

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

Product Name: Polar Wet Food Feeder

Trade Mark: PETLIBRO

Test Model: PLAF109

FCC ID: 2A3DE-PLAF109

### Environmental Conditions

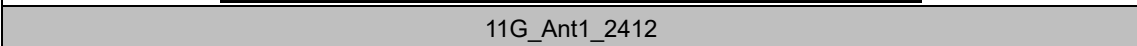
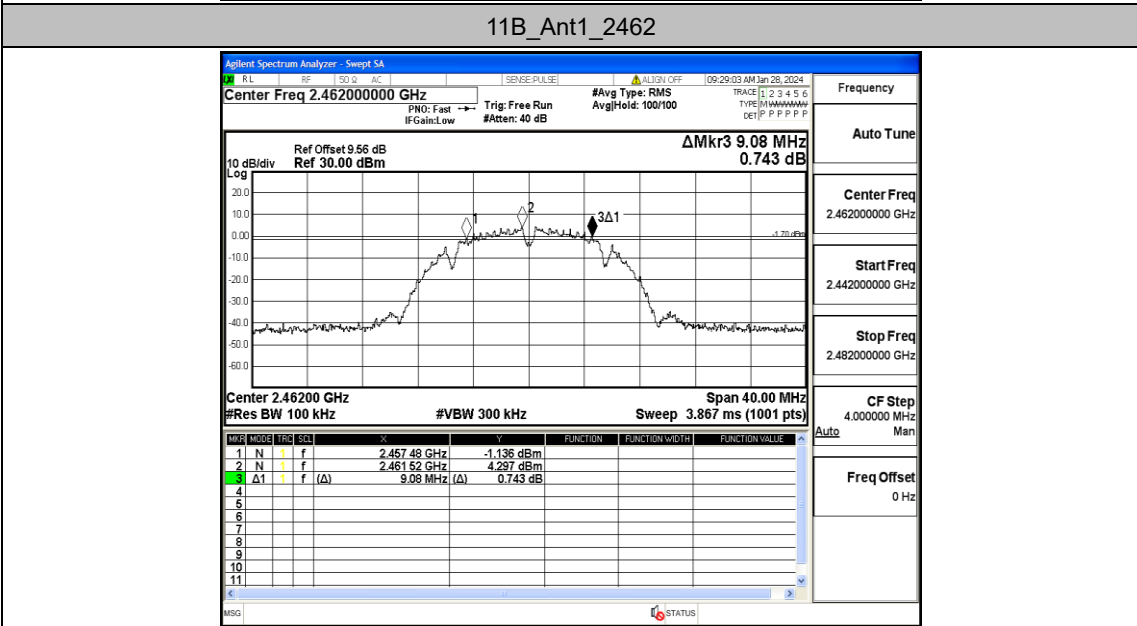
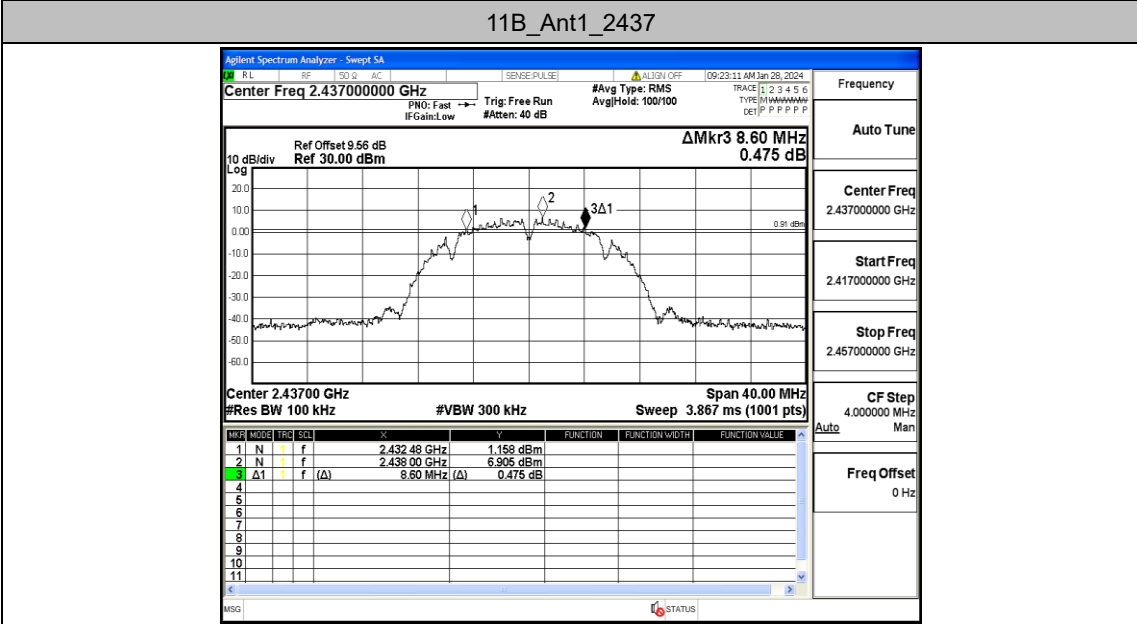
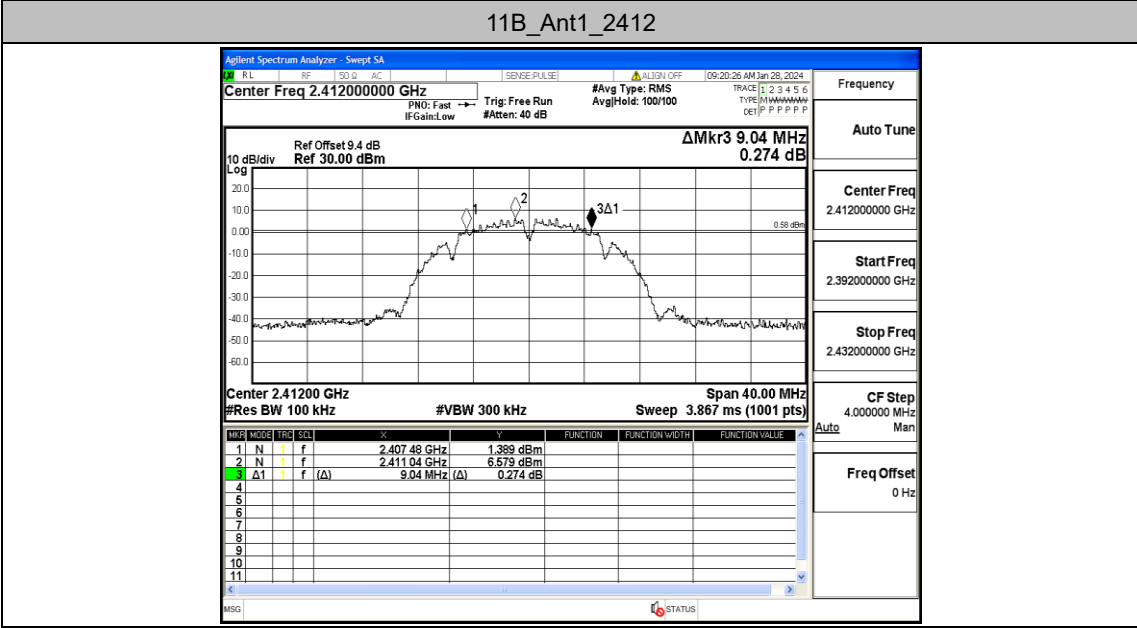
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

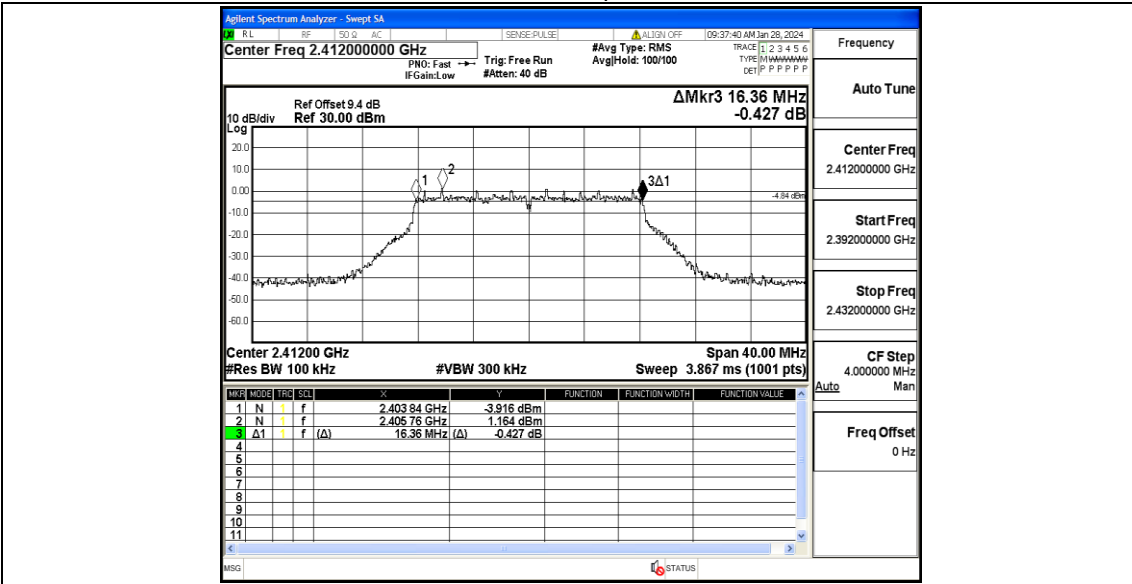
## Appendix A: DTS Bandwidth

### Test Result

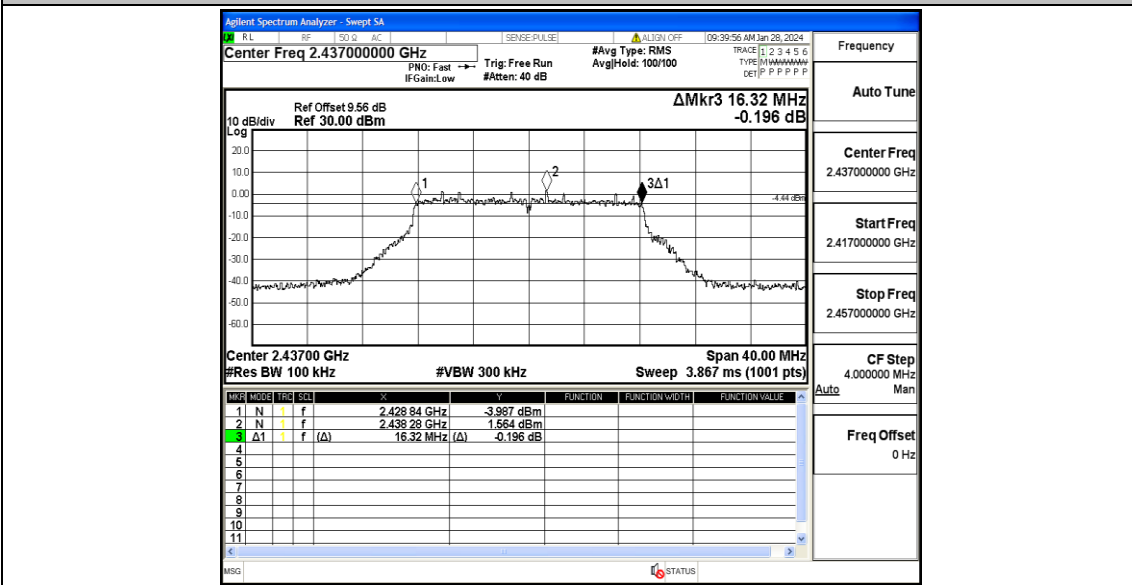
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	0.5	PASS
		2437	8.600	2432.480	2441.080	0.5	PASS
		2462	9.080	2457.480	2466.560	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	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

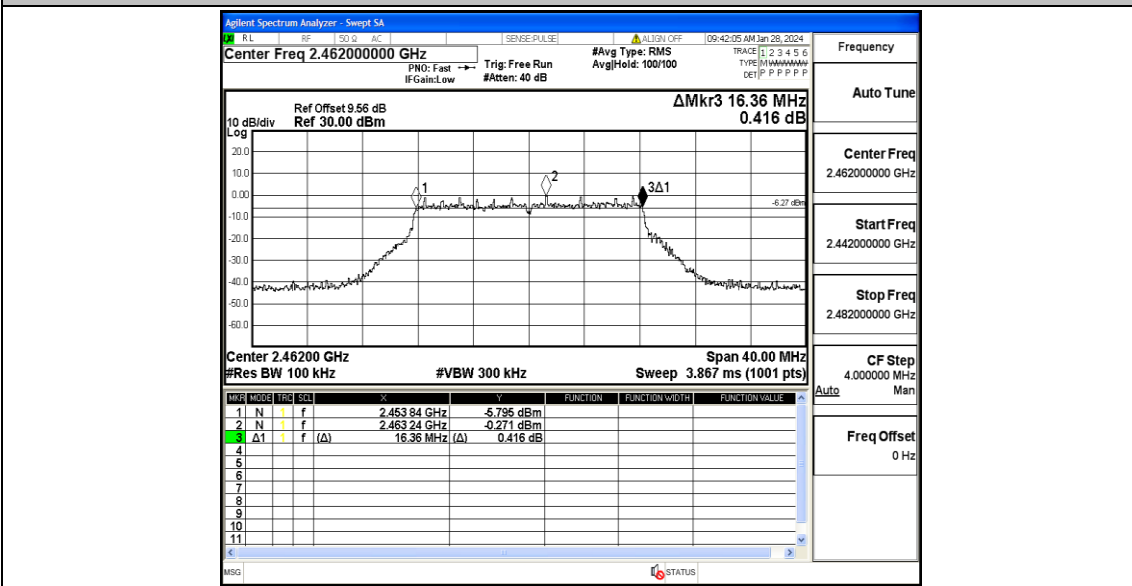




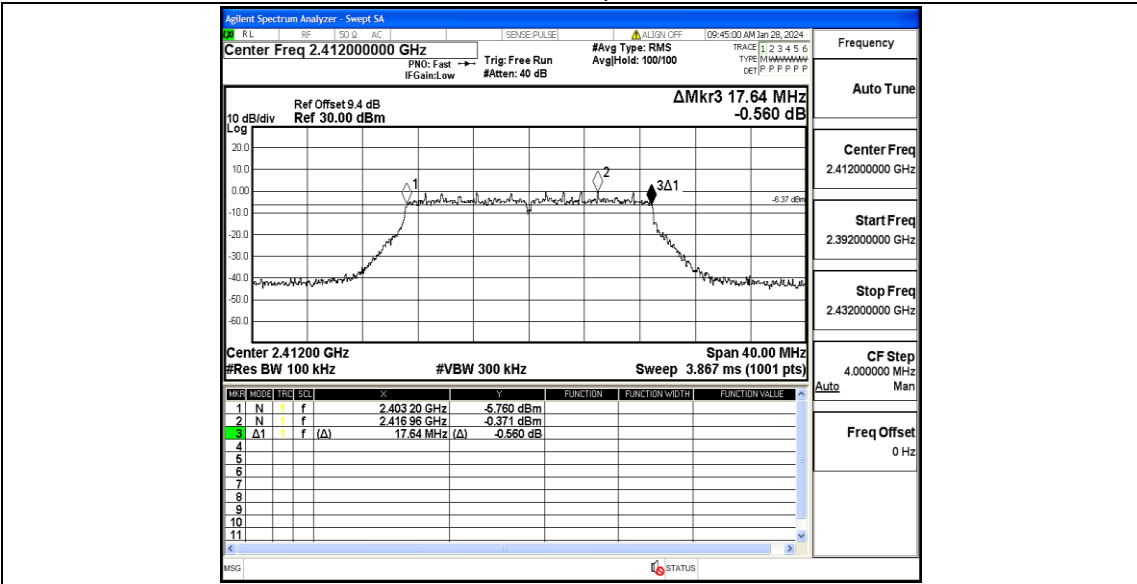
11G\_Ant1\_2437



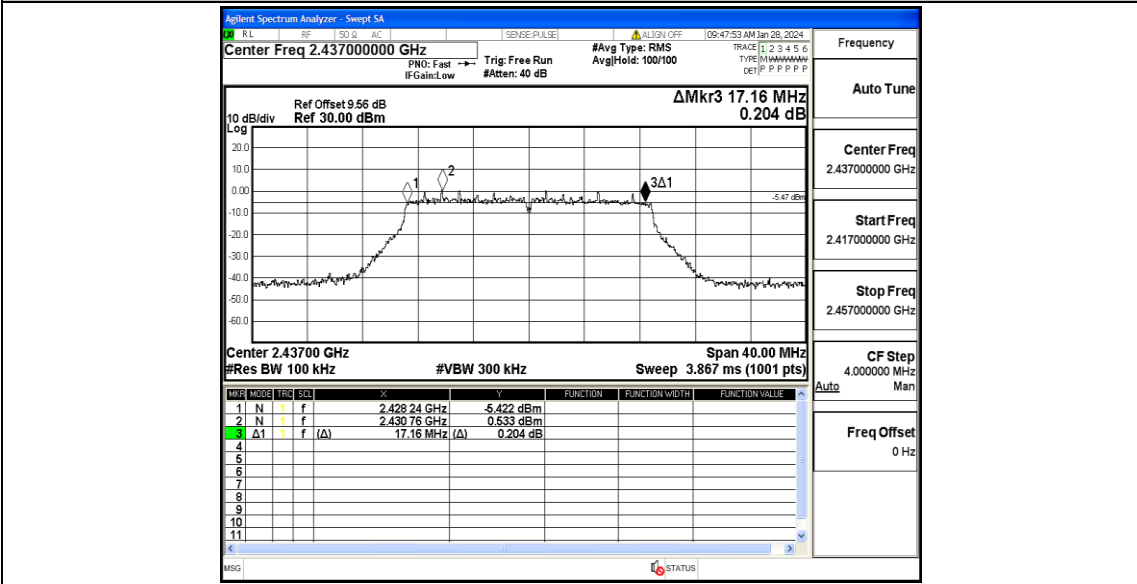
11G\_Ant1\_2462



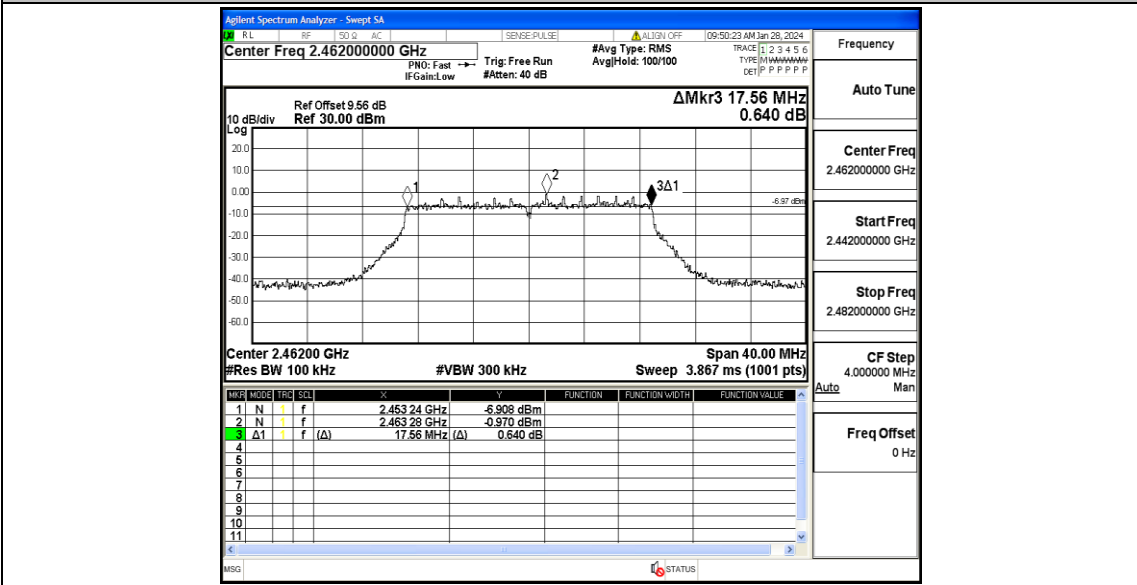
11N20SISO\_Ant1\_2412



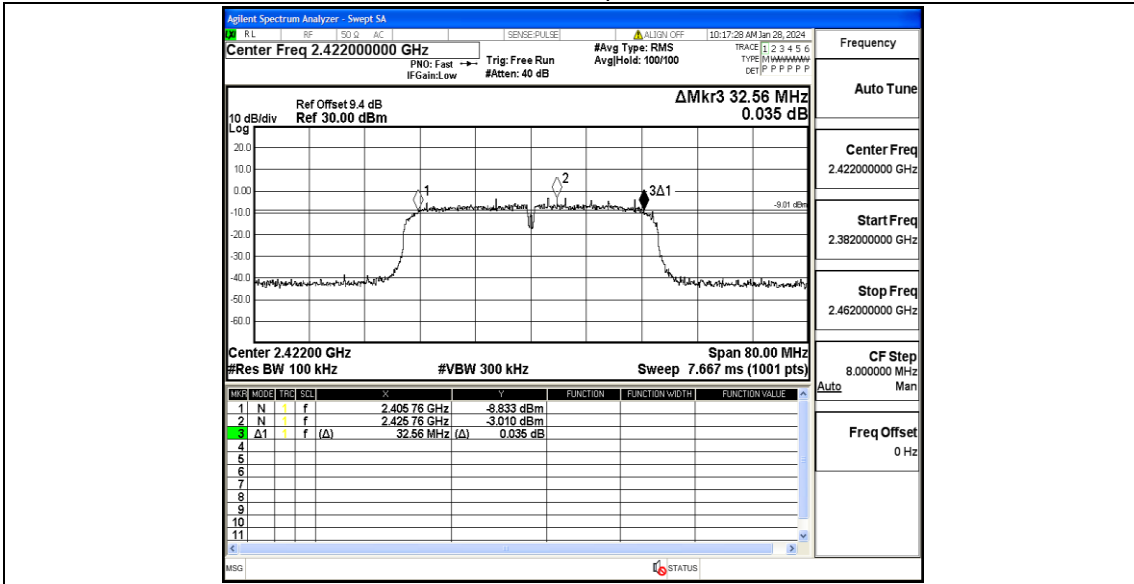
11N20SISO\_Ant1\_2437



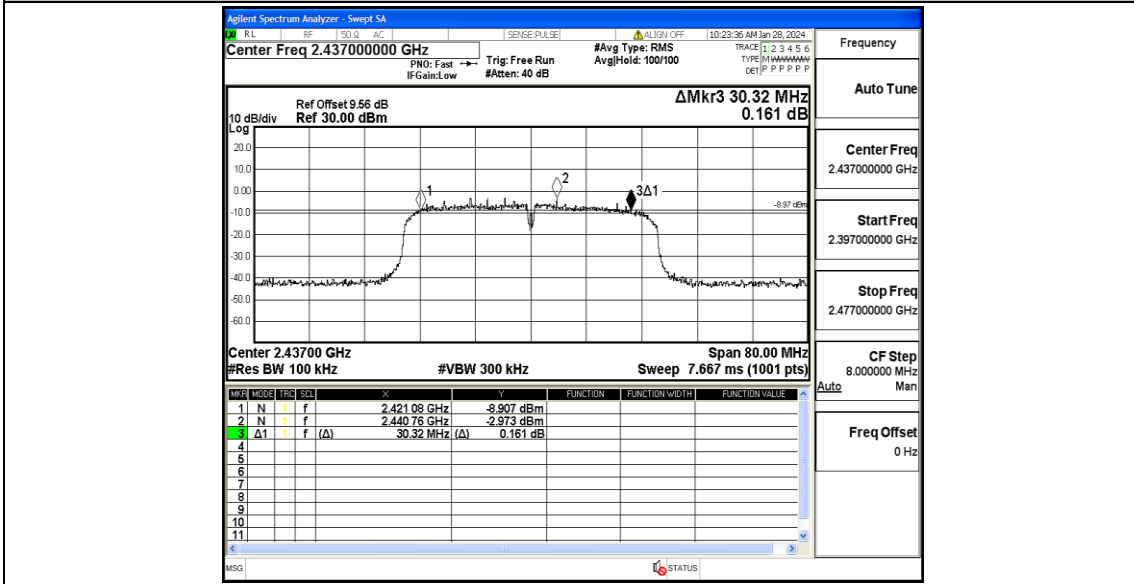
11N20SISO\_Ant1\_2462



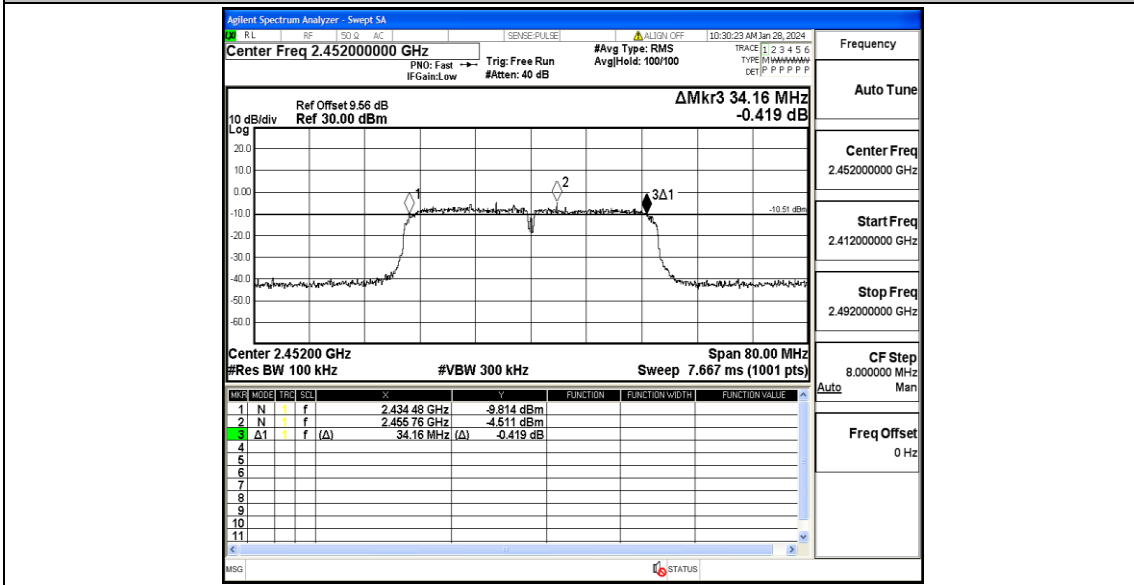
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

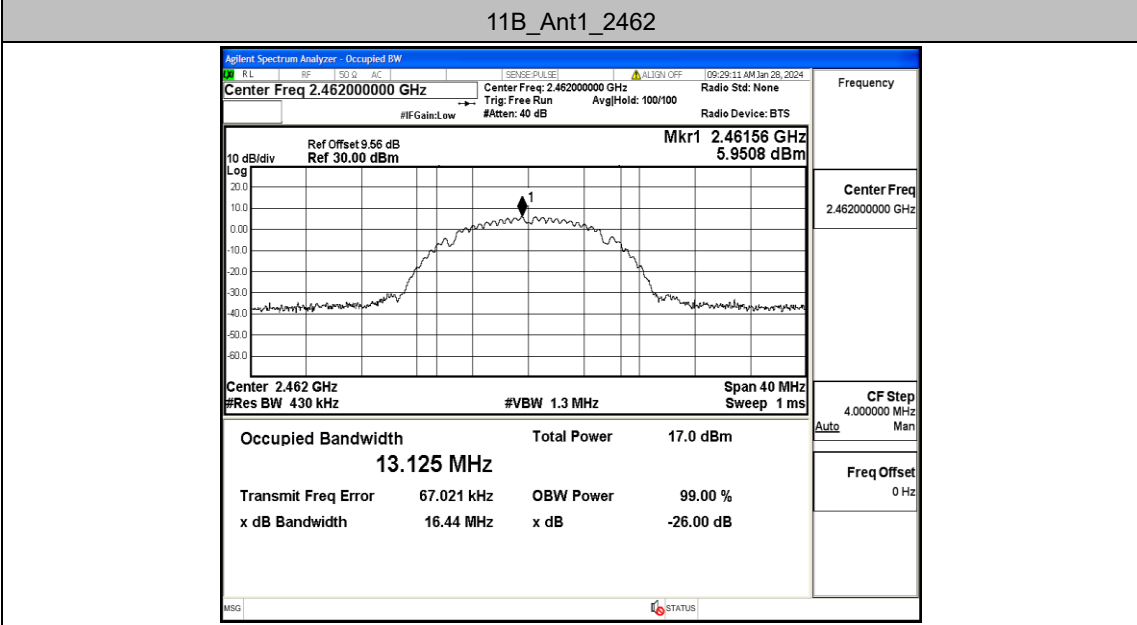
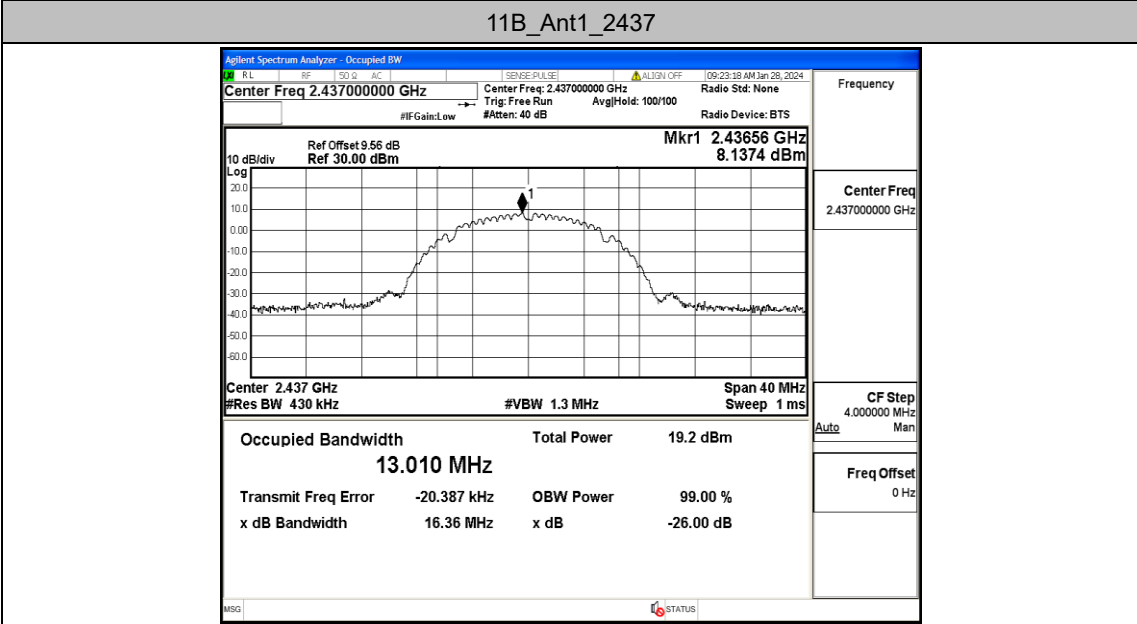
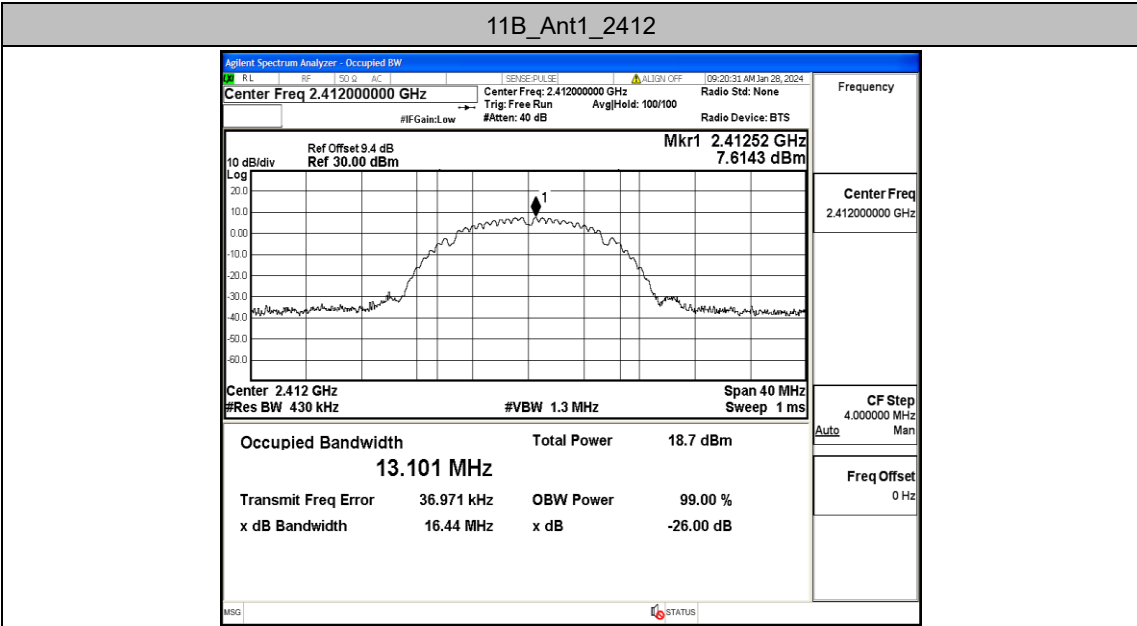


## Appendix B: Occupied Channel Bandwidth

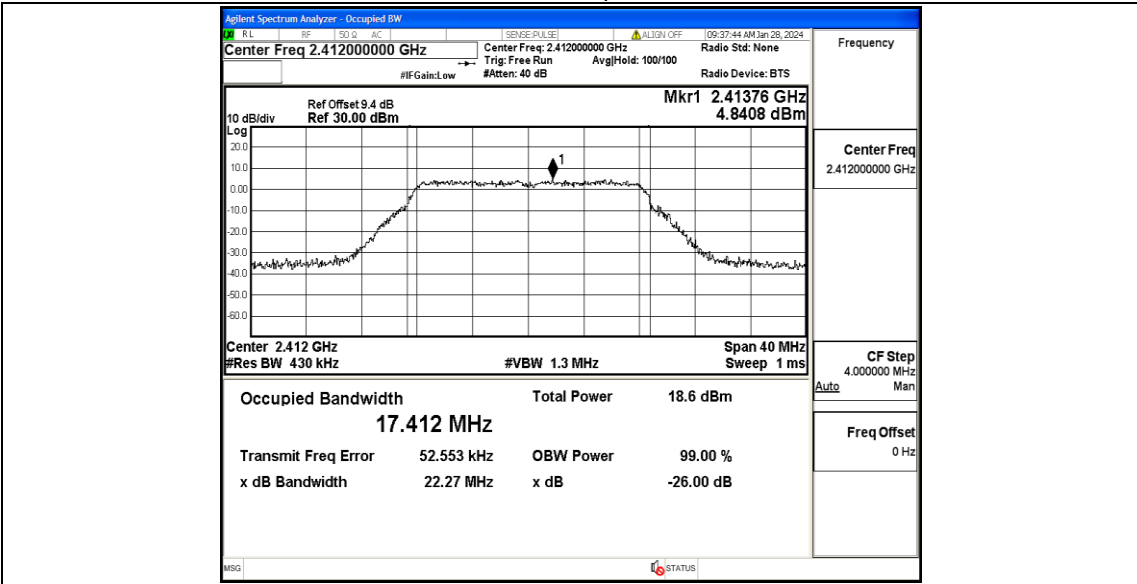
### Test Result

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	---	---

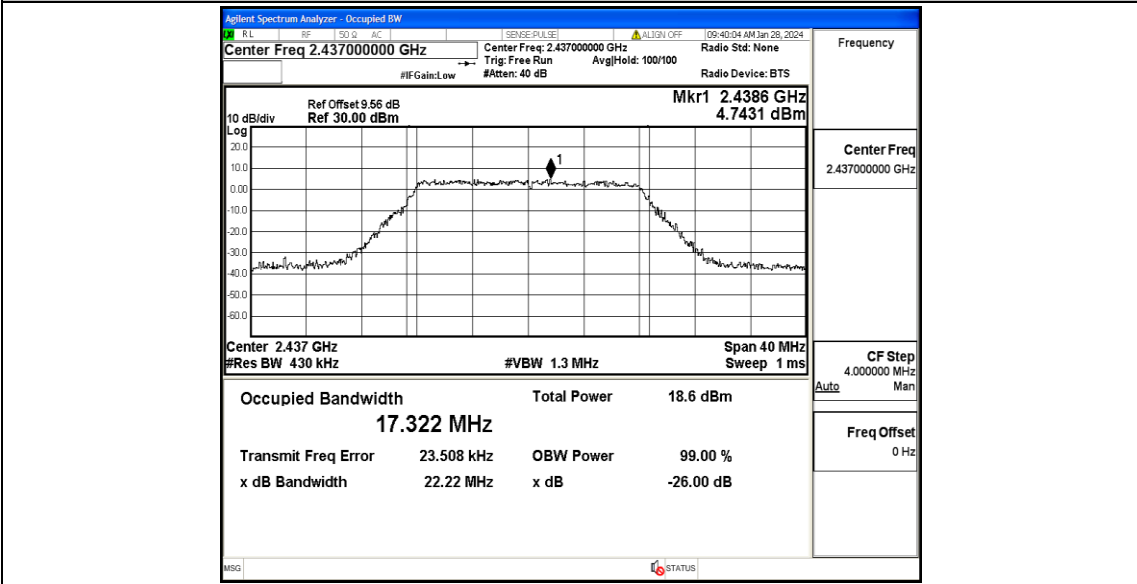
Test Graphs



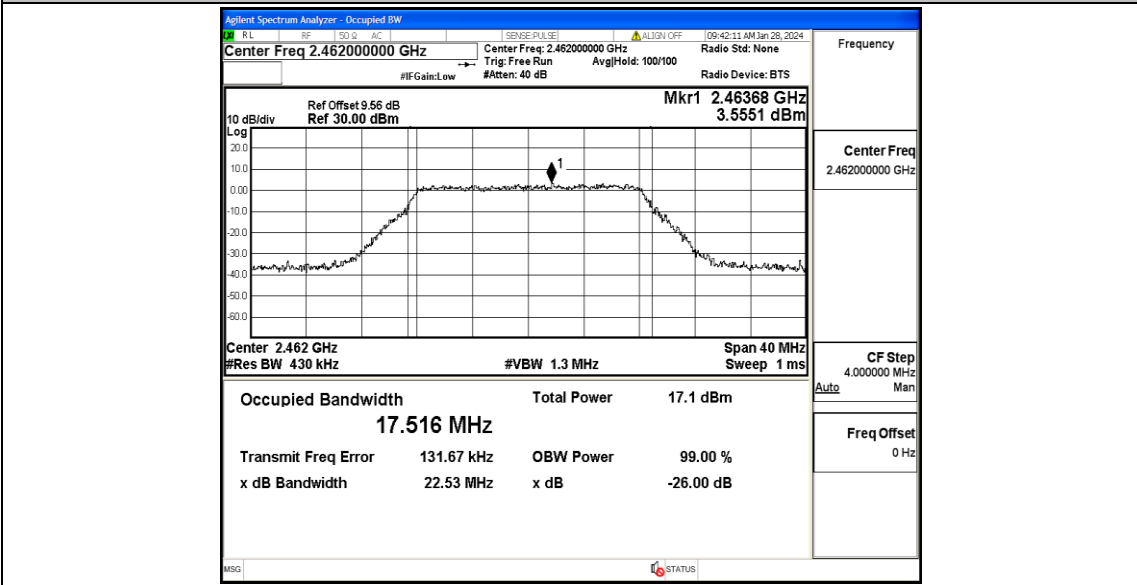
**11G\_Ant1\_2412**



11G\_Ant1\_2437

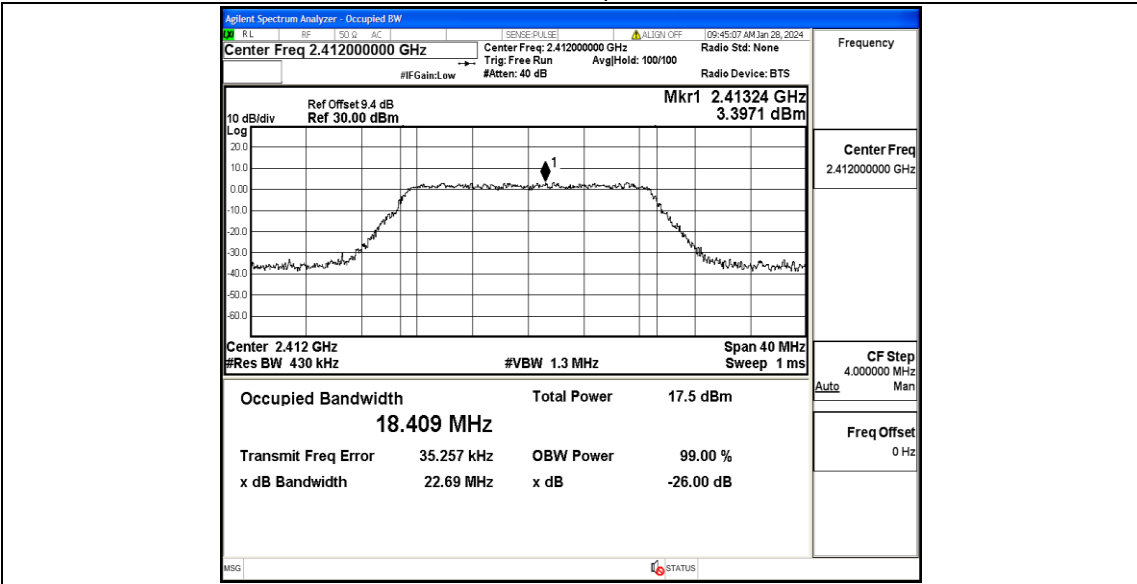


11G\_Ant1\_2462

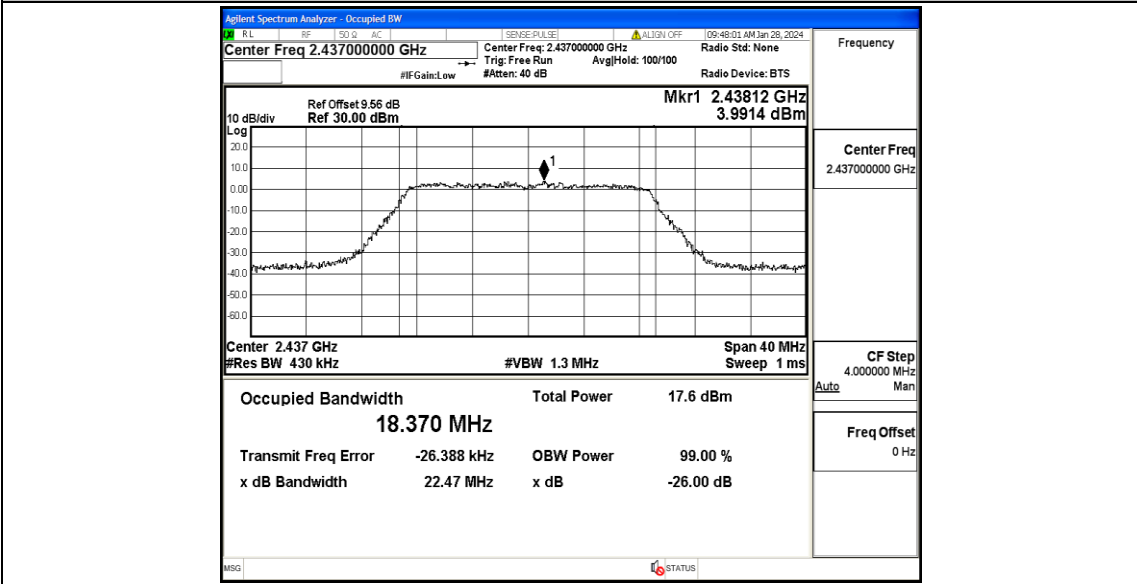


11N20SISO\_Ant1\_2412

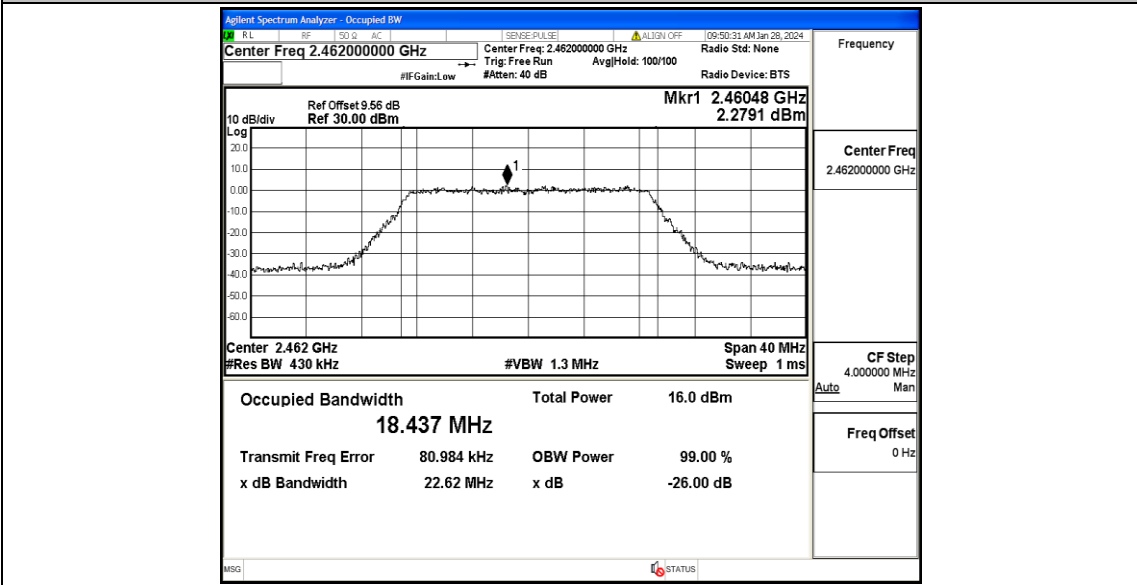




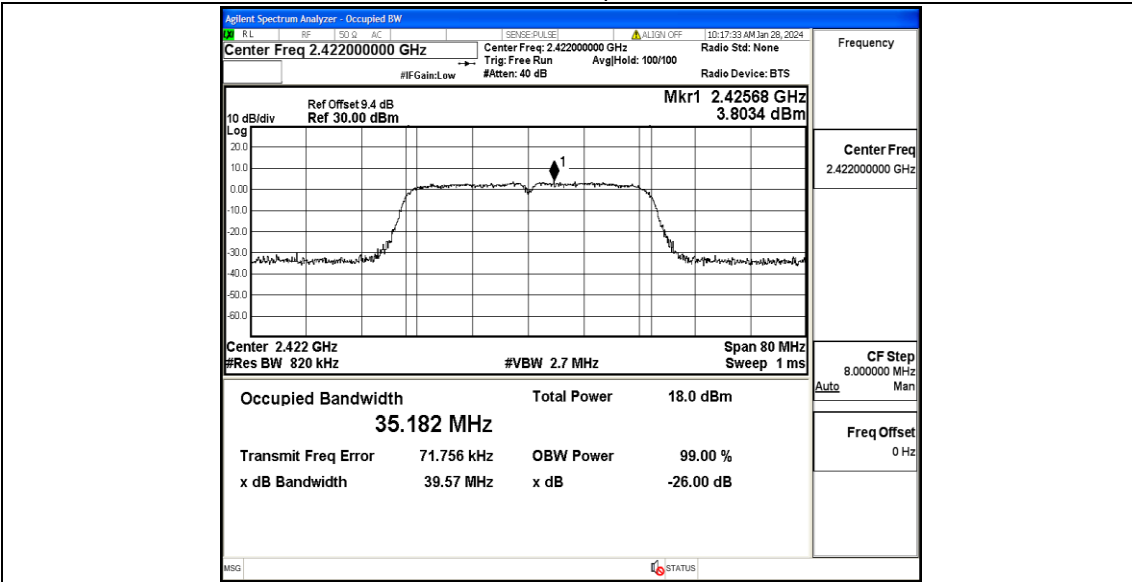
11N20SISO\_Ant1\_2437



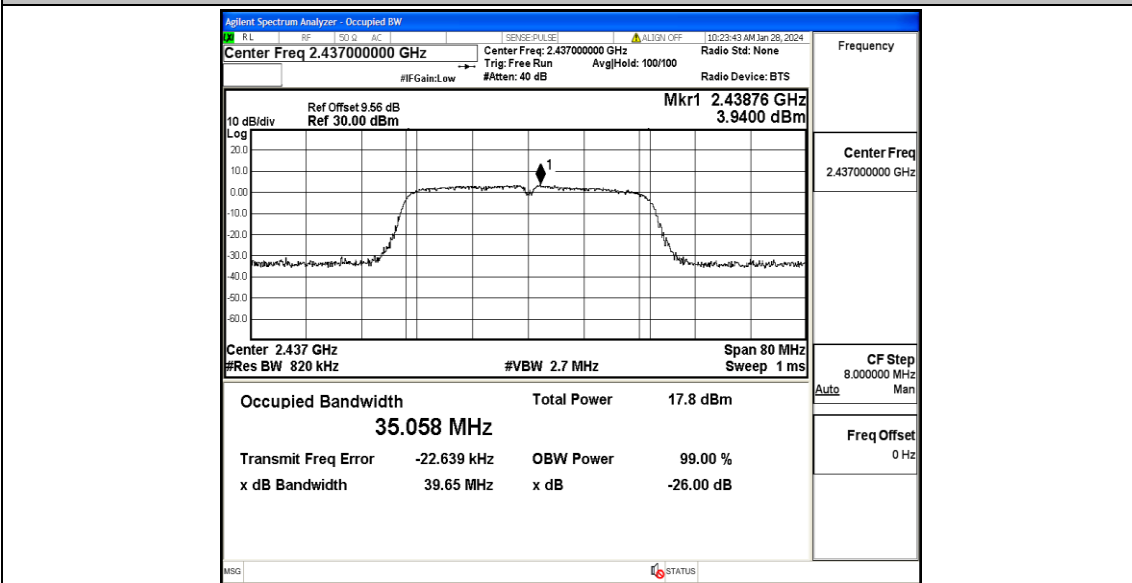
11N20SISO\_Ant1\_2462



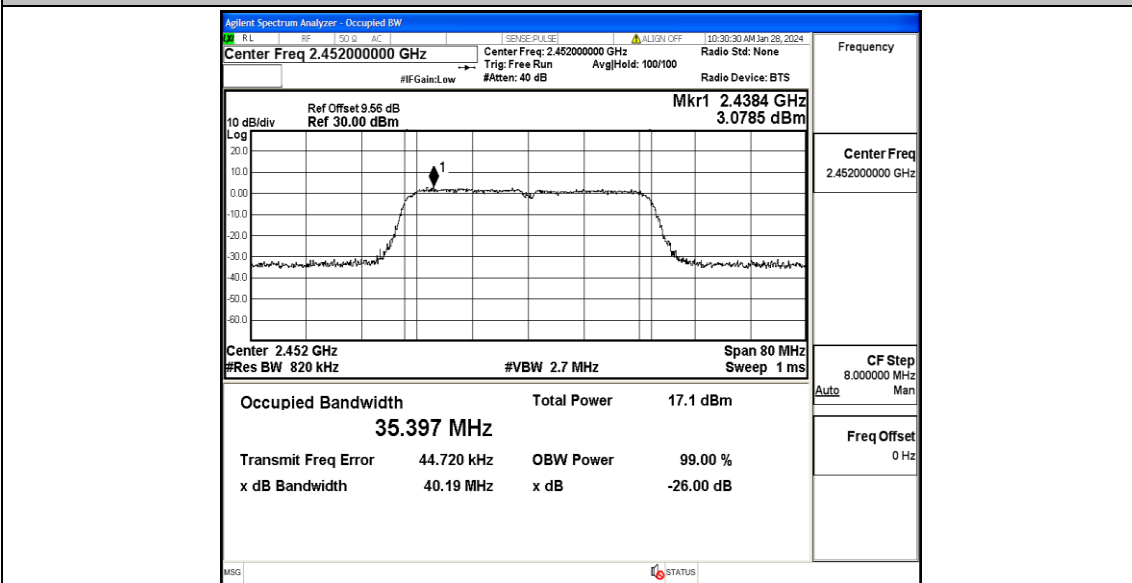
11N40SISO\_Ant1\_2422



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	15.71	≤30.00	PASS
		2437	15.95	≤30.00	PASS
		2462	14.23	≤30.00	PASS
11G	Ant1	2412	12.53	≤30.00	PASS
		2437	12.51	≤30.00	PASS
		2462	11.15	≤30.00	PASS
11N20SISO	Ant1	2412	11.72	≤30.00	PASS
		2437	11.53	≤30.00	PASS
		2462	10.26	≤30.00	PASS
11N40SISO	Ant1	2422	10.74	≤30.00	PASS
		2437	10.76	≤30.00	PASS
		2452	10.14	≤30.00	PASS

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

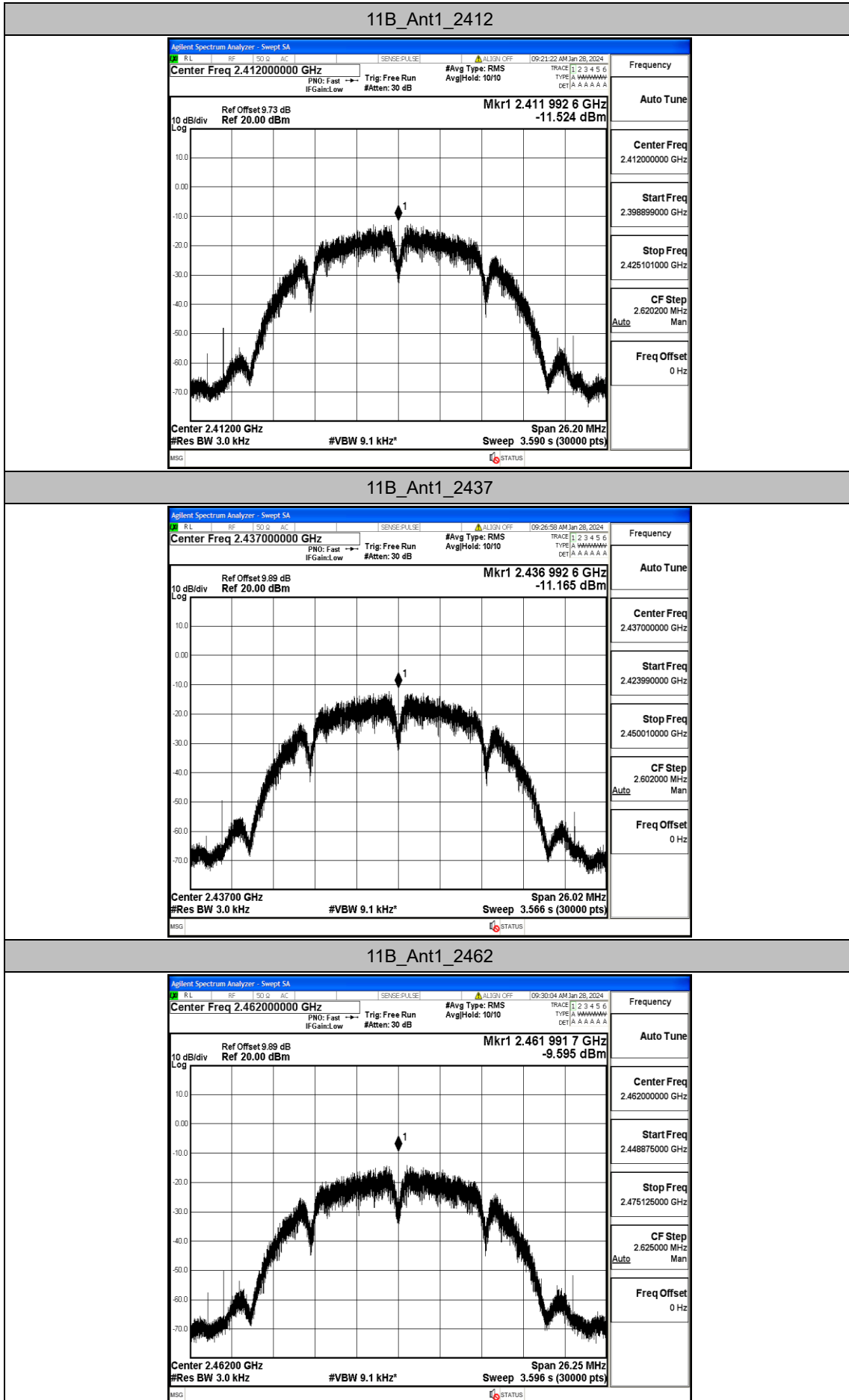
## Appendix D: Maximum power spectral density

### Test Result

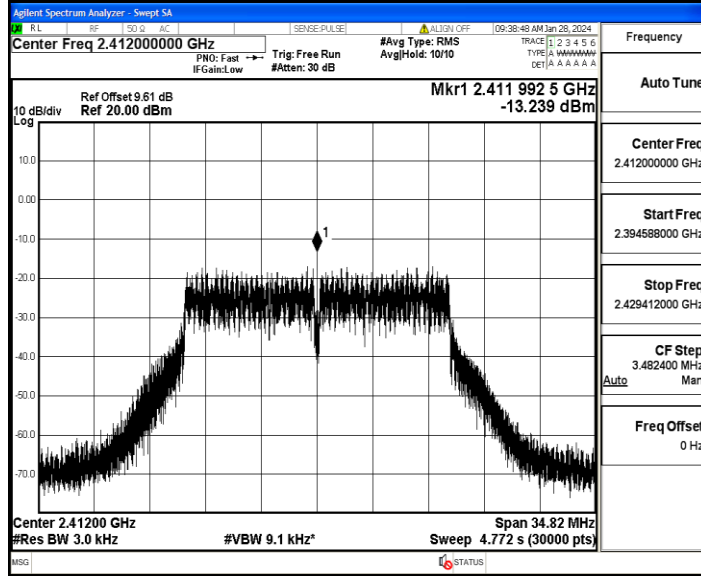
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.52	≤8.00	PASS
		2437	-11.17	≤8.00	PASS
		2462	-9.6	≤8.00	PASS
11G	Ant1	2412	-13.24	≤8.00	PASS
		2437	-12.63	≤8.00	PASS
		2462	-13.92	≤8.00	PASS
11N20SISO	Ant1	2412	-15.16	≤8.00	PASS
		2437	-14.13	≤8.00	PASS
		2462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

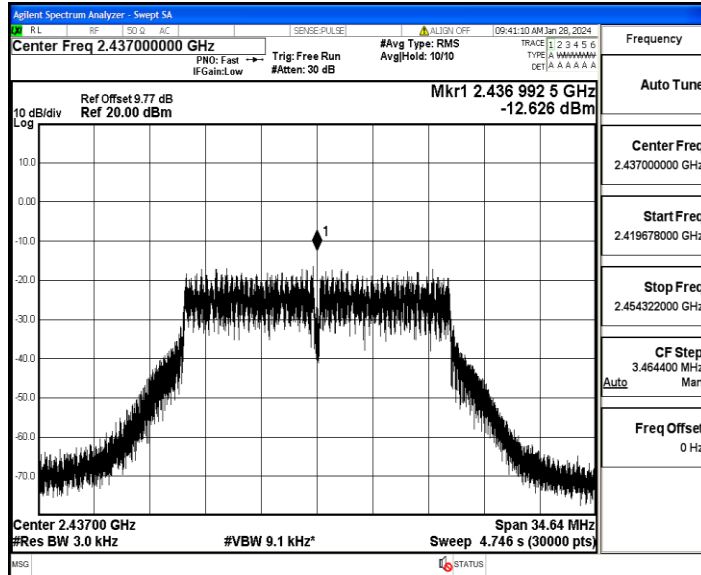
### Test Graphs



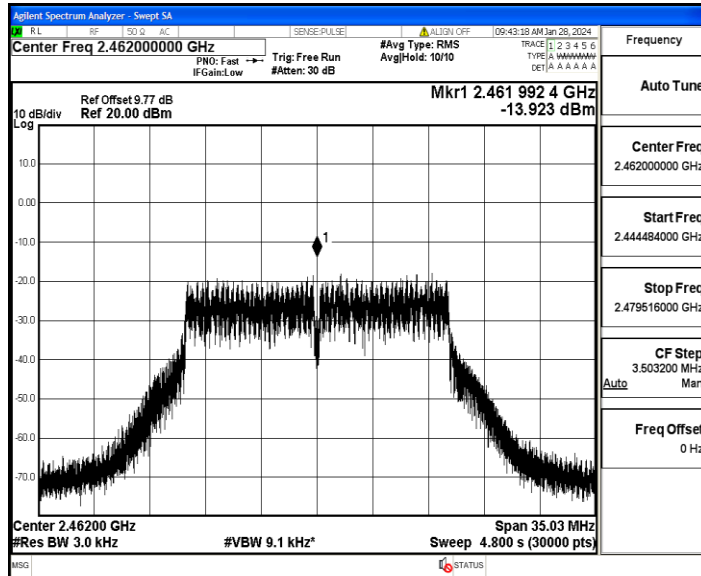
11G\_Ant1\_2412



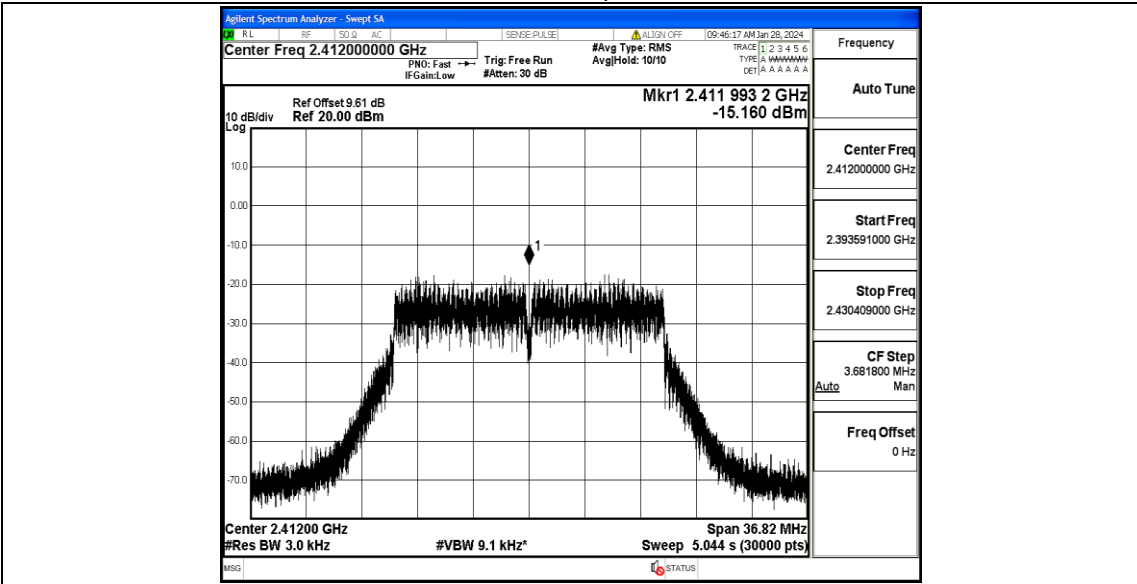
11G\_Ant1\_2437



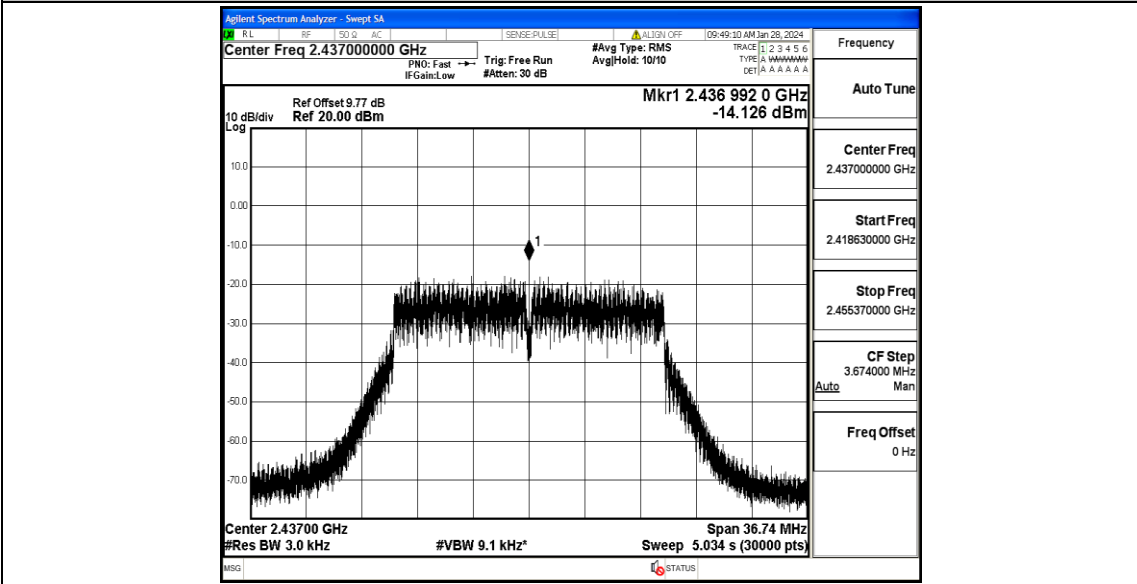
11G\_Ant1\_2462



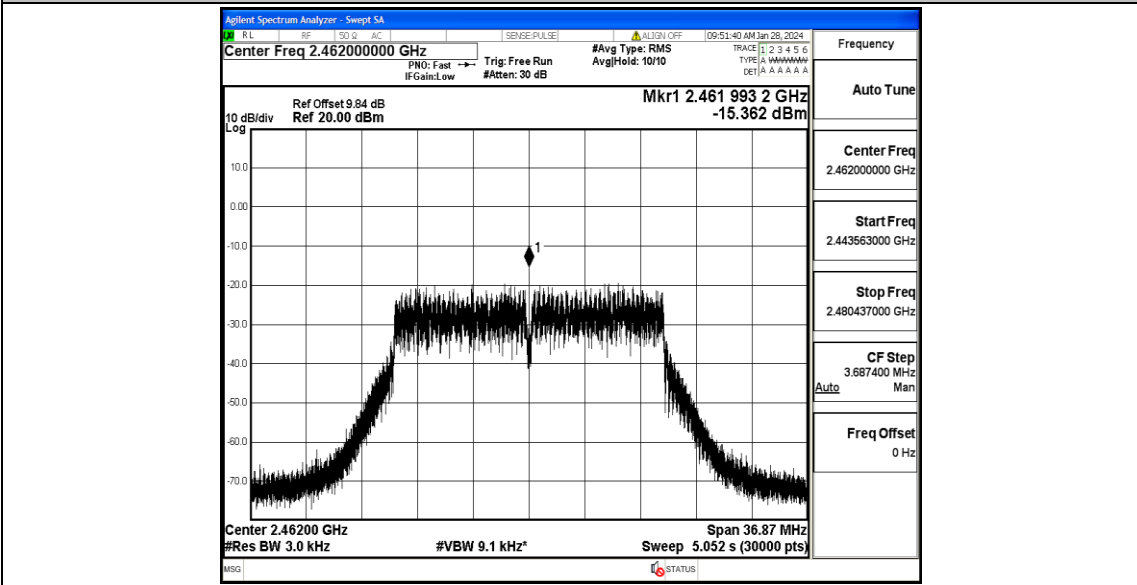
11N20SISO\_Ant1\_2412



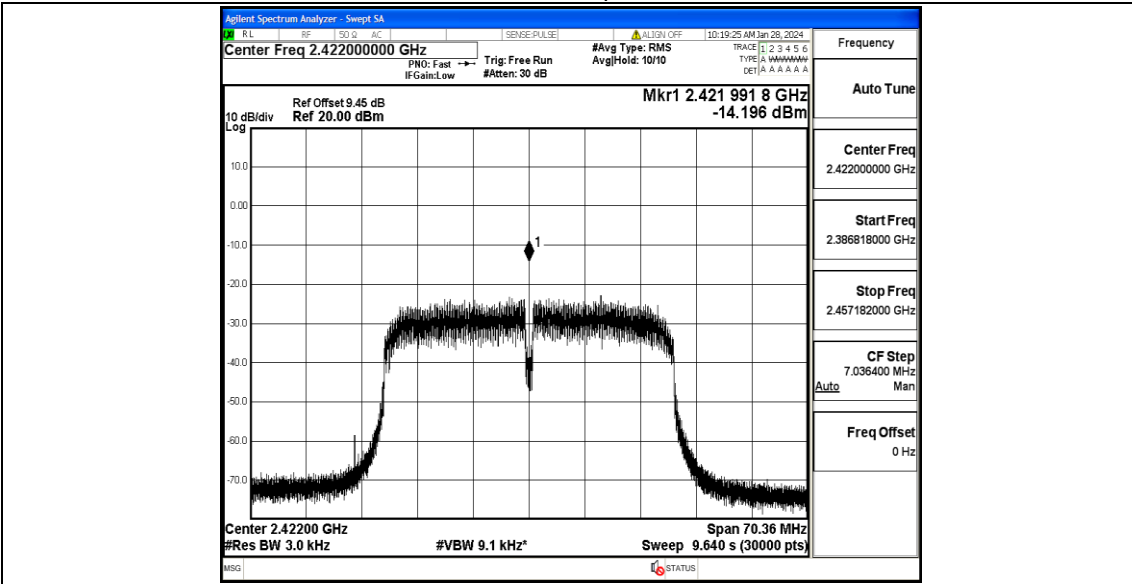
11N20SISO\_Ant1\_2437



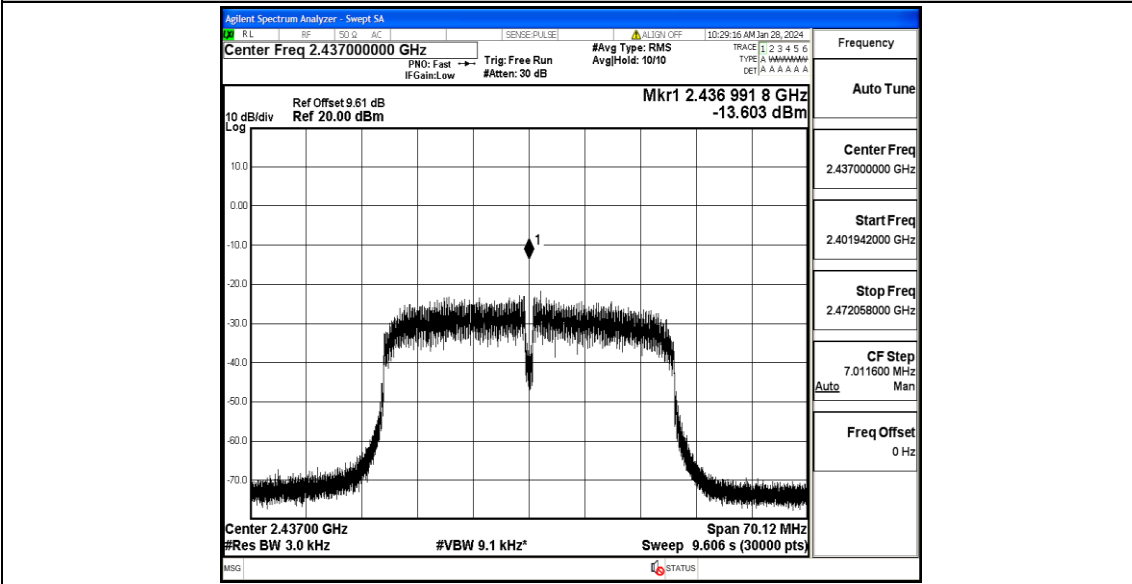
11N20SISO\_Ant1\_2462



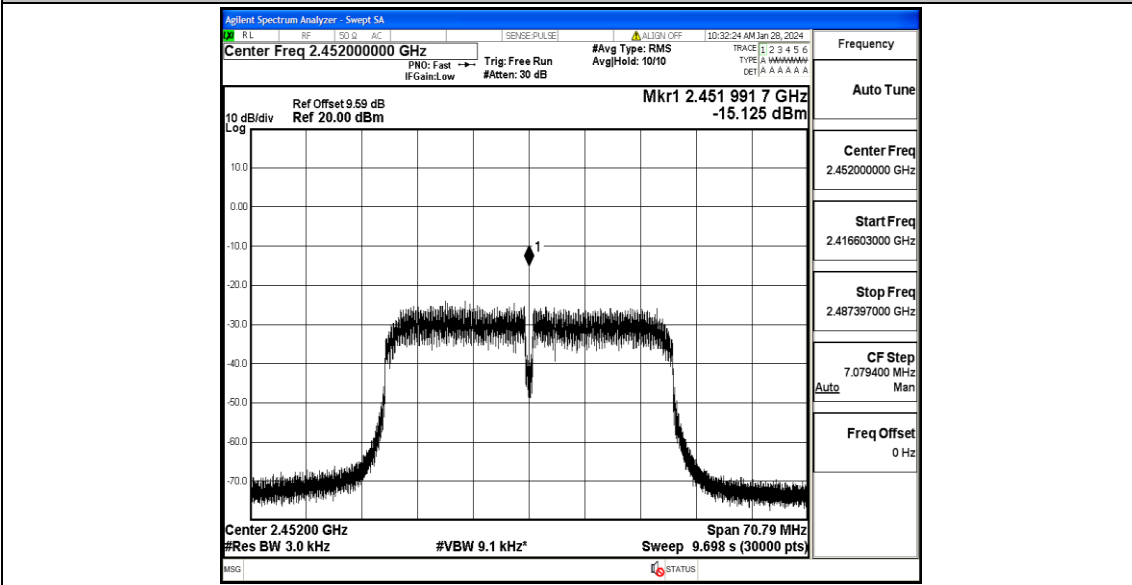
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452





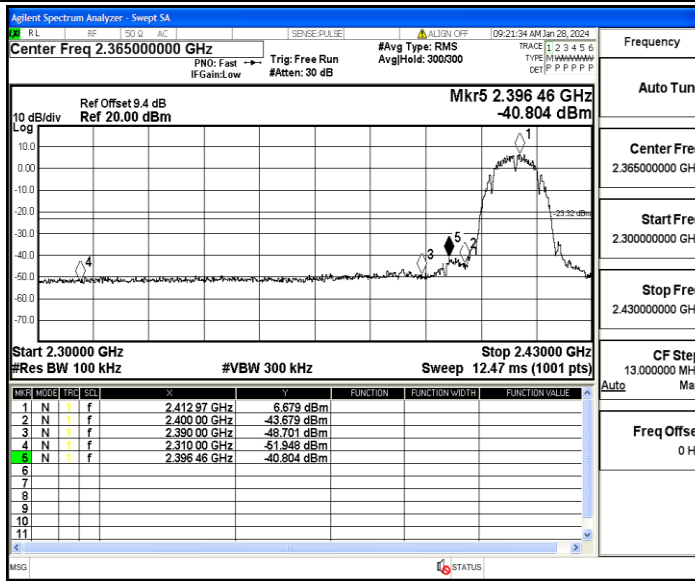
## Appendix E: Band edge measurements

### Test Result

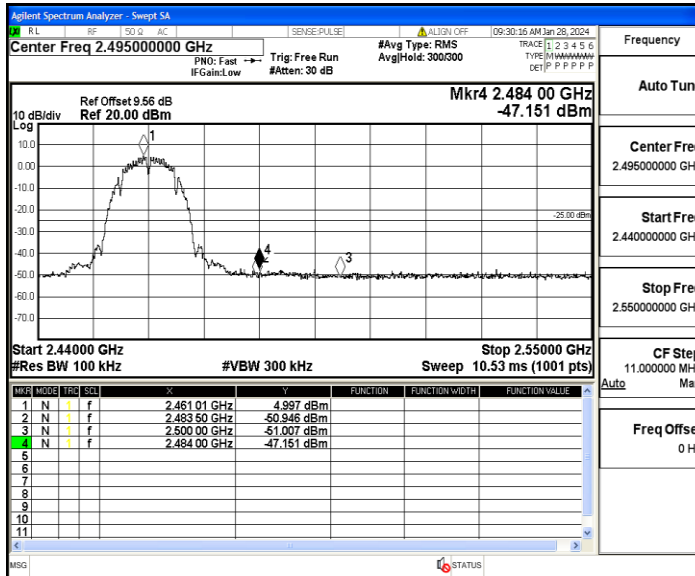
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.68	-40.8	≤-23.32	PASS
		High	2462	5.00	-47.15	≤-25	PASS
11G	Ant1	Low	2412	1.21	-36.53	≤-28.79	PASS
		High	2462	0.03	-47.19	≤-29.97	PASS
11N20SISO	Ant1	Low	2412	0.47	-34.87	≤-29.53	PASS
		High	2462	-1.15	-47.99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

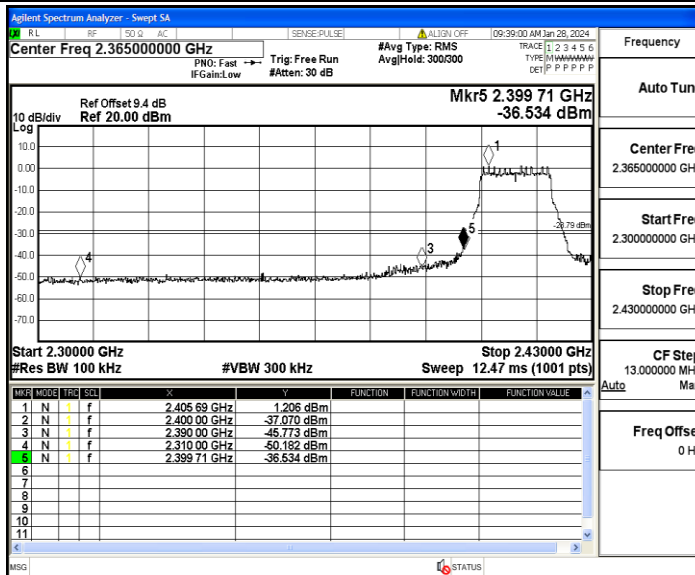
11B\_Ant1\_Low\_2412



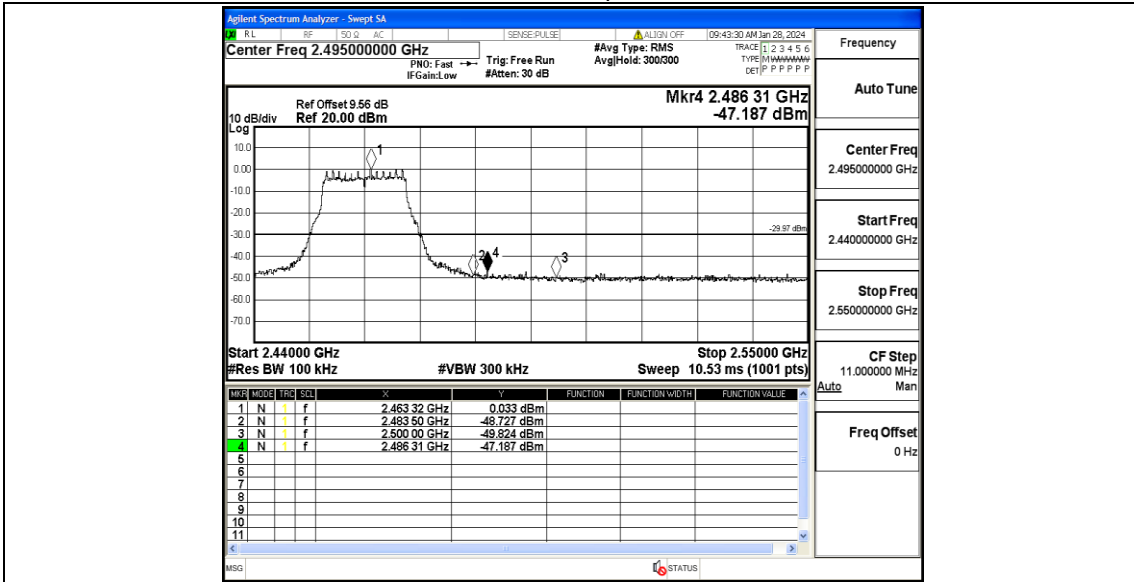
11B\_Ant1\_High\_2462



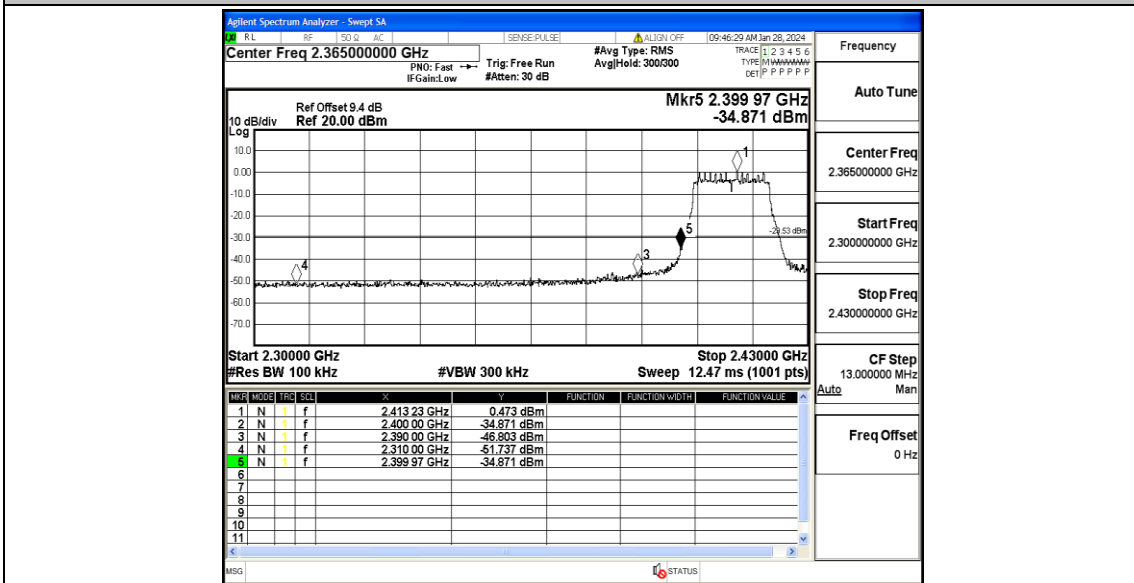
11G\_Ant1\_Low\_2412



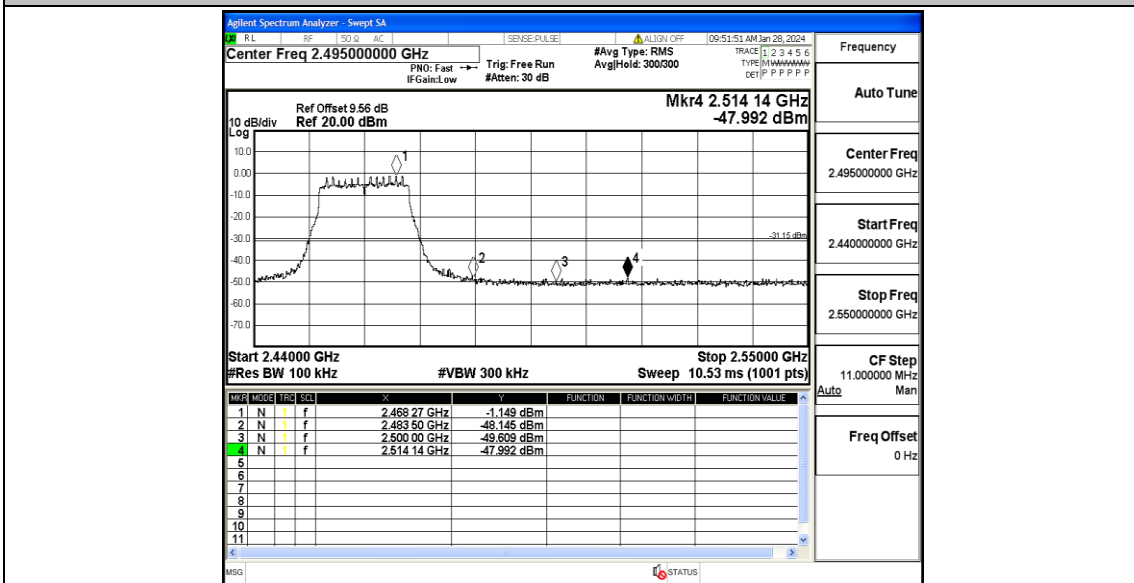
11G\_Ant1\_High\_2462



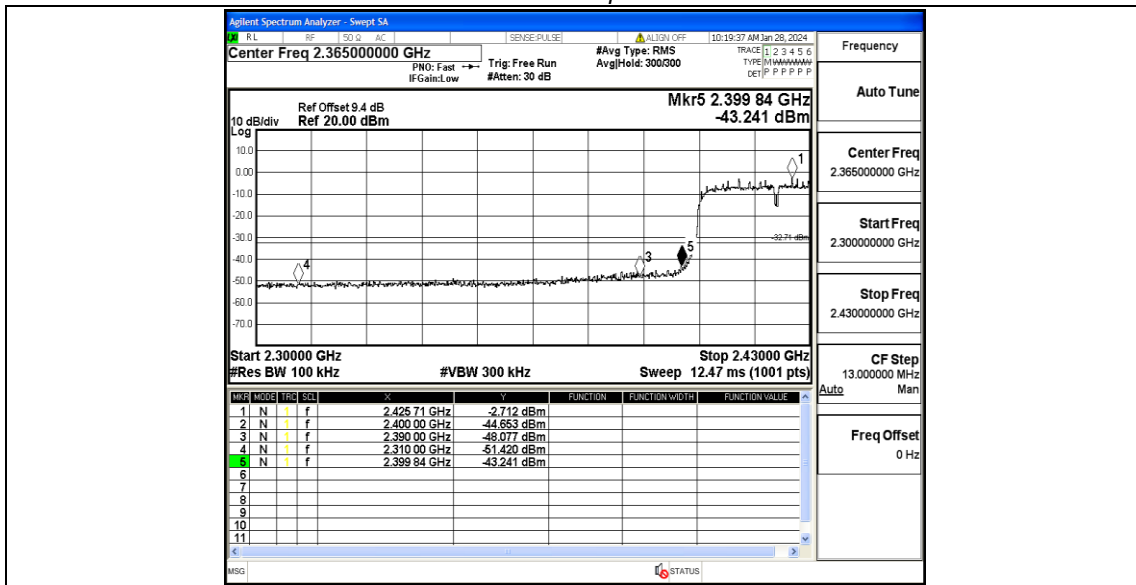
11N20SISO\_Ant1\_Low\_2412



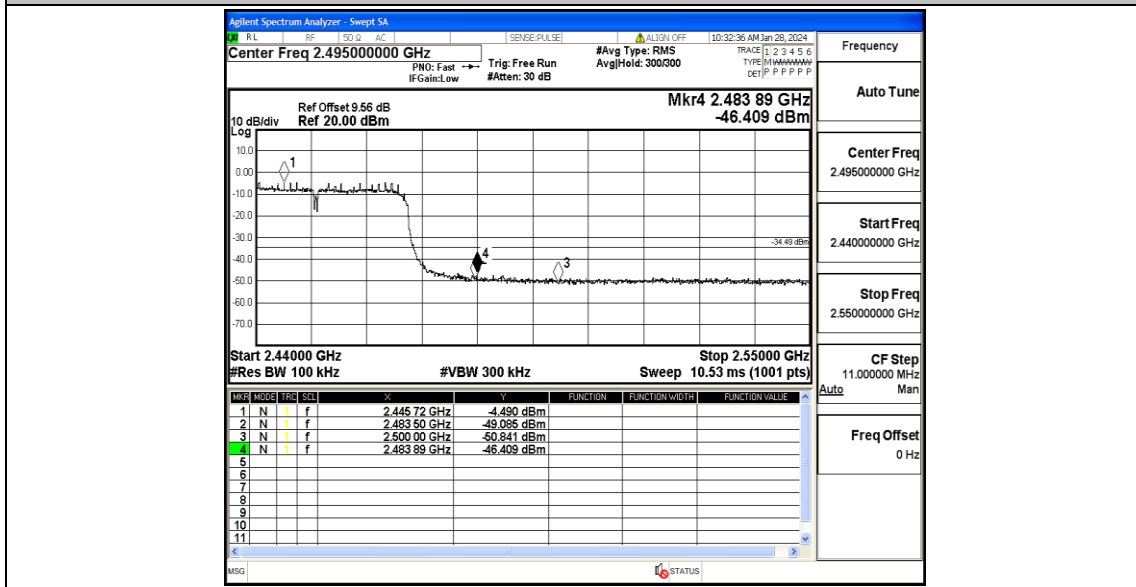
11N20SISO\_Ant1\_High\_2462



11N40SISO\_Ant1\_Low\_2422



11N40SISO\_Ant1\_High\_2452



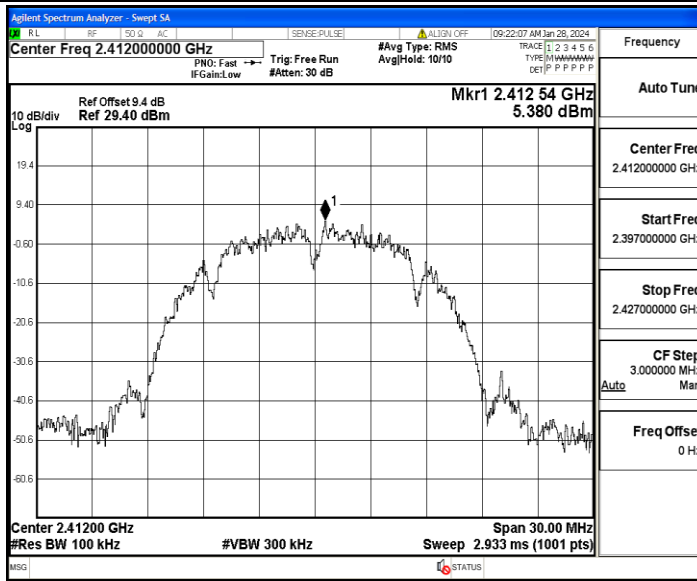
## Appendix F: Conducted Spurious Emission

### Test Result

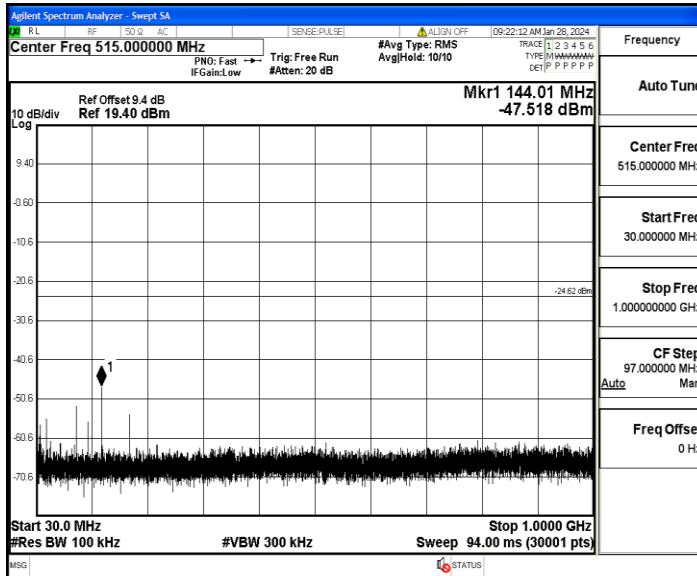
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	5.38	5.38	---	PASS
			30~1000	5.38	-47.52	≤-24.62	PASS
			1000~26500	5.38	-51.3	≤-24.62	PASS
		2437	Reference	6.29	6.29	---	PASS
			30~1000	6.29	-47.61	≤-23.71	PASS
			1000~26500	6.29	-51.44	≤-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

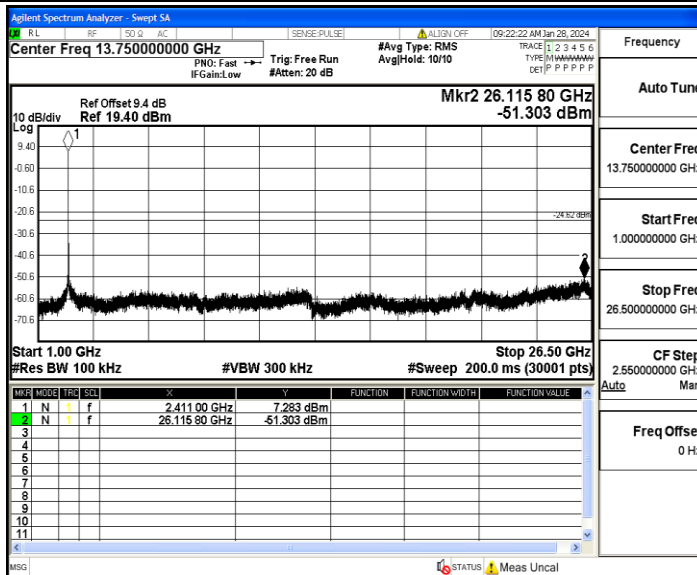
11B\_Ant1\_2412\_0~Reference



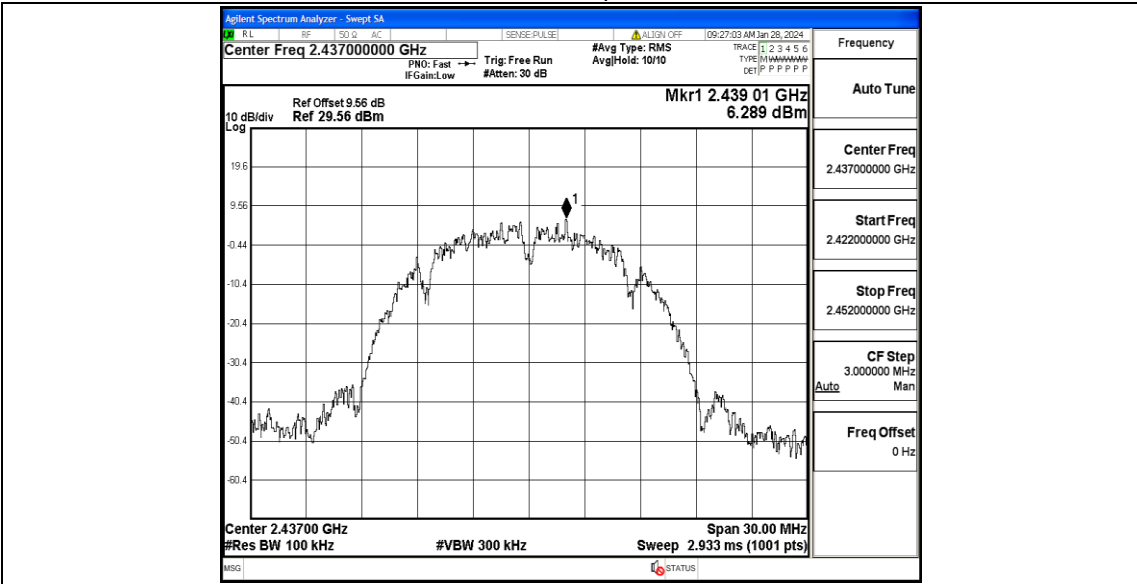
11B\_Ant1\_2412\_30~1000



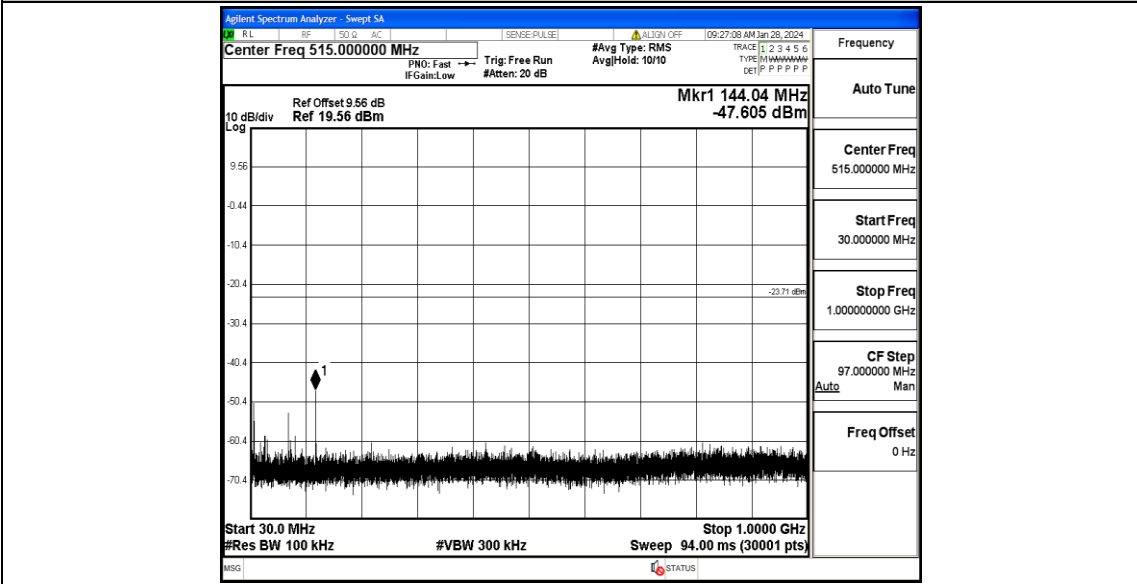
11B\_Ant1\_2412\_1000~26500



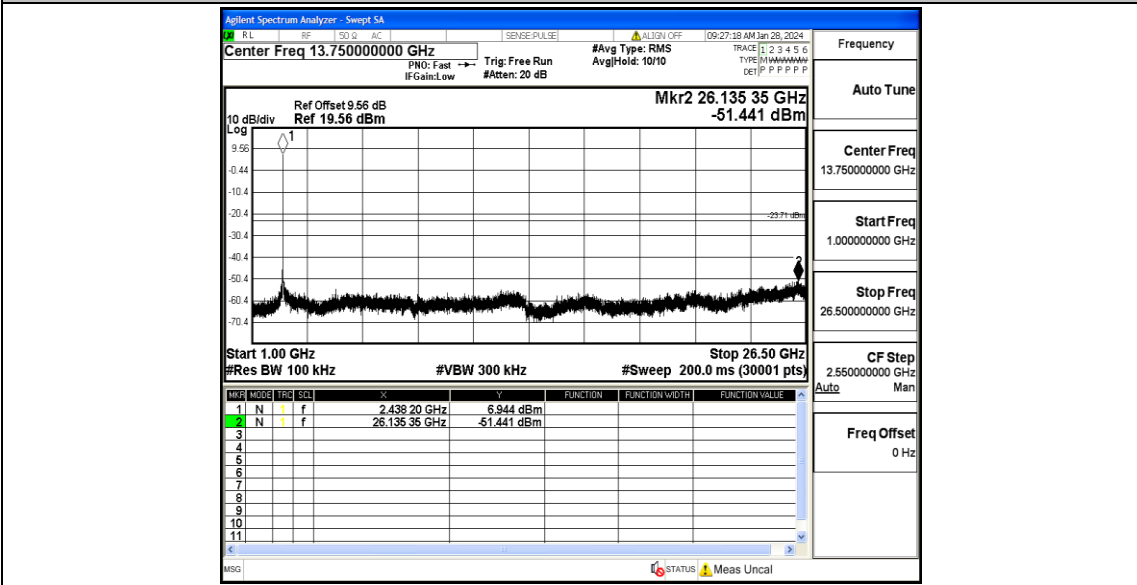
11B\_Ant1\_2437\_0~Reference



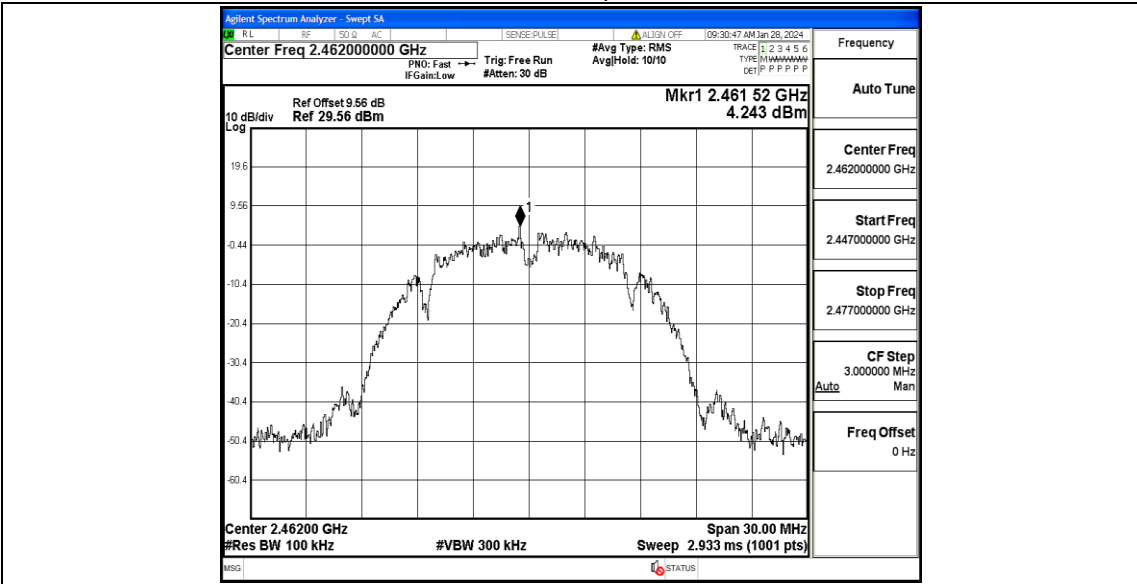
11B\_Ant1\_2437\_30~1000



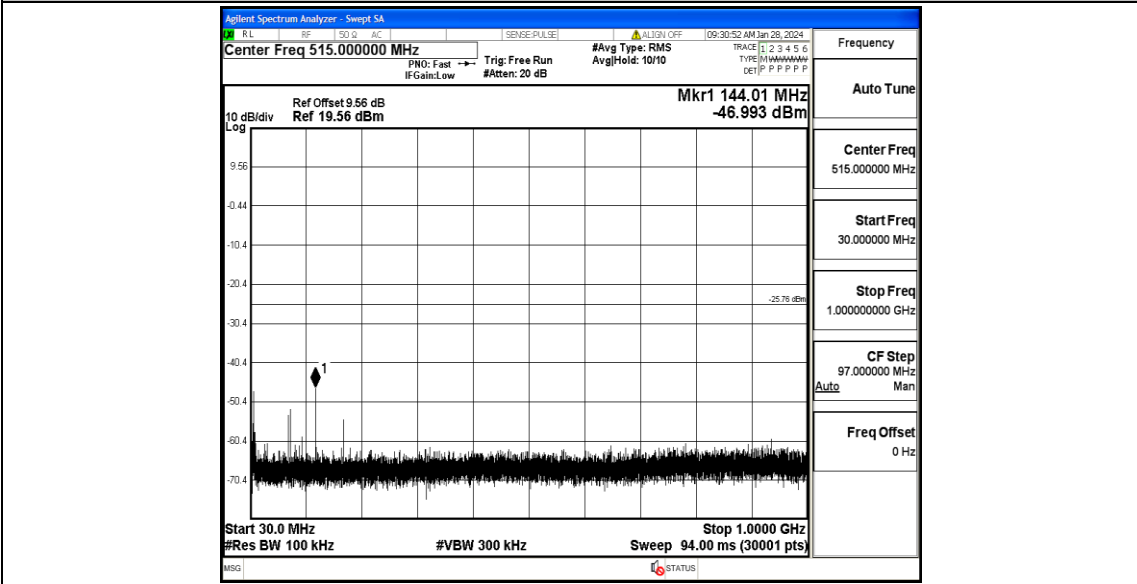
11B\_Ant1\_2437\_1000~26500



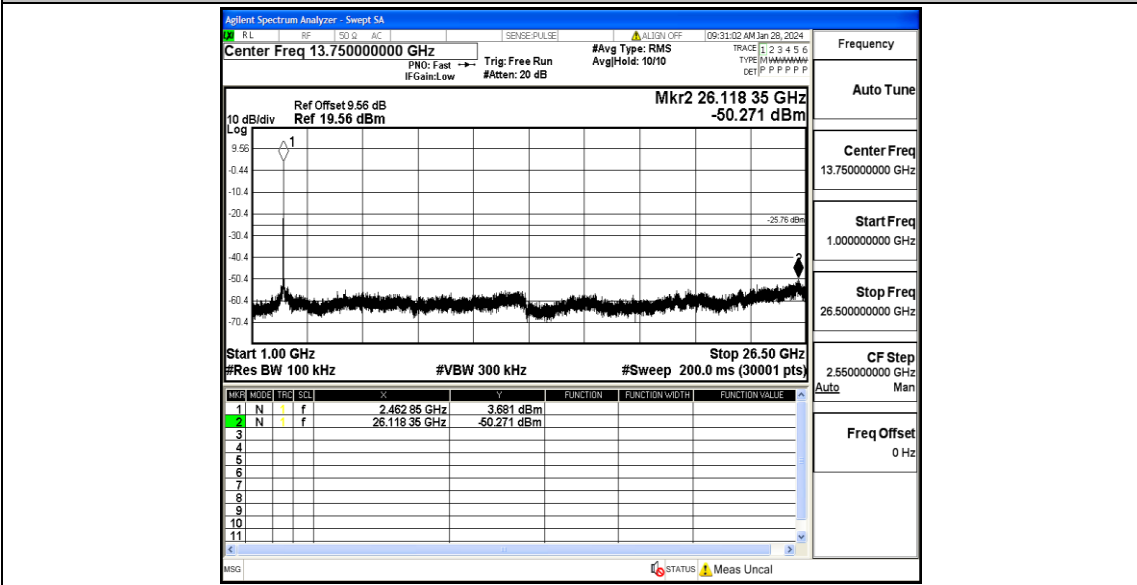
11B\_Ant1\_2462\_0~Reference



11B\_Ant1\_2462\_30~1000

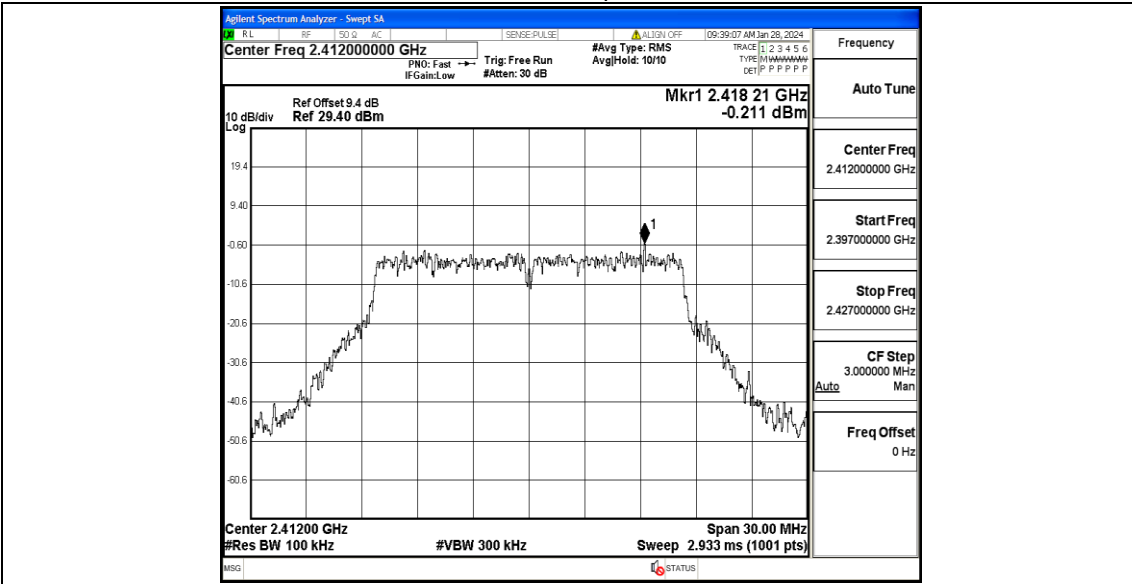


11B\_Ant1\_2462\_1000~26500

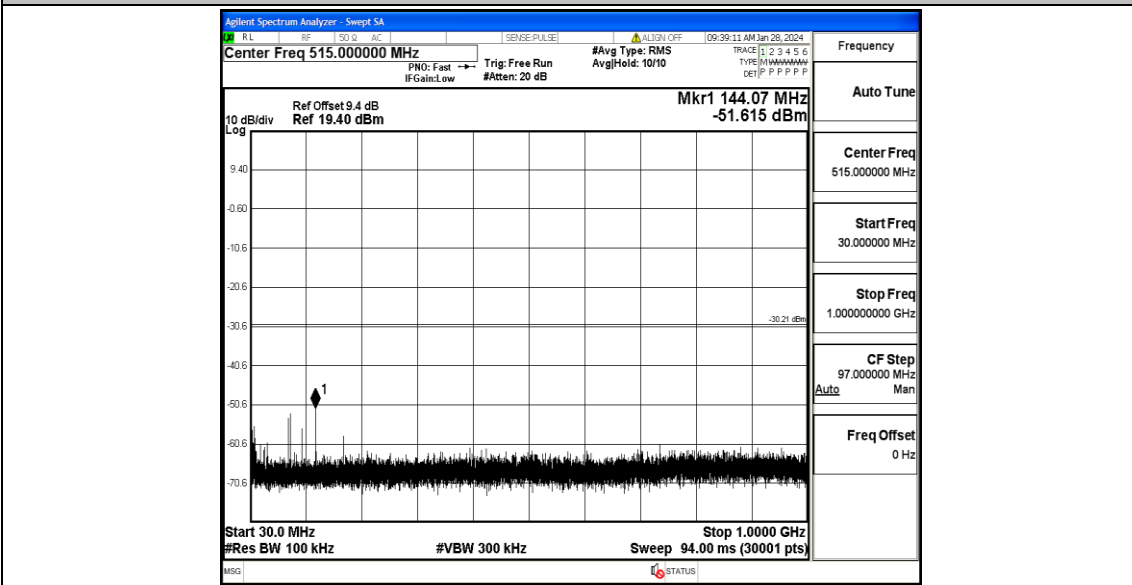


11G\_Ant1\_2412\_0~Reference

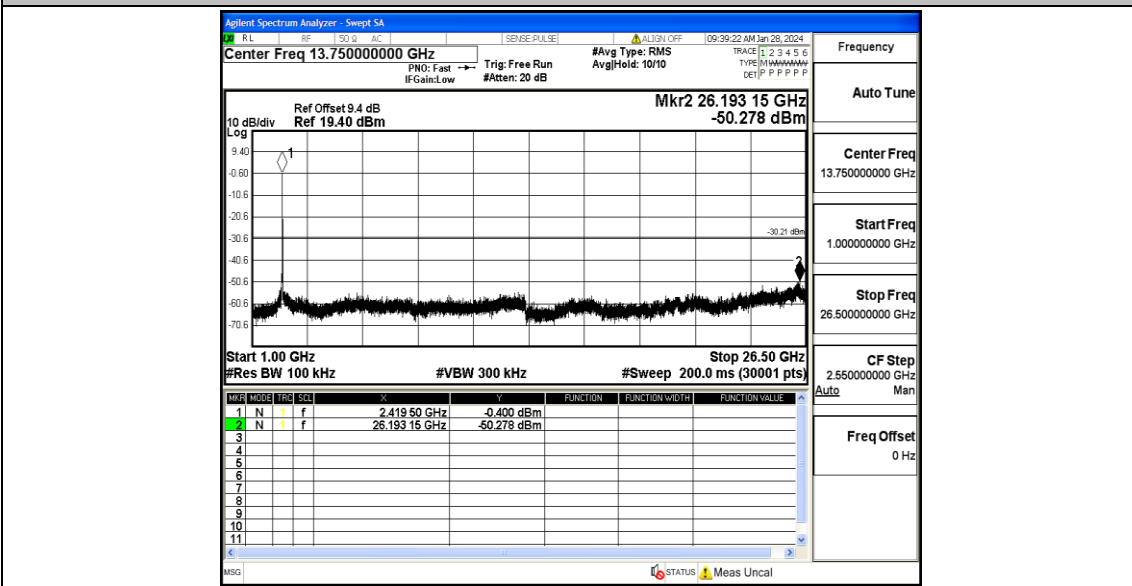




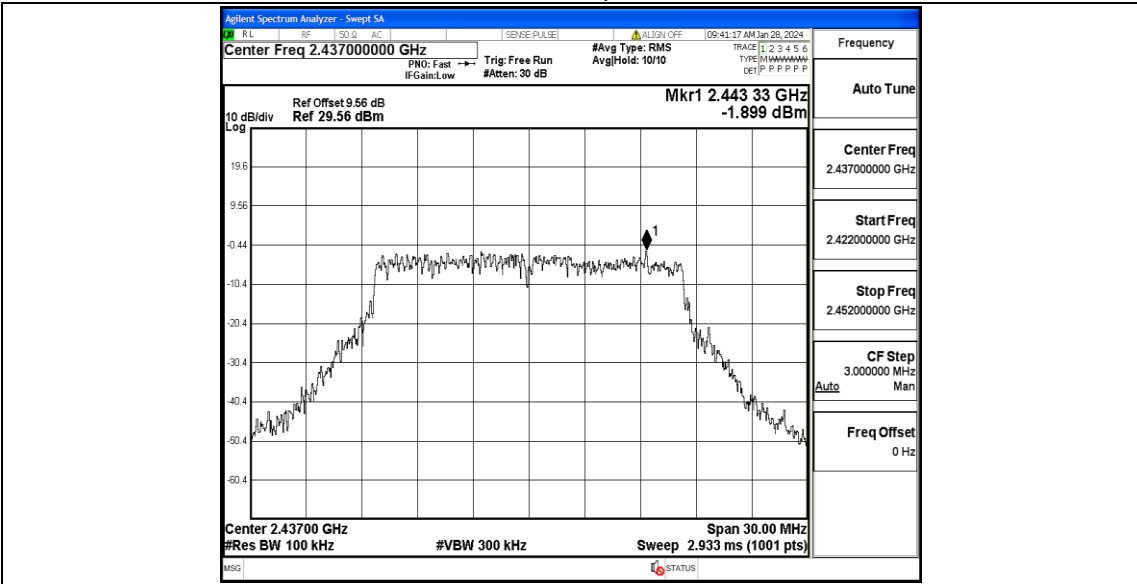
11G\_Ant1\_2412\_30~1000



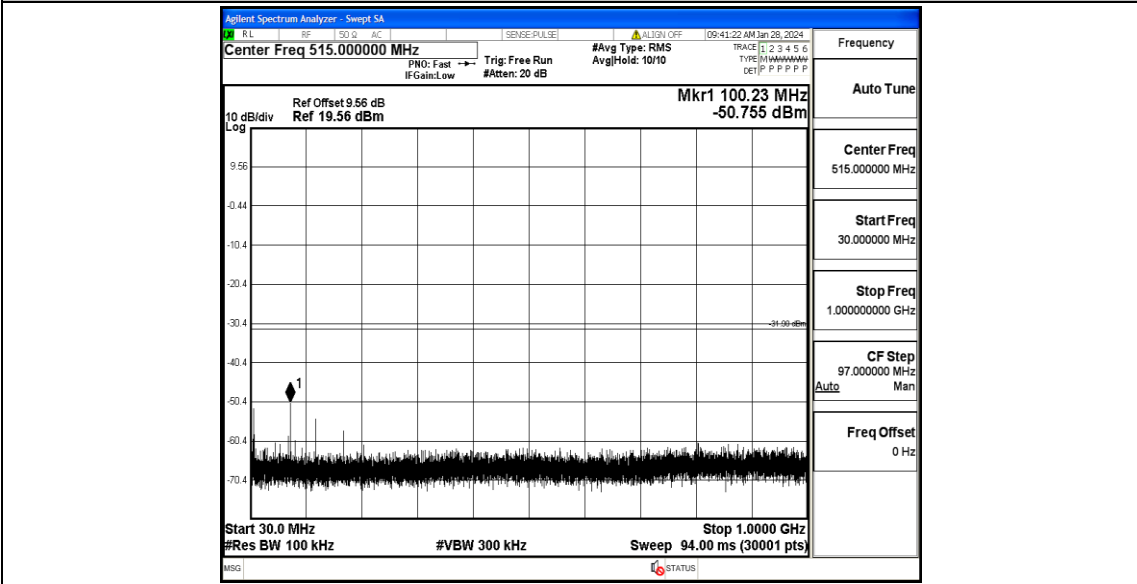
11G\_Ant1\_2412\_1000~26500



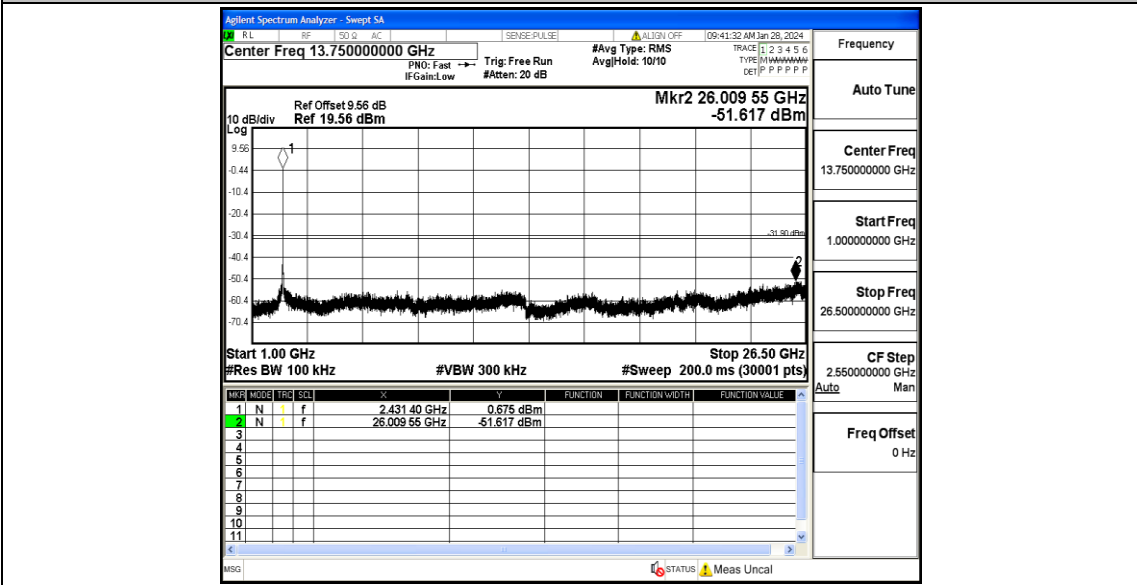
11G\_Ant1\_2437\_0~Reference



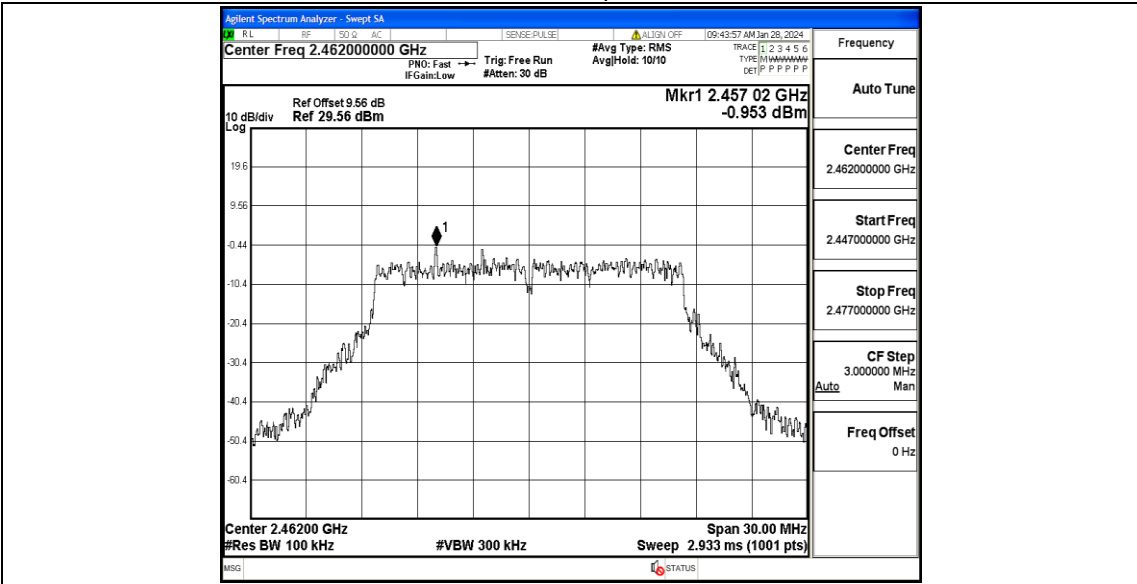
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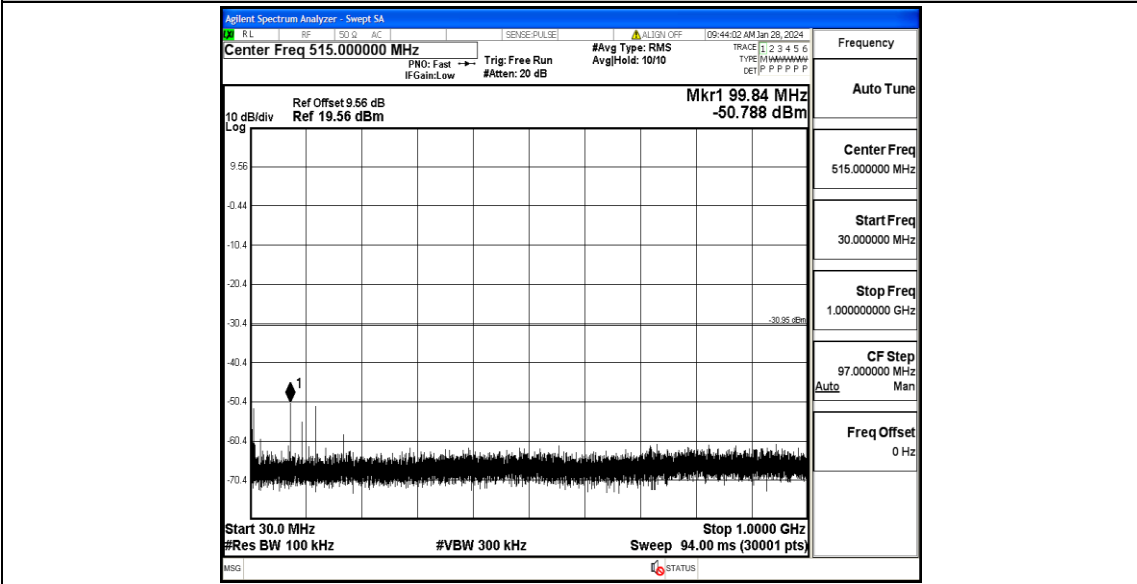
11G\_Ant1\_2437\_1000~26500



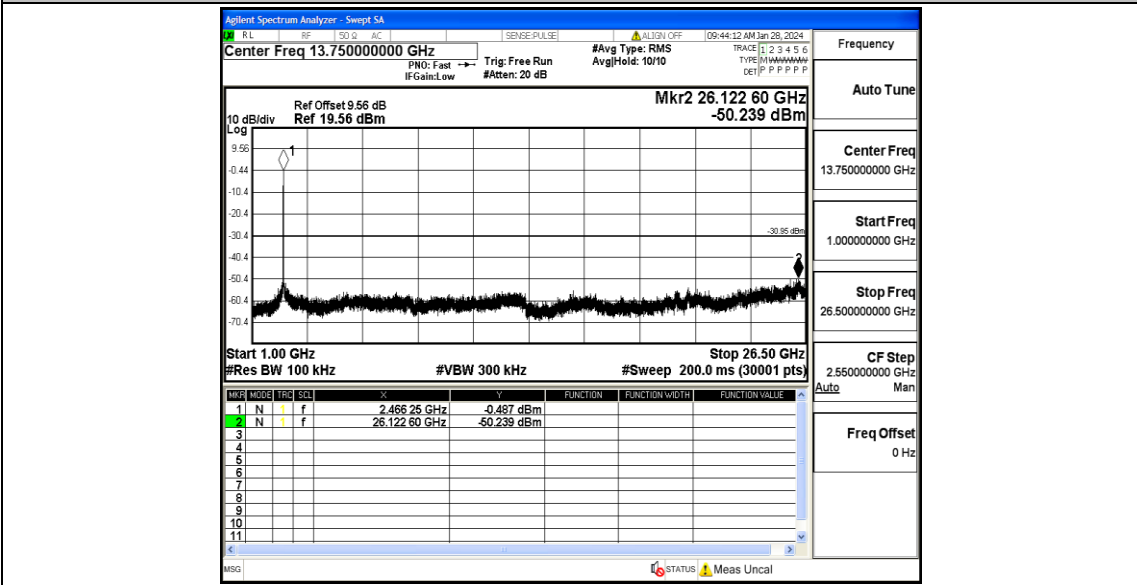
11G\_Ant1\_2462\_0~Reference



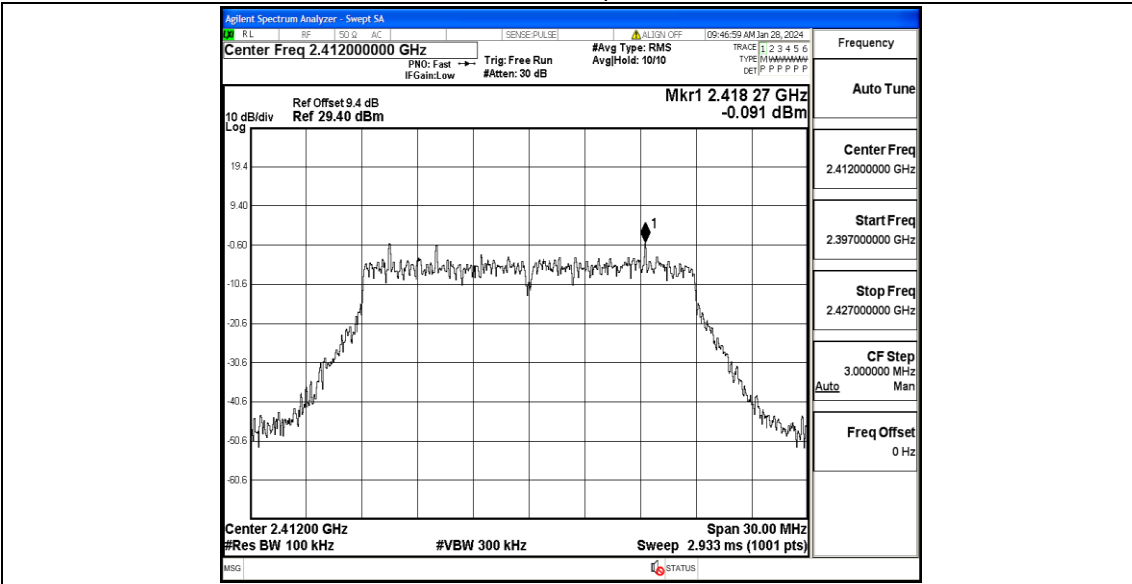
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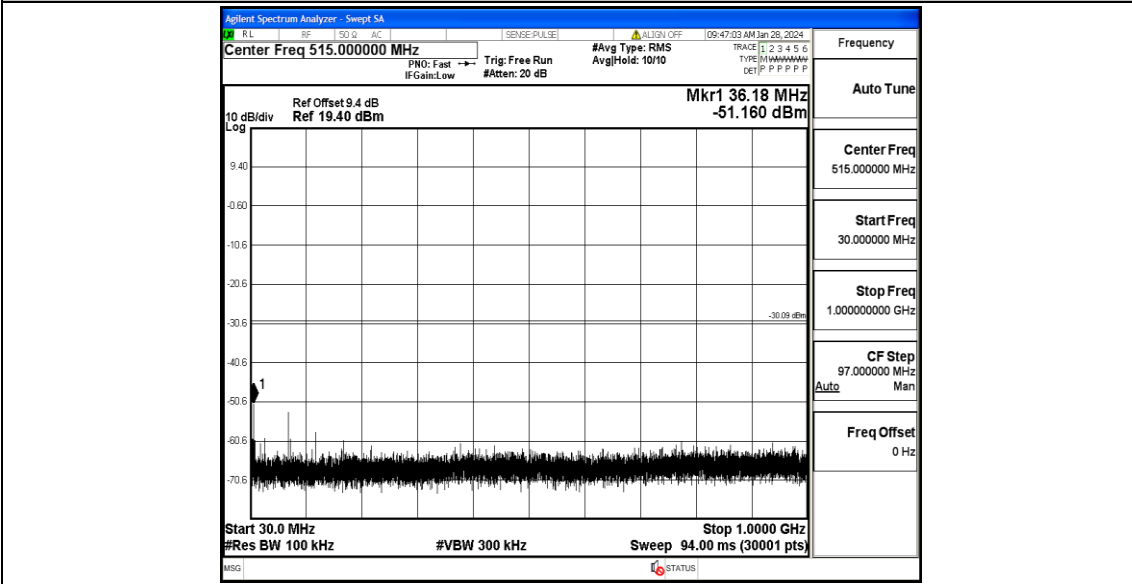
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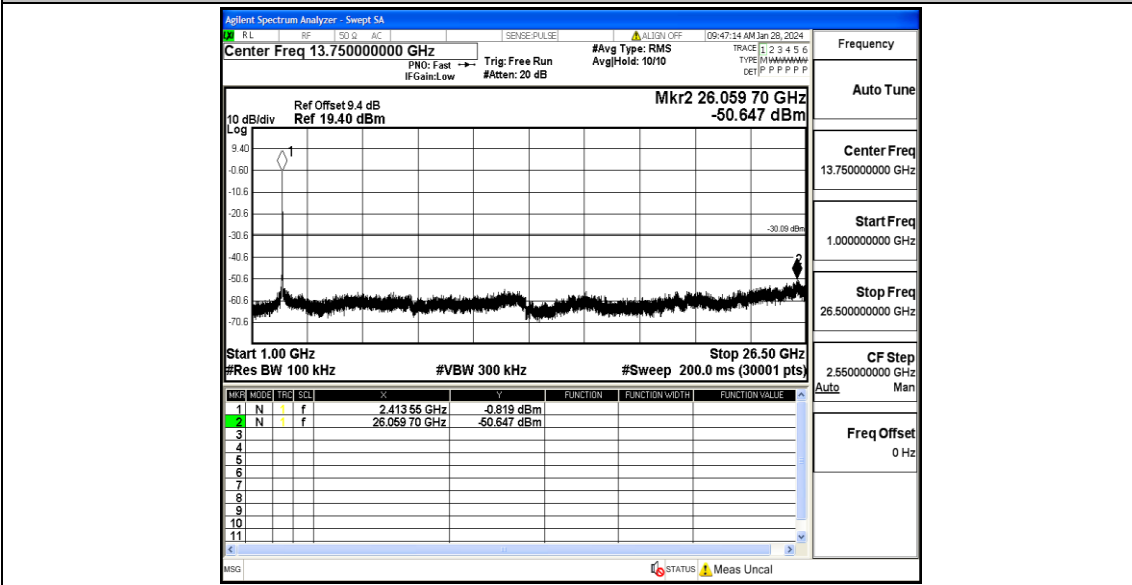
11N20SISO\_Ant1\_2412\_0~Reference



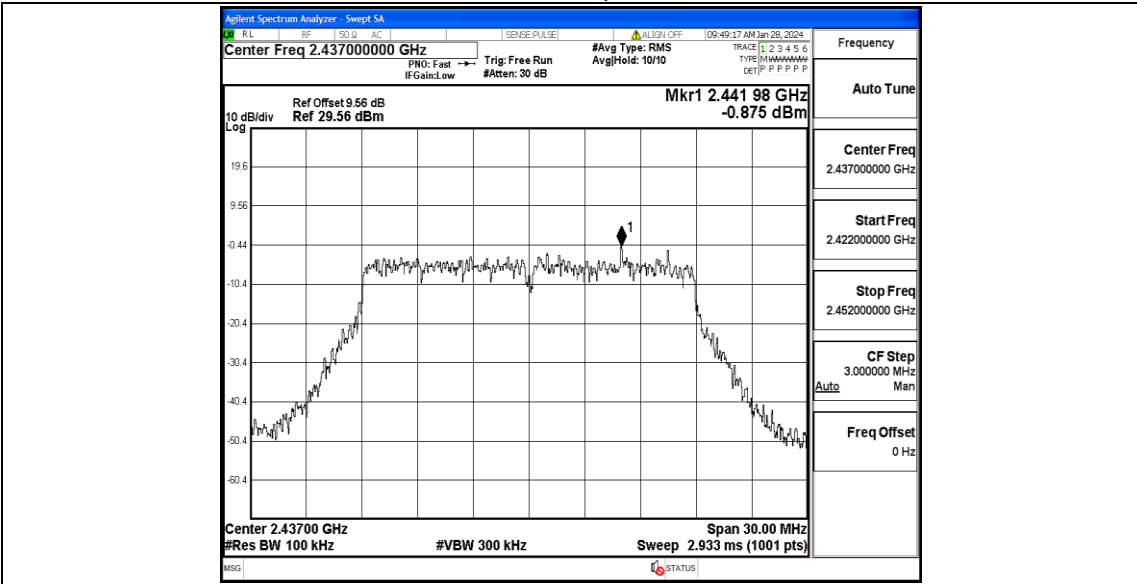
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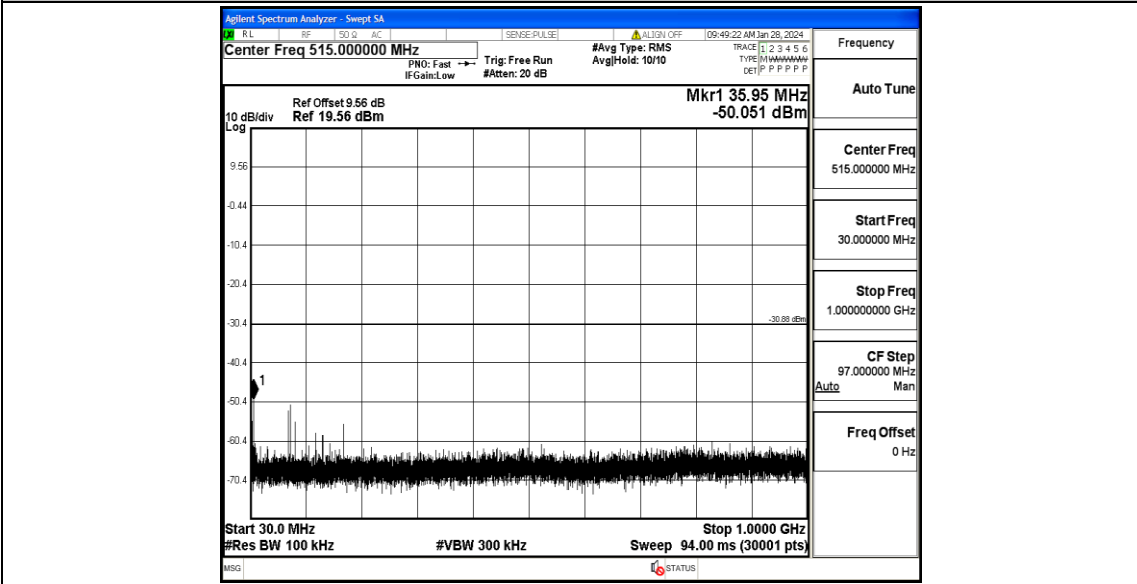
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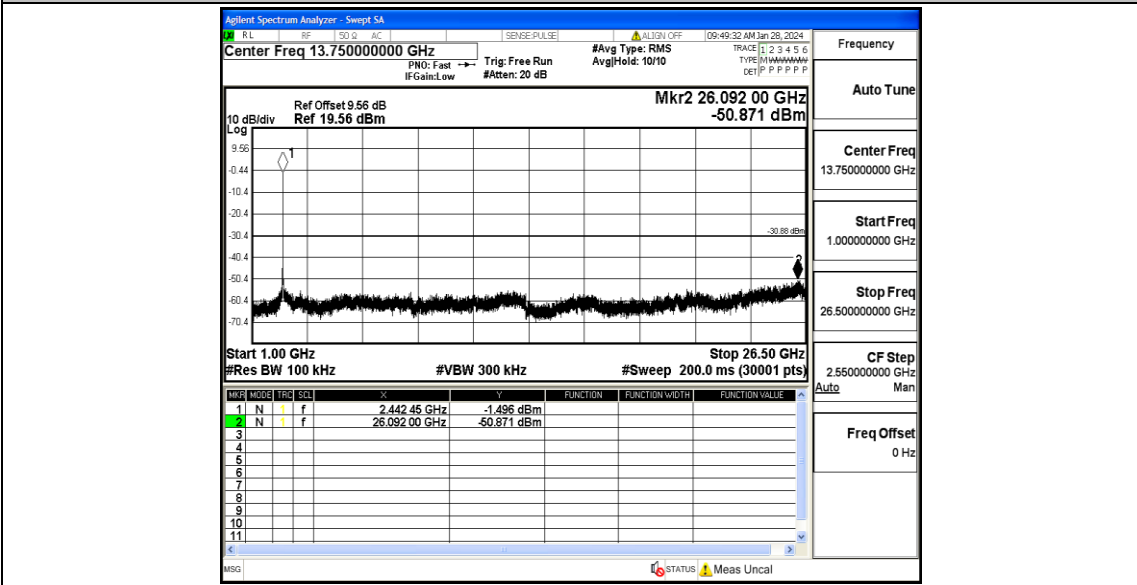
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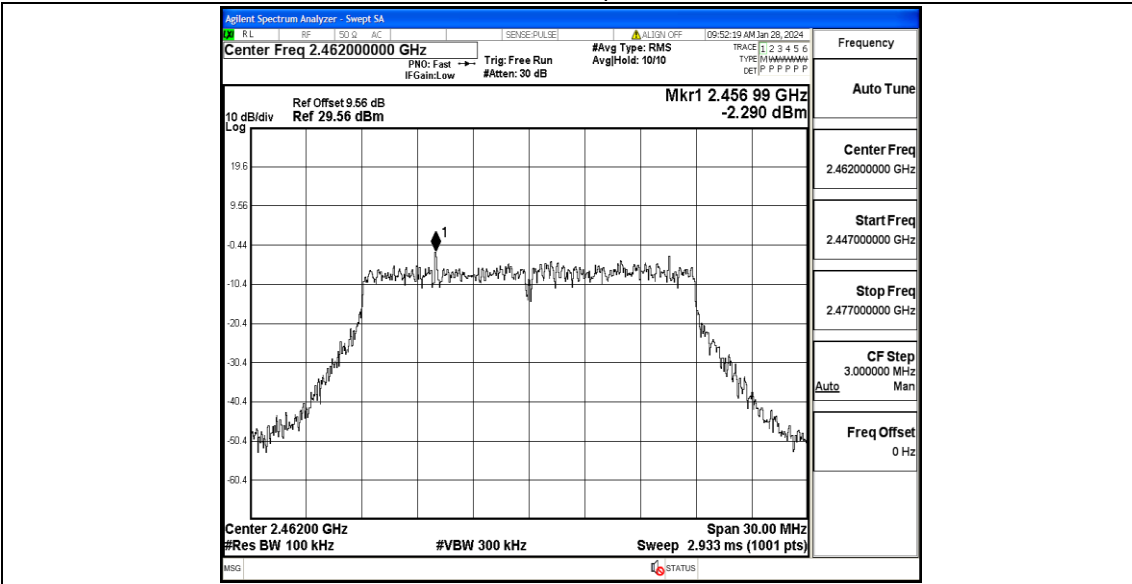
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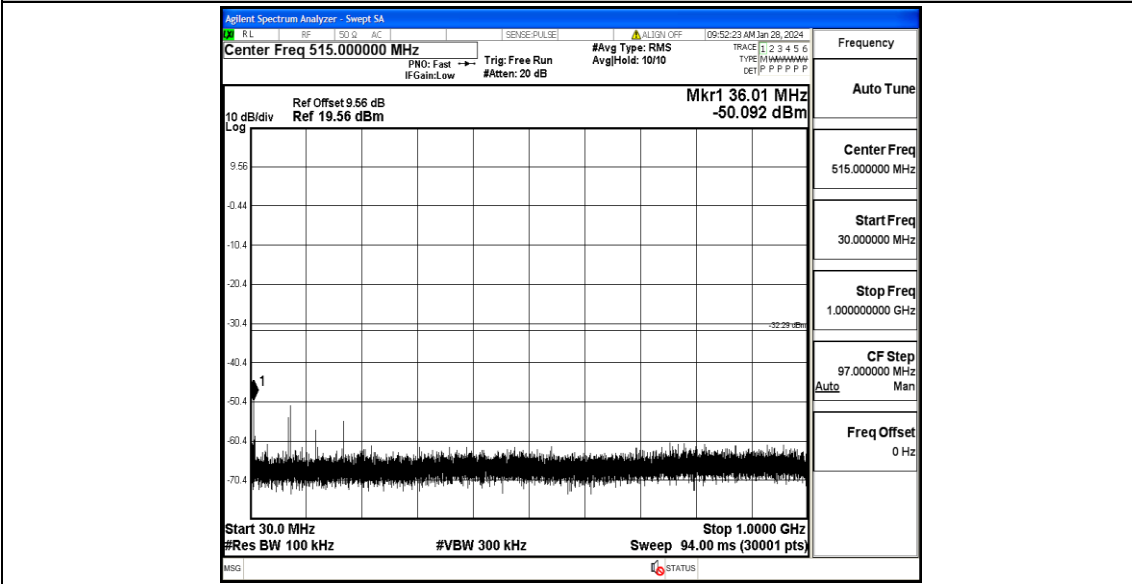
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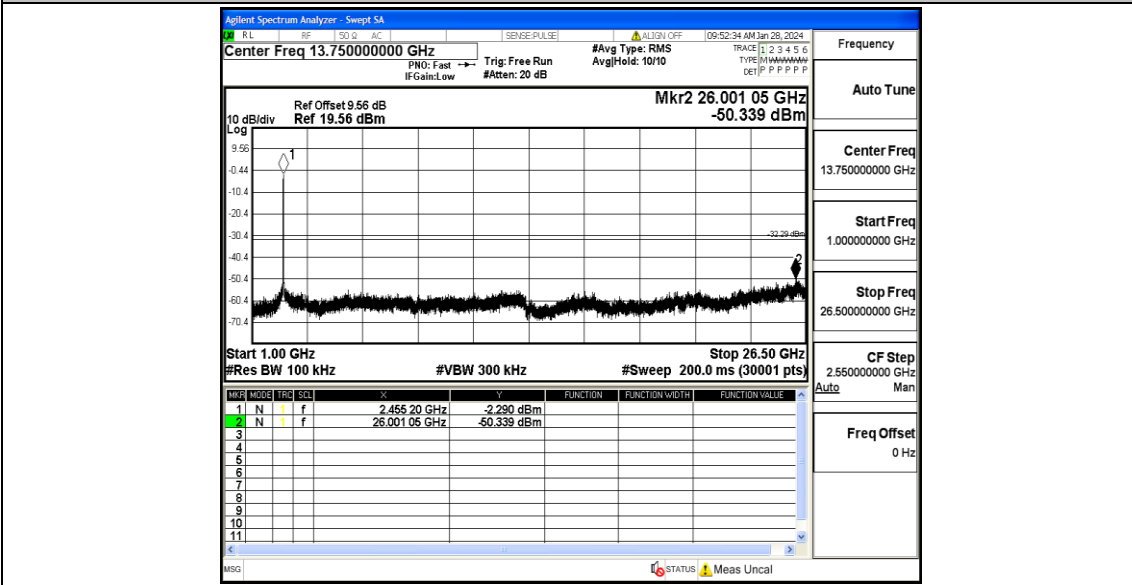
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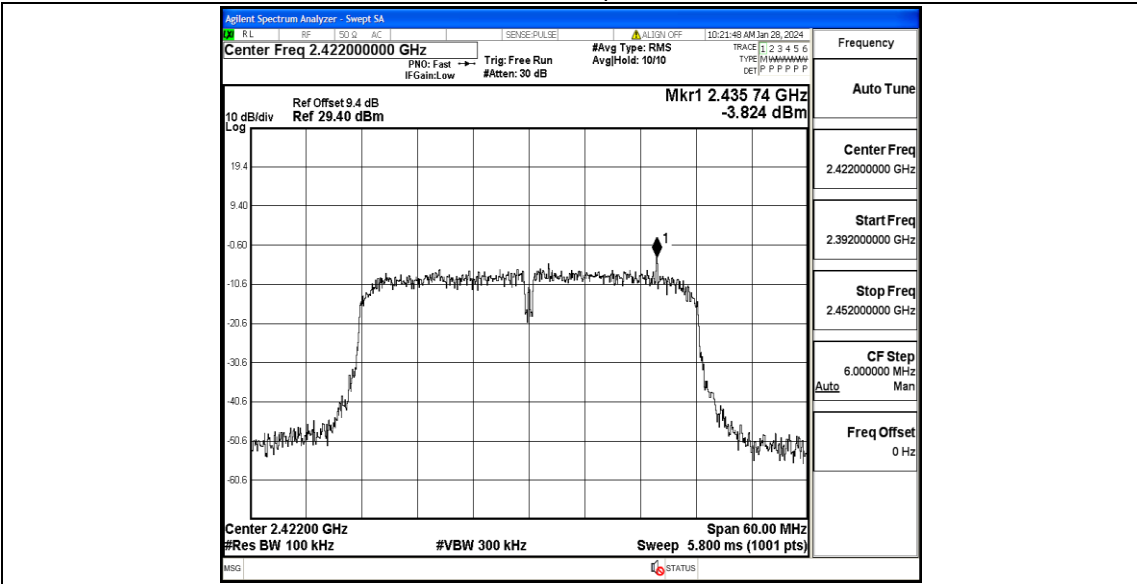
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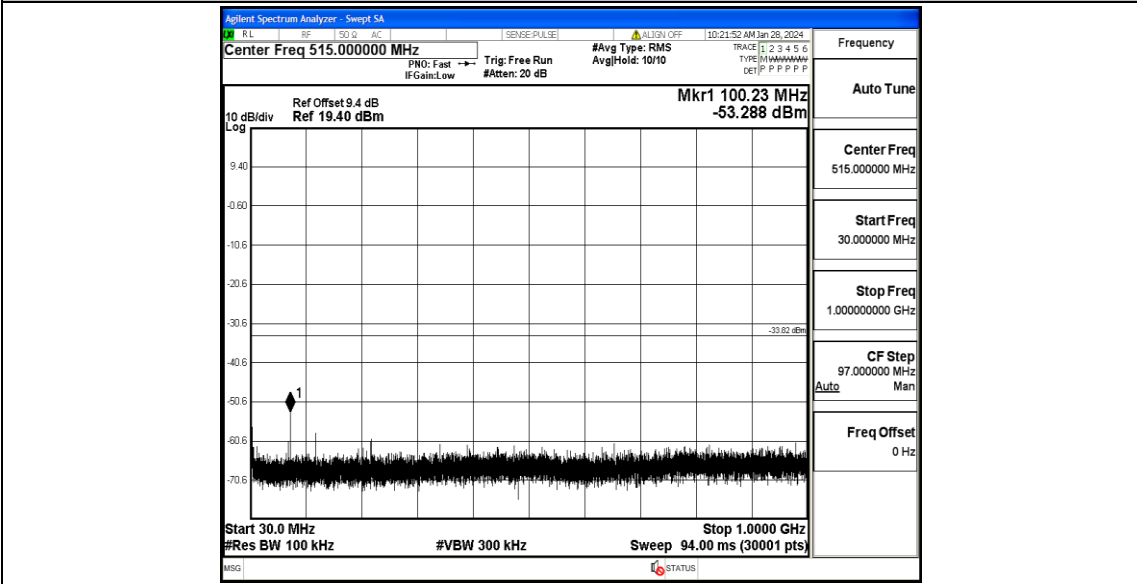
11N20SISO\_Ant1\_2462\_1000~26500



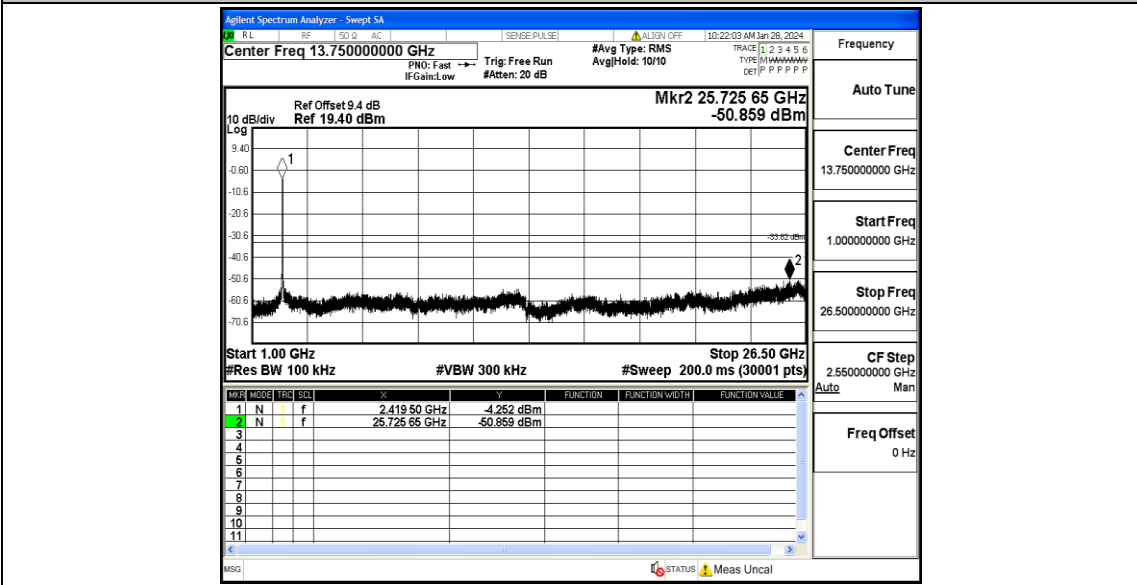
11N40SISO\_Ant1\_2422\_0~Reference



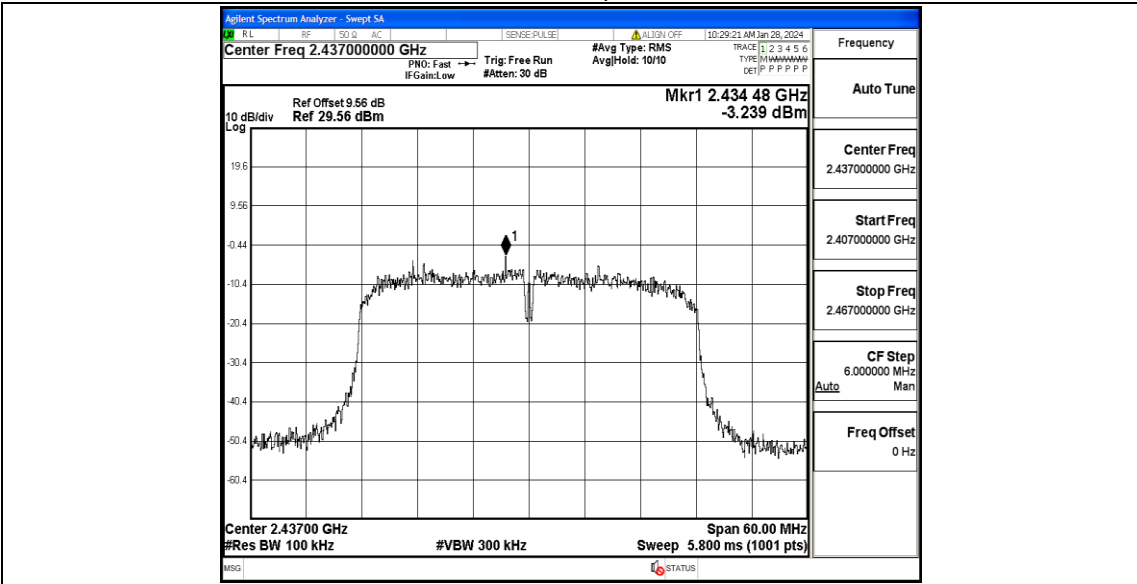
11N40SISO\_Ant1\_2422\_30~1000



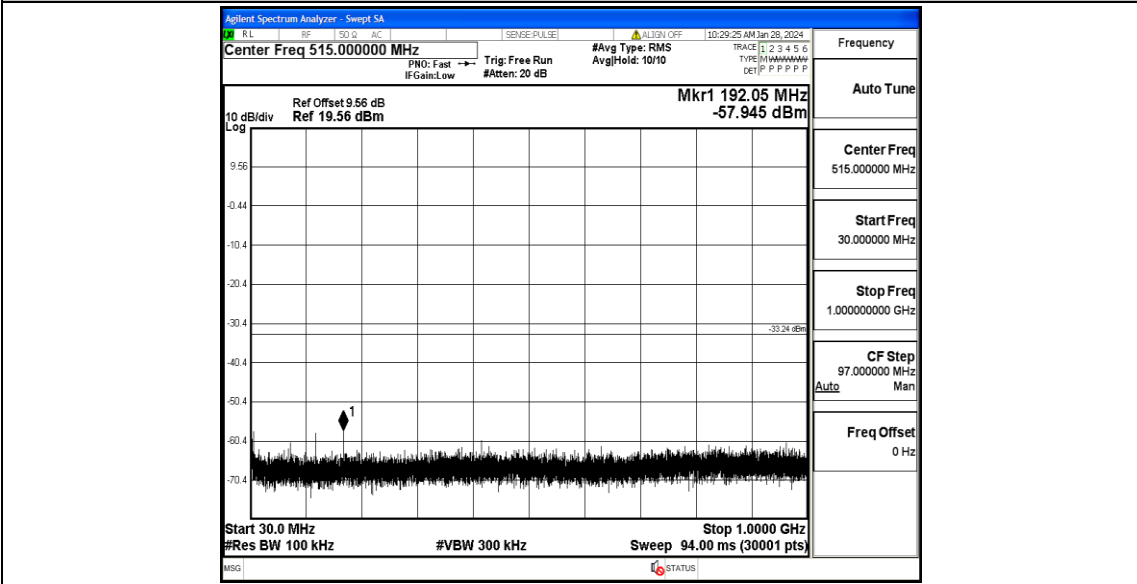
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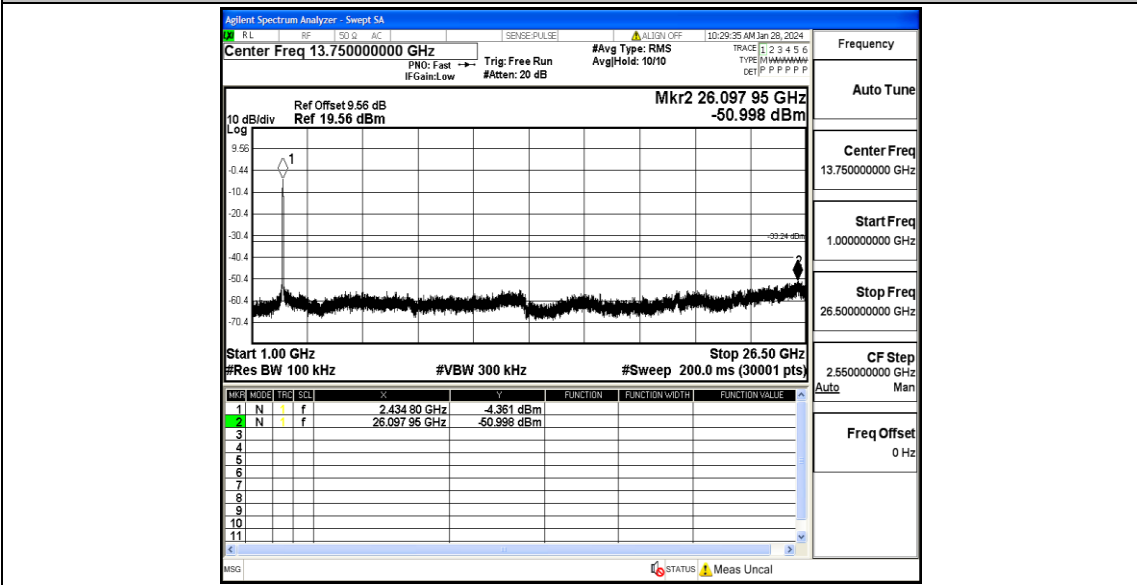
11N40SISO\_Ant1\_2437\_0~Reference



11N40SISO\_Ant1\_2437\_30~1000

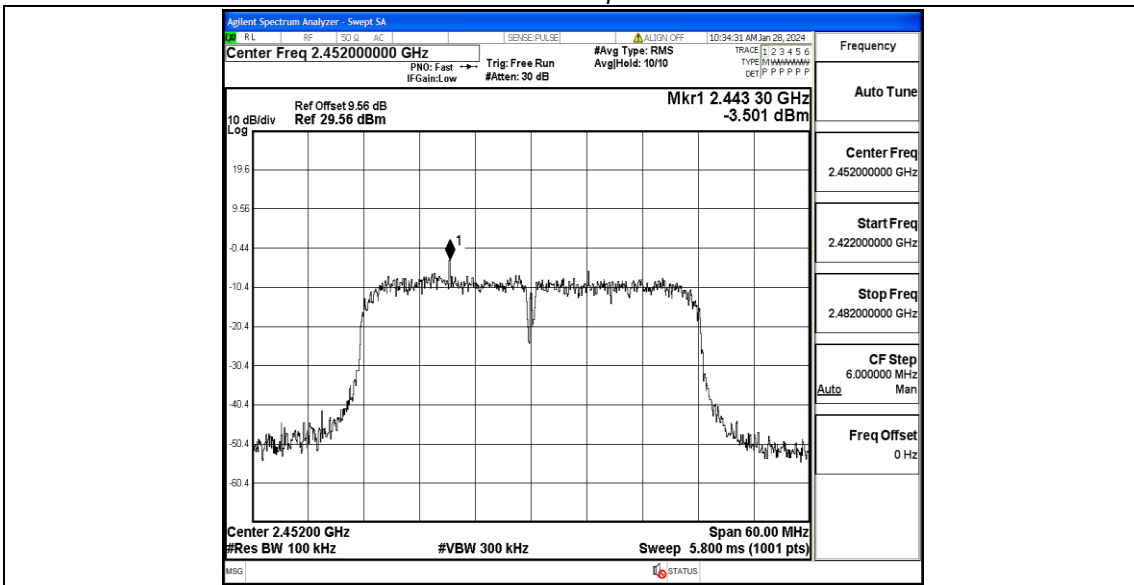


11N40SISO\_Ant1\_2437\_1000~26500

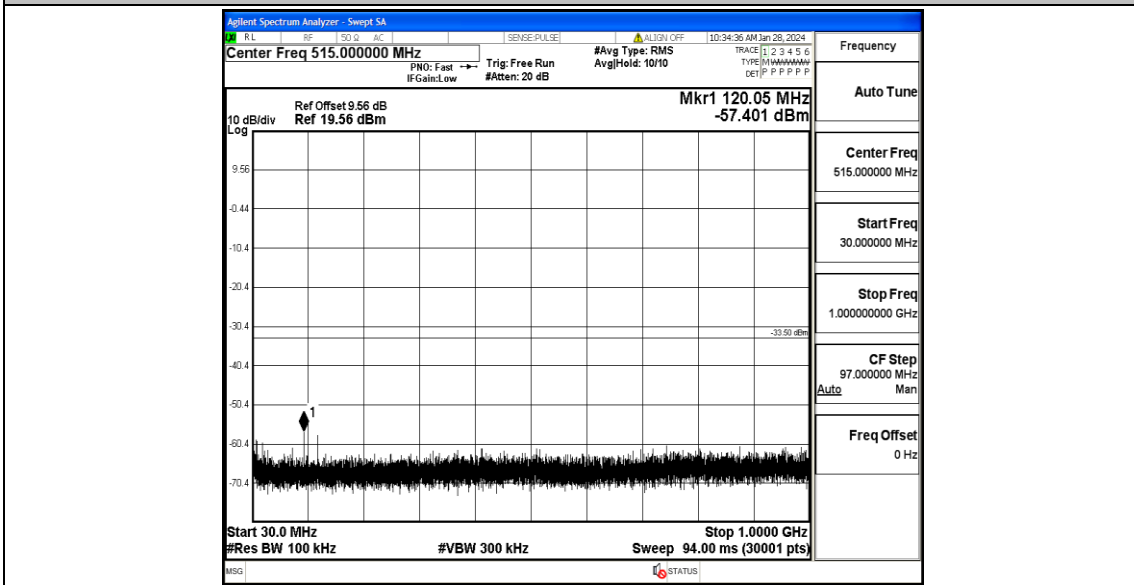


11N40SISO\_Ant1\_2452\_0~Reference

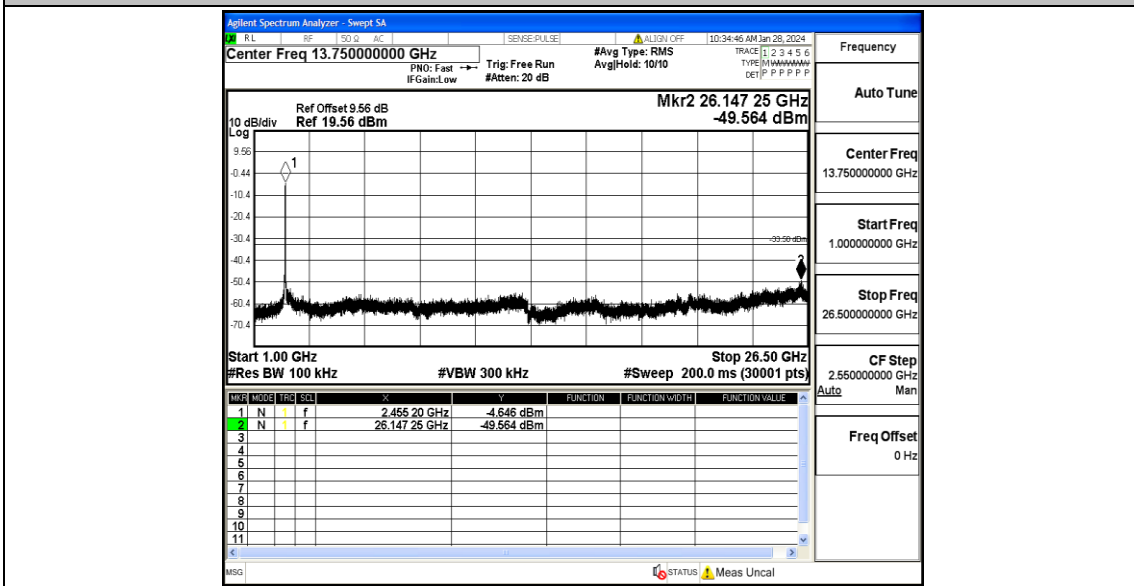




11N40SISO\_Ant1\_2452\_30~1000



11N40SISO\_Ant1\_2452\_1000~26500

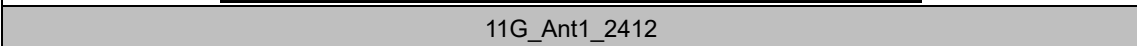
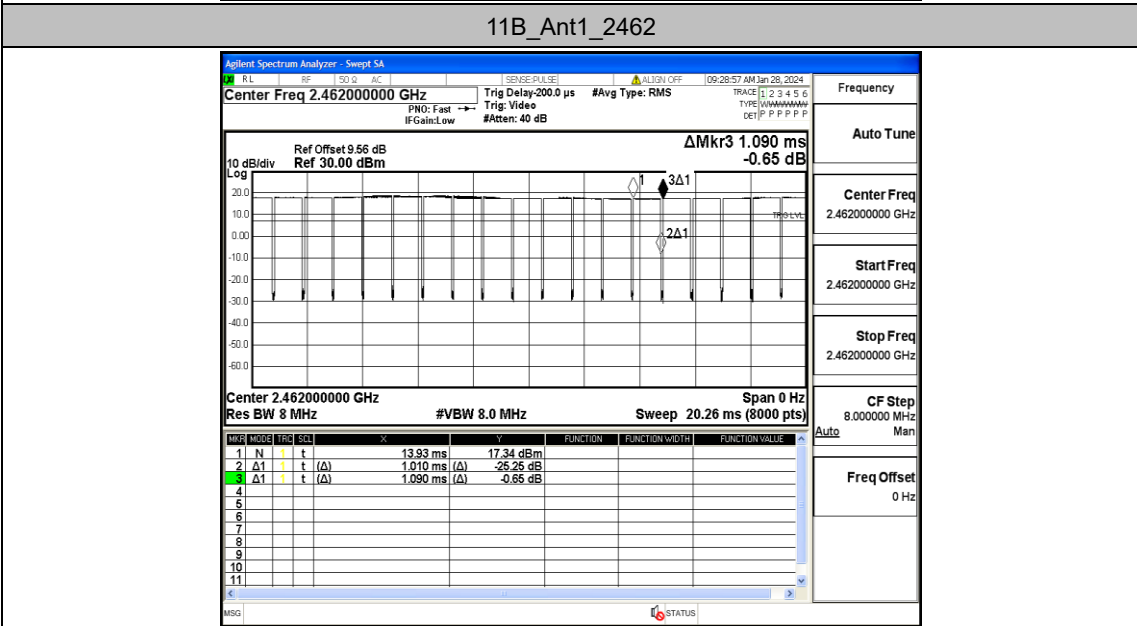
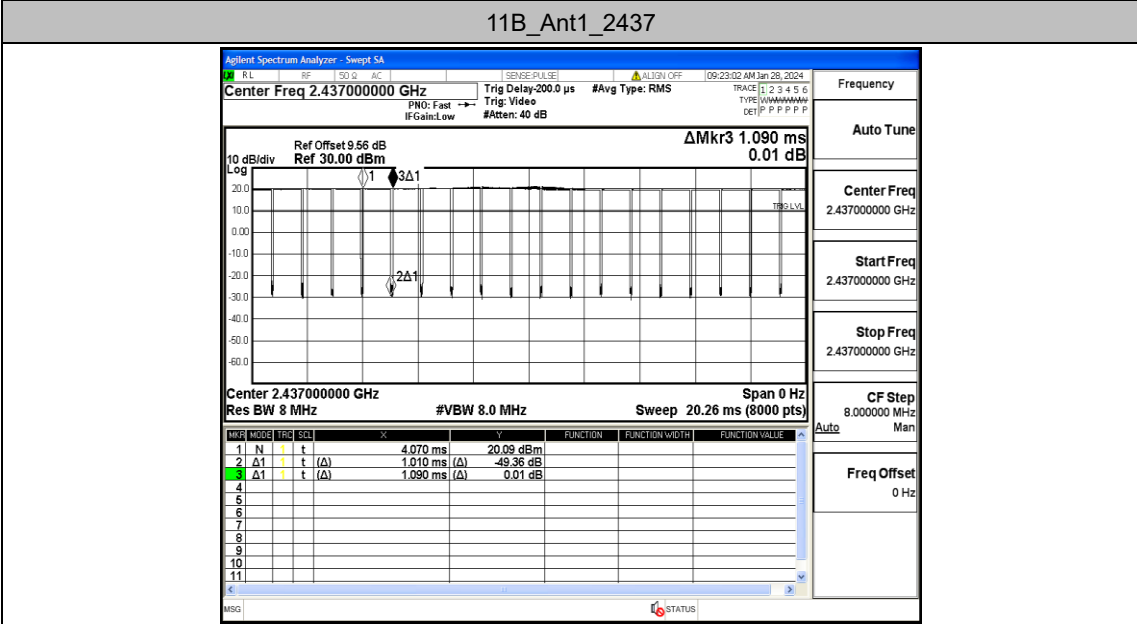
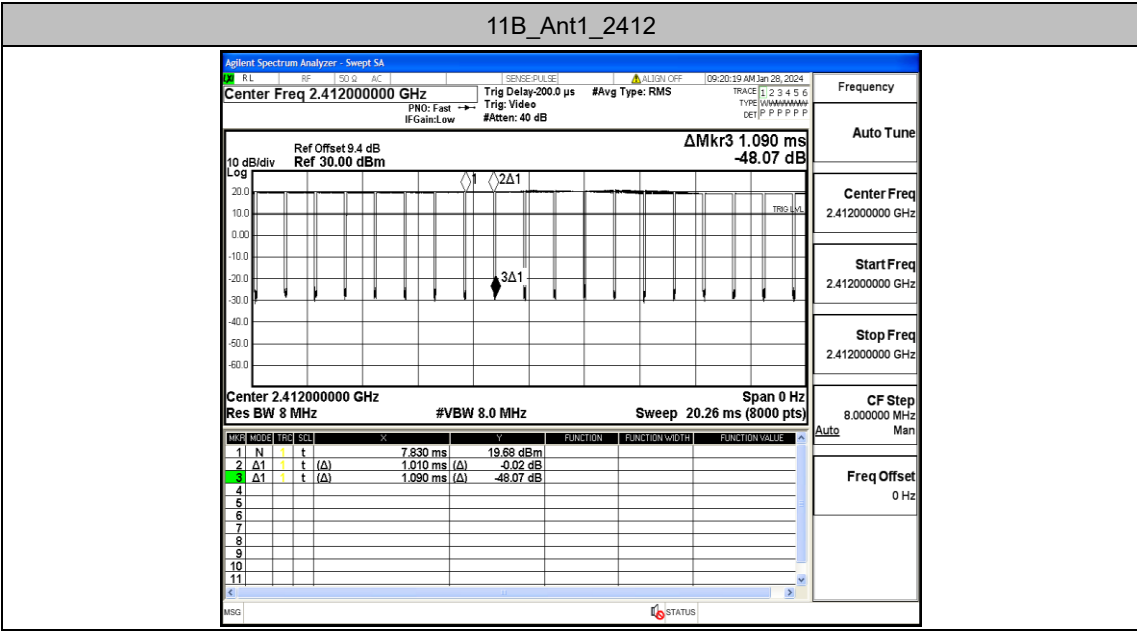


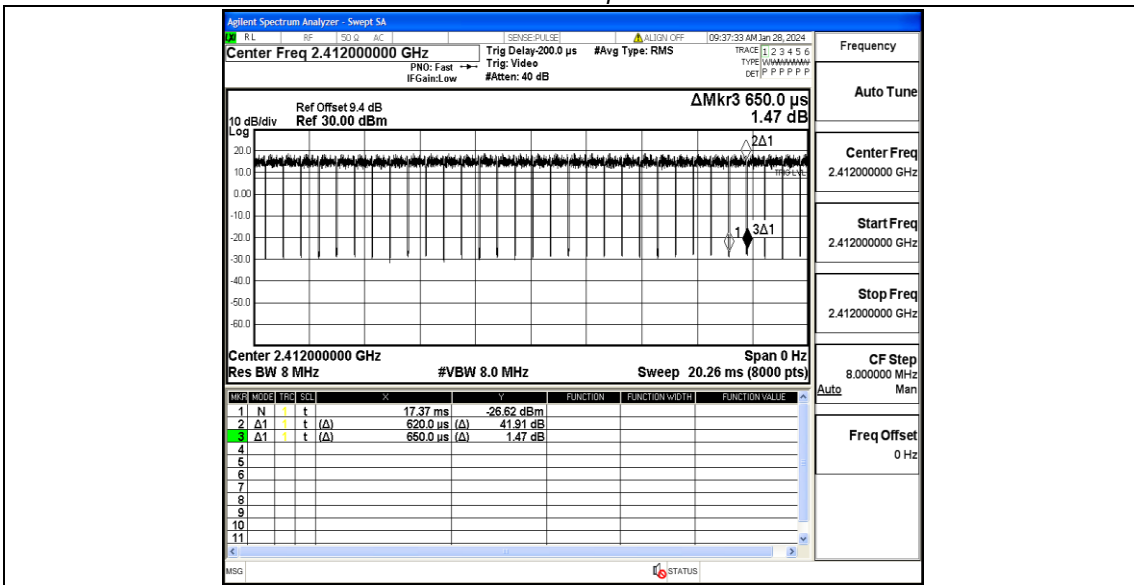
## Appendix G: Duty Cycle

### Test Result

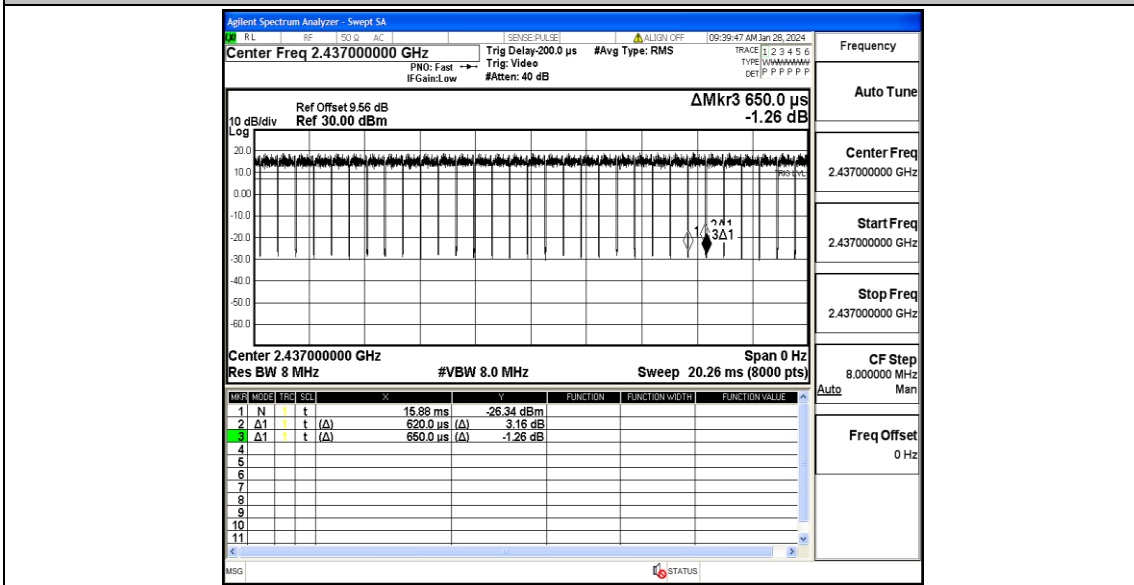
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
11B	Ant1	2412	1.01	1.09	92.66	0.99
		2437	1.01	1.09	92.66	0.99
		2462	1.01	1.09	92.66	0.99
11G	Ant1	2412	0.62	0.65	95.38	1.61
		2437	0.62	0.65	95.38	1.61
		2462	0.62	0.65	95.38	1.61
11N20SISO	Ant1	2412	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

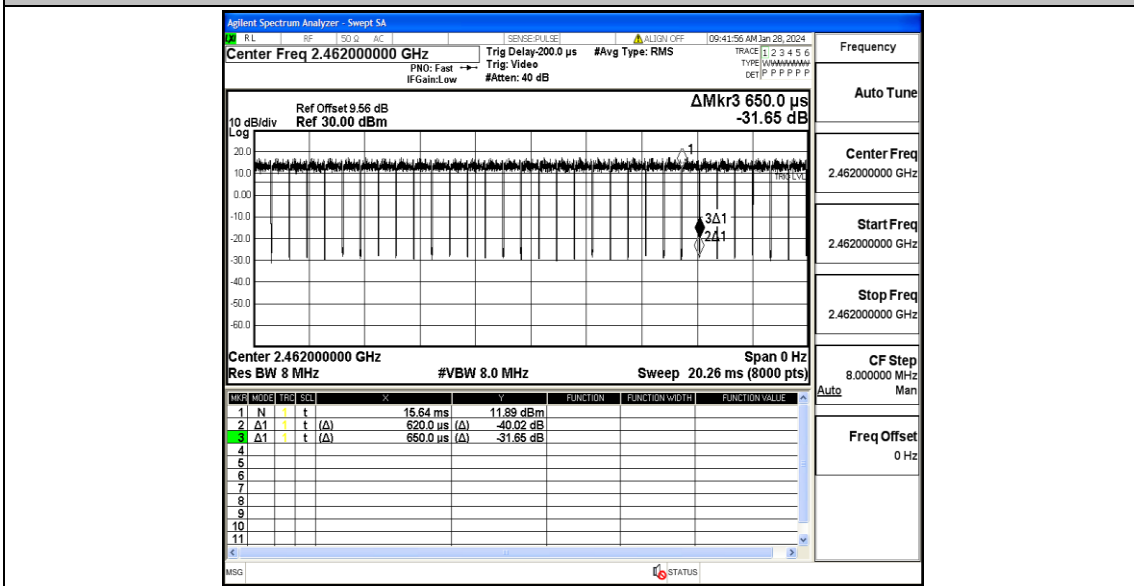




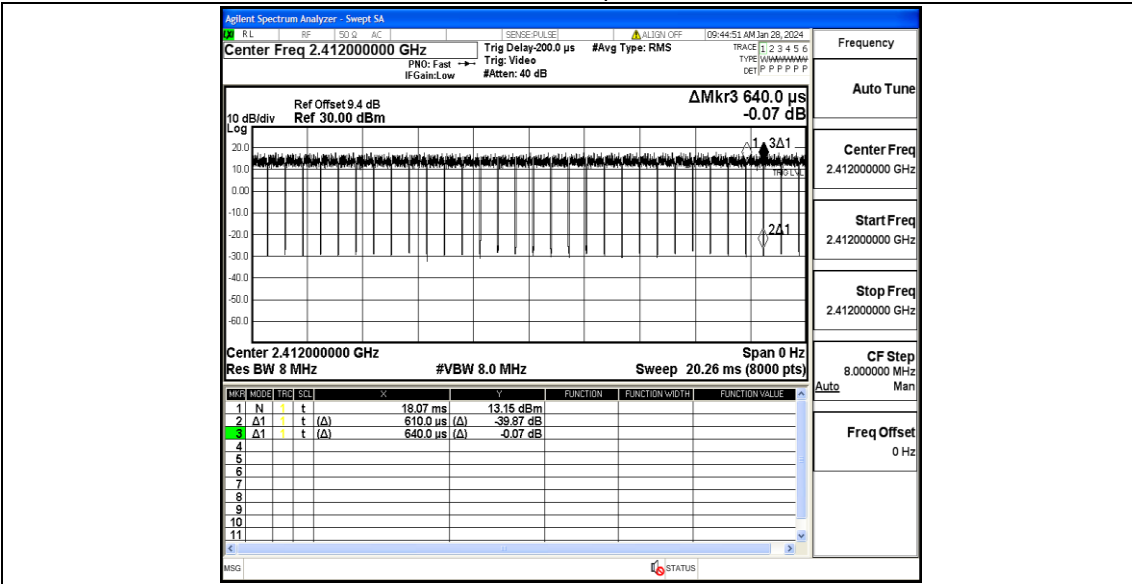
11G\_Ant1\_2437



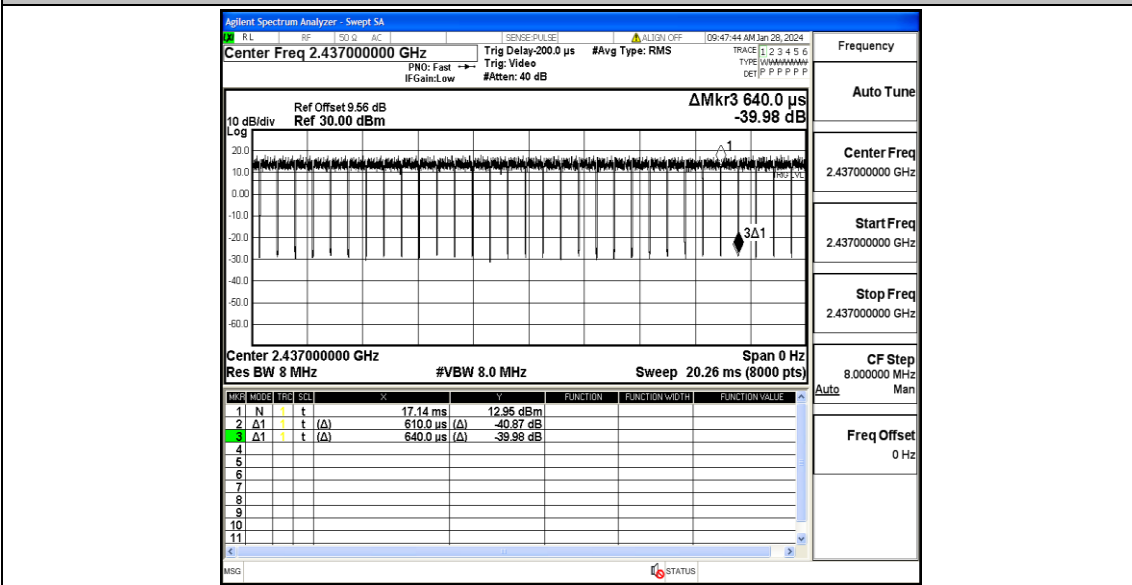
11G\_Ant1\_2462



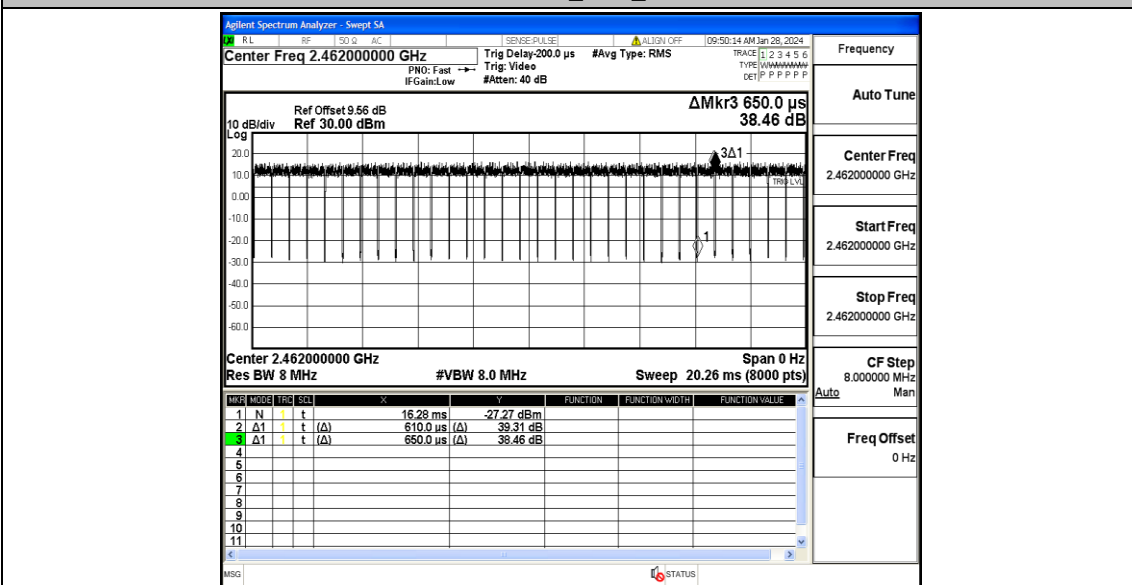
11N20SISO\_Ant1\_2412



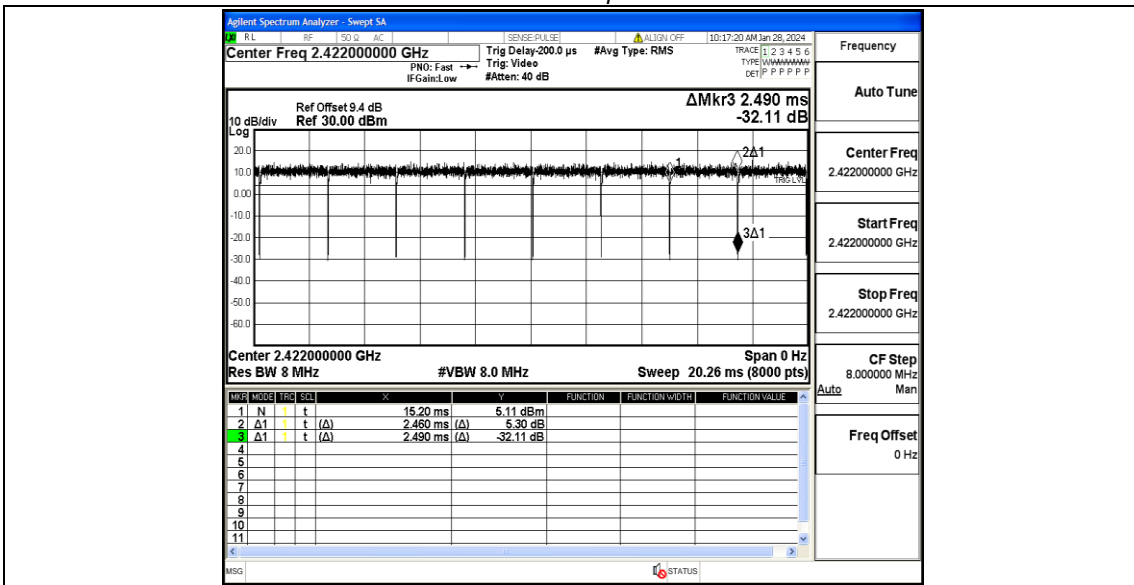
11N20SISO\_Ant1\_2437



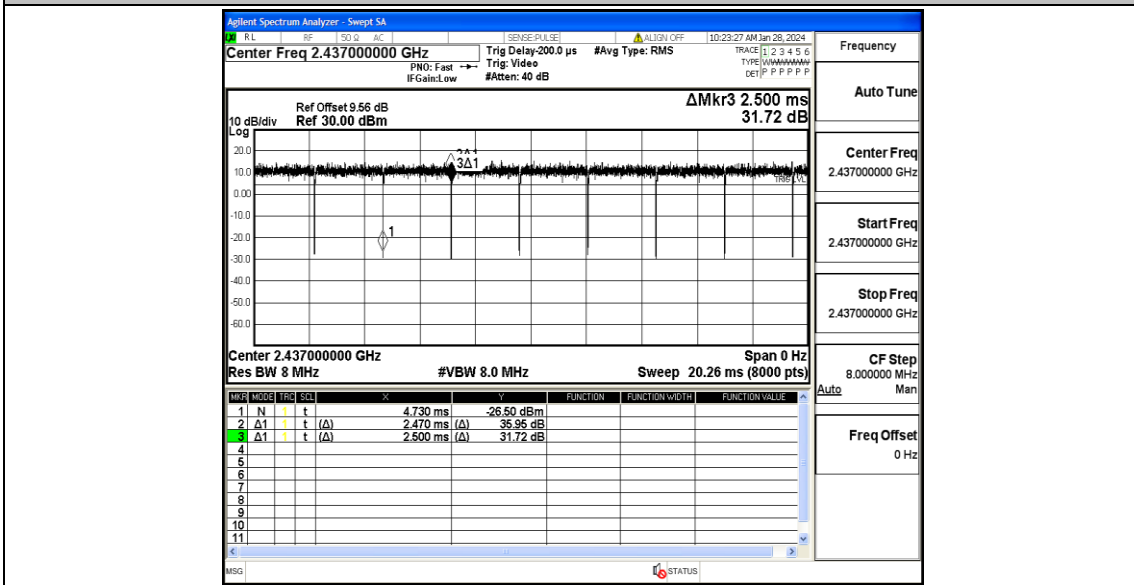
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

