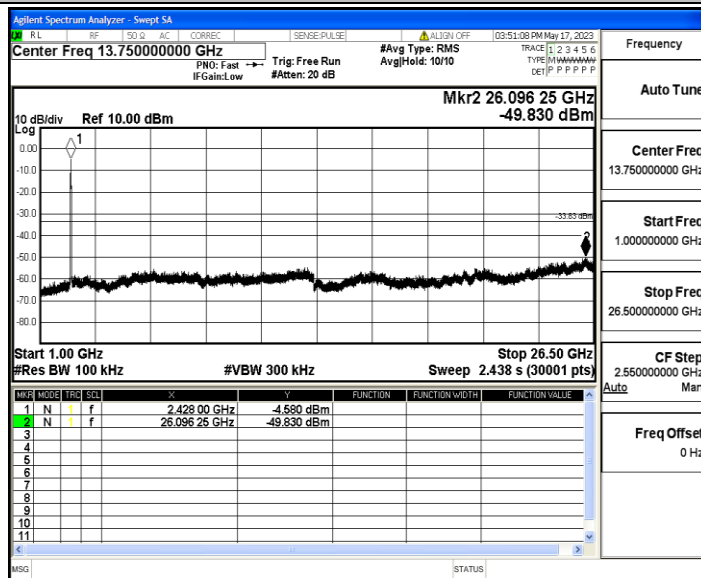
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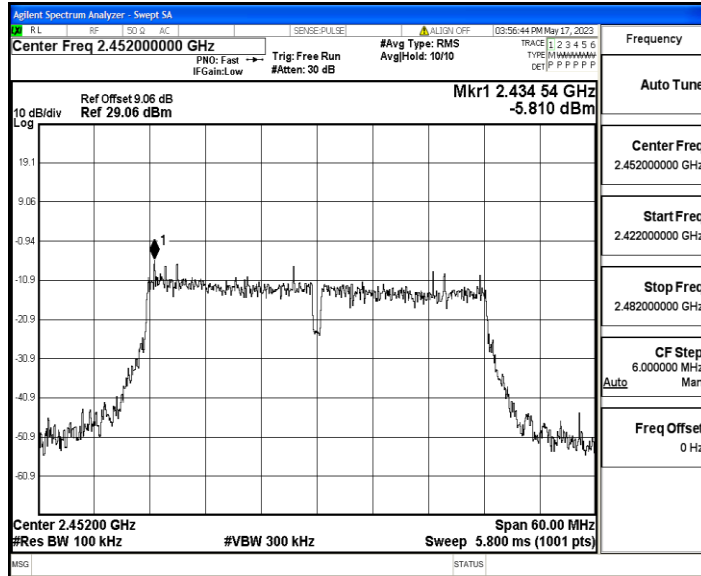
11N40SISO_Ant1_2437_30~1000



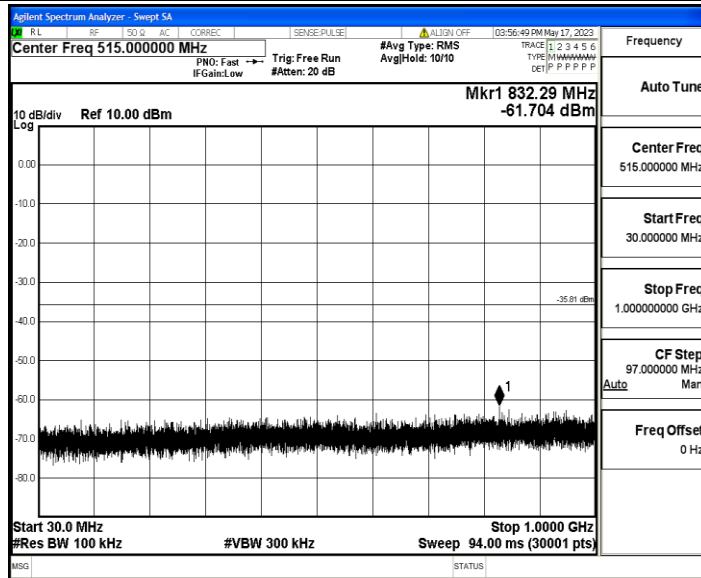
11N40SISO_Ant1_2437_1000~26500



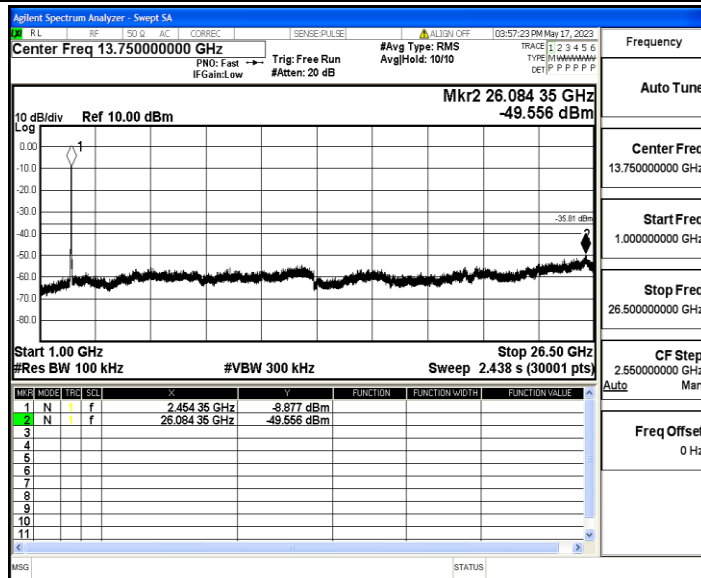
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

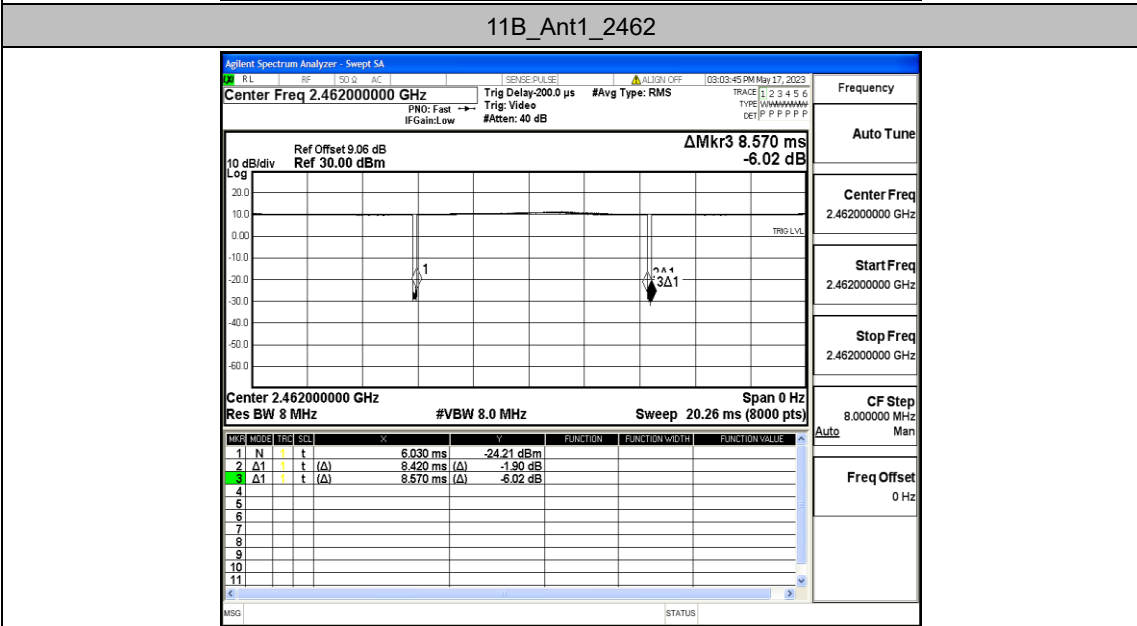
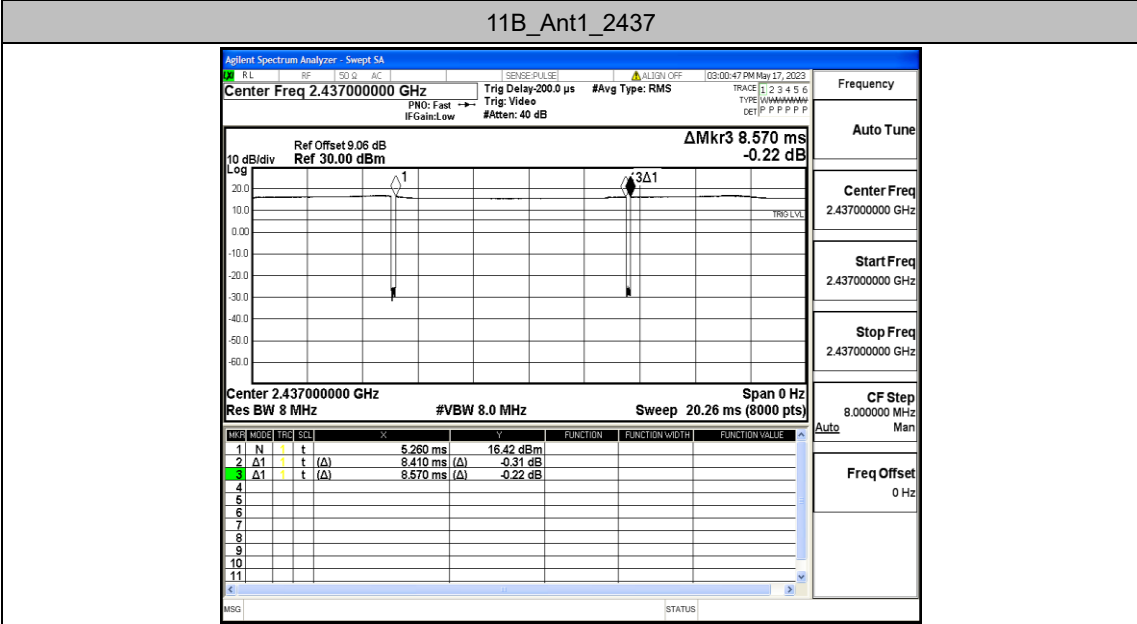
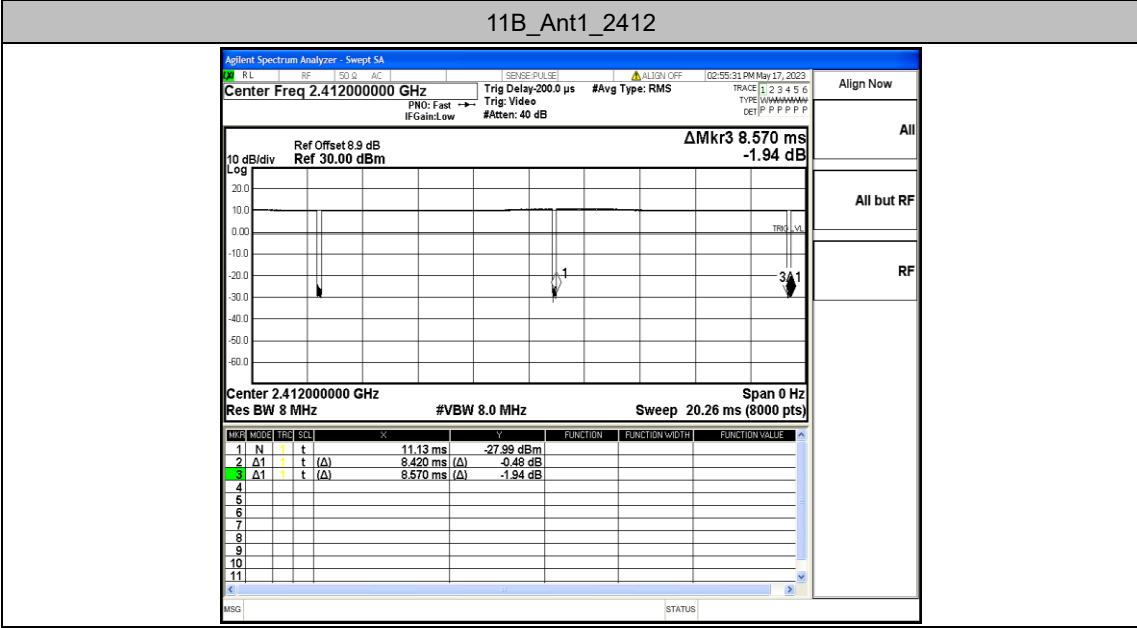


Appendix G: Duty Cycle

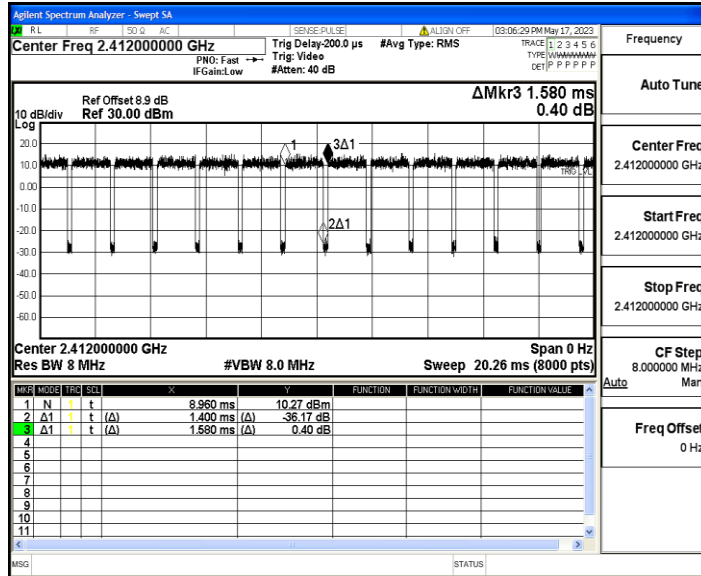
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
11B	Ant1	2412	8.42	8.57	98.25	0.12
		2437	8.41	8.57	98.13	0.12
		2462	8.42	8.57	98.25	0.12
11G	Ant1	2412	1.40	1.58	88.61	0.71
		2437	1.40	1.58	88.61	0.71
		2462	1.40	1.56	89.74	0.71
11N20SISO	Ant1	2412	1.18	1.35	87.41	0.85
		2437	1.30	1.35	96.30	0.77
		2462	0.46	0.53	86.79	2.17
11N40SISO	Ant1	2422	0.65	0.70	92.86	1.54
		2437	0.65	0.70	92.86	1.54
		2452	0.64	0.69	92.75	1.56

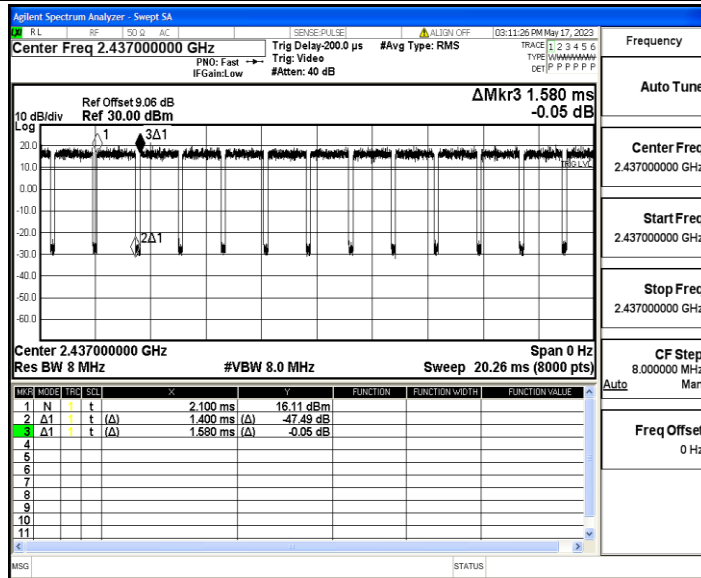
Test Graphs



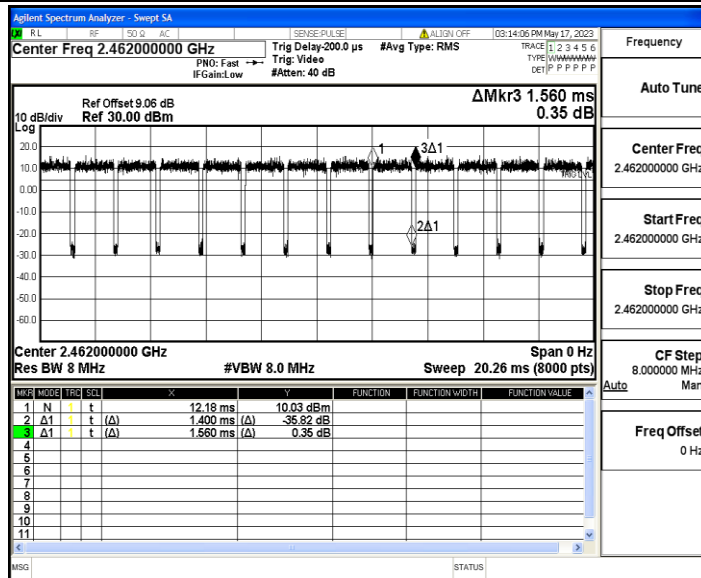
11G_Ant1_2412



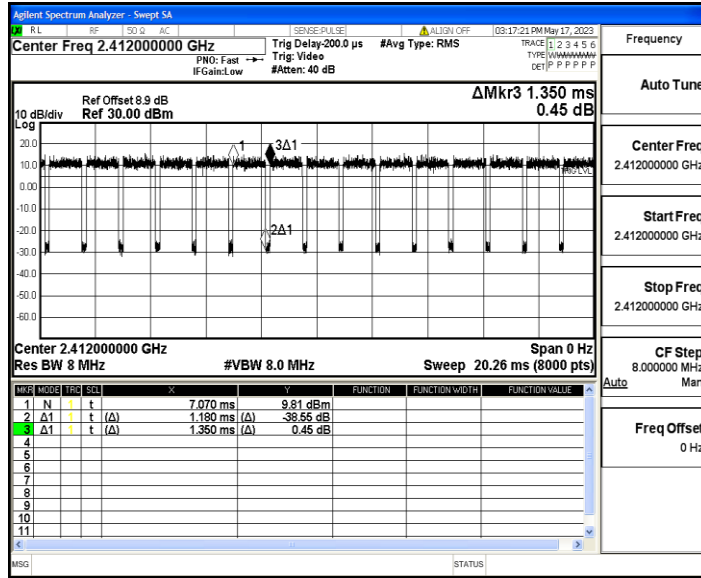
11G_Ant1_2437



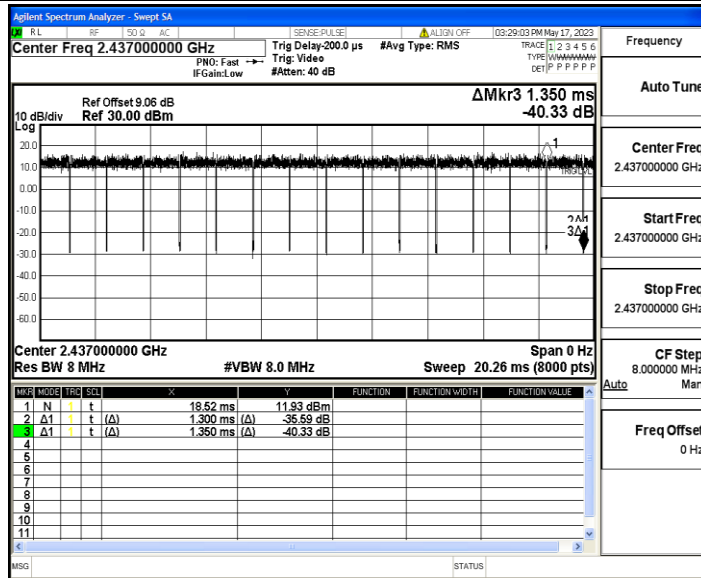
11G_Ant1_2462



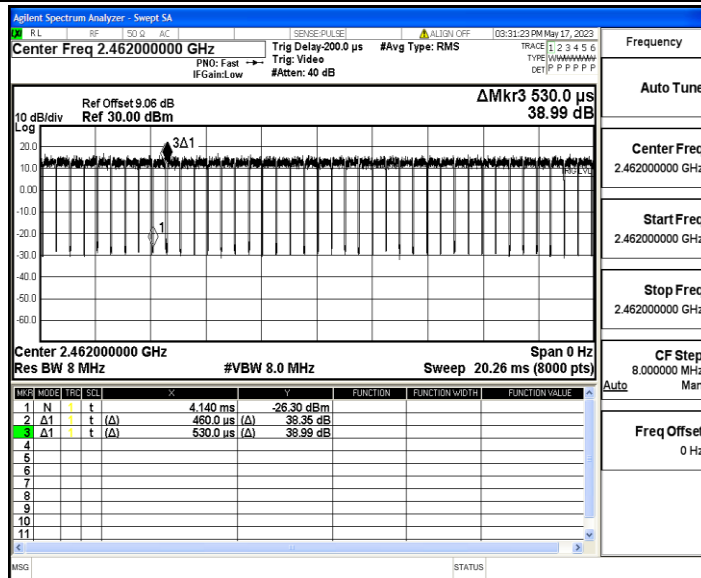
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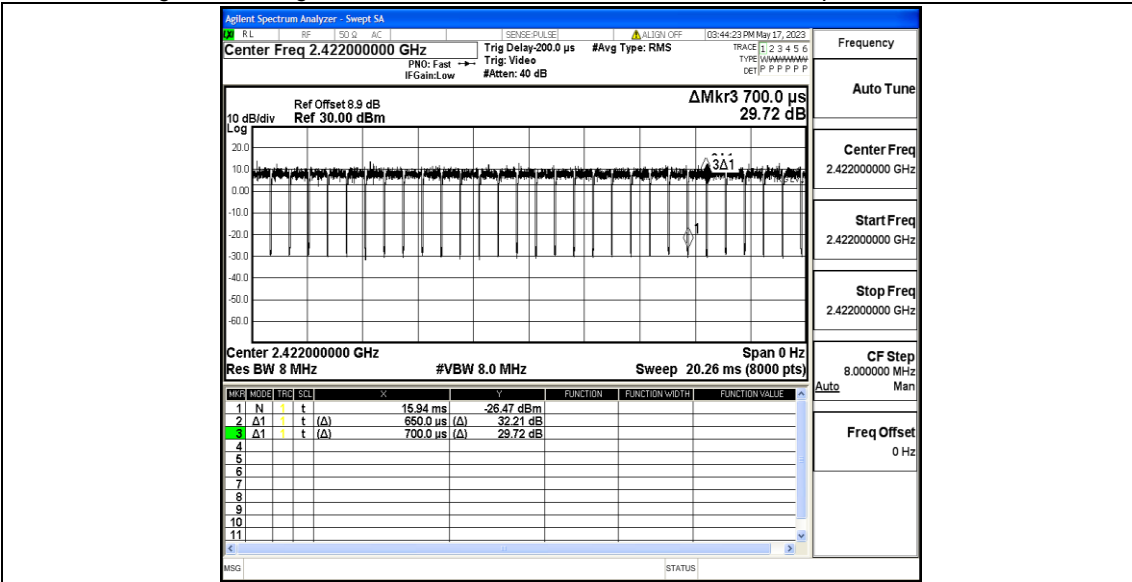
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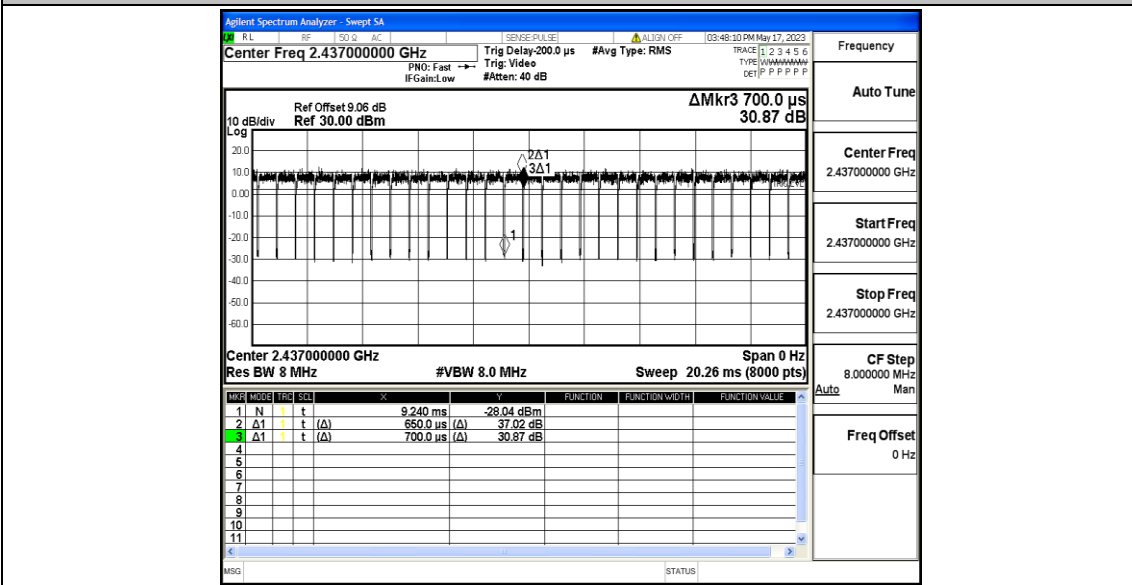
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

