



Appendix Test Data for WLAN(2. 4G) (Conducted Measurement)

Product Name: Wireless Camera

Trade Mark: /

Test Model:CMS42

FCC ID: 2AM6L-CMS42

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	10.160	2406.920	2417.080	0.5	PASS
11B	Ant1	2437	10.160	2431.920	2442.080	0.5	PASS
11B	Ant1	2462	10.160	2456.920	2467.080	0.5	PASS
11G	Ant1	2412	16.400	2403.800	2420.200	0.5	PASS
11G	Ant1	2437	16.440	2428.760	2445.200	0.5	PASS
11G	Ant1	2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.840	2403.040	2420.880	0.5	PASS
11N20SISO	Ant1	2437	17.840	2428.040	2445.880	0.5	PASS
11N20SISO	Ant1	2462	17.840	2453.040	2470.880	0.5	PASS
11N40SISO	Ant1	2422	36.480	2403.760	2440.240	0.5	PASS
11N40SISO	Ant1	2437	36.400	2418.760	2455.160	0.5	PASS
11N40SISO	Ant1	2452	36.480	2433.760	2470.240	0.5	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



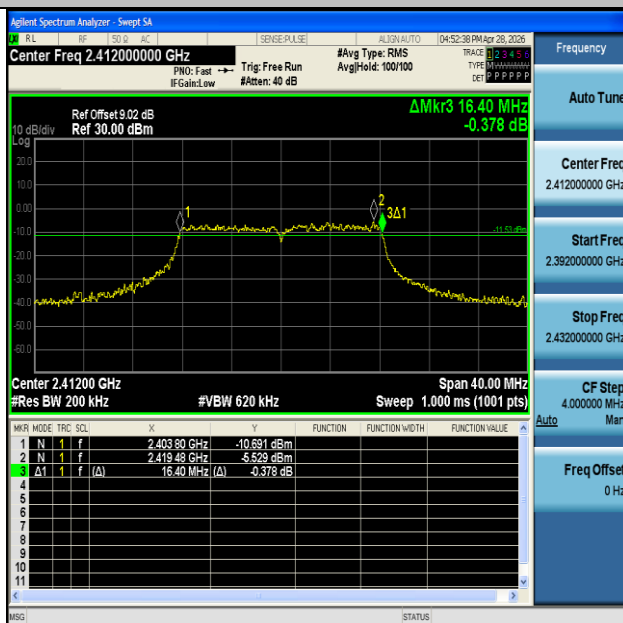


Test Graphs





11B-Ant1-2462-PASS



11G-Ant1-2412-PASS





11G-Ant1-2437-PASS



11G-Ant1-2462-PASS





11N20SISO-Ant1-2412-PASS

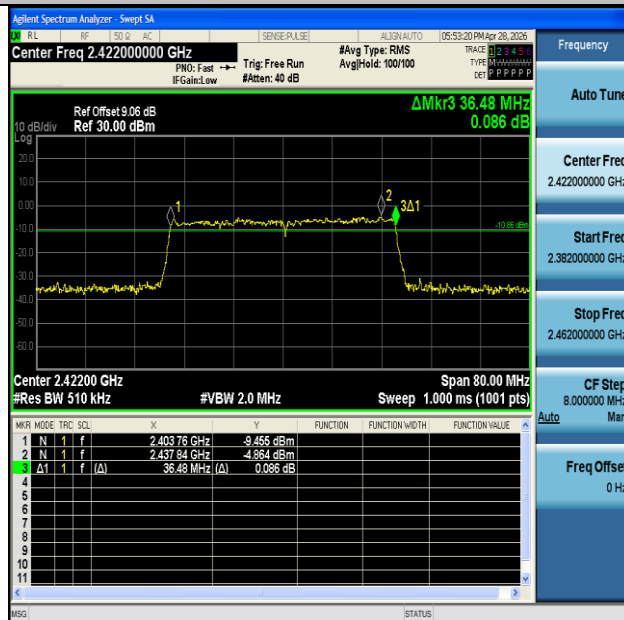


11N20SISO-Ant1-2437-PASS



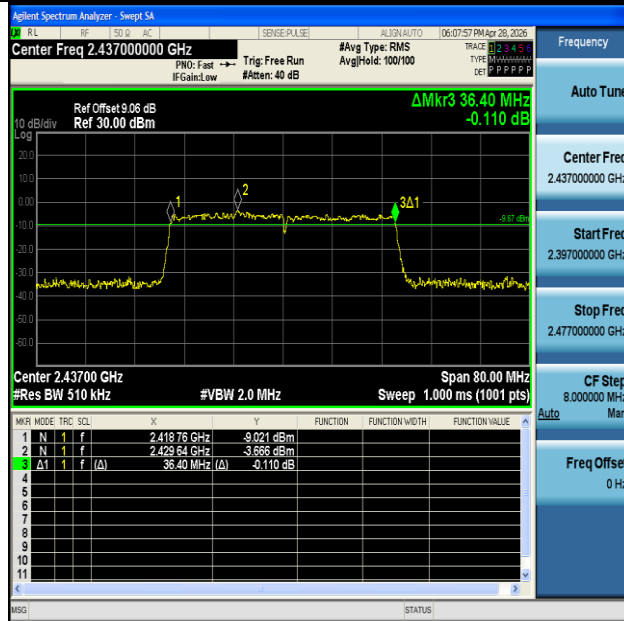


11N20SISO-Ant1-2462-PASS

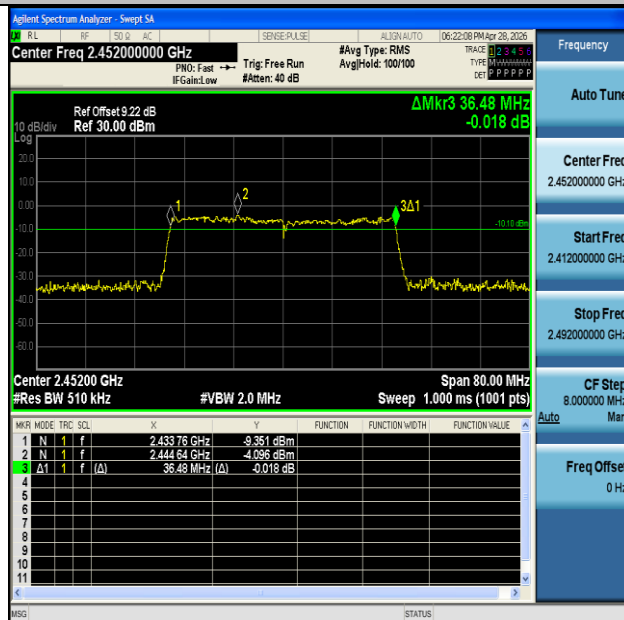


11N40SISO-Ant1-2422-PASS





11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS





Appendix B: Occupied Channel Bandwidth

Test Result

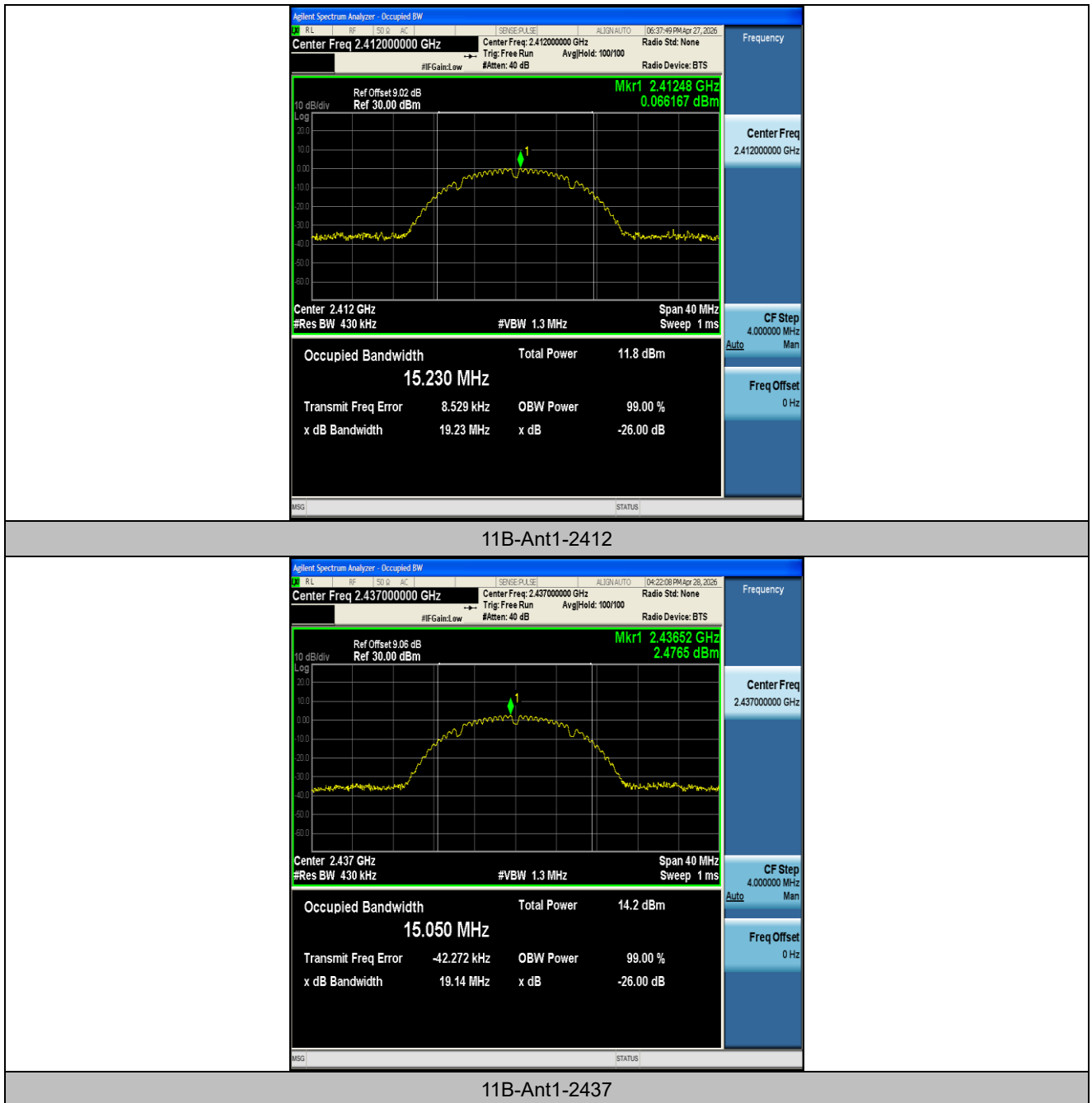
Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	15.230	2404.3935	2419.6235	---	---
11B	Ant1	2437	15.050	2429.4327	2444.4827	---	---
11B	Ant1	2462	15.246	2454.4029	2469.6489	---	---
11G	Ant1	2412	17.445	2403.1969	2420.6419	---	---
11G	Ant1	2437	17.376	2428.1413	2445.5173	---	---
11G	Ant1	2462	17.516	2453.1106	2470.6266	---	---
11N20SISO	Ant1	2412	18.287	2402.8175	2421.1045	---	---
11N20SISO	Ant1	2437	18.204	2427.7800	2445.9840	---	---
11N20SISO	Ant1	2462	18.297	2452.8027	2471.0997	---	---
11N40SISO	Ant1	2422	36.455	2403.7910	2440.2460	---	---
11N40SISO	Ant1	2437	36.445	2418.7483	2455.1933	---	---
11N40SISO	Ant1	2452	36.610	2433.6435	2470.2535	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



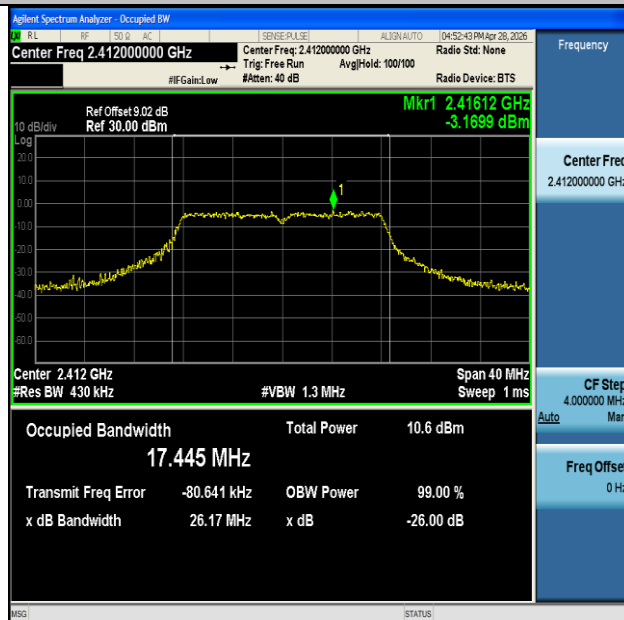


Test Graphs



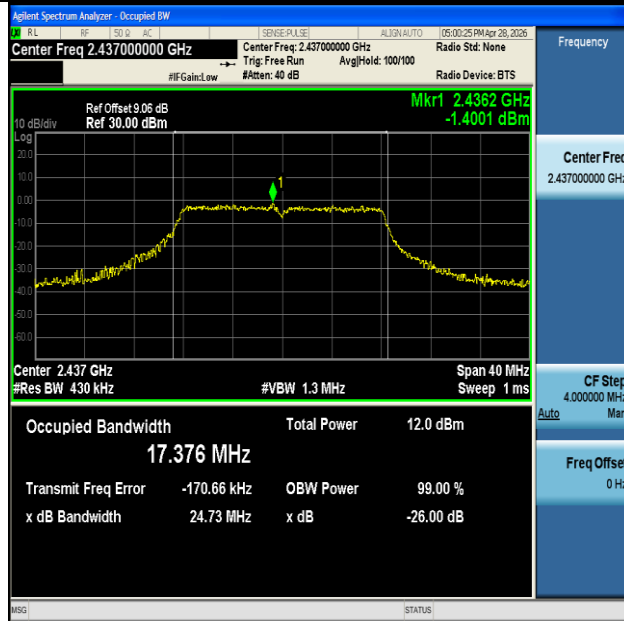


11B-Ant1-2462

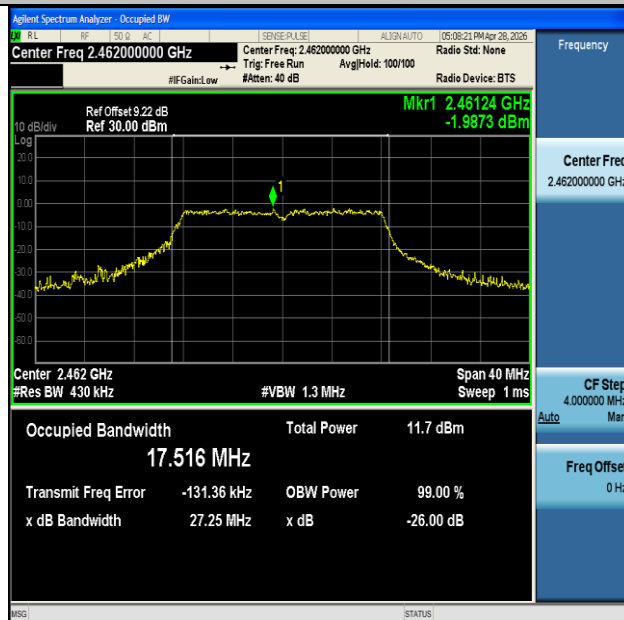


11G-Ant1-2412



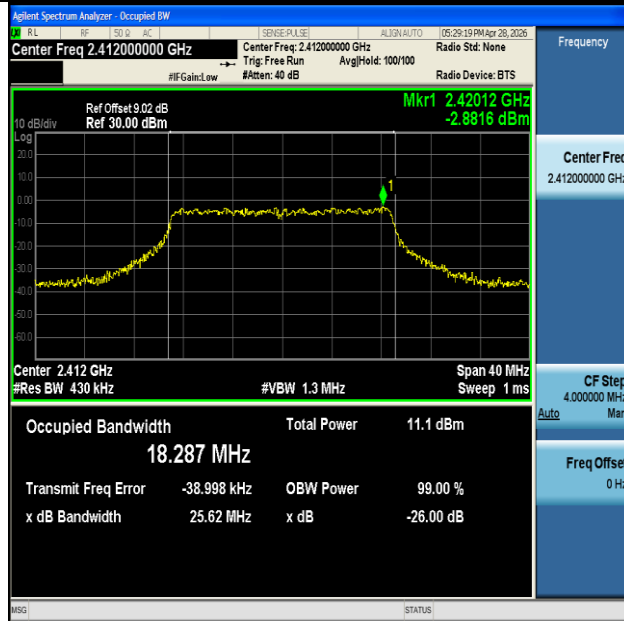


11G-Ant1-2437

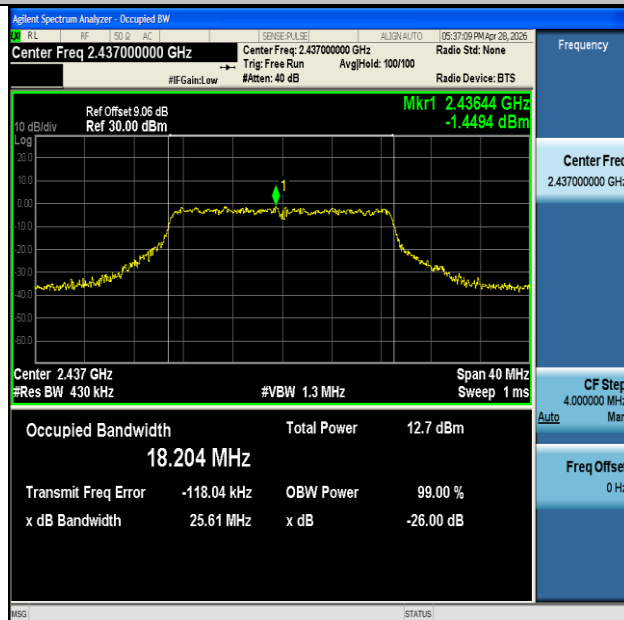


11G-Ant1-2462



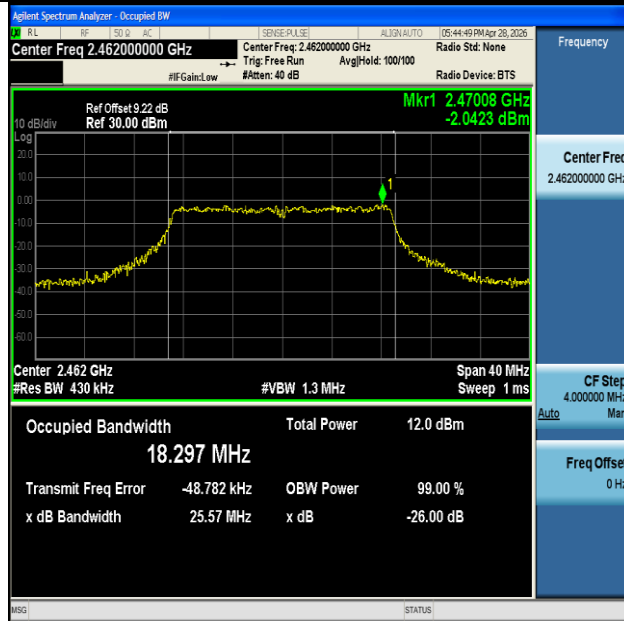


11N20SISO-Ant1-2412

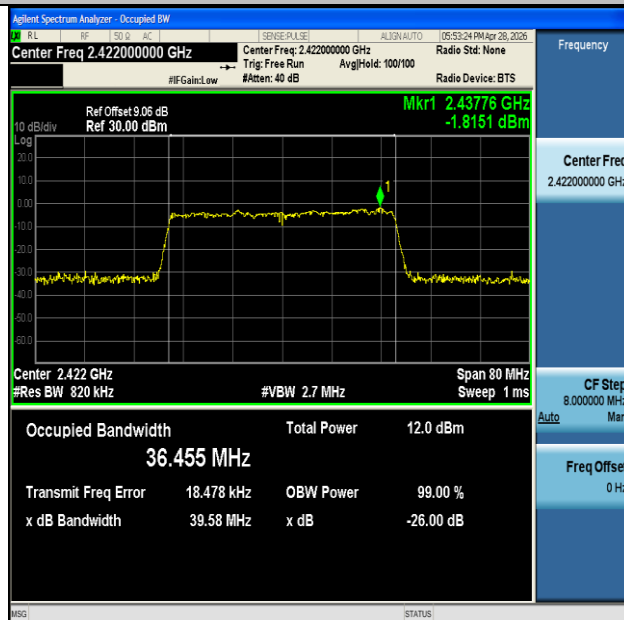


11N20SISO-Ant1-2437



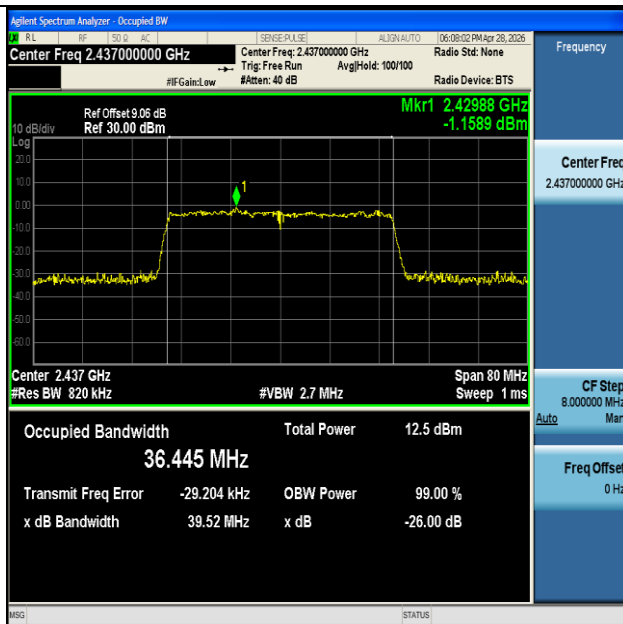


11N20SISO-Ant1-2462

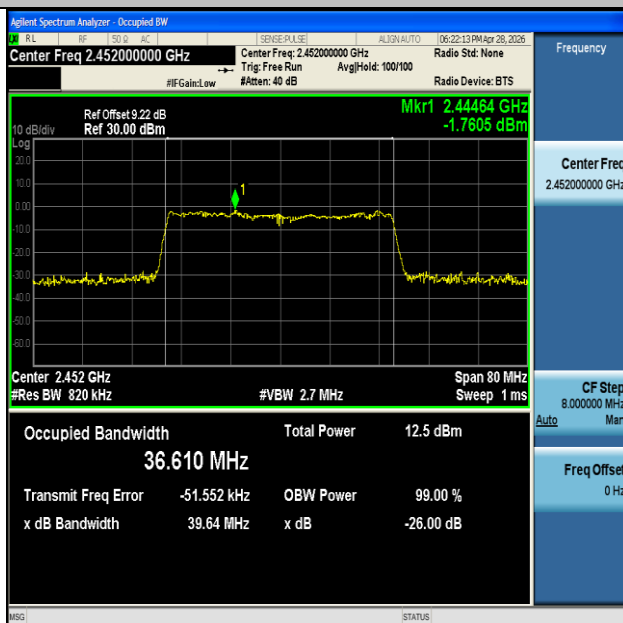


11N40SISO-Ant1-2422





11N40SISO-Ant1-2437



11N40SISO-Ant1-2452





Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	8.90	≤30.00	PASS
11B	Ant1	2437	11.17	≤30.00	PASS
11B	Ant1	2462	10.49	≤30.00	PASS
11G	Ant1	2412	4.70	≤30.00	PASS
11G	Ant1	2437	6.17	≤30.00	PASS
11G	Ant1	2462	5.75	≤30.00	PASS
11N20SISO	Ant1	2412	4.81	≤30.00	PASS
11N20SISO	Ant1	2437	6.37	≤30.00	PASS
11N20SISO	Ant1	2462	5.72	≤30.00	PASS
11N40SISO	Ant1	2422	5.22	≤30.00	PASS
11N40SISO	Ant1	2437	5.86	≤30.00	PASS
11N40SISO	Ant1	2452	5.74	≤30.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)





Appendix D: Maximum Average power spectral density

Test Result

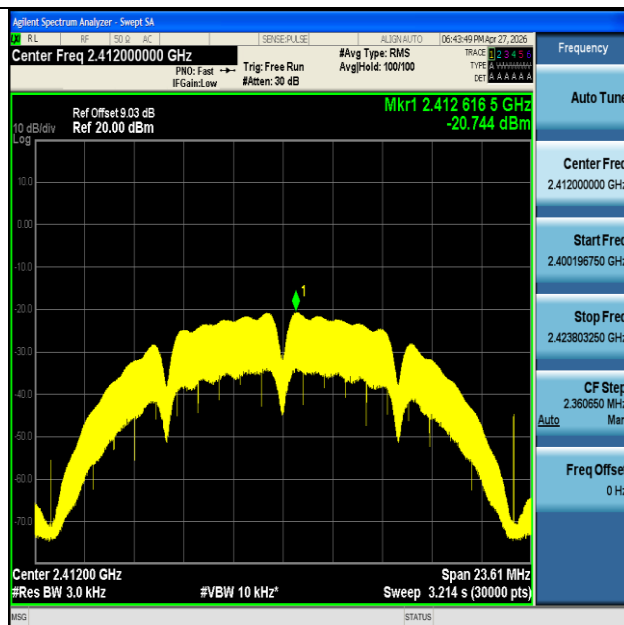
Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-20.74	≤8.00	PASS
11B	Ant1	2437	-20.18	≤8.00	PASS
11B	Ant1	2462	-18.30	≤8.00	PASS
11G	Ant1	2412	-27.57	≤8.00	PASS
11G	Ant1	2437	-25.92	≤8.00	PASS
11G	Ant1	2462	-26.00	≤8.00	PASS
11N20SISO	Ant1	2412	-21.30	≤8.00	PASS
11N20SISO	Ant1	2437	-19.06	≤8.00	PASS
11N20SISO	Ant1	2462	-19.98	≤8.00	PASS
11N40SISO	Ant1	2422	-21.75	≤8.00	PASS
11N40SISO	Ant1	2437	-21.54	≤8.00	PASS
11N40SISO	Ant1	2452	-22.51	≤8.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

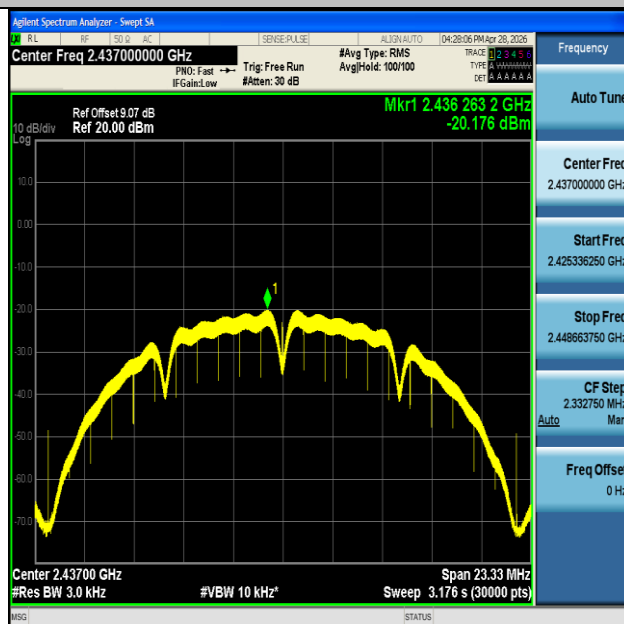




Test Graphs

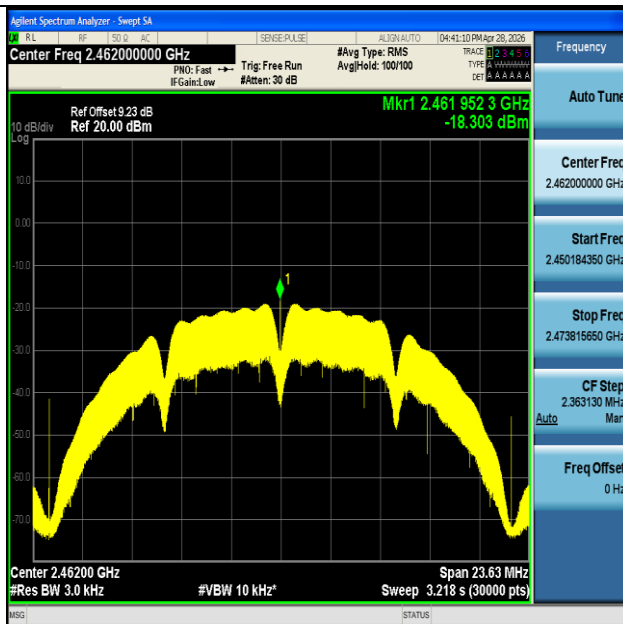


11B-Ant1-2412-PASS

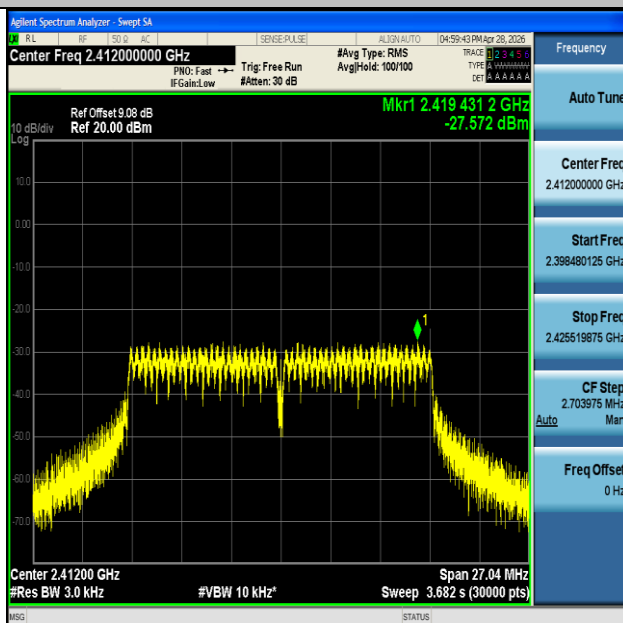


11B-Ant1-2437-PASS



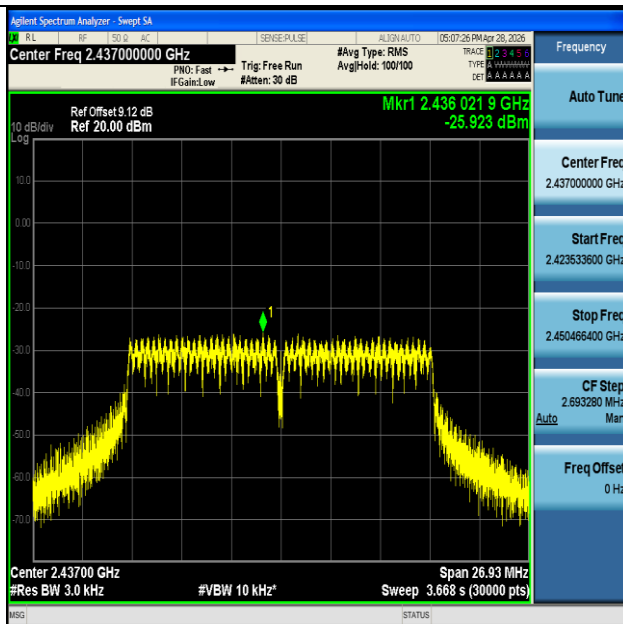


11B-Ant1-2462-PASS

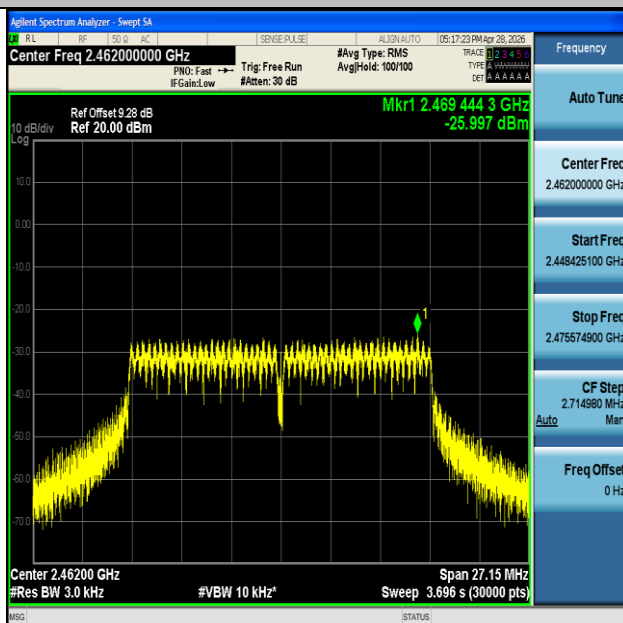


11G-Ant1-2412-PASS



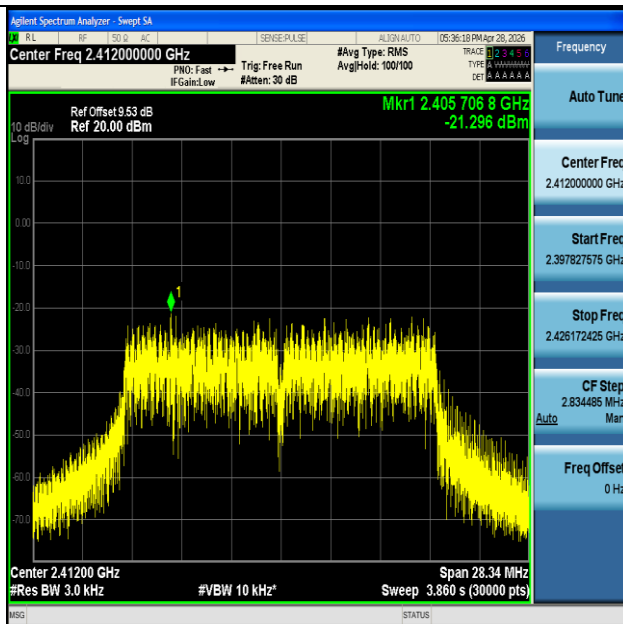


11G-Ant1-2437-PASS

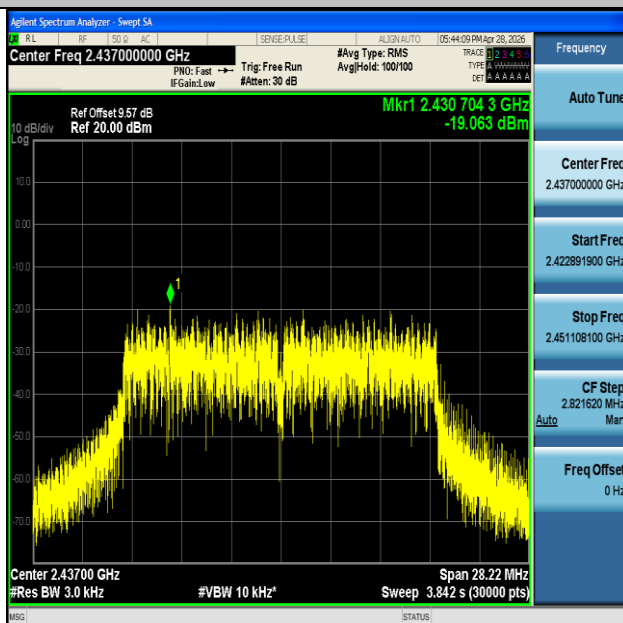


11G-Ant1-2462-PASS



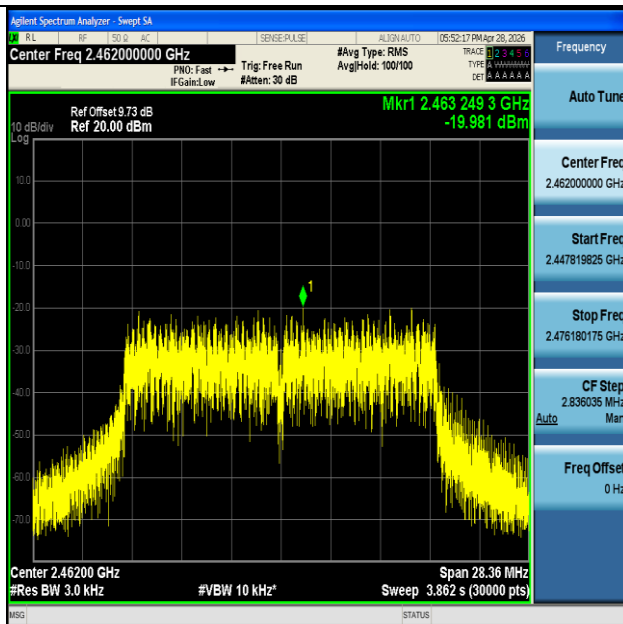


11N20SISO-Ant1-2412-PASS

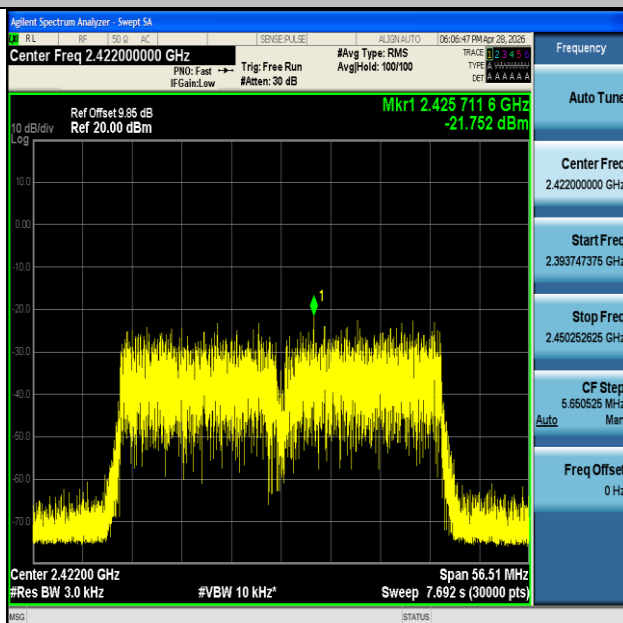


11N20SISO-Ant1-2437-PASS



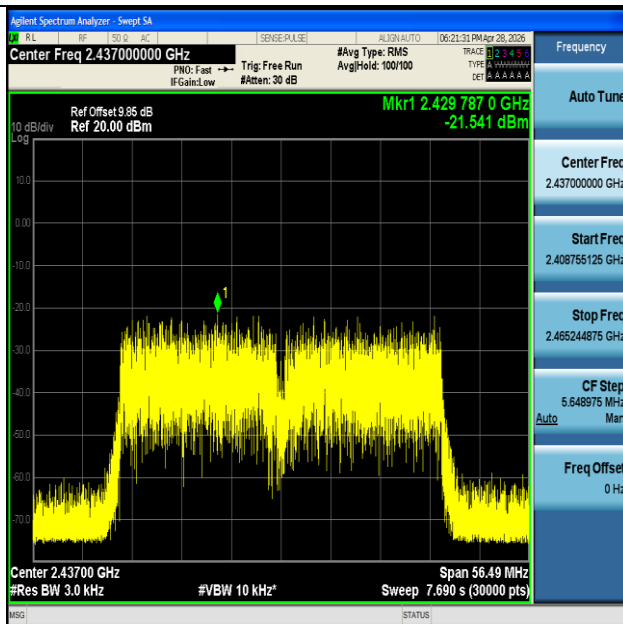


11N20SISO-Ant1-2462-PASS

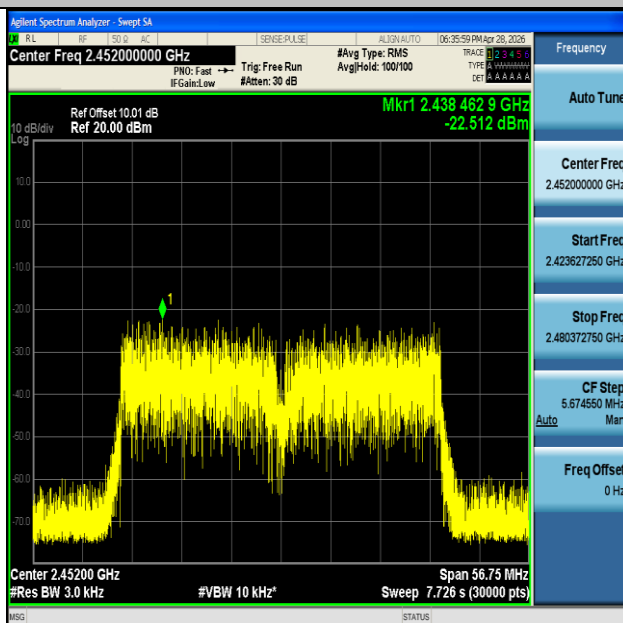


11N40SISO-Ant1-2422-PASS





11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS





Appendix E: Band edge measurements

Test Result

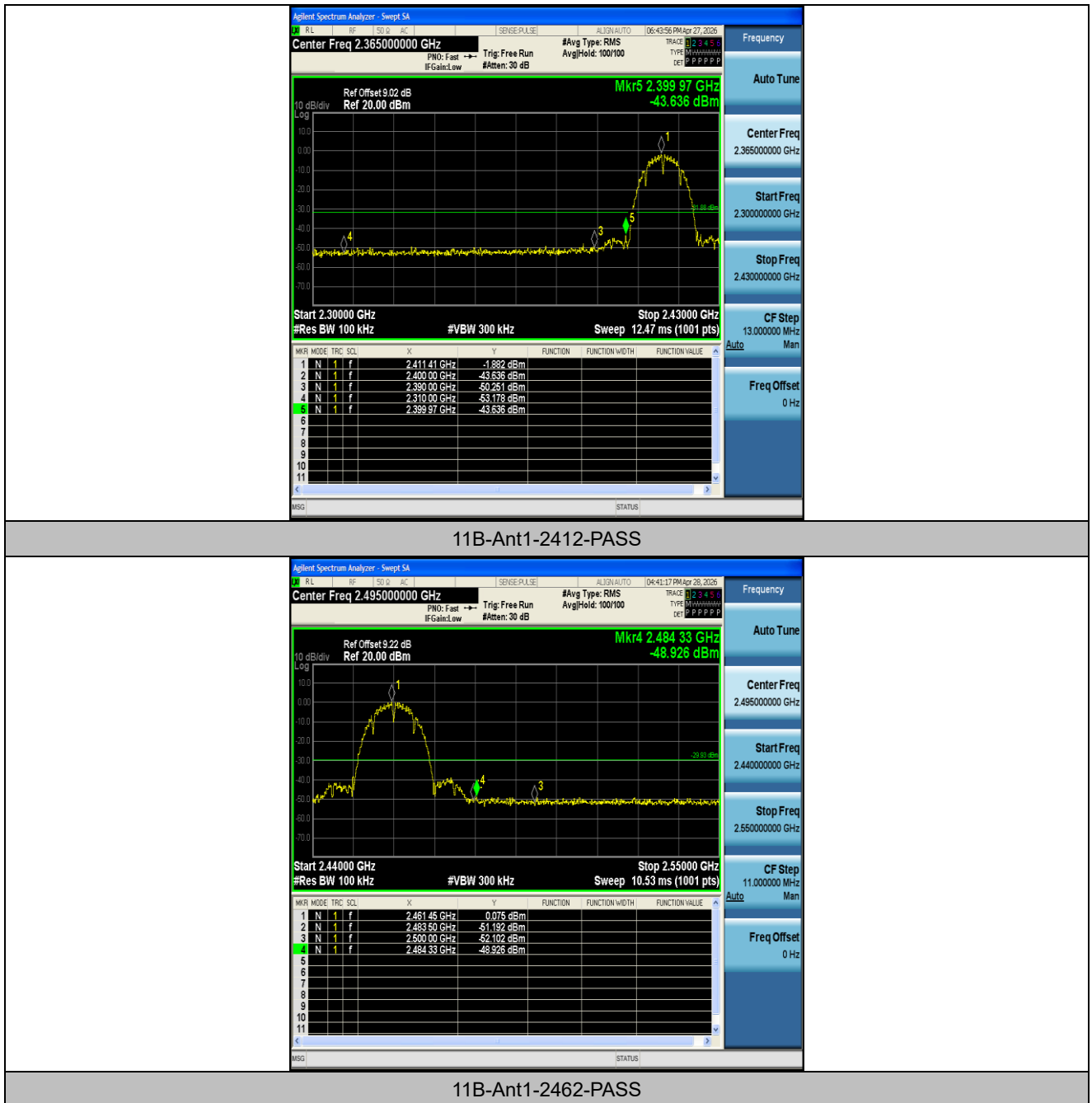
Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	-1.88	-43.64	≤ -31.88	PASS
11B	Ant1	High	2462	0.08	-48.93	≤ -29.93	PASS
11G	Ant1	Low	2412	-6.50	-37.07	≤ -36.5	PASS
11G	Ant1	High	2462	-5.51	-48.66	≤ -35.51	PASS
11N20SISO	Ant1	Low	2412	-6.26	-36.82	≤ -36.26	PASS
11N20SISO	Ant1	High	2462	-5.33	-48.05	≤ -35.33	PASS
11N40SISO	Ant1	Low	2422	-9.23	-44.42	≤ -39.23	PASS
11N40SISO	Ant1	High	2452	-8.50	-42.44	≤ -38.5	PASS

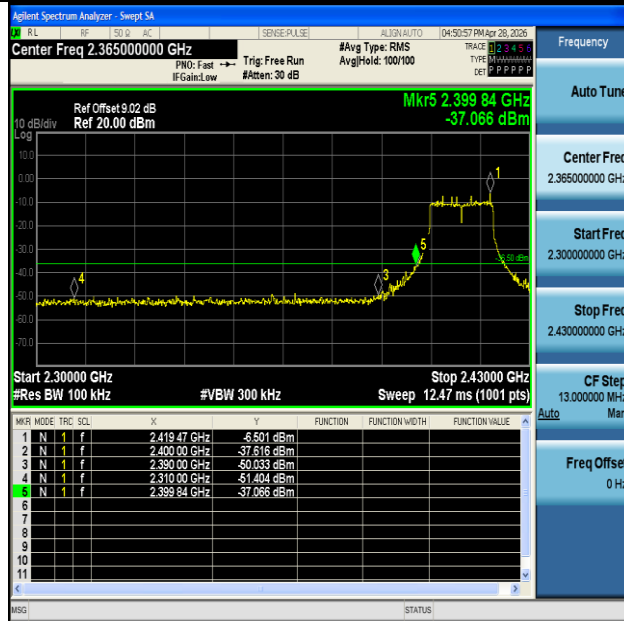
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



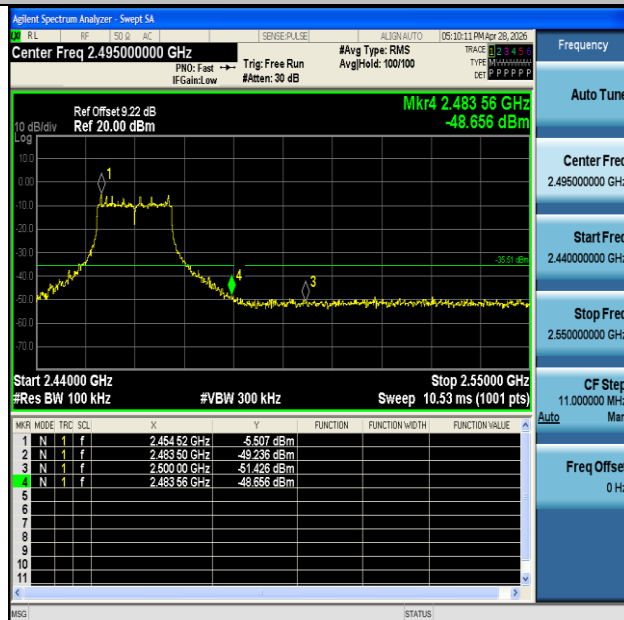


Test Graphs



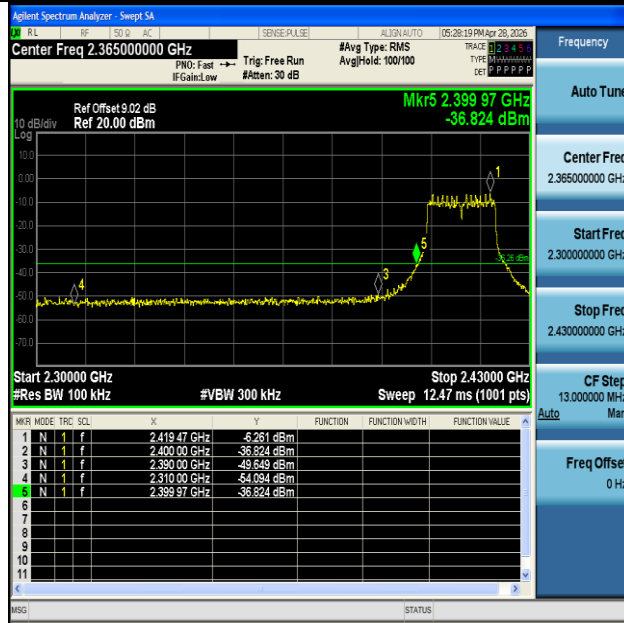


11G-Ant1-2412-PASS

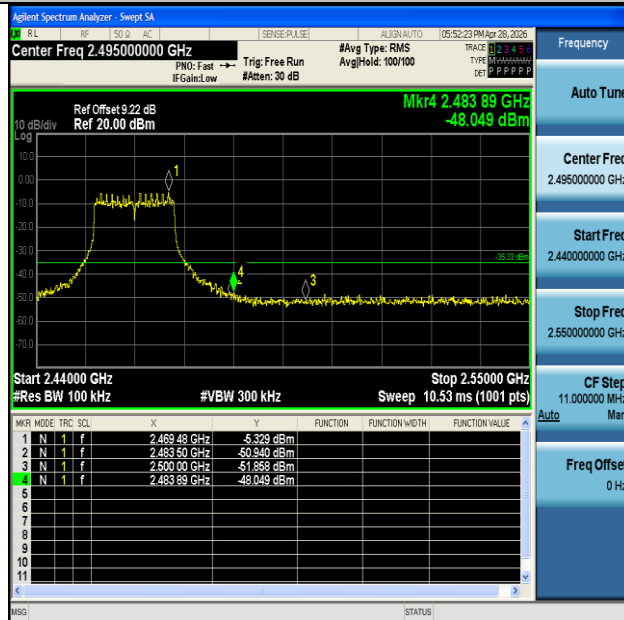


11G-Ant1-2462-PASS



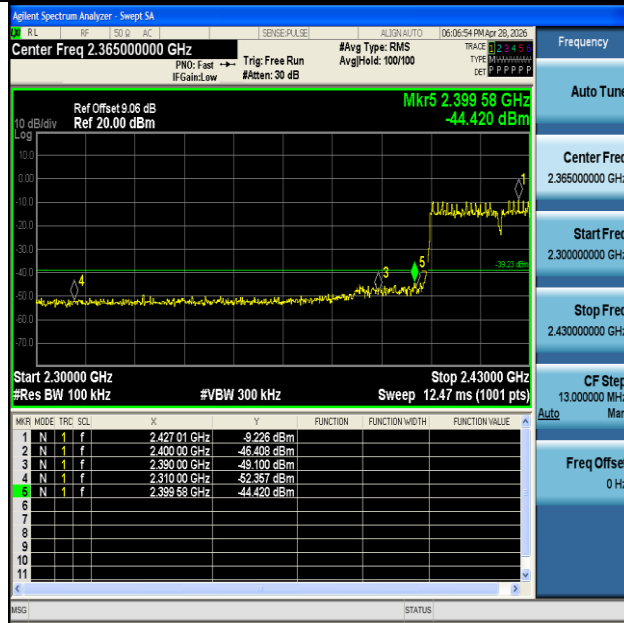


11N20SISO-Ant1-2412-PASS

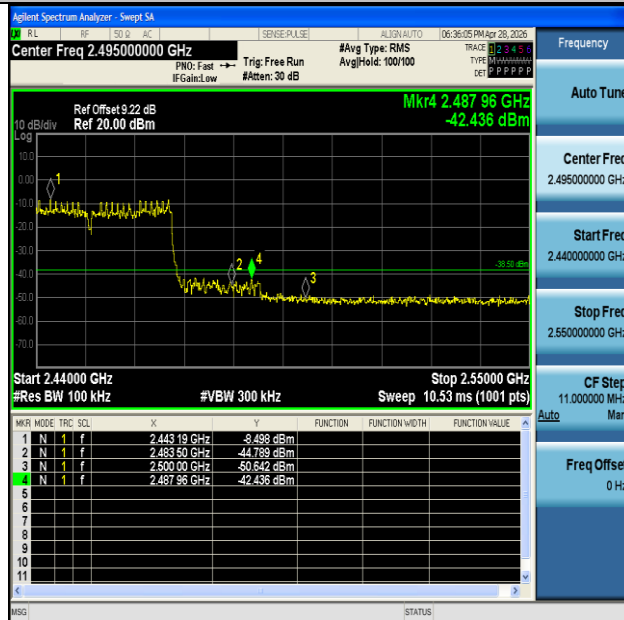


11N20SISO-Ant1-2462-PASS





11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2452-PASS





Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	-0.85	-0.85	---	PASS
11B	Ant1	2412	30~1000	-0.85	-70.32	≤-30.85	PASS
11B	Ant1	2412	1000~26500	-0.85	-54.19	≤-30.85	PASS
11B	Ant1	2437	0~Reference	-0.42	-0.42	---	PASS
11B	Ant1	2437	30~1000	-0.42	-70.22	≤-30.42	PASS
11B	Ant1	2437	1000~26500	-0.42	-54.02	≤-30.42	PASS
11B	Ant1	2462	0~Reference	-0.30	-0.30	---	PASS
11B	Ant1	2462	30~1000	-0.30	-69.42	≤-30.3	PASS
11B	Ant1	2462	1000~26500	-0.30	-54.5	≤-30.3	PASS
11G	Ant1	2412	0~Reference	-6.79	-6.79	---	PASS
11G	Ant1	2412	30~1000	-6.79	-69.95	≤-36.79	PASS
11G	Ant1	2412	1000~26500	-6.79	-55.84	≤-36.79	PASS
11G	Ant1	2437	0~Reference	-5.88	-5.88	---	PASS
11G	Ant1	2437	30~1000	-5.88	-69.38	≤-35.88	PASS
11G	Ant1	2437	1000~26500	-5.88	-55.37	≤-35.88	PASS
11G	Ant1	2462	0~Reference	-5.88	-5.88	---	PASS
11G	Ant1	2462	30~1000	-5.88	-69.58	≤-35.88	PASS
11G	Ant1	2462	1000~26500	-5.88	-54.42	≤-35.88	PASS
11N20SISO	Ant1	2412	0~Reference	-6.65	-6.65	---	PASS
11N20SISO	Ant1	2412	30~1000	-6.65	-70.24	≤-36.65	PASS
11N20SISO	Ant1	2412	1000~26500	-6.65	-54.99	≤-36.65	PASS
11N20SISO	Ant1	2437	0~Reference	-5.52	-5.52	---	PASS
11N20SISO	Ant1	2437	30~1000	-5.52	-70.05	≤-35.52	PASS
11N20SISO	Ant1	2437	1000~26500	-5.52	-54.47	≤-35.52	PASS
11N20SISO	Ant1	2462	0~Reference	-5.64	-5.64	---	PASS
11N20SISO	Ant1	2462	30~1000	-5.64	-69.56	≤-35.64	PASS
11N20SISO	Ant1	2462	1000~26500	-5.64	-55.47	≤-35.64	PASS
11N40SISO	Ant1	2422	0~Reference	-9.67	-9.67	---	PASS
11N40SISO	Ant1	2422	30~1000	-9.67	-69.12	≤-39.67	PASS
11N40SISO	Ant1	2422	1000~26500	-9.67	-55.13	≤-39.67	PASS
11N40SISO	Ant1	2437	0~Reference	-8.75	-8.75	---	PASS
11N40SISO	Ant1	2437	30~1000	-8.75	-70.41	≤-38.75	PASS
11N40SISO	Ant1	2437	1000~26500	-8.75	-55.99	≤-38.75	PASS
11N40SISO	Ant1	2452	0~Reference	-8.66	-8.66	---	PASS
11N40SISO	Ant1	2452	30~1000	-8.66	-69.76	≤-38.66	PASS
11N40SISO	Ant1	2452	1000~26500	-8.66	-54.81	≤-38.66	PASS



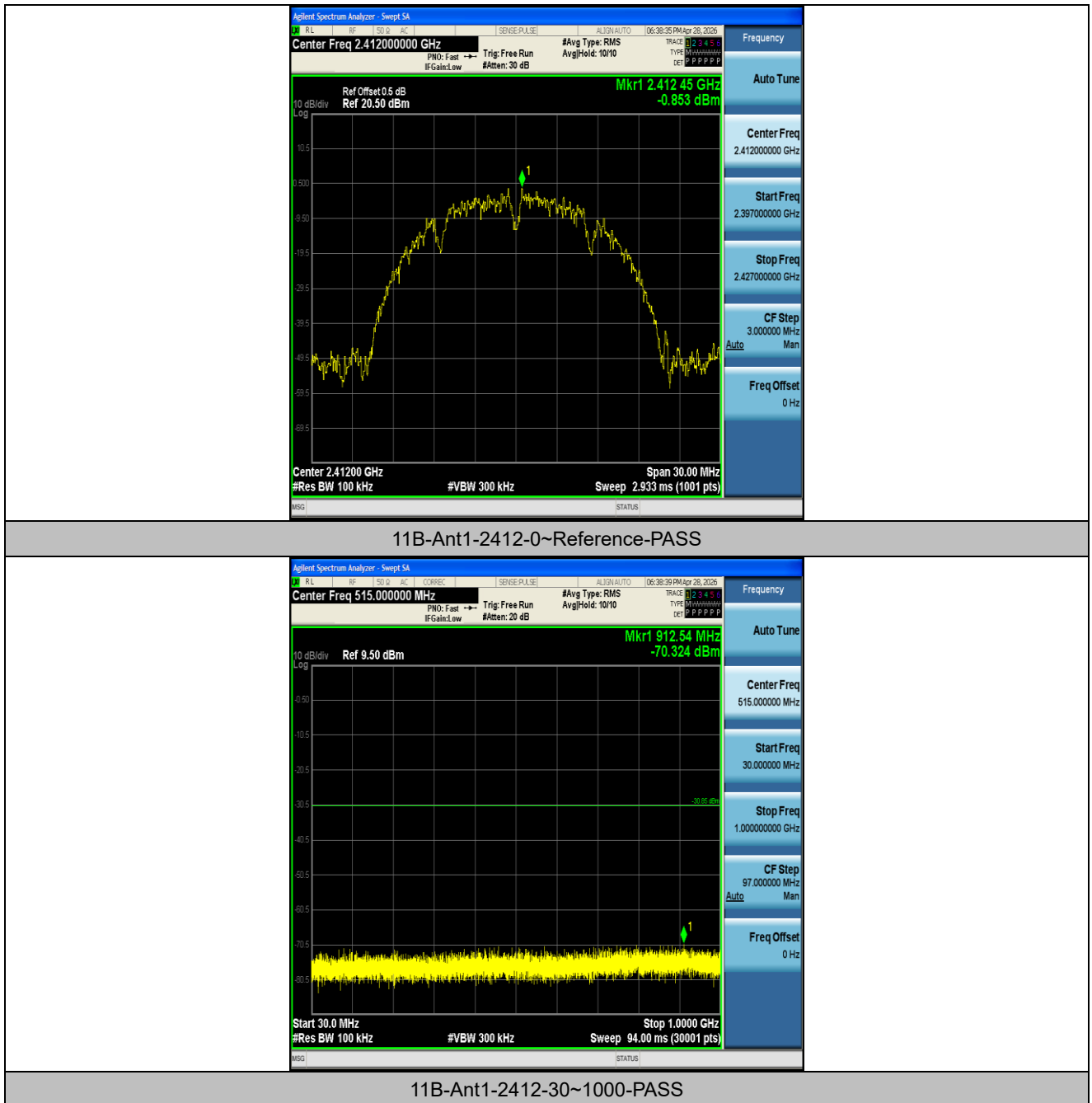


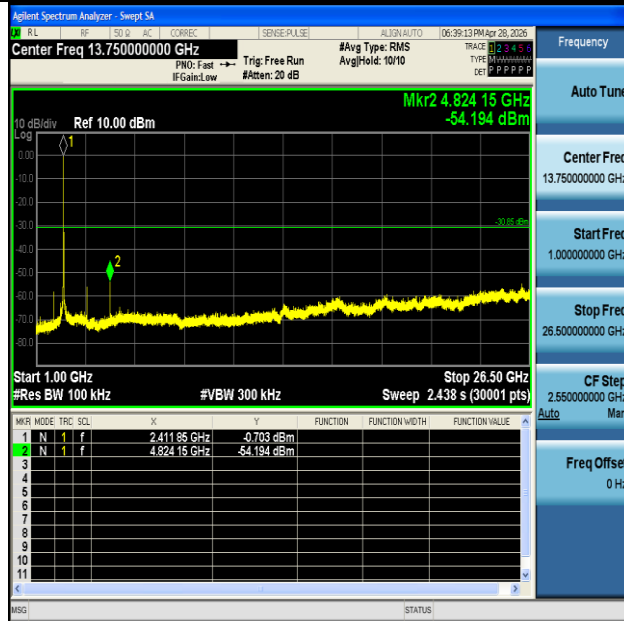
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.





Test Graphs



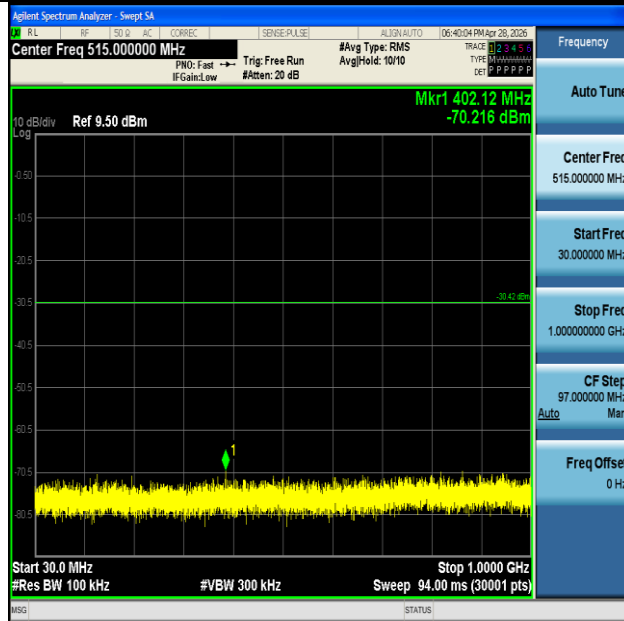


11B-Ant1-2412-1000~26500-PASS

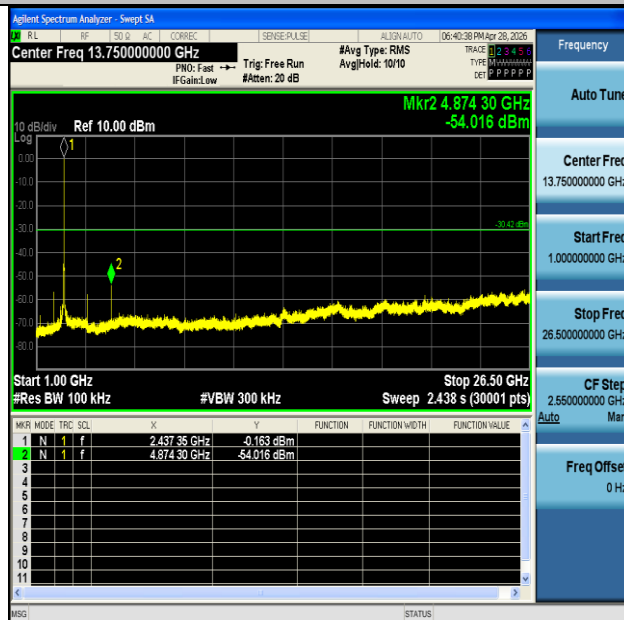


11B-Ant1-2437-0~Reference-PASS





11B-Ant1-2437-30~1000-PASS

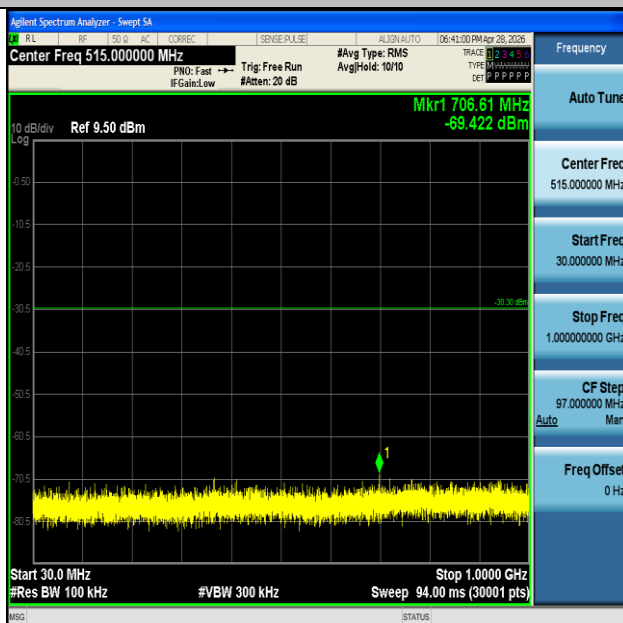


11B-Ant1-2437-1000~26500-PASS



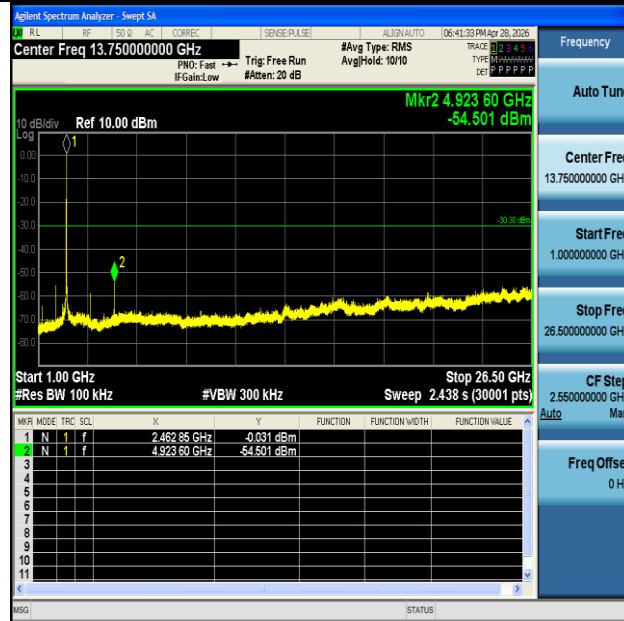


11B-Ant1-2462-0~Reference-PASS

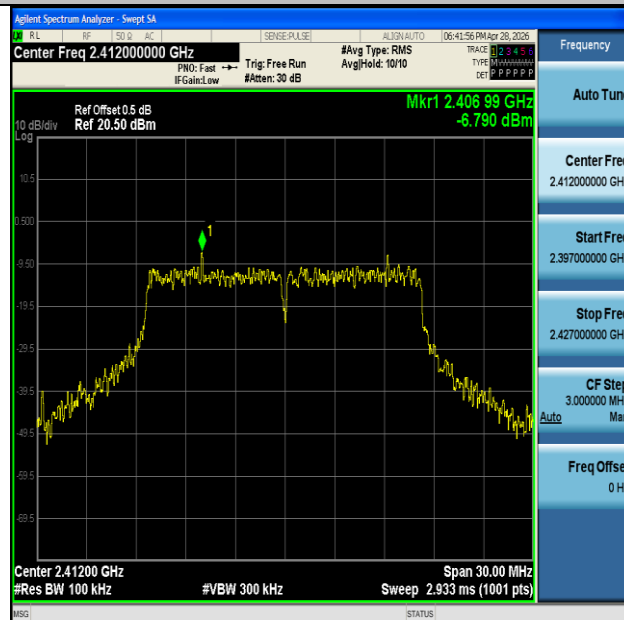


11B-Ant1-2462-30~1000-PASS



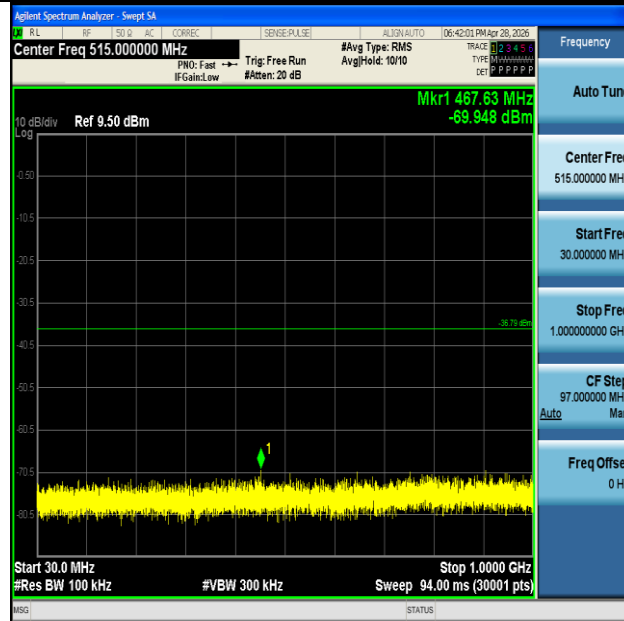


11B-Ant1-2462-1000~26500-PASS

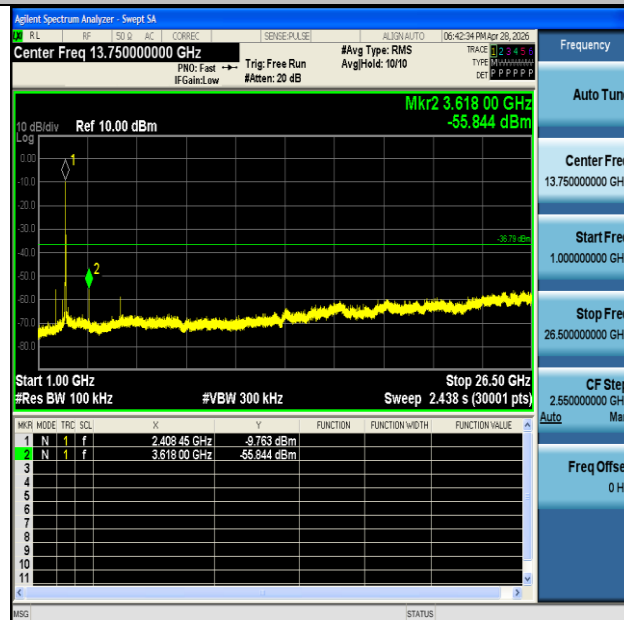


11G-Ant1-2412-0~Reference-PASS





11G-Ant1-2412-30~1000-PASS

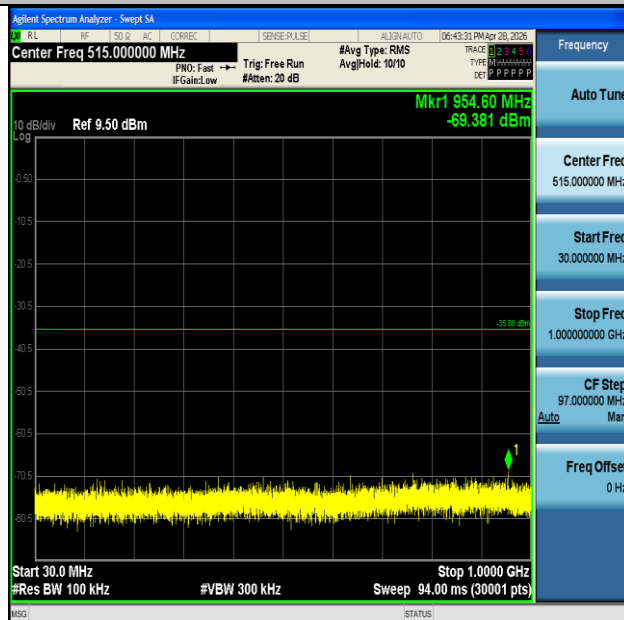


11G-Ant1-2412-1000~26500-PASS



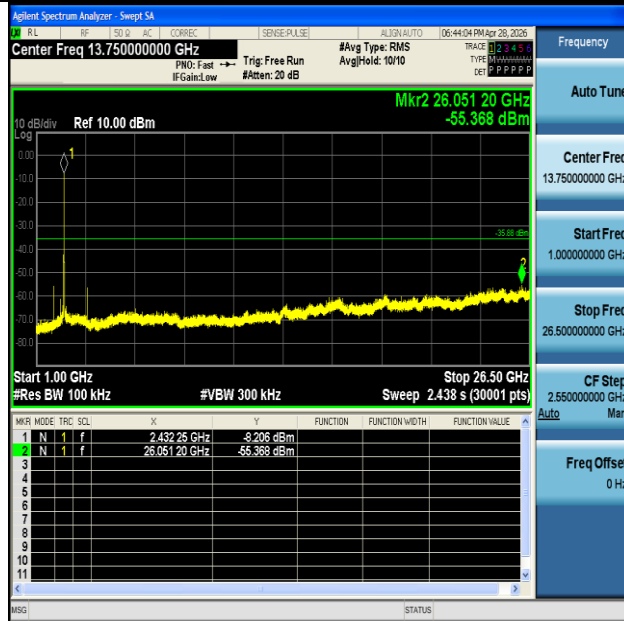


11G-Ant1-2437-0~Reference-PASS

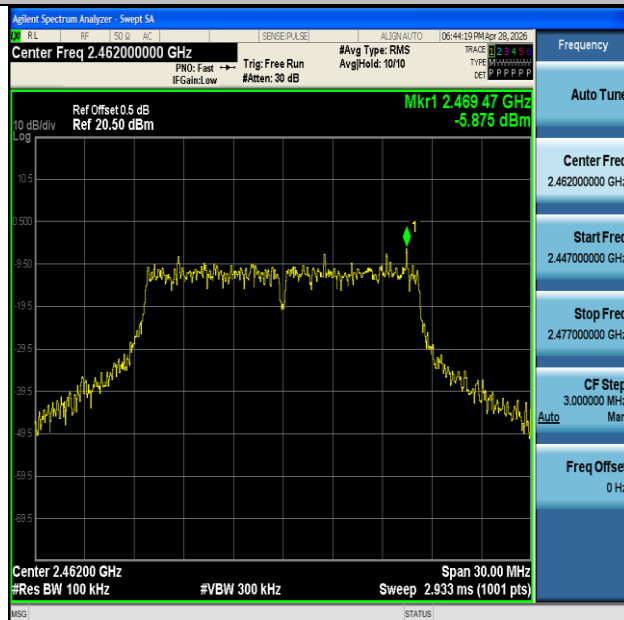


11G-Ant1-2437-30~1000-PASS



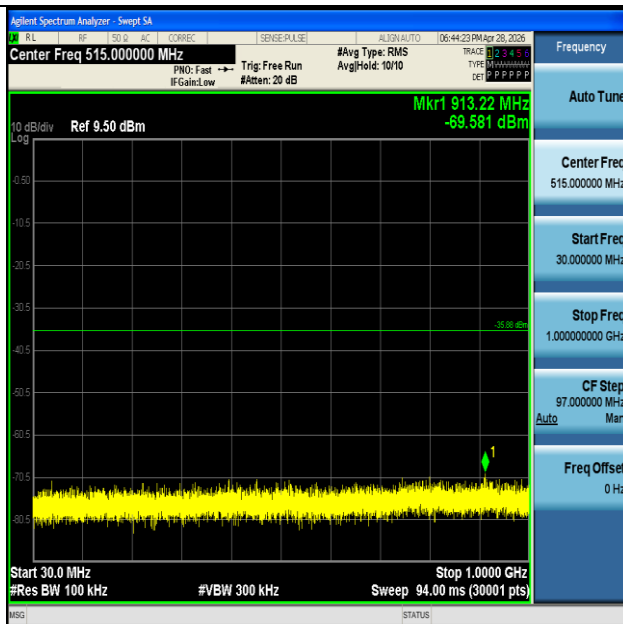


11G-Ant1-2437-1000~26500-PASS

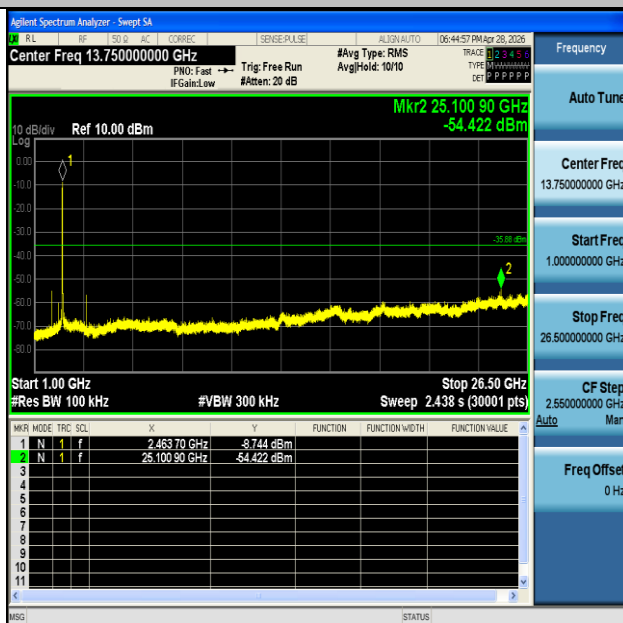


11G-Ant1-2462-0~Reference-PASS



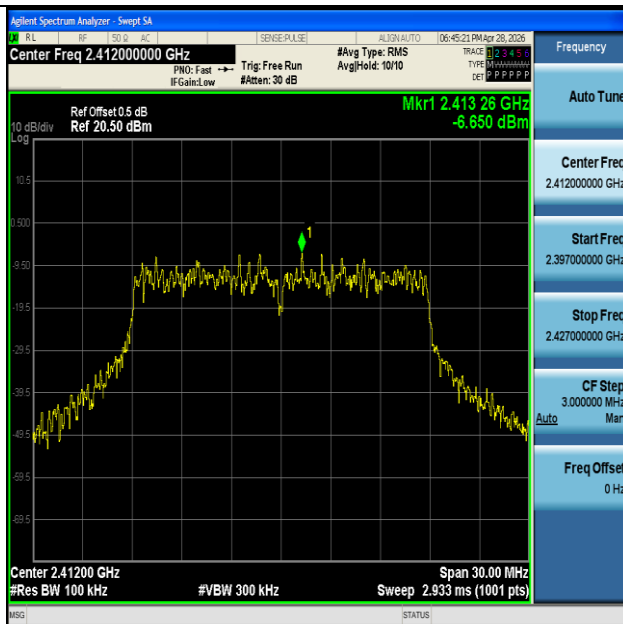


11G-Ant1-2462-30~1000-PASS

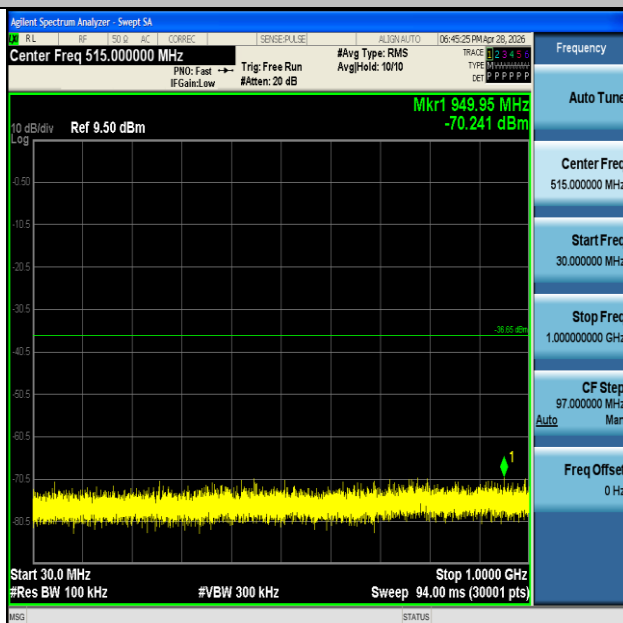


11G-Ant1-2462-1000~26500-PASS



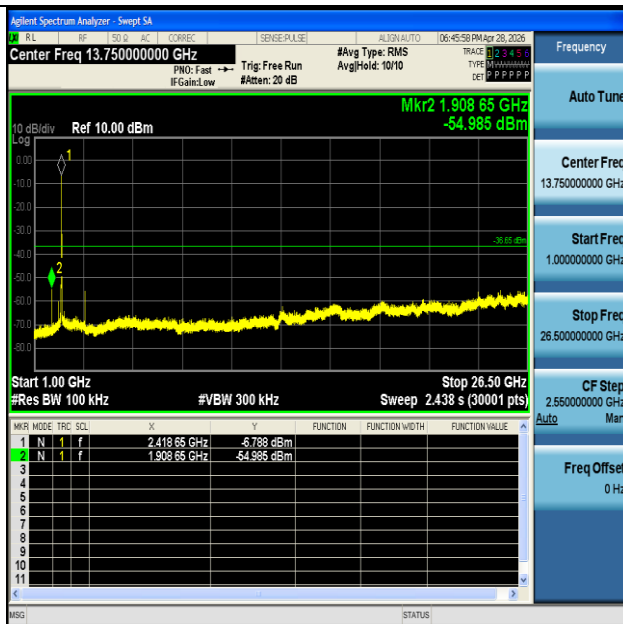


11N20SISO-Ant1-2412-0~Reference-PASS

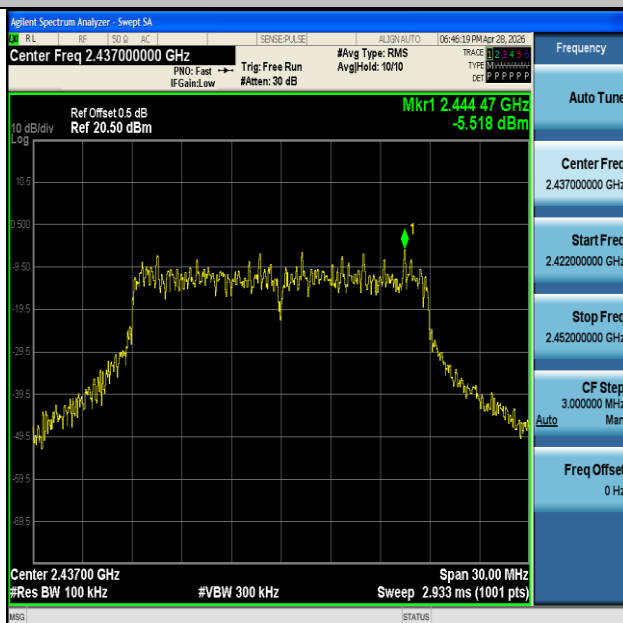


11N20SISO-Ant1-2412-30~1000-PASS



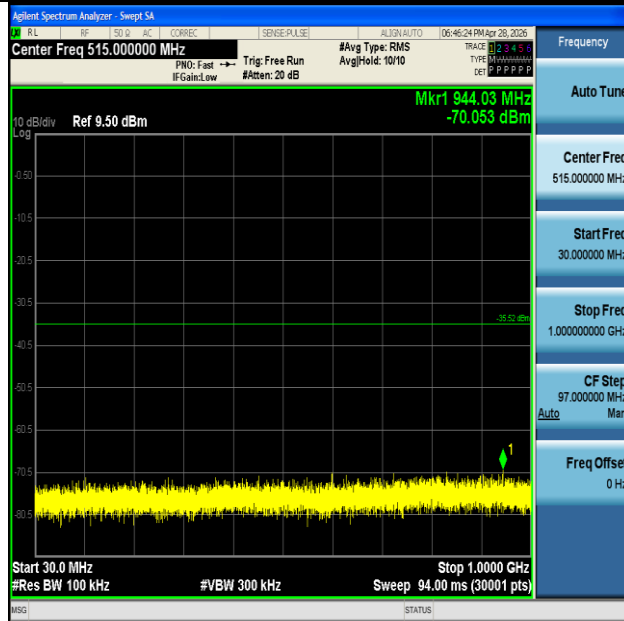


11N20SISO-Ant1-2412-1000~26500-PASS

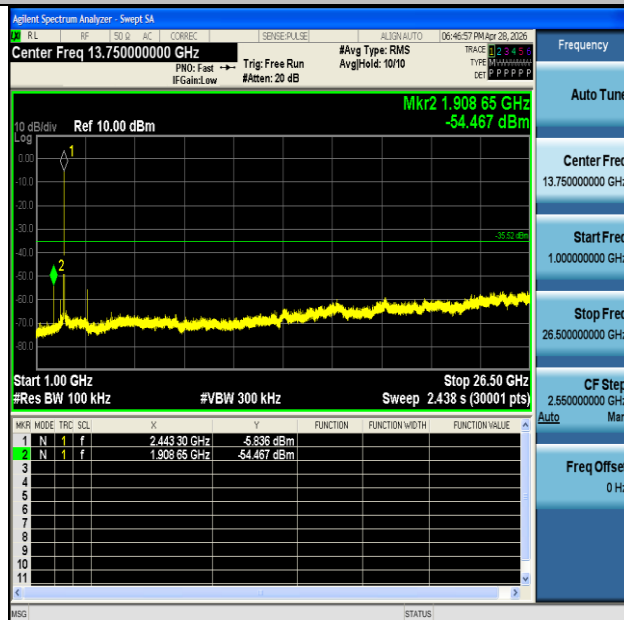


11N20SISO-Ant1-2437-0~Reference-PASS



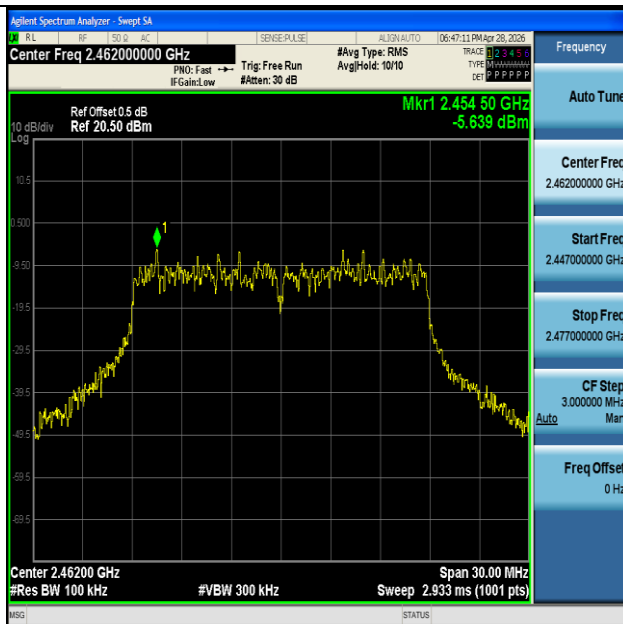


11N20SISO-Ant1-2437-30~1000-PASS

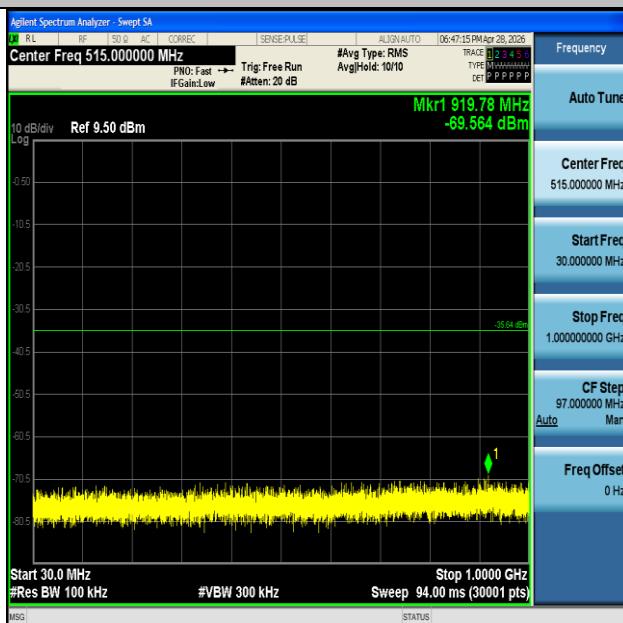


11N20SISO-Ant1-2437-1000~26500-PASS



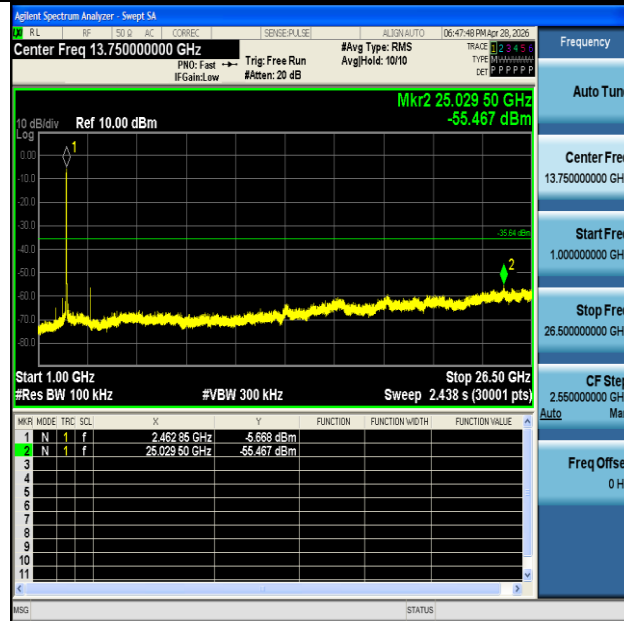


11N20SISO-Ant1-2462-0~Reference-PASS

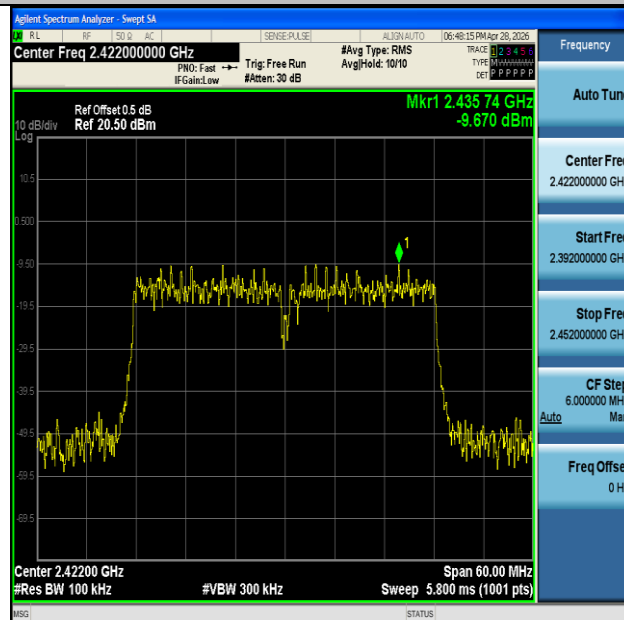


11N20SISO-Ant1-2462-30~1000-PASS



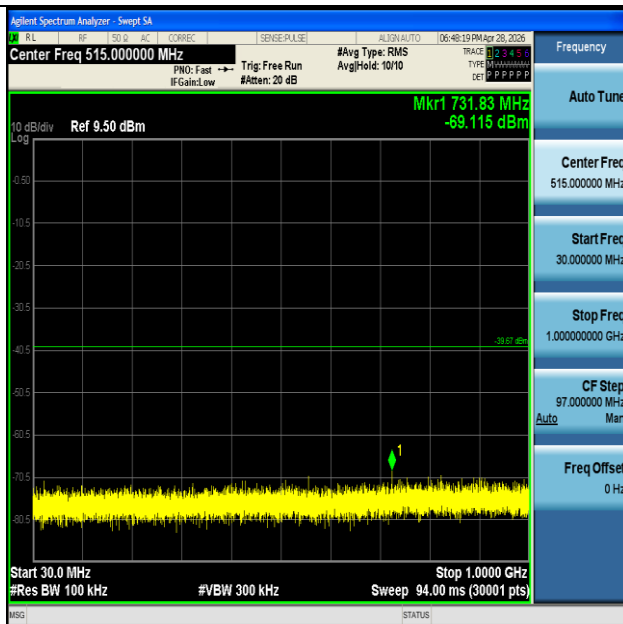


11N20SISO-Ant1-2462-1000~26500-PASS

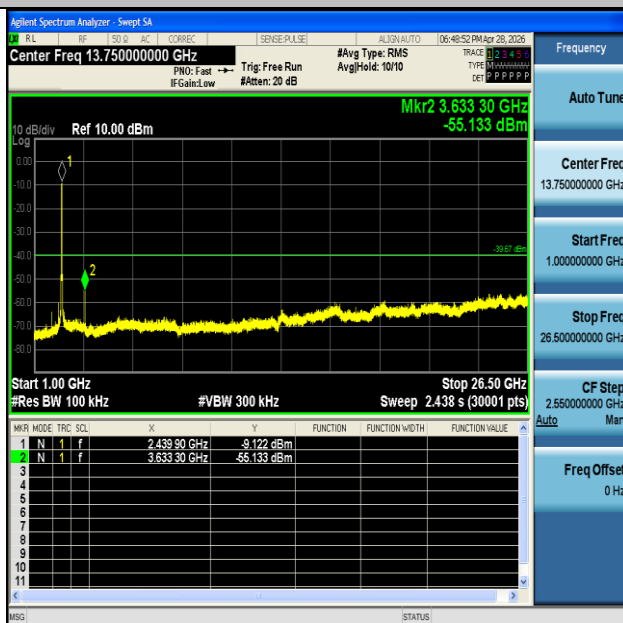


11N40SISO-Ant1-2422-0~Reference-PASS



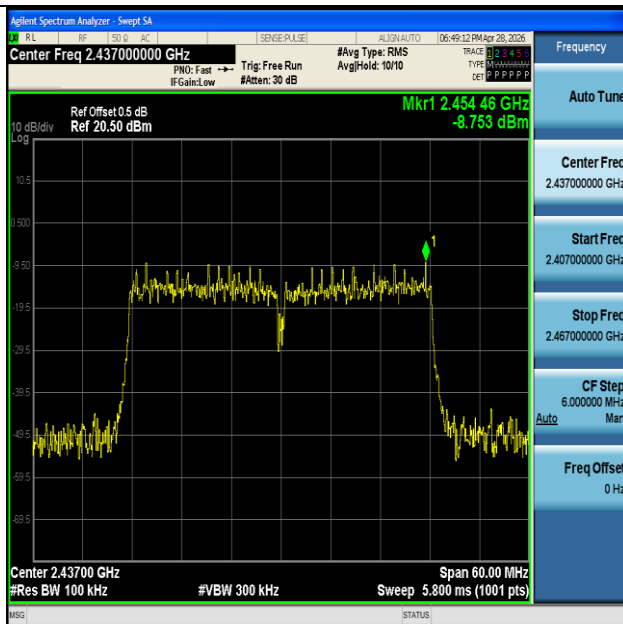


11N40SISO-Ant1-2422-30~1000-PASS

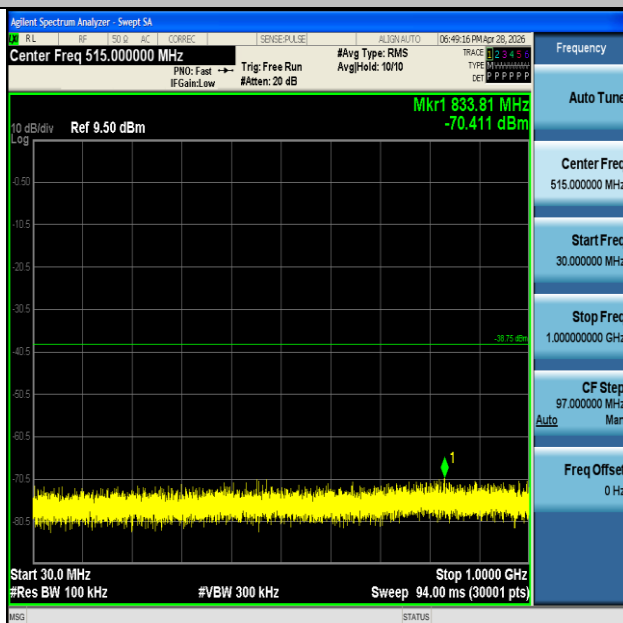


11N40SISO-Ant1-2422-1000~26500-PASS



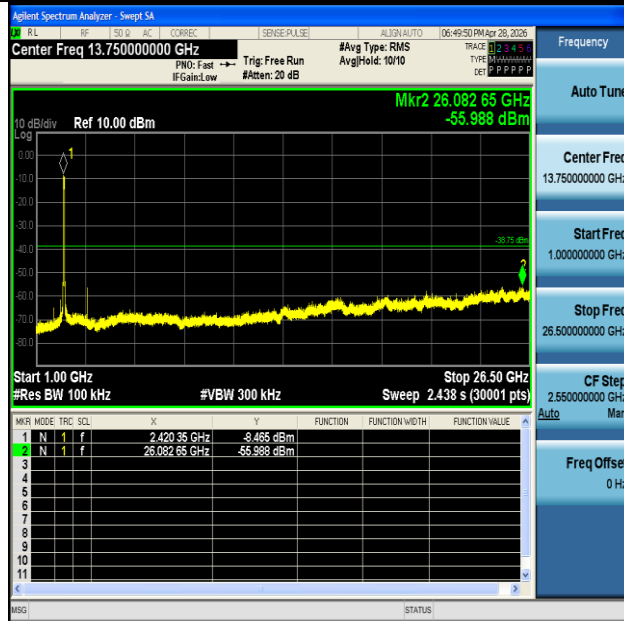


11N40SISO-Ant1-2437-0~Reference-PASS

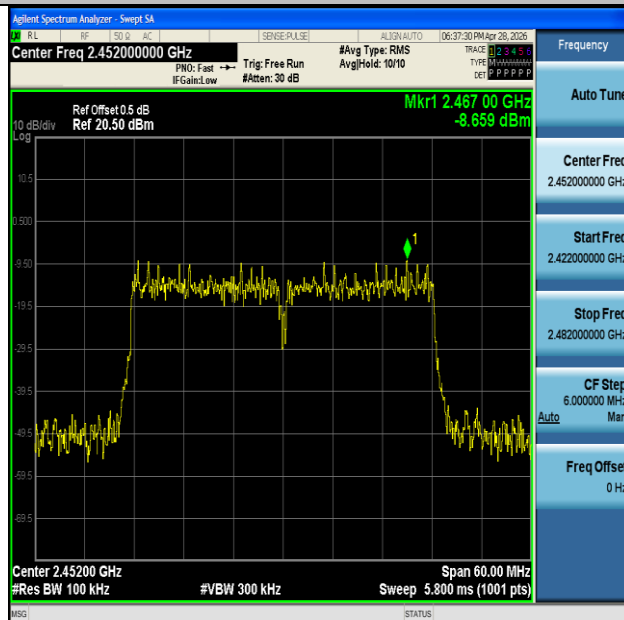


11N40SISO-Ant1-2437-30~1000-PASS



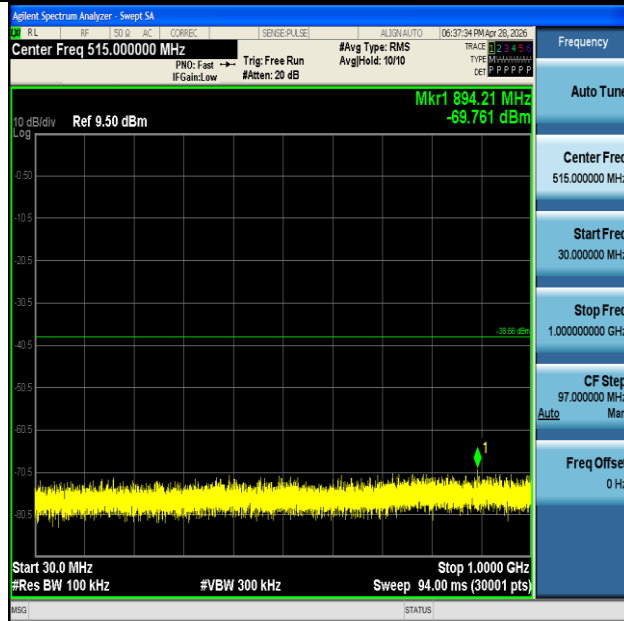


11N40SISO-Ant1-2437-1000~26500-PASS

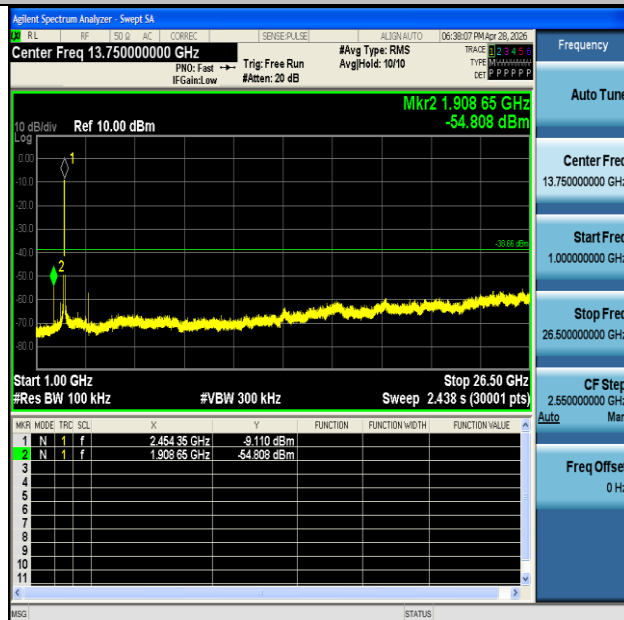


11N40SISO-Ant1-2452-0~Reference-PASS





11N40SISO-Ant1-2452-30~1000-PASS



11N40SISO-Ant1-2452-1000~26500-PASS





Appendix G: Duty Cycle

Test Result

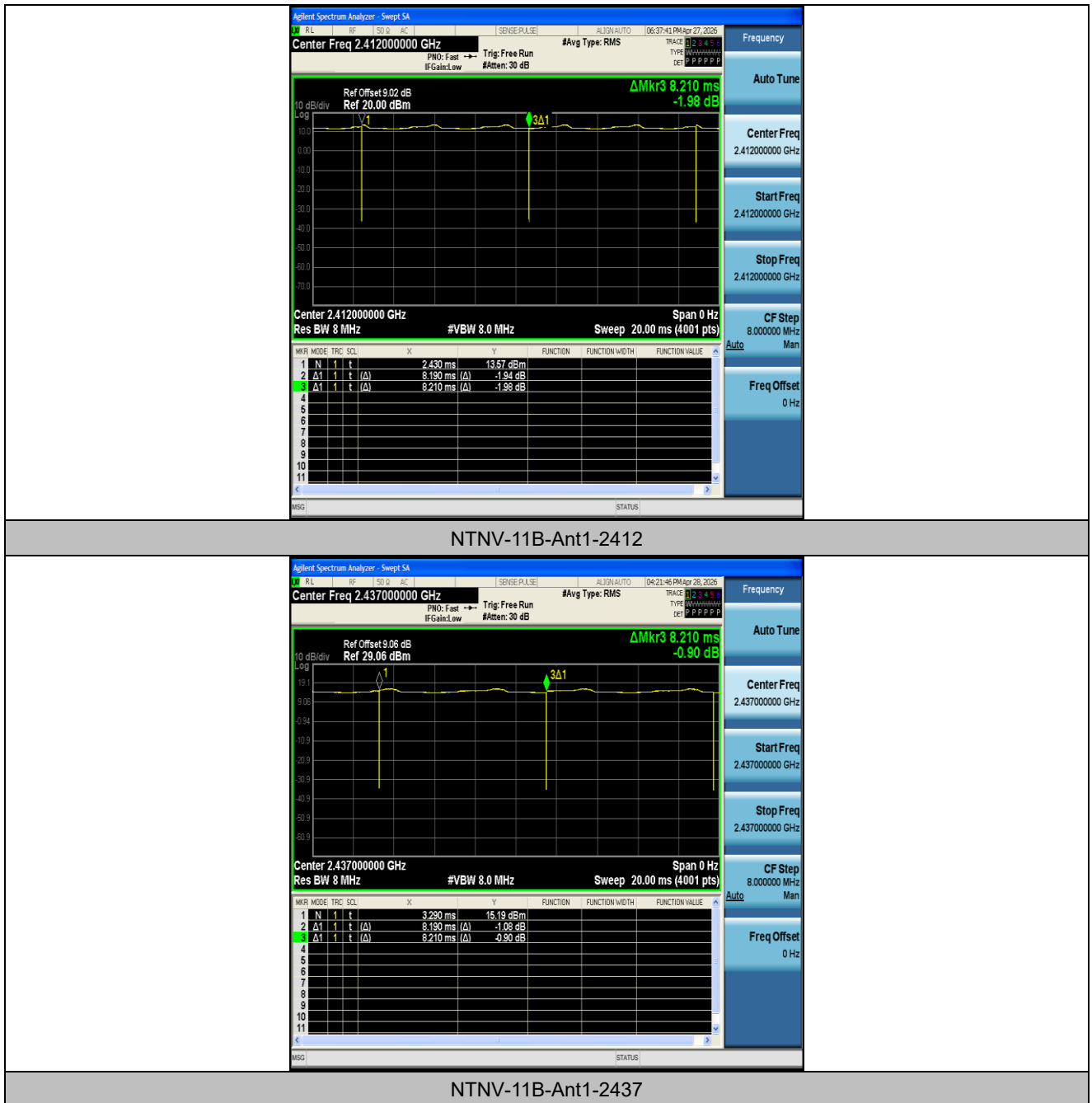
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.19	8.21	99.76	0.01
11B	Ant1	2437	8.19	8.21	99.76	0.01
11B	Ant1	2462	8.19	8.21	99.76	0.01
11G	Ant1	2412	1.36	1.38	98.55	0.06
11G	Ant1	2437	1.36	1.38	98.55	0.06
11G	Ant1	2462	1.36	1.38	98.55	0.06
11N20SISO	Ant1	2412	0.16	0.18	88.89	0.51
11N20SISO	Ant1	2437	0.16	0.18	88.89	0.51
11N20SISO	Ant1	2462	0.16	0.18	88.89	0.51
11N40SISO	Ant1	2422	0.10	0.12	83.33	0.79
11N40SISO	Ant1	2437	0.10	0.12	83.33	0.79
11N40SISO	Ant1	2452	0.10	0.12	83.33	0.79

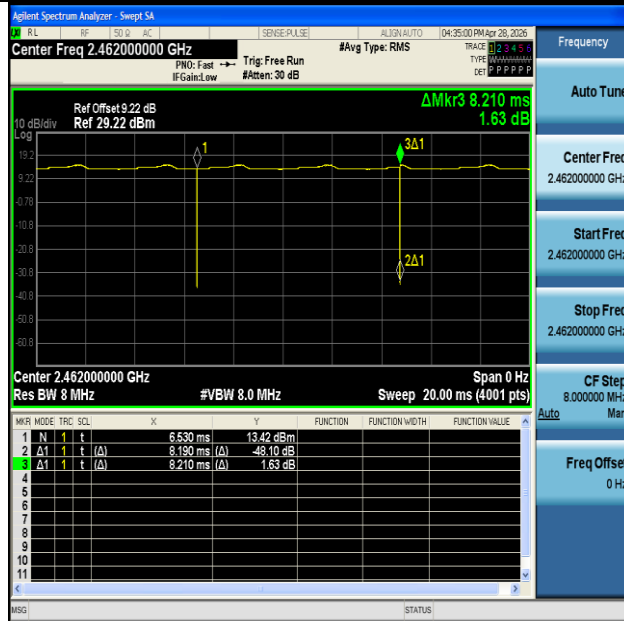
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



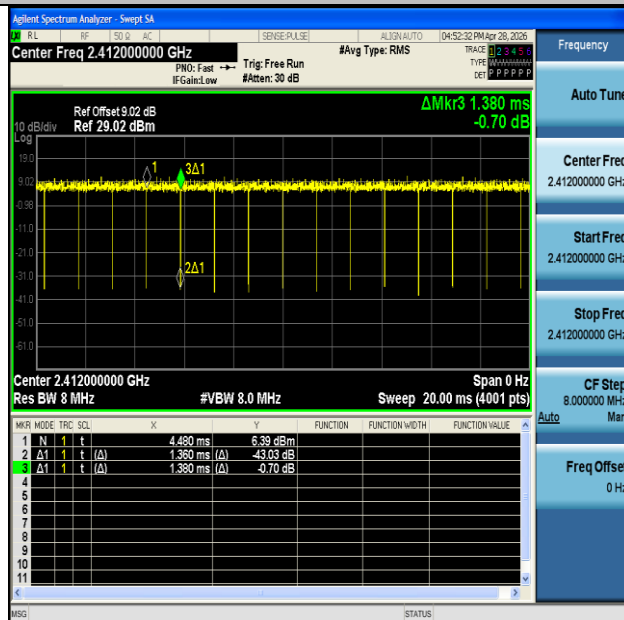


Test Graphs



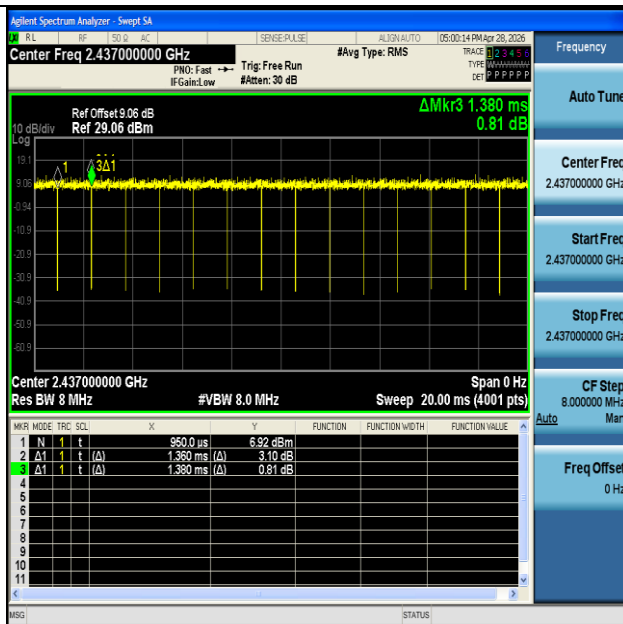


NTNV-11B-Ant1-2462

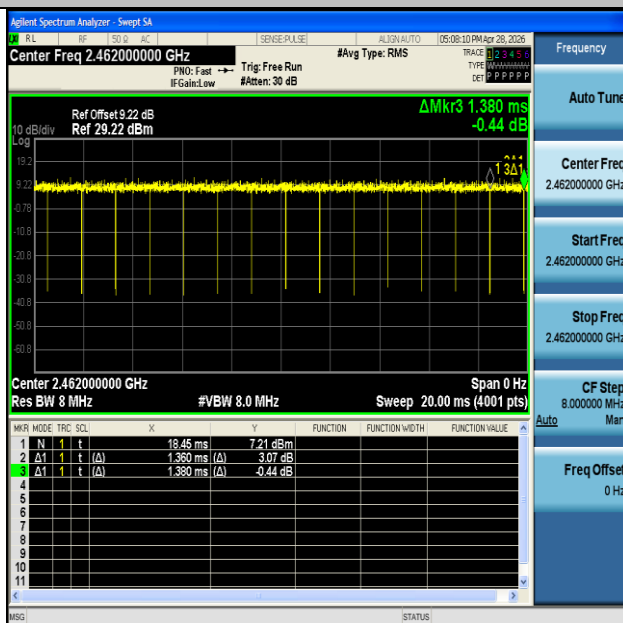


NTNV-11G-Ant1-2412



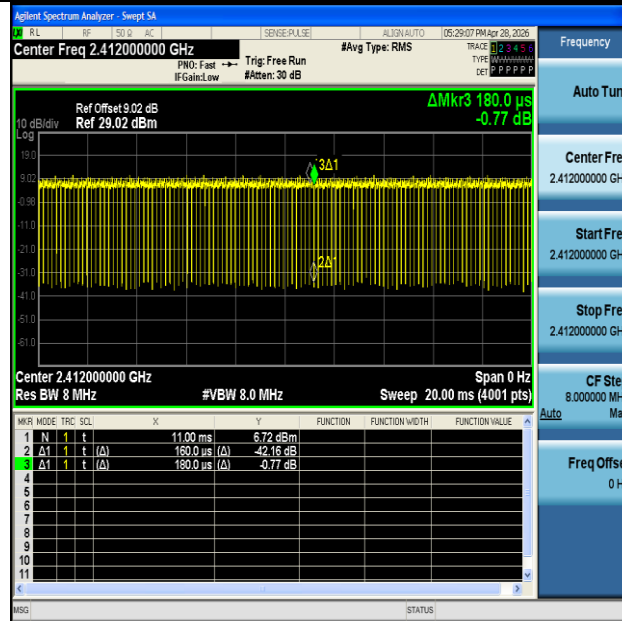


NTNV-11G-Ant1-2437

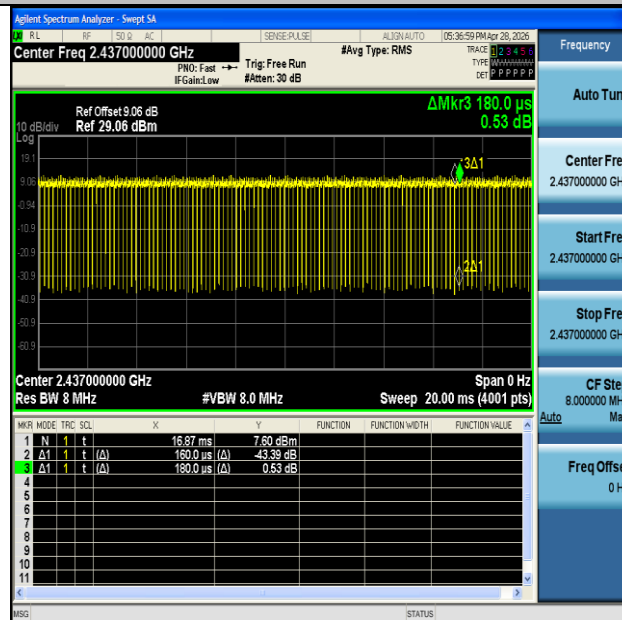


NTNV-11G-Ant1-2462





NTNV-11N20SISO-Ant1-2412



NTNV-11N20SISO-Ant1-2437

