

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

Product Name: AoA positioning Locator

Trade Mark: Dusun

Test Model: DSGW-200

FCC ID: 2AUXBDSGW-200

Environmental Conditions

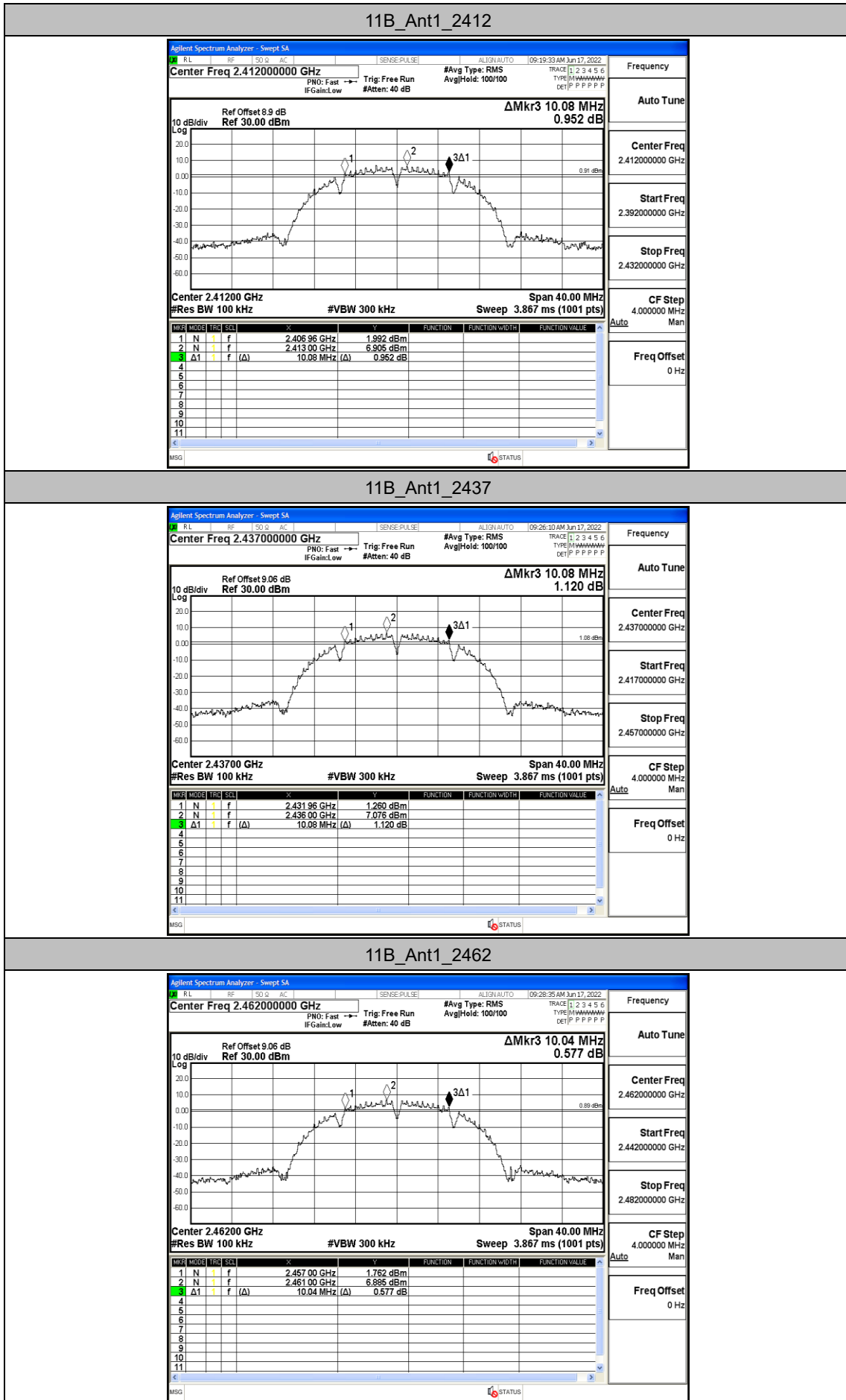
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test #/JobTitle:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

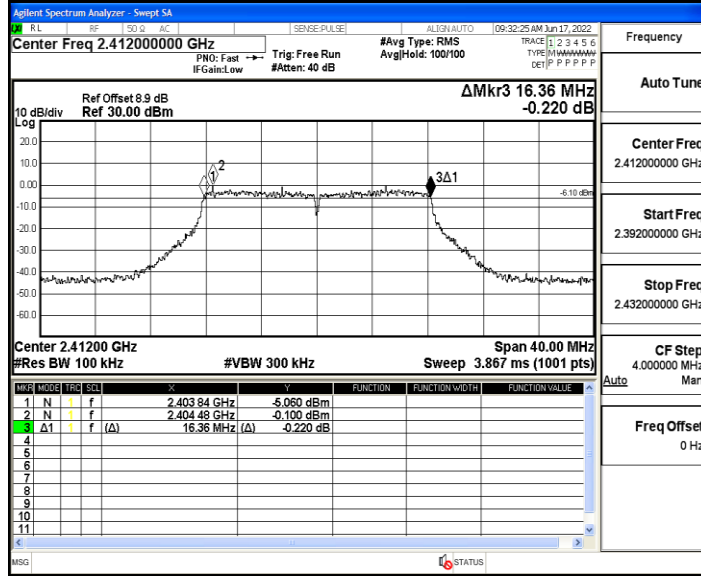
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2406.960	2417.040	0.5	PASS
		2437	10.080	2431.960	2442.040	0.5	PASS
		2462	10.040	2457.000	2467.040	0.5	PASS
11G	Ant1	2412	16.360	2403.840	2420.200	0.5	PASS
		2437	16.360	2428.840	2445.200	0.5	PASS
		2462	16.400	2453.840	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.520	2403.240	2420.760	0.5	PASS
		2437	17.600	2428.200	2445.800	0.5	PASS
		2462	17.560	2453.240	2470.800	0.5	PASS
11N40SISO	Ant1	2422	36.320	2403.840	2440.160	0.5	PASS
		2437	36.320	2418.840	2455.160	0.5	PASS
		2452	35.600	2434.160	2469.760	0.5	PASS

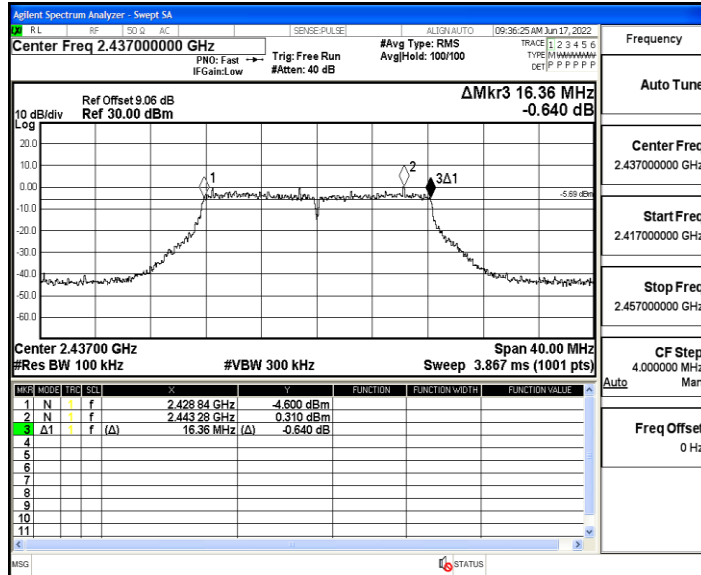
Test Graphs



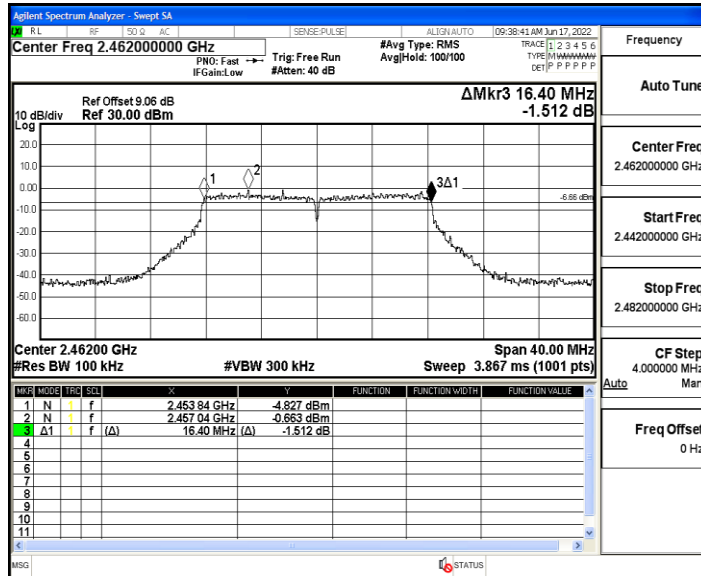
11G_Ant1_2412



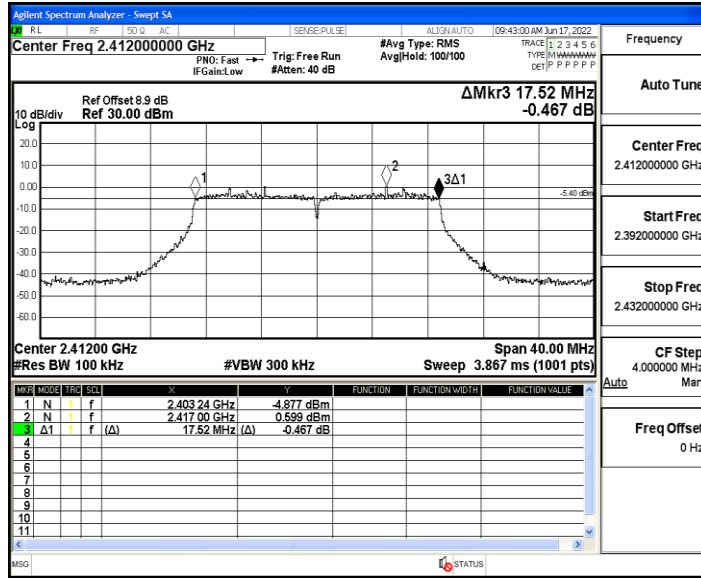
11G_Ant1_2437



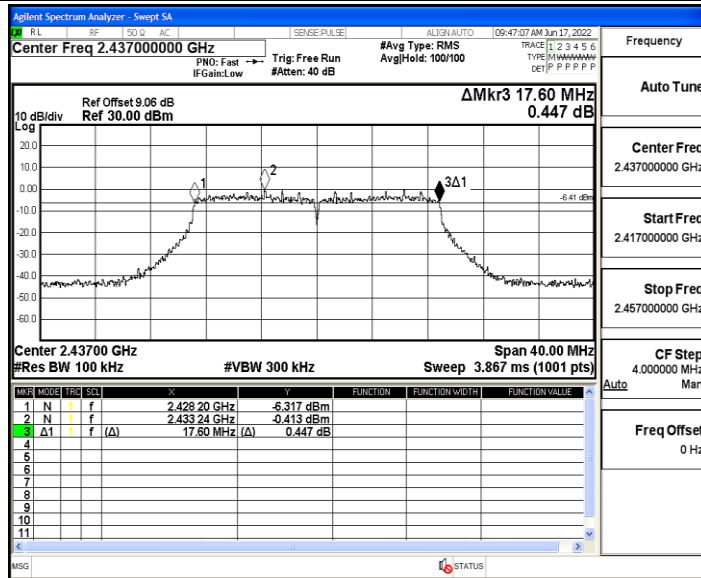
11G_Ant1_2462



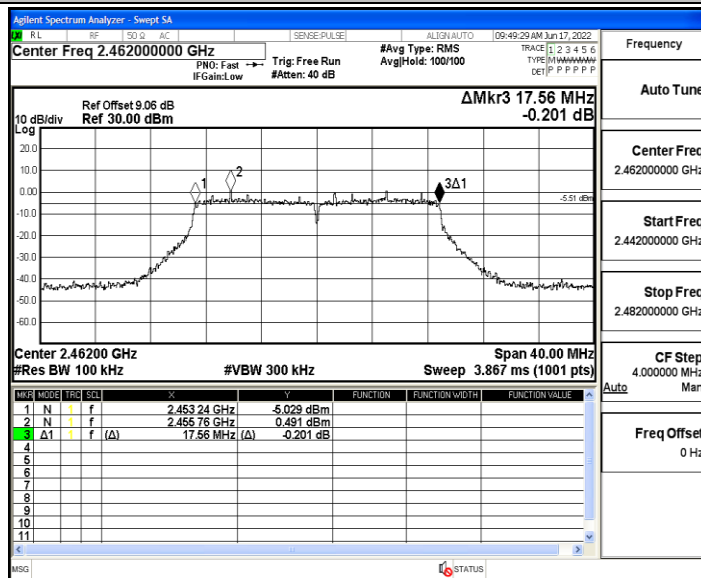
11N20SISO_Ant1_2412



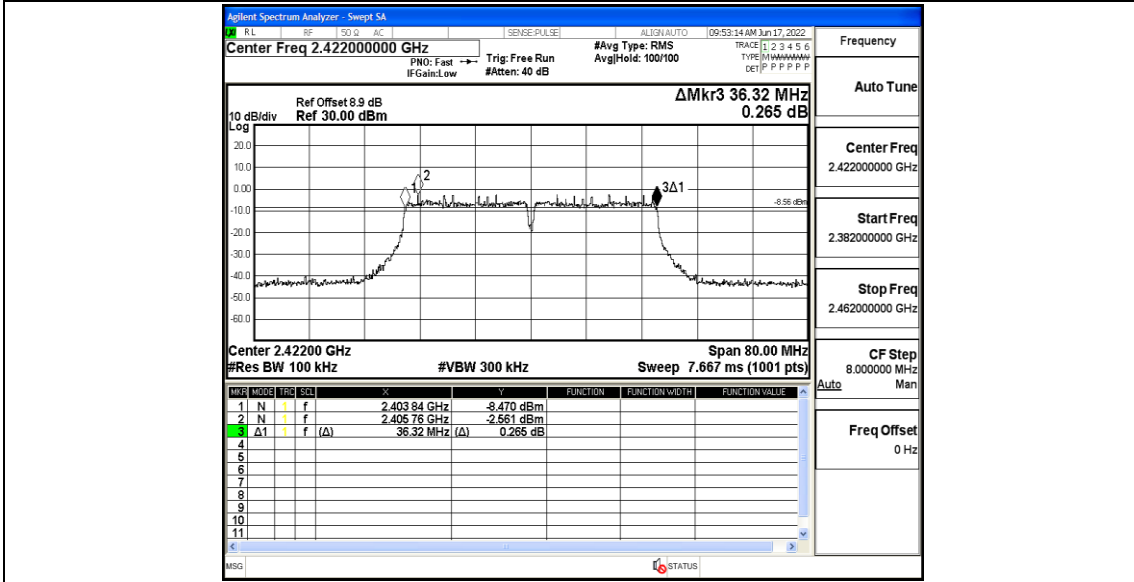
11N20SISO_Ant1_2437



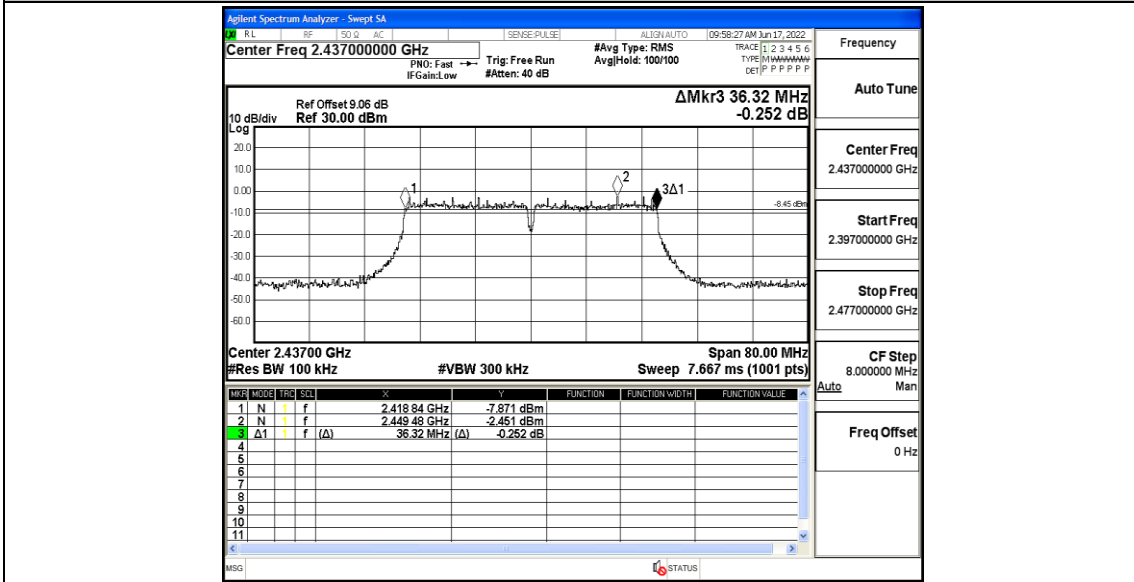
11N20SISO_Ant1_2462



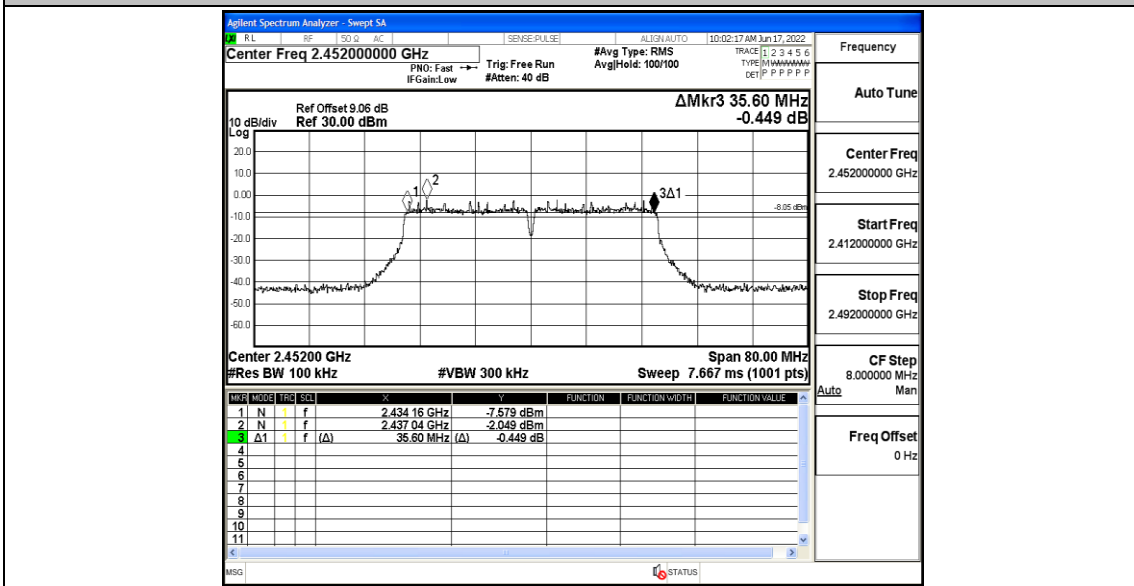
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

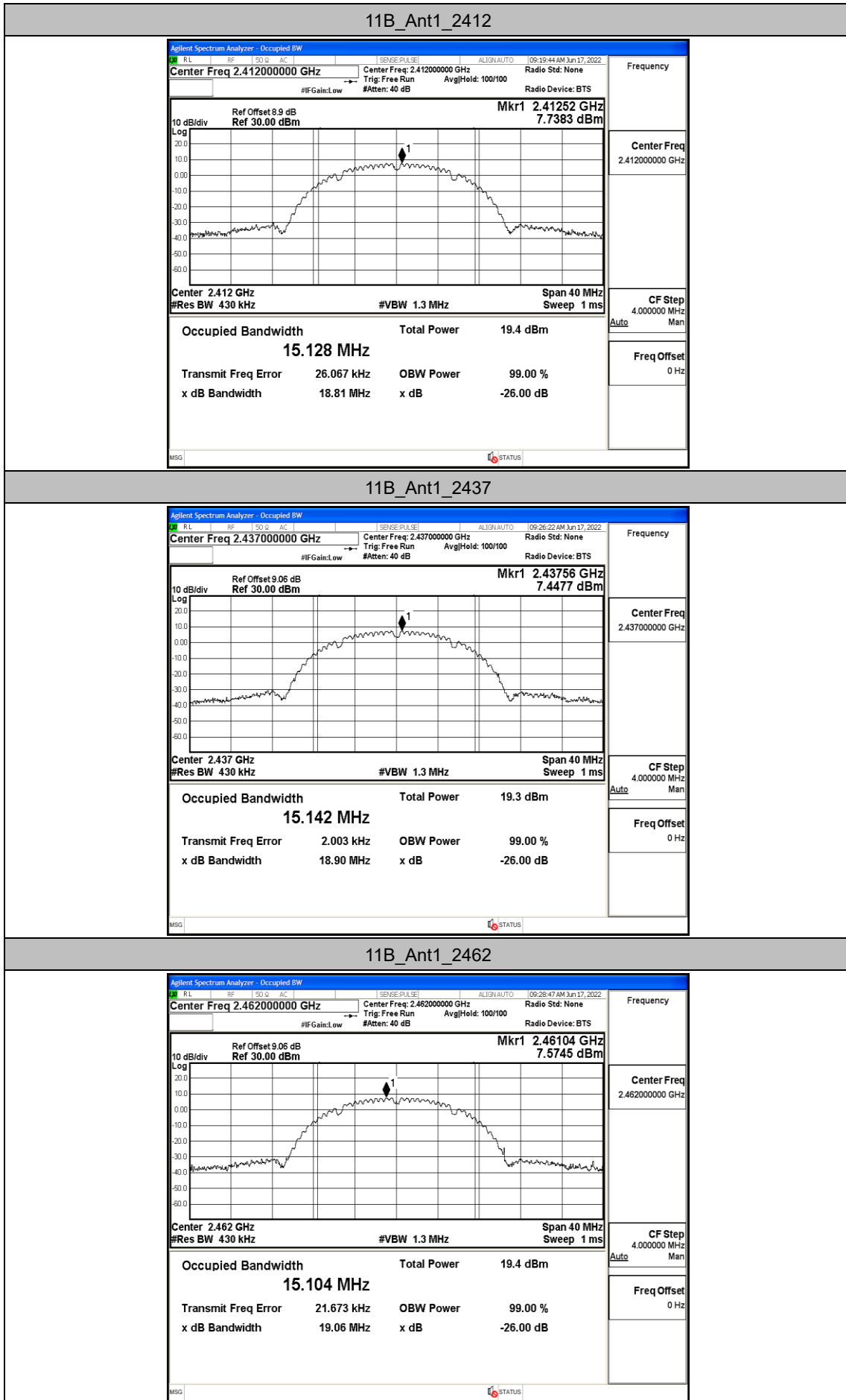


Appendix B: Occupied Channel Bandwidth

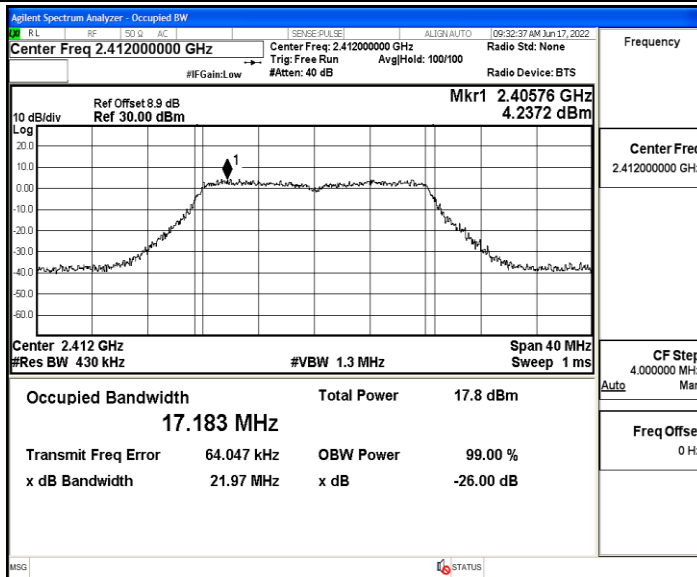
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	15.128	2404.462	2419.590	---	---
		2437	15.142	2429.431	2444.573	---	---
		2462	15.104	2454.470	2469.574	---	---
11G	Ant1	2412	17.183	2403.473	2420.656	---	---
		2437	17.033	2428.489	2445.522	---	---
		2462	17.233	2453.388	2470.621	---	---
11N20SISO	Ant1	2412	18.004	2403.014	2421.018	---	---
		2437	18.082	2427.983	2446.065	---	---
		2462	18.133	2453.019	2471.152	---	---
11N40SISO	Ant1	2422	36.571	2403.683	2440.254	---	---
		2437	36.504	2418.773	2455.277	---	---
		2452	36.825	2433.666	2470.491	---	---

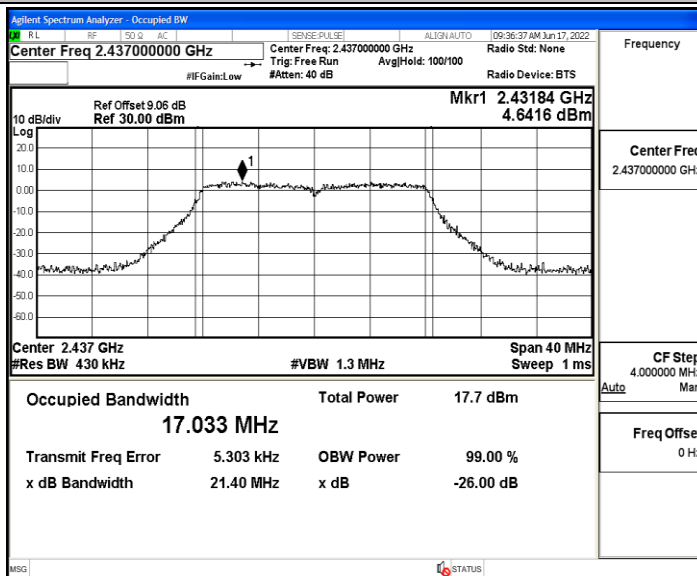
Test Graphs



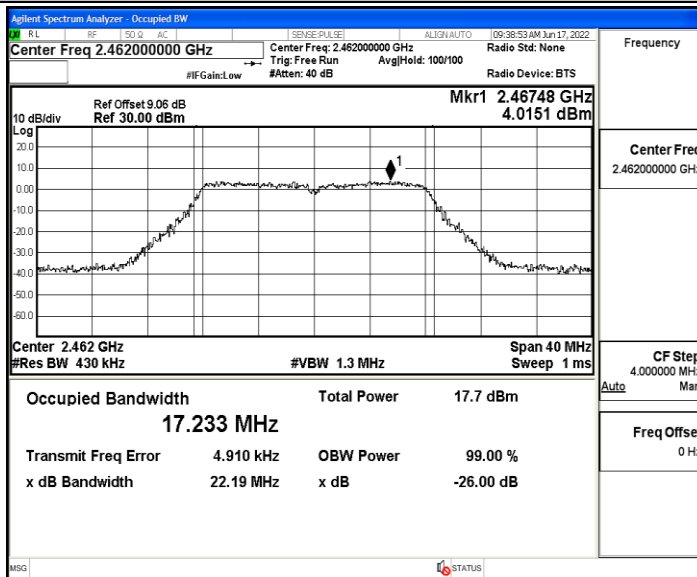
11G_Ant1_2412



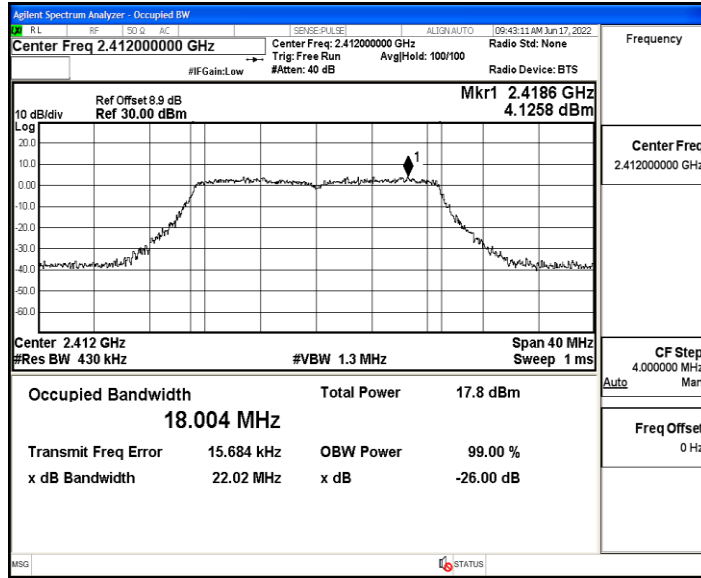
11G_Ant1_2437



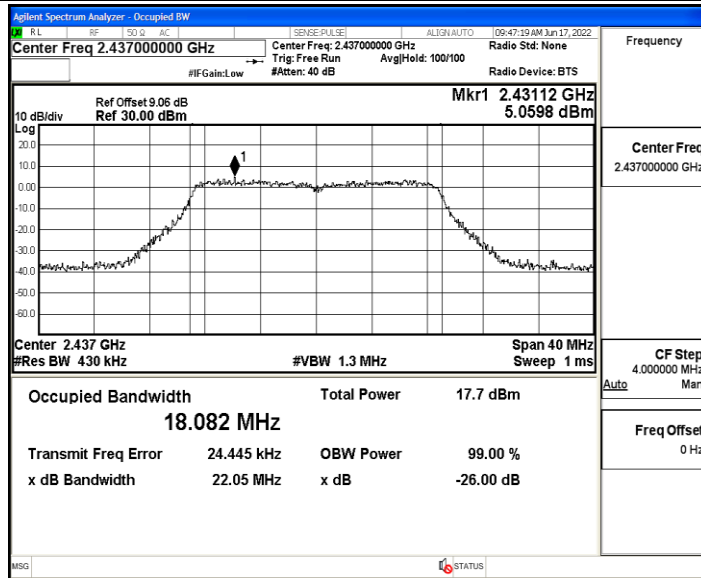
11G_Ant1_2462



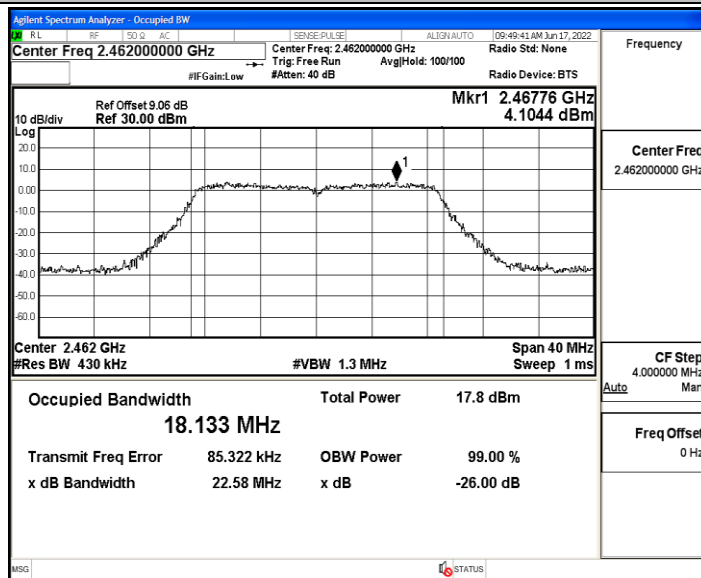
11N20SISO_Ant1_2412



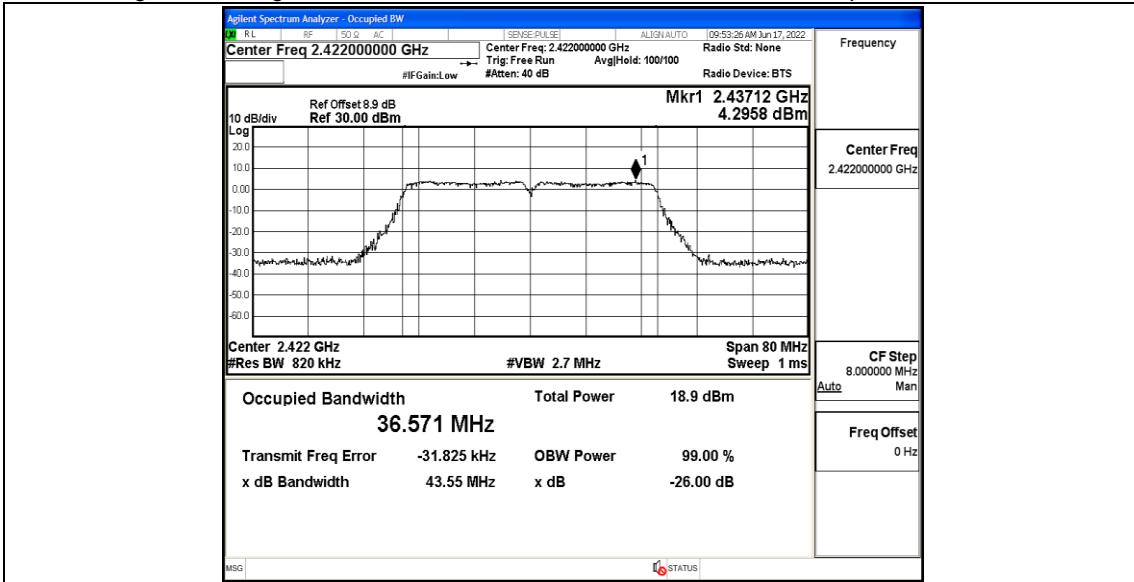
11N20SISO_Ant1_2437



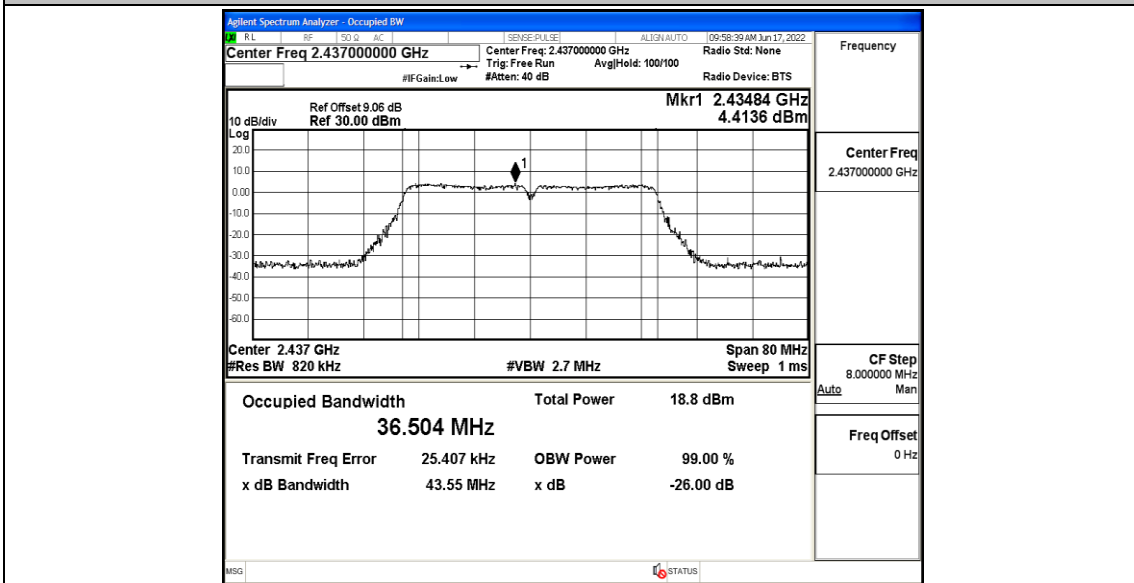
11N20SISO_Ant1_2462



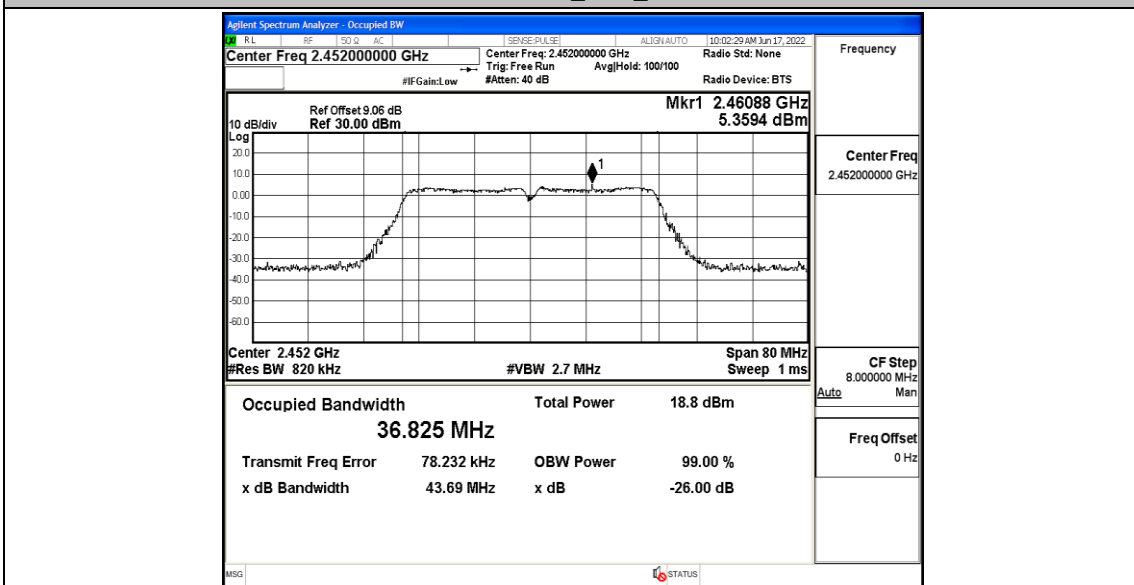
11N40SISO_Ant1_2422



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	16.29	≤30.00	PASS
		2437	16.07	≤30.00	PASS
		2462	16.25	≤30.00	PASS
11G	Ant1	2412	11.81	≤30.00	PASS
		2437	11.61	≤30.00	PASS
		2462	11.78	≤30.00	PASS
11N20SISO	Ant1	2412	11.90	≤30.00	PASS
		2437	11.63	≤30.00	PASS
		2462	11.66	≤30.00	PASS
11N40SISO	Ant1	2422	12.35	≤30.00	PASS
		2437	12.08	≤30.00	PASS
		2452	12.27	≤30.00	PASS

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

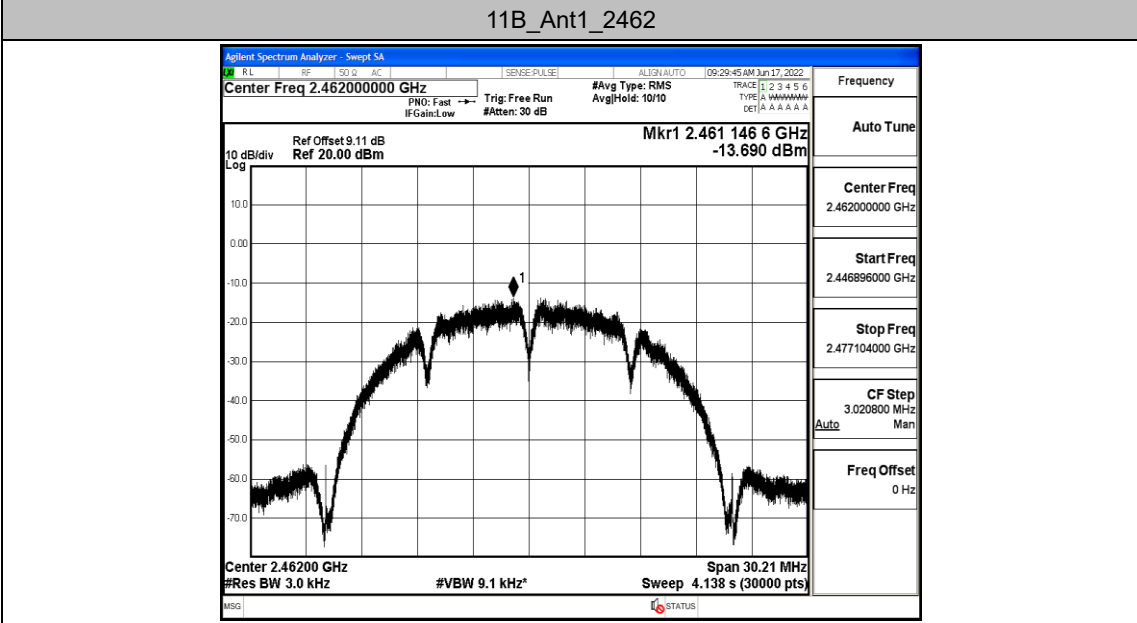
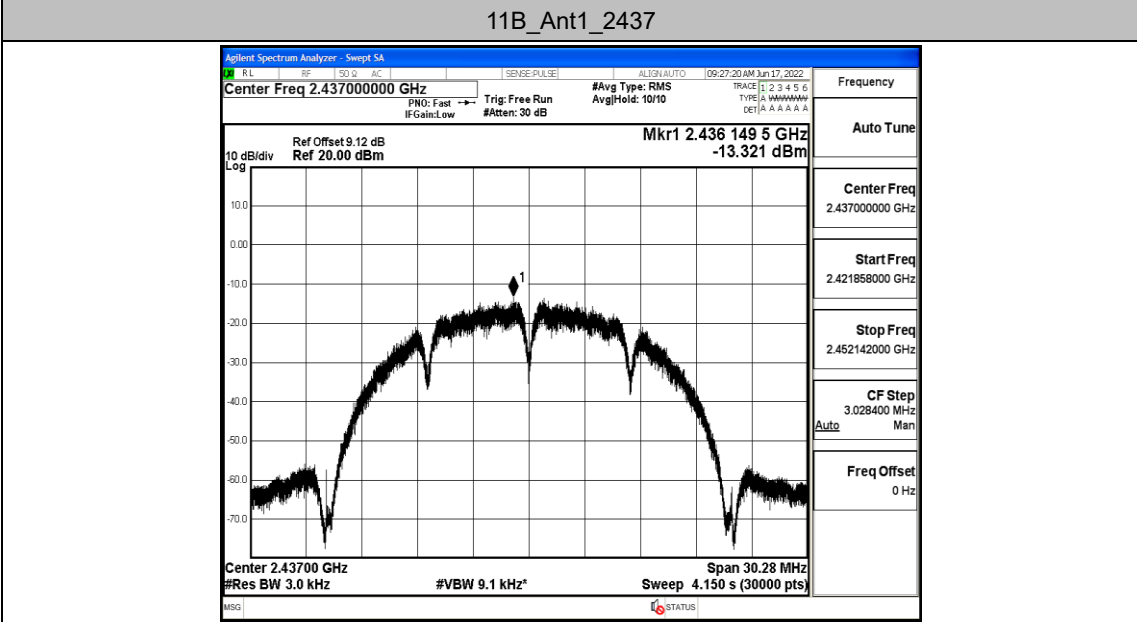
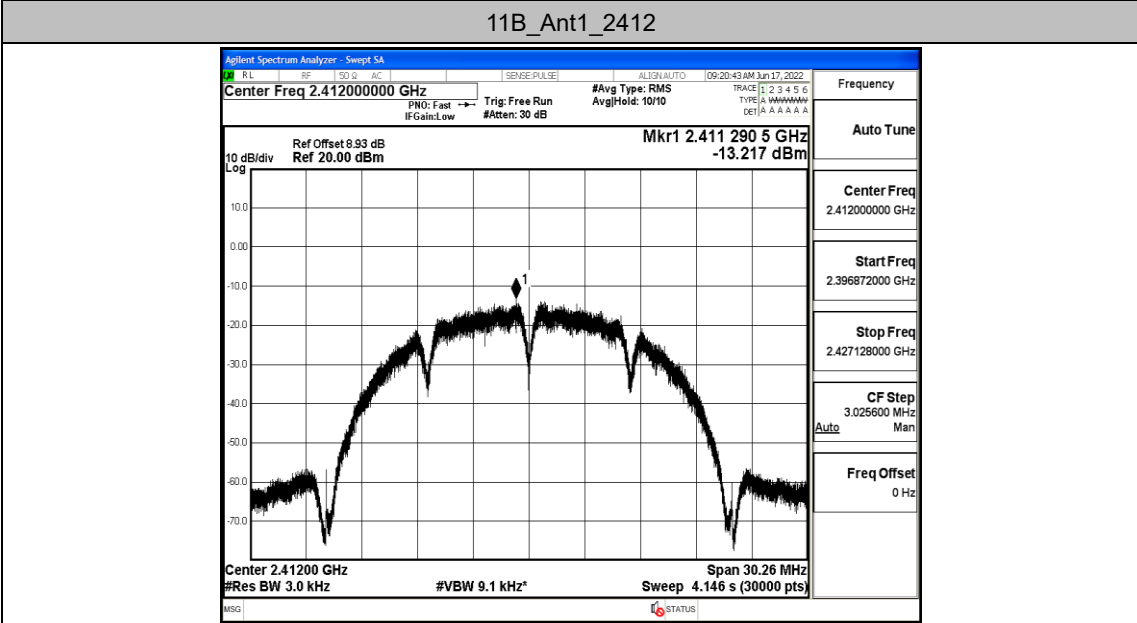
Appendix D: Maximum power spectral density

Test Result

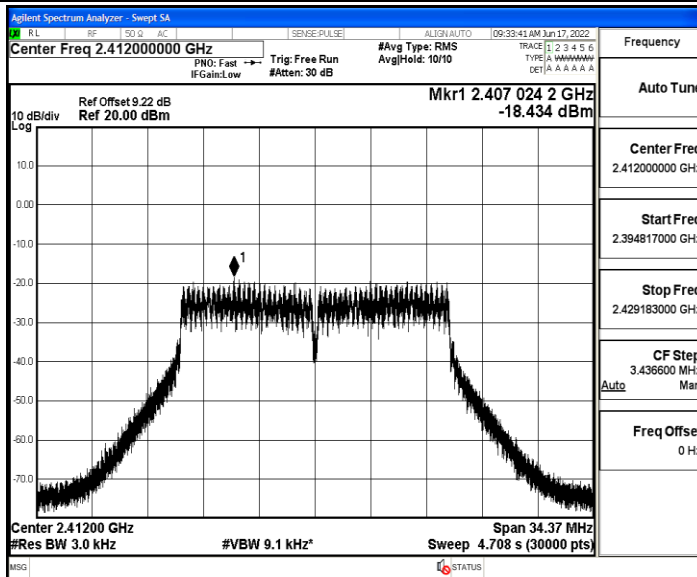
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-13.22	≤8.00	PASS
		2437	-13.32	≤8.00	PASS
		2462	-13.69	≤8.00	PASS
11G	Ant1	2412	-18.43	≤8.00	PASS
		2437	-19.08	≤8.00	PASS
		2462	-18.42	≤8.00	PASS
11N20SISO	Ant1	2412	-18.96	≤8.00	PASS
		2437	-16.71	≤8.00	PASS
		2462	-18.87	≤8.00	PASS
11N40SISO	Ant1	2422	-20.52	≤8.00	PASS
		2437	-20.67	≤8.00	PASS
		2452	-21.35	≤8.00	PASS

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

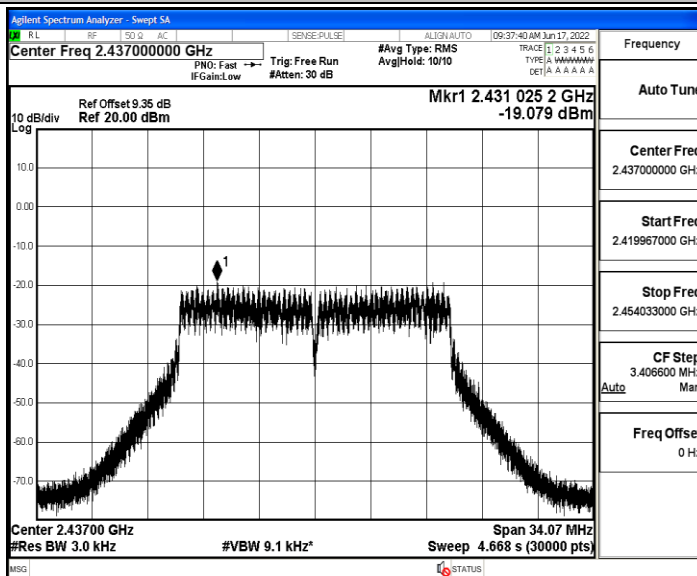
Test Graphs



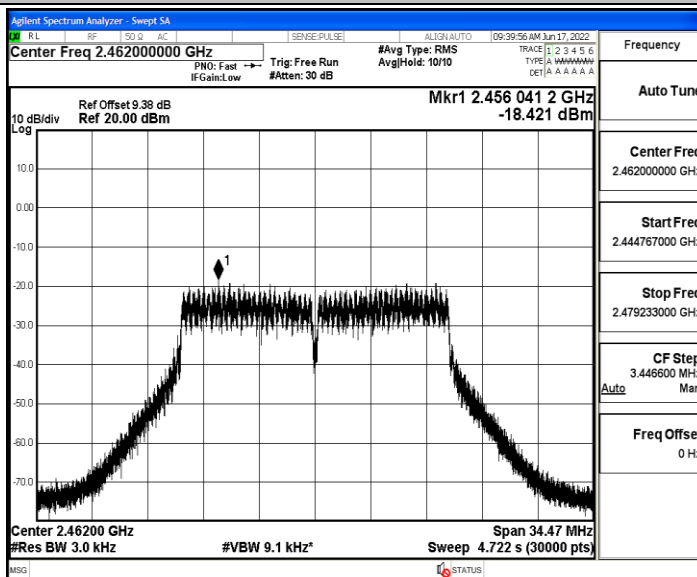
11G_Ant1_2412



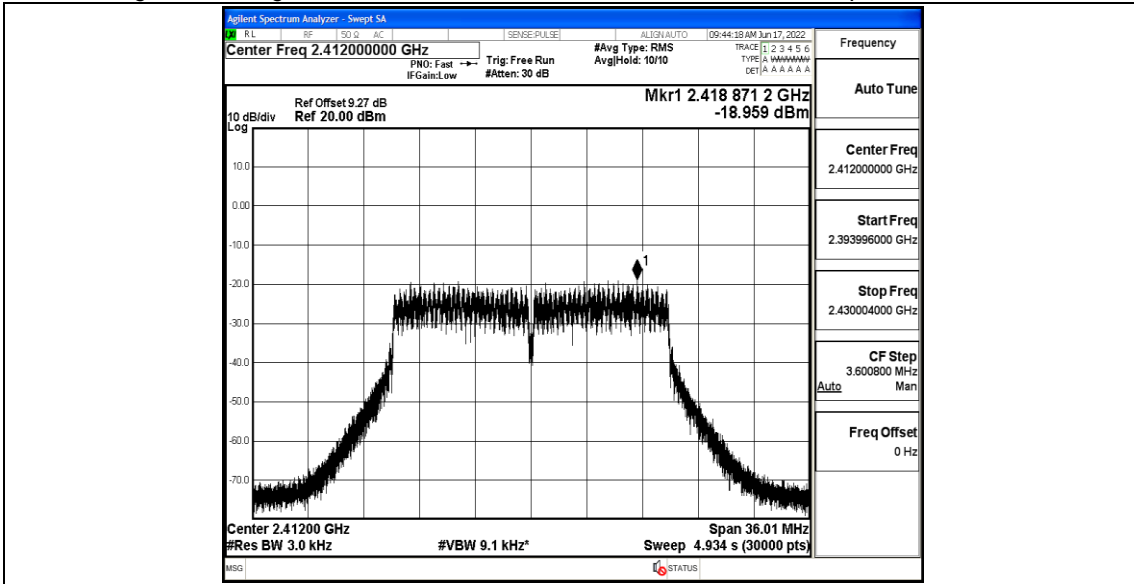
11G_Ant1_2437



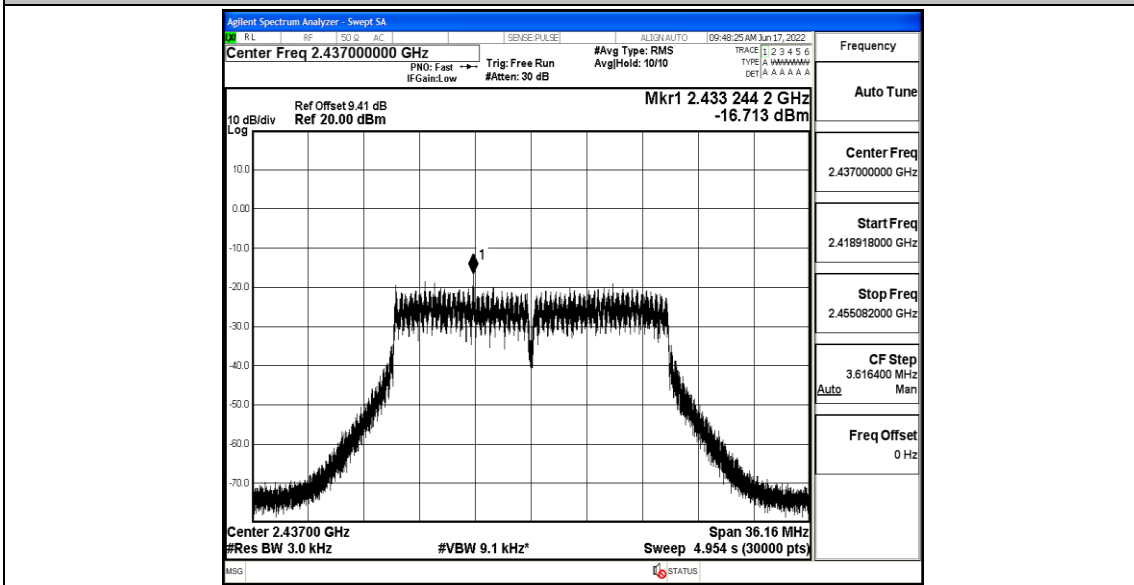
11G_Ant1_2462



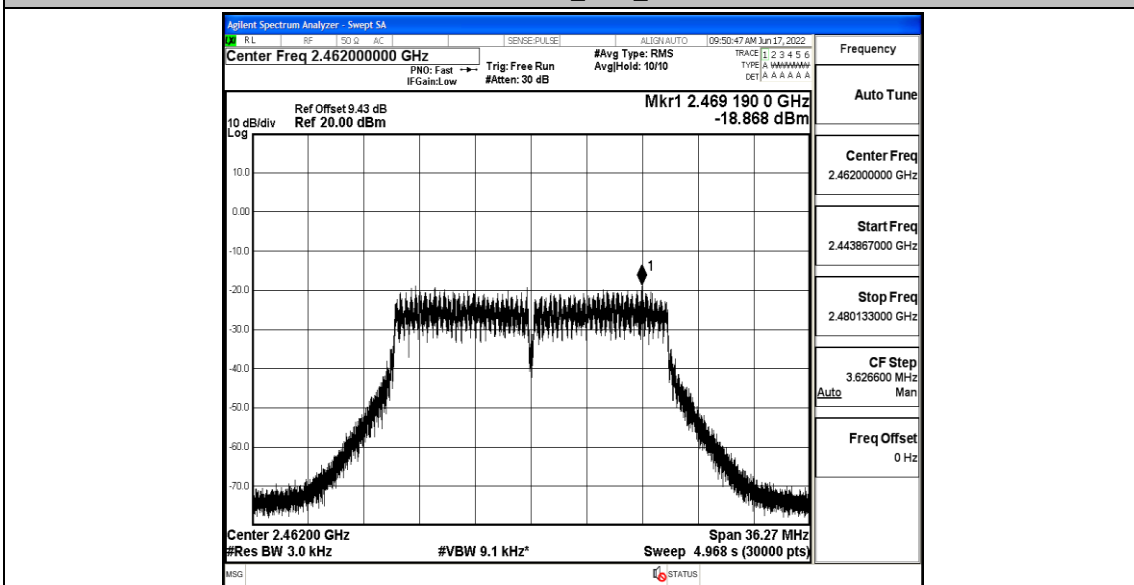
11N20SISO_Ant1_2412



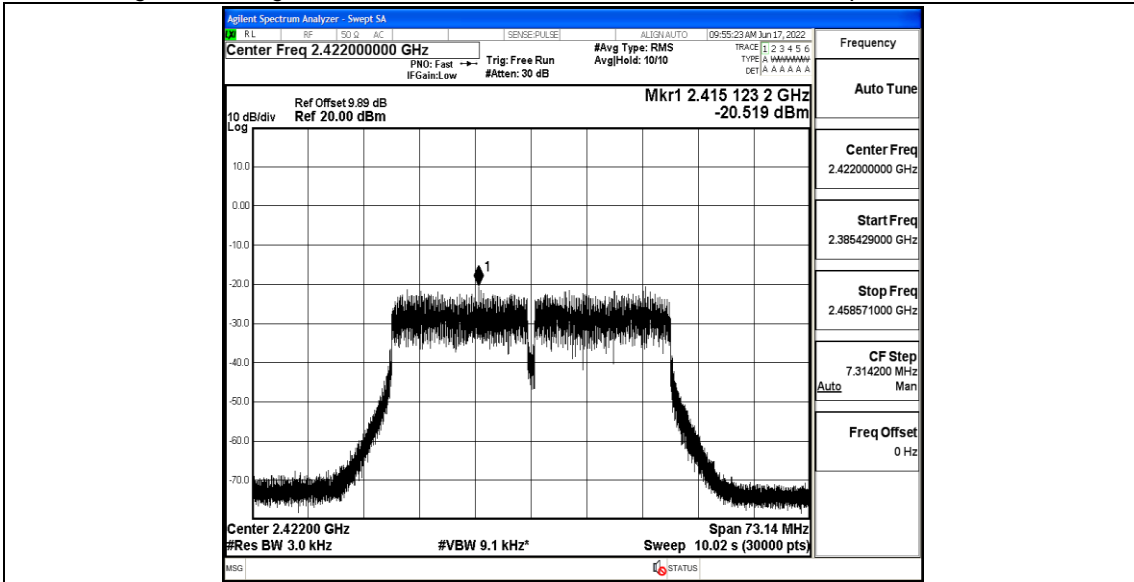
11N20SISO_Ant1_2437



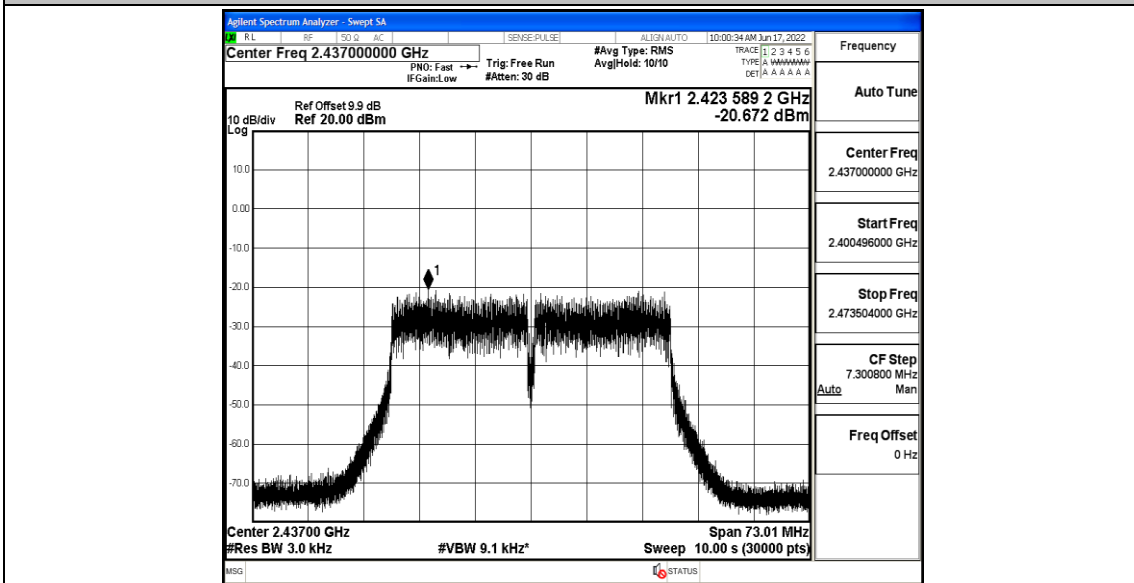
11N20SISO_Ant1_2462



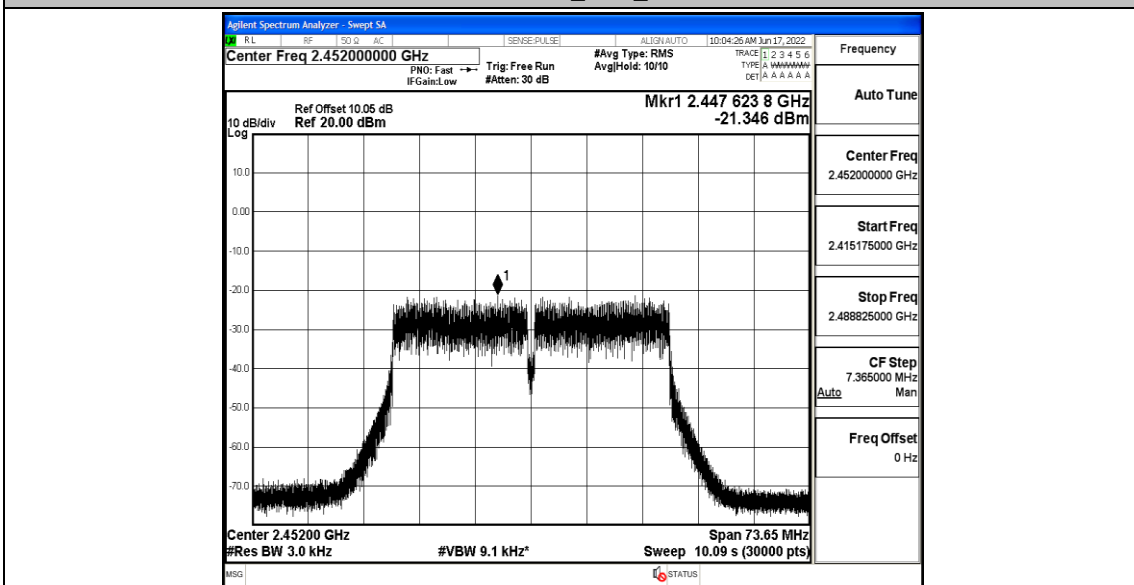
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

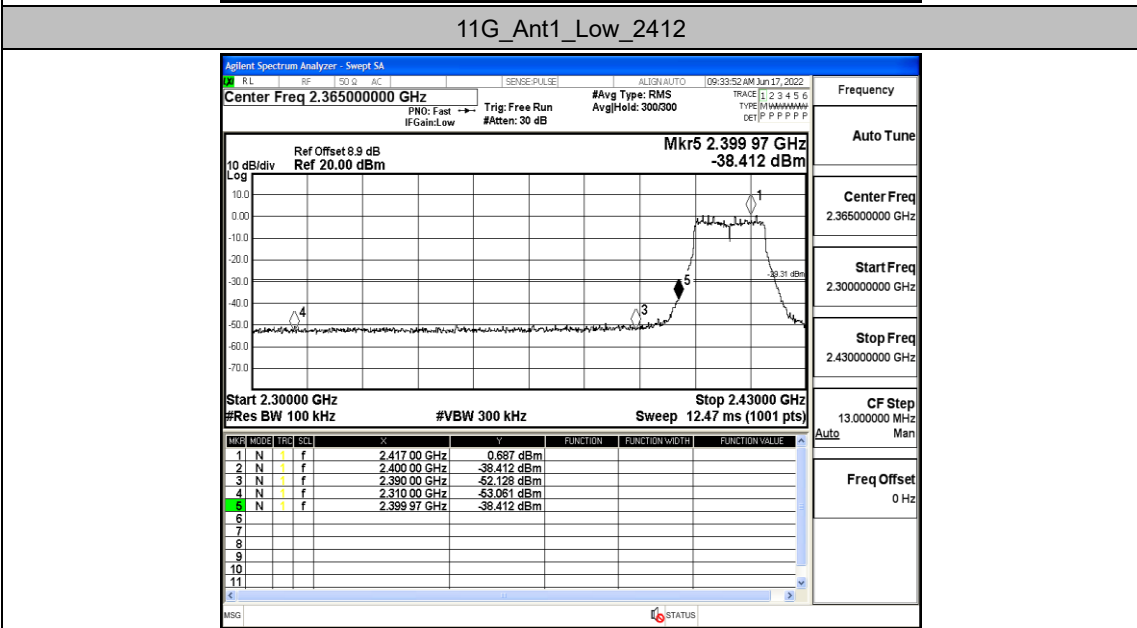
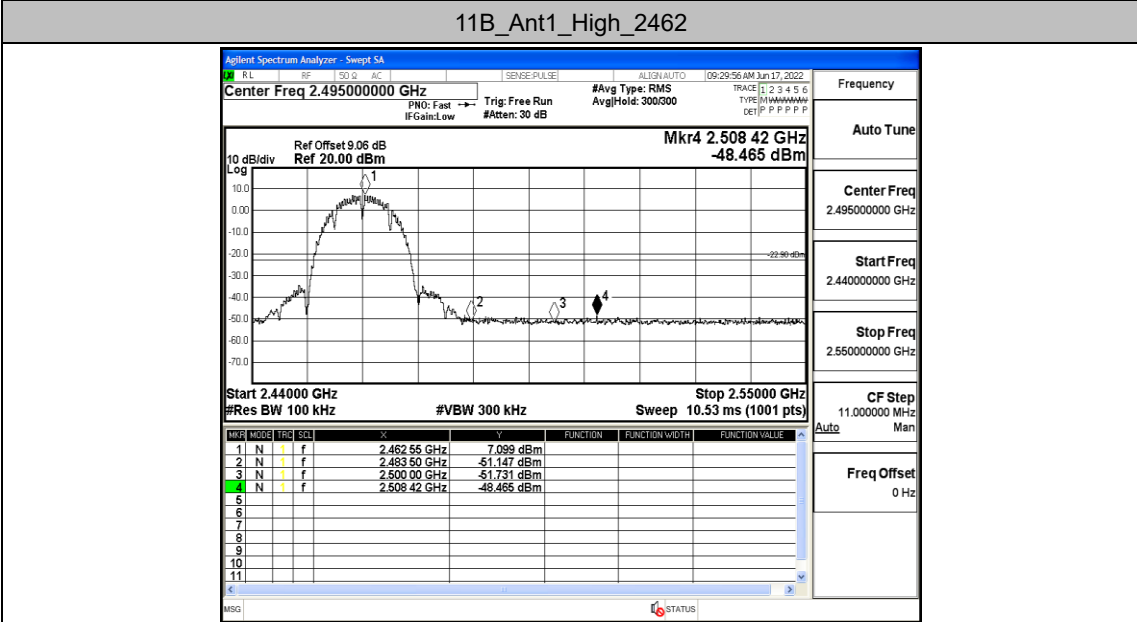
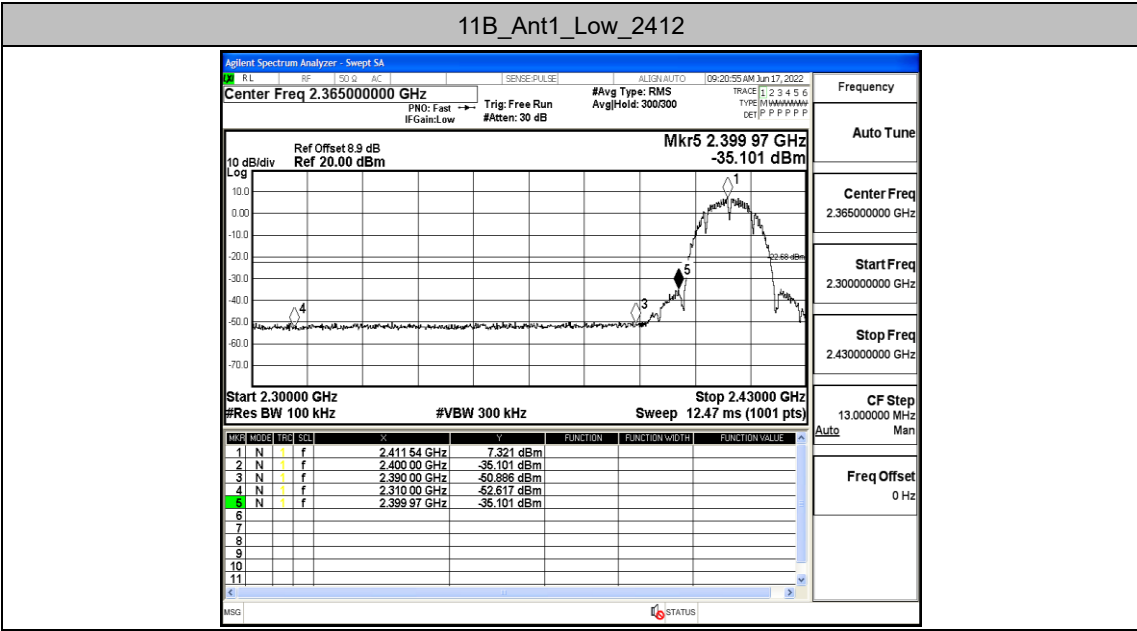


Appendix E: Band edge measurements

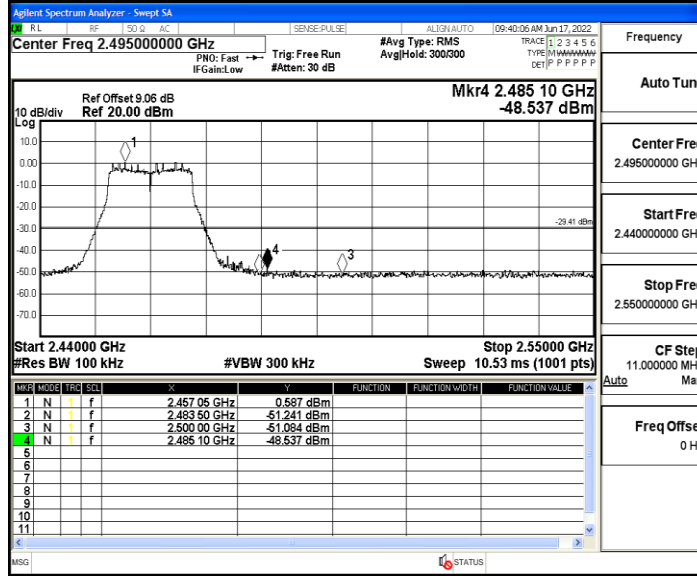
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	7.32	-35.1	≤-22.68	PASS
		High	2462	7.10	-48.47	≤-22.9	PASS
11G	Ant1	Low	2412	0.69	-38.41	≤-29.31	PASS
		High	2462	0.59	-48.54	≤-29.41	PASS
11N20SISO	Ant1	Low	2412	0.72	-35.96	≤-29.28	PASS
		High	2462	0.60	-48.44	≤-29.4	PASS
11N40SISO	Ant1	Low	2422	-1.82	-36.3	≤-31.82	PASS
		High	2452	-1.88	-48.09	≤-31.88	PASS

Test Graphs

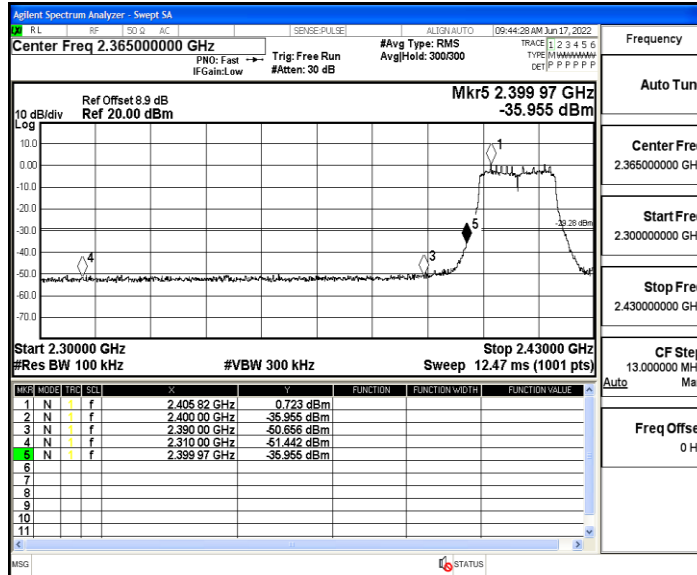


11G_Ant1_High_2462



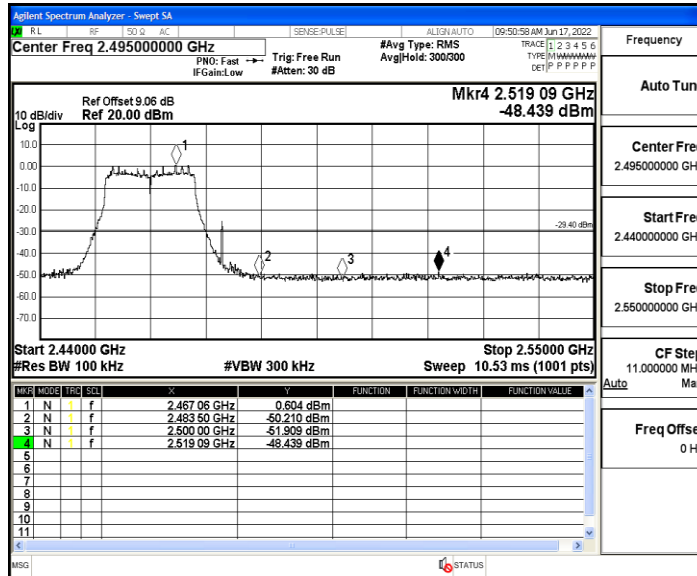
Frequency	Auto Tune
Center Freq	2.495000000 GHz
Start Freq	2.440000000 GHz
Stop Freq	2.550000000 GHz
CF Step	11.000000 MHz
Freq Offset	0 Hz

11N20SISO_Ant1_Low_2412



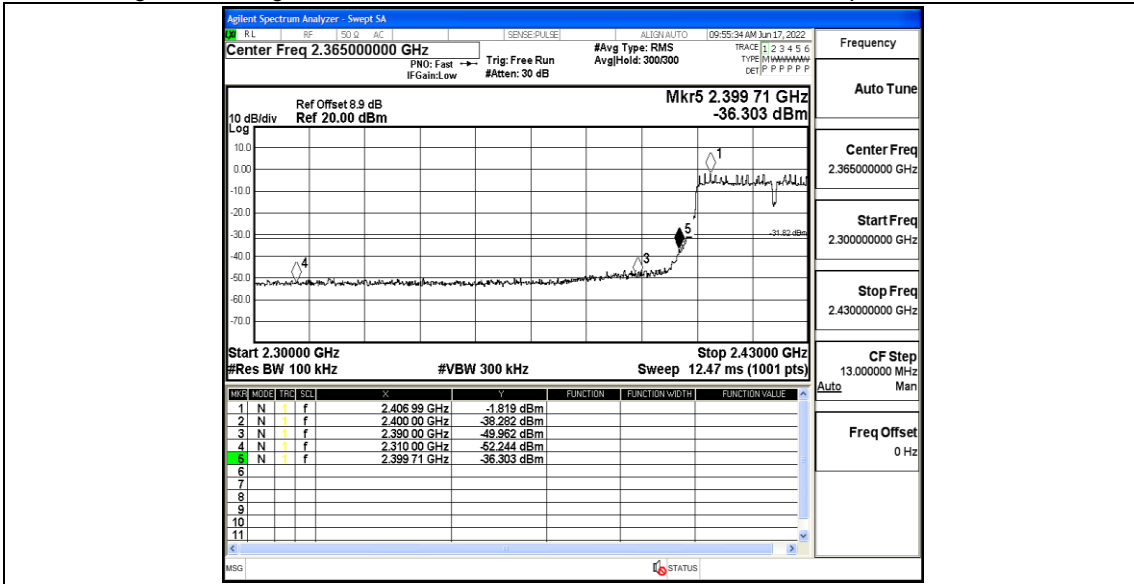
Frequency	Auto Tune
Center Freq	2.365000000 GHz
Start Freq	2.300000000 GHz
Stop Freq	2.430000000 GHz
CF Step	13.000000 MHz
Freq Offset	0 Hz

11N20SISO_Ant1_High_2462

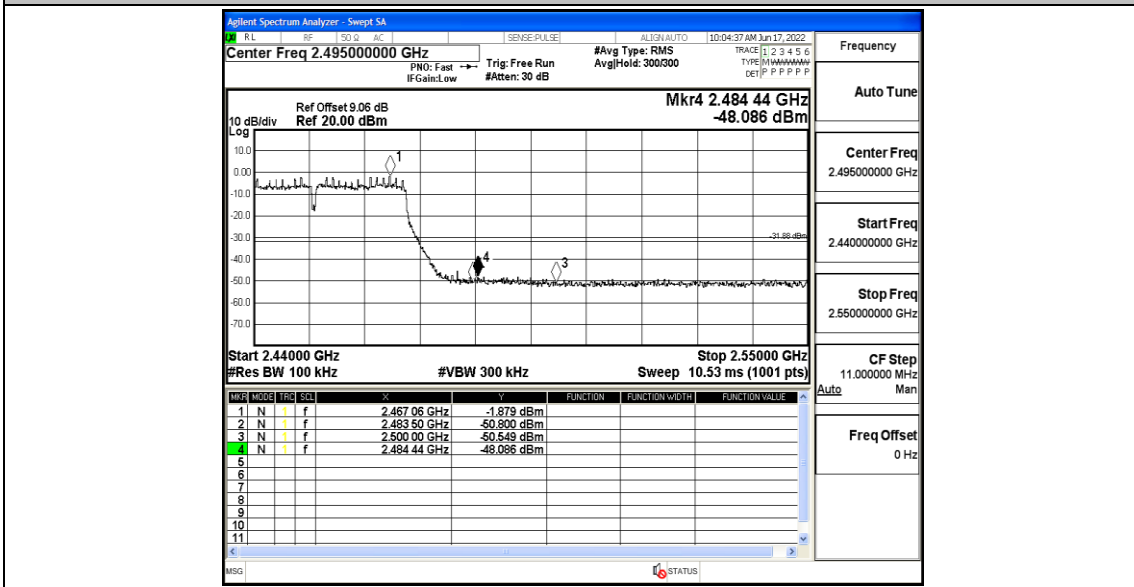


Frequency	Auto Tune
Center Freq	2.495000000 GHz
Start Freq	2.440000000 GHz
Stop Freq	2.550000000 GHz
CF Step	11.000000 MHz
Freq Offset	0 Hz

11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

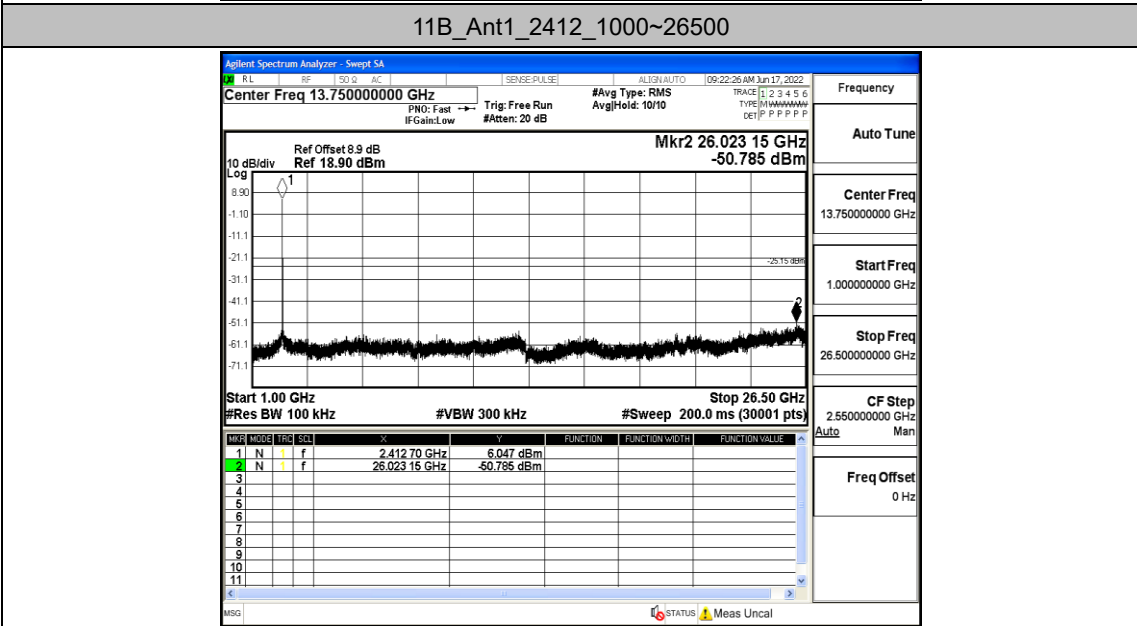
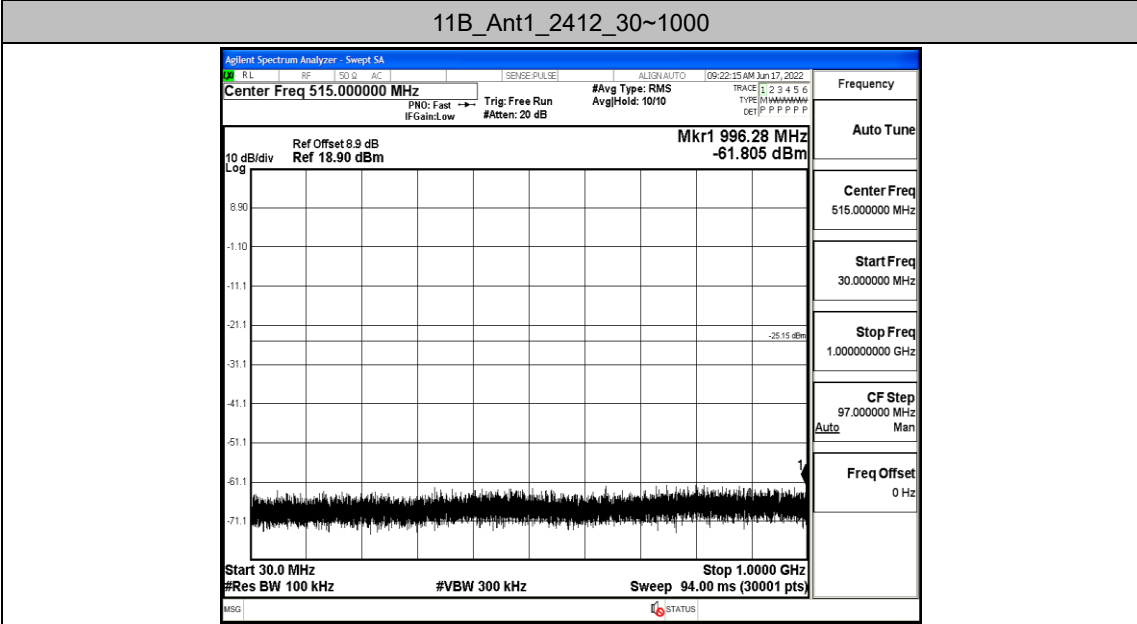
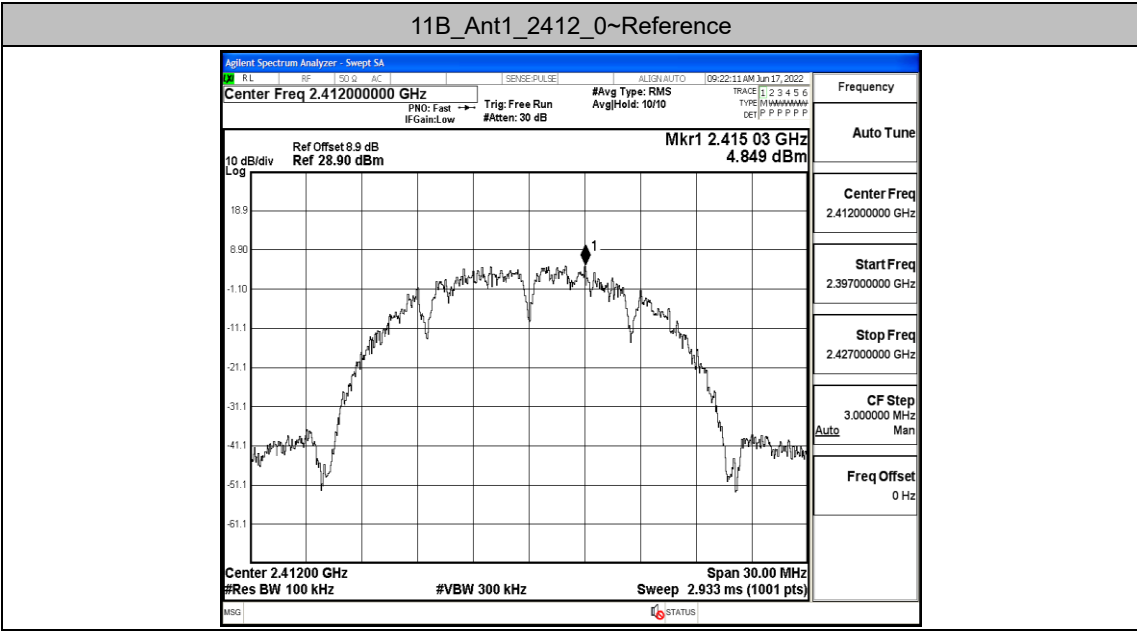


Appendix F: Conducted Spurious Emission

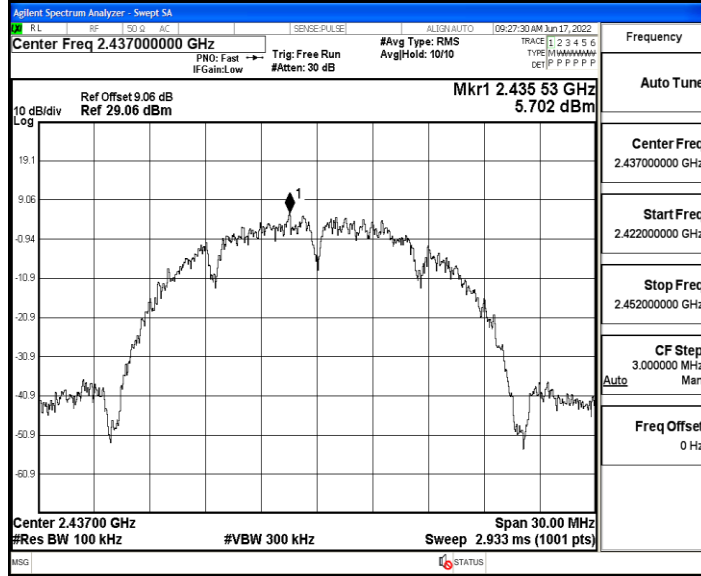
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.85	4.85	---	PASS
			30~1000	4.85	-61.81	≤-25.15	PASS
			1000~26500	4.85	-50.79	≤-25.15	PASS
		2437	Reference	5.70	5.70	---	PASS
			30~1000	5.70	-61.18	≤-24.3	PASS
			1000~26500	5.70	-51.29	≤-24.3	PASS
		2462	Reference	6.14	6.14	---	PASS
			30~1000	6.14	-61.61	≤-23.86	PASS
			1000~26500	6.14	-51.4	≤-23.86	PASS
11G	Ant1	2412	Reference	-2.67	-2.67	---	PASS
			30~1000	-2.67	-60.7	≤-32.67	PASS
			1000~26500	-2.67	-51.18	≤-32.67	PASS
		2437	Reference	-1.37	-1.37	---	PASS
			30~1000	-1.37	-61.89	≤-31.37	PASS
			1000~26500	-1.37	-51.79	≤-31.37	PASS
		2462	Reference	0.03	0.03	---	PASS
			30~1000	0.03	-61.65	≤-29.97	PASS
			1000~26500	0.03	-51.78	≤-29.97	PASS
11N20SISO	Ant1	2412	Reference	-2.94	-2.94	---	PASS
			30~1000	-2.94	-61.7	≤-32.94	PASS
			1000~26500	-2.94	-51.12	≤-32.94	PASS
		2437	Reference	-0.81	-0.81	---	PASS
			30~1000	-0.81	-60.45	≤-30.81	PASS
			1000~26500	-0.81	-51.46	≤-30.81	PASS
		2462	Reference	-1.99	-1.99	---	PASS
			30~1000	-1.99	-61.15	≤-31.99	PASS
			1000~26500	-1.99	-50.54	≤-31.99	PASS
11N40SISO	Ant1	2422	Reference	-2.98	-2.98	---	PASS
			30~1000	-2.98	-61.2	≤-32.98	PASS
			1000~26500	-2.98	-51.13	≤-32.98	PASS
		2437	Reference	-3.62	-3.62	---	PASS
			30~1000	-3.62	-60.94	≤-33.62	PASS
			1000~26500	-3.62	-51.82	≤-33.62	PASS
		2452	Reference	-2.55	-2.55	---	PASS
			30~1000	-2.55	-60.24	≤-32.55	PASS
			1000~26500	-2.55	-51.23	≤-32.55	PASS

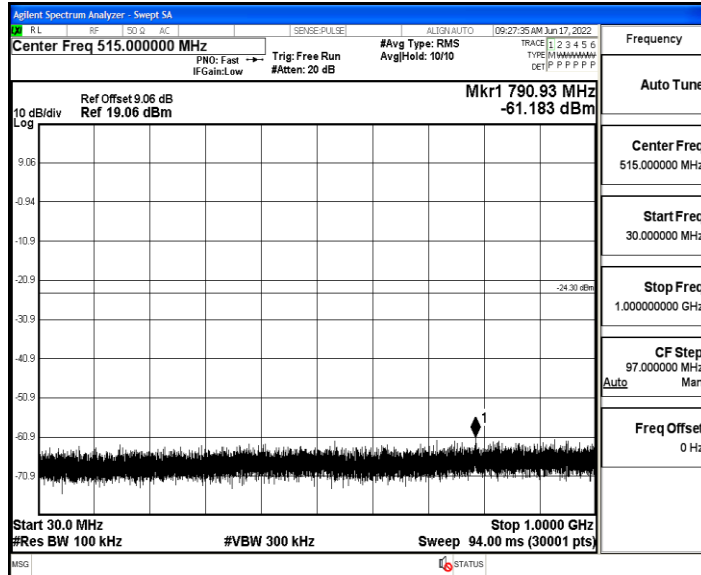
Test Graphs



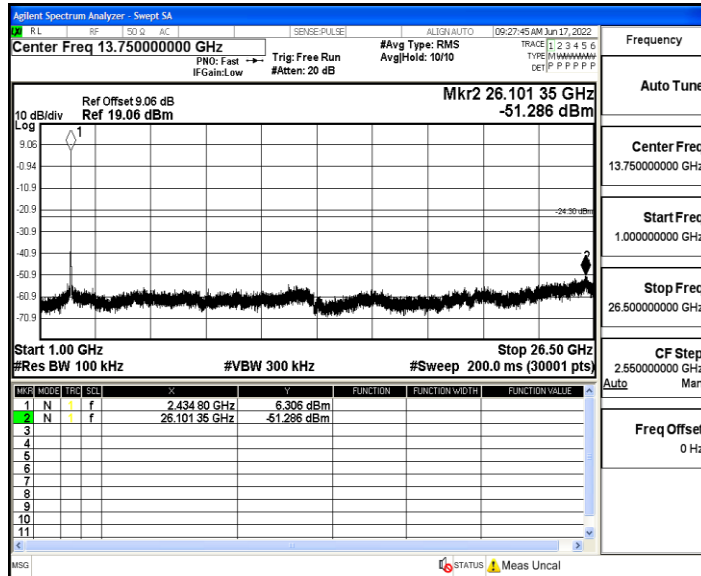
11B_Ant1_2437_0~Reference



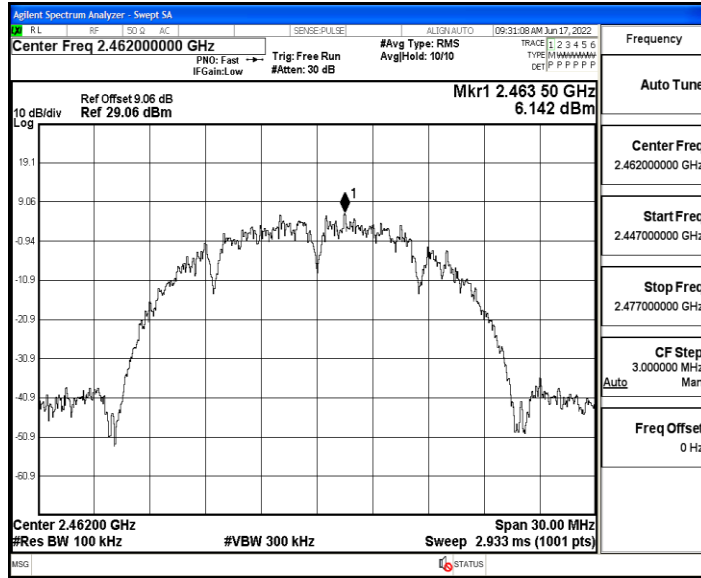
11B_Ant1_2437_30~1000



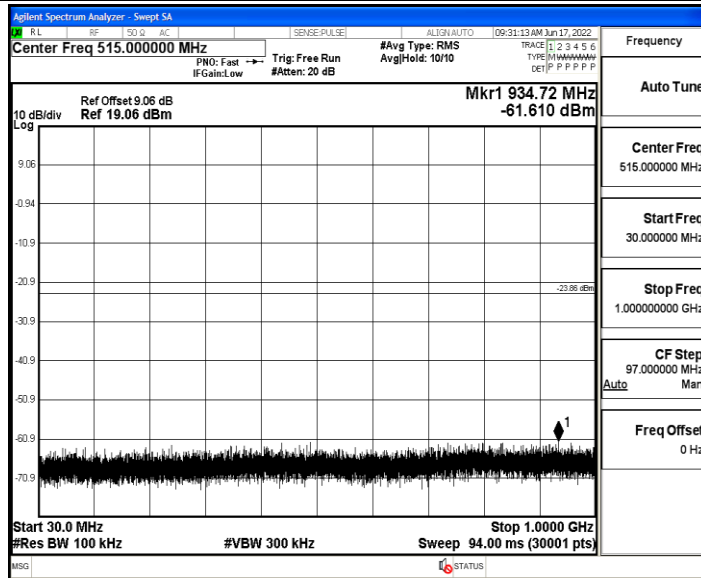
11B_Ant1_2437_1000~26500



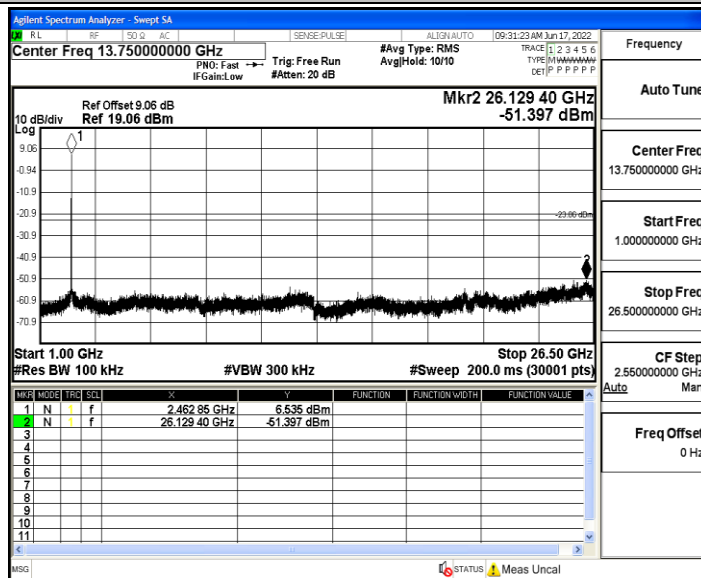
11B_Ant1_2462_0~Reference



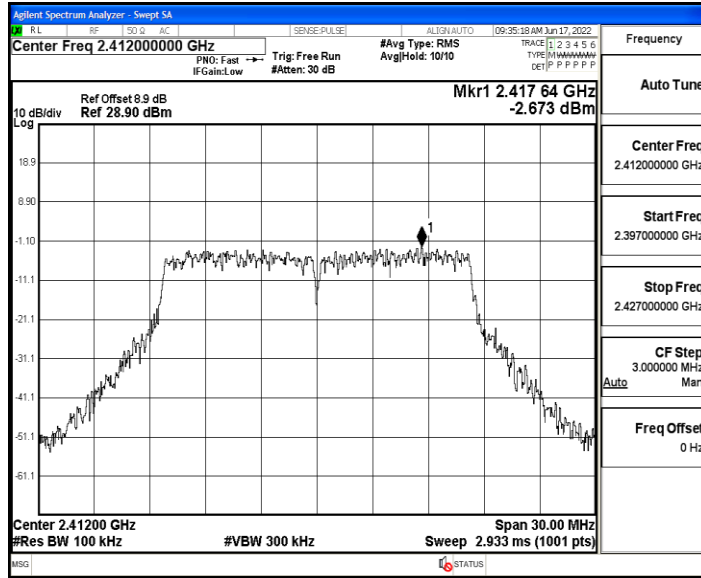
11B_Ant1_2462_30~1000



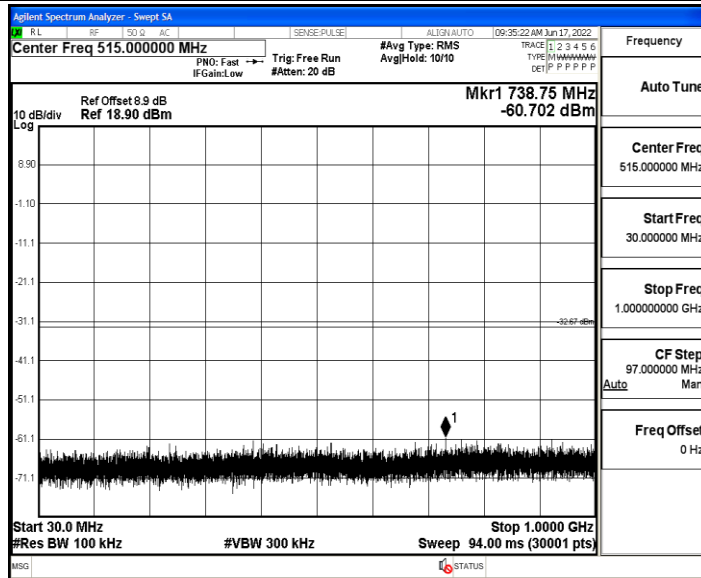
11B_Ant1_2462_1000~26500



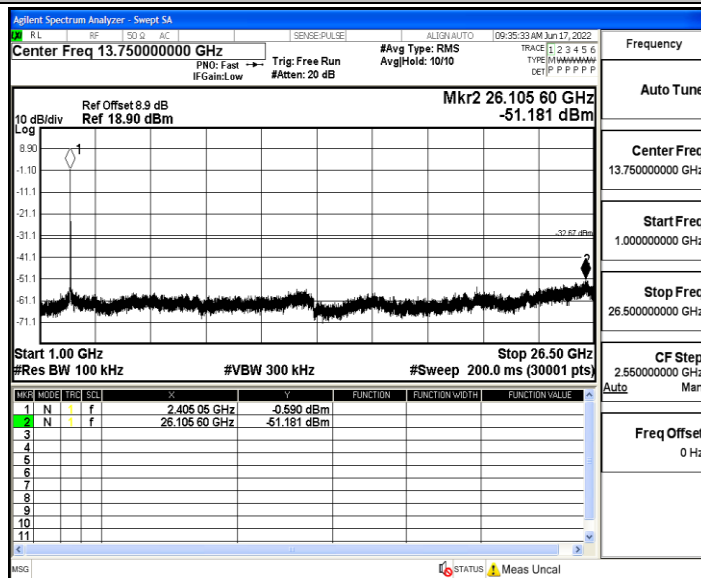
11G_Ant1_2412_0~Reference



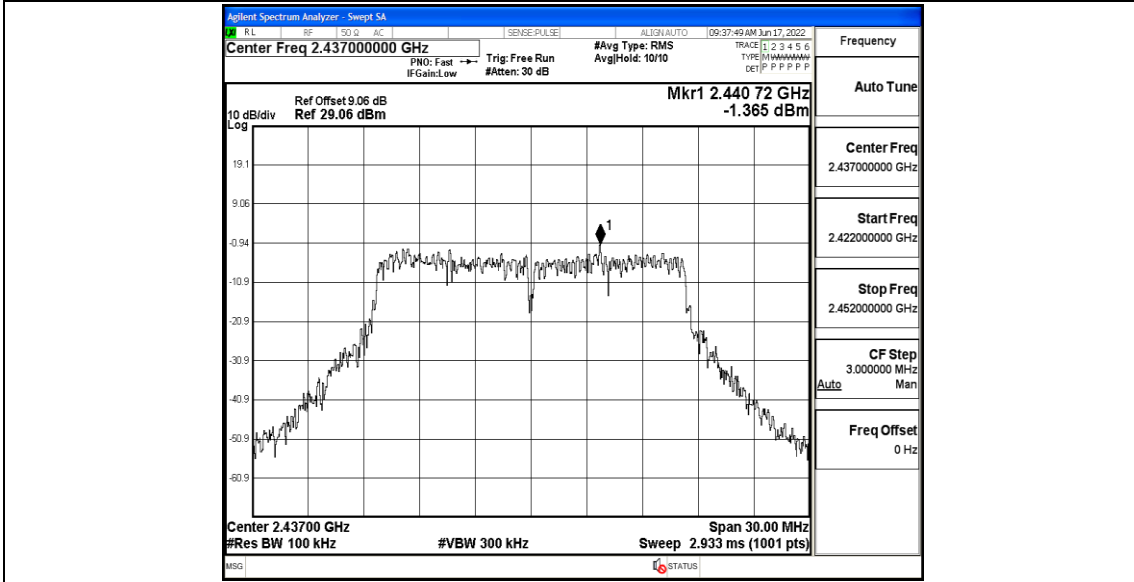
11G_Ant1_2412_30~1000



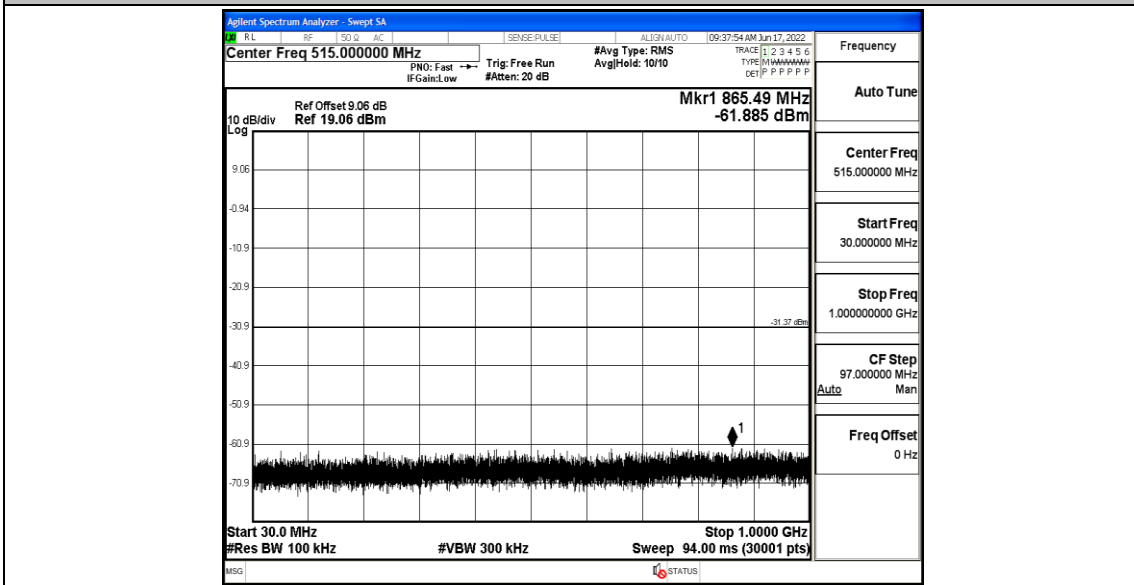
11G_Ant1_2412_1000~26500



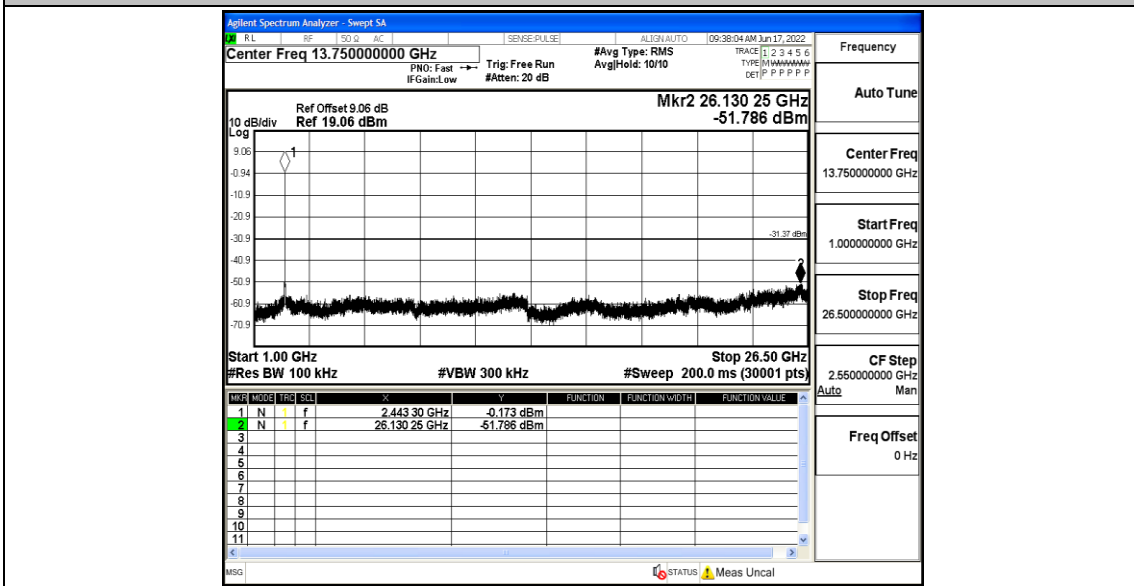
11G_Ant1_2437_0~Reference



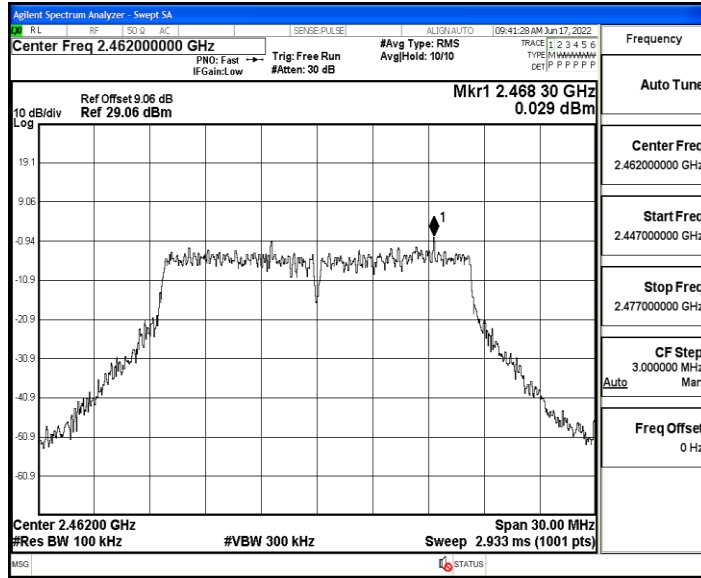
11G_Ant1_2437_30~1000



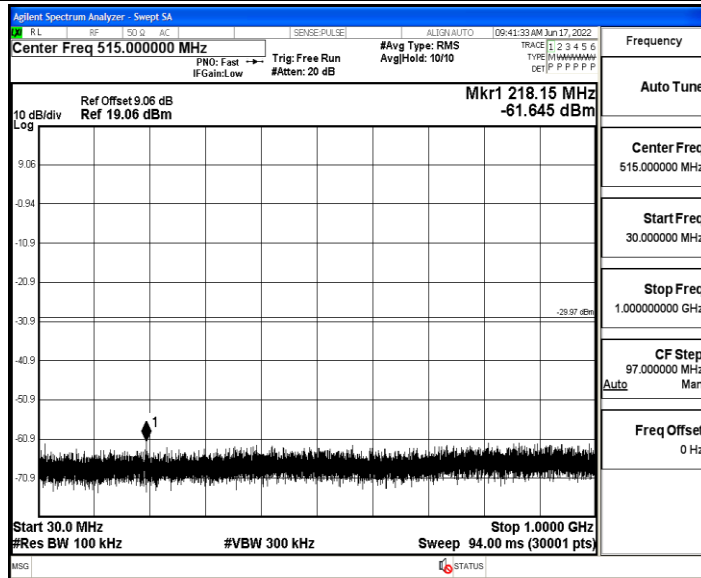
11G_Ant1_2437_1000~26500



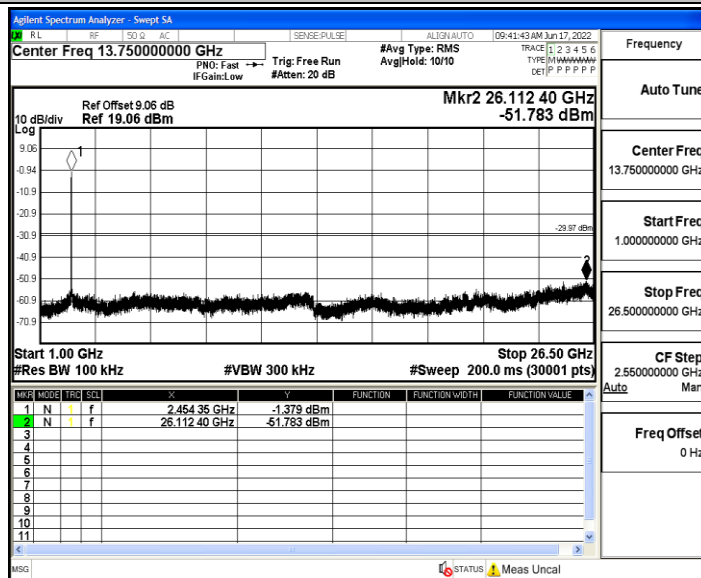
11G_Ant1_2462_0~Reference



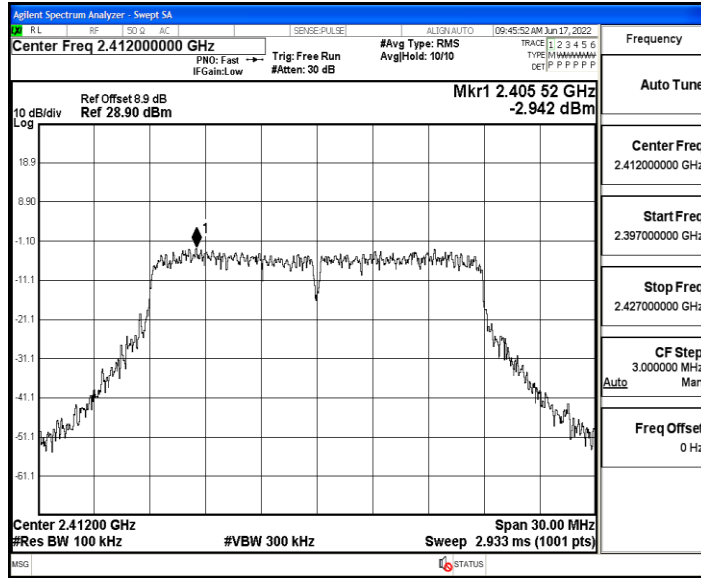
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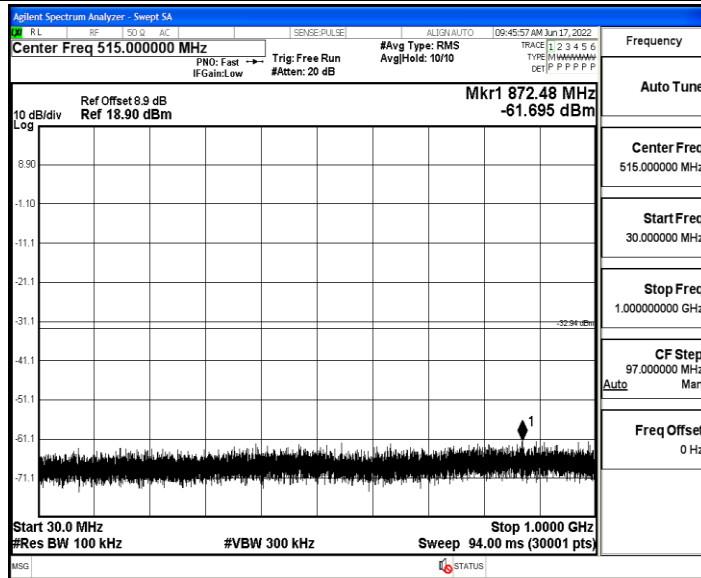
11G_Ant1_2462_1000~26500



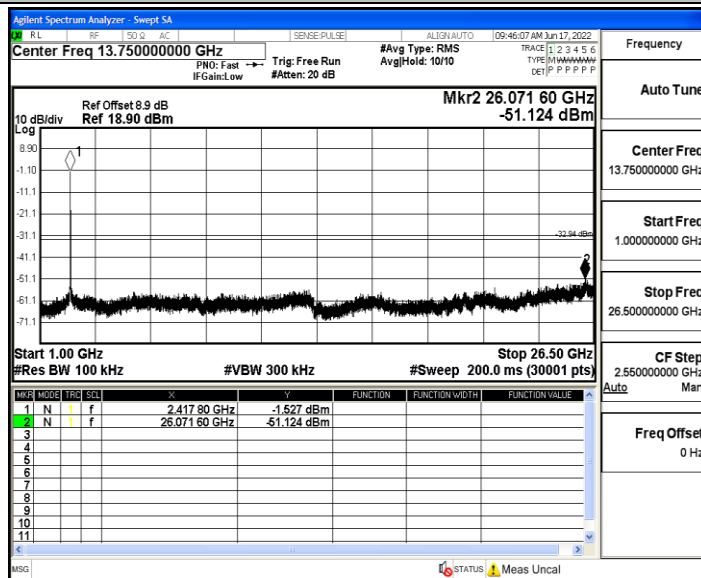
11N20SISO_Ant1_2412_0~Reference



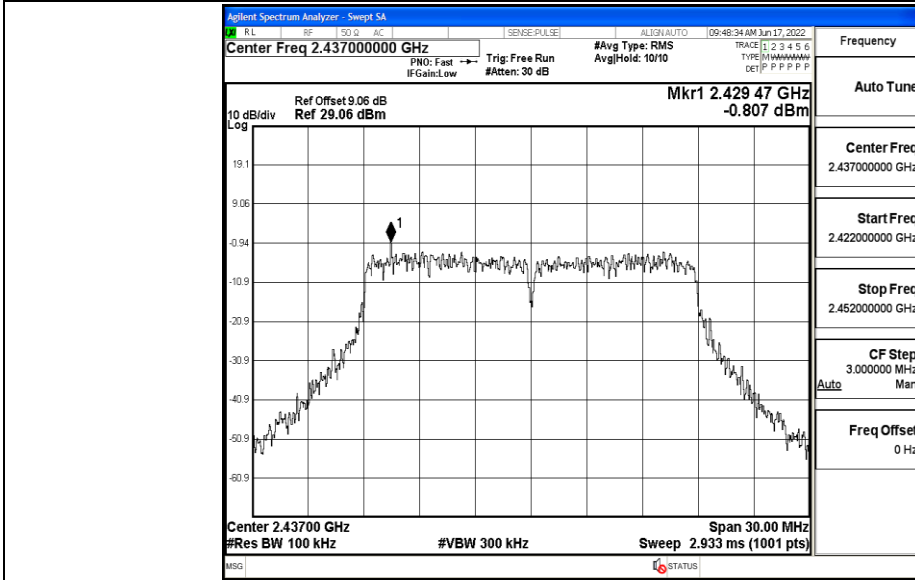
11N20SISO_Ant1_2412_30~1000



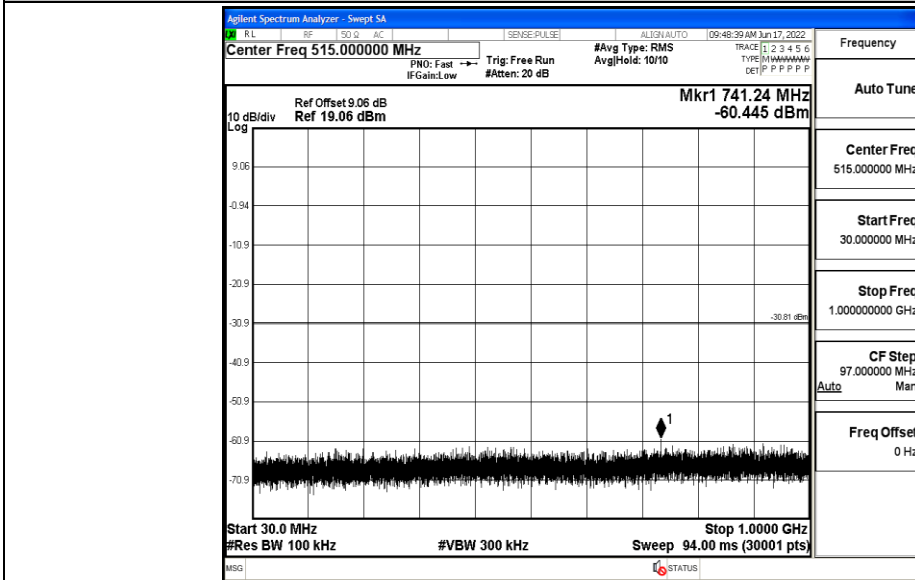
11N20SISO_Ant1_2412_1000~26500



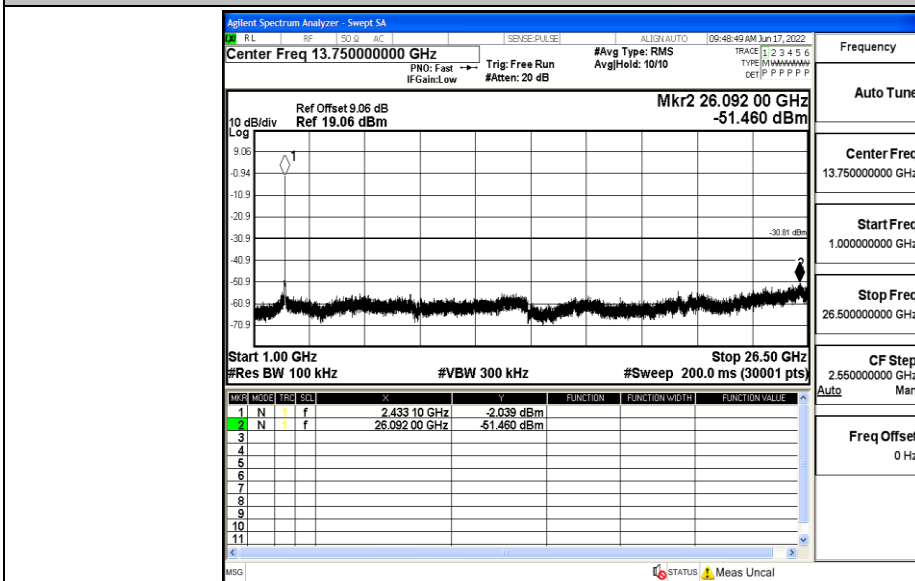
11N20SISO_Ant1_2437_0~Reference



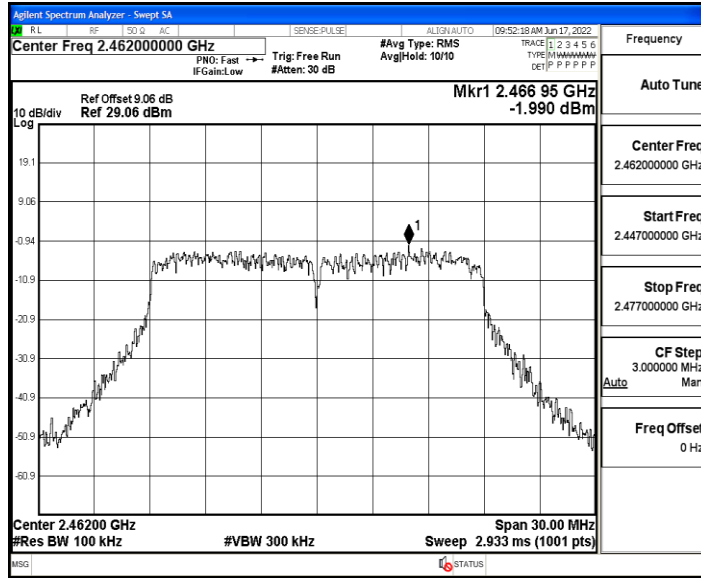
11N20SISO_Ant1_2437_30~1000



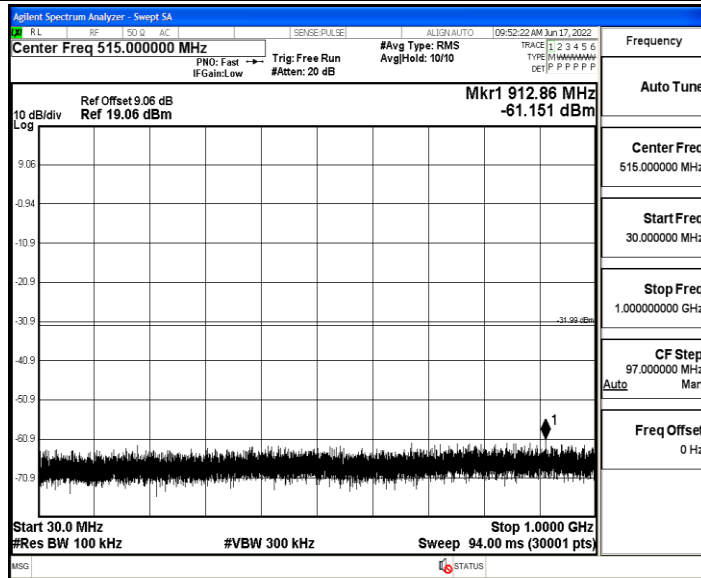
11N20SISO_Ant1_2437_1000~26500



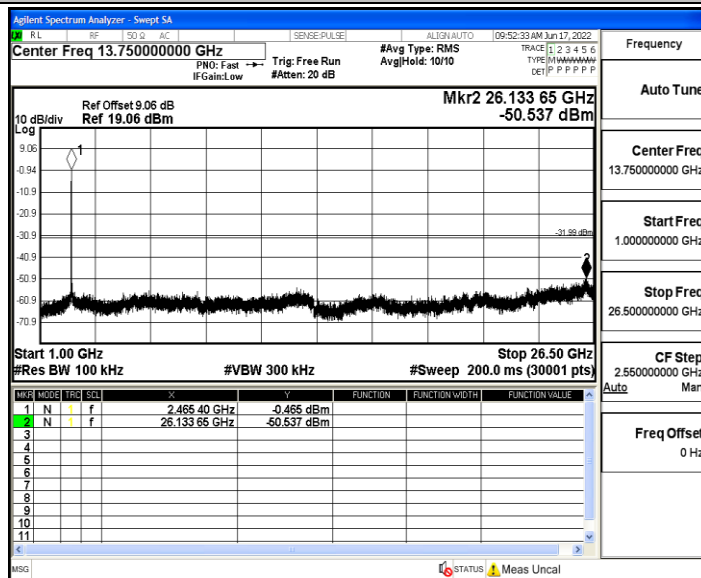
11N20SISO_Ant1_2462_0~Reference



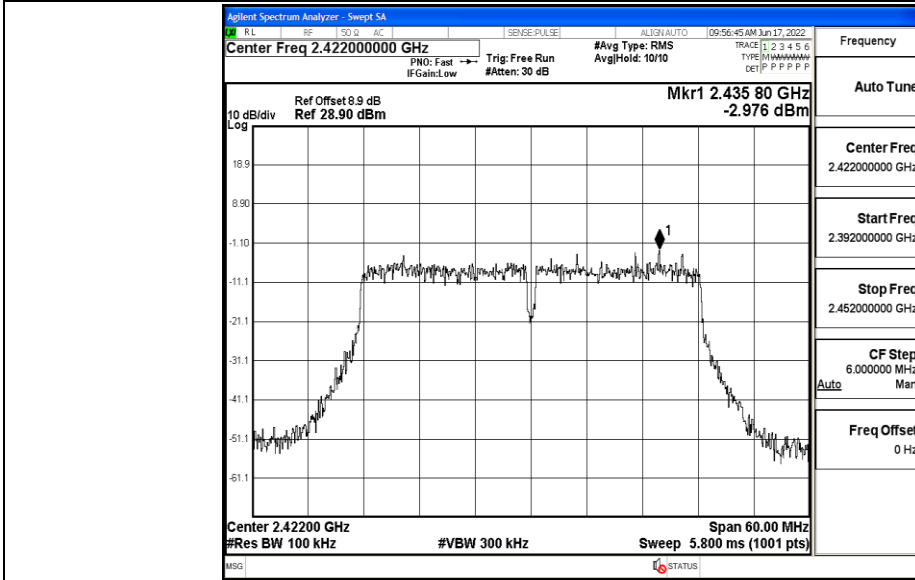
11N20SISO_Ant1_2462_30~1000



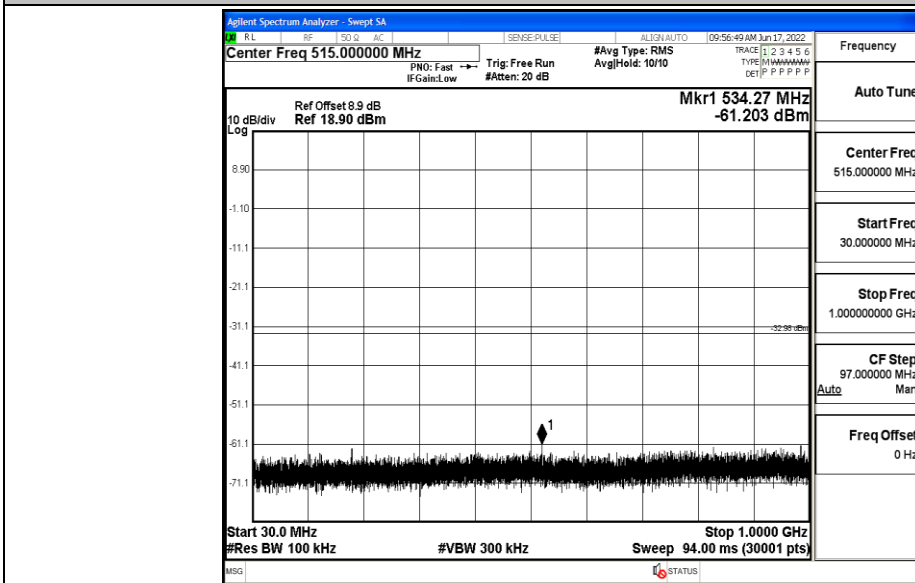
11N20SISO_Ant1_2462_1000~26500



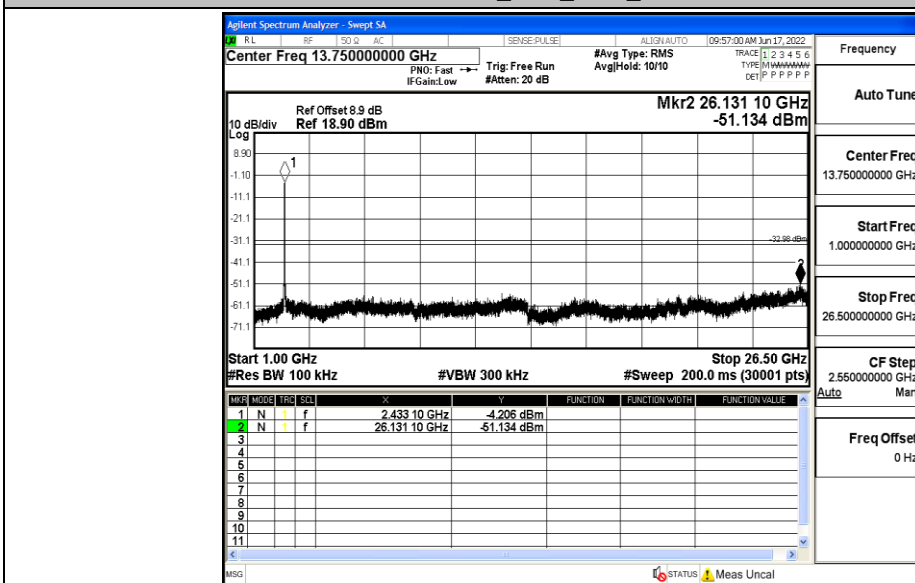
11N40SISO_Ant1_2422_0~Reference



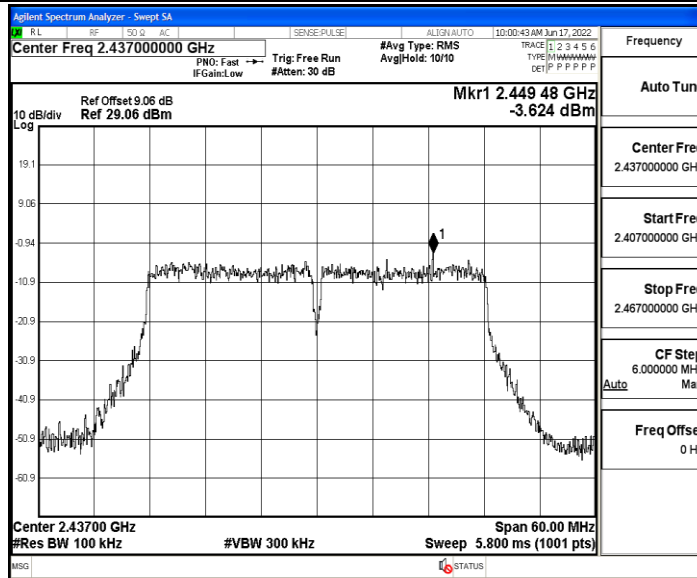
11N40SISO_Ant1_2422_30~1000



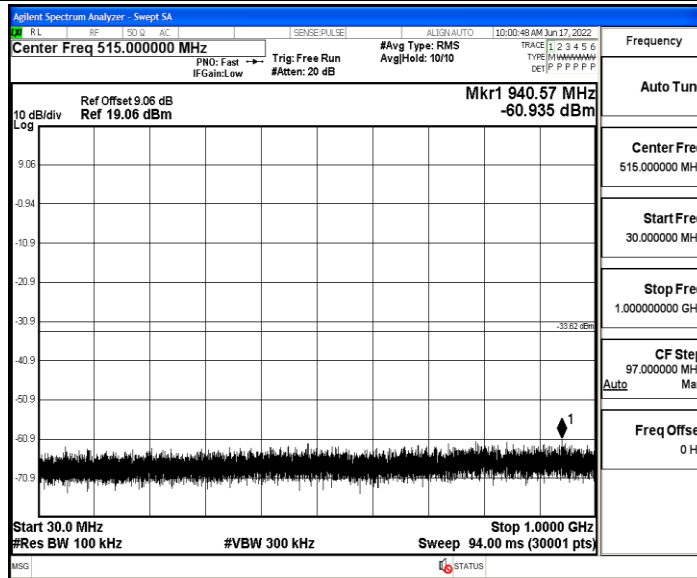
11N40SISO_Ant1_2422_1000~26500



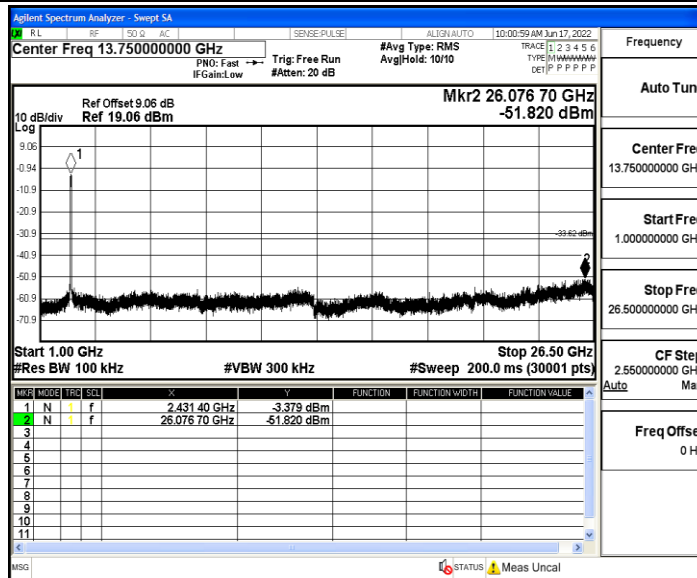
11N40SISO_Ant1_2437_0~Reference



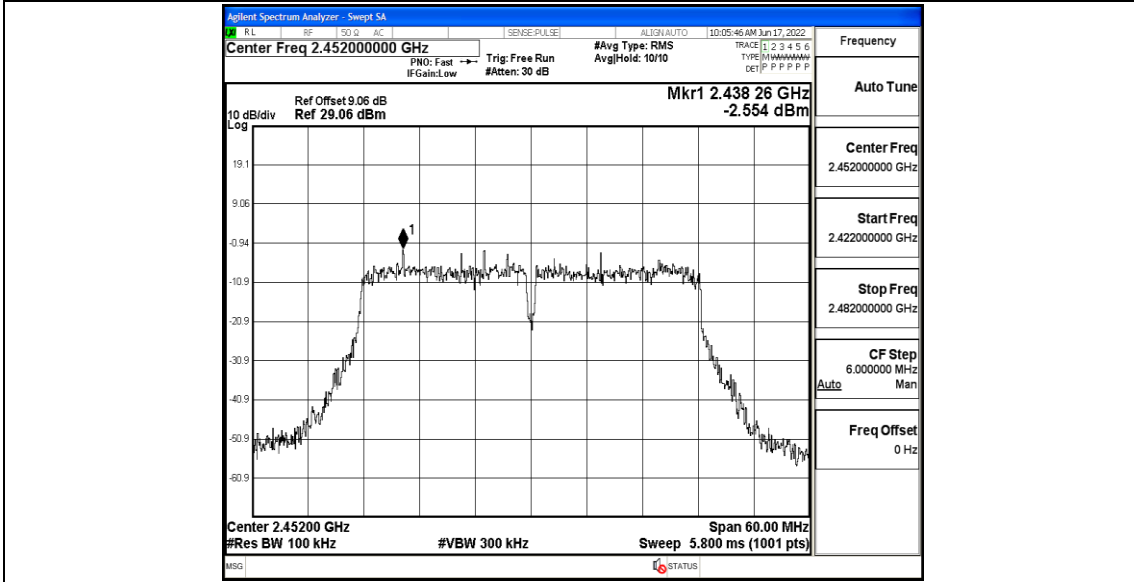
11N40SISO_Ant1_2437_30~1000



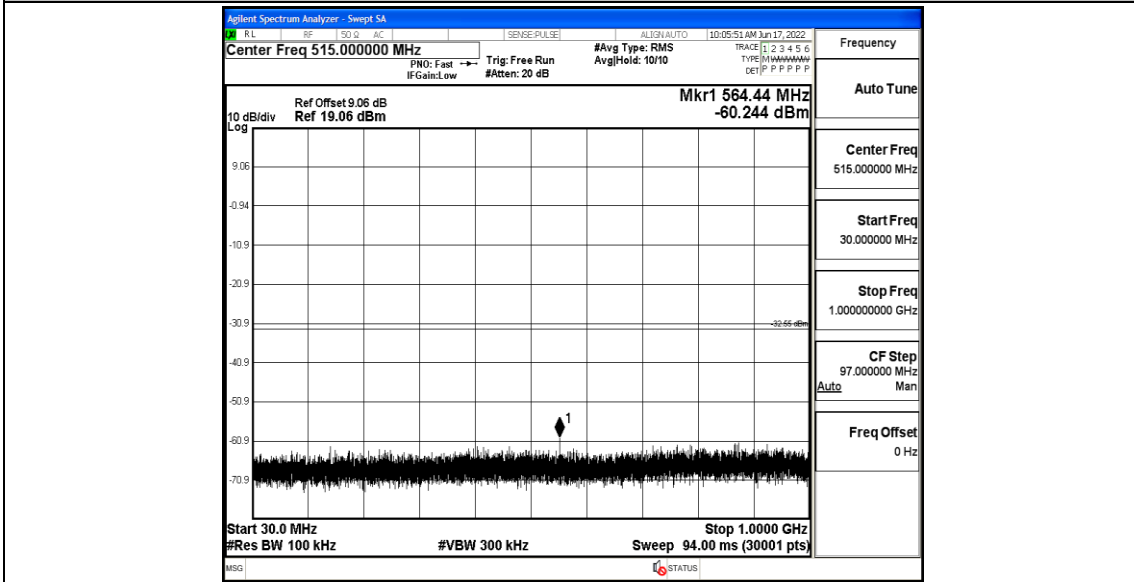
11N40SISO_Ant1_2437_1000~26500



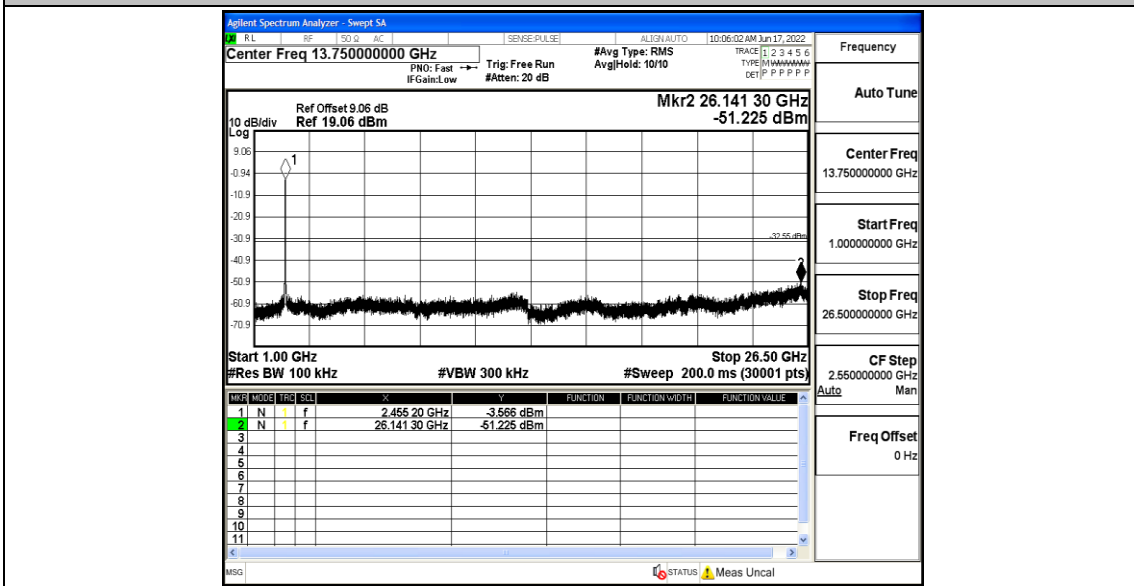
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

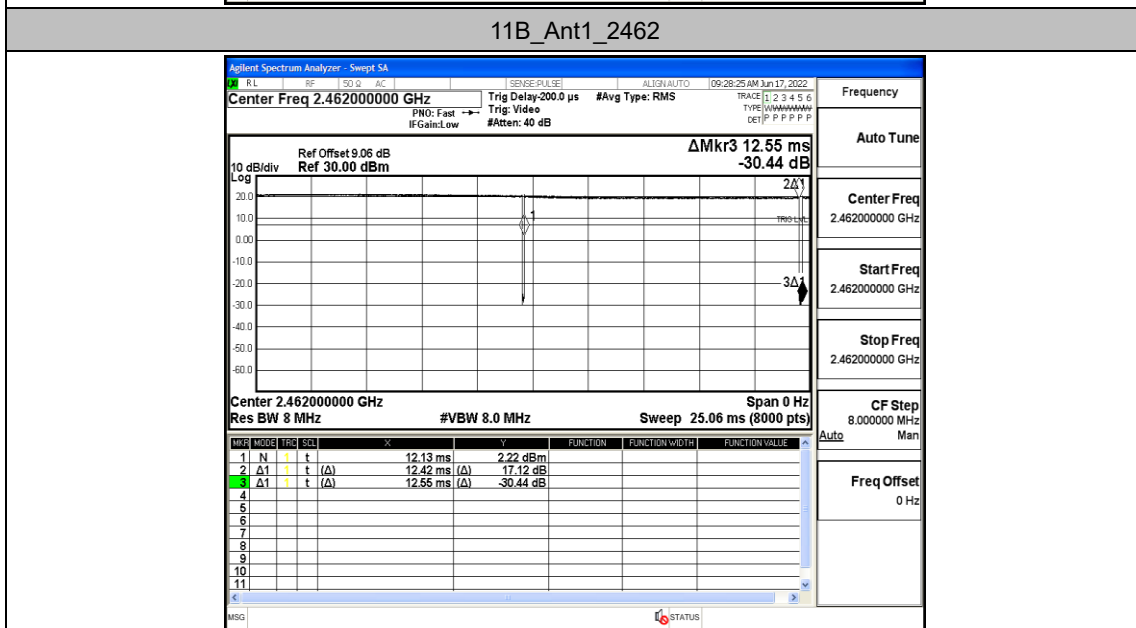
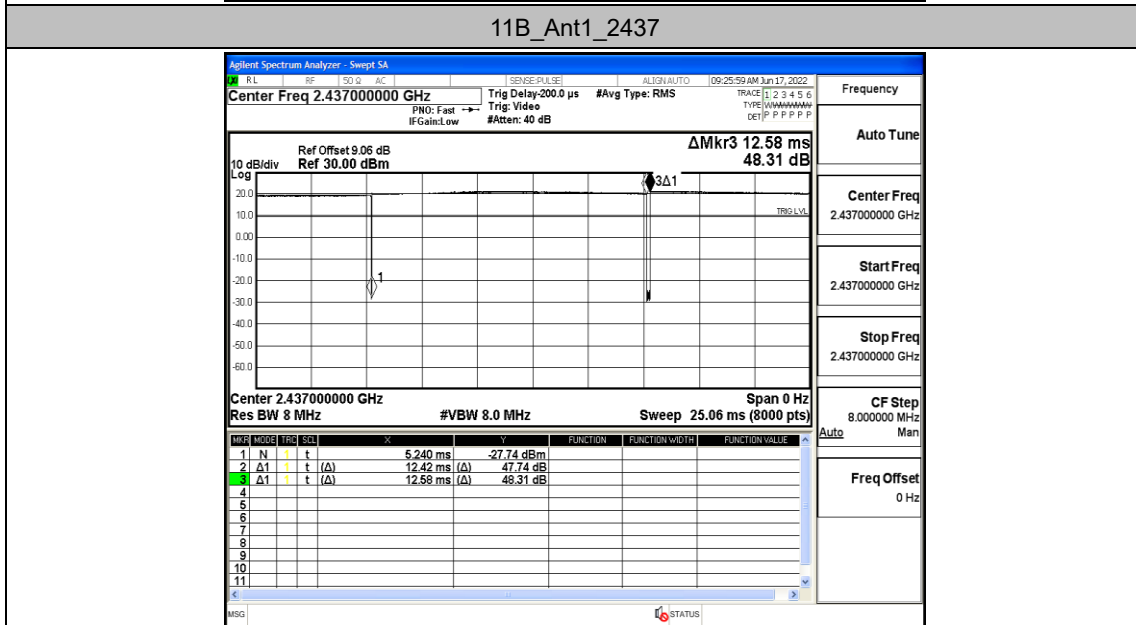
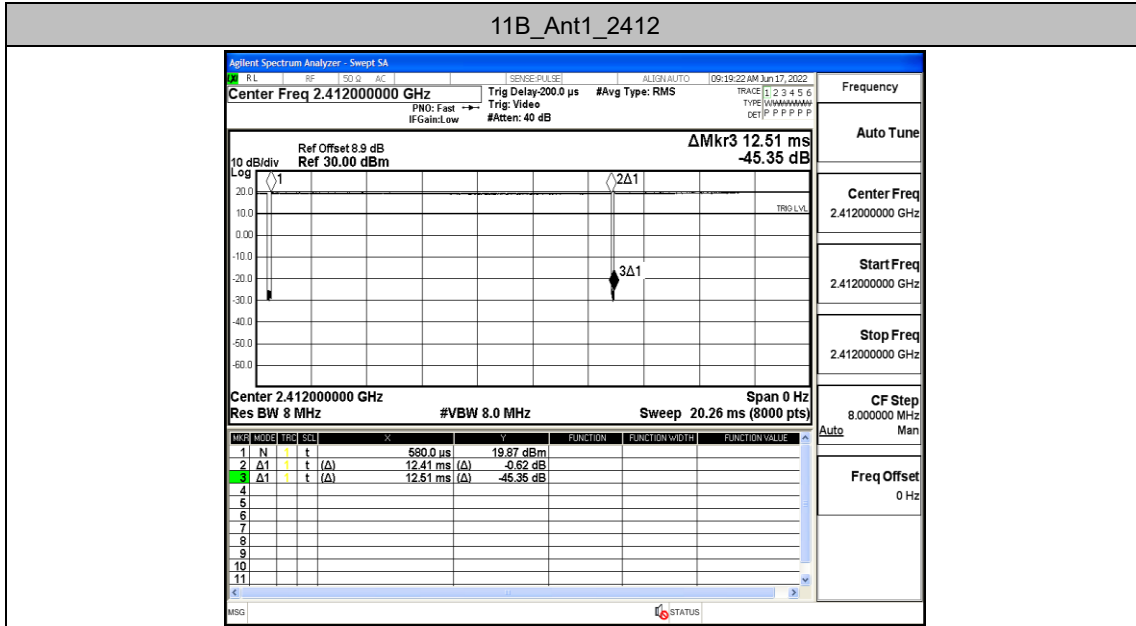


Appendix G: Duty Cycle

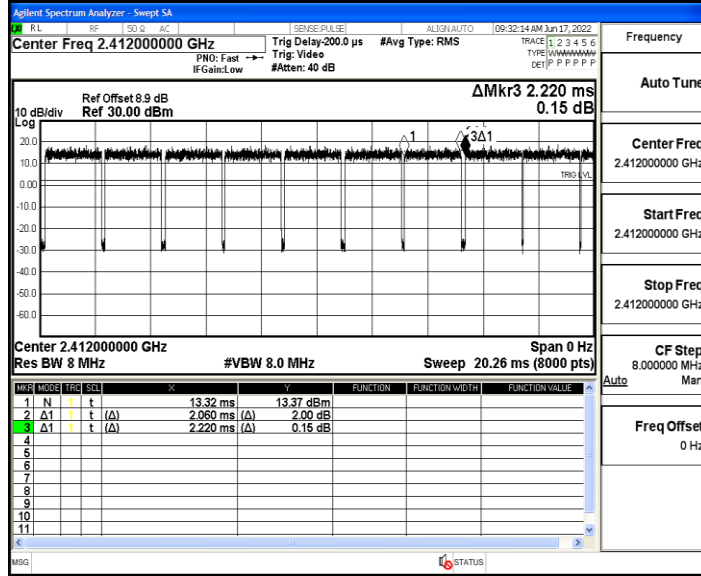
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T
11B	Ant1	2412	12.41	12.51	99.20	0.08
		2437	12.42	12.58	98.73	0.08
		2462	12.42	12.55	98.96	0.08
11G	Ant1	2412	2.06	2.22	92.79	0.49
		2437	2.06	2.20	93.64	0.49
		2462	2.06	2.22	92.79	0.49
11N20SISO	Ant1	2412	1.92	2.09	91.87	0.52
		2437	1.92	2.08	92.31	0.52
		2462	1.92	2.09	91.87	0.52
11N40SISO	Ant1	2422	0.94	1.18	79.66	1.06
		2437	0.94	1.14	82.46	1.06
		2452	0.94	1.18	79.66	1.06

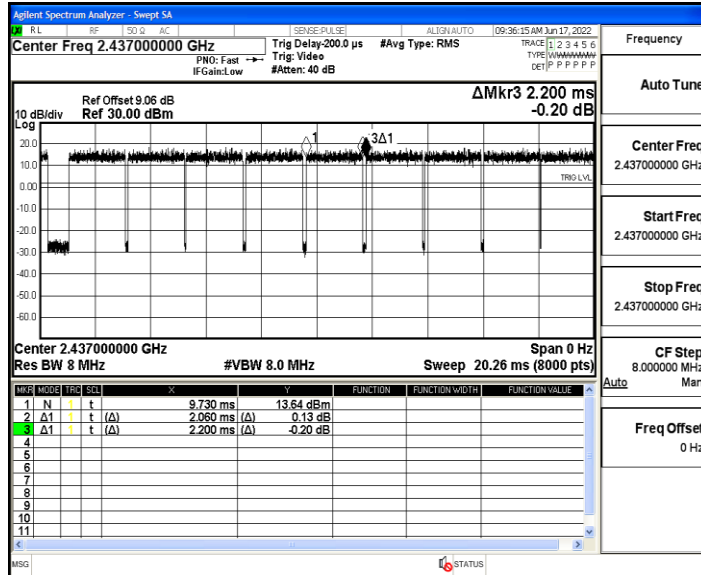
Test Graphs



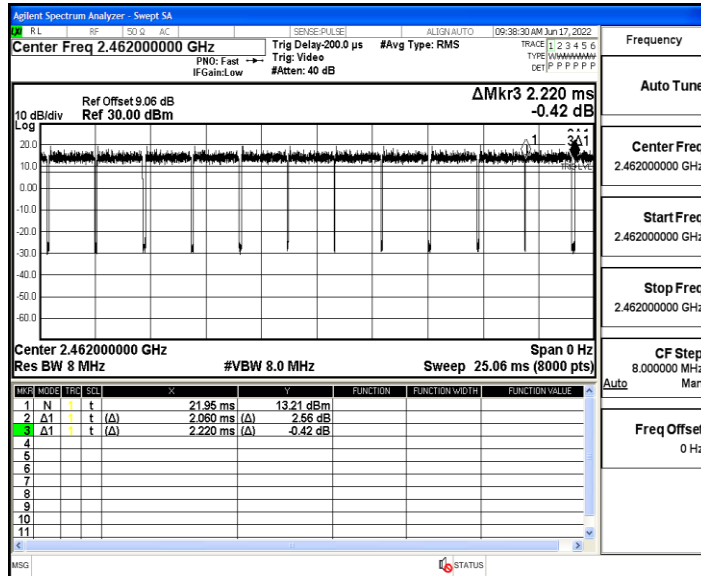
11G_Ant1_2412



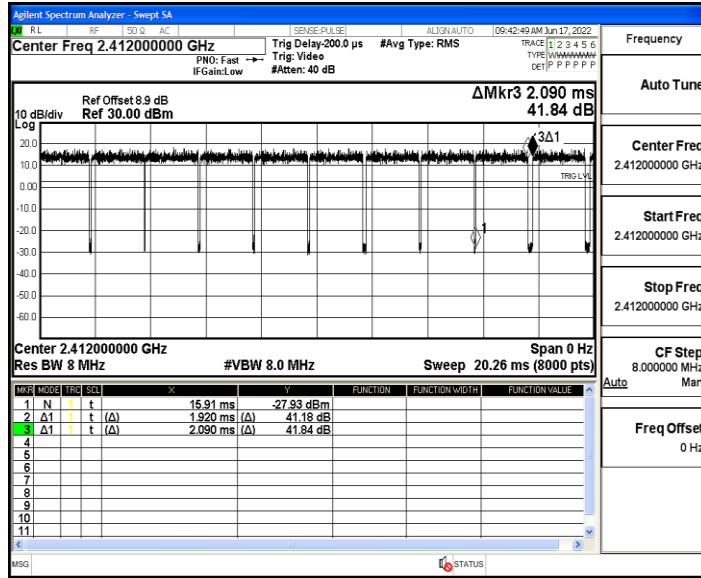
11G_Ant1_2437



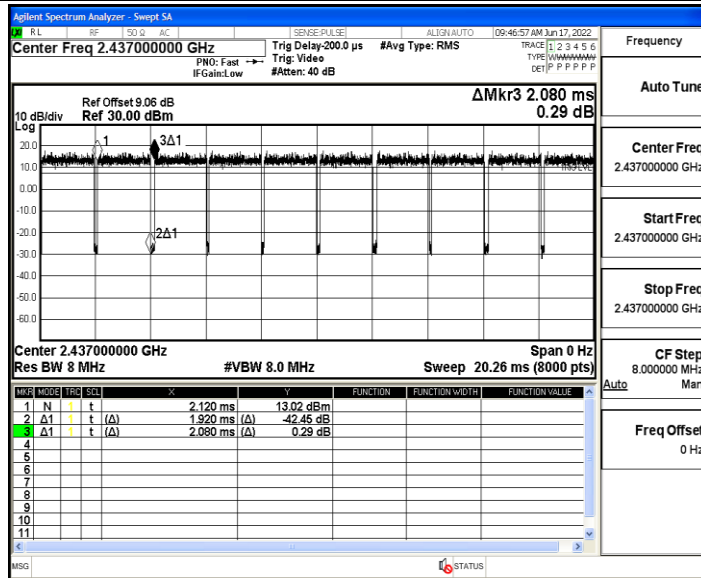
11G_Ant1_2462



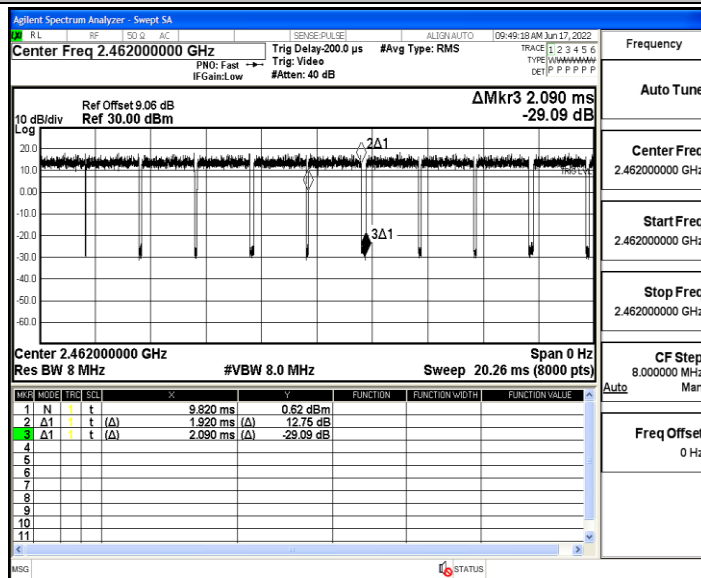
11N20SISO_Ant1_2412



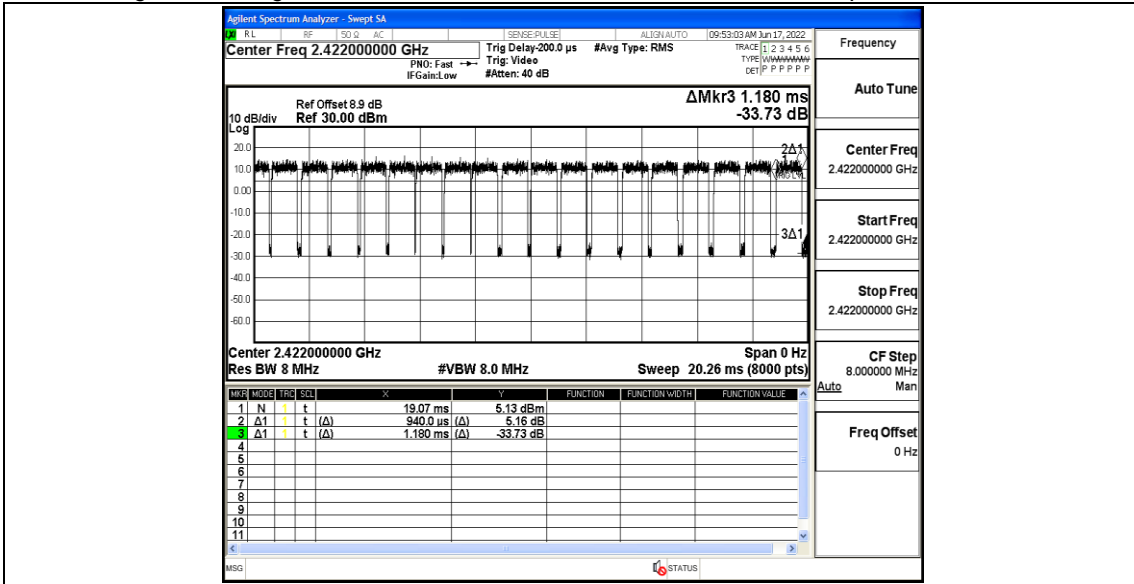
11N20SISO_Ant1_2437



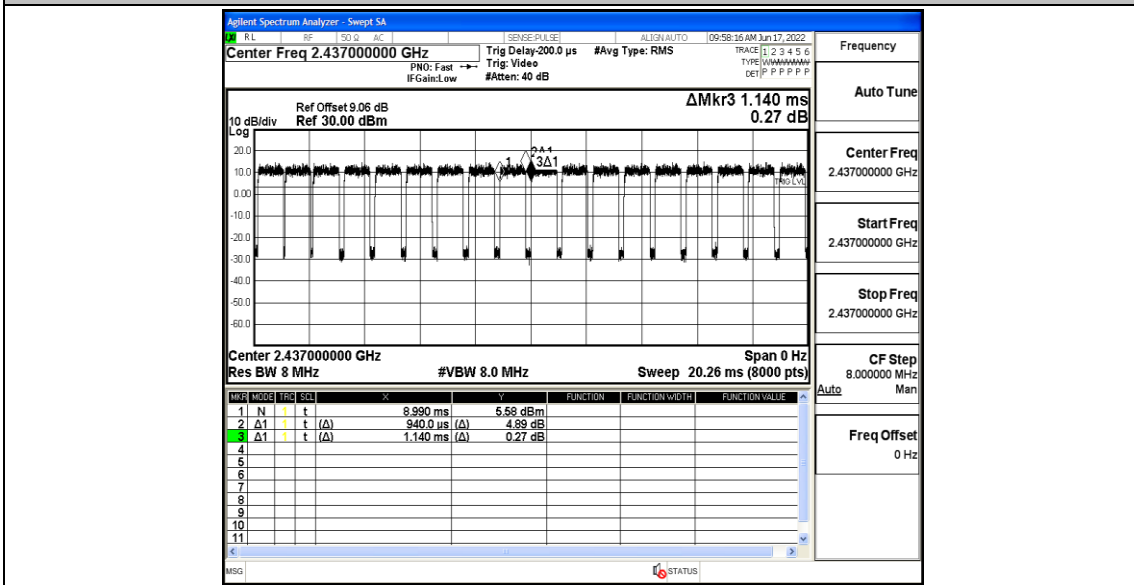
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

