



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

Product Name: walkie-talkie

Trade Mark: /

Test Model: LY-001

FCC ID: 2BK33-LY058

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	8.120	2408.480	2416.600	0.5	PASS
11B	Ant1	2437	8.560	2432.480	2441.040	0.5	PASS
11B	Ant1	2462	8.160	2458.480	2466.640	0.5	PASS
11G	Ant1	2412	15.280	2404.920	2420.200	0.5	PASS
11G	Ant1	2437	15.720	2428.840	2444.560	0.5	PASS
11G	Ant1	2462	14.480	2455.760	2470.240	0.5	PASS
11N20SISO	Ant1	2412	16.760	2404.080	2420.840	0.5	PASS
11N20SISO	Ant1	2437	16.560	2428.240	2444.800	0.5	PASS
11N20SISO	Ant1	2462	16.400	2454.480	2470.880	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





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	12.878	2405.8804	2418.7584	---	---
11B	Ant1	2437	12.908	2430.3527	2443.2607	---	---
11B	Ant1	2462	13.114	2455.9070	2469.0210	---	---
11G	Ant1	2412	16.786	2403.8642	2420.6502	---	---
11G	Ant1	2437	16.894	2428.3983	2445.2923	---	---
11G	Ant1	2462	16.934	2453.8885	2470.8225	---	---
11N20SISO	Ant1	2412	17.825	2403.3207	2421.1457	---	---
11N20SISO	Ant1	2437	17.824	2427.9559	2445.7799	---	---
11N20SISO	Ant1	2462	17.941	2453.3547	2471.2957	---	---

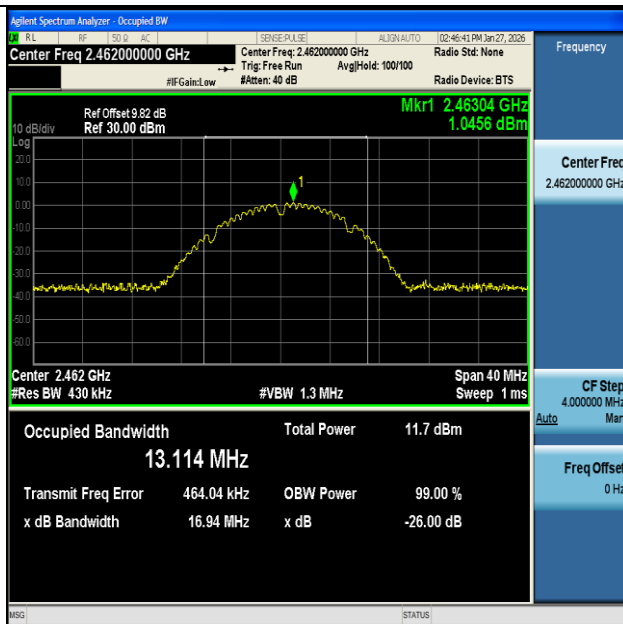
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



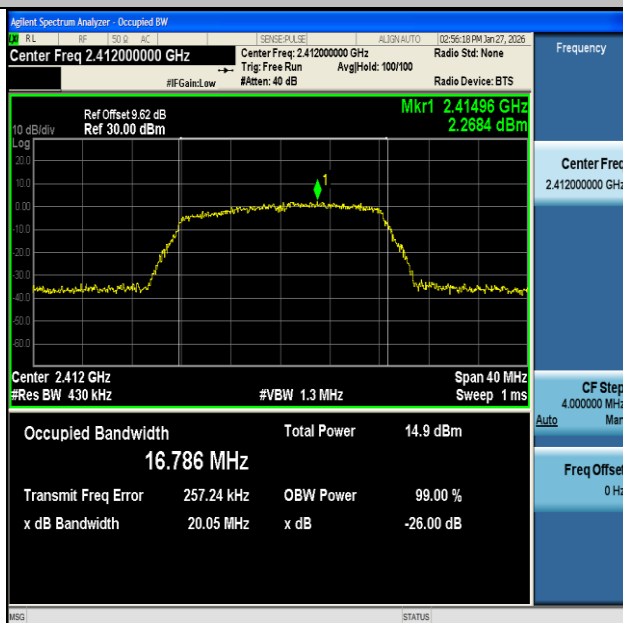


Test Graphs





11B-Ant1-2462

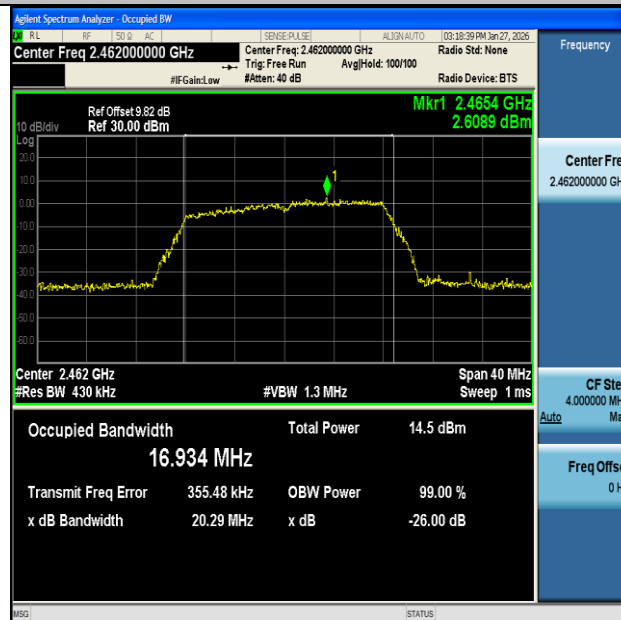


11G-Ant1-2412



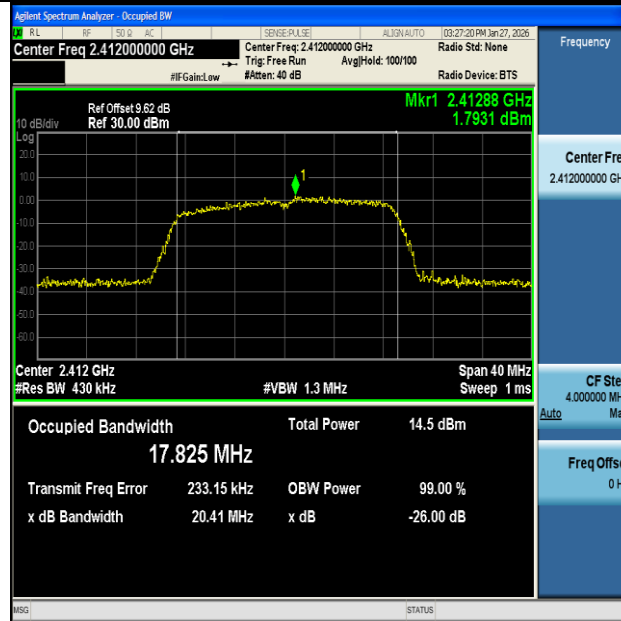


11G-Ant1-2437

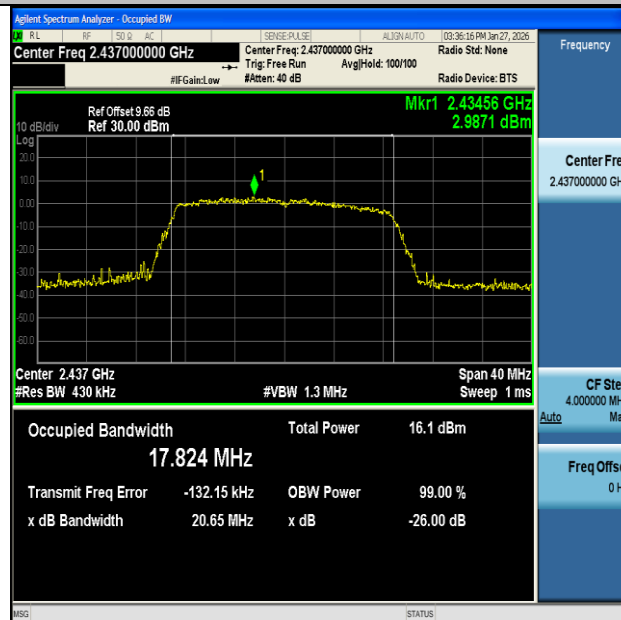


11G-Ant1-2462



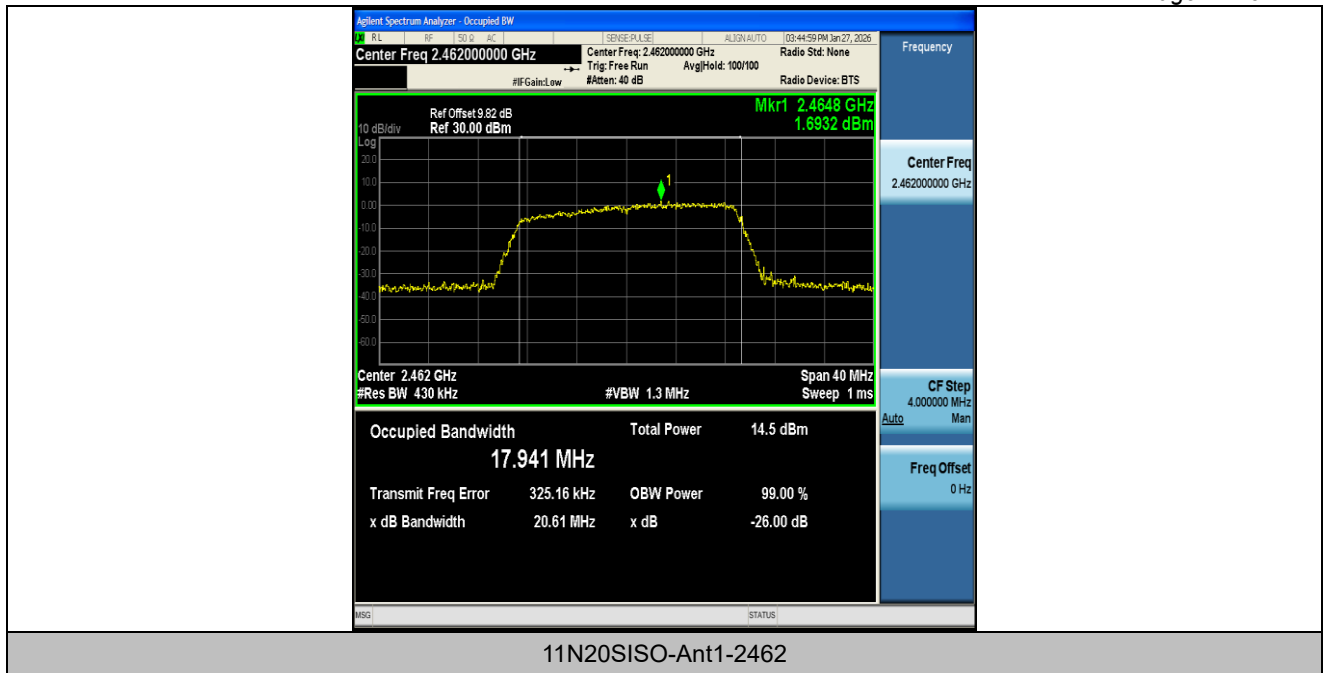


11N20SISO-Ant1-2412



11N20SISO-Ant1-2437







Appendix C: Maximum Average conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	8.65	≤30.00	PASS
11B	Ant1	2437	8.86	≤30.00	PASS
11B	Ant1	2462	8.71	≤30.00	PASS
11G	Ant1	2412	8.83	≤30.00	PASS
11G	Ant1	2437	7.86	≤30.00	PASS
11G	Ant1	2462	8.46	≤30.00	PASS
11N20SISO	Ant1	2412	8.62	≤30.00	PASS
11N20SISO	Ant1	2437	7.30	≤30.00	PASS
11N20SISO	Ant1	2462	8.46	≤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

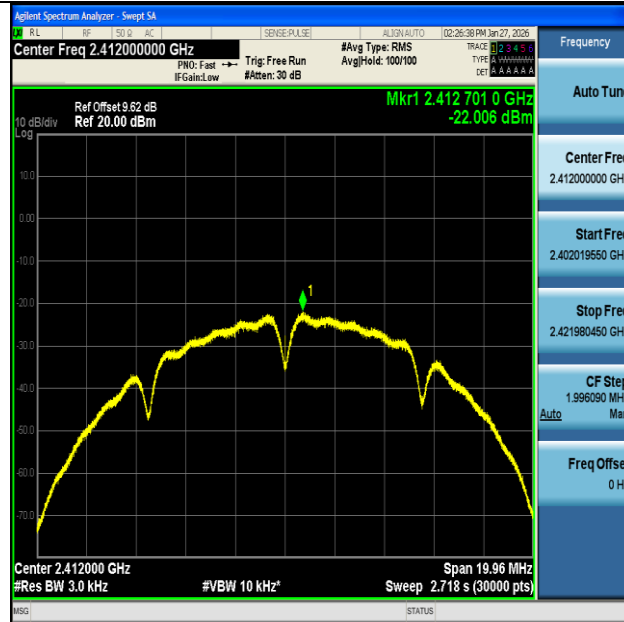
Test Mode	Antenna	Frequency [MHz]	Raw. Data [dBm/3-100kHz]	Dc. Factor	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-22.01	0.00	-22.01	≤8.00	PASS
11B	Ant1	2437	-20.72	0.02	-20.70	≤8.00	PASS
11B	Ant1	2462	-22.09	0.02	-22.07	≤8.00	PASS
11G	Ant1	2412	-24.48	0.15	-24.33	≤8.00	PASS
11G	Ant1	2437	-23.01	0.15	-22.86	≤8.00	PASS
11G	Ant1	2462	-24.68	0.15	-24.53	≤8.00	PASS
11N20SISO	Ant1	2412	-24.35	0.16	-24.19	≤8.00	PASS
11N20SISO	Ant1	2437	-22.68	0.16	-22.52	≤8.00	PASS
11N20SISO	Ant1	2462	-24.46	0.16	-24.30	≤8.00	PASS

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

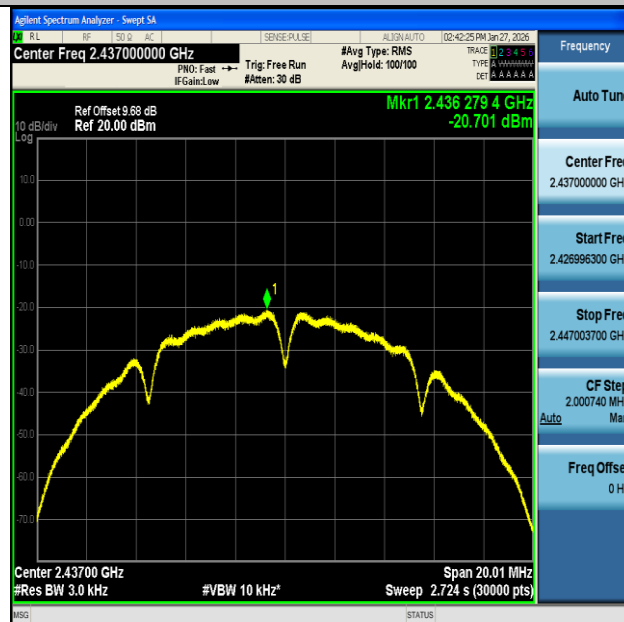




Test Graphs

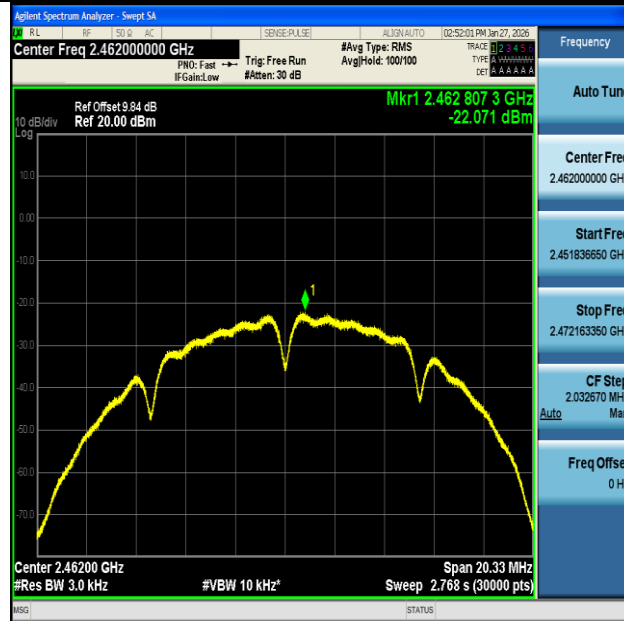


11B-Ant1-2412-PASS

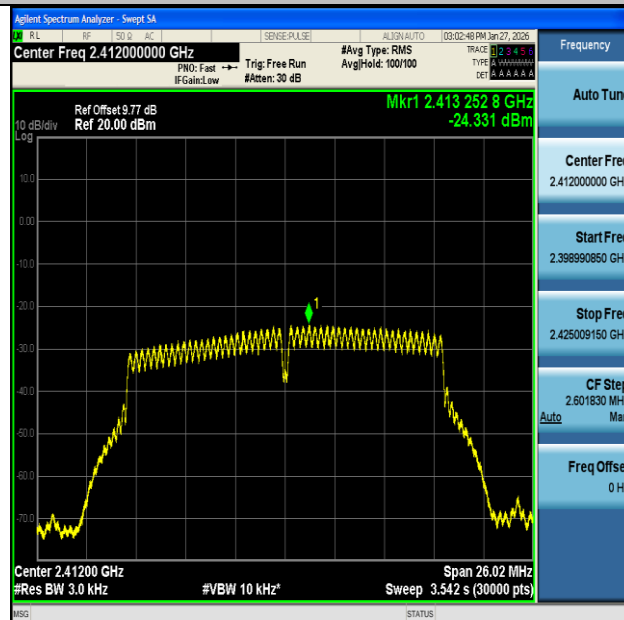


11B-Ant1-2437-PASS



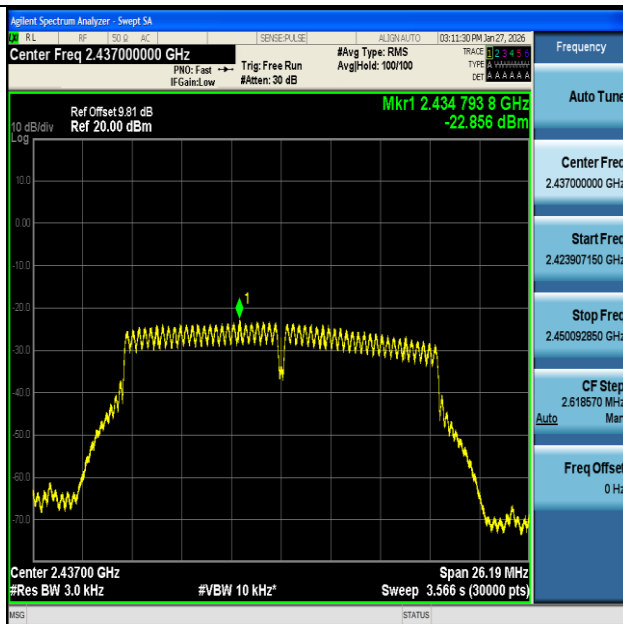


11B-Ant1-2462-PASS

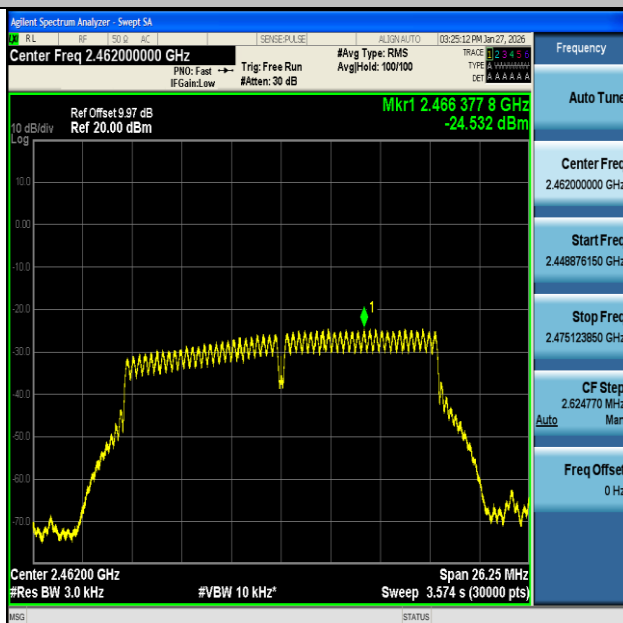


11G-Ant1-2412-PASS



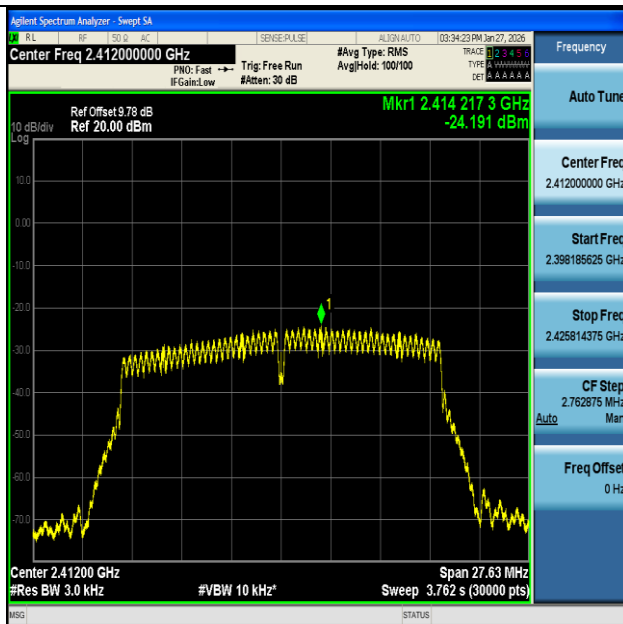


11G-Ant1-2437-PASS

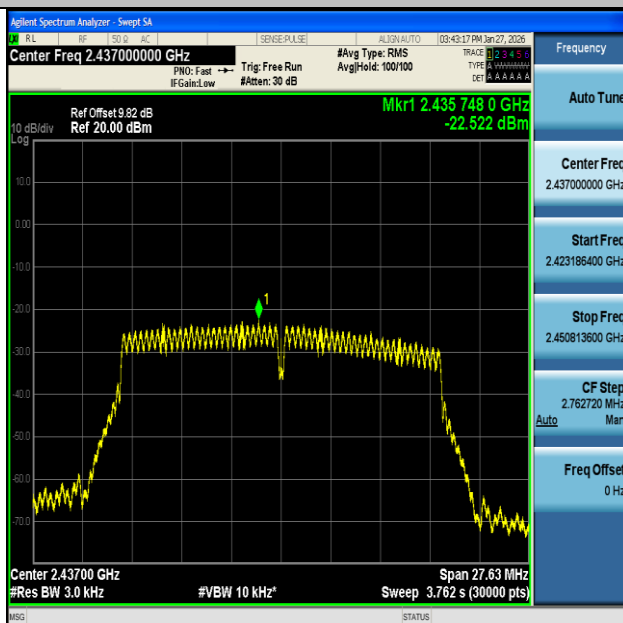


11G-Ant1-2462-PASS





11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS





11N20SISO-Ant1-2462-PASS





Appendix E: Band edge measurements

Test Result

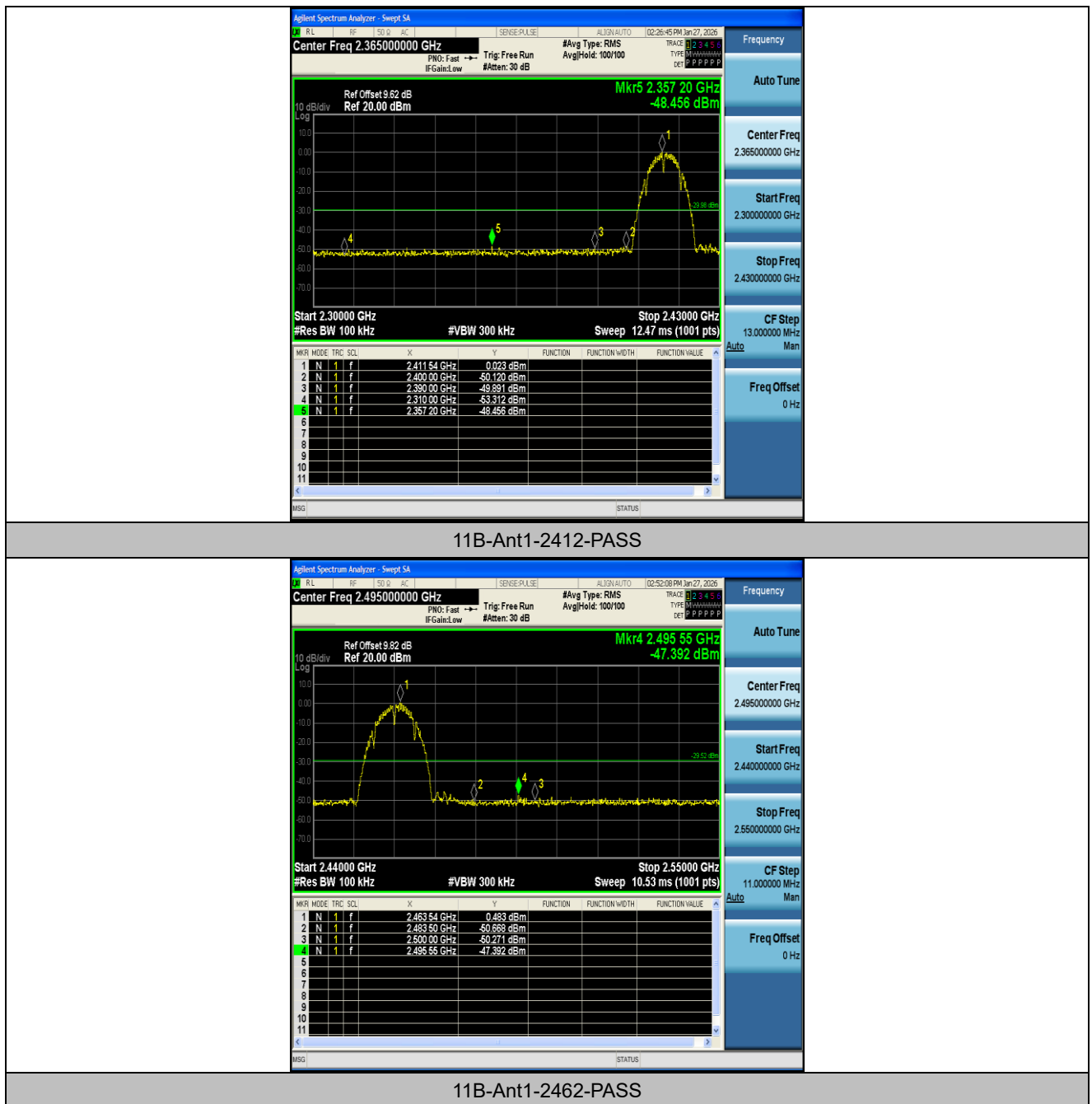
Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	0.02	-48.46	≤-29.98	PASS
11B	Ant1	High	2462	0.48	-47.39	≤-29.52	PASS
11G	Ant1	Low	2412	-1.21	-47.37	≤-31.21	PASS
11G	Ant1	High	2462	-1.47	-47.76	≤-31.47	PASS
11N20SISO	Ant1	Low	2412	-1.74	-45.5	≤-31.74	PASS
11N20SISO	Ant1	High	2462	-1.80	-47.99	≤-31.8	PASS

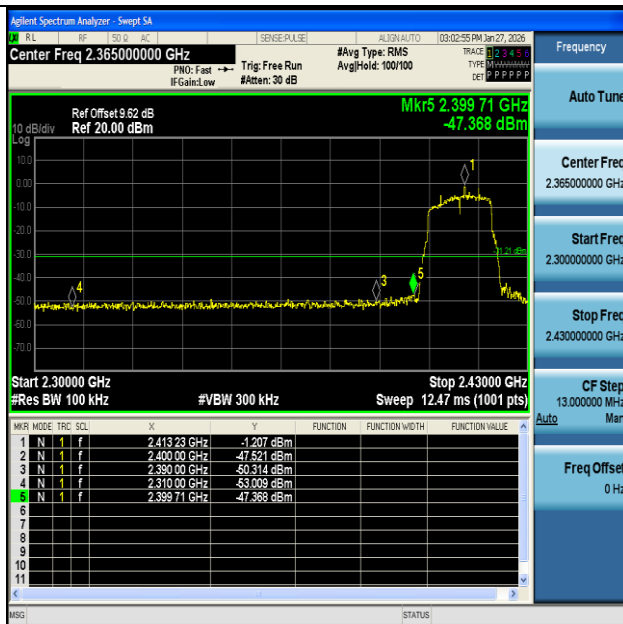
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



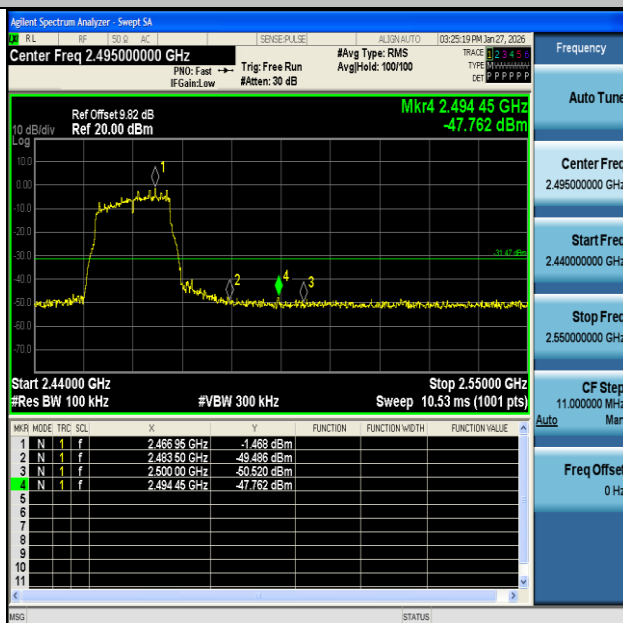


Test Graphs



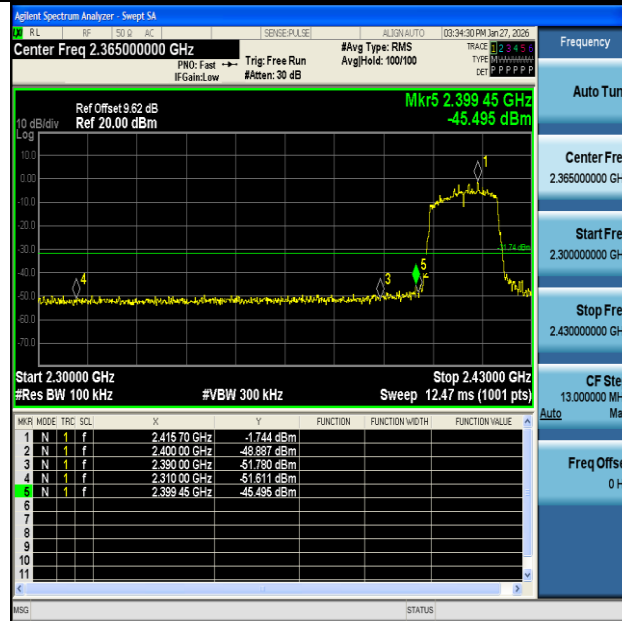


11G-Ant1-2412-PASS

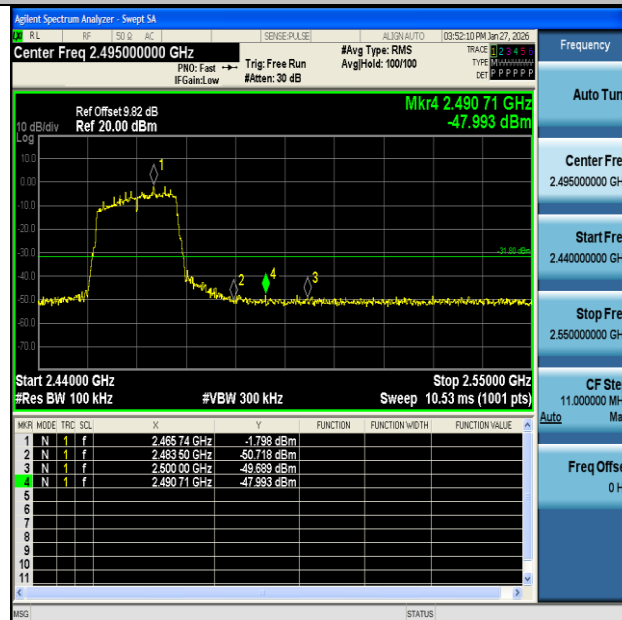


11G-Ant1-2462-PASS





11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS





Appendix F: Conducted Spurious Emission

Test Result

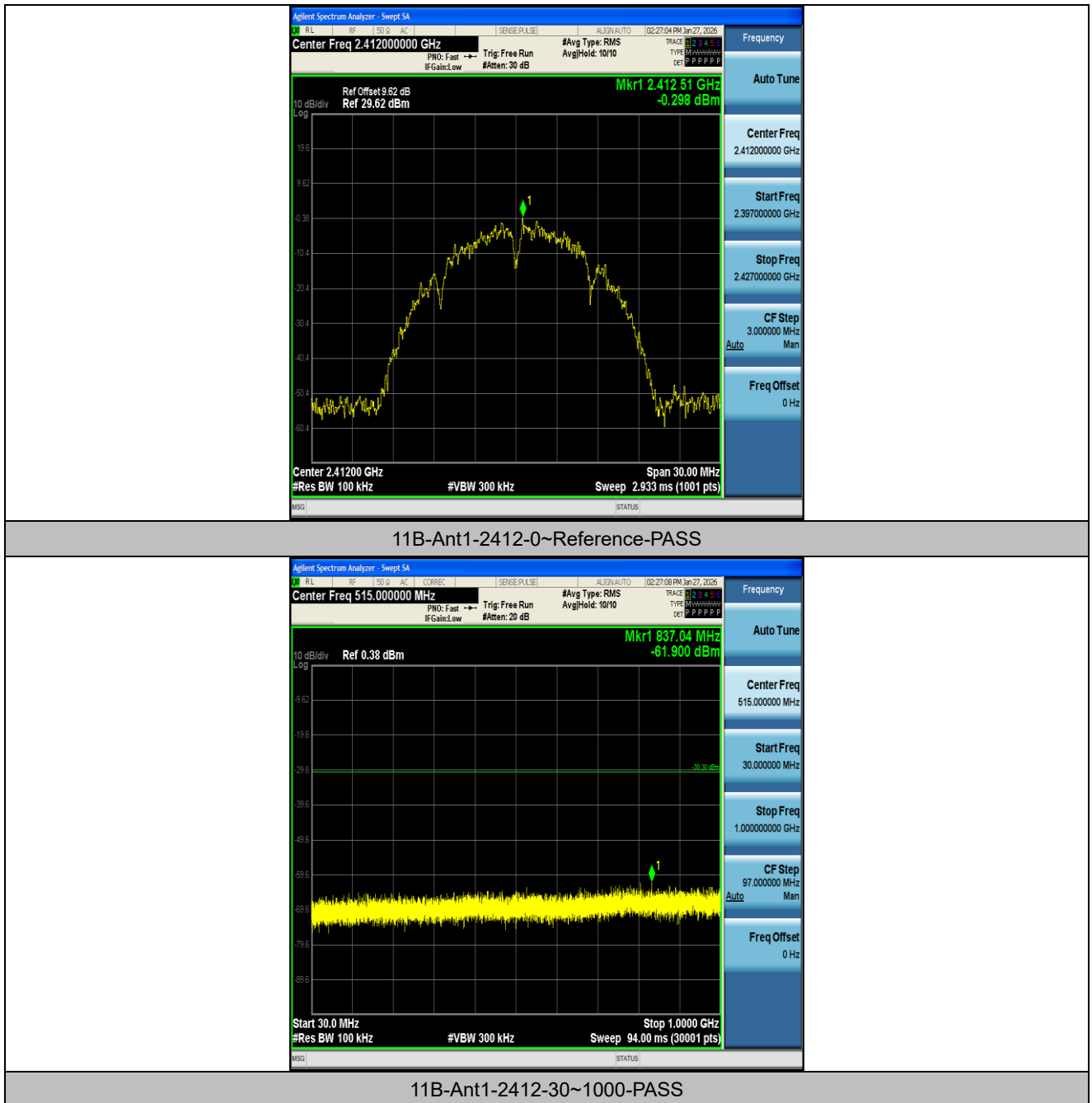
Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	-0.30	-0.30	---	PASS
11B	Ant1	2412	30~1000	-0.30	-61.9	≤-30.3	PASS
11B	Ant1	2412	1000~26500	-0.30	-36.36	≤-30.3	PASS
11B	Ant1	2437	0~Reference	0.23	0.23	---	PASS
11B	Ant1	2437	30~1000	0.23	-61.91	≤-29.77	PASS
11B	Ant1	2437	1000~26500	0.23	-37.3	≤-29.77	PASS
11B	Ant1	2462	0~Reference	-0.68	-0.68	---	PASS
11B	Ant1	2462	30~1000	-0.68	-62.18	≤-30.68	PASS
11B	Ant1	2462	1000~26500	-0.68	-37.37	≤-30.68	PASS
11G	Ant1	2412	0~Reference	-4.46	-4.46	---	PASS
11G	Ant1	2412	30~1000	-4.46	-62.65	≤-34.46	PASS
11G	Ant1	2412	1000~26500	-4.46	-37.31	≤-34.46	PASS
11G	Ant1	2437	0~Reference	-3.02	-3.02	---	PASS
11G	Ant1	2437	30~1000	-3.02	-61.45	≤-33.02	PASS
11G	Ant1	2437	1000~26500	-3.02	-35.52	≤-33.02	PASS
11G	Ant1	2462	0~Reference	-5.30	-5.30	---	PASS
11G	Ant1	2462	30~1000	-5.30	-61.8	≤-35.3	PASS
11G	Ant1	2462	1000~26500	-5.30	-36.49	≤-35.3	PASS
11N20SISO	Ant1	2412	0~Reference	-3.79	-3.79	---	PASS
11N20SISO	Ant1	2412	30~1000	-3.79	-62.04	≤-33.79	PASS
11N20SISO	Ant1	2412	1000~26500	-3.79	-36.86	≤-33.79	PASS
11N20SISO	Ant1	2437	0~Reference	-3.97	-3.97	---	PASS
11N20SISO	Ant1	2437	30~1000	-3.97	-61.9	≤-33.97	PASS
11N20SISO	Ant1	2437	1000~26500	-3.97	-36.28	≤-33.97	PASS
11N20SISO	Ant1	2462	0~Reference	-3.93	-3.93	---	PASS
11N20SISO	Ant1	2462	30~1000	-3.93	-61.9	≤-33.93	PASS
11N20SISO	Ant1	2462	1000~26500	-3.93	-36.38	≤-33.93	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.



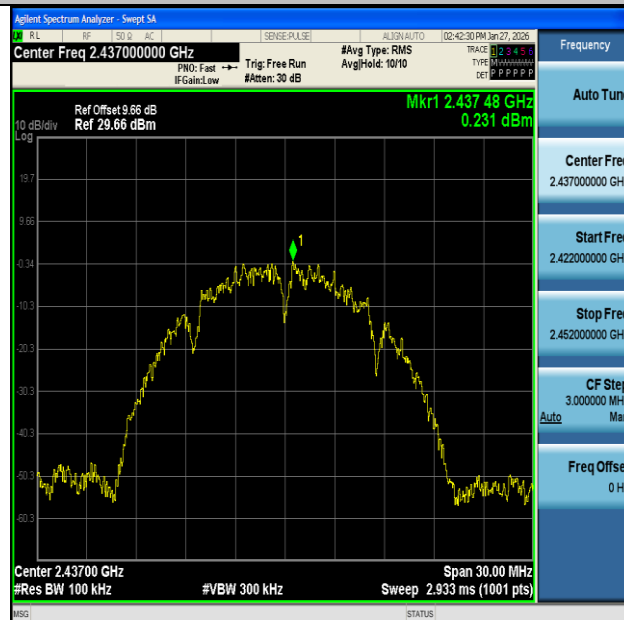


Test Graphs



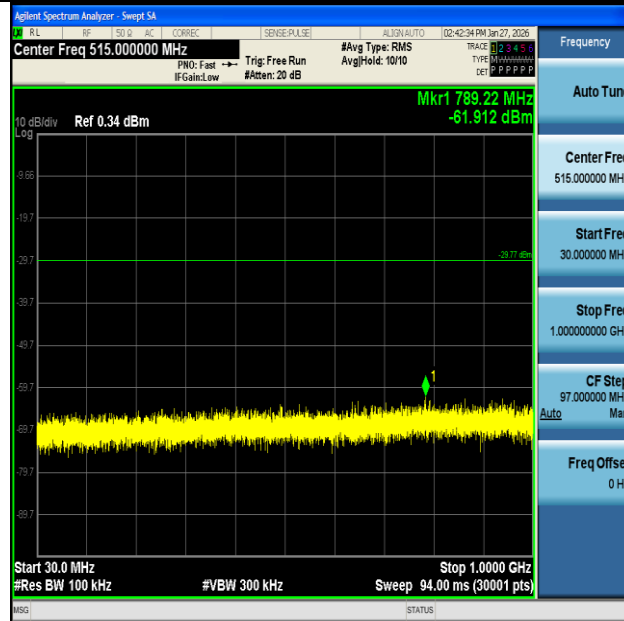


11B-Ant1-2412-1000~26500-PASS

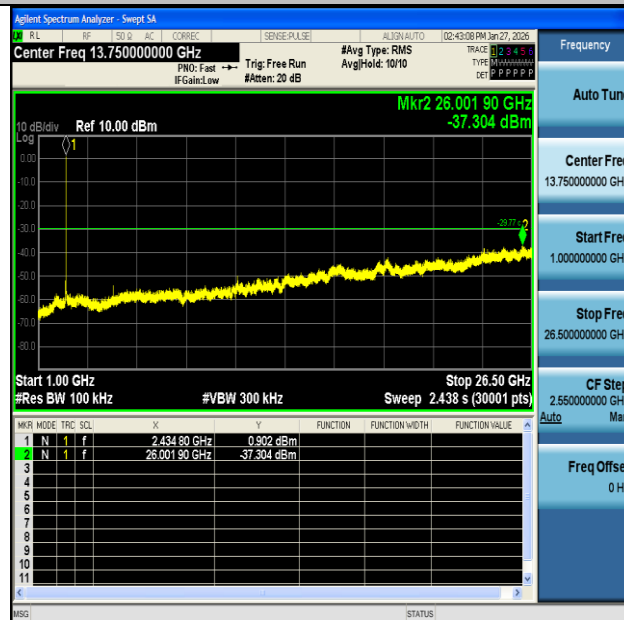


11B-Ant1-2437-0~Reference-PASS



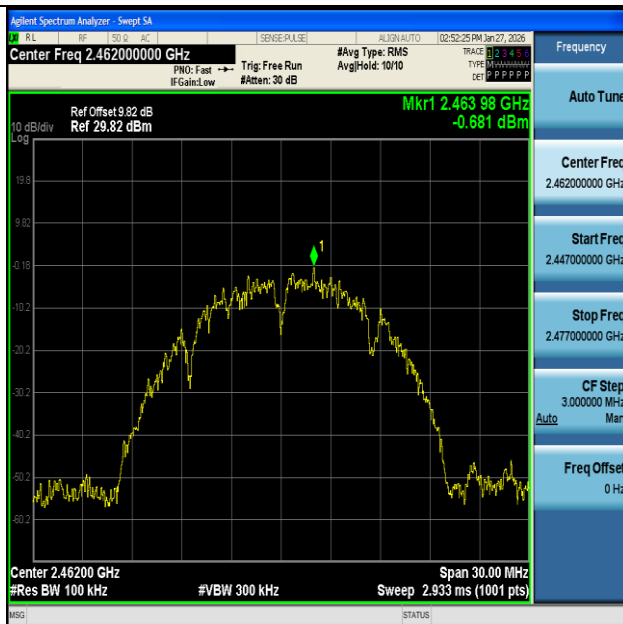


11B-Ant1-2437-30~1000-PASS

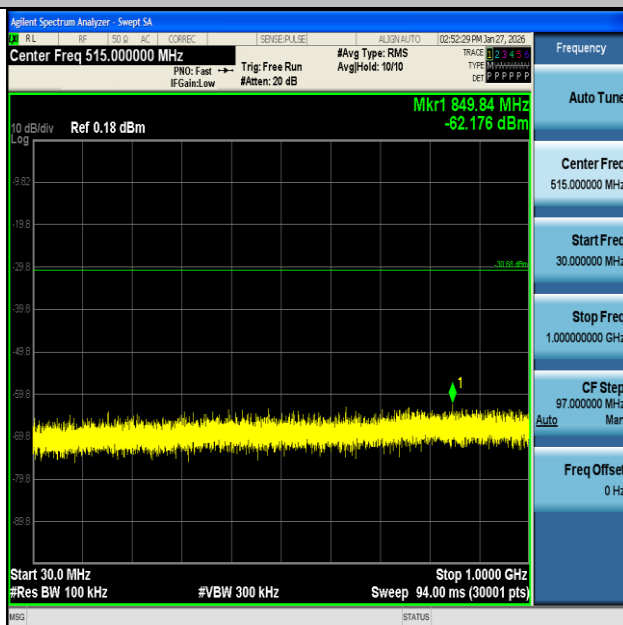


11B-Ant1-2437-1000~26500-PASS



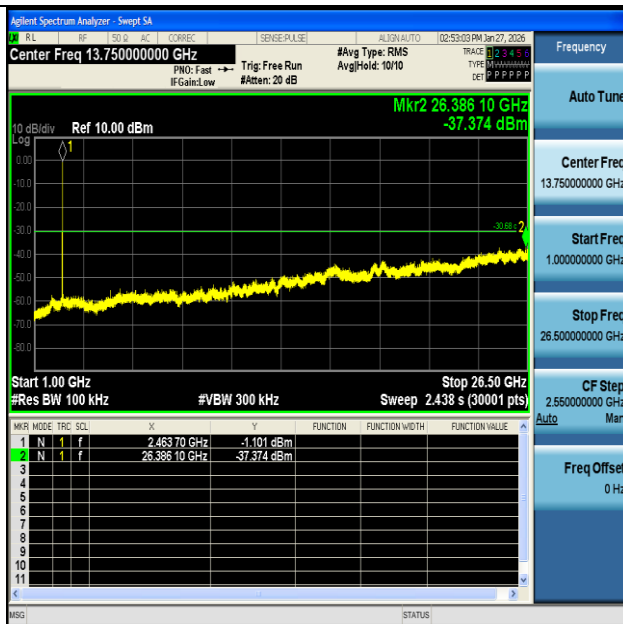


11B-Ant1-2462-0~Reference-PASS

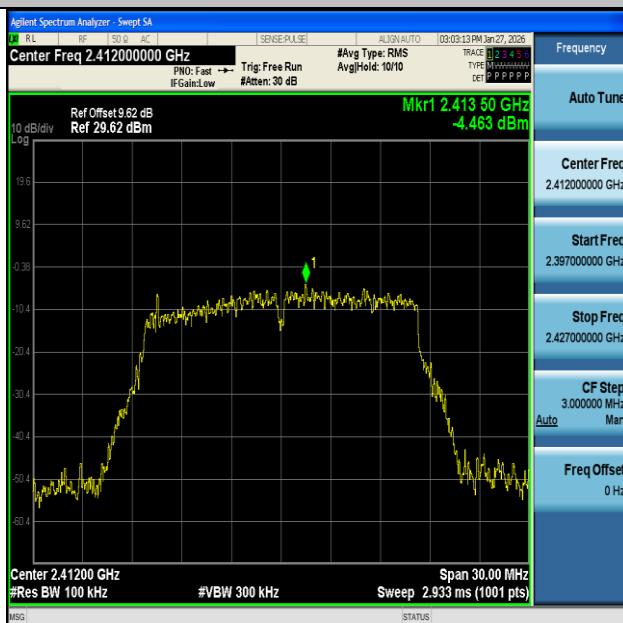


11B-Ant1-2462-30~1000-PASS



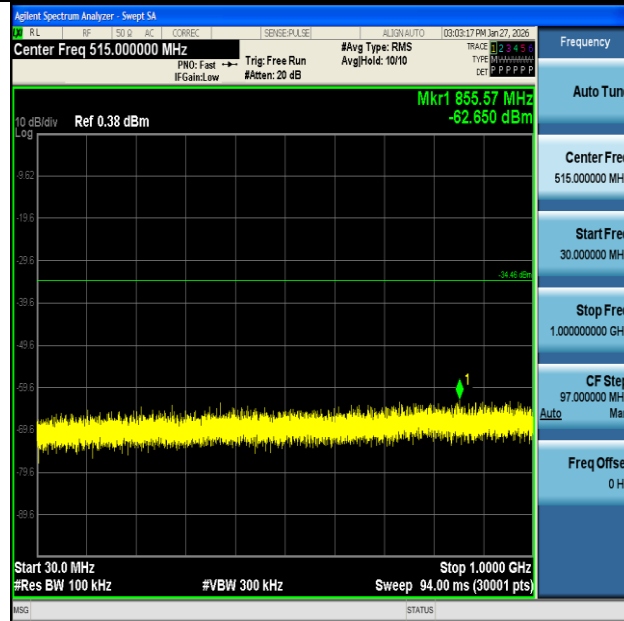


11B-Ant1-2462-1000~26500-PASS

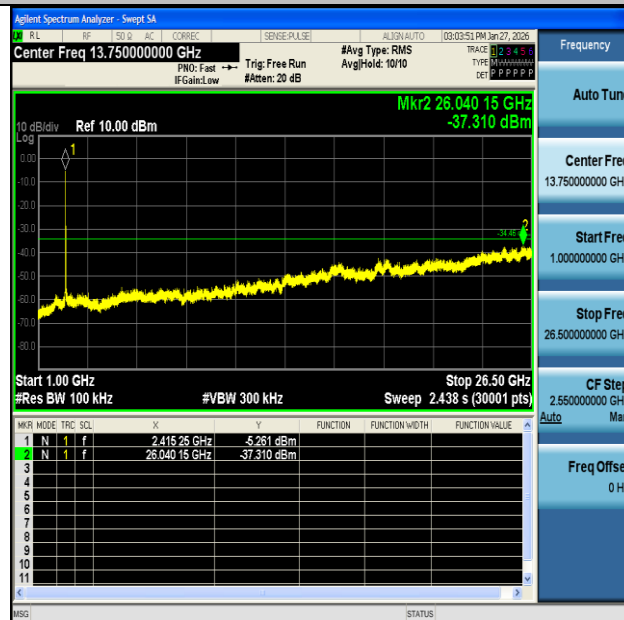


11G-Ant1-2412-0~Reference-PASS



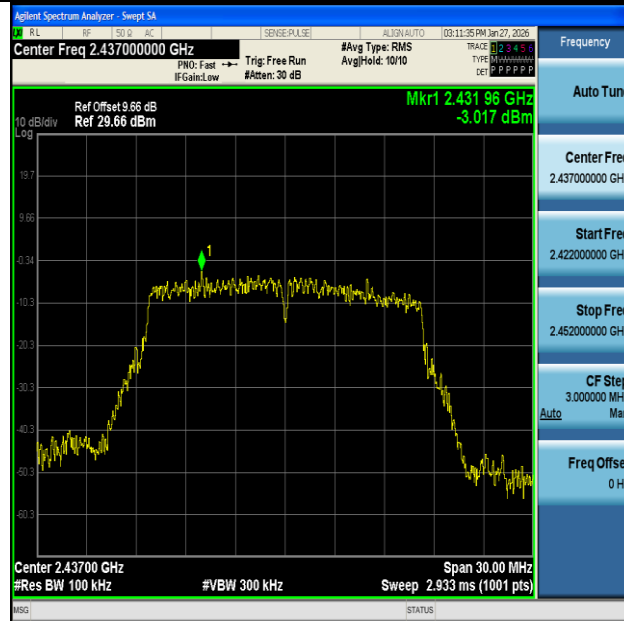


11G-Ant1-2412-30~1000-PASS

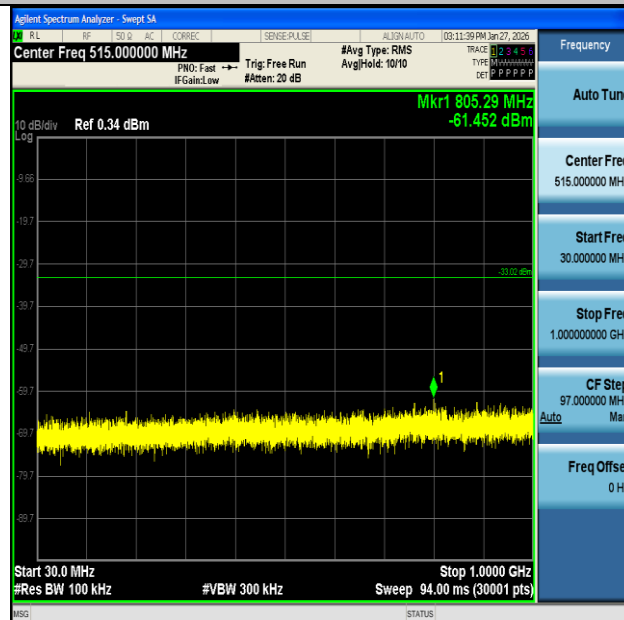


11G-Ant1-2412-1000~26500-PASS



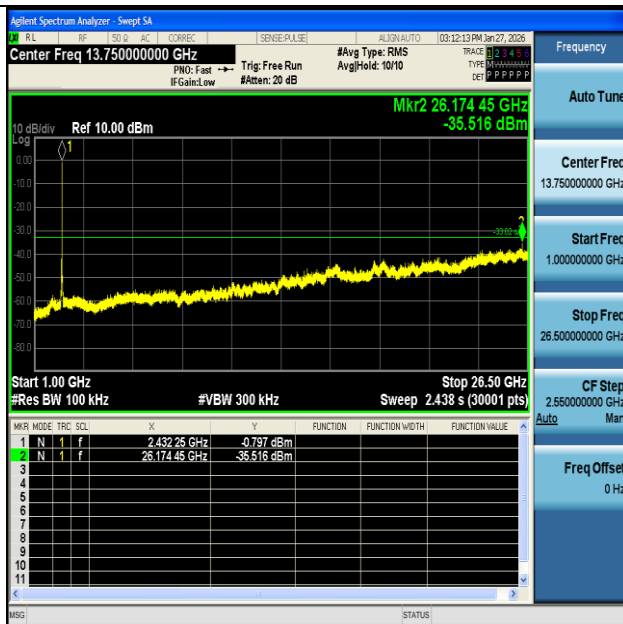


11G-Ant1-2437-0~Reference-PASS

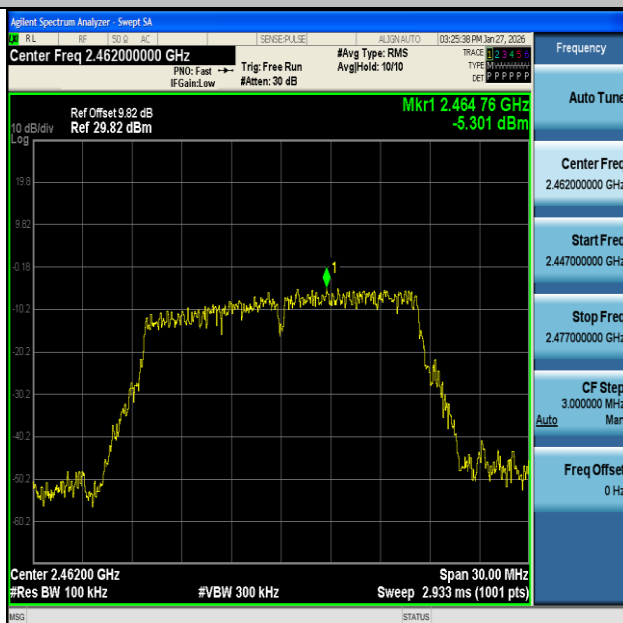


11G-Ant1-2437-30~1000-PASS



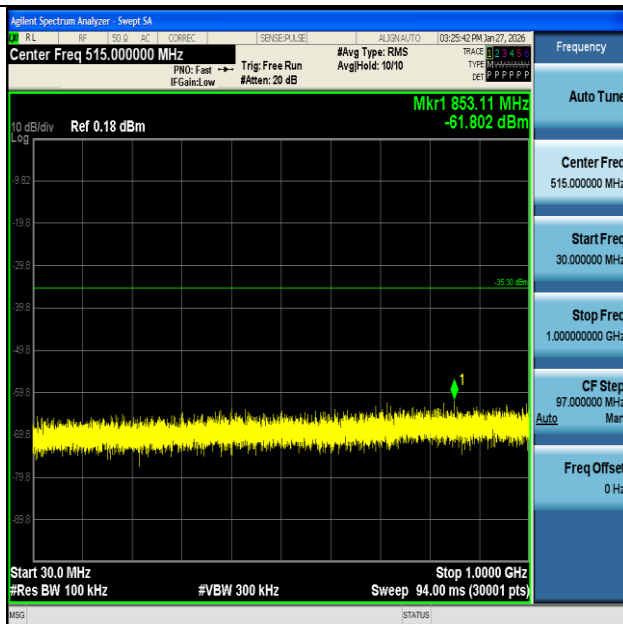


11G-Ant1-2437-1000~26500-PASS

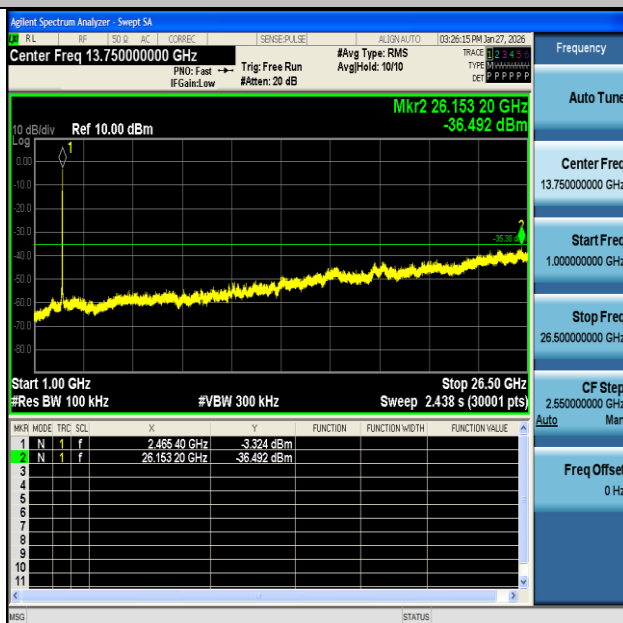


11G-Ant1-2462-0~Reference-PASS



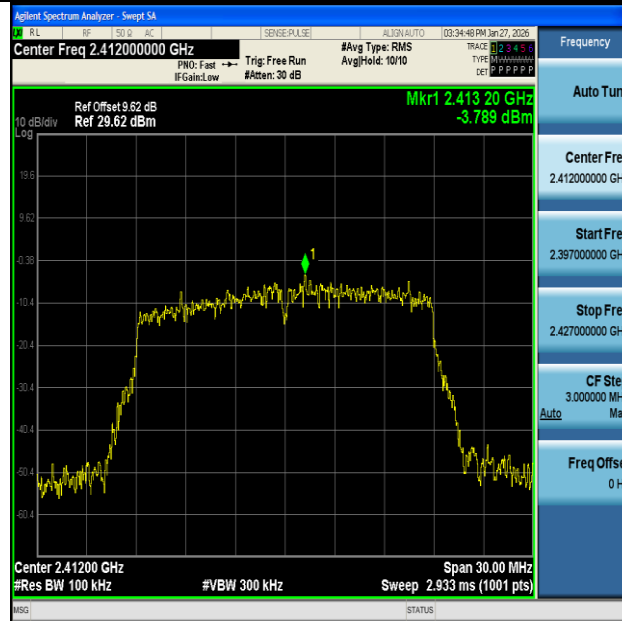


11G-Ant1-2462-30~1000-PASS

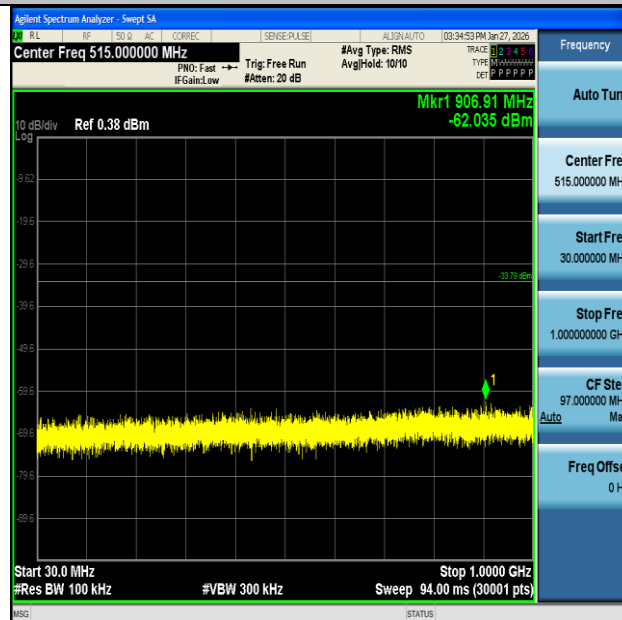


11G-Ant1-2462-1000~26500-PASS



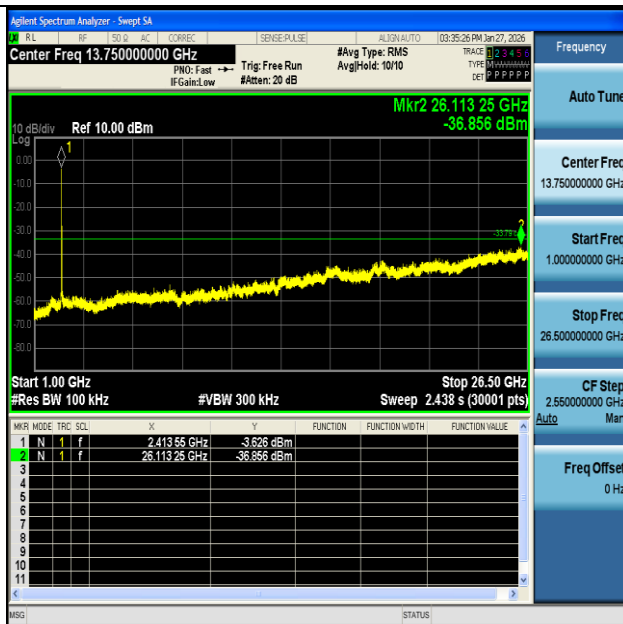


11N20SISO-Ant1-2412-0~Reference-PASS

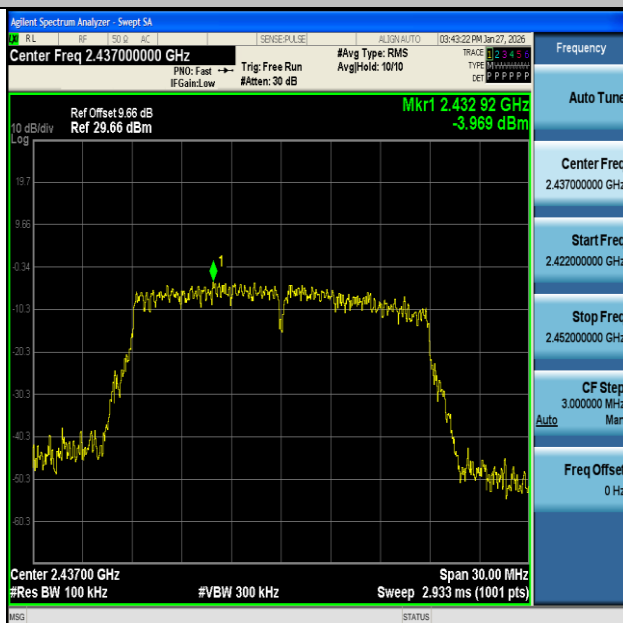


11N20SISO-Ant1-2412-30~1000-PASS



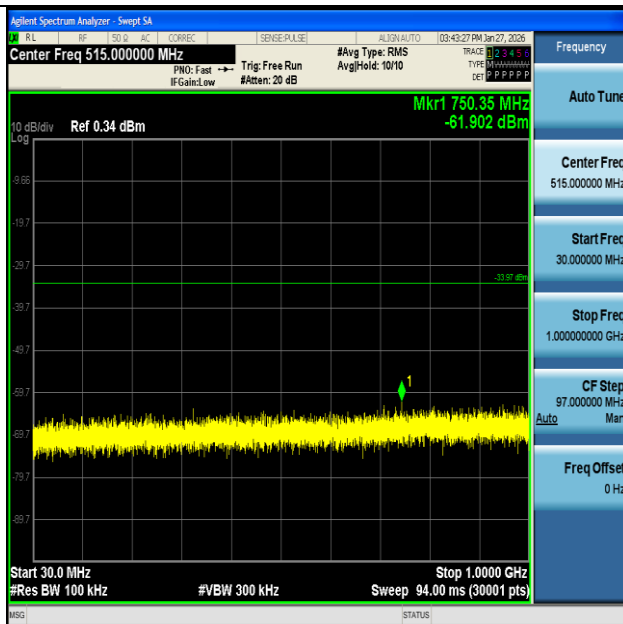


11N20SISO-Ant1-2412-1000~26500-PASS

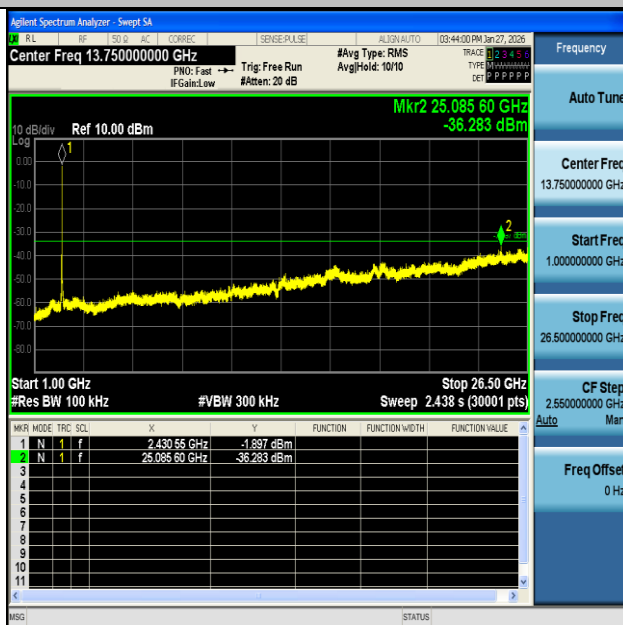


11N20SISO-Ant1-2437-0~Reference-PASS





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

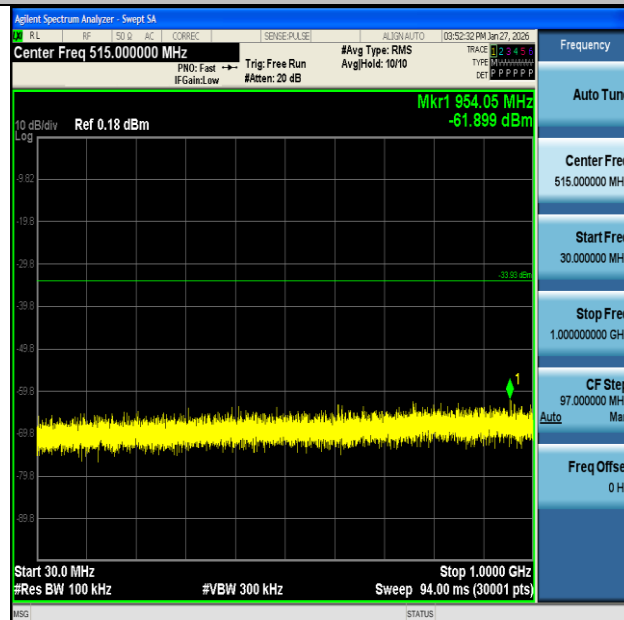


11N20SISO-Ant1-2437-1000~26500-PASS



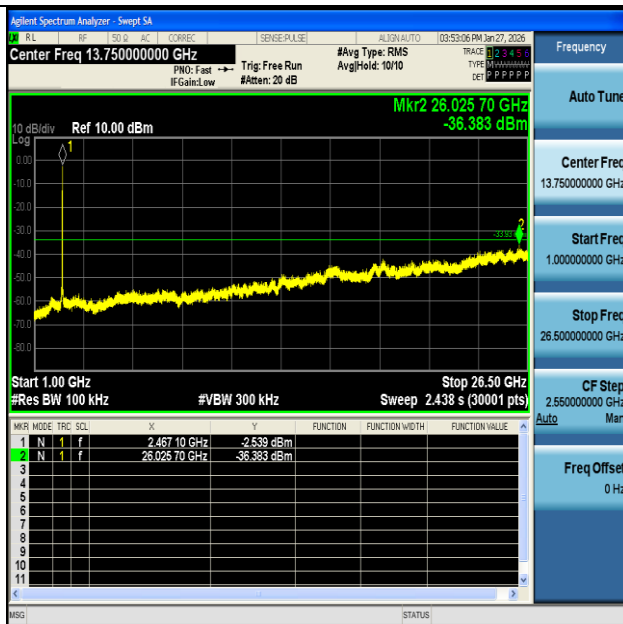


11N20SISO-Ant1-2462-0~Reference-PASS



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





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





Appendix G: Duty Cycle

Test Result

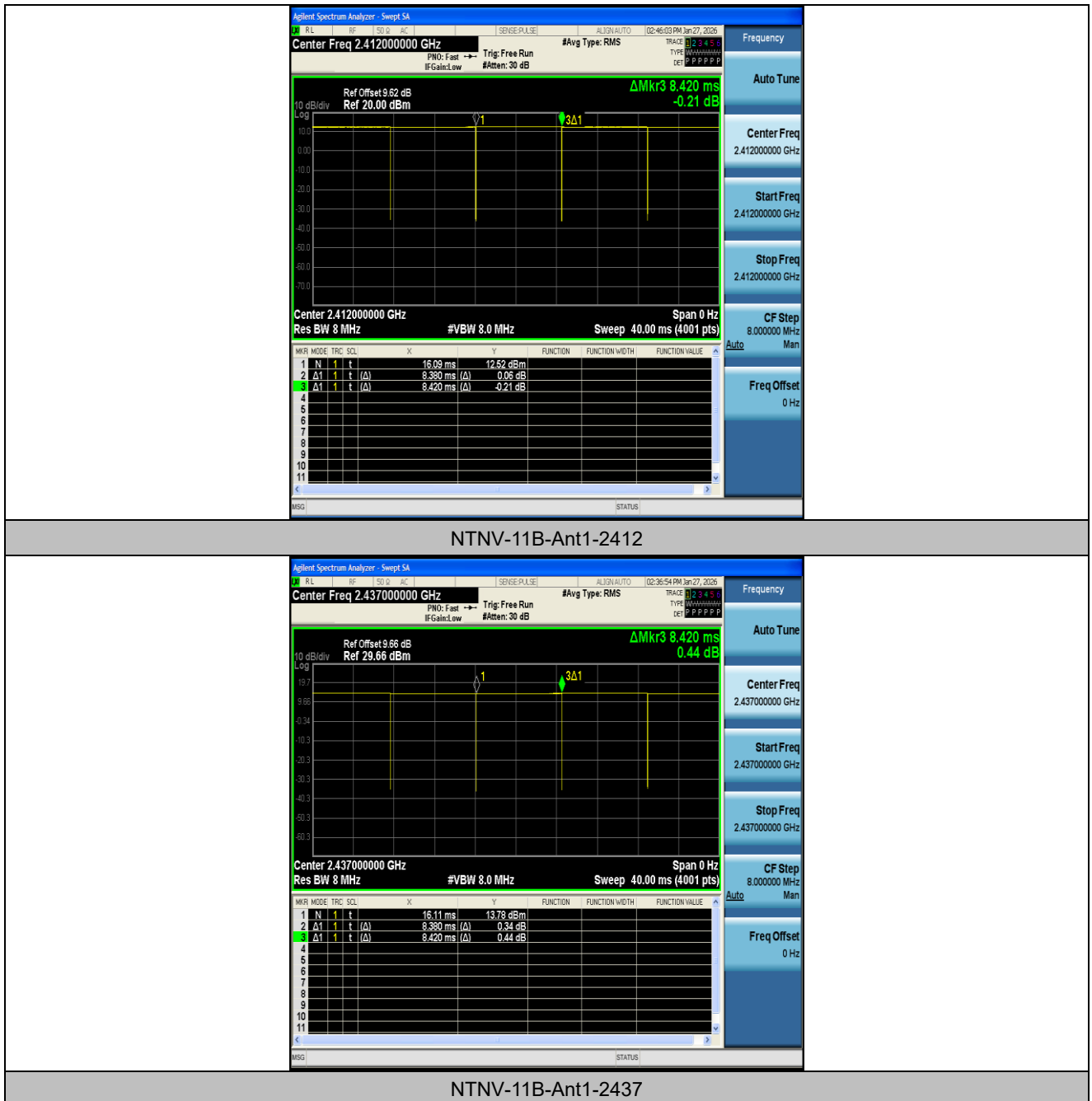
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.38	8.42	99.52	0.02
11B	Ant1	2437	8.38	8.42	99.52	0.02
11B	Ant1	2462	8.38	8.42	99.52	0.02
11G	Ant1	2412	1.39	1.44	96.53	0.15
11G	Ant1	2437	1.39	1.44	96.53	0.15
11G	Ant1	2462	1.39	1.44	96.53	0.15
11N20SISO	Ant1	2412	1.30	1.35	96.30	0.16
11N20SISO	Ant1	2437	1.30	1.35	96.30	0.16
11N20SISO	Ant1	2462	1.30	1.35	96.30	0.16

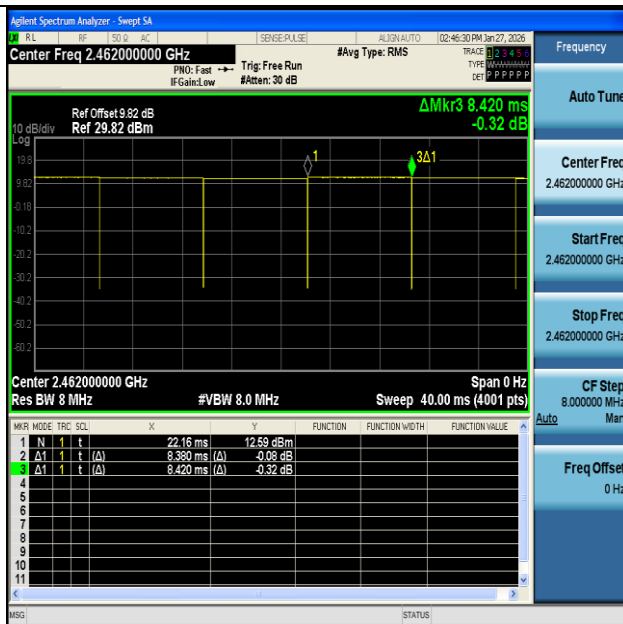
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



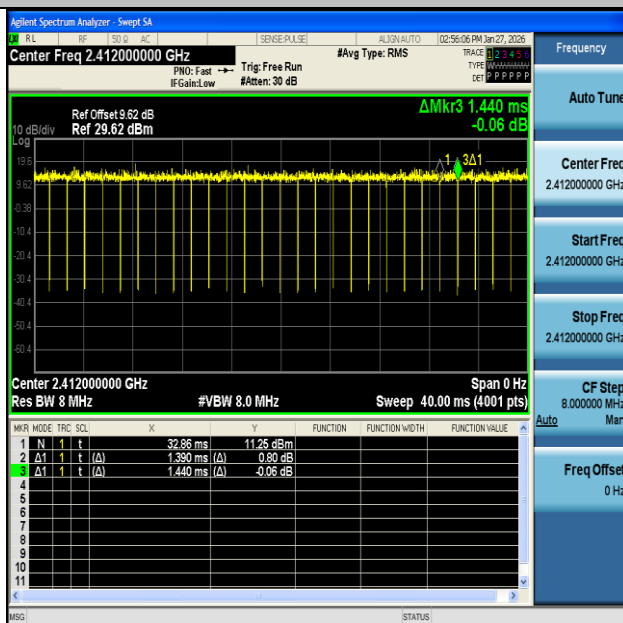


Test Graphs



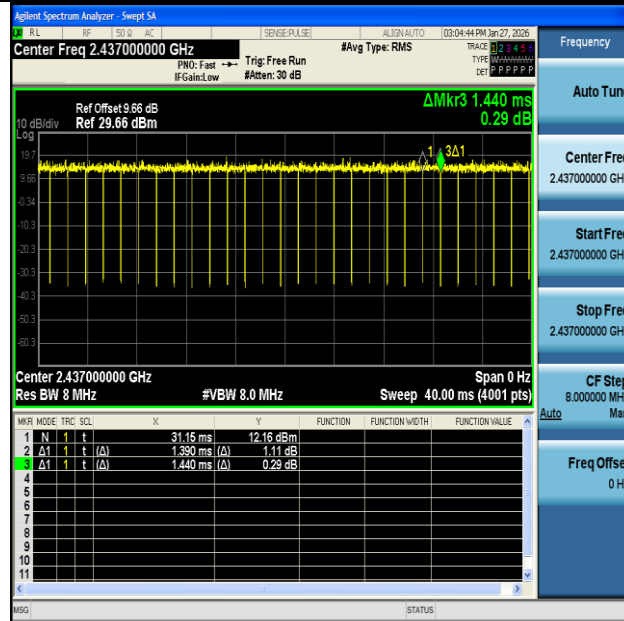


NTNV-11B-Ant1-2462

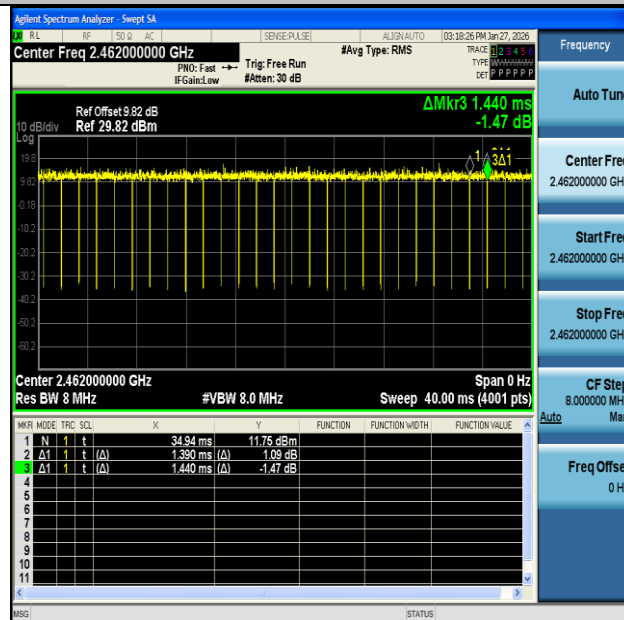


NTNV-11G-Ant1-2412



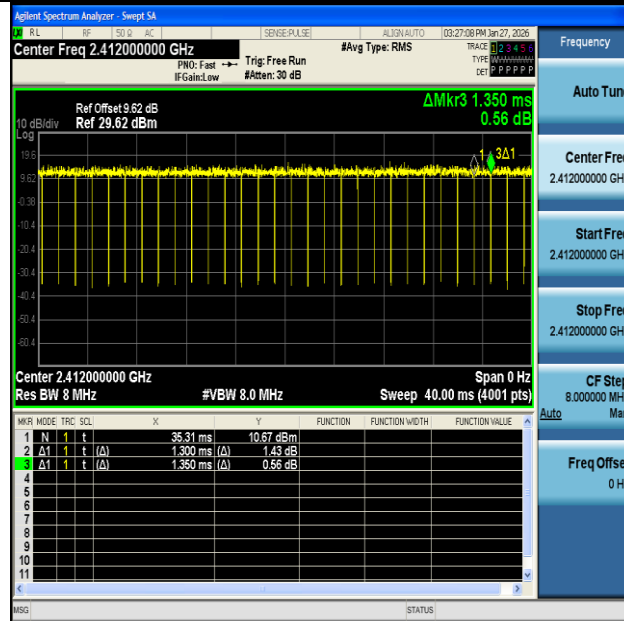


NTNV-11G-Ant1-2437

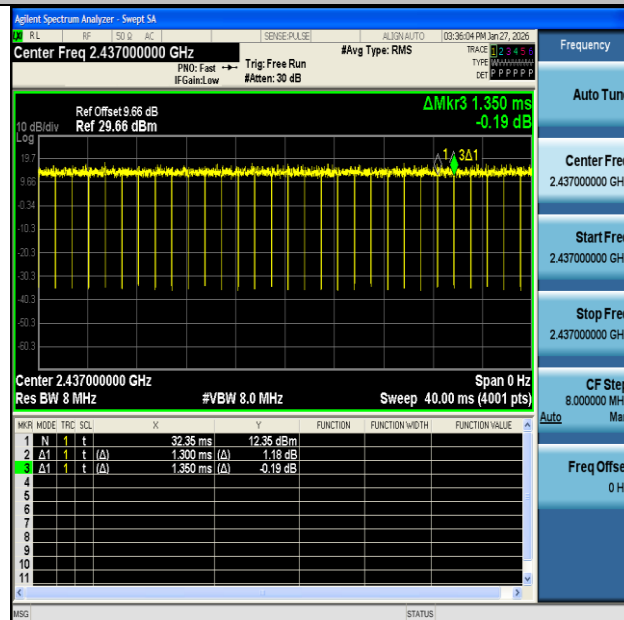


NTNV-11G-Ant1-2462



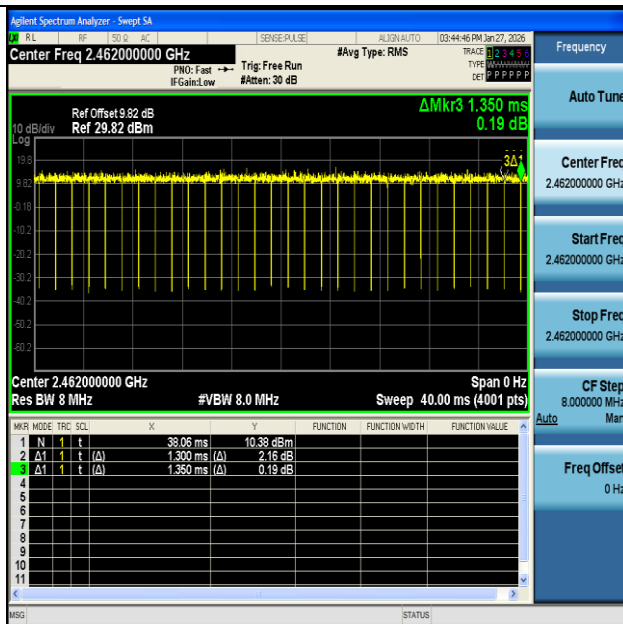


NTNV-11N20SISO-Ant1-2412



NTNV-11N20SISO-Ant1-2437





NTNV-11N20SISO-Ant1-2462

