

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

Product Name: Baby Monitor

Trade Mark: *acer*

Test Model: ST-5A

FCC ID: 2A2P5-ST-5A

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

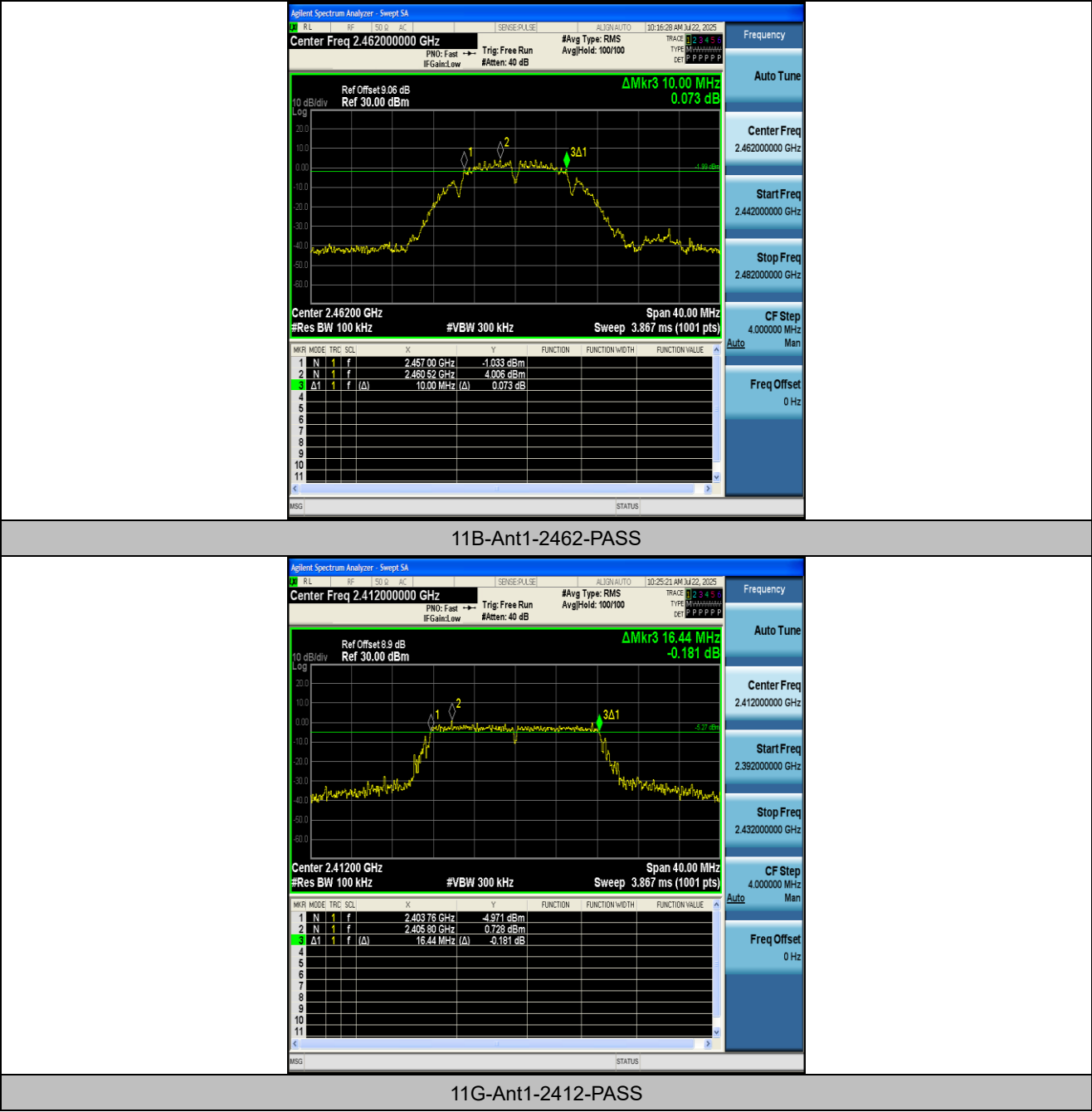
Test Result

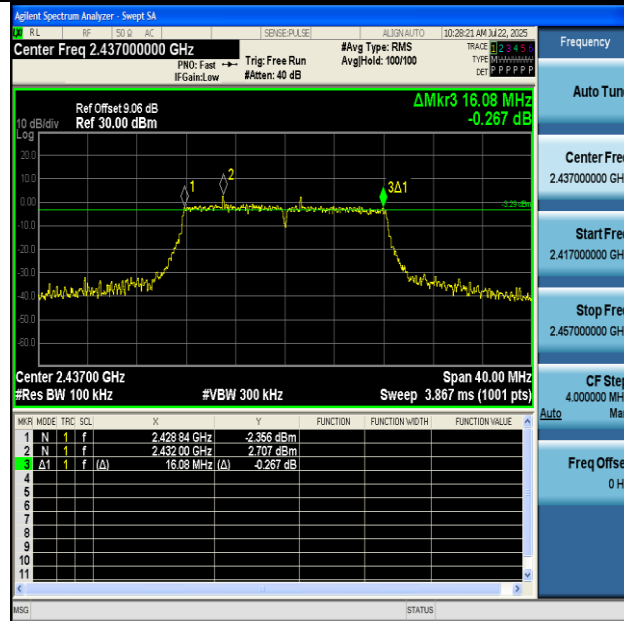
Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	9.640	2406.960	2416.600	0.5	PASS
11B	Ant1	2437	9.480	2432.000	2441.480	0.5	PASS
11B	Ant1	2462	10.000	2457.000	2467.000	0.5	PASS
11G	Ant1	2412	16.440	2403.760	2420.200	0.5	PASS
11G	Ant1	2437	16.080	2428.840	2444.920	0.5	PASS
11G	Ant1	2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.080	2403.360	2420.440	0.5	PASS
11N20SISO	Ant1	2437	16.840	2428.280	2445.120	0.5	PASS
11N20SISO	Ant1	2462	17.520	2453.240	2470.760	0.5	PASS

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

Test Graphs







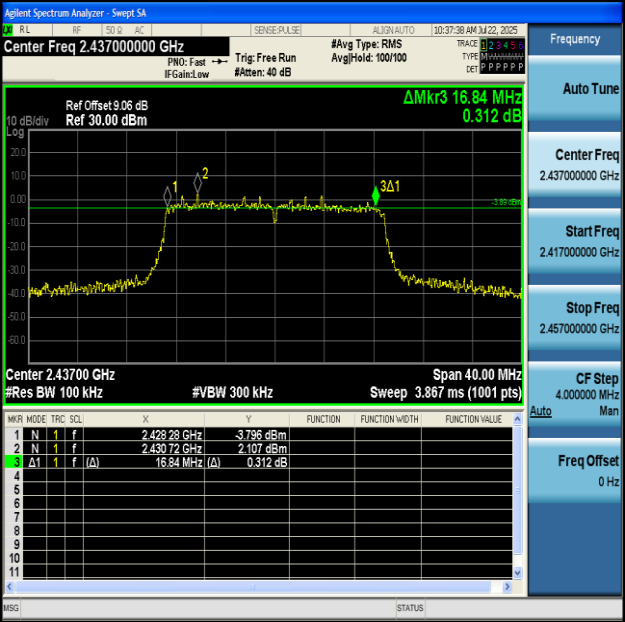
11G-Ant1-2437-PASS



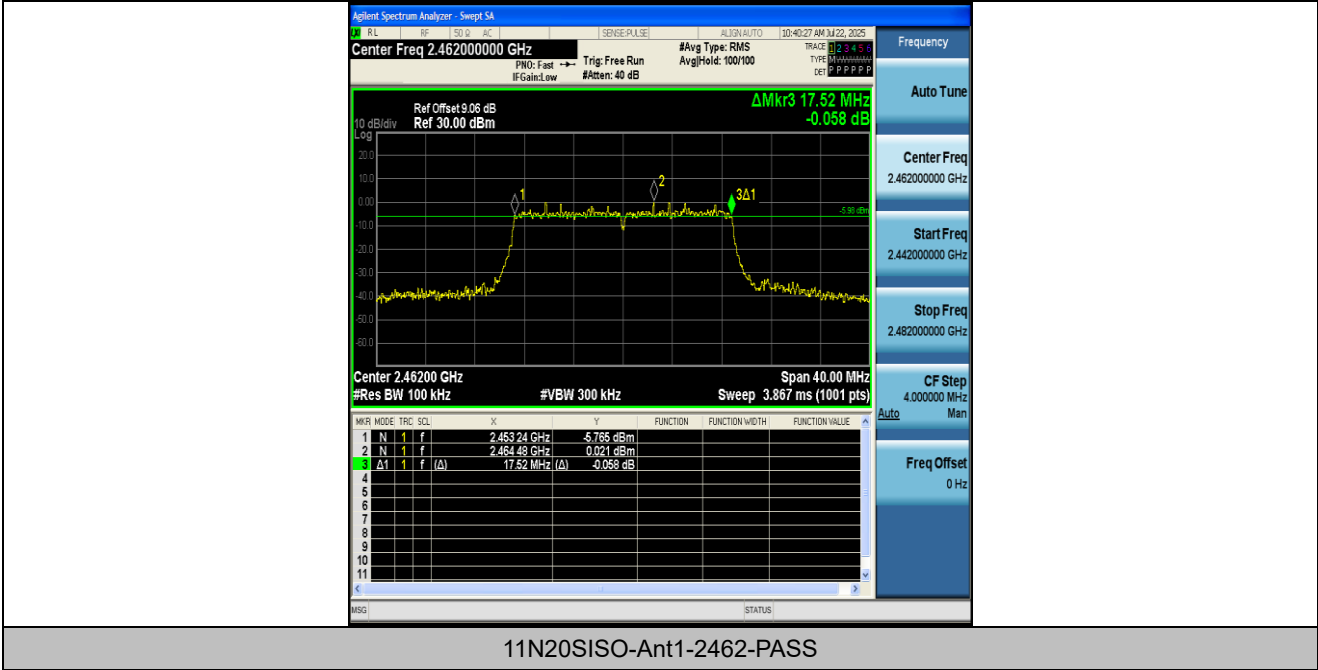
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



Appendix B: Occupied Channel Bandwidth

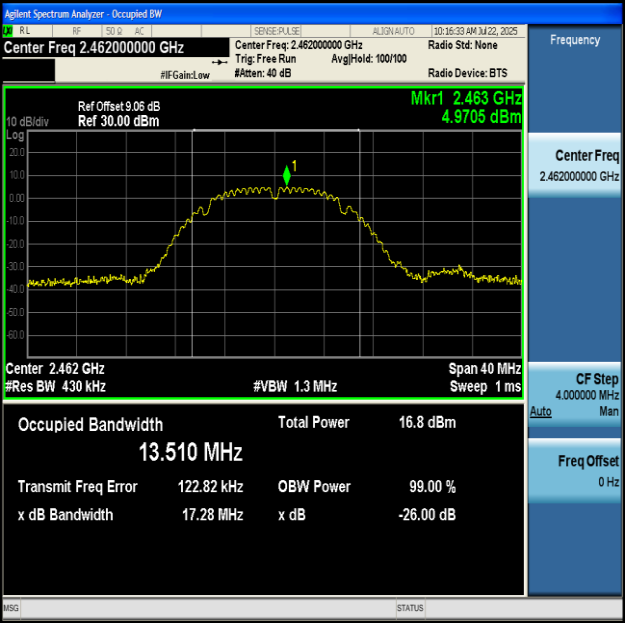
Test Result

Test Mode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	13.708	2405.1780	2418.8860	---	---
11B	Ant1	2437	13.382	2430.2722	2443.6542	---	---
11B	Ant1	2462	13.510	2455.3678	2468.8778	---	---
11G	Ant1	2412	16.908	2403.5769	2420.4849	---	---
11G	Ant1	2437	16.823	2428.5496	2445.3726	---	---
11G	Ant1	2462	16.975	2453.5188	2470.4938	---	---
11N20SISO	Ant1	2412	17.738	2403.1656	2420.9036	---	---
11N20SISO	Ant1	2437	17.647	2428.1505	2445.7975	---	---
11N20SISO	Ant1	2462	17.684	2453.1754	2470.8594	---	---

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

Test Graphs

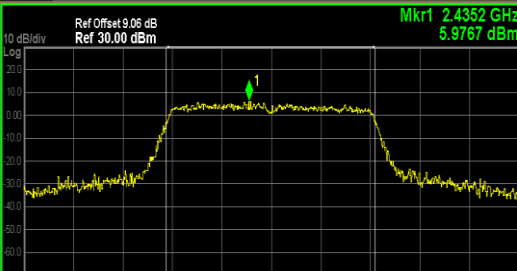
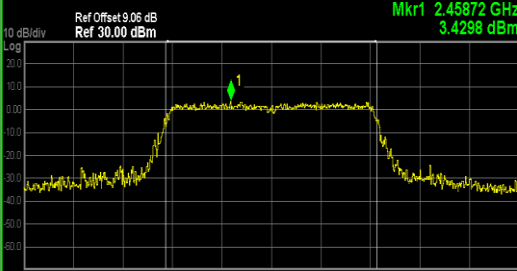




11B-Ant1-2462

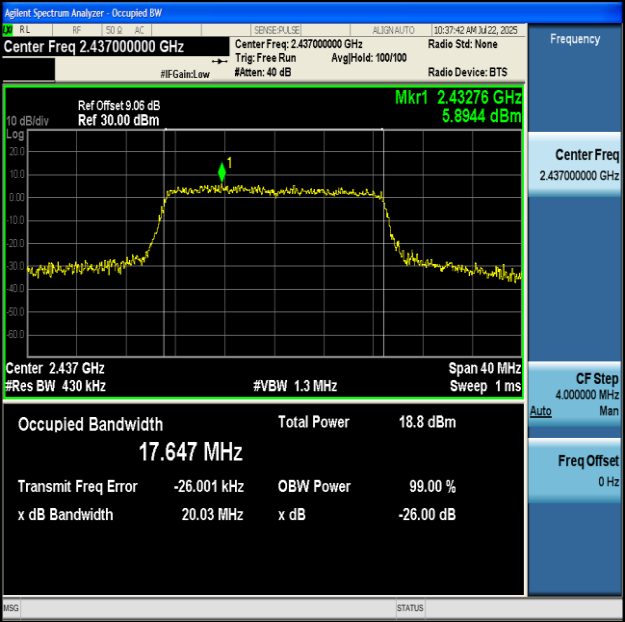


11G-Ant1-2412

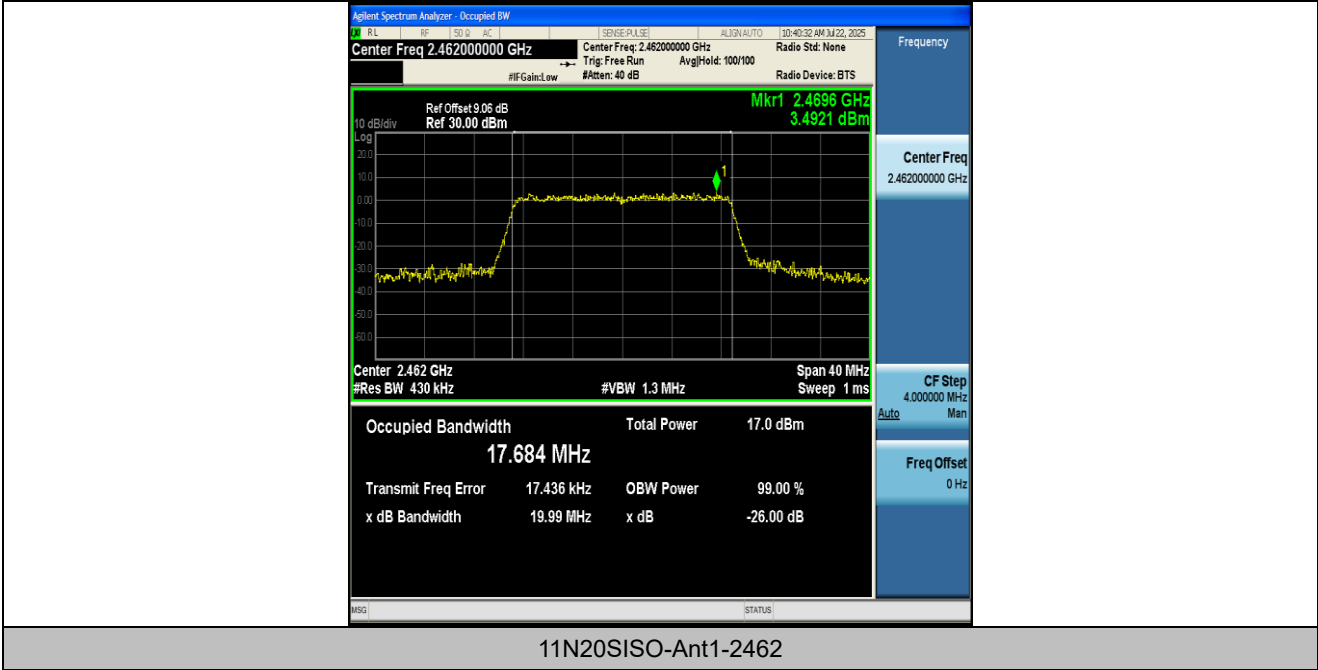
	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run #Atten: 40 dB Radio Std: None Radio Device: BTS Ref Offset 9.06 dB Ref 30.00 dBm Mkr1 2.4352 GHz 5.9767 dBm  Center 2.437 GHz #Res BW 430 kHz #VBW 1.3 MHz Span 40 MHz Sweep 1 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>19.0 dBm</td></tr><tr><td>16.823 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>-38.953 kHz</td><td>OBW Power 99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>19.67 MHz</td><td>x dB -26.00 dB</td></tr></table> MSG: STATUS:	Occupied Bandwidth	Total Power	19.0 dBm	16.823 MHz			Transmit Freq Error	-38.953 kHz	OBW Power 99.00 %	x dB Bandwidth	19.67 MHz	x dB -26.00 dB	Frequency Center Freq 2.437000000 GHz CF Step 4.0000000 MHz Auto Man Freq Offset 0 Hz
Occupied Bandwidth	Total Power	19.0 dBm												
16.823 MHz														
Transmit Freq Error	-38.953 kHz	OBW Power 99.00 %												
x dB Bandwidth	19.67 MHz	x dB -26.00 dB												
11G-Ant1-2437														
	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run #Atten: 40 dB Radio Std: None Radio Device: BTS Ref Offset 9.06 dB Ref 30.00 dBm Mkr1 2.45872 GHz 3.4298 dBm  Center 2.462 GHz #Res BW 430 kHz #VBW 1.3 MHz Span 40 MHz Sweep 1 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>17.0 dBm</td></tr><tr><td>16.975 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>6.253 kHz</td><td>OBW Power 99.00 %</td></tr><tr><td>x dB Bandwidth</td><td>20.02 MHz</td><td>x dB -26.00 dB</td></tr></table> MSG: STATUS:	Occupied Bandwidth	Total Power	17.0 dBm	16.975 MHz			Transmit Freq Error	6.253 kHz	OBW Power 99.00 %	x dB Bandwidth	20.02 MHz	x dB -26.00 dB	Frequency Center Freq 2.462000000 GHz CF Step 4.0000000 MHz Auto Man Freq Offset 0 Hz
Occupied Bandwidth	Total Power	17.0 dBm												
16.975 MHz														
Transmit Freq Error	6.253 kHz	OBW Power 99.00 %												
x dB Bandwidth	20.02 MHz	x dB -26.00 dB												
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	14.78	≤30.00	PASS
11B	Ant1	2437	15.60	≤30.00	PASS
11B	Ant1	2462	13.84	≤30.00	PASS
11G	Ant1	2412	12.88	≤30.00	PASS
11G	Ant1	2437	13.50	≤30.00	PASS
11G	Ant1	2462	12.53	≤30.00	PASS
11N20SISO	Ant1	2412	13.05	≤30.00	PASS
11N20SISO	Ant1	2437	13.57	≤30.00	PASS
11N20SISO	Ant1	2462	8.55	≤30.00	PASS

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

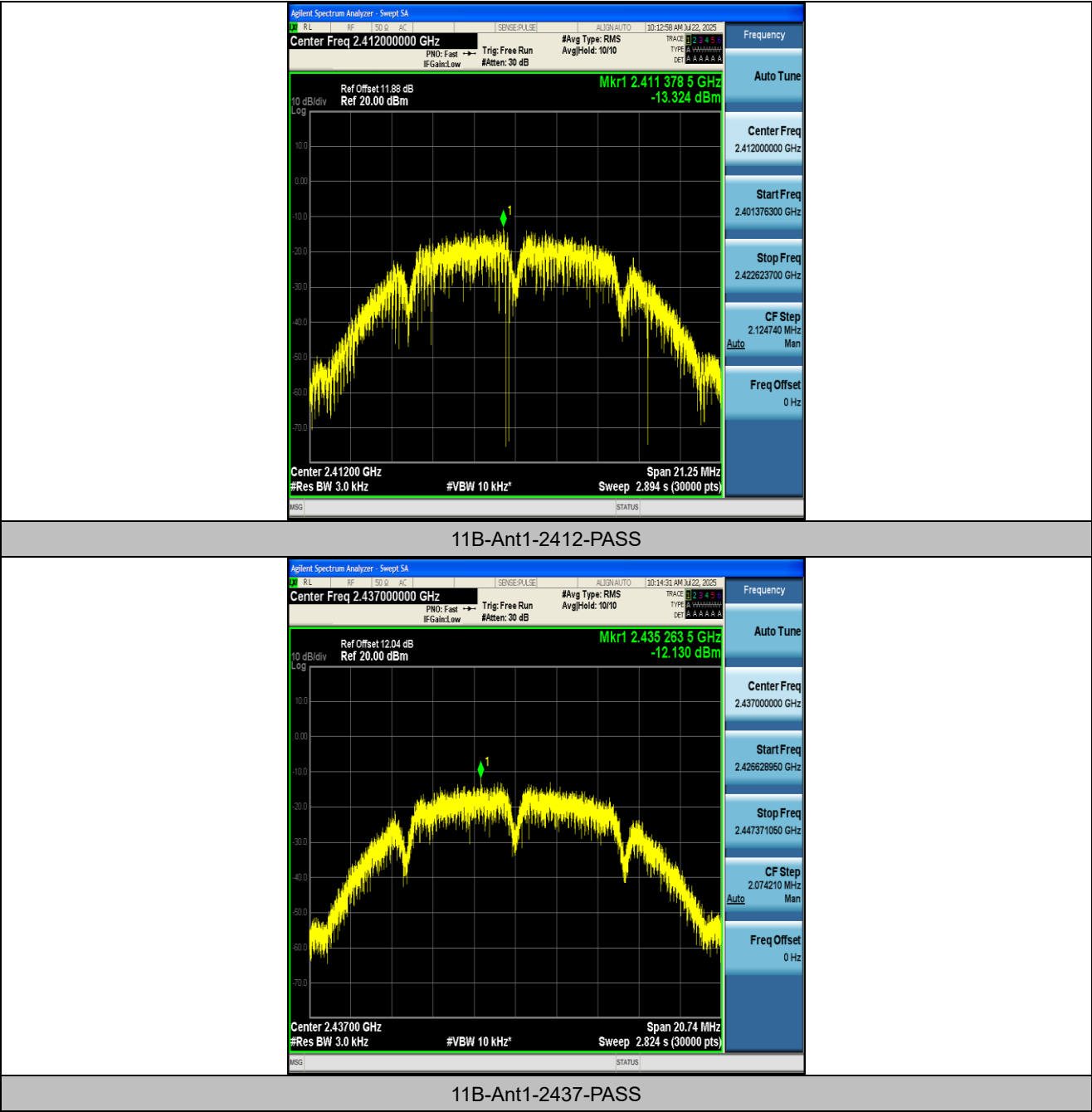
Appendix D: Maximum Average power spectral density

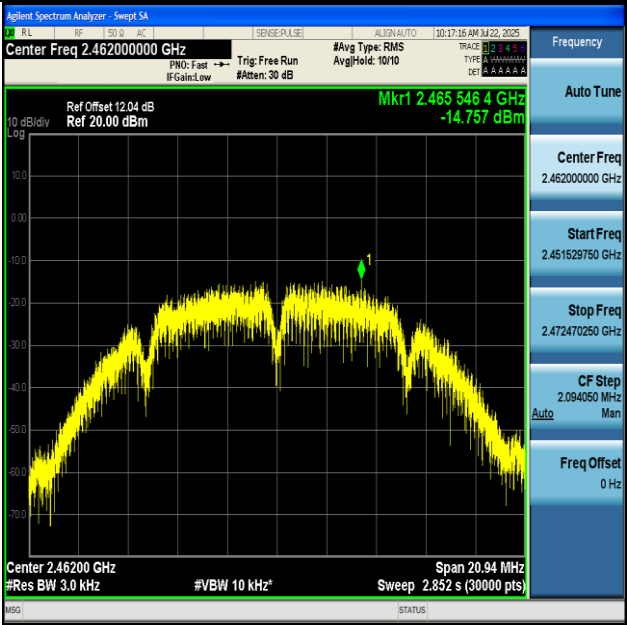
Test Result

Test Mode	Antenna	Frequency [MHz]	Raw. Data [dBm/3-100kHz]	Dc. Factor	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-16.30	2.98	-13.32	≤8.00	PASS
11B	Ant1	2437	-15.11	2.98	-12.13	≤8.00	PASS
11B	Ant1	2462	-17.74	2.98	-14.76	≤8.00	PASS
11G	Ant1	2412	-18.29	3.01	-15.28	≤8.00	PASS
11G	Ant1	2437	-20.14	3.01	-17.13	≤8.00	PASS
11G	Ant1	2462	-20.08	3.01	-17.07	≤8.00	PASS
11N20SISO	Ant1	2412	-18.68	2.91	-15.77	≤8.00	PASS
11N20SISO	Ant1	2437	-18.23	2.91	-15.32	≤8.00	PASS
11N20SISO	Ant1	2462	-19.32	0.00	-19.32	≤8.00	PASS

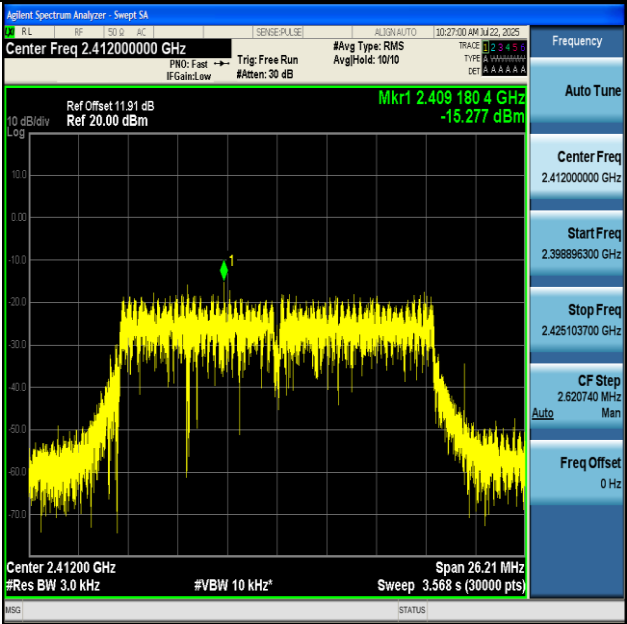
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

Test Graphs

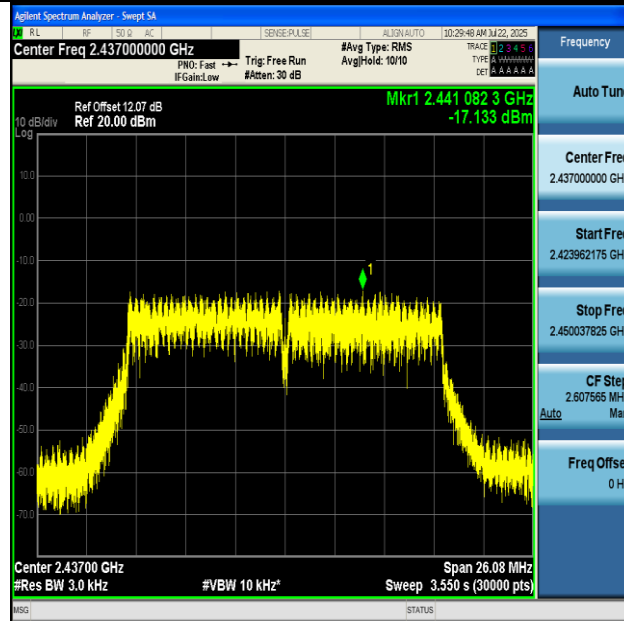




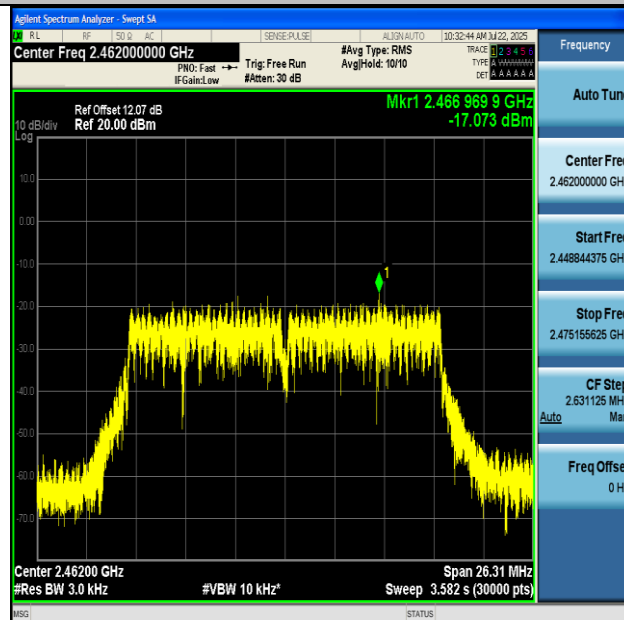
11B-Ant1-2462-PASS



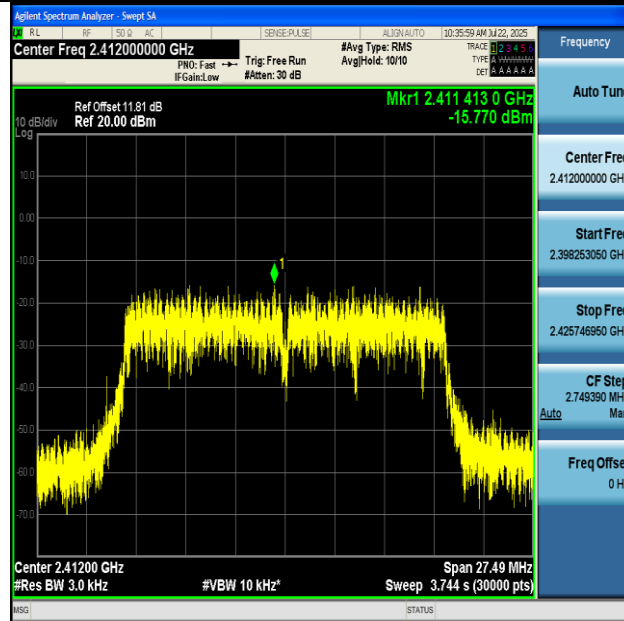
11G-Ant1-2412-PASS



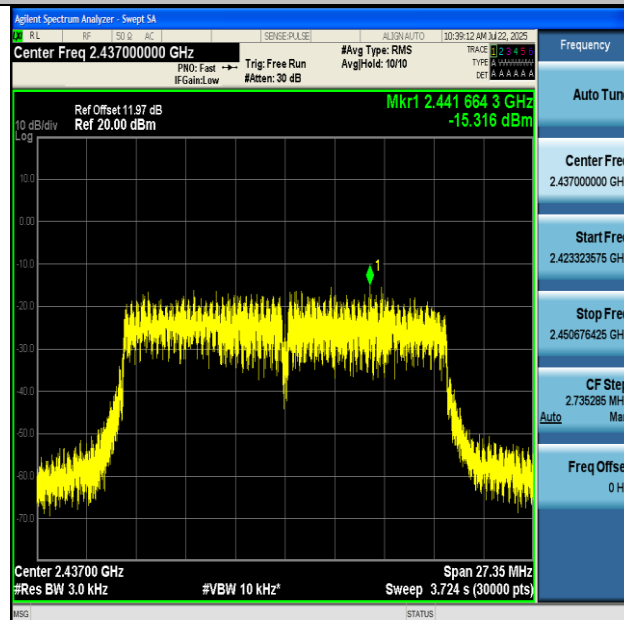
11G-Ant1-2437-PASS



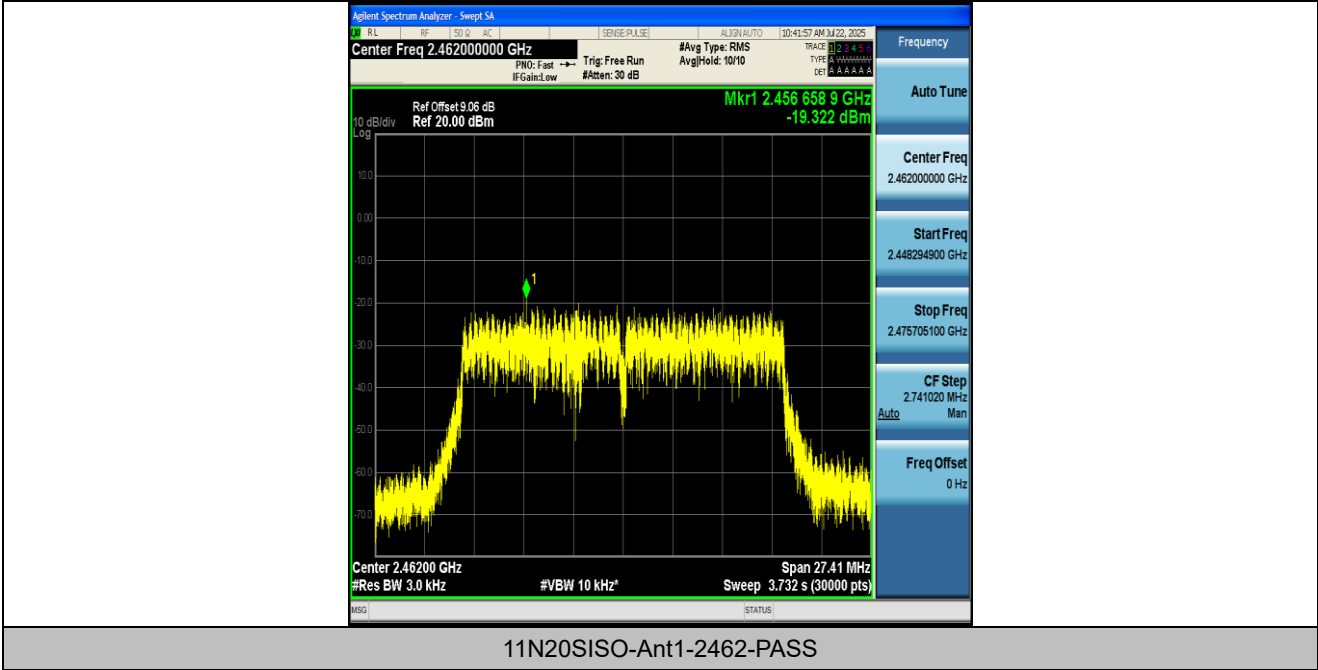
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



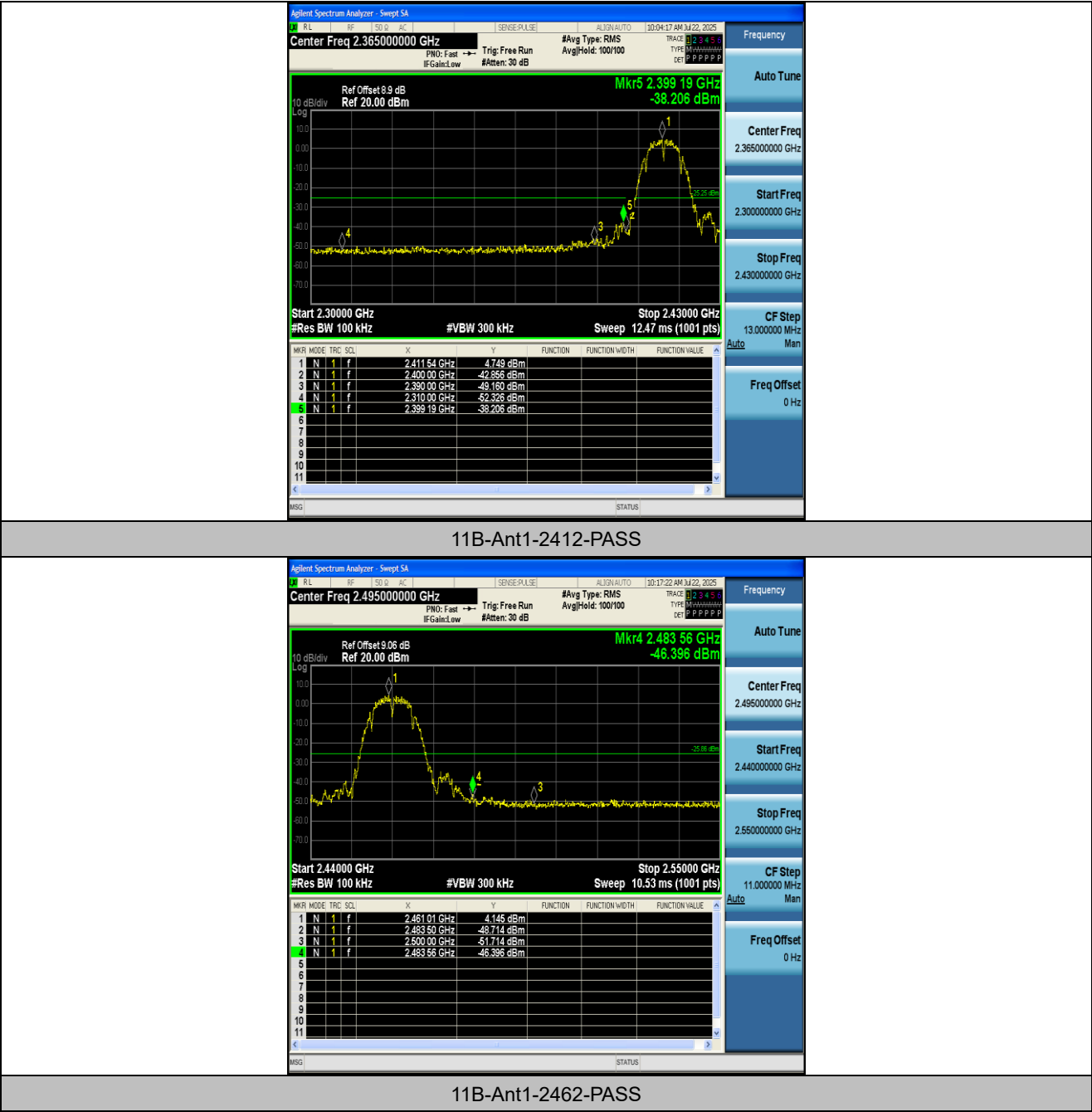
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency.[MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	4.75	-38.21	≤-25.25	PASS
11B	Ant1	High	2462	4.15	-46.4	≤-25.86	PASS
11G	Ant1	Low	2412	0.18	-31.36	≤-29.82	PASS
11G	Ant1	High	2462	0.32	-44.82	≤-29.68	PASS
11N20SISO	Ant1	Low	2412	1.67	-32.18	≤-28.33	PASS
11N20SISO	Ant1	High	2462	0.16	-45.31	≤-29.84	PASS

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

Test Graphs

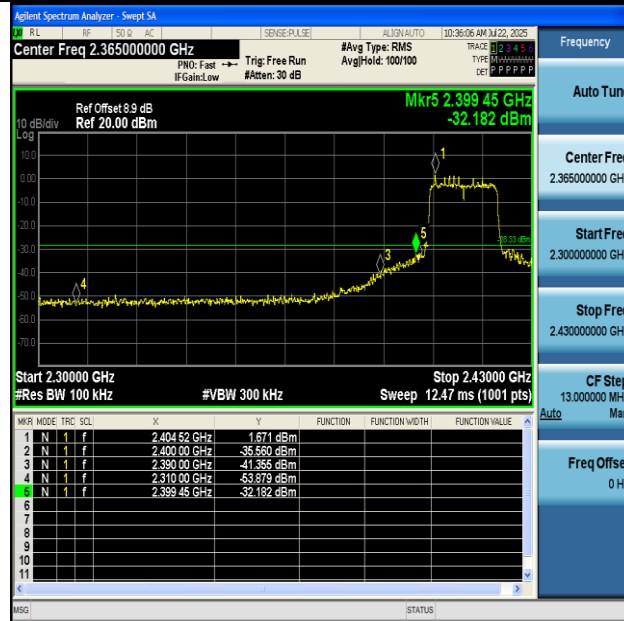




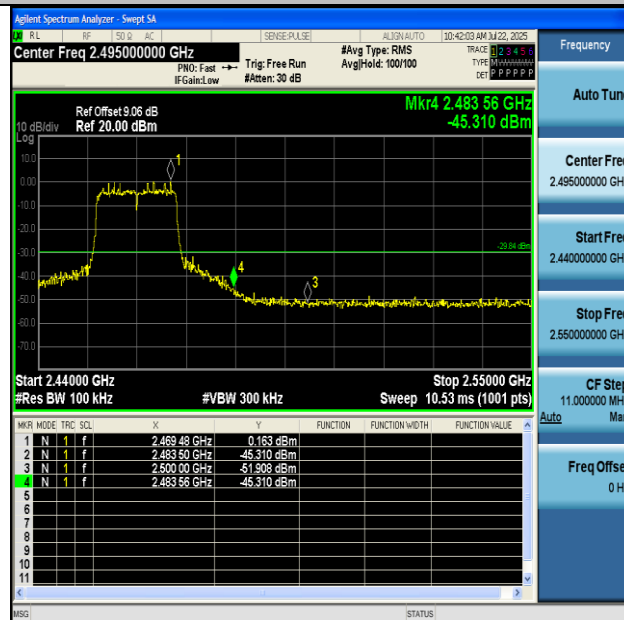
11G-Ant1-2412-PASS



11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS

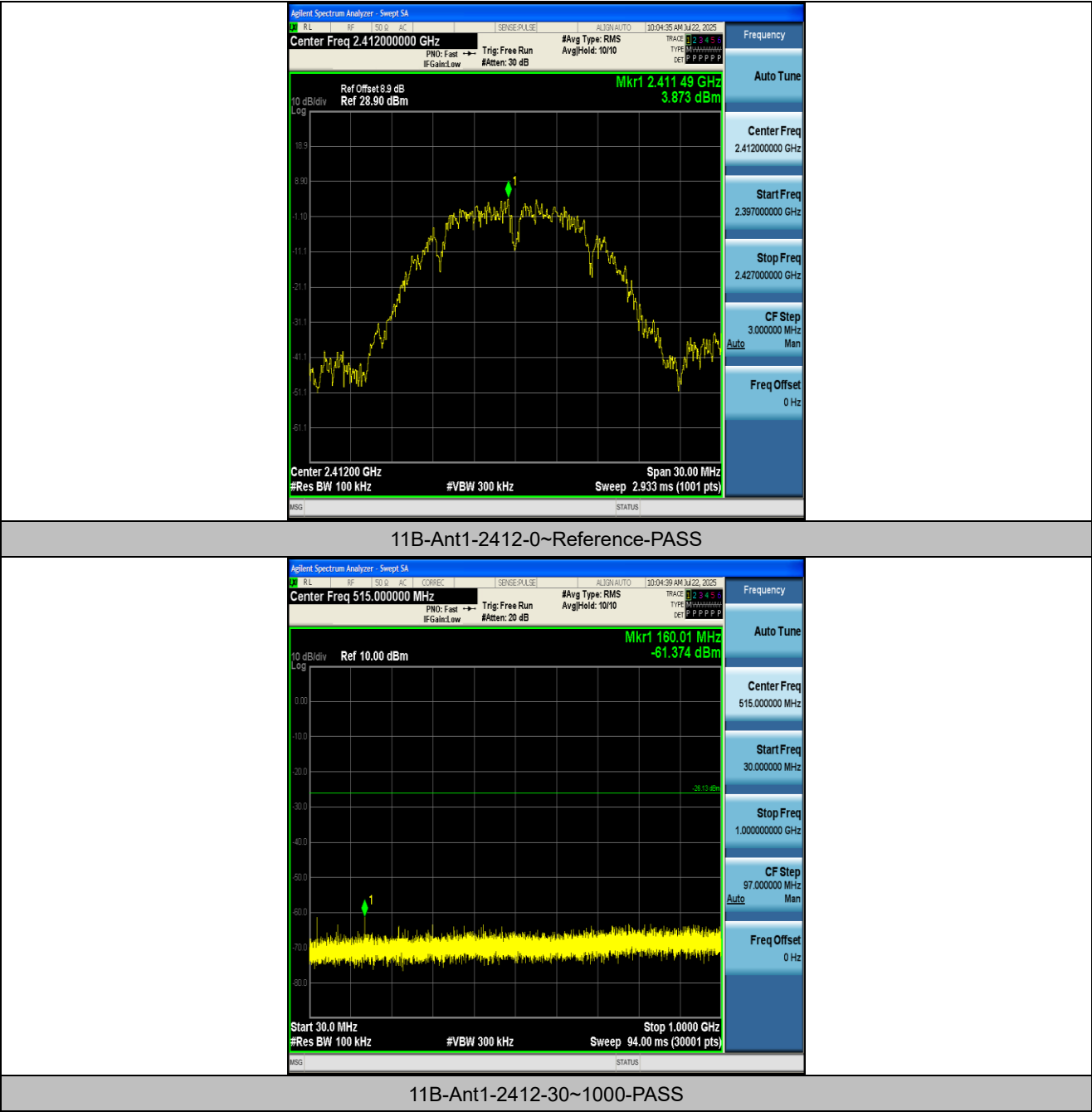
Appendix F: Conducted Spurious Emission

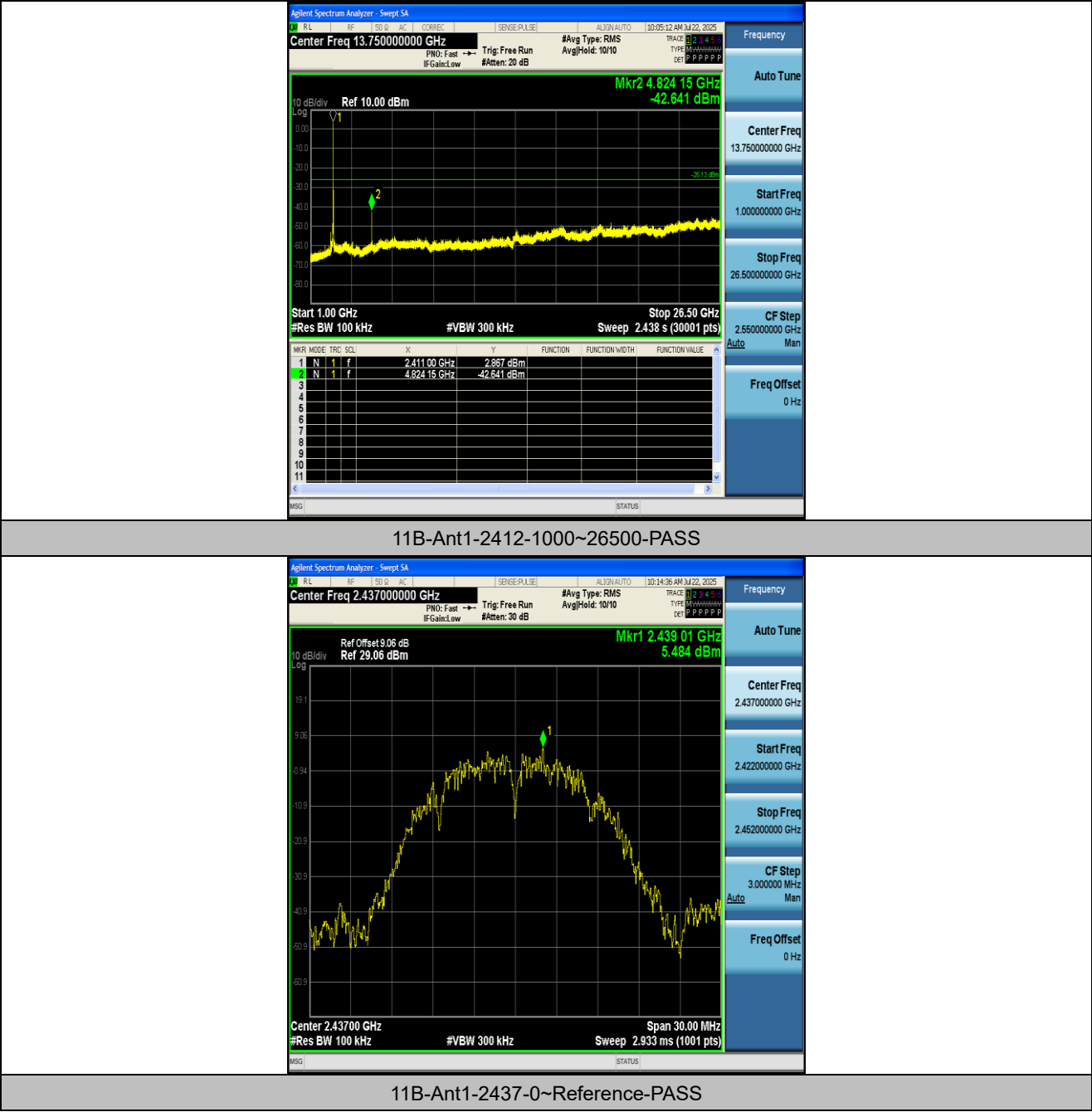
Test Result

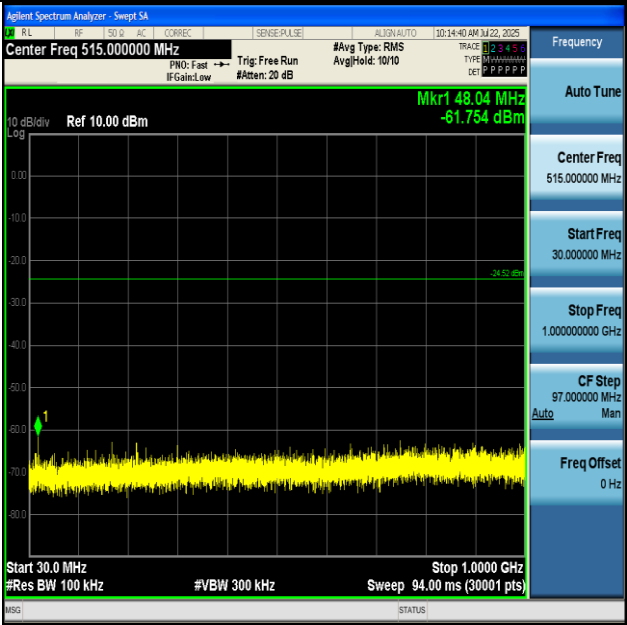
Test Mode	Antenna	Frequency [MHz]	Freq. Range [Mhz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	3.87	3.87	---	PASS
11B	Ant1	2412	30~1000	3.87	-61.37	≤-26.13	PASS
11B	Ant1	2412	1000~26500	3.87	-42.64	≤-26.13	PASS
11B	Ant1	2437	0~Reference	5.48	5.48	---	PASS
11B	Ant1	2437	30~1000	5.48	-61.75	≤-24.52	PASS
11B	Ant1	2437	1000~26500	5.48	-42.16	≤-24.52	PASS
11B	Ant1	2462	0~Reference	2.63	2.63	---	PASS
11B	Ant1	2462	30~1000	2.63	-59.29	≤-27.37	PASS
11B	Ant1	2462	1000~26500	2.63	-41.94	≤-27.37	PASS
11G	Ant1	2412	0~Reference	-0.87	-0.87	---	PASS
11G	Ant1	2412	30~1000	-0.87	-61.94	≤-30.87	PASS
11G	Ant1	2412	1000~26500	-0.87	-45.72	≤-30.87	PASS
11G	Ant1	2437	0~Reference	-1.66	-1.66	---	PASS
11G	Ant1	2437	30~1000	-1.66	-61.03	≤-31.66	PASS
11G	Ant1	2437	1000~26500	-1.66	-45.49	≤-31.66	PASS
11G	Ant1	2462	0~Reference	-3.06	-3.06	---	PASS
11G	Ant1	2462	30~1000	-3.06	-61.75	≤-33.06	PASS
11G	Ant1	2462	1000~26500	-3.06	-45.64	≤-33.06	PASS
11N20SISO	Ant1	2412	0~Reference	0.12	0.12	---	PASS
11N20SISO	Ant1	2412	30~1000	0.12	-60.5	≤-29.88	PASS
11N20SISO	Ant1	2412	1000~26500	0.12	-45.42	≤-29.88	PASS
11N20SISO	Ant1	2437	0~Reference	1.84	1.84	---	PASS
11N20SISO	Ant1	2437	30~1000	1.84	-61.31	≤-28.16	PASS
11N20SISO	Ant1	2437	1000~26500	1.84	-45.53	≤-28.16	PASS
11N20SISO	Ant1	2462	0~Reference	-3.72	-3.72	---	PASS
11N20SISO	Ant1	2462	30~1000	-3.72	-59.79	≤-33.72	PASS
11N20SISO	Ant1	2462	1000~26500	-3.72	-45.42	≤-33.72	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.

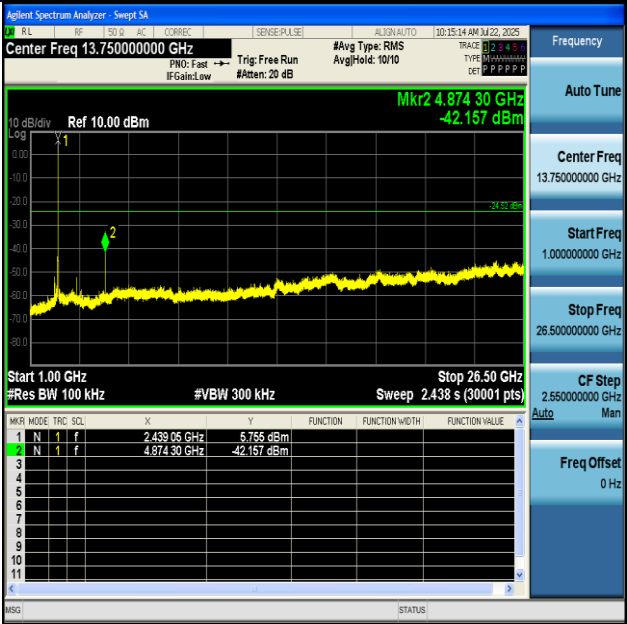
Test Graphs







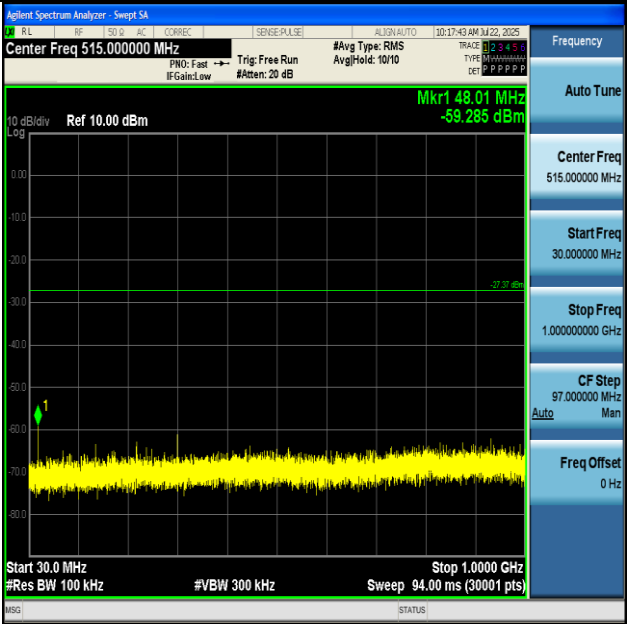
11B-Ant1-2437-30~1000-PASS



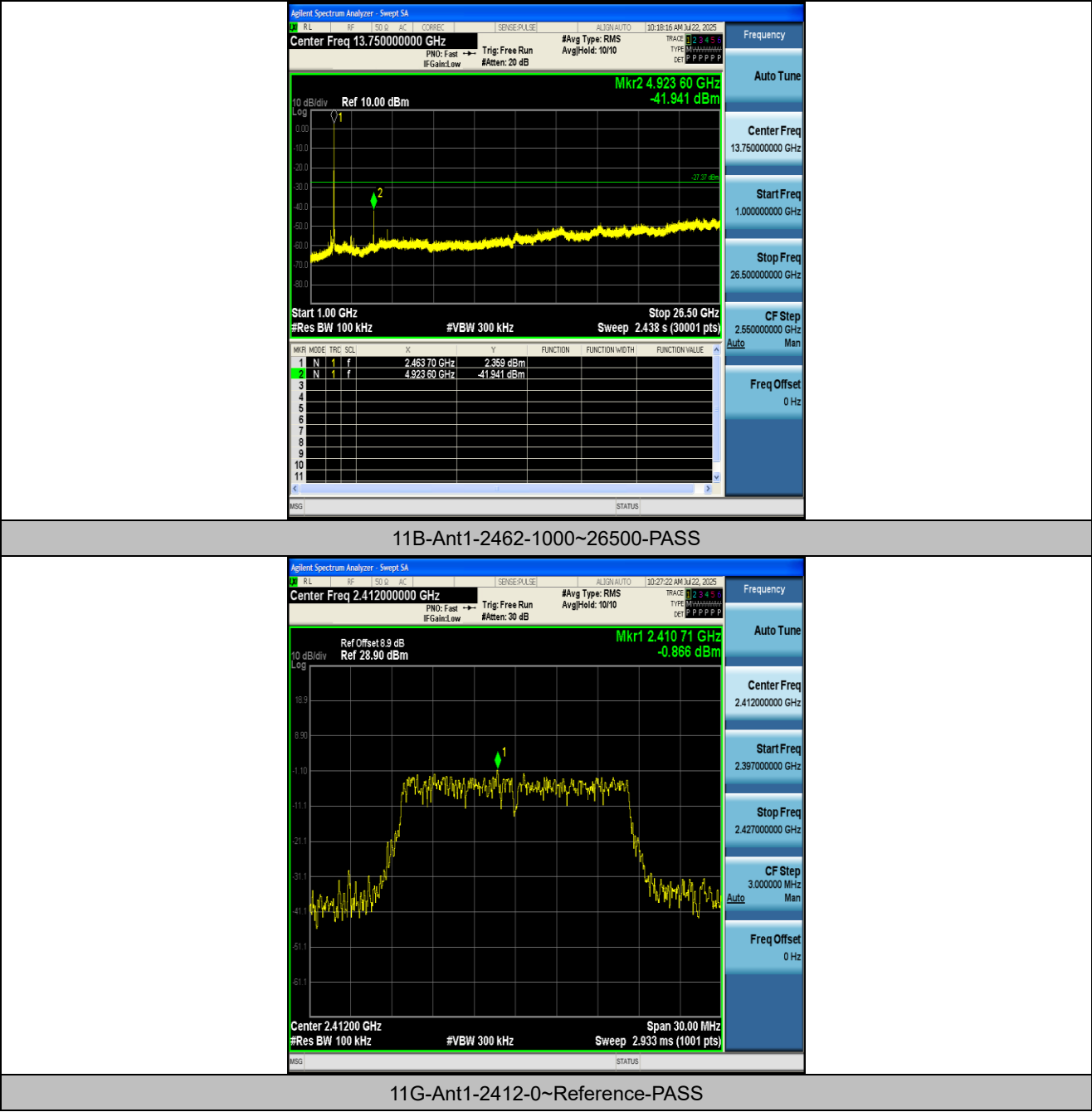
11B-Ant1-2437-1000~26500-PASS

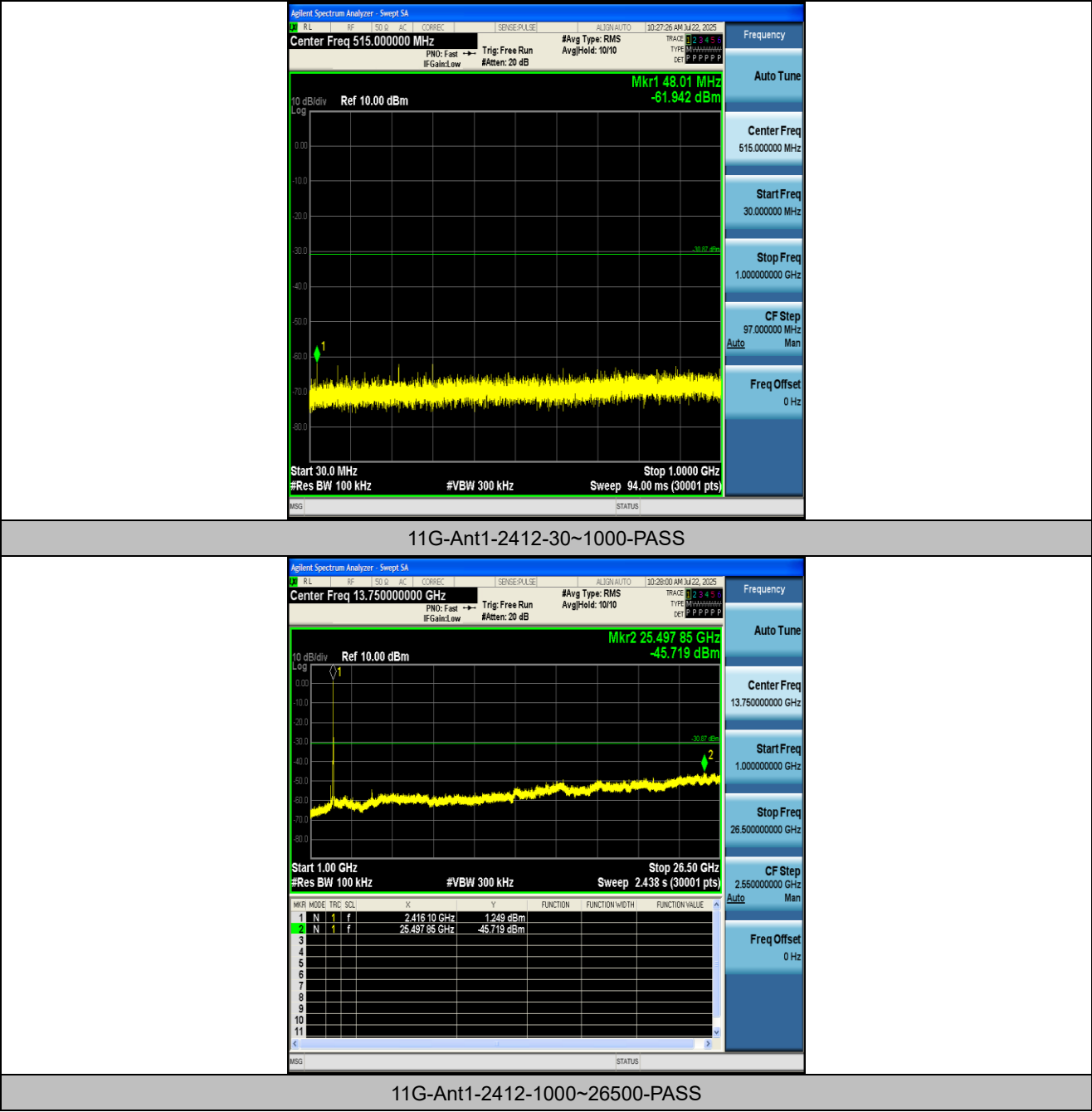


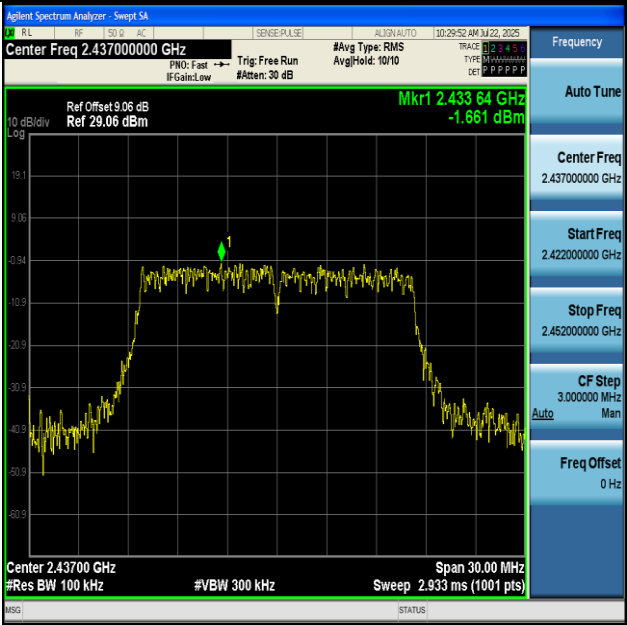
11B-Ant1-2462-0~Reference-PASS



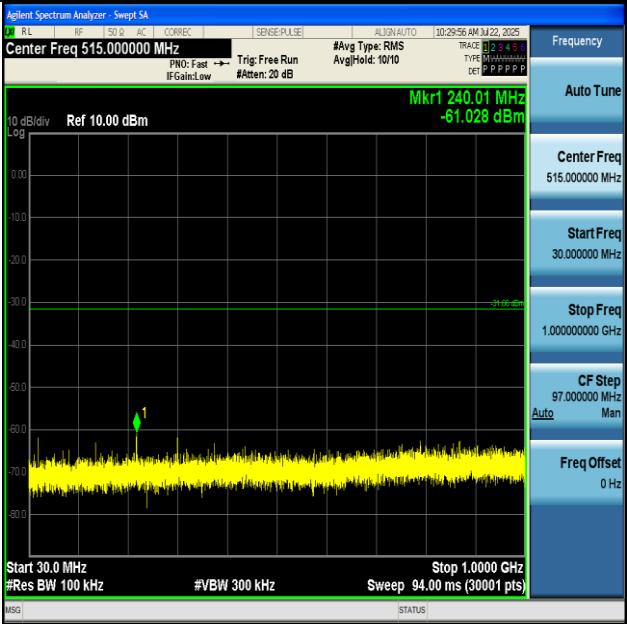
11B-Ant1-2462-30~1000-PASS



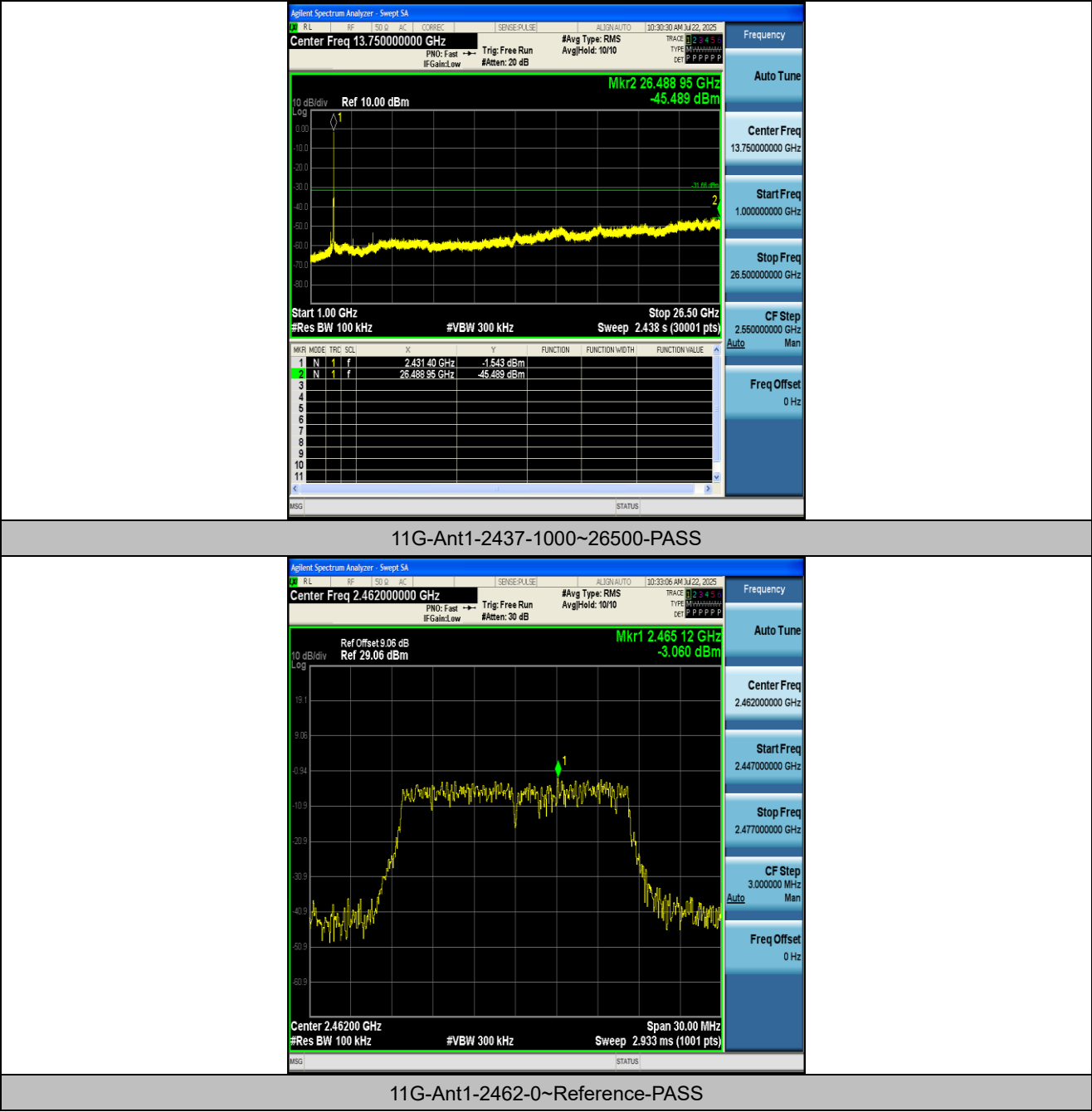


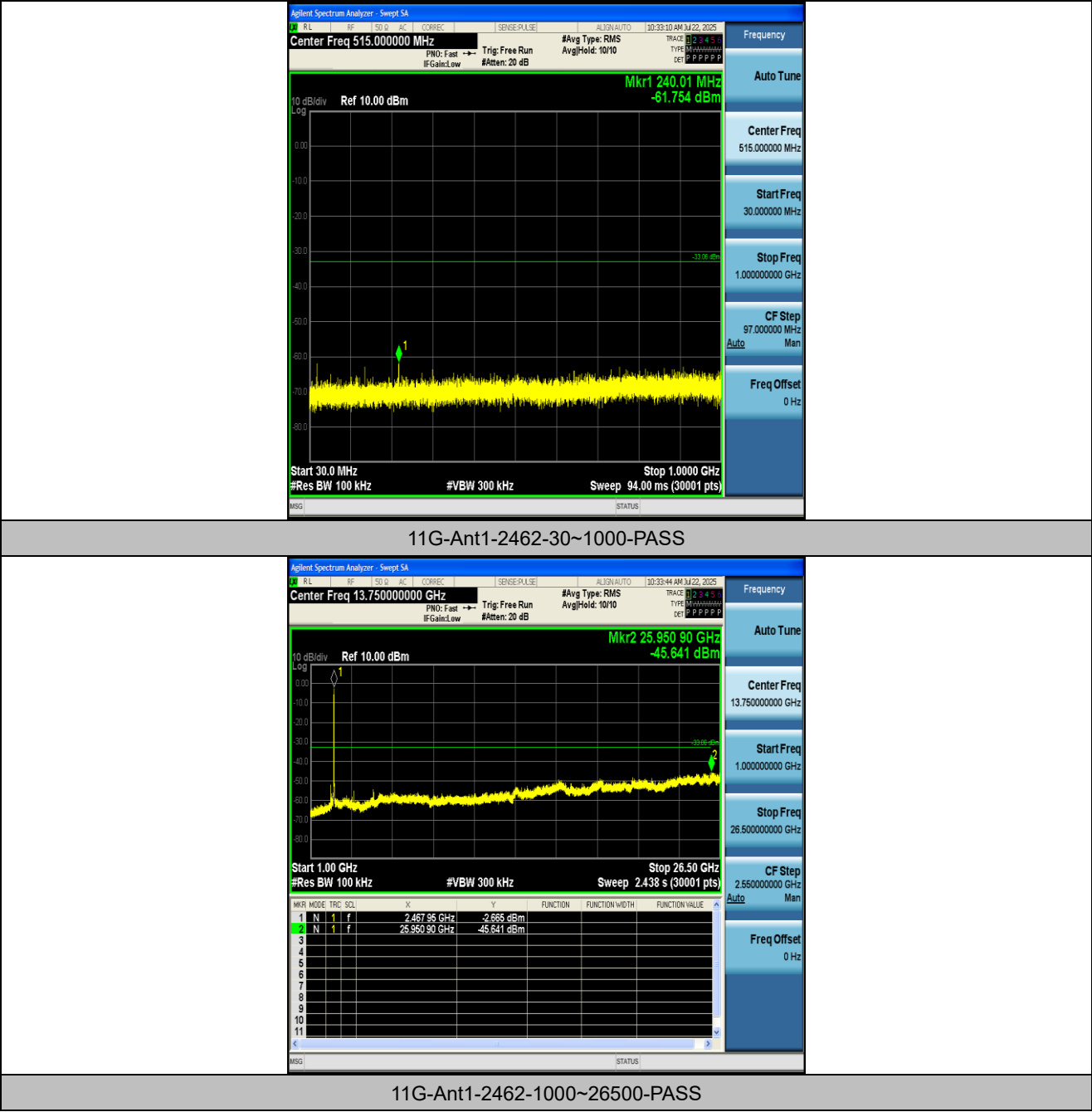


11G-Ant1-2437-0~Reference-PASS

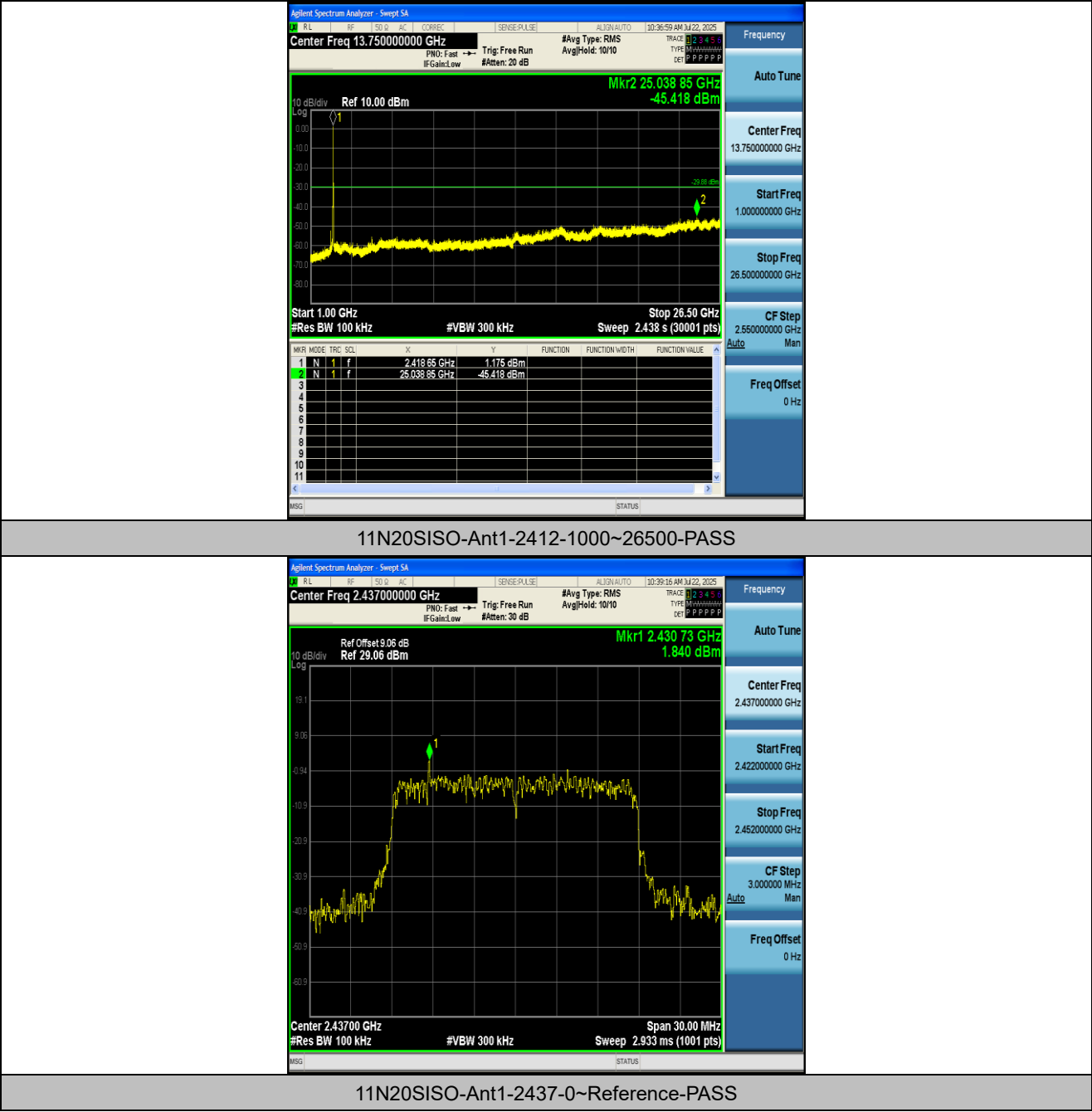


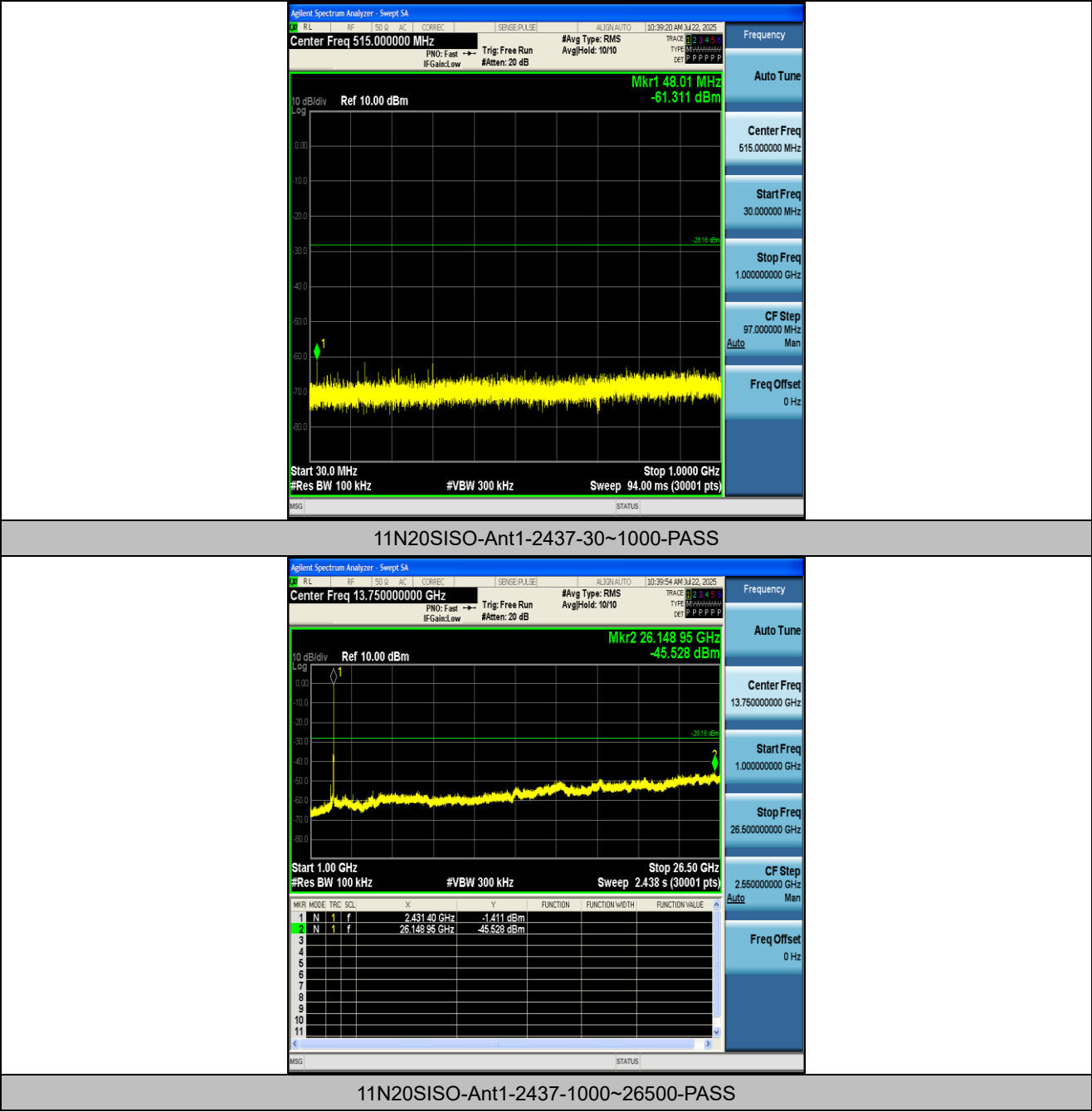
11G-Ant1-2437-30~1000-PASS

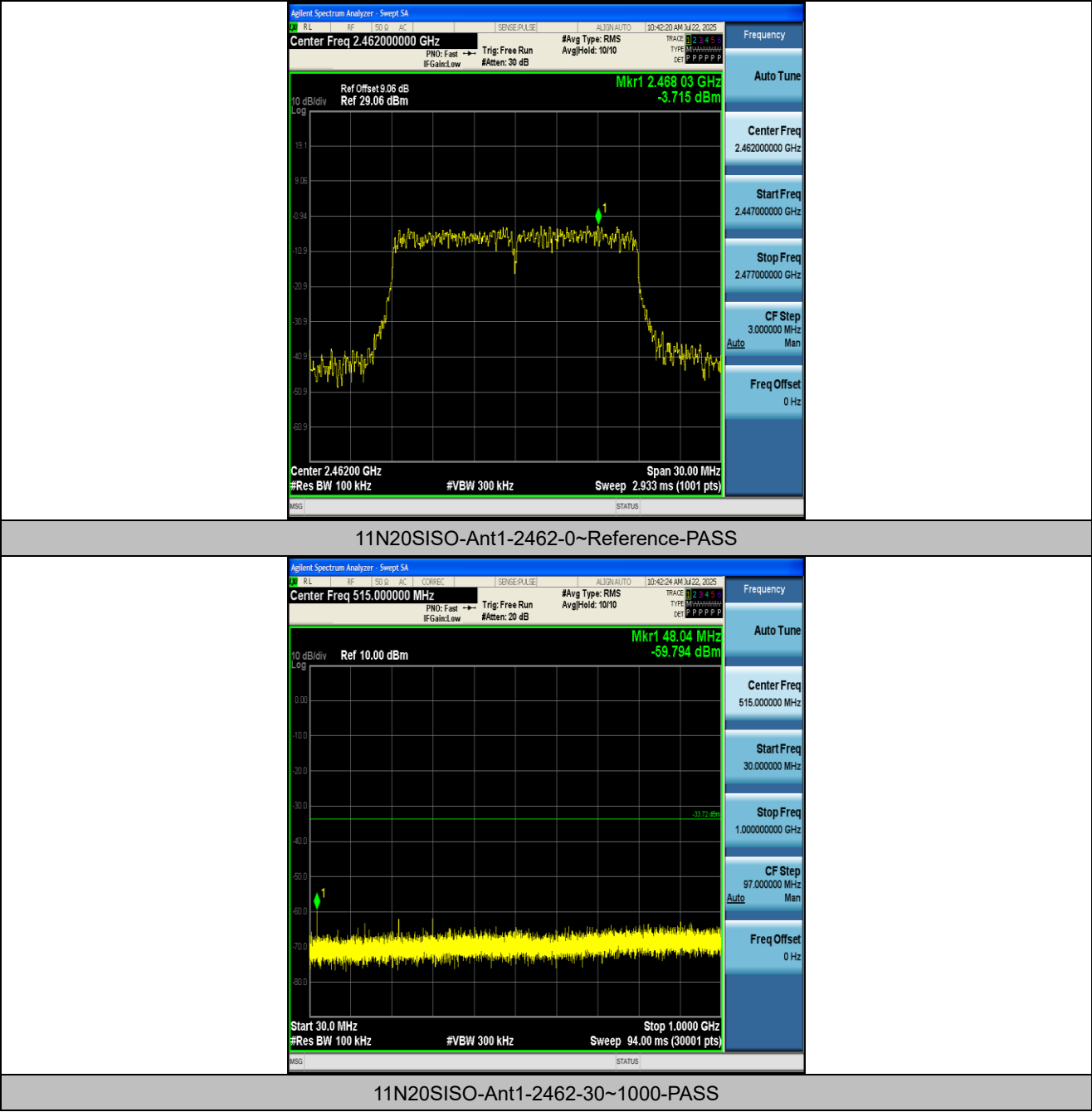


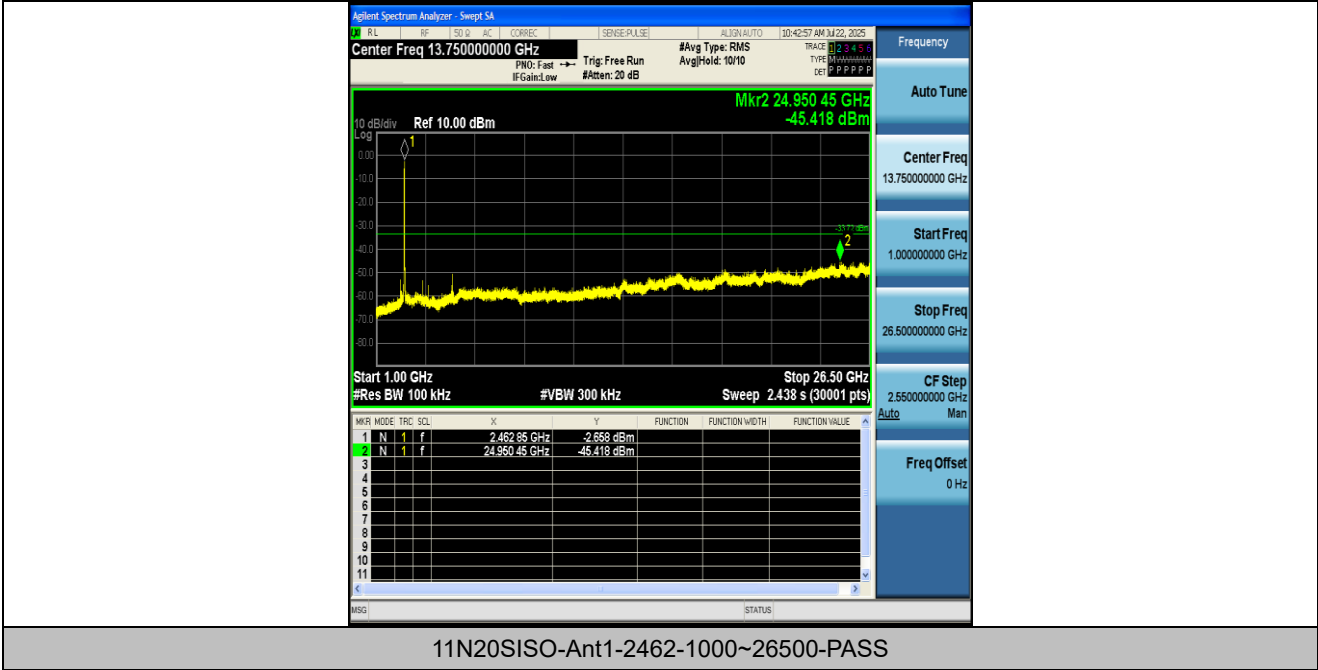












11N20SISO-Ant1-2462-1000~26500-PASS

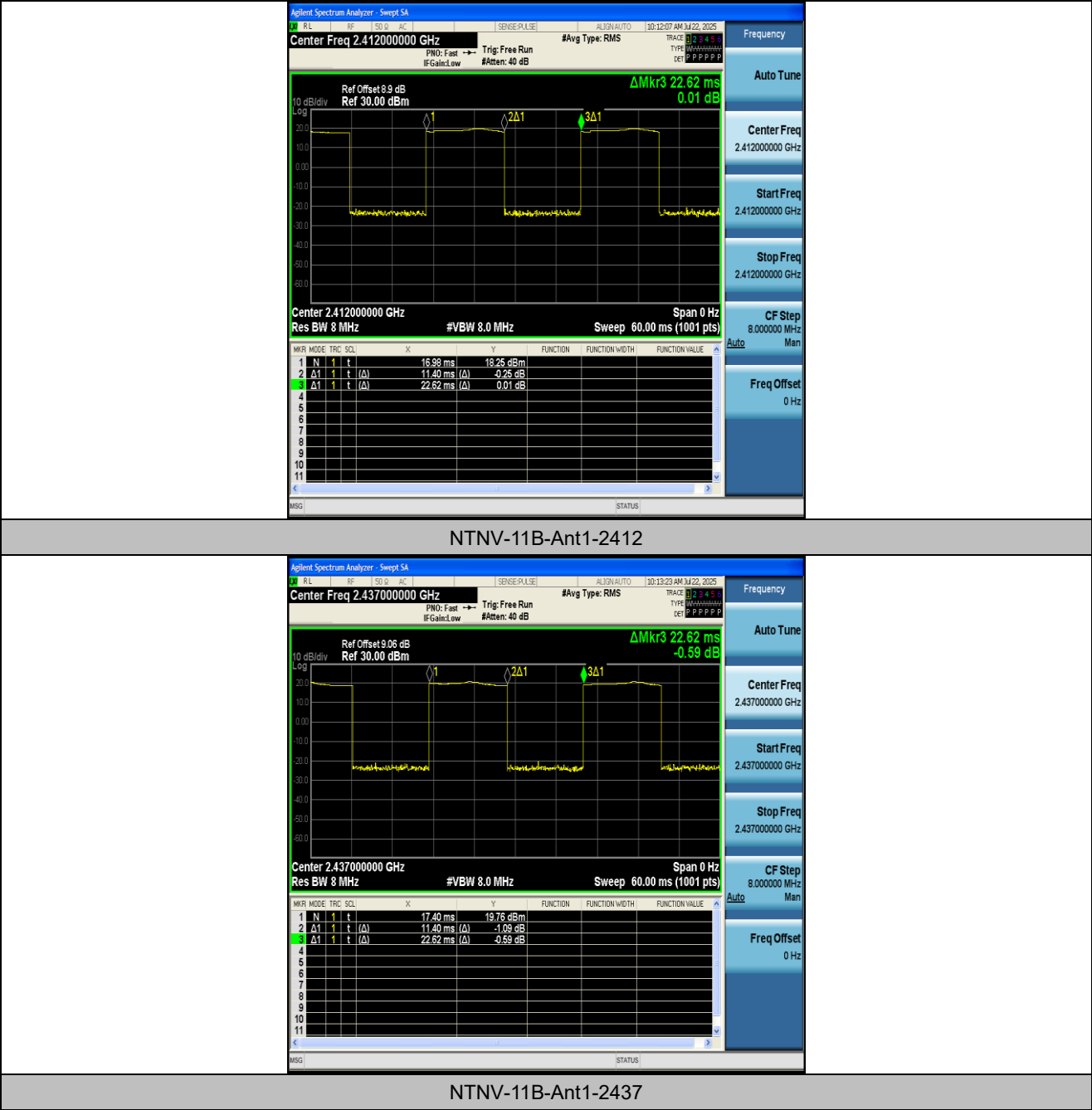
Appendix G: Duty Cycle

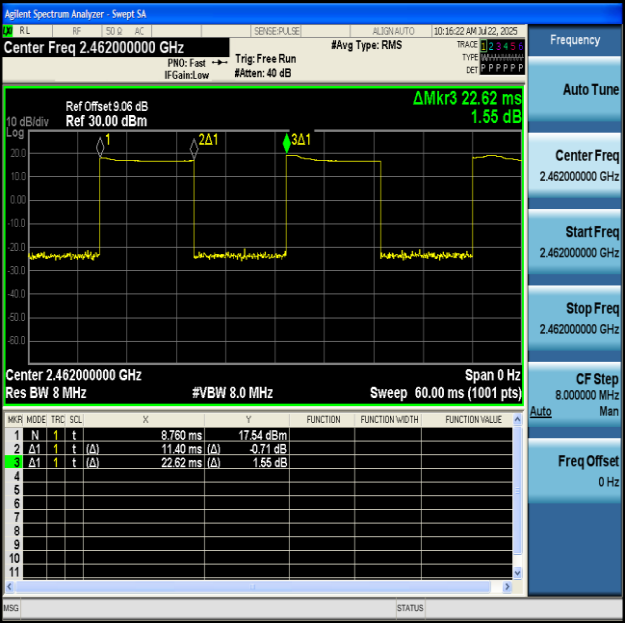
Test Result

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	11.40	22.62	50.40	2.98
11B	Ant1	2437	11.40	22.62	50.40	2.98
11B	Ant1	2462	11.40	22.62	50.40	2.98
11G	Ant1	2412	1.88	3.76	50.00	3.01
11G	Ant1	2437	1.88	3.76	50.00	3.01
11G	Ant1	2462	1.88	3.76	50.00	3.01
11N20SISO	Ant1	2412	0.90	1.76	51.14	2.91
11N20SISO	Ant1	2437	0.90	1.76	51.14	2.91
11N20SISO	Ant1	2462	1.76	3.50	50.29	2.99

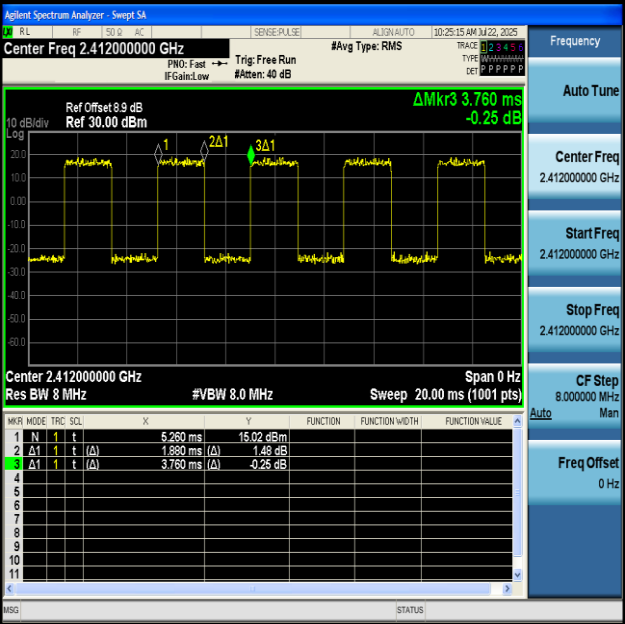
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

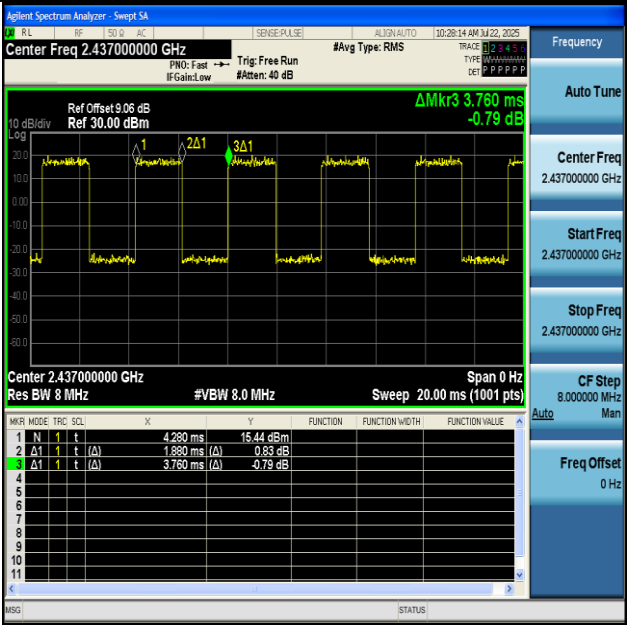




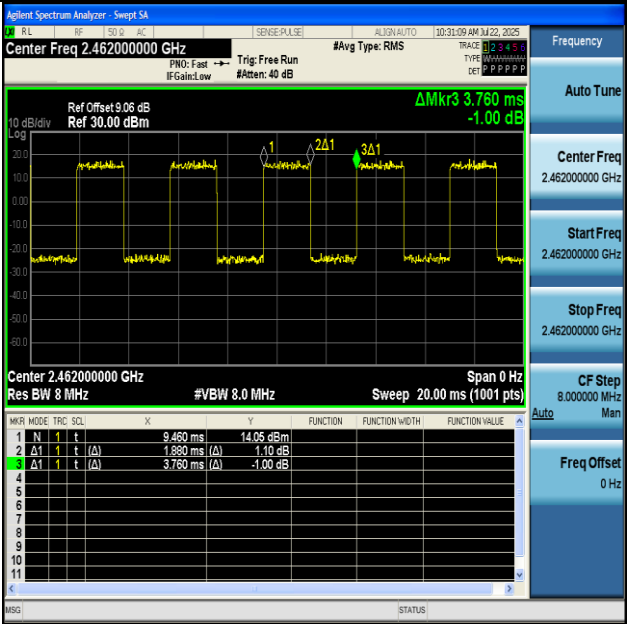
NTNV-11B-Ant1-2462



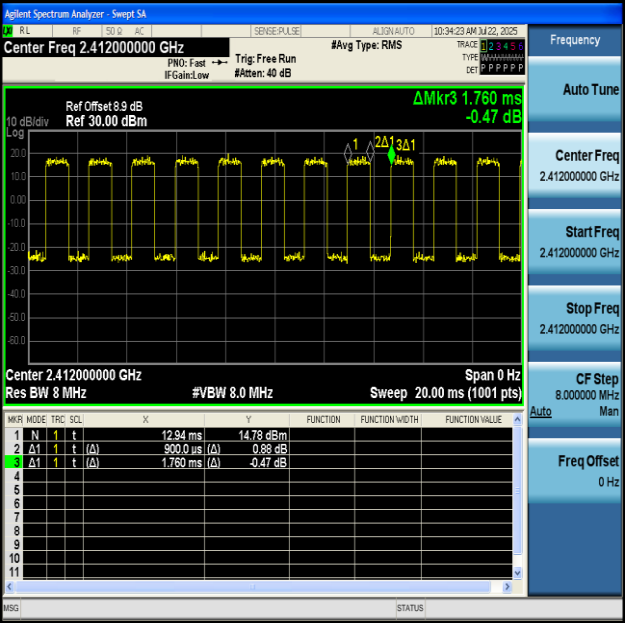
NTNV-11G-Ant1-2412



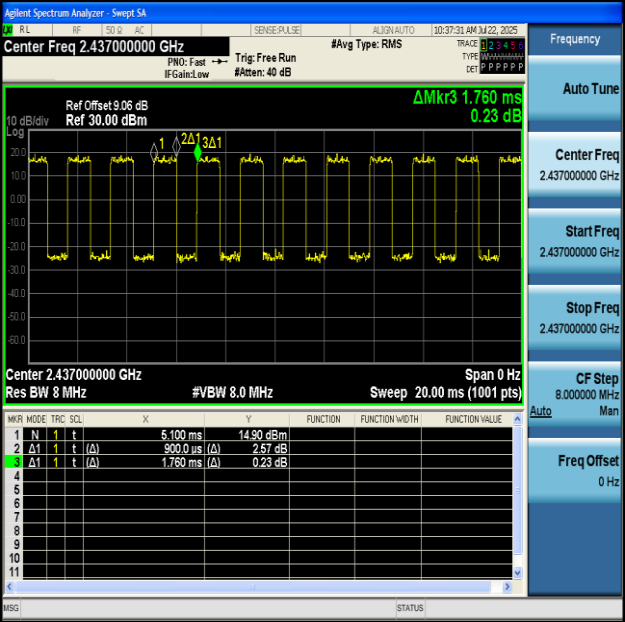
NTNV-11G-Ant1-2437



NTNV-11G-Ant1-2462



NTNV-11N20SISO-Ant1-2412



NTNV-11N20SISO-Ant1-2437

