

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

Product Name: Dockstream App Monitoring Automatic Pet Water Fountain

Trade Mark: PETLIBRO

Test Model: PLWF105

FCC ID: 2A3DE-PLWF105

Environmental Conditions

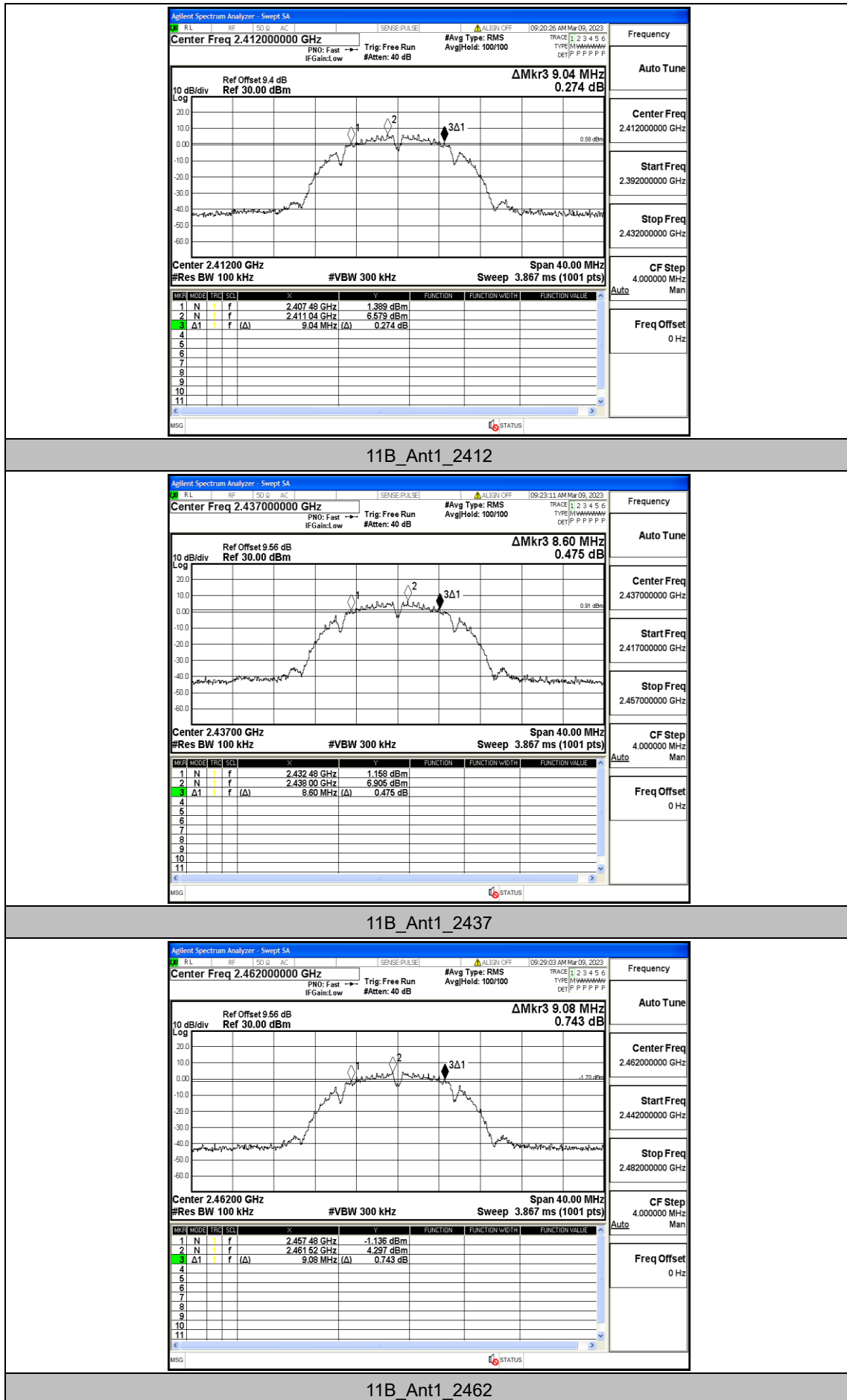
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

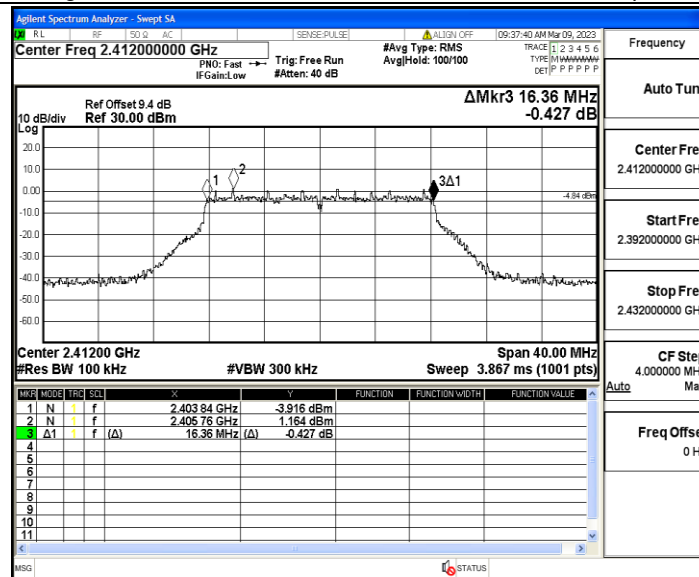
Appendix A: DTS Bandwidth

Test Result

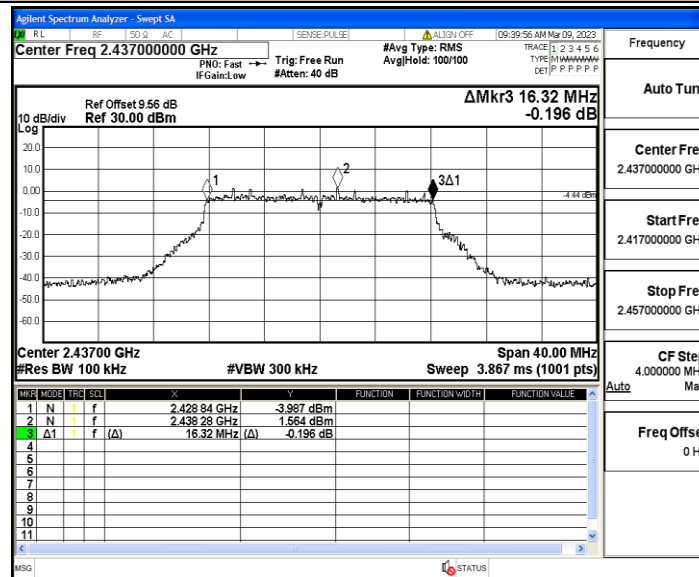
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	0.5	PASS
		2437	8.600	2432.480	2441.080	0.5	PASS
		2462	9.080	2457.480	2466.560	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.640	2403.200	2420.840	0.5	PASS
		2437	17.160	2428.240	2445.400	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	32.560	2405.760	2438.320	0.5	PASS
		2437	30.320	2421.080	2451.400	0.5	PASS
		2452	34.160	2434.480	2468.640	0.5	PASS

Test Graphs

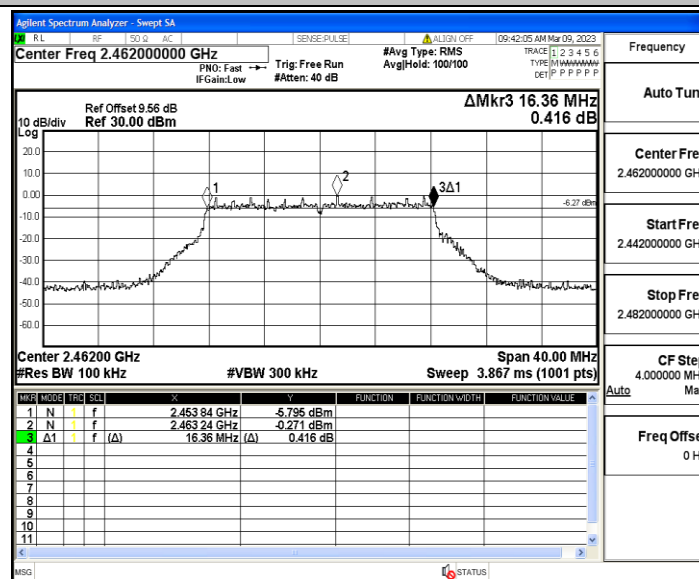




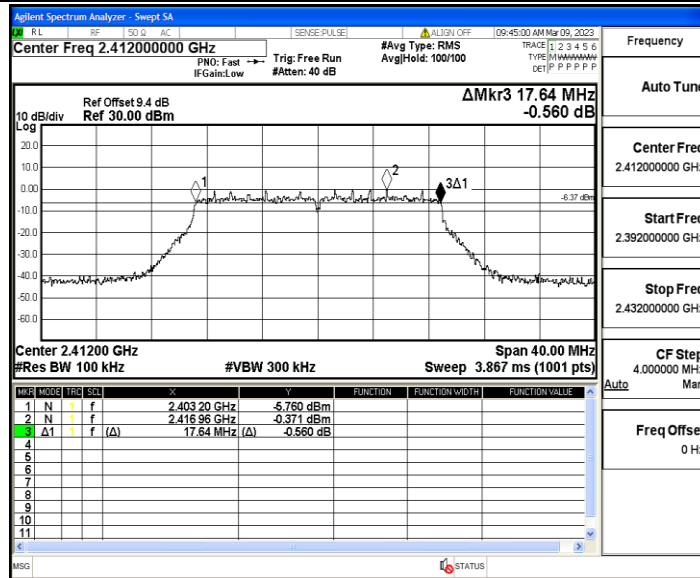
11G_Ant1_2412



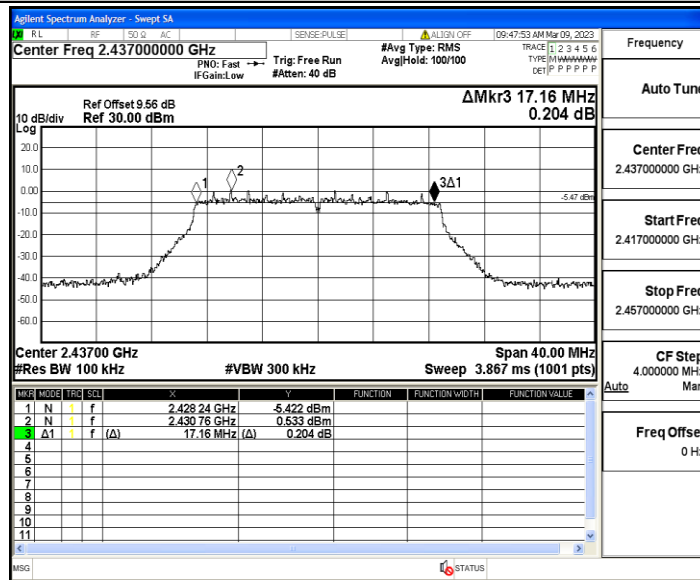
11G_Ant1_2437



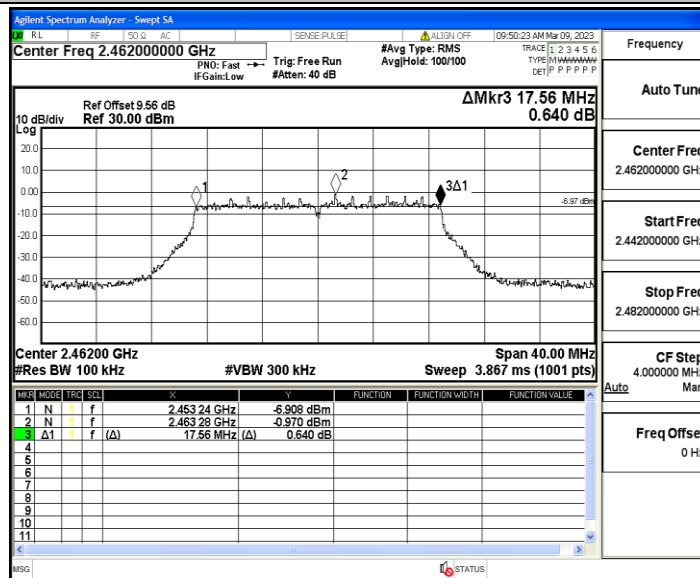
11G_Ant1_2462



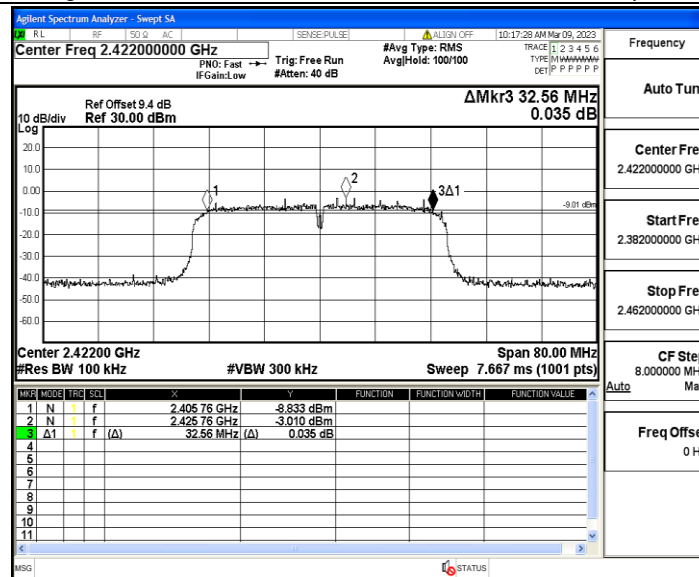
11N20SISO_Ant1_2412



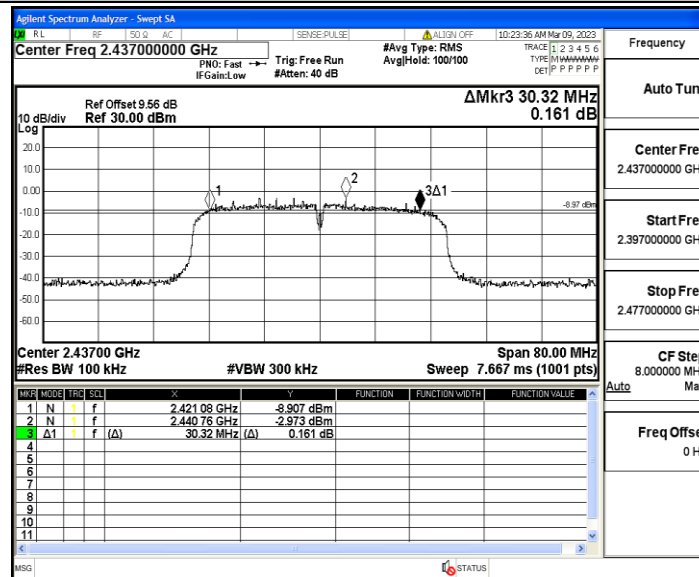
11N20SISO_Ant1_2437



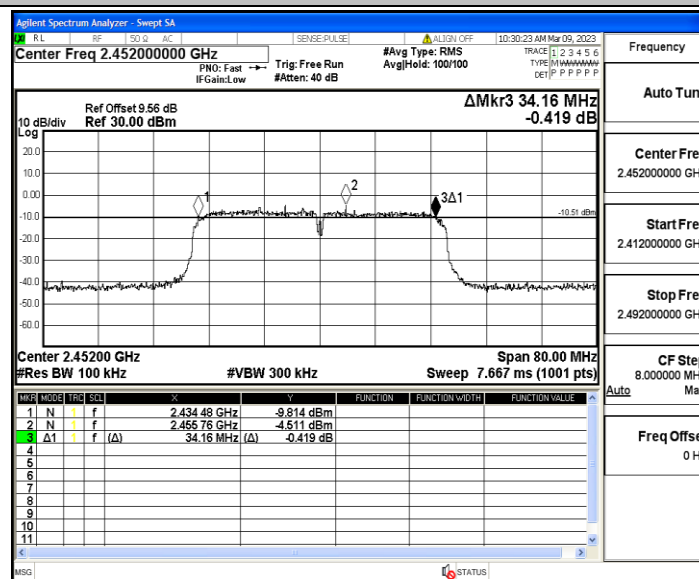
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



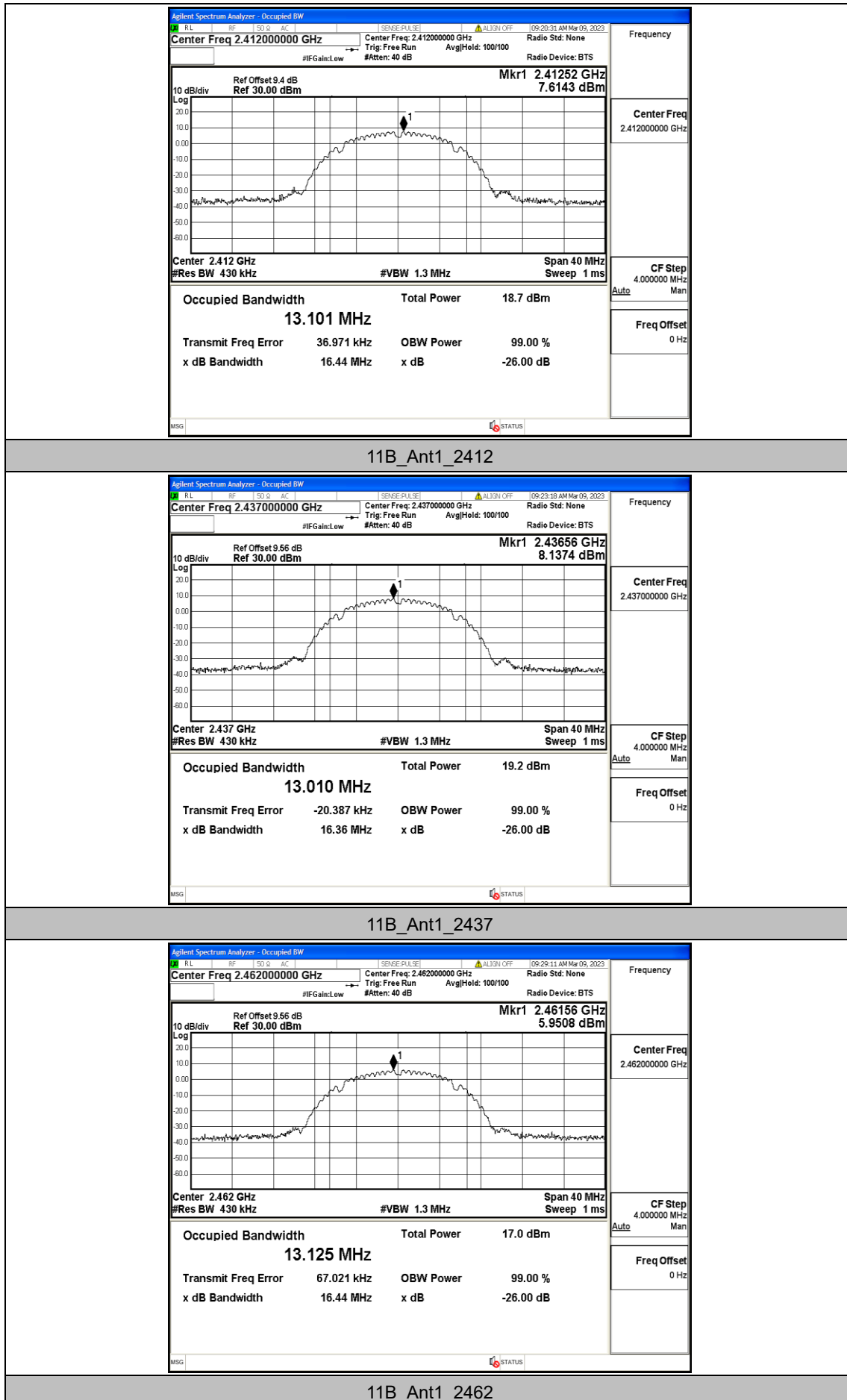
11N40SISO_Ant1_2452

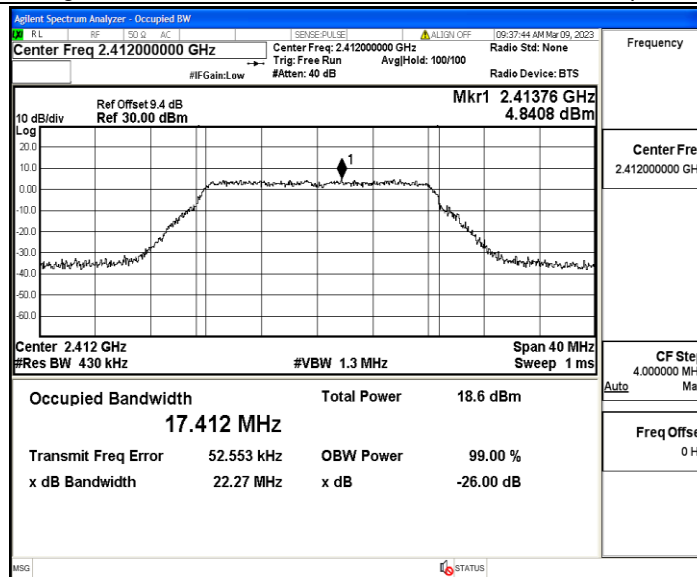
Appendix B: Occupied Channel Bandwidth

Test Result

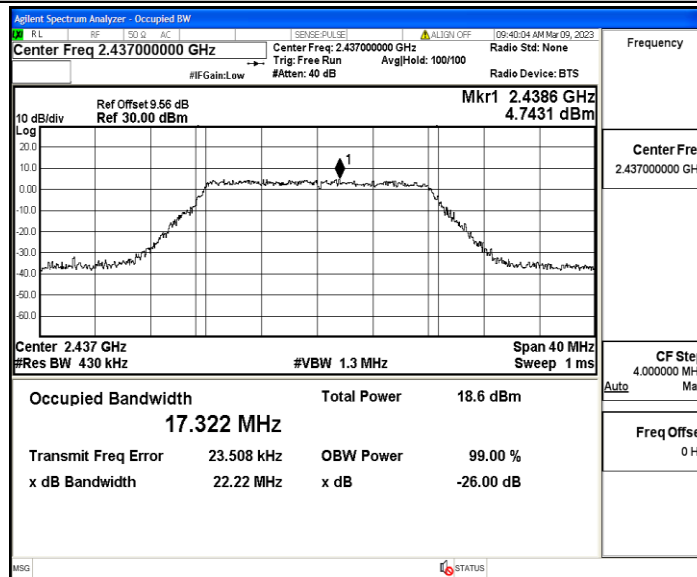
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.101	2405.4865	2418.5875	---	---
		2437	13.010	2430.4746	2443.4846	---	---
		2462	13.125	2455.5045	2468.6295	---	---
11G	Ant1	2412	17.412	2403.3466	2420.7586	---	---
		2437	17.322	2428.3625	2445.6845	---	---
		2462	17.516	2453.3737	2470.8897	---	---
11N20SISO	Ant1	2412	18.409	2402.8308	2421.2398	---	---
		2437	18.370	2427.7886	2446.1586	---	---
		2462	18.437	2452.8625	2471.2995	---	---
11N40SISO	Ant1	2422	35.182	2404.4808	2439.6628	---	---
		2437	35.058	2419.4484	2454.5064	---	---
		2452	35.397	2434.3462	2469.7432	---	---

Test Graphs

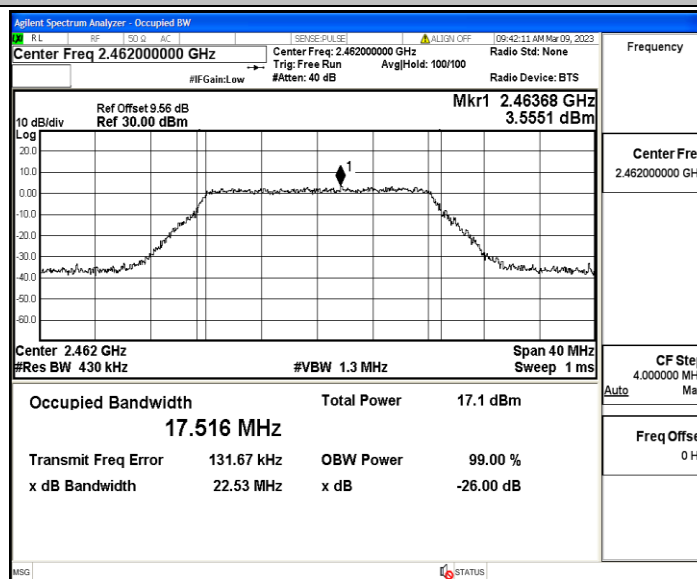




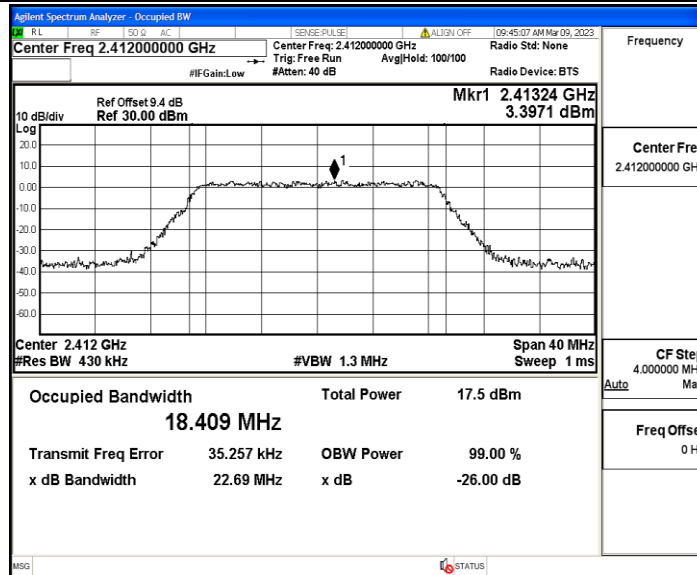
11G_Ant1_2412



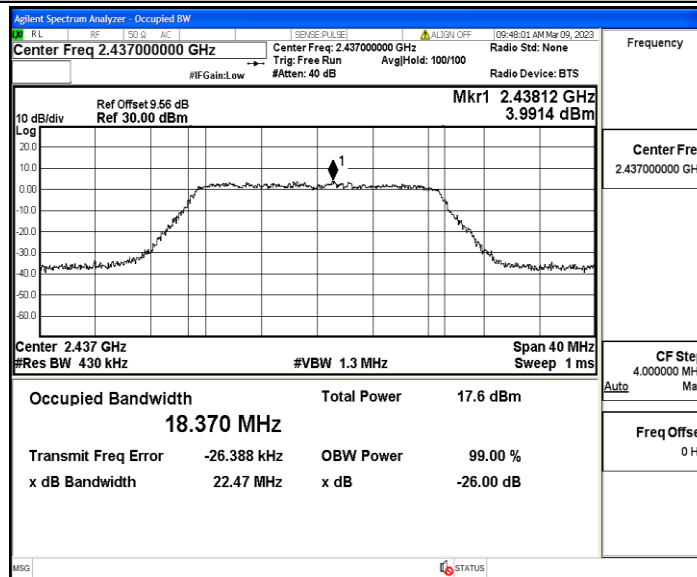
11G_Ant1_2437



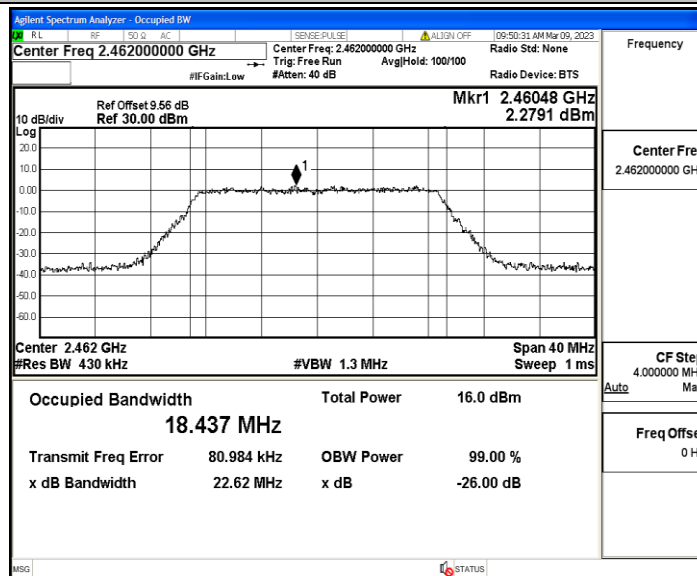
11G_Ant1_2462



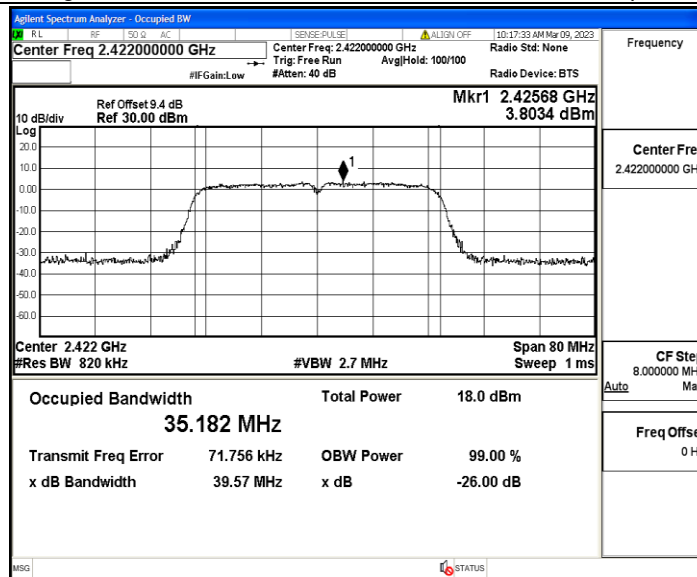
11N20SISO_Ant1_2412



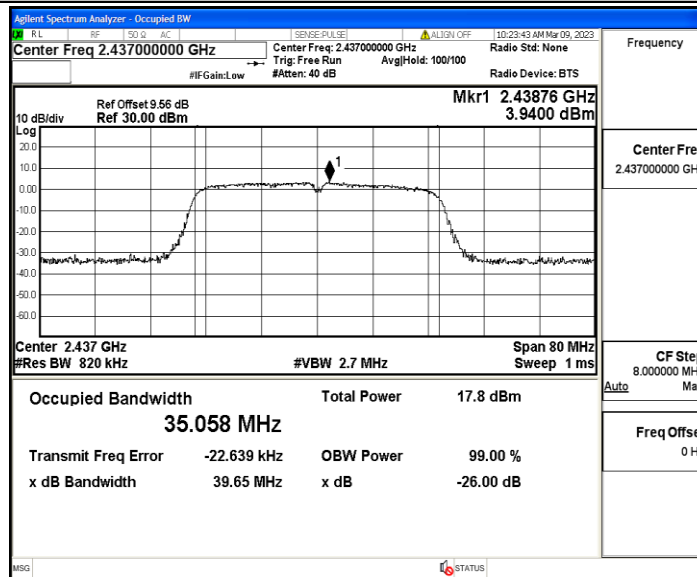
11N20SISO_Ant1_2437



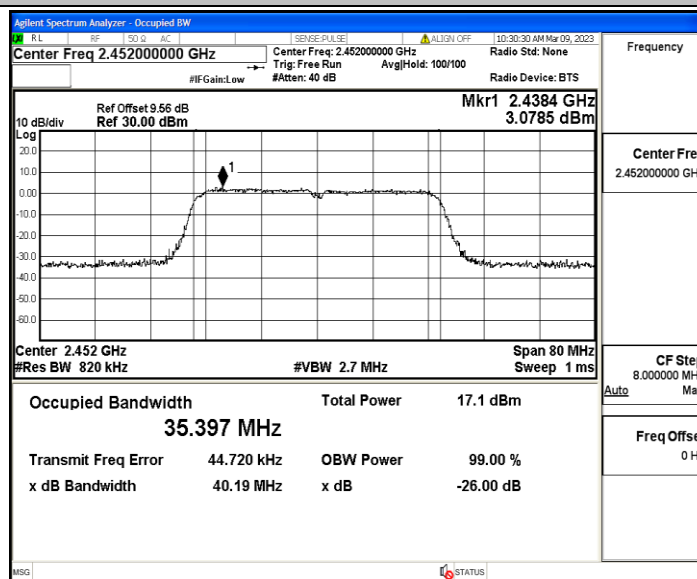
11N20SISO_Ant1_2462



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	15.59	≤30.00	PASS
		2437	16.00	≤30.00	PASS
		2462	14.02	≤30.00	PASS
11G	Ant1	2412	12.51	≤30.00	PASS
		2437	12.58	≤30.00	PASS
		2462	11.03	≤30.00	PASS
11N20SISO	Ant1	2412	11.51	≤30.00	PASS
		2437	11.62	≤30.00	PASS
		2462	10.15	≤30.00	PASS
11N40SISO	Ant1	2422	10.99	≤30.00	PASS
		2437	10.85	≤30.00	PASS
		2452	10.05	≤30.00	PASS

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

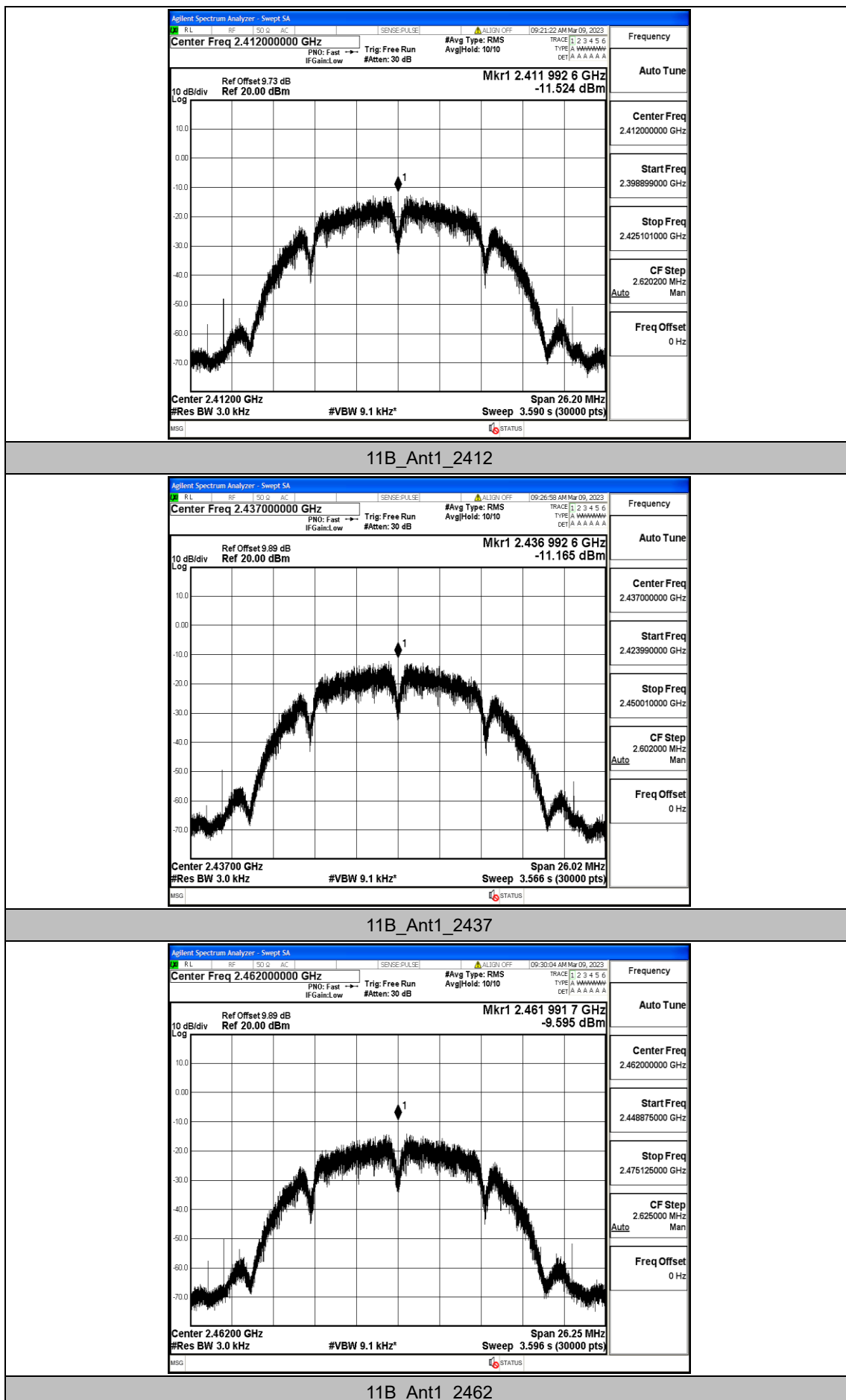
Appendix D: Maximum power spectral density

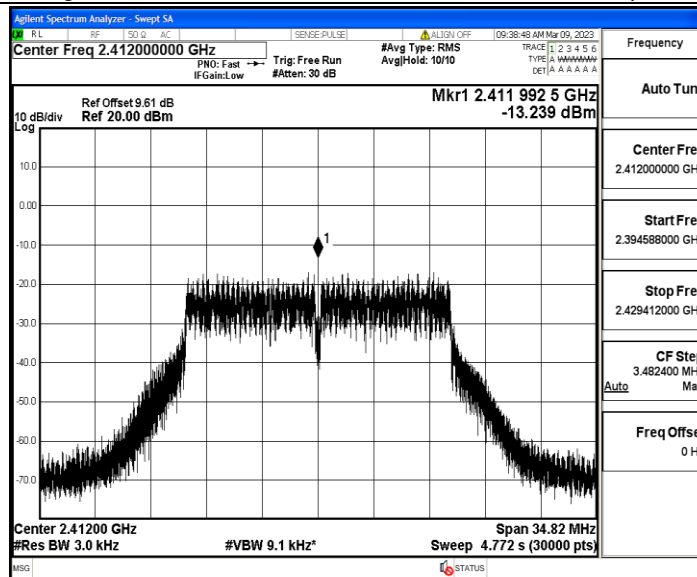
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.52	≤8.00	PASS
		2437	-11.17	≤8.00	PASS
		2462	-9.6	≤8.00	PASS
11G	Ant1	2412	-13.24	≤8.00	PASS
		2437	-12.63	≤8.00	PASS
		2462	-13.92	≤8.00	PASS
11N20SISO	Ant1	2412	-15.16	≤8.00	PASS
		2437	-14.13	≤8.00	PASS
		2462	-15.36	≤8.00	PASS
11N40SISO	Ant1	2422	-14.2	≤8.00	PASS
		2437	-13.6	≤8.00	PASS
		2452	-15.13	≤8.00	PASS

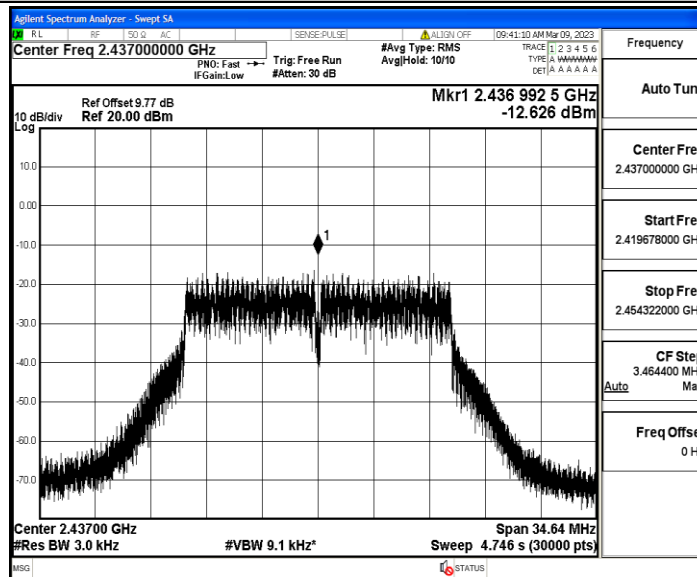
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

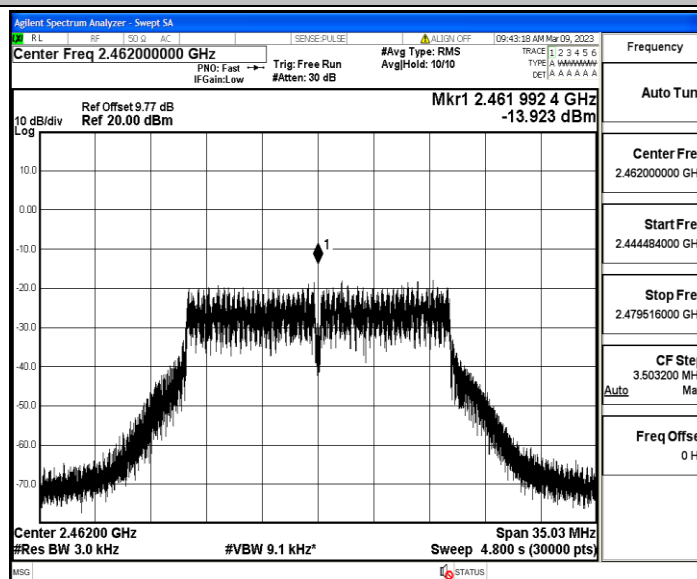




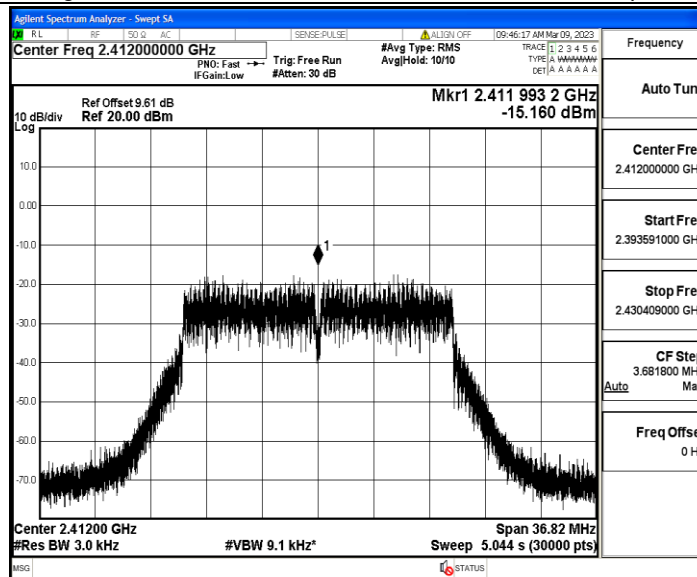
11G_Ant1_2412



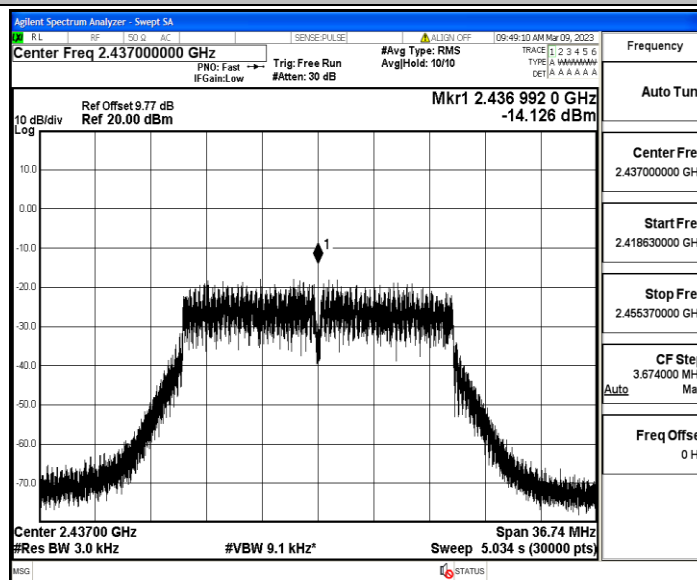
11G_Ant1_2437



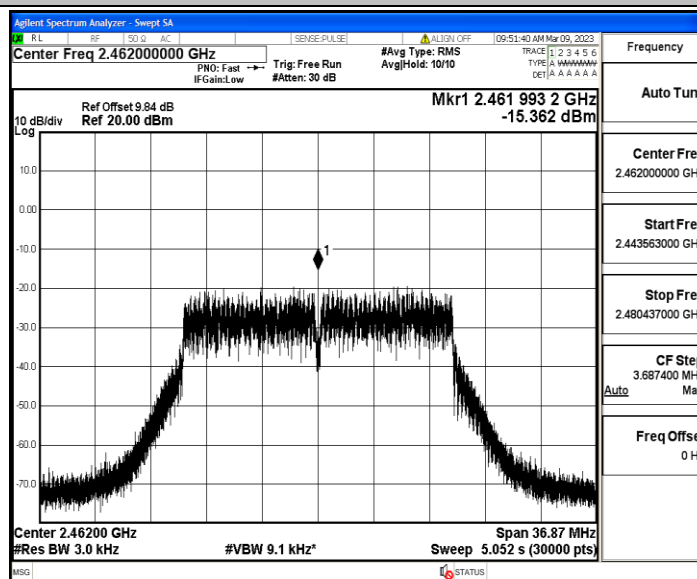
11G_Ant1_2462



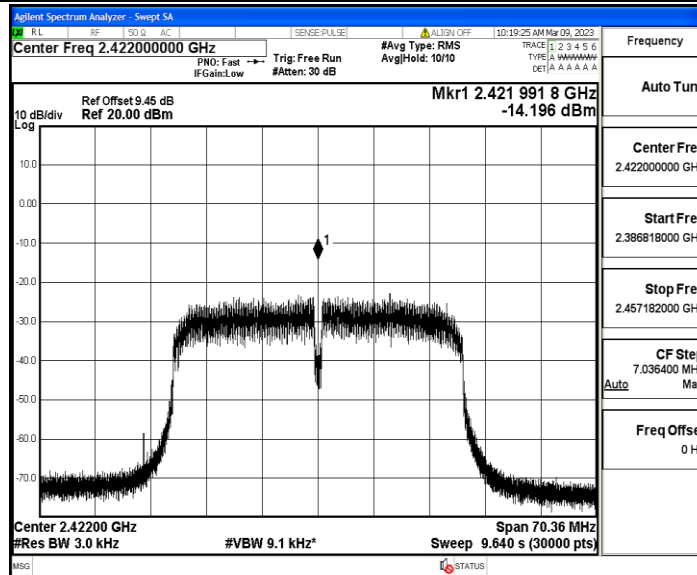
11N20SISO_Ant1_2412



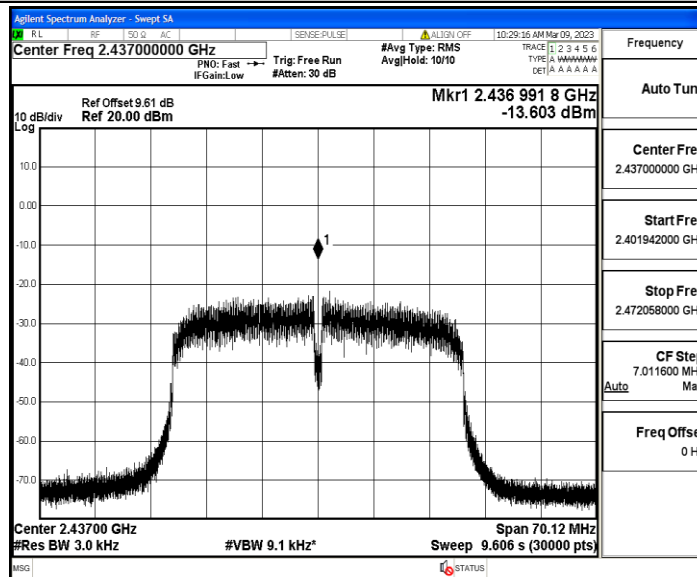
11N20SISO_Ant1_2437



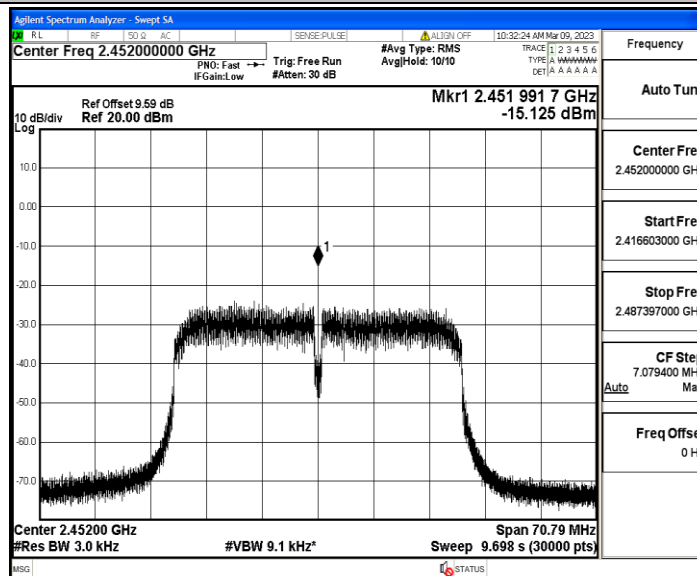
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



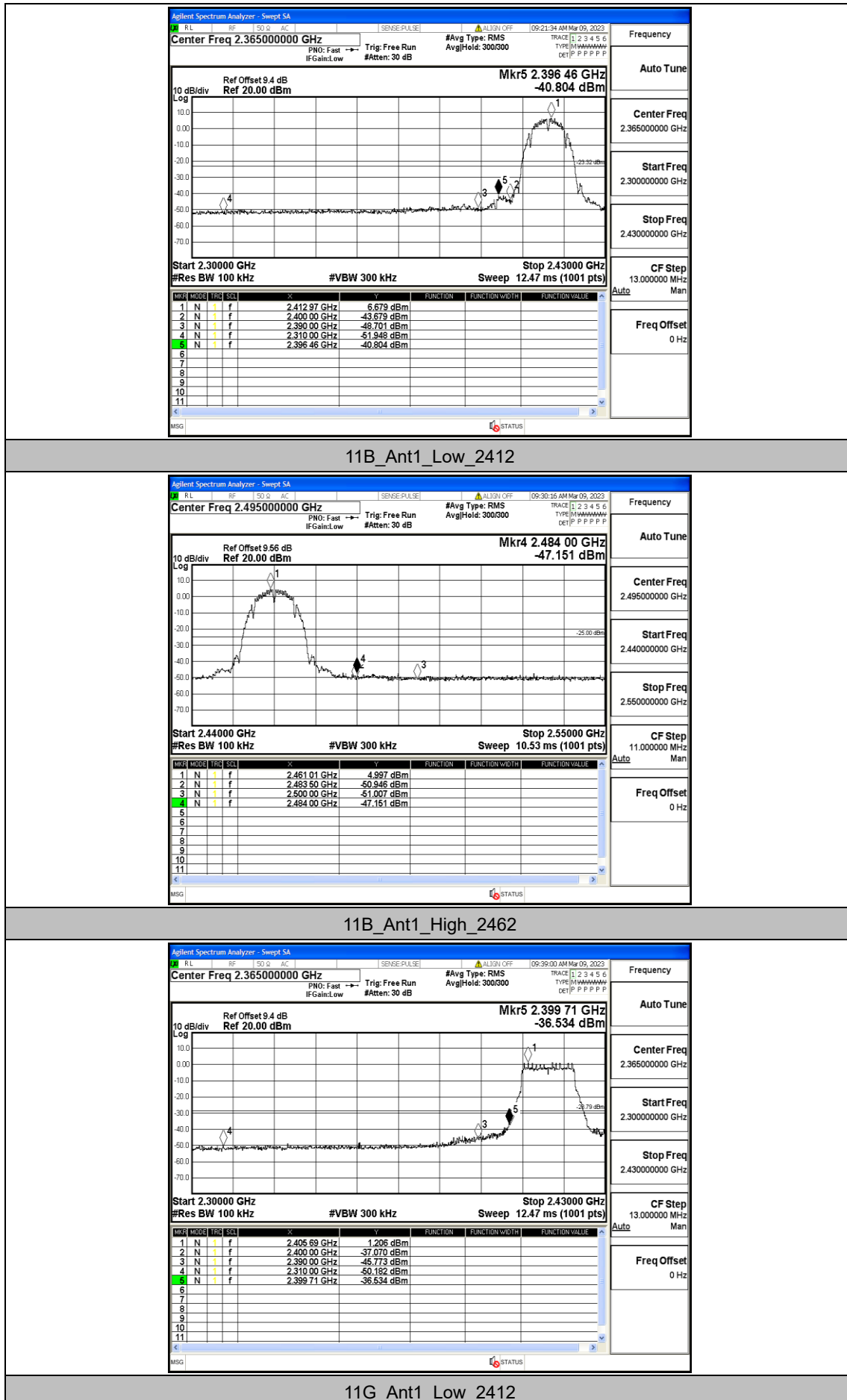
11N40SISO_Ant1_2452

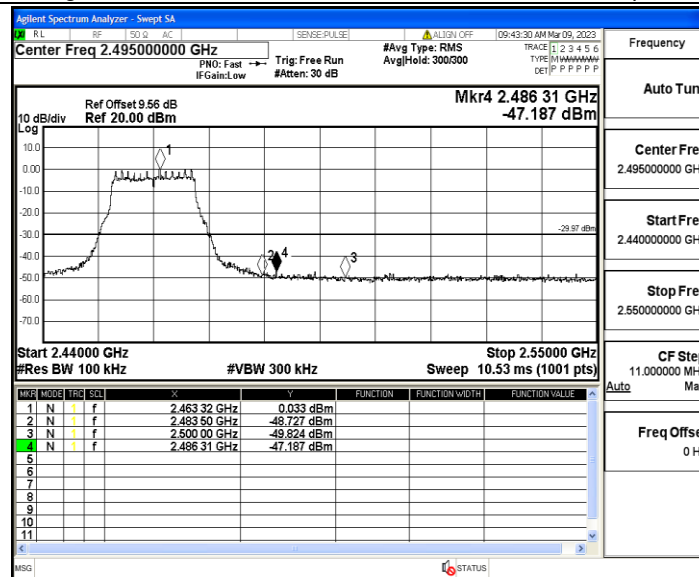
Appendix E: Band edge measurements

Test Result

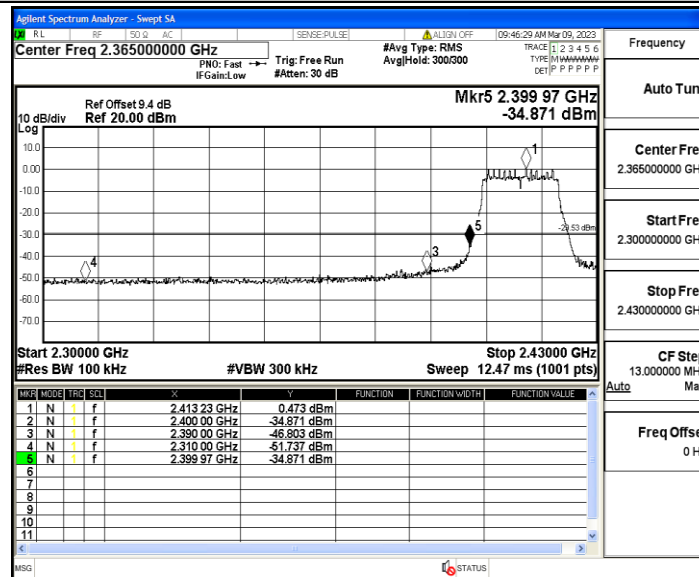
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.68	-40.8	≤ -23.32	PASS
		High	2462	5.00	-47.15	≤ -25	PASS
11G	Ant1	Low	2412	1.21	-36.53	≤ -28.79	PASS
		High	2462	0.03	-47.19	≤ -29.97	PASS
11N20SISO	Ant1	Low	2412	0.47	-34.87	≤ -29.53	PASS
		High	2462	-1.15	-47.99	≤ -31.15	PASS
11N40SISO	Ant1	Low	2422	-2.71	-43.24	≤ -32.71	PASS
		High	2452	-4.49	-46.41	≤ -34.49	PASS

Test Graphs

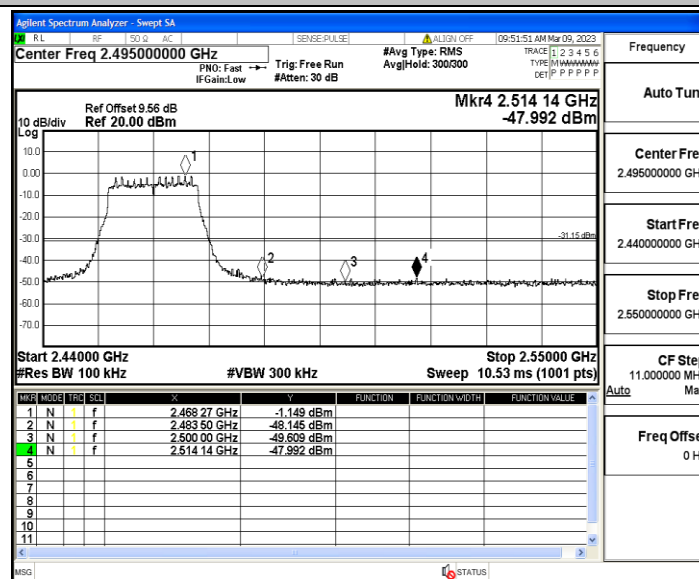




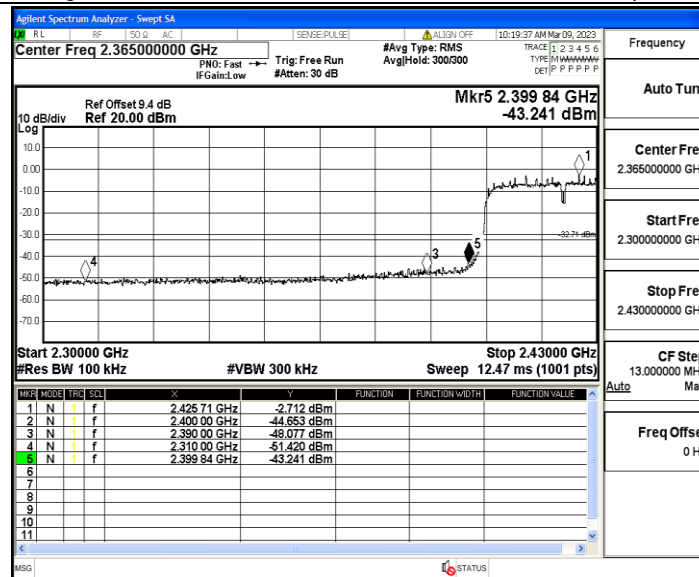
11G_Ant1_High_2462



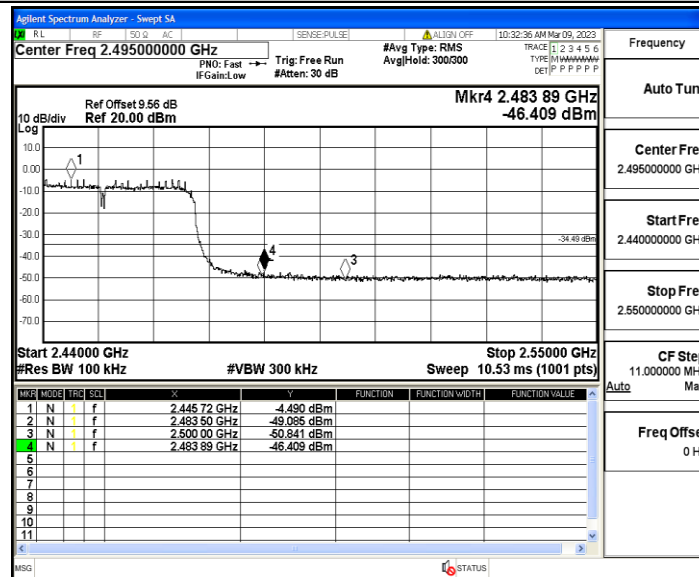
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



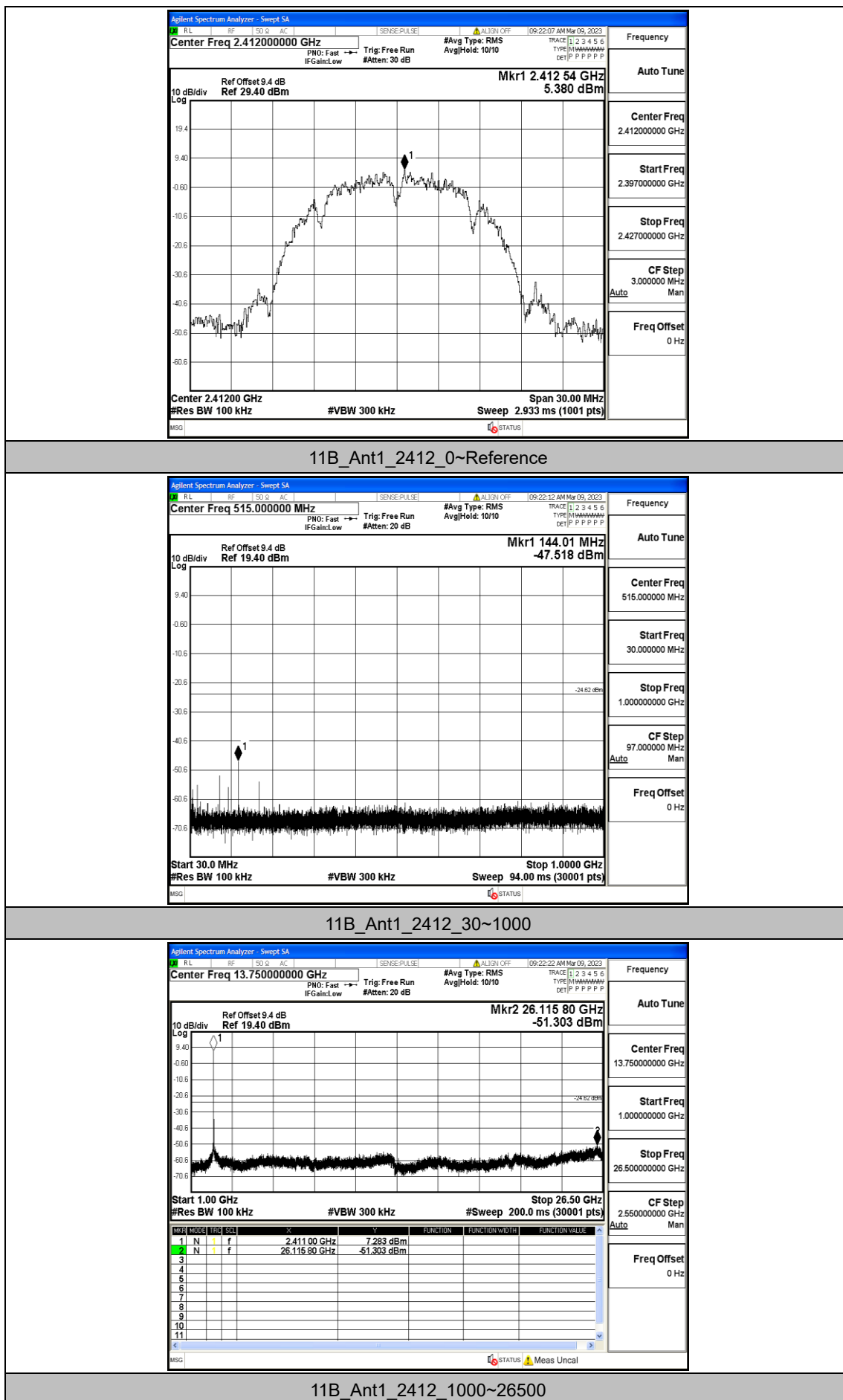
11N40SISO_Ant1_High_2452

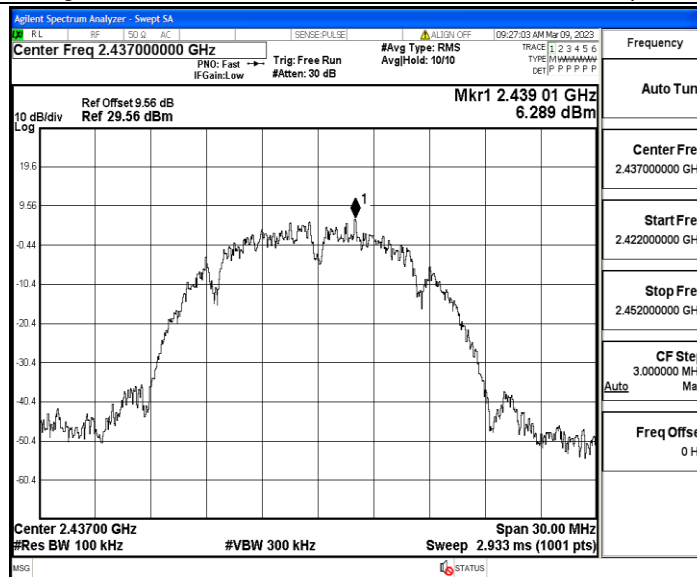
Appendix F: Conducted Spurious Emission

Test Result

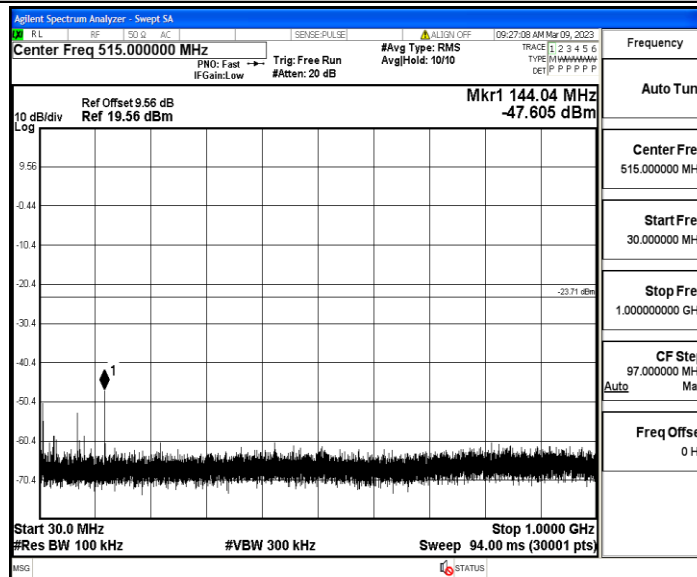
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.38	5.38	---	PASS
			30~1000	5.38	-47.52	≤-24.62	PASS
			1000~26500	5.38	-51.3	≤-24.62	PASS
		2437	Reference	6.29	6.29	---	PASS
			30~1000	6.29	-47.61	≤-23.71	PASS
			1000~26500	6.29	-51.44	≤-23.71	PASS
		2462	Reference	4.24	4.24	---	PASS
			30~1000	4.24	-46.99	≤-25.76	PASS
			1000~26500	4.24	-50.27	≤-25.76	PASS
11G	Ant1	2412	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-51.62	≤-30.21	PASS
			1000~26500	-0.21	-50.28	≤-30.21	PASS
		2437	Reference	-1.90	-1.90	---	PASS
			30~1000	-1.90	-50.76	≤-31.9	PASS
			1000~26500	-1.90	-51.62	≤-31.9	PASS
		2462	Reference	-0.95	-0.95	---	PASS
			30~1000	-0.95	-50.79	≤-30.95	PASS
			1000~26500	-0.95	-50.24	≤-30.95	PASS
11N20SISO	Ant1	2412	Reference	-0.09	-0.09	---	PASS
			30~1000	-0.09	-51.16	≤-30.09	PASS
			1000~26500	-0.09	-50.65	≤-30.09	PASS
		2437	Reference	-0.88	-0.88	---	PASS
			30~1000	-0.88	-50.05	≤-30.88	PASS
			1000~26500	-0.88	-50.87	≤-30.88	PASS
		2462	Reference	-2.29	-2.29	---	PASS
			30~1000	-2.29	-50.09	≤-32.29	PASS
			1000~26500	-2.29	-50.34	≤-32.29	PASS
11N40SISO	Ant1	2422	Reference	-3.82	-3.82	---	PASS
			30~1000	-3.82	-53.29	≤-33.82	PASS
			1000~26500	-3.82	-50.86	≤-33.82	PASS
		2437	Reference	-3.24	-3.24	---	PASS
			30~1000	-3.24	-57.95	≤-33.24	PASS
			1000~26500	-3.24	-51	≤-33.24	PASS
		2452	Reference	-3.50	-3.50	---	PASS
			30~1000	-3.50	-57.4	≤-33.5	PASS
			1000~26500	-3.50	-49.56	≤-33.5	PASS

Test Graphs

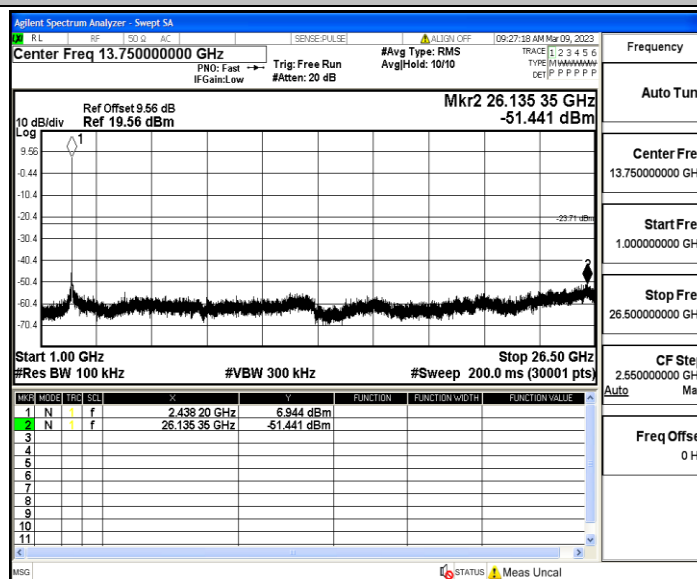




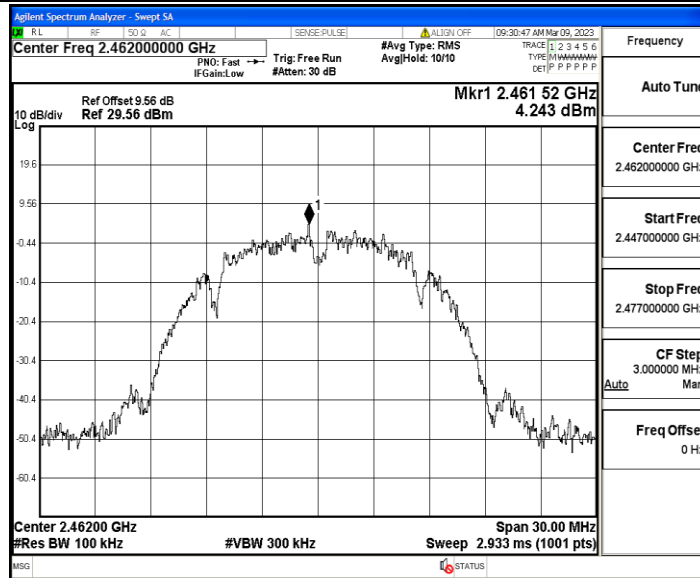
11B_Ant1_2437_0~Reference



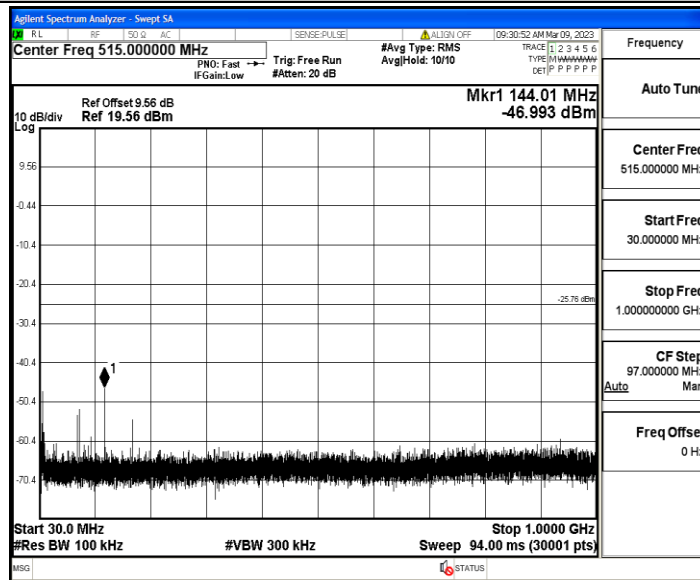
11B_Ant1_2437_30~1000



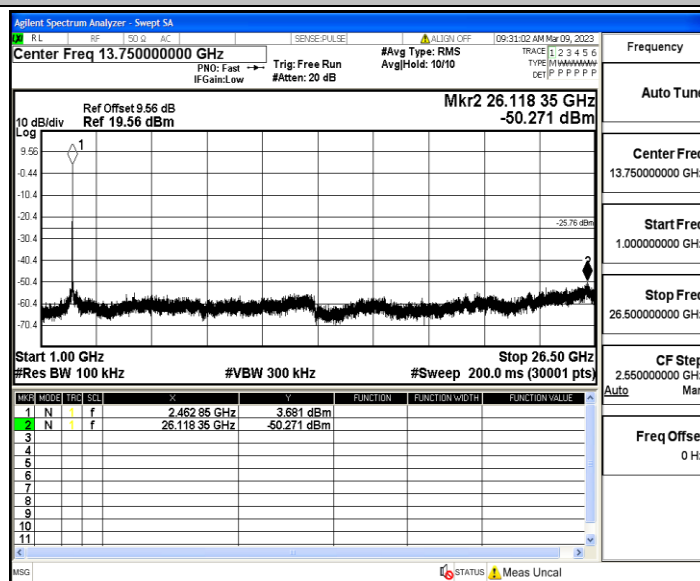
11B_Ant1_2437_1000~26500



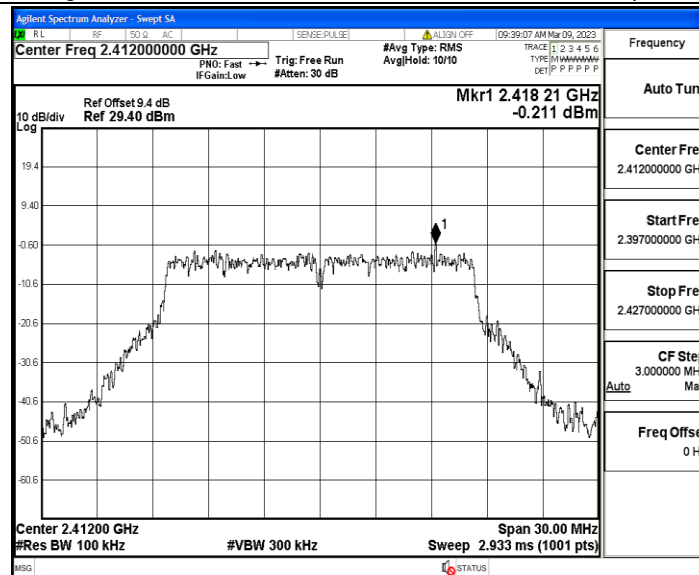
11B_Ant1_2462_0~Reference



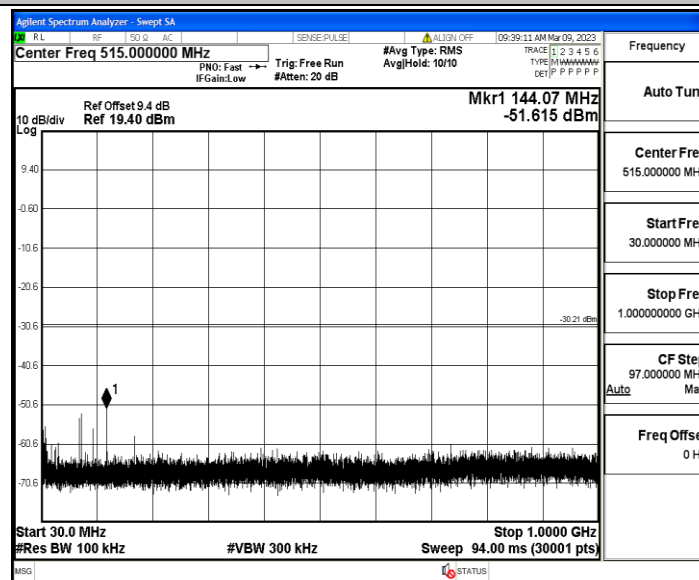
11B_Ant1_2462_30~1000



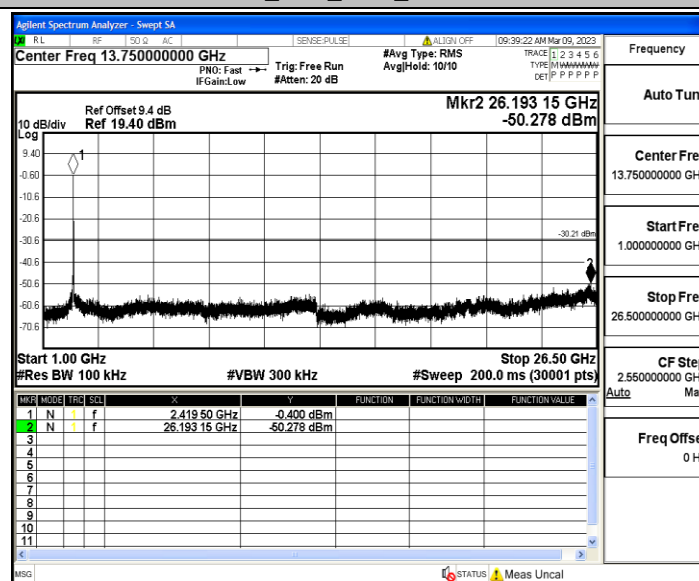
11B_Ant1_2462_1000~26500



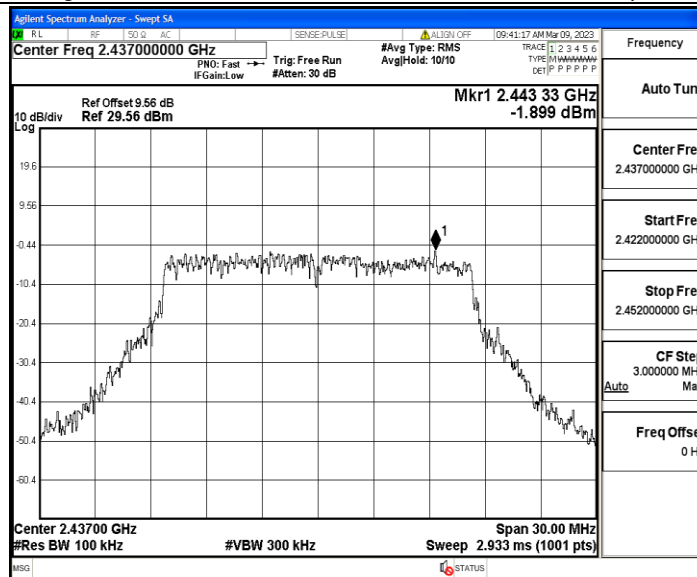
11G_Ant1_2412_0~Reference



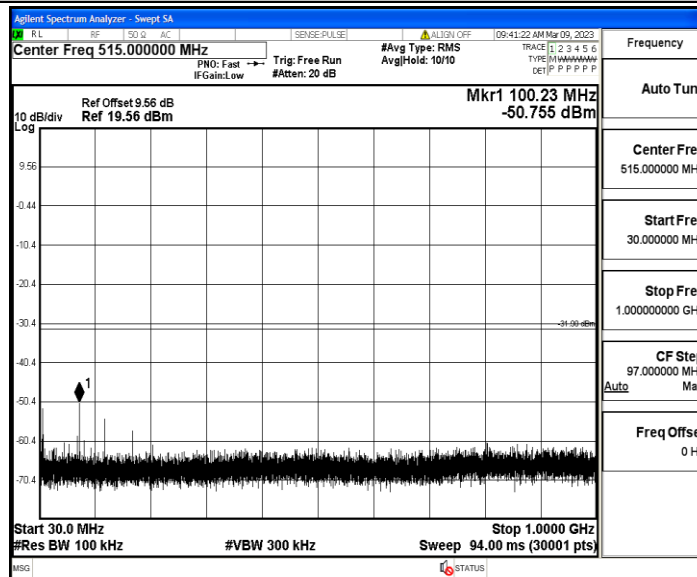
11G_Ant1_2412_30~1000



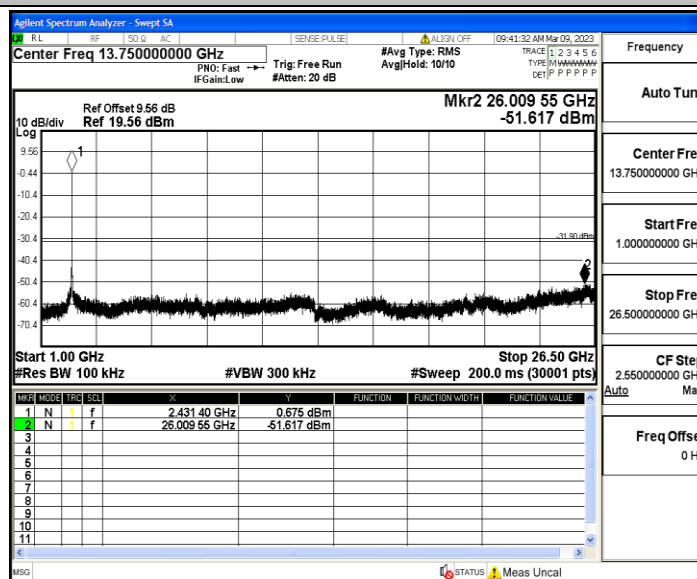
11G_Ant1_2412_1000~26500



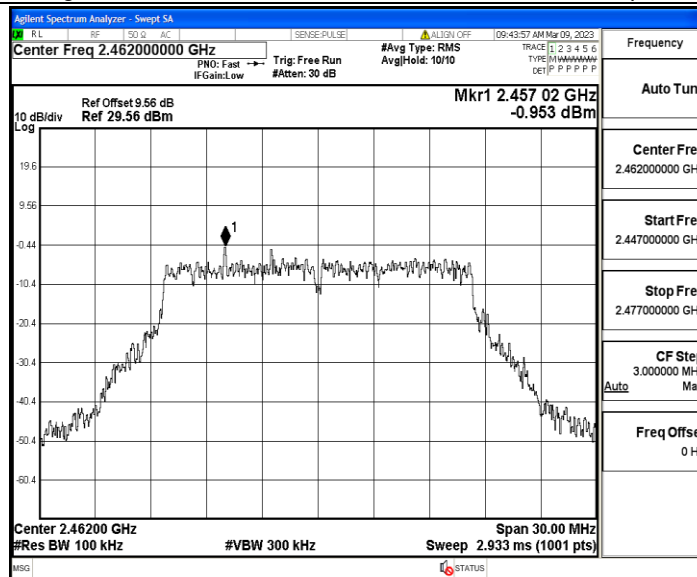
11G_Ant1_2437_0~Reference



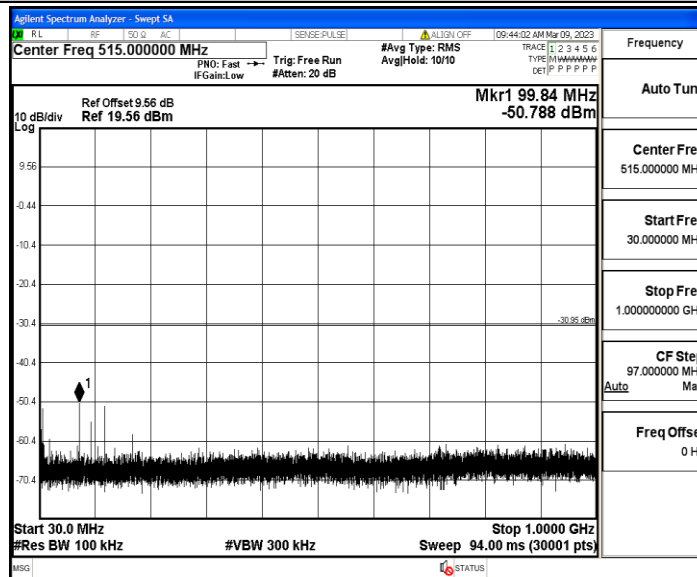
11G_Ant1_2437_30~1000



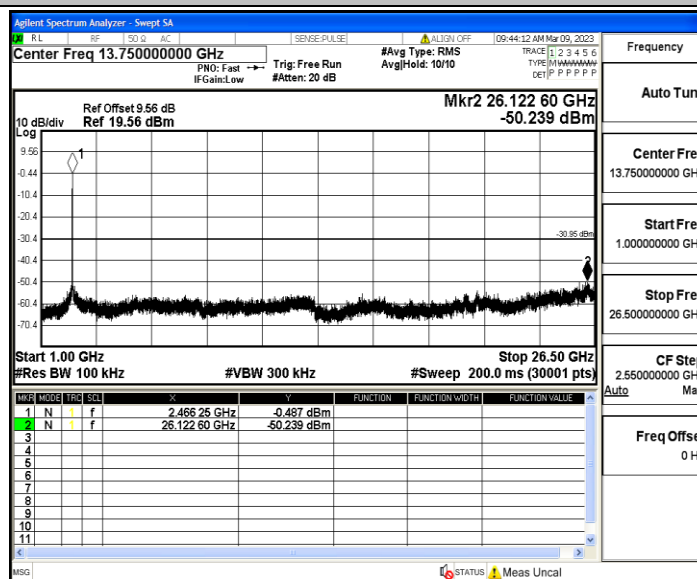
11G_Ant1_2437_1000~26500



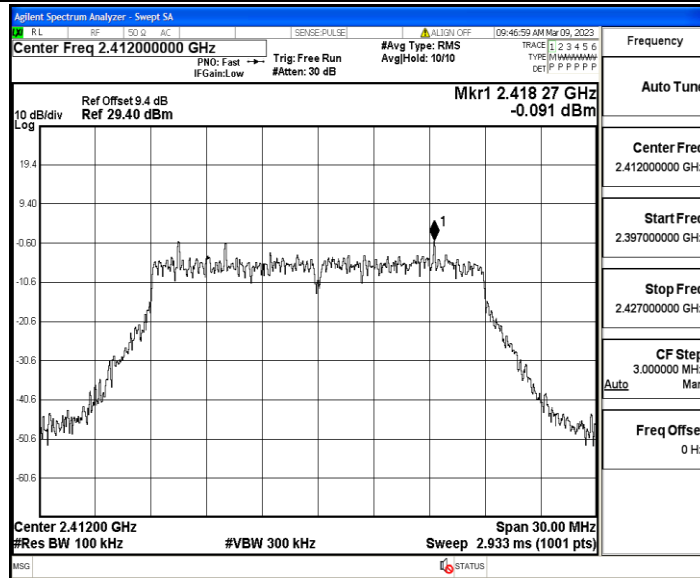
11G_Ant1_2462_0~Reference



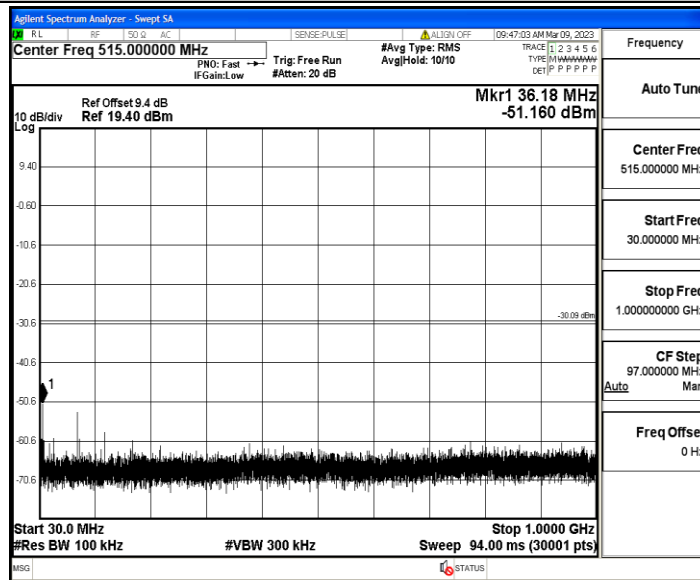
11G_Ant1_2462_30~1000



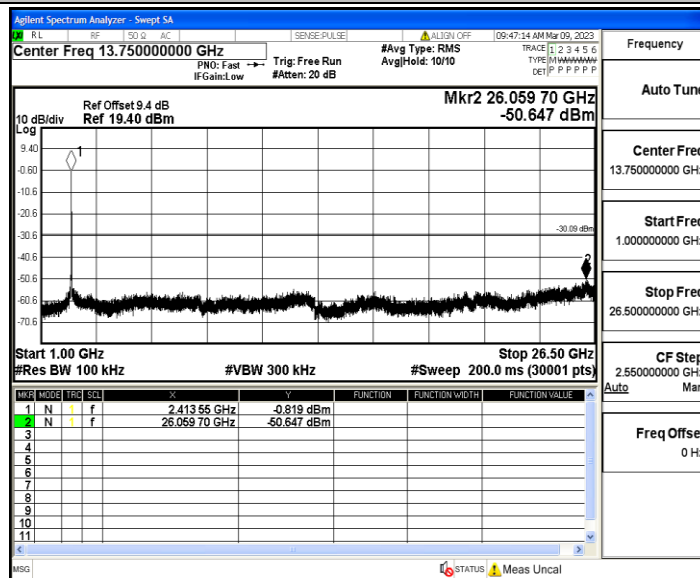
11G_Ant1_2462_1000~26500



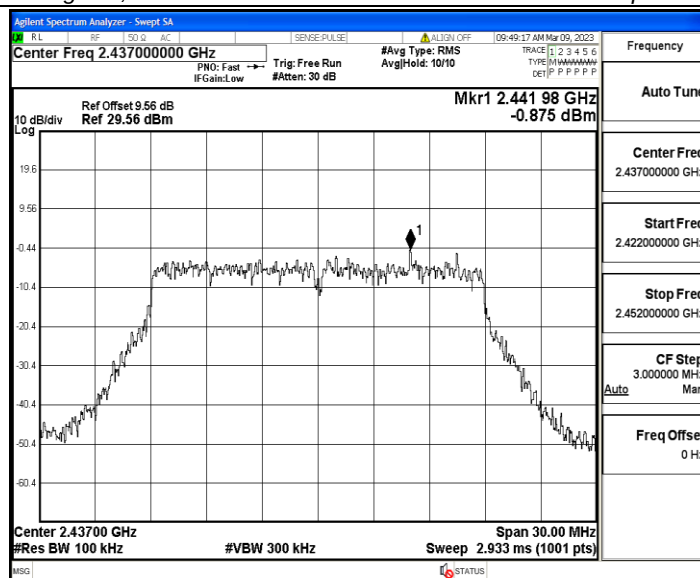
11N20SISO_Ant1_2412_0~Reference



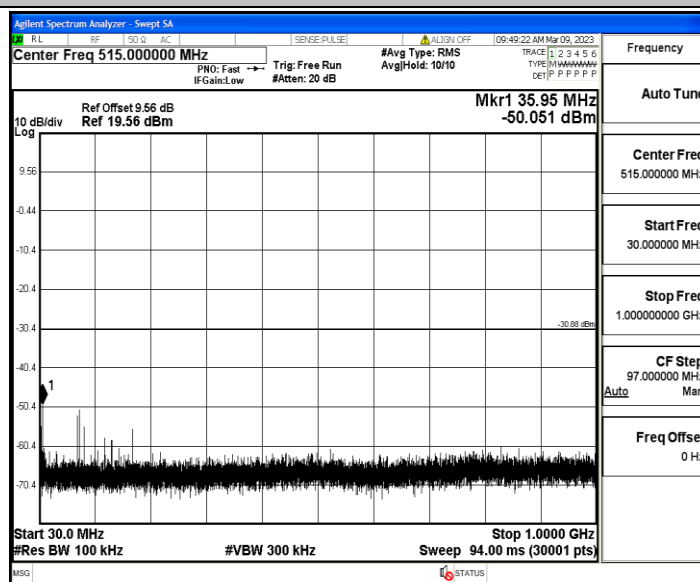
11N20SISO_Ant1_2412_30~1000



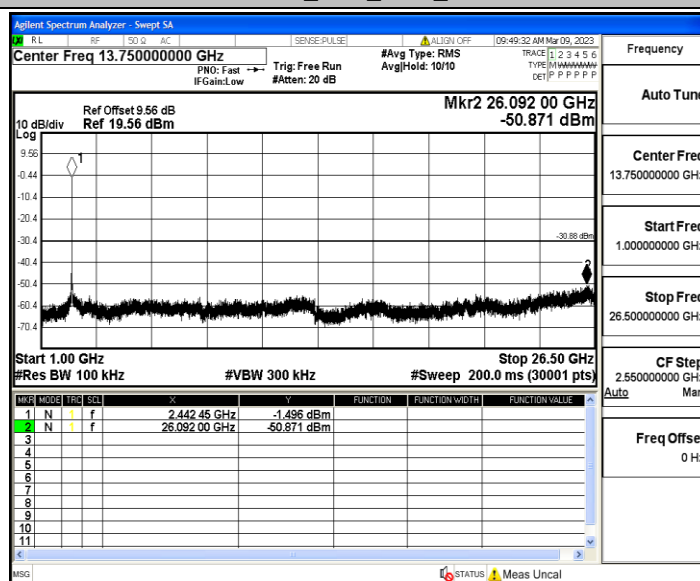
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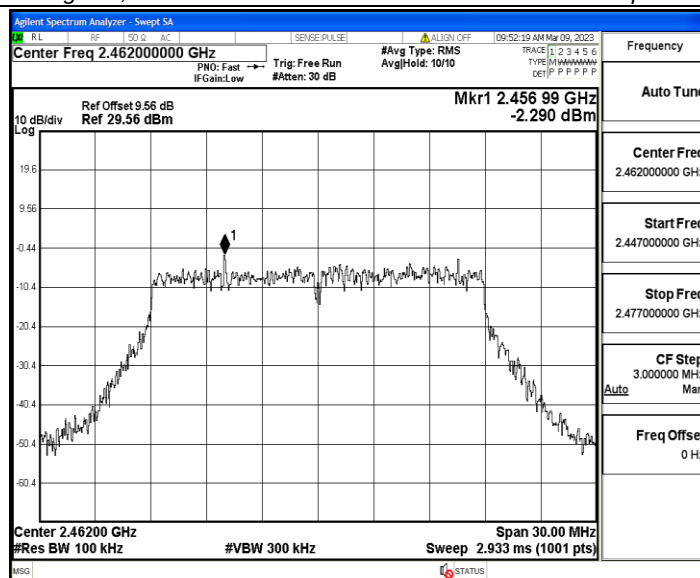
11N20SISO_Ant1_2437_0~Reference



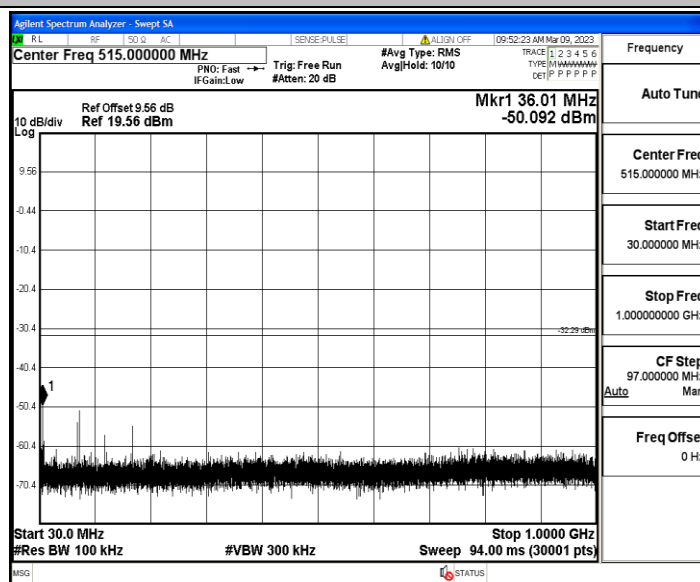
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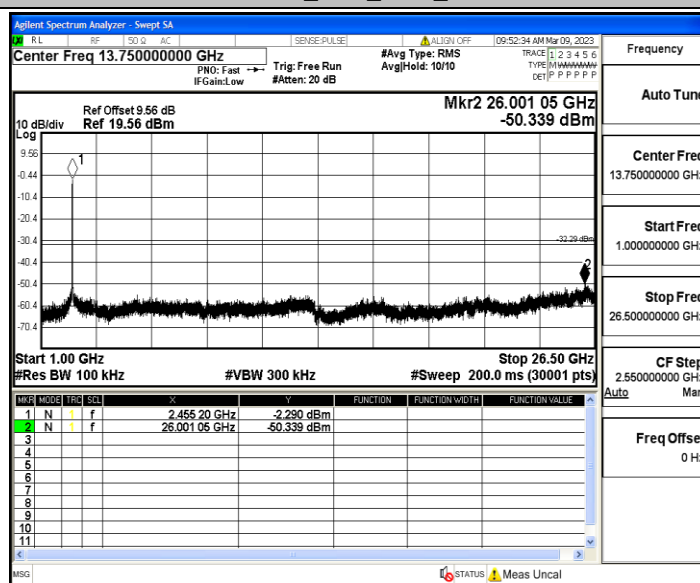
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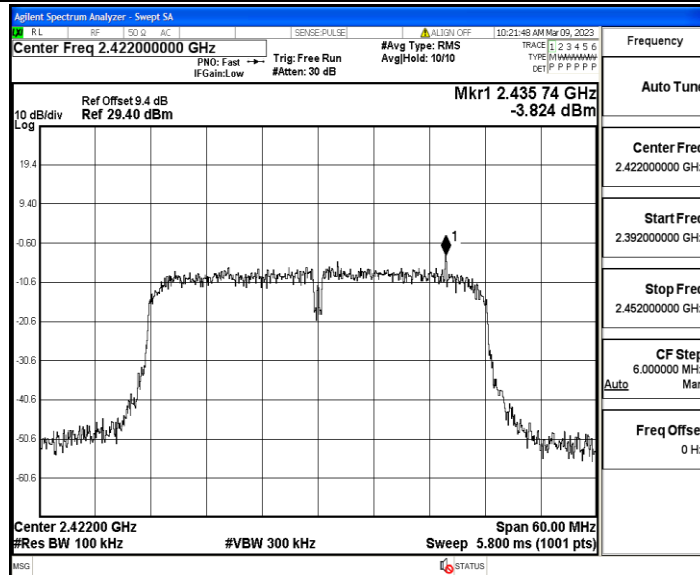
11N20SISO_Ant1_2462_0~Reference



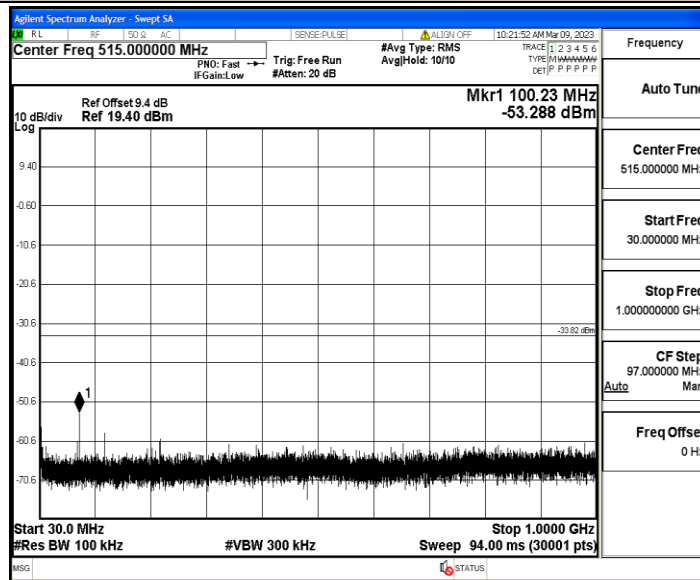
11N20SISO_Ant1_2462_30~1000



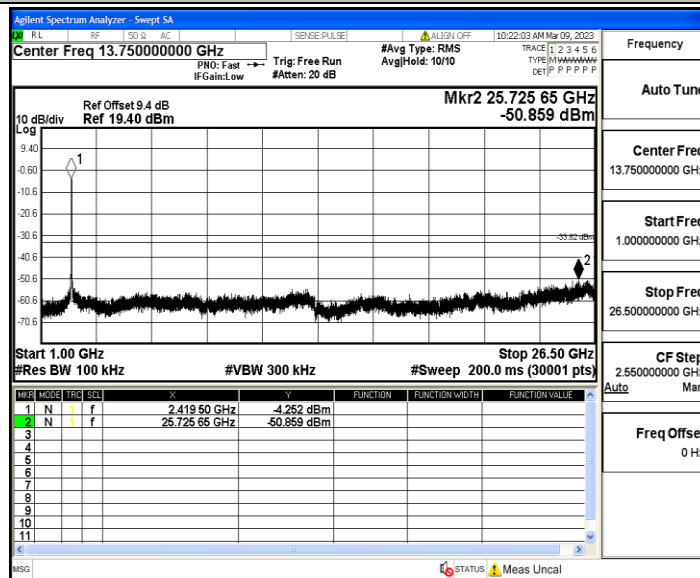
11N20SISO_Ant1_2462_1000~26500



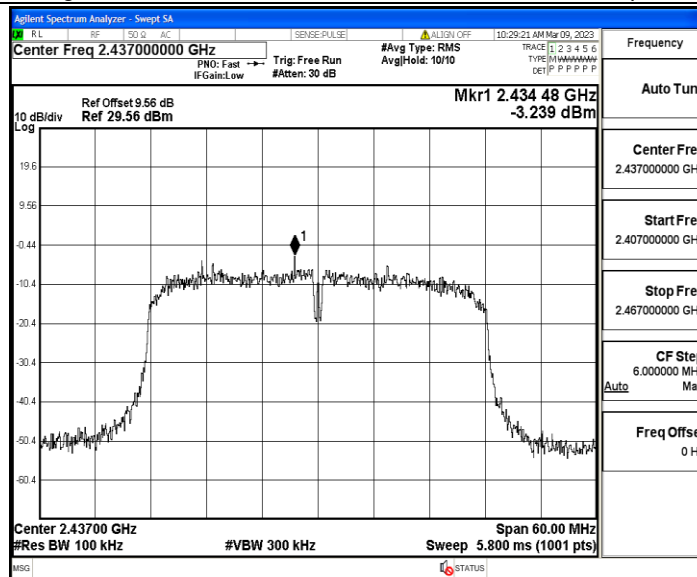
11N40SISO_Ant1_2422_0~Reference



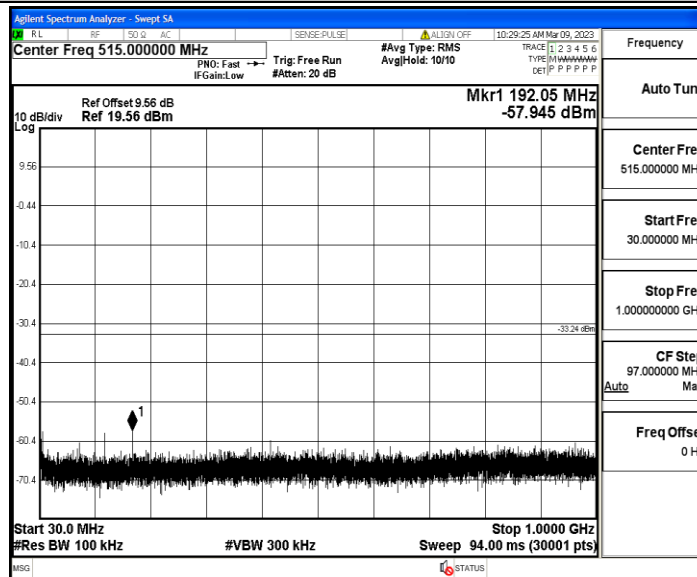
11N40SISO_Ant1_2422_30~1000



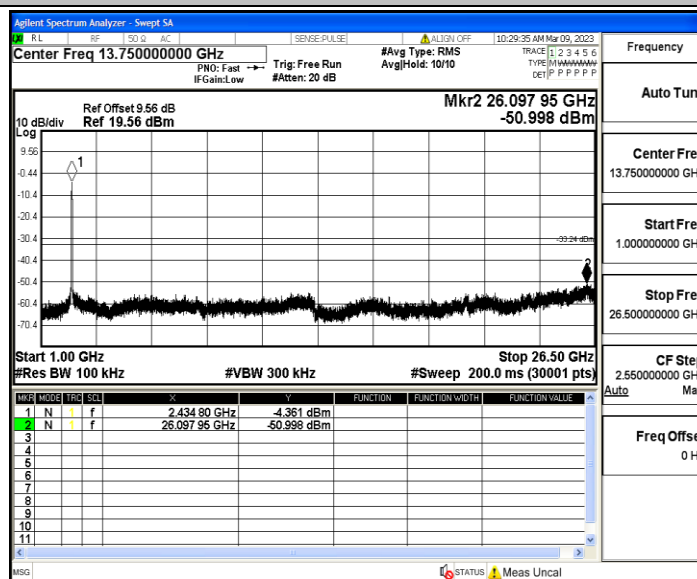
11N40SISO_Ant1_2422_1000~26500



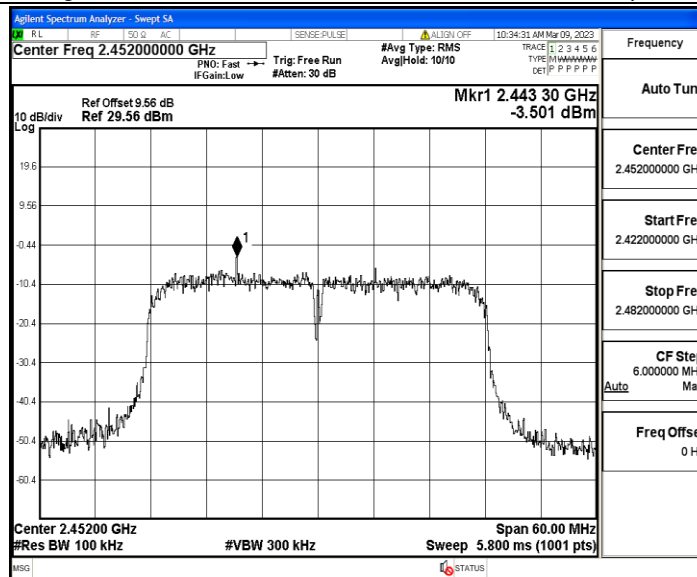
11N40SISO_Ant1_2437_0~Reference



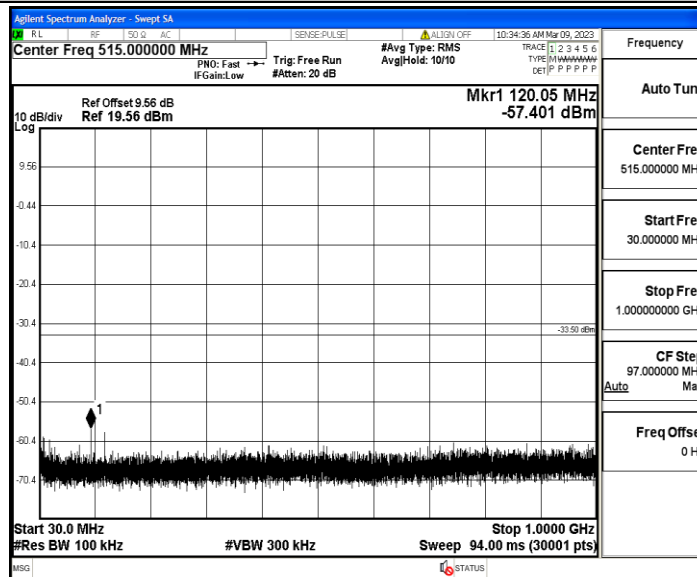
11N40SISO_Ant1_2437_30~1000



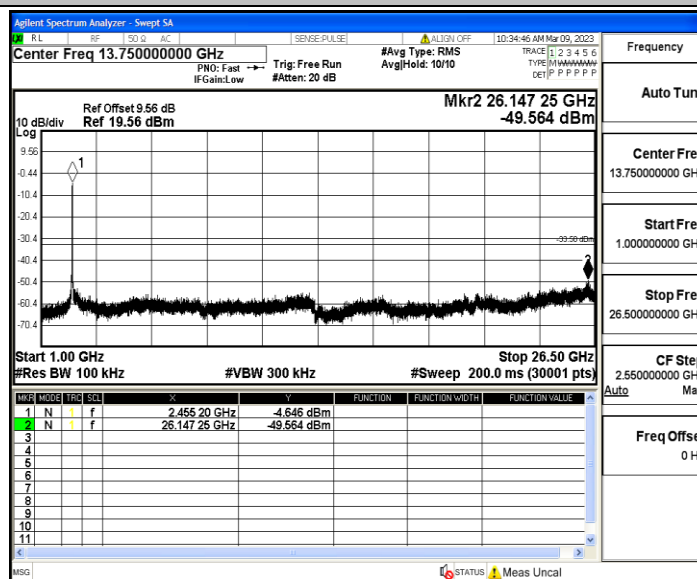
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



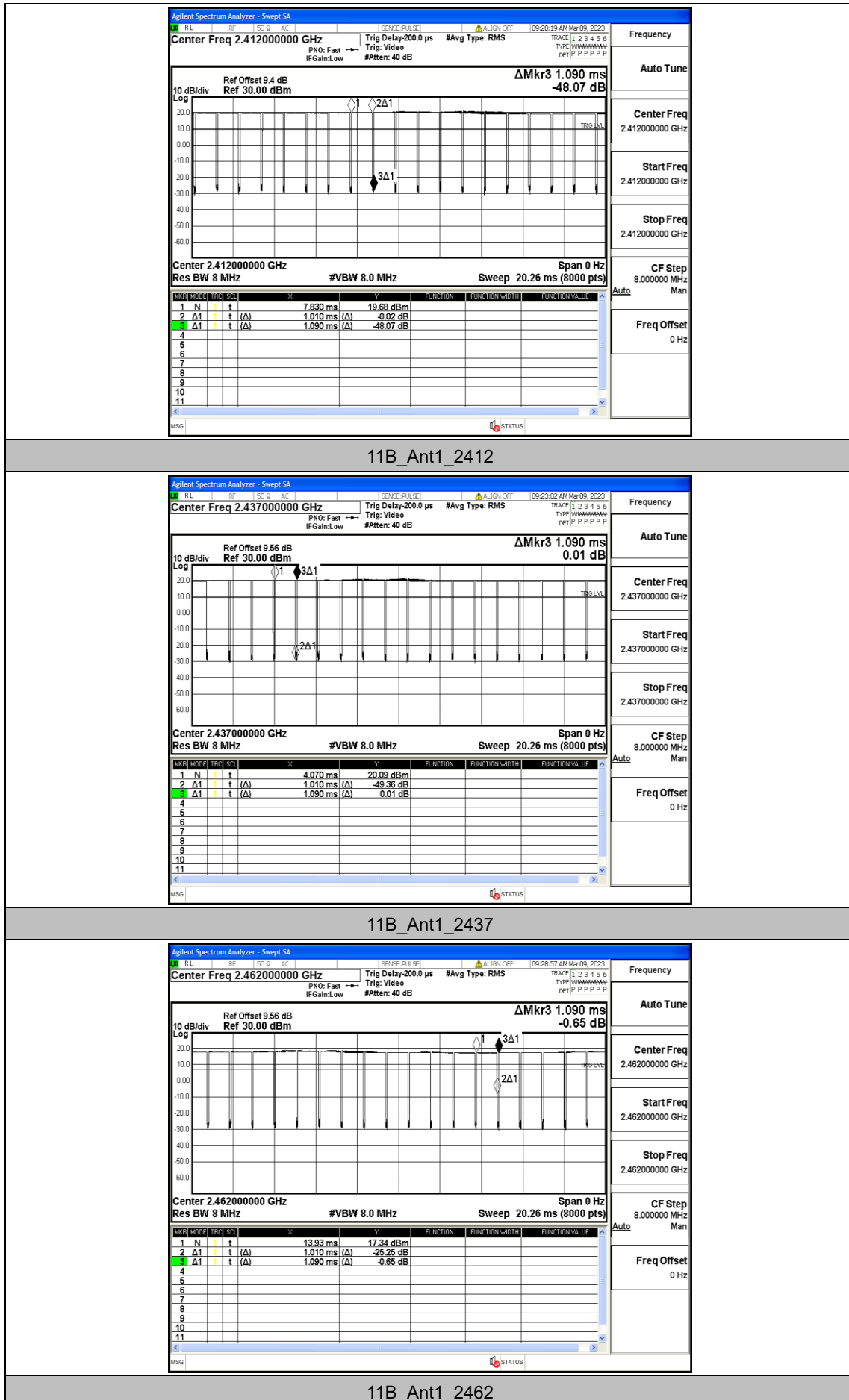
11N40SISO_Ant1_2452_1000~26500

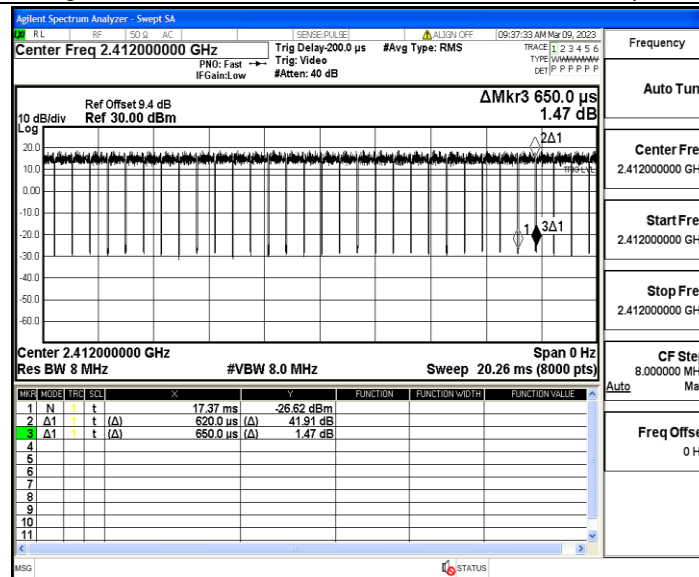
Appendix G: Duty Cycle

Test Result

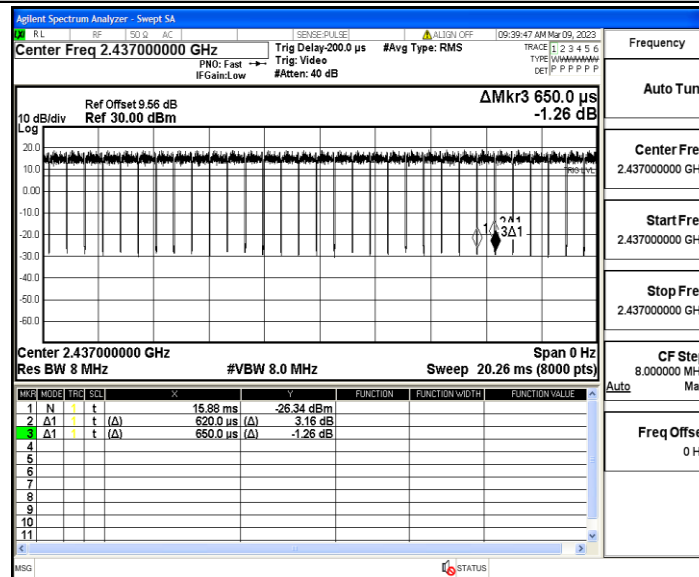
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T
11B	Ant1	2412	1.01	1.09	92.66	0.99
		2437	1.01	1.09	92.66	0.99
		2462	1.01	1.09	92.66	0.99
11G	Ant1	2412	0.62	0.65	95.38	1.61
		2437	0.62	0.65	95.38	1.61
		2462	0.62	0.65	95.38	1.61
11N20SISO	Ant1	2412	0.61	0.64	95.31	1.64
		2437	0.61	0.64	95.31	1.64
		2462	0.61	0.65	93.85	1.64
11N40SISO	Ant1	2422	2.46	2.49	98.80	0.41
		2437	2.47	2.50	98.80	0.40
		2452	2.47	2.49	99.20	0.40

Test Graphs

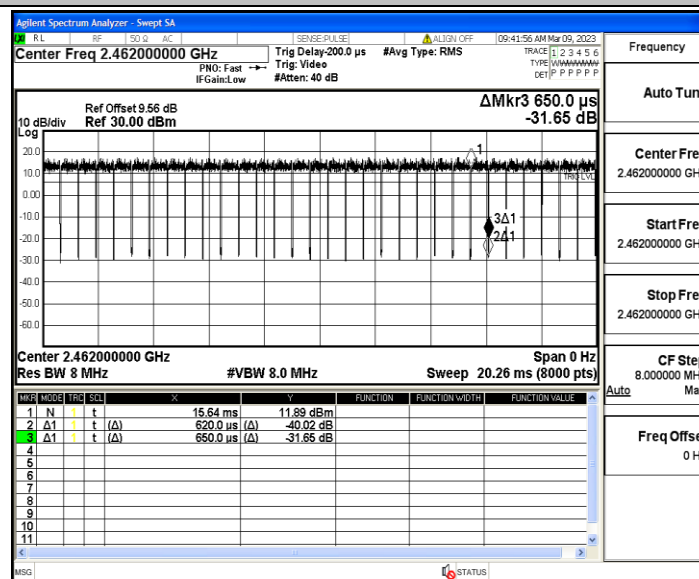




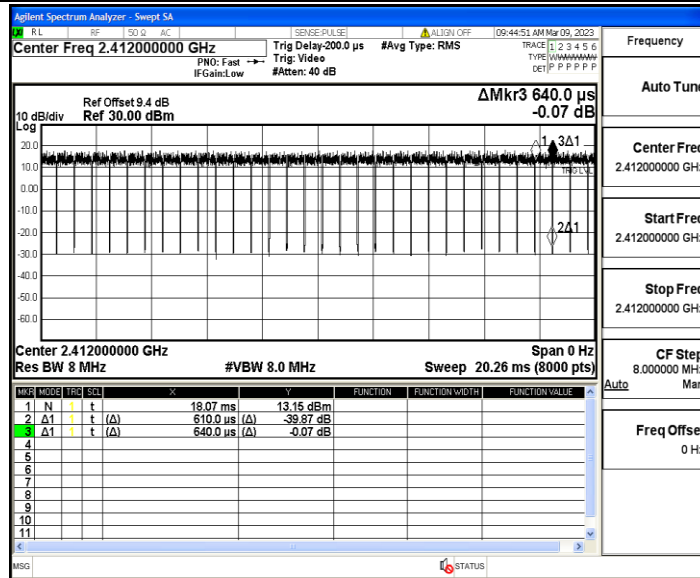
11G_Ant1_2412



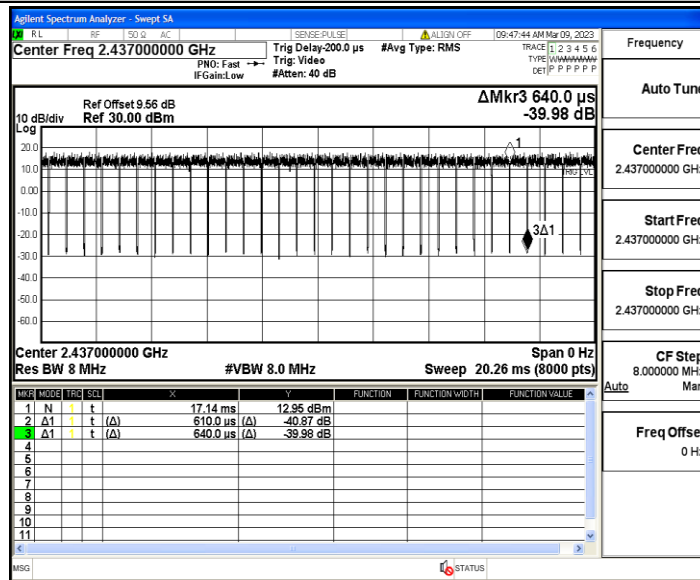
11G_Ant1_2437



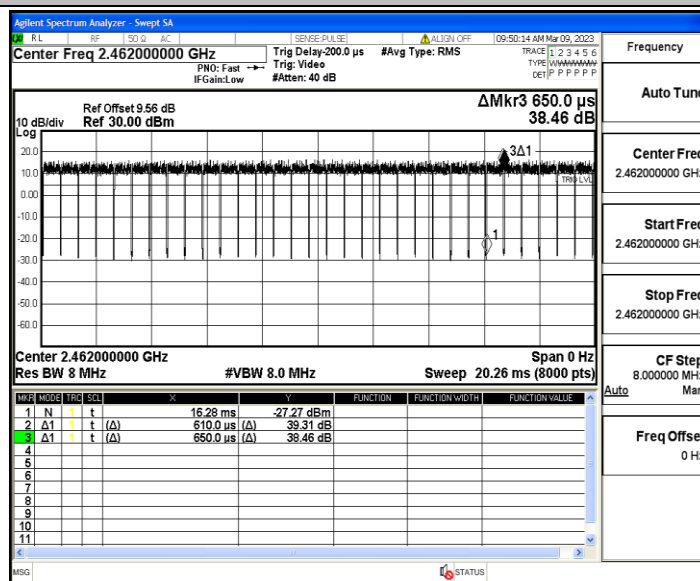
11G_Ant1_2462



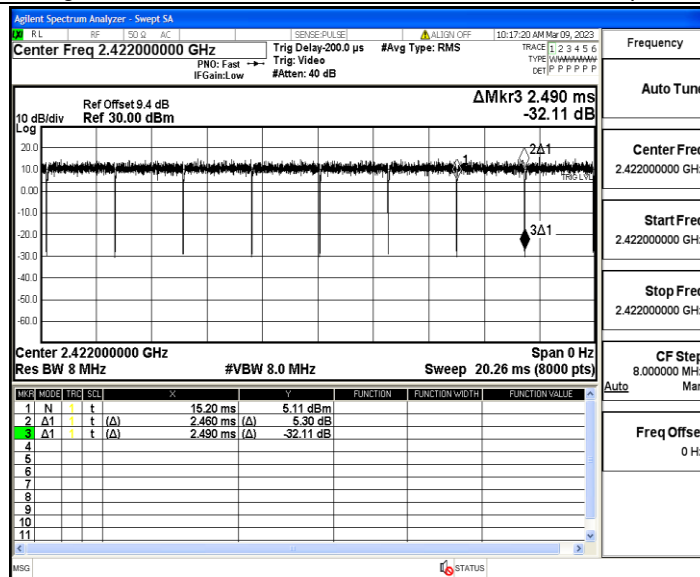
11N20SISO_Ant1_2412



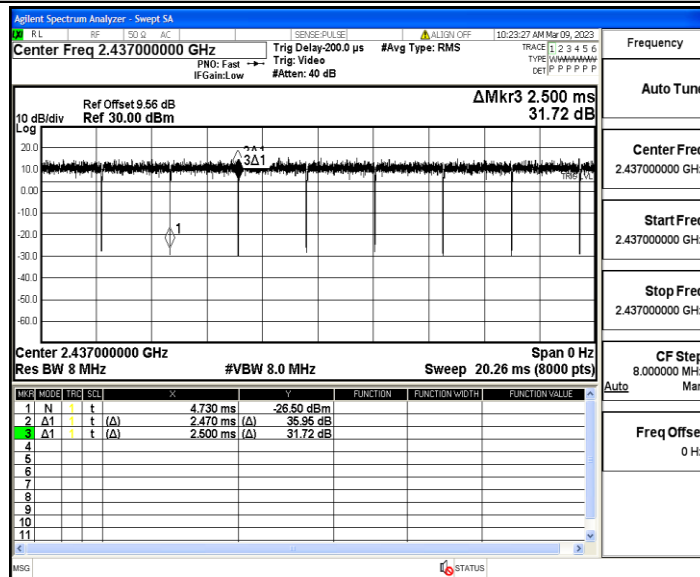
11N20SISO_Ant1_2437



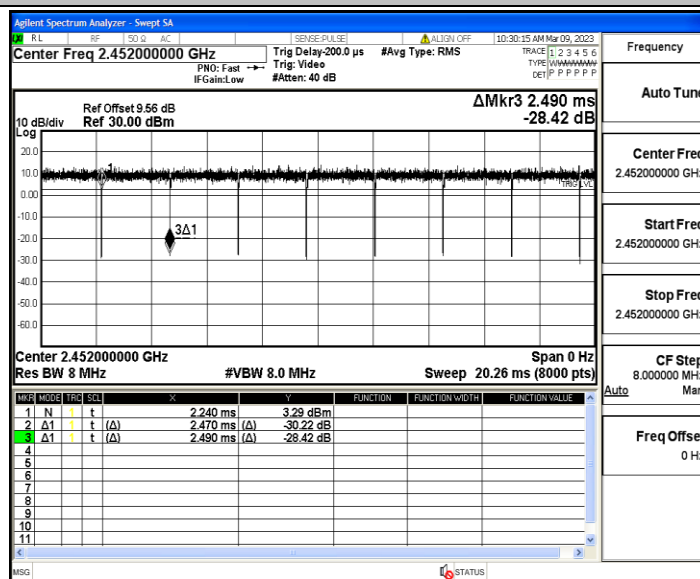
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452