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

Product Name: DRONE

Trade Mark: /

Test Model: V11 Air

FCC ID: 2BBLM-V11AIRYK

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	18.360	5170.760	5189.120	---	---
11A	Ant2	5180	18.360	5170.800	5189.160	---	---
11A	Ant1	5200	18.480	5190.720	5209.200	---	---
11A	Ant2	5200	18.440	5190.800	5209.240	---	---
11A	Ant1	5240	18.520	5230.720	5249.240	---	---
11A	Ant2	5240	18.400	5230.920	5249.320	---	---
11N20MIMO	Ant1	5180	19.480	5170.200	5189.680	---	---
11N20MIMO	Ant2	5180	19.480	5170.200	5189.680	---	---
11N20MIMO	Ant1	5200	19.320	5190.320	5209.640	---	---
11N20MIMO	Ant2	5200	19.200	5190.440	5209.640	---	---
11N20MIMO	Ant1	5240	19.280	5230.440	5249.720	---	---
11N20MIMO	Ant2	5240	19.280	5230.400	5249.680	---	---
11AC20MIMO	Ant1	5180	19.520	5170.280	5189.800	---	---
11AC20MIMO	Ant2	5180	19.440	5170.280	5189.720	---	---
11AC20MIMO	Ant1	5200	19.520	5190.240	5209.760	---	---
11AC20MIMO	Ant2	5200	19.480	5190.200	5209.680	---	---
11AC20MIMO	Ant1	5240	19.480	5230.240	5249.720	---	---
11AC20MIMO	Ant2	5240	19.320	5230.320	5249.640	---	---

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

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

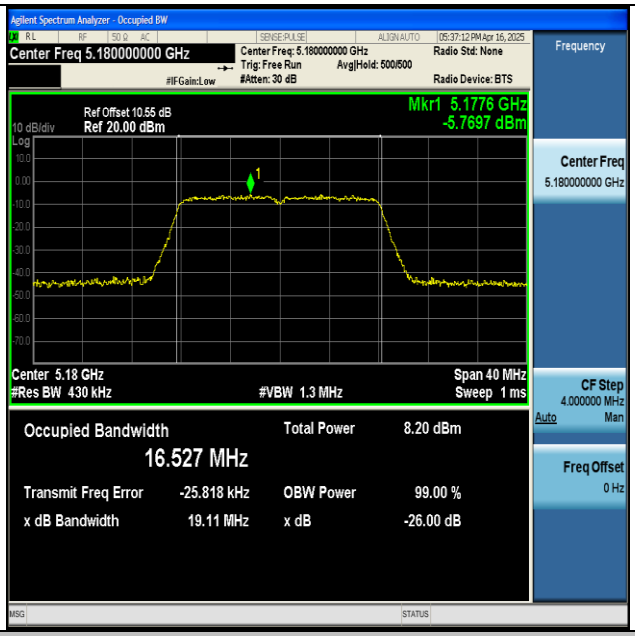
Appendix A2: Occupied channel bandwidth

Test Result

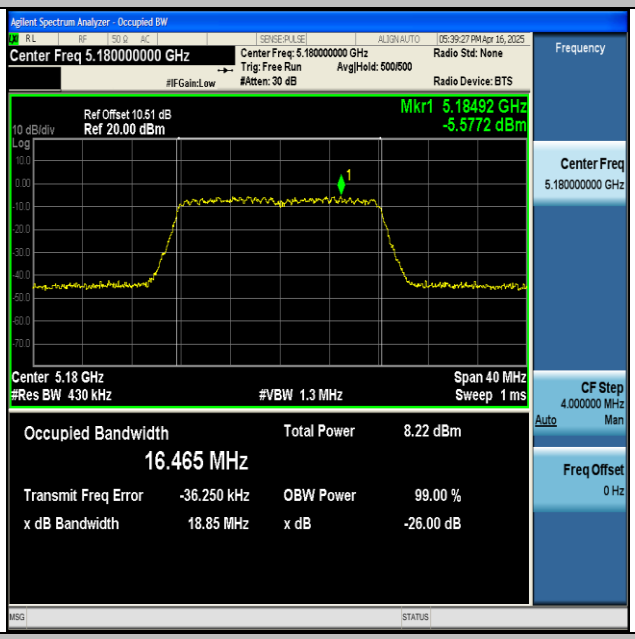
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	16.527	5171.7107	5188.2377	---	---
11A	Ant2	5180	16.465	5171.7313	5188.1963	---	---
11A	Ant1	5200	16.488	5191.7509	5208.2389	---	---
11A	Ant2	5200	16.450	5191.7575	5208.2075	---	---
11A	Ant1	5240	16.487	5231.7388	5248.2258	---	---
11A	Ant2	5240	16.485	5231.7439	5248.2289	---	---
11N20MIMO	Ant1	5180	17.656	5171.1431	5188.7991	---	---
11N20MIMO	Ant2	5180	17.660	5171.1331	5188.7931	---	---
11N20MIMO	Ant1	5200	17.601	5191.1832	5208.7842	---	---
11N20MIMO	Ant2	5200	17.615	5191.1756	5208.7906	---	---
11N20MIMO	Ant1	5240	17.629	5231.1684	5248.7974	---	---
11N20MIMO	Ant2	5240	17.613	5231.1827	5248.7957	---	---
11AC20MIMO	Ant1	5180	17.669	5171.1245	5188.7935	---	---
11AC20MIMO	Ant2	5180	17.662	5171.1345	5188.7965	---	---
11AC20MIMO	Ant1	5200	17.623	5191.1617	5208.7847	---	---
11AC20MIMO	Ant2	5200	17.601	5191.1738	5208.7748	---	---
11AC20MIMO	Ant1	5240	17.646	5231.1656	5248.8116	---	---
11AC20MIMO	Ant2	5240	17.637	5231.1724	5248.8094	---	---

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

Test Graphs



11A-Ant1-5180



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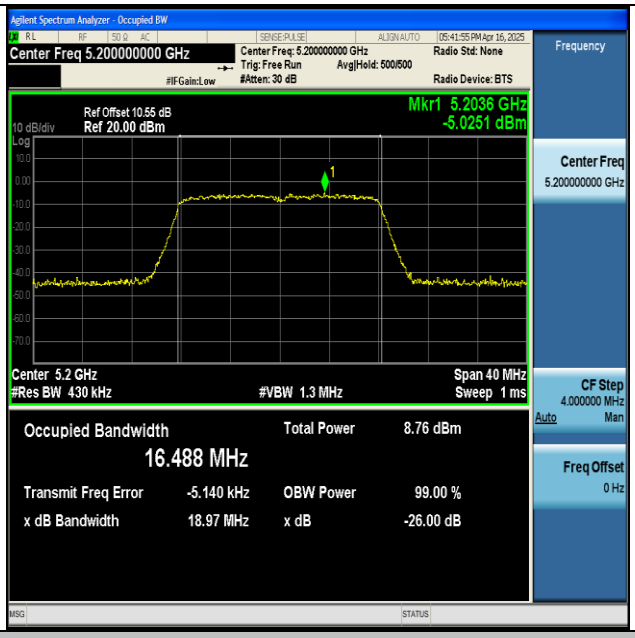

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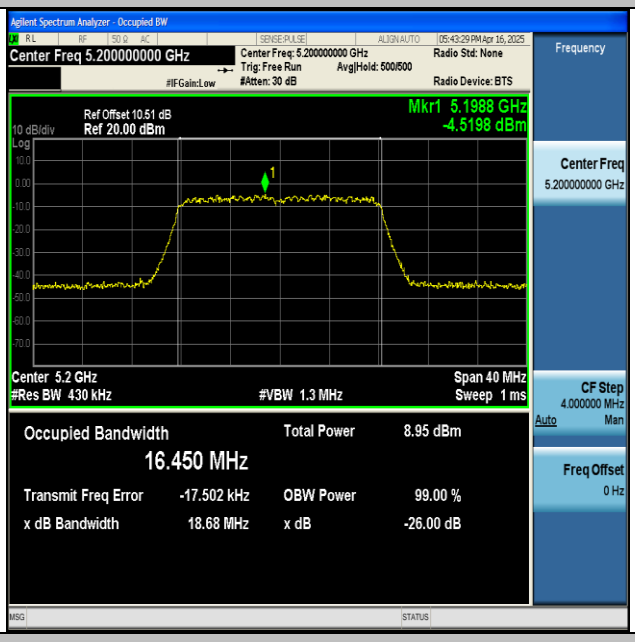

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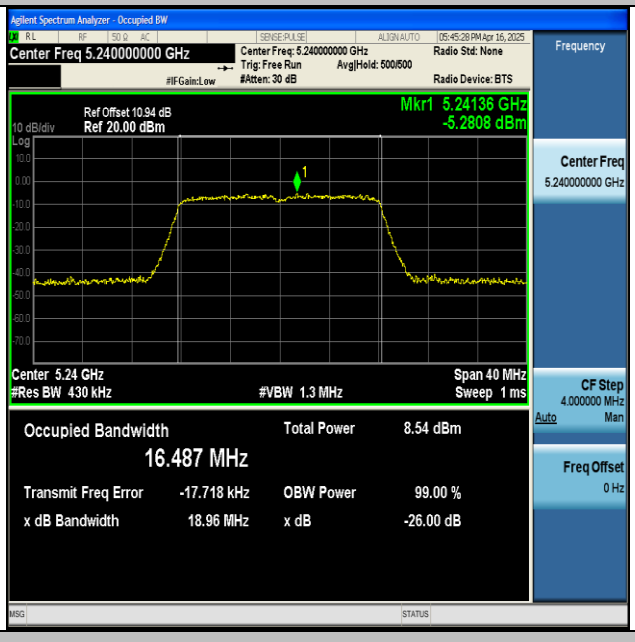

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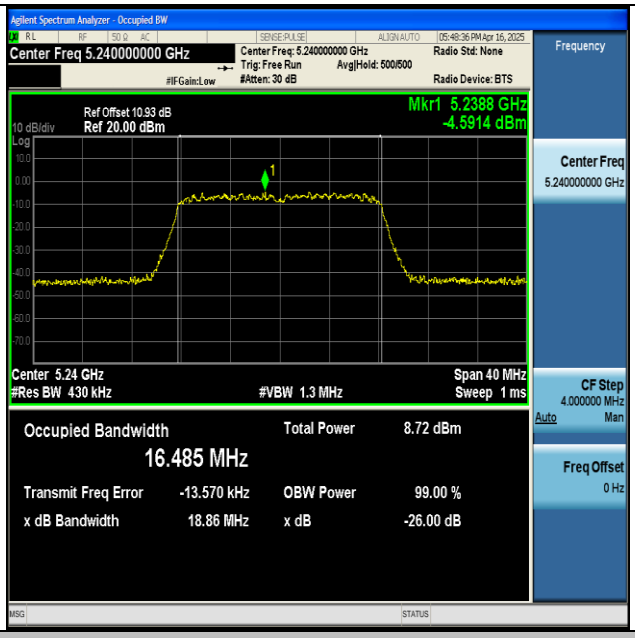

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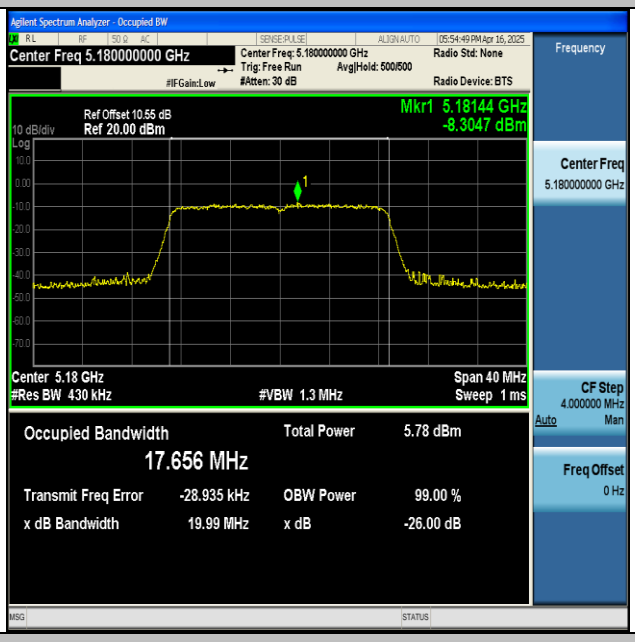

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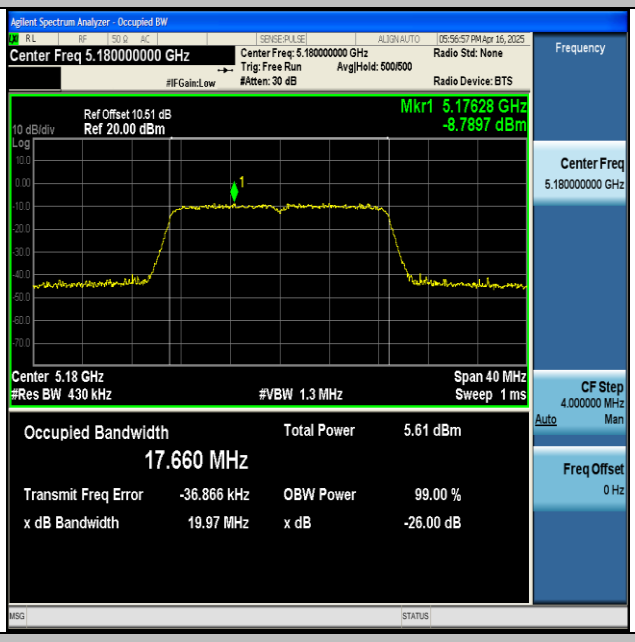

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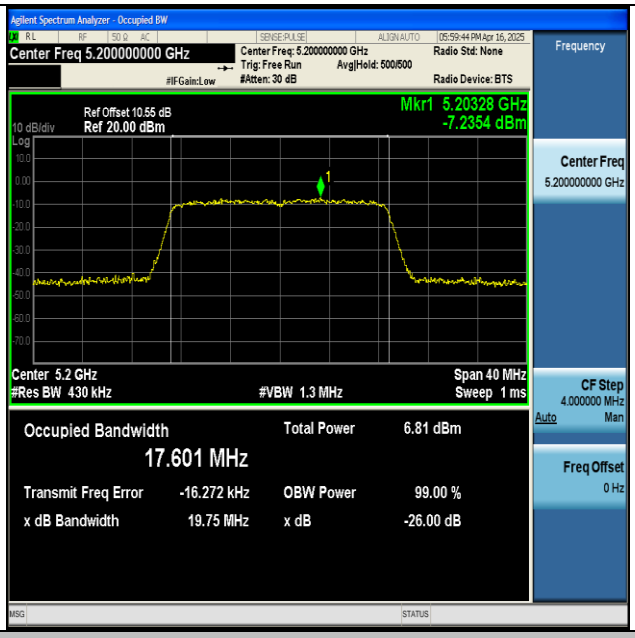

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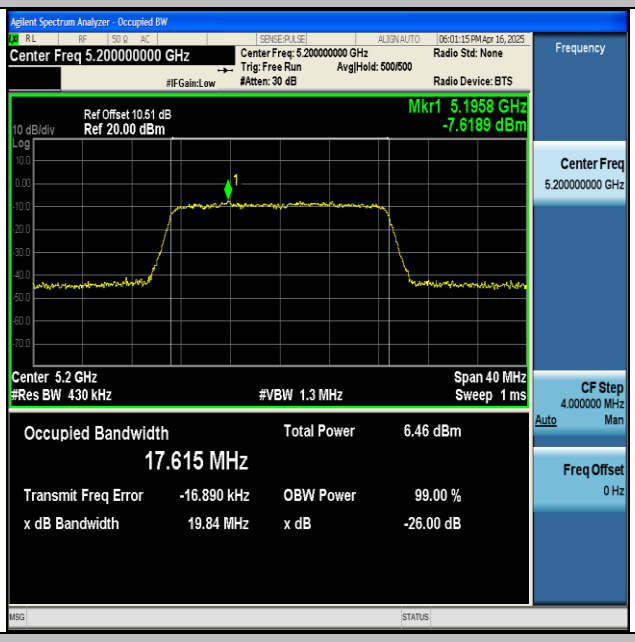
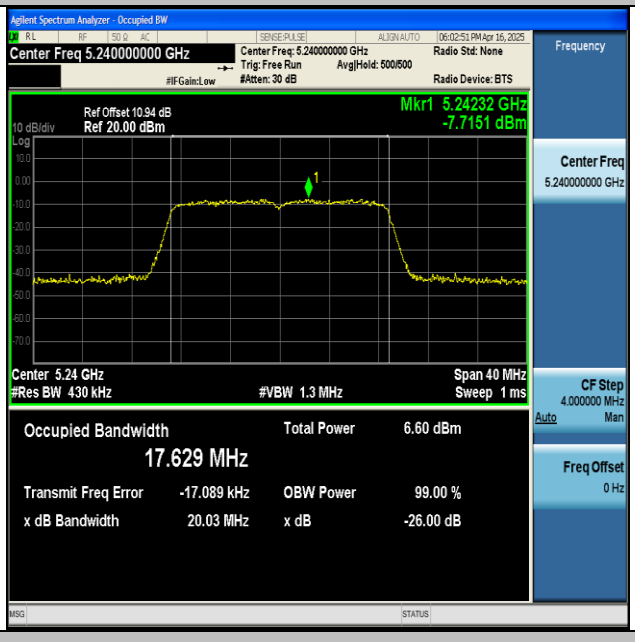
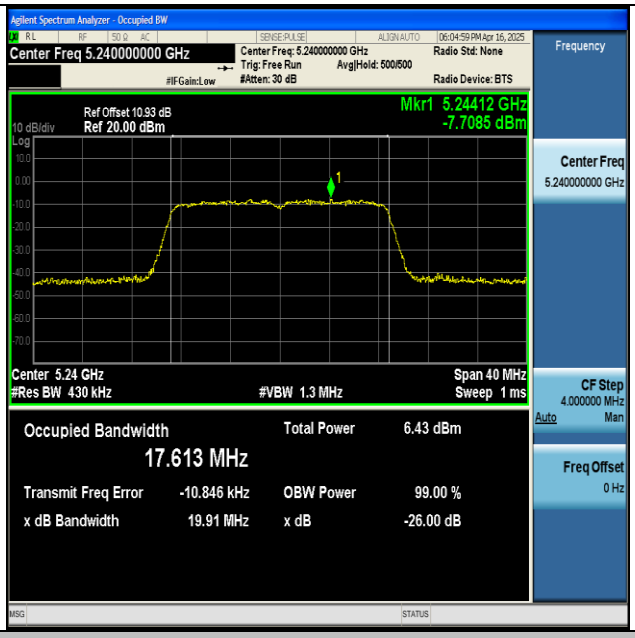


11N20MIMO-Ant2-5200



11N20MIMO-Ant1-5240



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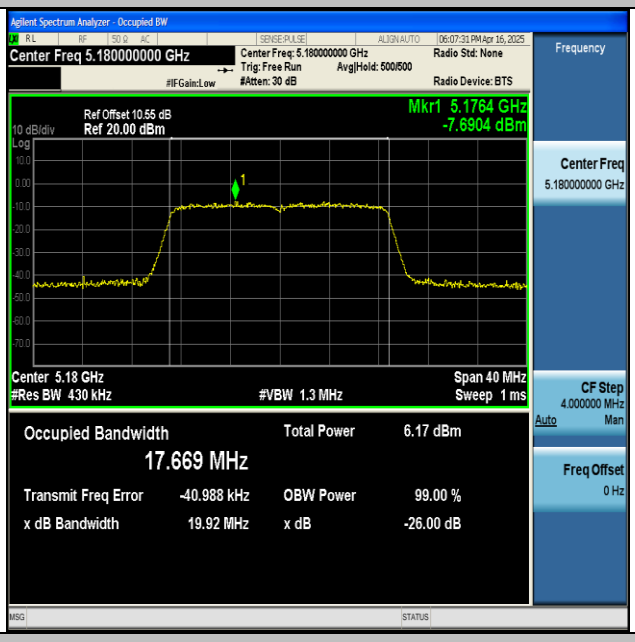
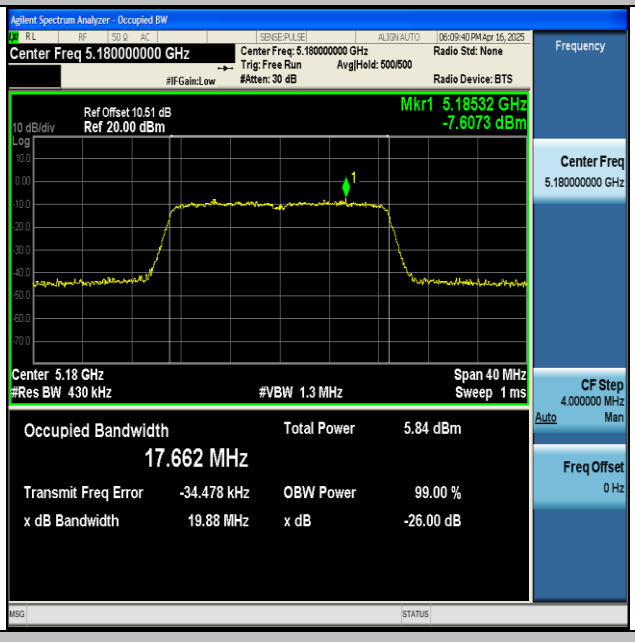
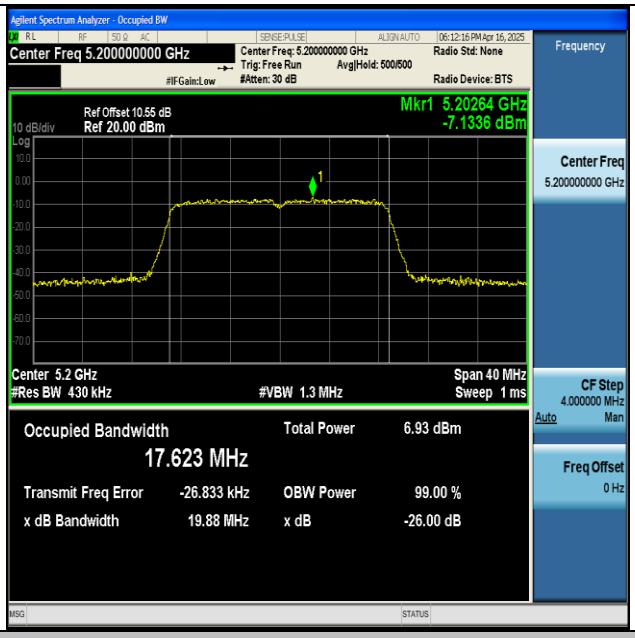


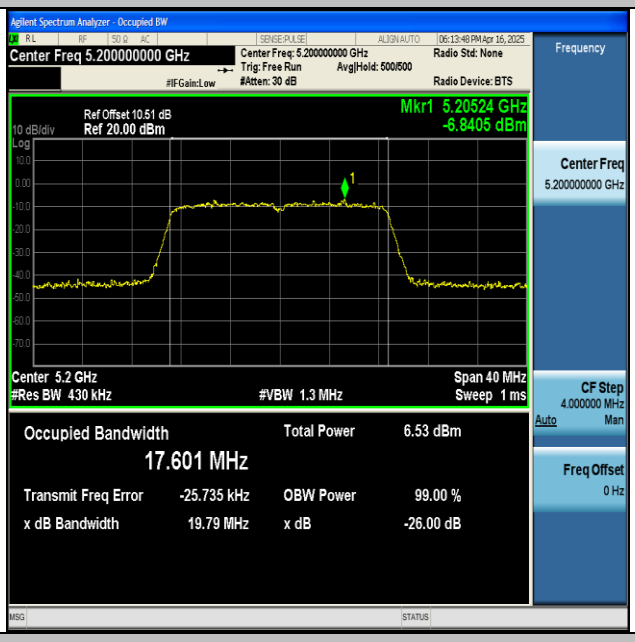
11AC20MIMO-Ant1-5180



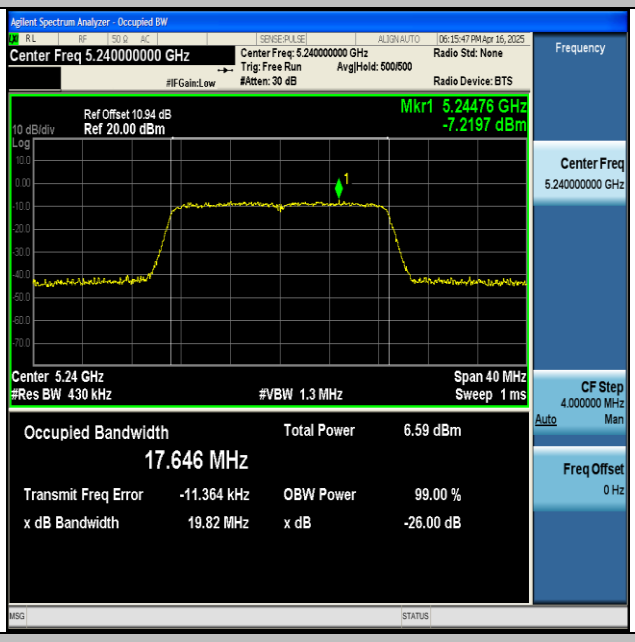
11AC20MIMO-Ant2-5180



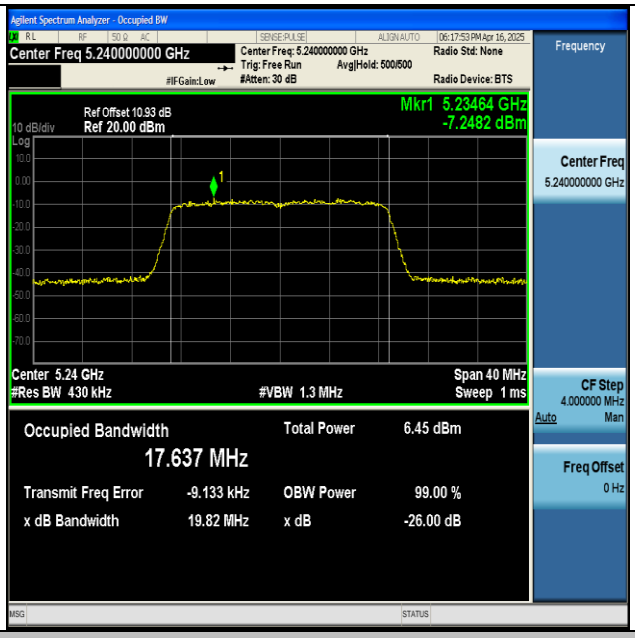
11AC20MIMO-Ant1-5200



11AC20MIMO-Ant2-5200



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	1.58	≤23.98	PASS
11A	Ant2	5180	1.10	≤23.98	PASS
11A	Ant1	5200	2.28	≤23.98	PASS
11A	Ant2	5200	1.86	≤23.98	PASS
11A	Ant1	5240	1.87	≤23.98	PASS
11A	Ant2	5240	1.84	≤23.98	PASS
11N20MIMO	Ant1	5180	-0.73	≤23.98	PASS
11N20MIMO	Ant2	5180	-0.99	≤23.98	PASS
11N20MIMO	total	5180	2.15	≤23.98	PASS
11N20MIMO	Ant1	5200	0.35	≤23.98	PASS
11N20MIMO	Ant2	5200	-0.09	≤23.98	PASS
11N20MIMO	total	5200	3.15	≤23.98	PASS
11N20MIMO	Ant1	5240	-0.05	≤23.98	PASS
11N20MIMO	Ant2	5240	-0.14	≤23.98	PASS
11N20MIMO	total	5240	2.92	≤23.98	PASS
11AC20MIMO	Ant1	5180	-0.38	≤23.98	PASS
11AC20MIMO	Ant2	5180	-0.73	≤23.98	PASS
11AC20MIMO	total	5180	2.46	≤23.98	PASS
11AC20MIMO	Ant1	5200	0.37	≤23.98	PASS
11AC20MIMO	Ant2	5200	-0.02	≤23.98	PASS
11AC20MIMO	total	5200	3.19	≤23.98	PASS
11AC20MIMO	Ant1	5240	-0.03	≤23.98	PASS
11AC20MIMO	Ant2	5240	-0.07	≤23.98	PASS
11AC20MIMO	total	5240	2.96	≤23.98	PASS

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

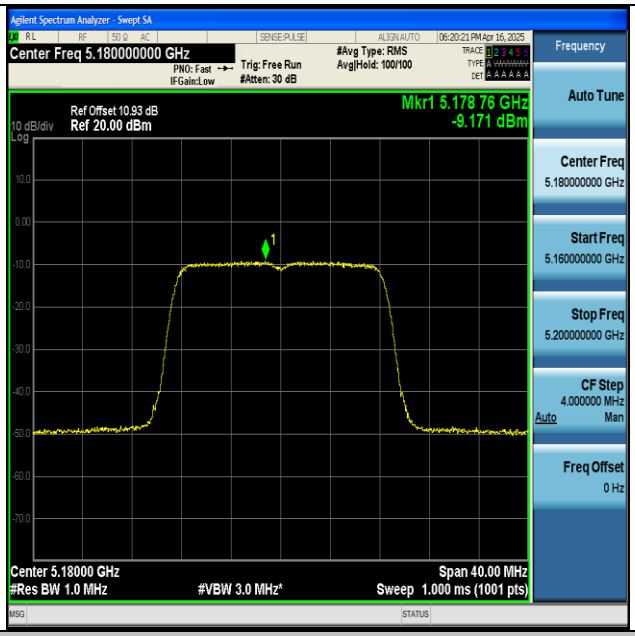
Appendix C: Maximum power spectral density

Test Result

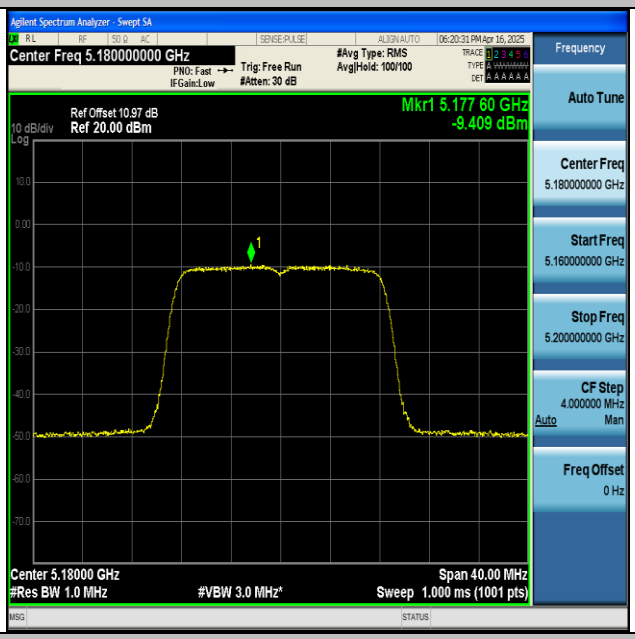
Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-9.17	≤11.00	PASS
11A	Ant2	5180	-9.41	≤11.00	PASS
11A	Ant1	5200	-8.48	≤11.00	PASS
11A	Ant2	5200	-8.98	≤11.00	PASS
11A	Ant1	5240	-8.90	≤11.00	PASS
11A	Ant2	5240	-8.94	≤11.00	PASS
11N20MIMO	Ant1	5180	-12.02	≤11.00	PASS
11N20MIMO	Ant2	5180	-12.43	≤11.00	PASS
11N20MIMO	total	5180	-9.21	≤10.26	PASS
11N20MIMO	Ant1	5200	-10.97	≤11.00	PASS
11N20MIMO	Ant2	5200	-11.27	≤11.00	PASS
11N20MIMO	total	5200	-8.11	≤10.26	PASS
11N20MIMO	Ant1	5240	-11.78	≤11.00	PASS
11N20MIMO	Ant2	5240	-11.60	≤11.00	PASS
11N20MIMO	total	5240	-8.68	≤10.26	PASS
11AC20MIMO	Ant1	5180	-11.74	≤11.00	PASS
11AC20MIMO	Ant2	5180	-12.09	≤11.00	PASS
11AC20MIMO	total	5180	-8.90	≤10.26	PASS
11AC20MIMO	Ant1	5200	-11.09	≤11.00	PASS
11AC20MIMO	Ant2	5200	-11.15	≤11.00	PASS
11AC20MIMO	total	5200	-8.11	≤10.26	PASS
11AC20MIMO	Ant2	5240	-11.58	≤11.00	PASS
11AC20MIMO	total	5240	-8.42	≤11.00	PASS
11AC20MIMO	Ant1	5240	-11.28	≤10.26	PASS

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

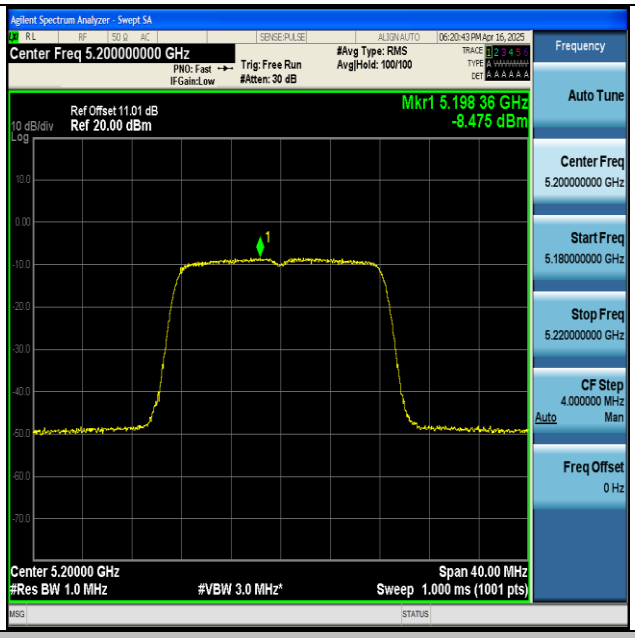
Test Graphs



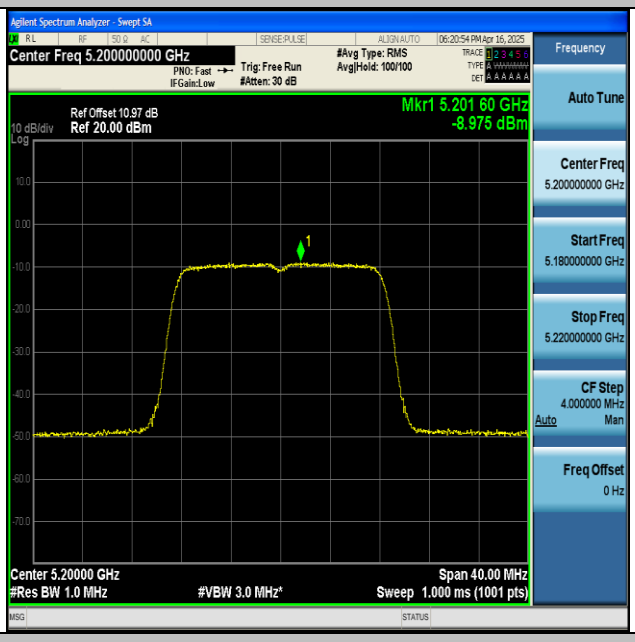
11A-Ant1-5180-PASS



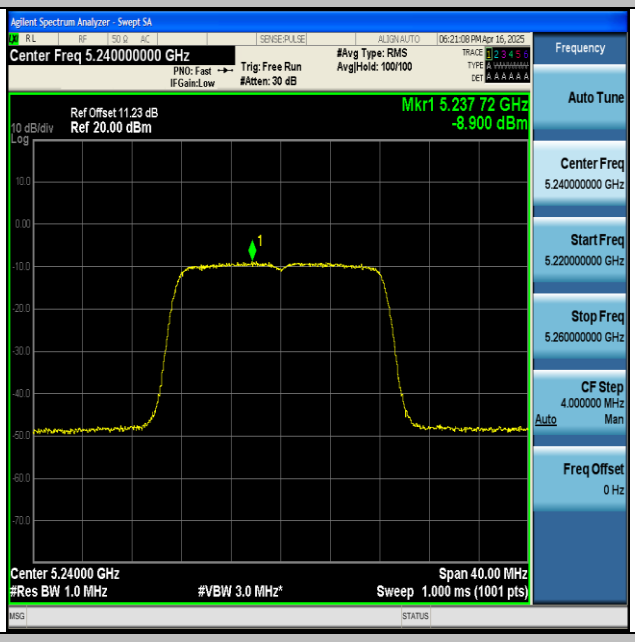
11A-Ant2-5180-PASS



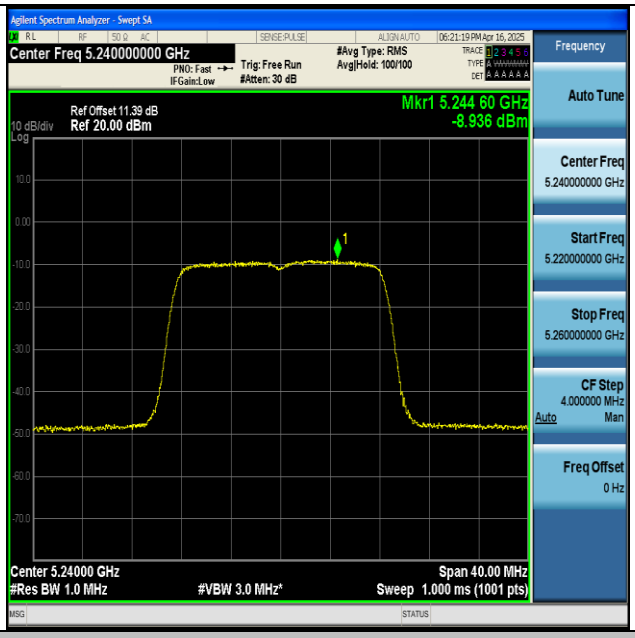
11A-Ant1-5200-PASS



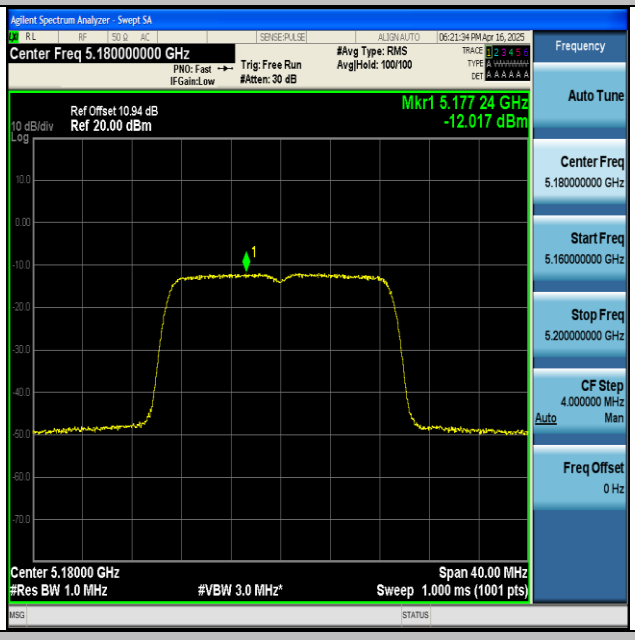
11A-Ant2-5200-PASS



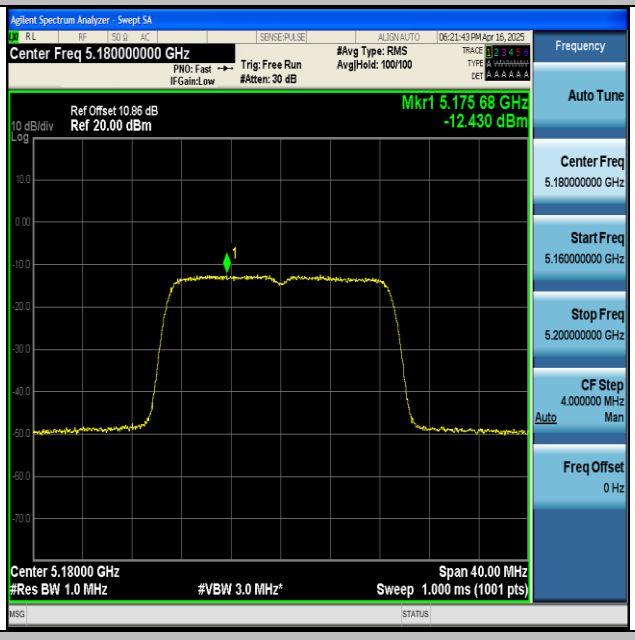
11A-Ant1-5240-PASS



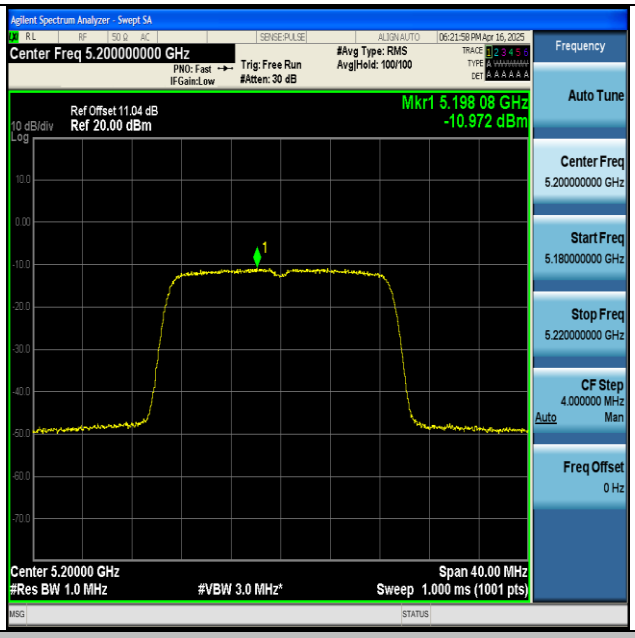
11A-Ant2-5240-PASS



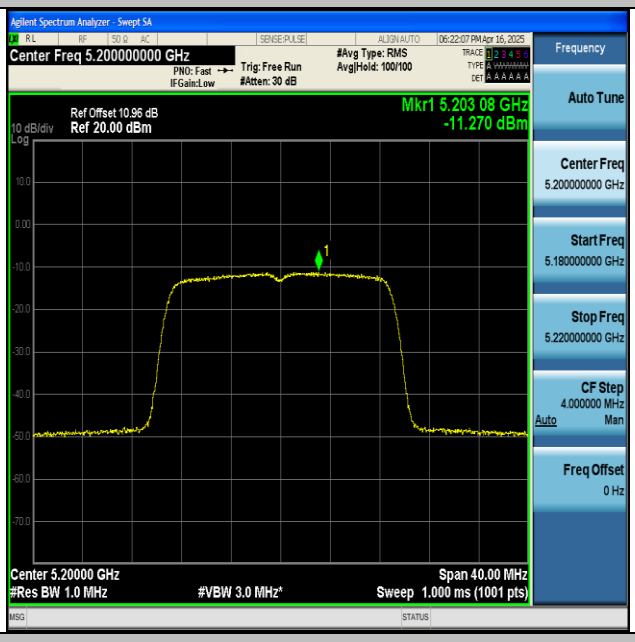
11N20MIMO-Ant1-5180-PASS



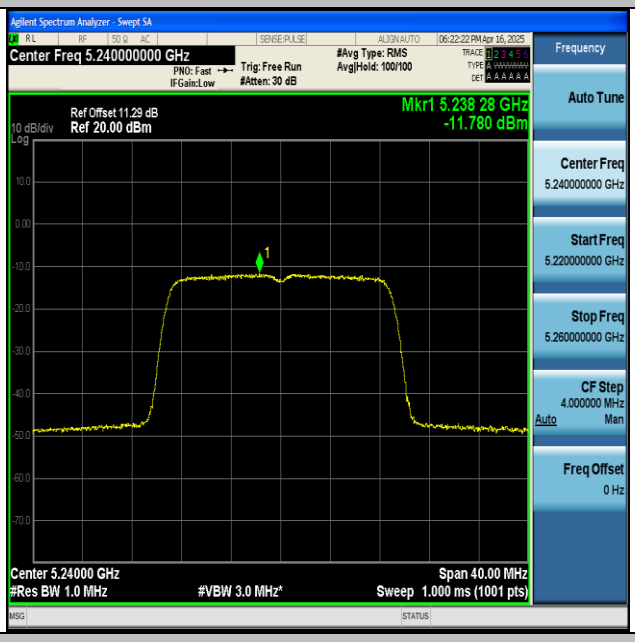
11N20MIMO-Ant2-5180-PASS



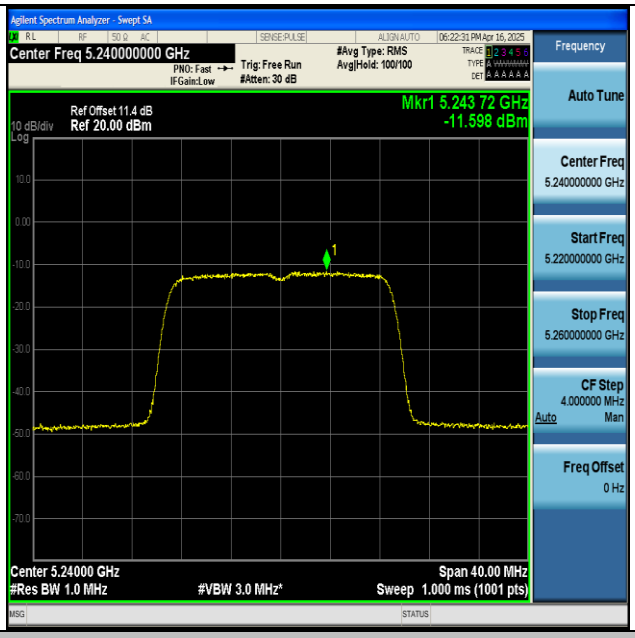
11N20MIMO-Ant1-5200-PASS



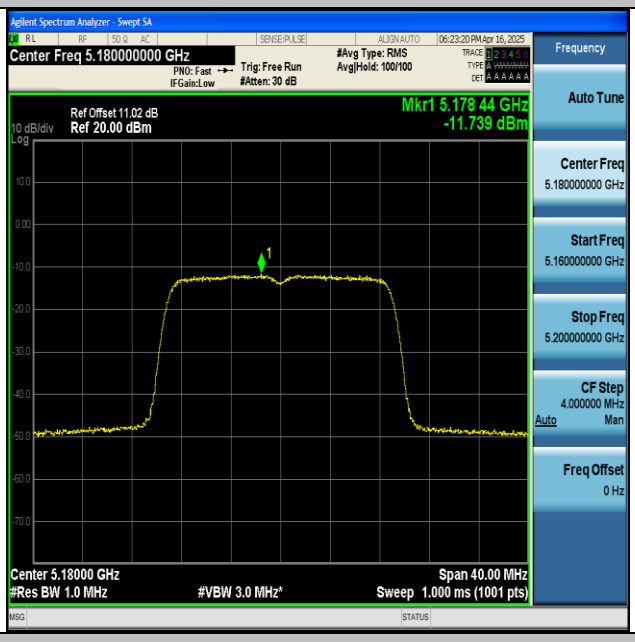
11N20MIMO-Ant2-5200-PASS



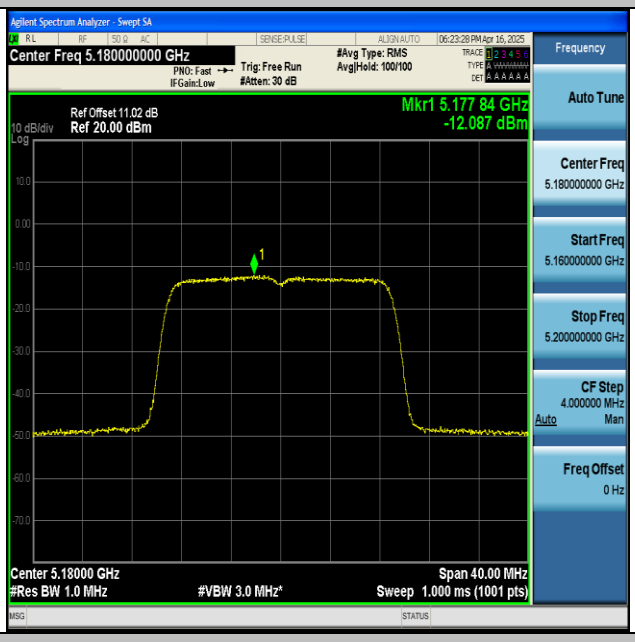
11N20MIMO-Ant1-5240-PASS



11N20MIMO-Ant2-5240-PASS



11AC20MIMO-Ant1-5180-PASS



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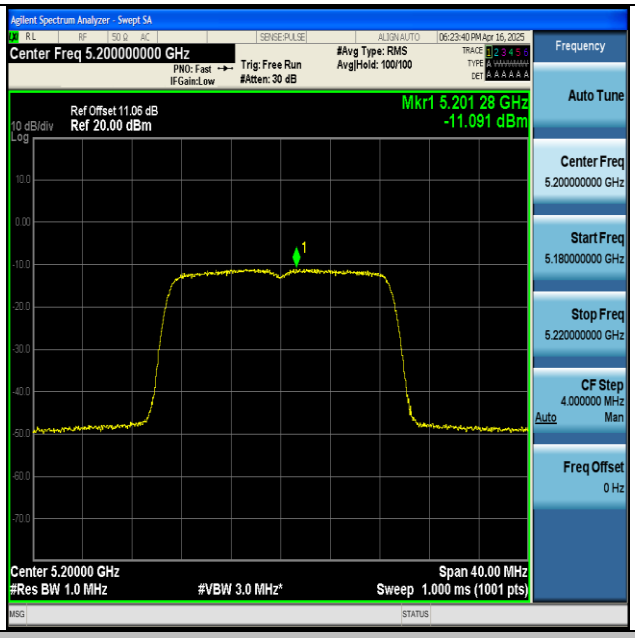
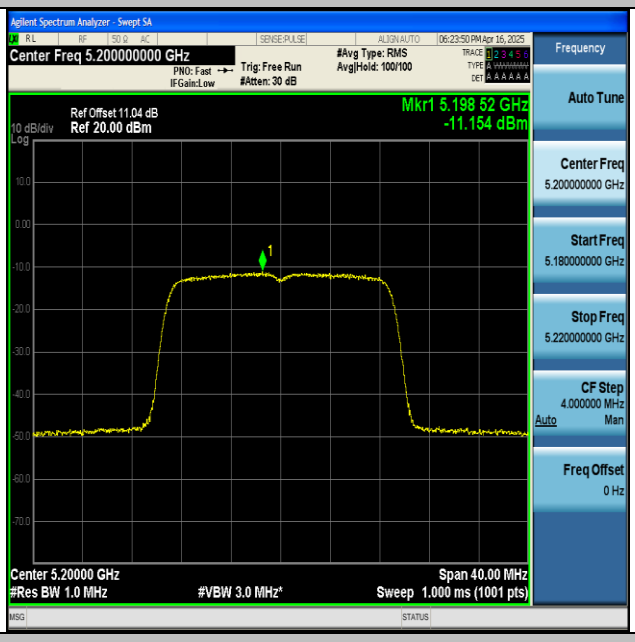
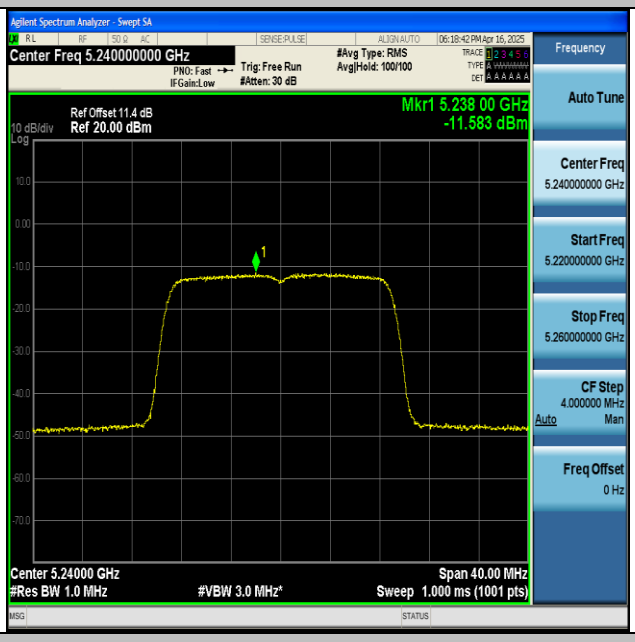


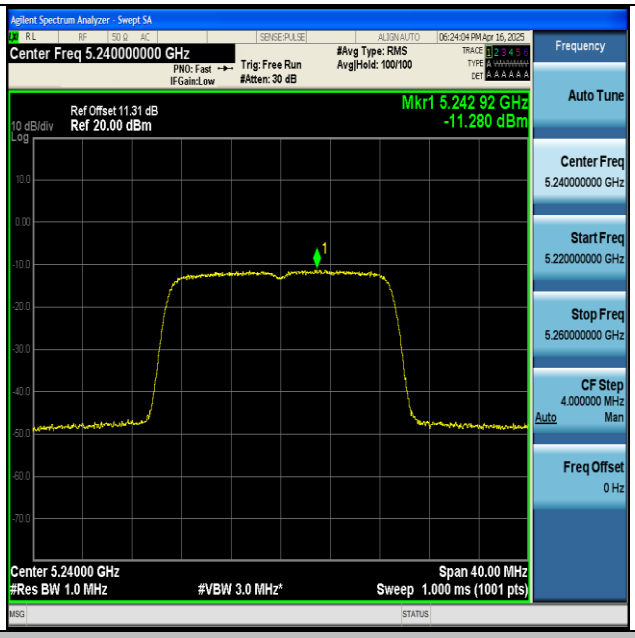
11AC20MIMO-Ant1-5200-PASS



11AC20MIMO-Ant2-5200-PASS



11AC20MIMO-Ant2-5240-PASS



11AC20MIMO-Ant1-5240-PASS

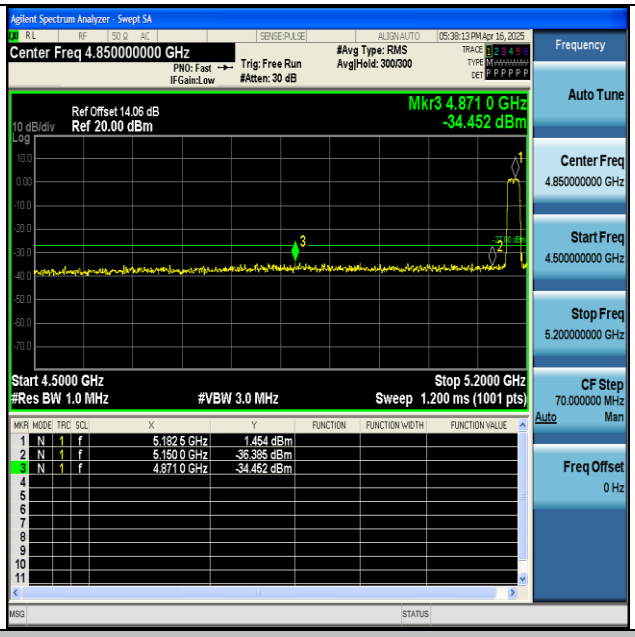
Appendix D: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	-34.45	≤-27	PASS
11A	Ant2	Low	5180	-33.76	≤-27	PASS
11A	Ant1	High	5240	-33.98	≤-27	PASS
11A	Ant2	High	5240	-33.7	≤-27	PASS
11N20MIMO	Ant1	Low	5180	-33.1	≤-27	PASS
11N20MIMO	Ant2	Low	5180	-33.99	≤-27	PASS
11N20MIMO	Ant1	High	5240	-33.22	≤-27	PASS
11N20MIMO	Ant2	High	5240	-33.36	≤-27	PASS
11AC20MIMO	Ant1	Low	5180	-34.75	≤-27	PASS
11AC20MIMO	Ant2	Low	5180	-33.74	≤-27	PASS
11AC20MIMO	Ant1	High	5240	-33.99	≤-27	PASS
11AC20MIMO	Ant2	High	5240	-33.1	≤-27	PASS

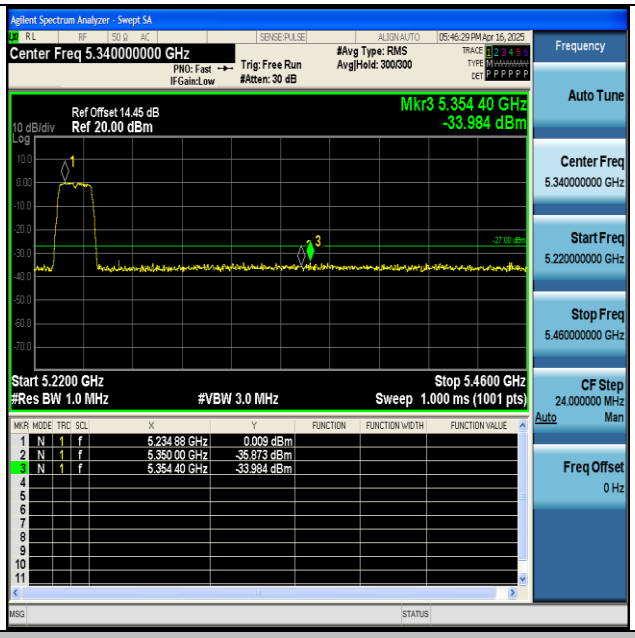
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

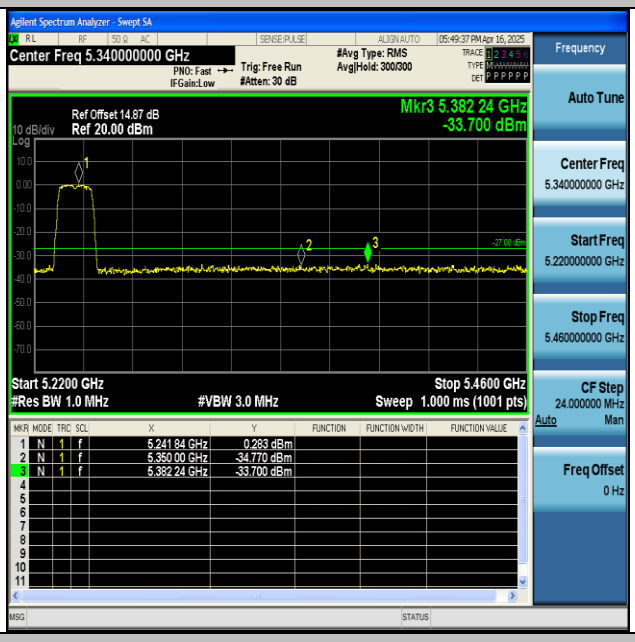


11A-Ant1-5180-PASS

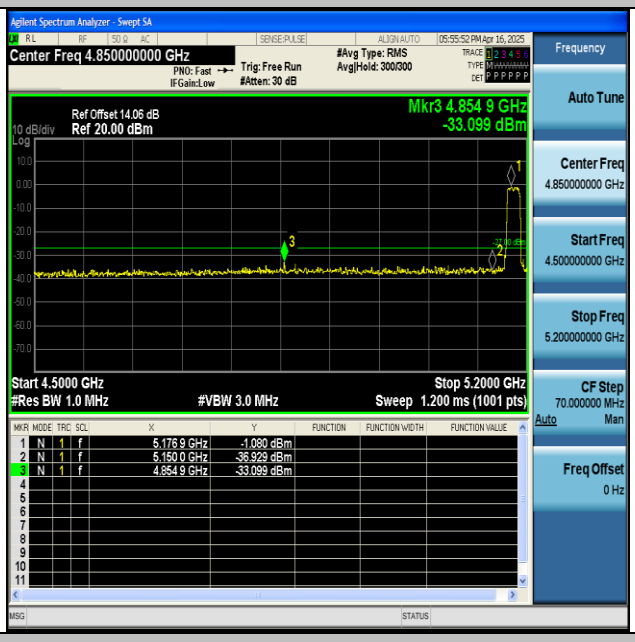
11A-Ant2-5180-PASS



11A-Ant1-5240-PASS



11A-Ant2-5240-PASS



11N20MIMO-Ant1-5180-PASS