



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

Product Name: Magic AI Glasses
Trade Mark: MAGIC MAN 2 WORLD TOUR
Test Model: Magic AI Glasses W
FCC ID: 2BTYX-GLASSESW

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	10.200	2406.920	2417.120	0.5	PASS
11B	Ant1	2437	10.160	2431.920	2442.080	0.5	PASS
11B	Ant1	2462	10.200	2456.920	2467.120	0.5	PASS
11G	Ant1	2412	16.320	2403.880	2420.200	0.5	PASS
11G	Ant1	2437	16.280	2428.840	2445.120	0.5	PASS
11G	Ant1	2462	16.320	2453.880	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.280	2403.360	2420.640	0.5	PASS
11N20SISO	Ant1	2437	17.200	2428.400	2445.600	0.5	PASS
11N20SISO	Ant1	2462	17.160	2453.440	2470.600	0.5	PASS
11N40SISO	Ant1	2422	35.840	2404.160	2440.000	0.5	PASS
11N40SISO	Ant1	2437	35.600	2419.160	2454.760	0.5	PASS
11N40SISO	Ant1	2452	36.400	2433.840	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

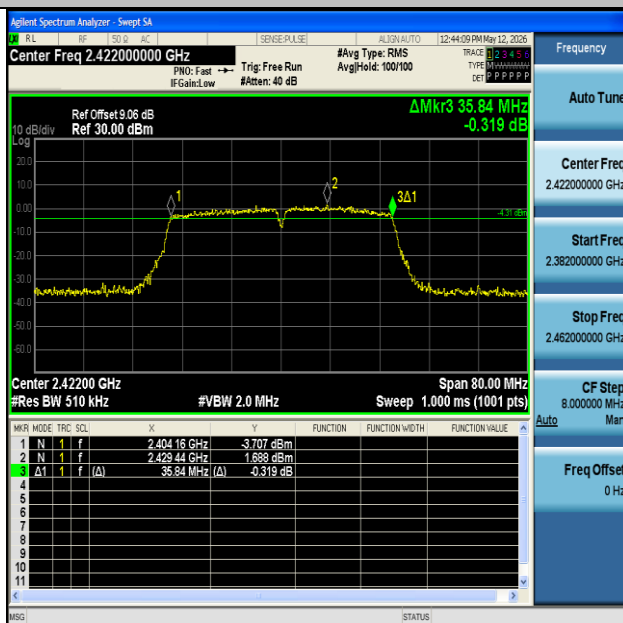


11G-Ant1-2462-PASS



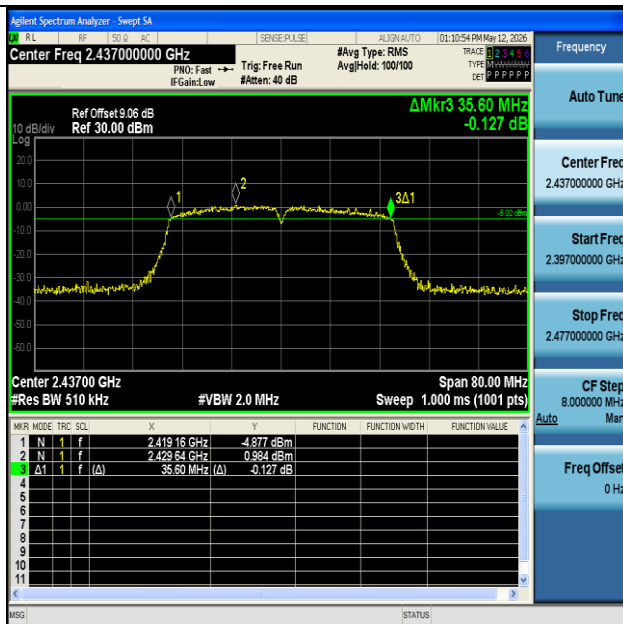


11N20SISO-Ant1-2462-PASS

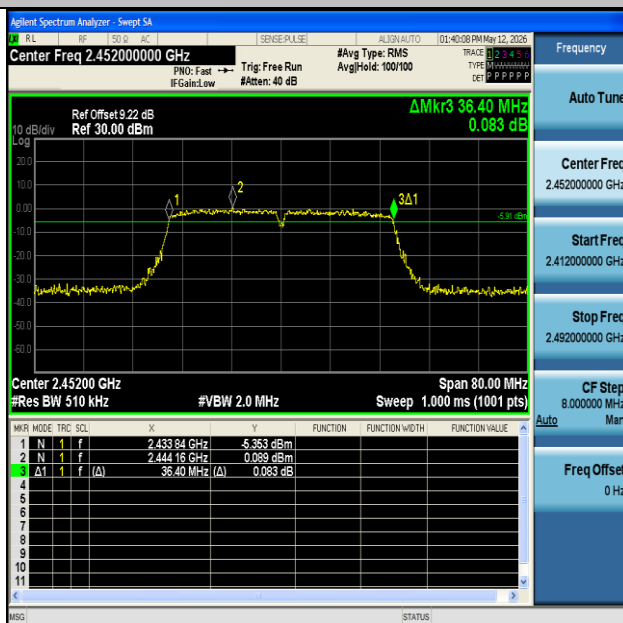


11N40SISO-Ant1-2422-PASS





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	14.941	2404.5574	2419.4984	---	---
11B	Ant1	2437	14.786	2429.5345	2444.3205	---	---
11B	Ant1	2462	14.916	2454.6029	2469.5189	---	---
11G	Ant1	2412	16.742	2403.7073	2420.4493	---	---
11G	Ant1	2437	16.733	2428.5838	2445.3168	---	---
11G	Ant1	2462	16.854	2453.6027	2470.4567	---	---
11N20SISO	Ant1	2412	17.909	2403.1123	2421.0213	---	---
11N20SISO	Ant1	2437	17.780	2428.0767	2445.8567	---	---
11N20SISO	Ant1	2462	17.923	2453.0949	2471.0179	---	---
11N40SISO	Ant1	2422	36.162	2403.9804	2440.1424	---	---
11N40SISO	Ant1	2437	36.143	2418.9210	2455.0640	---	---
11N40SISO	Ant1	2452	36.436	2433.8122	2470.2482	---	---

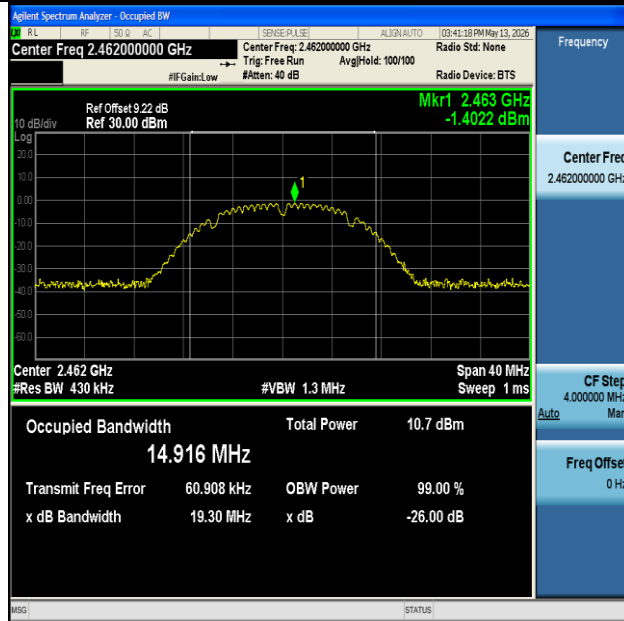
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



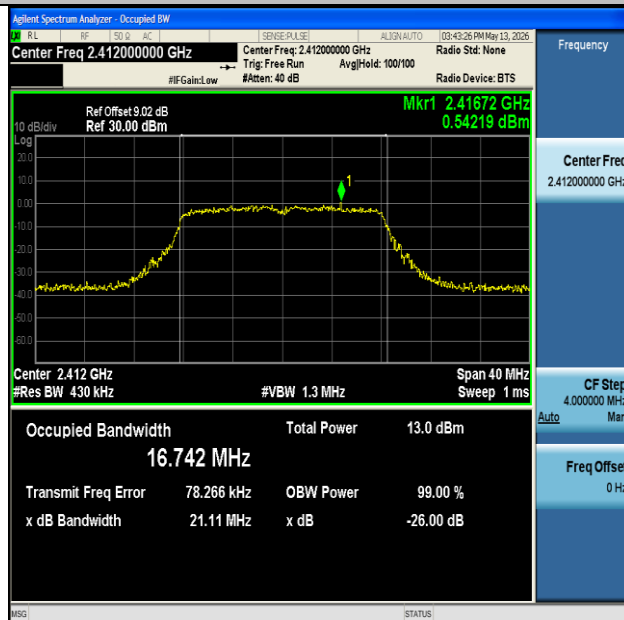


Test Graphs



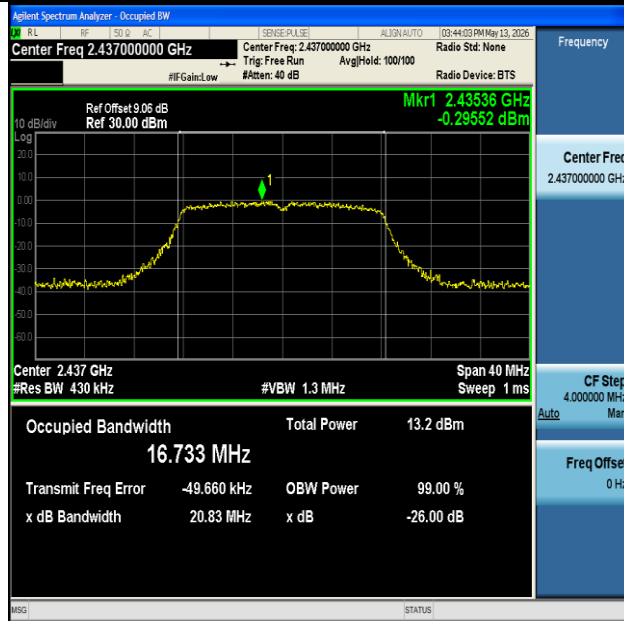


11B-Ant1-2462

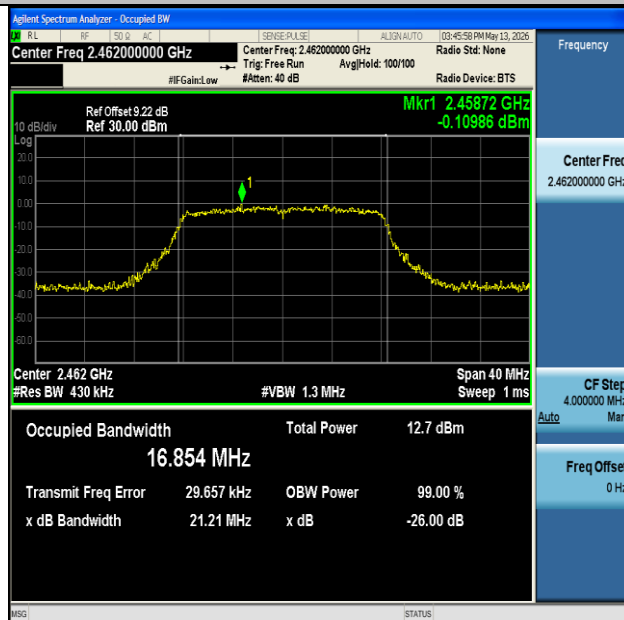


11G-Ant1-2412



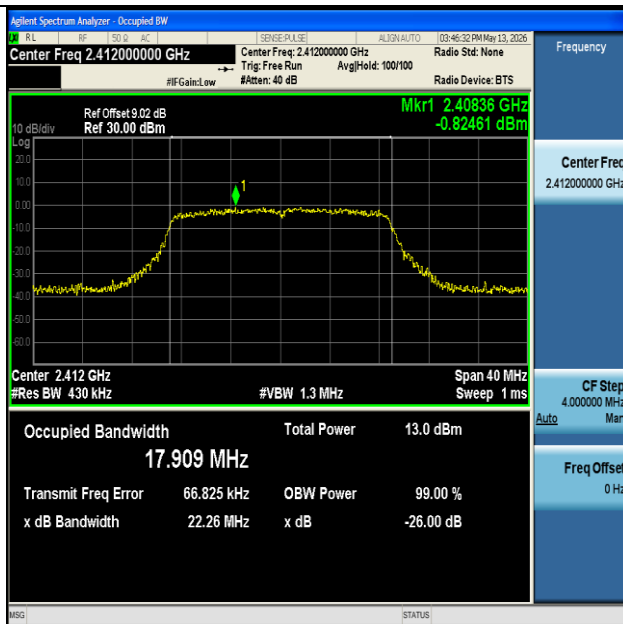


11G-Ant1-2437

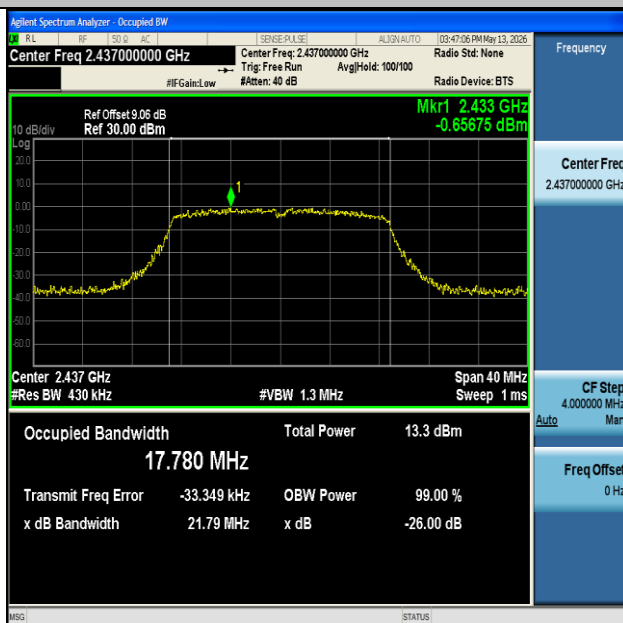


11G-Ant1-2462



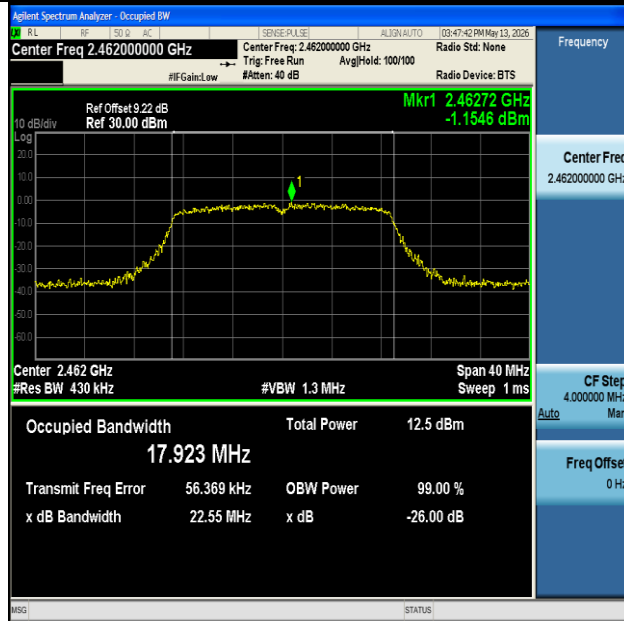


11N20SISO-Ant1-2412

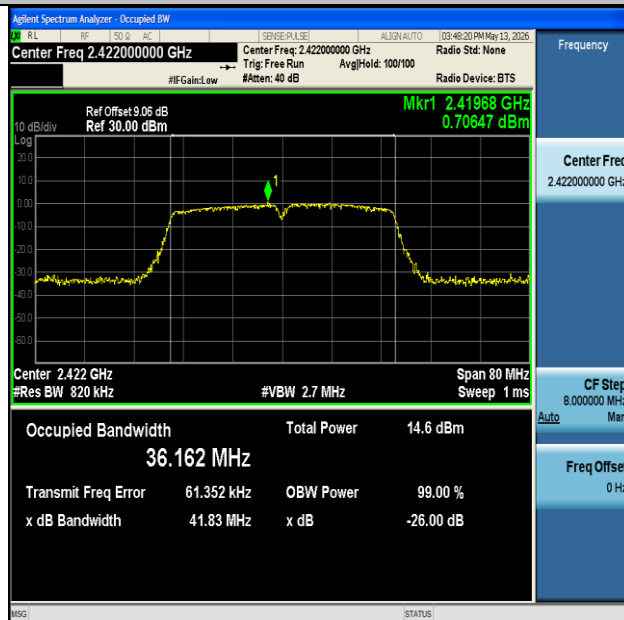


11N20SISO-Ant1-2437



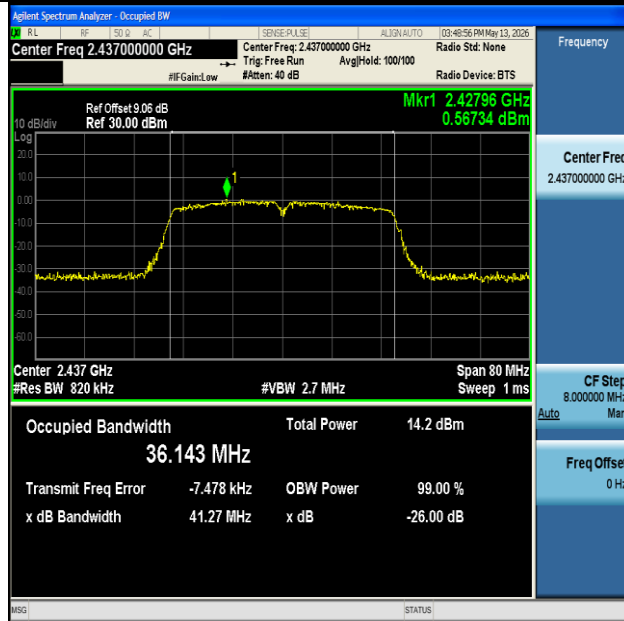


11N20SISO-Ant1-2462

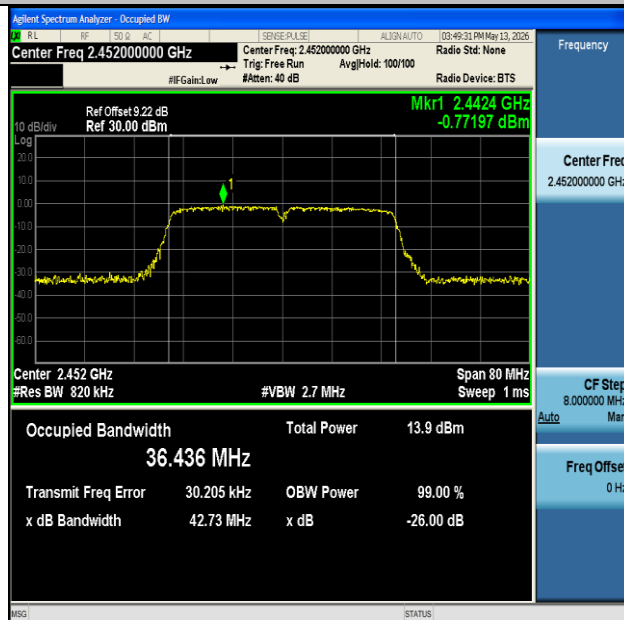


11N40SISO-Ant1-2422





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	7.86	≤30.00	PASS
11B	Ant1	2437	7.98	≤30.00	PASS
11B	Ant1	2462	7.72	≤30.00	PASS
11G	Ant1	2412	7.23	≤30.00	PASS
11G	Ant1	2437	7.58	≤30.00	PASS
11G	Ant1	2462	6.88	≤30.00	PASS
11N20SISO	Ant1	2412	8.03	≤30.00	PASS
11N20SISO	Ant1	2437	7.51	≤30.00	PASS
11N20SISO	Ant1	2462	6.69	≤30.00	PASS
11N40SISO	Ant1	2422	8.01	≤30.00	PASS
11N40SISO	Ant1	2437	7.59	≤30.00	PASS
11N40SISO	Ant1	2452	7.27	≤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

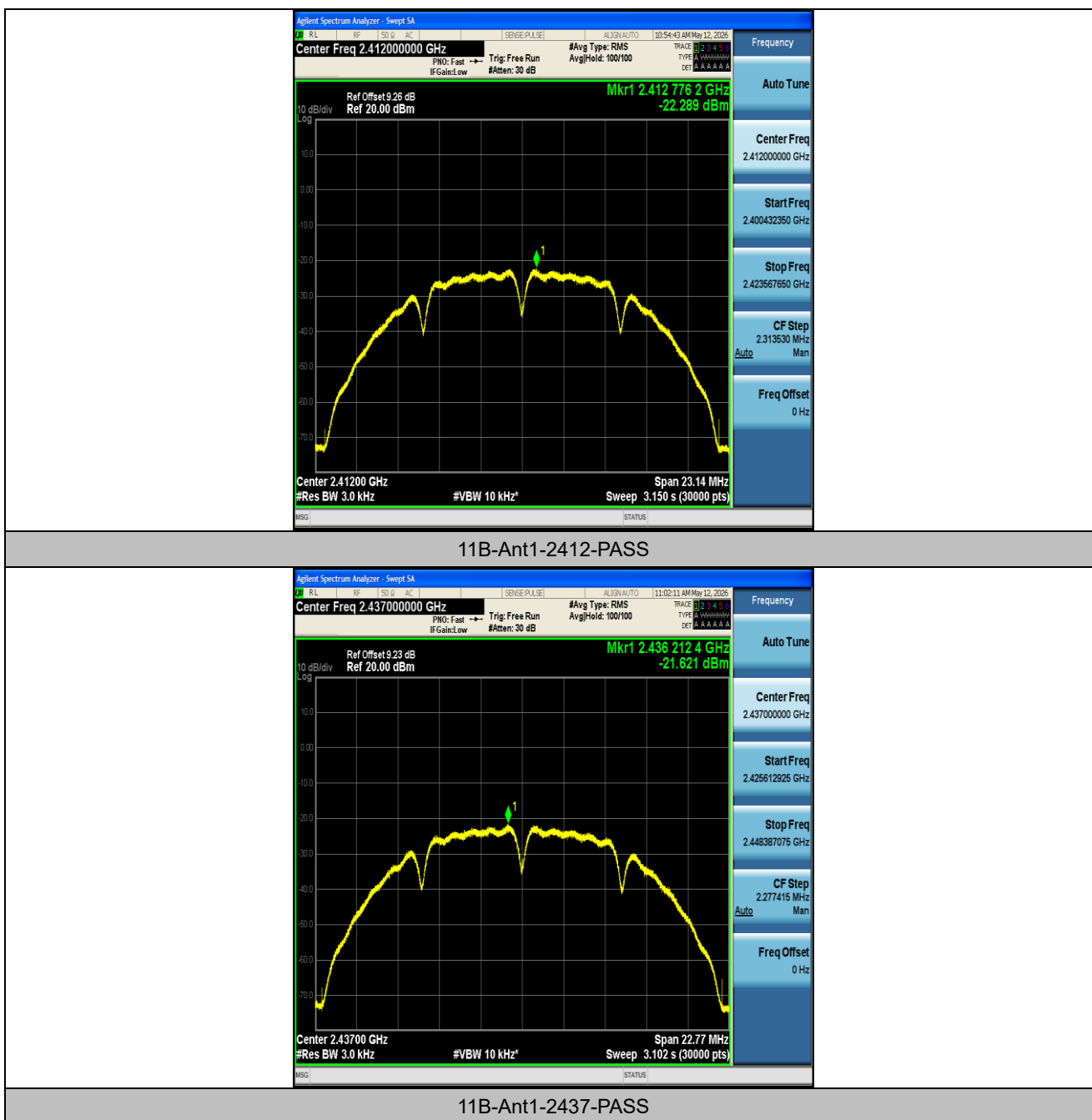
Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-22.29	≤8.00	PASS
11B	Ant1	2437	-21.62	≤8.00	PASS
11B	Ant1	2462	-22.10	≤8.00	PASS
11G	Ant1	2412	-20.49	≤8.00	PASS
11G	Ant1	2437	-19.69	≤8.00	PASS
11G	Ant1	2462	-21.25	≤8.00	PASS
11N20SISO	Ant1	2412	-21.45	≤8.00	PASS
11N20SISO	Ant1	2437	-19.71	≤8.00	PASS
11N20SISO	Ant1	2462	-21.02	≤8.00	PASS
11N40SISO	Ant1	2422	-19.78	≤8.00	PASS
11N40SISO	Ant1	2437	-21.26	≤8.00	PASS
11N40SISO	Ant1	2452	-22.42	≤8.00	PASS

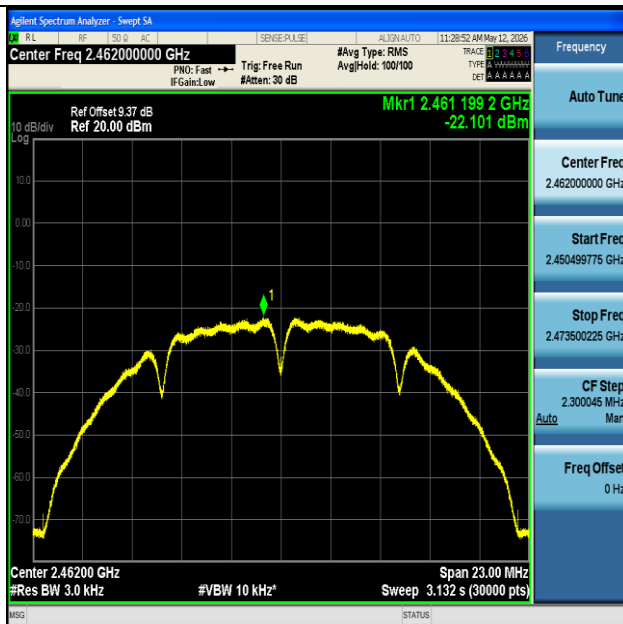
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)



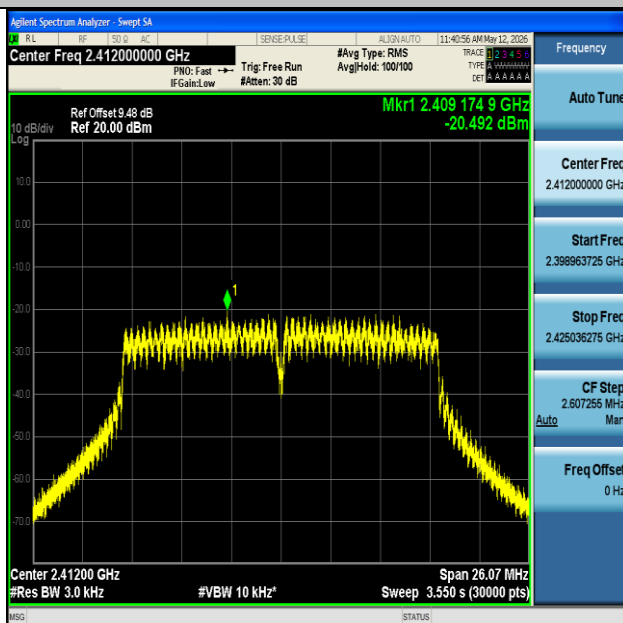


Test Graphs



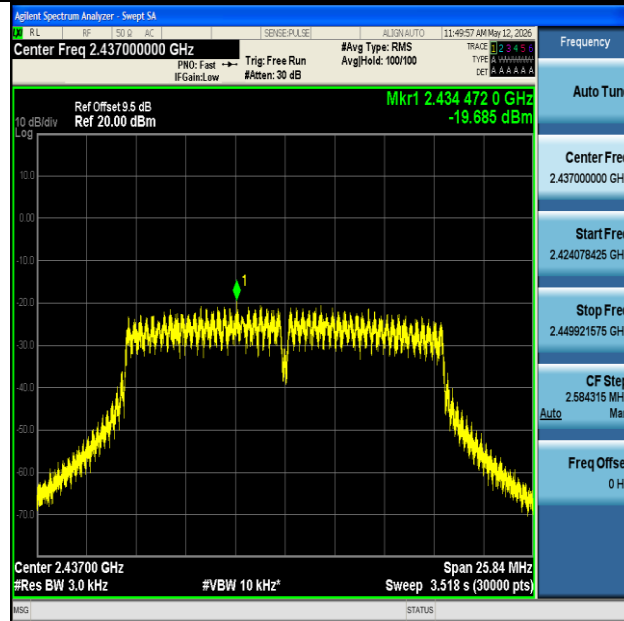


11B-Ant1-2462-PASS

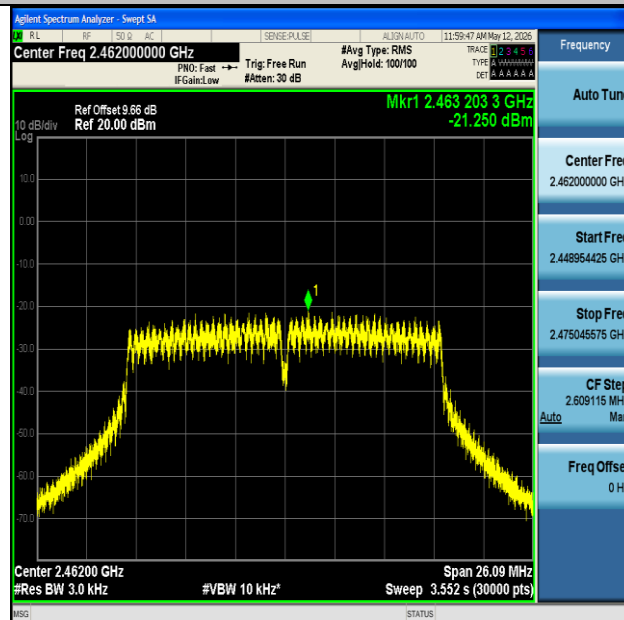


11G-Ant1-2412-PASS



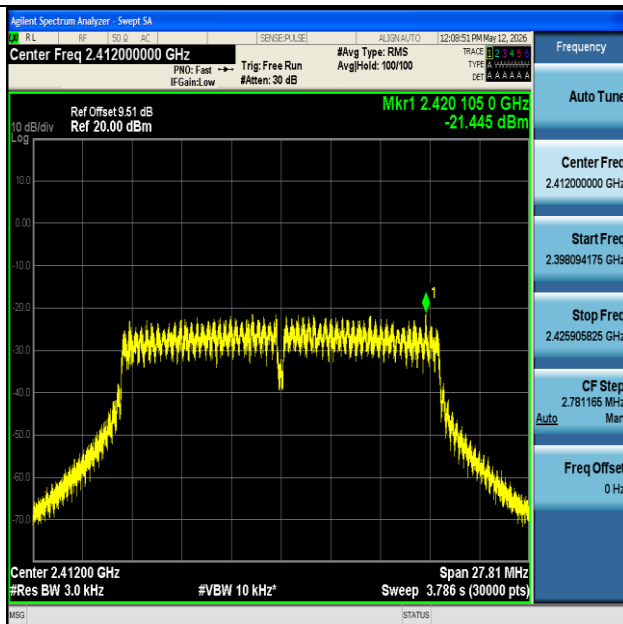


11G-Ant1-2437-PASS

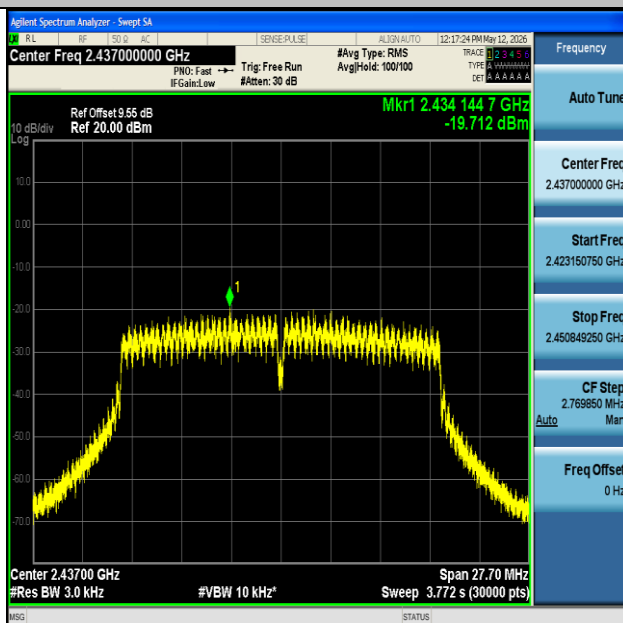


11G-Ant1-2462-PASS



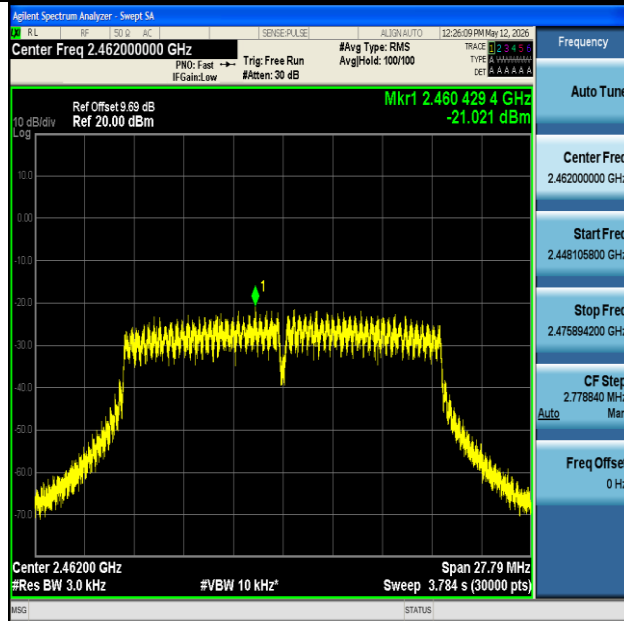


11N20SISO-Ant1-2412-PASS

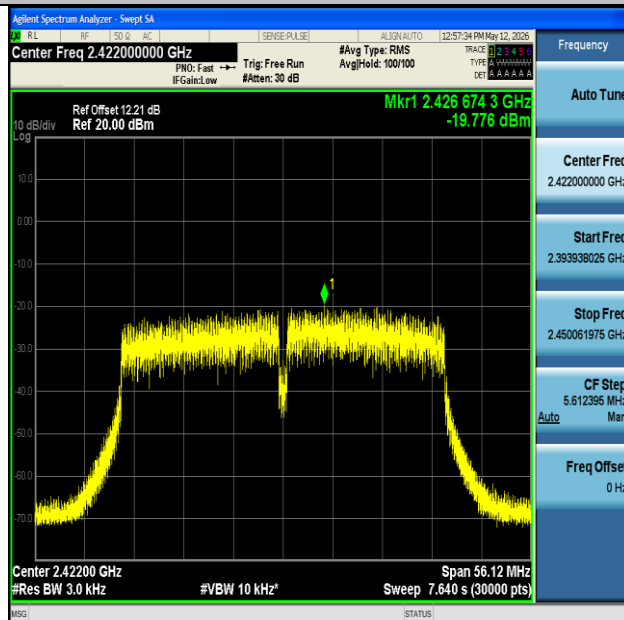


11N20SISO-Ant1-2437-PASS



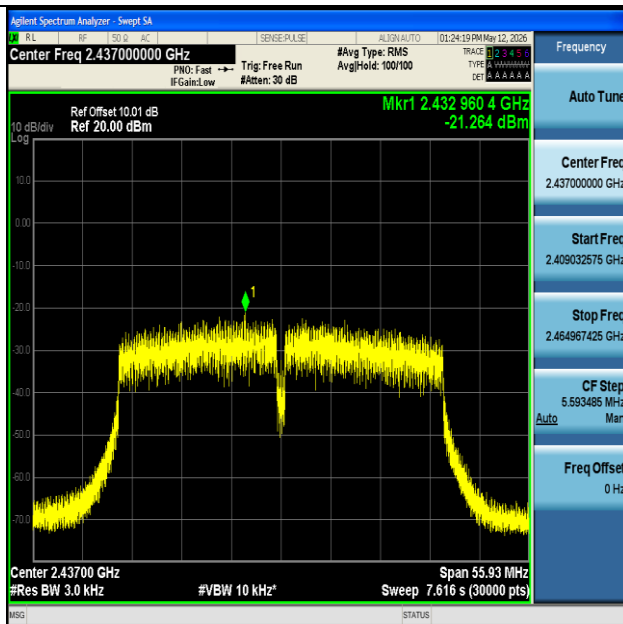


11N20SISO-Ant1-2462-PASS

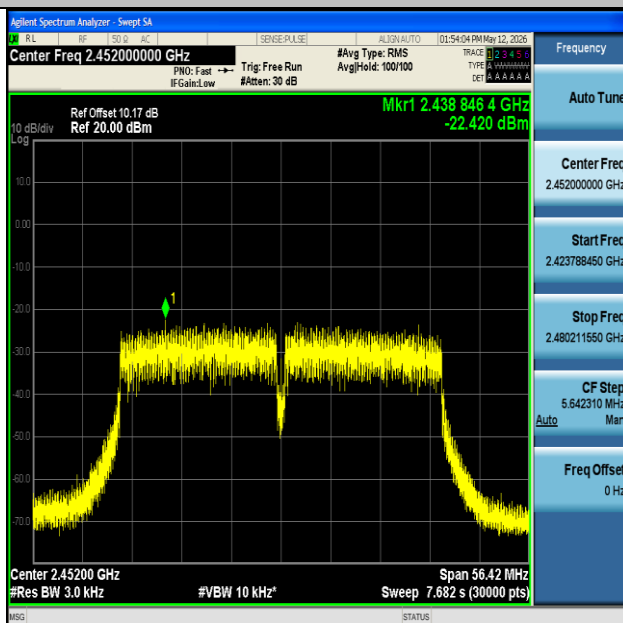


11N40SISO-Ant1-2422-PASS





11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS





Appendix E: Band edge measurements

Test Result

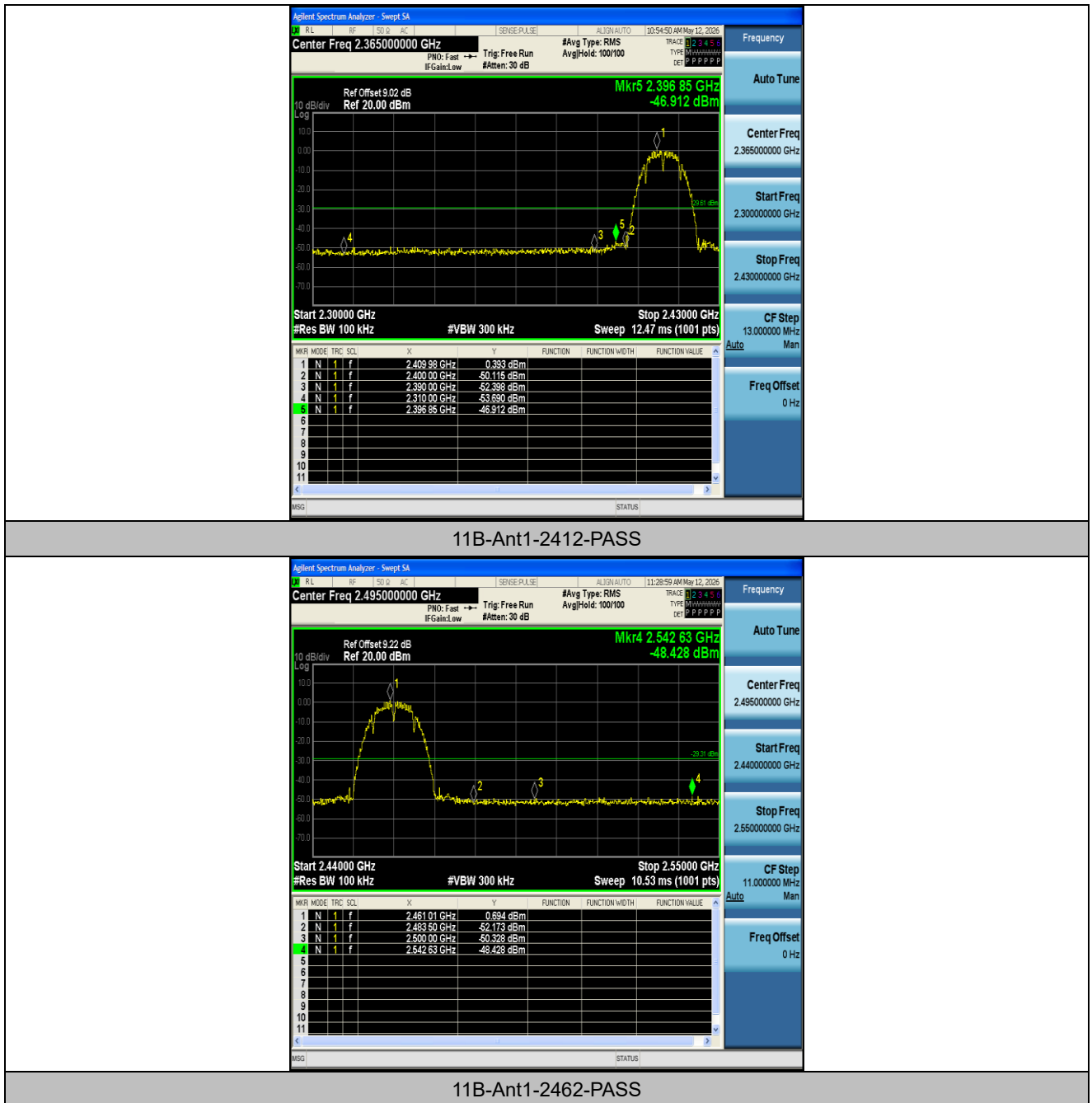
Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	0.39	-46.91	≤ -29.61	PASS
11B	Ant1	High	2462	0.69	-48.43	≤ -29.31	PASS
11G	Ant1	Low	2412	-1.10	-39.83	≤ -31.1	PASS
11G	Ant1	High	2462	-2.14	-49	≤ -32.14	PASS
11N20SISO	Ant1	Low	2412	-0.84	-37.24	≤ -30.84	PASS
11N20SISO	Ant1	High	2462	-0.42	-48.43	≤ -30.42	PASS
11N40SISO	Ant1	Low	2422	-2.46	-41.63	≤ -32.46	PASS
11N40SISO	Ant1	High	2452	-3.69	-45.3	≤ -33.69	PASS

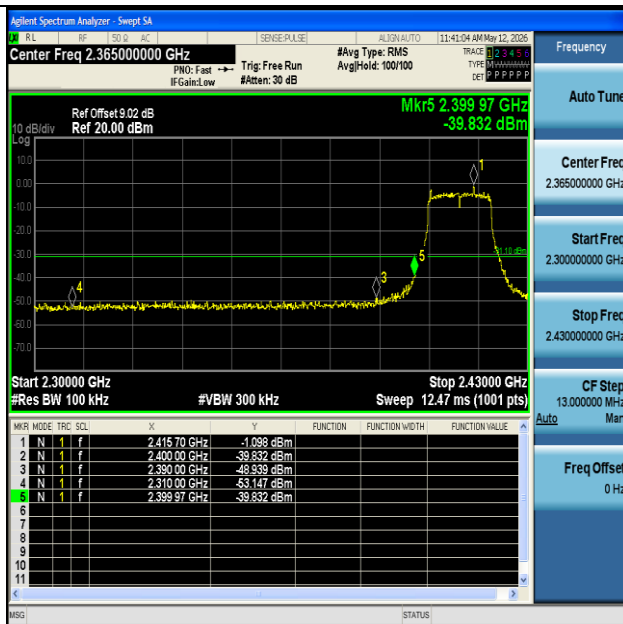
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



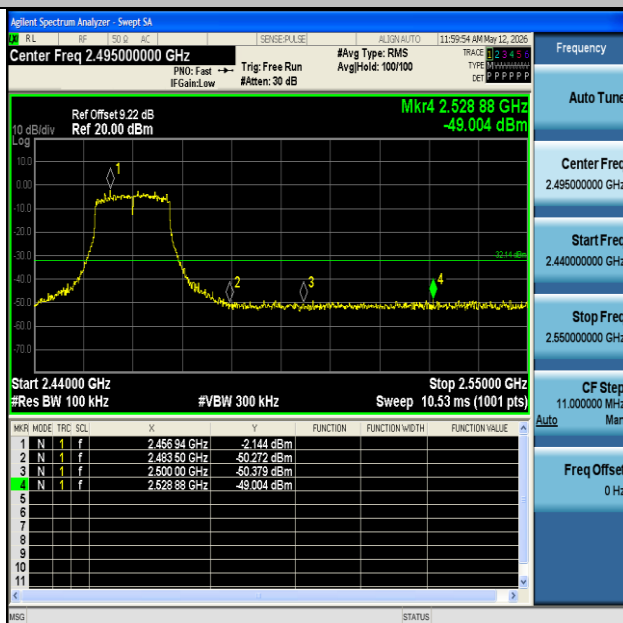


Test Graphs



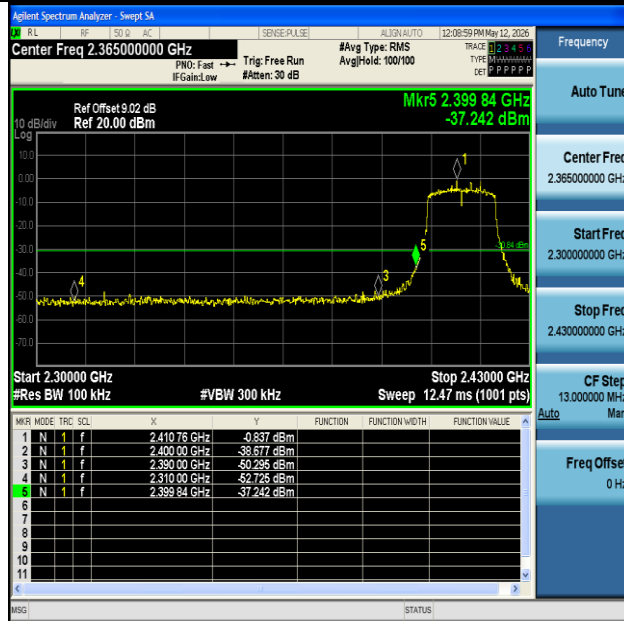


11G-Ant1-2412-PASS

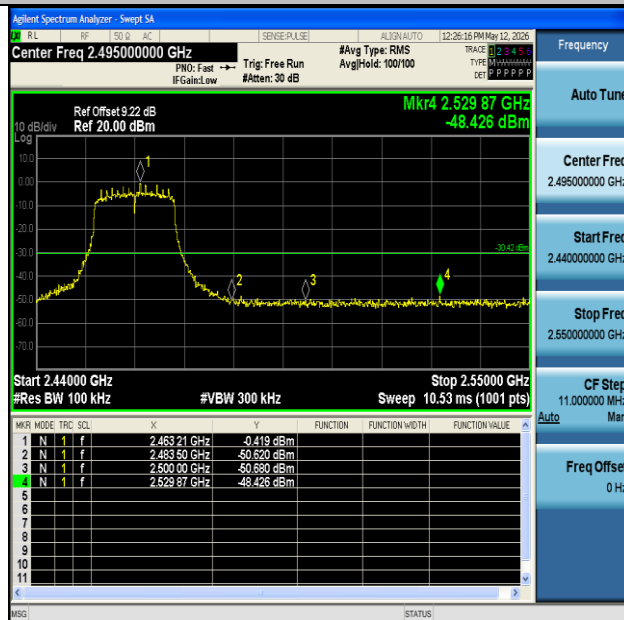


11G-Ant1-2462-PASS





11N20SISO-Ant1-2412-PASS

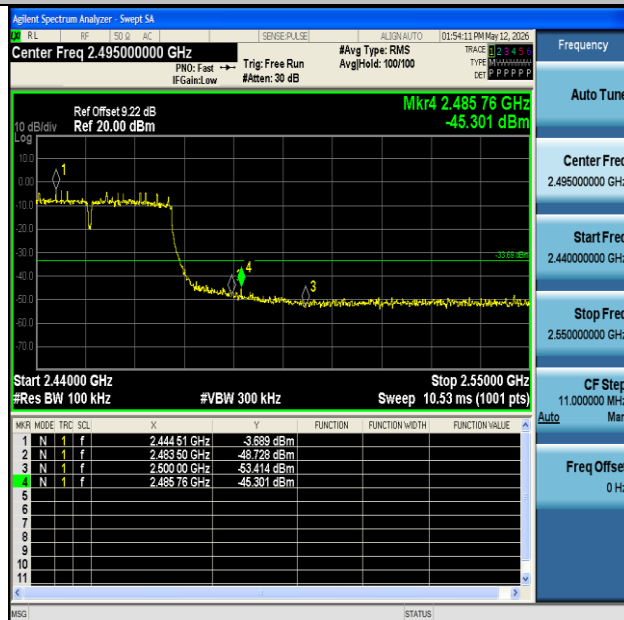


11N20SISO-Ant1-2462-PASS





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	-1.40	-1.40	---	PASS
11B	Ant1	2412	30~1000	-1.40	-62.86	≤-31.4	PASS
11B	Ant1	2412	1000~26500	-1.40	-37.14	≤-31.4	PASS
11B	Ant1	2437	0~Reference	0.11	0.11	---	PASS
11B	Ant1	2437	30~1000	0.11	-62.91	≤-29.89	PASS
11B	Ant1	2437	1000~26500	0.11	-37.51	≤-29.89	PASS
11B	Ant1	2462	0~Reference	0.34	0.34	---	PASS
11B	Ant1	2462	30~1000	0.34	-62.59	≤-29.66	PASS
11B	Ant1	2462	1000~26500	0.34	-37.48	≤-29.66	PASS
11G	Ant1	2412	0~Reference	-2.09	-2.09	---	PASS
11G	Ant1	2412	30~1000	-2.09	-62.28	≤-32.09	PASS
11G	Ant1	2412	1000~26500	-2.09	-37.32	≤-32.09	PASS
11G	Ant1	2437	0~Reference	-2.34	-2.34	---	PASS
11G	Ant1	2437	30~1000	-2.34	-63.09	≤-32.34	PASS
11G	Ant1	2437	1000~26500	-2.34	-37.11	≤-32.34	PASS
11G	Ant1	2462	0~Reference	-3.78	-3.78	---	PASS
11G	Ant1	2462	30~1000	-3.78	-62.69	≤-33.78	PASS
11G	Ant1	2462	1000~26500	-3.78	-37.98	≤-33.78	PASS
11N20SISO	Ant1	2412	0~Reference	-3.78	-3.78	---	PASS
11N20SISO	Ant1	2412	30~1000	-3.78	-62.12	≤-33.78	PASS
11N20SISO	Ant1	2412	1000~26500	-3.78	-37.94	≤-33.78	PASS
11N20SISO	Ant1	2437	0~Reference	-3.16	-3.16	---	PASS
11N20SISO	Ant1	2437	30~1000	-3.16	-62.64	≤-33.16	PASS
11N20SISO	Ant1	2437	1000~26500	-3.16	-37.28	≤-33.16	PASS
11N20SISO	Ant1	2462	0~Reference	-4.60	-4.60	---	PASS
11N20SISO	Ant1	2462	30~1000	-4.60	-62.57	≤-34.6	PASS
11N20SISO	Ant1	2462	1000~26500	-4.60	-37.29	≤-34.6	PASS
11N40SISO	Ant1	2422	0~Reference	-4.65	-4.65	---	PASS
11N40SISO	Ant1	2422	30~1000	-4.65	-62.41	≤-34.65	PASS
11N40SISO	Ant1	2422	1000~26500	-4.65	-37.23	≤-34.65	PASS
11N40SISO	Ant1	2437	0~Reference	-2.76	-2.76	---	PASS
11N40SISO	Ant1	2437	30~1000	-2.76	-63.07	≤-32.76	PASS
11N40SISO	Ant1	2437	1000~26500	-2.76	-37.83	≤-32.76	PASS
11N40SISO	Ant1	2452	0~Reference	-5.02	-5.02	---	PASS
11N40SISO	Ant1	2452	30~1000	-5.02	-63.12	≤-35.02	PASS
11N40SISO	Ant1	2452	1000~26500	-5.02	-37.26	≤-35.02	PASS



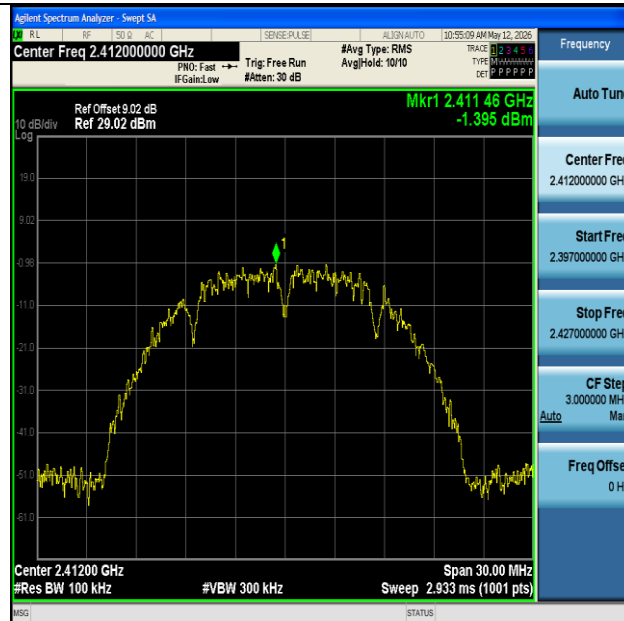


Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

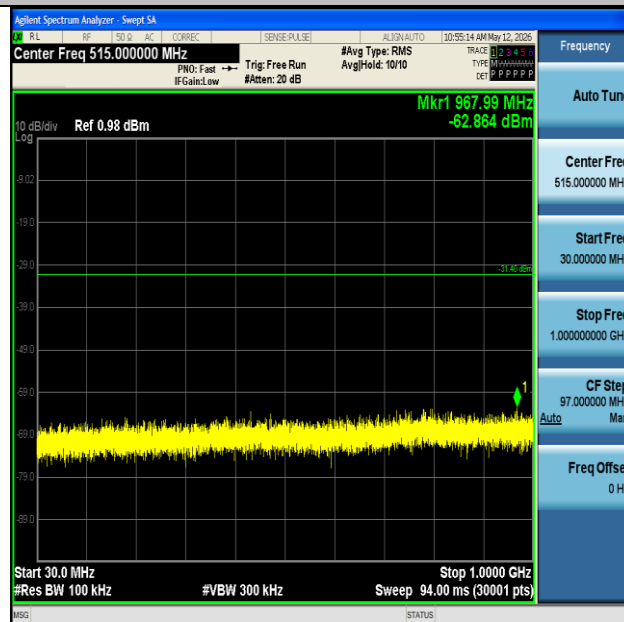




Test Graphs

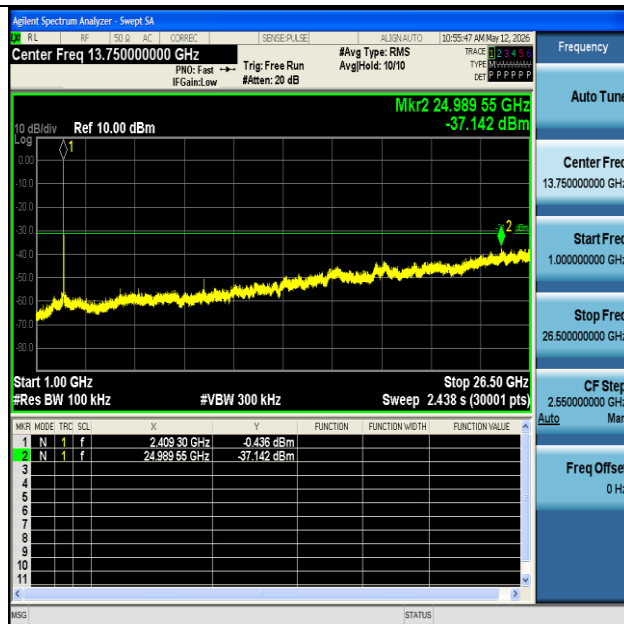


11B-Ant1-2412-0~Reference-PASS

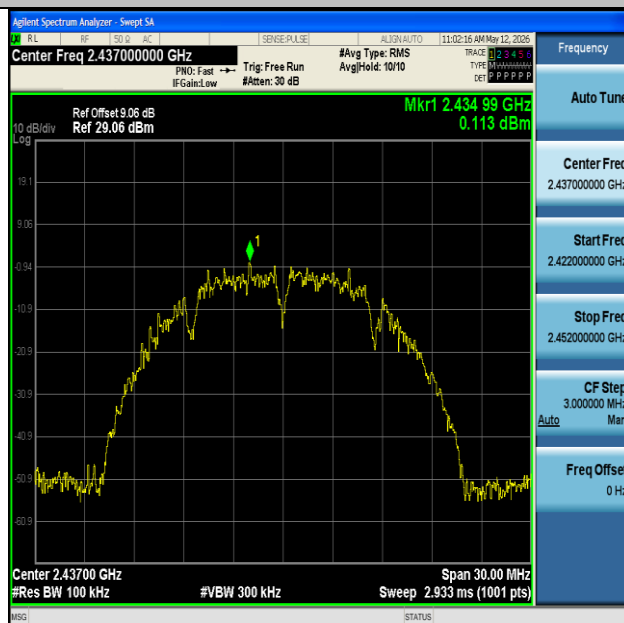


11B-Ant1-2412-30~1000-PASS



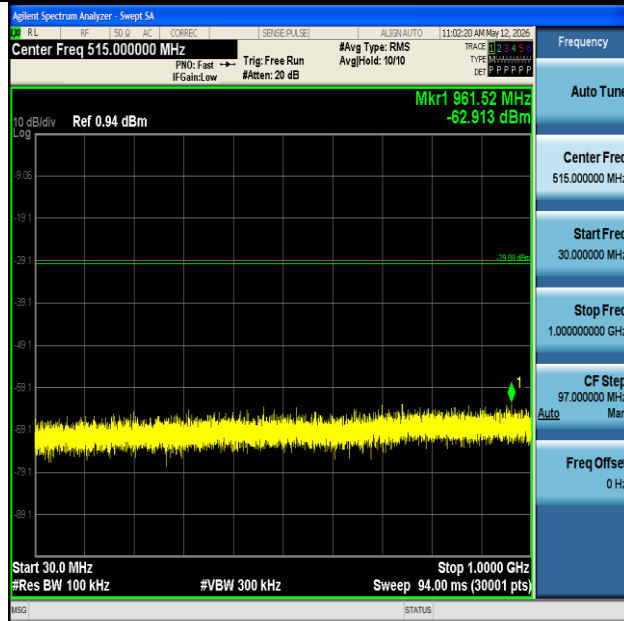


11B-Ant1-2412-1000~26500-PASS

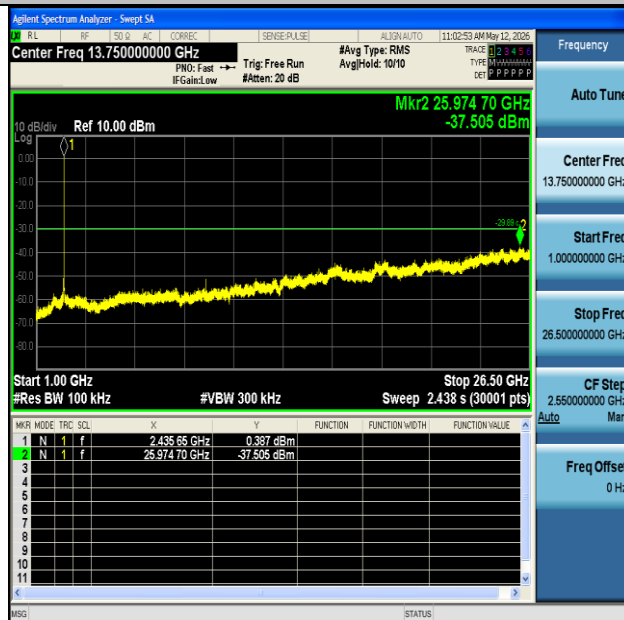


11B-Ant1-2437-0~Reference-PASS



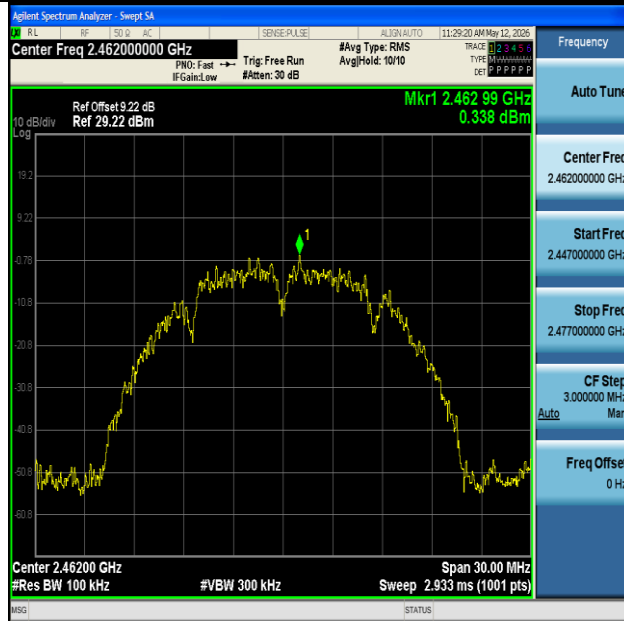


11B-Ant1-2437-30~1000-PASS

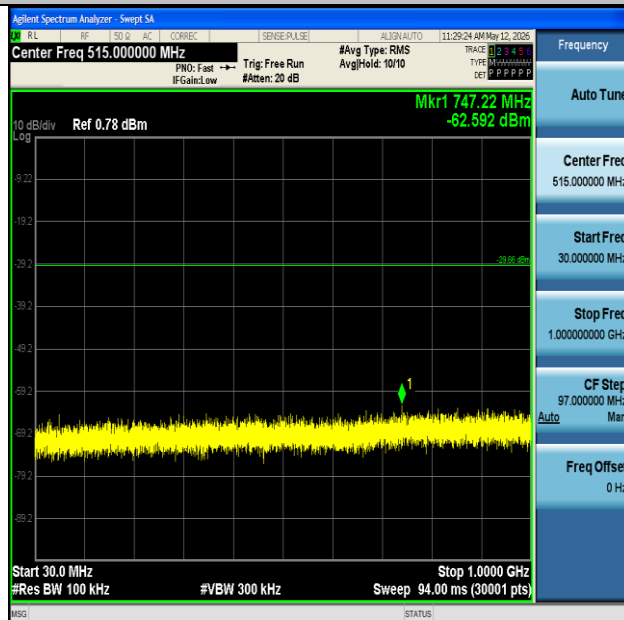


11B-Ant1-2437-1000~26500-PASS



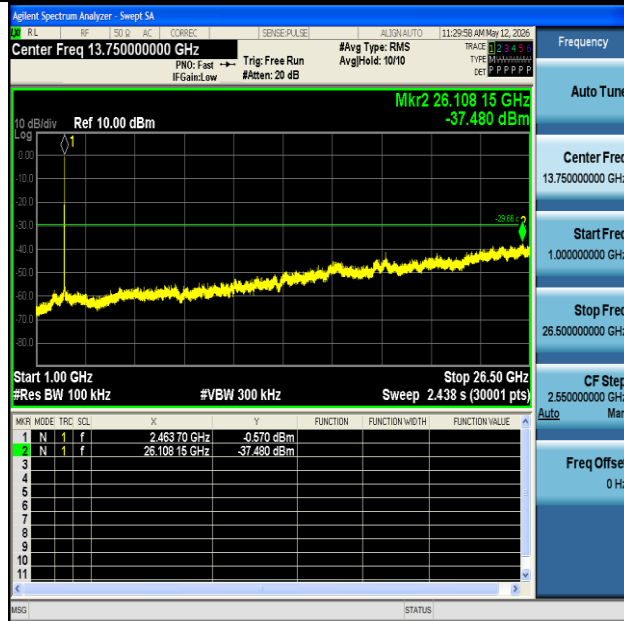


11B-Ant1-2462-0~Reference-PASS

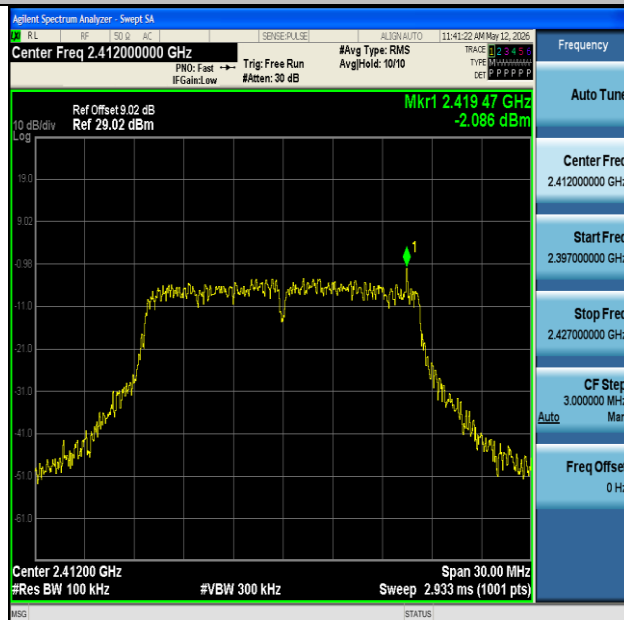


11B-Ant1-2462-30~1000-PASS



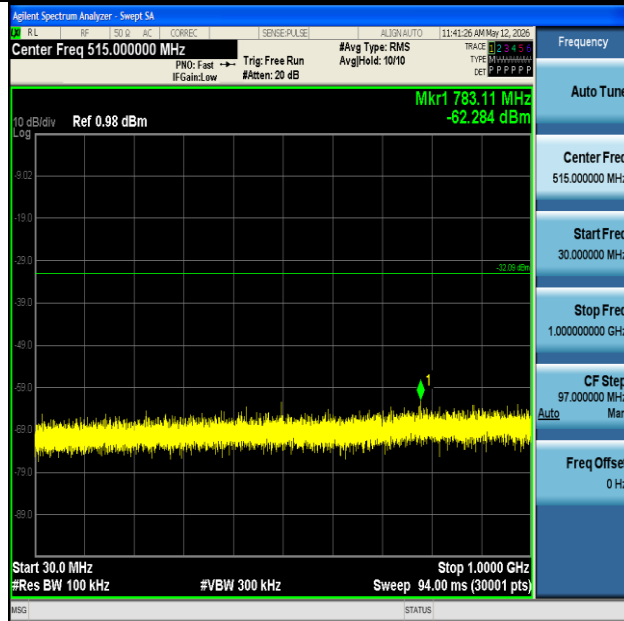


11B-Ant1-2462-1000~26500-PASS

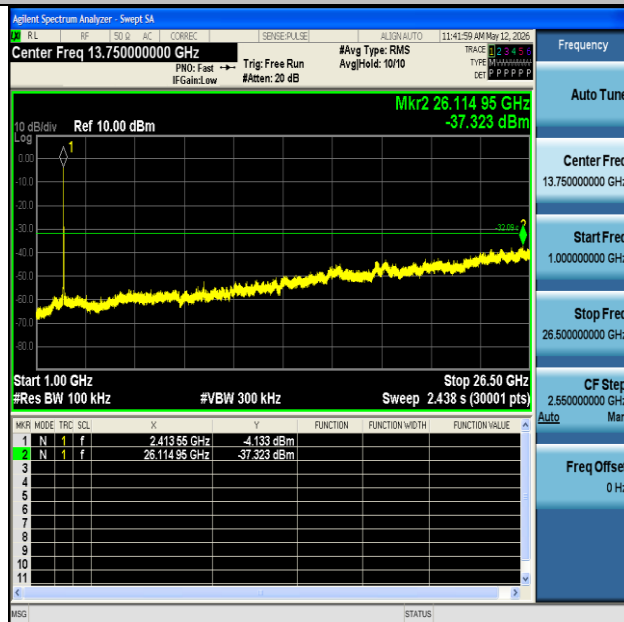


11G-Ant1-2412-0~Reference-PASS



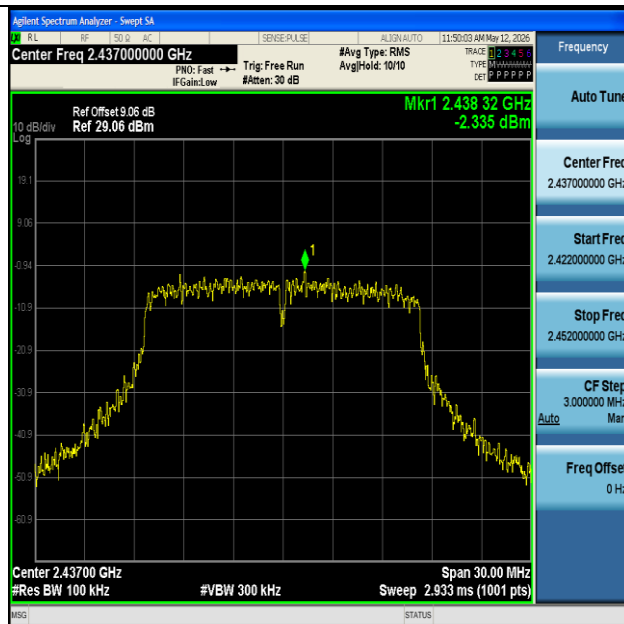


11G-Ant1-2412-30~1000-PASS

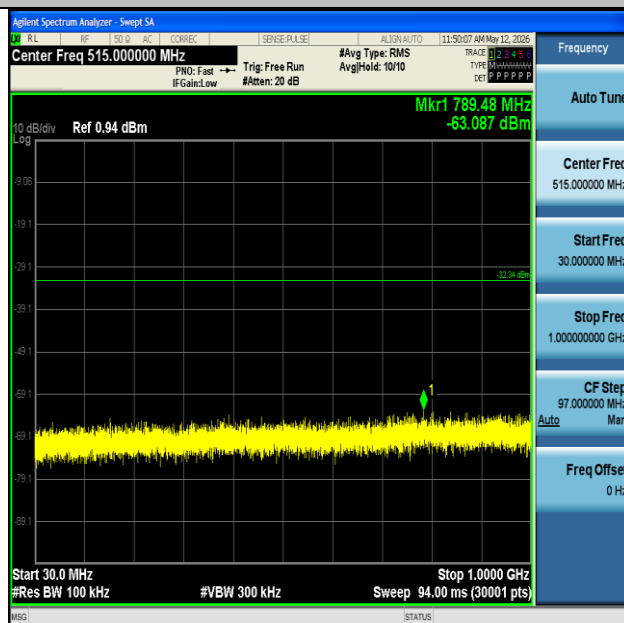


11G-Ant1-2412-1000~26500-PASS



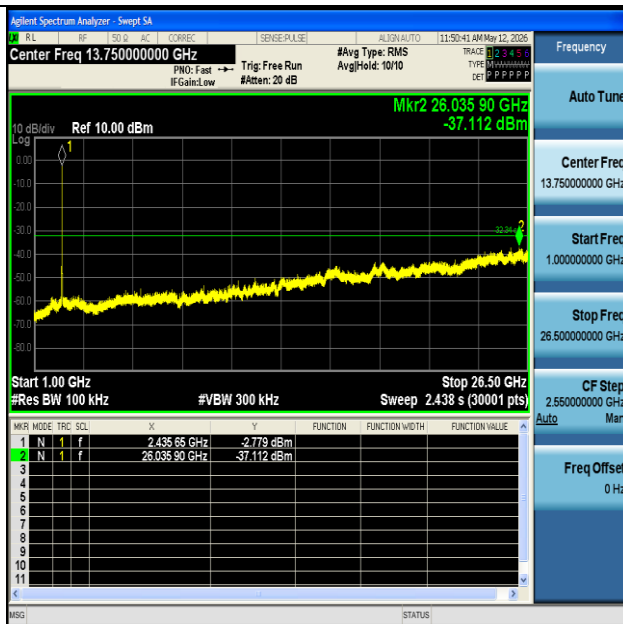


11G-Ant1-2437-0~Reference-PASS

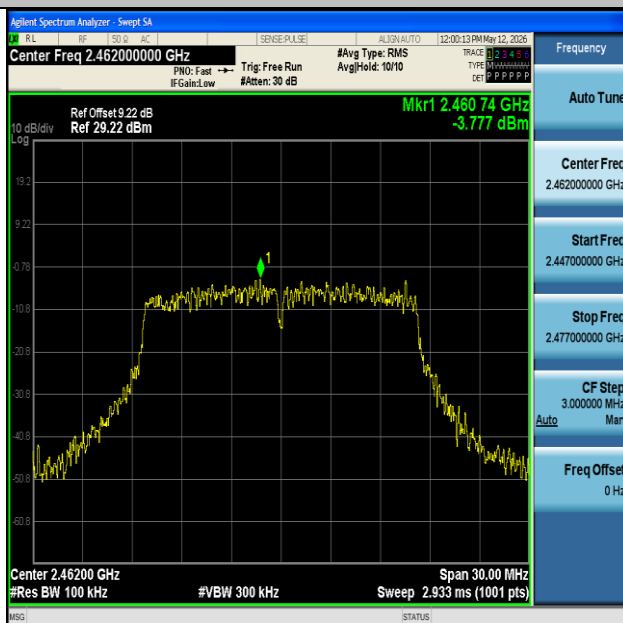


11G-Ant1-2437-30~1000-PASS





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

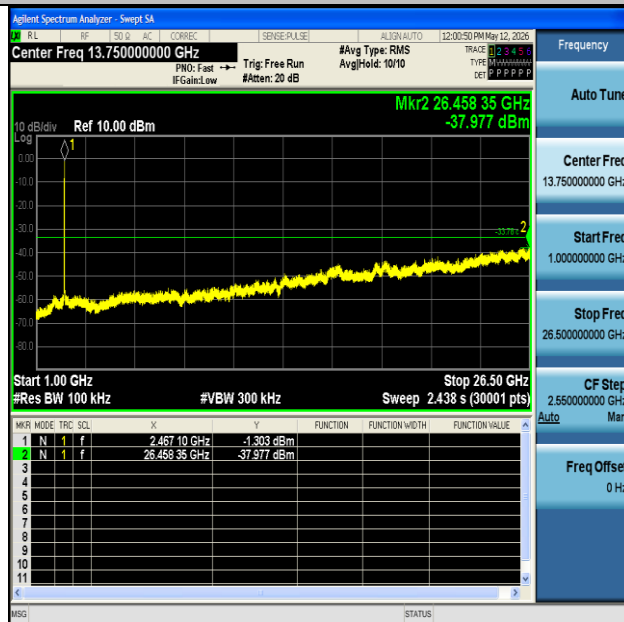


11G-Ant1-2462-0~Reference-PASS



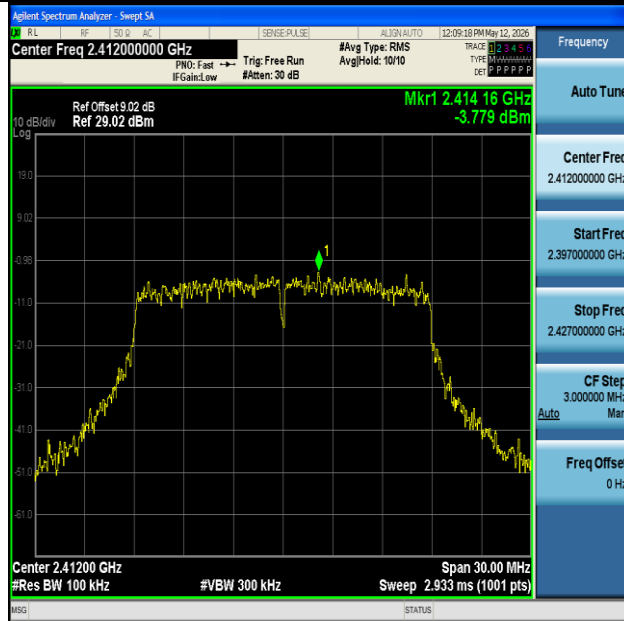


11G-Ant1-2462-30~1000-PASS

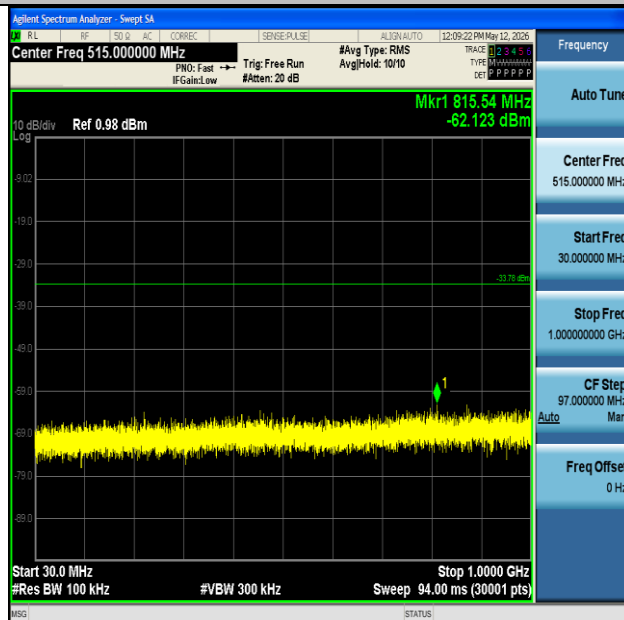


11G-Ant1-2462-1000~26500-PASS



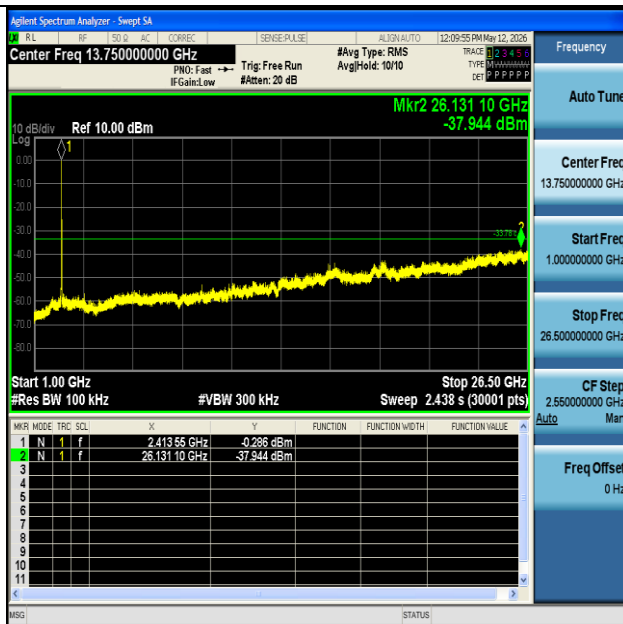


11N20SISO-Ant1-2412-0~Reference-PASS

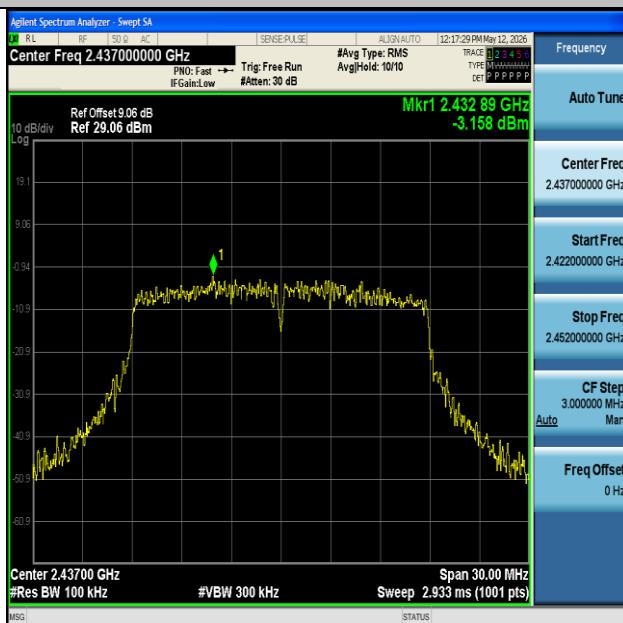


11N20SISO-Ant1-2412-30~1000-PASS



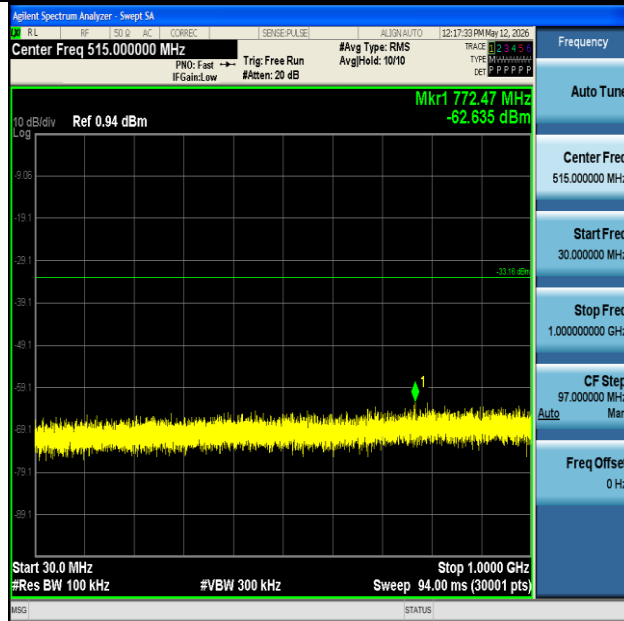


11N20SISO-Ant1-2412-1000~26500-PASS

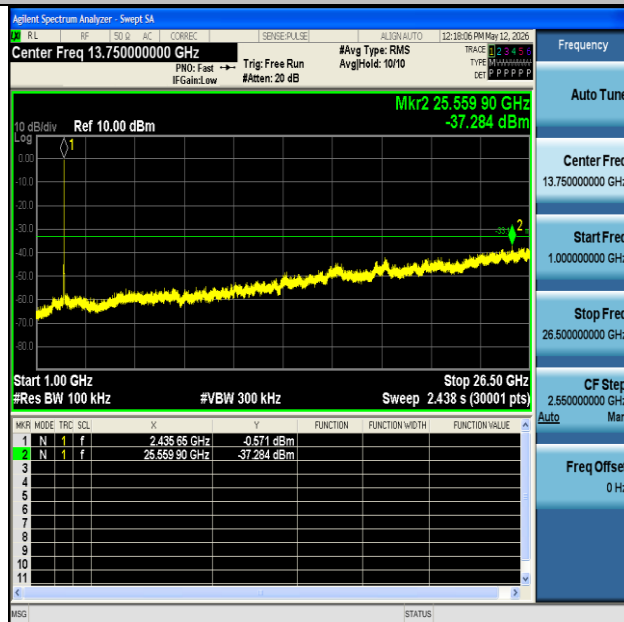


11N20SISO-Ant1-2437-0~Reference-PASS



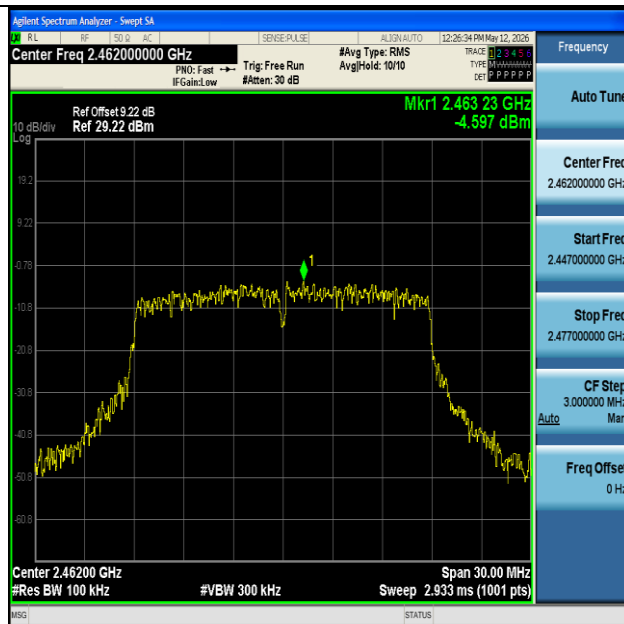


11N20SISO-Ant1-2437-30~1000-PASS

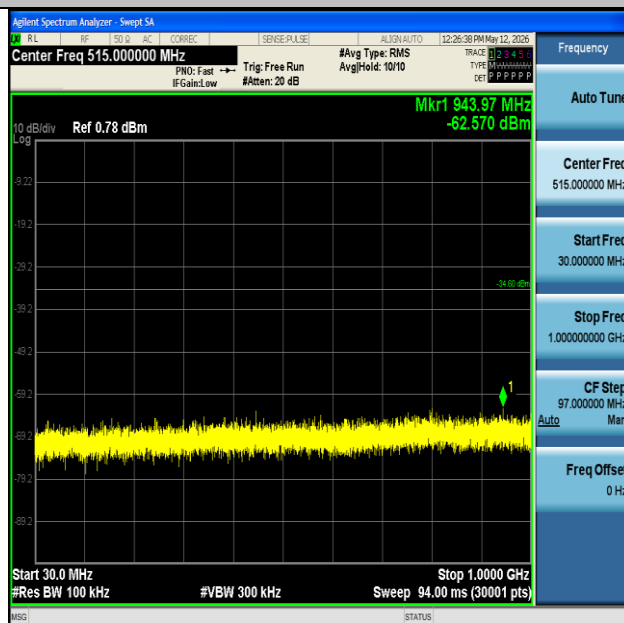


11N20SISO-Ant1-2437-1000~26500-PASS



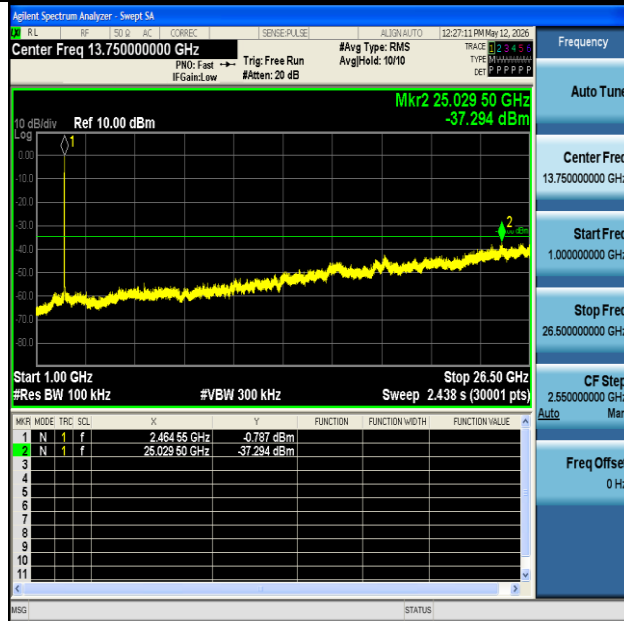


11N20SISO-Ant1-2462-0~Reference-PASS

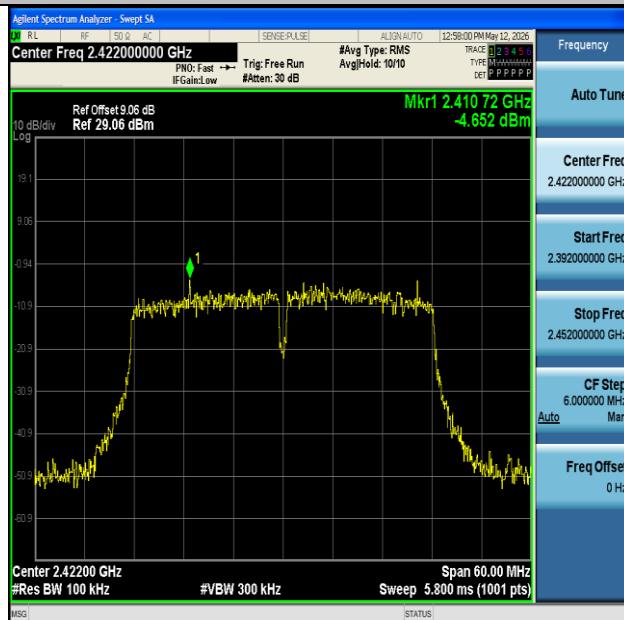


11N20SISO-Ant1-2462-30~1000-PASS



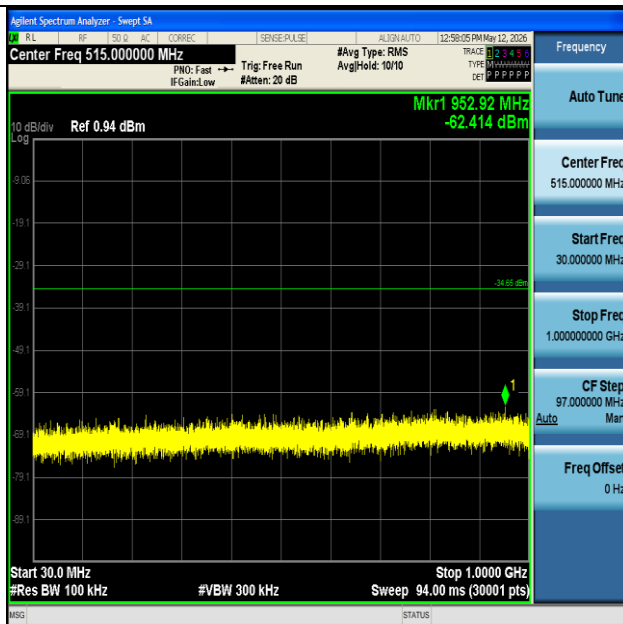


11N20SISO-Ant1-2462-1000~26500-PASS

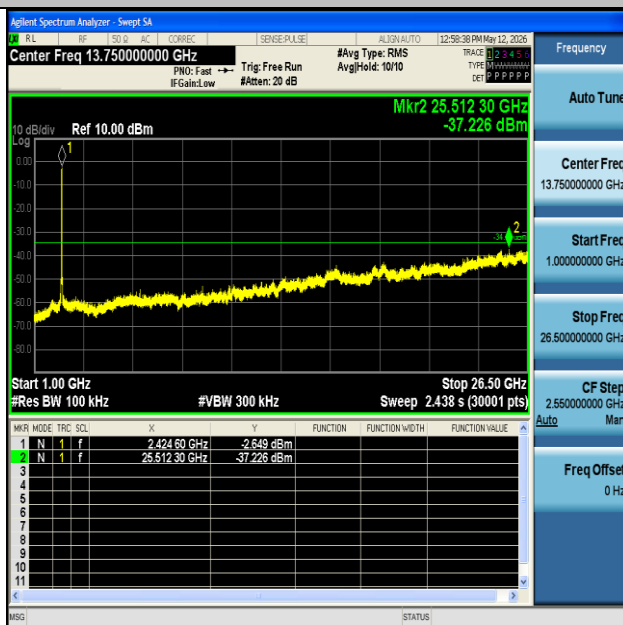


11N40SISO-Ant1-2422-0~Reference-PASS



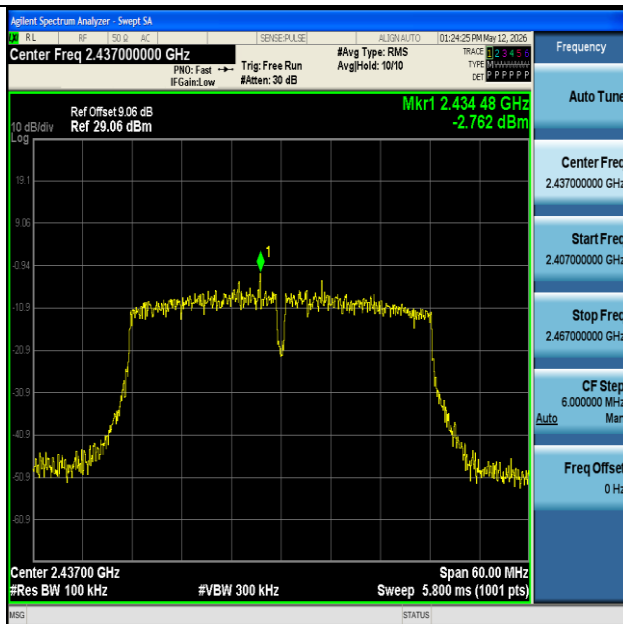


11N40SISO-Ant1-2422-30~1000-PASS

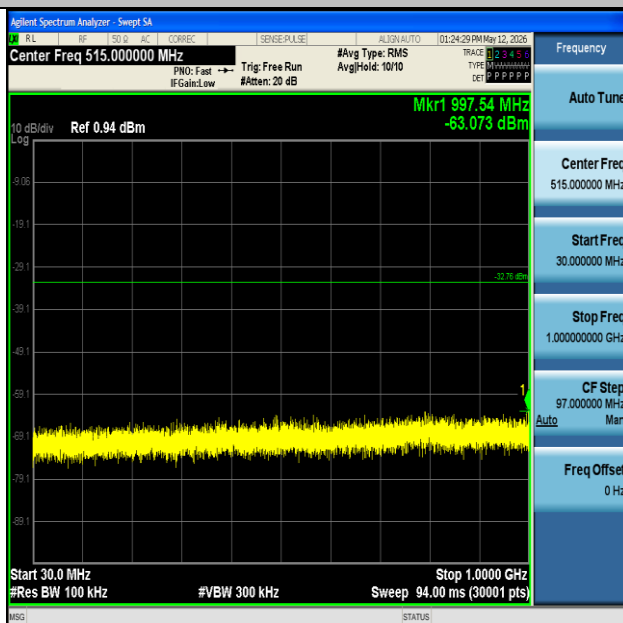


11N40SISO-Ant1-2422-1000~26500-PASS



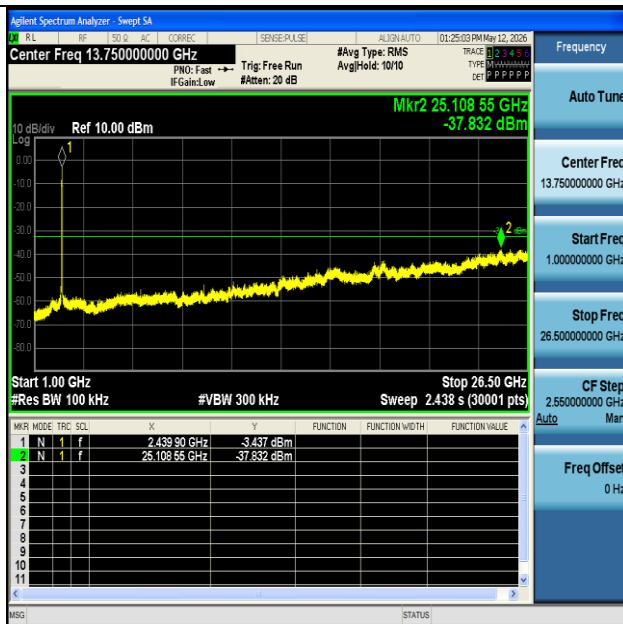


11N40SISO-Ant1-2437-0~Reference-PASS

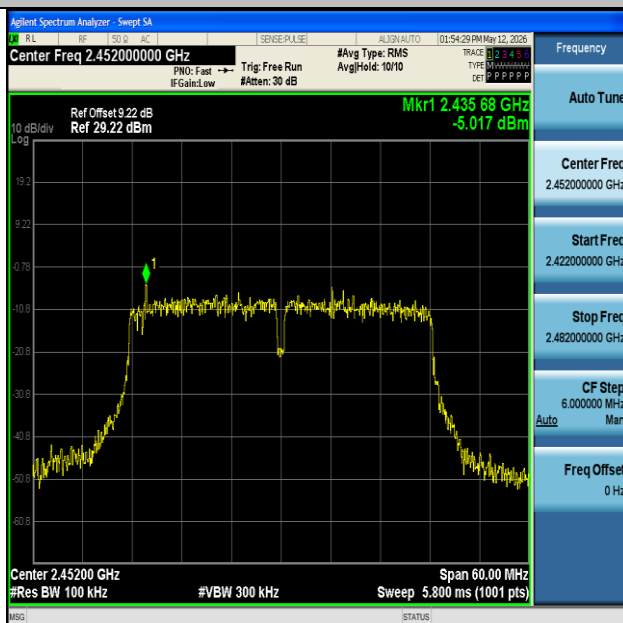


11N40SISO-Ant1-2437-30~1000-PASS



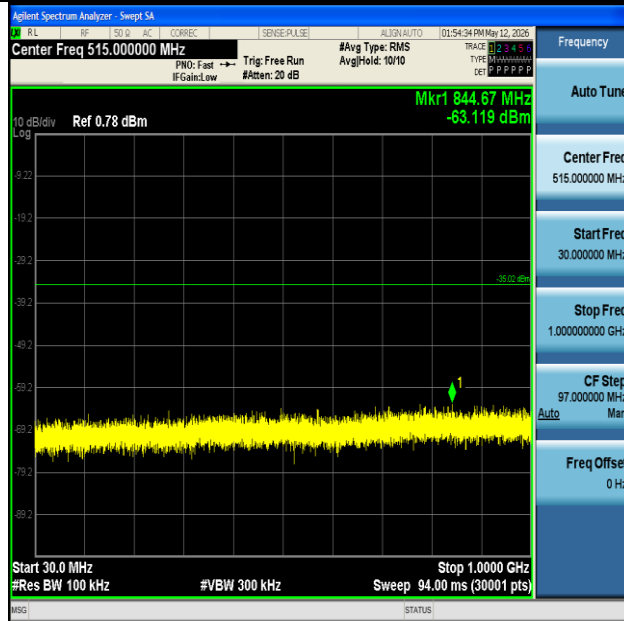


11N40SISO-Ant1-2437-1000~26500-PASS

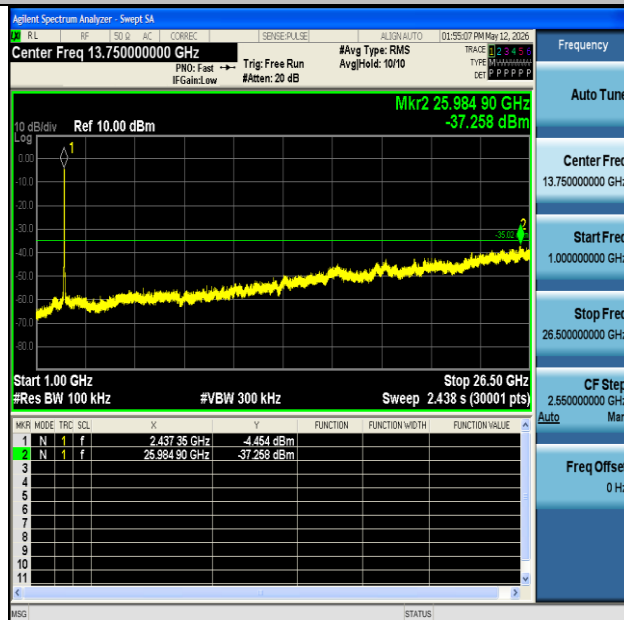


11N40SISO-Ant1-2452-0~Reference-PASS





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



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





Appendix G: Duty Cycle

Test Result

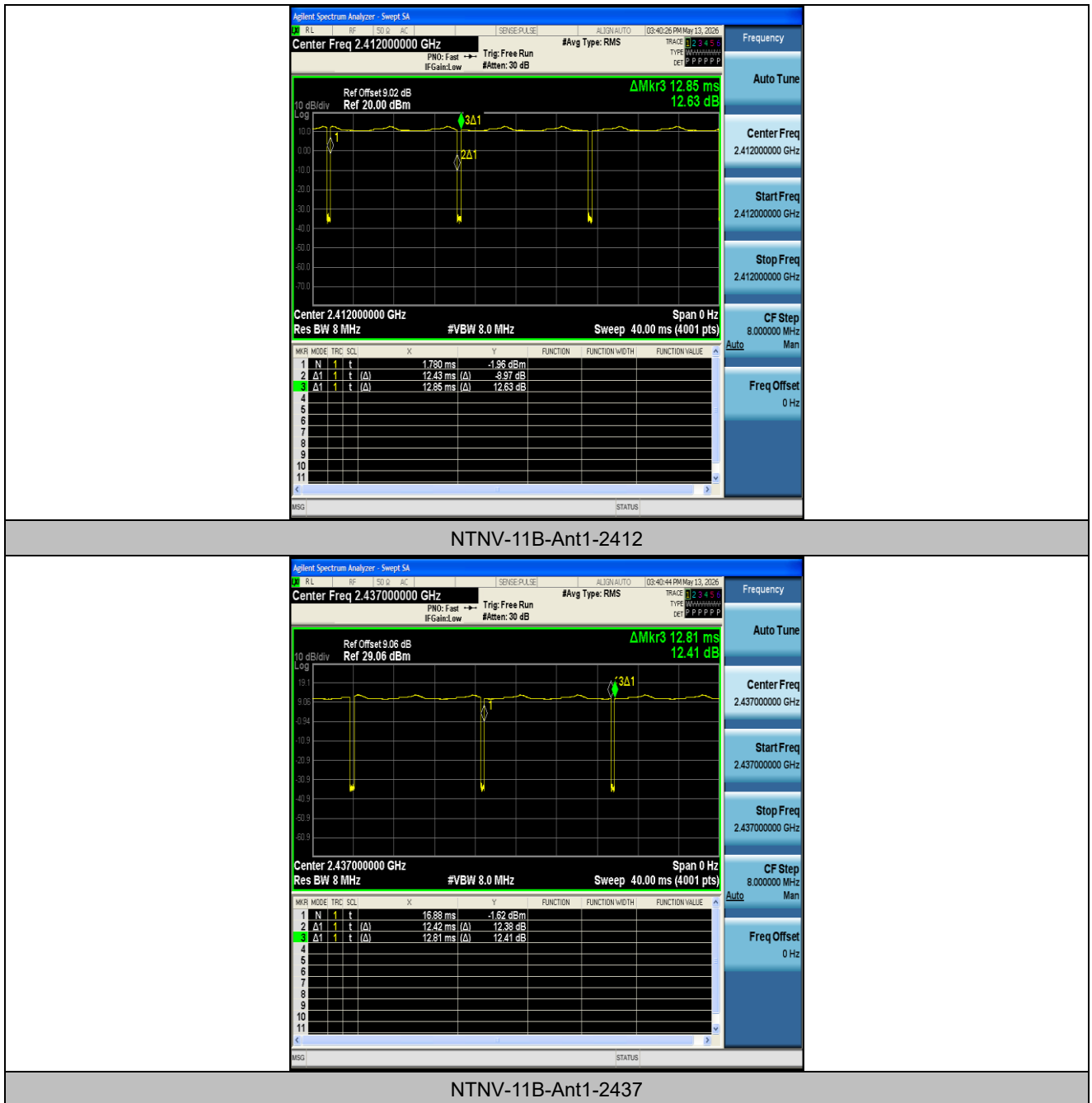
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.43	12.85	96.73	0.14
11B	Ant1	2437	12.42	12.81	96.96	0.13
11B	Ant1	2462	12.42	12.90	96.28	0.16
11G	Ant1	2412	2.06	2.29	89.96	0.46
11G	Ant1	2437	2.07	2.30	90.00	0.46
11G	Ant1	2462	2.07	2.30	90.00	0.46
11N20SISO	Ant1	2412	1.92	2.60	73.85	1.32
11N20SISO	Ant1	2437	1.92	2.15	89.30	0.49
11N20SISO	Ant1	2462	1.92	2.15	89.30	0.49
11N40SISO	Ant1	2422	0.94	1.17	80.34	0.95
11N40SISO	Ant1	2437	0.94	1.18	79.66	0.99
11N40SISO	Ant1	2452	0.94	1.17	80.34	0.95

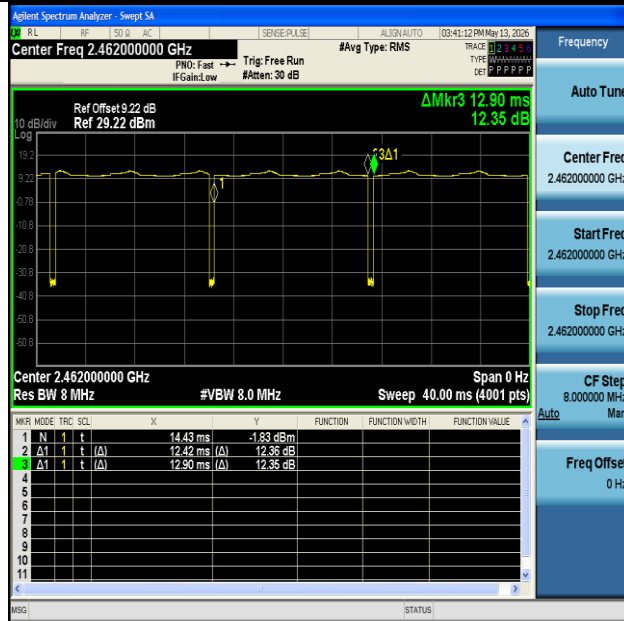
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



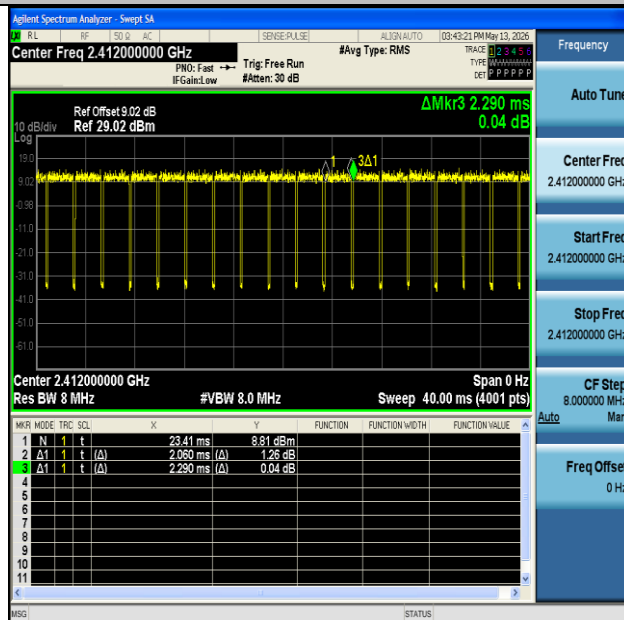


Test Graphs



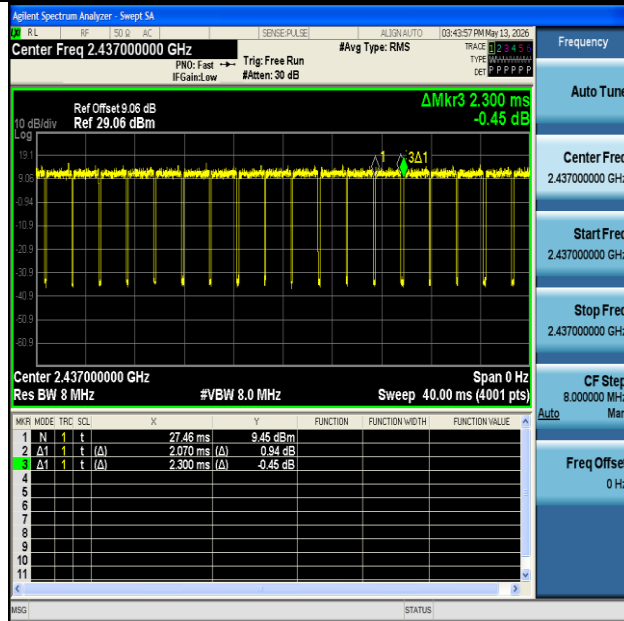


NTNV-11B-Ant1-2462

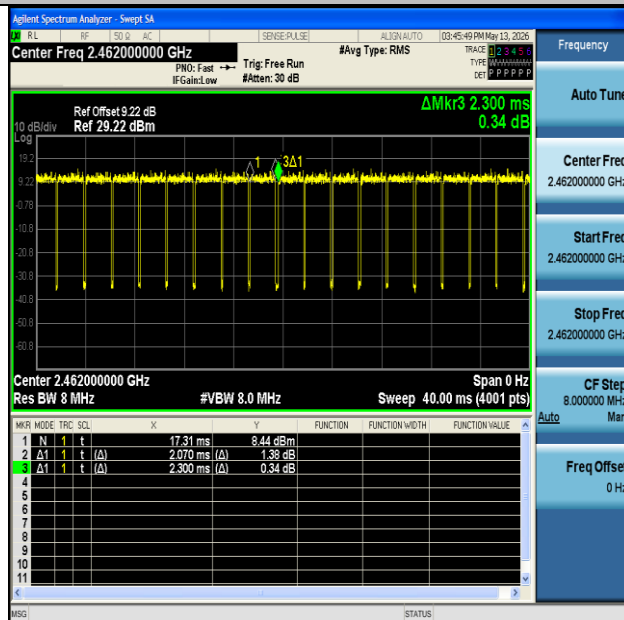


NTNV-11G-Ant1-2412



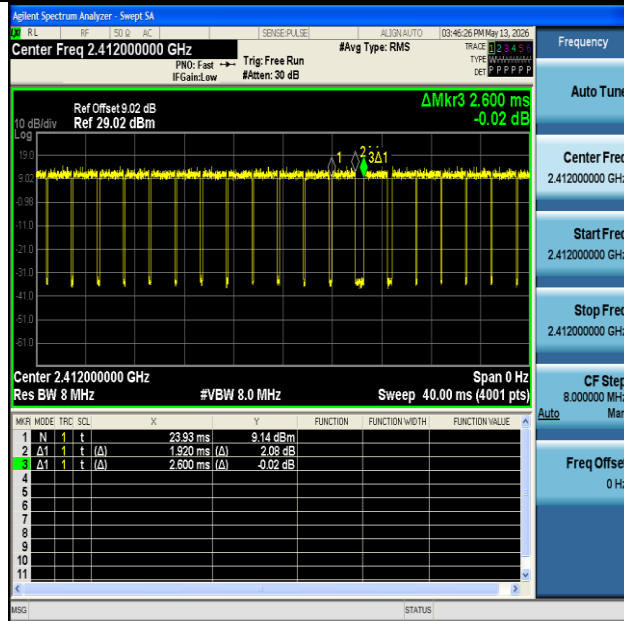


NTNV-11G-Ant1-2437

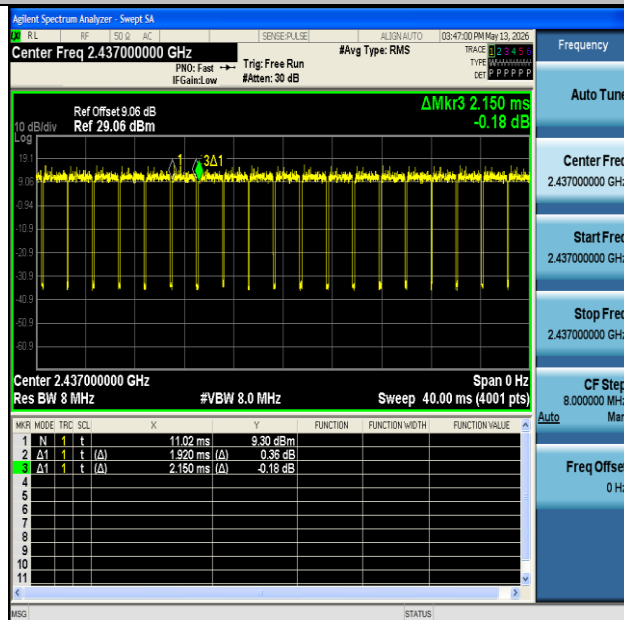


NTNV-11G-Ant1-2462





NTNV-11N20SISO-Ant1-2412



NTNV-11N20SISO-Ant1-2437

