

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

Product Name: Printer

Trade Mark: N/A

Test Model: GG-AT 80DW

FCC ID: 2A57DGG-AT80DW

### Environmental Conditions

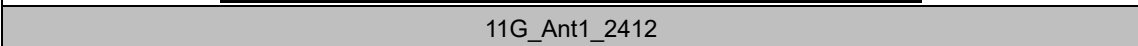
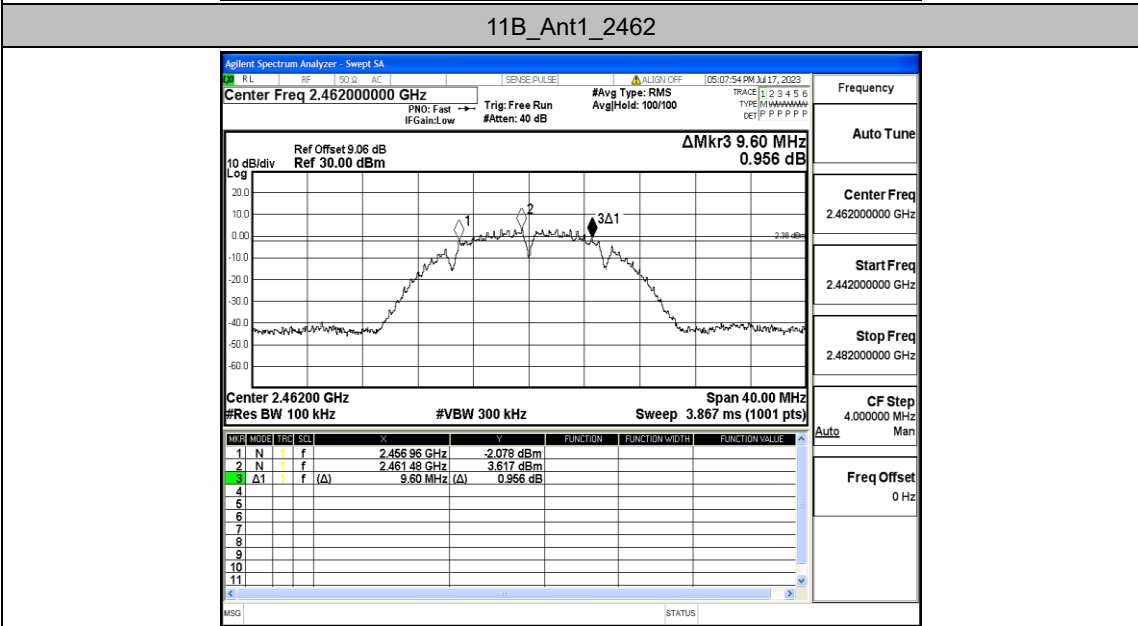
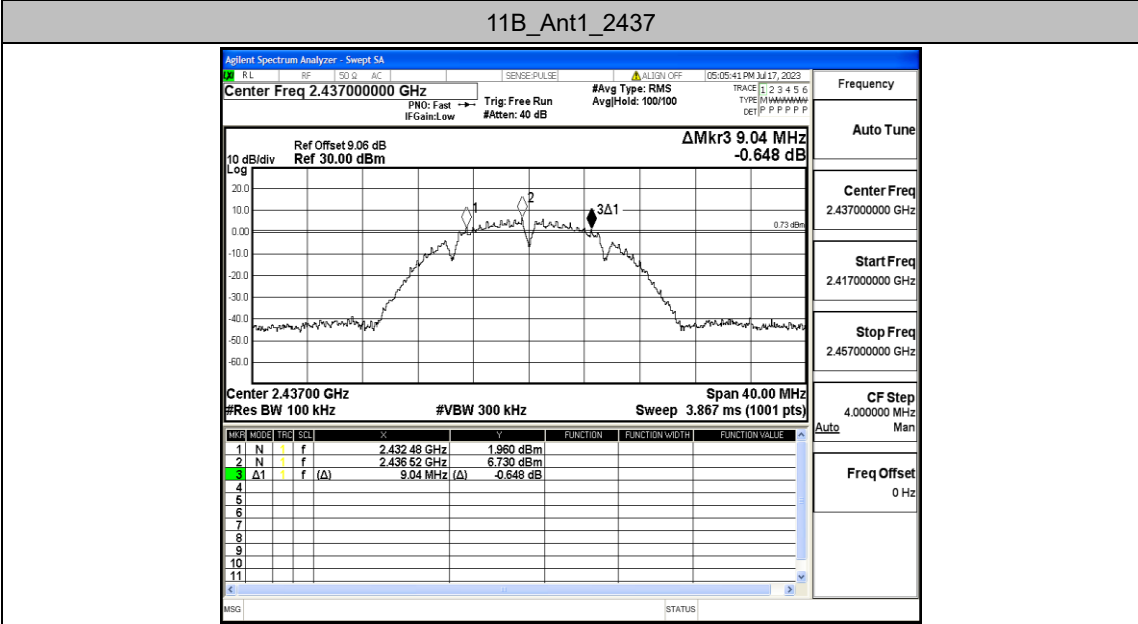
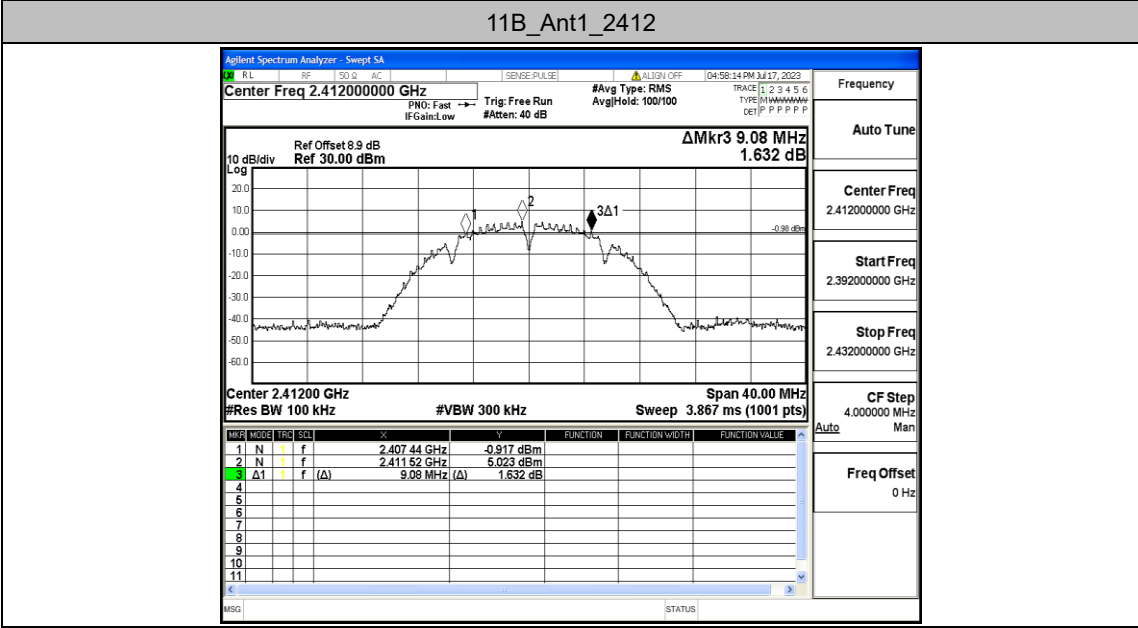
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

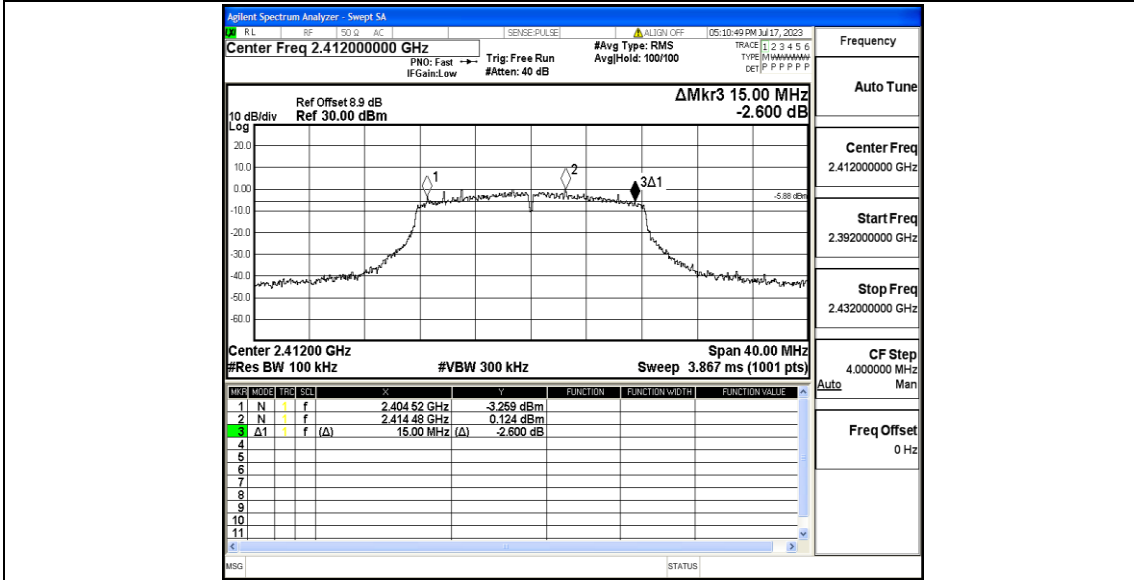
## Appendix A: DTS Bandwidth

### Test Result

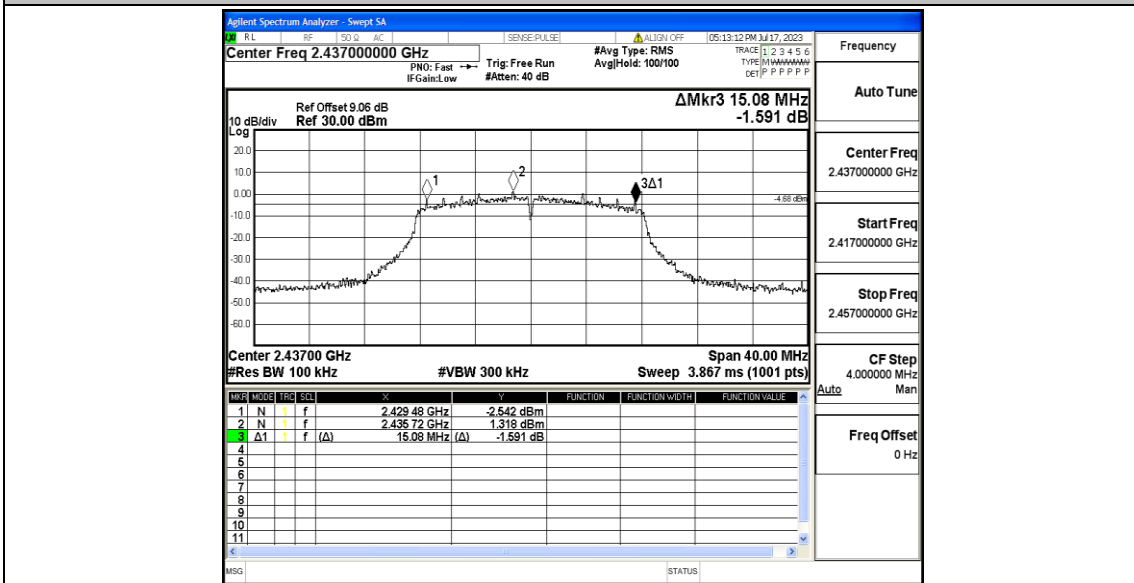
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.440	2416.520	0.5	PASS
		2437	9.040	2432.480	2441.520	0.5	PASS
		2462	9.600	2456.960	2466.560	0.5	PASS
11G	Ant1	2412	15.000	2404.520	2419.520	0.5	PASS
		2437	15.080	2429.480	2444.560	0.5	PASS
		2462	13.200	2455.680	2468.880	0.5	PASS
11N20SISO	Ant1	2412	13.800	2405.720	2419.520	0.5	PASS
		2437	11.960	2431.360	2443.320	0.5	PASS
		2462	11.360	2456.640	2468.000	0.5	PASS
11N40SISO	Ant1	2422	28.800	2409.440	2438.240	0.5	PASS
		2437	21.280	2424.440	2445.720	0.5	PASS
		2452	31.280	2435.680	2466.960	0.5	PASS

### Test Graphs

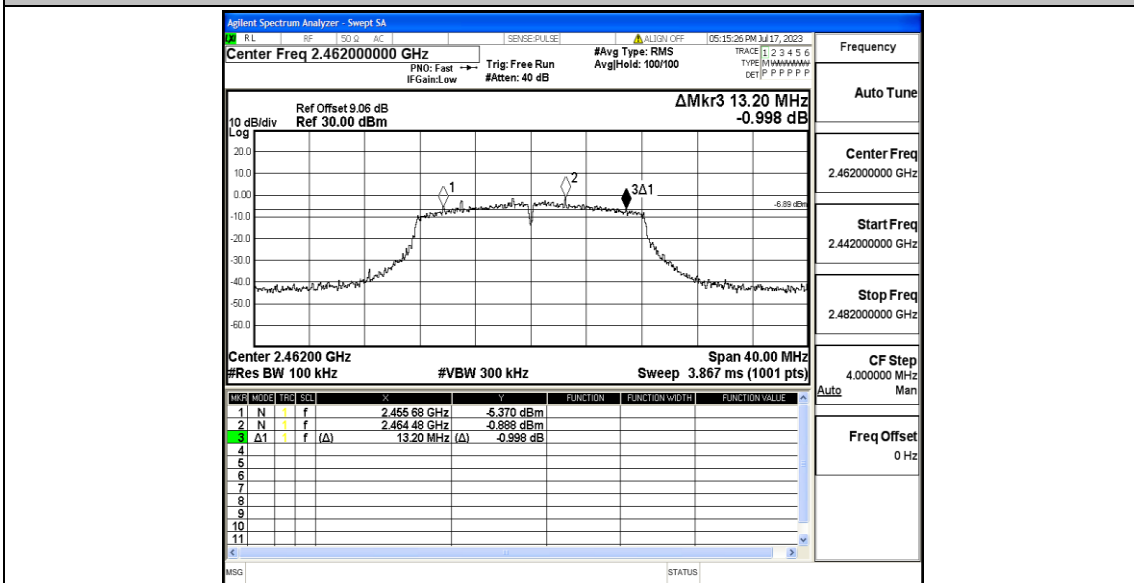




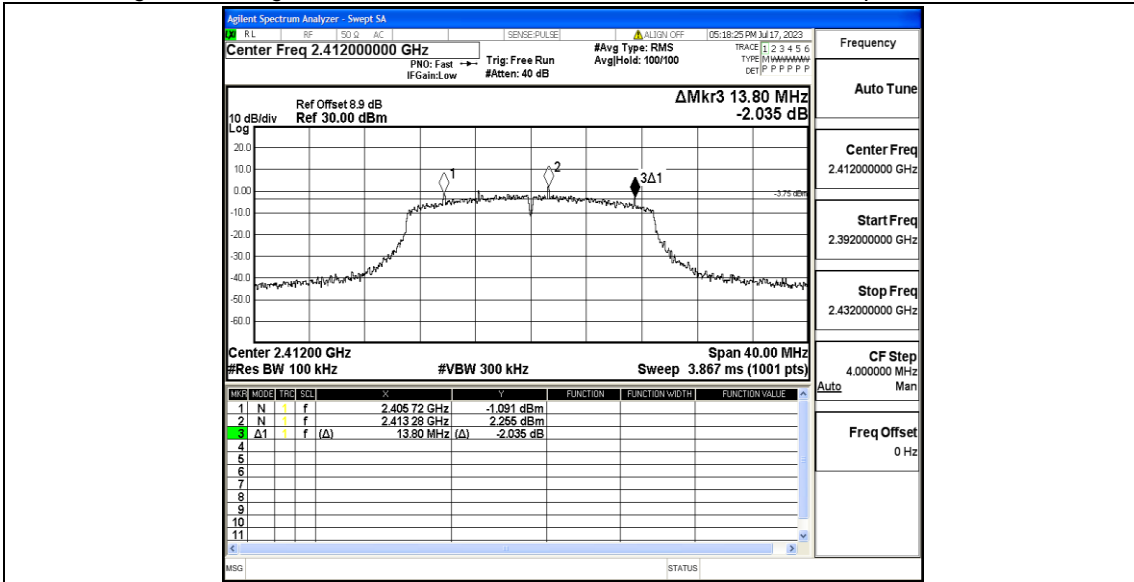
11G\_Ant1\_2437



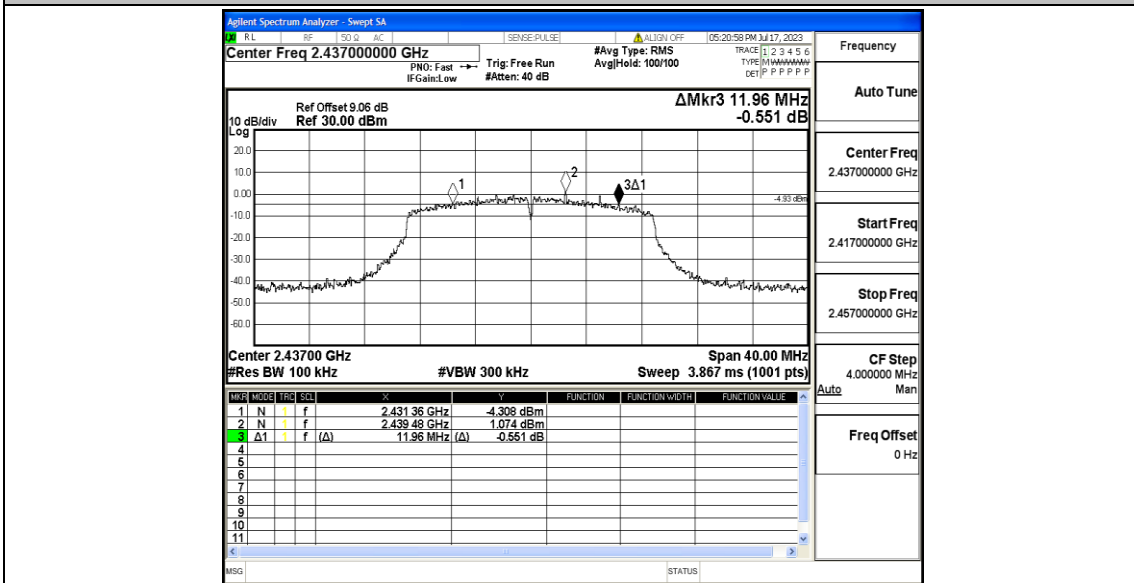
11G\_Ant1\_2462



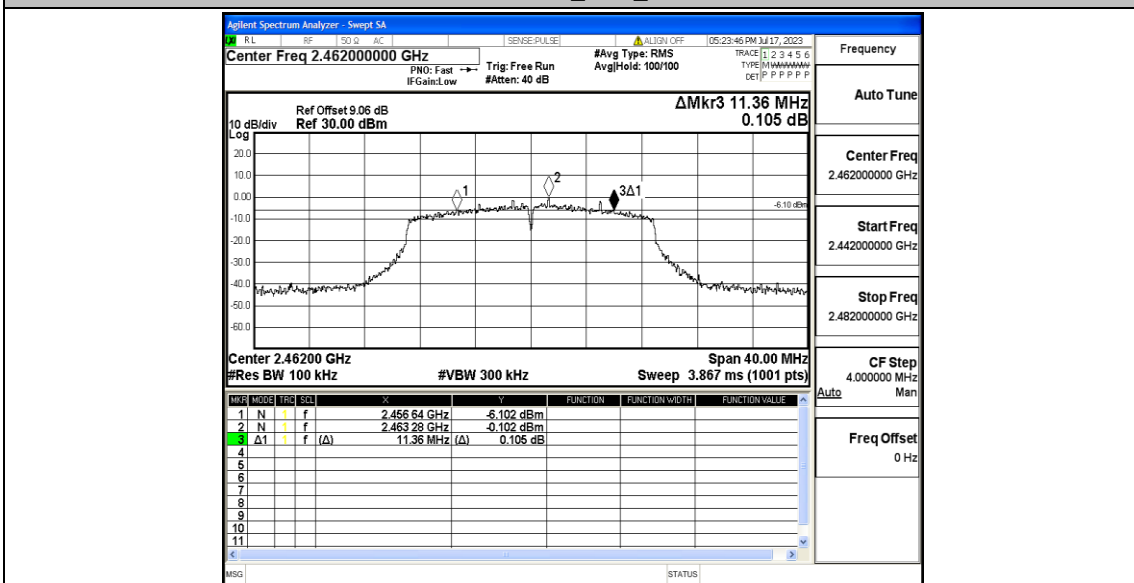
11N20SISO\_Ant1\_2412



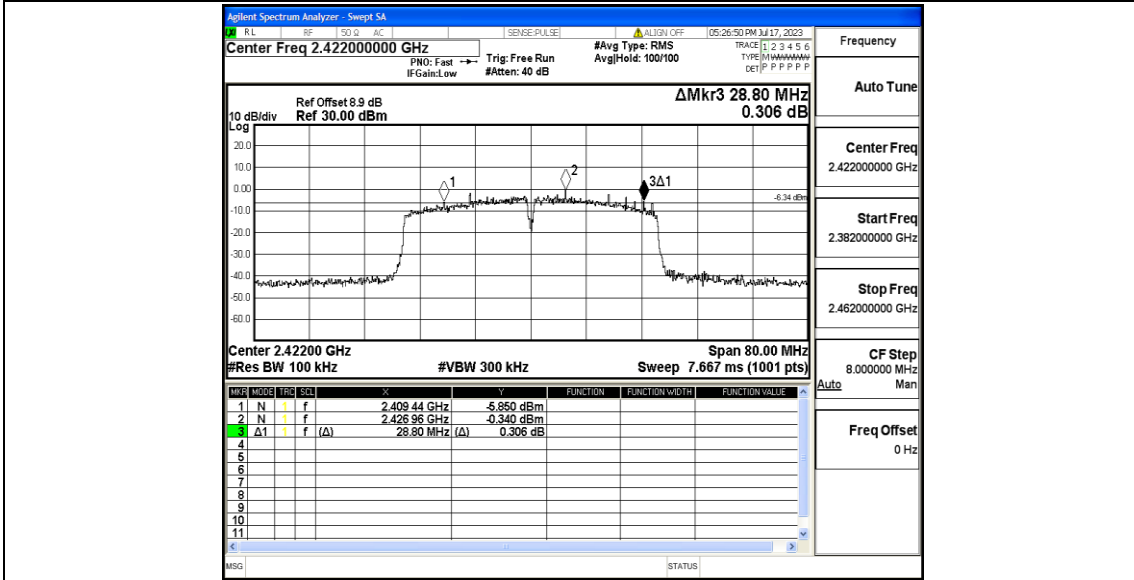
11N20SISO\_Ant1\_2437



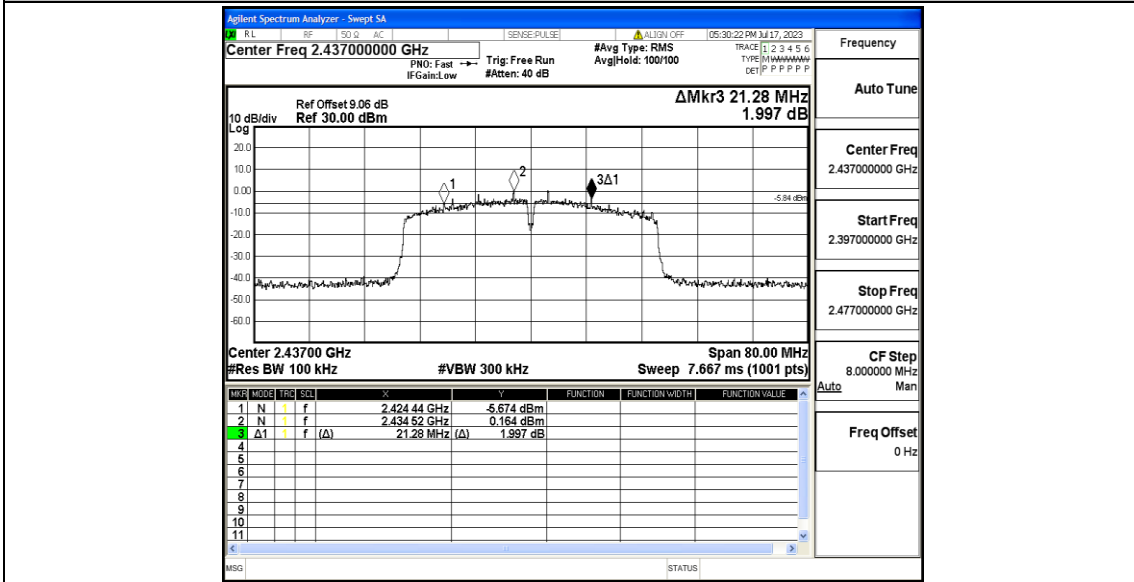
11N20SISO\_Ant1\_2462



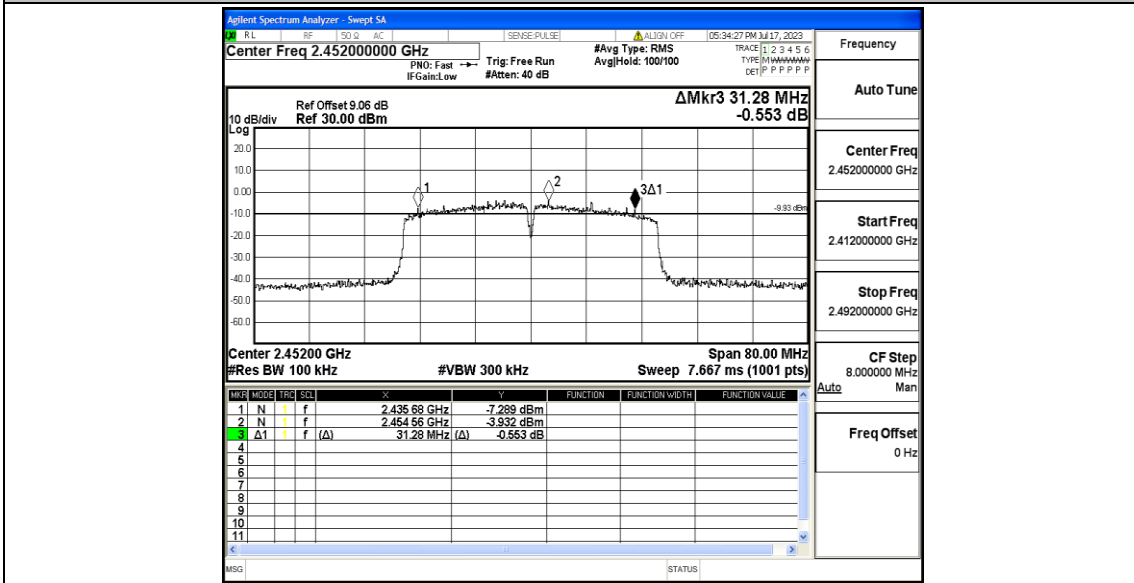
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

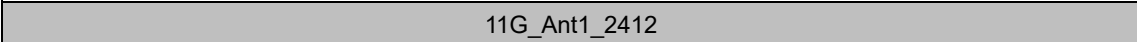
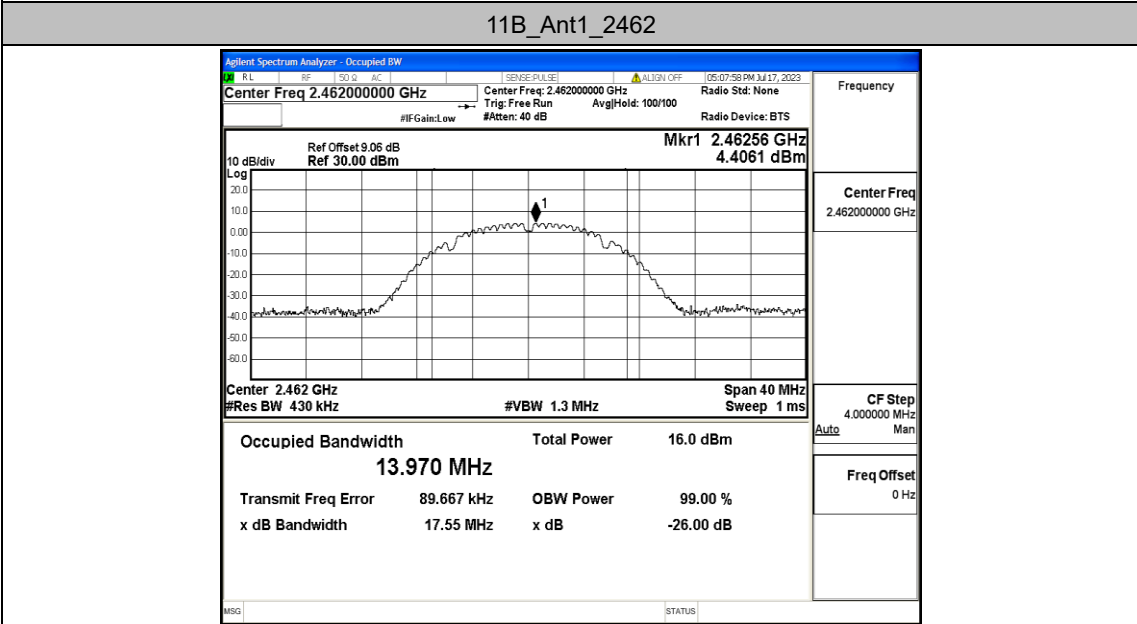
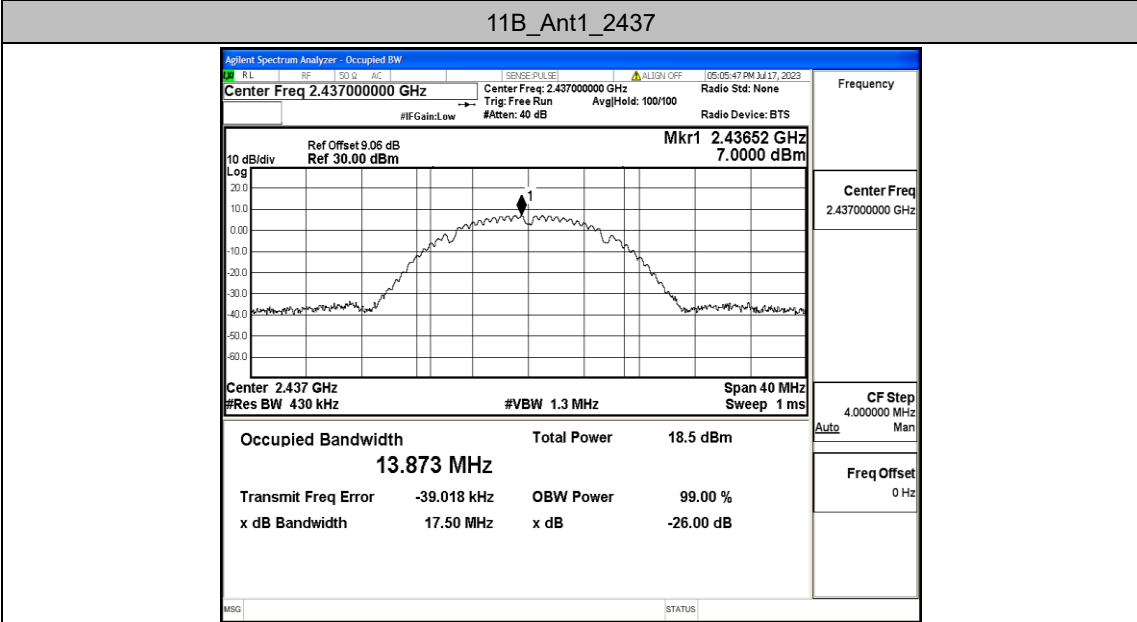
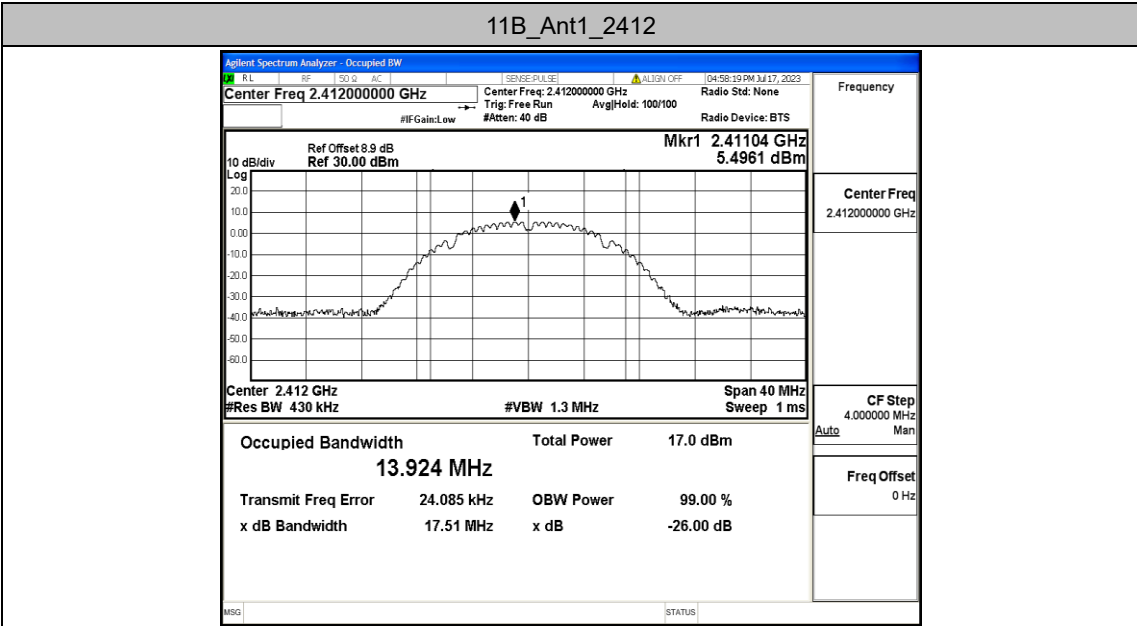


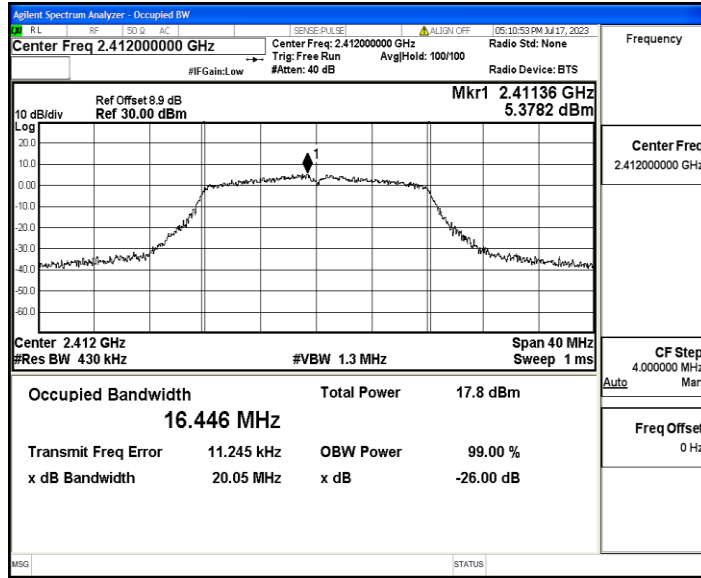
## Appendix B: Occupied Channel Bandwidth

### Test Result

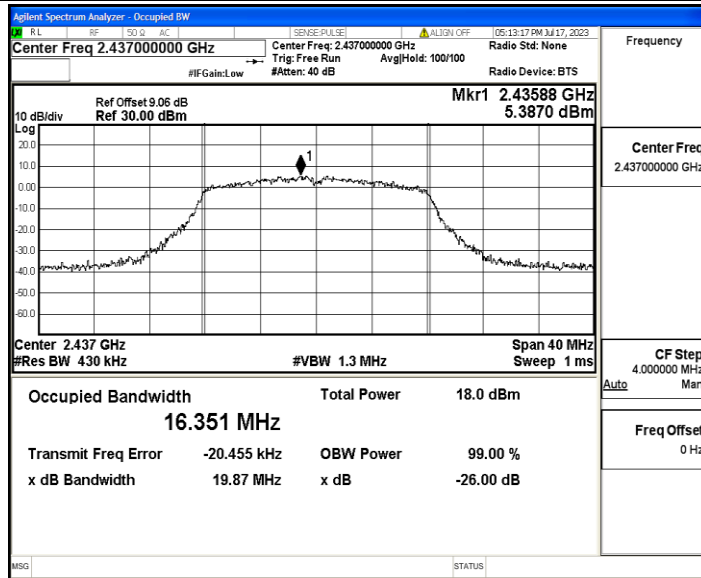
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.924	2405.0621	2418.9861	---	---
		2437	13.873	2430.0245	2443.8975	---	---
		2462	13.970	2455.1047	2469.0747	---	---
11G	Ant1	2412	16.446	2403.7883	2420.2343	---	---
		2437	16.351	2428.8040	2445.1550	---	---
		2462	16.434	2453.8518	2470.2858	---	---
11N20SISO	Ant1	2412	17.562	2403.2367	2420.7987	---	---
		2437	17.441	2428.2953	2445.7363	---	---
		2462	17.538	2453.2785	2470.8165	---	---
11N40SISO	Ant1	2422	35.290	2404.4448	2439.7348	---	---
		2437	35.100	2419.4278	2454.5278	---	---
		2452	35.487	2434.2696	2469.7566	---	---

### Test Graphs

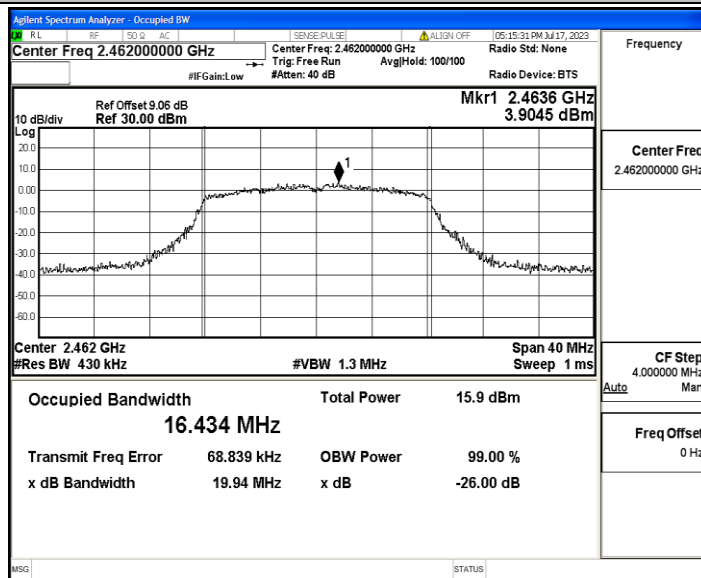




11G\_Ant1\_2437

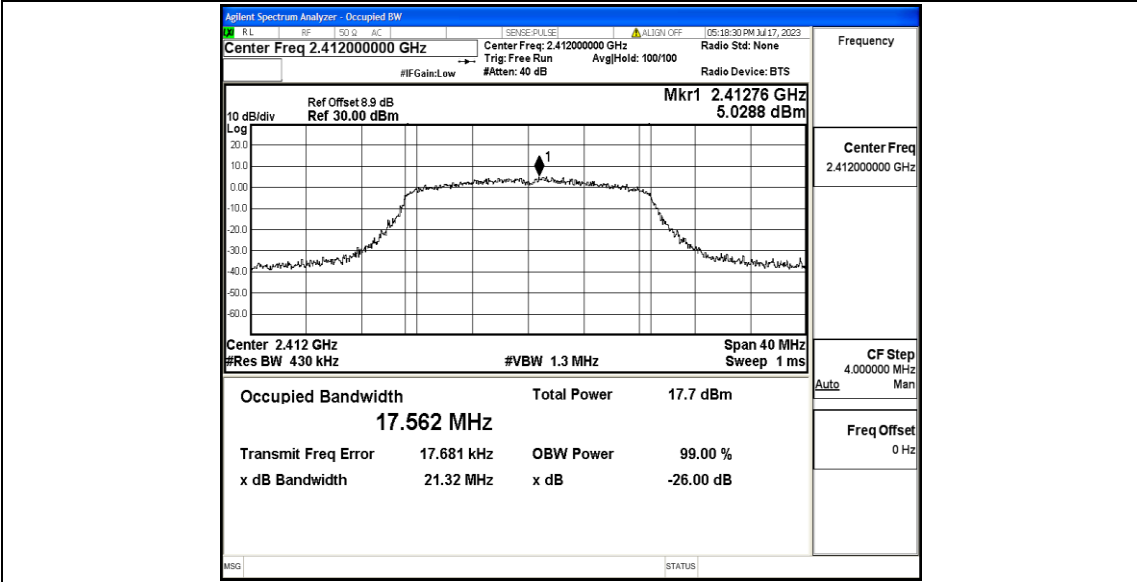


11G\_Ant1\_2462

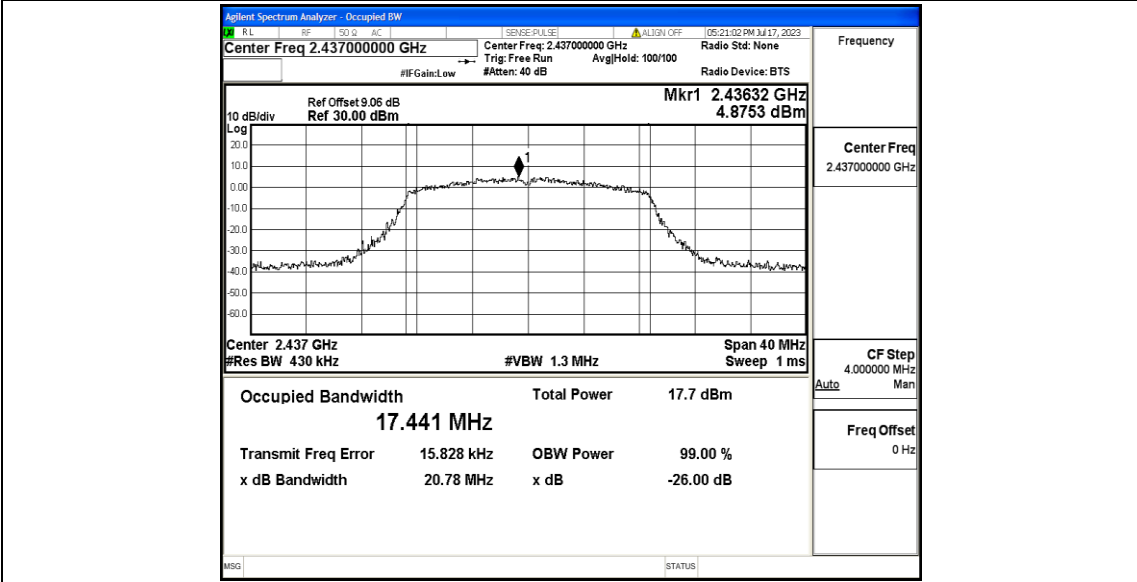


11N20SISO\_Ant1\_2412

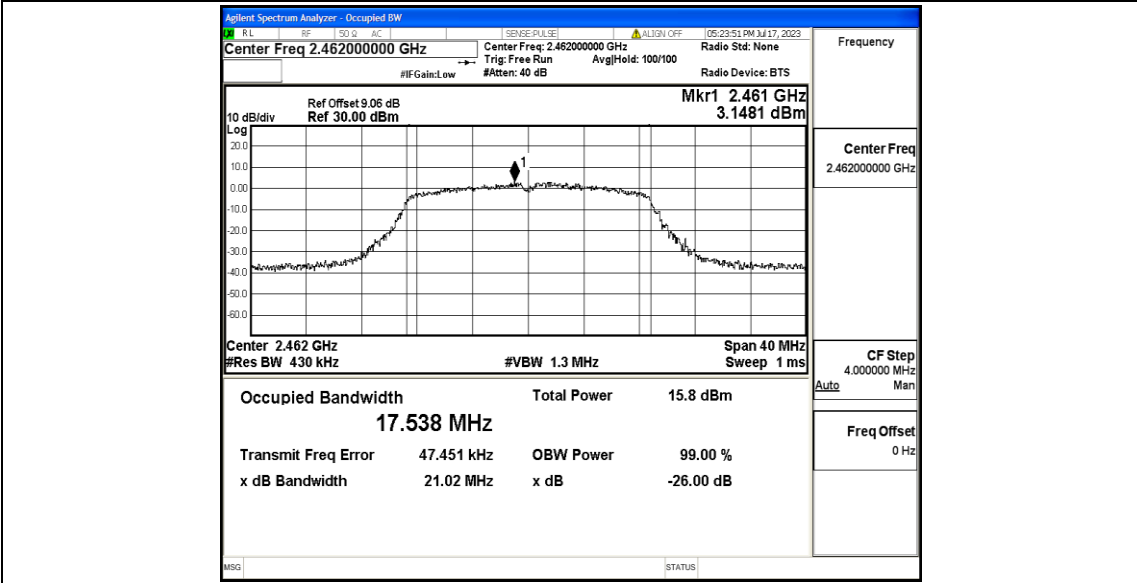




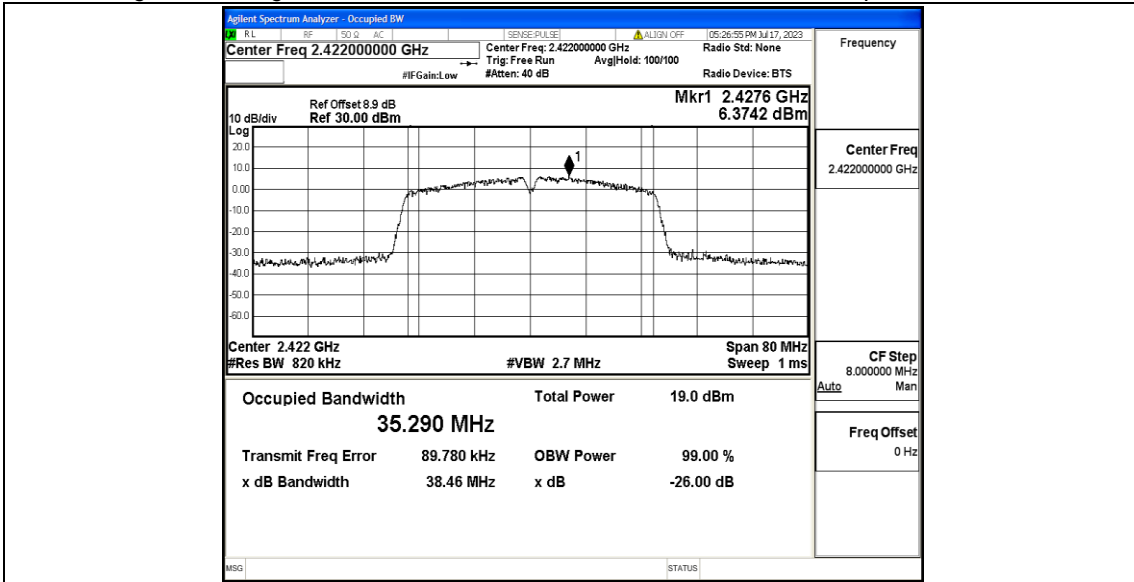
11N20SISO\_Ant1\_2437



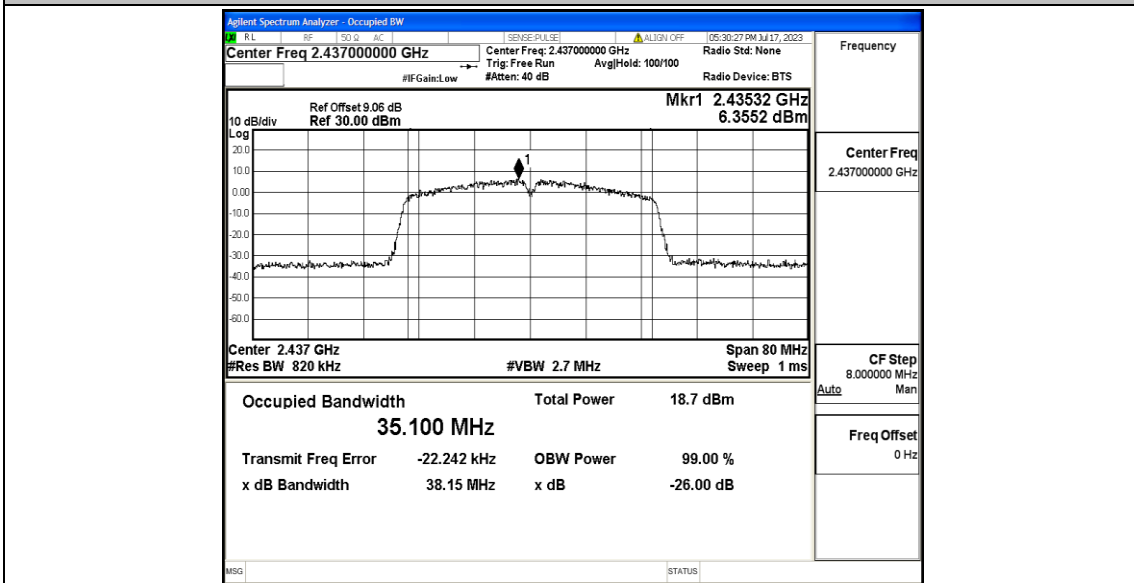
11N20SISO\_Ant1\_2462



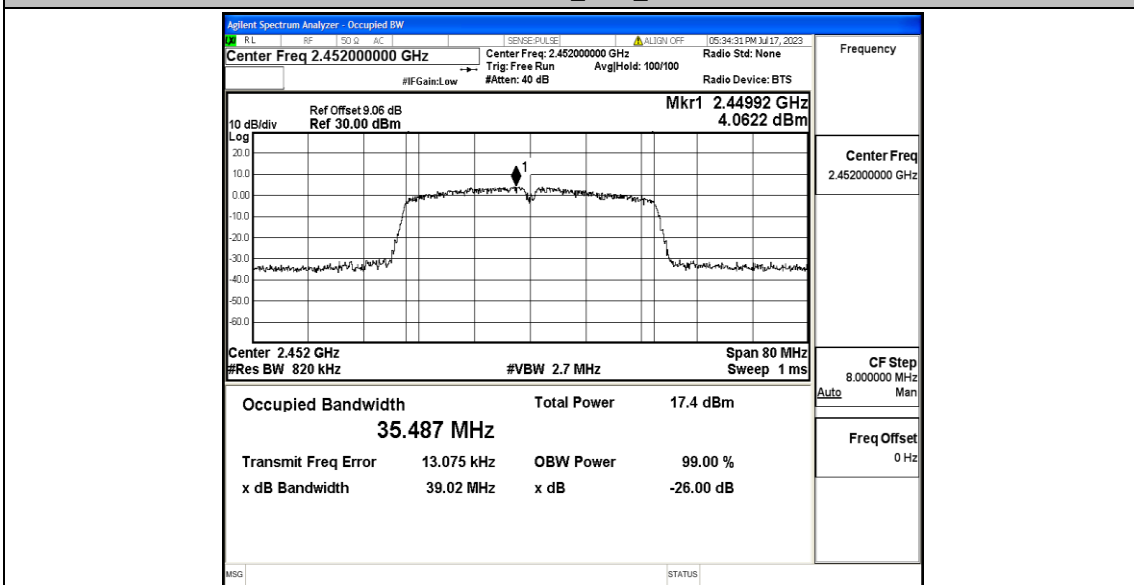
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452



## Appendix C: Maximum conducted output power

### Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	14.02	≤30.00	PASS
		2437	15.49	≤30.00	PASS
		2462	12.97	≤30.00	PASS
11G	Ant1	2412	12.79	≤30.00	PASS
		2437	13.01	≤30.00	PASS
		2462	10.65	≤30.00	PASS
11N20SISO	Ant1	2412	13.12	≤30.00	PASS
		2437	13.39	≤30.00	PASS
		2462	11.42	≤30.00	PASS
11N40SISO	Ant1	2422	12.48	≤30.00	PASS
		2437	11.84	≤30.00	PASS
		2452	10.50	≤30.00	PASS

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

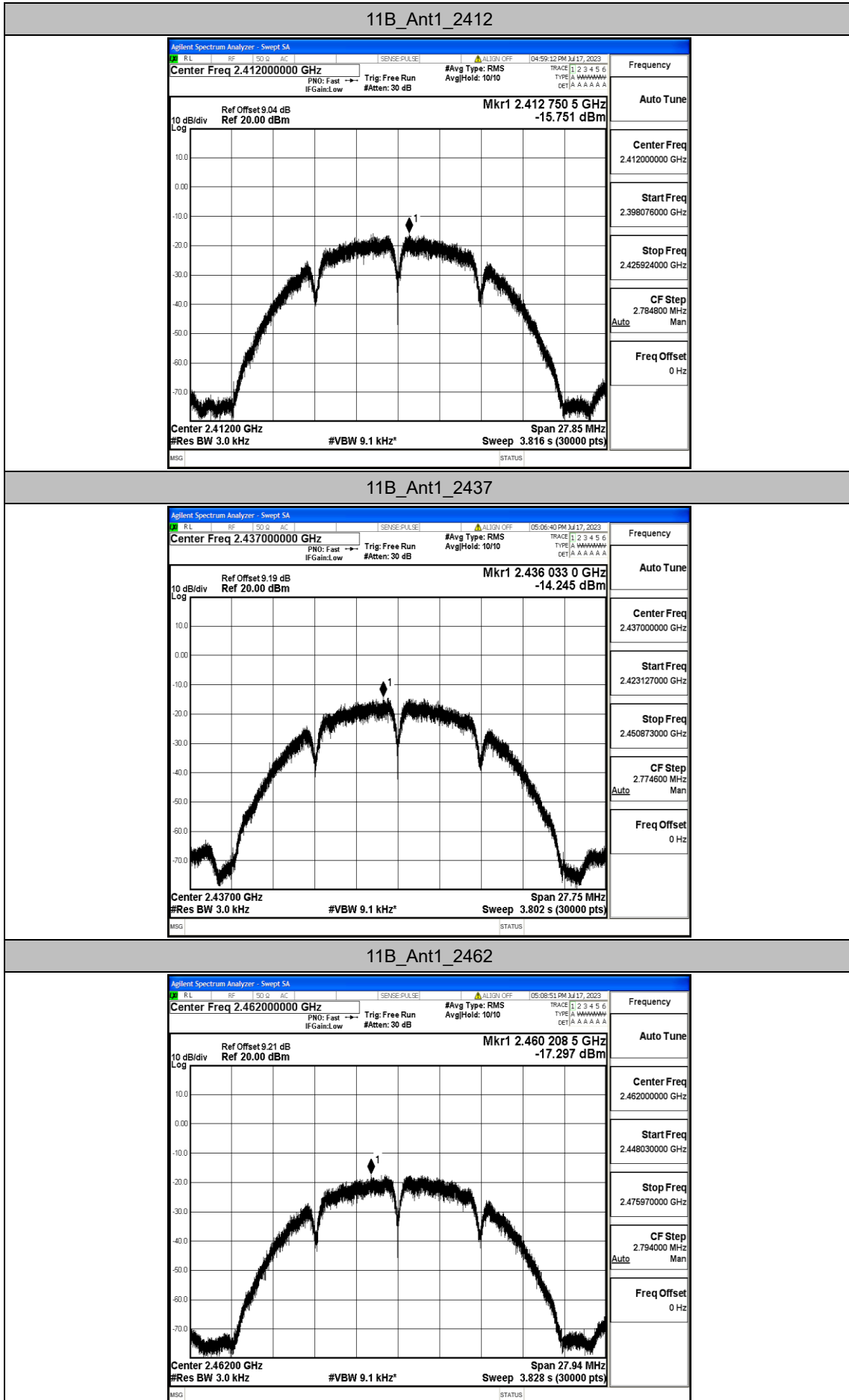
## Appendix D: Maximum power spectral density

### Test Result

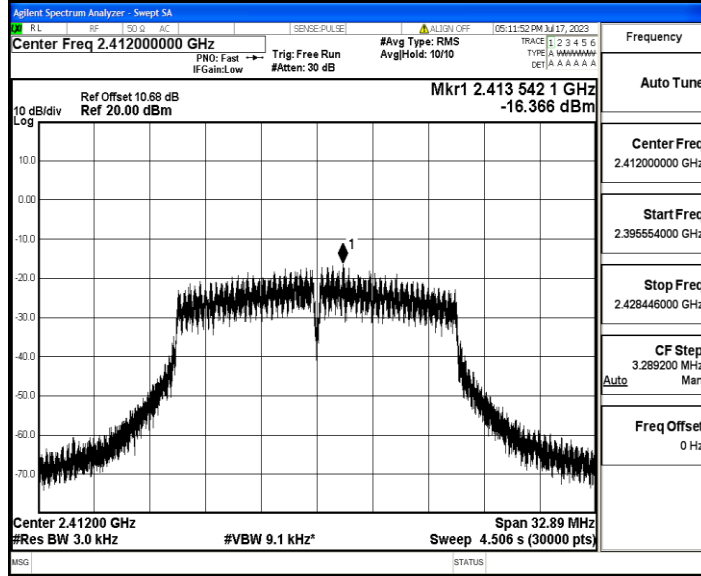
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.75	≤8.00	PASS
		2437	-14.25	≤8.00	PASS
		2462	-17.3	≤8.00	PASS
11G	Ant1	2412	-16.37	≤8.00	PASS
		2437	-16.21	≤8.00	PASS
		2462	-16.99	≤8.00	PASS
11N20SISO	Ant1	2412	-16.3	≤8.00	PASS
		2437	-15.25	≤8.00	PASS
		2462	-17.57	≤8.00	PASS
11N40SISO	Ant1	2422	-17.36	≤8.00	PASS
		2437	-17.6	≤8.00	PASS
		2452	-19.91	≤8.00	PASS

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

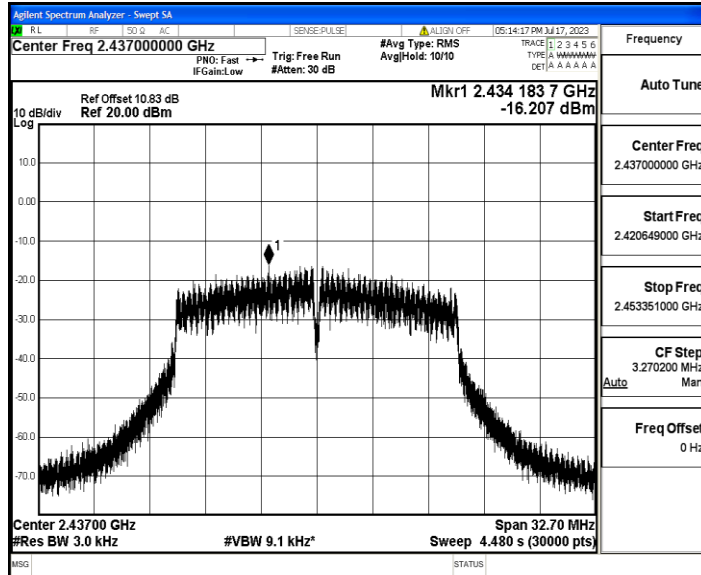
### Test Graphs



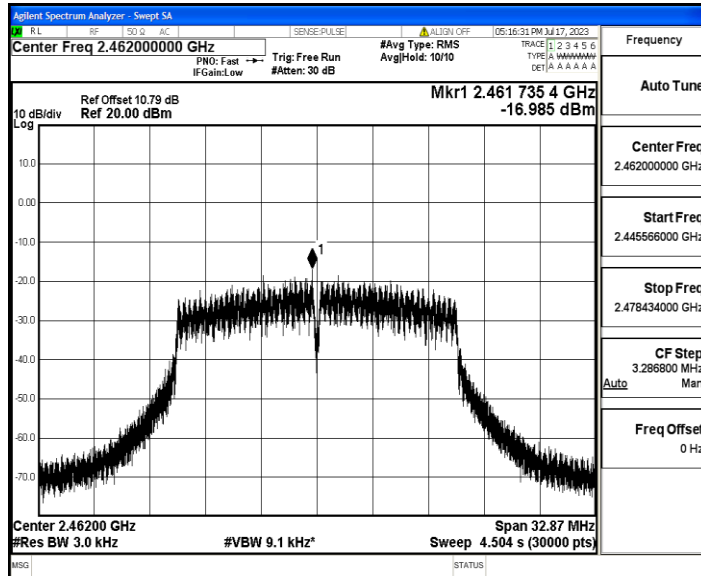
11G\_Ant1\_2412



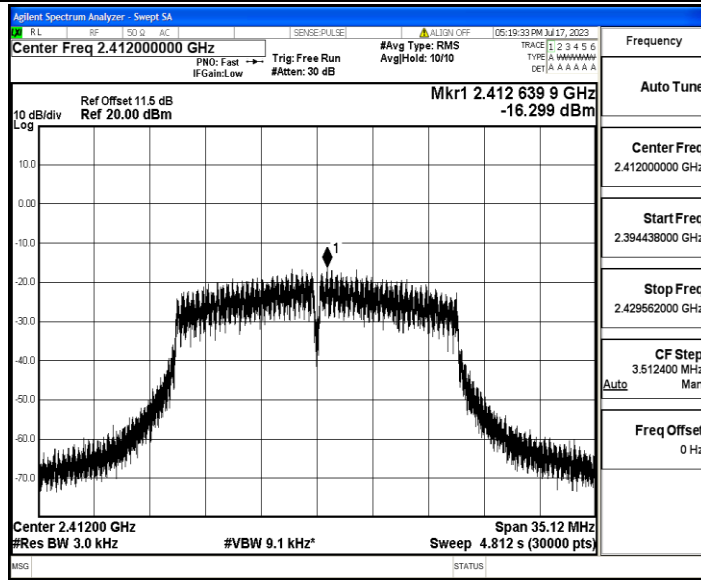
11G\_Ant1\_2437



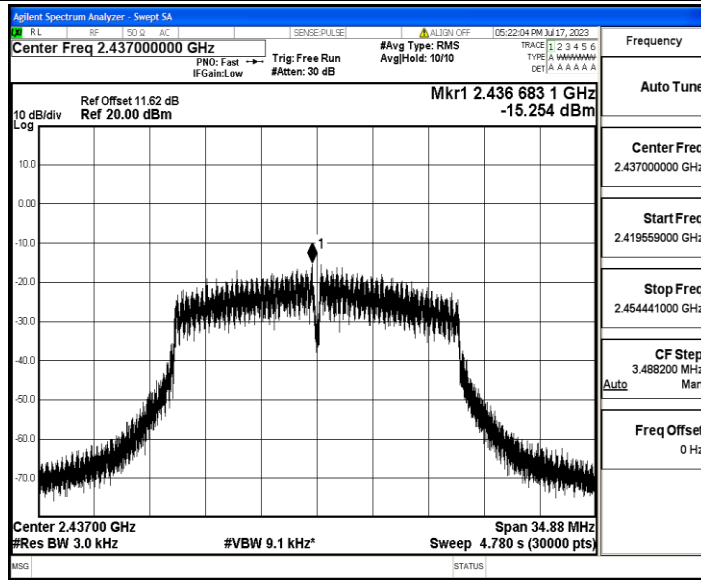
11G\_Ant1\_2462



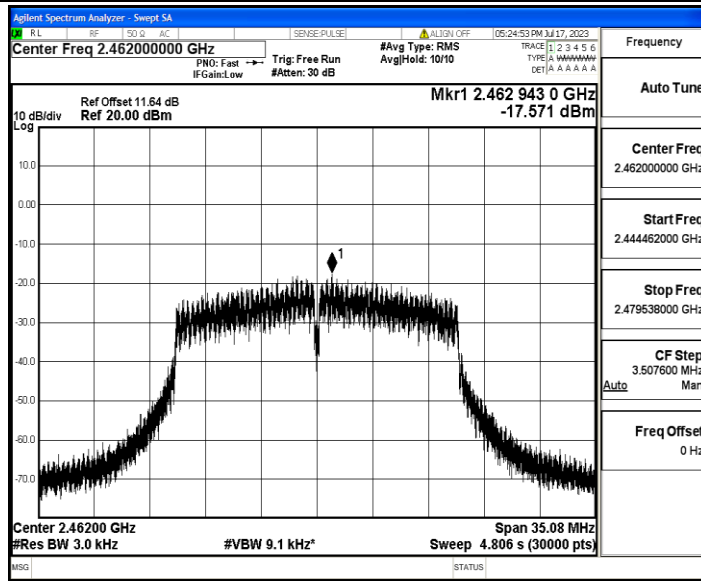
11N20SISO\_Ant1\_2412



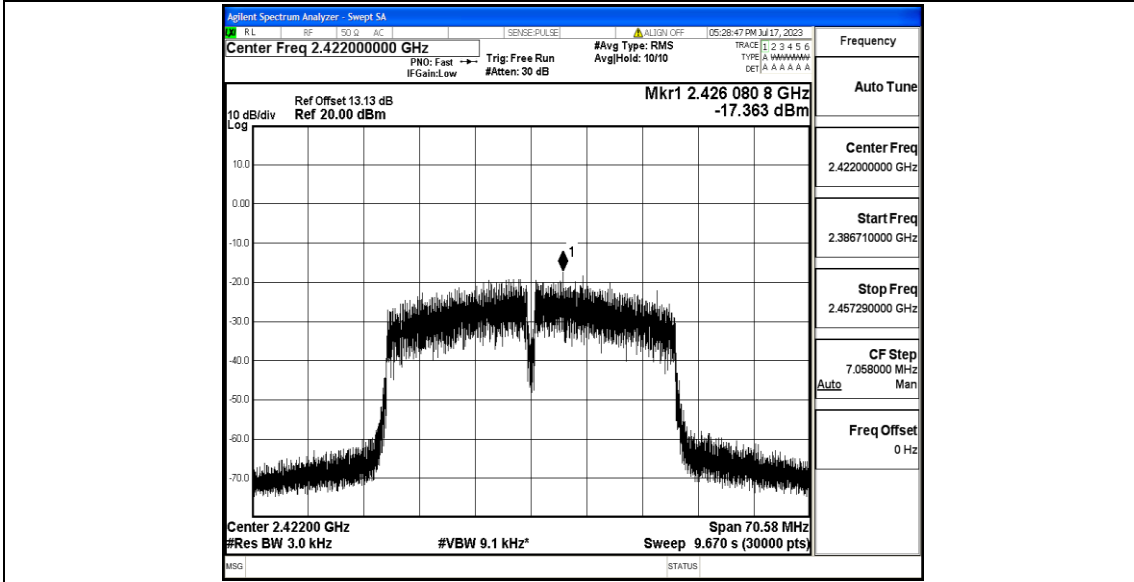
11N20SISO\_Ant1\_2437



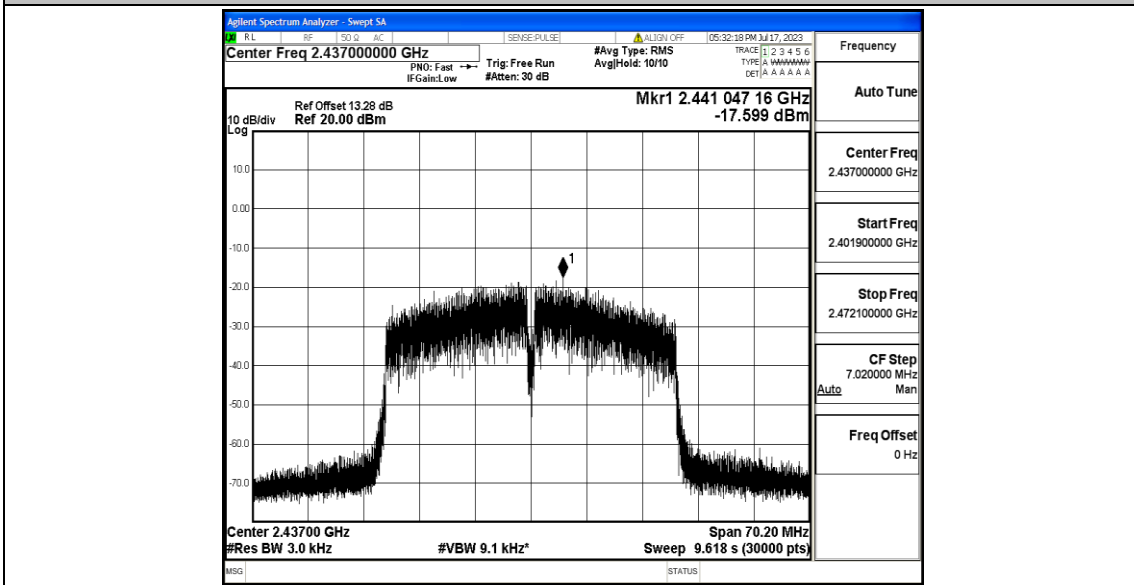
11N20SISO\_Ant1\_2462



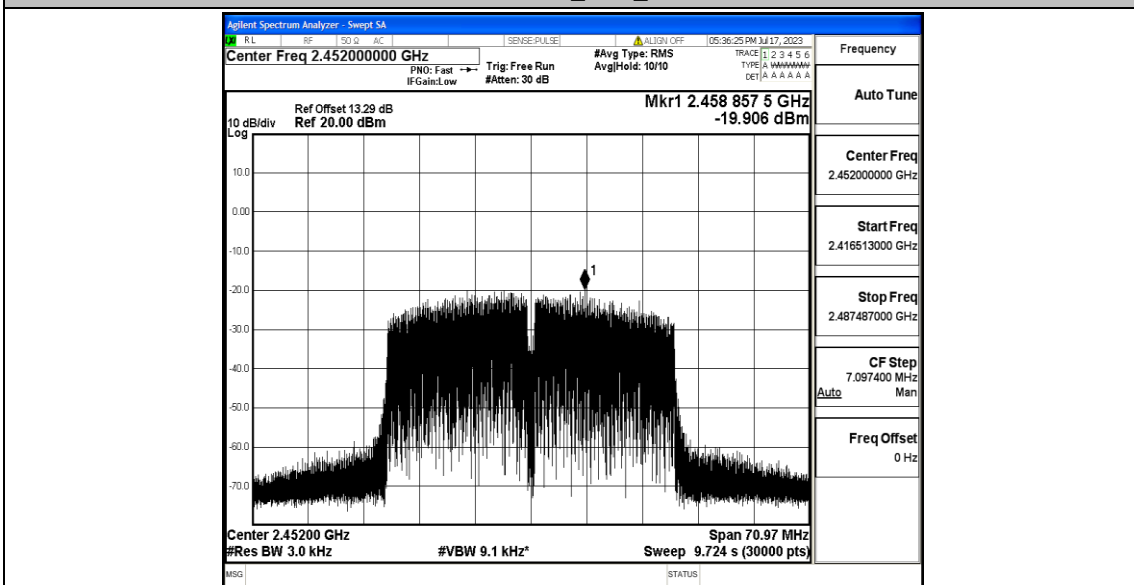
11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452





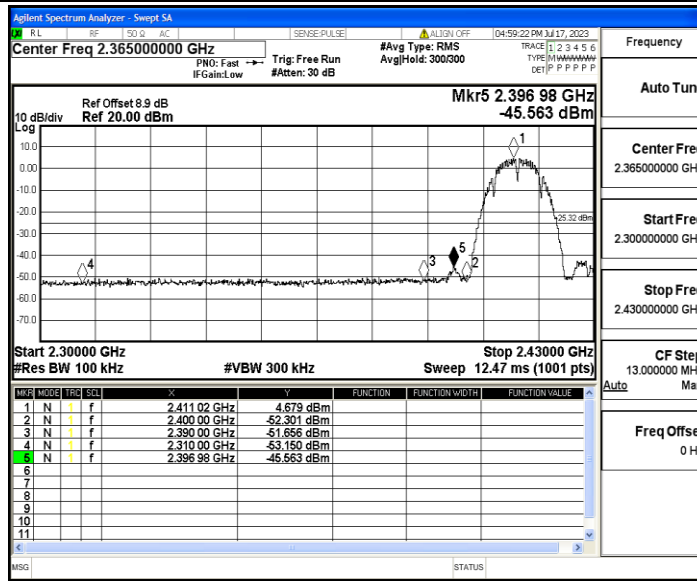
## Appendix E: Band edge measurements

### Test Result

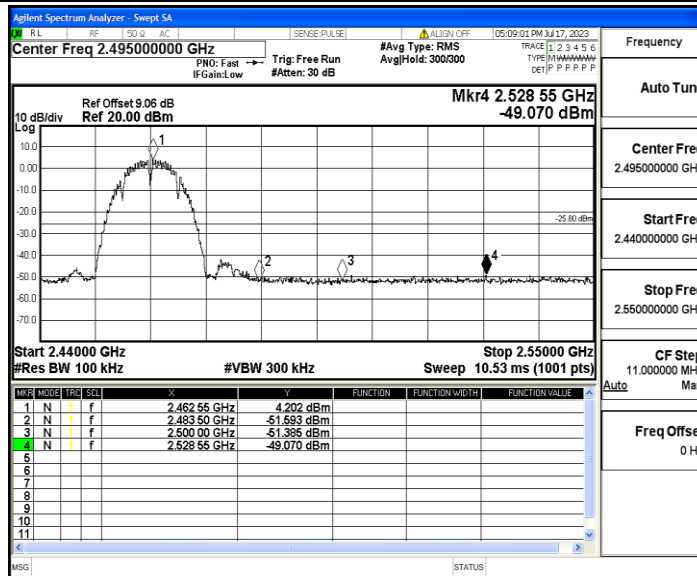
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.68	-45.56	≤-25.32	PASS
		High	2462	4.20	-49.07	≤-25.8	PASS
11G	Ant1	Low	2412	1.36	-39.07	≤-28.64	PASS
		High	2462	-0.90	-48.96	≤-30.9	PASS
11N20SISO	Ant1	Low	2412	2.27	-37.73	≤-27.73	PASS
		High	2462	0.03	-48.9	≤-29.97	PASS
11N40SISO	Ant1	Low	2422	-0.27	-40.92	≤-30.27	PASS
		High	2452	-1.52	-44.84	≤-31.52	PASS

Test Graphs

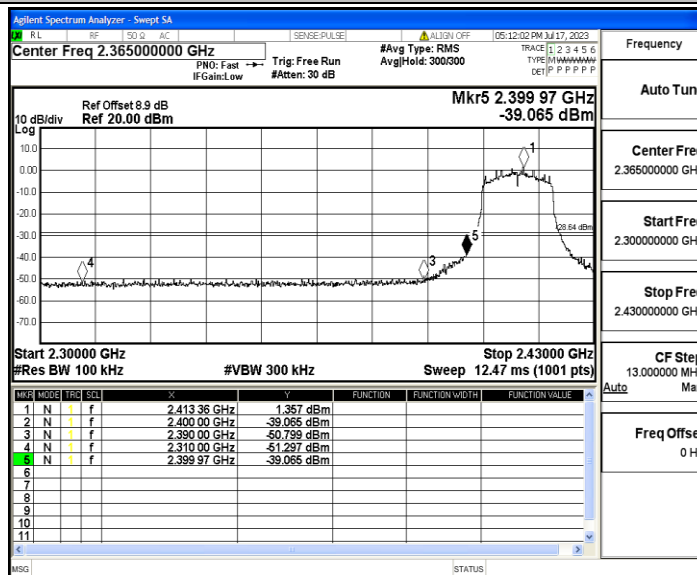
11B\_Ant1\_Low\_2412



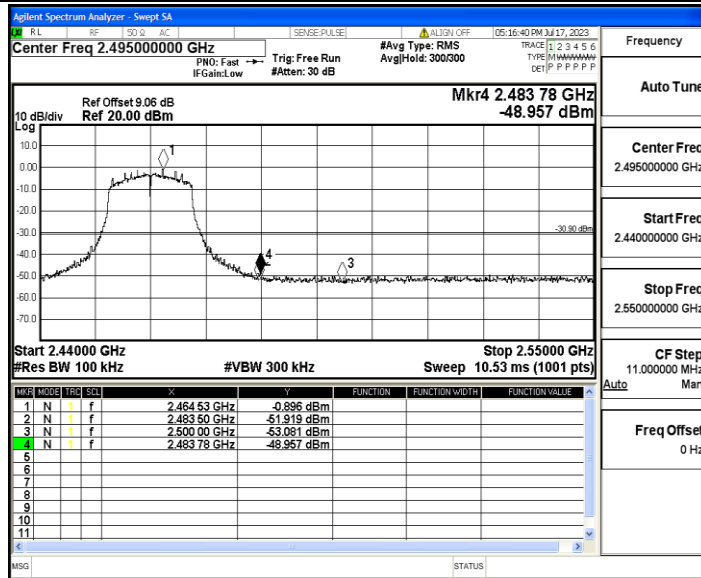
11B\_Ant1\_High\_2462



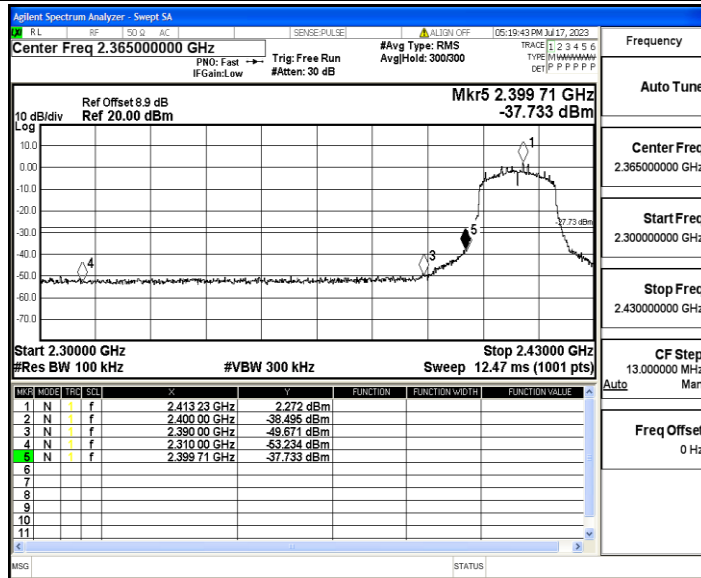
11G\_Ant1\_Low\_2412



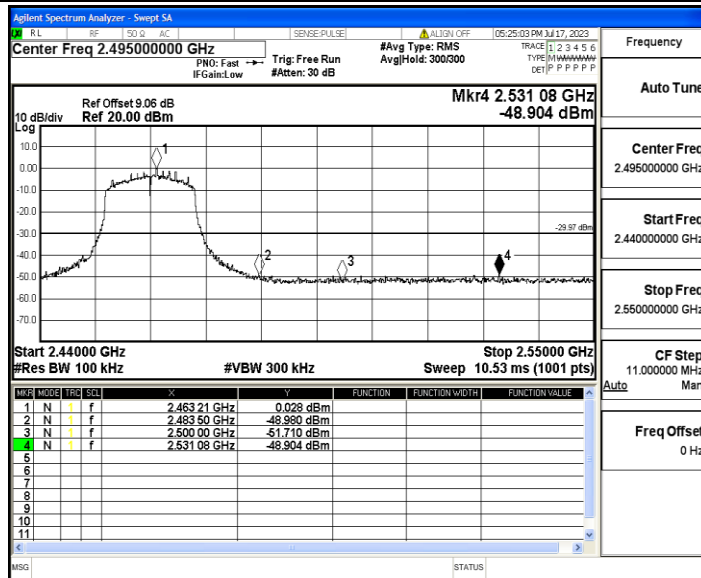
11G\_Ant1\_High\_2462



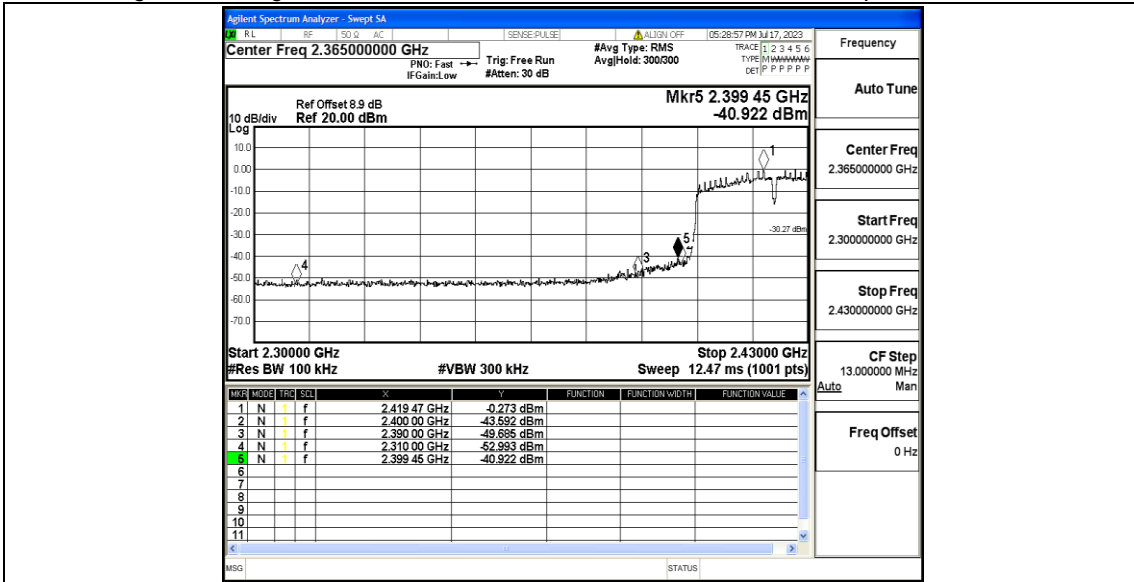
11N20SISO\_Ant1\_Low\_2412



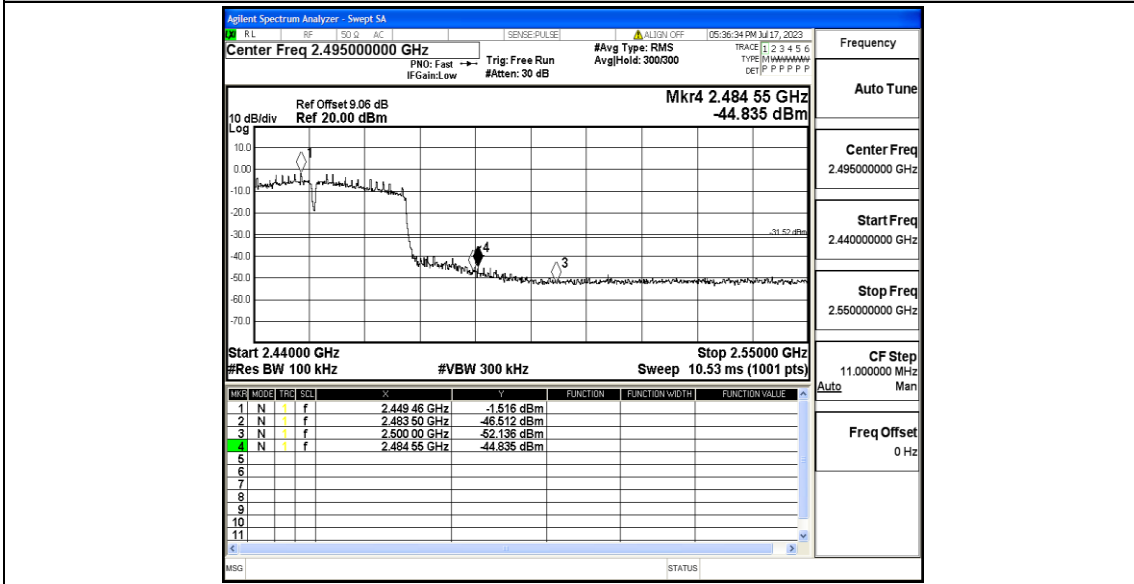
11N20SISO\_Ant1\_High\_2462



11N40SISO\_Ant1\_Low\_2422



11N40SISO\_Ant1\_High\_2452

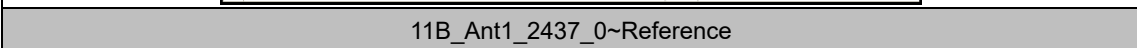
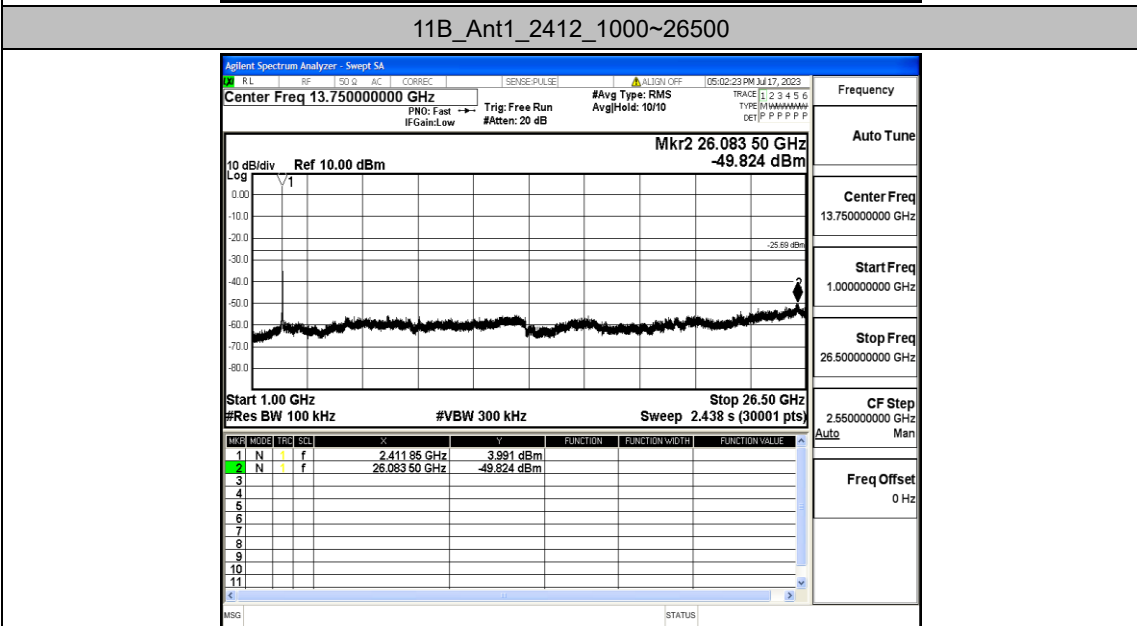
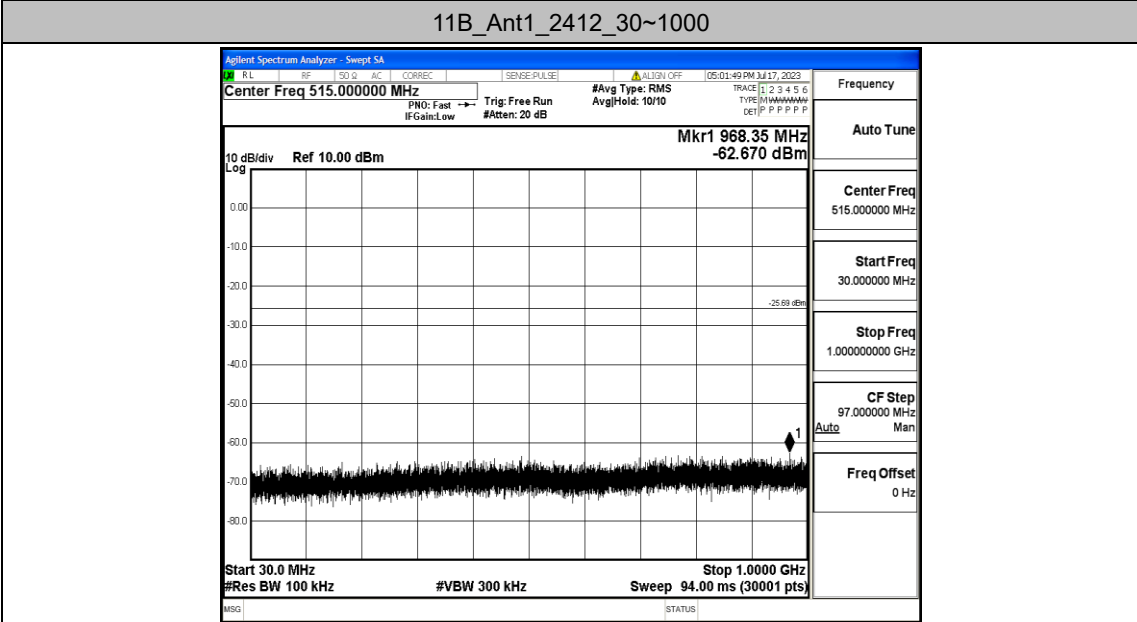
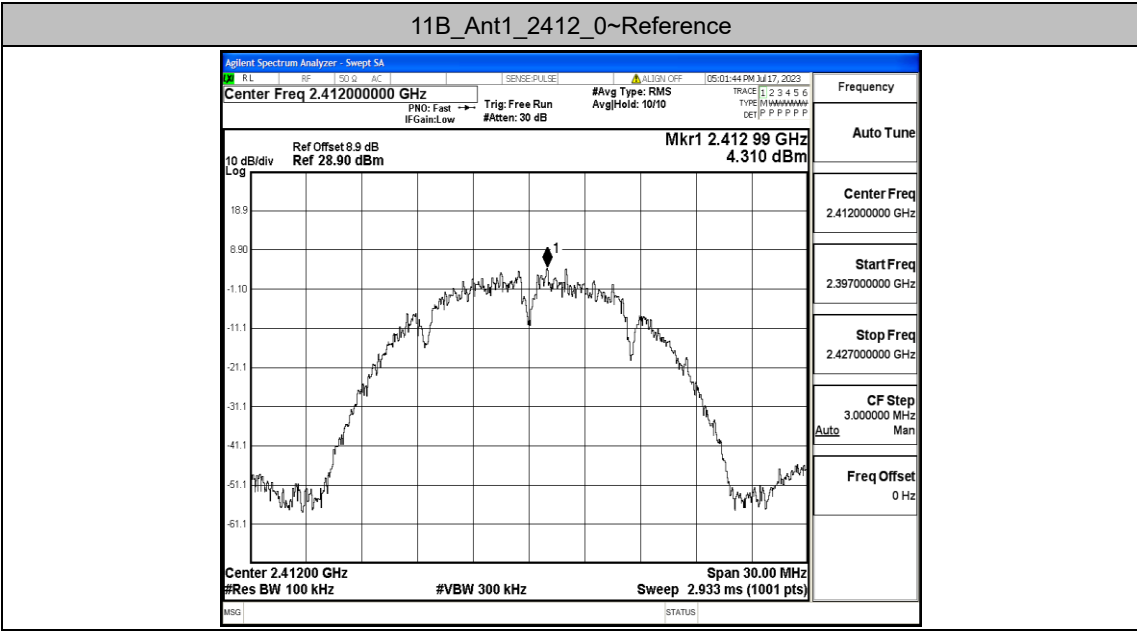


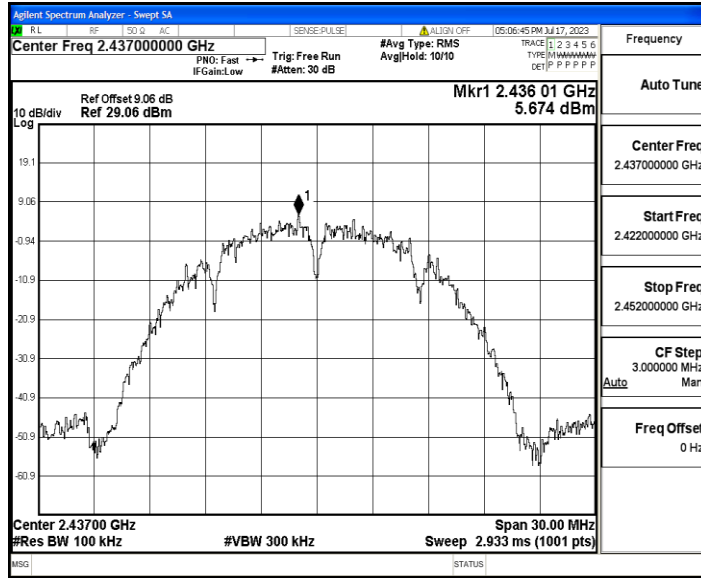
## Appendix F: Conducted Spurious Emission

### Test Result

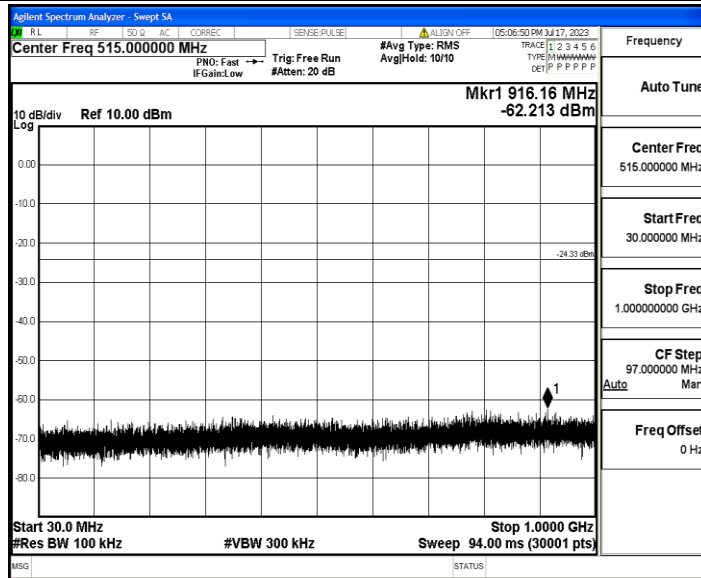
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.31	4.31	---	PASS
			30~1000	4.31	-62.67	≤-25.69	PASS
			1000~26500	4.31	-49.82	≤-25.69	PASS
		2437	Reference	5.67	5.67	---	PASS
			30~1000	5.67	-62.21	≤-24.33	PASS
			1000~26500	5.67	-50.36	≤-24.33	PASS
		2462	Reference	2.31	2.31	---	PASS
			30~1000	2.31	-62.49	≤-27.69	PASS
			1000~26500	2.31	-50.46	≤-27.69	PASS
11G	Ant1	2412	Reference	-1.75	-1.75	---	PASS
			30~1000	-1.75	-62.83	≤-31.75	PASS
			1000~26500	-1.75	-50.34	≤-31.75	PASS
		2437	Reference	-1.27	-1.27	---	PASS
			30~1000	-1.27	-62.21	≤-31.27	PASS
			1000~26500	-1.27	-50.48	≤-31.27	PASS
		2462	Reference	-3.45	-3.45	---	PASS
			30~1000	-3.45	-62.66	≤-33.45	PASS
			1000~26500	-3.45	-49.43	≤-33.45	PASS
11N20SISO	Ant1	2412	Reference	-1.71	-1.71	---	PASS
			30~1000	-1.71	-63.07	≤-31.71	PASS
			1000~26500	-1.71	-49.97	≤-31.71	PASS
		2437	Reference	0.67	0.67	---	PASS
			30~1000	0.67	-63.09	≤-29.33	PASS
			1000~26500	0.67	-50.07	≤-29.33	PASS
		2462	Reference	-3.78	-3.78	---	PASS
			30~1000	-3.78	-62.54	≤-33.78	PASS
			1000~26500	-3.78	-50.48	≤-33.78	PASS
11N40SISO	Ant1	2422	Reference	-4.40	-4.40	---	PASS
			30~1000	-4.40	-61.94	≤-34.4	PASS
			1000~26500	-4.40	-49.32	≤-34.4	PASS
		2437	Reference	-3.15	-3.15	---	PASS
			30~1000	-3.15	-62.11	≤-33.15	PASS
			1000~26500	-3.15	-50.58	≤-33.15	PASS
		2452	Reference	-5.63	-5.63	---	PASS
			30~1000	-5.63	-63.18	≤-35.63	PASS
			1000~26500	-5.63	-50.28	≤-35.63	PASS

### Test Graphs

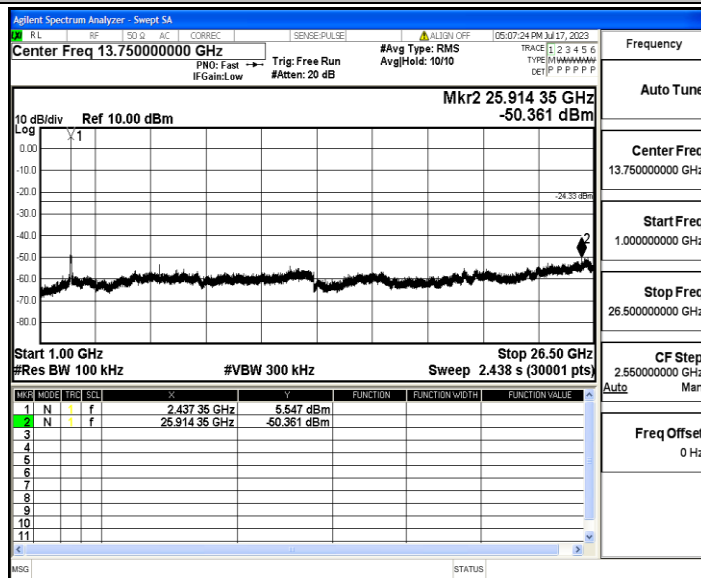




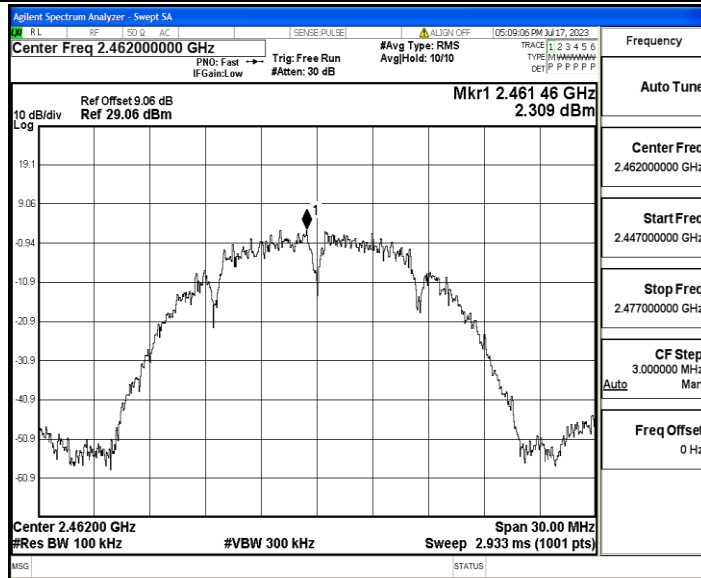
11B\_Ant1\_2437\_30~1000



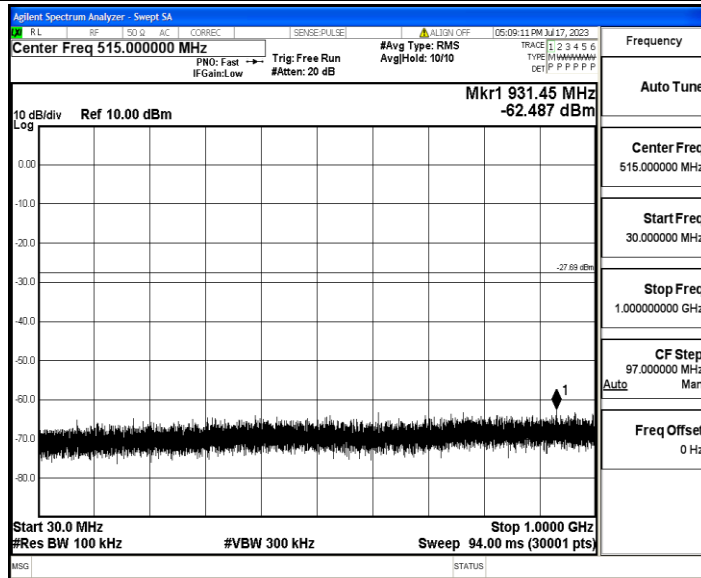
11B\_Ant1\_2437\_1000~26500



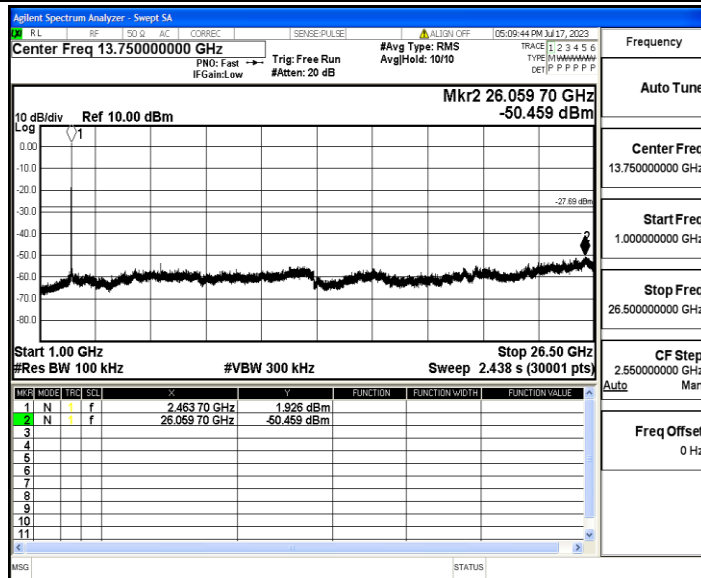
11B\_Ant1\_2462\_0~Reference



11B\_Ant1\_2462\_30~1000

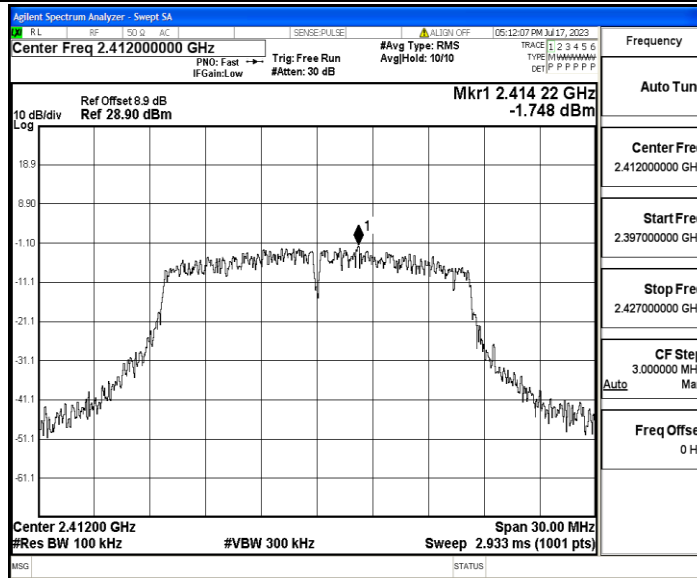


11B\_Ant1\_2462\_1000~26500

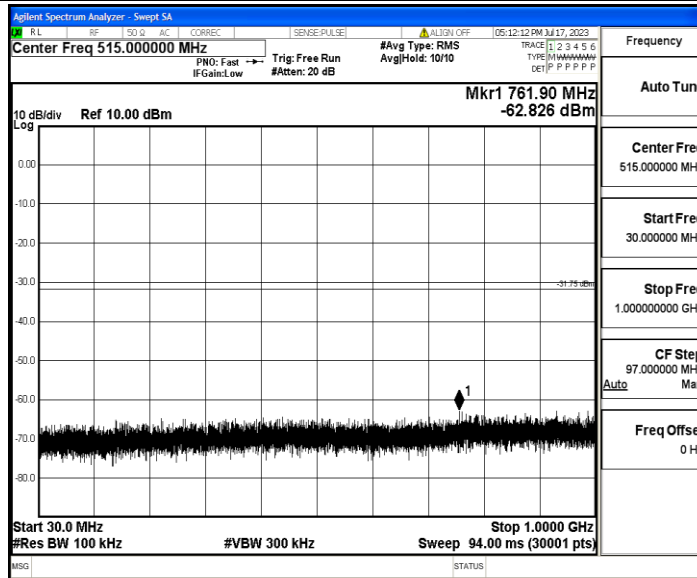


11G\_Ant1\_2412\_0~Reference

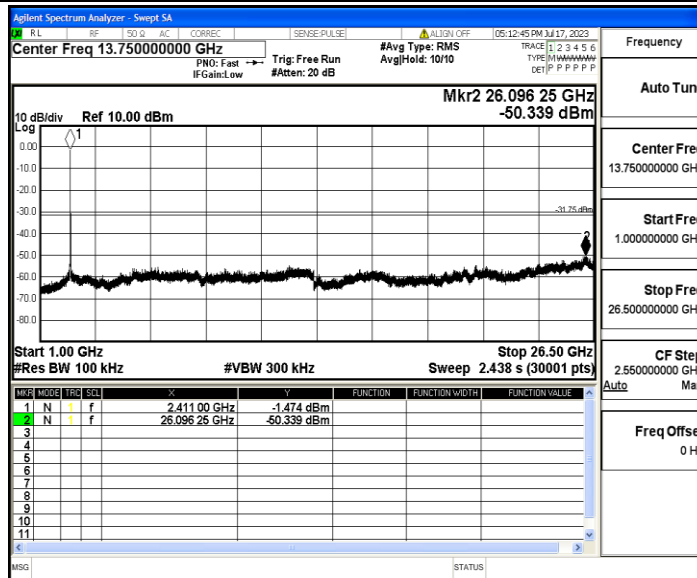




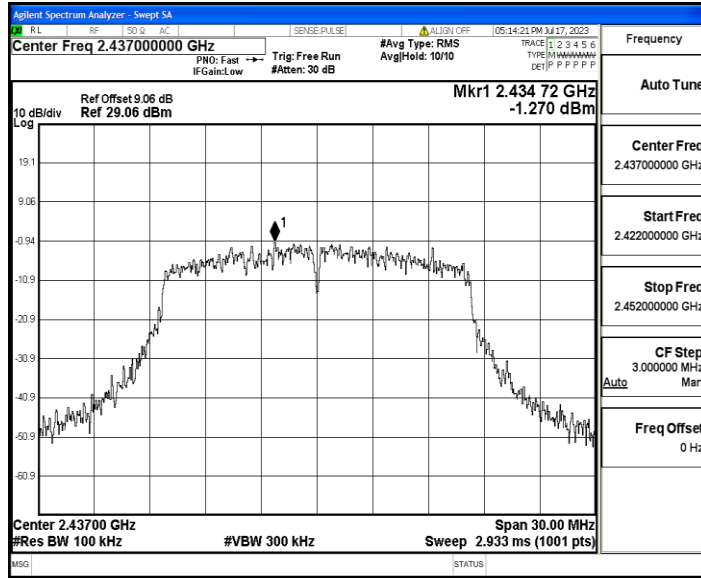
11G\_Ant1\_2412\_30~1000



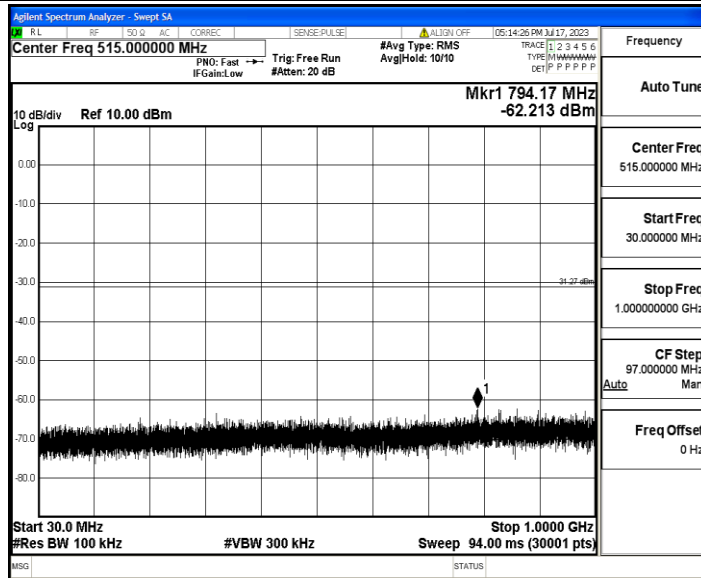
11G\_Ant1\_2412\_1000~26500



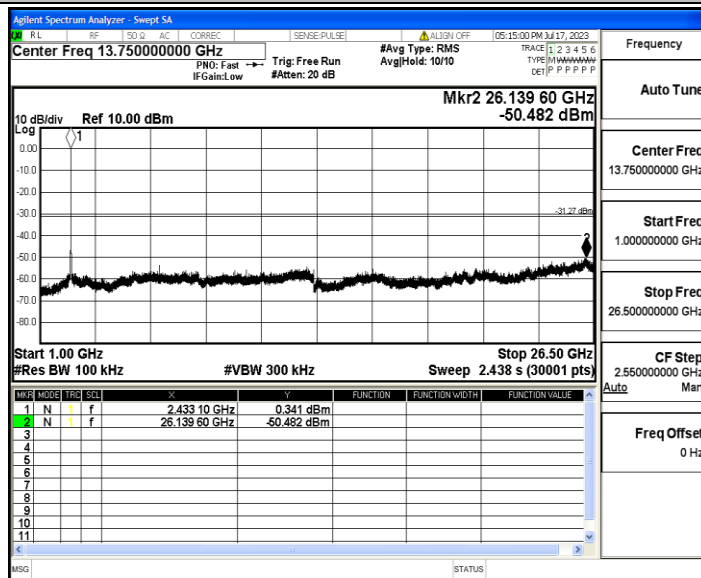
11G\_Ant1\_2437\_0~Reference



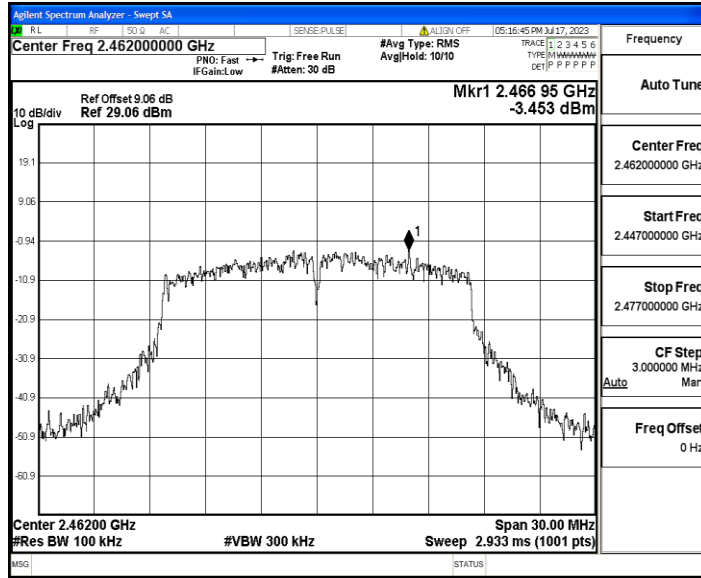
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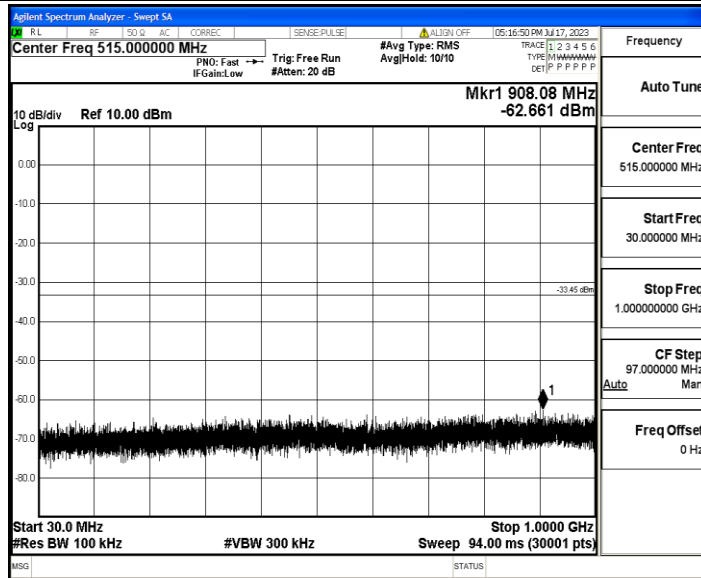
11G\_Ant1\_2437\_1000~26500



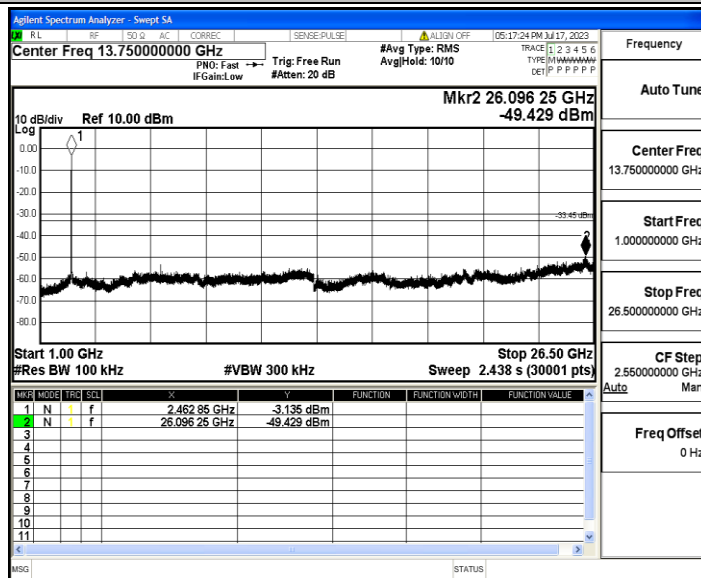
11G\_Ant1\_2462\_0~Reference



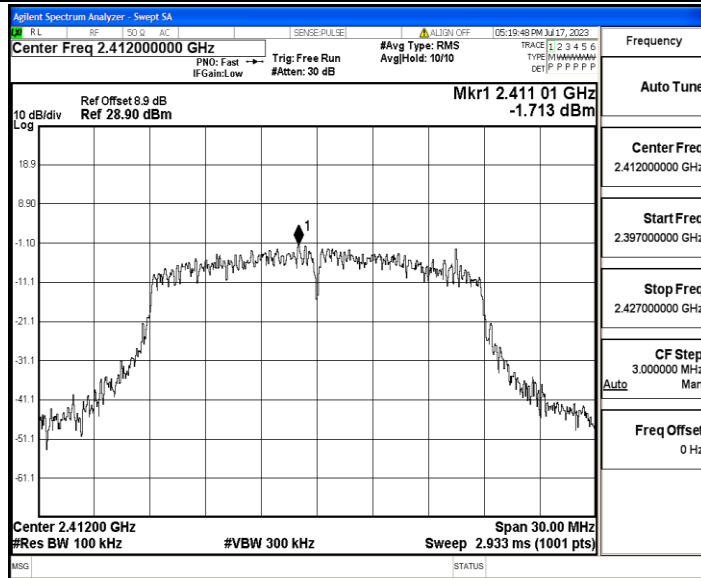
11G\_Ant1\_2462\_30~1000



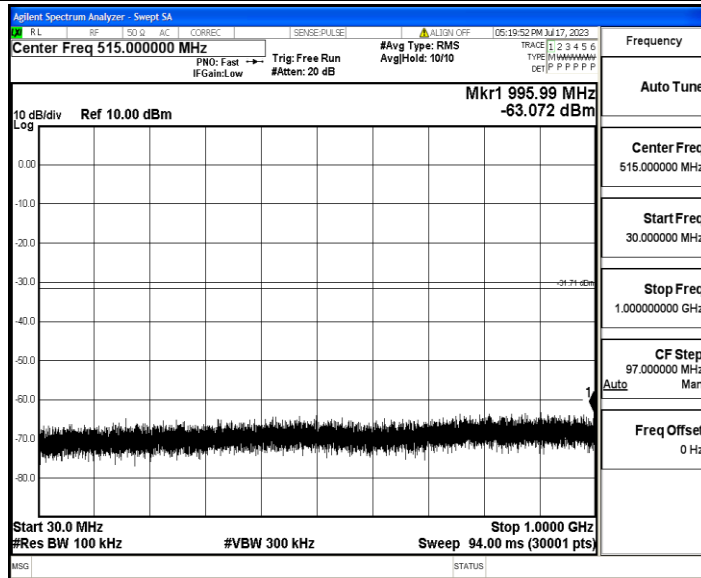
11G\_Ant1\_2462\_1000~26500



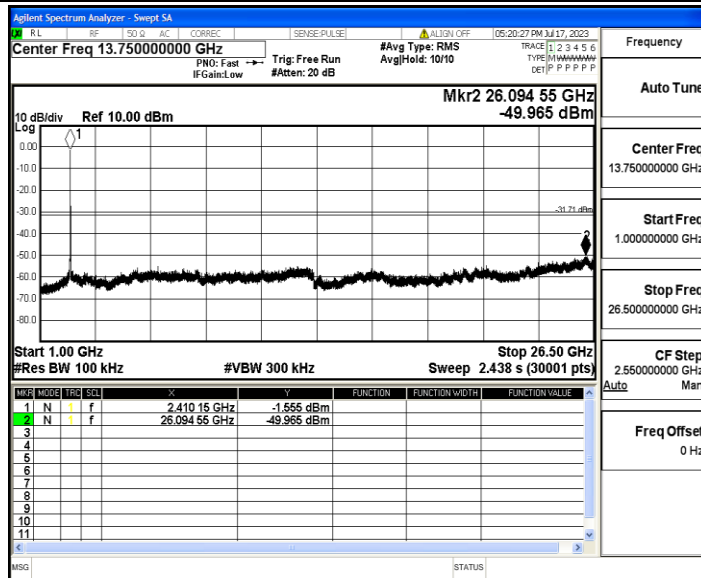
11N20SISO\_Ant1\_2412\_0~Reference



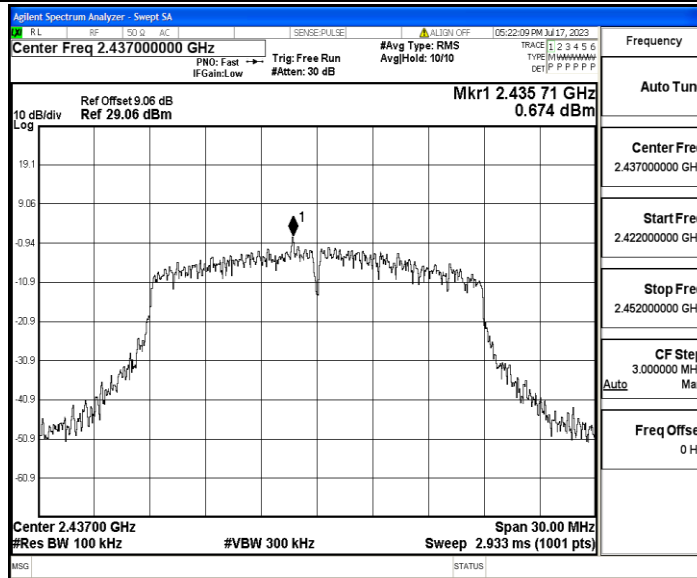
11N20SISO\_Ant1\_2412\_30~1000



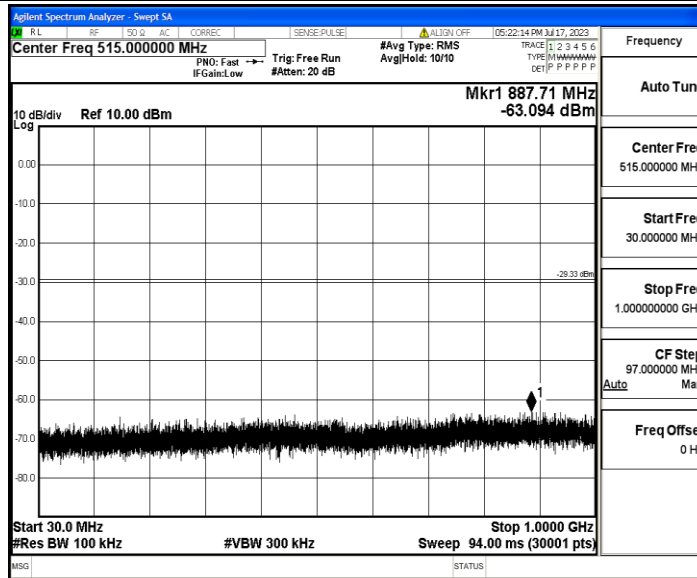
11N20SISO\_Ant1\_2412\_1000~26500



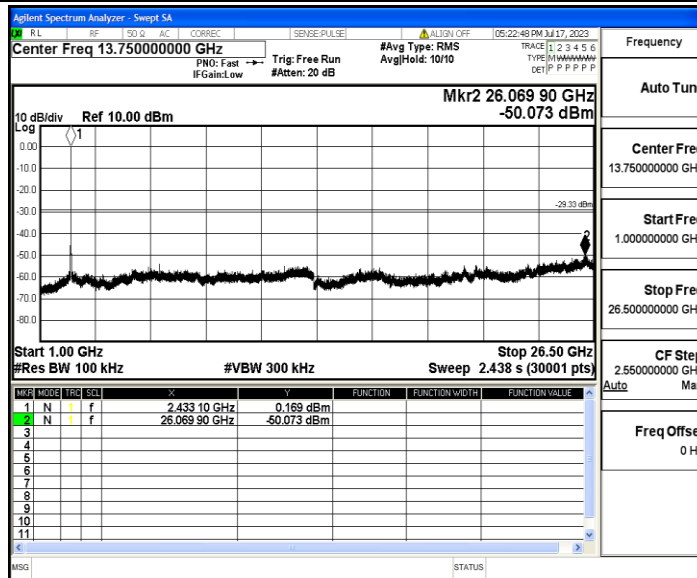
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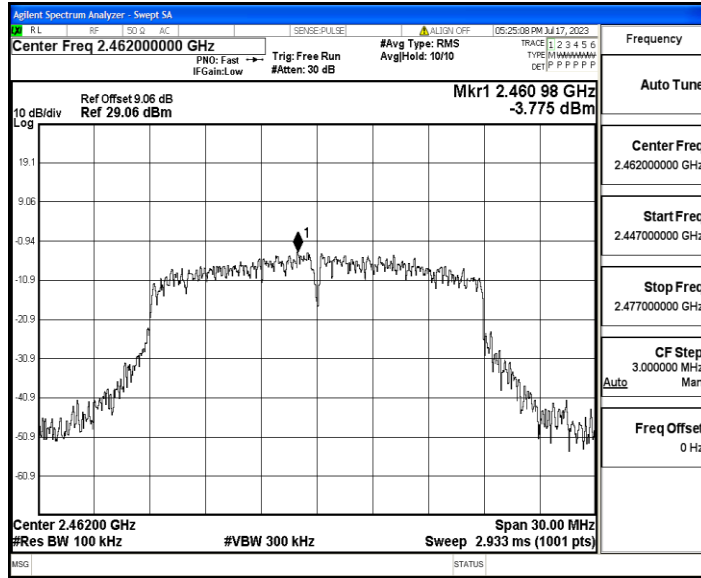
11N20SISO\_Ant1\_2437\_30~1000



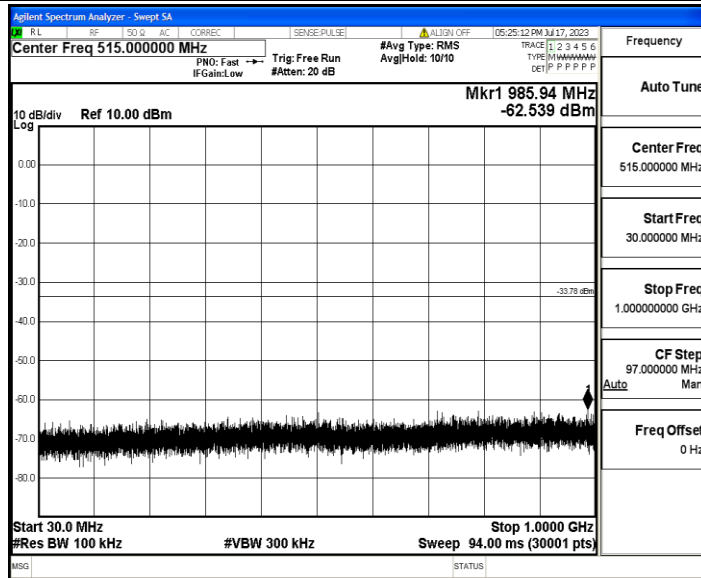
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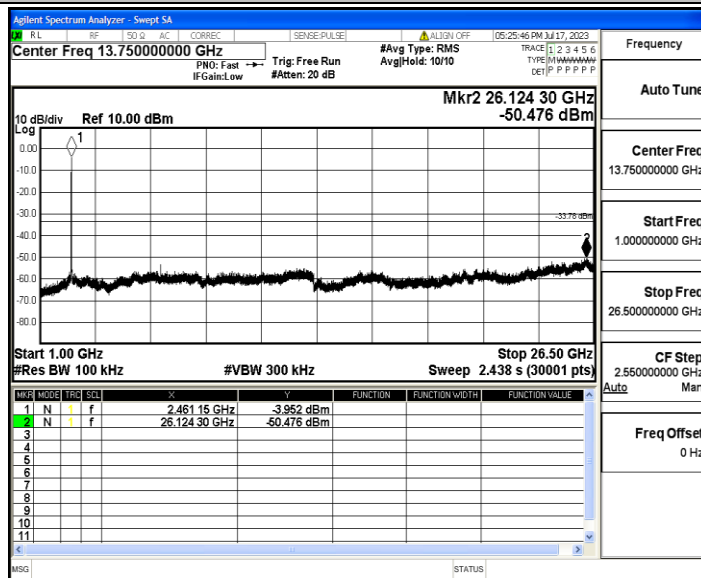
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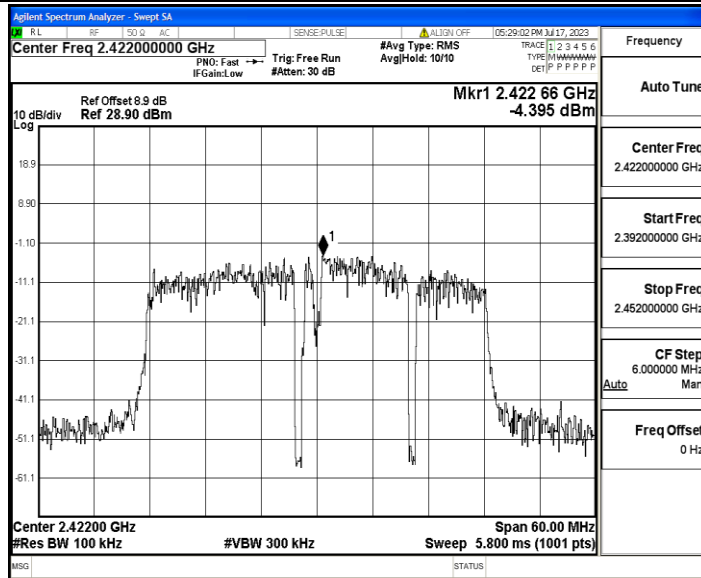
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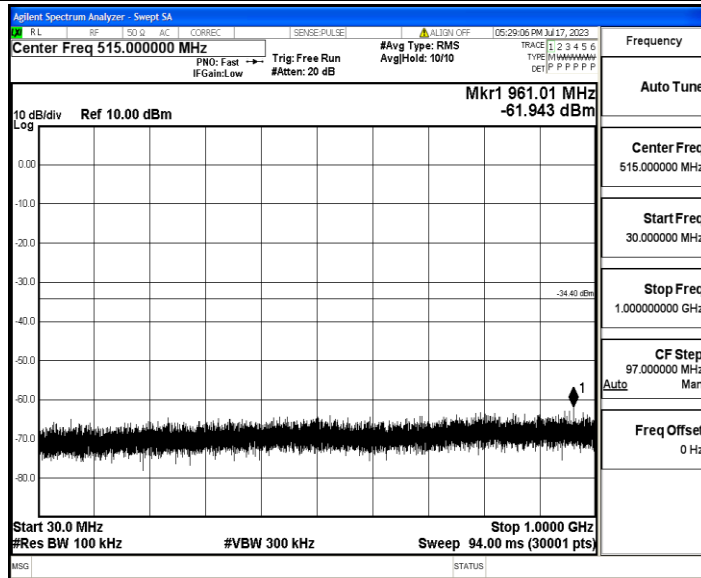
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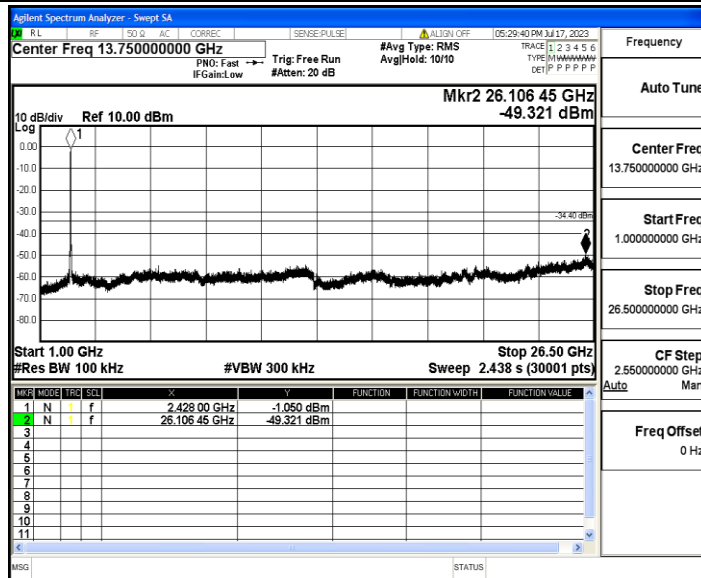
11N40SISO\_Ant1\_2422\_0~Reference



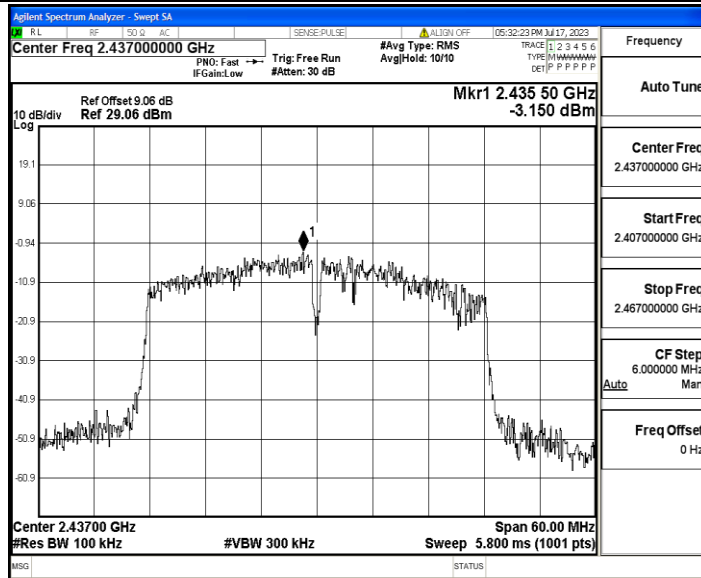
11N40SISO\_Ant1\_2422\_30~1000



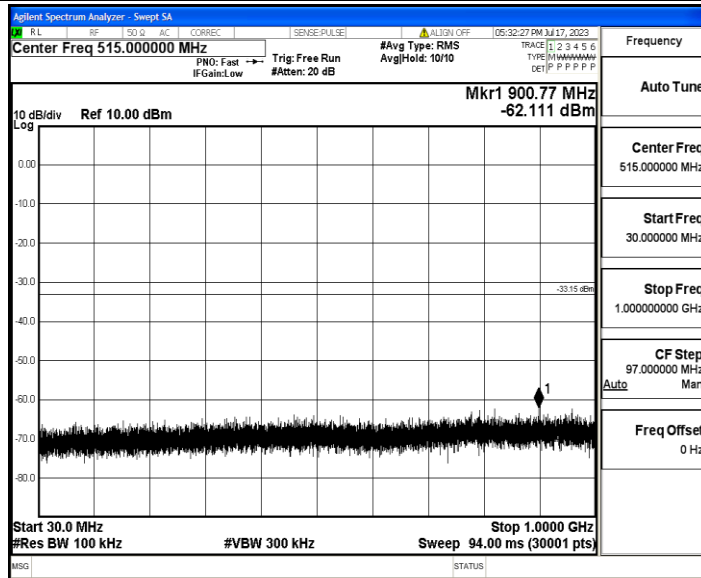
11N40SISO\_Ant1\_2422\_1000~26500



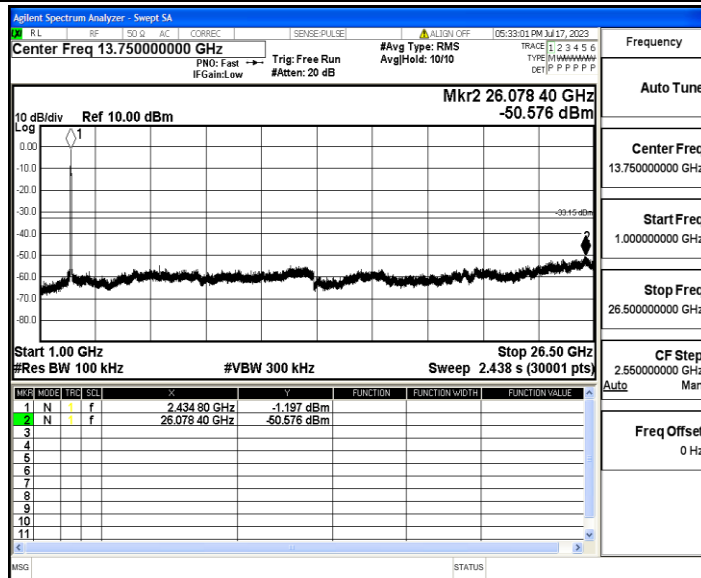
11N40SISO\_Ant1\_2437\_0~Reference



11N40SISO\_Ant1\_2437\_30~1000

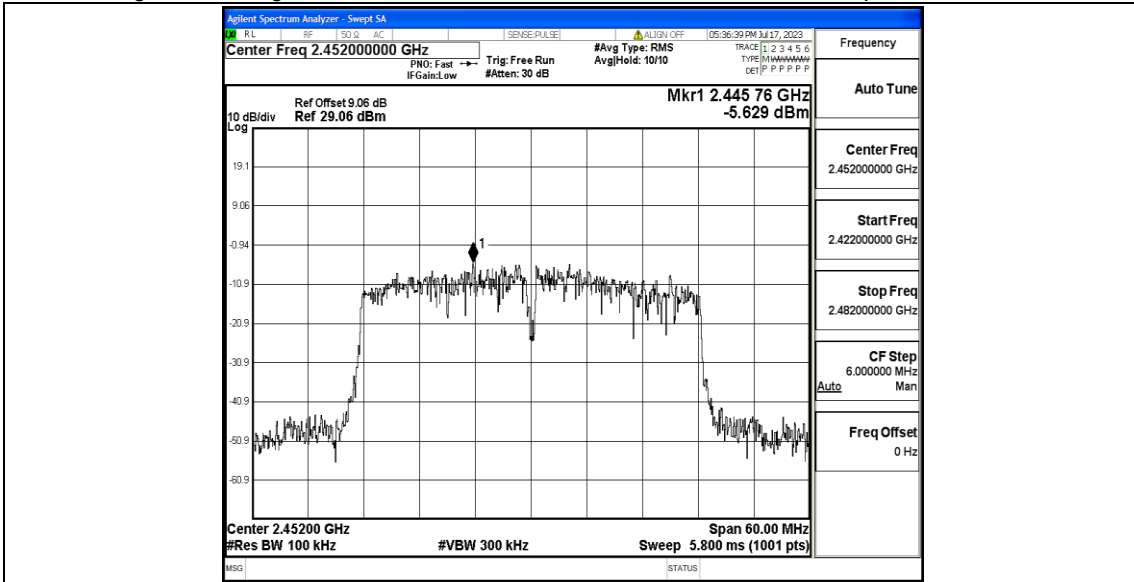


11N40SISO\_Ant1\_2437\_1000~26500

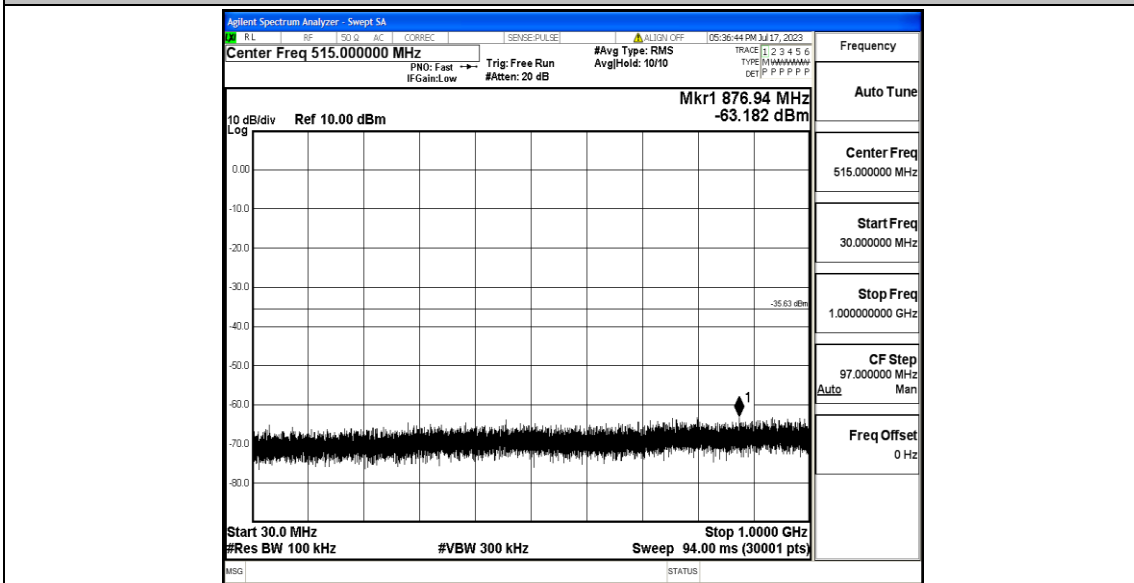


11N40SISO\_Ant1\_2452\_0~Reference

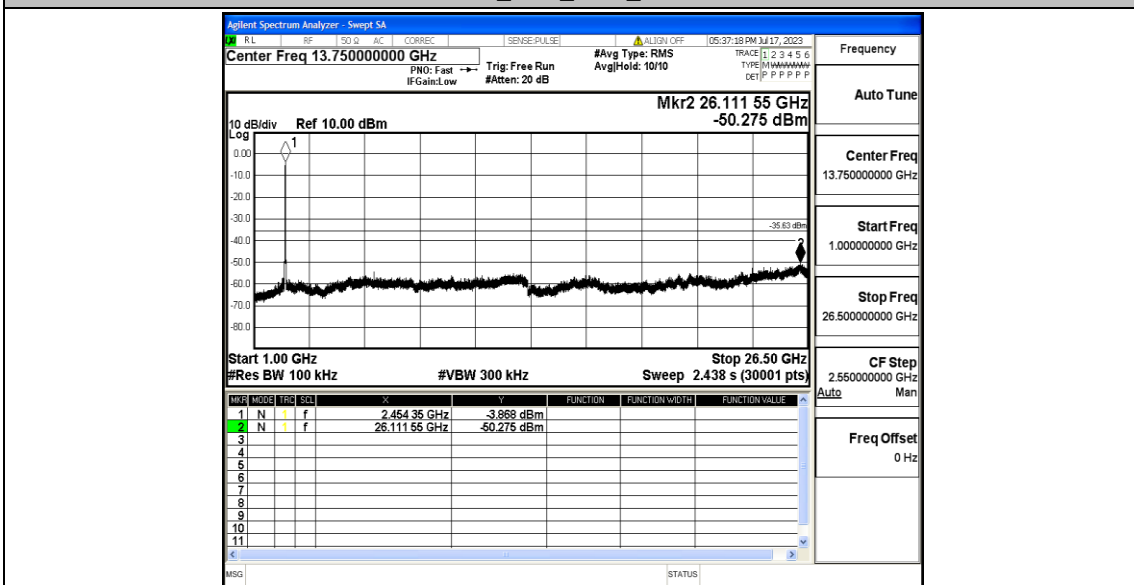




11N40SISO\_Ant1\_2452\_30~1000



11N40SISO\_Ant1\_2452\_1000~26500

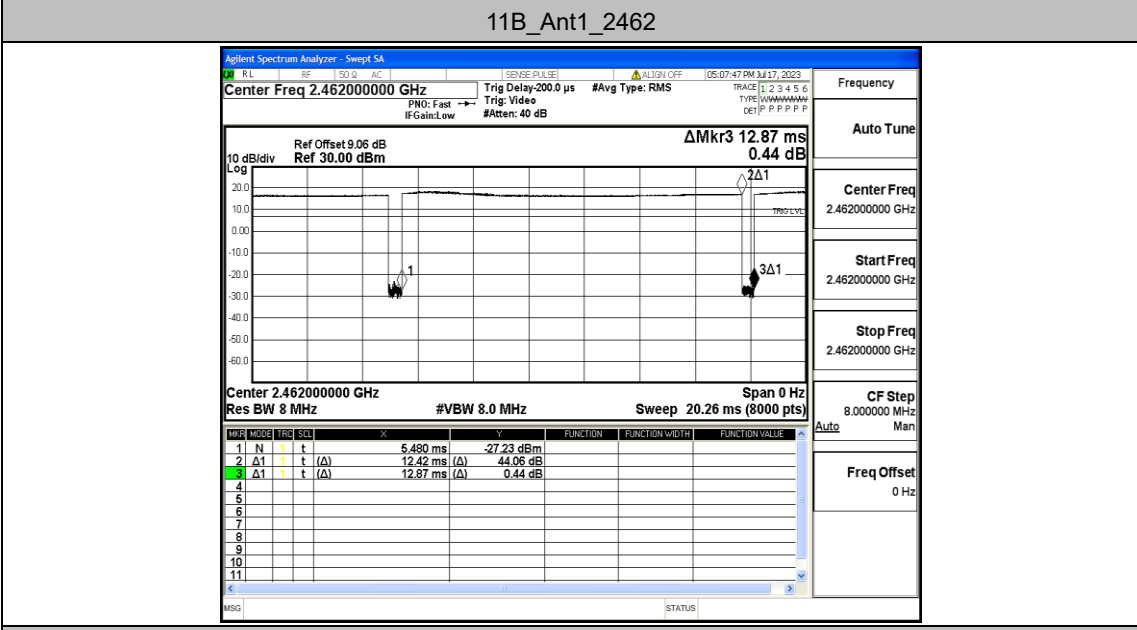
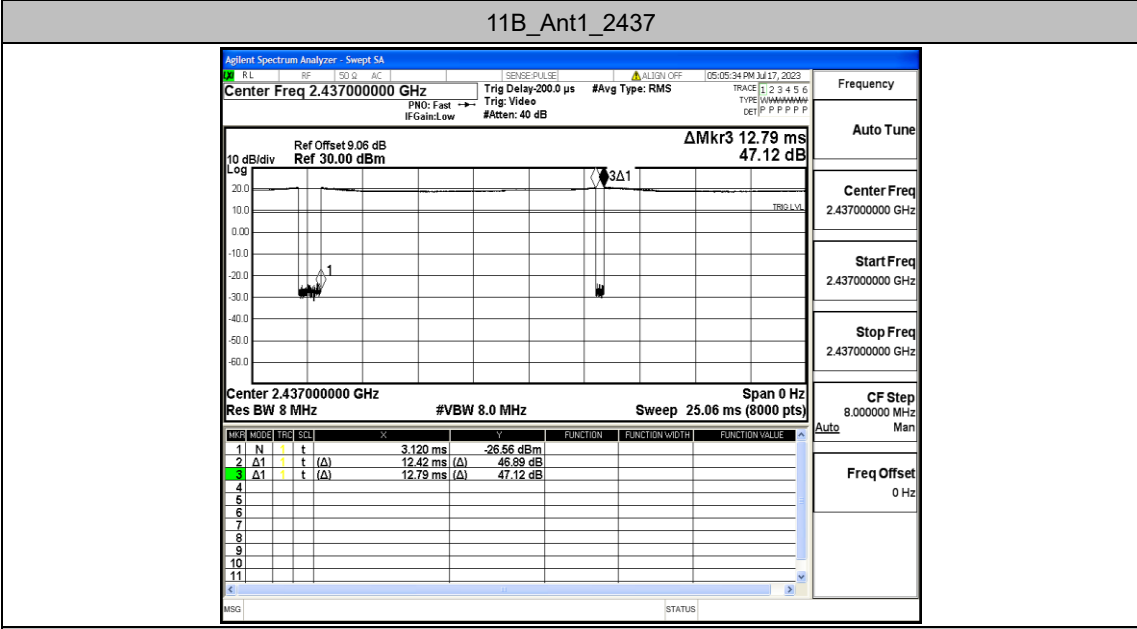
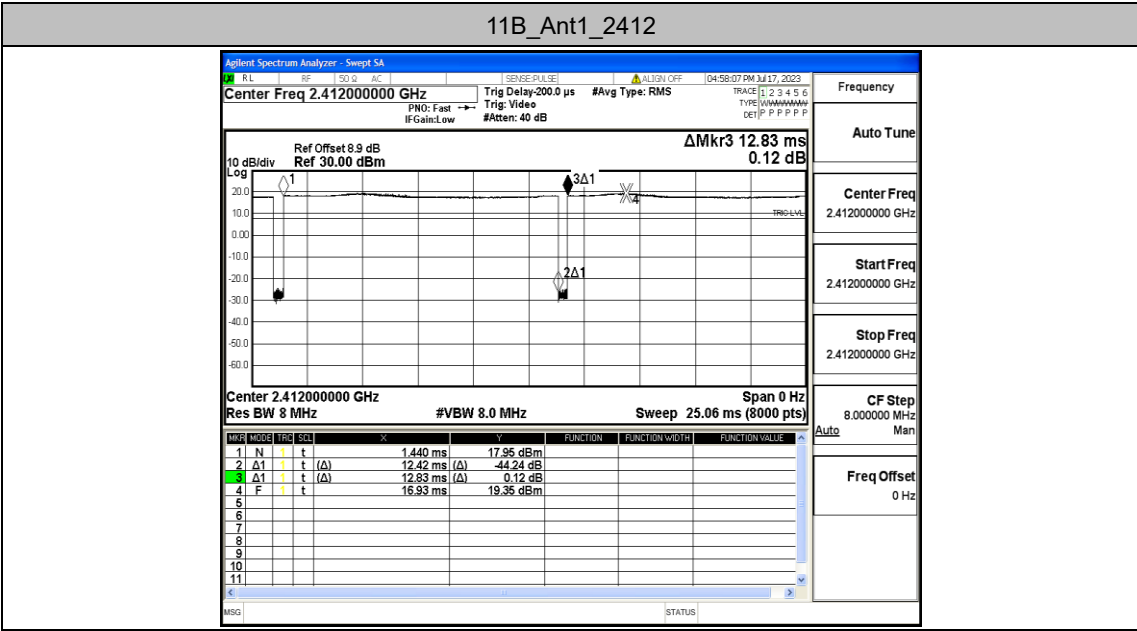


## Appendix G: Duty Cycle

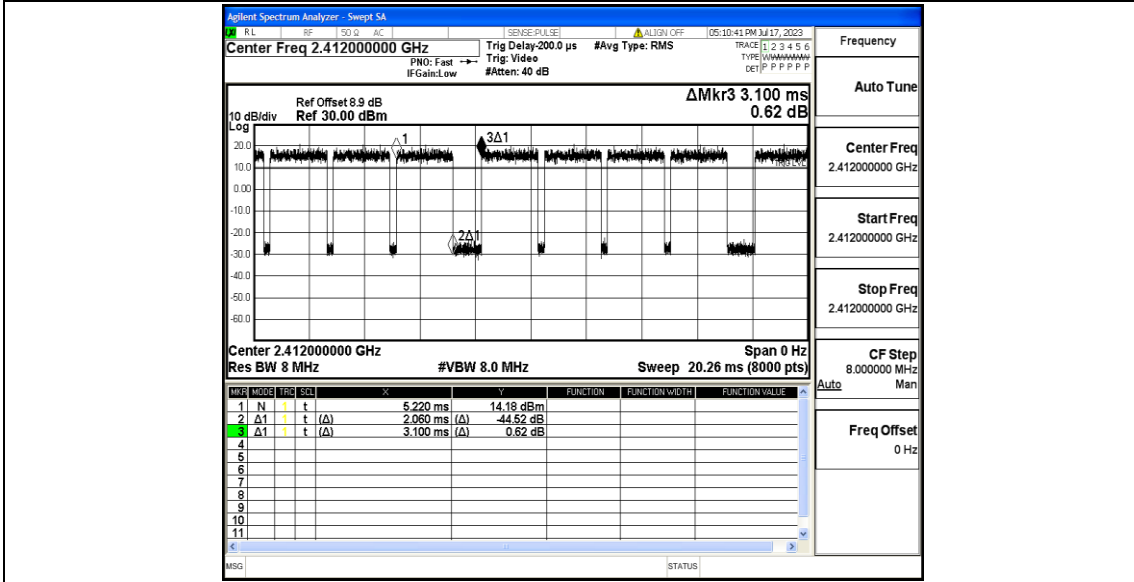
### Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
11B	Ant1	2412	12.42	12.83	96.80	0.08
		2437	12.42	12.79	97.11	0.08
		2462	12.42	12.87	96.50	0.08
11G	Ant1	2412	2.06	3.10	66.45	0.49
		2437	2.07	3.11	66.56	0.48
		2462	2.07	3.08	67.21	0.48
11N20SISO	Ant1	2412	1.92	3.49	55.01	0.52
		2437	1.92	3.46	55.49	0.52
		2462	1.92	3.48	55.17	0.52
11N40SISO	Ant1	2422	3.78	10.01	37.76	0.26
		2437	3.78	9.99	37.84	0.26
		2452	3.77	9.99	37.74	0.27

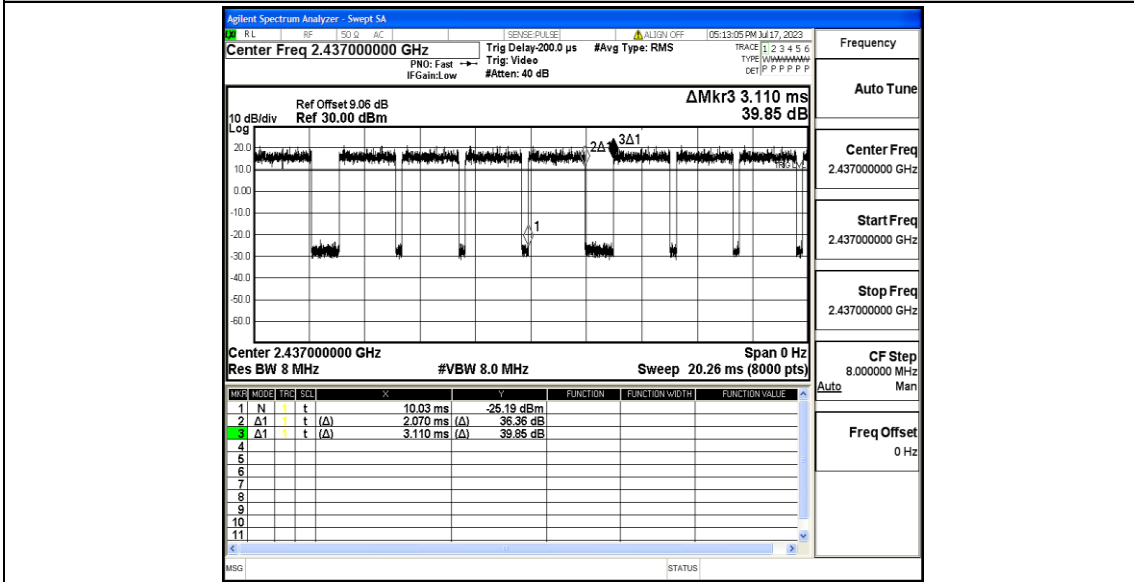
### Test Graphs



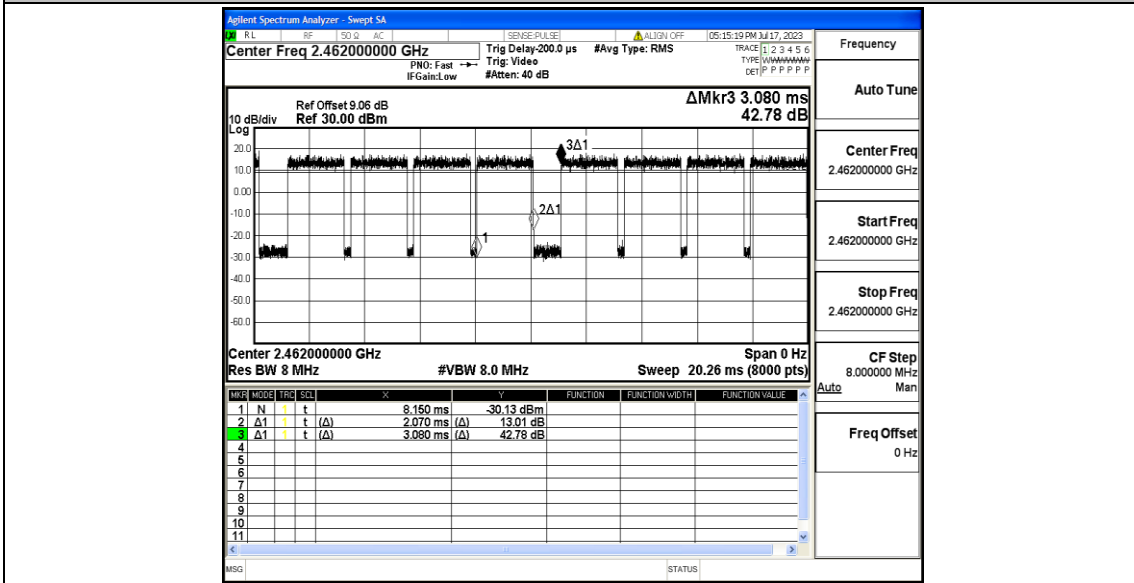
11G\_Ant1\_2412



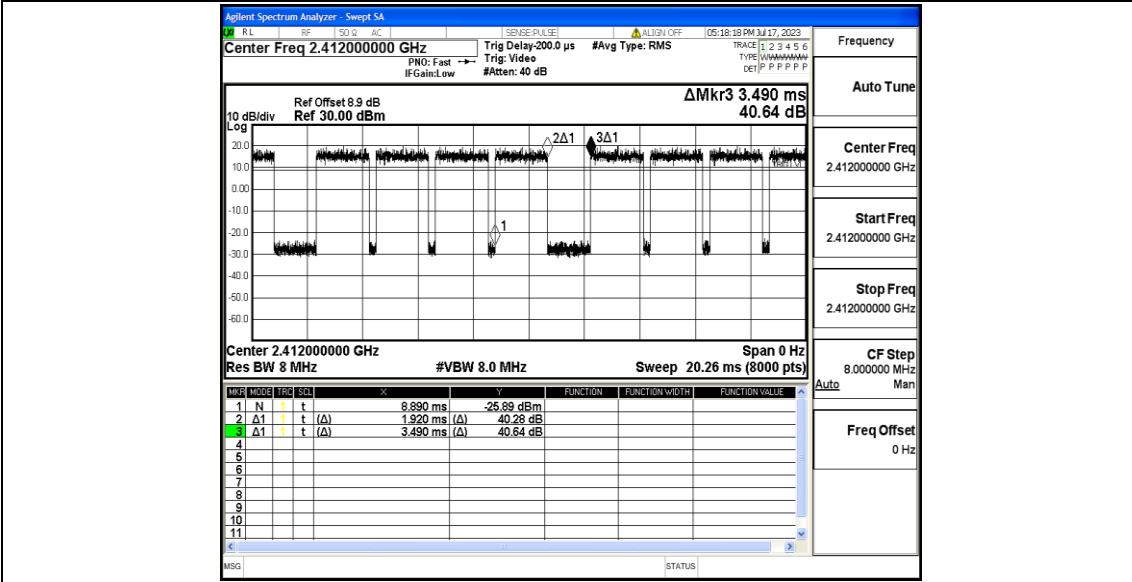
11G\_Ant1\_2437



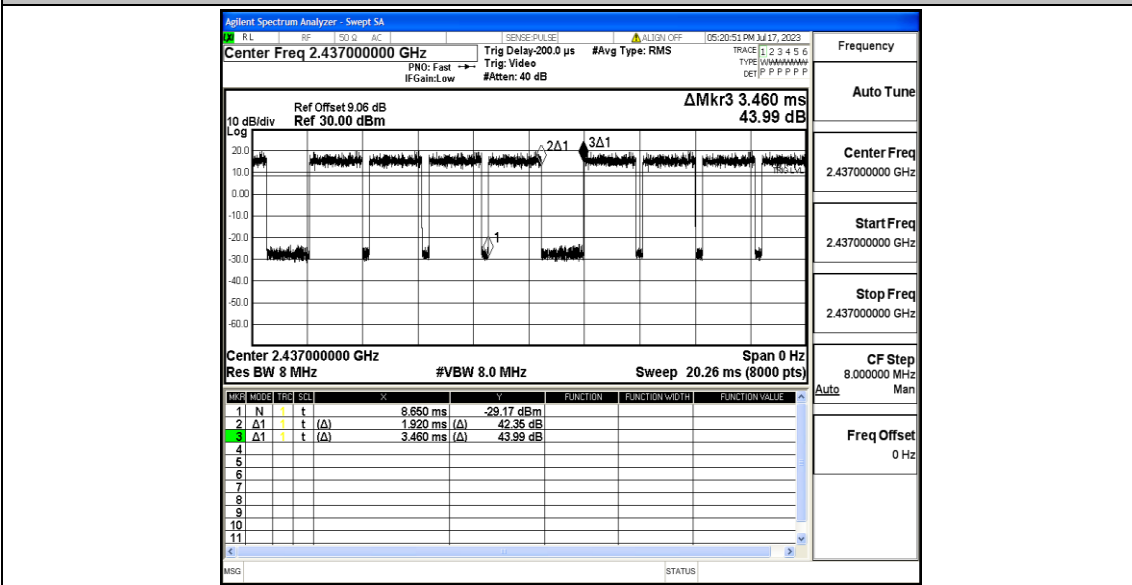
11G\_Ant1\_2462



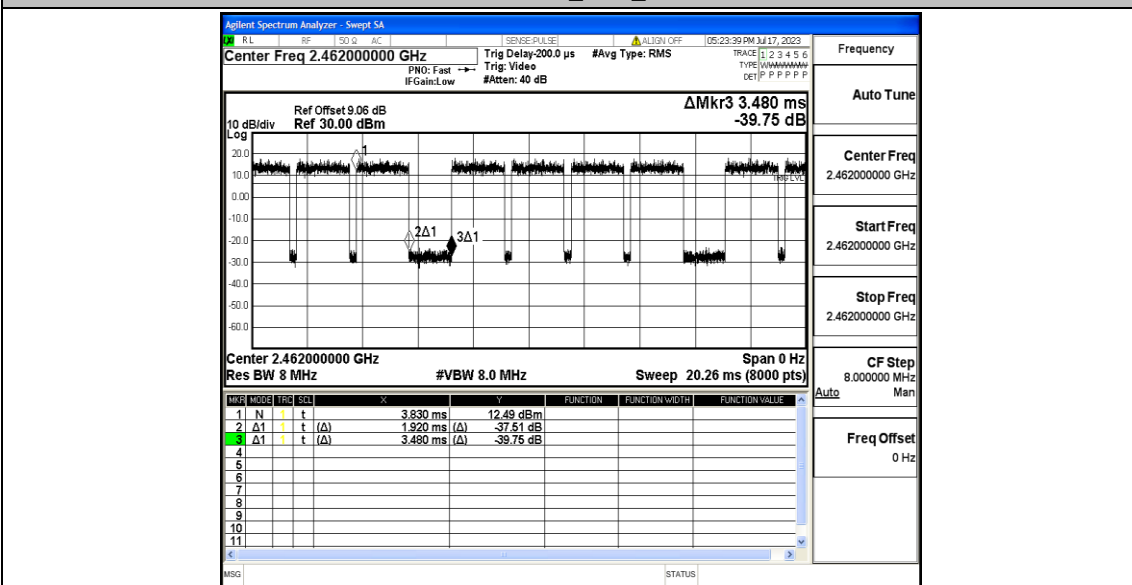
11N20SISO\_Ant1\_2412



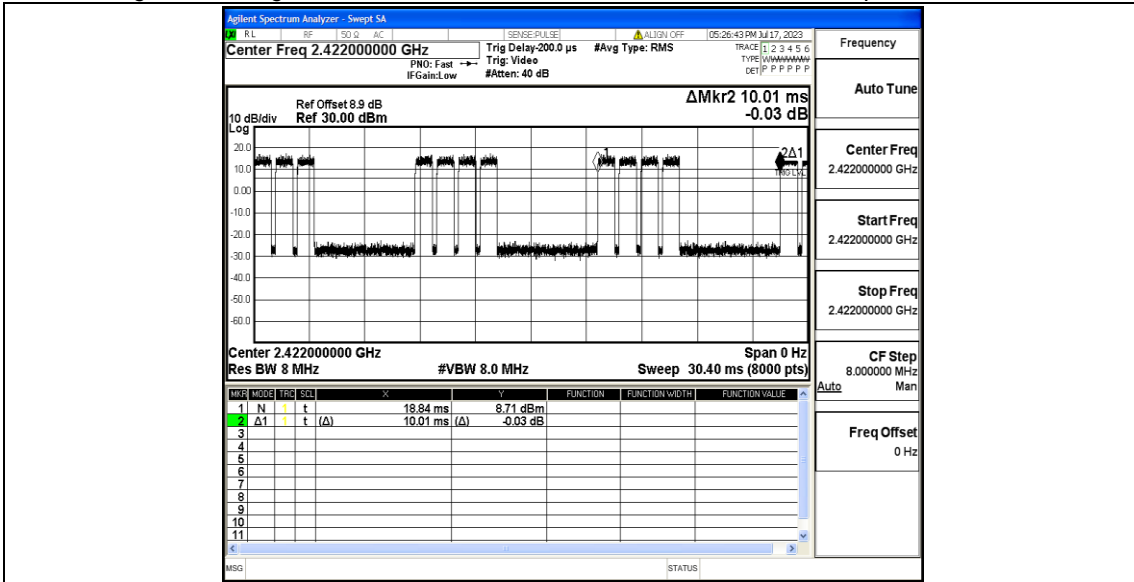
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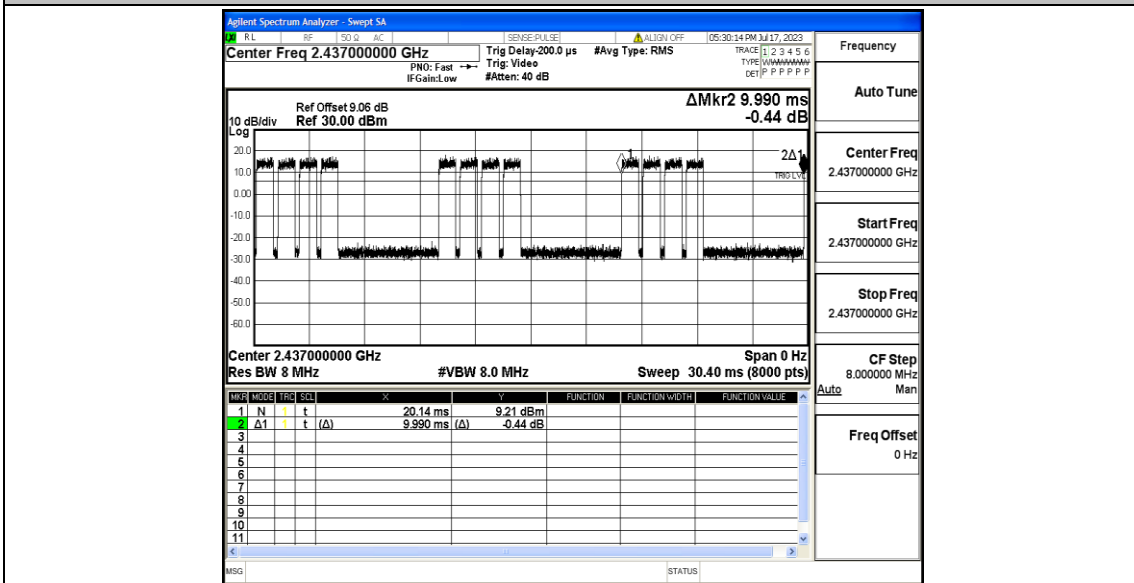
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



11N40SISO\_Ant1\_2437



11N40SISO\_Ant1\_2452

