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

Product Name: DRONE

Trade Mark: /

Test Model: F7GIM

FCC ID: 2A5GP-F7GIM

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	18.800	5170.640	5189.440	---	---
11A	Ant2	5180	18.480	5170.720	5189.200	---	---
11A	Ant1	5200	18.480	5190.720	5209.200	---	---
11A	Ant2	5200	18.400	5190.840	5209.240	---	---
11A	Ant1	5240	18.320	5230.840	5249.160	---	---
11A	Ant2	5240	18.560	5230.720	5249.280	---	---
11N20MIMO	Ant1	5180	19.360	5170.320	5189.680	---	---
11N20MIMO	Ant2	5180	19.400	5170.320	5189.720	---	---
11N20MIMO	Ant1	5200	19.440	5190.320	5209.760	---	---
11N20MIMO	Ant2	5200	19.480	5190.280	5209.760	---	---
11N20MIMO	Ant1	5240	19.400	5230.400	5249.800	---	---
11N20MIMO	Ant2	5240	19.280	5230.440	5249.720	---	---
11AC20MIMO	Ant1	5180	19.360	5170.240	5189.600	---	---
11AC20MIMO	Ant2	5180	19.440	5170.280	5189.720	---	---
11AC20MIMO	Ant1	5200	19.360	5190.360	5209.720	---	---
11AC20MIMO	Ant2	5200	19.280	5190.400	5209.680	---	---
11AC20MIMO	Ant1	5240	19.360	5230.360	5249.720	---	---
11AC20MIMO	Ant2	5240	19.320	5230.320	5249.640	---	---

Test Graphs

11A-Ant1-5180

11A-Ant2-5180

11A-Ant1-5200

11A-Ant2-5200

11A-Ant1-5240

11A-Ant2-5240

11N20MIMO-Ant1-5180

11N20MIMO-Ant2-5180

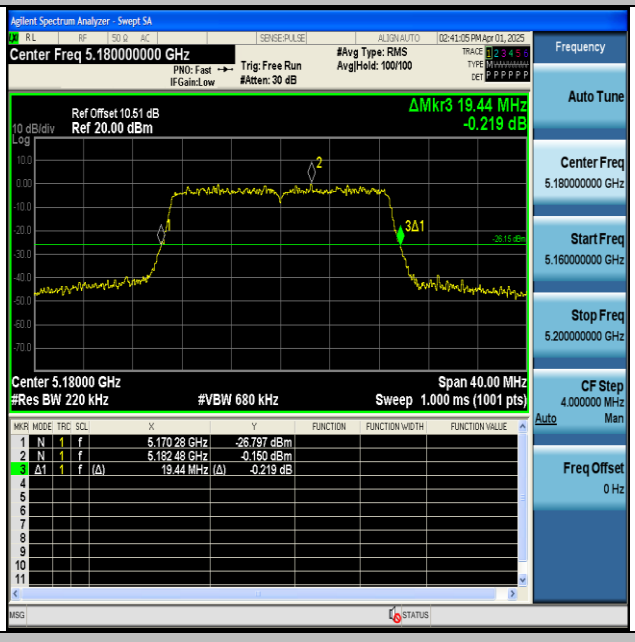
11N20MIMO-Ant1-5200

11N20MIMO-Ant2-5200

11N20MIMO-Ant1-5240

11N20MIMO-Ant2-5240

11AC20MIMO-Ant1-5180



11AC20MIMO-Ant2-5180

11AC20MIMO-Ant1-5200

11AC20MIMO-Ant2-5200

11AC20MIMO-Ant1-5240

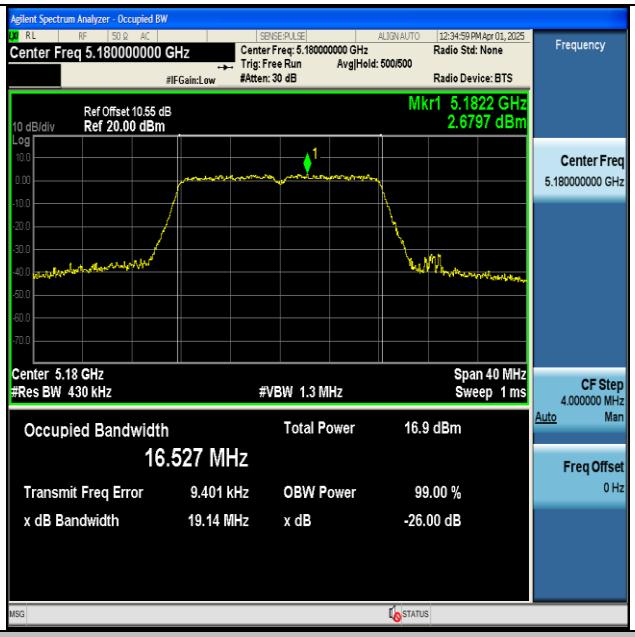
11AC20MIMO-Ant2-5240

Appendix A2: Occupied channel bandwidth

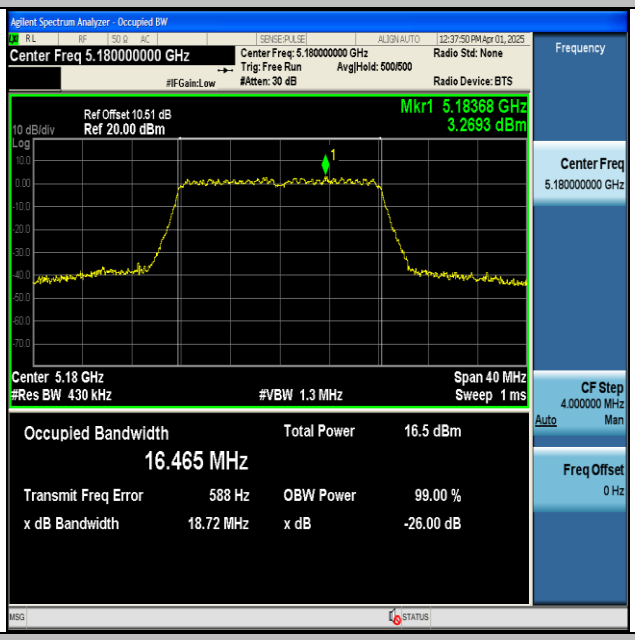
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	16.527	5171.7459	5188.2729	---	---
11A	Ant2	5180	16.465	5171.7681	5188.2331	---	---
11A	Ant1	5200	16.473	5191.7602	5208.2332	---	---
11A	Ant2	5200	16.438	5191.7799	5208.2179	---	---
11A	Ant1	5240	16.481	5231.7725	5248.2535	---	---
11A	Ant2	5240	16.463	5231.7794	5248.2424	---	---
11N20MIMO	Ant1	5180	17.655	5171.1739	5188.8289	---	---
11N20MIMO	Ant2	5180	17.670	5171.1599	5188.8299	---	---
11N20MIMO	Ant1	5200	17.583	5191.2190	5208.8020	---	---
11N20MIMO	Ant2	5200	17.601	5191.2159	5208.8169	---	---
11N20MIMO	Ant1	5240	17.627	5231.2000	5248.8270	---	---
11N20MIMO	Ant2	5240	17.626	5231.2013	5248.8273	---	---
11AC20MIMO	Ant1	5180	17.655	5171.1645	5188.8195	---	---
11AC20MIMO	Ant2	5180	17.650	5171.1632	5188.8132	---	---
11AC20MIMO	Ant1	5200	17.616	5191.1901	5208.8061	---	---
11AC20MIMO	Ant2	5200	17.606	5191.1969	5208.8029	---	---
11AC20MIMO	Ant1	5240	17.603	5231.2141	5248.8171	---	---
11AC20MIMO	Ant2	5240	17.601	5231.2129	5248.8139	---	---

Test Graphs



11A-Ant1-5180



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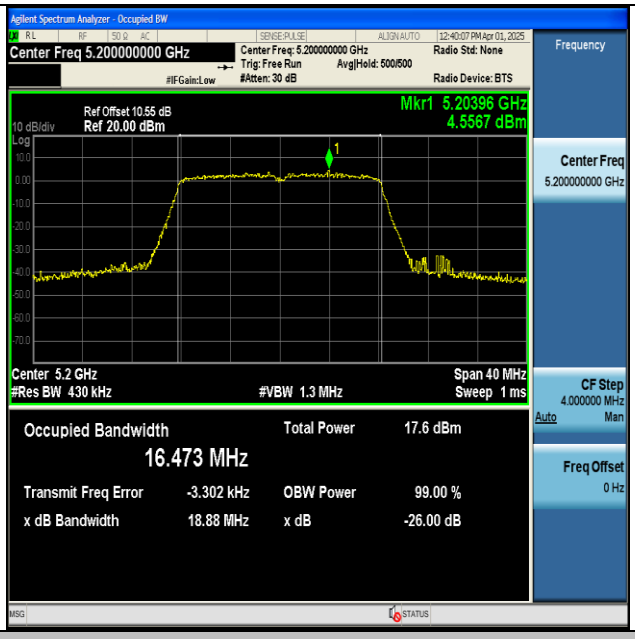
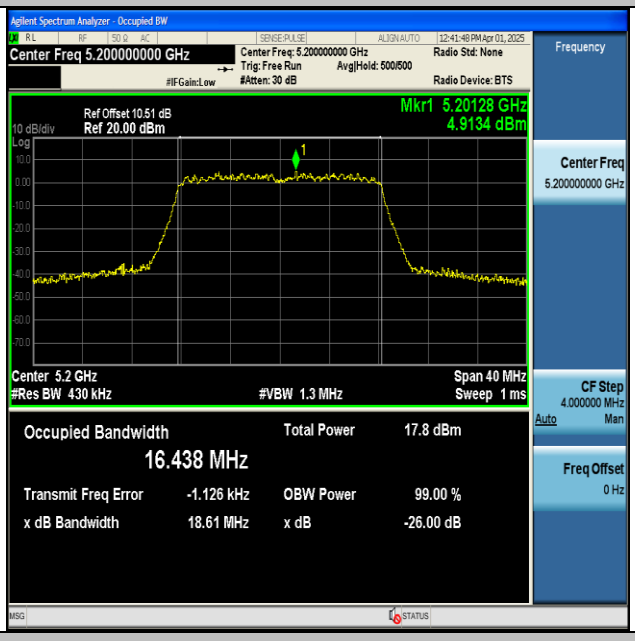
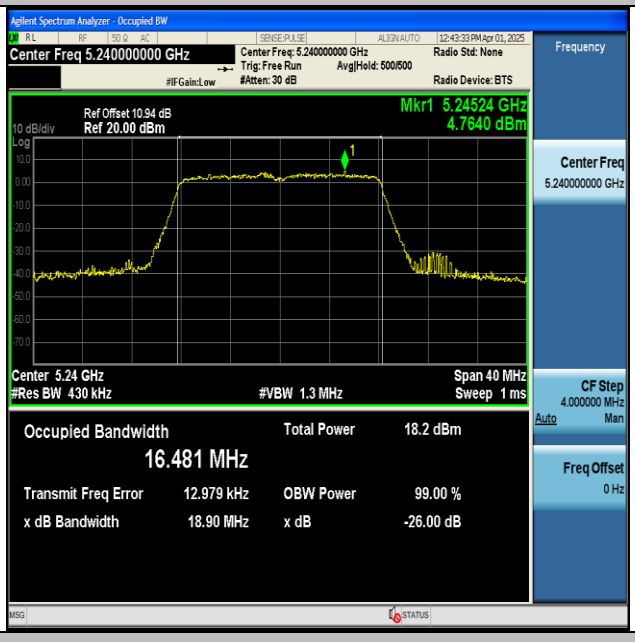


11A-Ant1-5200



11A-Ant2-5200



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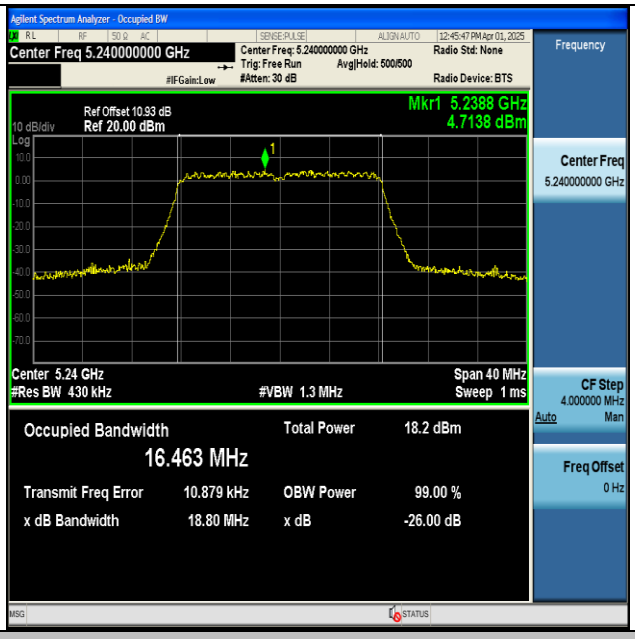
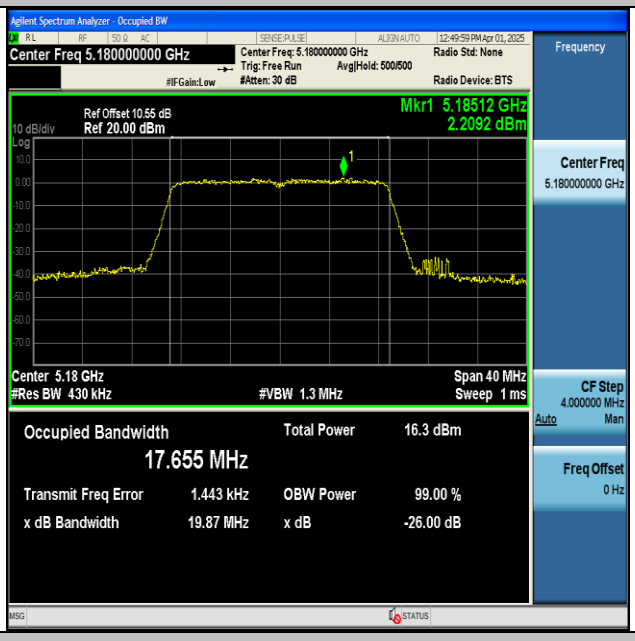


11A-Ant2-5240



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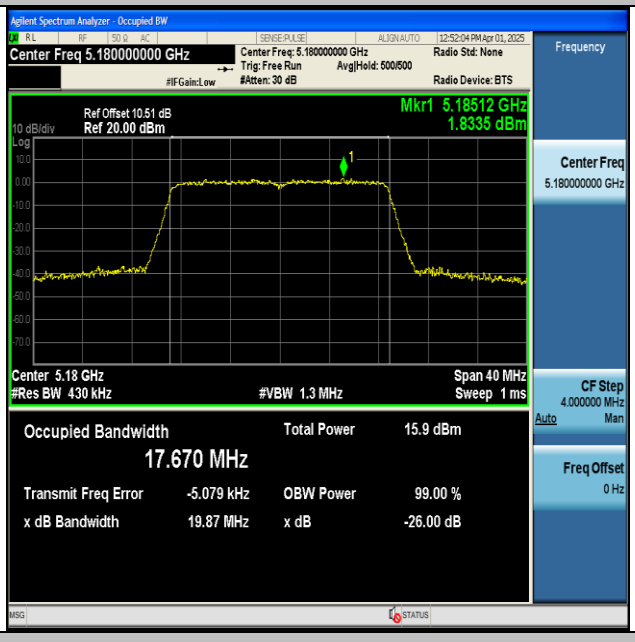
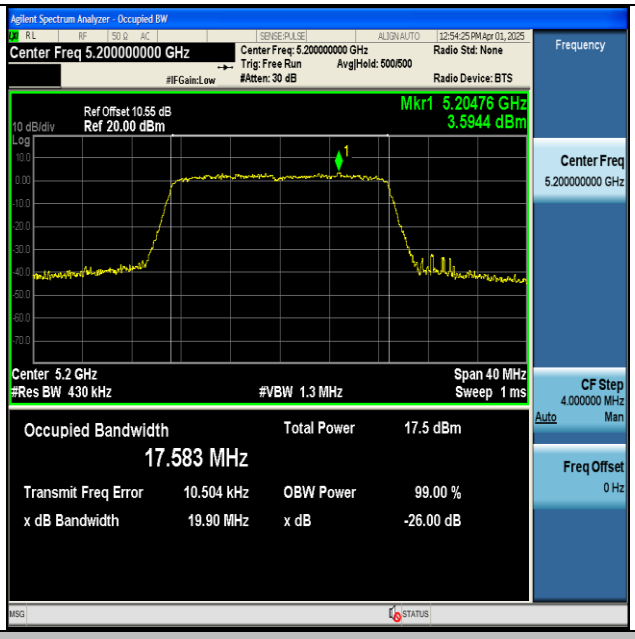


11N20MIMO-Ant2-5180



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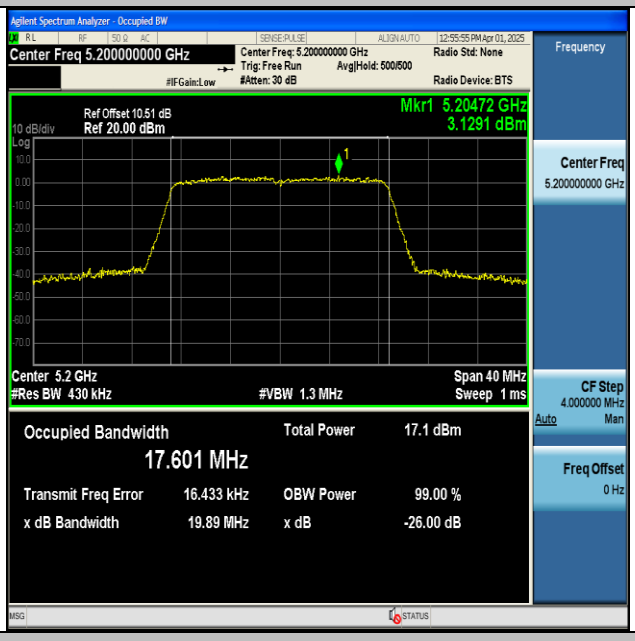
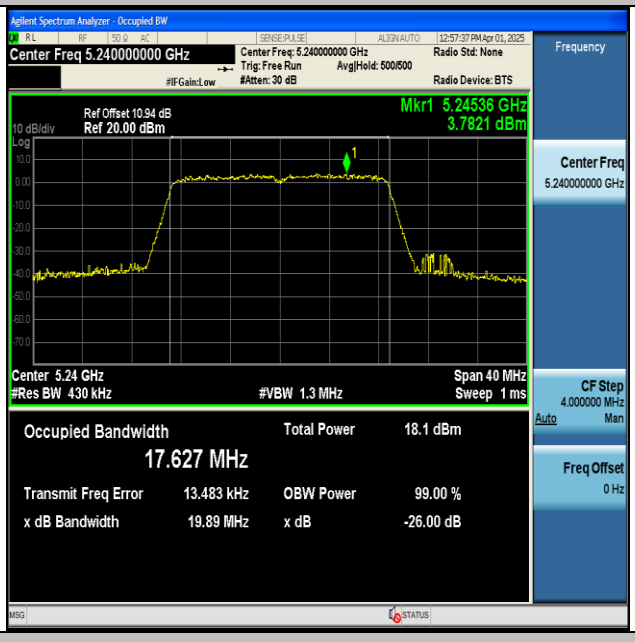
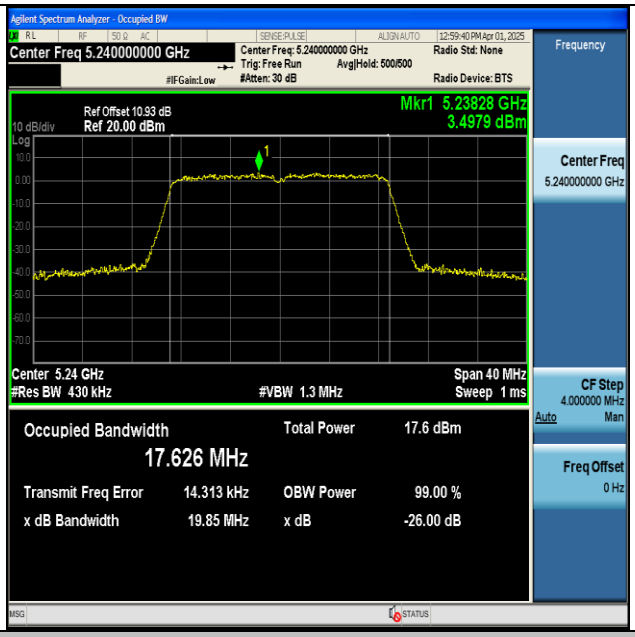


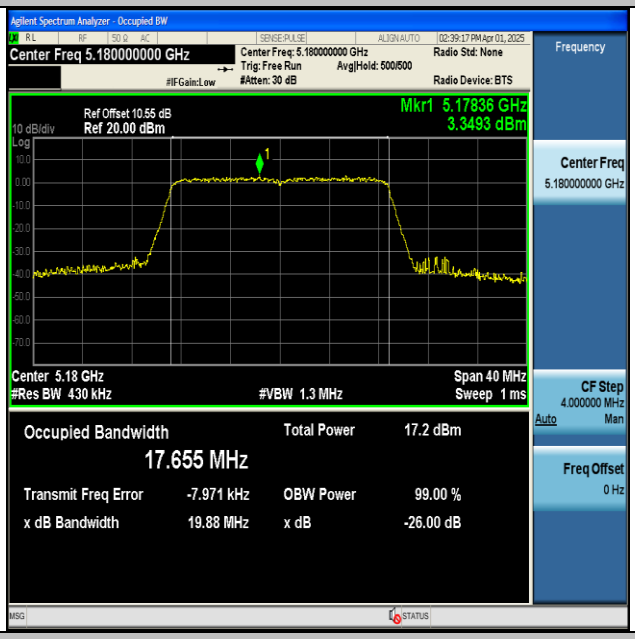
11N20MIMO-Ant2-5200



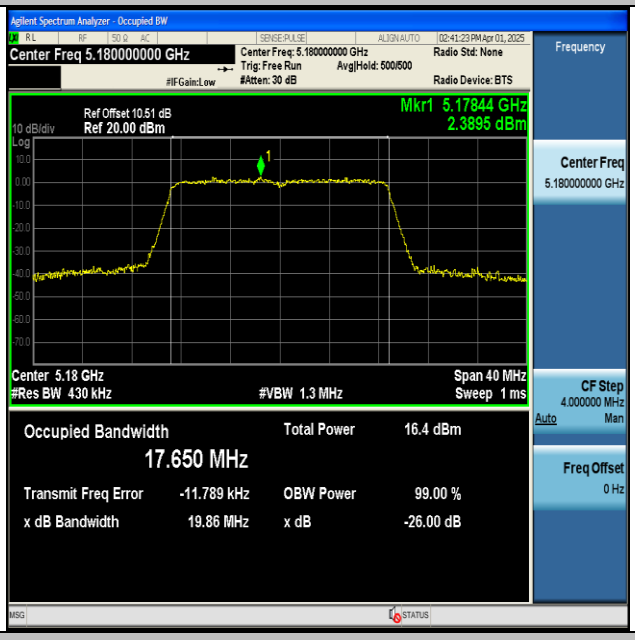
11N20MIMO-Ant1-5240



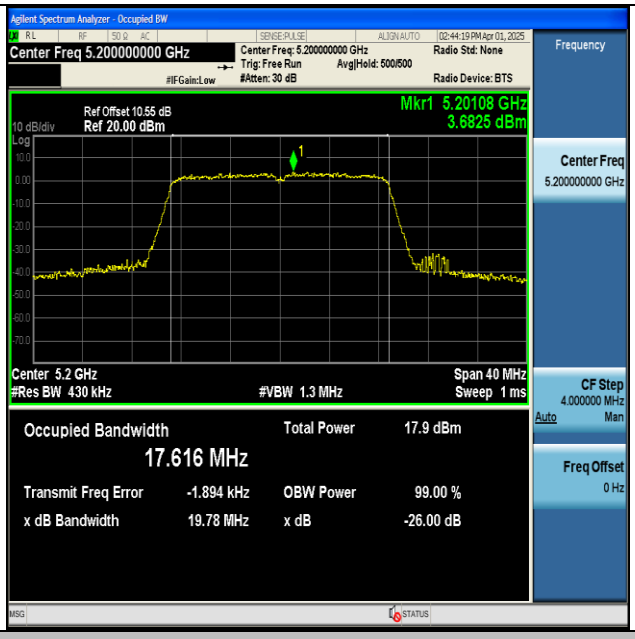
11N20MIMO-Ant2-5240



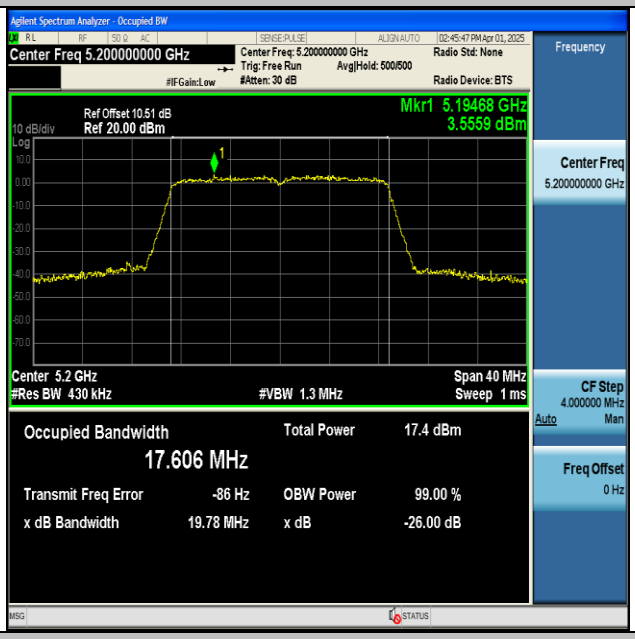
11AC20MIMO-Ant1-5180



11AC20MIMO-Ant2-5180



11AC20MIMO-Ant1-5200



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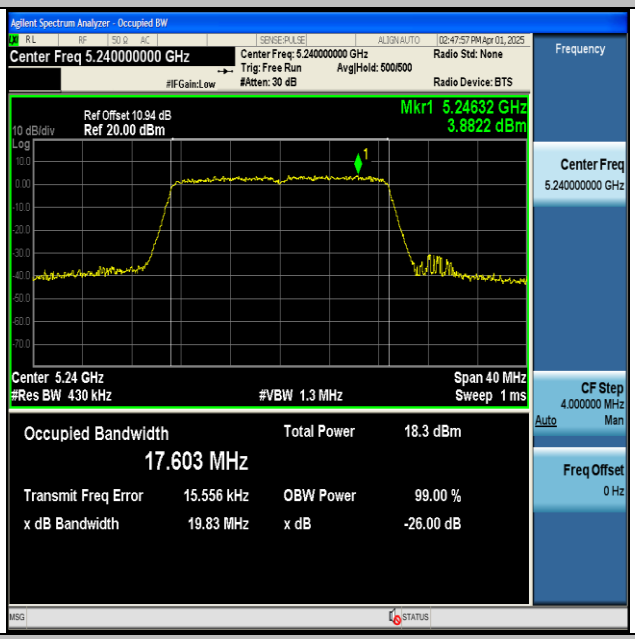
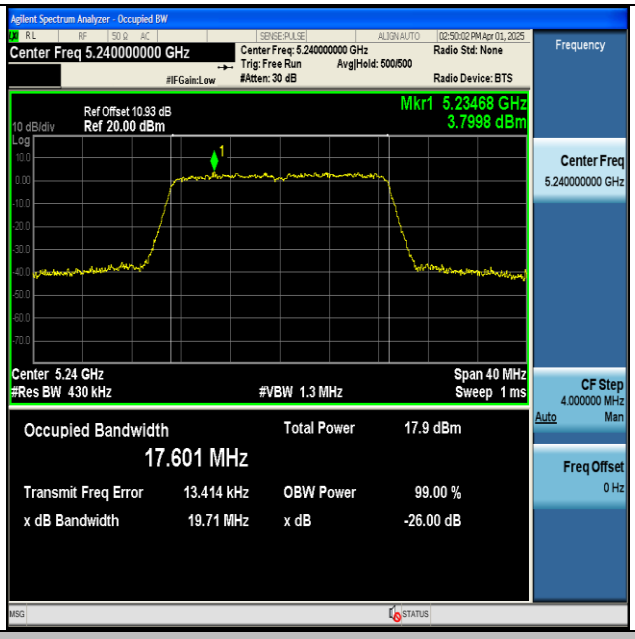


11AC20MIMO-Ant1-5240



11AC20MIMO-Ant2-5240

Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5180	10.06	≤23.98	PASS
11A	Ant2	5180	9.38	≤23.98	PASS
11A	Ant1	5200	10.97	≤23.98	PASS
11A	Ant2	5200	10.64	≤23.98	PASS
11A	Ant1	5240	11.52	≤23.98	PASS
11A	Ant2	5240	11.15	≤23.98	PASS
11N20MIMO	Ant1	5180	9.76	≤23.98	PASS
11N20MIMO	Ant2	5180	9.37	≤23.98	PASS
11N20MIMO	total	5180	12.58	≤23.98	PASS
11N20MIMO	Ant1	5200	10.79	≤23.98	PASS
11N20MIMO	Ant2	5200	10.45	≤23.98	PASS
11N20MIMO	total	5200	13.63	≤23.98	PASS
11N20MIMO	Ant1	5240	11.46	≤23.98	PASS
11N20MIMO	Ant2	5240	10.94	≤23.98	PASS
11N20MIMO	total	5240	14.22	≤23.98	PASS
11AC20MIMO	Ant1	5180	10.22	≤23.98	PASS
11AC20MIMO	Ant2	5180	9.77	≤23.98	PASS
11AC20MIMO	total	5180	13.01	≤23.98	PASS
11AC20MIMO	Ant1	5200	11.17	≤23.98	PASS
11AC20MIMO	Ant2	5200	10.79	≤23.98	PASS
11AC20MIMO	total	5200	13.99	≤23.98	PASS
11AC20MIMO	Ant1	5240	11.83	≤23.98	PASS
11AC20MIMO	Ant2	5240	11.07	≤23.98	PASS
11AC20MIMO	total	5240	14.48	≤23.98	PASS

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

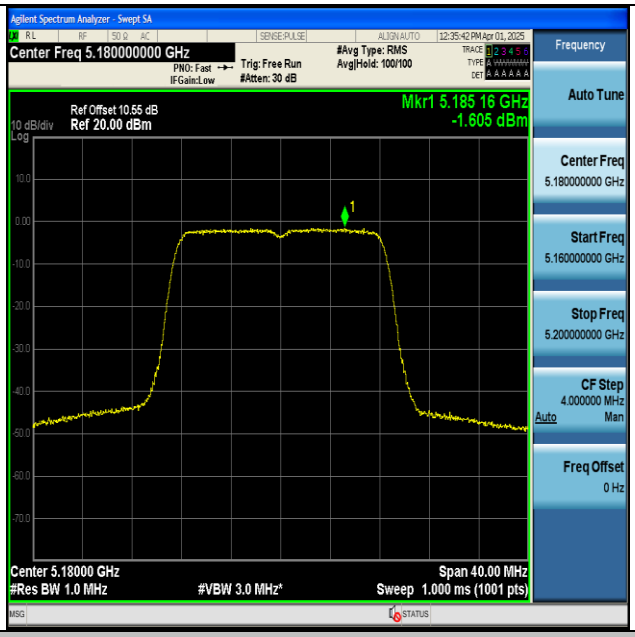
Appendix C: Maximum power spectral density

Test Result

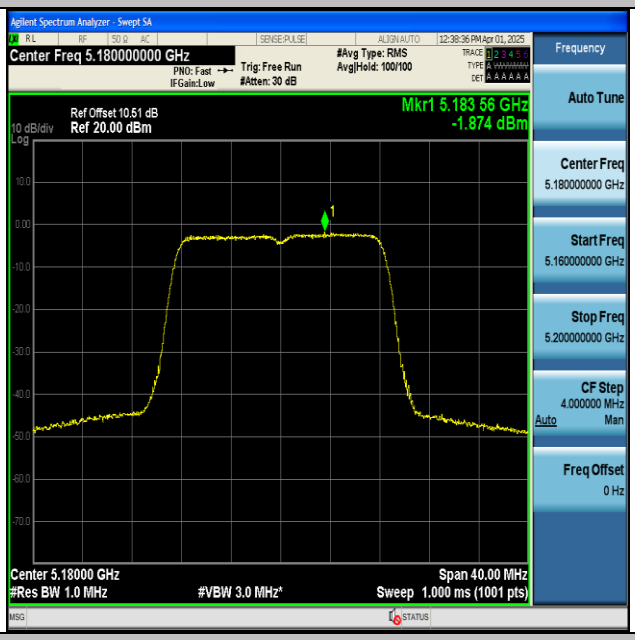
Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-1.21	≤11.00	PASS
11A	Ant2	5180	-1.49	≤11.00	PASS
11A	Ant1	5200	0.15	≤11.00	PASS
11A	Ant2	5200	-0.49	≤11.00	PASS
11A	Ant1	5240	0.67	≤11.00	PASS
11A	Ant2	5240	-0.07	≤11.00	PASS
11N20MIMO	Ant1	5180	-2.05	≤11.00	PASS
11N20MIMO	Ant2	5180	-1.90	≤11.00	PASS
11N20MIMO	total	5180	1.04	≤10.26	PASS
11N20MIMO	Ant1	5200	-0.28	≤11.00	PASS
11N20MIMO	Ant2	5200	-0.45	≤11.00	PASS
11N20MIMO	total	5200	2.65	≤10.26	PASS
11N20MIMO	Ant1	5240	0.47	≤11.00	PASS
11N20MIMO	Ant2	5240	-0.08	≤11.00	PASS
11N20MIMO	total	5240	3.21	≤10.26	PASS
11AC20MIMO	Ant1	5180	-1.08	≤11.00	PASS
11AC20MIMO	Ant2	5180	-1.62	≤11.00	PASS
11AC20MIMO	total	5180	1.67	≤10.26	PASS
11AC20MIMO	Ant1	5200	0.07	≤11.00	PASS
11AC20MIMO	Ant2	5200	-0.28	≤11.00	PASS
11AC20MIMO	total	5200	2.91	≤10.26	PASS
11AC20MIMO	Ant1	5240	0.54	≤11.00	PASS
11AC20MIMO	Ant2	5240	0.03	≤11.00	PASS
11AC20MIMO	total	5240	3.30	≤10.26	PASS

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

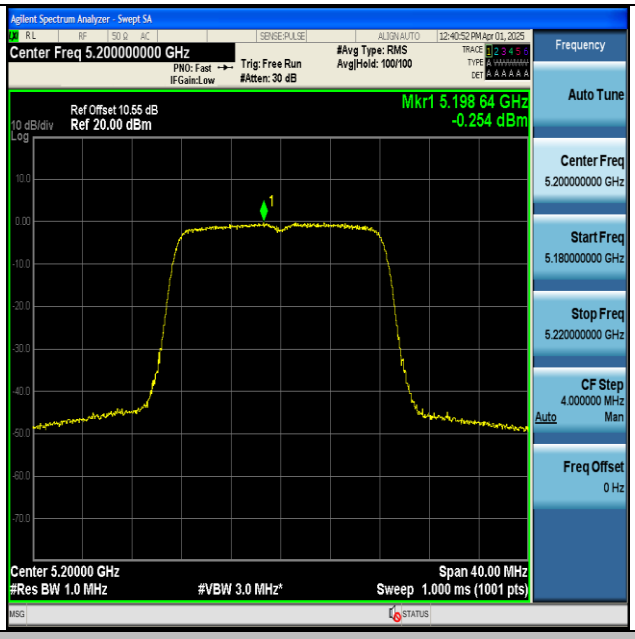
Test Graphs



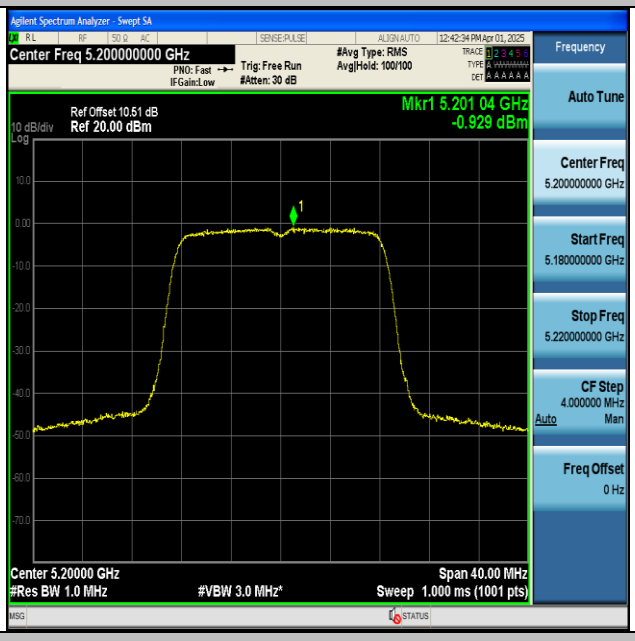
11A-Ant1-5180-PASS



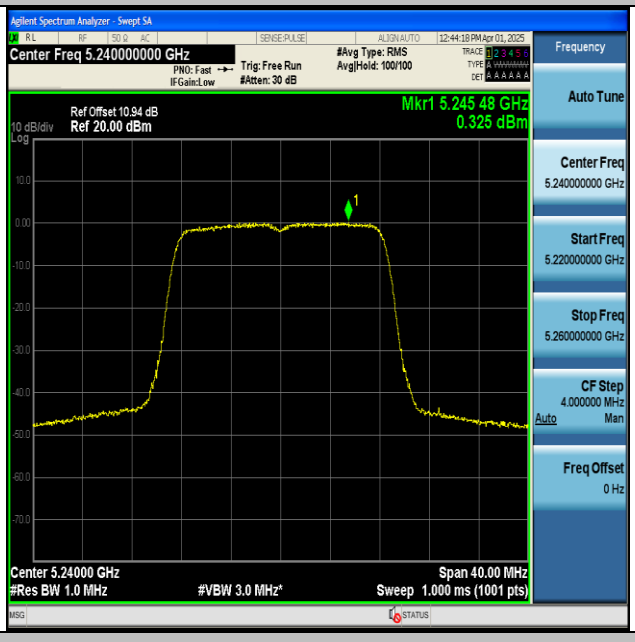
11A-Ant2-5180-PASS



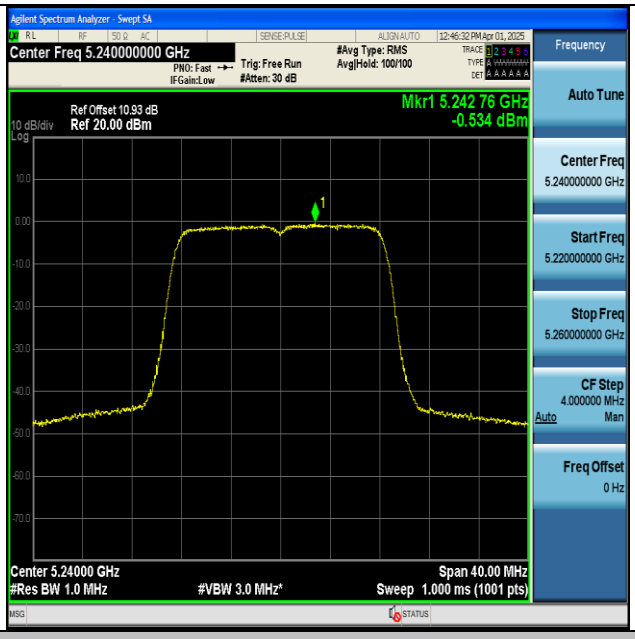
11A-Ant1-5200-PASS



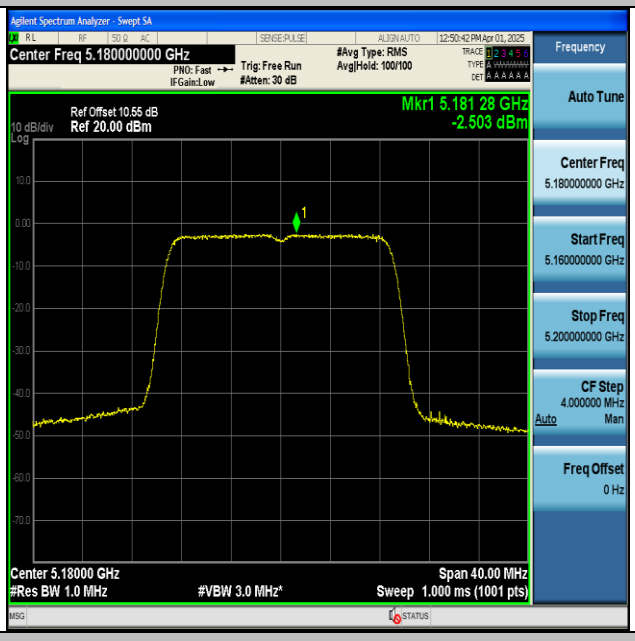
11A-Ant2-5200-PASS



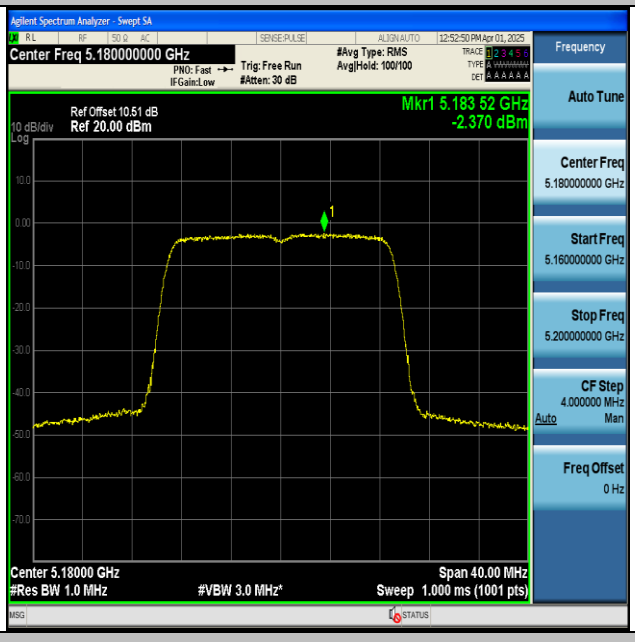
11A-Ant1-5240-PASS



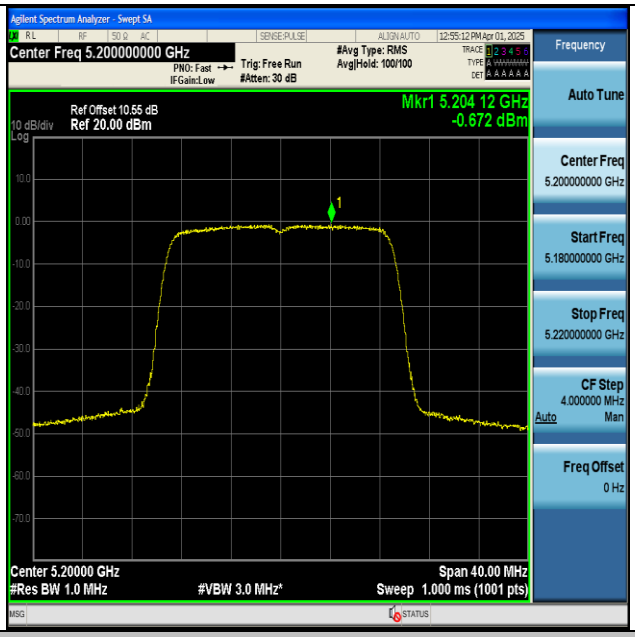
11A-Ant2-5240-PASS



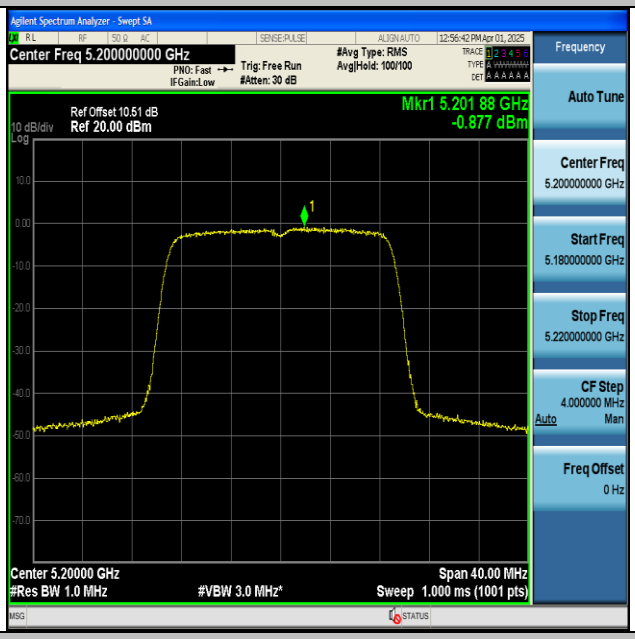
11N20MIMO-Ant1-5180-PASS



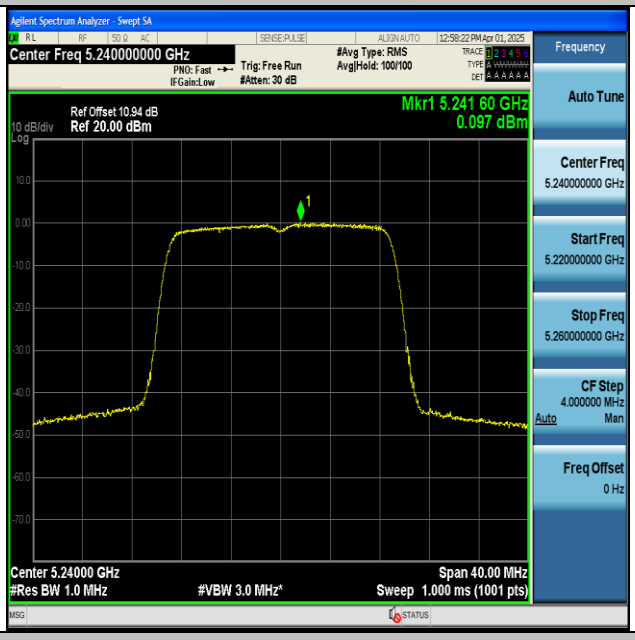
11N20MIMO-Ant2-5180-PASS



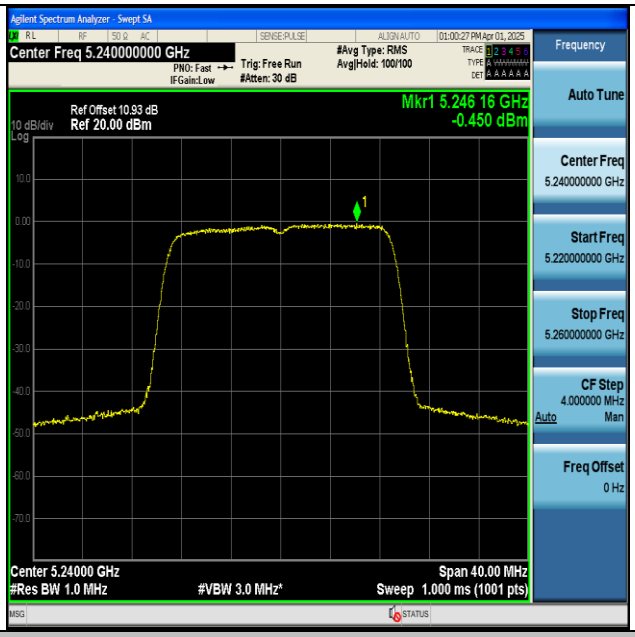
11N20MIMO-Ant1-5200-PASS



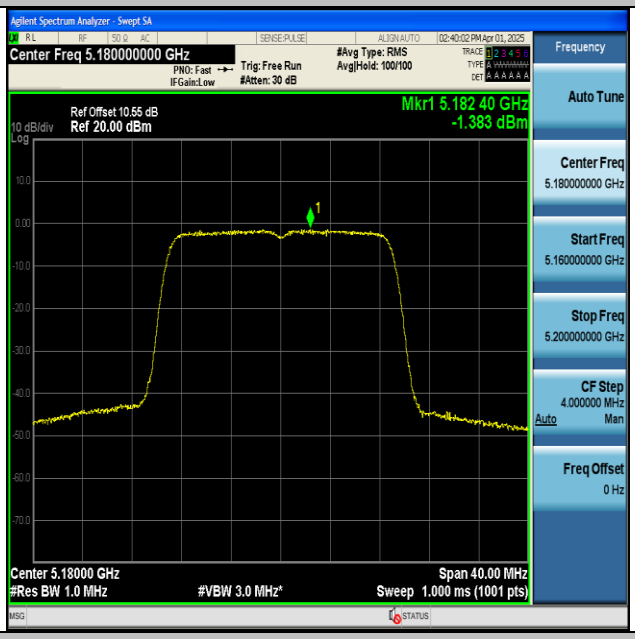
11N20MIMO-Ant2-5200-PASS



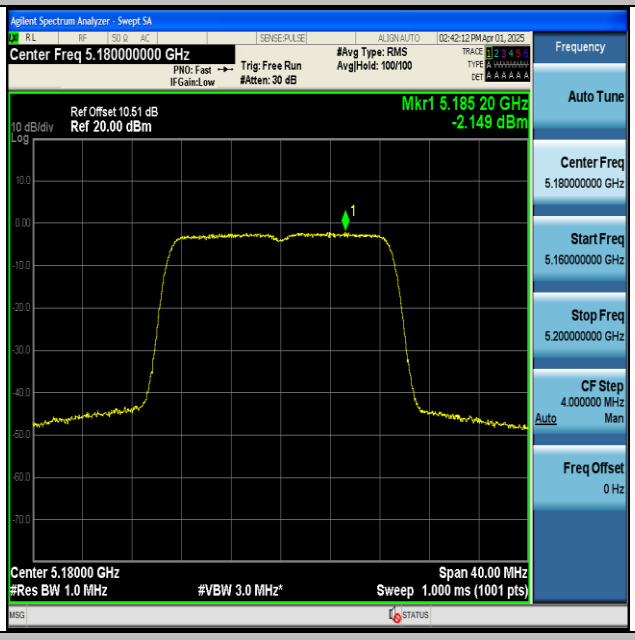
11N20MIMO-Ant1-5240-PASS



11N20MIMO-Ant2-5240-PASS



11AC20MIMO-Ant1-5180-PASS



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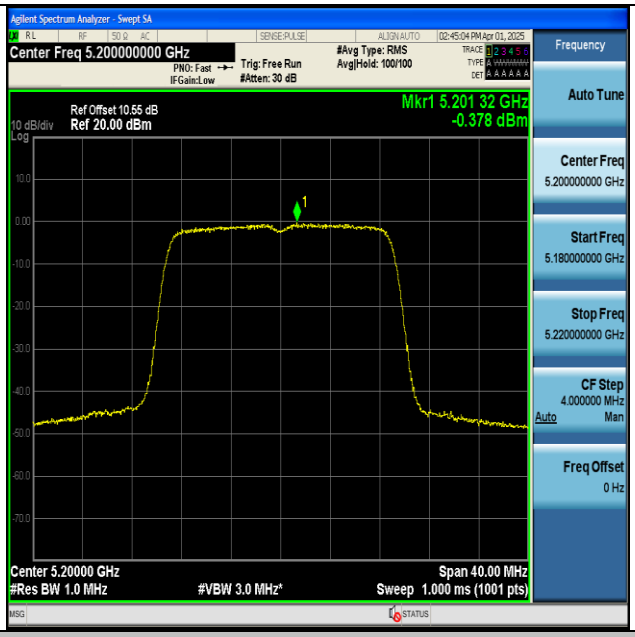
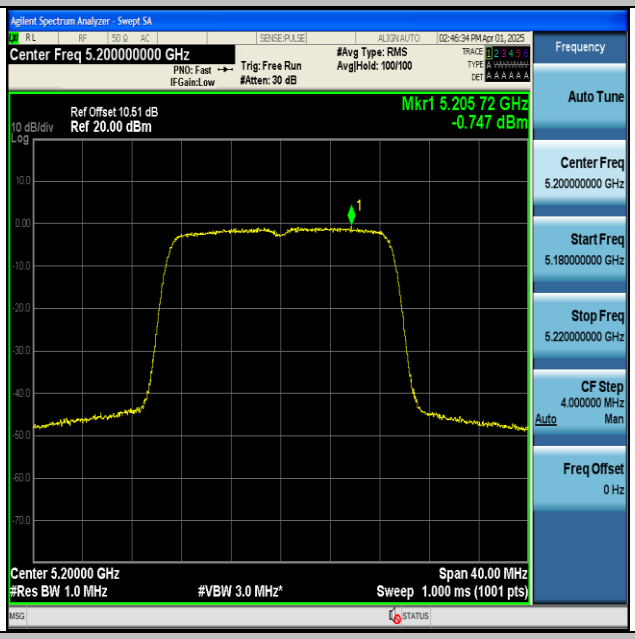
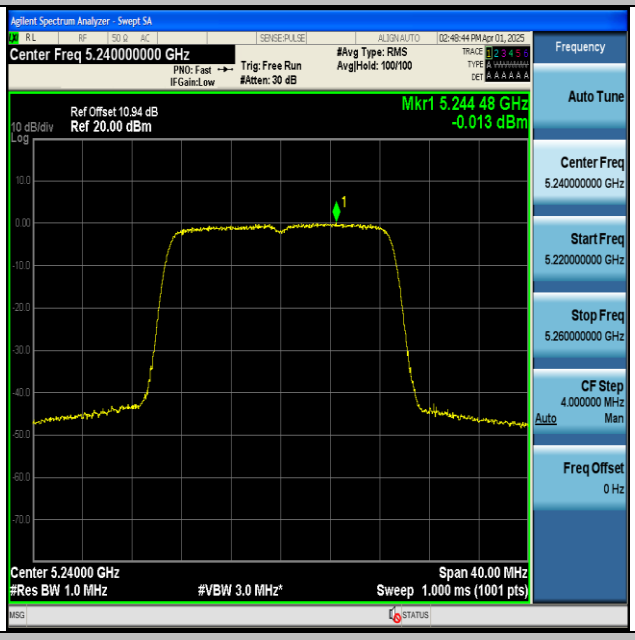


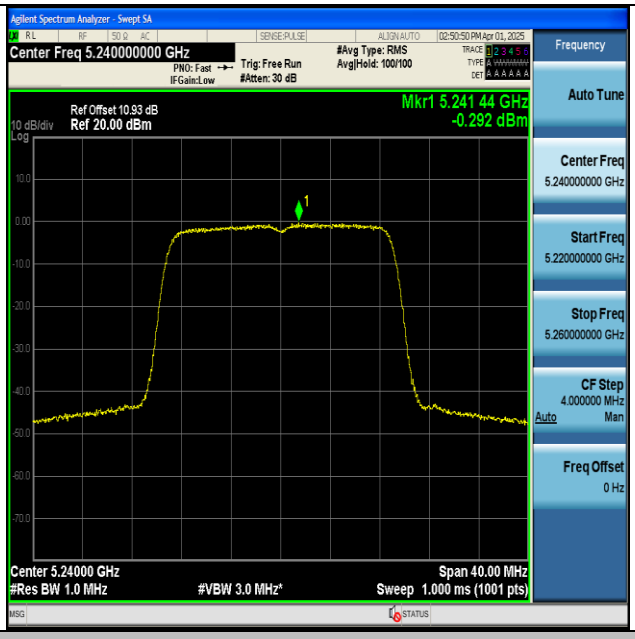
11AC20MIMO-Ant1-5200-PASS



11AC20MIMO-Ant2-5200-PASS



11AC20MIMO-Ant1-5240-PASS



11AC20MIMO-Ant2-5240-PASS

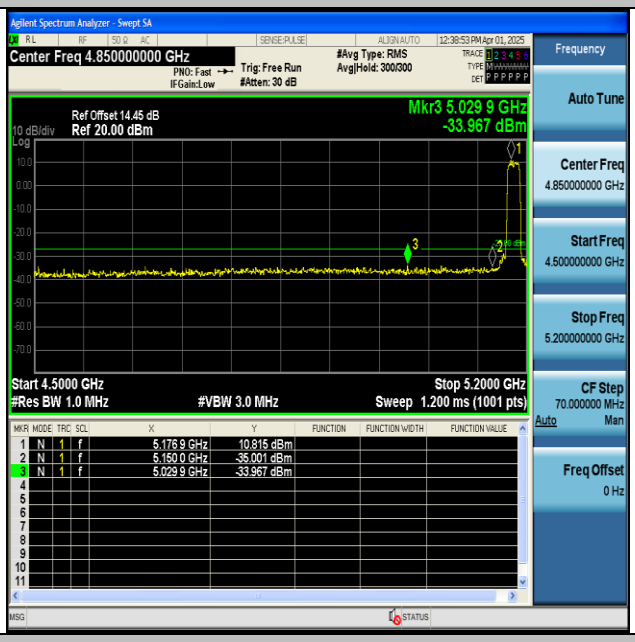
Appendix D: Band edge measurements

Test Result

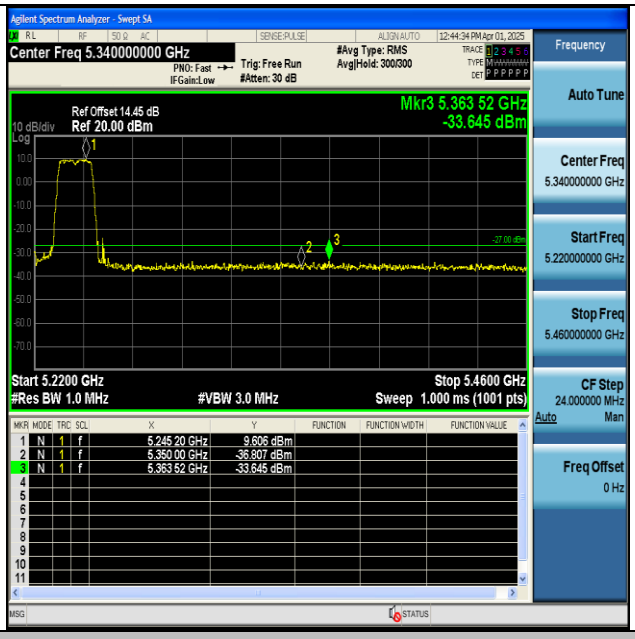
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	-34.31	≤-27	PASS
11A	Ant2	Low	5180	-33.97	≤-27	PASS
11A	Ant1	High	5240	-33.65	≤-27	PASS
11A	Ant2	High	5240	-33.51	≤-27	PASS
11N20MIMO	Ant1	Low	5180	-34.63	≤-27	PASS
11N20MIMO	Ant2	Low	5180	-33.67	≤-27	PASS
11N20MIMO	Ant1	High	5240	-33.89	≤-27	PASS
11N20MIMO	Ant2	High	5240	-33.83	≤-27	PASS
11AC20MIMO	Ant1	Low	5180	-33.51	≤-27	PASS
11AC20MIMO	Ant2	Low	5180	-34.27	≤-27	PASS
11AC20MIMO	Ant1	High	5240	-33.29	≤-27	PASS
11AC20MIMO	Ant2	High	5240	-33.75	≤-27	PASS

Test Graphs

11A-Ant1-5180-PASS



11A-Ant2-5180-PASS



11A-Ant1-5240-PASS

11A-Ant2-5240-PASS

11N20MIMO-Ant1-5180-PASS