

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

Product Name: 7-in IPS Touch Screen Wireless CarPlay

Trade Mark: N/A

Test Model: CP701S

FCC ID: 2A5PH-CP701S

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

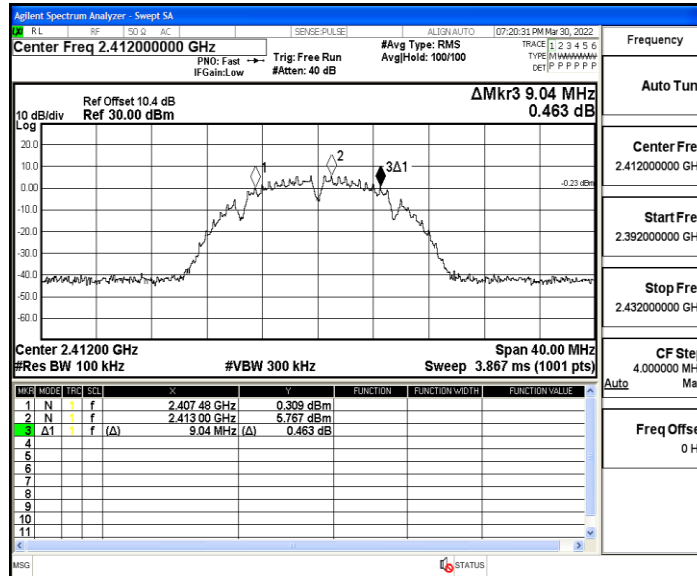
Appendix A: DTS Bandwidth

Test Result

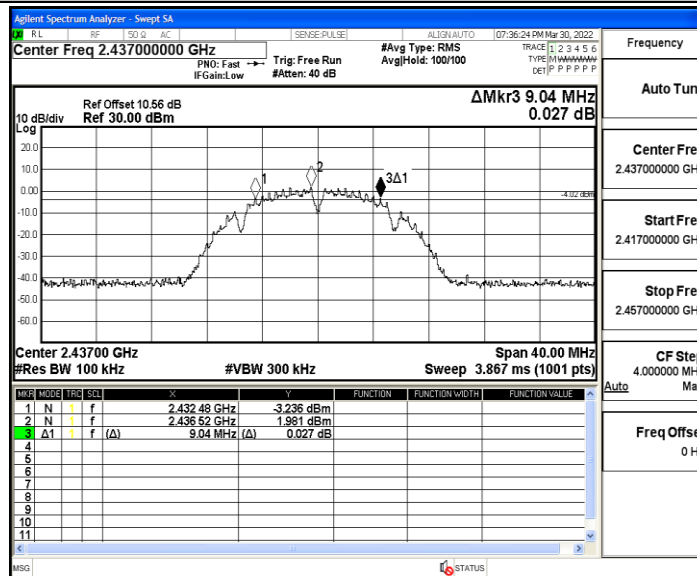
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.040	2407.480	2416.520	0.5	PASS
		2437	9.040	2432.480	2441.520	0.5	PASS
		2462	8.520	2457.960	2466.480	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.680	2428.120	2445.800	0.5	PASS
		2462	17.640	2453.200	2470.840	0.5	PASS
11N40SISO	Ant1	2422	36.400	2403.760	2440.160	0.5	PASS
		2437	36.400	2418.760	2455.160	0.5	PASS
		2452	36.400	2433.840	2470.240	0.5	PASS

Test Graphs

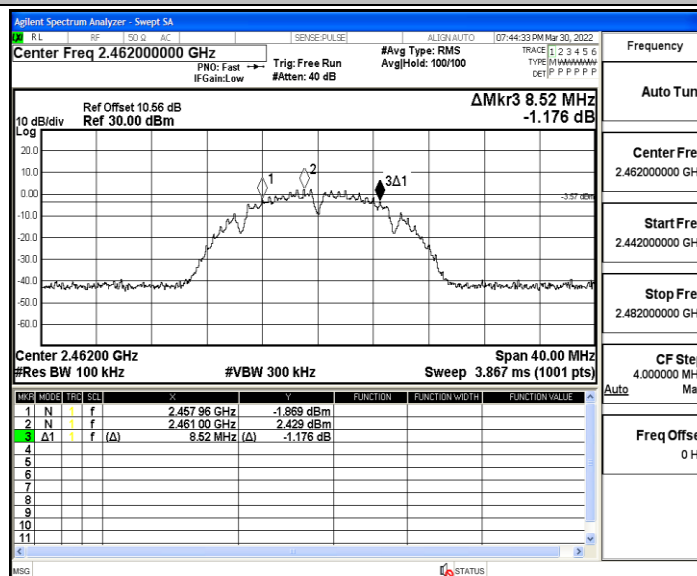
11B_Ant1_2412



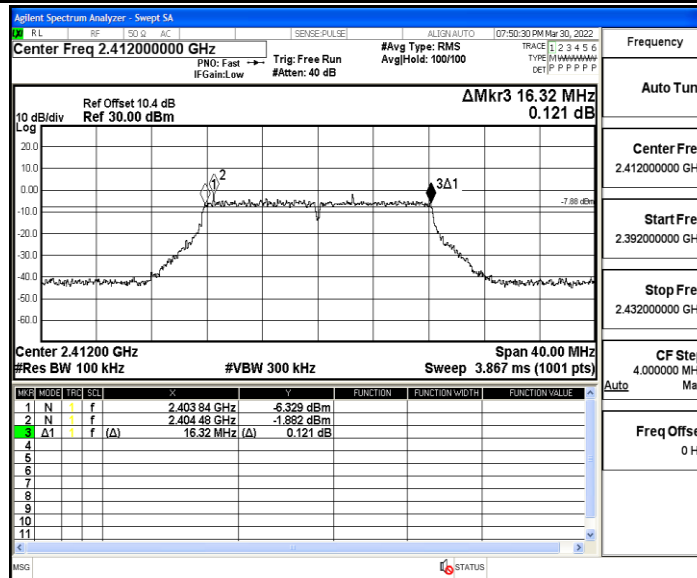
11B_Ant1_2437



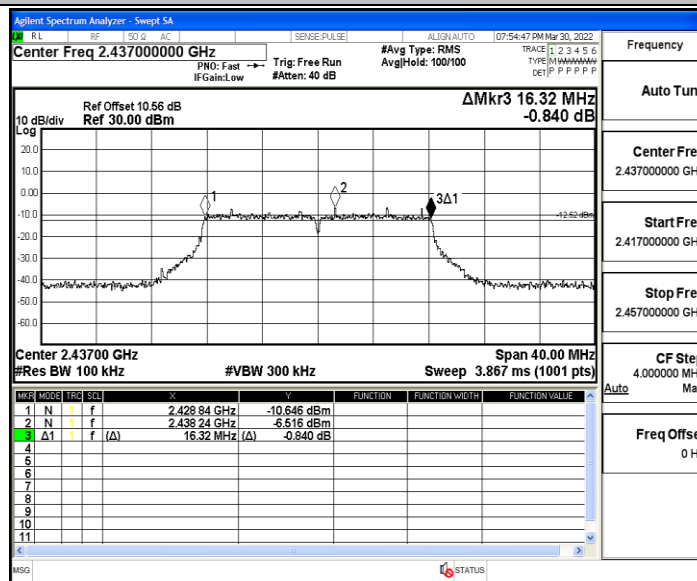
11B_Ant1_2462



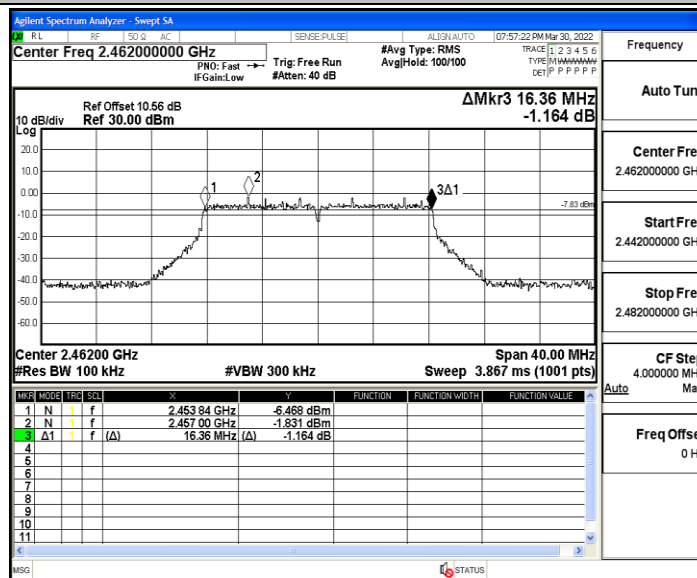
11G_Ant1_2412



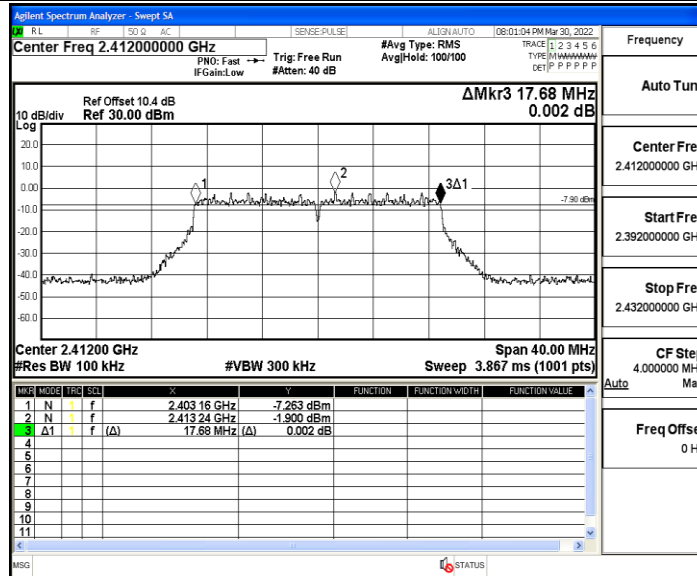
11G_Ant1_2437



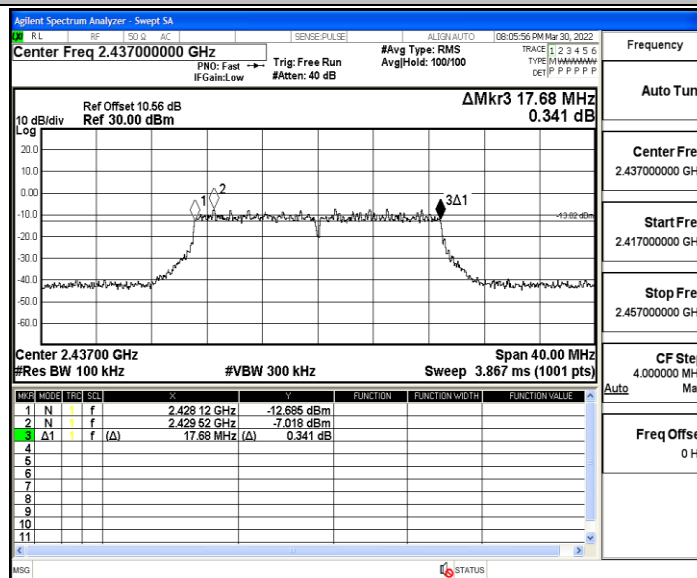
11G_Ant1_2462



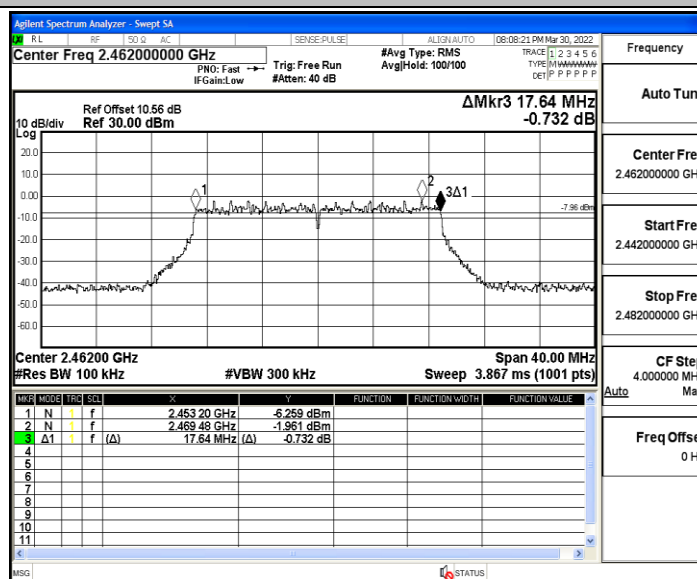
11N20SISO_Ant1_2412



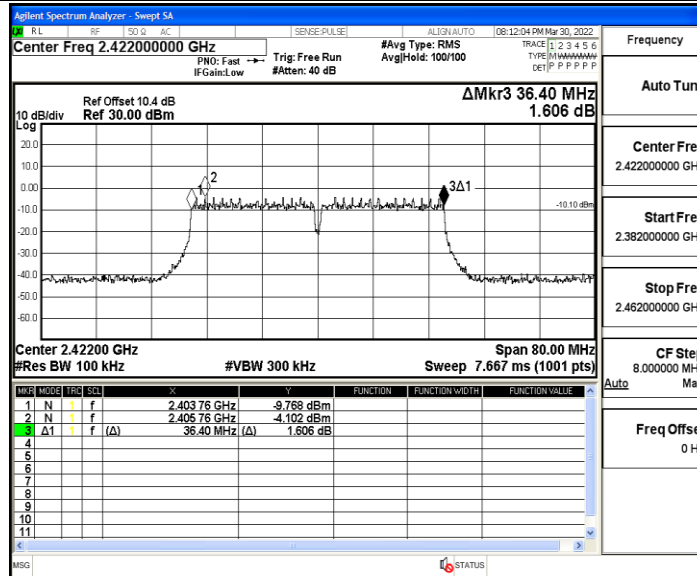
11N20SISO_Ant1_2437



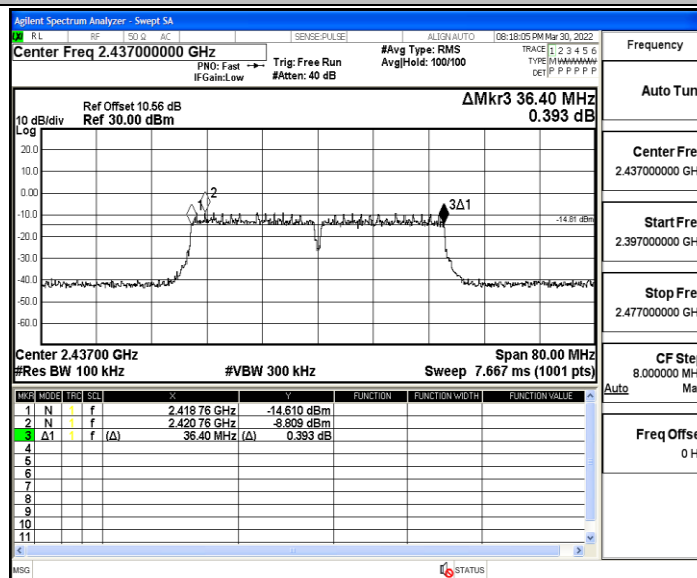
11N20SISO_Ant1_2462



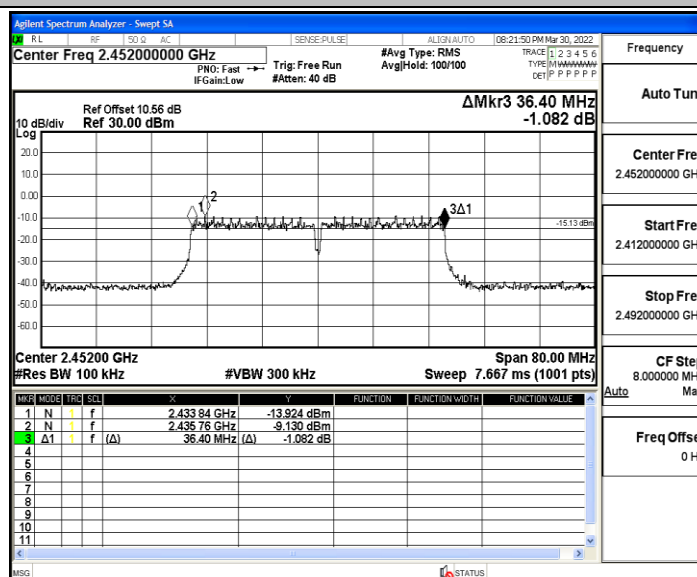
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



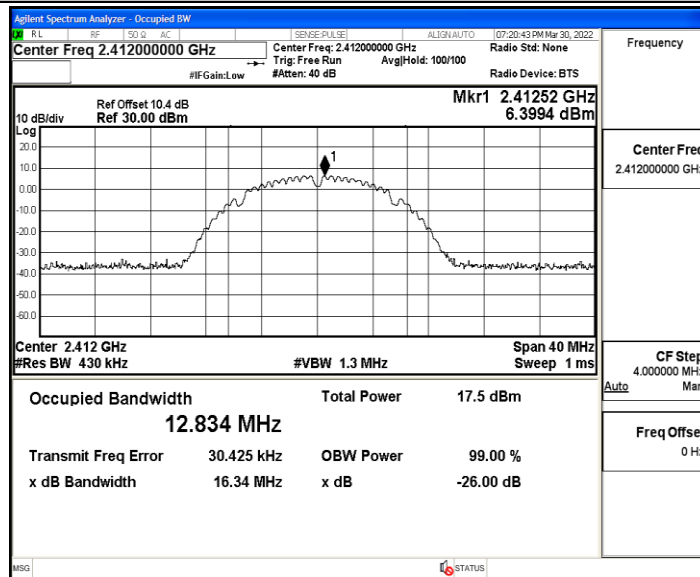
Appendix B: Occupied Channel Bandwidth

Test Result

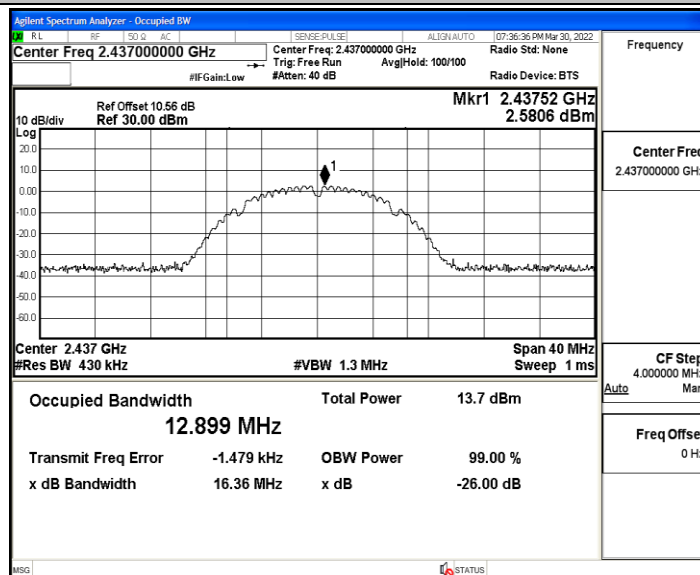
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.834	2405.613	2418.447	---	PASS
		2437	12.899	2430.549	2443.448	---	PASS
		2462	12.869	2455.601	2468.470	---	PASS
11G	Ant1	2412	17.212	2403.465	2420.677	---	PASS
		2437	17.379	2428.303	2445.682	---	PASS
		2462	17.188	2453.428	2470.616	---	PASS
11N20SISO	Ant1	2412	18.084	2402.983	2421.067	---	PASS
		2437	18.155	2427.964	2446.119	---	PASS
		2462	18.117	2452.973	2471.090	---	PASS
11N40SISO	Ant1	2422	36.548	2403.742	2440.290	---	PASS
		2437	36.612	2418.718	2455.330	---	PASS
		2452	36.803	2433.666	2470.469	---	PASS

Test Graphs

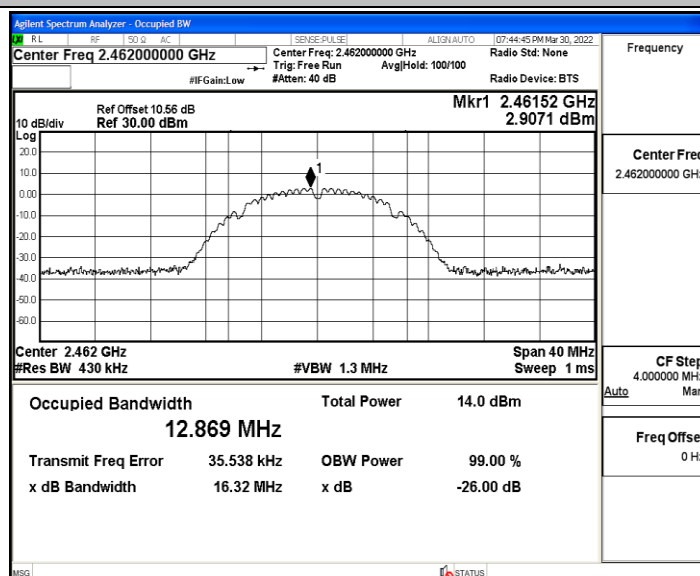
11B_Ant1_2412



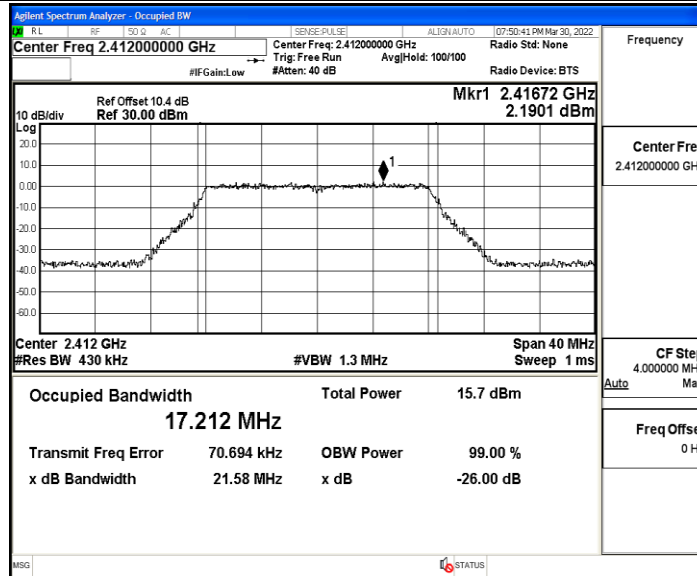
11B_Ant1_2437



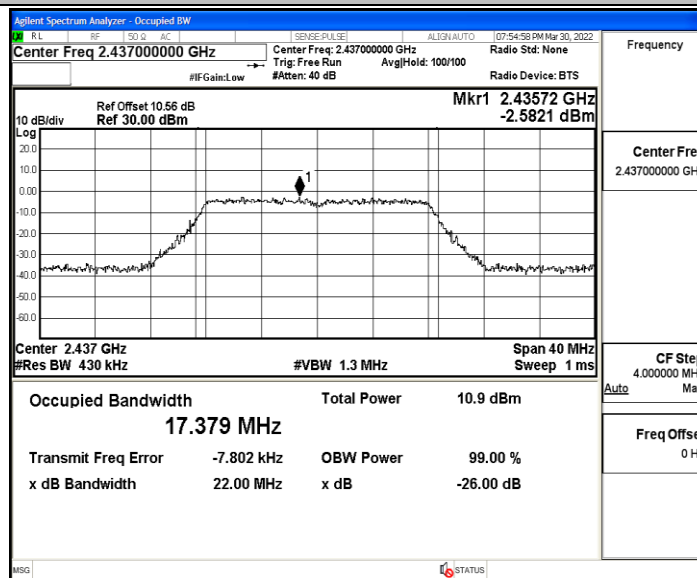
11B_Ant1_2462



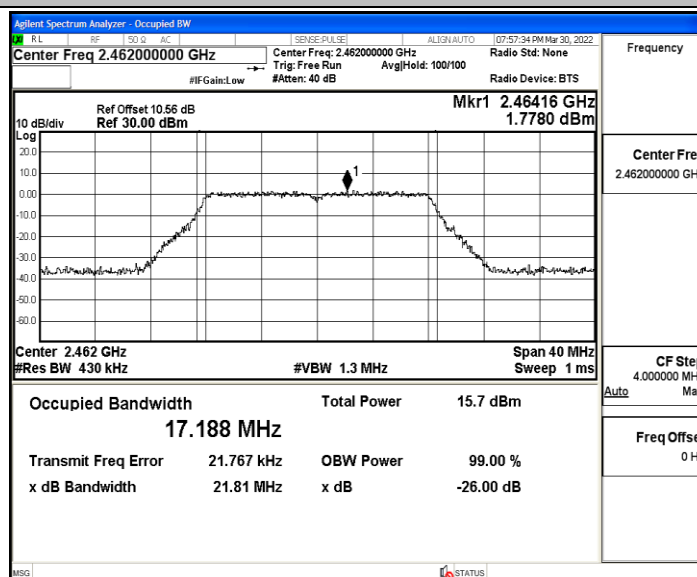
11G_Ant1_2412



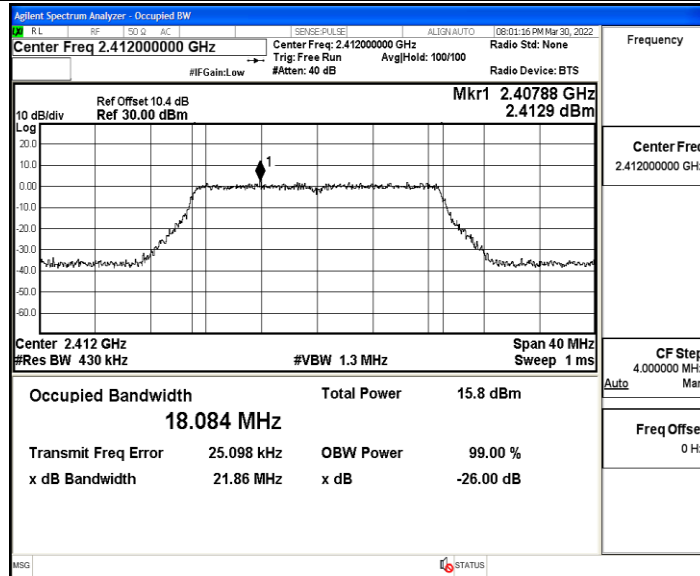
11G_Ant1_2437



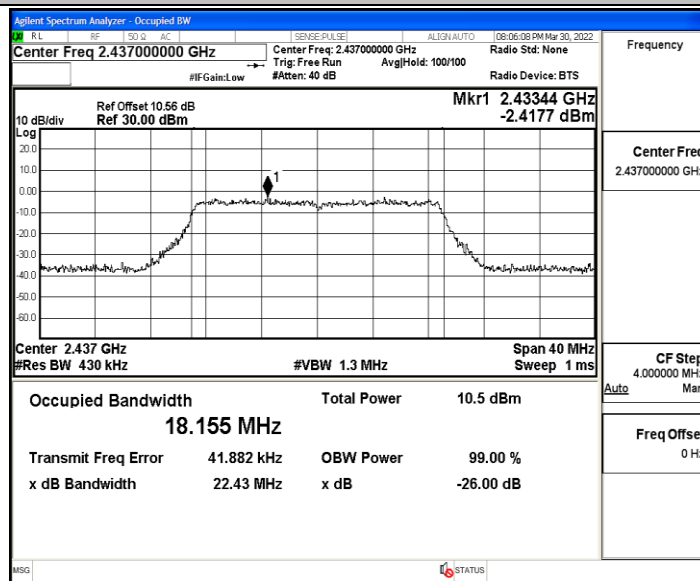
11G_Ant1_2462



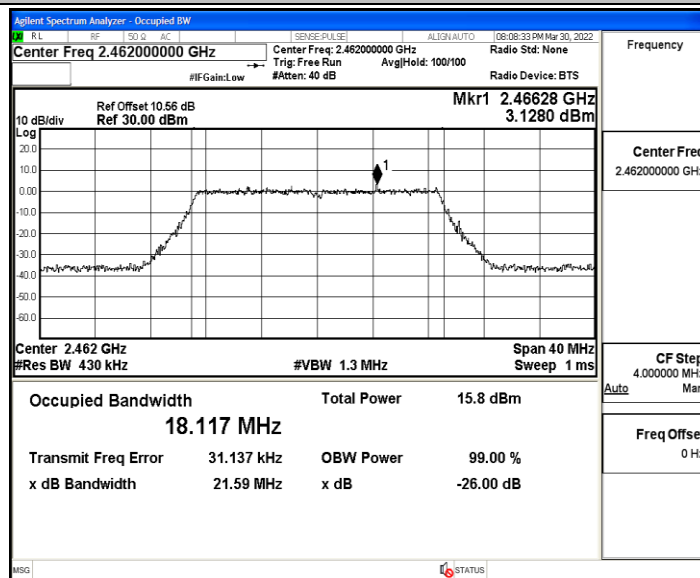
11N20SISO_Ant1_2412



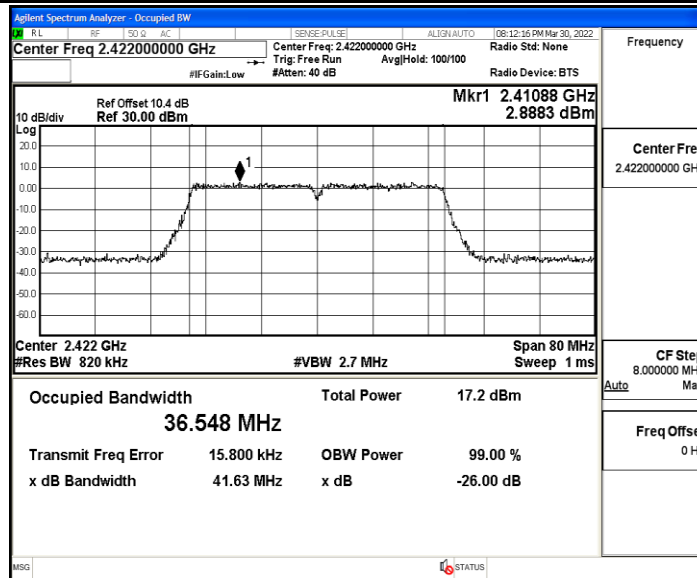
11N20SISO_Ant1_2437



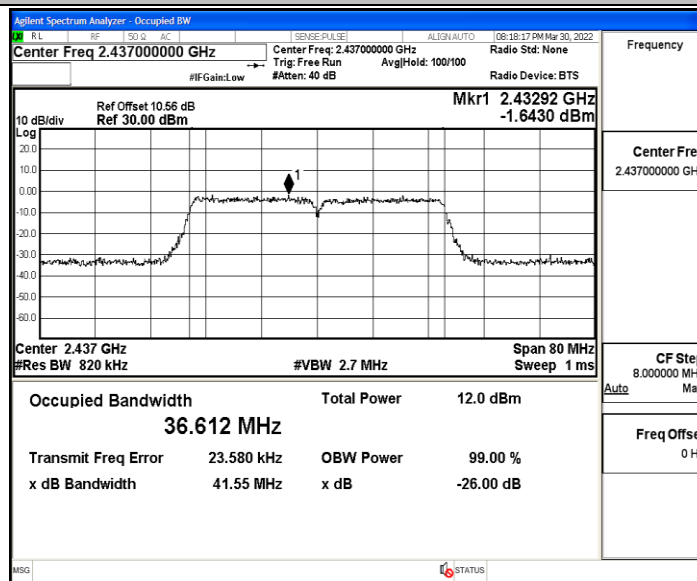
11N20SISO_Ant1_2462



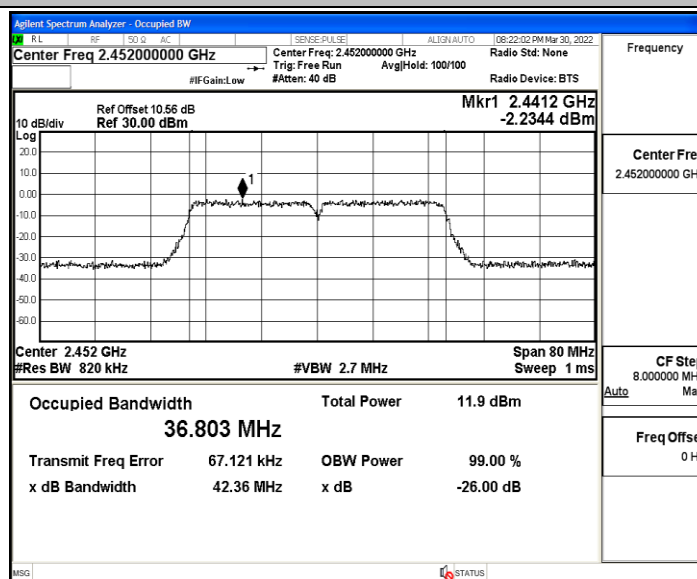
11N40SISO_Ant1_2422



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	17.14	≤30	PASS
		2437	13.33	≤30	PASS
		2462	13.53	≤30	PASS
11G	Ant1	2412	16.76	≤30	PASS
		2437	11.98	≤30	PASS
		2462	16.79	≤30	PASS
11N20SISO	Ant1	2412	16.55	≤30	PASS
		2437	11.34	≤30	PASS
		2462	16.58	≤30	PASS
11N40SISO	Ant1	2422	17.19	≤30	PASS
		2437	12.22	≤30	PASS
		2452	12.00	≤30	PASS

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

Appendix D: Maximum power spectral density

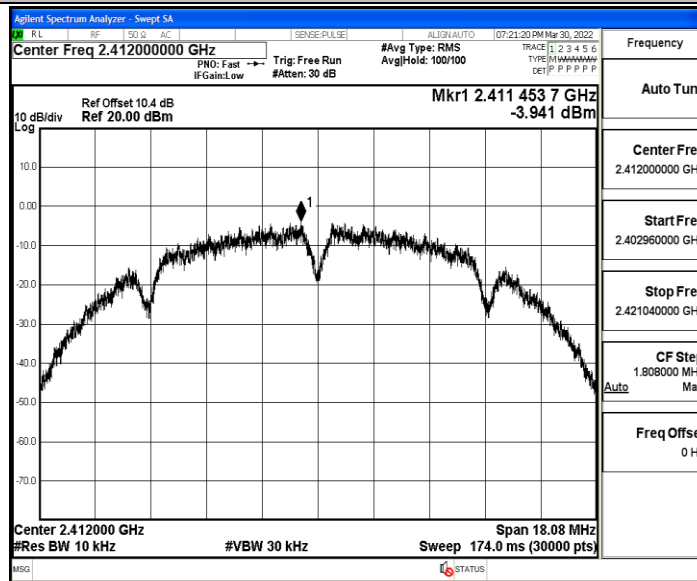
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-3.94	≤8	PASS
		2437	-7.77	≤8	PASS
		2462	-7.46	≤8	PASS
11G	Ant1	2412	-9.67	≤8	PASS
		2437	-14.6	≤8	PASS
		2462	-9.45	≤8	PASS
11N20SISO	Ant1	2412	-10.08	≤8	PASS
		2437	-14.62	≤8	PASS
		2462	-10.08	≤8	PASS
11N40SISO	Ant1	2422	-11.57	≤8	PASS
		2437	-16.84	≤8	PASS
		2452	-16.95	≤8	PASS

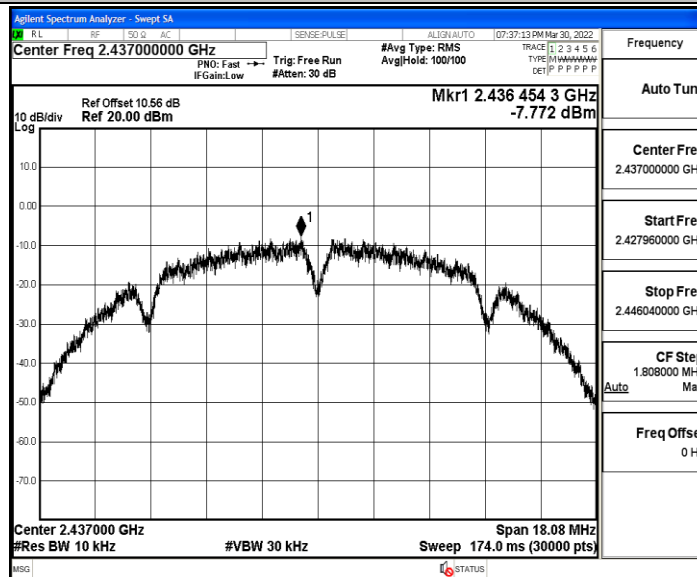
Note: The Duty Cycle Factor is compensated in the test result.

Test Graphs

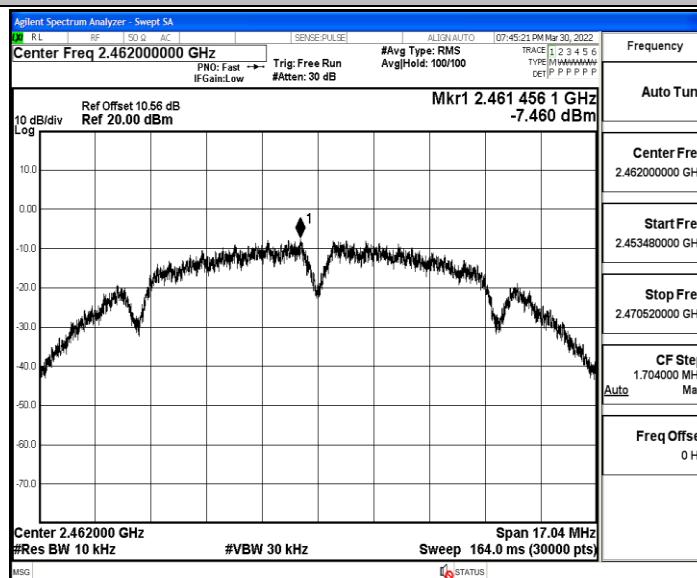
11B_Ant1_2412



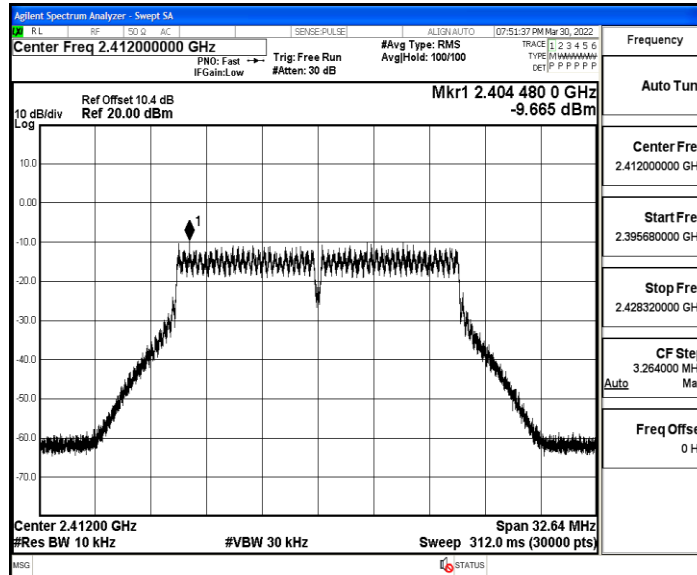
11B_Ant1_2437



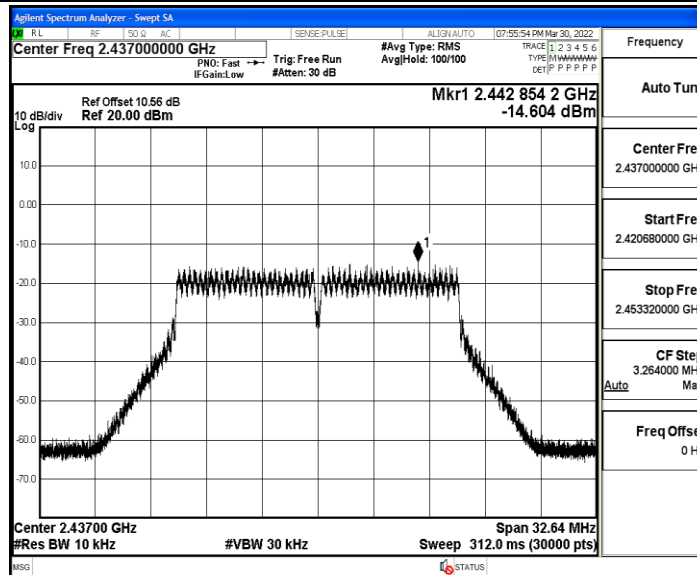
11B_Ant1_2462



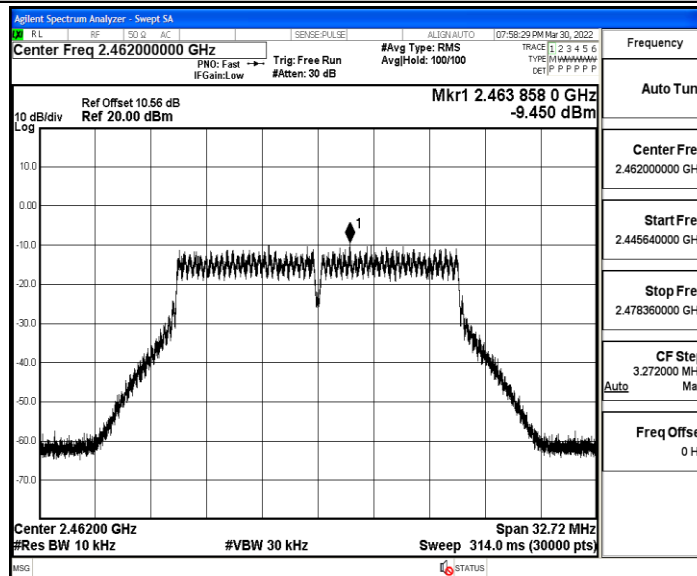
11G_Ant1_2412



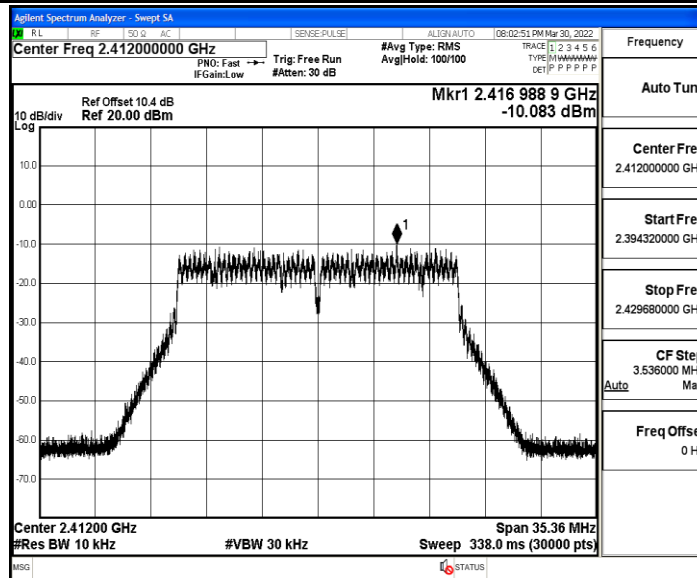
11G_Ant1_2437



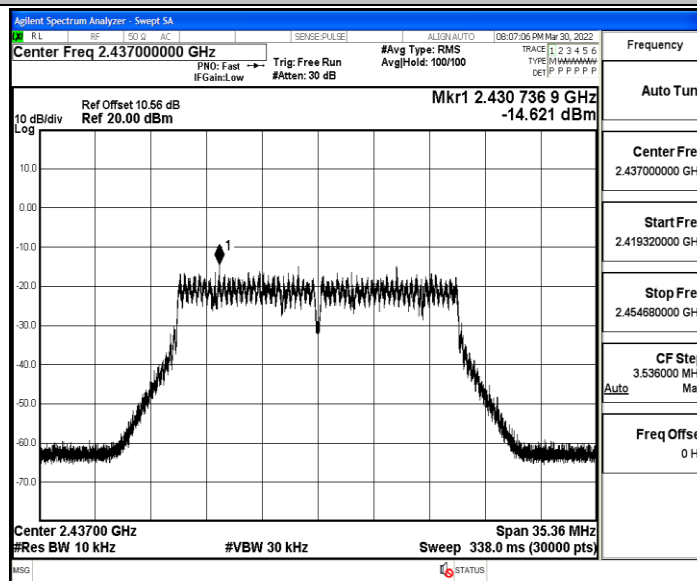
11G_Ant1_2462



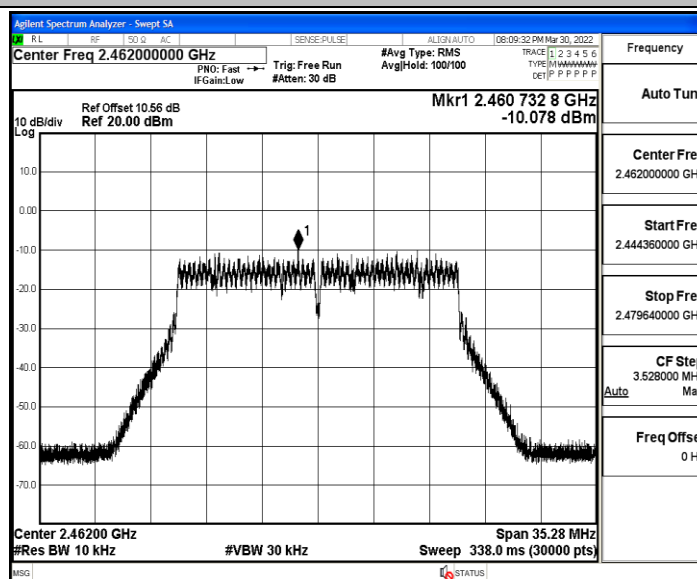
11N20SISO_Ant1_2412



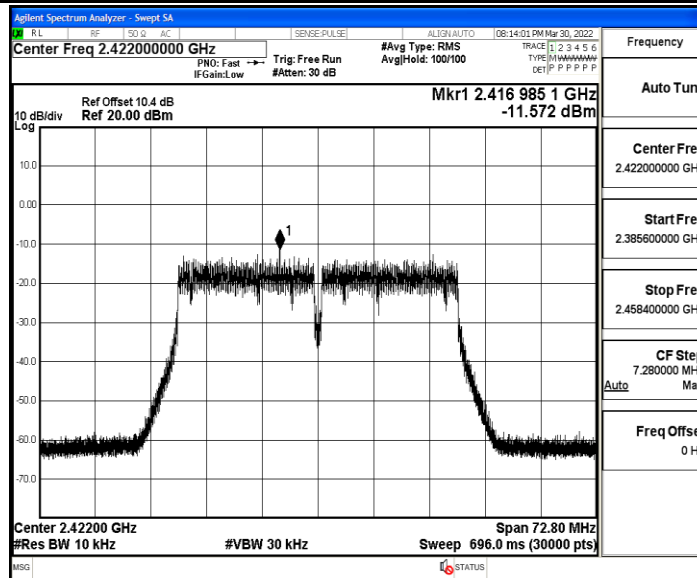
11N20SISO_Ant1_2437



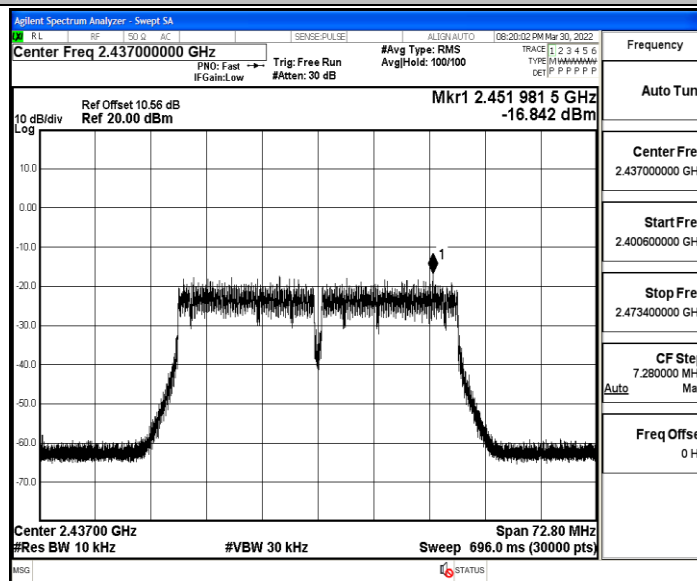
11N20SISO_Ant1_2462



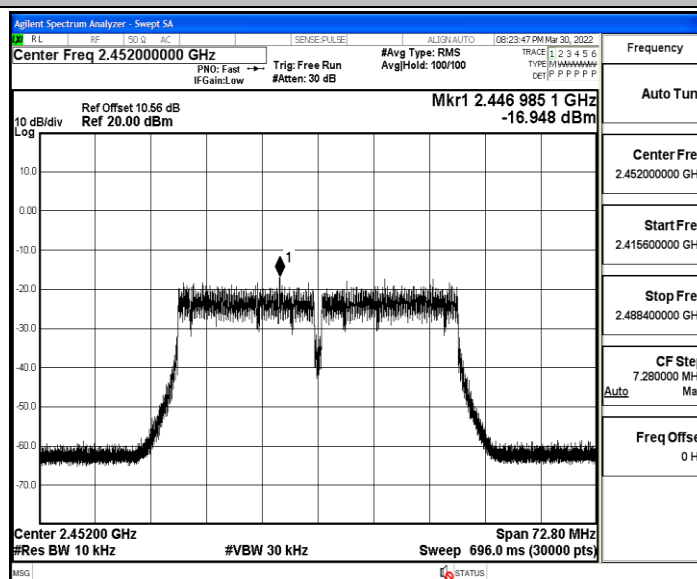
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



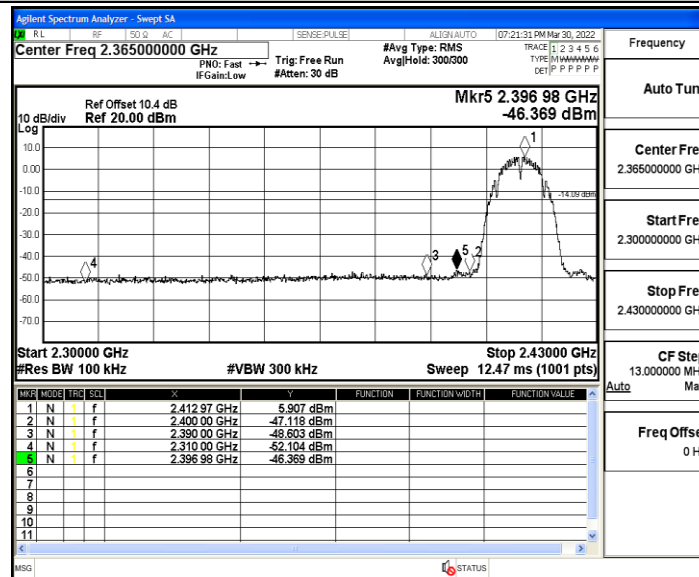
Appendix E: Band edge measurements

Test Result

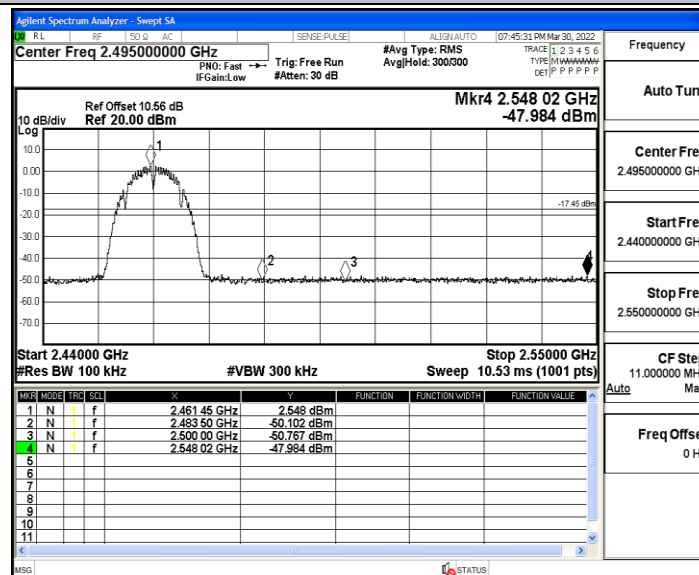
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.91	-46.37	≤-14.09	PASS
		High	2462	2.55	-47.98	≤-17.45	PASS
11G	Ant1	Low	2412	-1.57	-41.24	≤-21.57	PASS
		High	2462	-1.77	-47.48	≤-21.77	PASS
11N20SISO	Ant1	Low	2412	-1.82	-41.36	≤-21.82	PASS
		High	2462	-1.83	-47.2	≤-21.83	PASS
11N40SISO	Ant1	Low	2422	-3.92	-44.58	≤-23.92	PASS
		High	2452	-9.07	-47.99	≤-29.07	PASS

Test Graphs

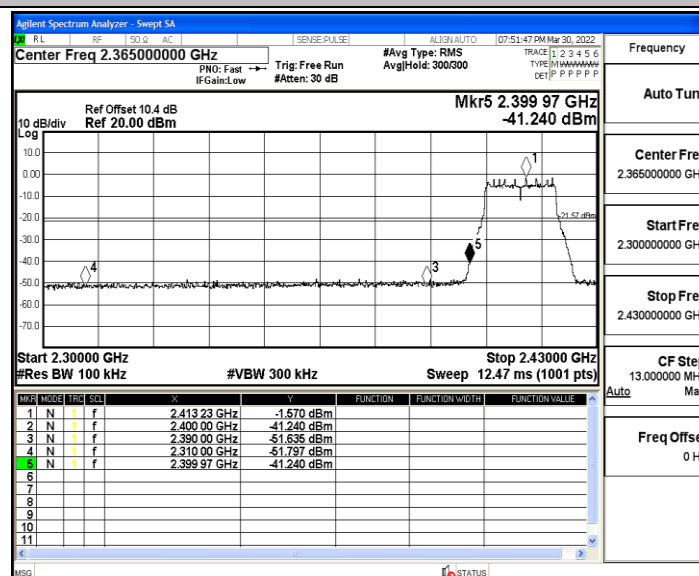
11B_Ant1_Low_2412



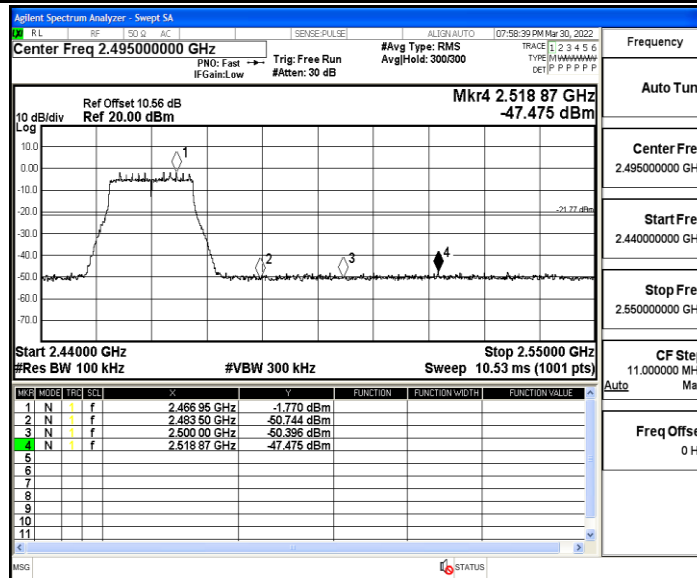
11B_Ant1_High_2462



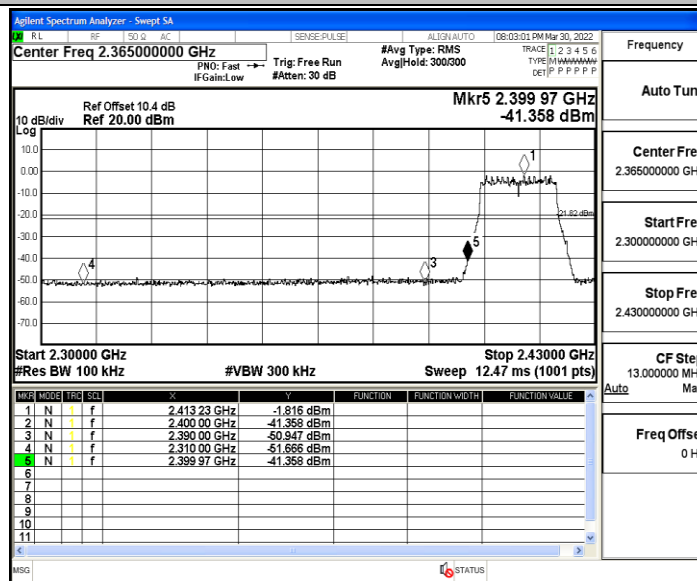
11G_Ant1_Low_2412



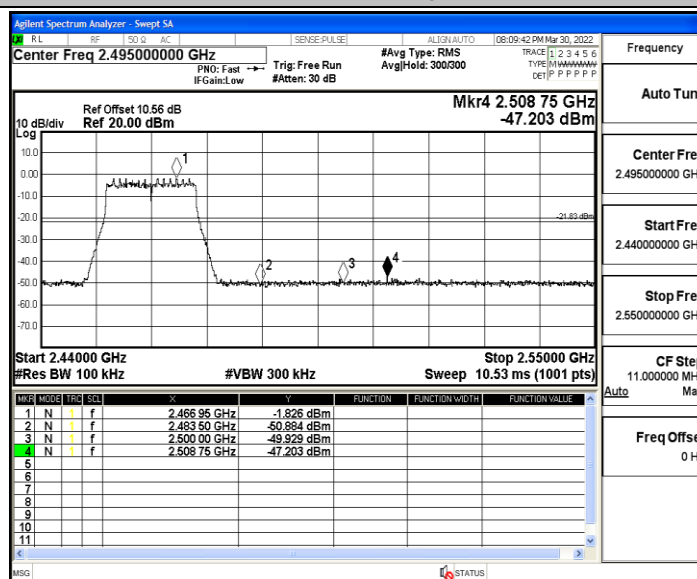
11G_Ant1_High_2462



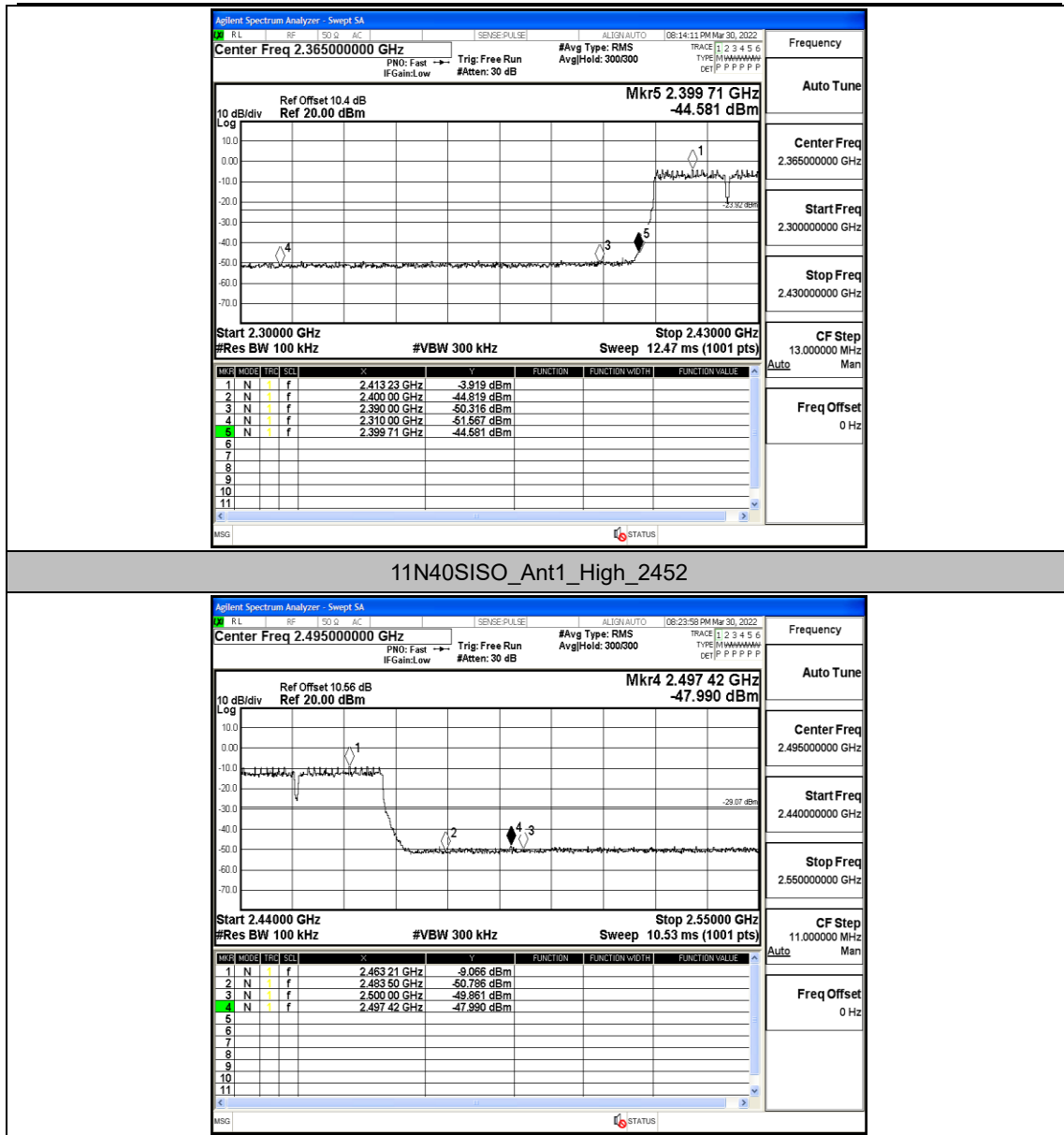
11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

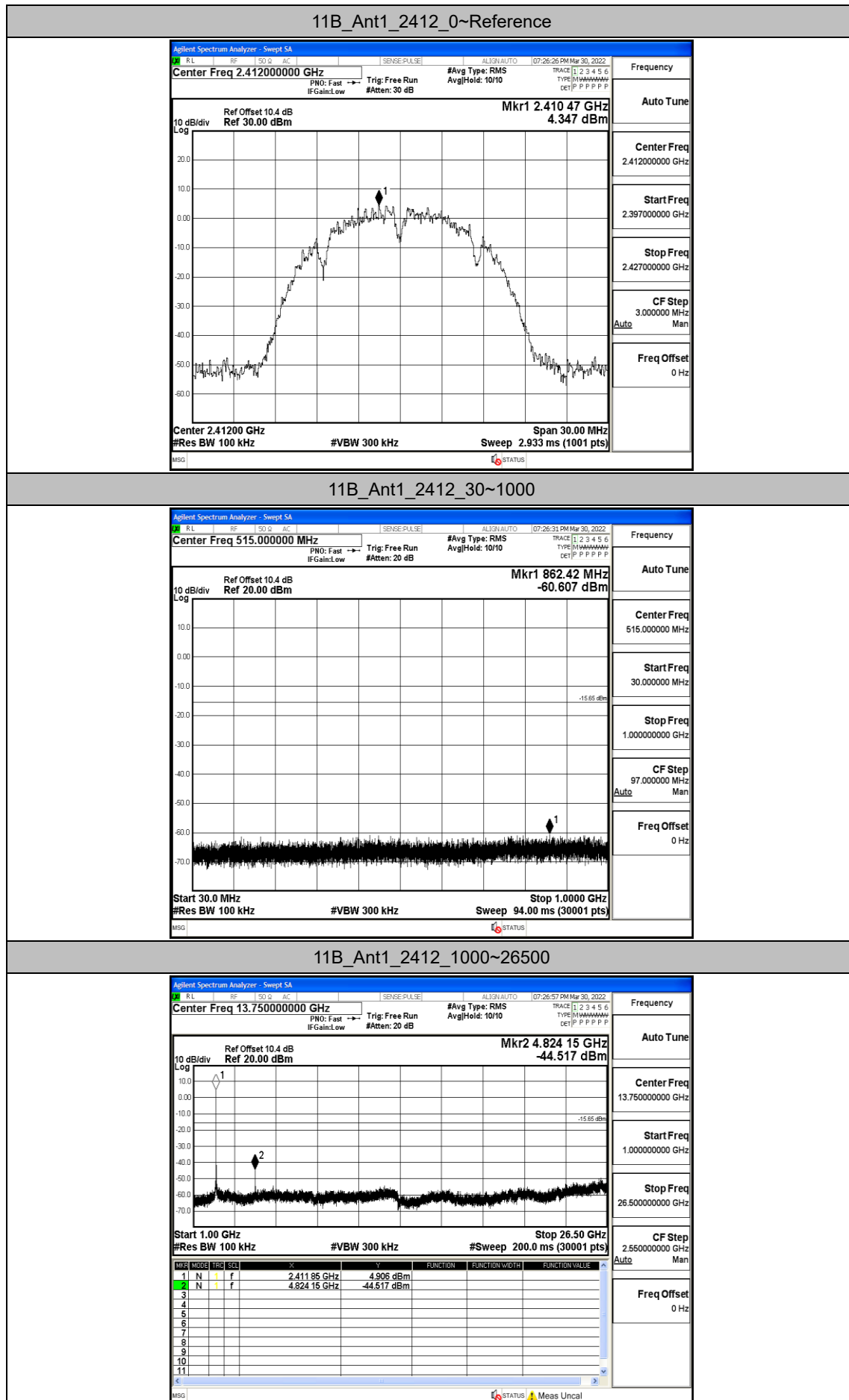


Appendix F: Conducted Spurious Emission

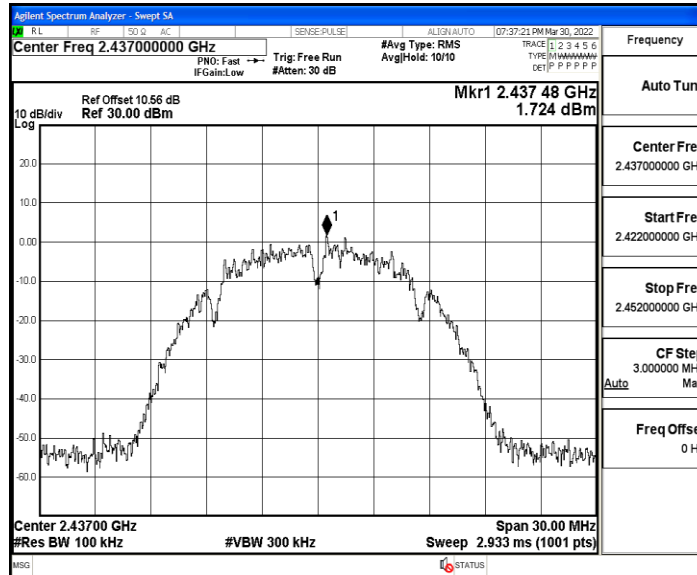
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.35	4.35	---	PASS
			30~1000	4.35	-60.61	≤-15.65	PASS
			1000~26500	4.35	-44.52	≤-15.65	PASS
		2437	Reference	1.72	1.72	---	PASS
			30~1000	1.72	-59.81	≤-18.28	PASS
			1000~26500	1.72	-47.47	≤-18.28	PASS
		2462	Reference	2.34	2.34	---	PASS
			30~1000	2.34	-59.29	≤-17.66	PASS
			1000~26500	2.34	-49.78	≤-17.66	PASS
11G	Ant1	2412	Reference	-4.10	-4.10	---	PASS
			30~1000	-4.10	-59.41	≤-24.1	PASS
			1000~26500	-4.10	-49.49	≤-24.1	PASS
		2437	Reference	-6.96	-6.96	---	PASS
			30~1000	-6.96	-60.35	≤-26.96	PASS
			1000~26500	-6.96	-50.06	≤-26.96	PASS
		2462	Reference	-5.29	-5.29	---	PASS
			30~1000	-5.29	-60.02	≤-25.29	PASS
			1000~26500	-5.29	-49.6	≤-25.29	PASS
11N20SISO	Ant1	2412	Reference	-2.03	-2.03	---	PASS
			30~1000	-2.03	-59.24	≤-22.03	PASS
			1000~26500	-2.03	-49.82	≤-22.03	PASS
		2437	Reference	-8.34	-8.34	---	PASS
			30~1000	-8.34	-59.75	≤-28.34	PASS
			1000~26500	-8.34	-49.92	≤-28.34	PASS
		2462	Reference	-2.03	-2.03	---	PASS
			30~1000	-2.03	-58.66	≤-22.03	PASS
			1000~26500	-2.03	-49.56	≤-22.03	PASS
11N40SISO	Ant1	2422	Reference	-4.08	-4.08	---	PASS
			30~1000	-4.08	-59.91	≤-24.08	PASS
			1000~26500	-4.08	-49.94	≤-24.08	PASS
		2437	Reference	-9.40	-9.40	---	PASS
			30~1000	-9.40	-60.18	≤-29.4	PASS
			1000~26500	-9.40	-49.59	≤-29.4	PASS
		2452	Reference	-9.77	-9.77	---	PASS
			30~1000	-9.77	-60.14	≤-29.77	PASS
			1000~26500	-9.77	-50.12	≤-29.77	PASS

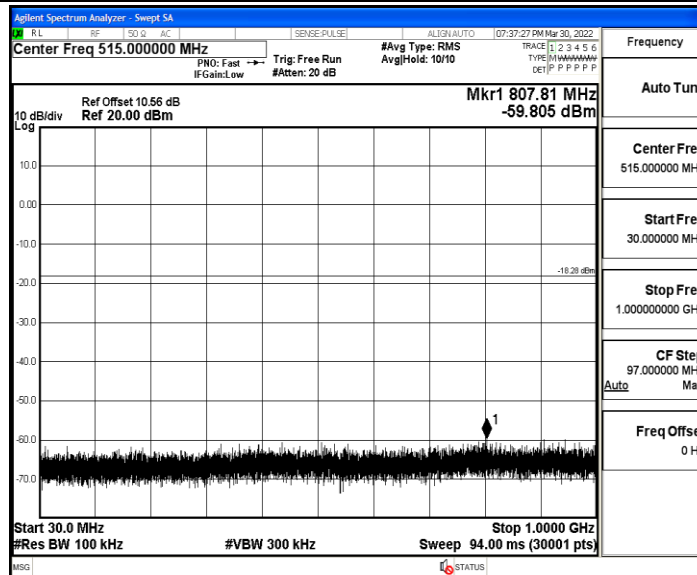
Test Graphs



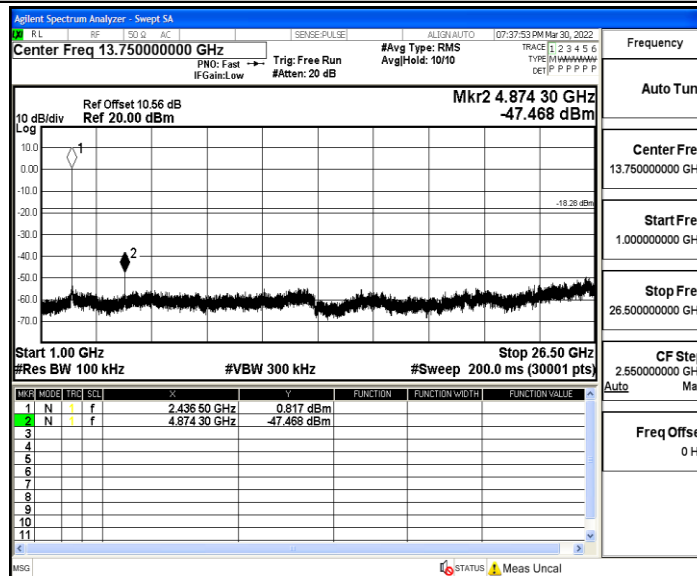
11B_Ant1_2437_0~Reference



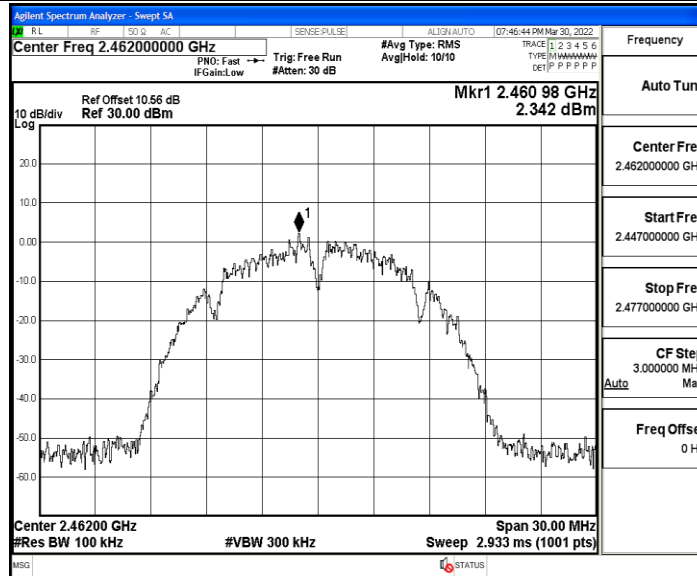
11B_Ant1_2437_30~1000



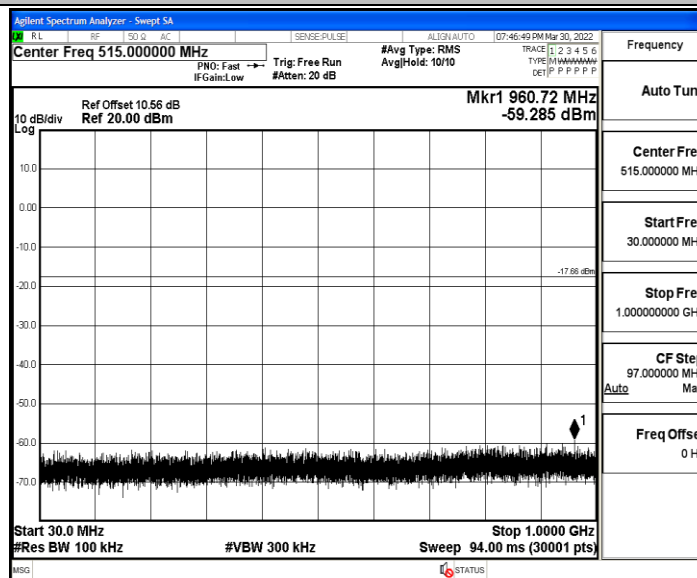
11B_Ant1_2437_1000~26500



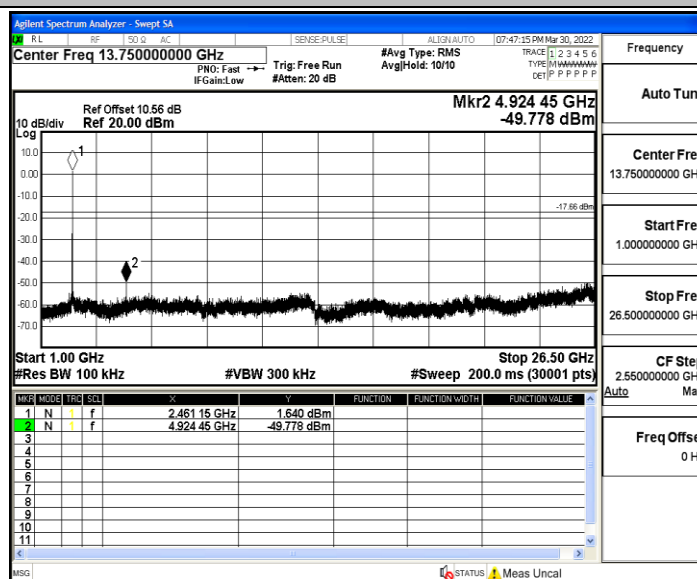
11B_Ant1_2462_0~Reference



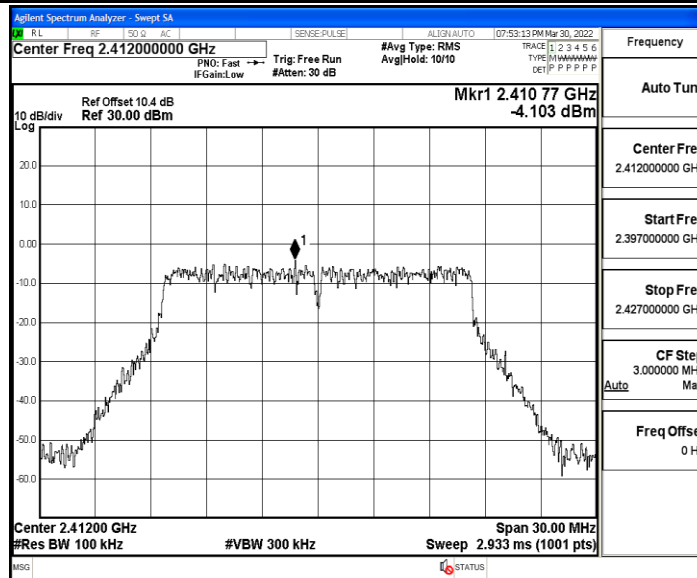
11B_Ant1_2462_30~1000



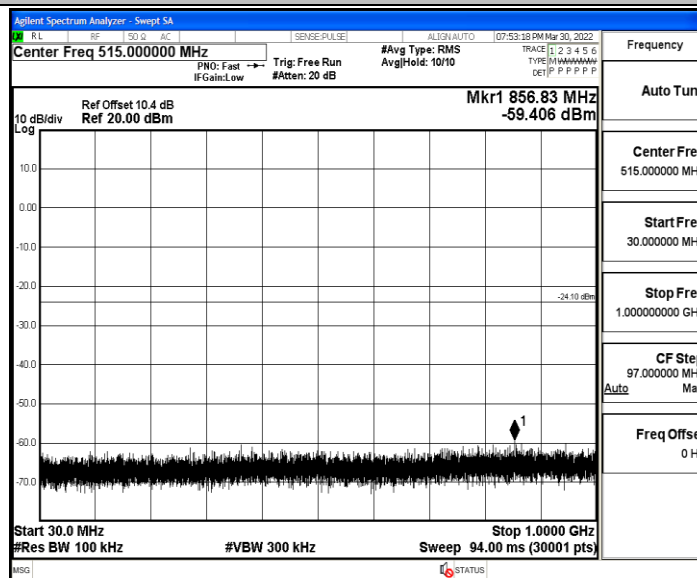
11B_Ant1_2462_1000~26500



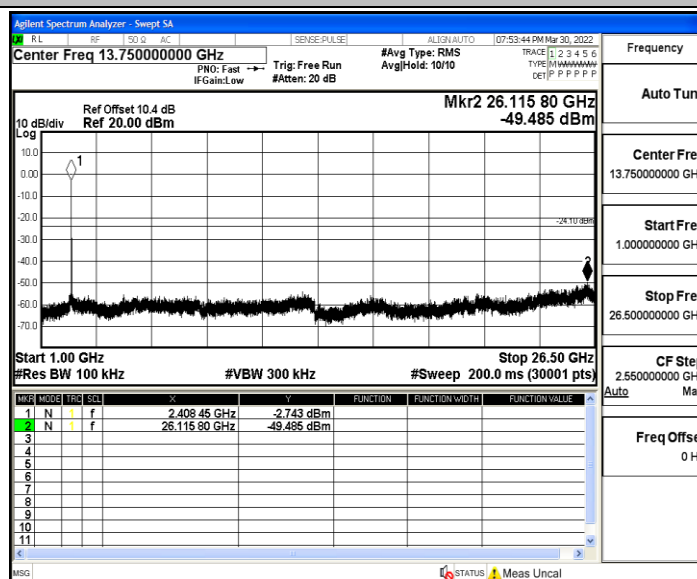
11G_Ant1_2412_0~Reference



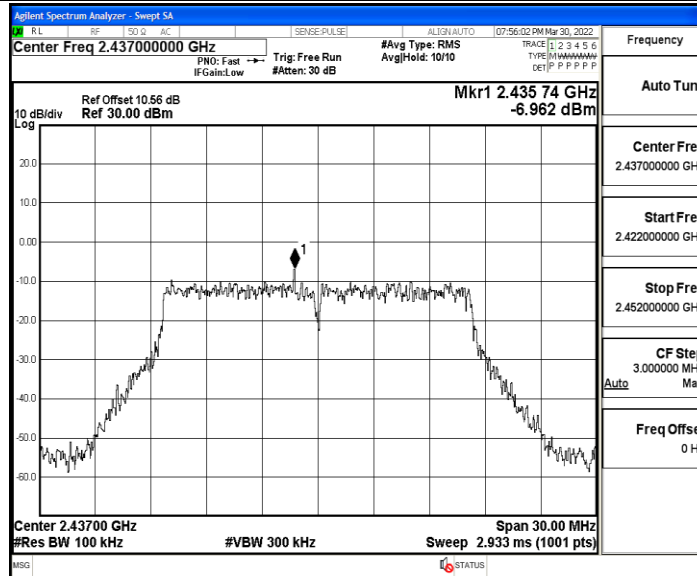
11G_Ant1_2412_30~1000



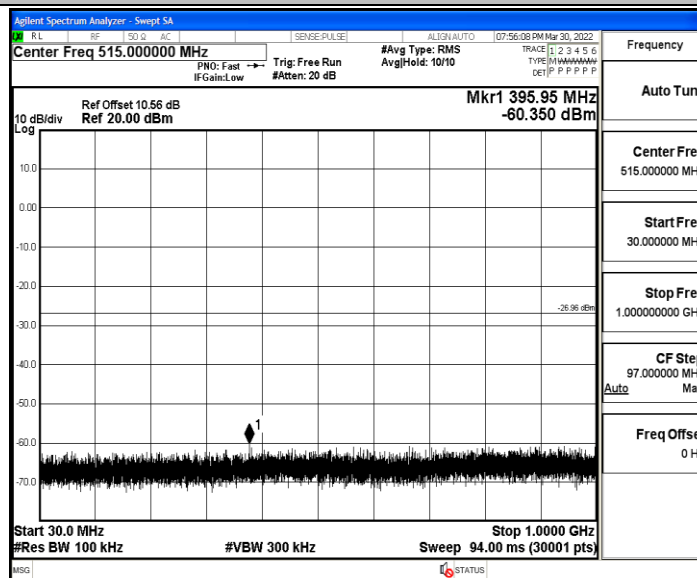
11G_Ant1_2412_1000~26500



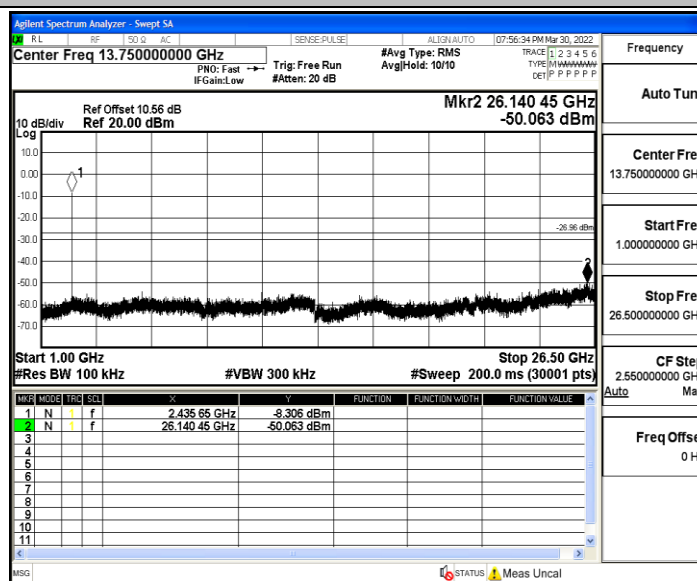
11G_Ant1_2437_0~Reference



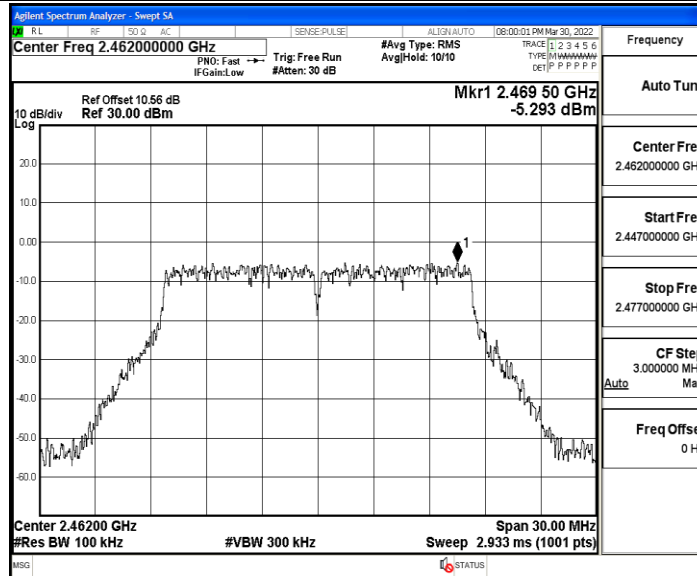
11G_Ant1_2437_30~1000



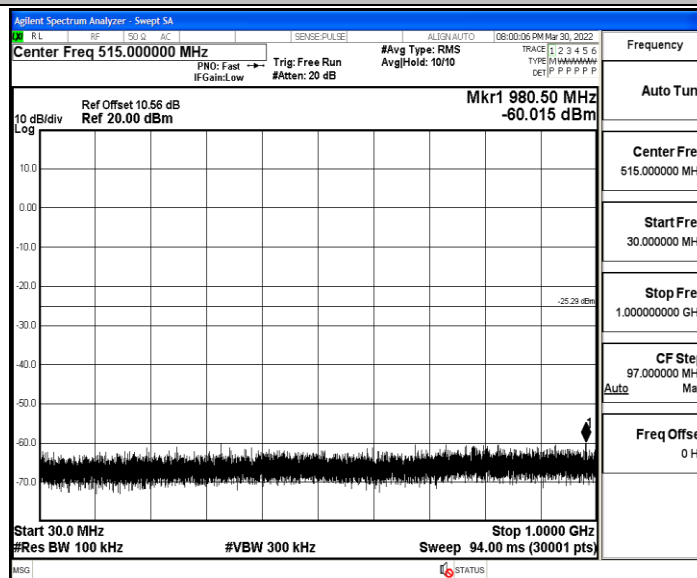
11G_Ant1_2437_1000~26500



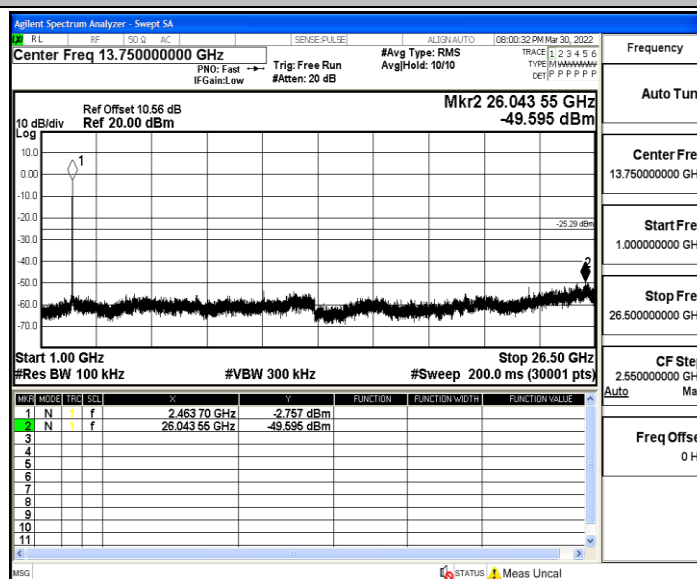
11G_Ant1_2462_0~Reference



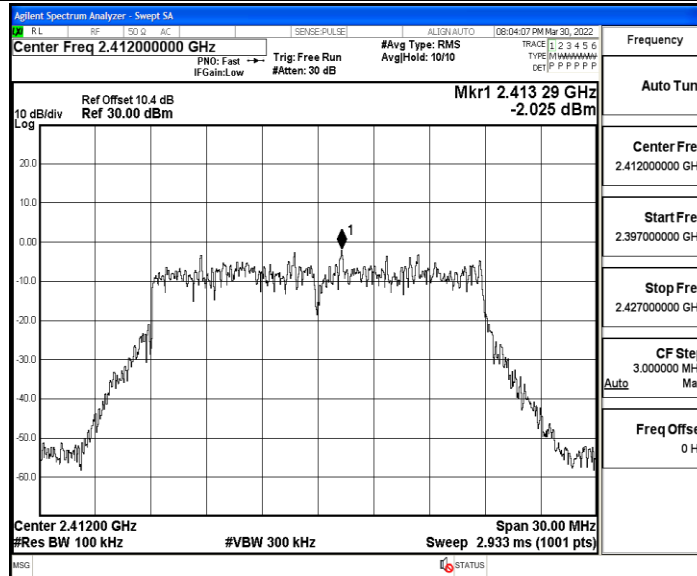
11G_Ant1_2462_30~1000



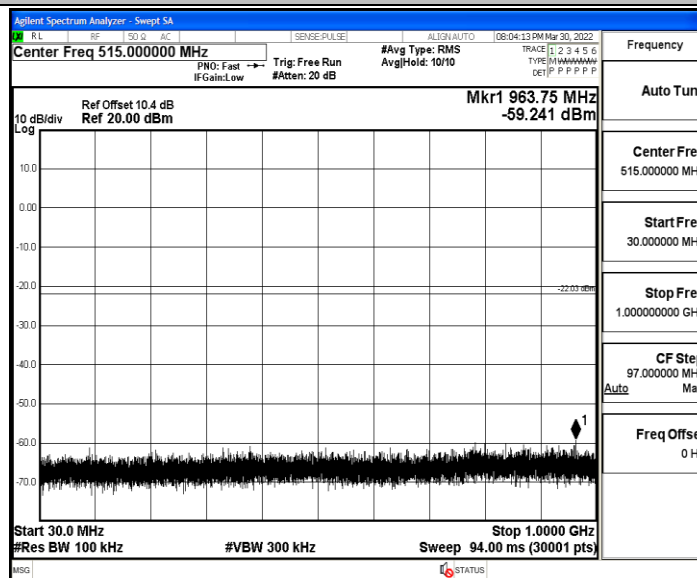
11G_Ant1_2462_1000~26500



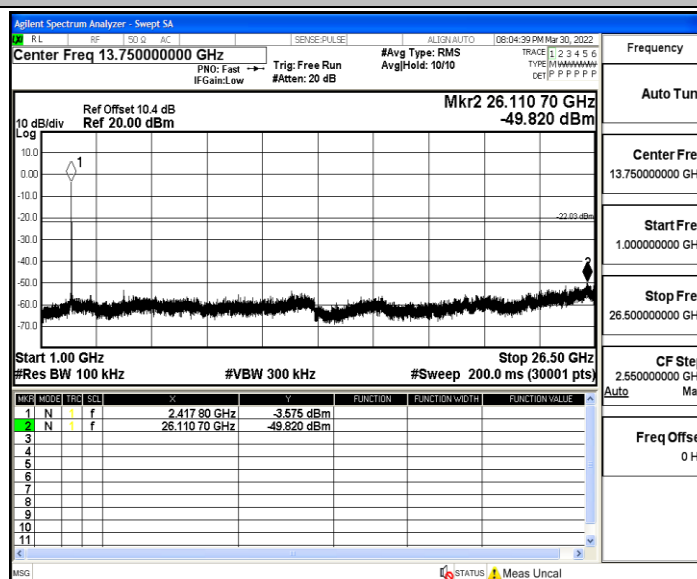
11N20SISO_Ant1_2412_0~Reference



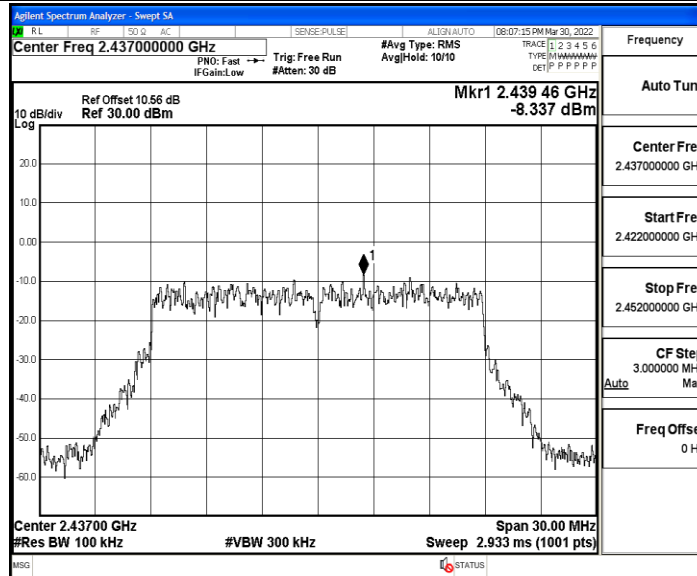
11N20SISO_Ant1_2412_30~1000



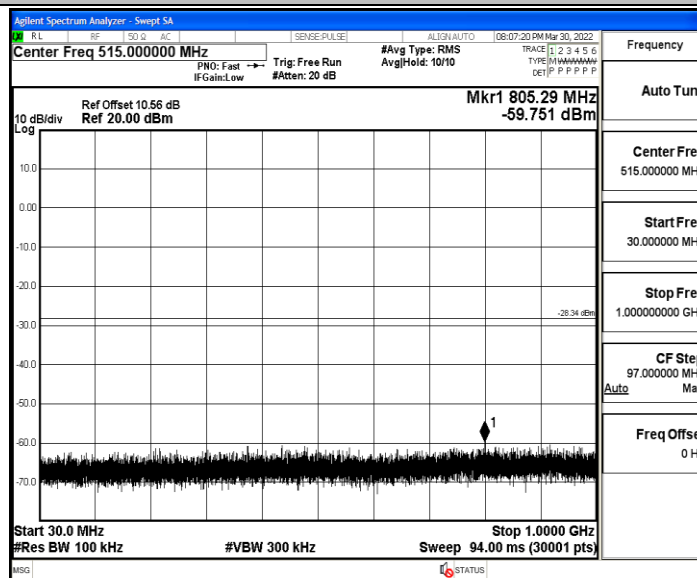
11N20SISO_Ant1_2412_1000~26500



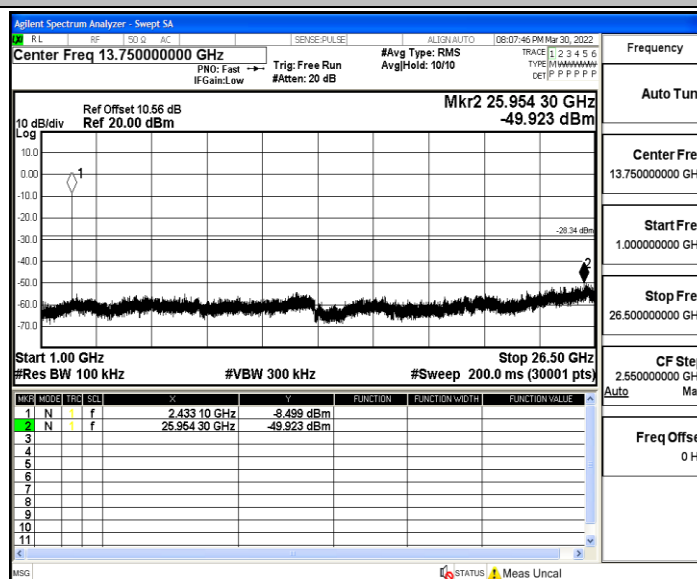
11N20SISO_Ant1_2437_0~Reference



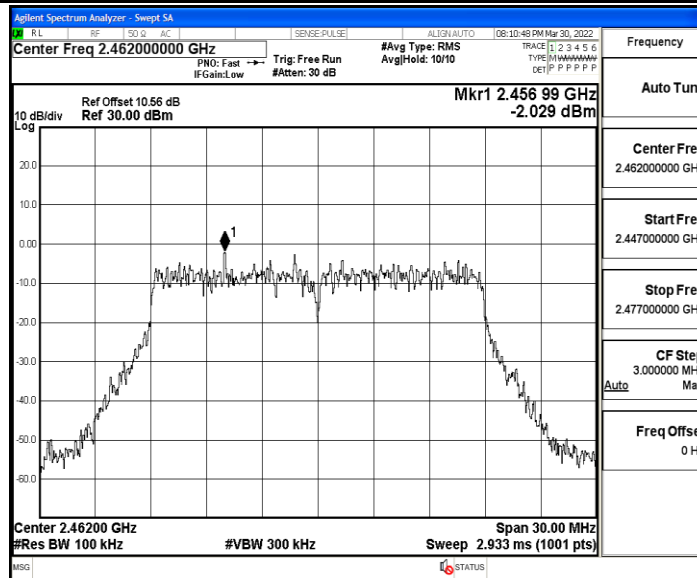
11N20SISO_Ant1_2437_30~1000



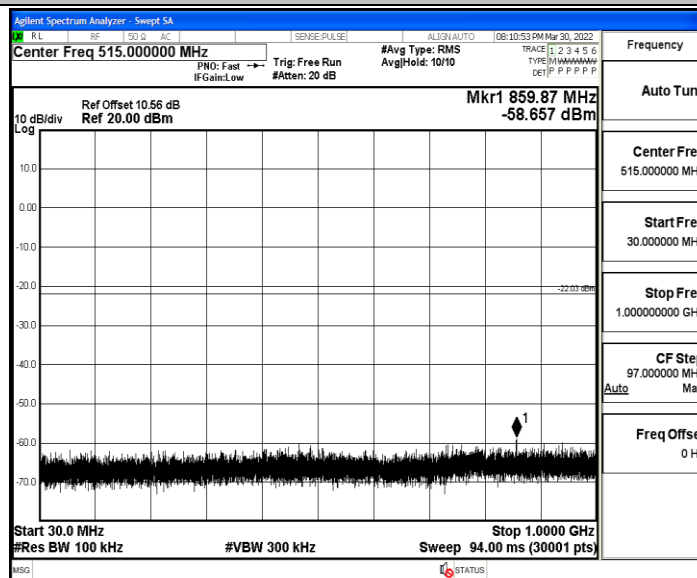
11N20SISO_Ant1_2437_1000~26500



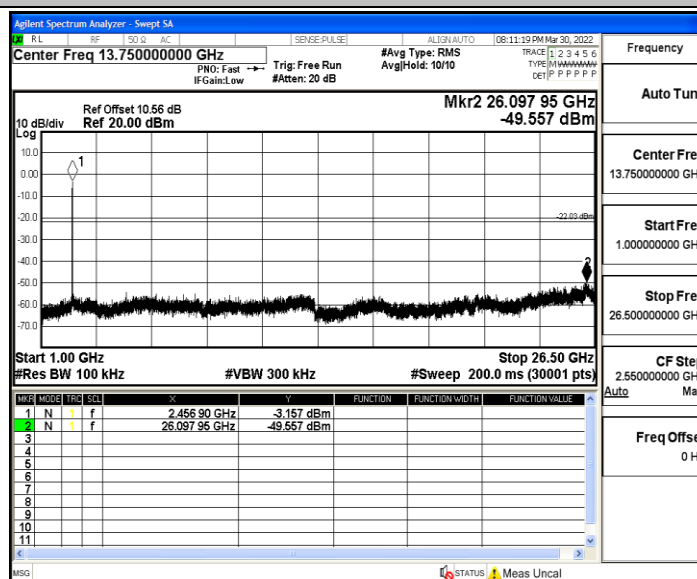
11N20SISO_Ant1_2462_0~Reference



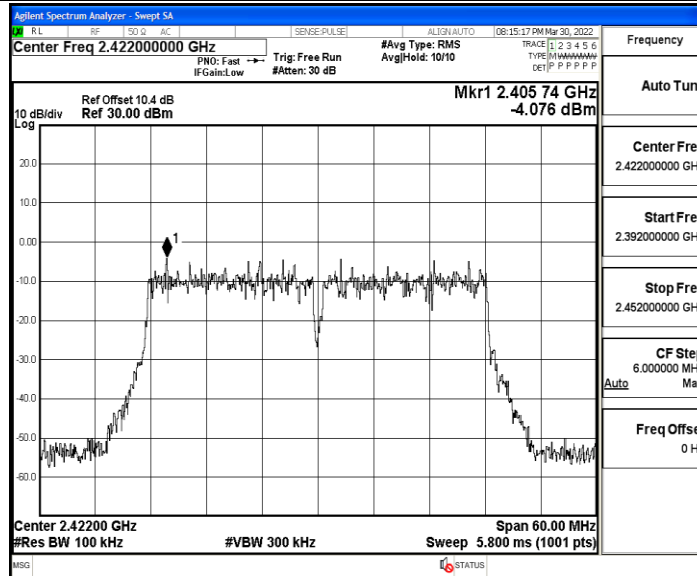
11N20SISO_Ant1_2462_30~1000



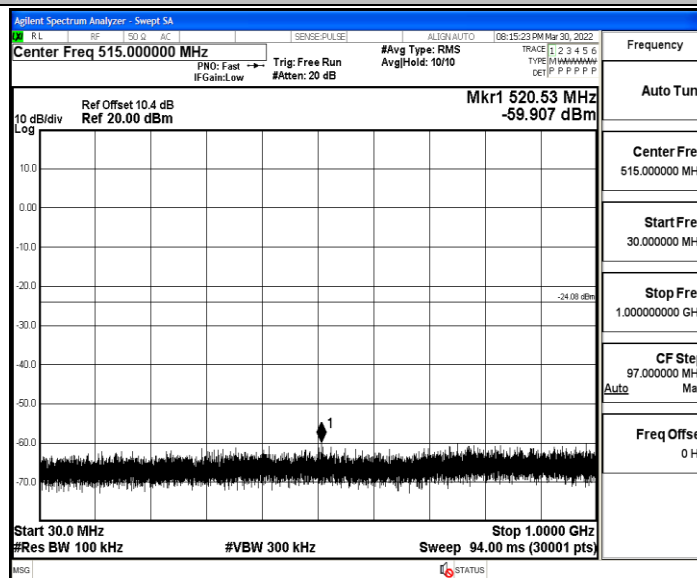
11N20SISO_Ant1_2462_1000~26500



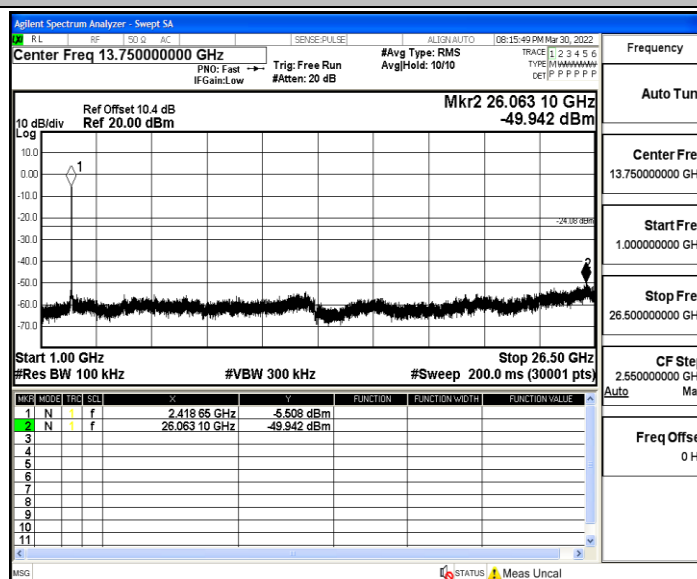
11N40SISO_Ant1_2422_0~Reference



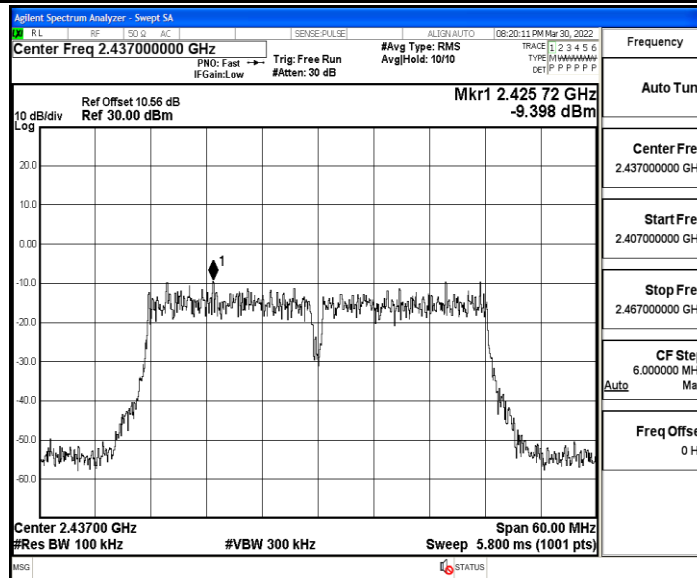
11N40SISO_Ant1_2422_30~1000



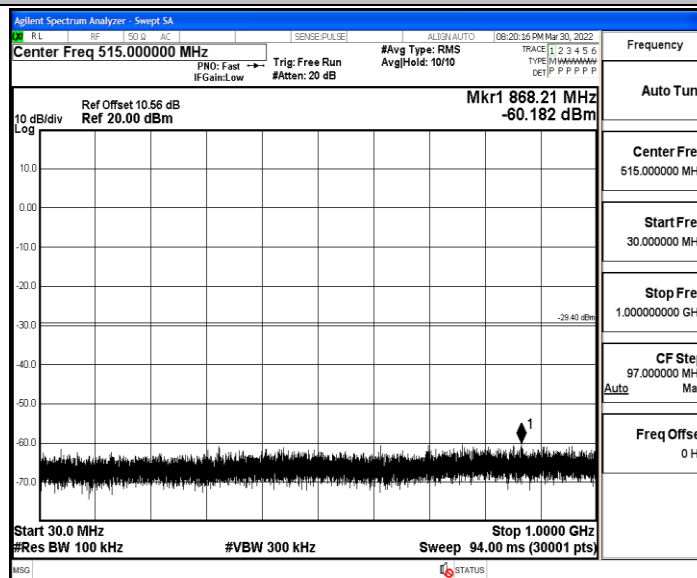
11N40SISO_Ant1_2422_1000~26500



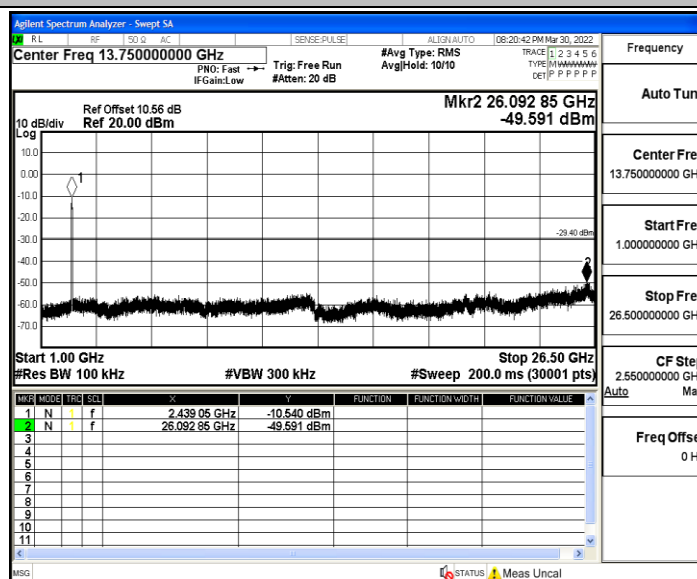
11N40SISO_Ant1_2437_0~Reference



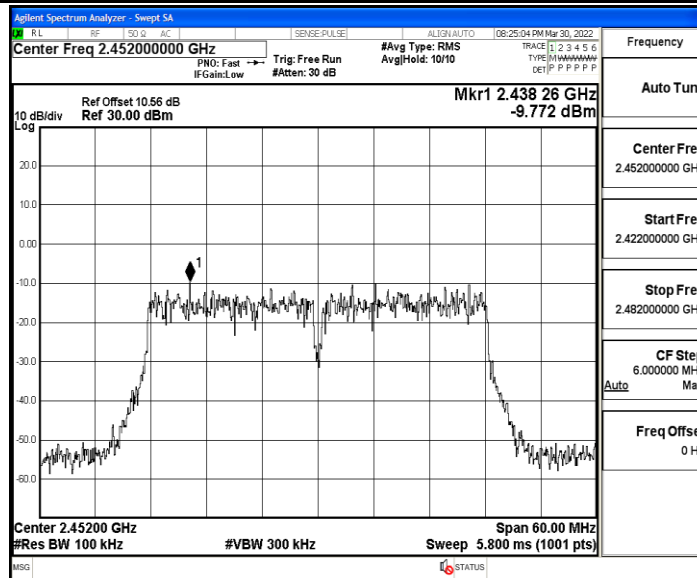
11N40SISO_Ant1_2437_30~1000



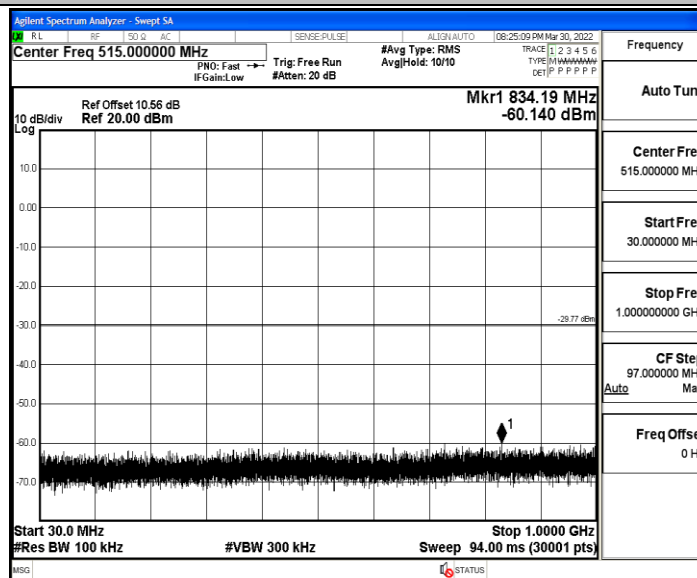
11N40SISO_Ant1_2437_1000~26500



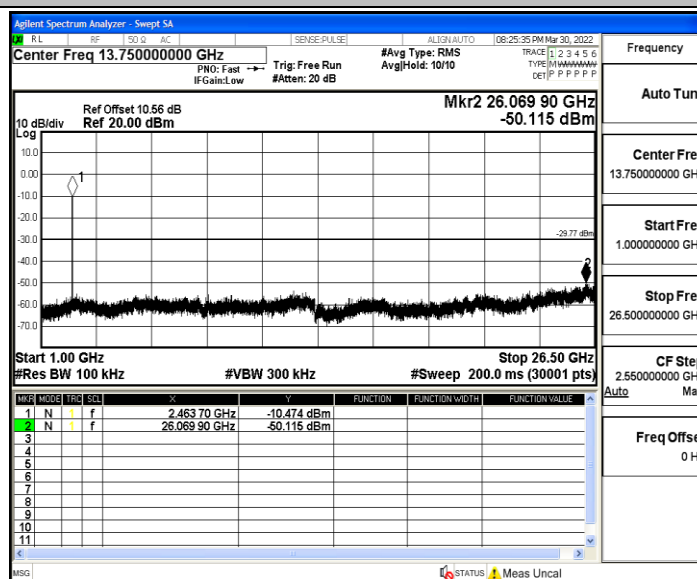
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



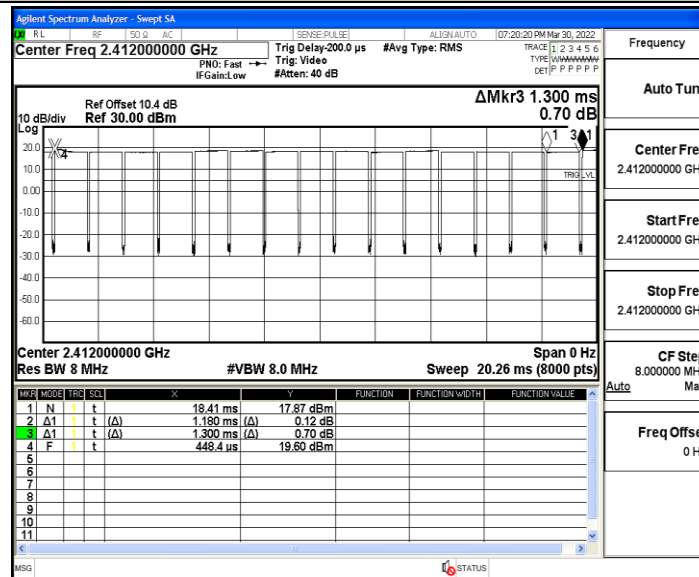
Appendix G: Duty Cycle

Test Result

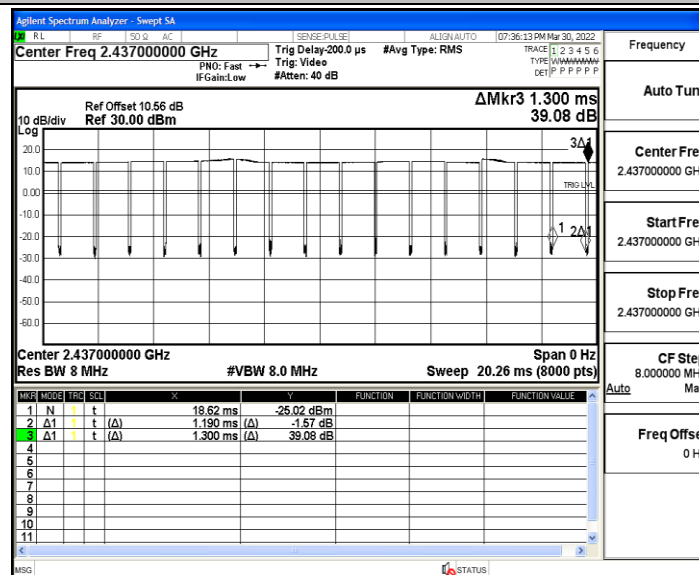
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B [kHz]
11B	Ant1	2412	1.18	1.30	90.77	0.85
		2437	1.19	1.30	91.54	0.84
		2462	1.18	1.31	90.08	0.85
11G	Ant1	2412	2.05	2.16	94.91	0.49
		2437	2.06	2.17	94.93	0.49
		2462	2.05	2.16	94.91	0.49
11N20SISO	Ant1	2412	0.23	0.36	63.89	4.35
		2437	0.23	0.38	60.53	4.35
		2462	0.22	0.33	66.67	4.55
11N40SISO	Ant1	2422	0.12	0.24	50.00	8.33
		2437	0.12	0.26	46.15	8.33
		2452	0.12	0.33	36.36	8.33

Test Graphs

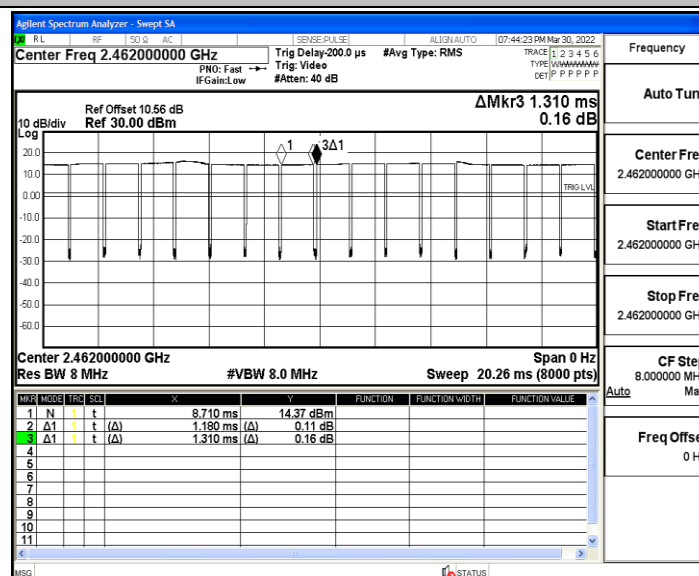
11B_Ant1_2412



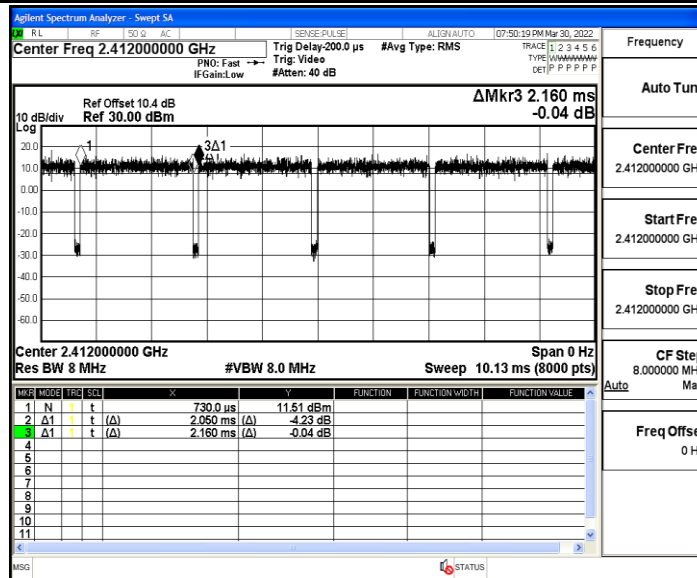
11B_Ant1_2437



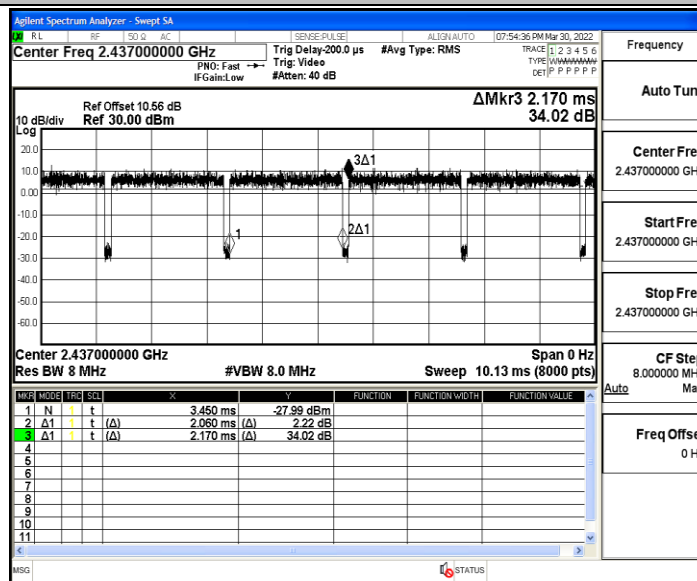
11B_Ant1_2462



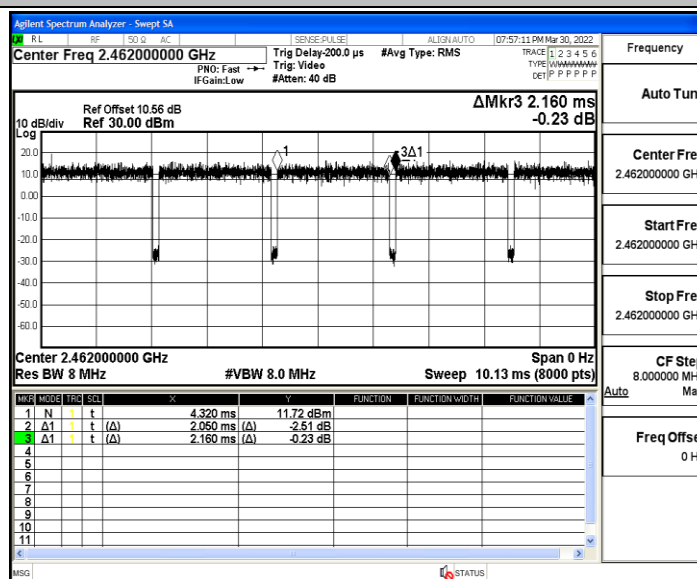
11G_Ant1_2412



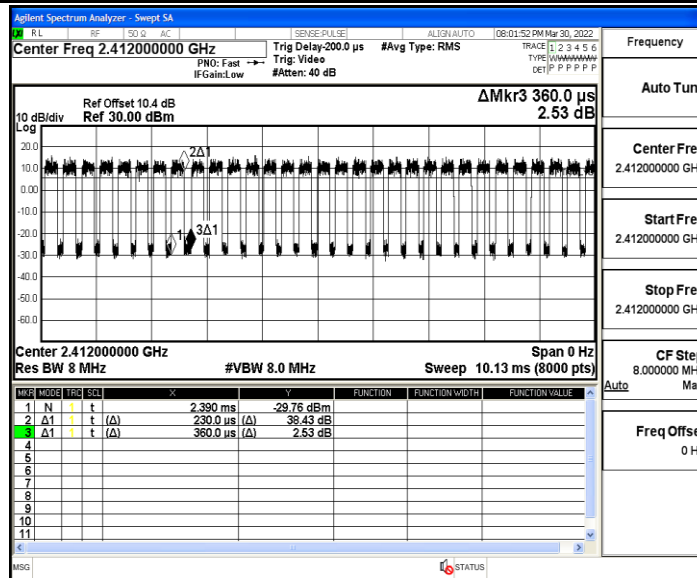
11G_Ant1_2437



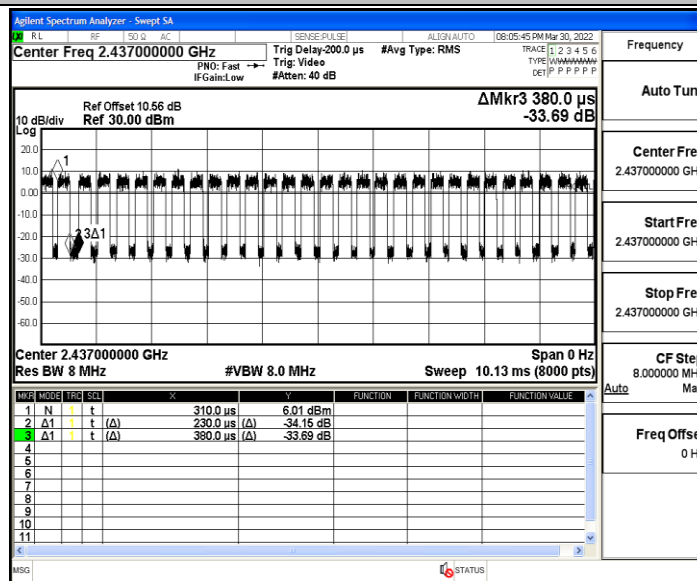
11G_Ant1_2462



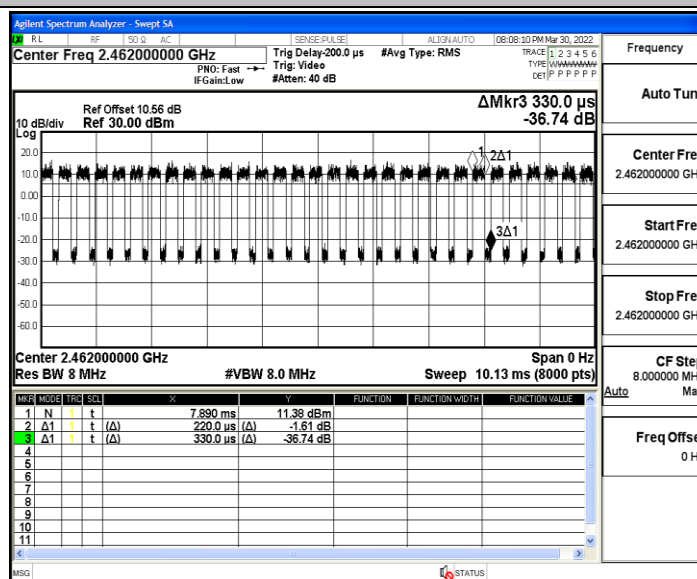
11N20SISO_Ant1_2412



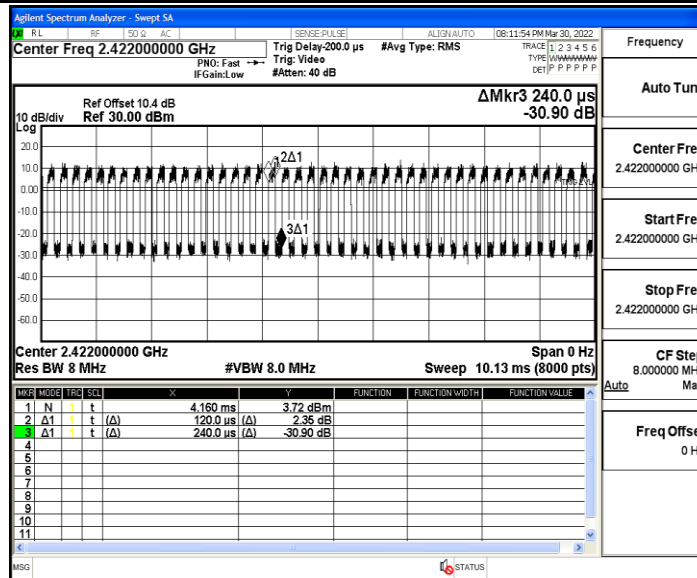
11N20SISO_Ant1_2437



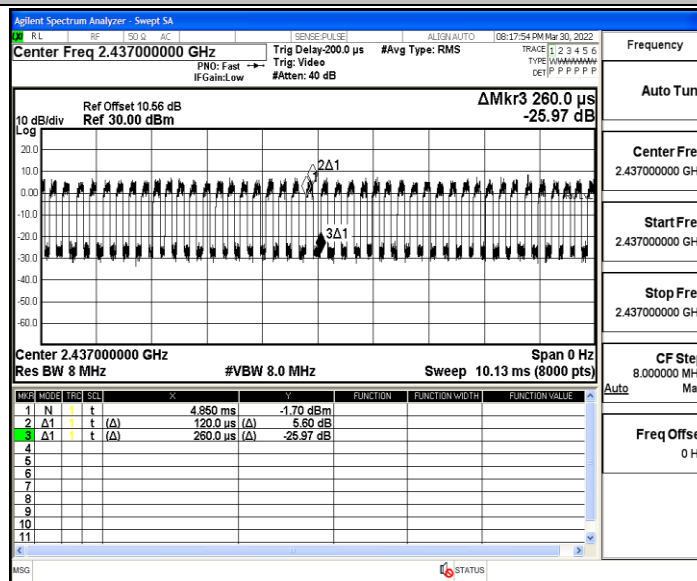
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

