

RF Test Data for RLAN(5.2G) (Conducted Measurement)

Product Name: DRONE

Trade Mark: /

Test Model: F7GIM

FCC ID: 2A5GP-F7GIMYK

Environmental Conditions

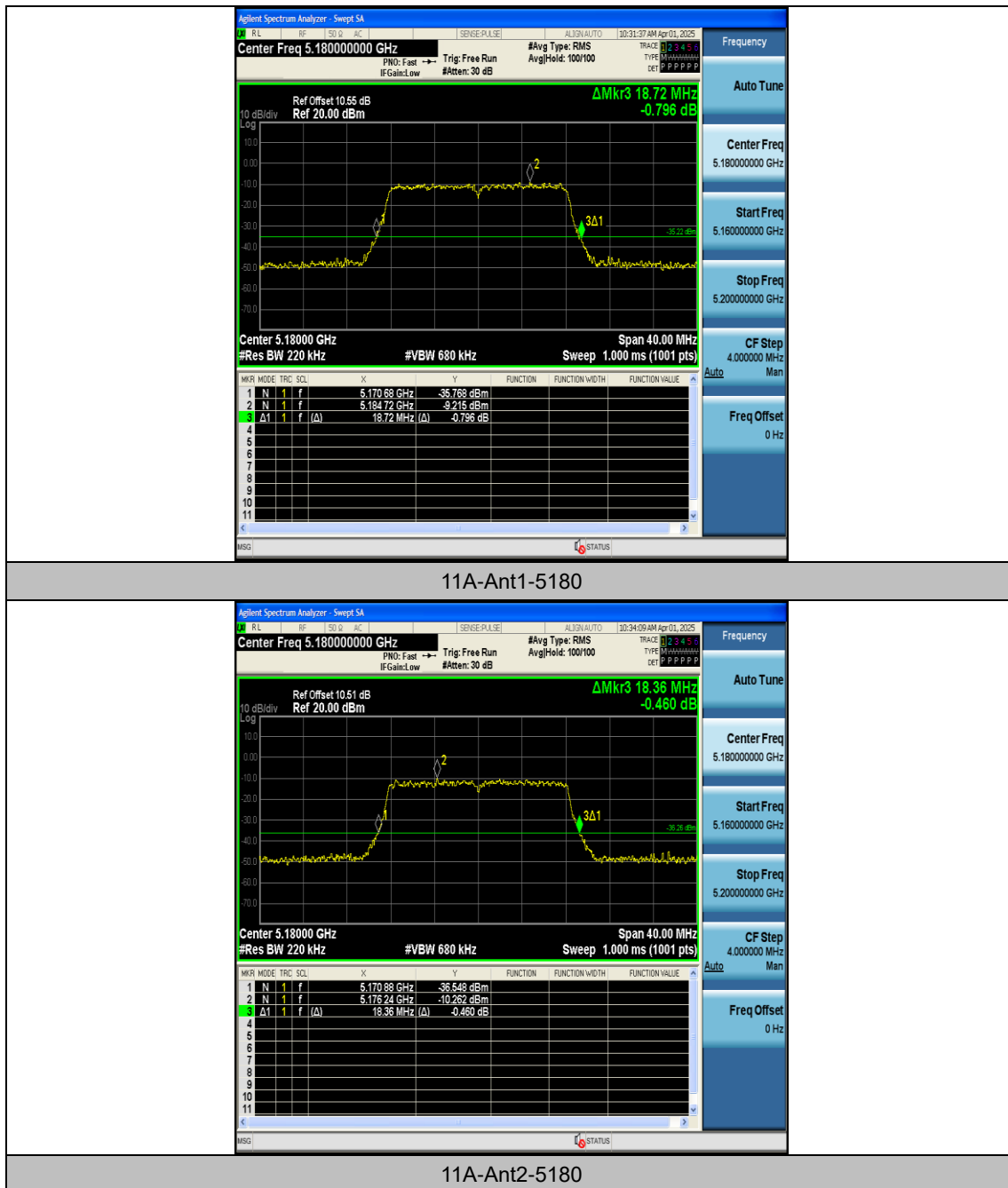
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A1: Emission Bandwidth

Test Result

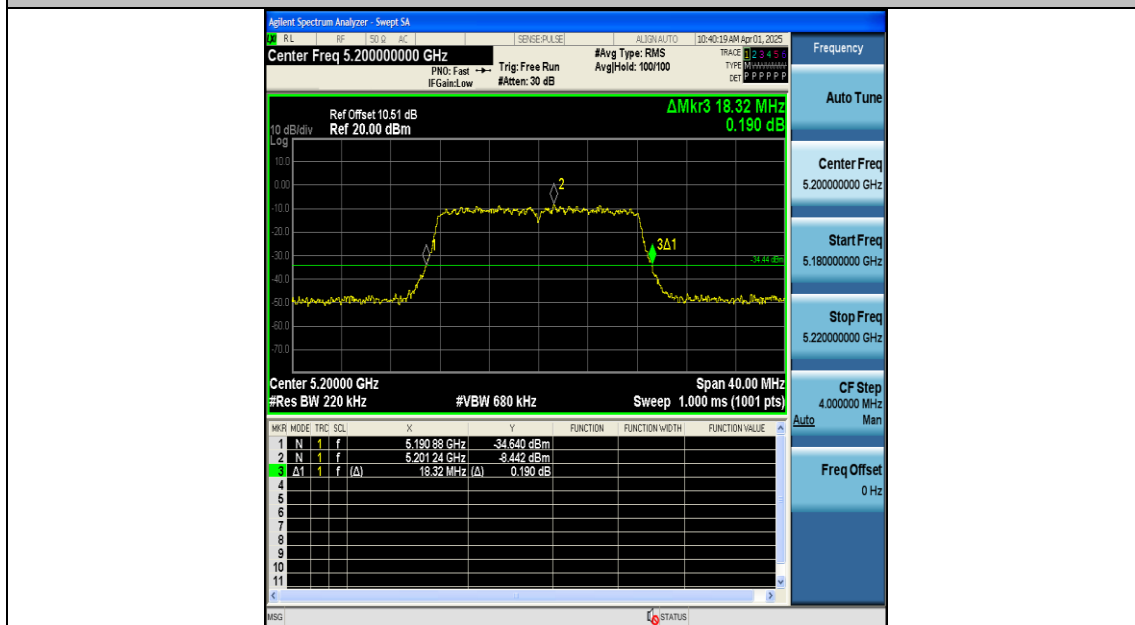
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	18.720	5170.680	5189.400	---	---
11A	Ant2	5180	18.360	5170.880	5189.240	---	---
11A	Ant1	5200	18.600	5190.720	5209.320	---	---
11A	Ant2	5200	18.320	5190.880	5209.200	---	---
11A	Ant1	5240	18.600	5230.680	5249.280	---	---
11A	Ant2	5240	18.440	5230.880	5249.320	---	---
11N20MIMO	Ant1	5180	19.600	5170.160	5189.760	---	---
11N20MIMO	Ant2	5180	19.480	5170.280	5189.760	---	---
11N20MIMO	Ant1	5200	19.360	5190.360	5209.720	---	---
11N20MIMO	Ant2	5200	19.360	5190.360	5209.720	---	---
11N20MIMO	Ant1	5240	19.280	5230.400	5249.680	---	---
11N20MIMO	Ant2	5240	19.360	5230.440	5249.800	---	---
11AC20MIMO	Ant1	5180	19.440	5170.280	5189.720	---	---
11AC20MIMO	Ant2	5180	19.360	5170.360	5189.720	---	---
11AC20MIMO	Ant1	5200	19.360	5190.360	5209.720	---	---
11AC20MIMO	Ant2	5200	19.400	5190.280	5209.680	---	---
11AC20MIMO	Ant1	5240	19.240	5230.400	5249.640	---	---
11AC20MIMO	Ant2	5240	19.560	5230.120	5249.680	---	---

Test Graphs

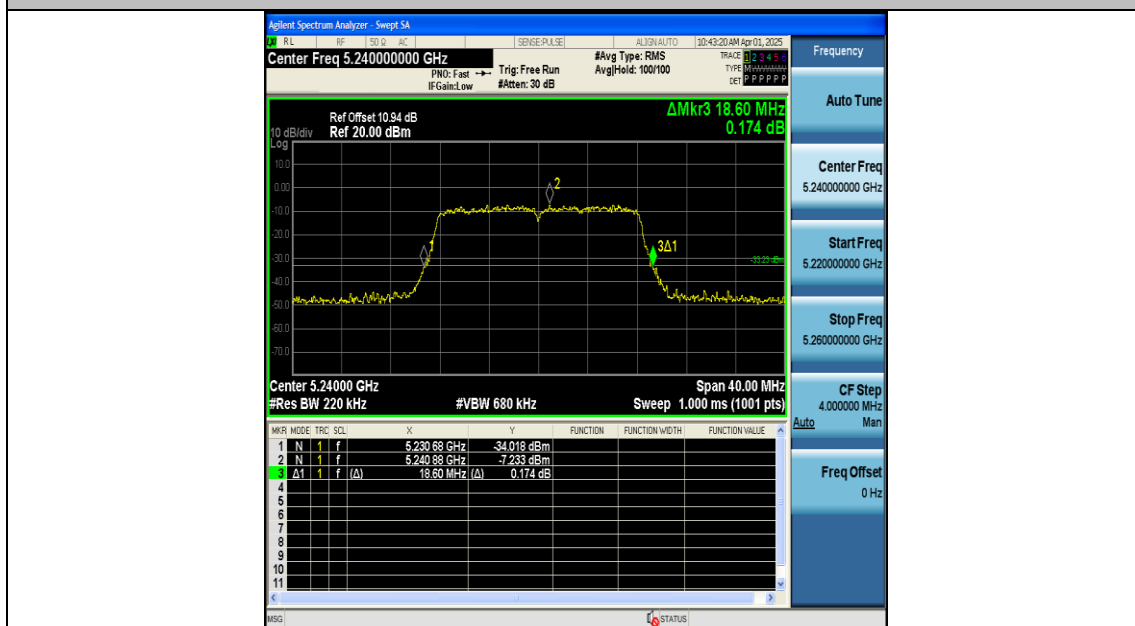




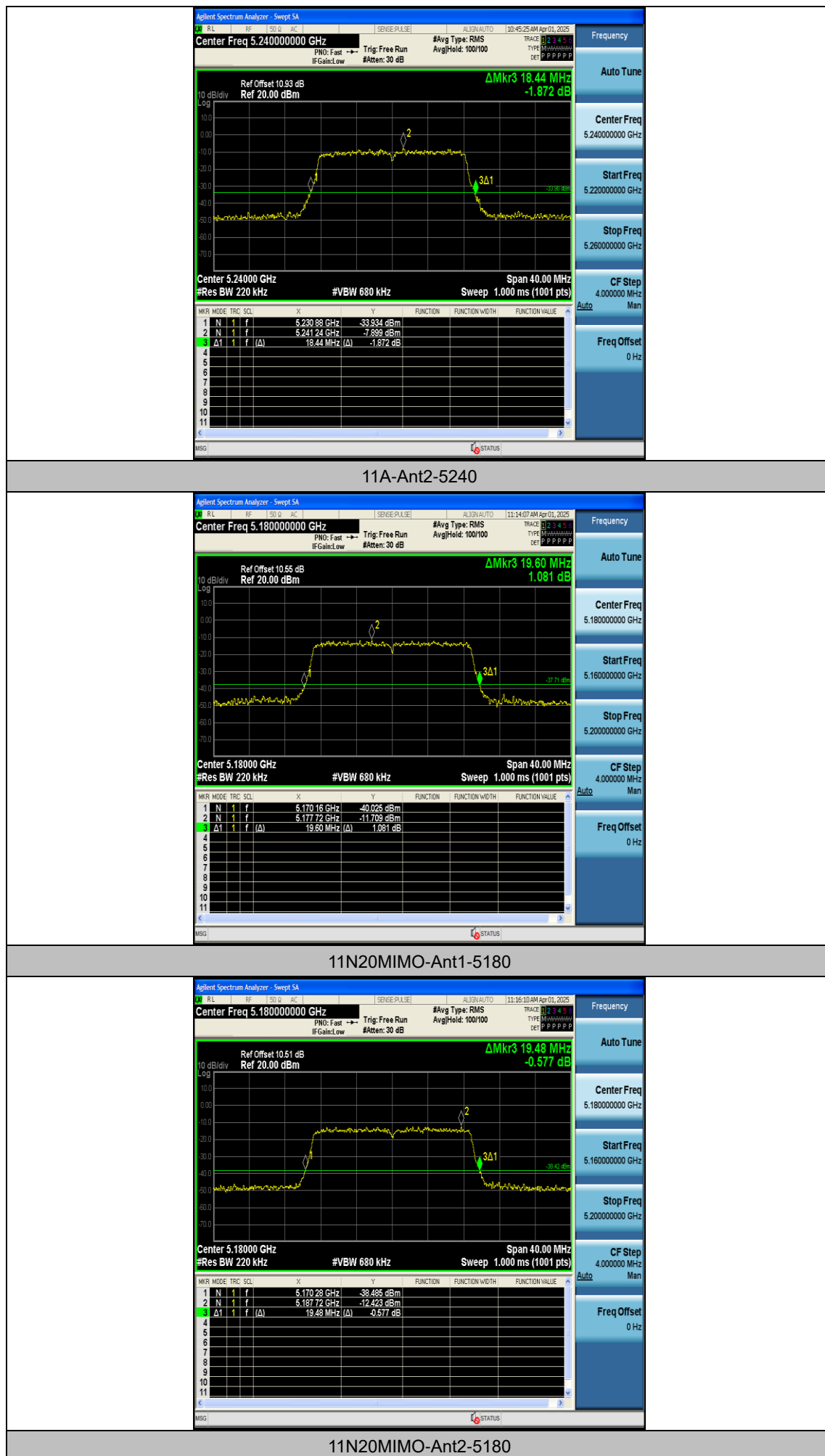
11A-Ant1-5200

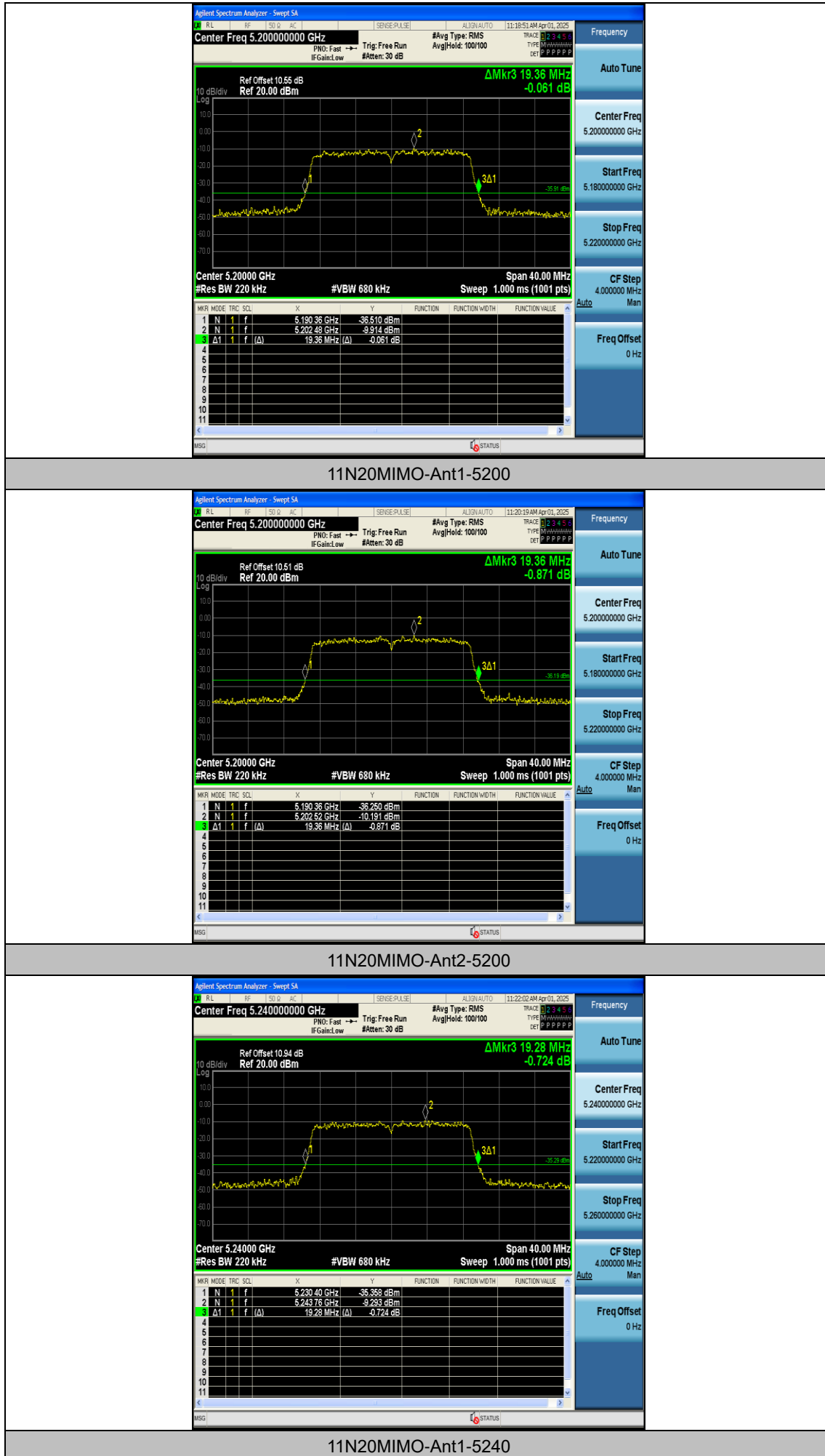


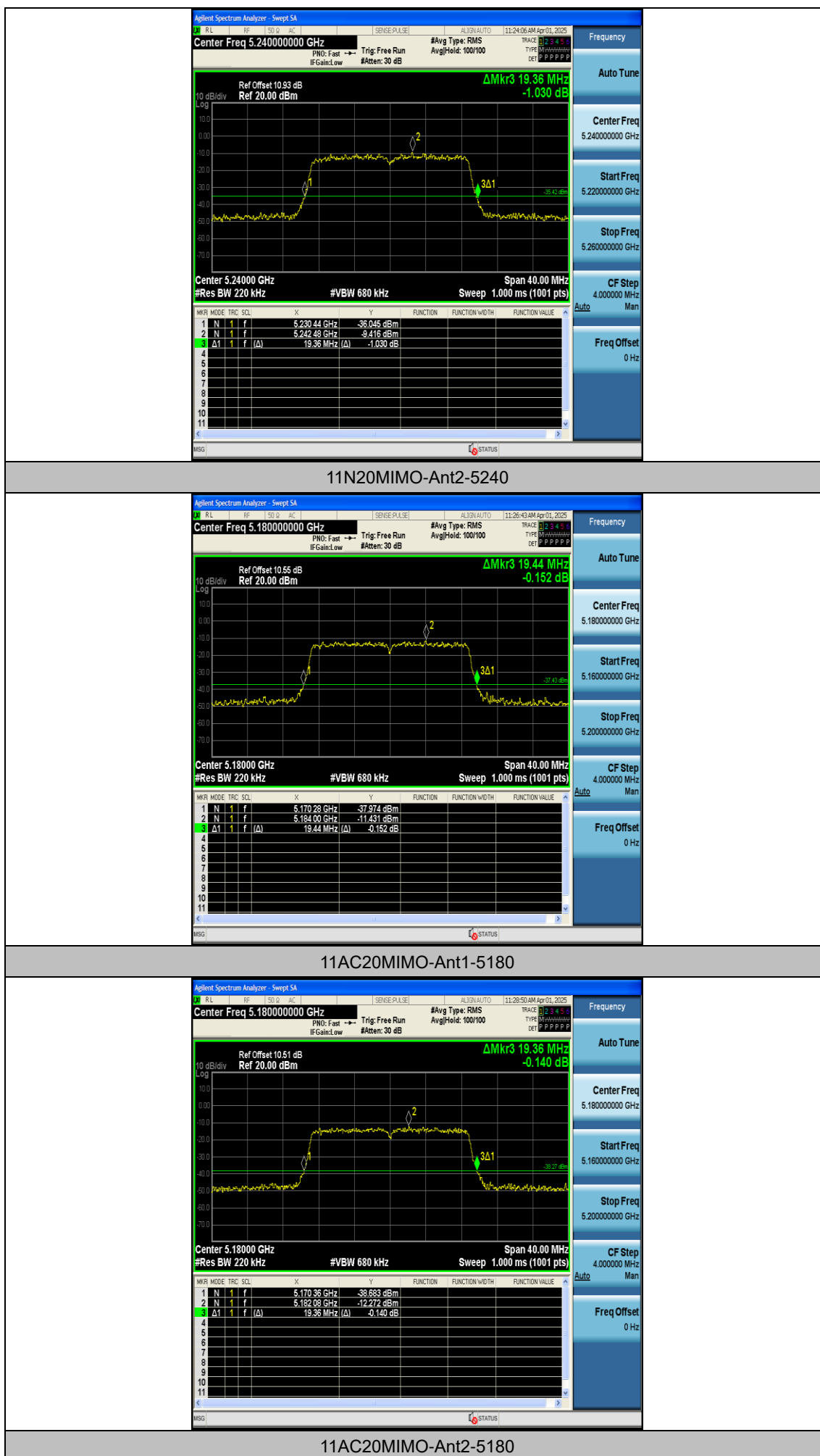
11A-Ant2-5200

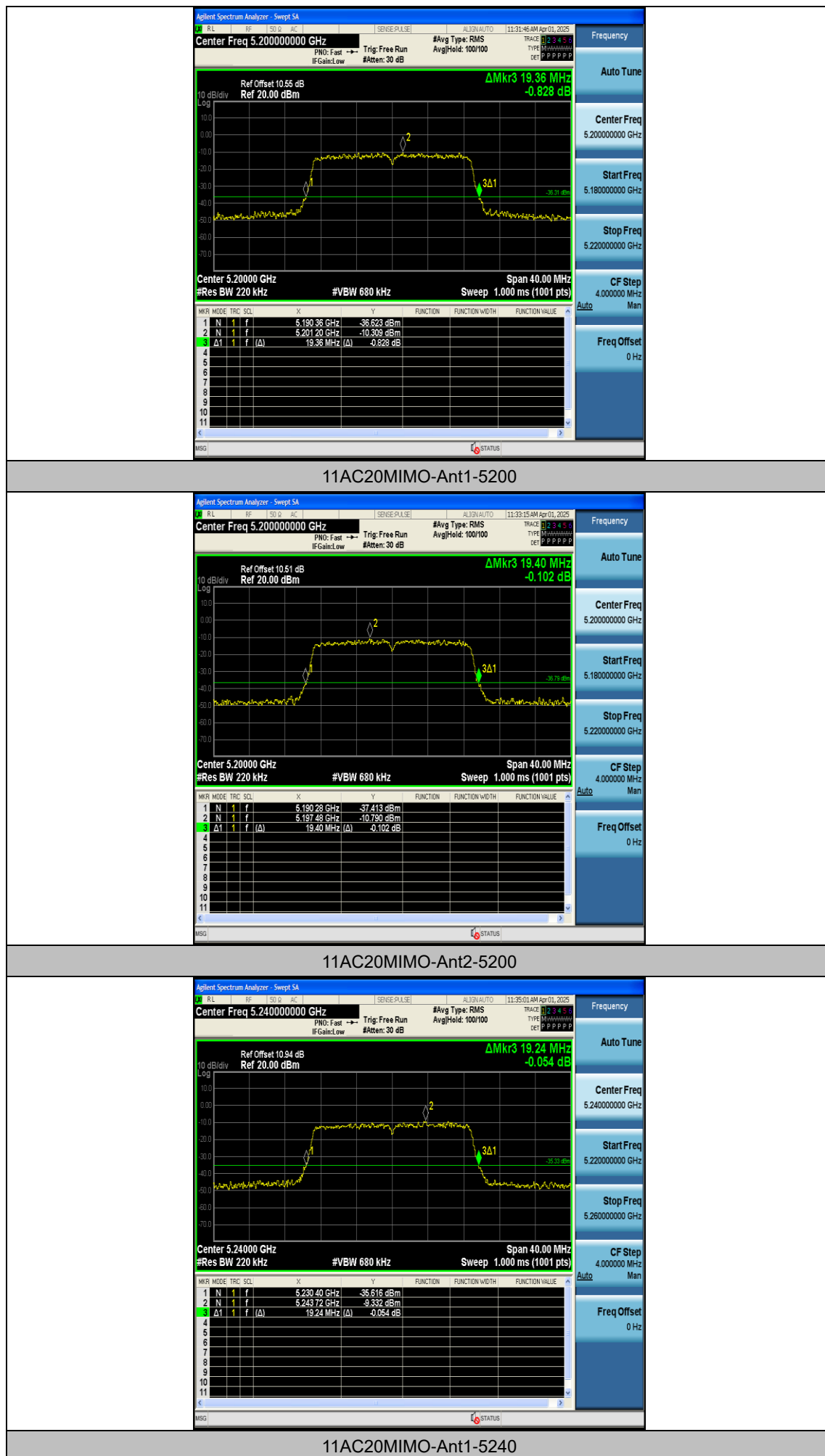


11A-Ant1-5240









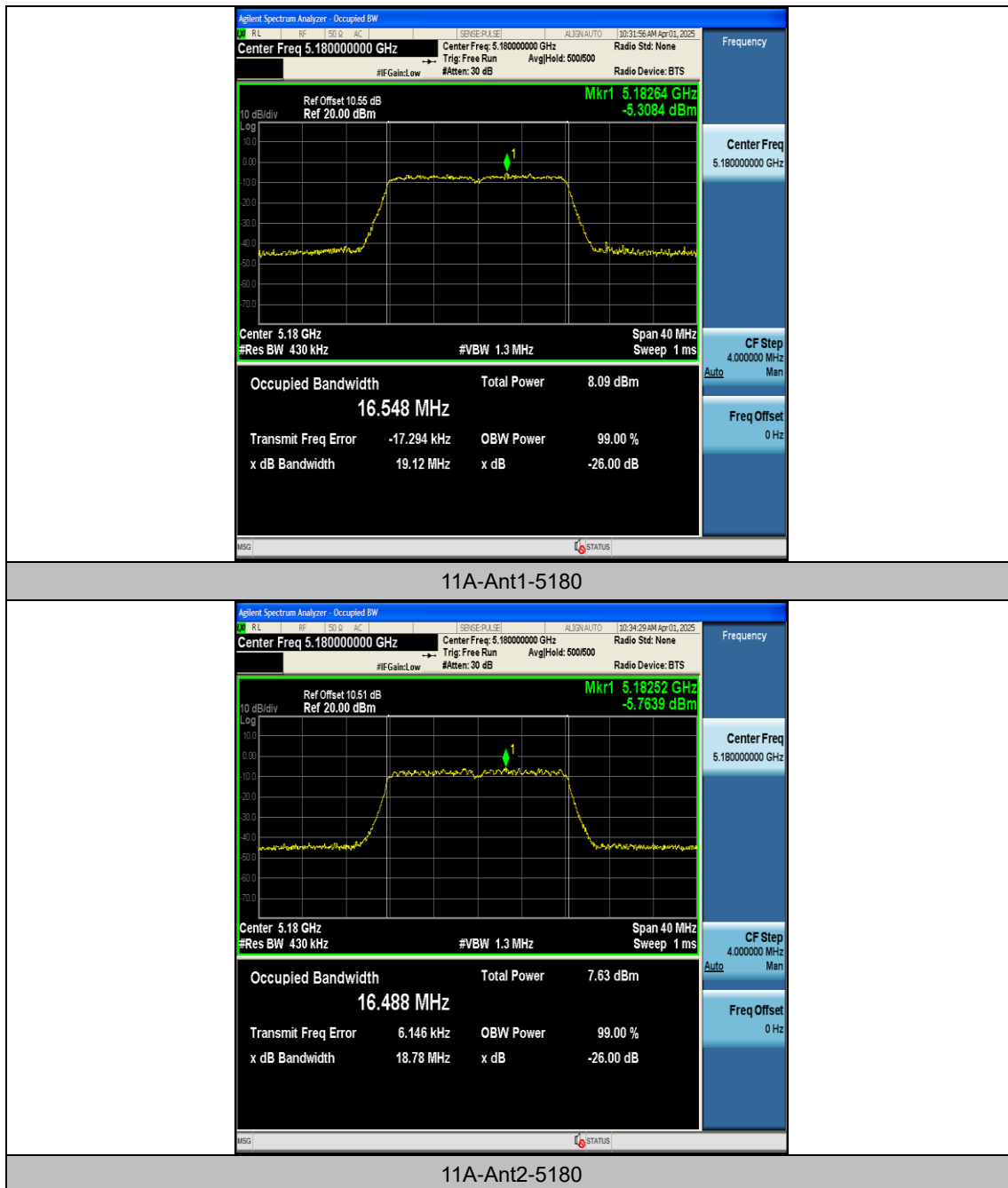


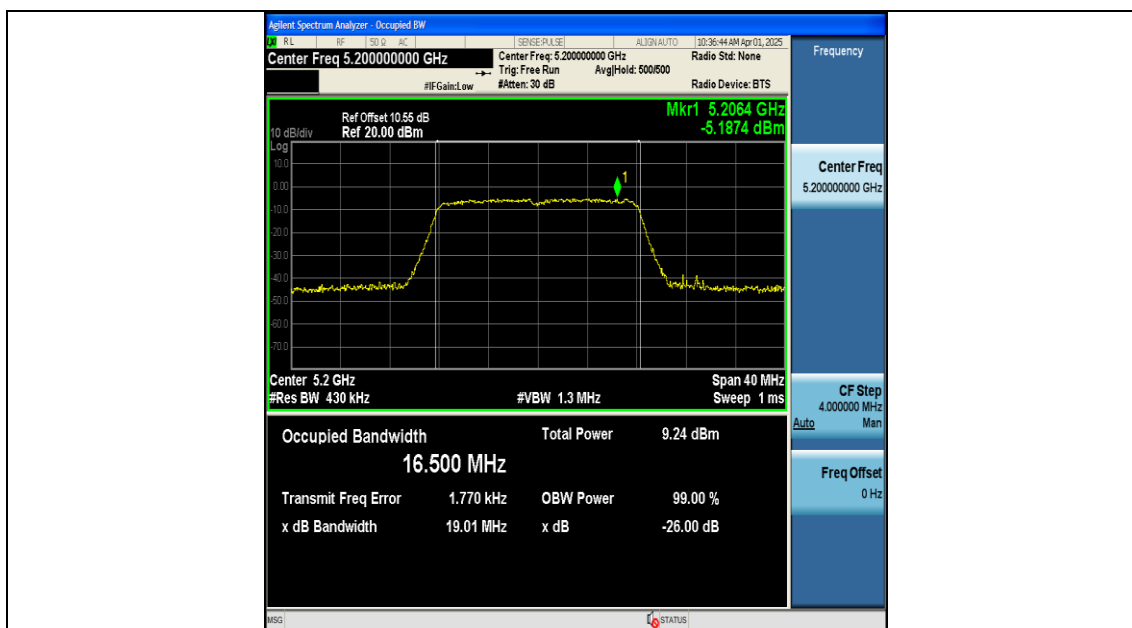
Appendix A2: Occupied channel bandwidth

Test Result

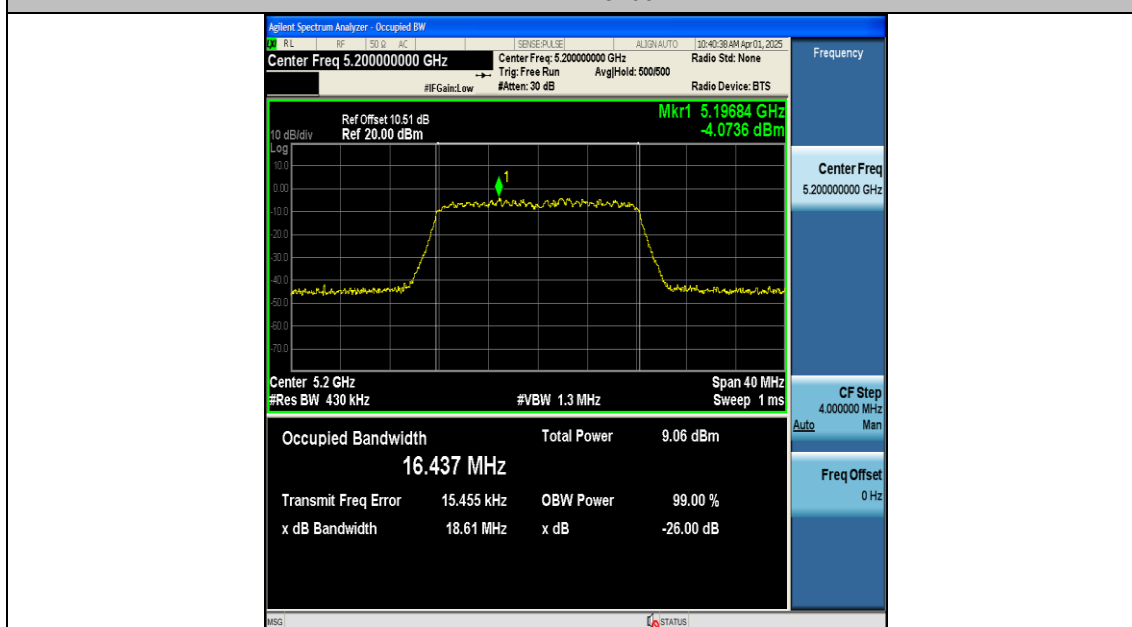
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	16.548	5171.7087	5188.2567	---	---
11A	Ant2	5180	16.488	5171.7622	5188.2502	---	---
11A	Ant1	5200	16.500	5191.7518	5208.2518	---	---
11A	Ant2	5200	16.437	5191.7970	5208.2340	---	---
11A	Ant1	5240	16.514	5231.7691	5248.2831	---	---
11A	Ant2	5240	16.473	5231.7712	5248.2442	---	---
11N20MIMO	Ant1	5180	17.690	5171.1446	5188.8346	---	---
11N20MIMO	Ant2	5180	17.673	5171.1570	5188.8300	---	---
11N20MIMO	Ant1	5200	17.626	5191.1831	5208.8091	---	---
11N20MIMO	Ant2	5200	17.619	5191.1870	5208.8060	---	---
11N20MIMO	Ant1	5240	17.642	5231.1838	5248.8258	---	---
11N20MIMO	Ant2	5240	17.633	5231.1947	5248.8277	---	---
11AC20MIMO	Ant1	5180	17.668	5171.1654	5188.8334	---	---
11AC20MIMO	Ant2	5180	17.665	5171.1748	5188.8398	---	---
11AC20MIMO	Ant1	5200	17.628	5191.1833	5208.8113	---	---
11AC20MIMO	Ant2	5200	17.609	5191.1995	5208.8085	---	---
11AC20MIMO	Ant1	5240	17.665	5231.1820	5248.8470	---	---
11AC20MIMO	Ant2	5240	17.647	5231.1904	5248.8374	---	---

Test Graphs





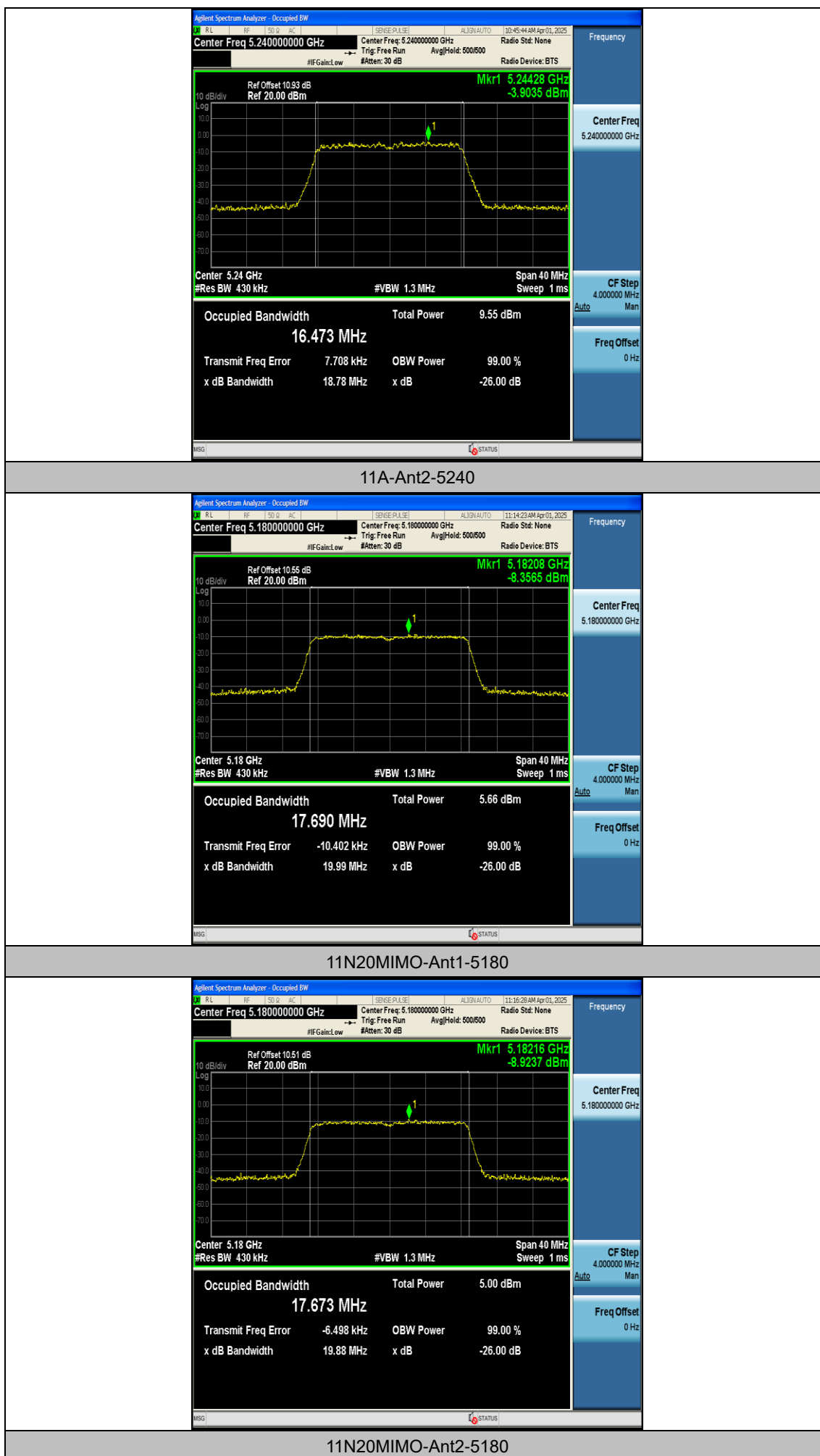
11A-Ant1-5200

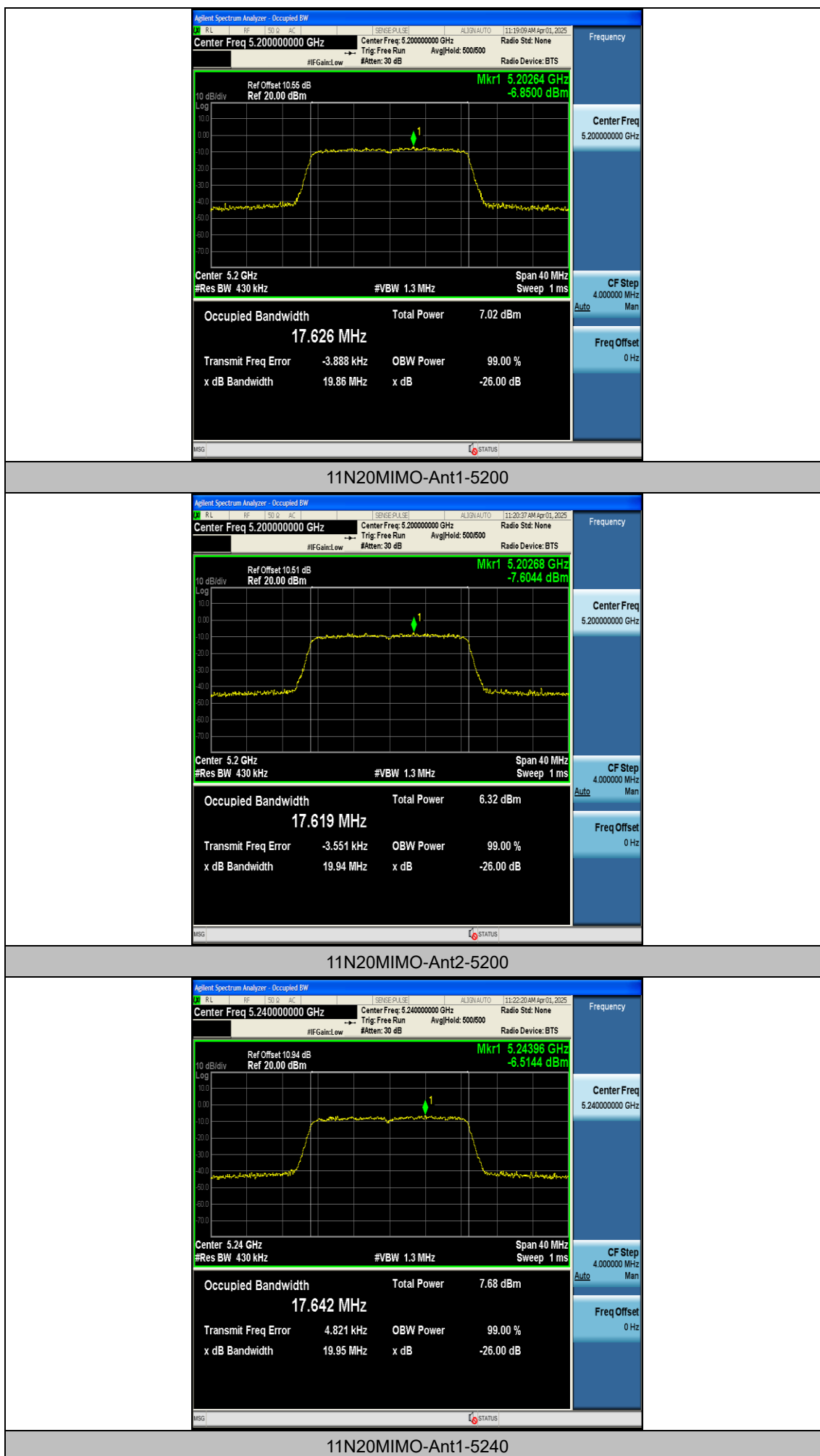


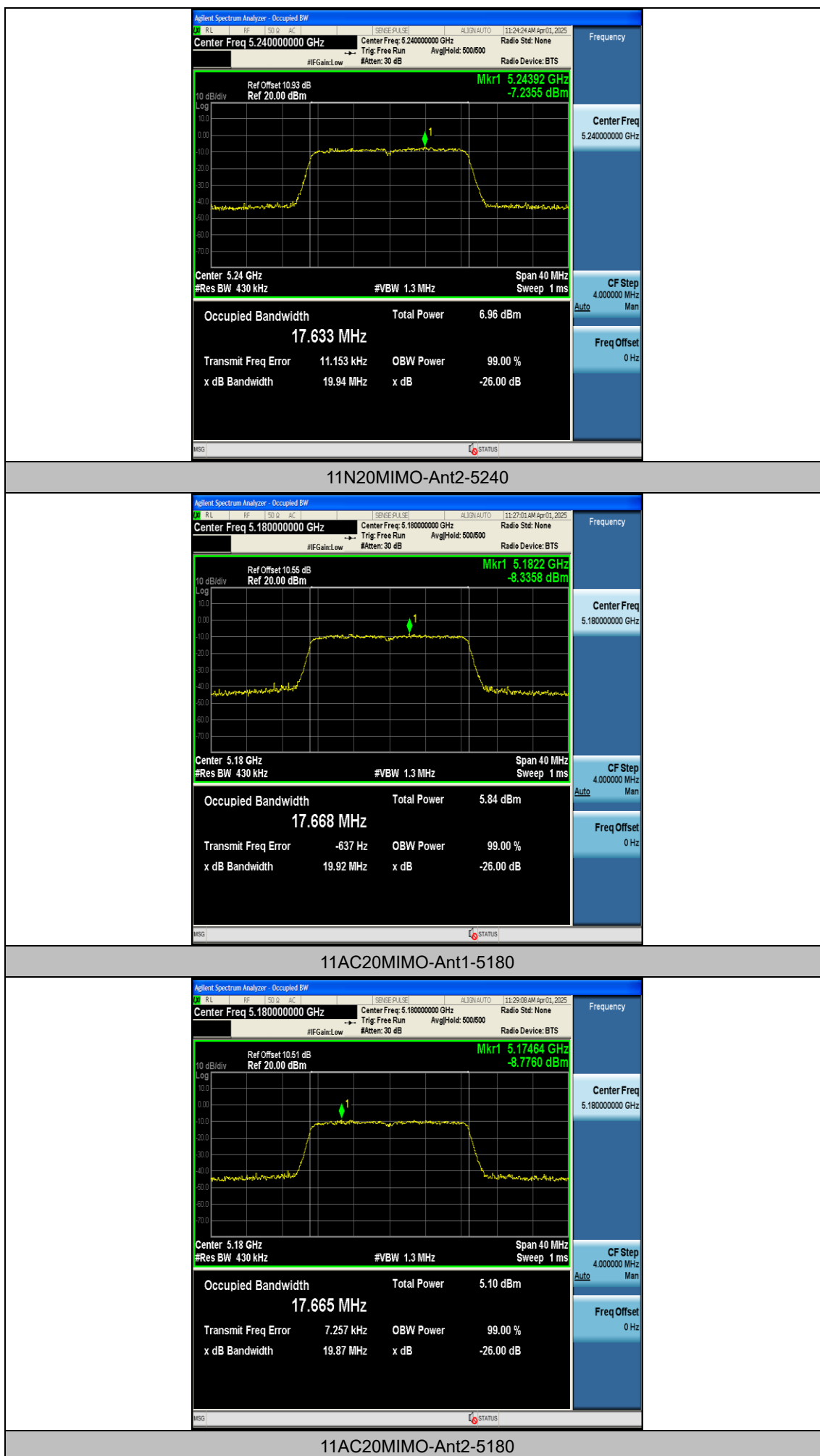
11A-Ant2-5200

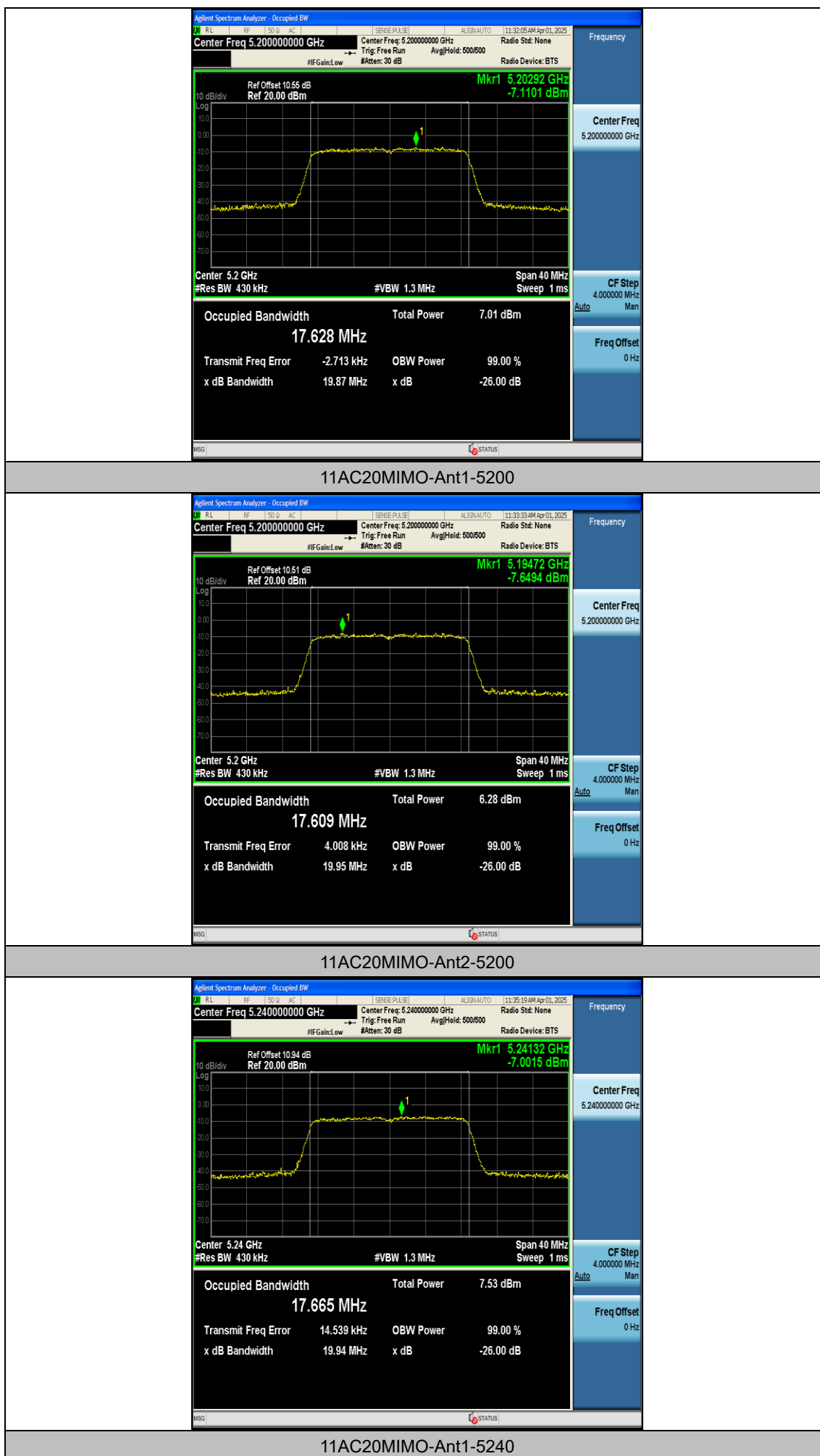


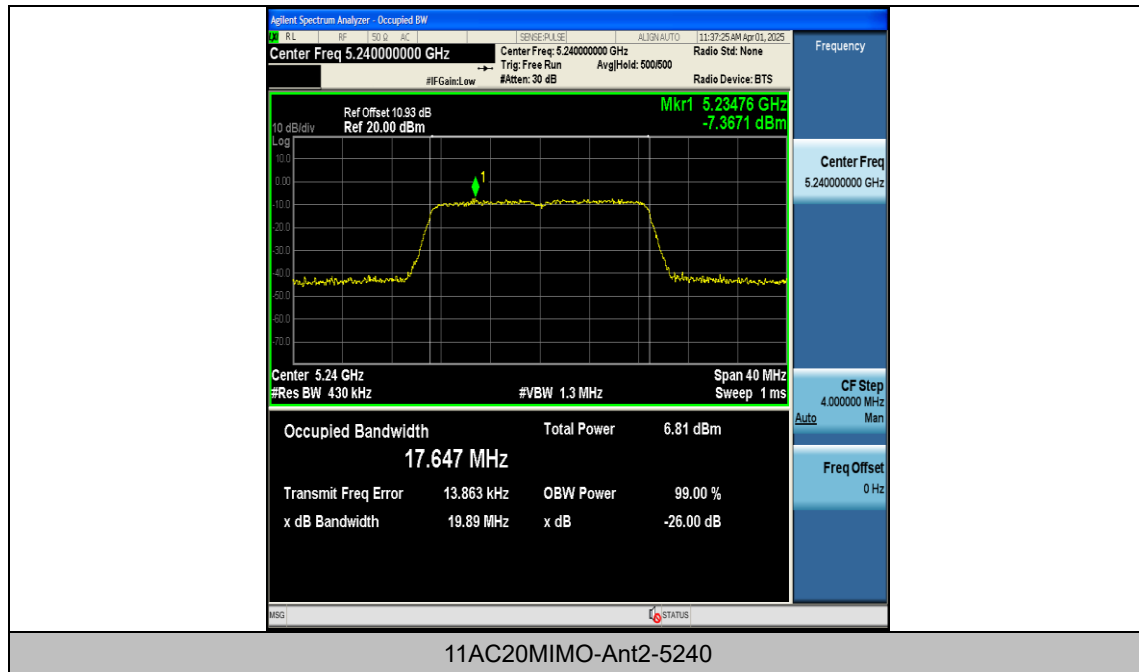
11A-Ant1-5240











Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5180	1.55	≤23.98	PASS
11A	Ant2	5180	0.49	≤23.98	PASS
11A	Ant1	5200	2.68	≤23.98	PASS
11A	Ant2	5200	1.66	≤23.98	PASS
11A	Ant1	5240	3.36	≤23.98	PASS
11A	Ant2	5240	2.37	≤23.98	PASS
11N20MIMO	Ant1	5180	-0.81	≤23.98	PASS
11N20MIMO	Ant2	5180	-1.48	≤23.98	PASS
11N20MIMO	total	5180	1.88	≤23.98	PASS
11N20MIMO	Ant1	5200	0.46	≤23.98	PASS
11N20MIMO	Ant2	5200	-0.36	≤23.98	PASS
11N20MIMO	total	5200	3.08	≤23.98	PASS
11N20MIMO	Ant1	5240	1.04	≤23.98	PASS
11N20MIMO	Ant2	5240	0.30	≤23.98	PASS
11N20MIMO	total	5240	3.70	≤23.98	PASS
11AC20MIMO	Ant1	5180	-0.62	≤23.98	PASS
11AC20MIMO	Ant2	5180	-1.54	≤23.98	PASS
11AC20MIMO	total	5180	1.95	≤23.98	PASS
11AC20MIMO	Ant1	5200	0.38	≤23.98	PASS
11AC20MIMO	Ant2	5200	-0.33	≤23.98	PASS
11AC20MIMO	total	5200	3.05	≤23.98	PASS
11AC20MIMO	Ant1	5240	1.12	≤23.98	PASS
11AC20MIMO	Ant2	5240	0.19	≤23.98	PASS
11AC20MIMO	total	5240	3.69	≤23.98	PASS

Note: The Power Sensor offset(dB) = attenuator factor(dB) + cable loss(dB) + Duty Cycle Factor(dB).

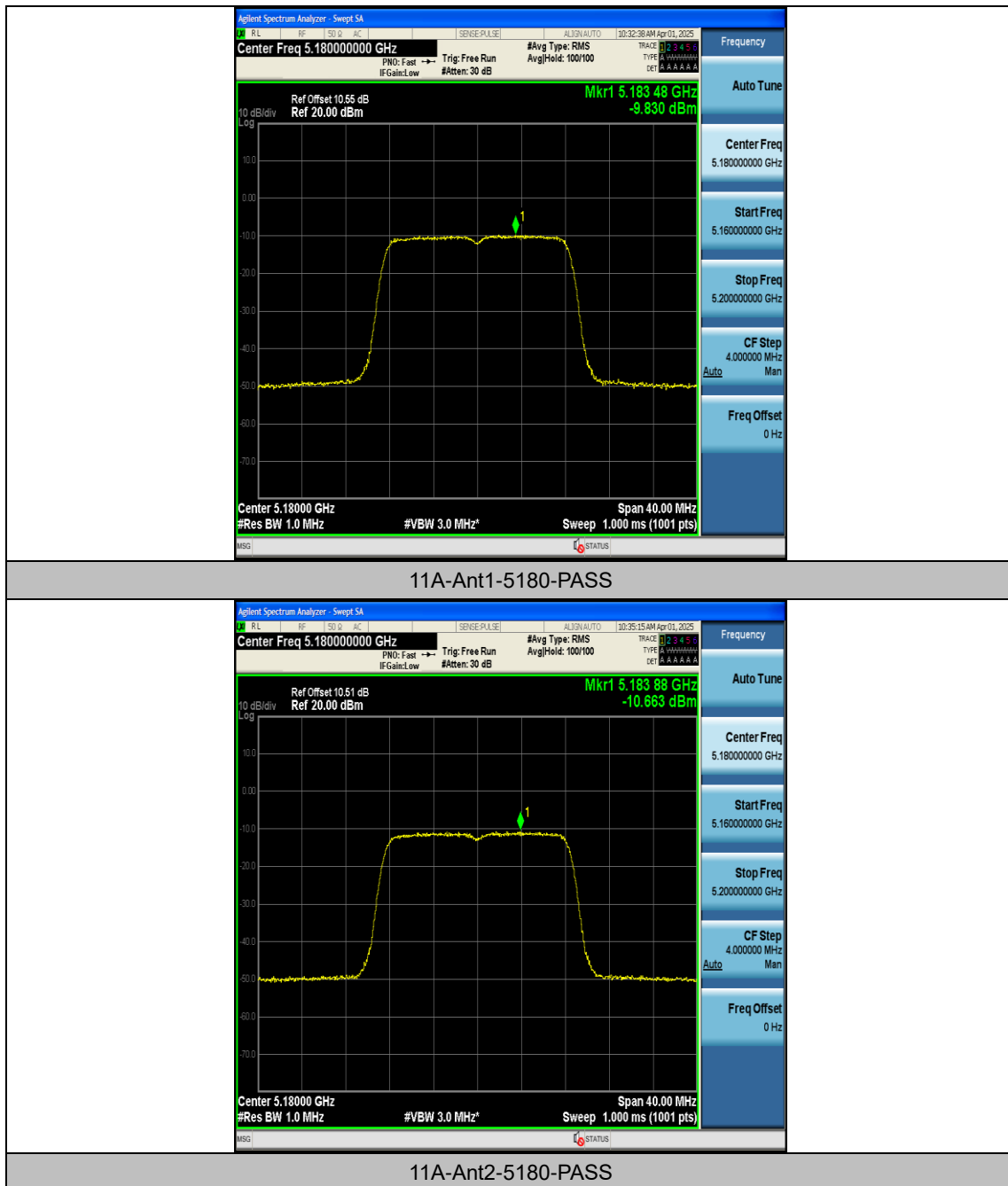
Appendix C: Maximum power spectral density

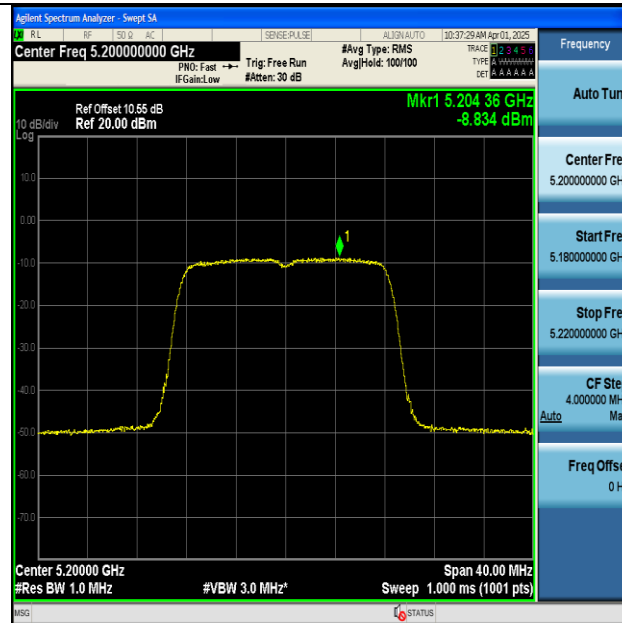
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-9.45	≤11.00	PASS
11A	Ant2	5180	-10.22	≤11.00	PASS
11A	Ant1	5200	-8.39	≤11.00	PASS
11A	Ant2	5200	-9.20	≤11.00	PASS
11A	Ant1	5240	-7.52	≤11.00	PASS
11A	Ant2	5240	-8.39	≤11.00	PASS
11N20MIMO	Ant1	5180	-12.36	≤11.00	PASS
11N20MIMO	Ant2	5180	-12.99	≤11.00	PASS
11N20MIMO	total	5180	-9.65	≤10.26	PASS
11N20MIMO	total	5200	-8.08	≤11.00	PASS
11N20MIMO	Ant1	5200	-10.82	≤11.00	PASS
11N20MIMO	Ant2	5200	-11.38	≤10.26	PASS
11N20MIMO	Ant1	5240	-9.90	≤11.00	PASS
11N20MIMO	Ant2	5240	-11.02	≤11.00	PASS
11N20MIMO	total	5240	-7.41	≤10.26	PASS
11AC20MIMO	Ant1	5180	-11.78	≤11.00	PASS
11AC20MIMO	Ant2	5180	-12.64	≤11.00	PASS
11AC20MIMO	total	5180	-9.18	≤10.26	PASS
11AC20MIMO	Ant1	5200	-10.64	≤11.00	PASS
11AC20MIMO	Ant2	5200	-11.65	≤11.00	PASS
11AC20MIMO	total	5200	-8.11	≤10.26	PASS
11AC20MIMO	Ant1	5240	-10.00	≤11.00	PASS
11AC20MIMO	Ant2	5240	-10.98	≤11.00	PASS
11AC20MIMO	total	5240	-7.45	≤10.26	PASS

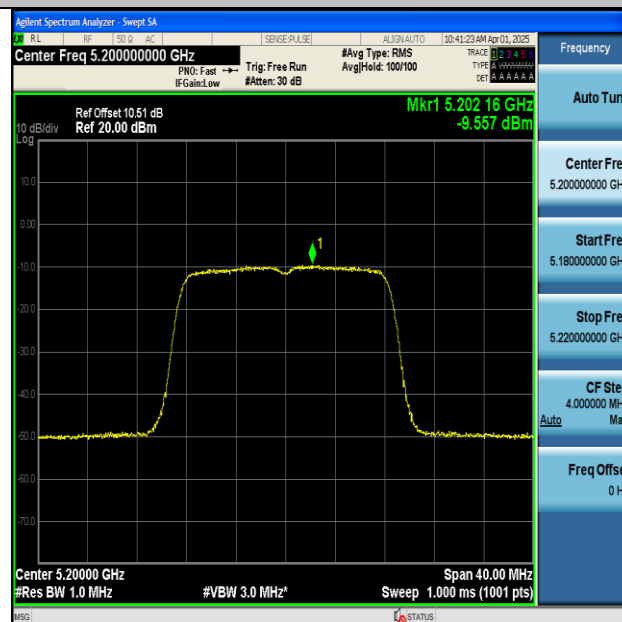
Note: The SA offset(dB) = attenuator factor(dB) + cable loss(dB) + Duty Cycle Factor(dB).

Test Graphs





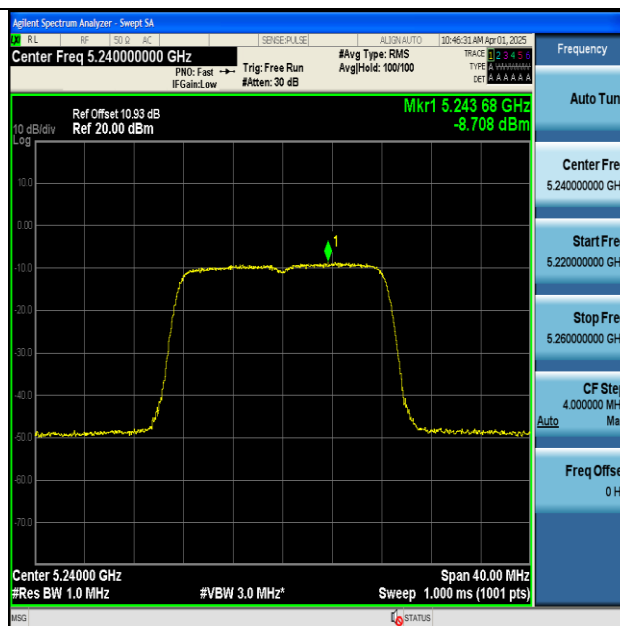
11A-Ant1-5200-PASS



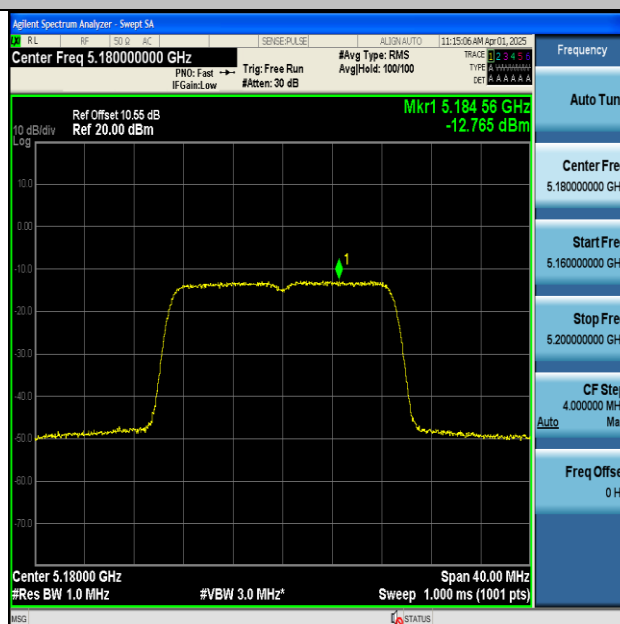
11A-Ant2-5200-PASS



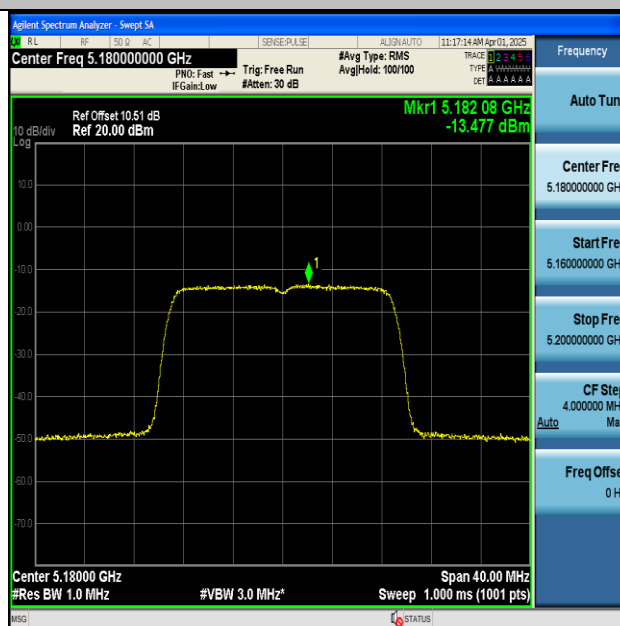
11A-Ant1-5240-PASS



11A-Ant2-5240-PASS



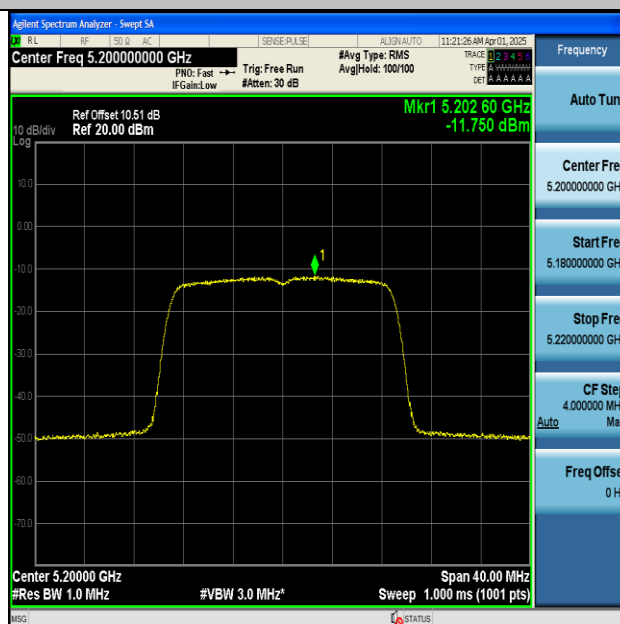
11N20MIMO-Ant1-5180-PASS



11N20MIMO-Ant2-5180-PASS



11N20MIMO-Ant1-5200-PASS



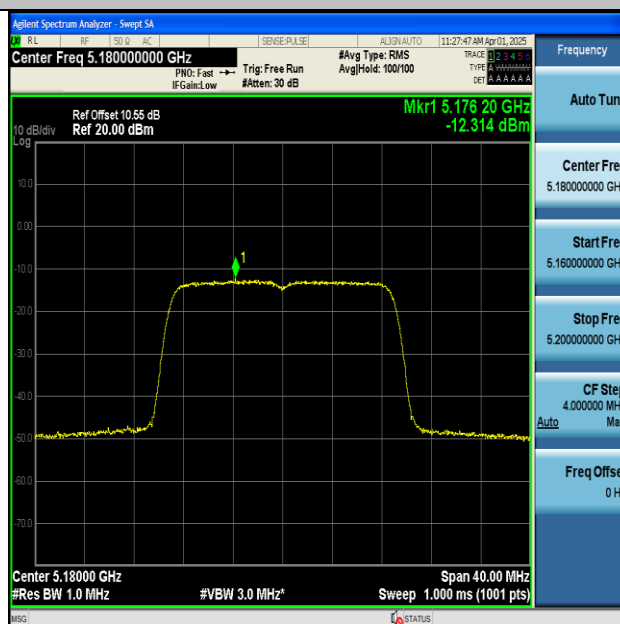
11N20MIMO-Ant2-5200-PASS



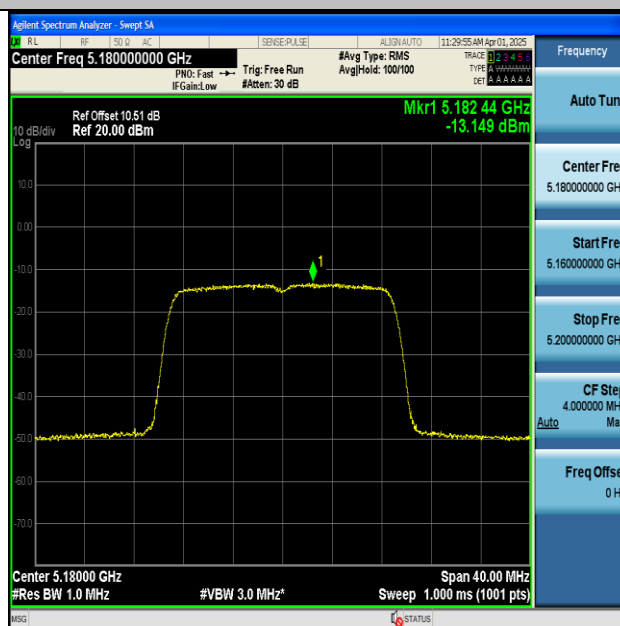
11N20MIMO-Ant1-5240-PASS



11N20MIMO-Ant2-5240-PASS



11AC20MIMO-Ant1-5180-PASS



11AC20MIMO-Ant2-5180-PASS



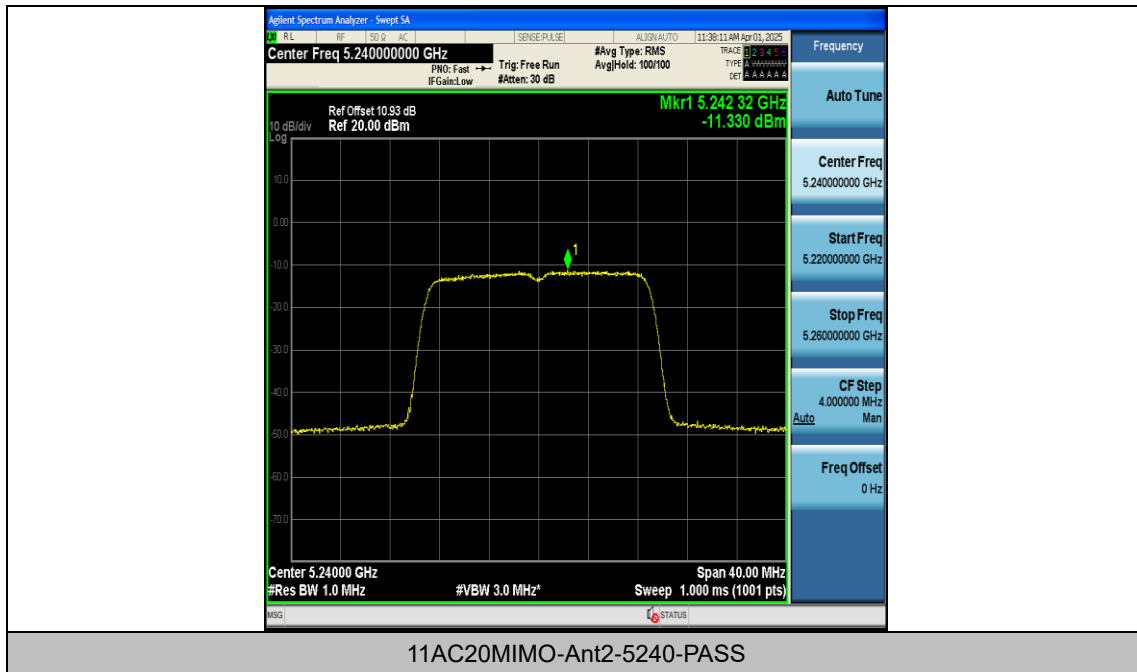
11AC20MIMO-Ant1-5200-PASS



11AC20MIMO-Ant2-5200-PASS



11AC20MIMO-Ant1-5240-PASS

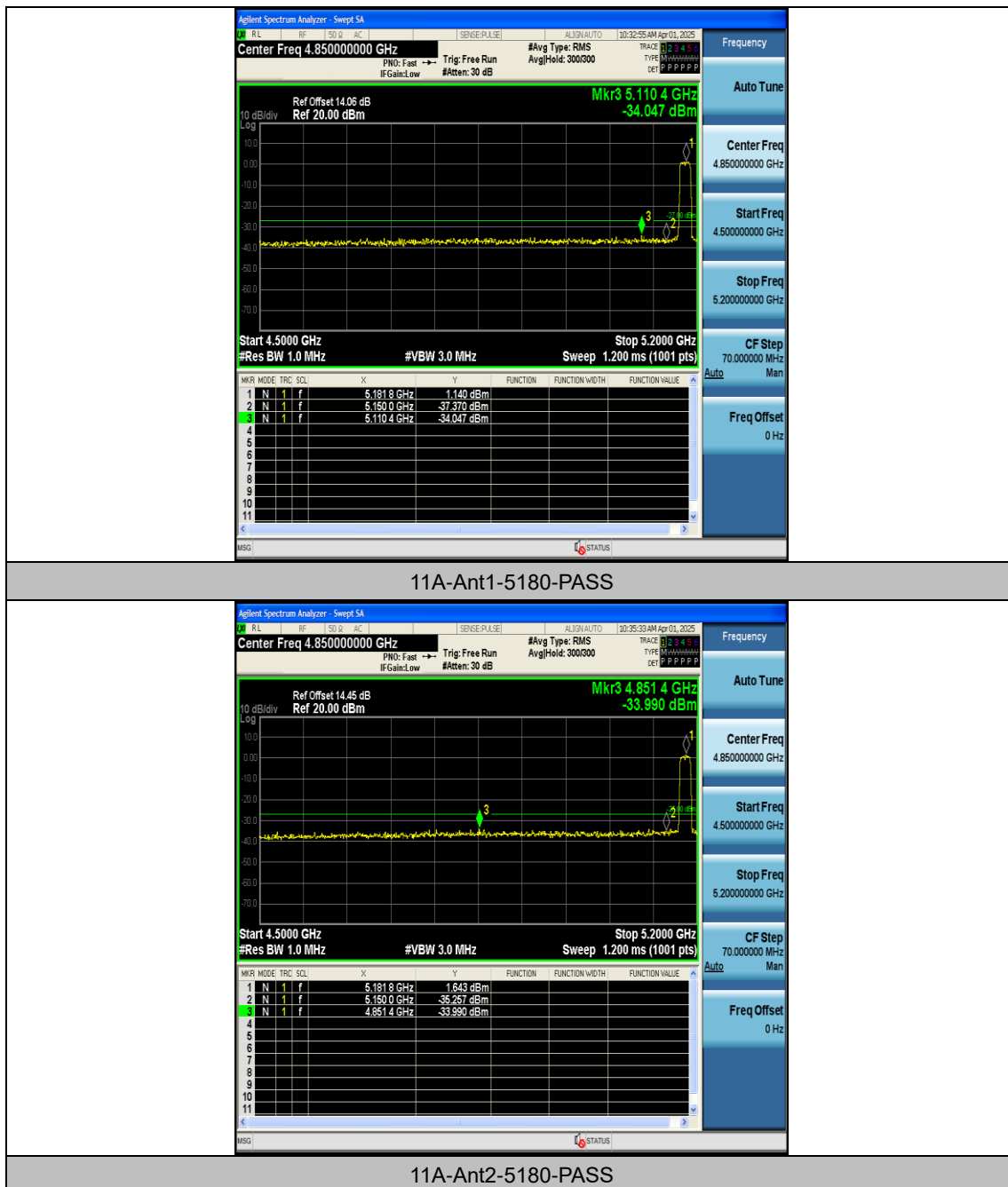


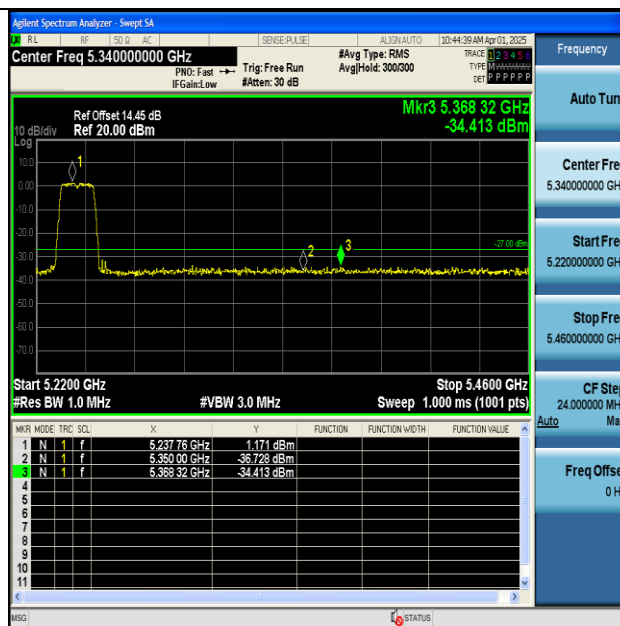
Appendix D: Band edge measurements

Test Result

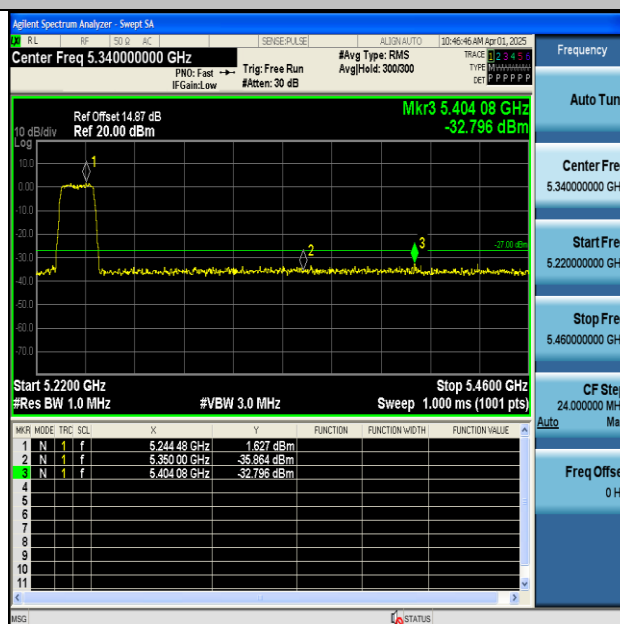
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	-34.05	≤ -27	PASS
11A	Ant2	Low	5180	-33.99	≤ -27	PASS
11A	Ant1	High	5240	-34.41	≤ -27	PASS
11A	Ant2	High	5240	-32.8	≤ -27	PASS
11N20MIMO	Ant1	Low	5180	-34.53	≤ -27	PASS
11N20MIMO	Ant2	Low	5180	-33.62	≤ -27	PASS
11N20MIMO	Ant1	High	5240	-34.22	≤ -27	PASS
11N20MIMO	Ant2	High	5240	-33.83	≤ -27	PASS
11AC20MIMO	Ant1	Low	5180	-34.32	≤ -27	PASS
11AC20MIMO	Ant2	Low	5180	-33.85	≤ -27	PASS
11AC20MIMO	Ant1	High	5240	-34.06	≤ -27	PASS
11AC20MIMO	Ant2	High	5240	-33.35	≤ -27	PASS

Test Graphs

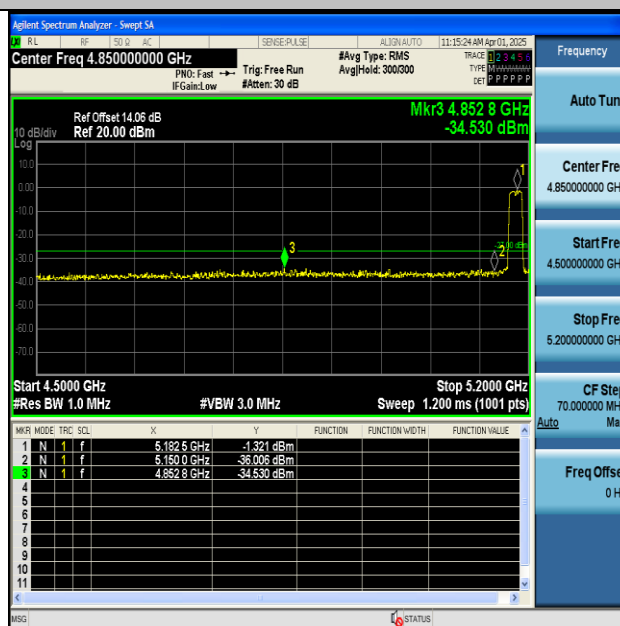




11A-Ant1-5240-PASS



11A-Ant2-5240-PASS



11N20MIMO-Ant1-5180-PASS