

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

Product Name: 4K Set Top Box

Trade Mark: Homatics

Test Model: SN6BKHA

FCC ID: 2AOVU-SN6BKHA

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A1: Emission Bandwidth

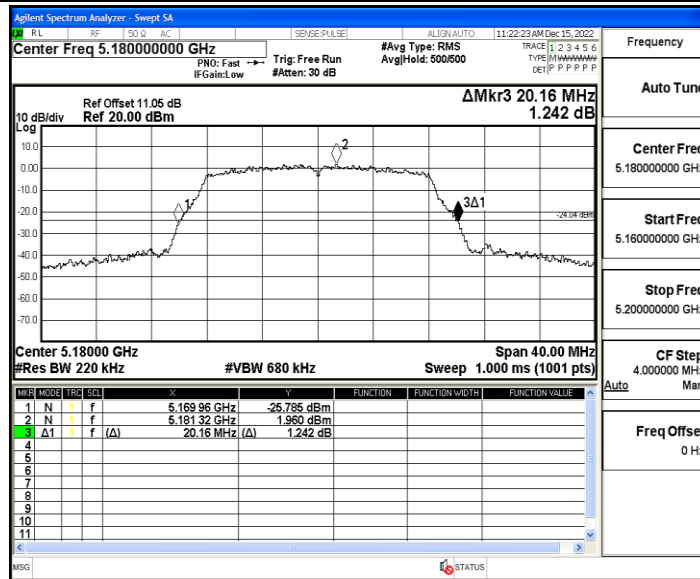
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.160	5169.960	5190.120	---	---
	Ant2	5180	20.000	5170.080	5190.080	---	---
	Ant1	5200	22.600	5189.640	5212.240	---	---
	Ant2	5200	20.080	5190.040	5210.120	---	---
	Ant1	5240	23.160	5229.120	5252.280	---	---
	Ant2	5240	20.200	5230.040	5250.240	---	---
11N20MIMO	Ant1	5180	20.240	5169.920	5190.160	---	---
	Ant2	5180	20.200	5169.960	5190.160	---	---
	Ant1	5200	20.400	5189.840	5210.240	---	---
	Ant2	5200	20.200	5189.920	5210.120	---	---
	Ant1	5240	20.240	5229.880	5250.120	---	---
	Ant2	5240	20.320	5229.880	5250.200	---	---
11N40MIMO	Ant1	5190	40.800	5169.600	5210.400	---	---
	Ant2	5190	40.320	5169.840	5210.160	---	---
	Ant1	5230	40.480	5209.760	5250.240	---	---
	Ant2	5230	40.240	5210.080	5250.320	---	---
11AC20MIMO	Ant1	5180	20.240	5169.920	5190.160	---	---
	Ant2	5180	20.120	5169.960	5190.080	---	---
	Ant1	5200	20.360	5189.840	5210.200	---	---
	Ant2	5200	20.240	5189.960	5210.200	---	---
	Ant1	5240	20.280	5229.840	5250.120	---	---
	Ant2	5240	20.280	5229.920	5250.200	---	---
11AC40MIMO	Ant1	5190	40.720	5169.520	5210.240	---	---
	Ant2	5190	40.480	5169.760	5210.240	---	---
	Ant1	5230	40.320	5209.840	5250.160	---	---
	Ant2	5230	40.240	5210.080	5250.320	---	---

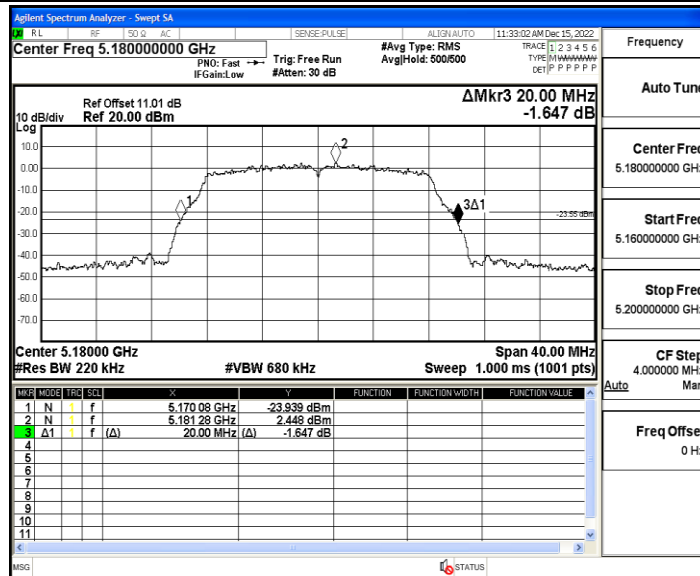
11AC80MIMO	Ant1	5210	81.440	5169.520	5250.960	---	---
	Ant2	5210	81.600	5169.360	5250.960	---	---

Test Graphs

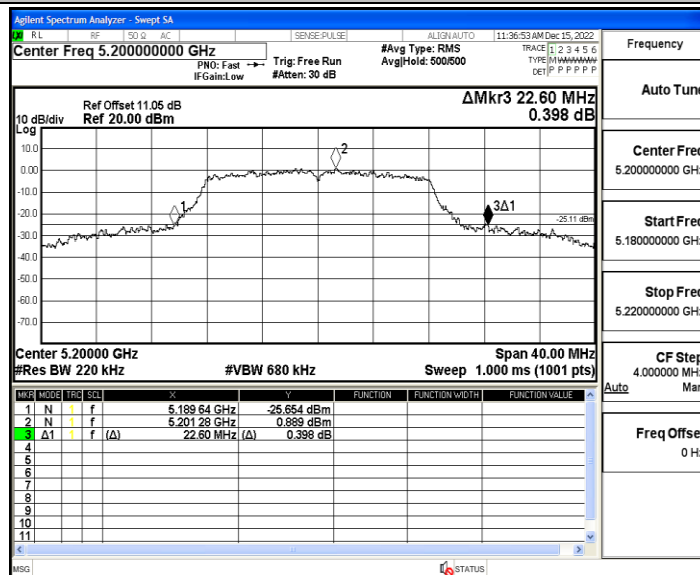
11A_Ant1_5180



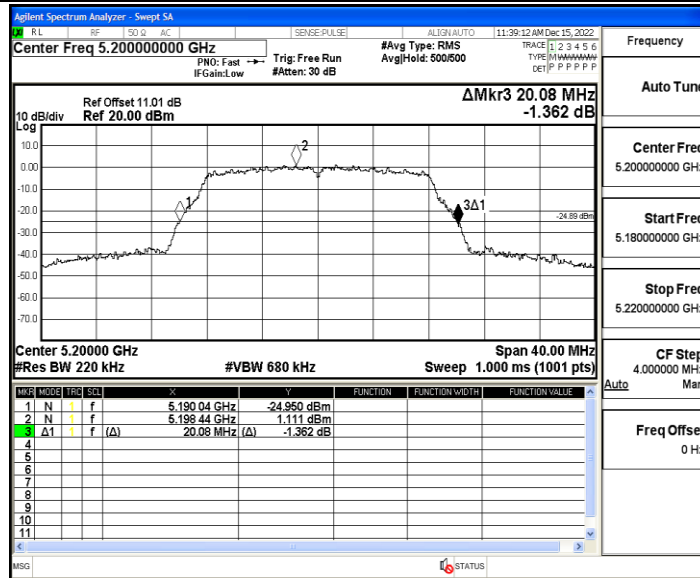
11A_Ant2_5180



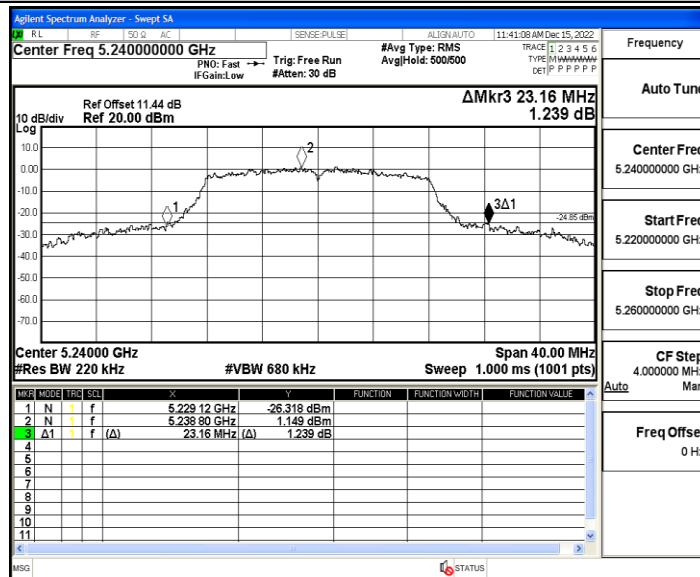
11A_Ant1_5200



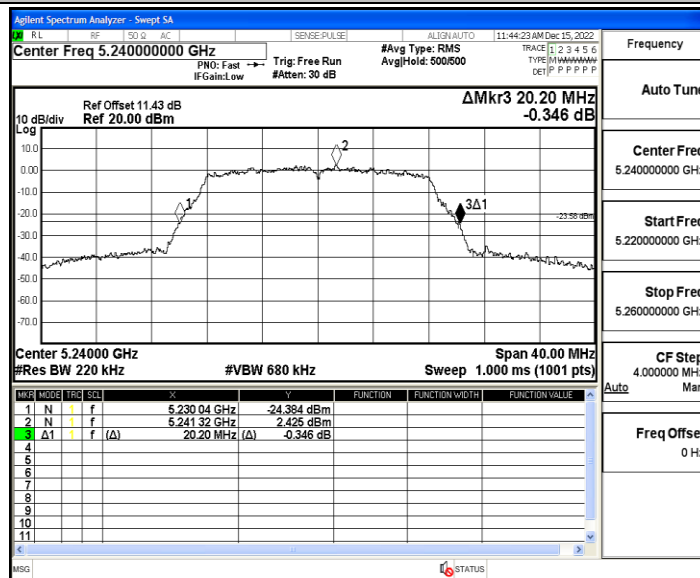
11A_Ant2_5200



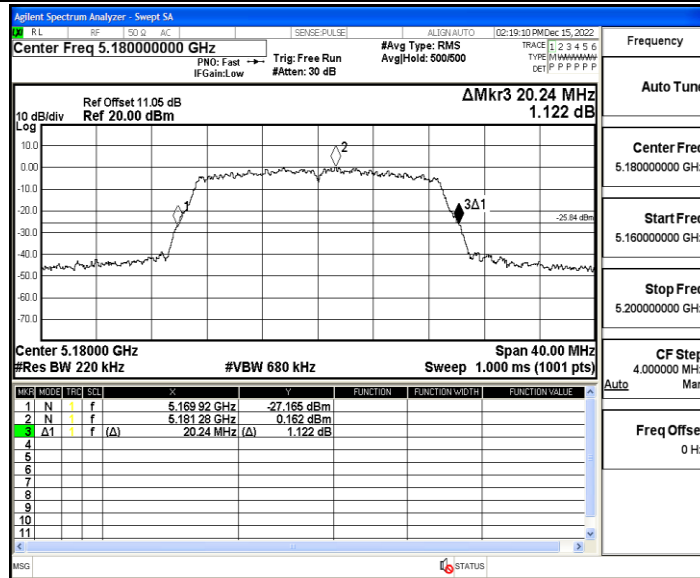
11A_Ant1_5240



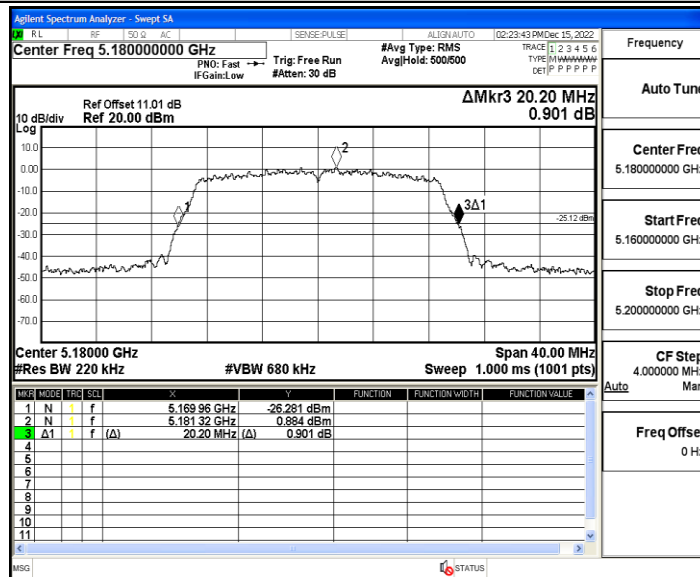
11A_Ant2_5240



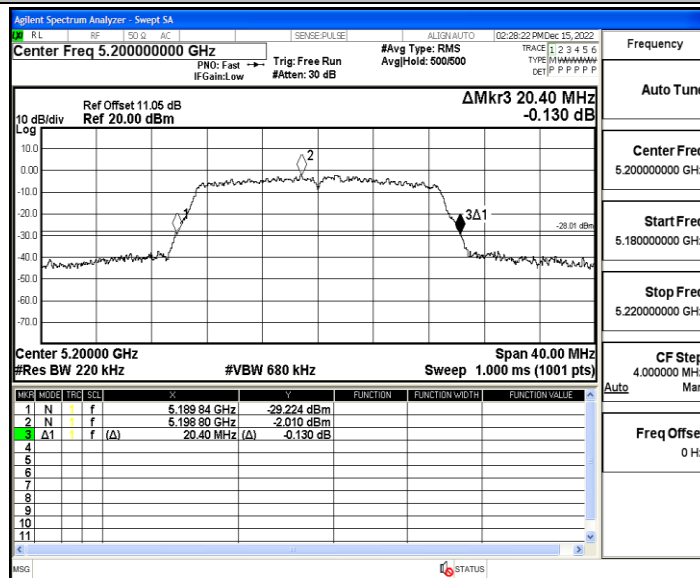
11N20MIMO_Ant1_5180



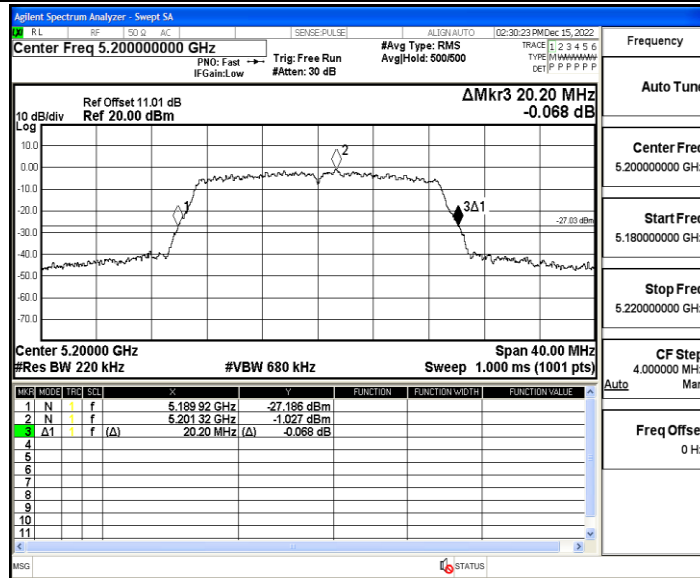
11N20MIMO_Ant2_5180



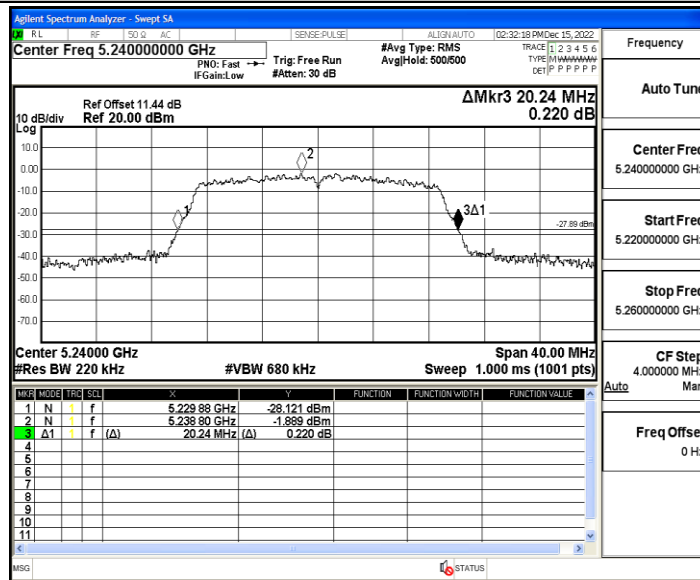
11N20MIMO_Ant1_5200



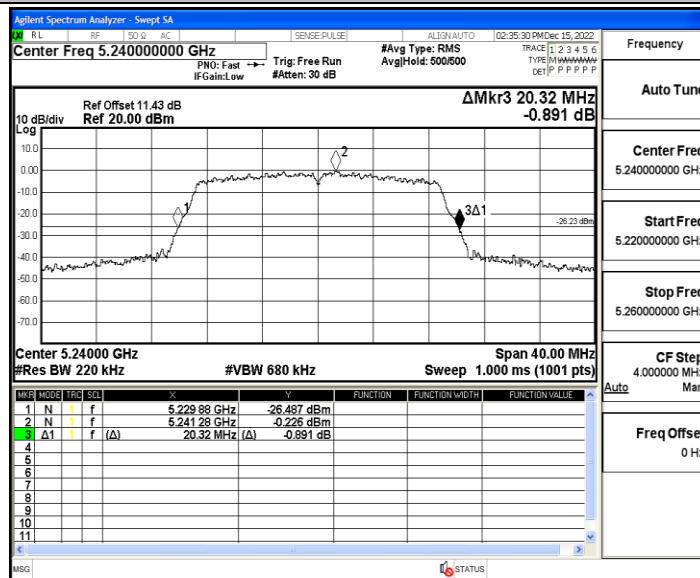
11N20MIMO_Ant2_5200



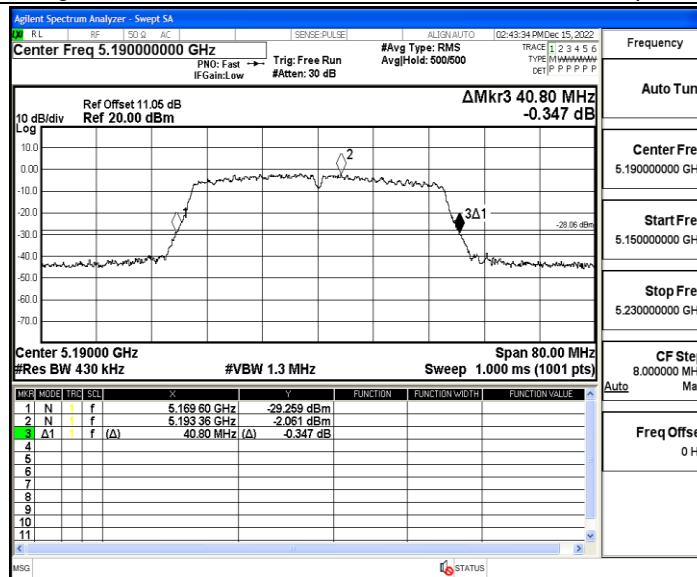
11N20MIMO_Ant1_5240



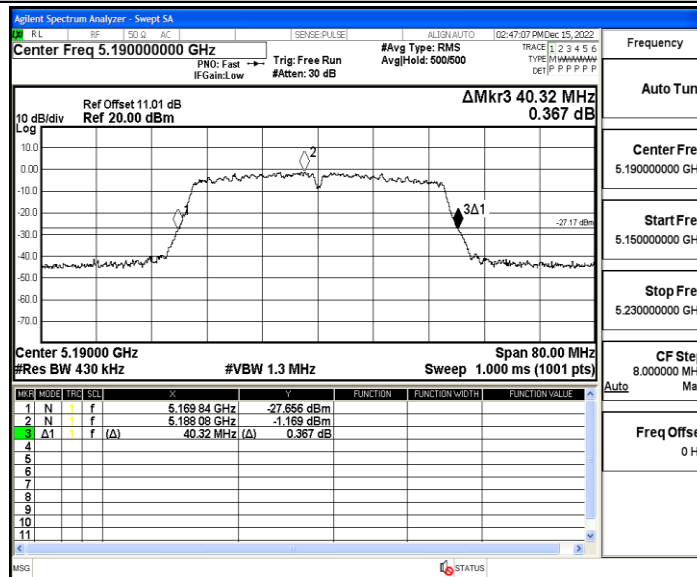
11N20MIMO_Ant2_5240



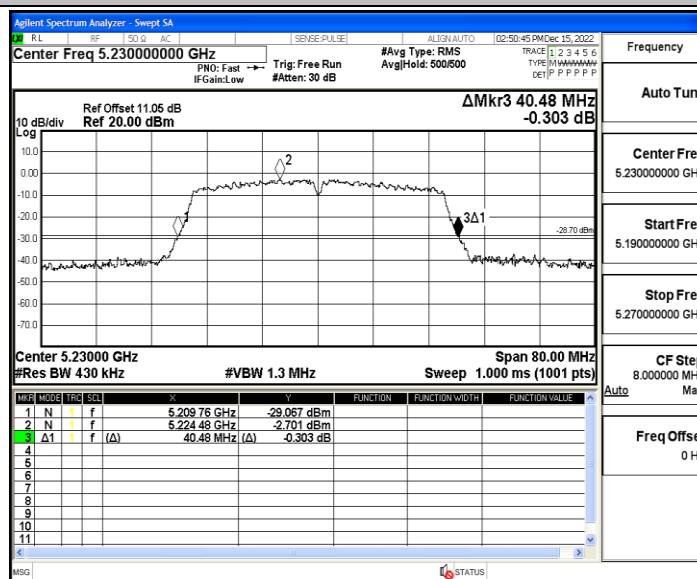
11N40MIMO_Ant1_5190



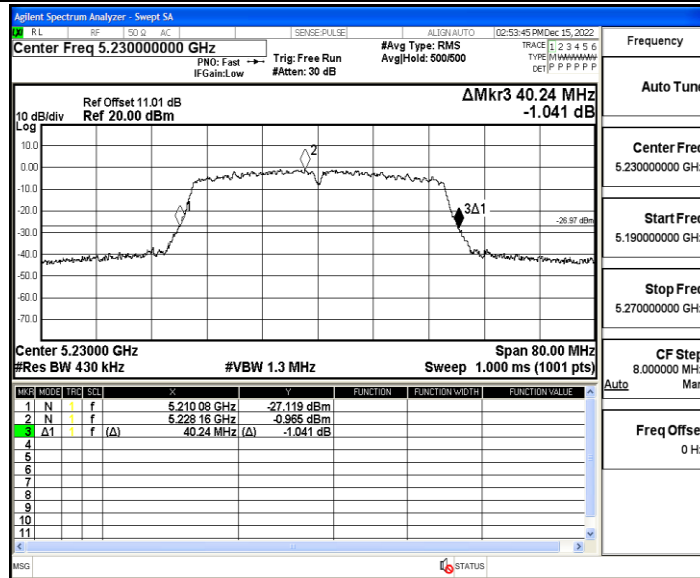
11N40MIMO_Ant2_5190



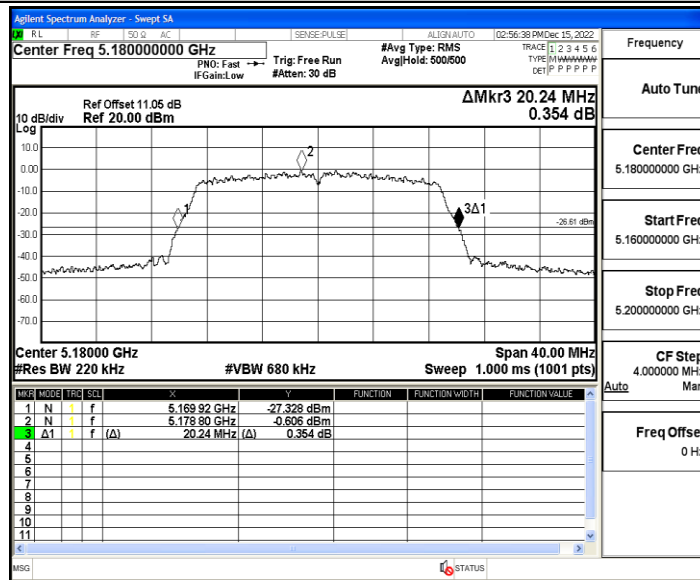
11N40MIMO_Ant1_5230



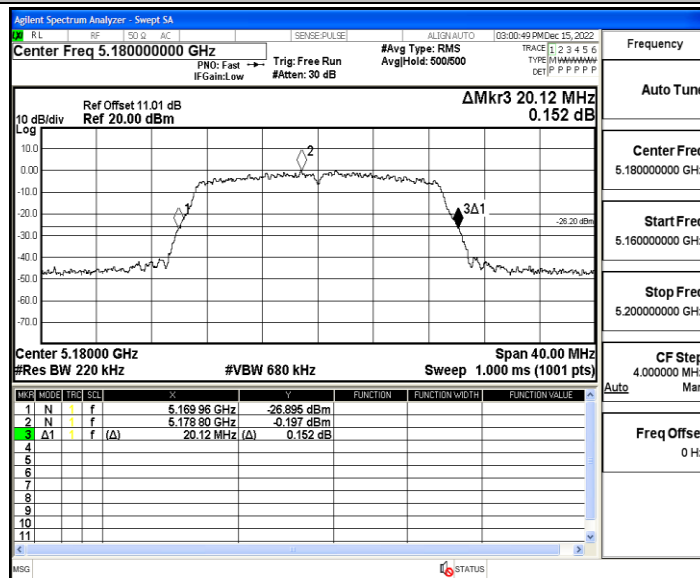
11N40MIMO_Ant2_5230



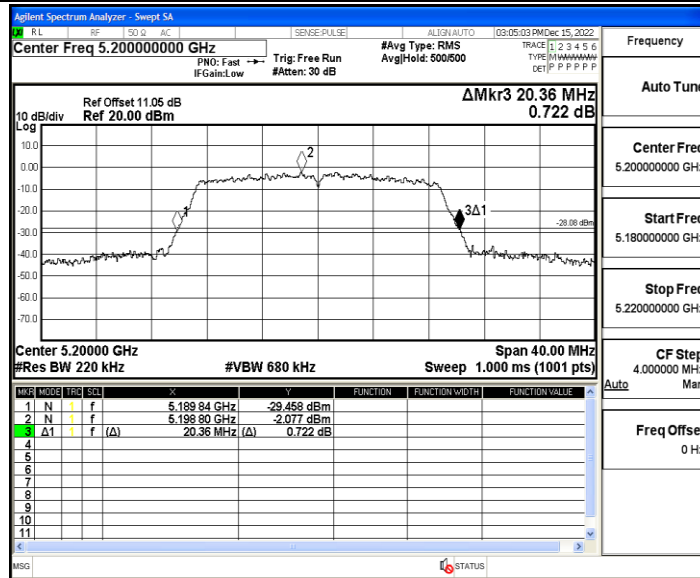
11AC20MIMO_Ant1_5180



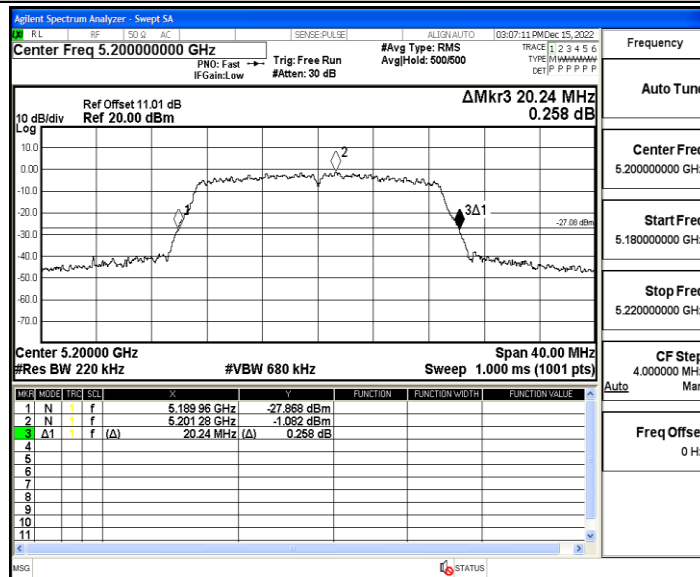
11AC20MIMO_Ant2_5180



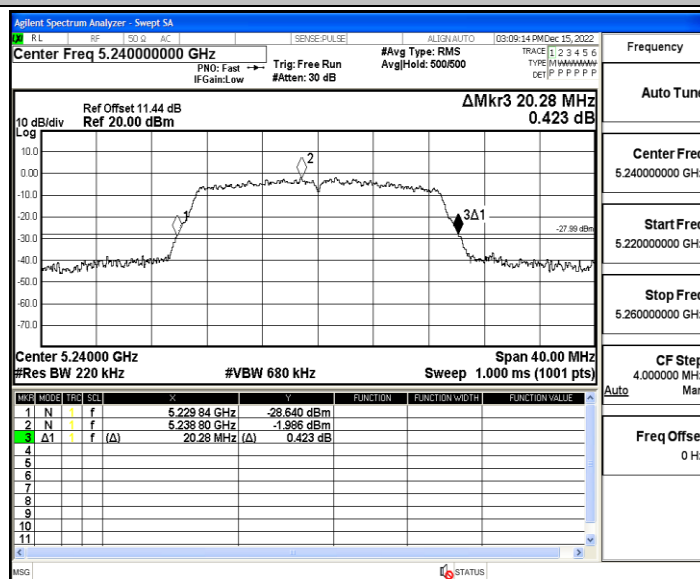
11AC20MIMO_Ant1_5200



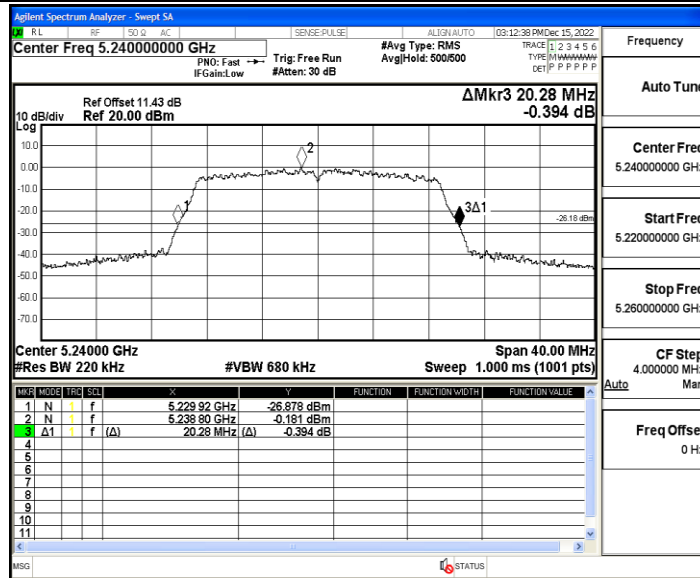
11AC20MIMO_Ant2_5200



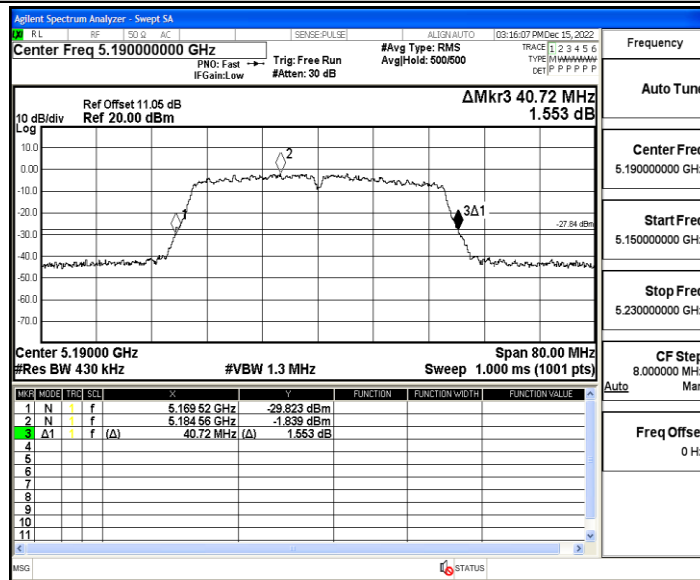
11AC20MIMO_Ant1_5240



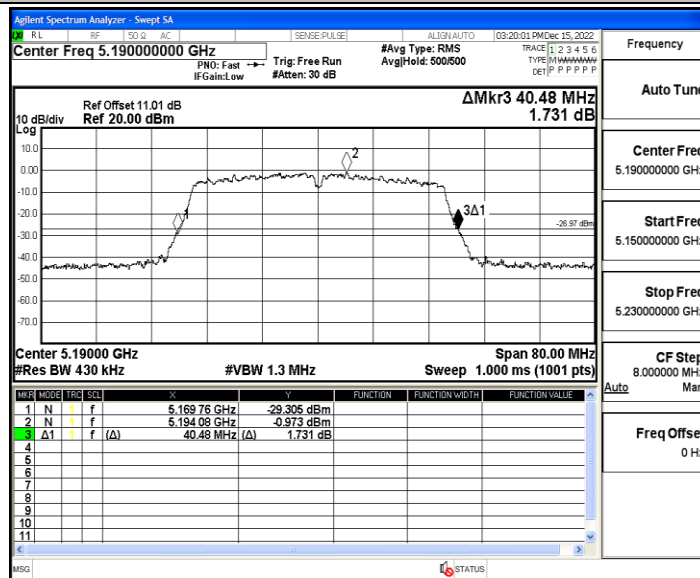
11AC20MIMO_Ant2_5240



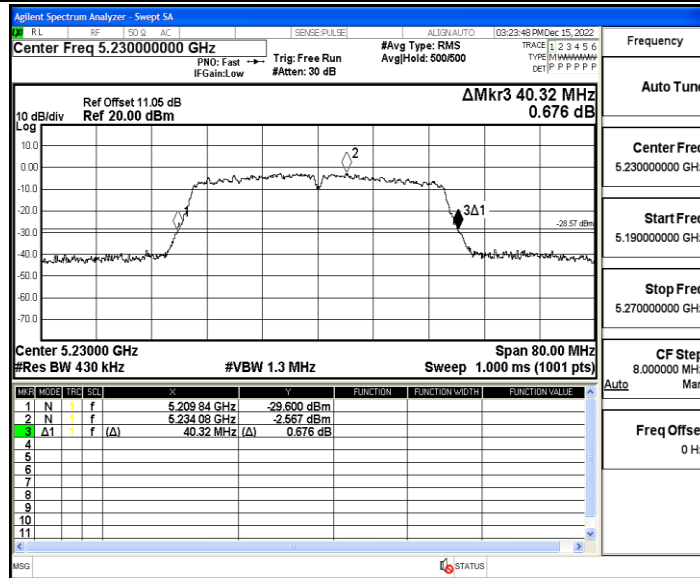
11AC40MIMO_Ant1_5190



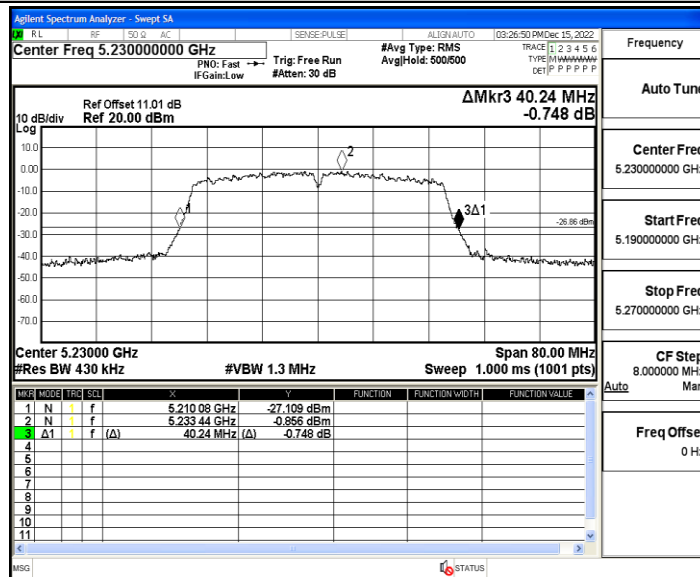
11AC40MIMO_Ant2_5190



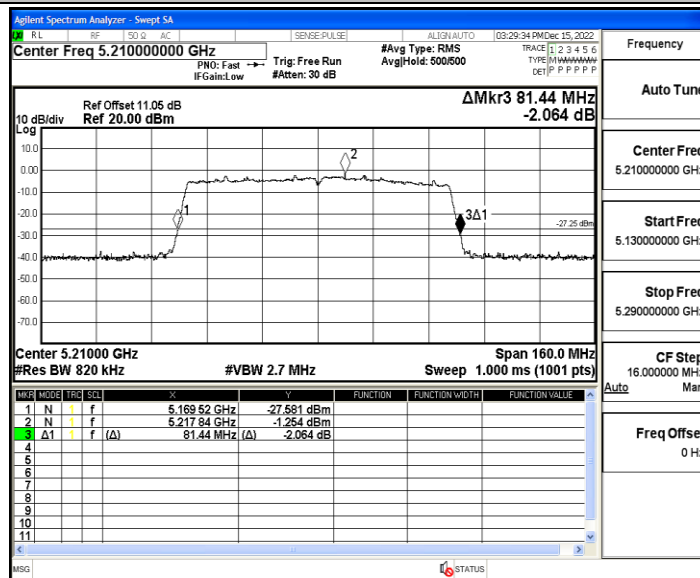
11AC40MIMO_Ant1_5230



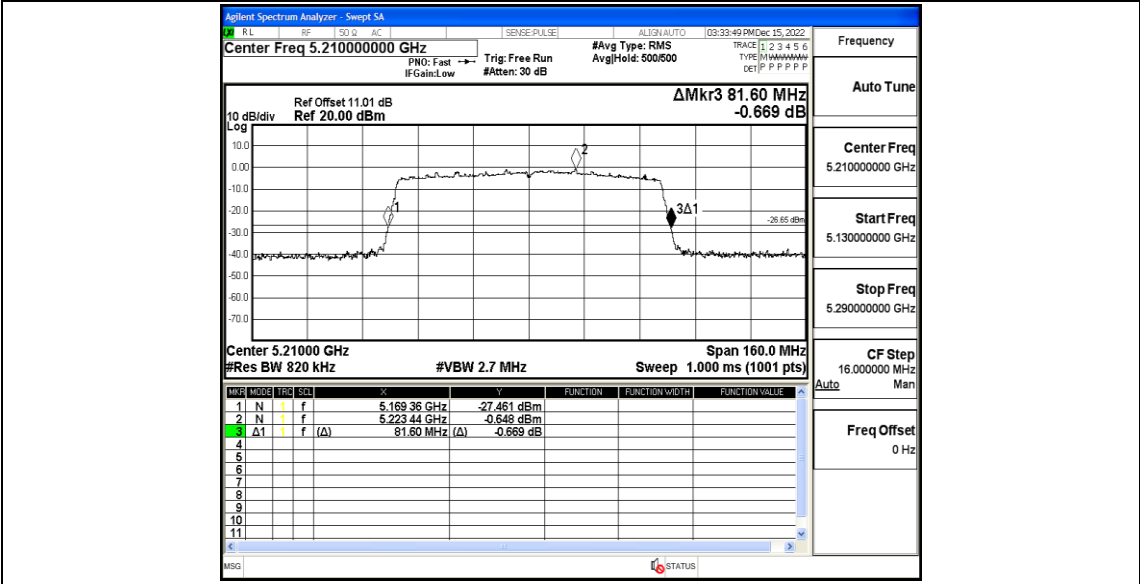
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



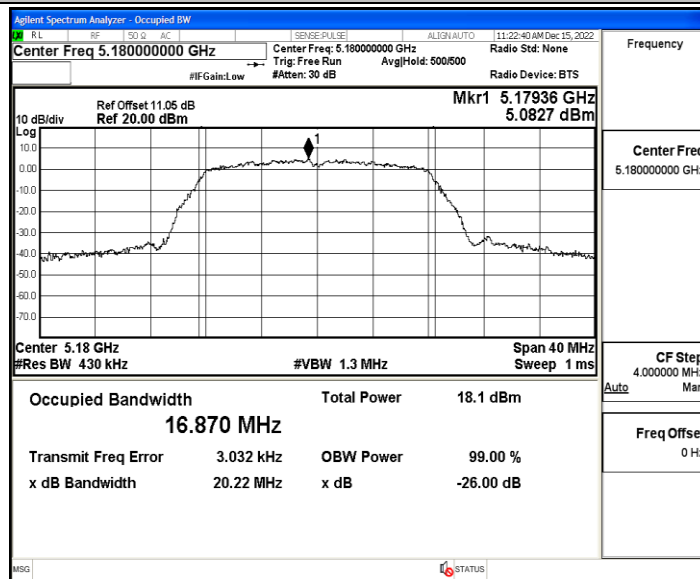
Appendix A2: Occupied channel bandwidth

Test Result

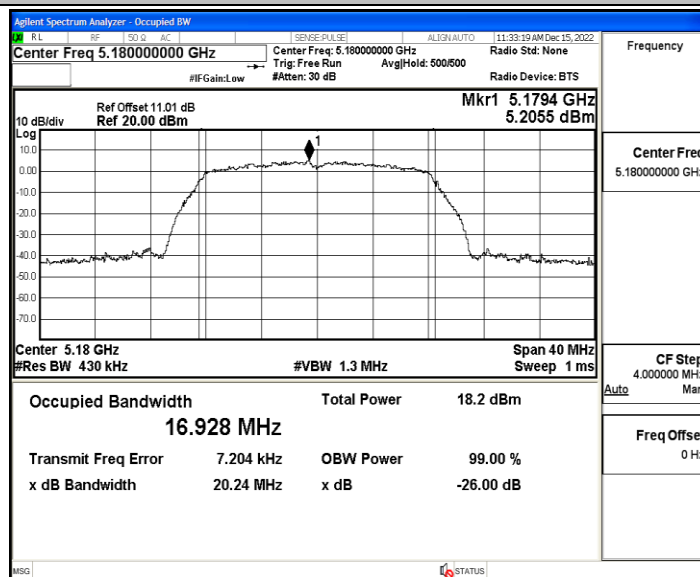
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.870	5171.5680	5188.4380	---	---
	Ant2	5180	16.928	5171.5432	5188.4712	---	---
	Ant1	5200	17.311	5191.3228	5208.6338	---	---
	Ant2	5200	17.000	5191.5035	5208.5035	---	---
	Ant1	5240	17.234	5231.3399	5248.5739	---	---
	Ant2	5240	16.989	5231.4800	5248.4690	---	---
11N20MIMO	Ant1	5180	17.796	5171.1127	5188.9087	---	---
	Ant2	5180	17.777	5171.1296	5188.9066	---	---
	Ant1	5200	17.901	5191.0516	5208.9526	---	---
	Ant2	5200	17.830	5191.1115	5208.9415	---	---
	Ant1	5240	17.862	5231.0826	5248.9446	---	---
	Ant2	5240	17.811	5231.0928	5248.9038	---	---
11N40MIMO	Ant1	5190	36.152	5171.9127	5208.0647	---	---
	Ant2	5190	36.120	5171.9857	5208.1057	---	---
	Ant1	5230	36.077	5211.9920	5248.0690	---	---
	Ant2	5230	36.068	5212.0284	5248.0964	---	---
11AC20MIMO	Ant1	5180	17.793	5171.1182	5188.9112	---	---
	Ant2	5180	17.742	5171.1592	5188.9012	---	---
	Ant1	5200	17.899	5191.0573	5208.9563	---	---
	Ant2	5200	17.841	5191.0931	5208.9341	---	---
	Ant1	5240	17.863	5231.0803	5248.9433	---	---
	Ant2	5240	17.804	5231.0970	5248.9010	---	---
11AC40MIMO	Ant1	5190	36.168	5171.8823	5208.0503	---	---
	Ant2	5190	36.125	5171.9944	5208.1194	---	---
	Ant1	5230	36.032	5212.0260	5248.0580	---	---
	Ant2	5230	36.010	5212.0729	5248.0829	---	---
11AC80MIMO	Ant1	5210	75.713	5172.1215	5247.8345	---	---
	Ant2	5210	75.531	5172.3019	5247.8329	---	---

Test Graphs

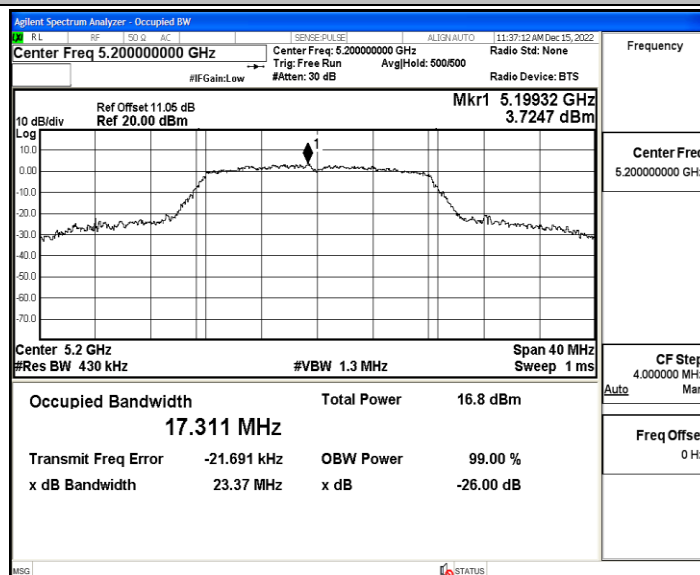
11A_Ant1_5180



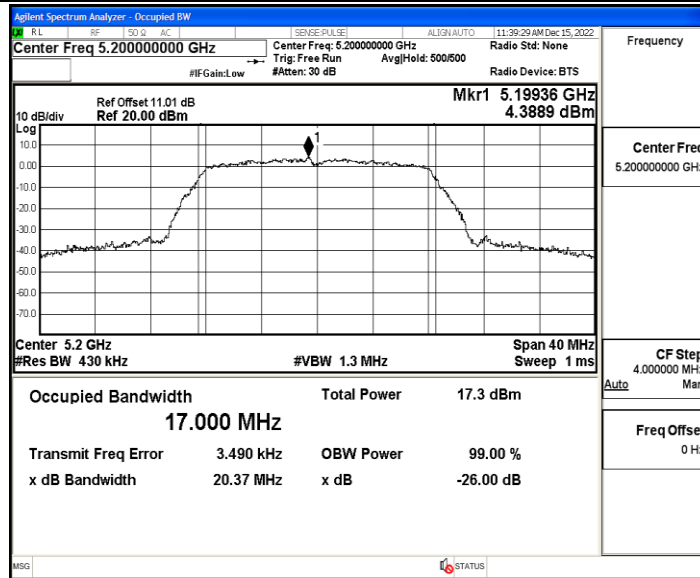
11A_Ant2_5180



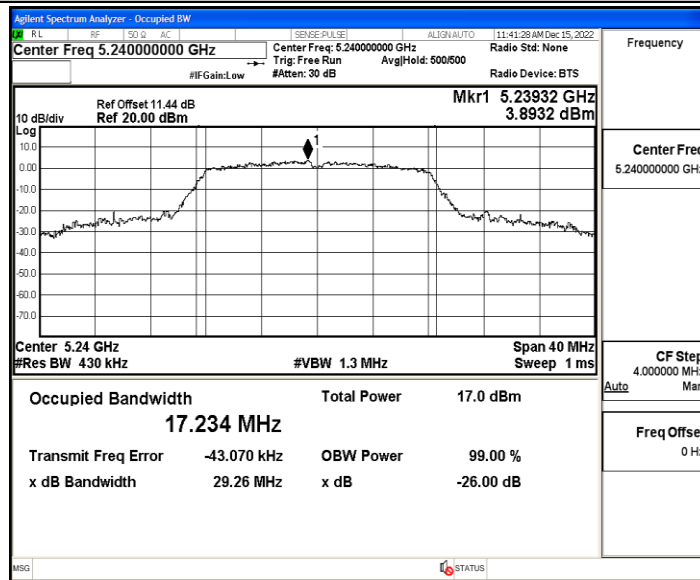
11A_Ant1_5200



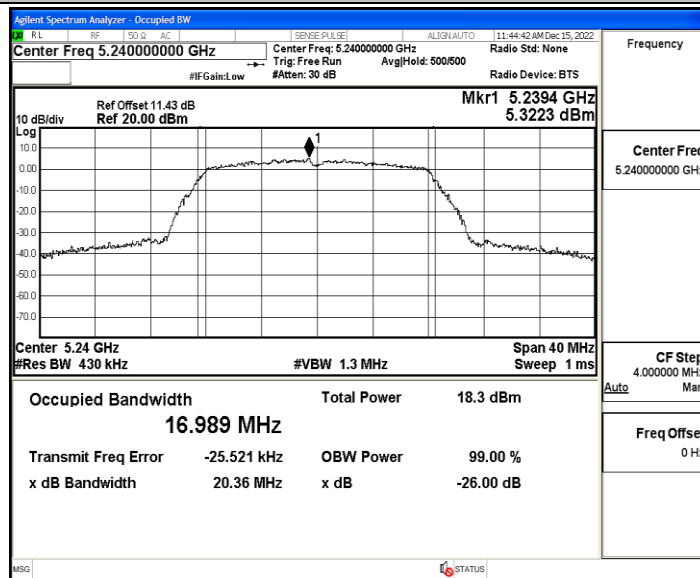
11A_Ant2_5200



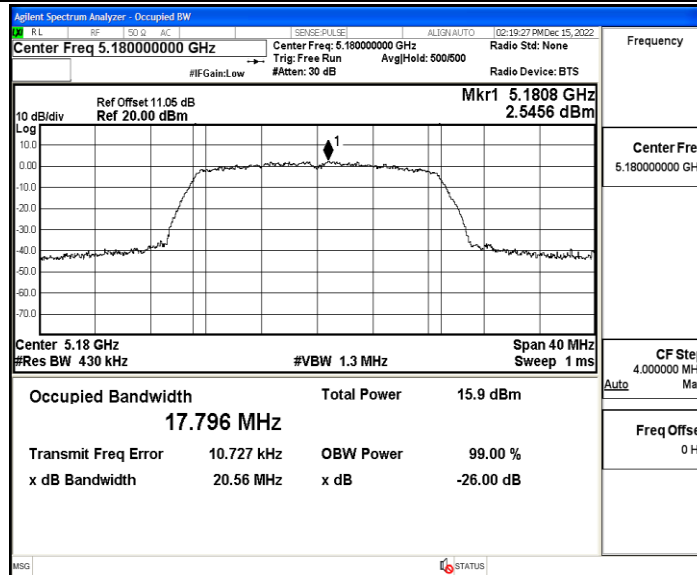
11A_Ant1_5240



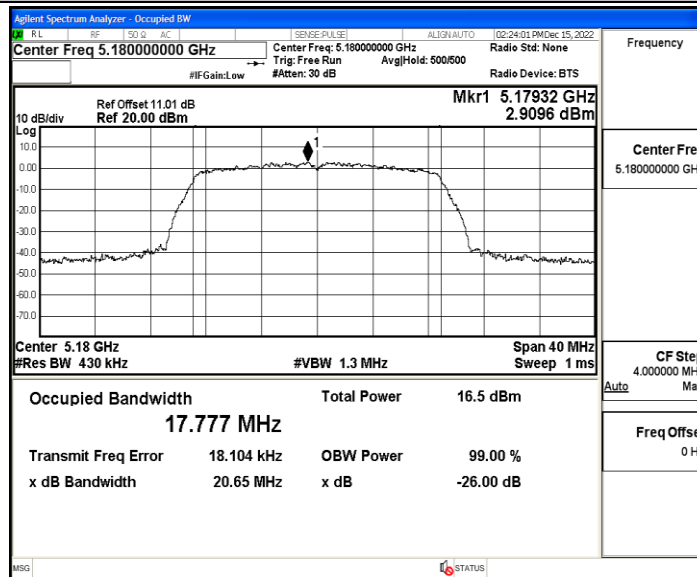
11A_Ant2_5240



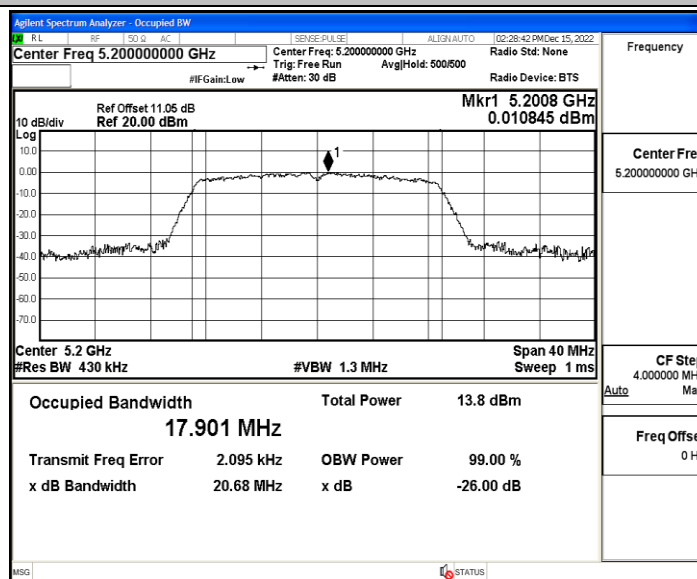
11N20MIMO_Ant1_5180



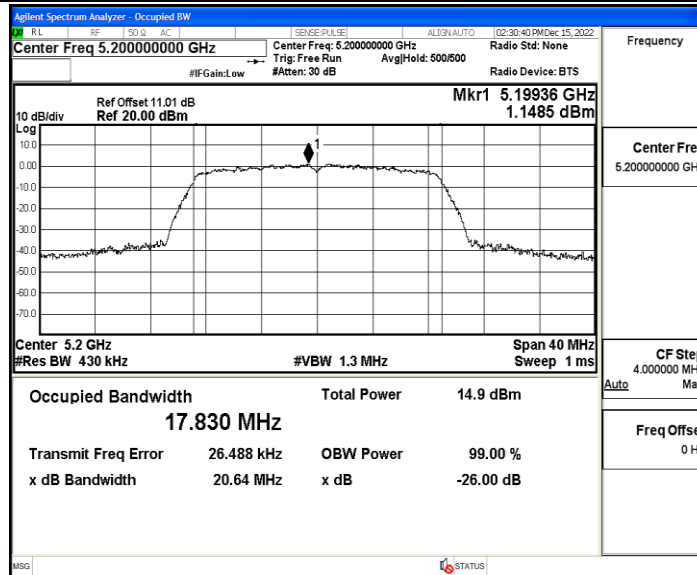
11N20MIMO_Ant2_5180



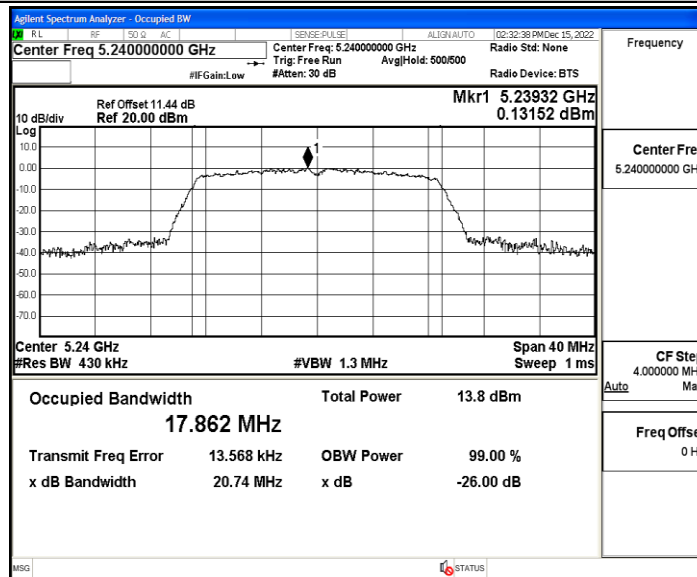
11N20MIMO_Ant1_5200



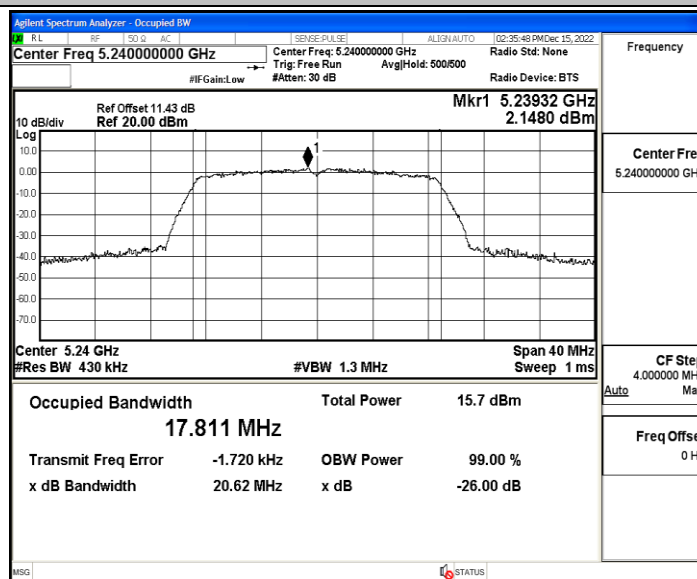
11N20MIMO_Ant2_5200



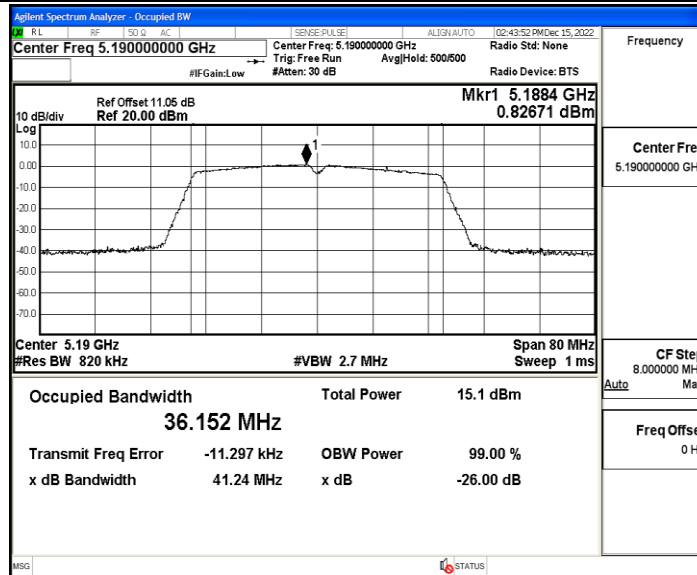
11N20MIMO_Ant1_5240



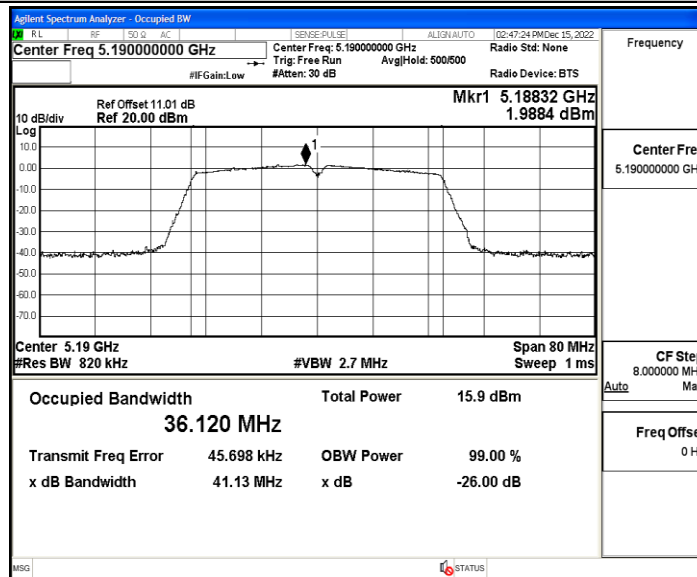
11N20MIMO_Ant2_5240



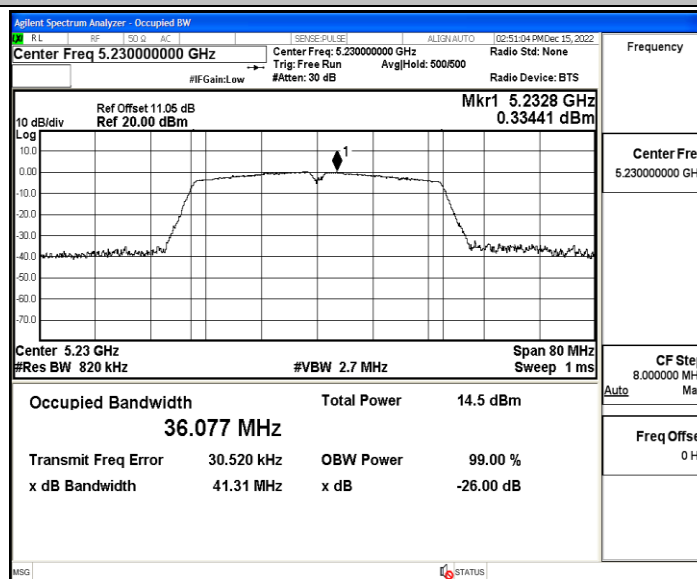
11N40MIMO_Ant1_5190



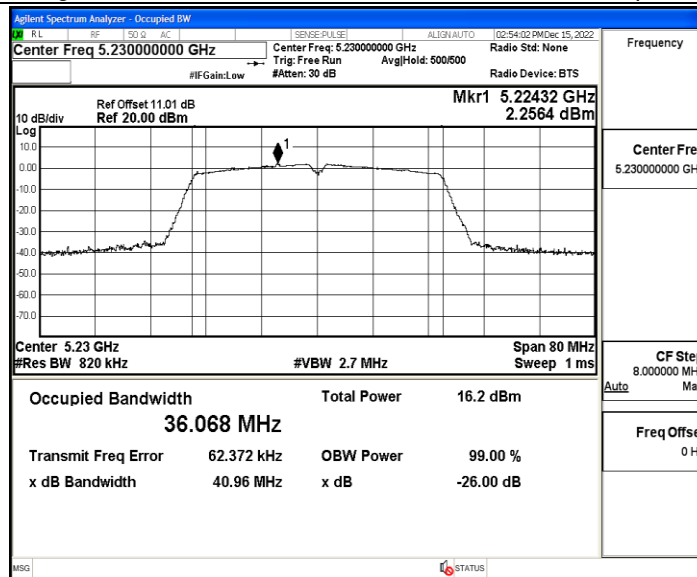
11N40MIMO_Ant2_5190



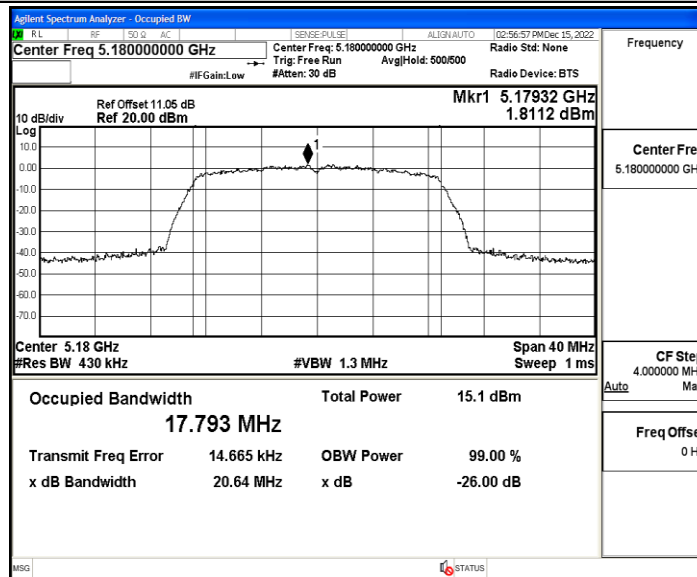
11N40MIMO_Ant1_5230



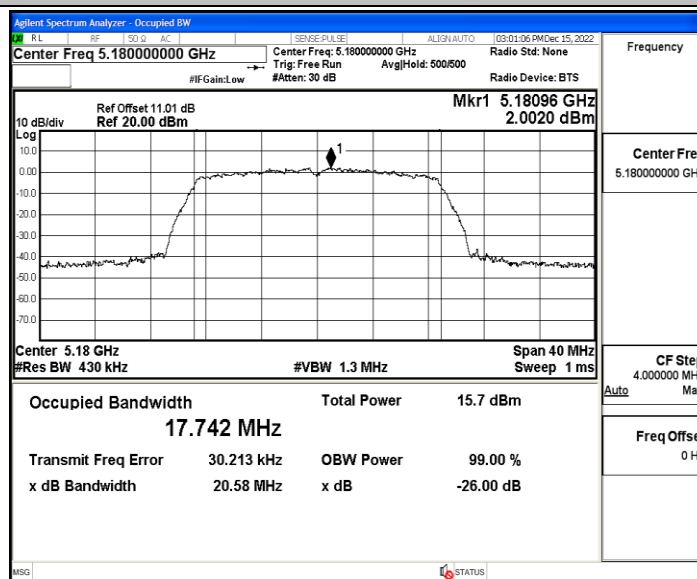
11N40MIMO_Ant2_5230



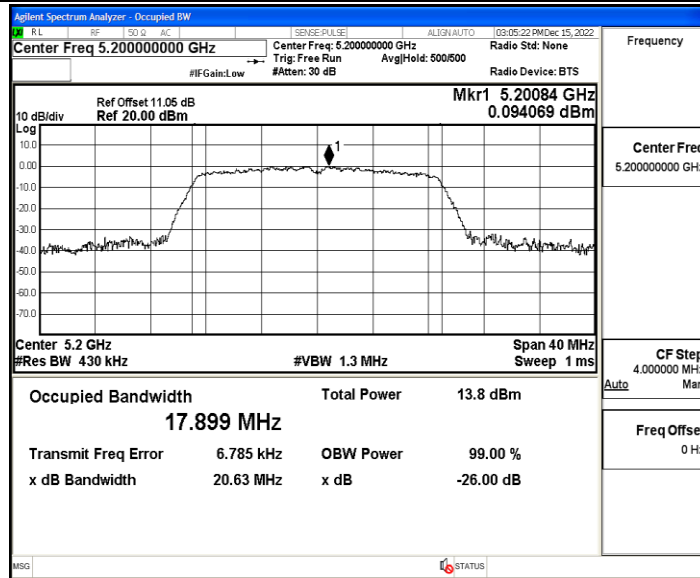
11AC20MIMO_Ant1_5180



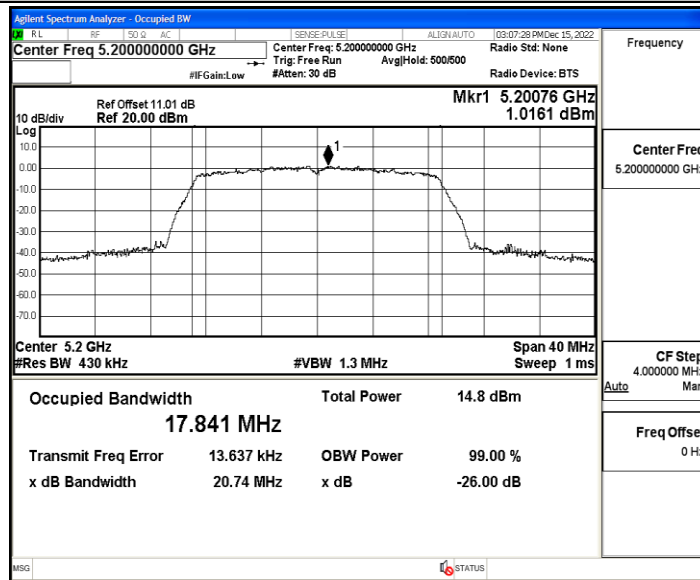
11AC20MIMO_Ant2_5180



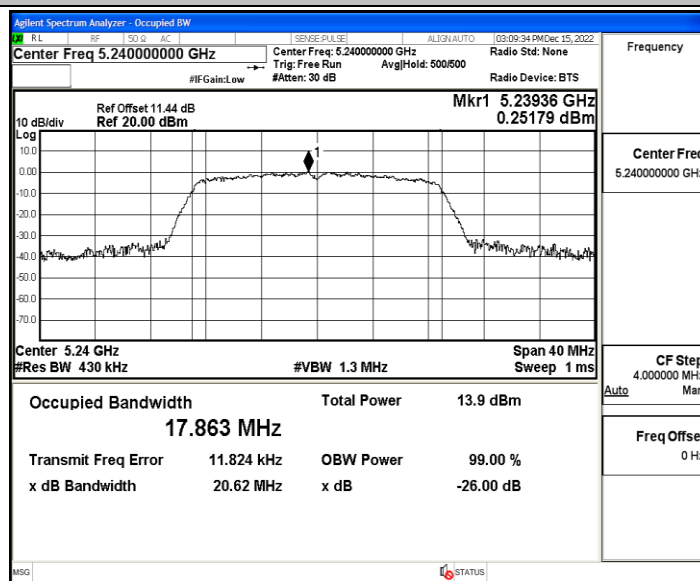
11AC20MIMO_Ant1_5200



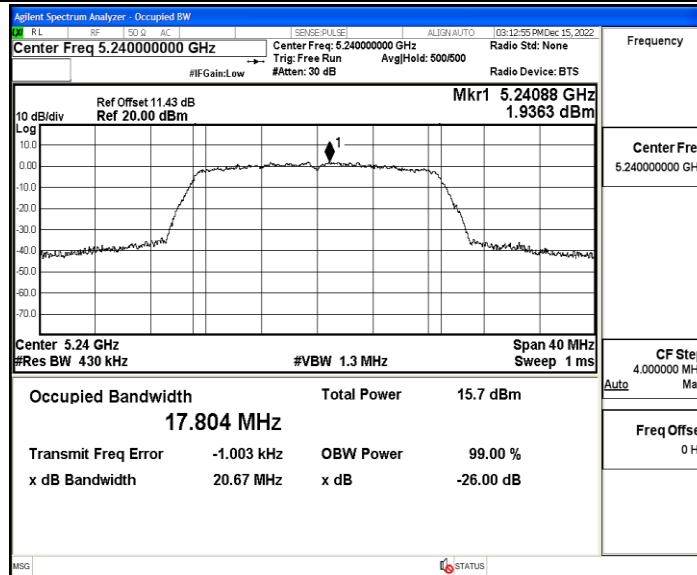
11AC20MIMO_Ant2_5200



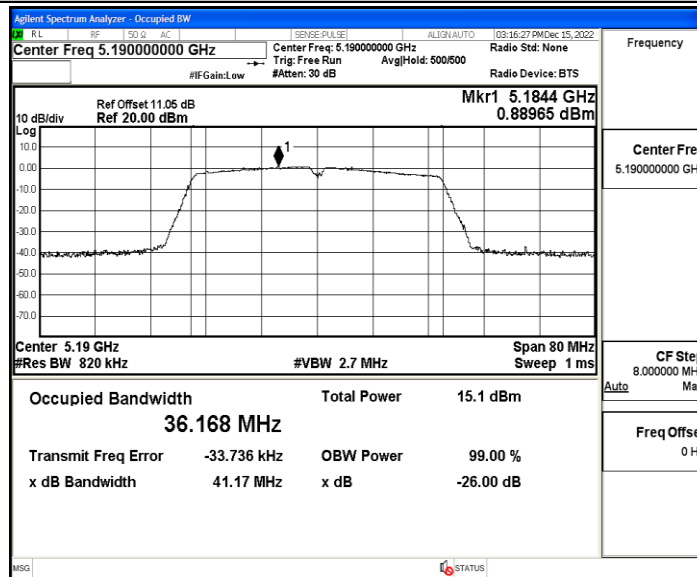
11AC20MIMO_Ant1_5240



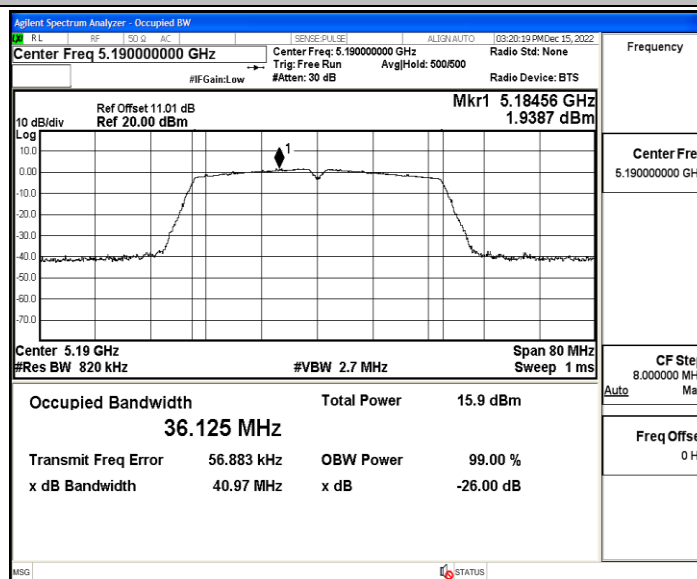
11AC20MIMO_Ant2_5240



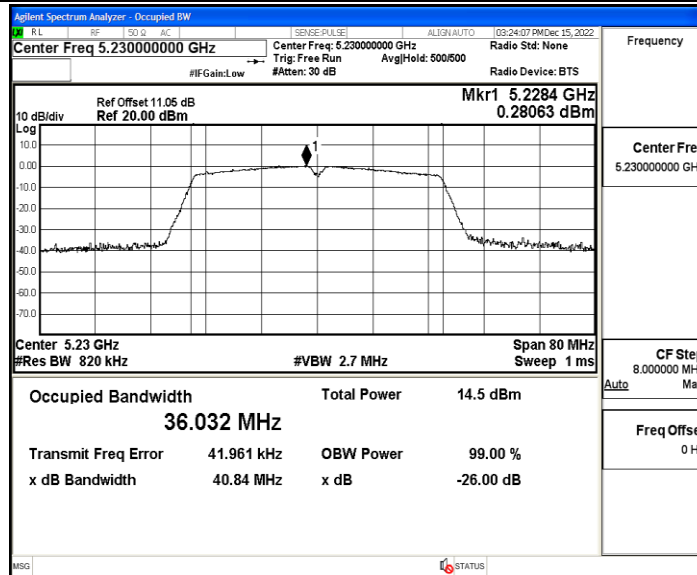
11AC40MIMO_Ant1_5190



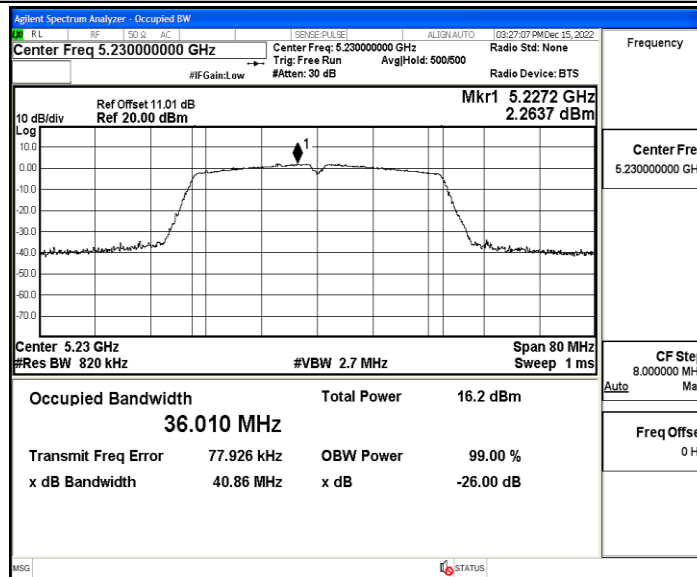
11AC40MIMO_Ant2_5190



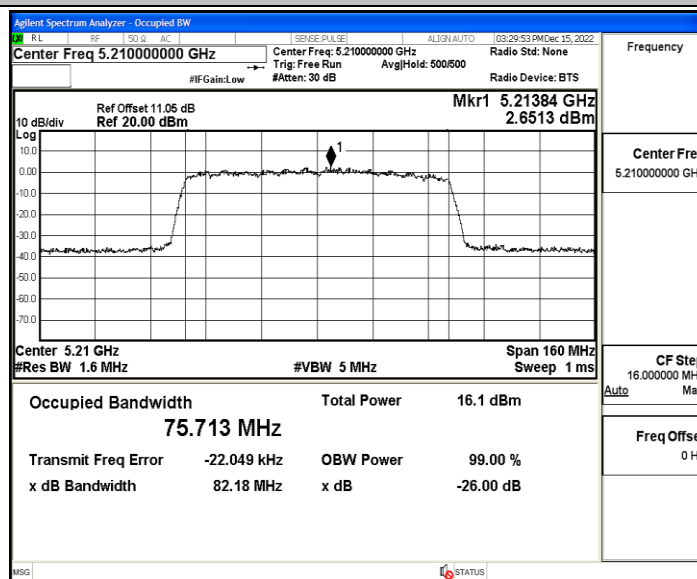
11AC40MIMO_Ant1_5230



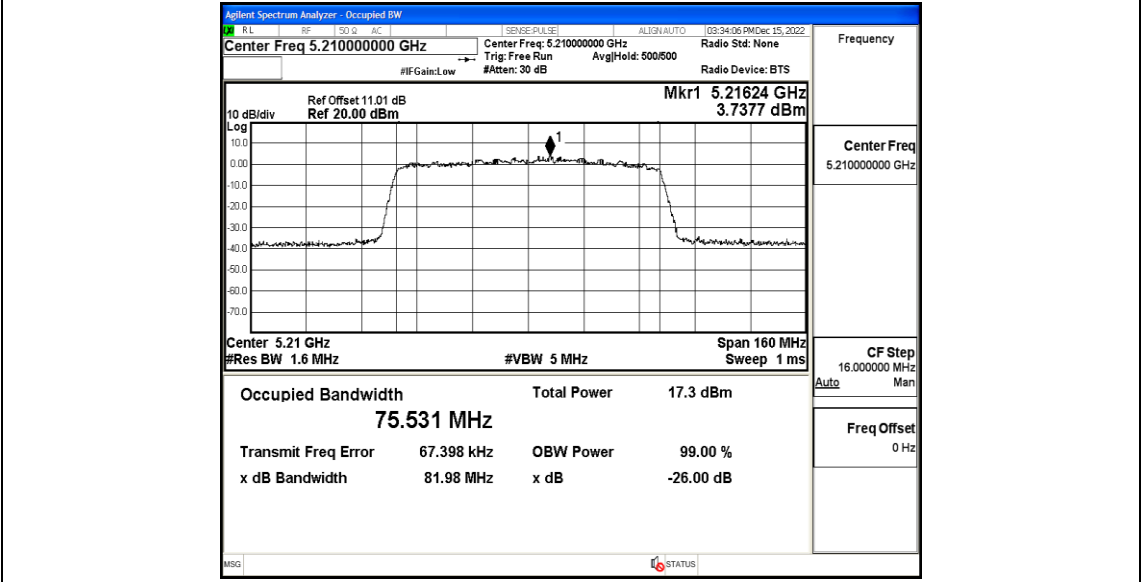
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	11.45	≤23.98	PASS
	Ant2	5180	11.56	≤23.98	PASS
	Ant1	5200	10.13	≤23.98	PASS
	Ant2	5200	10.56	≤23.98	PASS
	Ant1	5240	10.38	≤23.98	PASS
	Ant2	5240	11.57	≤23.98	PASS
11N20MIMO	Ant1	5180	9.18	≤23.98	PASS
	Ant2	5180	9.80	≤23.98	PASS
	total	5180	12.51	≤23.95	PASS
	Ant1	5200	7.02	≤23.98	PASS
	Ant2	5200	8.08	≤23.98	PASS
	total	5200	10.59	≤23.95	PASS
	Ant1	5240	7.15	≤23.98	PASS
	Ant2	5240	8.94	≤23.98	PASS
	total	5240	11.15	≤23.95	PASS
11N40MIMO	Ant1	5190	7.88	≤23.98	PASS
	Ant2	5190	8.73	≤23.98	PASS
	total	5190	11.34	≤23.95	PASS
	Ant1	5230	7.23	≤23.98	PASS
	Ant2	5230	9.00	≤23.98	PASS
	total	5230	11.21	≤23.95	PASS
11AC20MIMO	Ant1	5180	8.33	≤23.98	PASS
	Ant2	5180	9.00	≤23.98	PASS
	total	5180	11.69	≤23.95	PASS
	Ant1	5200	7.12	≤23.98	PASS
	Ant2	5200	8.06	≤23.98	PASS
	total	5200	10.63	≤23.95	PASS
	Ant1	5240	7.20	≤23.98	PASS
	Ant2	5240	8.94	≤23.98	PASS
	total	5240	11.17	≤23.95	PASS
11AC40MIMO	Ant1	5190	7.86	≤23.98	PASS
	Ant2	5190	8.69	≤23.98	PASS
	total	5190	11.31	≤23.95	PASS
	Ant1	5230	7.17	≤23.98	PASS
	Ant2	5230	9.12	≤23.98	PASS
	total	5230	11.26	≤23.95	PASS
11AC80MIMO	Ant1	5210	7.35	≤23.98	PASS
	Ant2	5210	8.59	≤23.98	PASS
	total	5210	11.02	≤23.95	PASS

Note: The Duty Cycle Factor is compensated in the test result.

Appendix C: Maximum power spectral density

Test Result

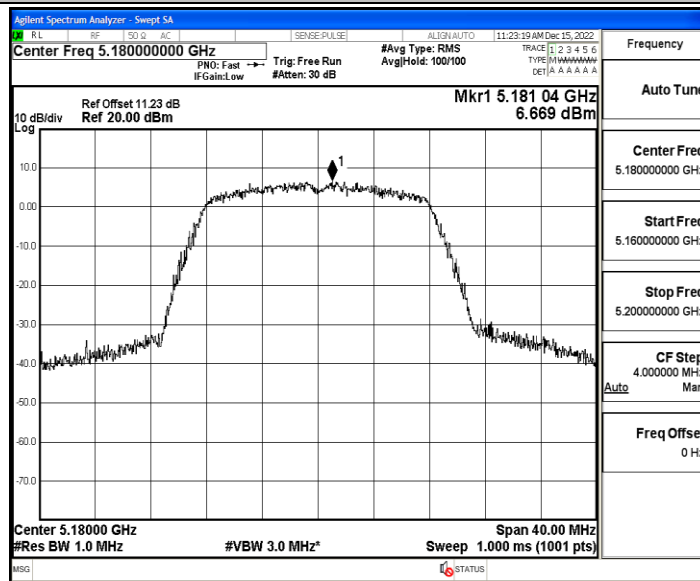
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.67	≤11.00	PASS
	Ant2	5180	6.88	≤11.00	PASS
	Ant1	5200	5.6	≤11.00	PASS
	Ant2	5200	5.86	≤11.00	PASS
	Ant1	5240	5.29	≤11.00	PASS
	Ant2	5240	6.49	≤11.00	PASS
11N20MIMO	Ant1	5180	4.23	≤11.00	PASS
	Ant2	5180	4.9	≤11.00	PASS
	total	5180	7.59	≤10.97	PASS
	Ant1	5200	1.9	≤11.00	PASS
	Ant2	5200	3.05	≤11.00	PASS
	total	5200	5.52	≤10.97	PASS
	Ant1	5240	1.97	≤11.00	PASS
	Ant2	5240	3.61	≤11.00	PASS
	total	5240	5.88	≤10.97	PASS
11N40MIMO	Ant1	5190	0.01	≤11.00	PASS
	Ant2	5190	0.91	≤11.00	PASS
	total	5190	3.49	≤10.97	PASS
	Ant1	5230	-0.55	≤11.00	PASS
	Ant2	5230	1.37	≤11.00	PASS
	total	5230	3.53	≤10.97	PASS
11AC20MIMO	Ant1	5180	3.48	≤11.00	PASS
	Ant2	5180	3.98	≤11.00	PASS
	total	5180	6.75	≤10.97	PASS
	Ant1	5200	1.85	≤11.00	PASS
	Ant2	5200	2.78	≤11.00	PASS
	total	5200	5.35	≤10.97	PASS
	Ant1	5240	2.48	≤11.00	PASS
	Ant2	5240	3.86	≤11.00	PASS
	total	5240	6.23	≤10.97	PASS
11AC40MIMO	Ant1	5190	-0.09	≤11.00	PASS
	Ant2	5190	0.66	≤11.00	PASS
	total	5190	3.31	≤10.97	PASS
	Ant1	5230	-0.61	≤11.00	PASS
	Ant2	5230	1.36	≤11.00	PASS
	total	5230	3.50	≤10.97	PASS
11AC80MIMO	Ant1	5210	-2.54	≤11.00	PASS
	Ant2	5210	-1.44	≤11.00	PASS
	total	5210	1.06	≤10.97	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

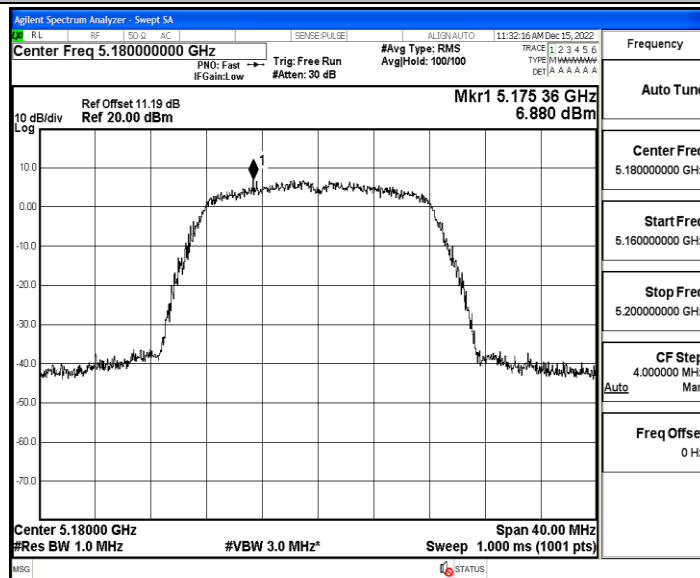
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

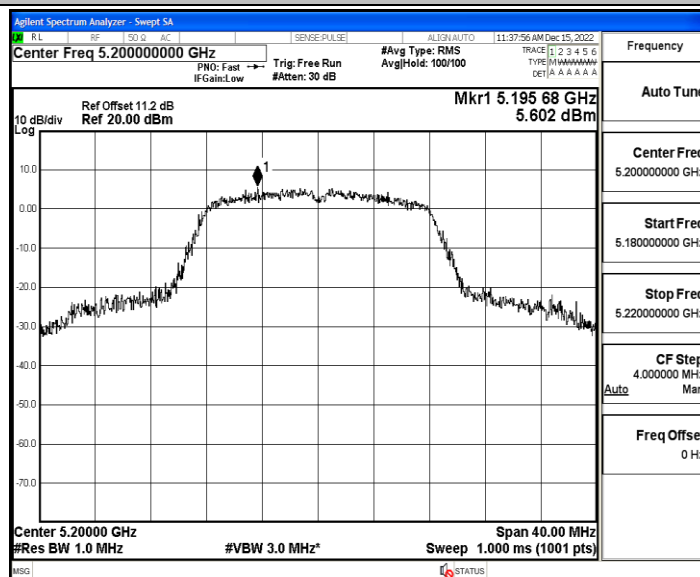
11A_Ant1_5180



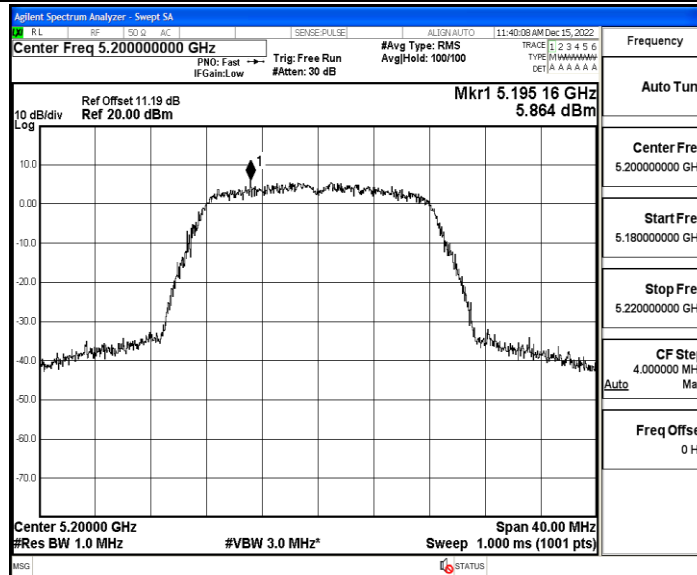
11A_Ant2_5180



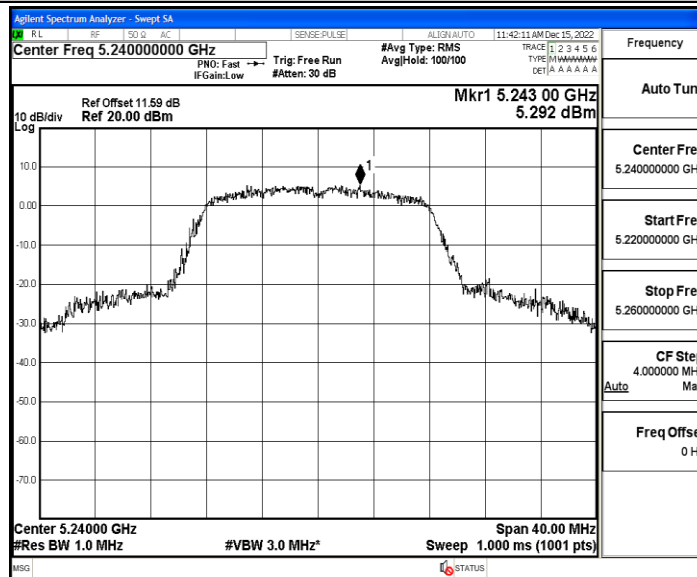
11A_Ant1_5200



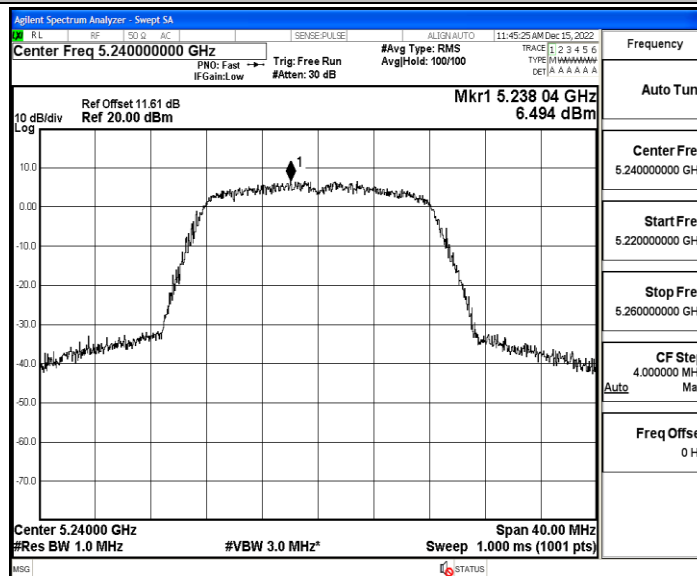
11A_Ant2_5200



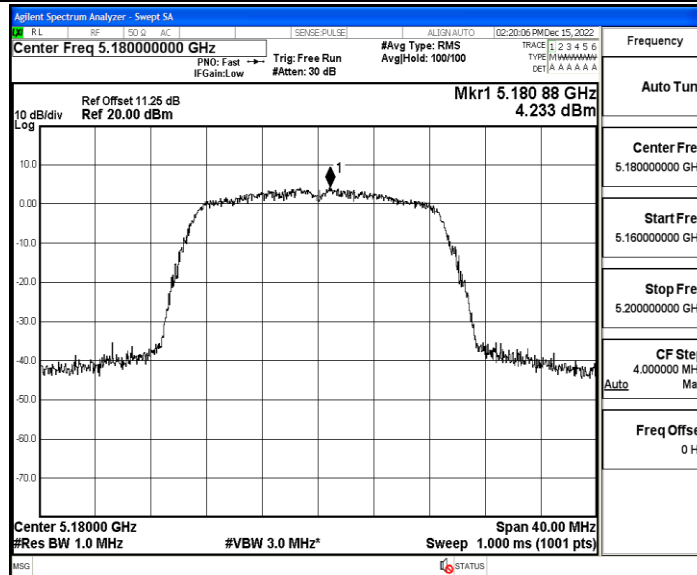
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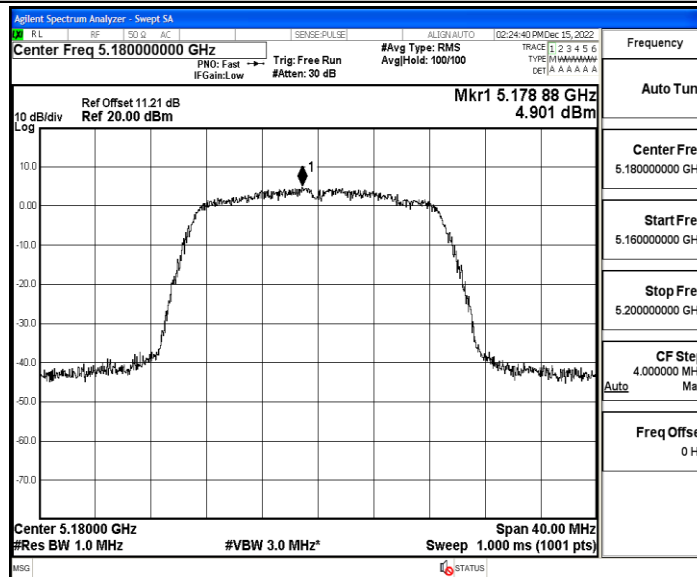
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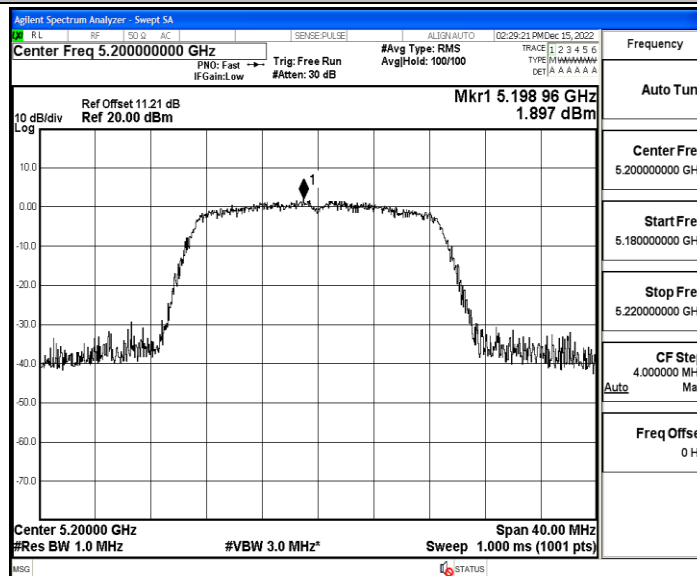
11N20MIMO_Ant1_5180



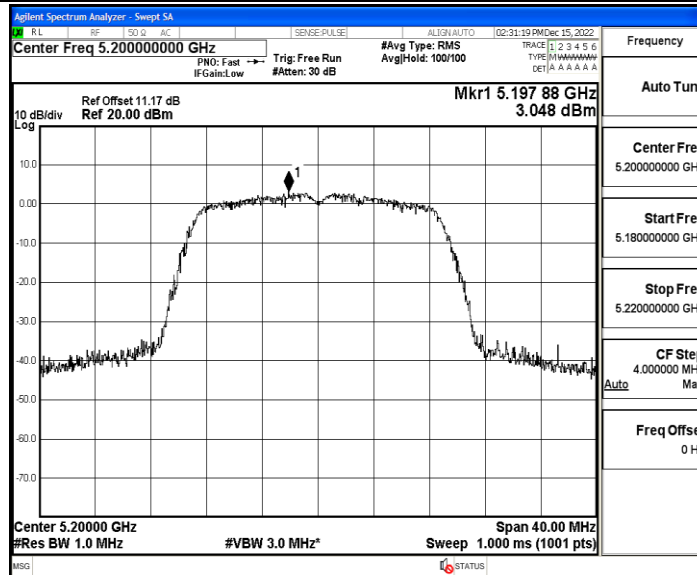
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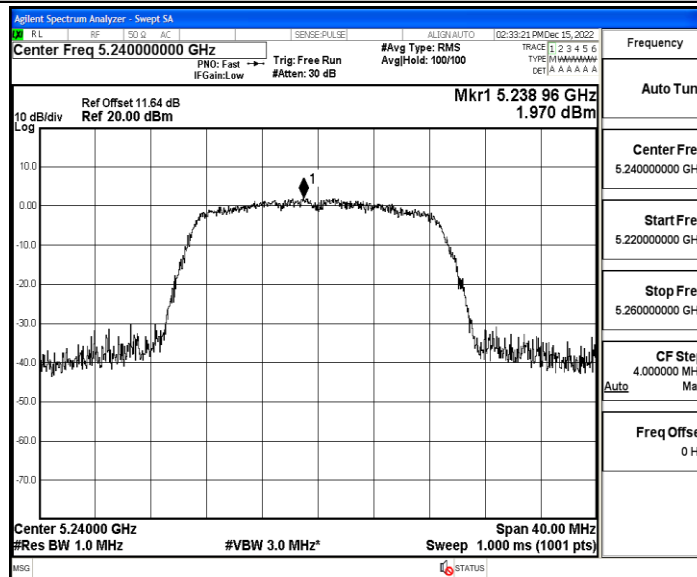
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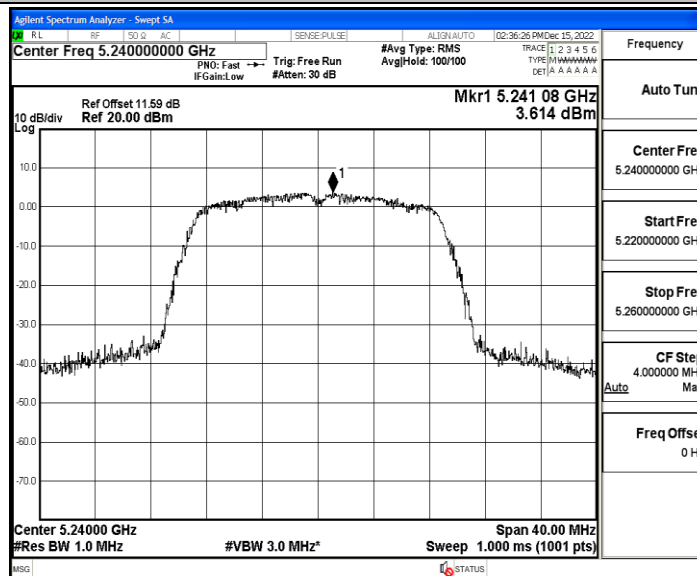
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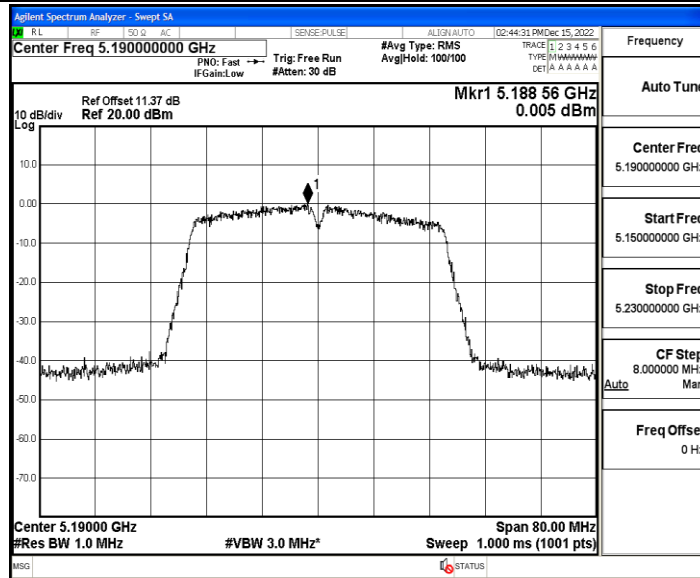
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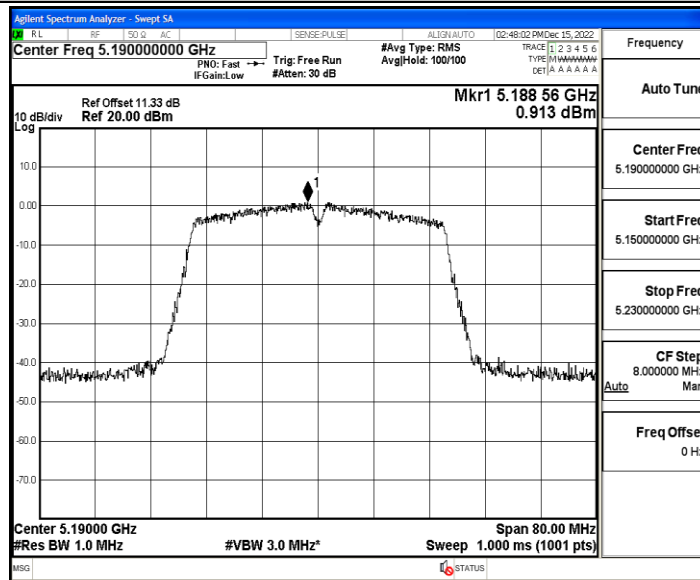
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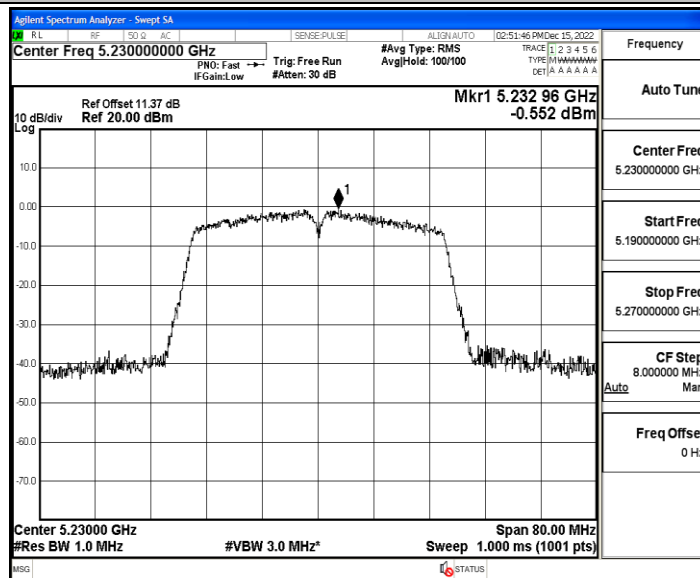
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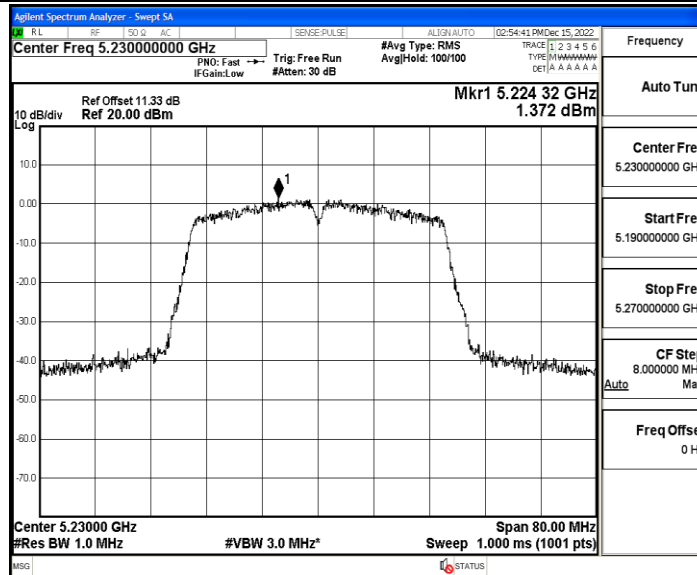
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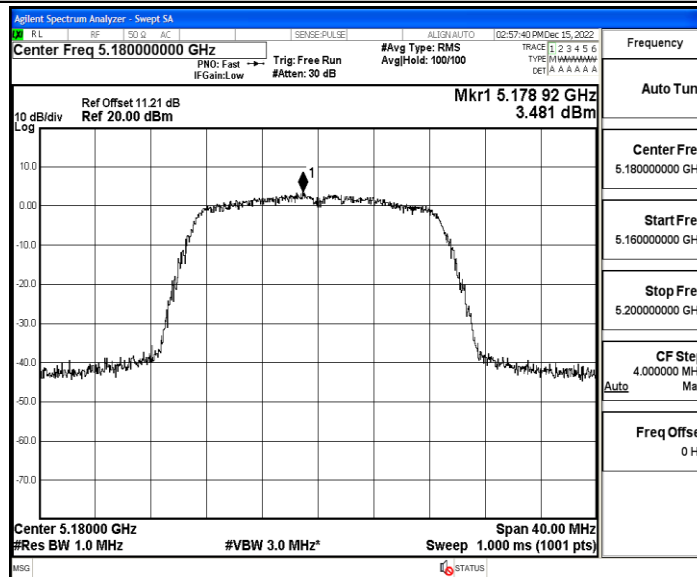
11N40MIMO_Ant1_5230



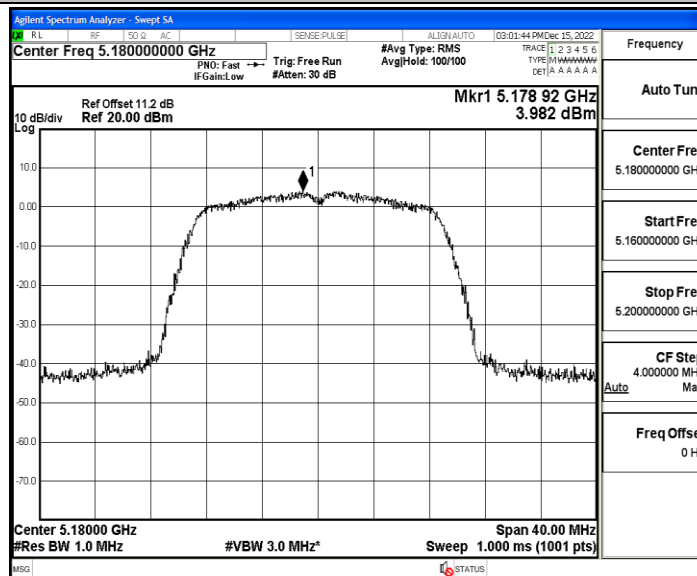
11N40MIMO_Ant2_5230



11AC20MIMO_Ant1_5180



11AC20MIMO_Ant2_5180



11AC20MIMO_Ant1_5200