

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

Product Name: NucBox5

Trade Mark: GMKtec

Test Model: KB5

FCC ID: 2AXUD-KB5

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

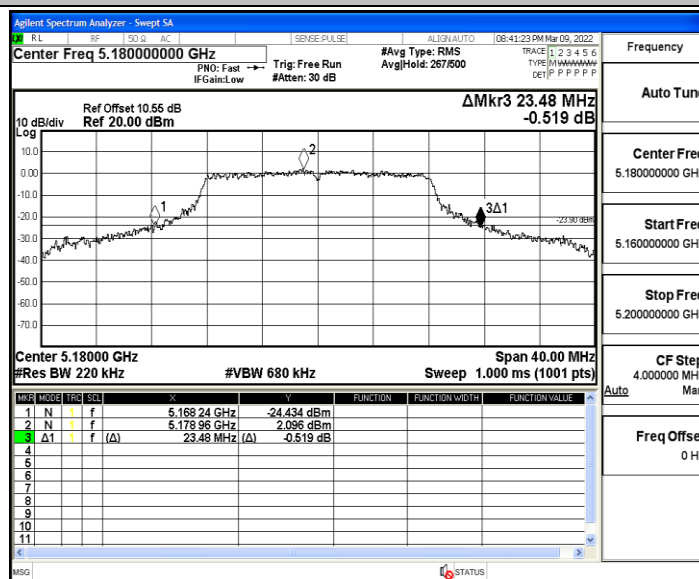
Appendix A1: Emission Bandwidth

Test Result

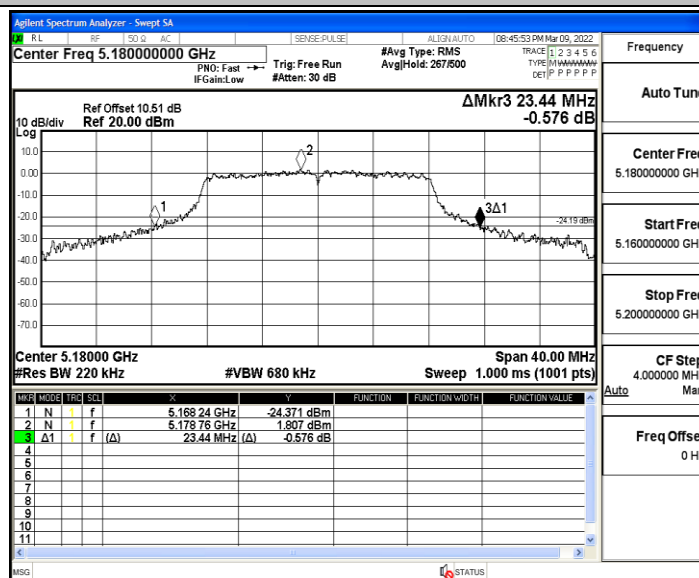
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.480	5168.240	5191.720	---	PASS
	Ant2	5180	23.440	5168.240	5191.680	---	PASS
	Ant1	5200	25.280	5187.040	5212.320	---	PASS
	Ant2	5200	24.800	5187.360	5212.160	---	PASS
	Ant1	5240	19.920	5229.960	5249.880	---	PASS
	Ant2	5240	19.600	5230.160	5249.760	---	PASS
11N20MIMO	Ant1	5180	25.320	5167.440	5192.760	---	PASS
	Ant2	5180	24.640	5167.520	5192.160	---	PASS
	Ant1	5200	25.400	5187.760	5213.160	---	PASS
	Ant2	5200	26.280	5186.640	5212.920	---	PASS
	Ant1	5240	20.320	5229.760	5250.080	---	PASS
	Ant2	5240	20.120	5229.920	5250.040	---	PASS
11N40MIMO	Ant1	5190	39.920	5170.240	5210.160	---	PASS
	Ant2	5190	39.680	5170.400	5210.080	---	PASS
	Ant1	5230	39.600	5210.240	5249.840	---	PASS
	Ant2	5230	39.600	5210.400	5250.000	---	PASS
11AC20MIMO	Ant1	5180	25.280	5167.640	5192.920	---	PASS
	Ant2	5180	24.680	5168.600	5193.280	---	PASS
	Ant1	5200	24.600	5187.840	5212.440	---	PASS
	Ant2	5200	24.240	5188.440	5212.680	---	PASS
	Ant1	5240	20.280	5229.840	5250.120	---	PASS
	Ant2	5240	20.120	5229.840	5249.960	---	PASS
11AC40MIMO	Ant1	5190	40.240	5170.080	5210.320	---	PASS
	Ant2	5190	39.040	5170.480	5209.520	---	PASS
	Ant1	5230	39.680	5210.240	5249.920	---	PASS
	Ant2	5230	39.200	5210.560	5249.760	---	PASS
11AC80MIMO	Ant1	5210	79.520	5170.480	5250.000	---	PASS
	Ant2	5210	79.520	5170.480	5250.000	---	PASS

Test Graphs

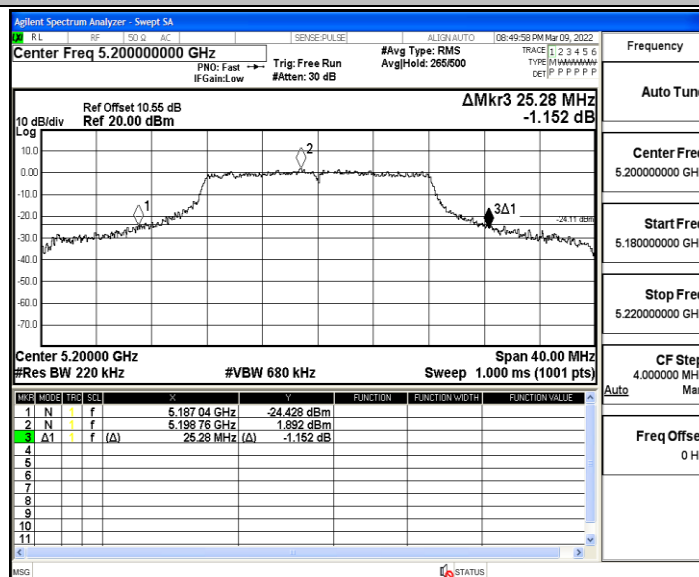
11A_Ant1_5180



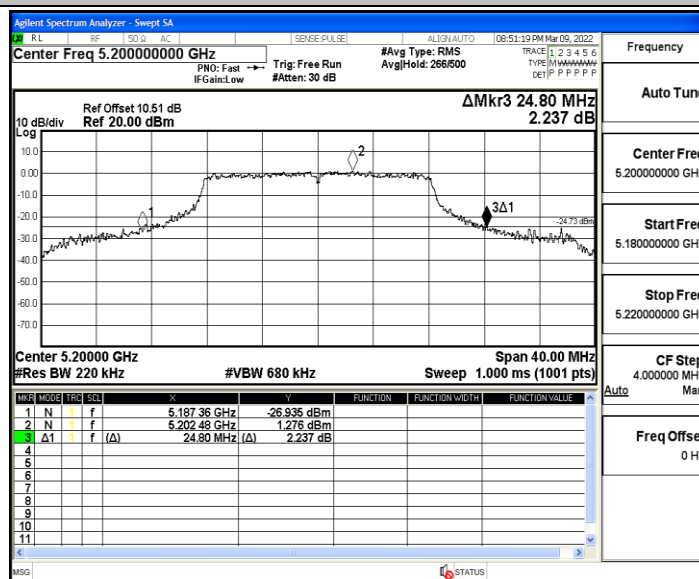
11A_Ant2_5180



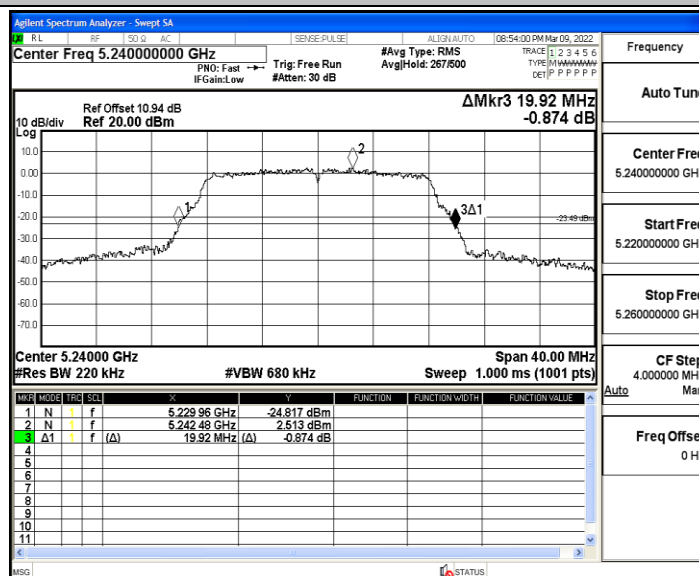
11A_Ant1_5200



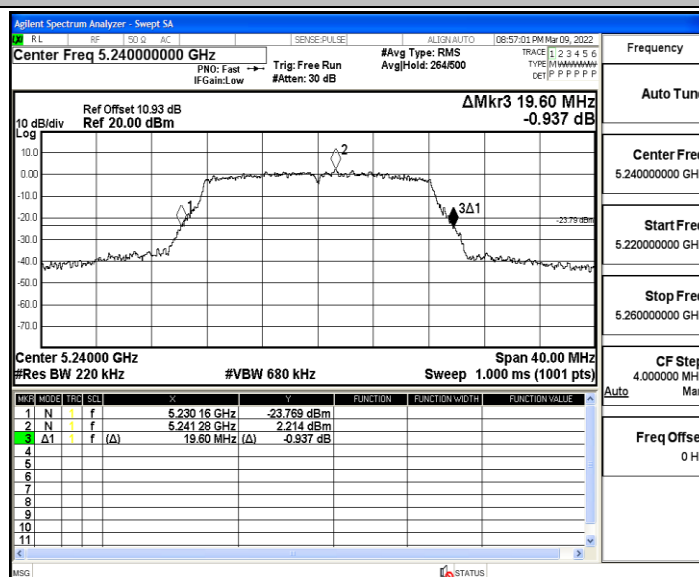
11A_Ant2_5200



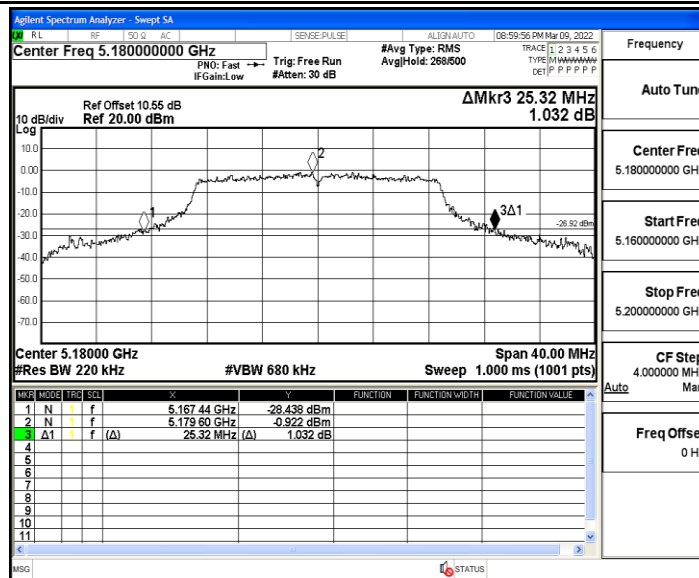
11A_Ant1_5240



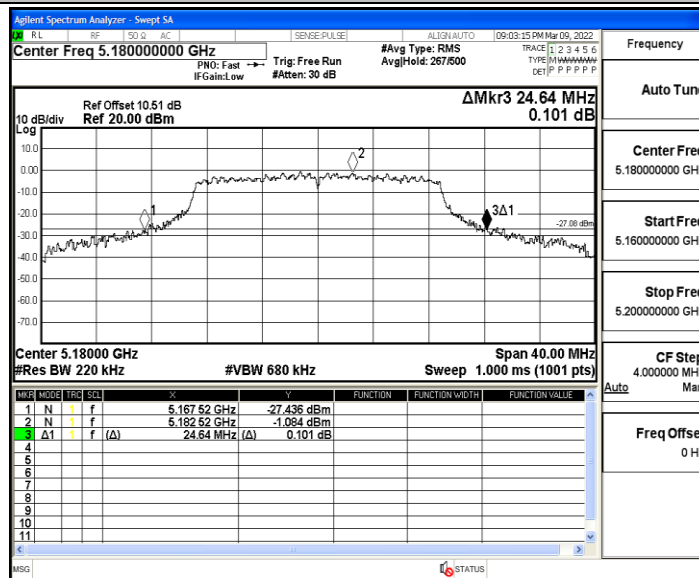
11A_Ant2_5240



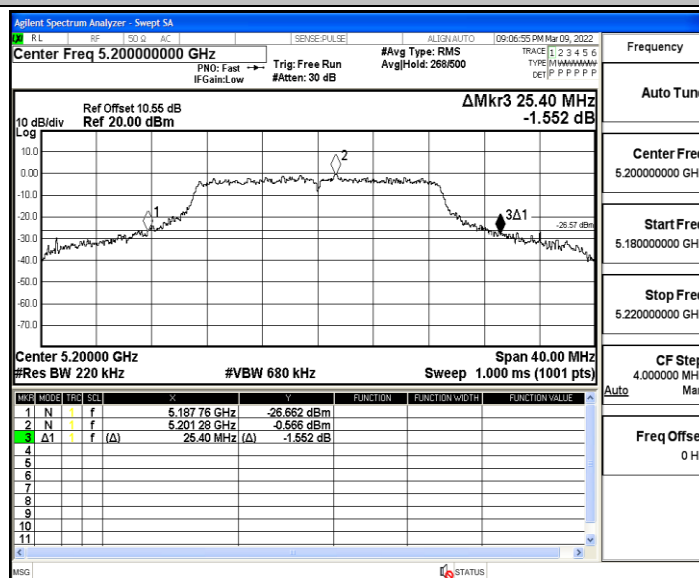
11N20MIMO_Ant1_5180



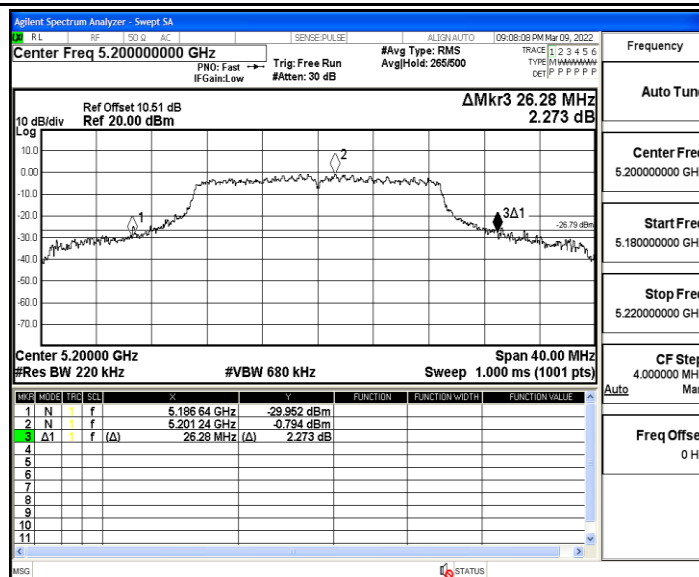
11N20MIMO_Ant2_5180



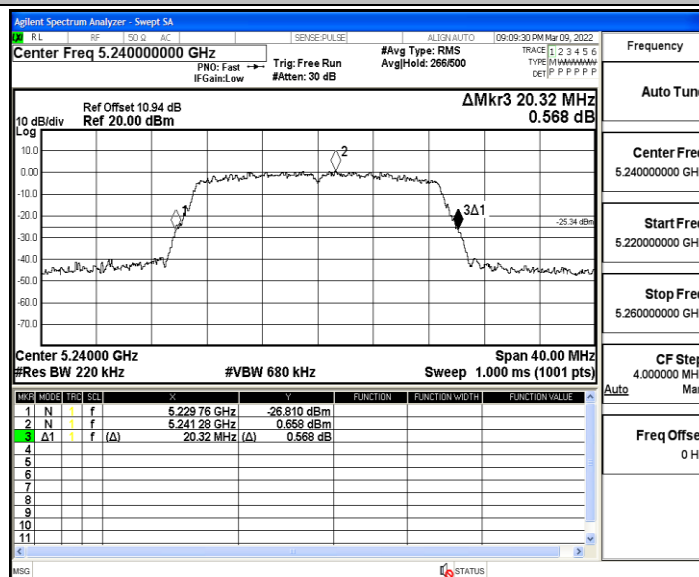
11N20MIMO_Ant1_5200



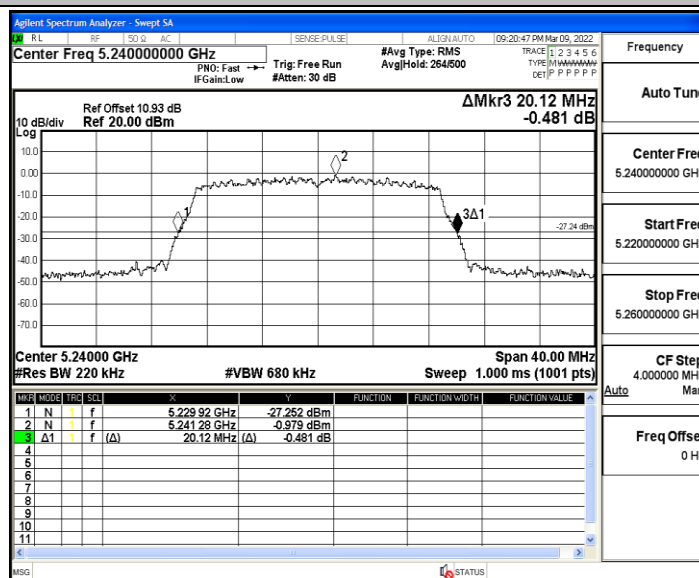
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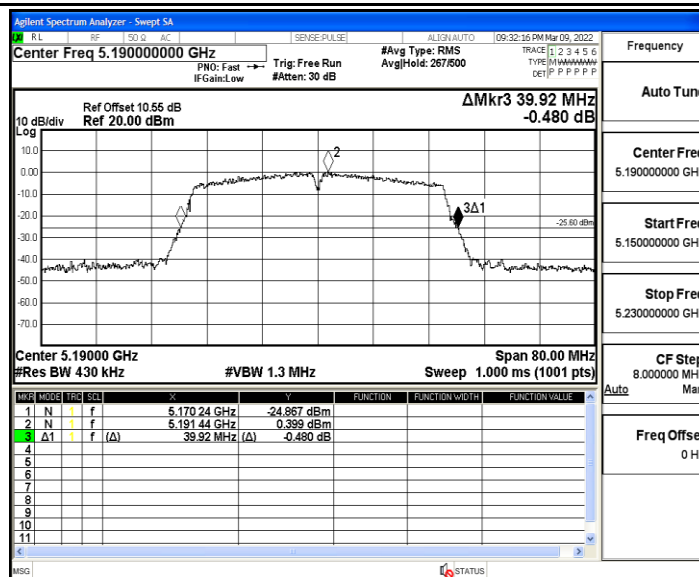
11N20MIMO_Ant1_5240



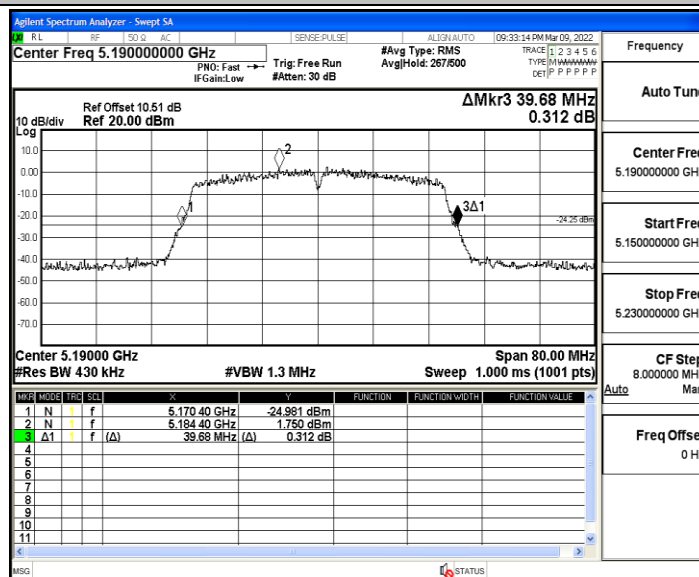
11N20MIMO_Ant2_5240



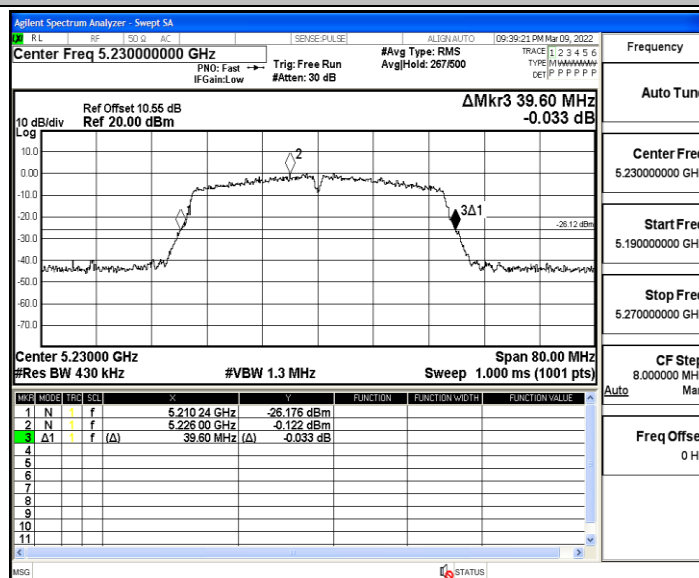
11N40MIMO_Ant1_5190



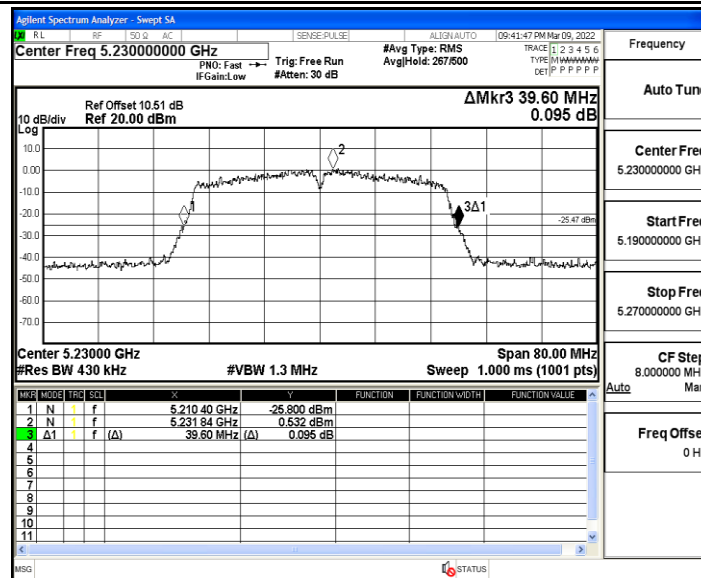
11N40MIMO_Ant2_5190



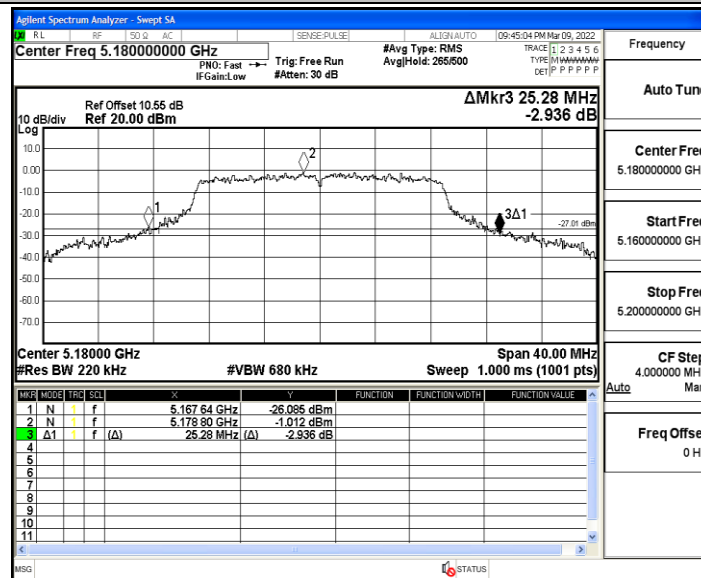
11N40MIMO_Ant1_5230



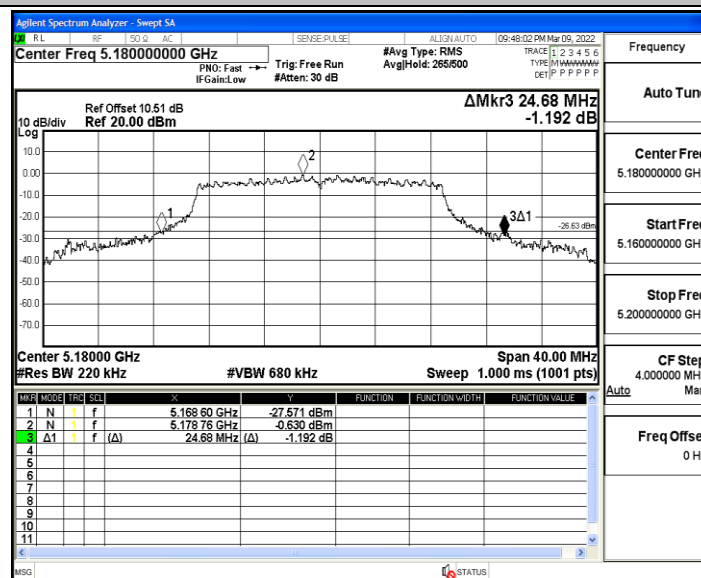
11N40MIMO_Ant2_5230



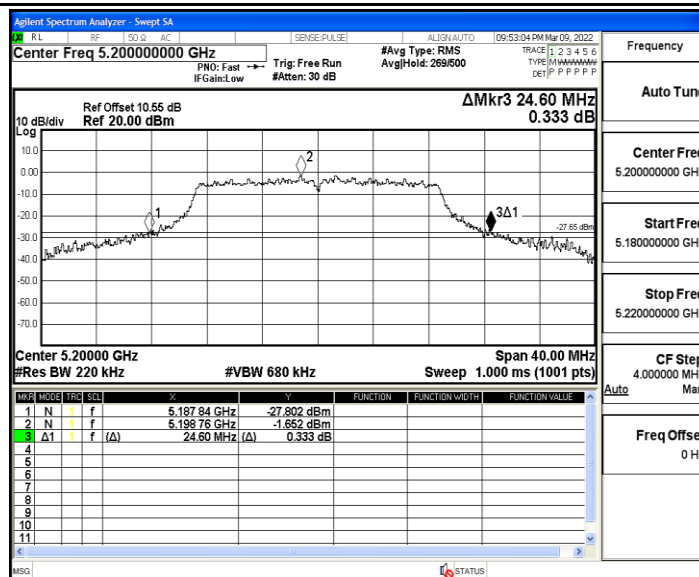
11AC20MIMO_Ant1_5180



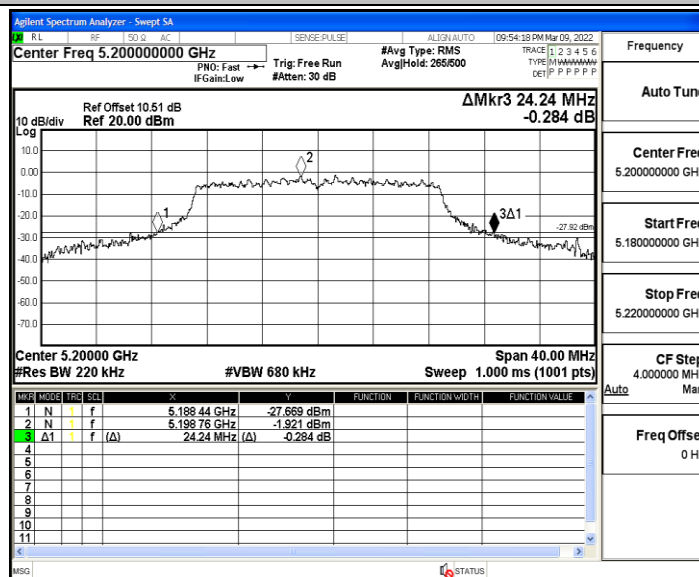
11AC20MIMO_Ant2_5180



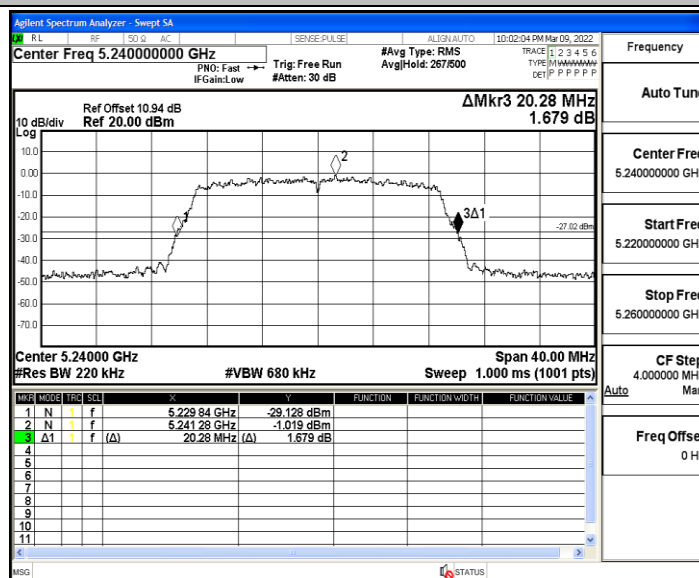
11AC20MIMO_Ant1_5200



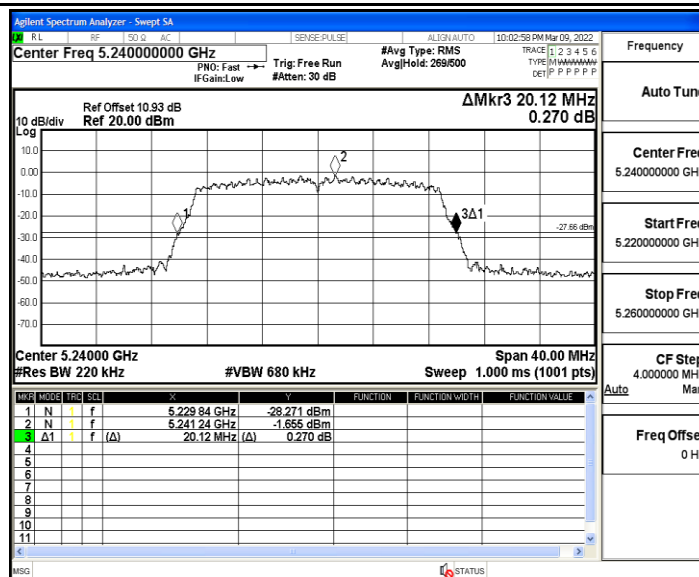
11AC20MIMO_Ant2_5200



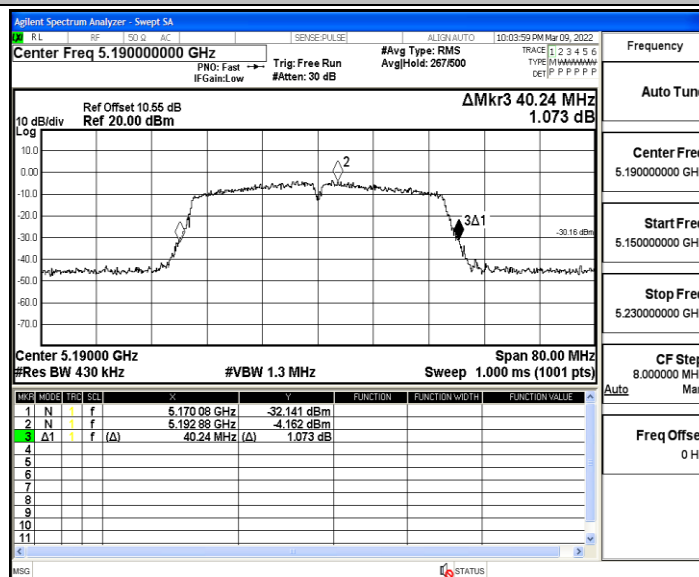
11AC20MIMO_Ant1_5240



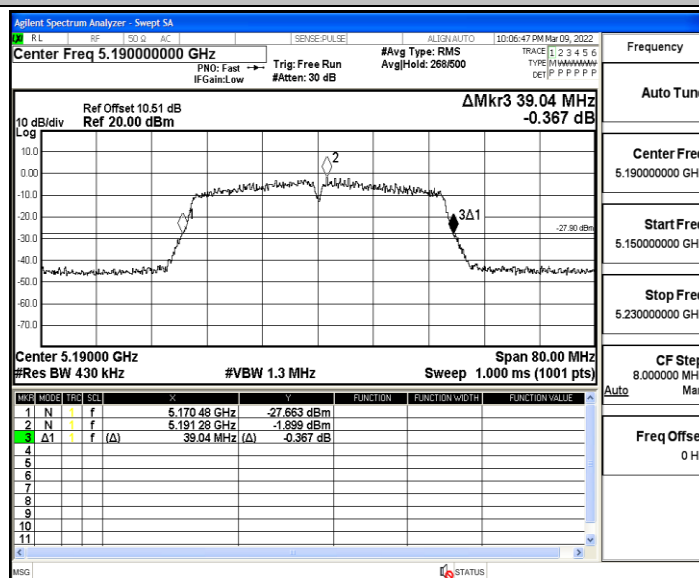
11AC20MIMO_Ant2_5240



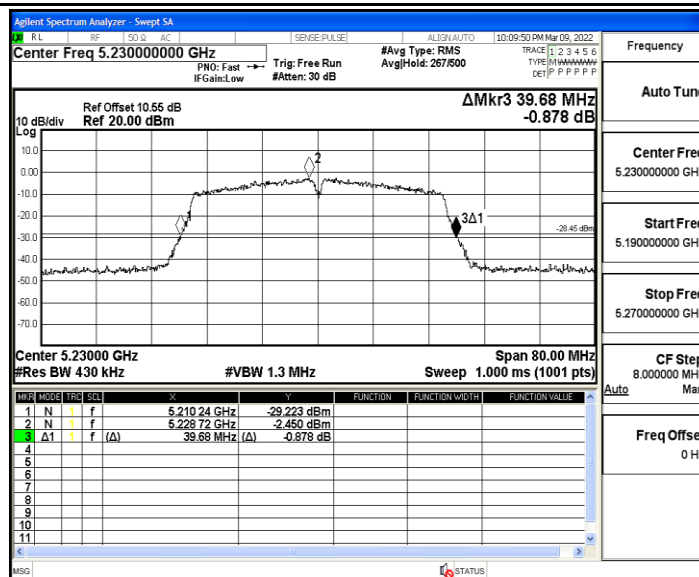
11AC40MIMO_Ant1_5190



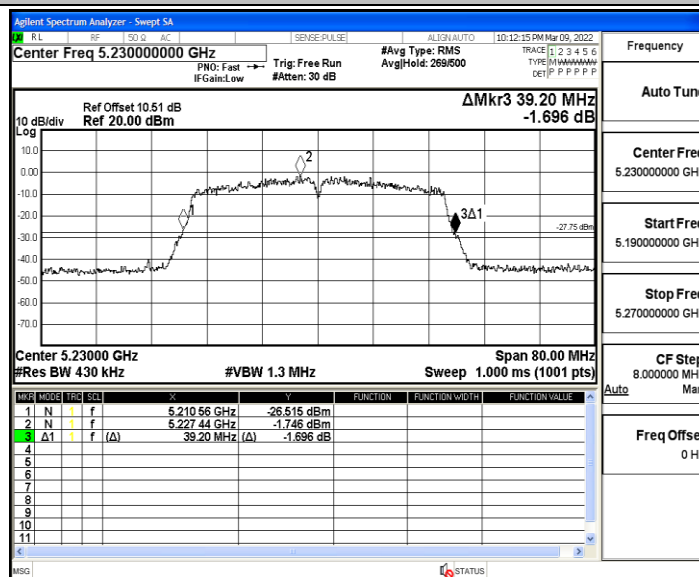
11AC40MIMO_Ant2_5190



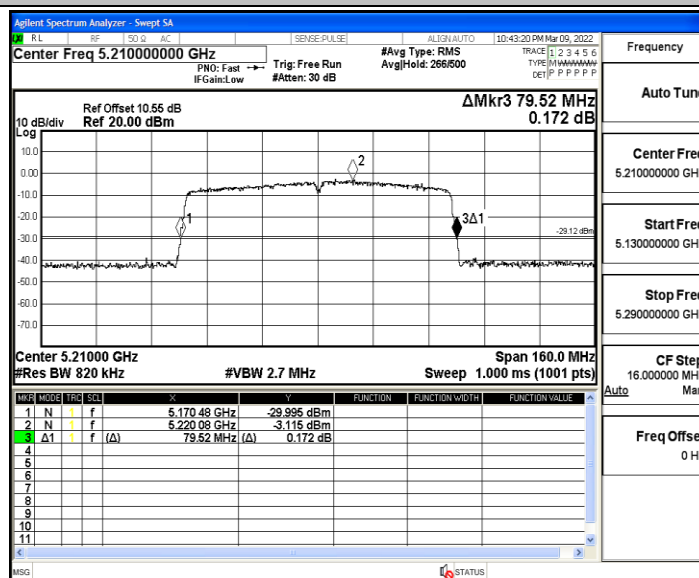
11AC40MIMO_Ant1_5230



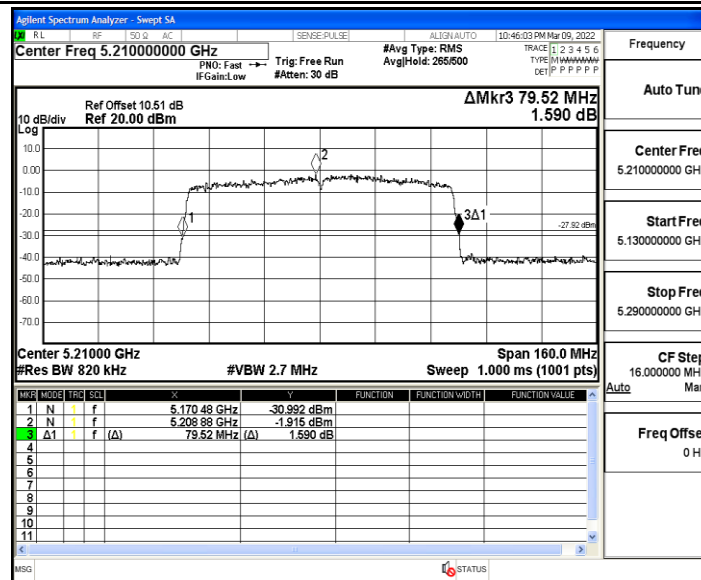
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



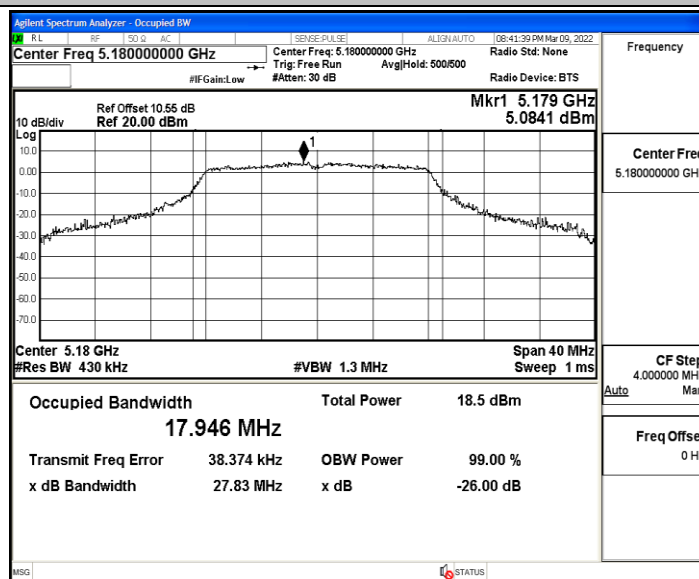
Appendix A2: Occupied channel bandwidth

Test Result

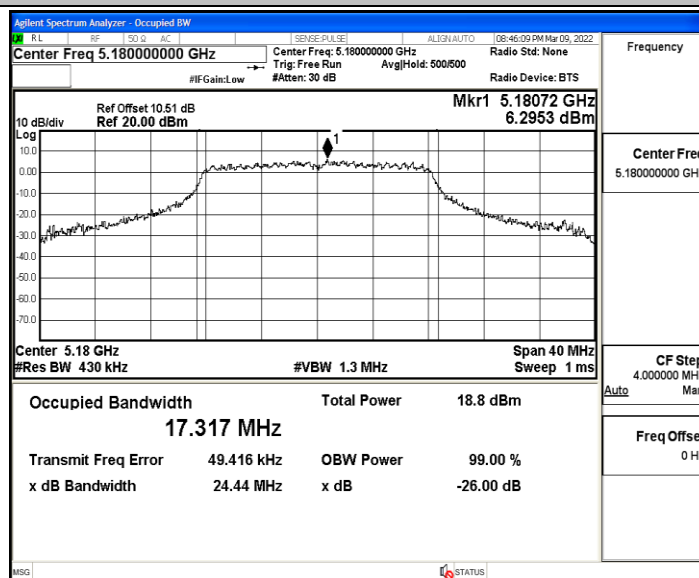
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.946	5171.065	5189.011	---	PASS
	Ant2	5180	17.317	5171.391	5188.708	---	PASS
	Ant1	5200	18.322	5190.793	5209.115	---	PASS
	Ant2	5200	17.534	5191.288	5208.822	---	PASS
	Ant1	5240	16.923	5231.533	5248.456	---	PASS
	Ant2	5240	16.645	5231.668	5248.313	---	PASS
11N20MIMO	Ant1	5180	18.913	5170.576	5189.489	---	PASS
	Ant2	5180	18.371	5170.832	5189.203	---	PASS
	Ant1	5200	19.305	5190.378	5209.683	---	PASS
	Ant2	5200	18.445	5190.794	5209.239	---	PASS
	Ant1	5240	17.886	5231.025	5248.911	---	PASS
	Ant2	5240	17.708	5231.144	5248.852	---	PASS
11N40MIMO	Ant1	5190	36.042	5172.114	5208.156	---	PASS
	Ant2	5190	35.927	5172.150	5208.077	---	PASS
	Ant1	5230	35.863	5212.116	5247.979	---	PASS
	Ant2	5230	35.799	5212.194	5247.993	---	PASS
11AC20MIMO	Ant1	5180	18.853	5170.640	5189.493	---	PASS
	Ant2	5180	18.347	5170.900	5189.247	---	PASS
	Ant1	5200	19.126	5190.516	5209.642	---	PASS
	Ant2	5200	18.461	5190.815	5209.276	---	PASS
	Ant1	5240	17.826	5231.064	5248.890	---	PASS
	Ant2	5240	17.705	5231.133	5248.838	---	PASS
11AC40MIMO	Ant1	5190	35.928	5172.080	5208.008	---	PASS
	Ant2	5190	35.892	5172.157	5208.049	---	PASS
	Ant1	5230	35.819	5212.150	5247.969	---	PASS
	Ant2	5230	35.778	5212.153	5247.931	---	PASS
11AC80MIMO	Ant1	5210	74.989	5172.710	5247.699	---	PASS
	Ant2	5210	74.930	5172.776	5247.706	---	PASS

Test Graphs

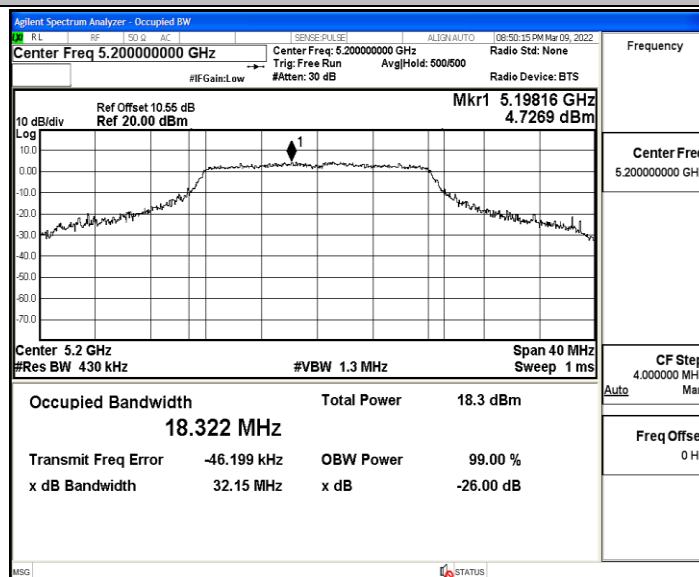
11A_Ant1_5180



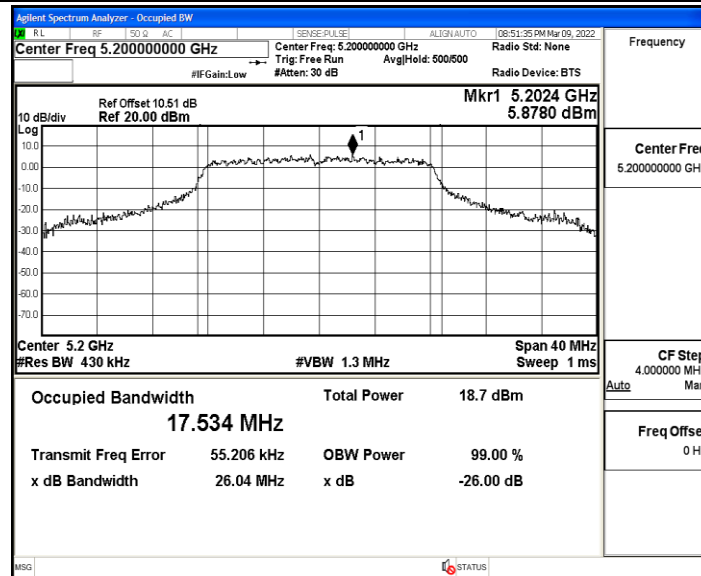
11A_Ant2_5180



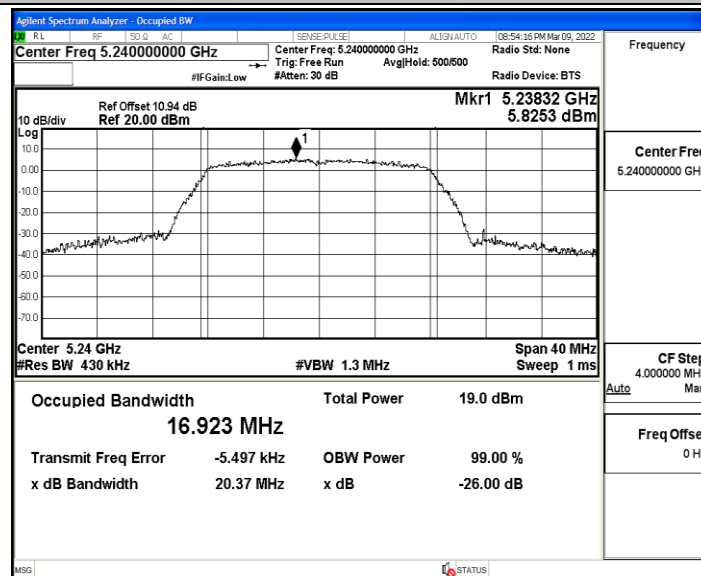
11A_Ant1_5200



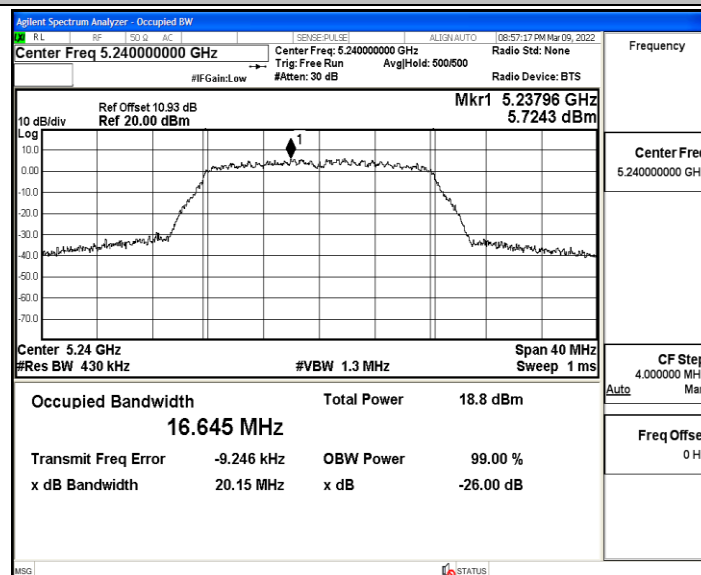
11A_Ant2_5200



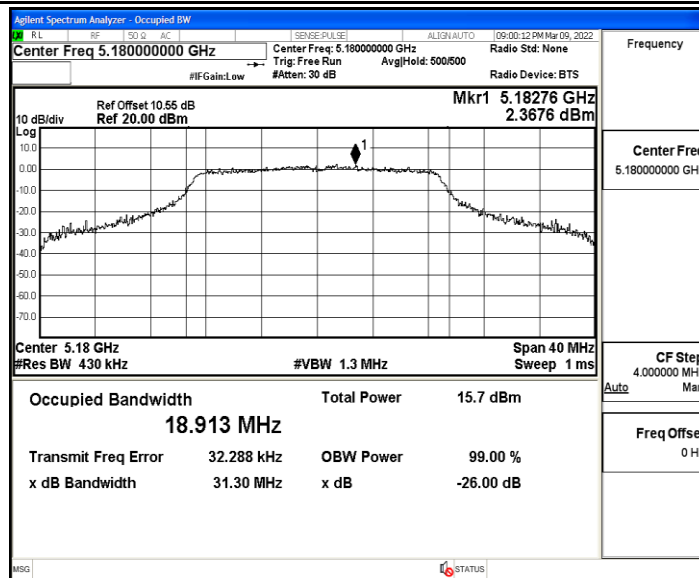
11A_Ant1_5240



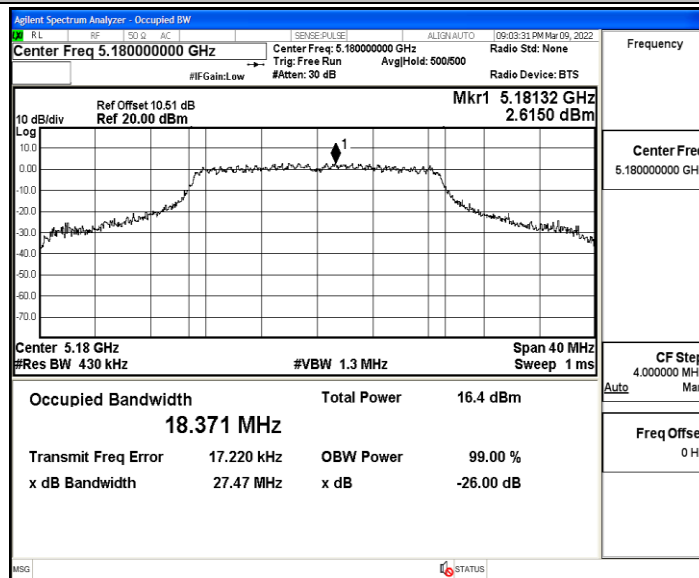
11A_Ant2_5240



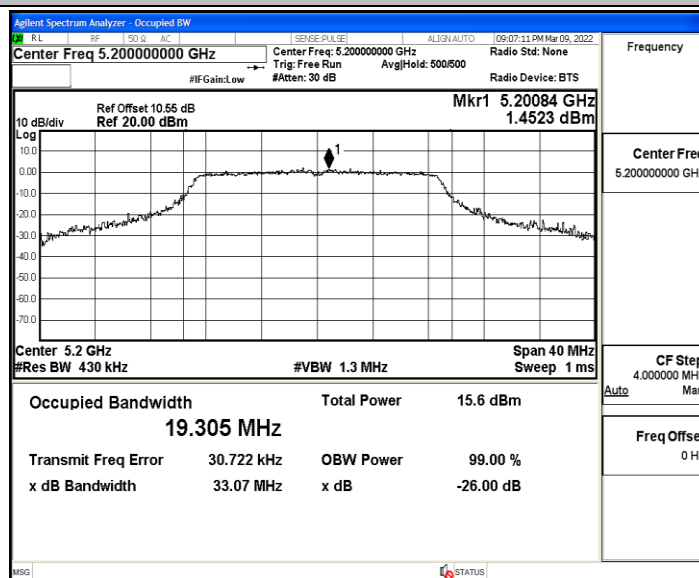
11N20MIMO_Ant1_5180



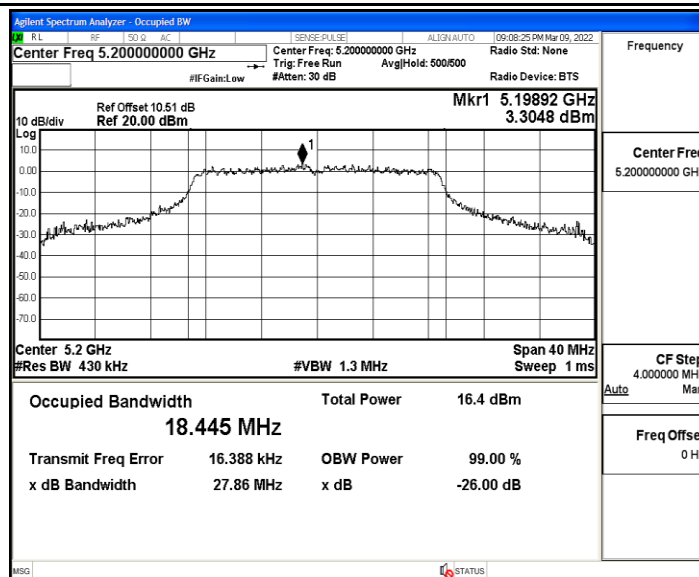
11N20MIMO_Ant2_5180



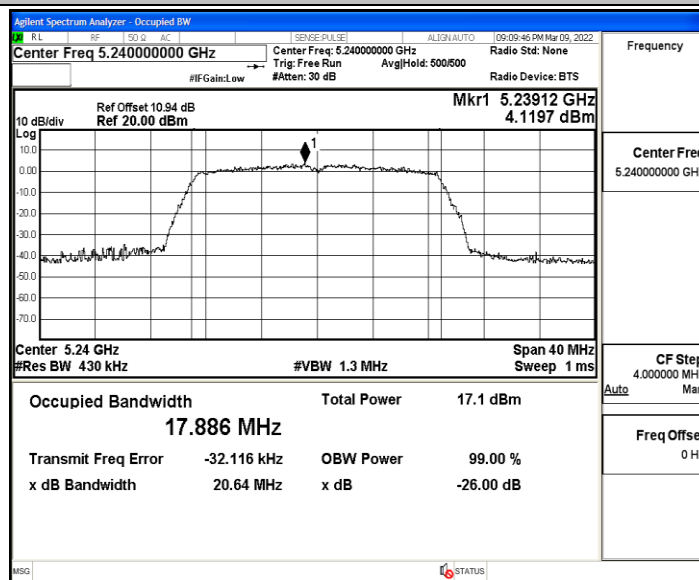
11N20MIMO_Ant1_5200



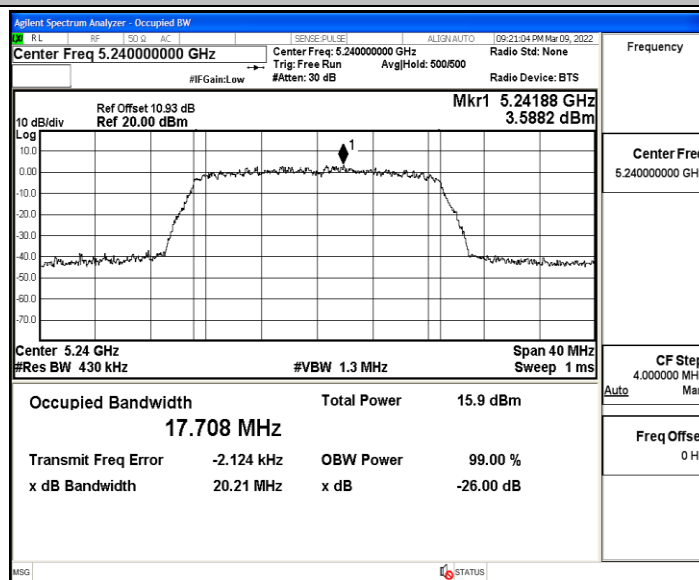
11N20MIMO_Ant2_5200



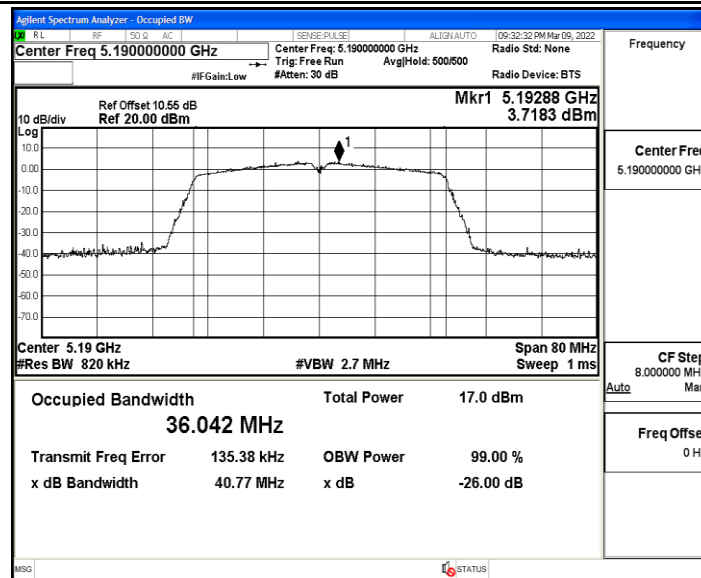
11N20MIMO_Ant1_5240



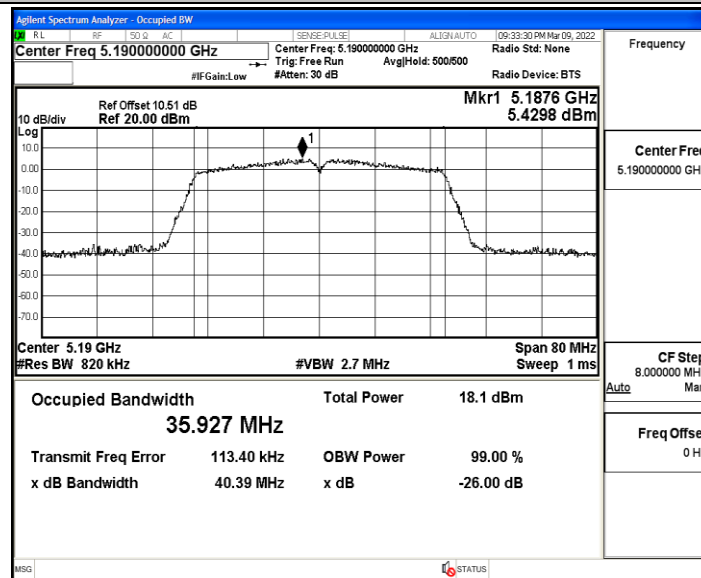
11N20MIMO_Ant2_5240



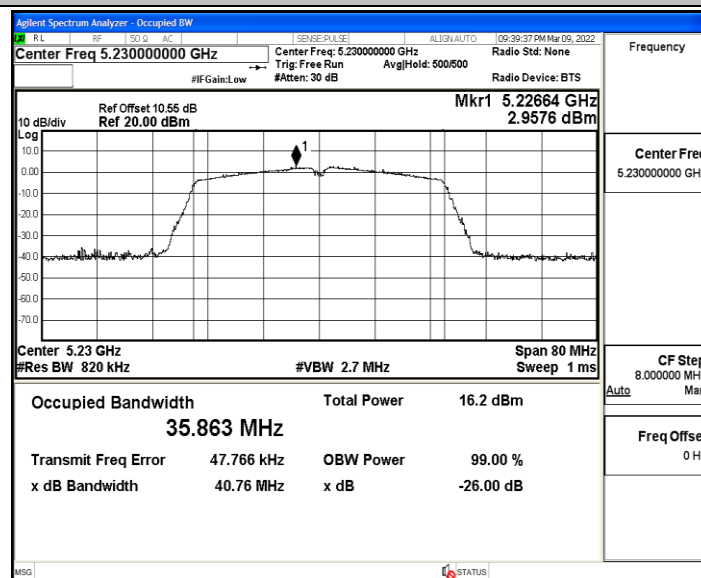
11N40MIMO_Ant1_5190



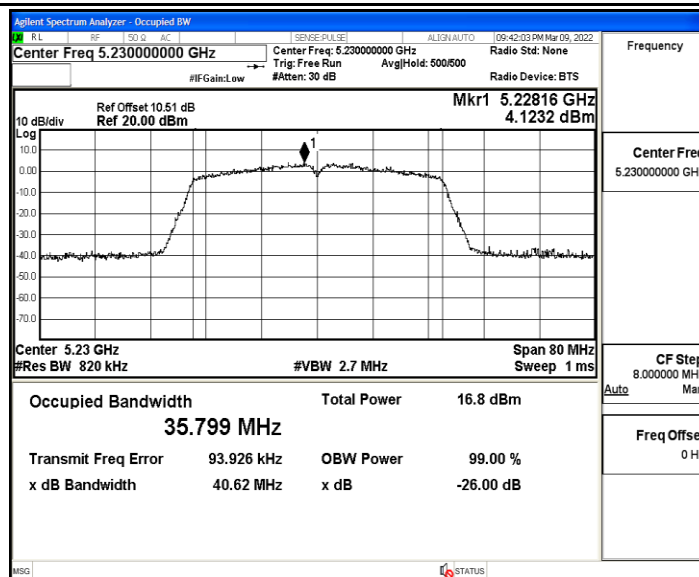
11N40MIMO_Ant2_5190



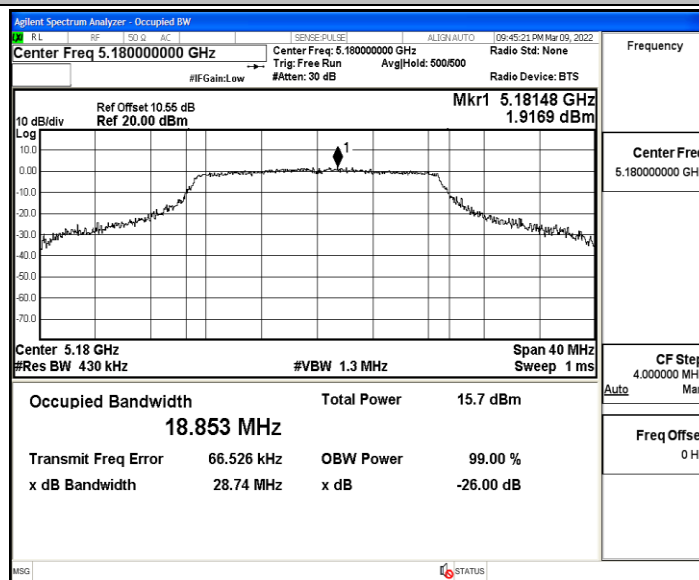
11N40MIMO_Ant1_5230



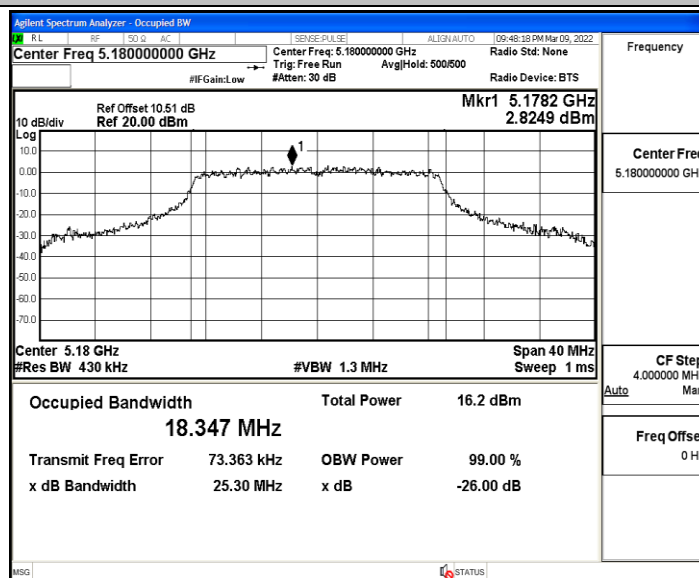
11N40MIMO_Ant2_5230



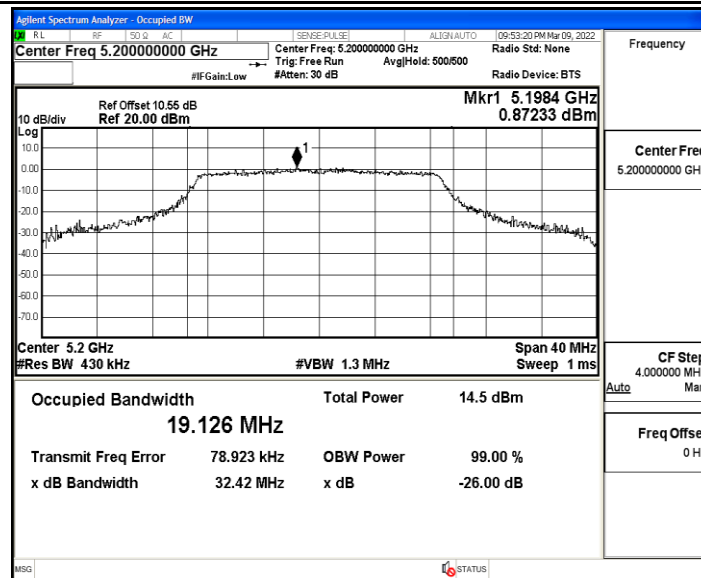
11AC20MIMO_Ant1_5180



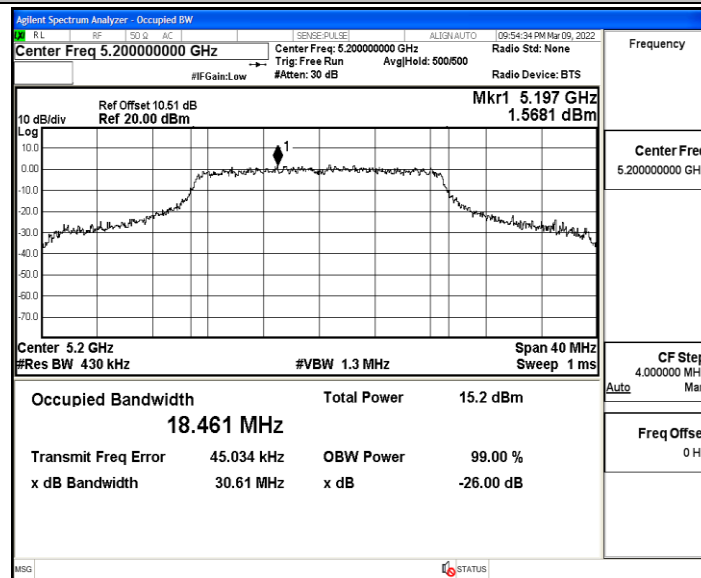
11AC20MIMO_Ant2_5180



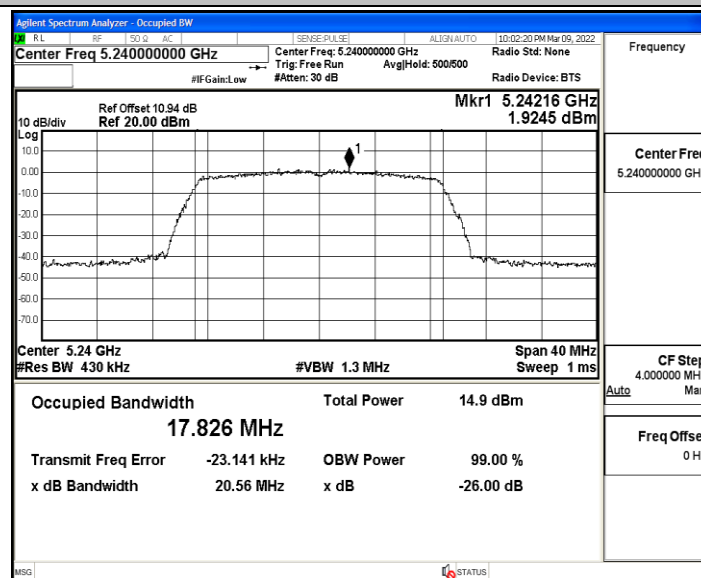
11AC20MIMO_Ant1_5200



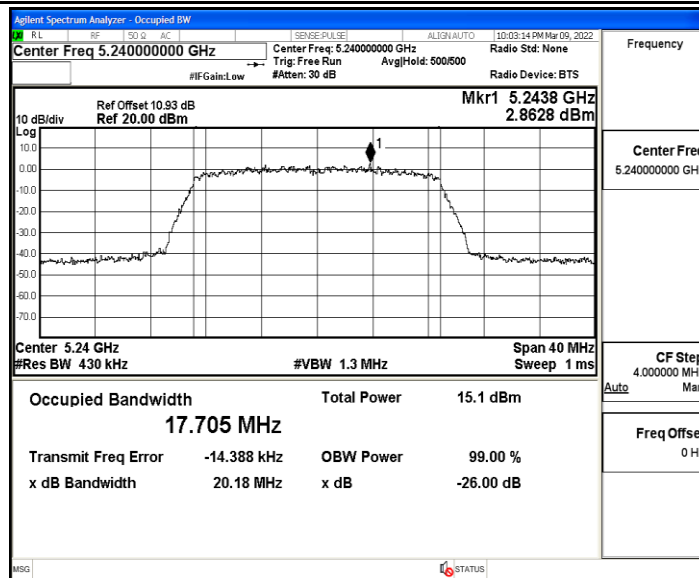
11AC20MIMO_Ant2_5200



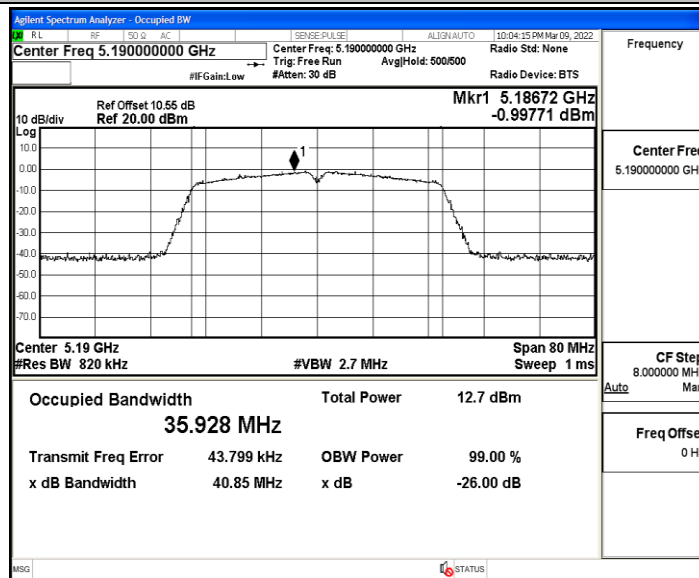
11AC20MIMO_Ant1_5240



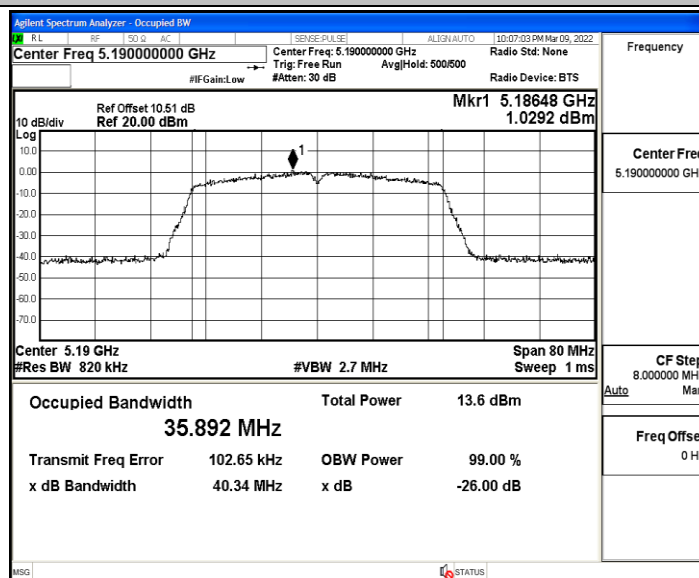
11AC20MIMO_Ant2_5240



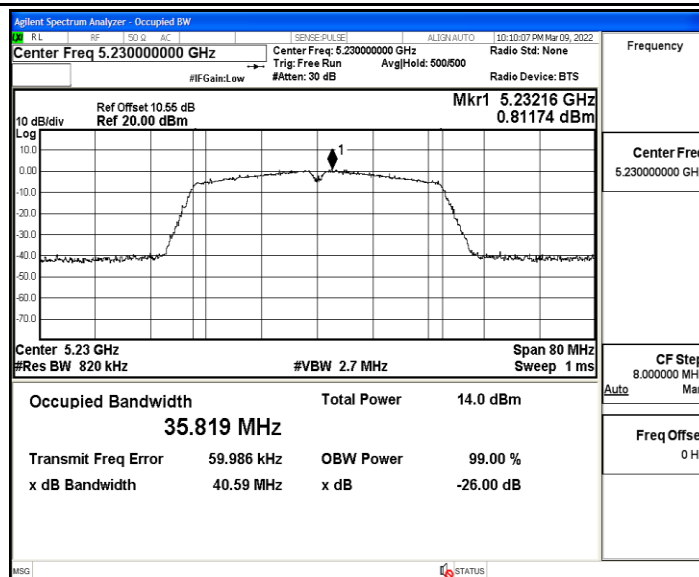
11AC40MIMO_Ant1_5190



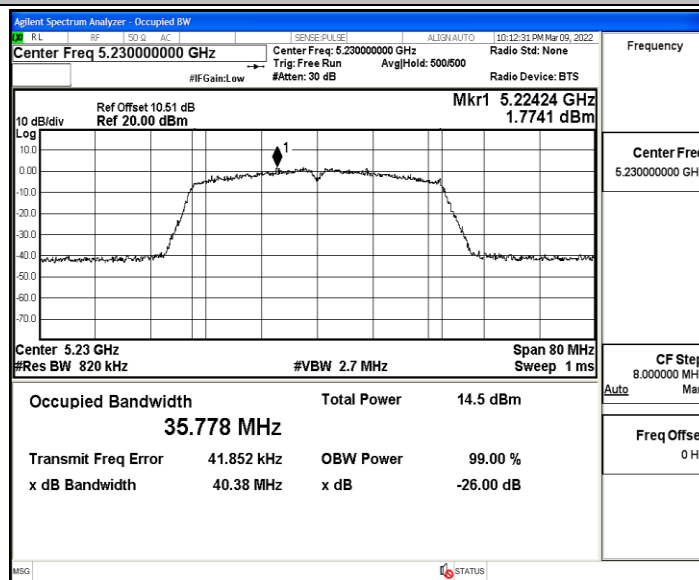
11AC40MIMO_Ant2_5190



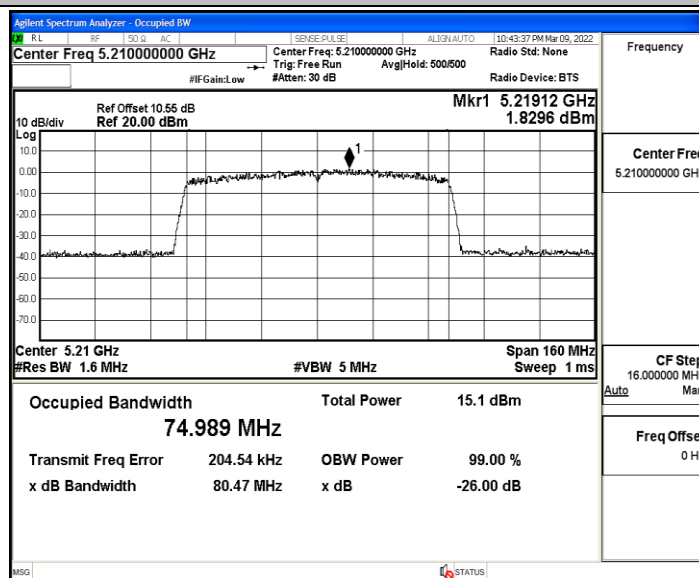
11AC40MIMO_Ant1_5230



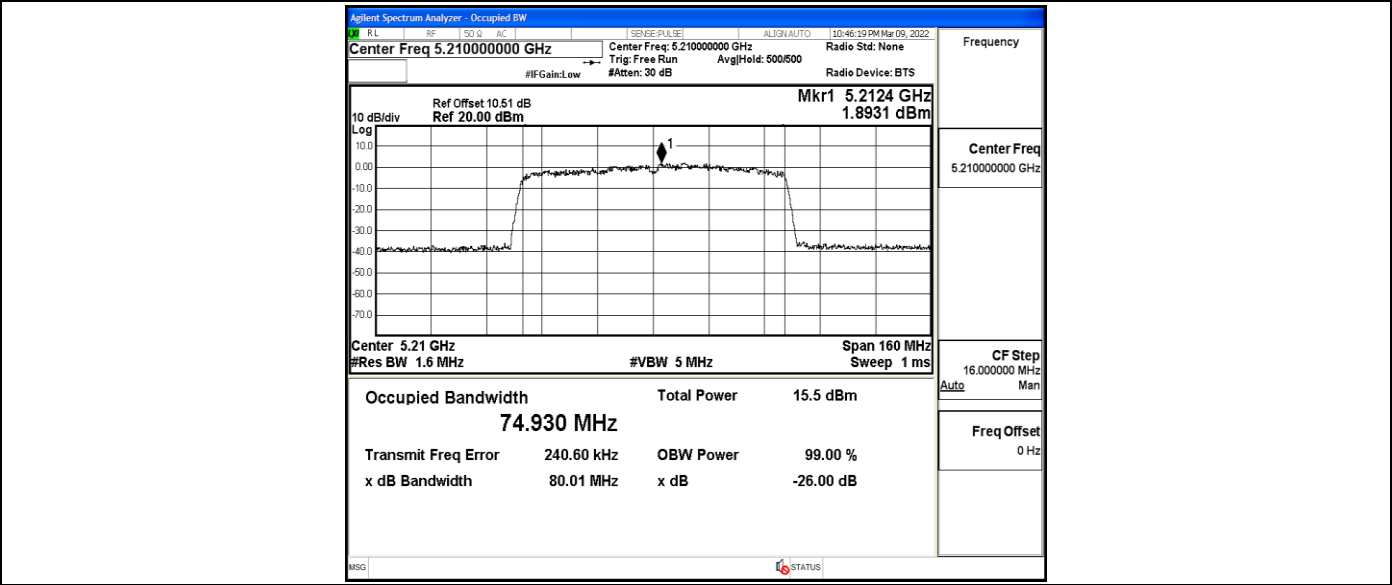
11AC40MIMO_Ant2_5230



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	11.34	≤23.98	PASS
	Ant2	5180	11.43	≤23.98	PASS
	Ant1	5200	11.70	≤23.98	PASS
	Ant2	5200	11.71	≤23.98	PASS
	Ant1	5240	12.36	≤23.98	PASS
	Ant2	5240	11.73	≤23.98	PASS
11N20MIMO	Ant1	5180	9.17	≤23.98	PASS
	Ant2	5180	8.83	≤23.98	PASS
	total	5180	12.01	≤23.98	PASS
	Ant1	5200	8.92	≤23.98	PASS
	Ant2	5200	8.88	≤23.98	PASS
	total	5200	11.91	≤23.98	PASS
	Ant1	5240	9.00	≤23.98	PASS
	Ant2	5240	8.46	≤23.98	PASS
	total	5240	11.75	≤23.98	PASS
11N40MIMO	Ant1	5190	9.59	≤23.98	PASS
	Ant2	5190	10.11	≤23.98	PASS
	total	5190	12.87	≤23.98	PASS
	Ant1	5230	9.12	≤23.98	PASS
	Ant2	5230	8.97	≤23.98	PASS
	total	5230	12.06	≤23.98	PASS
11AC20MIMO	Ant1	5180	8.03	≤23.98	PASS
	Ant2	5180	8.49	≤23.98	PASS
	total	5180	11.71	≤23.98	PASS
	Ant1	5200	7.94	≤23.98	PASS
	Ant2	5200	7.61	≤23.98	PASS
	total	5200	10.79	≤23.98	PASS
	Ant1	5240	8.41	≤23.98	PASS
	Ant2	5240	7.55	≤23.98	PASS
	total	5240	11.01	≤23.98	PASS
11AC40MIMO	Ant1	5190	5.53	≤23.98	PASS
	Ant2	5190	6.01	≤23.98	PASS
	total	5190	8.79	≤23.98	PASS
	Ant1	5230	6.88	≤23.98	PASS
	Ant2	5230	6.60	≤23.98	PASS
	total	5230	9.75	≤23.98	PASS
11AC80MIMO	Ant1	5210	6.93	≤23.98	PASS
	Ant2	5210	7.29	≤23.98	PASS
	total	5210	10.12	≤23.98	PASS

Appendix C: Maximum power spectral density

Test Result

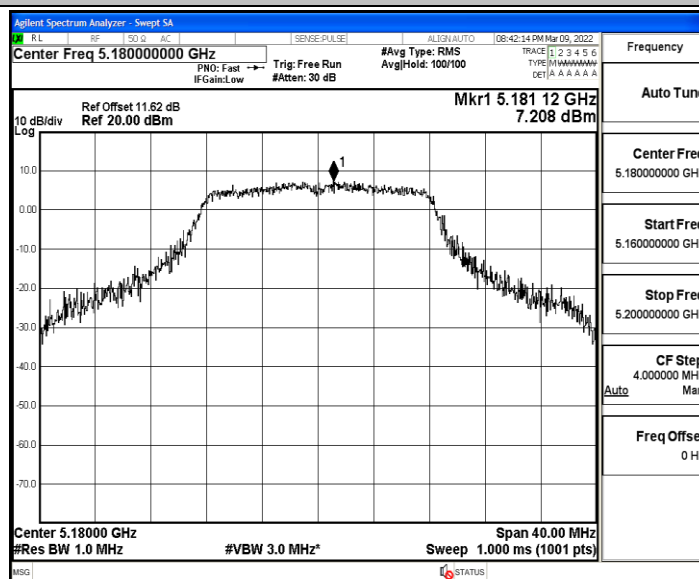
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	7.21	≤11	PASS
	Ant2	5180	8.17	≤11	PASS
	Ant1	5200	7.2	≤11	PASS
	Ant2	5200	7.62	≤11	PASS
	Ant1	5240	7.87	≤11	PASS
	Ant2	5240	8.12	≤11	PASS
11N20MIMO	Ant1	5180	4.5	≤11	PASS
	Ant2	5180	5.53	≤11	PASS
	total	5180	8.06	≤11	PASS
	Ant1	5200	4.77	≤11	PASS
	Ant2	5200	5.87	≤11	PASS
	total	5200	8.37	≤11	PASS
	Ant1	5240	5.5	≤11	PASS
	Ant2	5240	4.92	≤11	PASS
	total	5240	8.23	≤11	PASS
11N40MIMO	Ant1	5190	4.22	≤11	PASS
	Ant2	5190	5.66	≤11	PASS
	total	5190	8.01	≤11	PASS
	Ant1	5230	3.08	≤11	PASS
	Ant2	5230	4.17	≤11	PASS
	total	5230	6.67	≤11	PASS
11AC20MIMO	Ant1	5180	4.04	≤11	PASS
	Ant2	5180	5.77	≤11	PASS
	total	5180	8.00	≤11	PASS
	Ant1	5200	5.37	≤11	PASS
	Ant2	5200	5.19	≤11	PASS
	total	5200	8.29	≤11	PASS
	Ant1	5240	5.11	≤11	PASS
	Ant2	5240	6.23	≤11	PASS
	total	5240	8.72	≤11	PASS
11AC40MIMO	Ant1	5190	0.86	≤11	PASS
	Ant2	5190	2.9	≤11	PASS
	total	5190	5.01	≤11	PASS
	Ant1	5230	1.88	≤11	PASS
	Ant2	5230	3.52	≤11	PASS
	total	5230	5.79	≤11	PASS
11AC80MIMO	Ant1	5210	0.81	≤11	PASS
	Ant2	5210	1.13	≤11	PASS
	total	5210	3.98	≤11	PASS

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

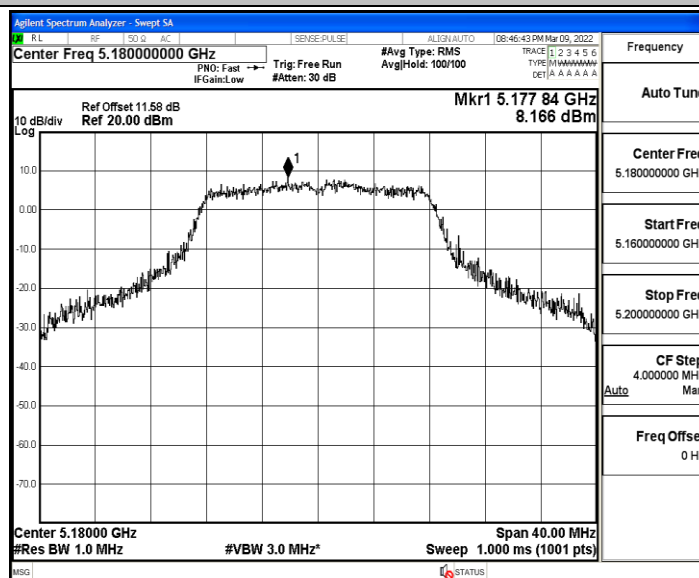
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

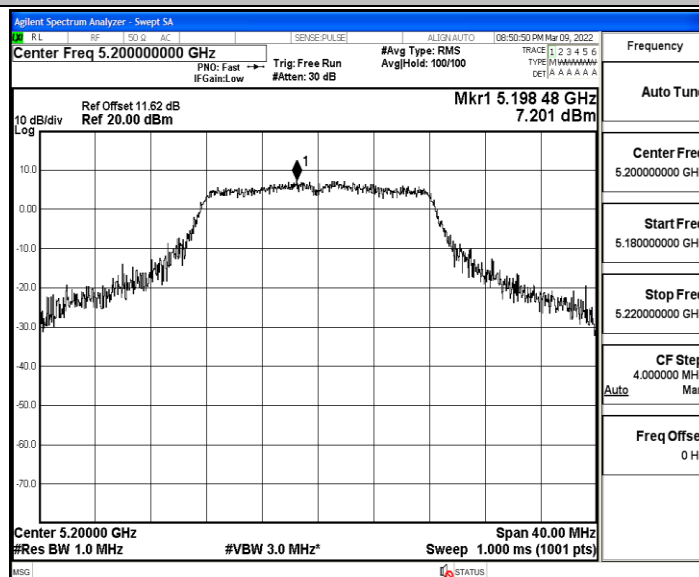
11A_Ant1_5180



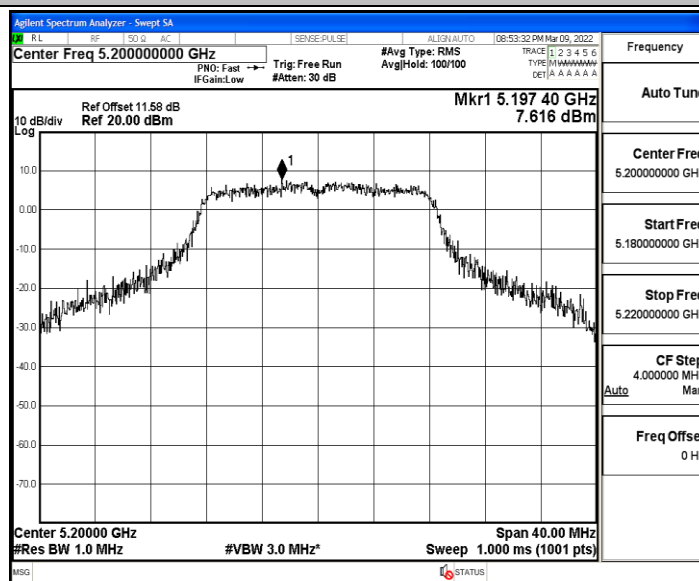
11A_Ant2_5180



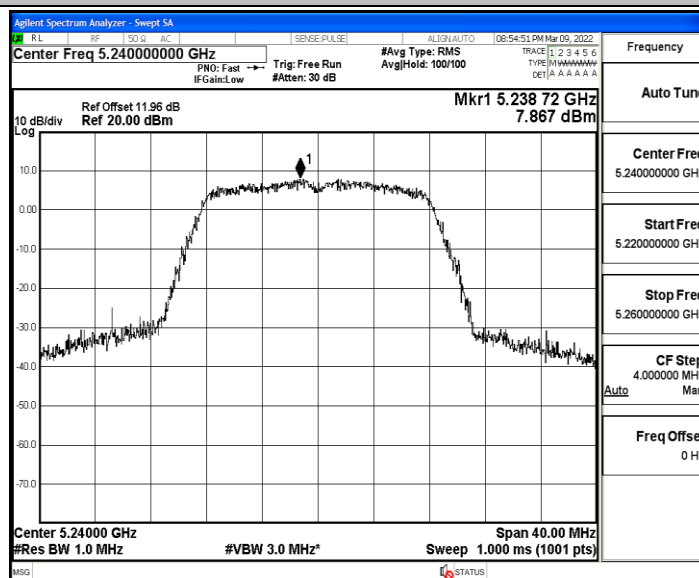
11A_Ant1_5200



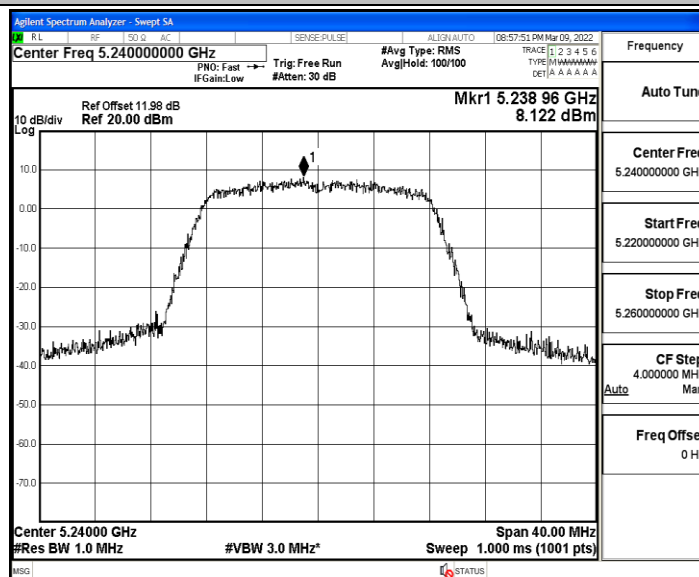
11A_Ant2_5200



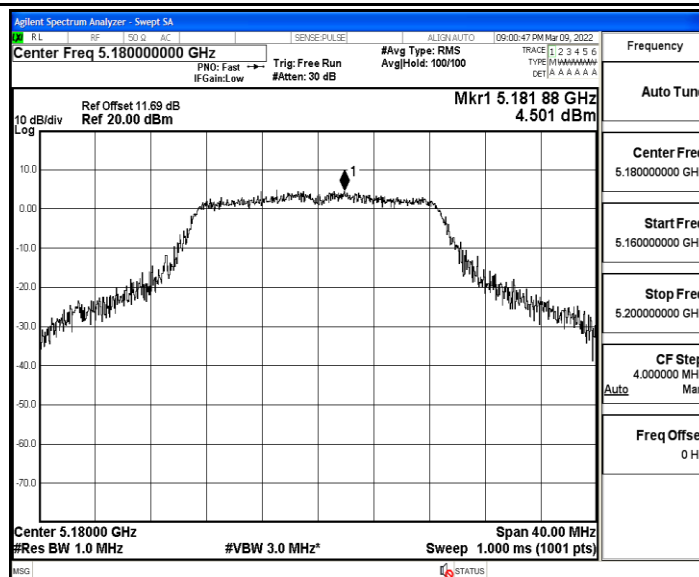
11A_Ant1_5240



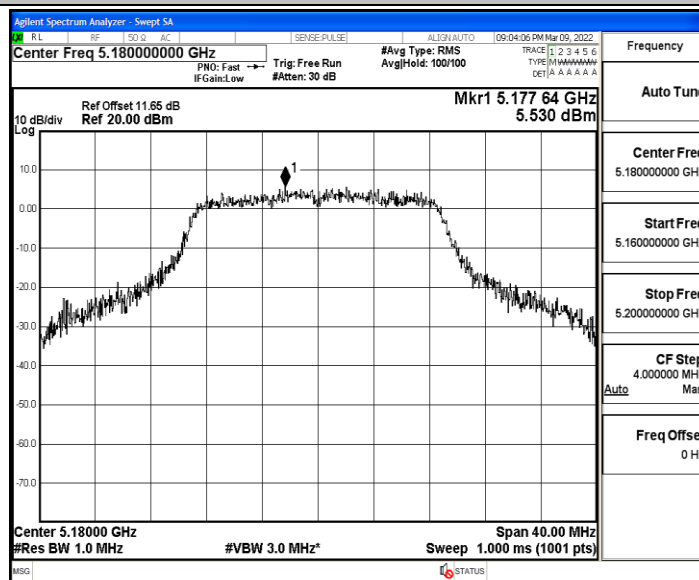
11A_Ant2_5240



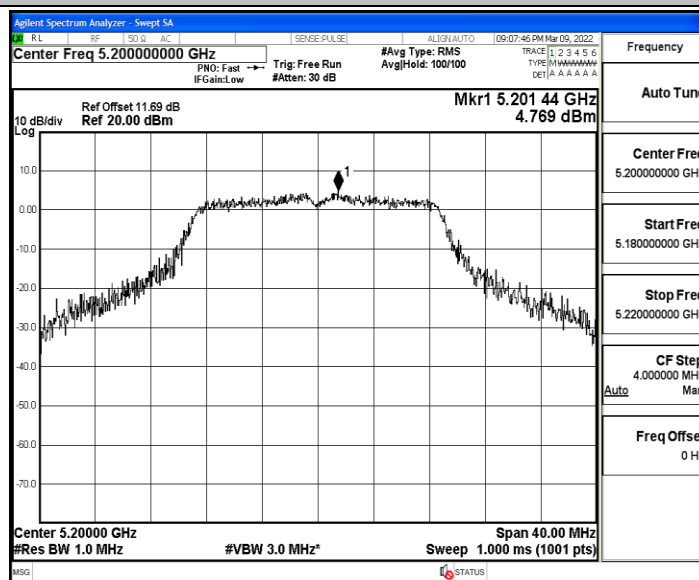
11N20MIMO_Ant1_5180



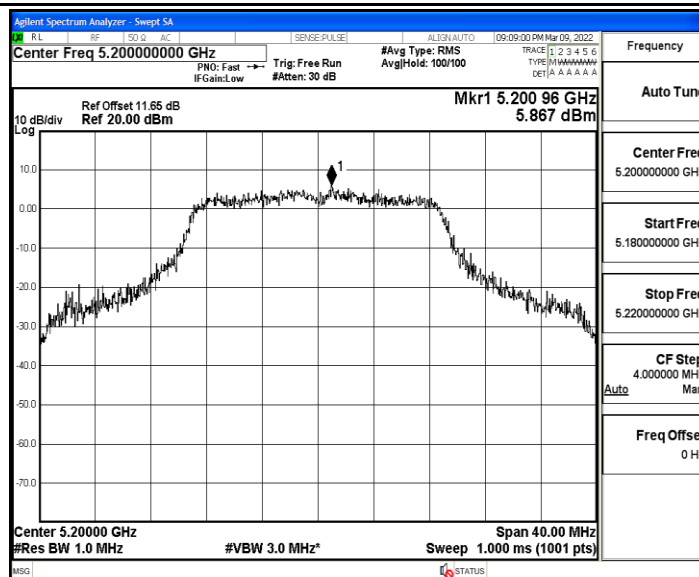
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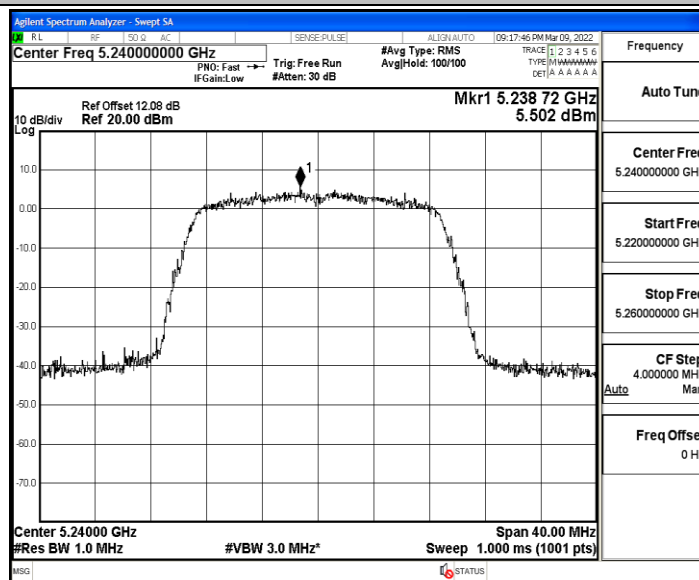
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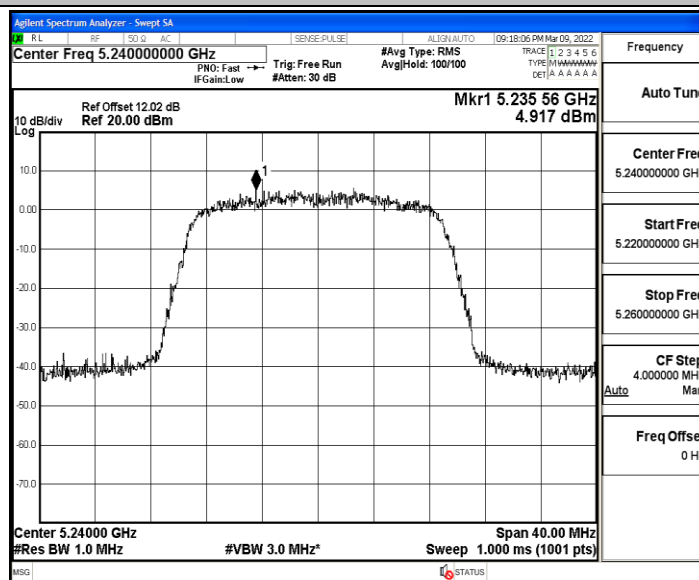
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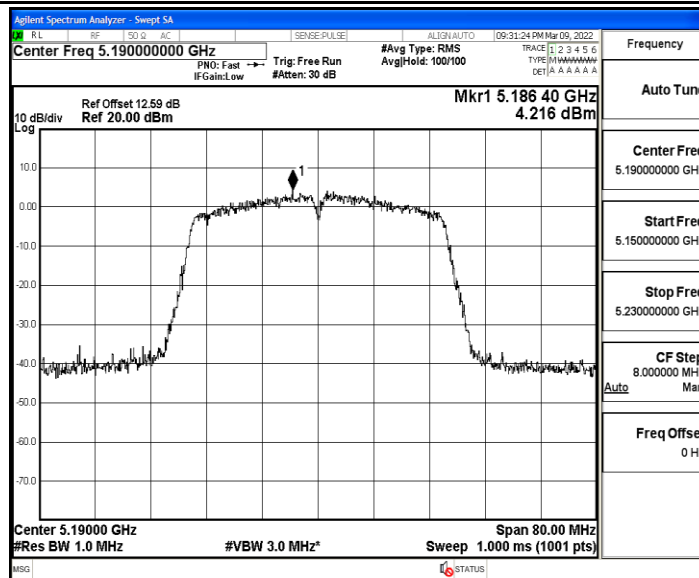
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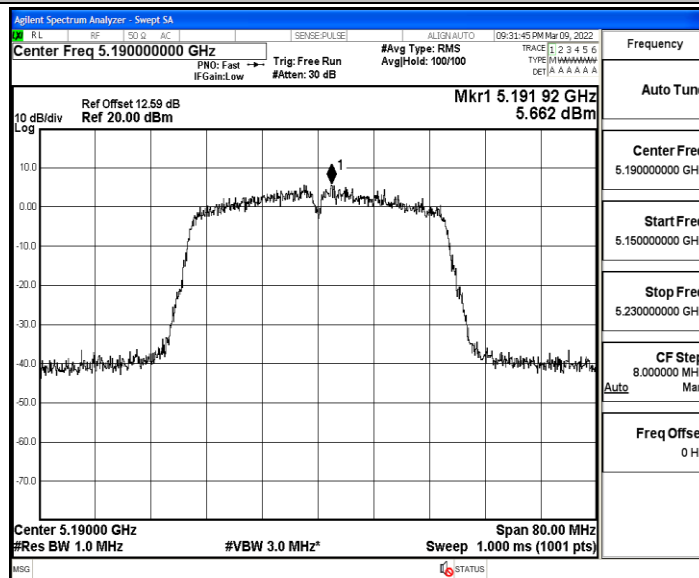
11N20MIMO_Ant2_5240



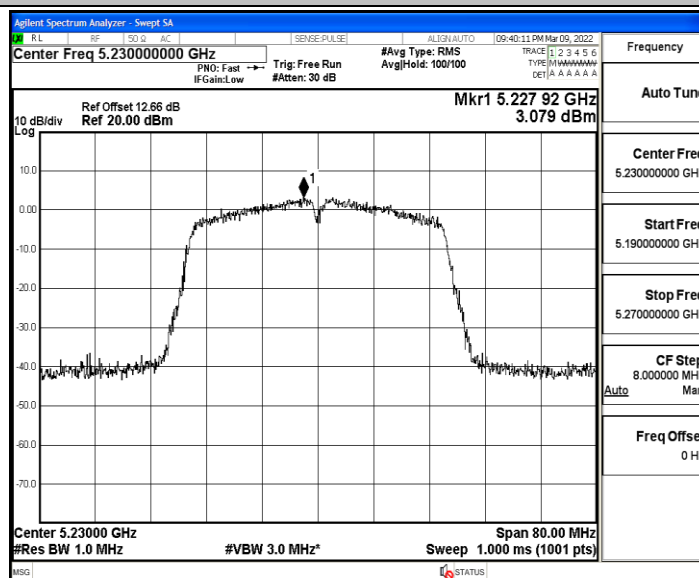
11N40MIMO_Ant1_5190



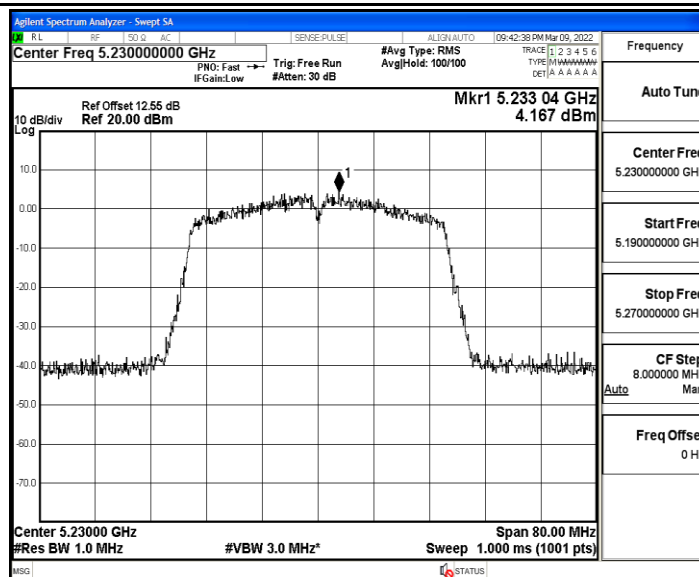
11N40MIMO_Ant2_5190



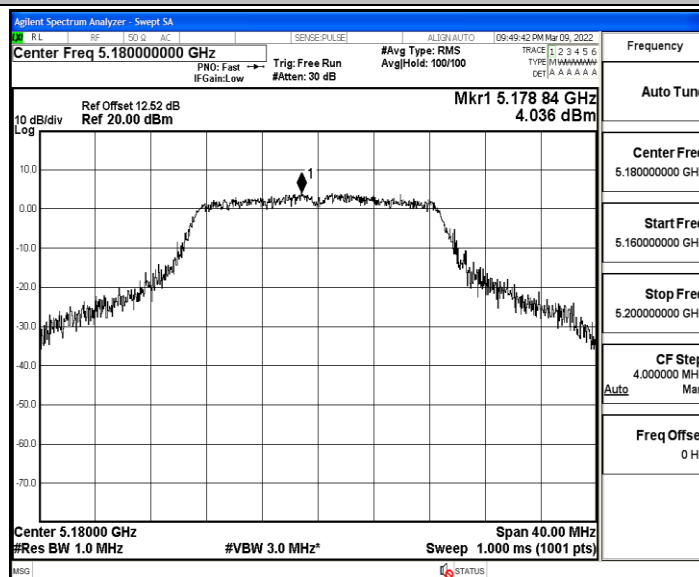
11N40MIMO_Ant1_5230



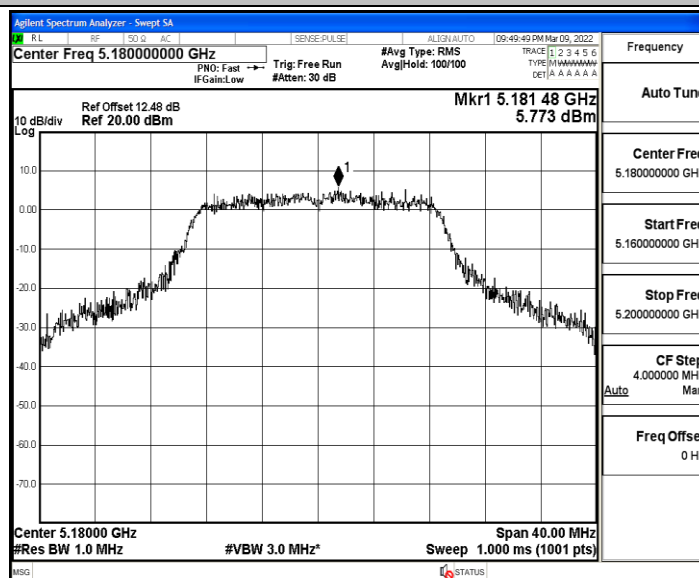
11N40MIMO_Ant2_5230



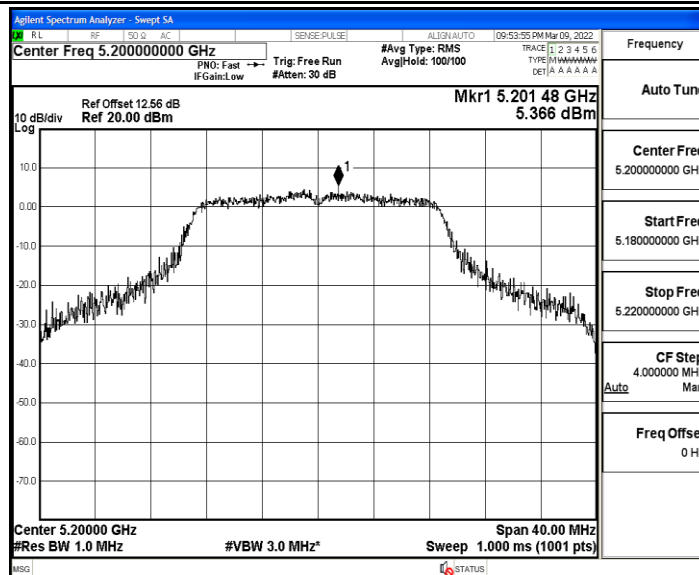
11AC20MIMO_Ant1_5180



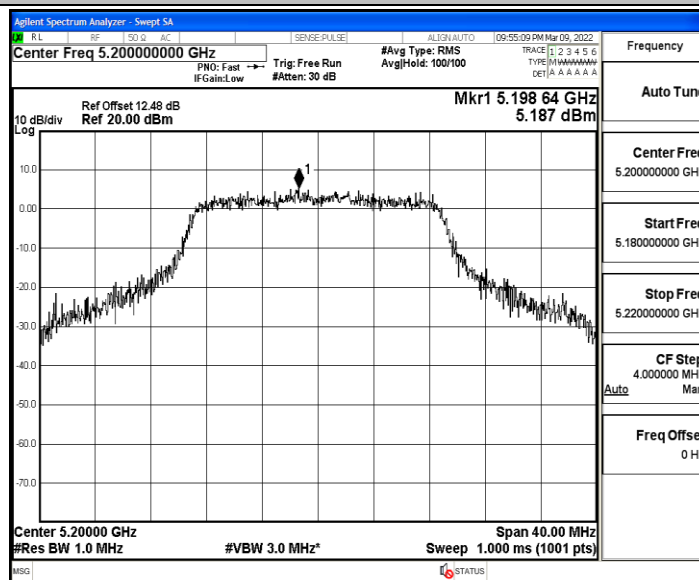
11AC20MIMO_Ant2_5180



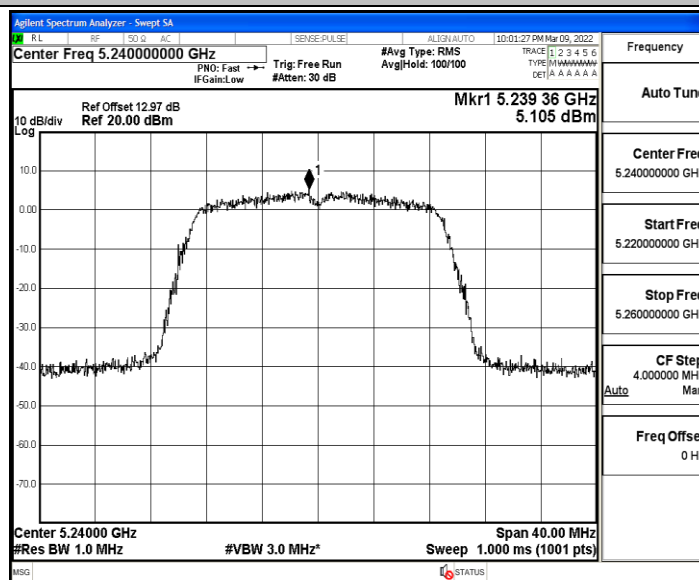
11AC20MIMO_Ant1_5200



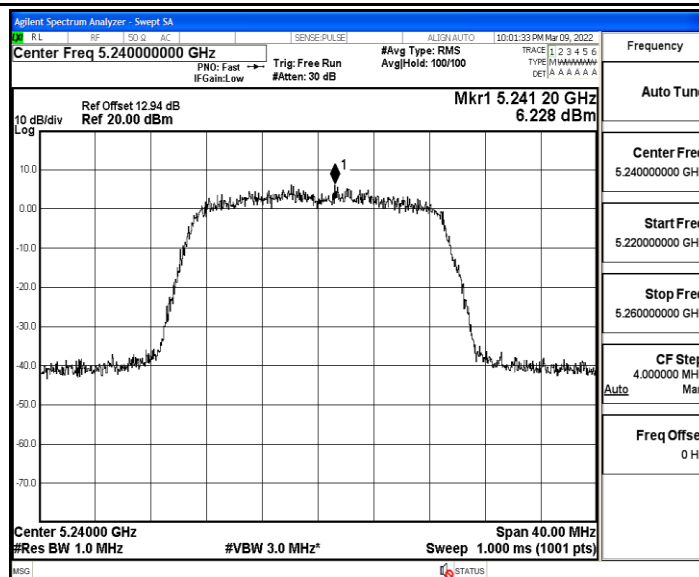
11AC20MIMO_Ant2_5200



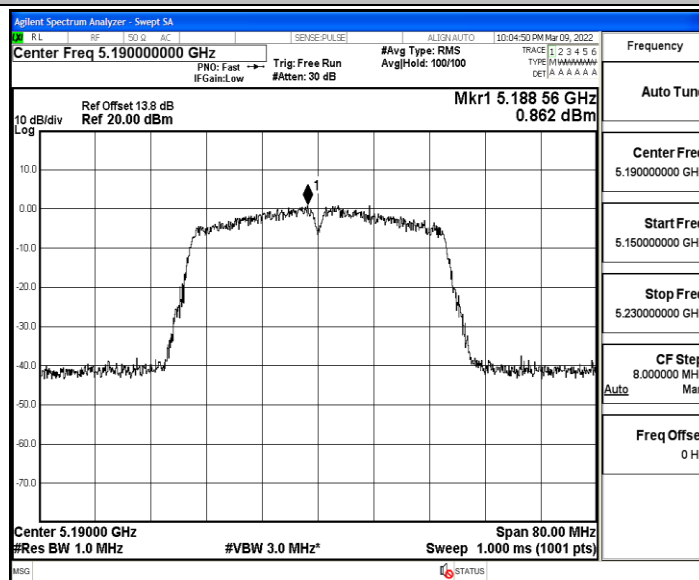
11AC20MIMO_Ant1_5240



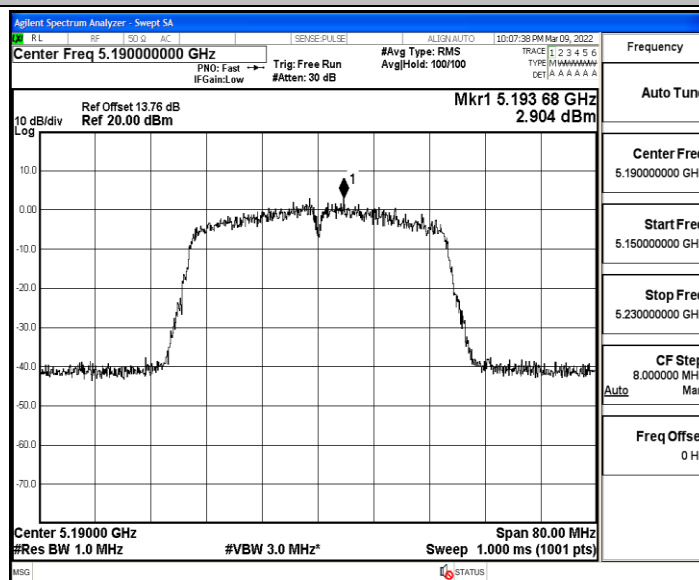
11AC20MIMO_Ant2_5240



11AC40MIMO_Ant1_5190



11AC40MIMO_Ant2_5190



11AC40MIMO_Ant1_5230