

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

Product Name: NucBox

Trade Mark: GMKtec

Test Model: G1

FCC ID: 2AXUD-G1

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

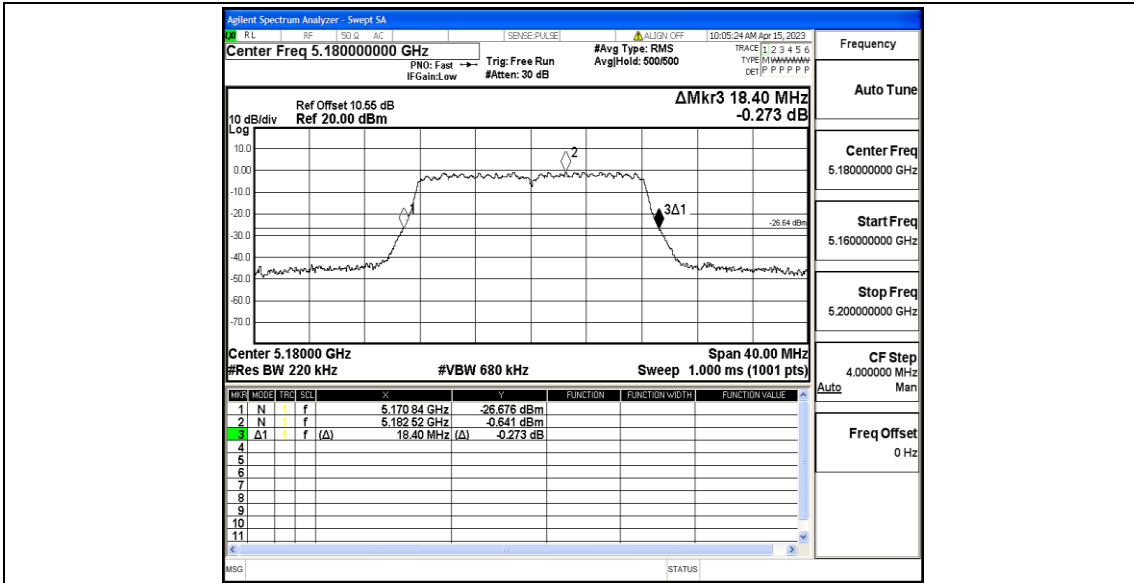
Appendix A1: Emission Bandwidth

Test Result

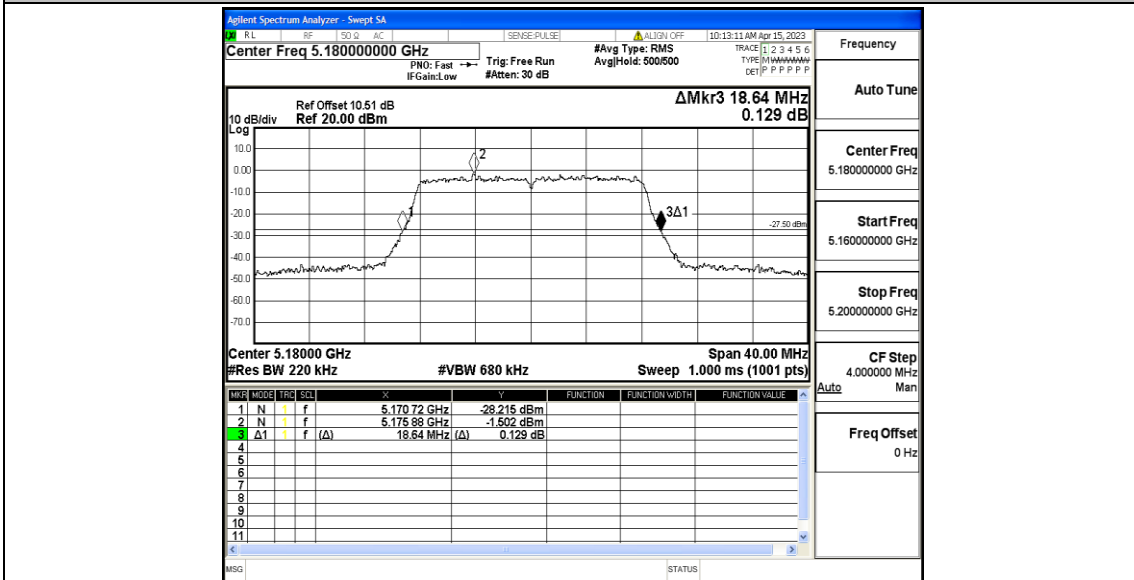
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.400	5170.840	5189.240	---	---
	Ant2	5180	18.640	5170.720	5189.360	---	---
	Ant1	5200	18.360	5190.800	5209.160	---	---
	Ant2	5200	18.520	5190.720	5209.240	---	---
	Ant1	5240	18.400	5230.840	5249.240	---	---
	Ant2	5240	18.600	5230.720	5249.320	---	---
11N20MIMO	Ant1	5180	19.560	5170.240	5189.800	---	---
	Ant2	5180	19.640	5170.200	5189.840	---	---
	Ant1	5200	19.560	5190.200	5209.760	---	---
	Ant2	5200	19.480	5190.240	5209.720	---	---
	Ant1	5240	19.560	5230.240	5249.800	---	---
	Ant2	5240	19.640	5230.160	5249.800	---	---
11N40MIMO	Ant1	5190	38.880	5170.640	5209.520	---	---
	Ant2	5190	38.880	5170.640	5209.520	---	---
	Ant1	5230	39.040	5210.560	5249.600	---	---
	Ant2	5230	39.040	5210.640	5249.680	---	---
11AC20MIMO	Ant1	5180	19.640	5170.200	5189.840	---	---
	Ant2	5180	19.680	5170.200	5189.880	---	---
	Ant1	5200	19.520	5190.200	5209.720	---	---
	Ant2	5200	19.480	5190.200	5209.680	---	---
	Ant1	5240	19.640	5230.200	5249.840	---	---
	Ant2	5240	19.600	5230.160	5249.760	---	---
11AC40MIMO	Ant1	5190	38.880	5170.640	5209.520	---	---
	Ant2	5190	38.880	5170.640	5209.520	---	---
	Ant1	5230	38.960	5210.640	5249.600	---	---

	Ant2	5230	38.800	5210.720	5249.520	---	---
11AC80MIMO	Ant1	5210	85.440	5168.080	5253.520	---	---
	Ant2	5210	85.600	5167.600	5253.200	---	---

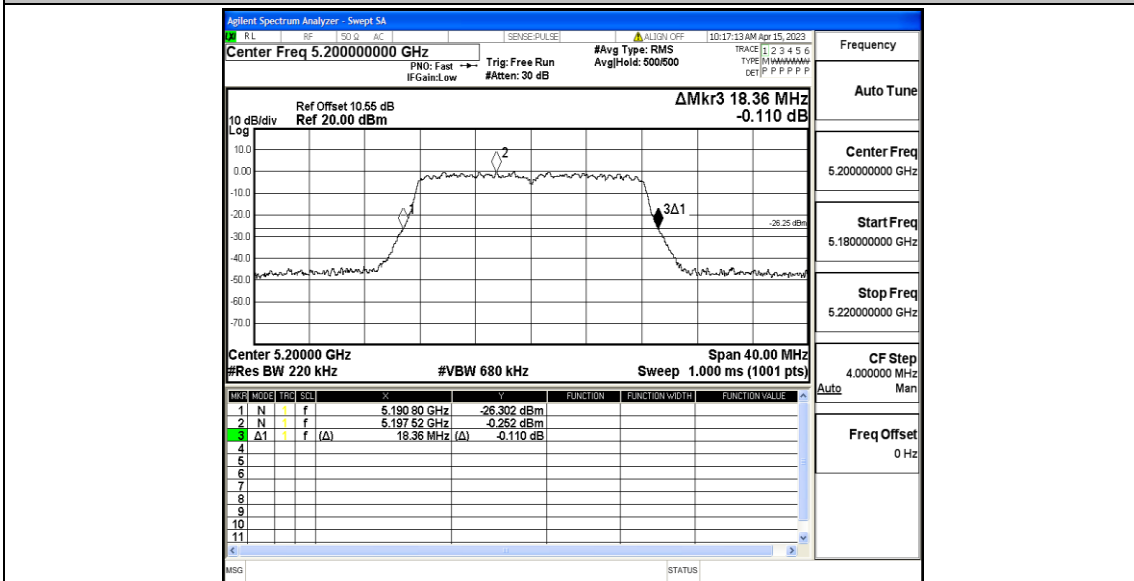
Test Graphs



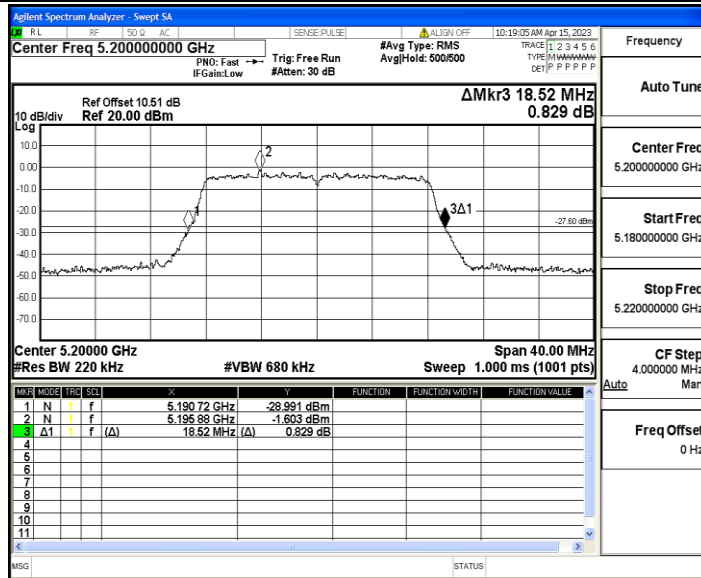
11A_Ant1_5180



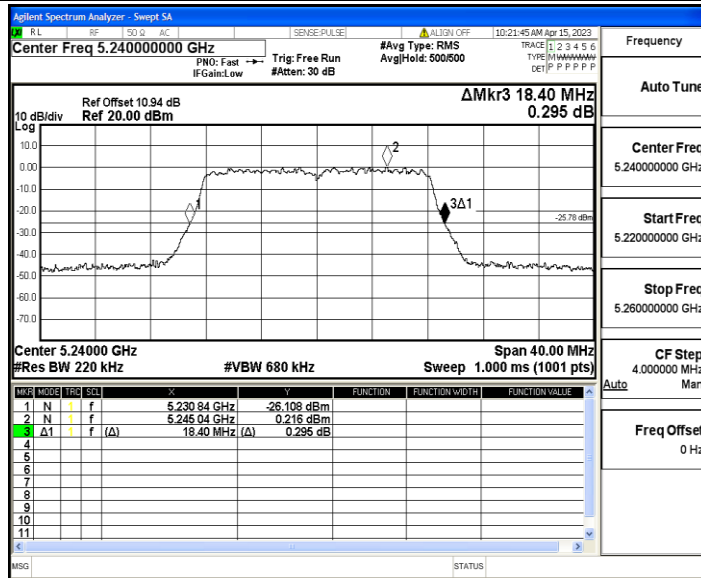
11A_Ant2_5180



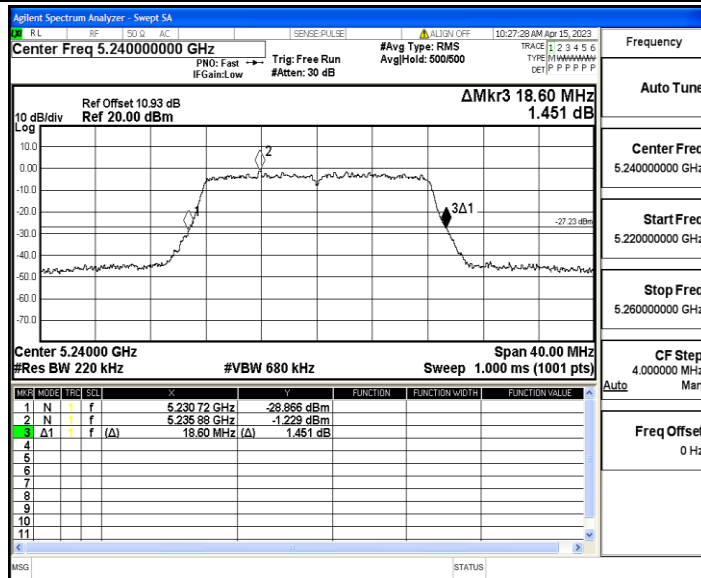
11A_Ant1_5200



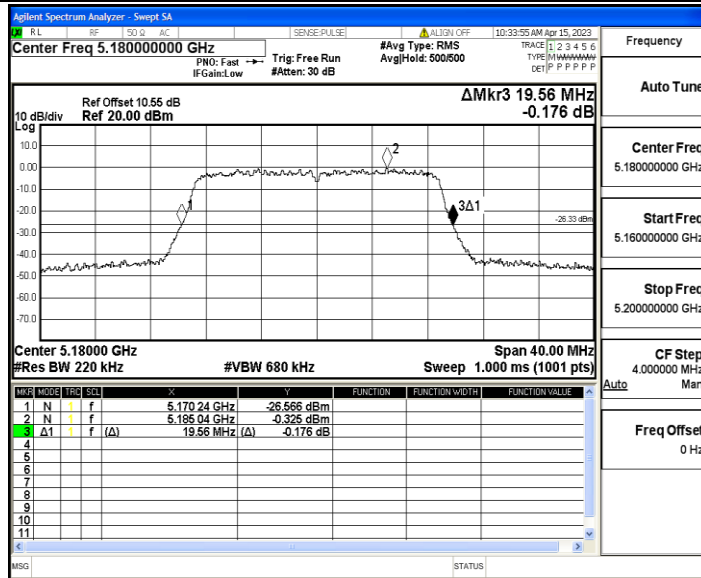
11A_Ant2_5200



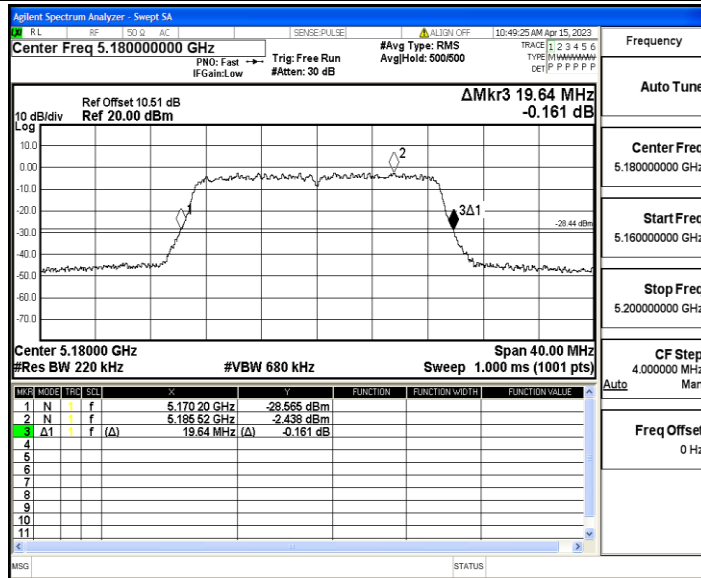
11A_Ant1_5240



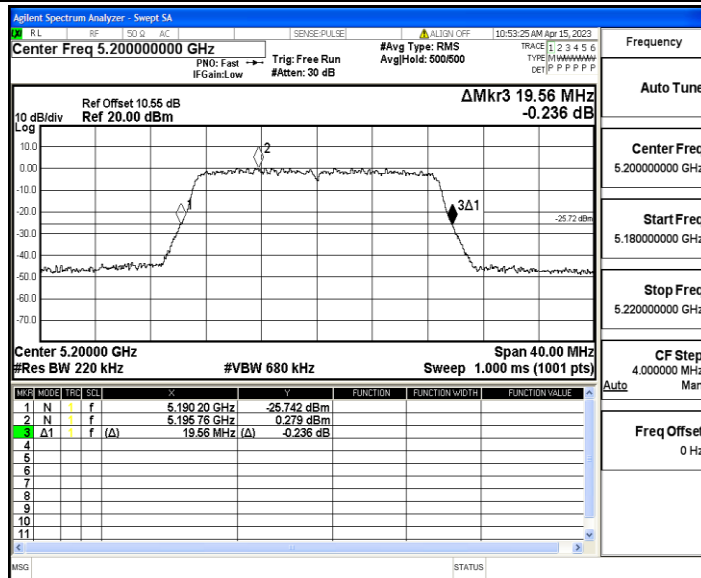
11A_Ant2_5240



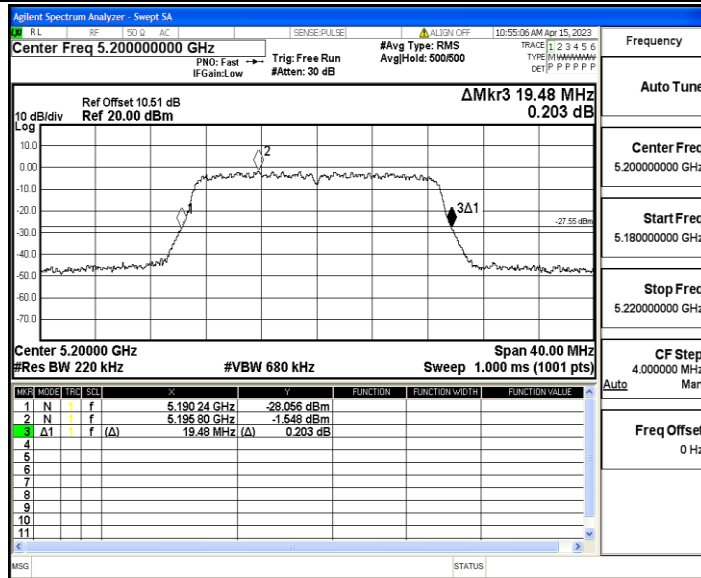
11N20MIMO_Ant1_5180



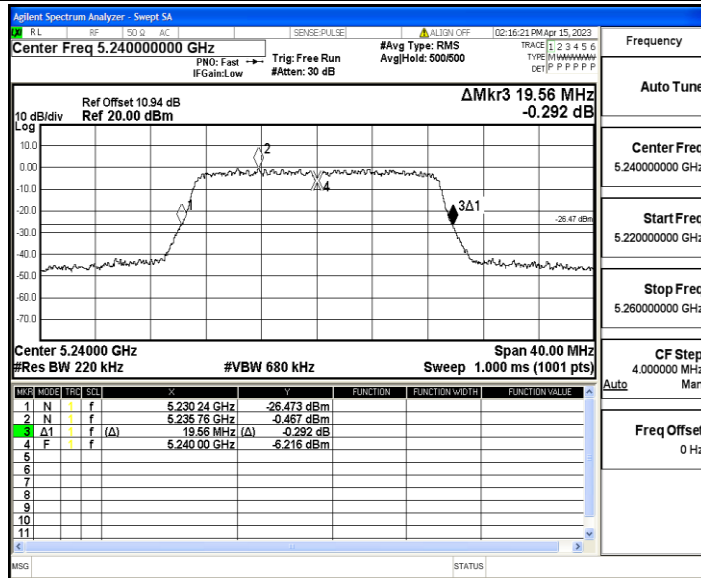
11N20MIMO_Ant2_5180



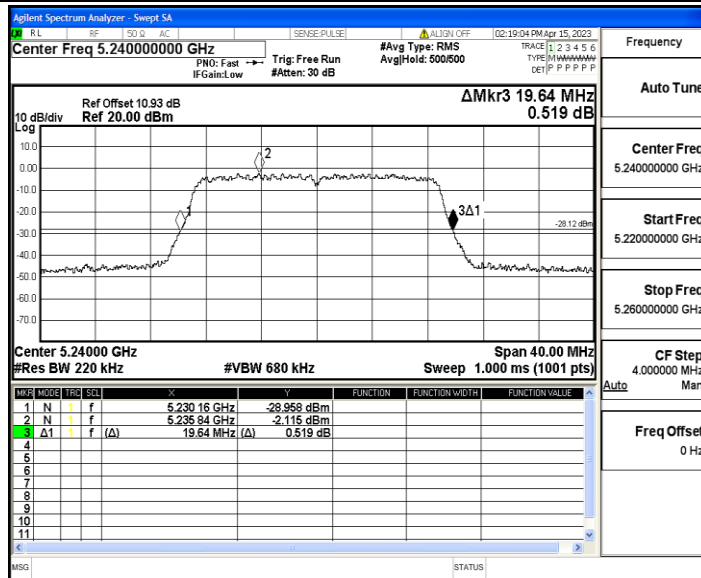
11N20MIMO_Ant1_5200



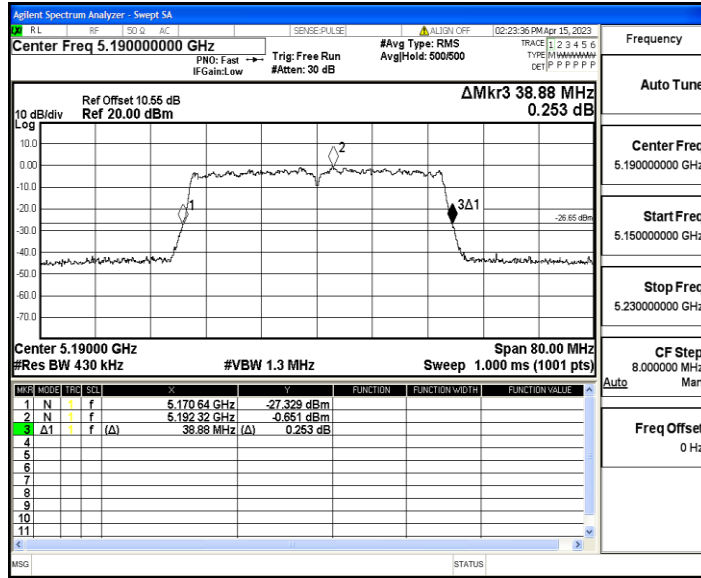
11N20MIMO_Ant2_5200



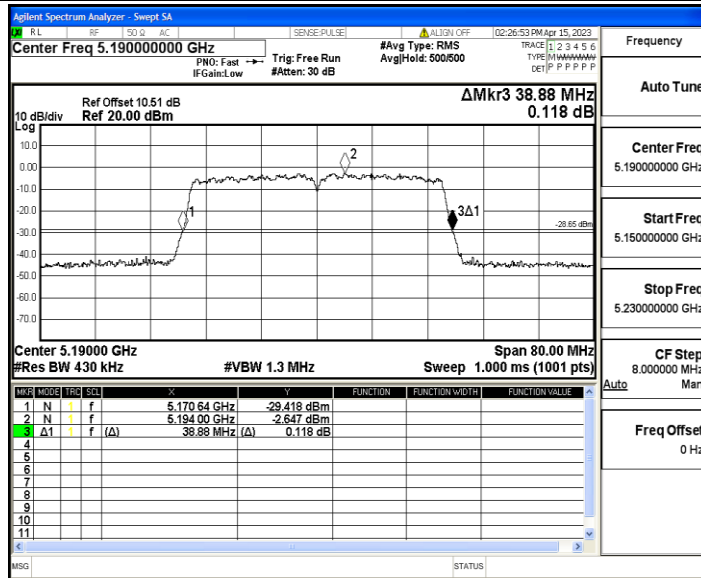
11N20MIMO_Ant1_5240



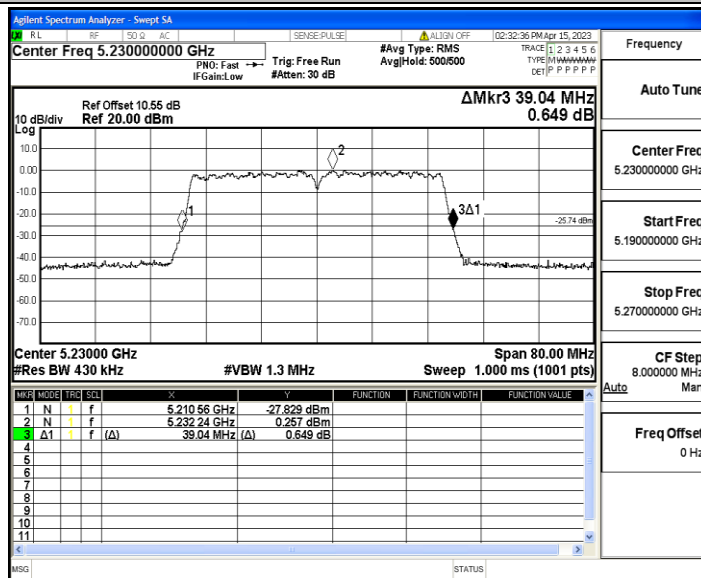
11N20MIMO_Ant2_5240



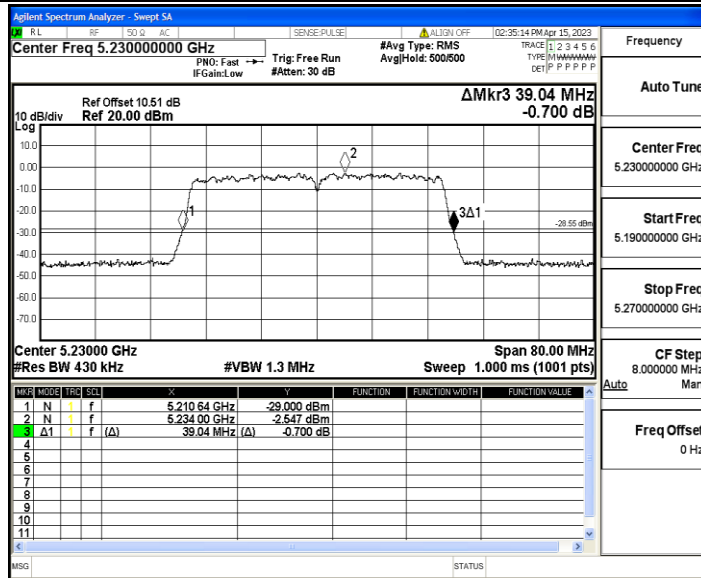
11N40MIMO_Ant1_5190



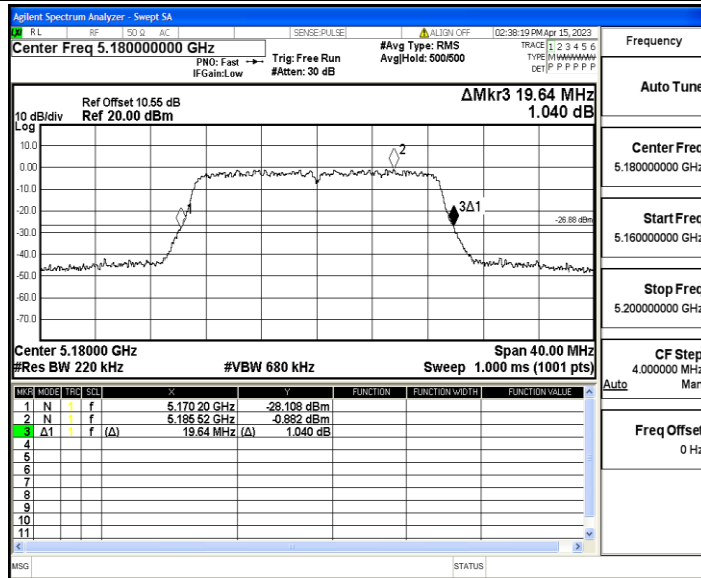
11N40MIMO_Ant2_5190



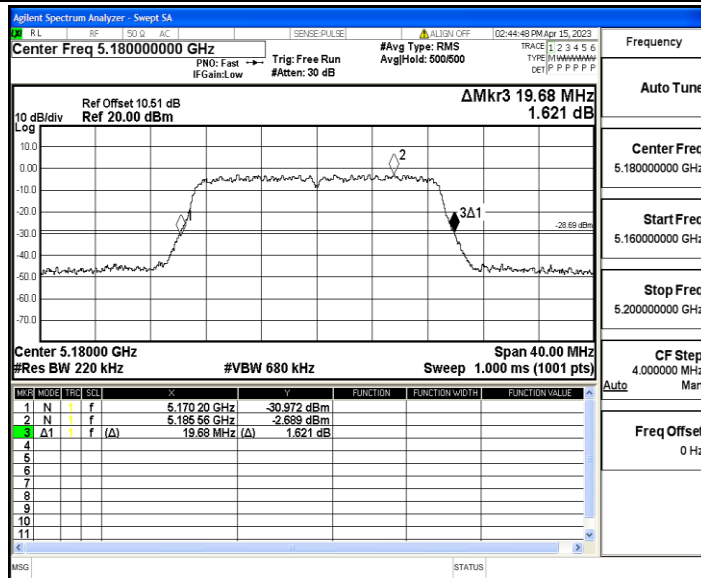
11N40MIMO_Ant1_5230



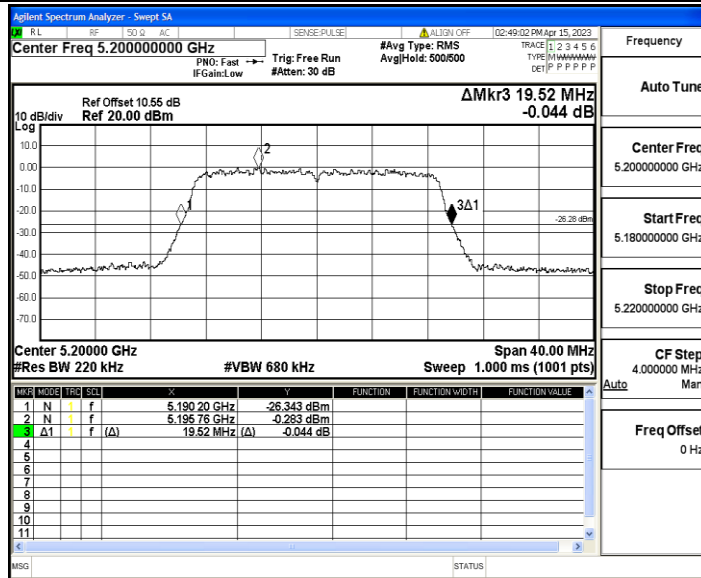
11N40MIMO_Ant2_5230



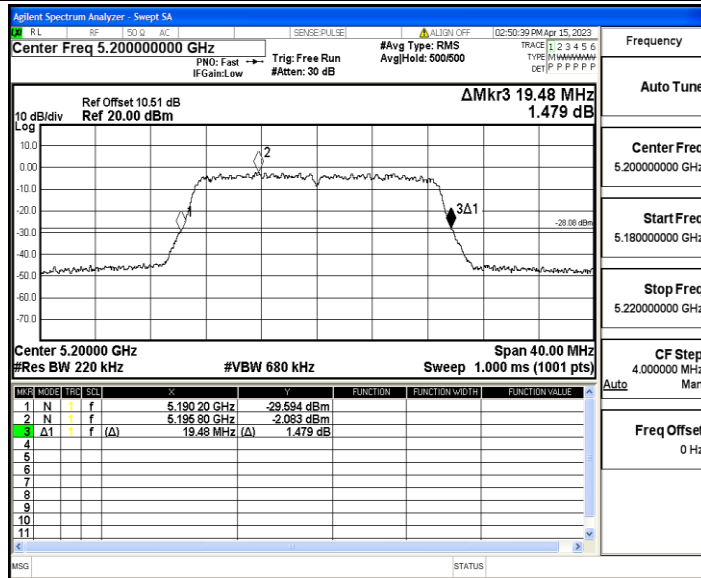
11AC20MIMO_Ant1_5180



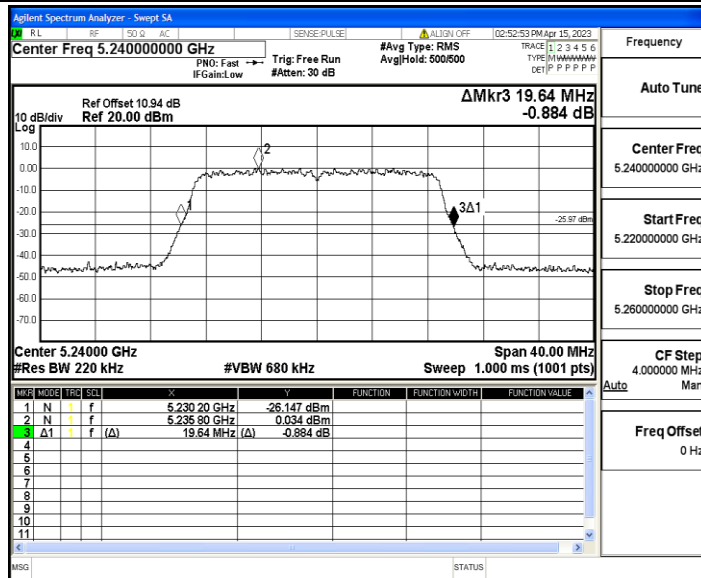
11AC20MIMO_Ant2_5180



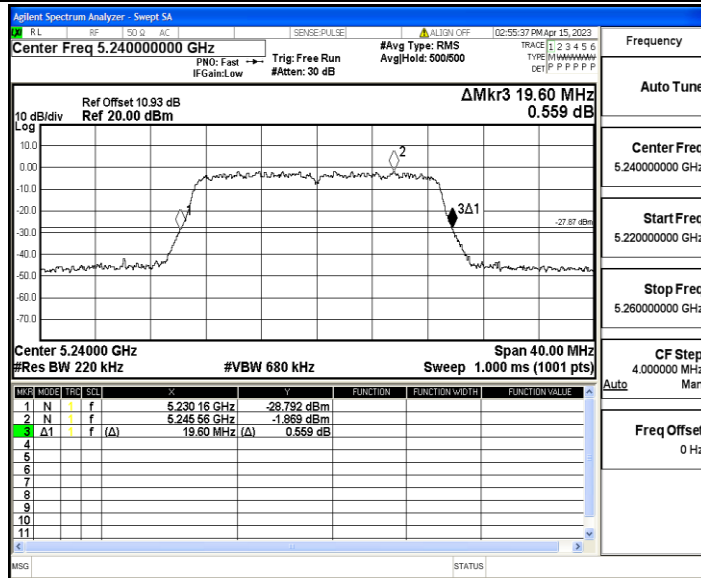
11AC20MIMO_Ant1_5200



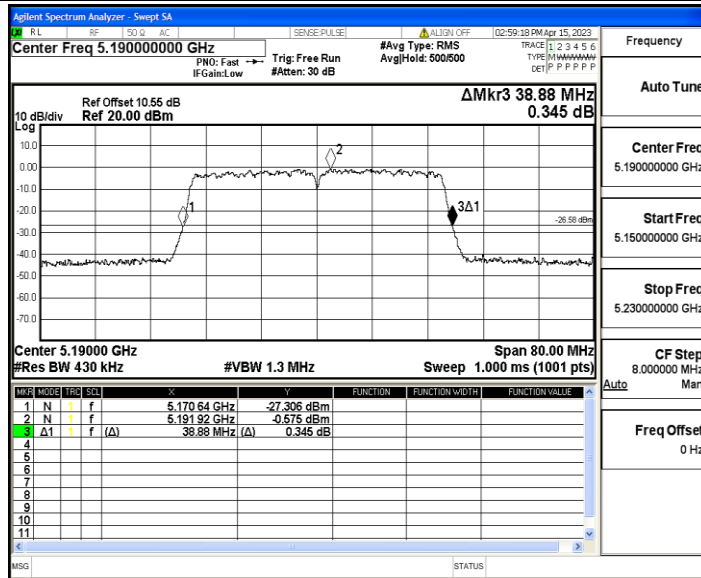
11AC20MIMO_Ant2_5200



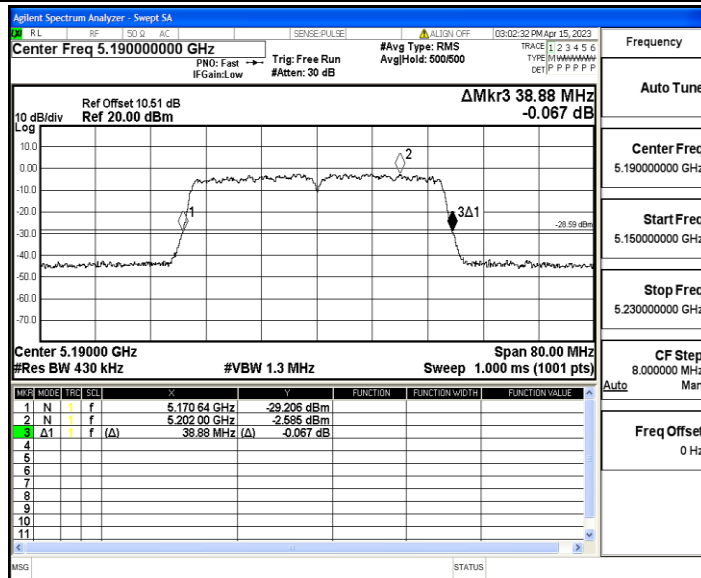
11AC20MIMO_Ant1_5240



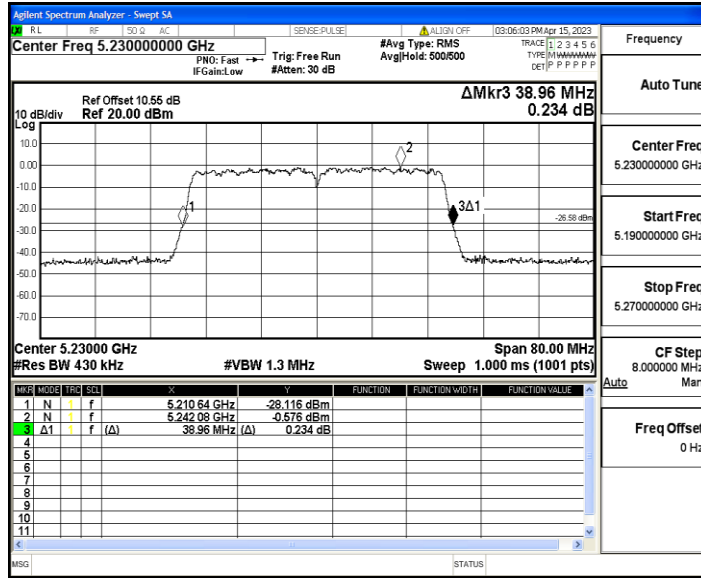
11AC20MIMO_Ant2_5240



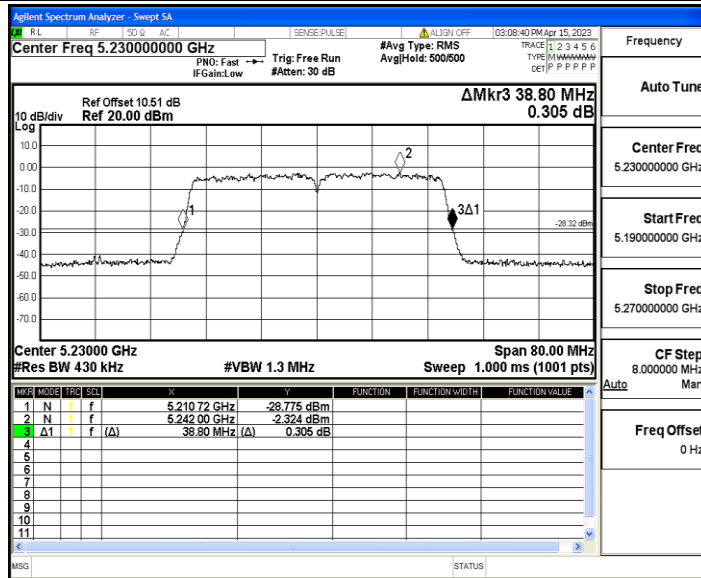
11AC40MIMO_Ant1_5190



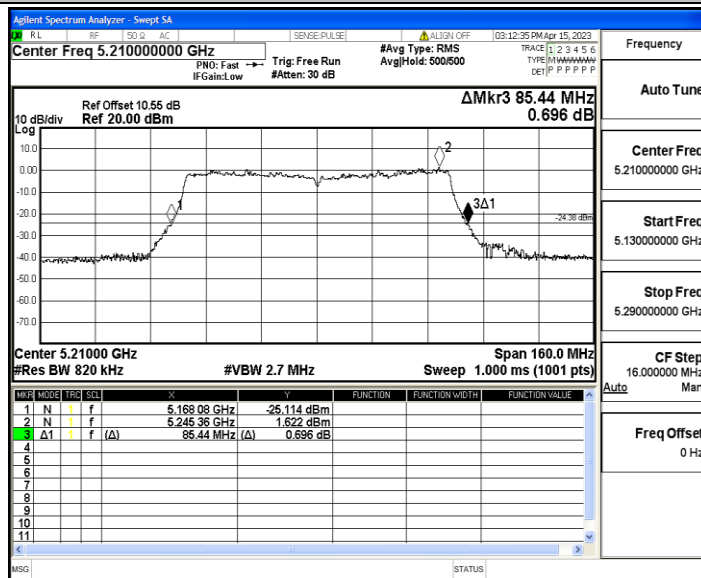
11AC40MIMO_Ant2_5190



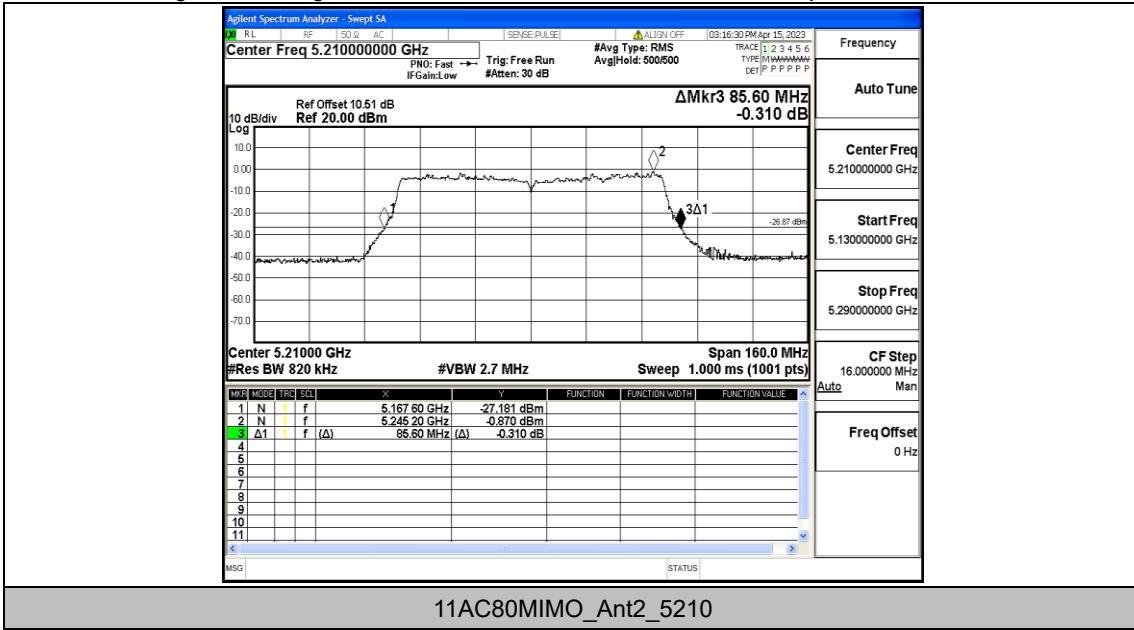
11AC40MIMO_Ant1_5230



11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



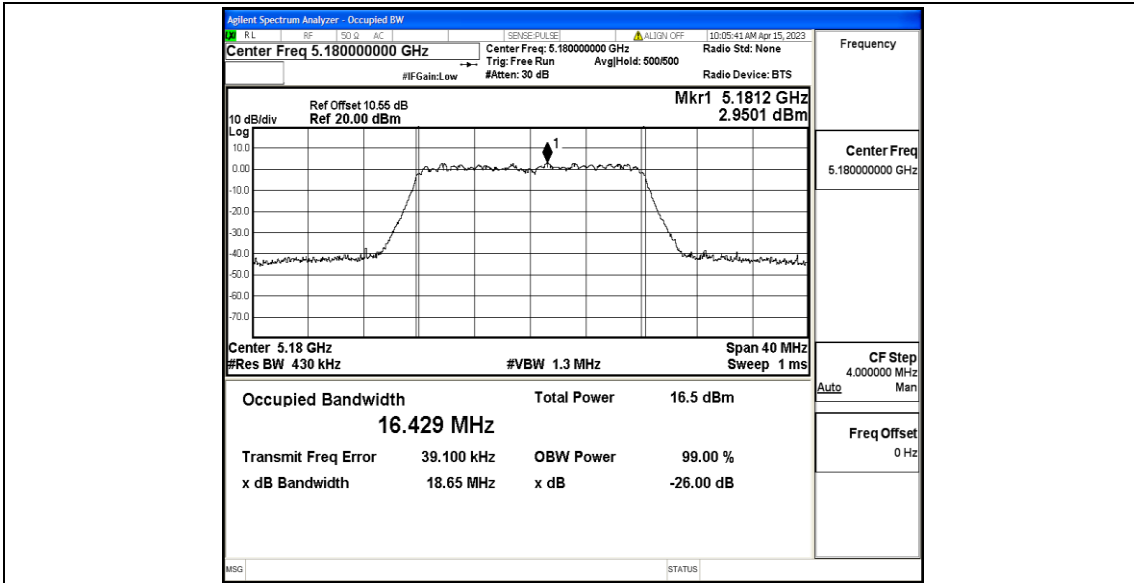
11AC80MIMO_Ant2_5210

Appendix A2: Occupied channel bandwidth

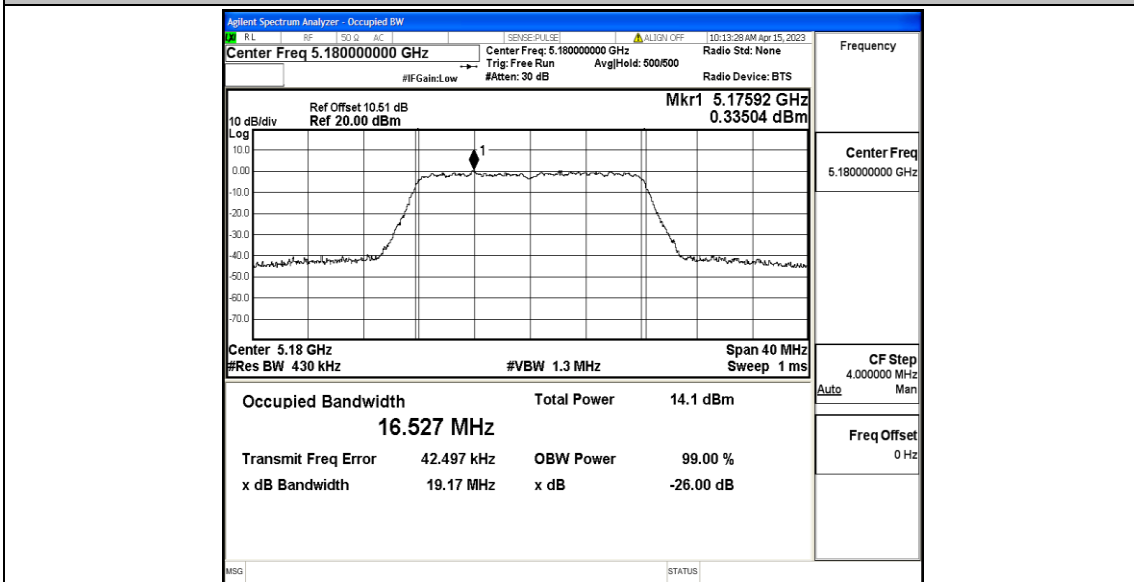
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.429	5171.8246	5188.2536	---	---
	Ant2	5180	16.527	5171.7790	5188.3060	---	---
	Ant1	5200	16.396	5191.8148	5208.2108	---	---
	Ant2	5200	16.484	5191.7718	5208.2558	---	---
	Ant1	5240	16.410	5231.8248	5248.2348	---	---
	Ant2	5240	16.483	5231.7969	5248.2799	---	---
11N20MIMO	Ant1	5180	17.550	5171.2621	5188.8121	---	---
	Ant2	5180	17.549	5171.2530	5188.8020	---	---
	Ant1	5200	17.523	5191.2318	5208.7548	---	---
	Ant2	5200	17.522	5191.2309	5208.7529	---	---
	Ant1	5240	17.524	5231.2521	5248.7761	---	---
	Ant2	5240	17.526	5231.2514	5248.7774	---	---
11N40MIMO	Ant1	5190	36.091	5172.0210	5208.1120	---	---
	Ant2	5190	35.959	5172.1110	5208.0700	---	---
	Ant1	5230	36.148	5211.9885	5248.1365	---	---
	Ant2	5230	36.025	5212.0841	5248.1091	---	---
11AC20MIMO	Ant1	5180	17.551	5171.2550	5188.8060	---	---
	Ant2	5180	17.537	5171.2609	5188.7979	---	---
	Ant1	5200	17.513	5191.2394	5208.7524	---	---
	Ant2	5200	17.498	5191.2502	5208.7482	---	---
	Ant1	5240	17.519	5231.2643	5248.7833	---	---
	Ant2	5240	17.506	5231.2670	5248.7730	---	---
11AC40MIMO	Ant1	5190	35.973	5172.1226	5208.0956	---	---
	Ant2	5190	35.921	5172.1229	5208.0439	---	---
	Ant1	5230	36.020	5212.0883	5248.1083	---	---
	Ant2	5230	36.003	5212.0930	5248.0960	---	---
11AC80MIMO	Ant1	5210	76.879	5172.0052	5248.8842	---	---
	Ant2	5210	76.558	5172.0620	5248.6200	---	---

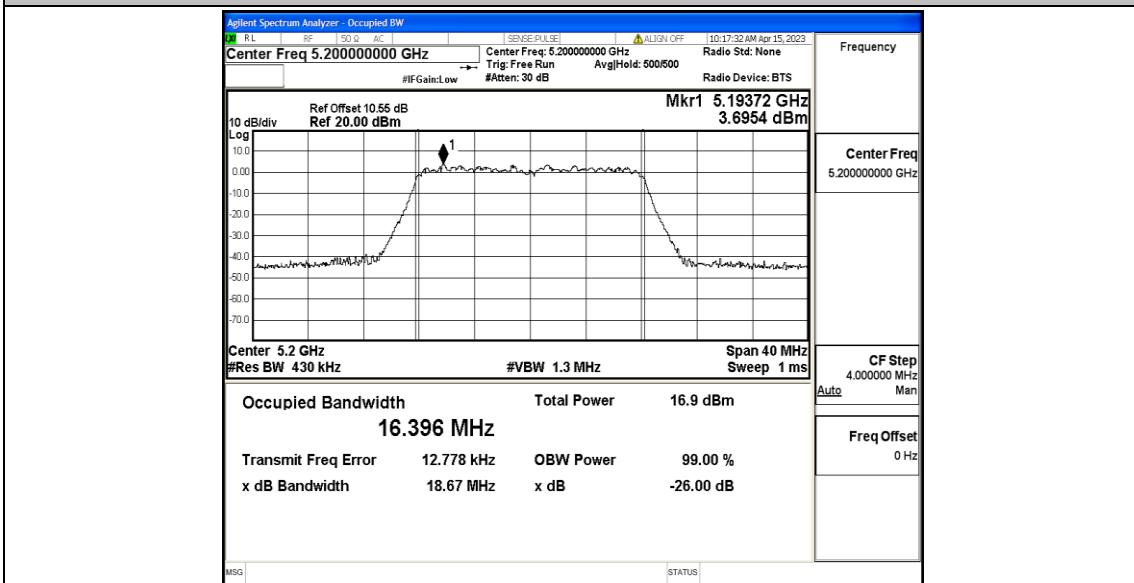
Test Graphs



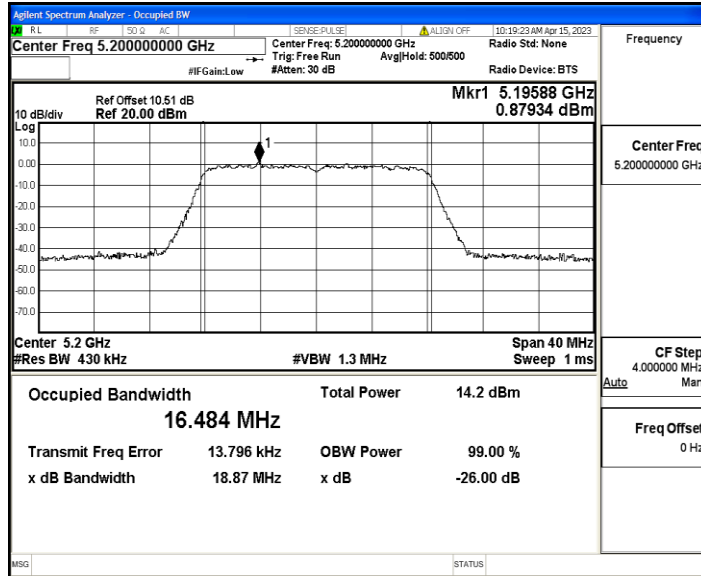
11A_Ant1_5180



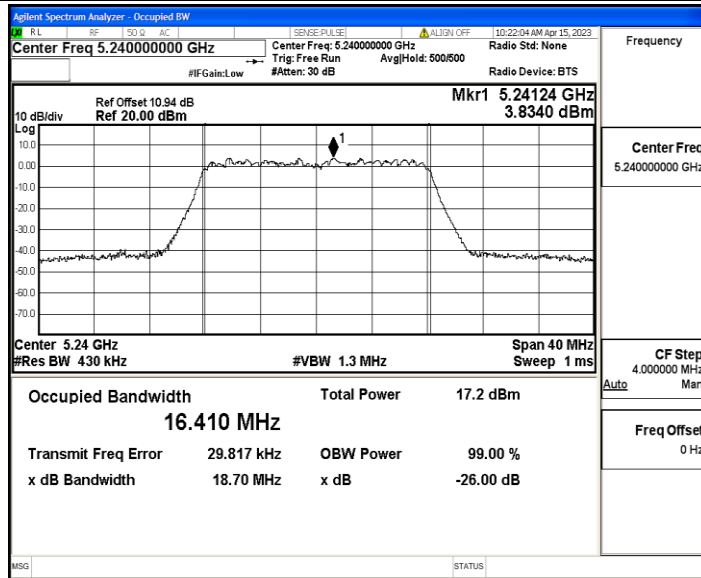
11A_Ant2_5180



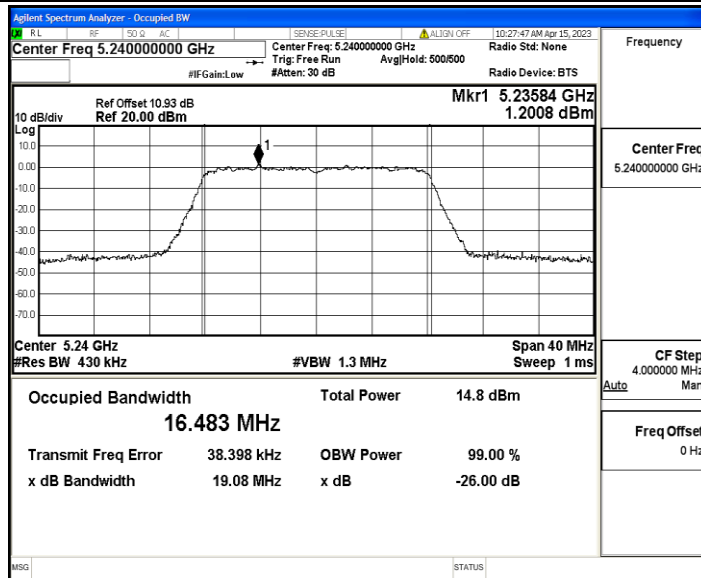
11A_Ant1_5200



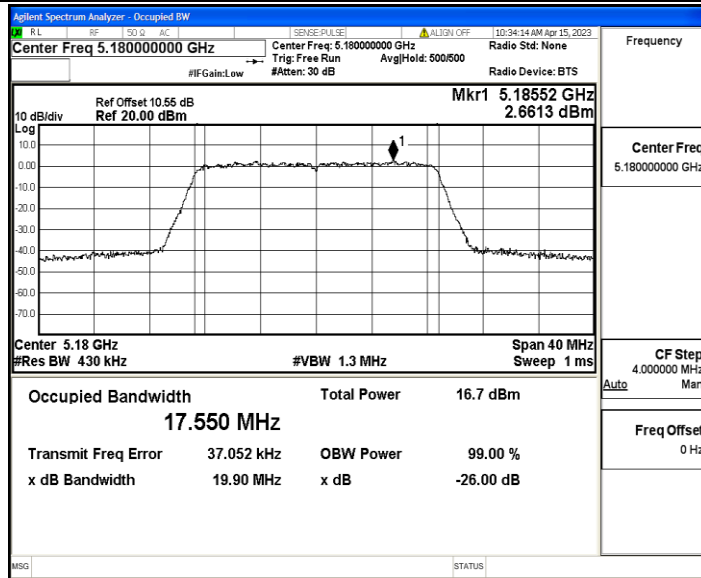
11A_Ant2_5200



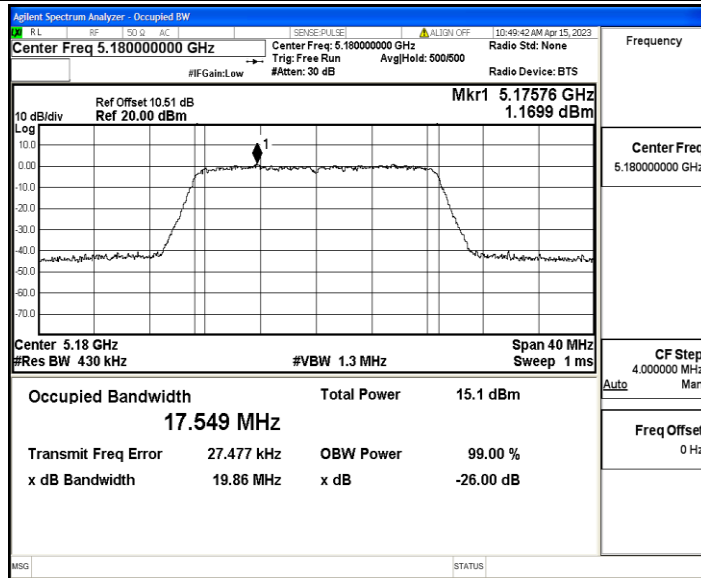
11A_Ant1_5240



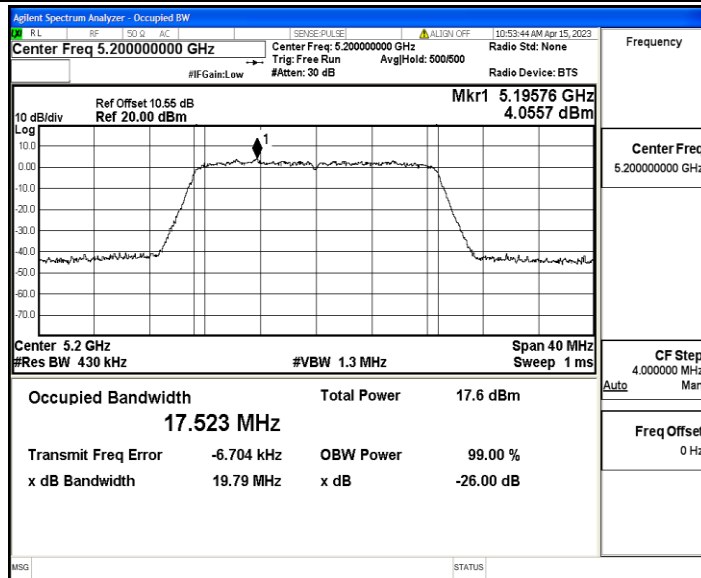
11A_Ant2_5240



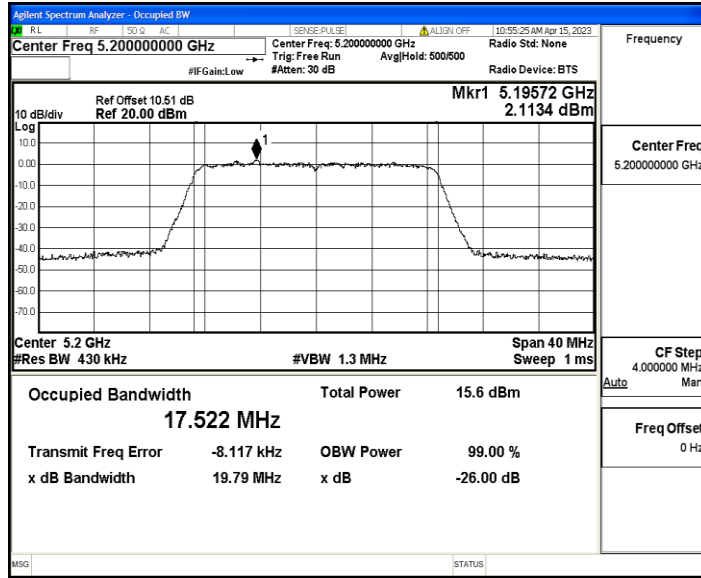
11N20MIMO_Ant1_5180



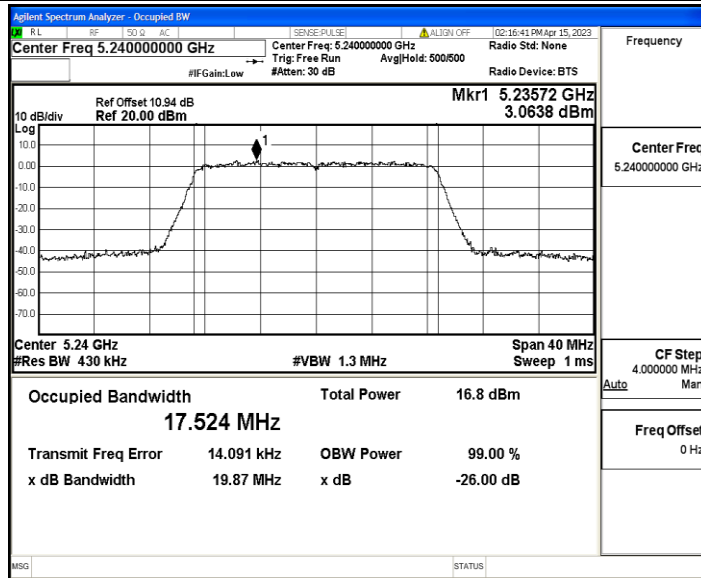
11N20MIMO_Ant2_5180



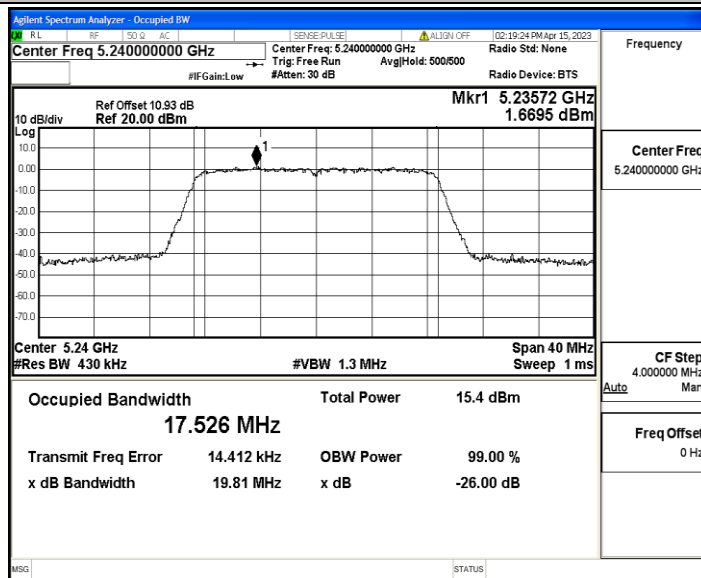
11N20MIMO_Ant1_5200



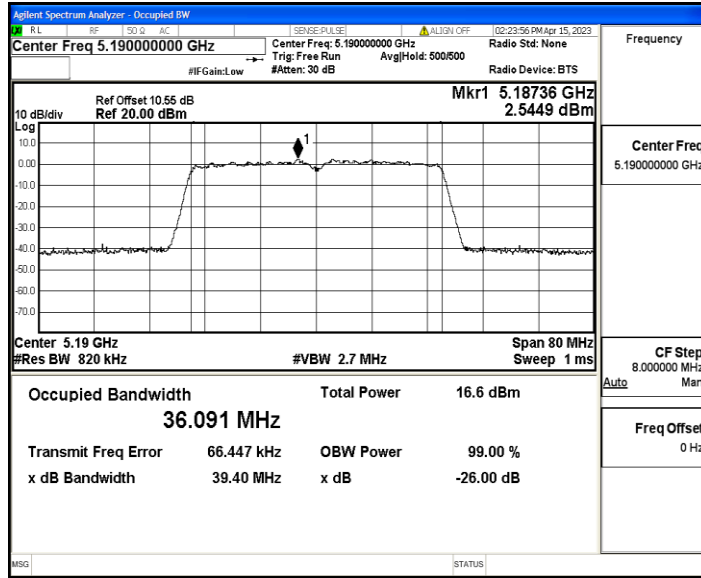
11N20MIMO_Ant2_5200



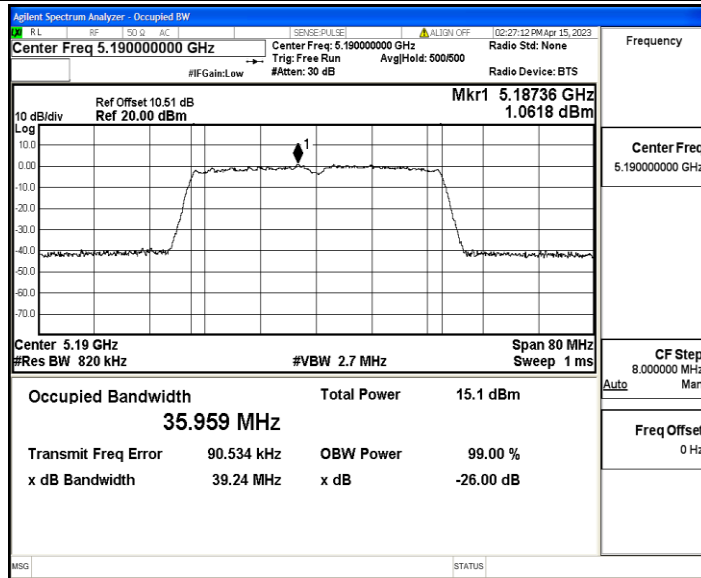
11N20MIMO_Ant1_5240



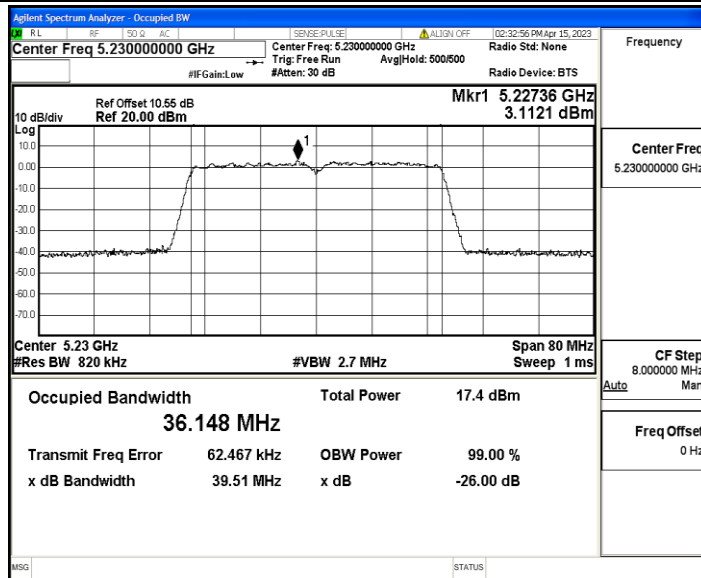
11N20MIMO_Ant2_5240



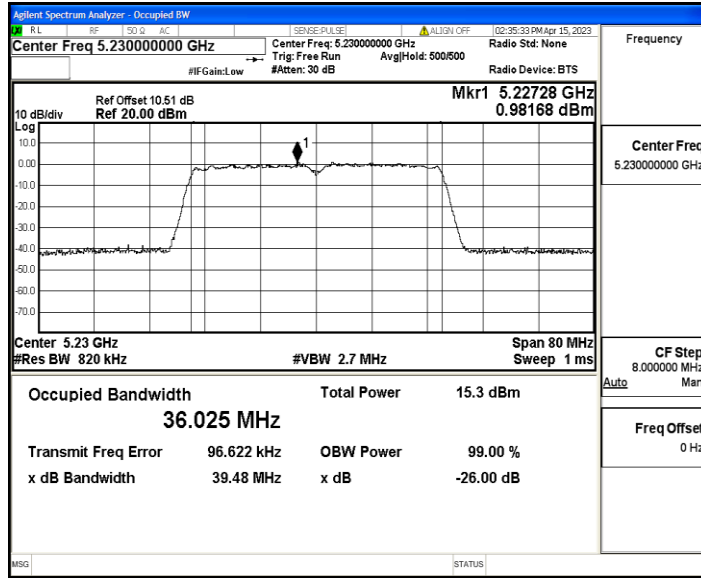
11N40MIMO_Ant1_5190



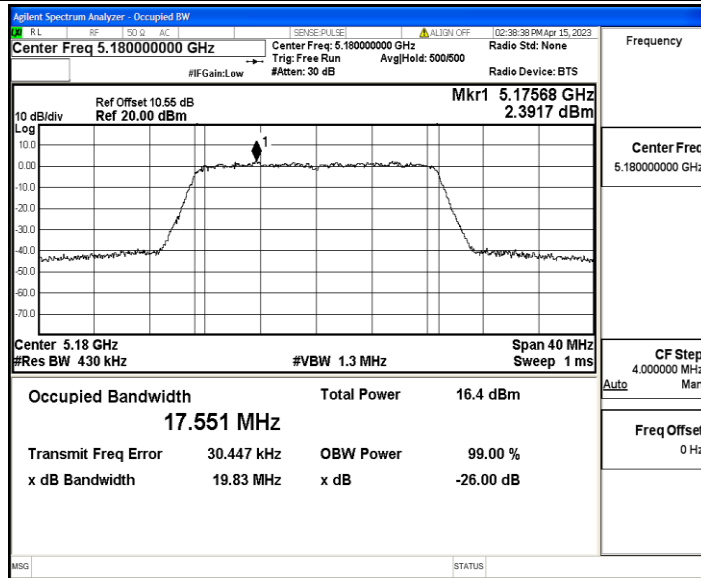
11N40MIMO_Ant2_5190



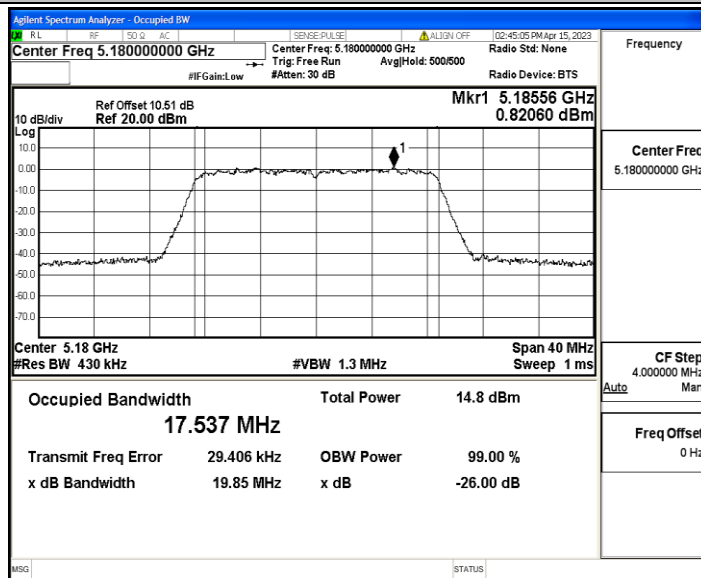
11N40MIMO_Ant1_5230



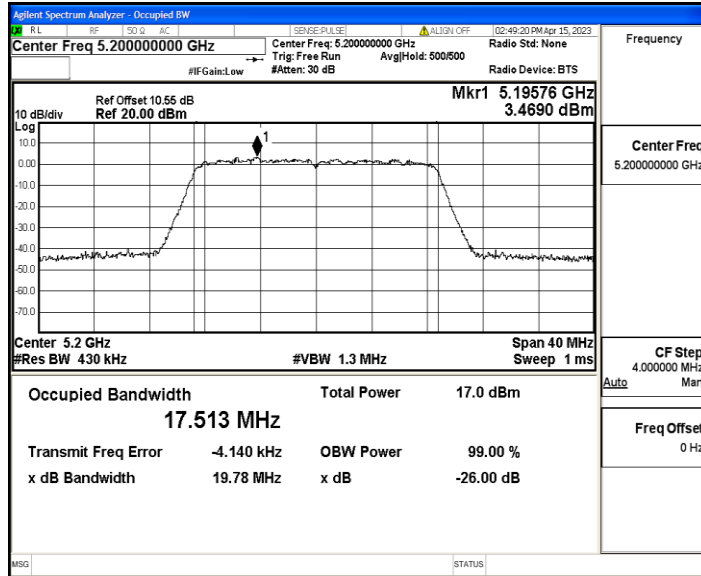
11N40MIMO_Ant2_5230



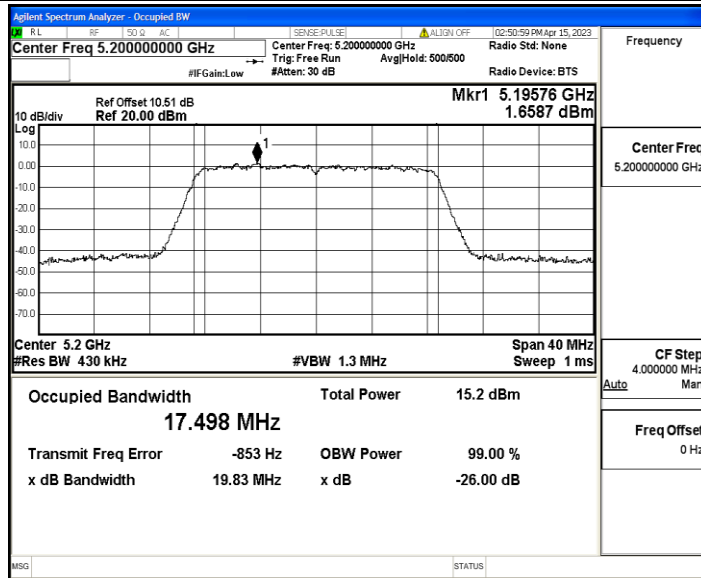
11AC20MIMO_Ant1_5180



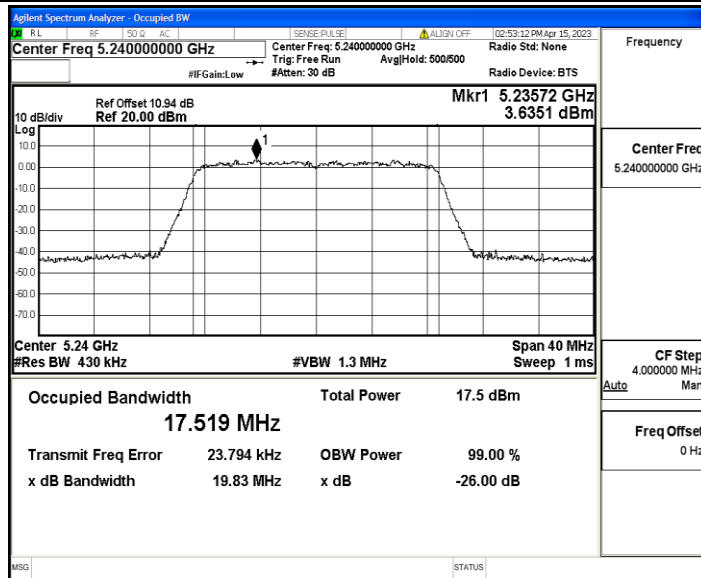
11AC20MIMO_Ant2_5180



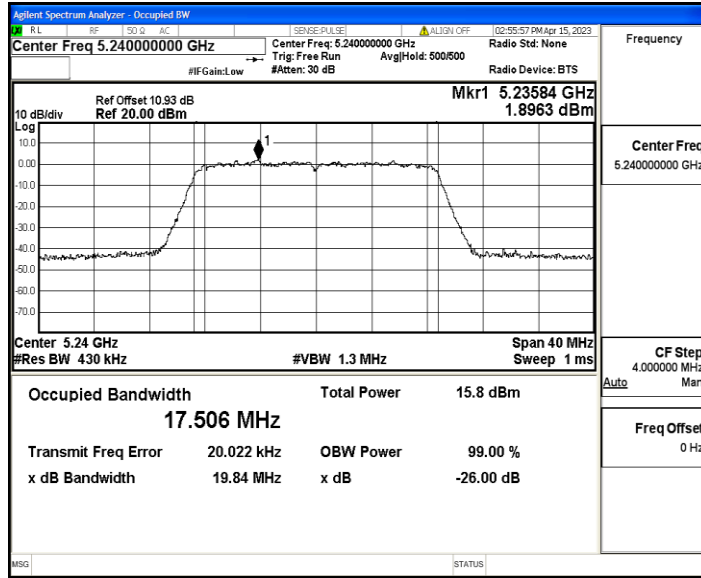
11AC20MIMO_Ant1_5200



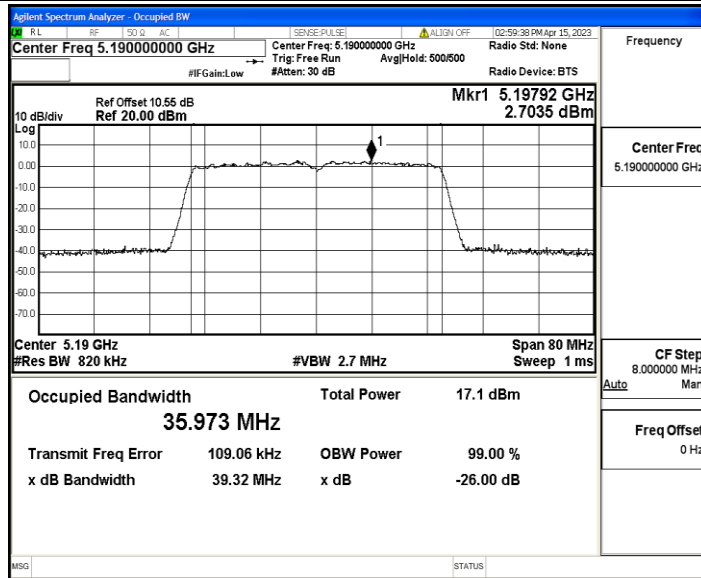
11AC20MIMO_Ant2_5200



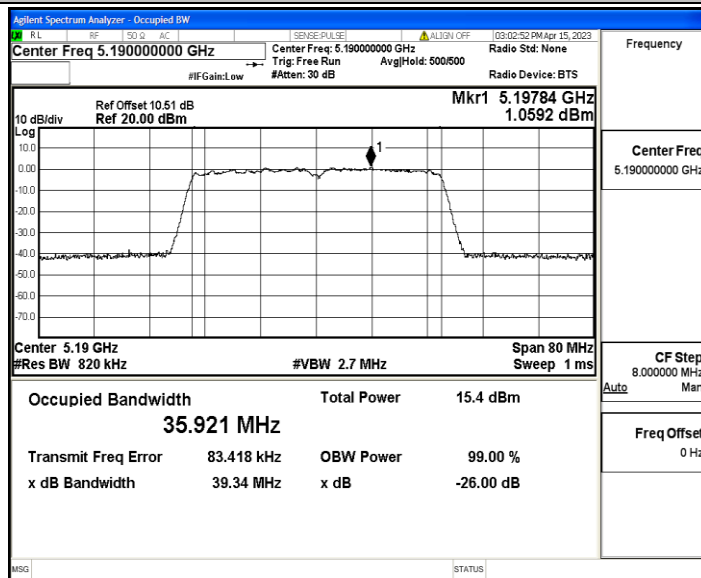
11AC20MIMO_Ant1_5240



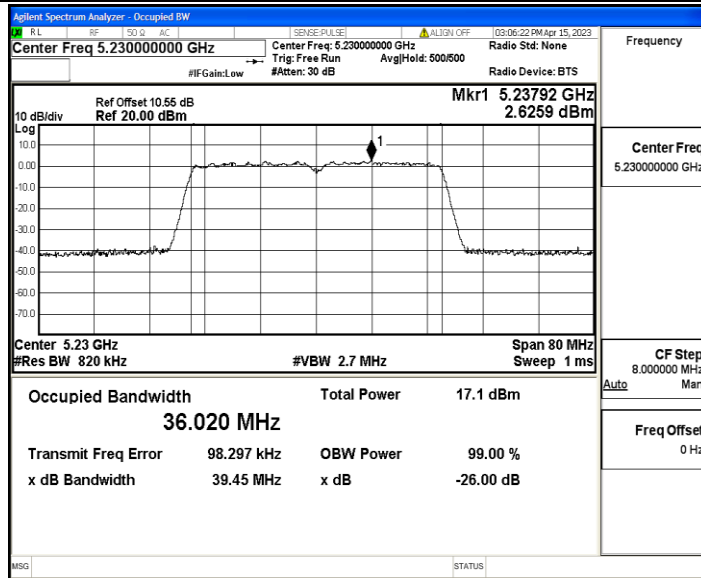
11AC20MIMO_Ant2_5240



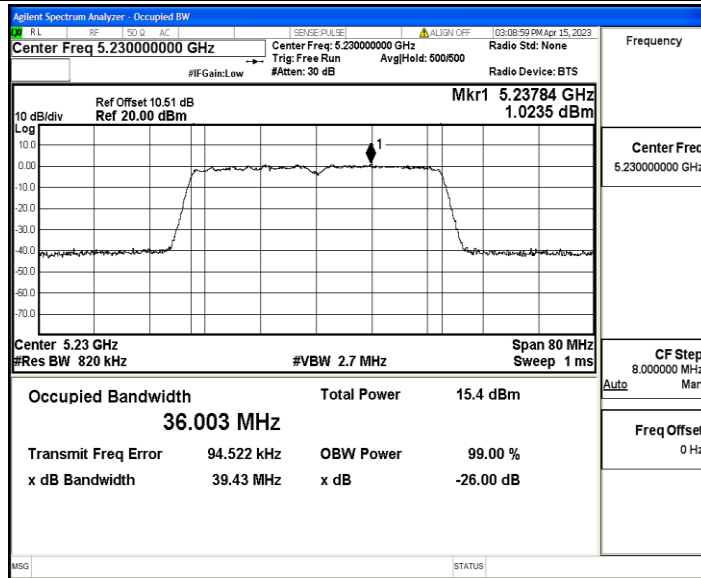
11AC40MIMO_Ant1_5190



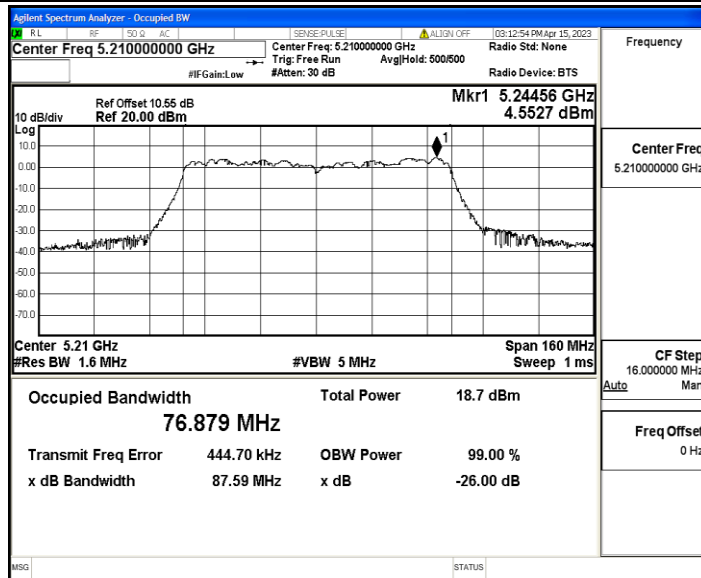
11AC40MIMO_Ant2_5190



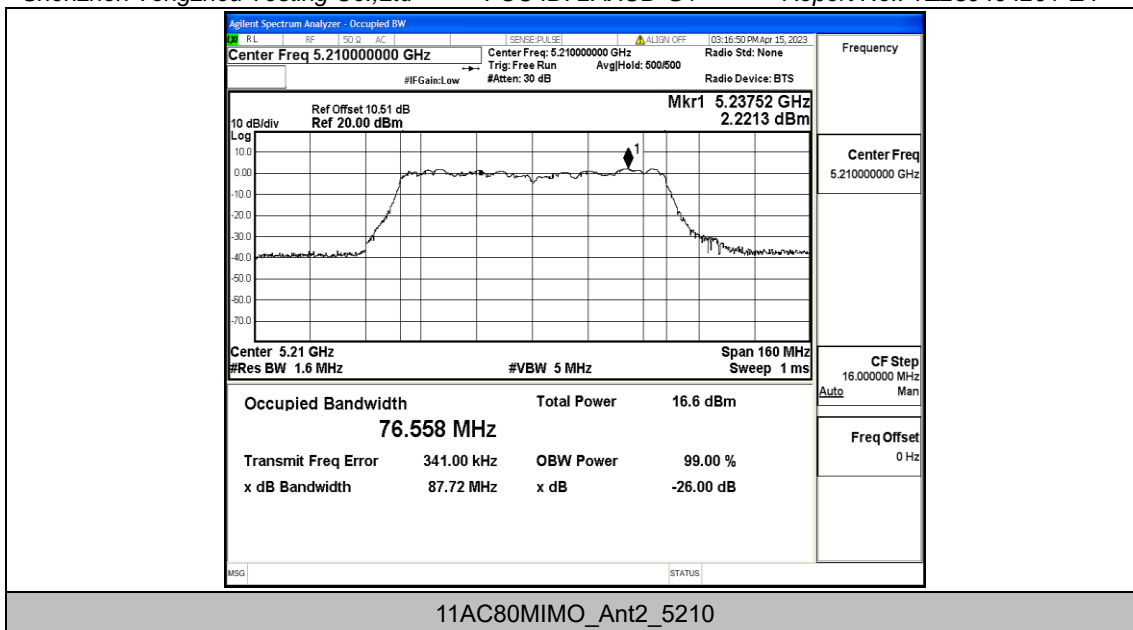
11AC40MIMO_Ant1_5230



11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	9.17	≤23.98	PASS
	Ant2	5180	7.37	≤23.98	PASS
	Ant1	5200	9.65	≤23.98	PASS
	Ant2	5200	7.76	≤23.98	PASS
	Ant1	5240	10.01	≤23.98	PASS
	Ant2	5240	8.29	≤23.98	PASS
11N20MIMO	Ant1	5180	9.21	≤23.98	PASS
	Ant2	5180	7.62	≤23.98	PASS
	total	5180	11.50	≤23.98	PASS
	Ant1	5200	10.12	≤23.98	PASS
	Ant2	5200	8.13	≤23.98	PASS
	total	5200	12.25	≤23.98	PASS
	Ant1	5240	9.46	≤23.98	PASS
	Ant2	5240	8.05	≤23.98	PASS
	total	5240	11.82	≤23.98	PASS
11N40MIMO	Ant1	5190	8.92	≤23.98	PASS
	Ant2	5190	7.47	≤23.98	PASS
	total	5190	11.27	≤23.98	PASS
	Ant1	5230	9.43	≤23.98	PASS
	Ant2	5230	7.51	≤23.98	PASS
	total	5230	11.59	≤23.98	PASS
11AC20MIMO	Ant1	5180	8.80	≤23.98	PASS
	Ant2	5180	7.32	≤23.98	PASS
	total	5180	11.13	≤23.98	PASS
	Ant1	5200	9.49	≤23.98	PASS
	Ant2	5200	7.70	≤23.98	PASS
	total	5200	11.70	≤23.98	PASS
	Ant1	5240	10.02	≤23.98	PASS
	Ant2	5240	8.36	≤23.98	PASS
	total	5240	12.28	≤23.98	PASS
11AC40MIMO	Ant1	5190	9.40	≤23.98	PASS
	Ant2	5190	7.81	≤23.98	PASS
	total	5190	11.69	≤23.98	PASS
	Ant1	5230	9.43	≤23.98	PASS
	Ant2	5230	7.84	≤23.98	PASS
	total	5230	11.72	≤23.98	PASS
11AC80MIMO	Ant1	5210	9.71	≤23.98	PASS
	Ant2	5210	7.74	≤23.98	PASS
	total	5210	11.85	≤23.98	PASS

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

Appendix C: Maximum power spectral density

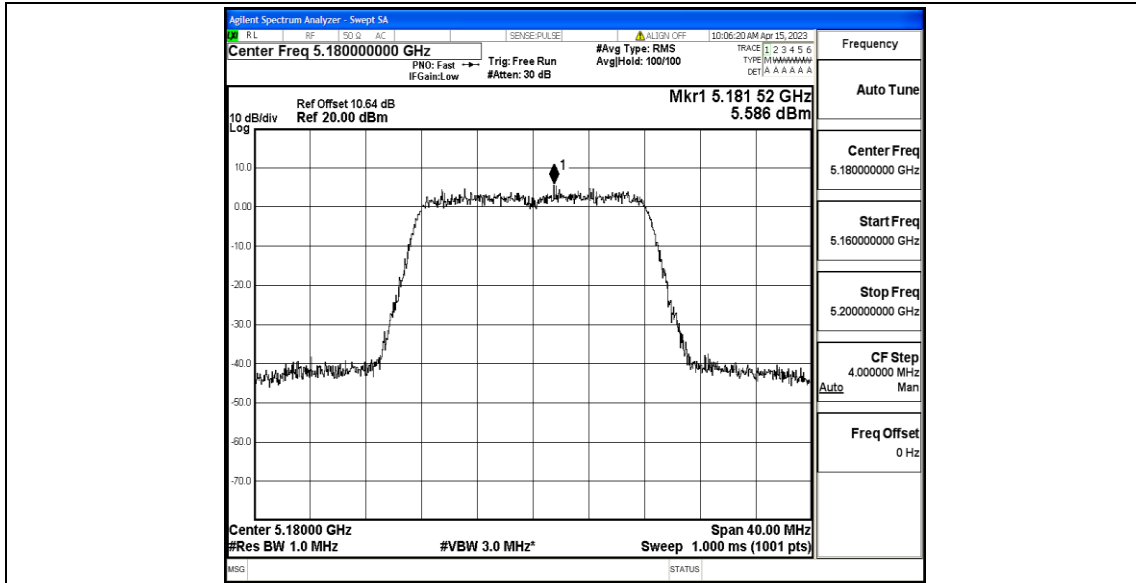
Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	5.59	≤11.00	PASS
	Ant2	5180	1.48	≤11.00	PASS
	Ant1	5200	5.91	≤11.00	PASS
	Ant2	5200	2.06	≤11.00	PASS
	Ant1	5240	6.24	≤11.00	PASS
	Ant2	5240	2.47	≤11.00	PASS
11N20MIMO	Ant1	5180	4.38	≤11.00	PASS
	Ant2	5180	3.18	≤11.00	PASS
	total	5180	6.83	≤11.00	PASS
	Ant1	5200	5.73	≤11.00	PASS
	Ant2	5200	4.31	≤11.00	PASS
	total	5200	8.09	≤11.00	PASS
	Ant1	5240	4.74	≤11.00	PASS
	Ant2	5240	3.36	≤11.00	PASS
	total	5240	7.11	≤11.00	PASS
11N40MIMO	Ant1	5190	1.36	≤11.00	PASS
	Ant2	5190	0.01	≤11.00	PASS
	total	5190	3.75	≤11.00	PASS
	Ant1	5230	1.82	≤11.00	PASS
	Ant2	5230	0.12	≤11.00	PASS
	total	5230	4.06	≤11.00	PASS
11AC20MIMO	Ant1	5180	4.24	≤11.00	PASS
	Ant2	5180	2.67	≤11.00	PASS
	total	5180	6.54	≤11.00	PASS
	Ant1	5200	5.47	≤11.00	PASS
	Ant2	5200	3.54	≤11.00	PASS
	total	5200	7.62	≤11.00	PASS
	Ant1	5240	5.63	≤11.00	PASS
	Ant2	5240	4.01	≤11.00	PASS
	total	5240	7.91	≤11.00	PASS
11AC40MIMO	Ant1	5190	1.85	≤11.00	PASS
	Ant2	5190	0.12	≤11.00	PASS
	total	5190	4.08	≤11.00	PASS
	Ant1	5230	1.17	≤11.00	PASS
	Ant2	5230	-0.25	≤11.00	PASS
	total	5230	3.53	≤11.00	PASS
11AC80MIMO	Ant1	5210	-0.21	≤11.00	PASS
	Ant2	5210	-1.71	≤11.00	PASS
	total	5210	2.11	≤11.00	PASS

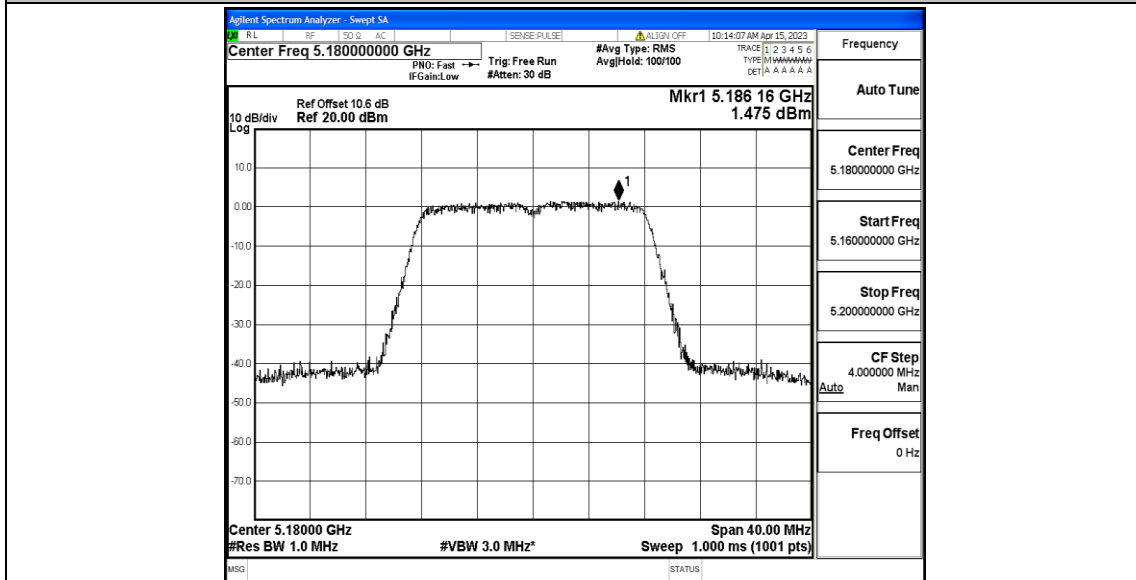
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

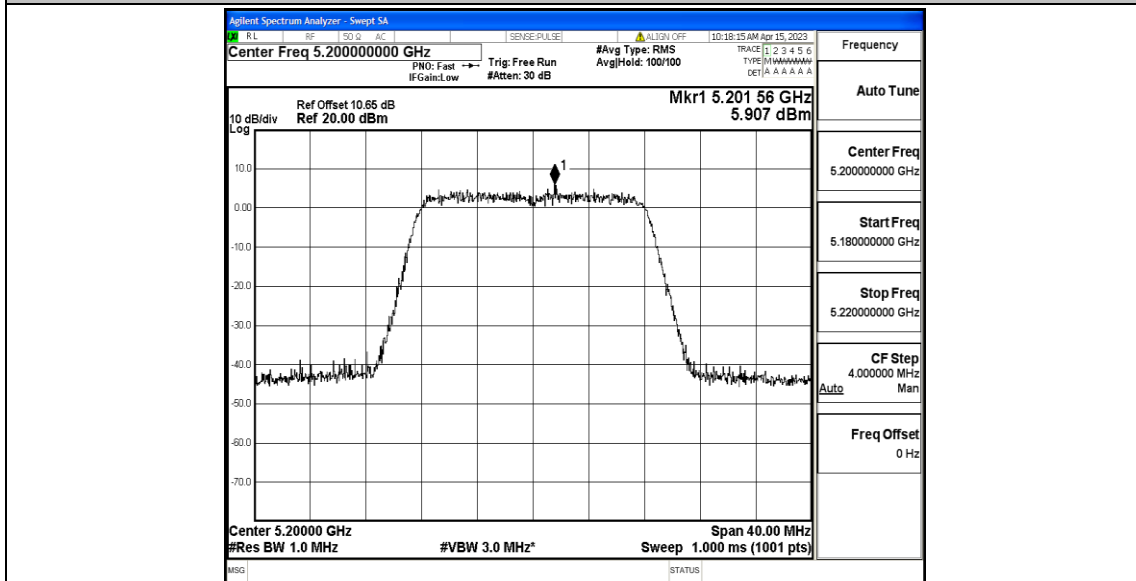
Test Graphs



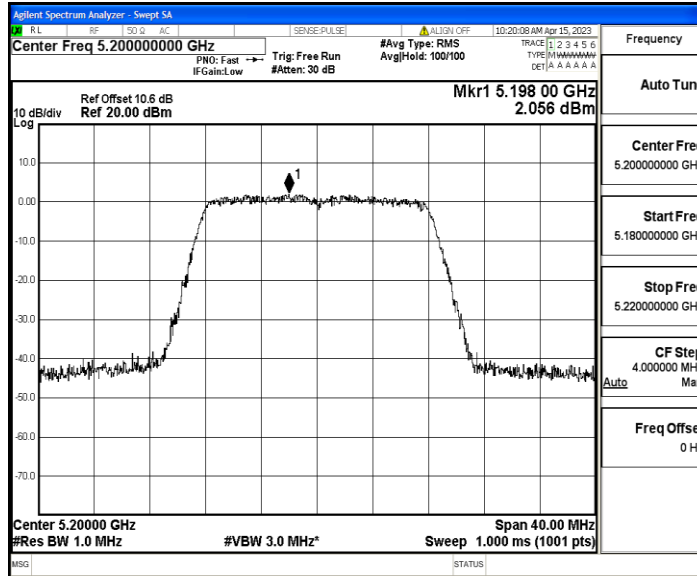
11A_Ant1_5180



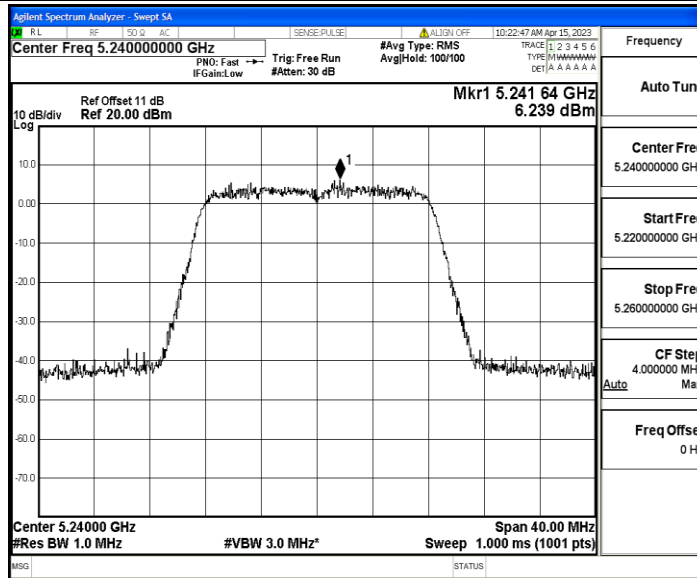
11A_Ant2_5180



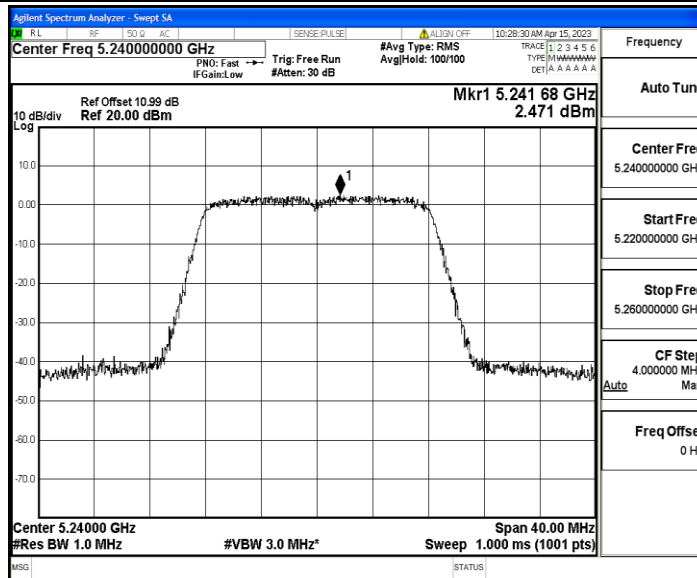
11A_Ant1_5200



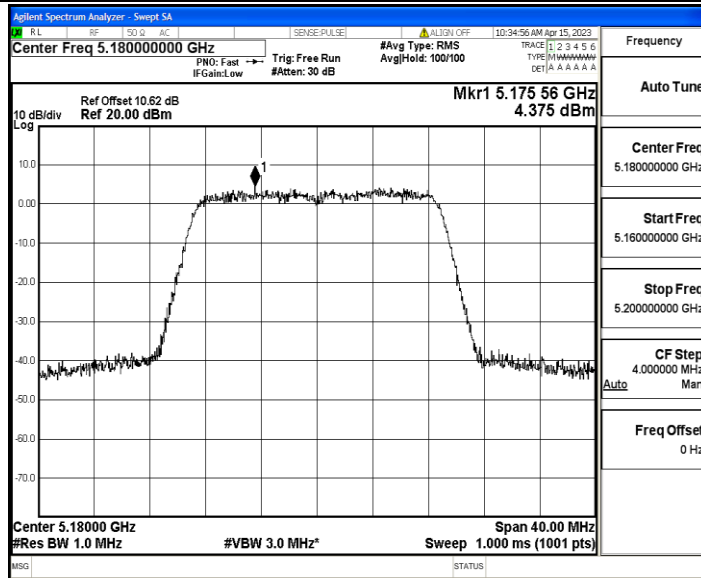
11A_Ant2_5200



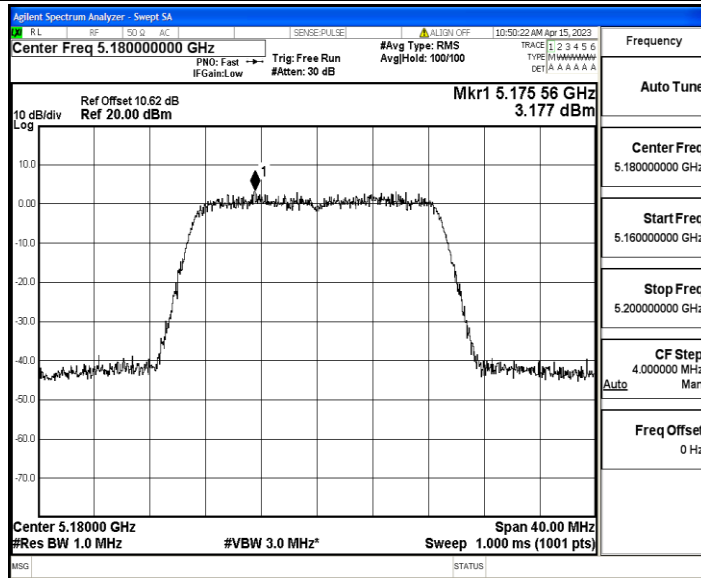
11A_Ant1_5240



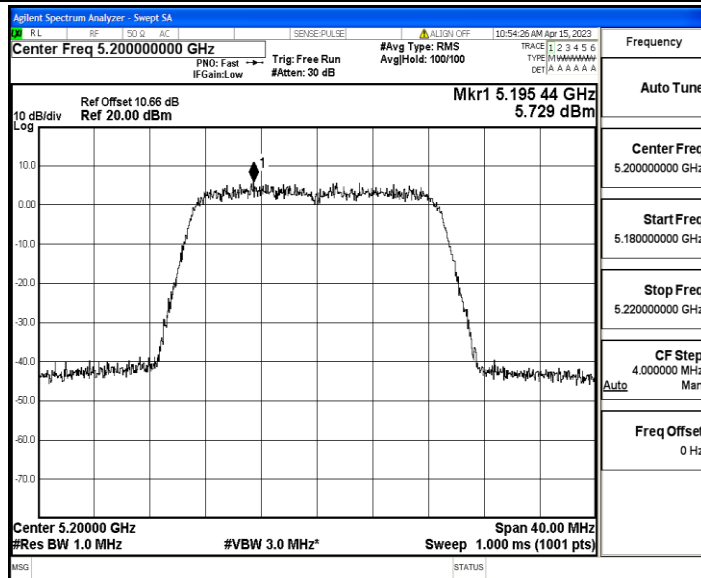
11A_Ant2_5240



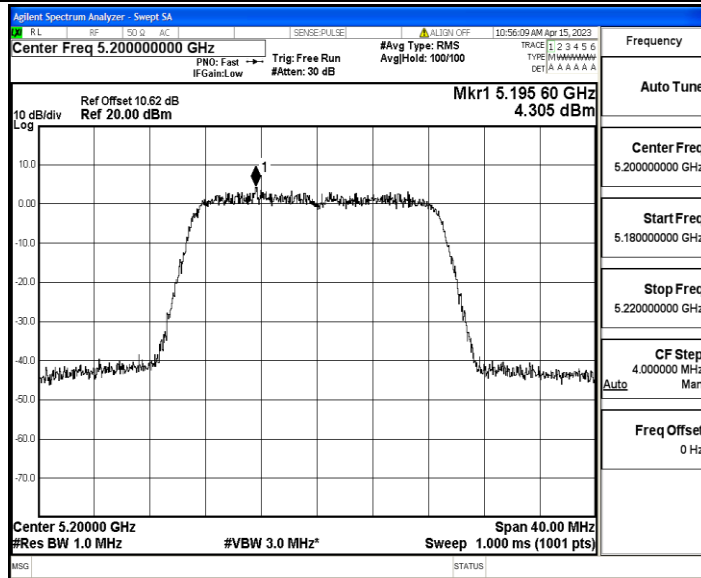
11N20MIMO_Ant1_5180



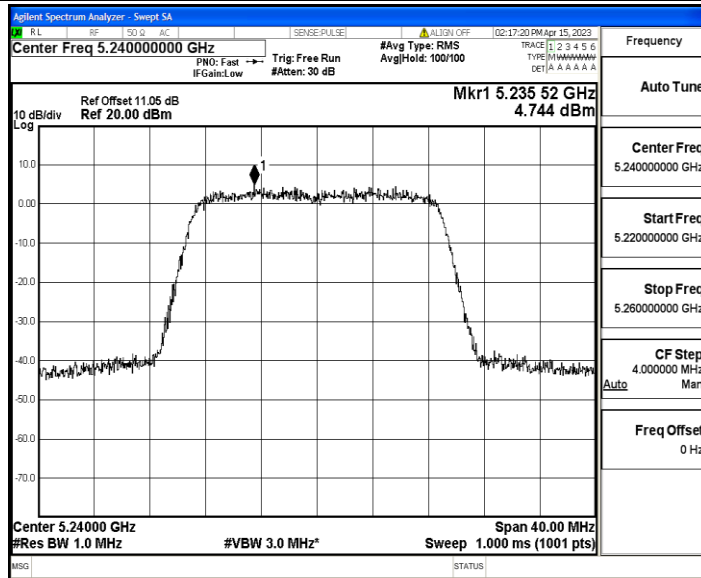
11N20MIMO_Ant2_5180



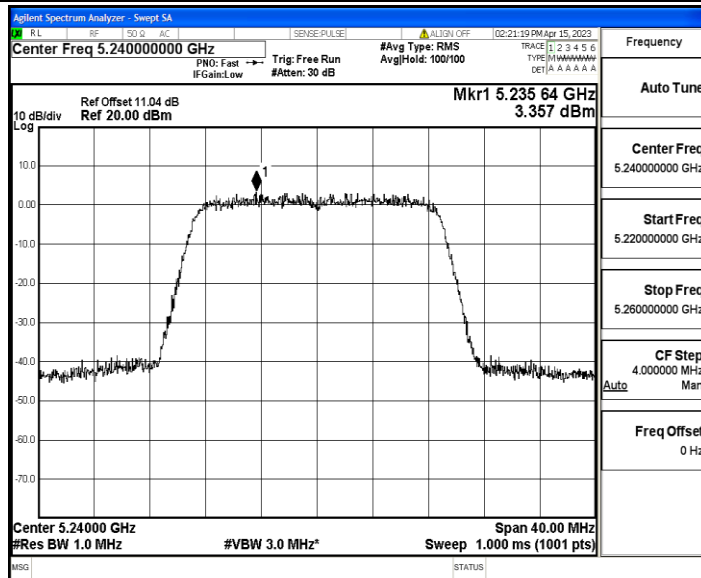
11N20MIMO_Ant1_5200



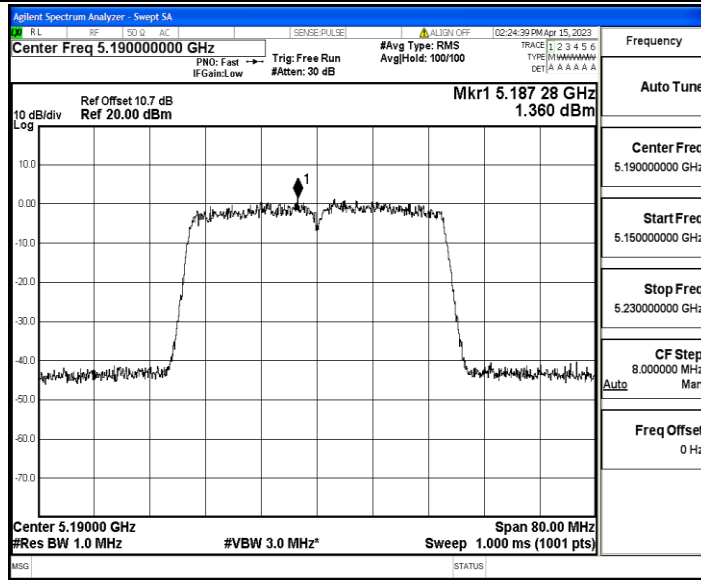
11N20MIMO_Ant2_5200



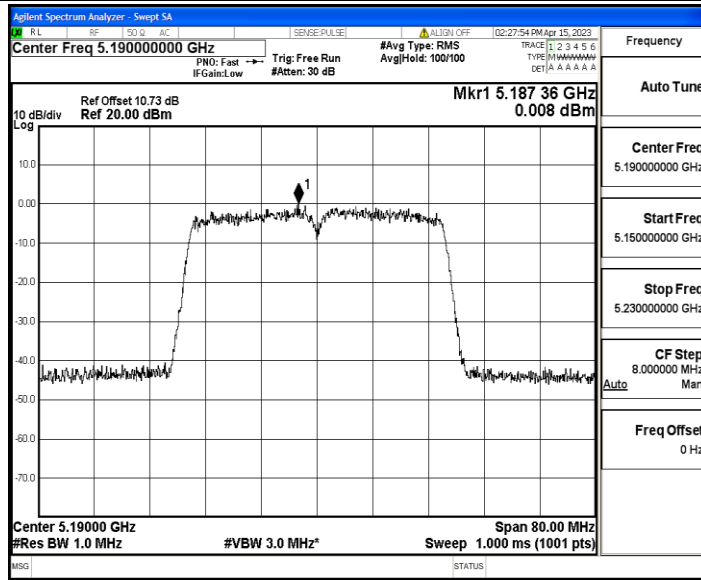
11N20MIMO_Ant1_5240



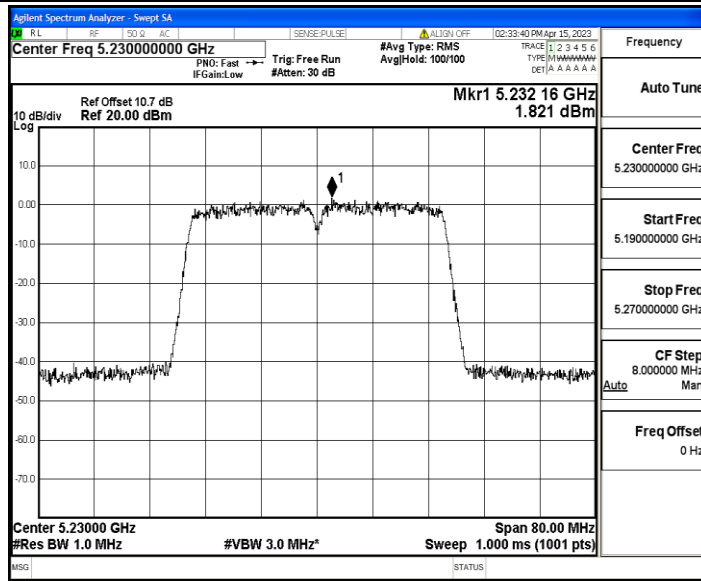
11N20MIMO_Ant2_5240



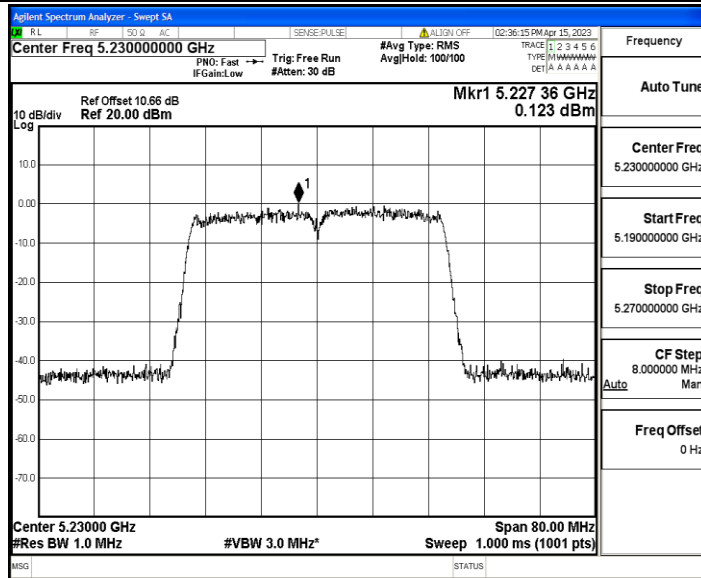
11N40MIMO_Ant1_5190



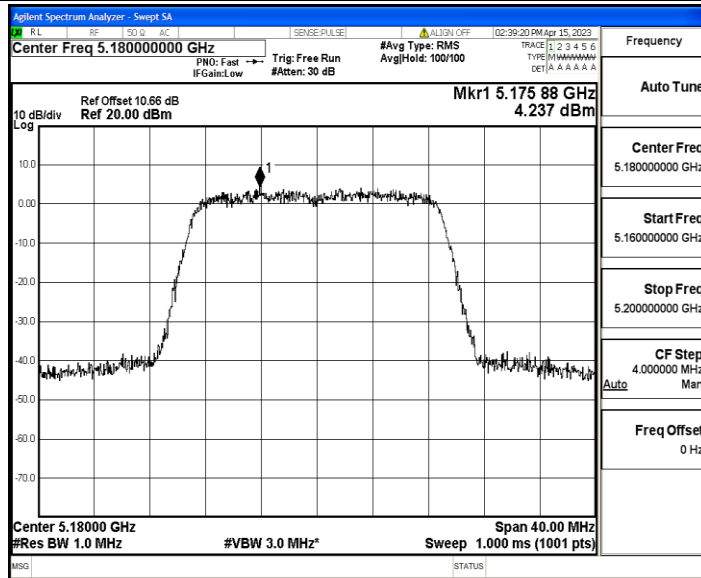
11N40MIMO_Ant2_5190



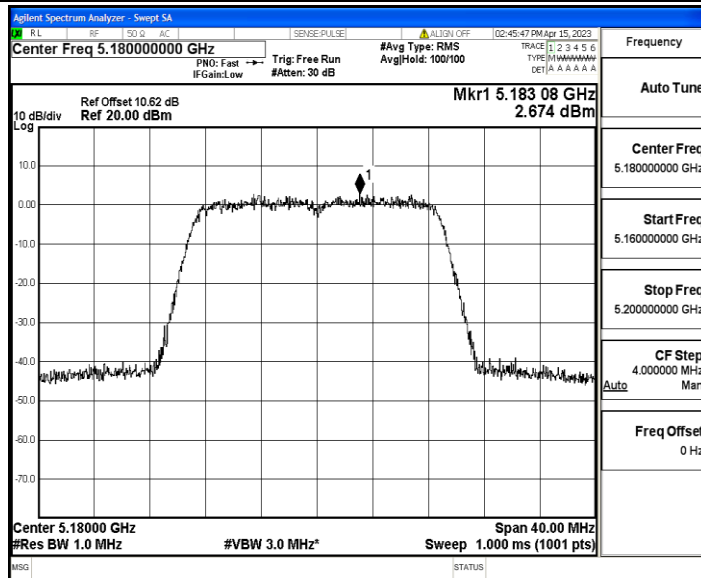
11N40MIMO_Ant1_5230



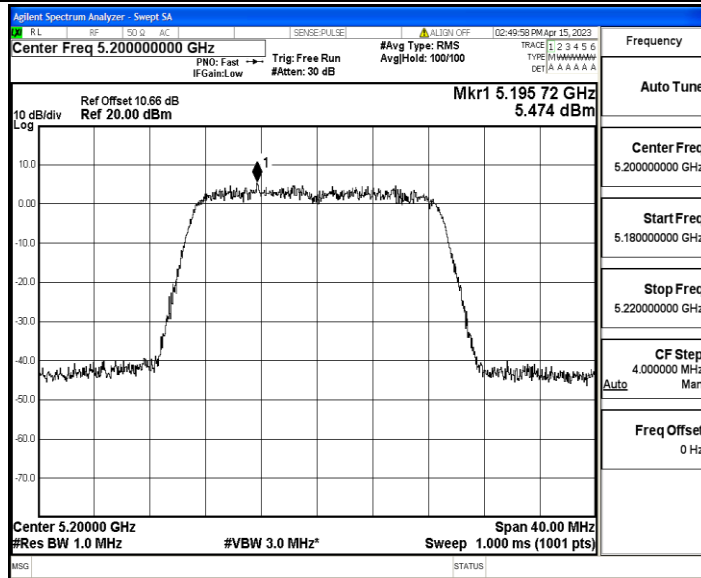
11N40MIMO_Ant2_5230



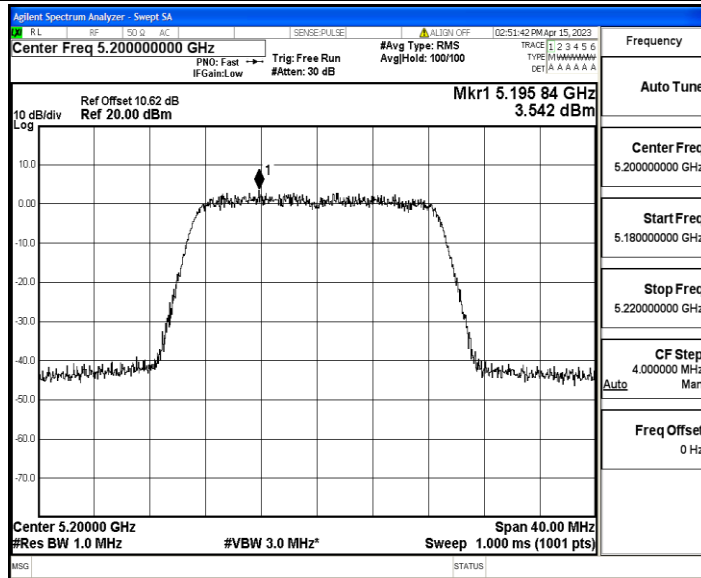
11AC20MIMO_Ant1_5180



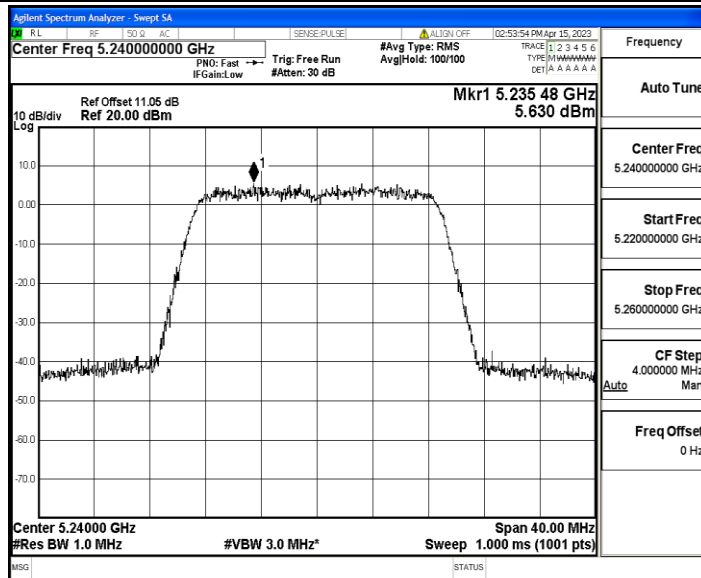
11AC20MIMO_Ant2_5180



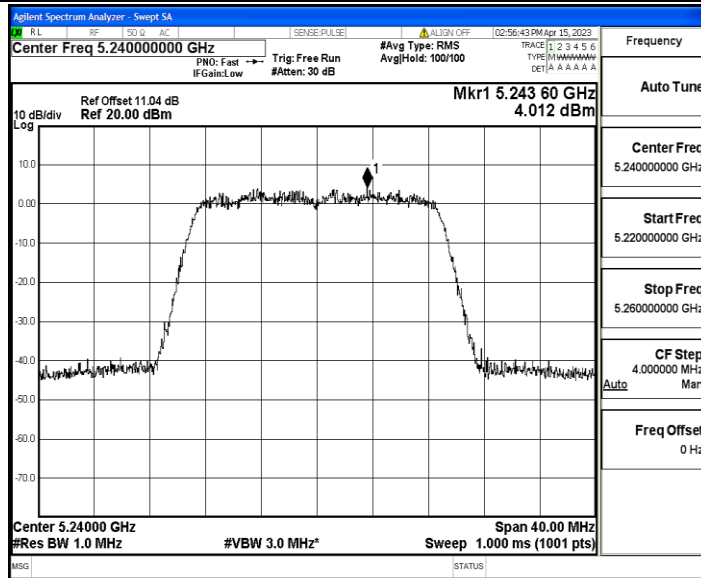
11AC20MIMO_Ant1_5200



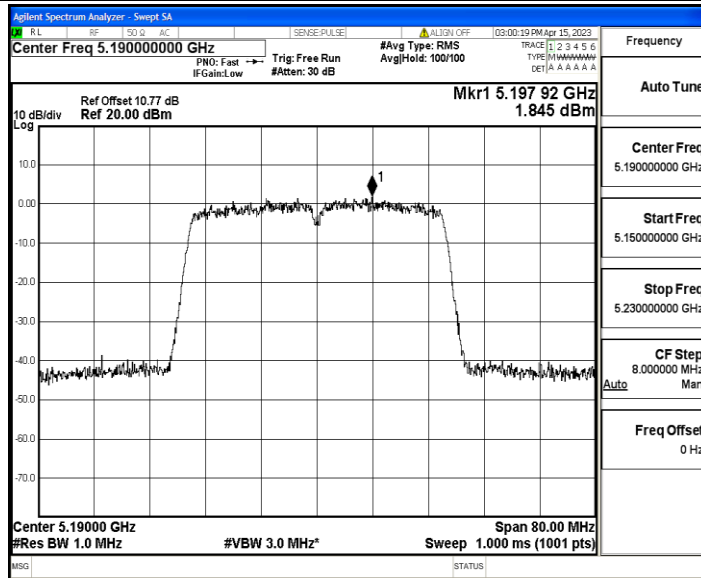
11AC20MIMO_Ant2_5200



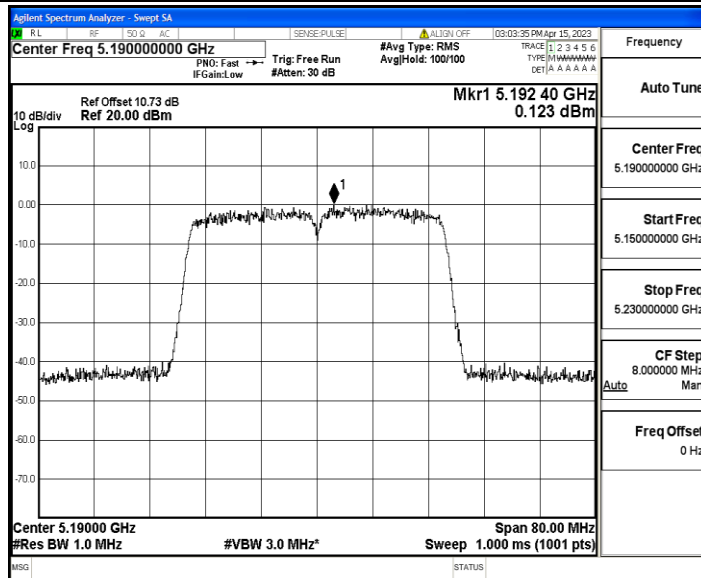
11AC20MIMO_Ant1_5240



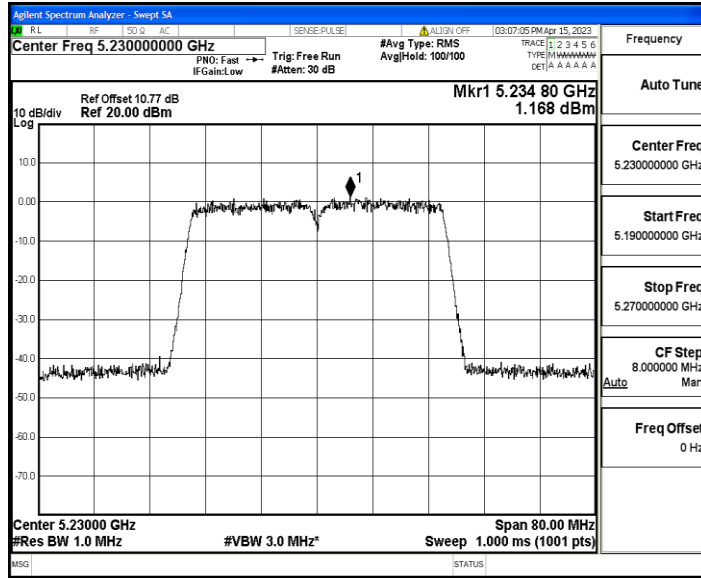
11AC20MIMO_Ant2_5240



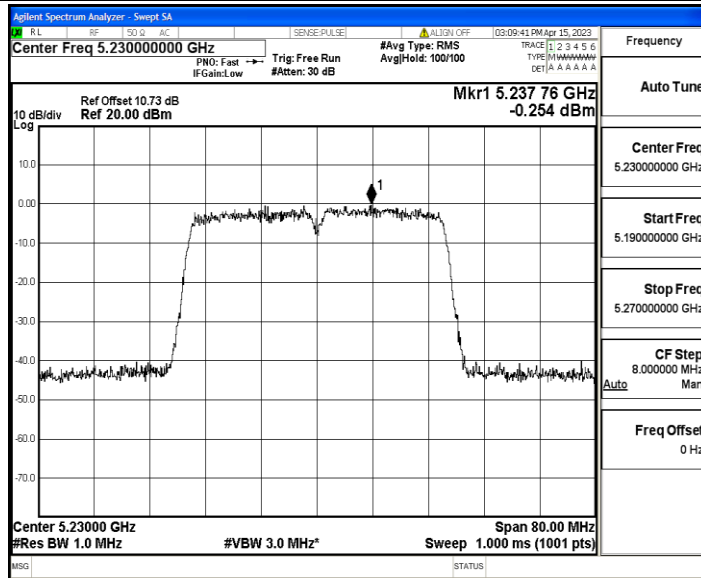
11AC40MIMO_Ant1_5190



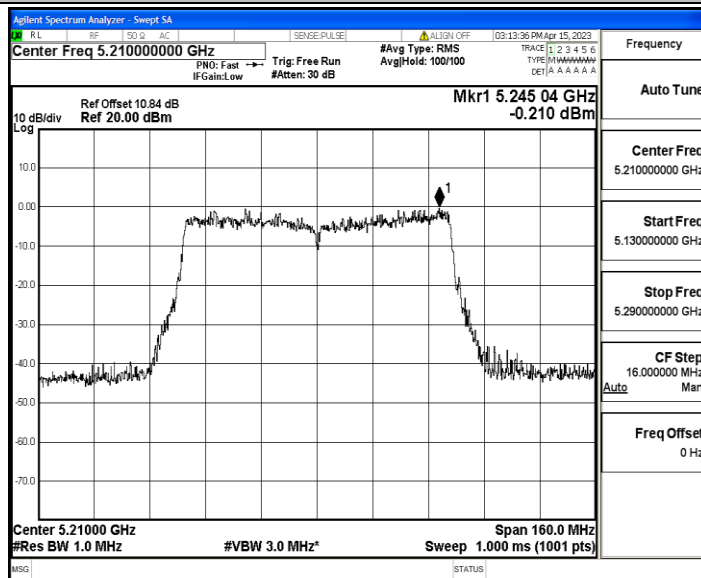
11AC40MIMO_Ant2_5190



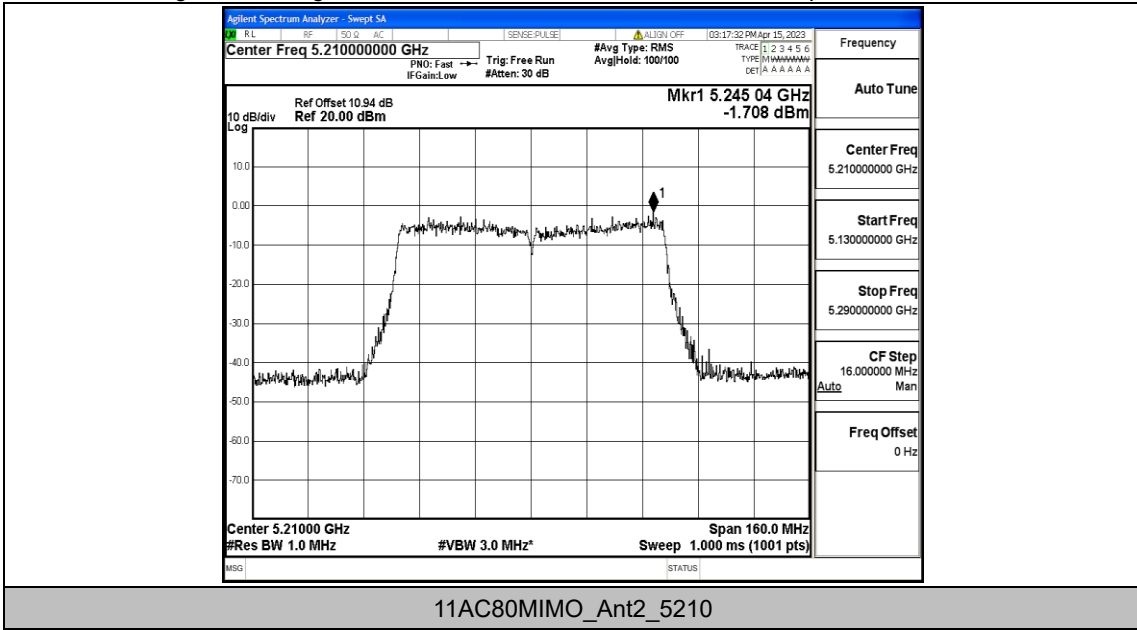
11AC40MIMO_Ant1_5230



11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210

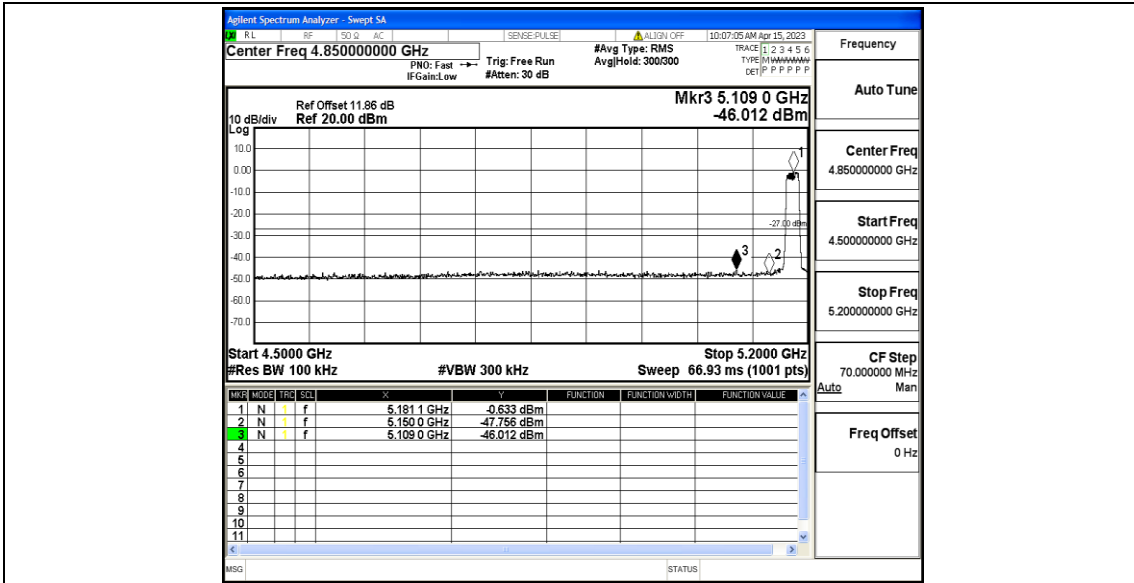


Appendix D: Band edge measurements

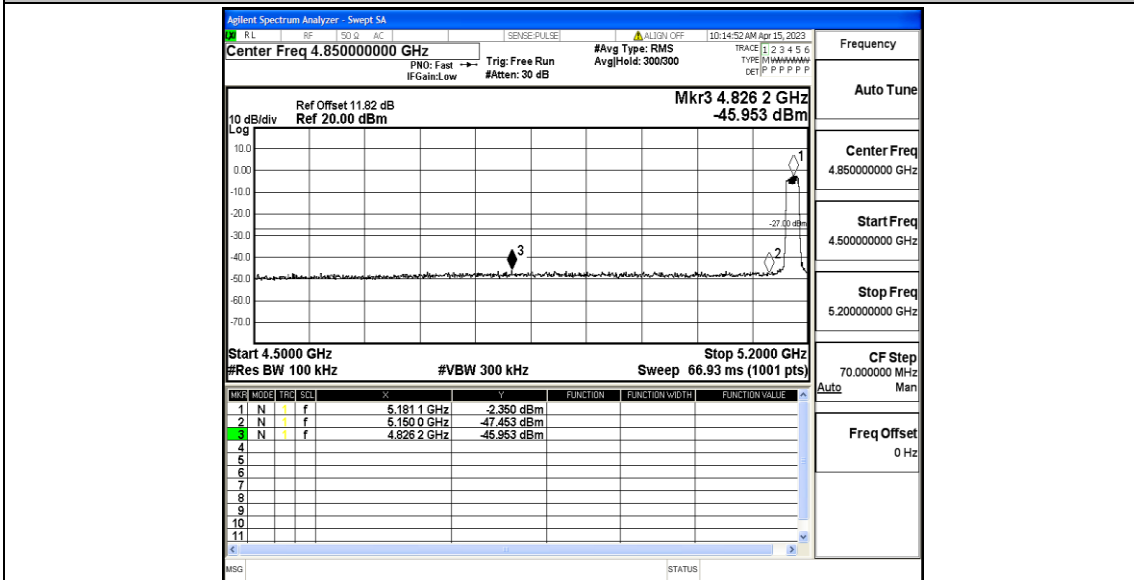
Test Result

TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-46.01	≤-27	PASS
	Ant2	Low	5180	-45.95	≤-27	PASS
	Ant1	High	5240	-45.72	≤-27	PASS
	Ant2	High	5240	-45.83	≤-27	PASS
11N20MIMO	Ant1	Low	5180	-46.02	≤-27	PASS
	Ant2	Low	5180	-45.7	≤-27	PASS
	Ant1	High	5240	-46.05	≤-27	PASS
	Ant2	High	5240	-46.67	≤-27	PASS
11N40MIMO	Ant1	Low	5190	-46.4	≤-27	PASS
	Ant2	Low	5190	-46.41	≤-27	PASS
	Ant1	High	5230	-46.42	≤-27	PASS
	Ant2	High	5230	-46.32	≤-27	PASS
11AC20MIMO	Ant1	Low	5180	-45.61	≤-27	PASS
	Ant2	Low	5180	-46.17	≤-27	PASS
	Ant1	High	5240	-45.47	≤-27	PASS
	Ant2	High	5240	-46.01	≤-27	PASS
11AC40MIMO	Ant1	Low	5190	-45.91	≤-27	PASS
	Ant2	Low	5190	-45.87	≤-27	PASS
	Ant1	High	5230	-45.4	≤-27	PASS
	Ant2	High	5230	-46.55	≤-27	PASS
11AC80MIMO	Ant1	Low	5210	-45.44	≤-27	PASS
	Ant2	Low	5210	-45.57	≤-27	PASS
	Ant1	High	5210	-46.13	≤-27	PASS
	Ant2	High	5210	-46.52	≤-27	PASS

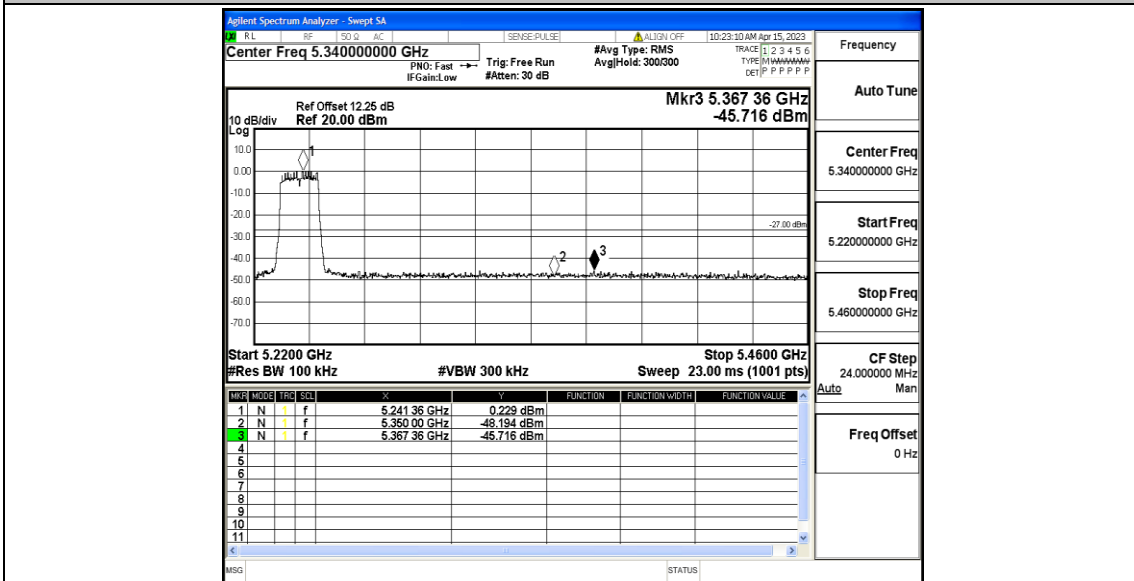
Test Graphs



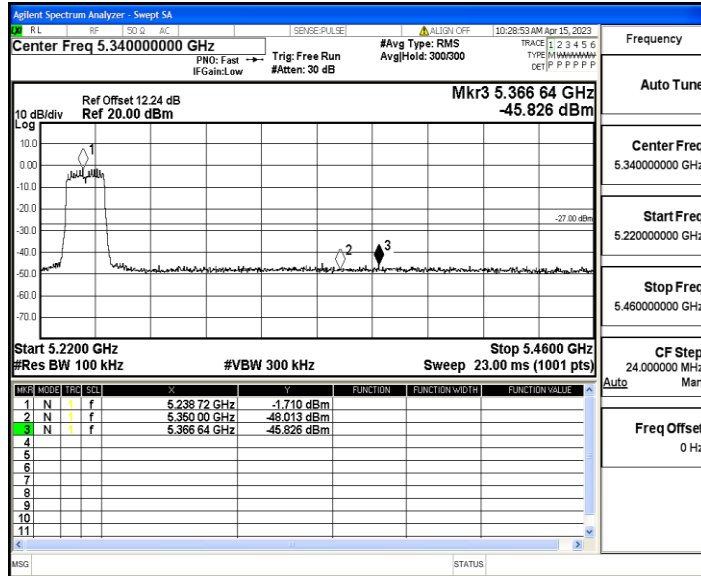
11A_Ant1_Low_5180



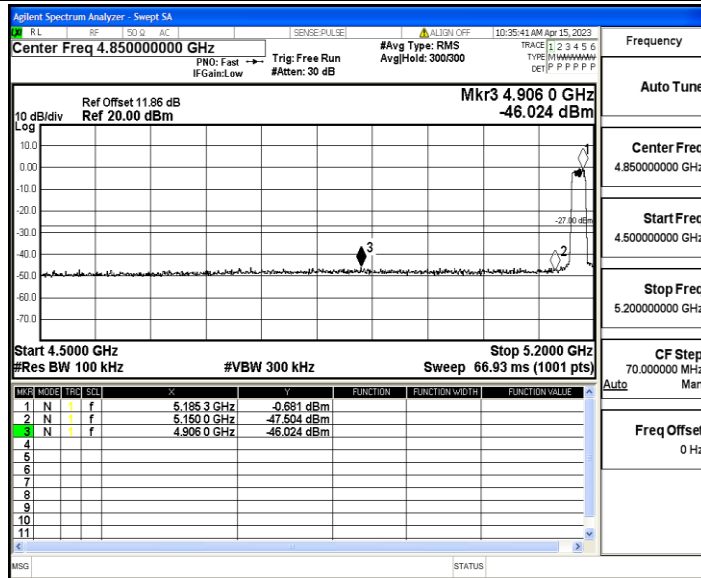
11A_Ant2_Low_5180



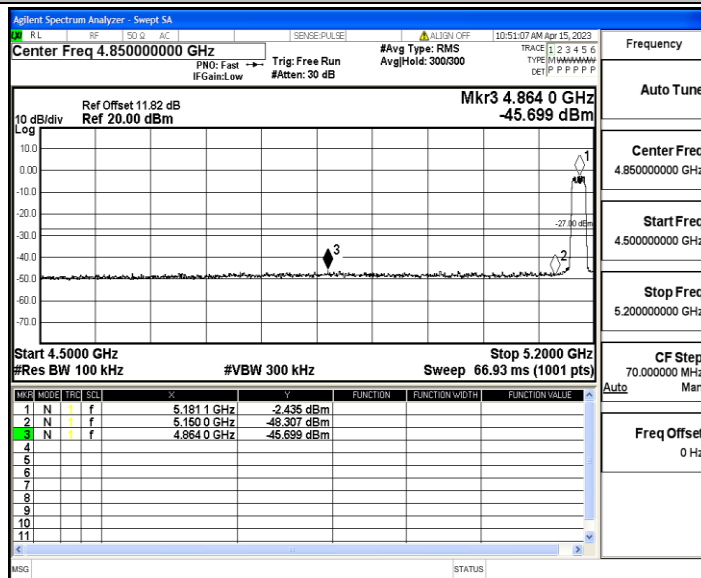
11A_Ant1_High_5240



11A_Ant2_High_5240



11N20MIMO_Ant1_Low_5180



11N20MIMO_Ant2_Low_5180