

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

Product Name: OTT+DVB

Trade Mark: N/A

Test Model: SH5BFAA

FCC ID: 2AOVU-SH5BFAX

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

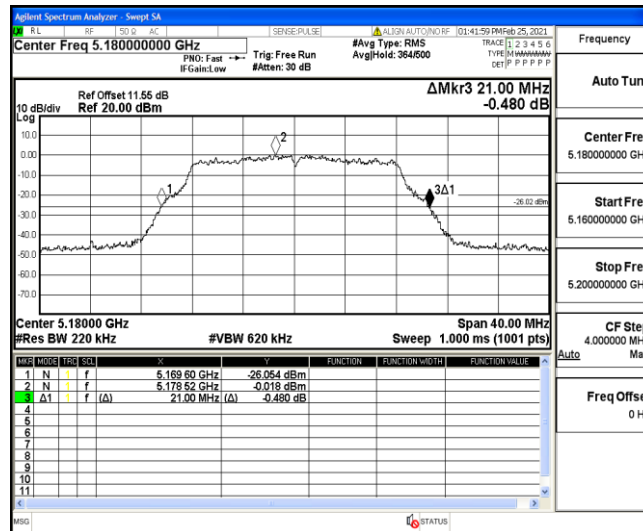
Appendix A: Emission Bandwidth

Test Result

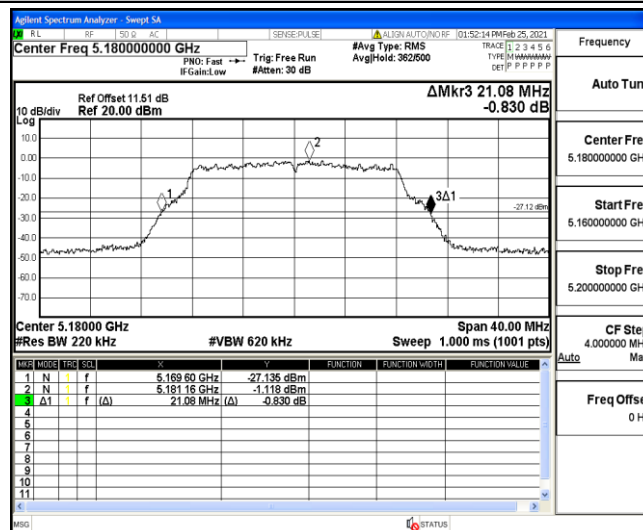
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.000	5169.600	5190.600	---	PASS
	Ant2	5180	21.080	5169.600	5190.680	---	PASS
	Ant1	5200	21.440	5189.320	5210.760	---	PASS
	Ant2	5200	21.480	5189.400	5210.880	---	PASS
	Ant1	5240	21.440	5229.440	5250.880	---	PASS
	Ant2	5240	21.360	5229.480	5250.840	---	PASS
11N20MIMO	Ant1	5180	21.440	5169.440	5190.880	---	PASS
	Ant2	5180	21.280	5169.440	5190.720	---	PASS
	Ant1	5200	21.400	5189.400	5210.800	---	PASS
	Ant2	5200	21.680	5189.240	5210.920	---	PASS
	Ant1	5240	21.360	5229.400	5250.760	---	PASS
	Ant2	5240	21.520	5229.360	5250.880	---	PASS
11N40MIMO	Ant1	5190	39.680	5170.400	5210.080	---	PASS
	Ant2	5190	39.600	5170.240	5209.840	---	PASS
	Ant1	5230	39.280	5210.480	5249.760	---	PASS
	Ant2	5230	39.520	5210.320	5249.840	---	PASS
11AC20MIMO	Ant1	5180	21.520	5169.320	5190.840	---	PASS
	Ant2	5180	21.280	5169.480	5190.760	---	PASS
	Ant1	5200	21.560	5189.280	5210.840	---	PASS
	Ant2	5200	21.720	5189.200	5210.920	---	PASS
	Ant1	5240	21.400	5229.320	5250.720	---	PASS
	Ant2	5240	21.480	5229.360	5250.840	---	PASS
11AC40MIMO	Ant1	5190	40.080	5170.080	5210.160	---	PASS
	Ant2	5190	39.600	5170.160	5209.760	---	PASS
	Ant1	5230	40.080	5210.080	5250.160	---	PASS
	Ant2	5230	39.520	5210.320	5249.840	---	PASS
11AC80MIMO	Ant1	5210	81.120	5169.840	5250.960	---	PASS
	Ant2	5210	81.280	5169.520	5250.800	---	PASS

Test Graphs

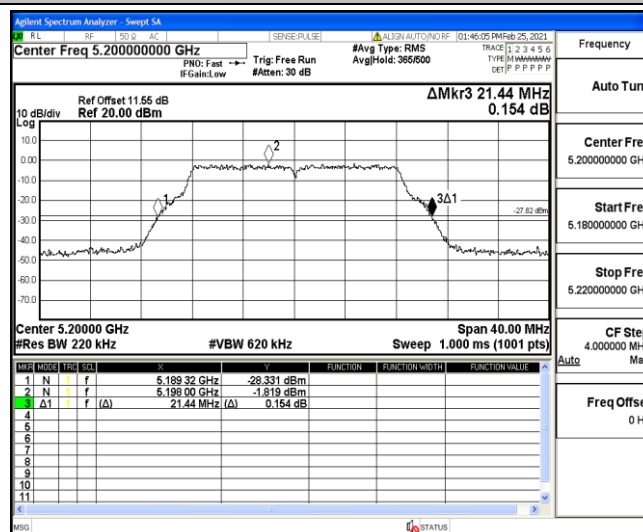
11A_Ant1_5180



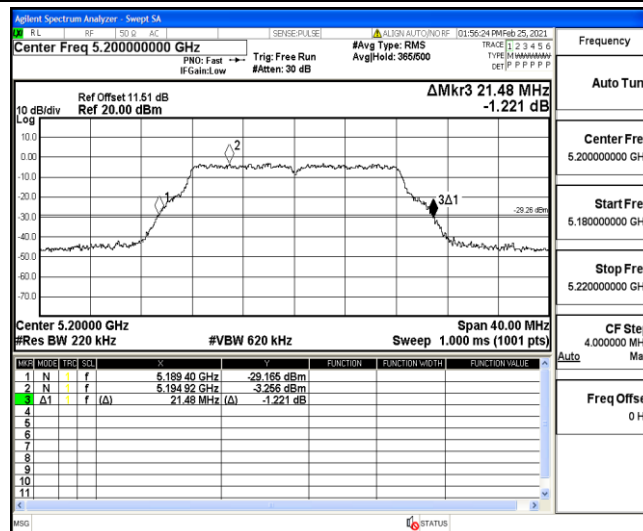
11A_Ant2_5180



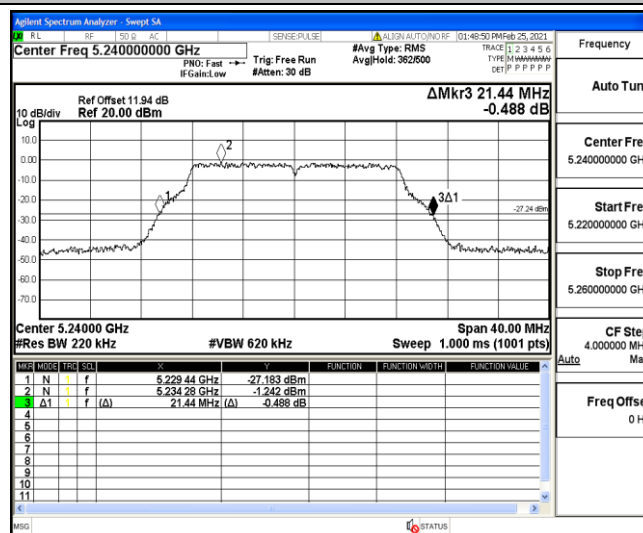
11A_Ant1_5200



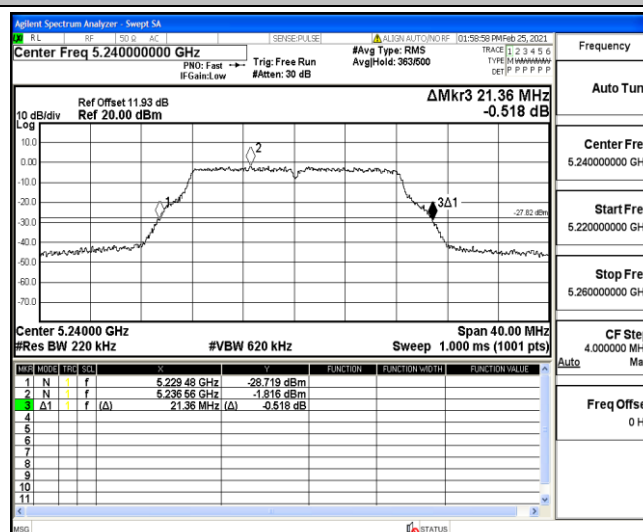
11A_Ant2_5200



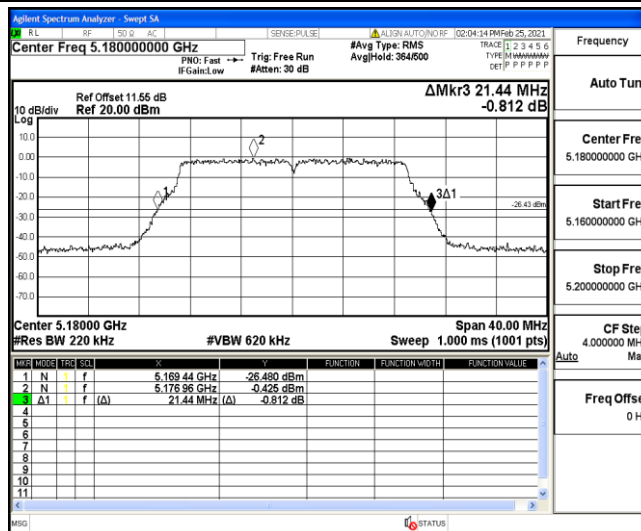
11A_Ant1_5240



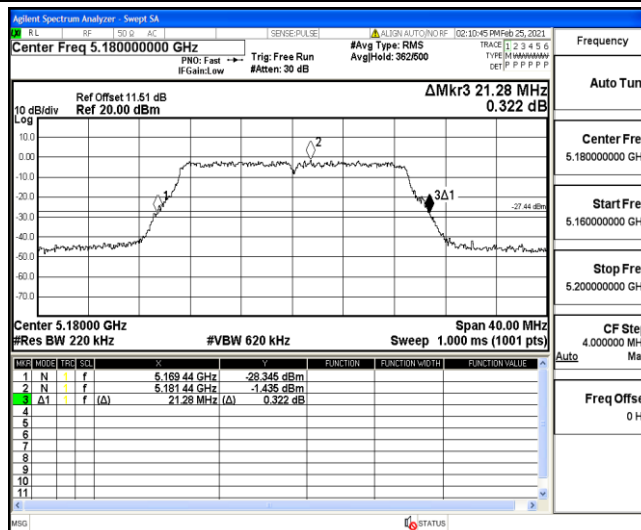
11A_Ant2_5240



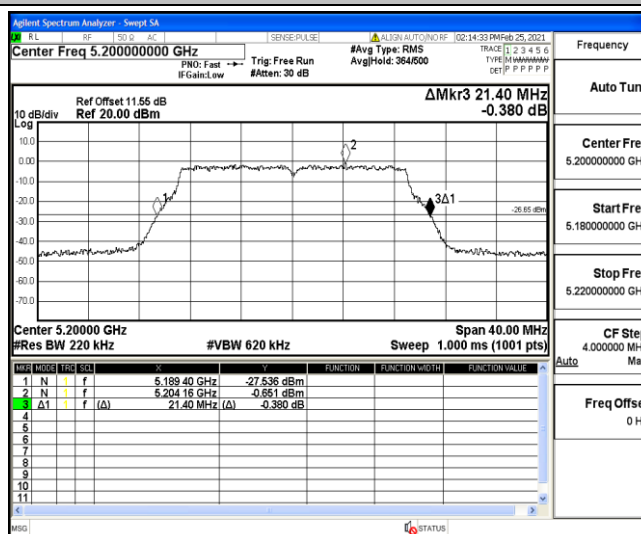
11N20MIMO_Ant1_5180



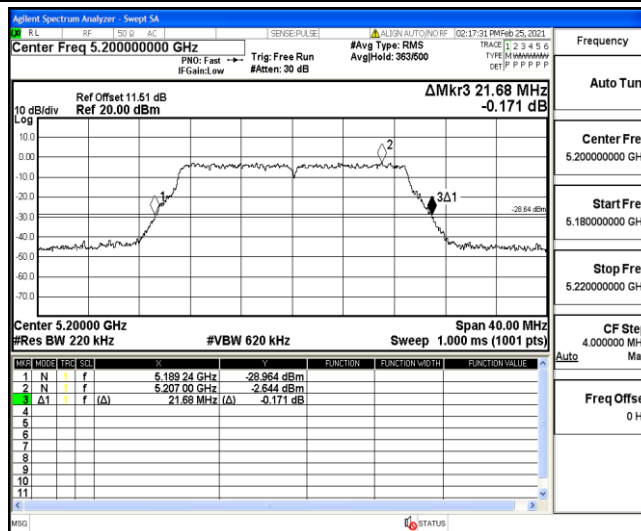
11N20MIMO_Ant2_5180



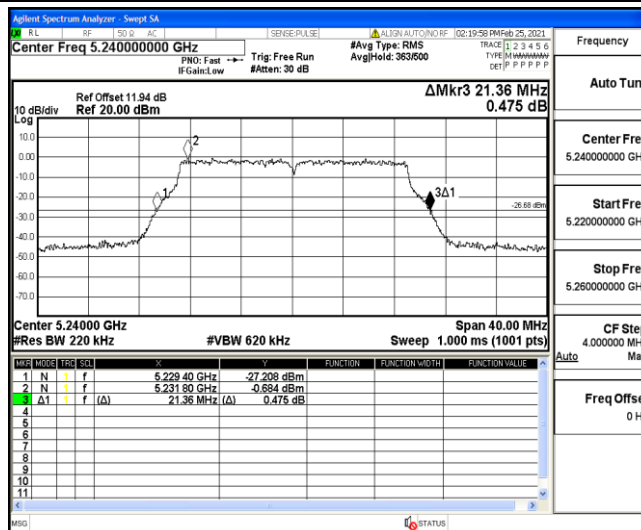
11N20MIMO_Ant1_5200



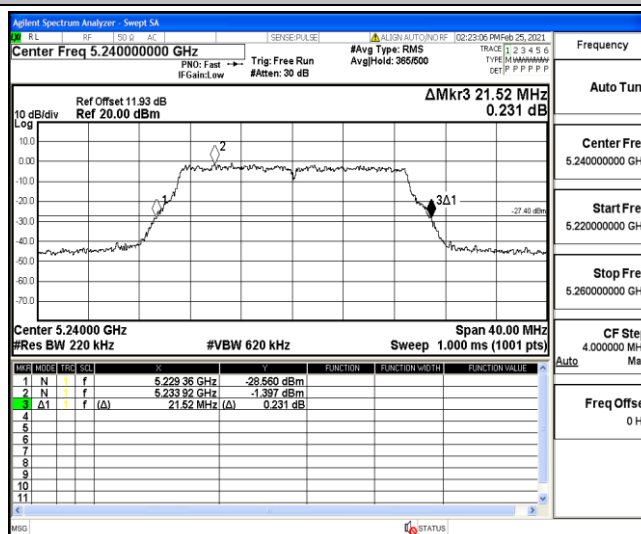
11N20MIMO_Ant2_5200



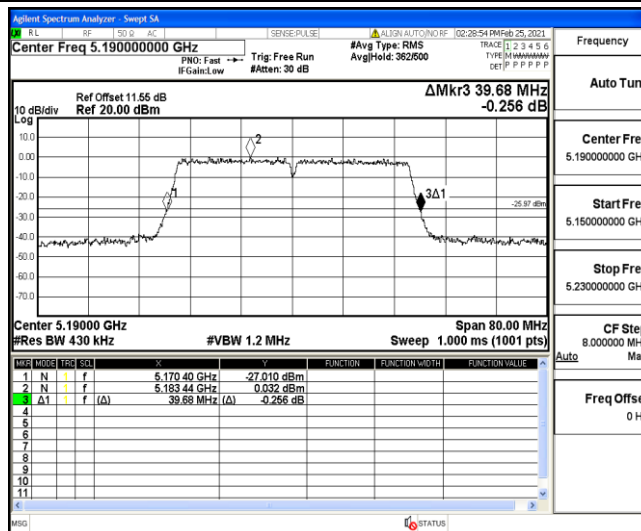
11N20MIMO_Ant1_5240



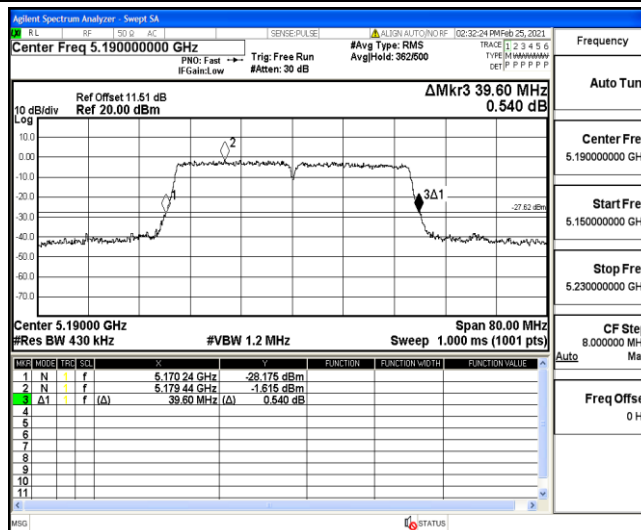
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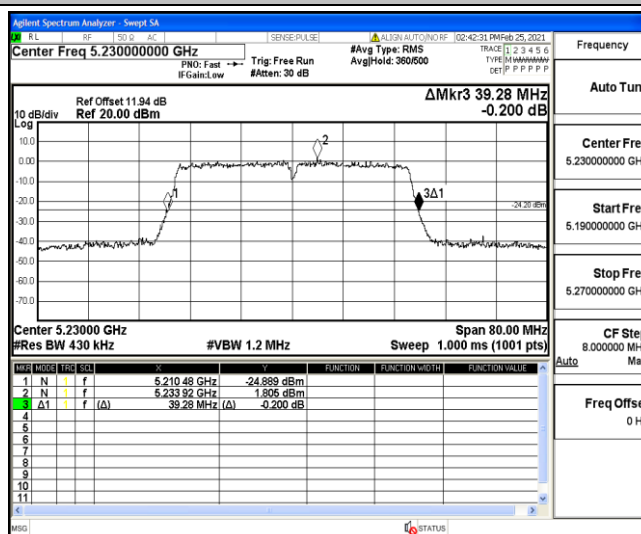
11N40MIMO_Ant1_5190



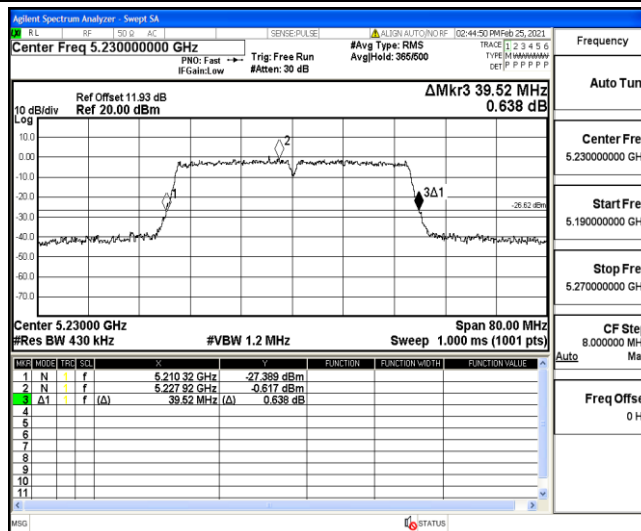
11N40MIMO_Ant2_5190



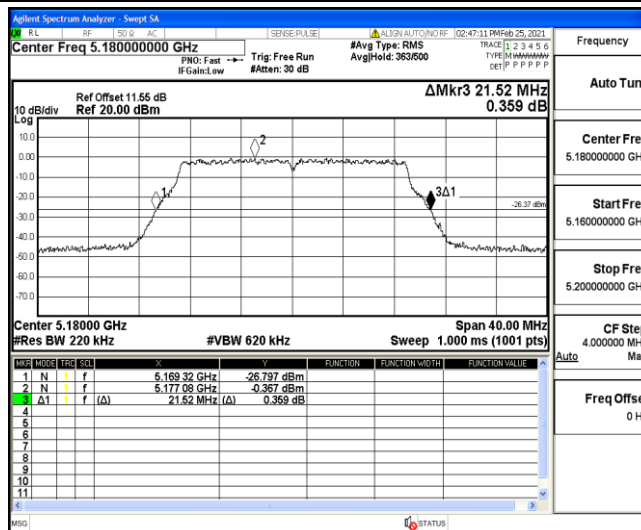
11N40MIMO_Ant1_5230



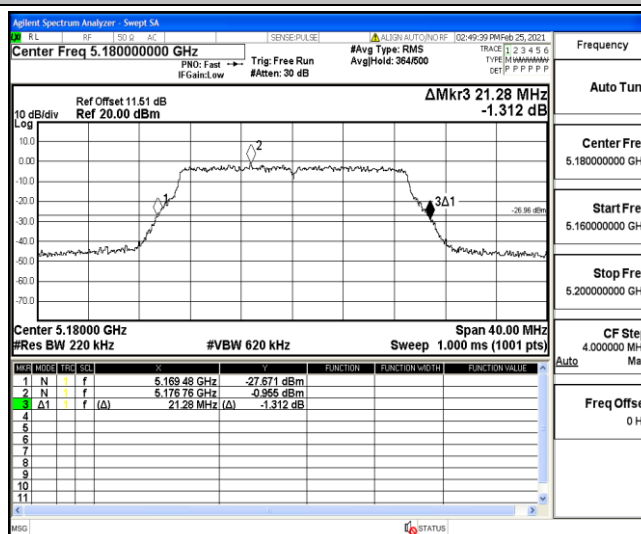
11N40MIMO_Ant2_5230



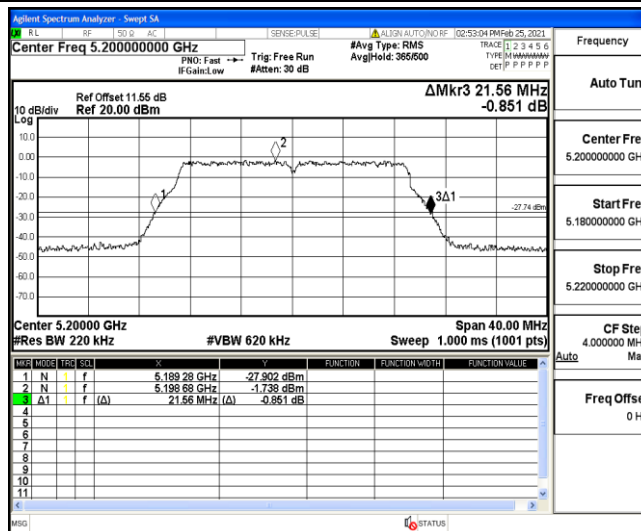
11AC20MIMO_Ant1_5180



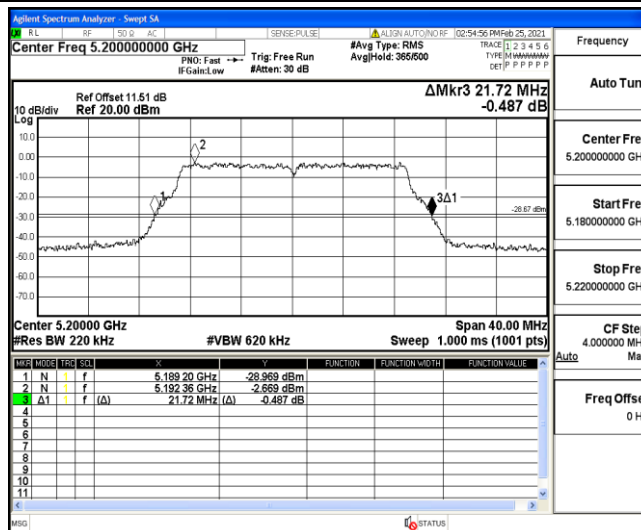
11AC20MIMO_Ant2_5180



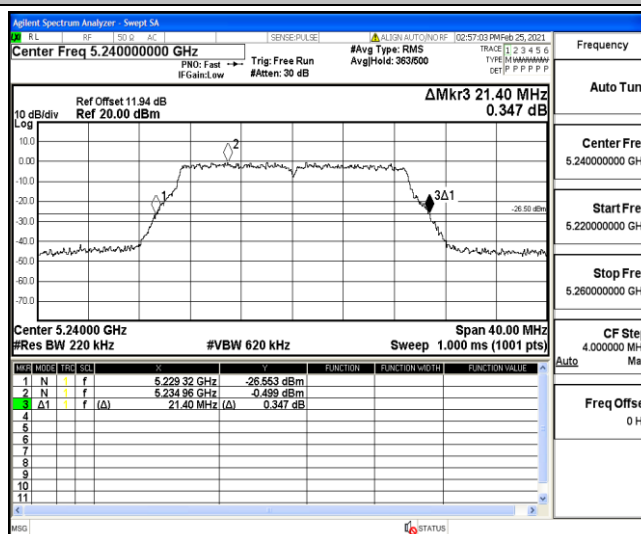
11AC20MIMO_Ant1_5200



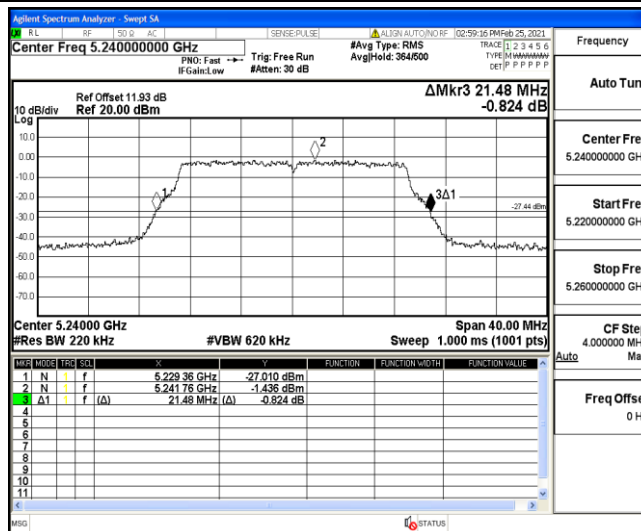
11AC20MIMO_Ant2_5200



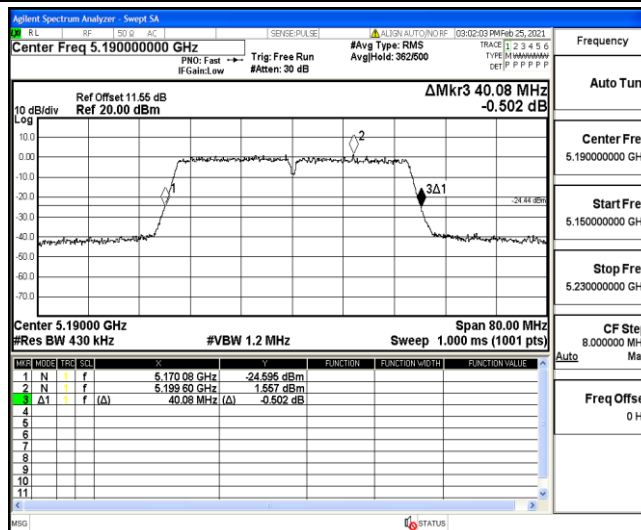
11AC20MIMO_Ant1_5240



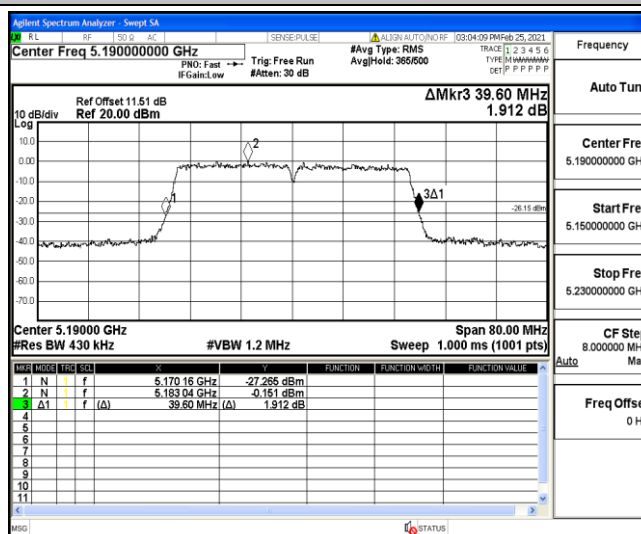
11AC20MIMO_Ant2_5240



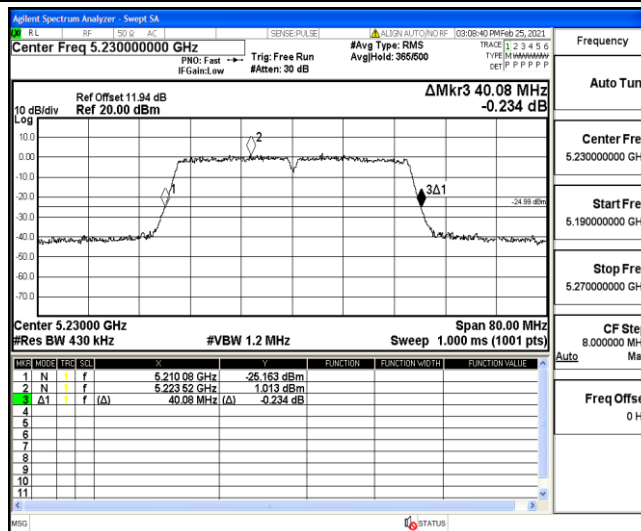
11AC40MIMO_Ant1_5190



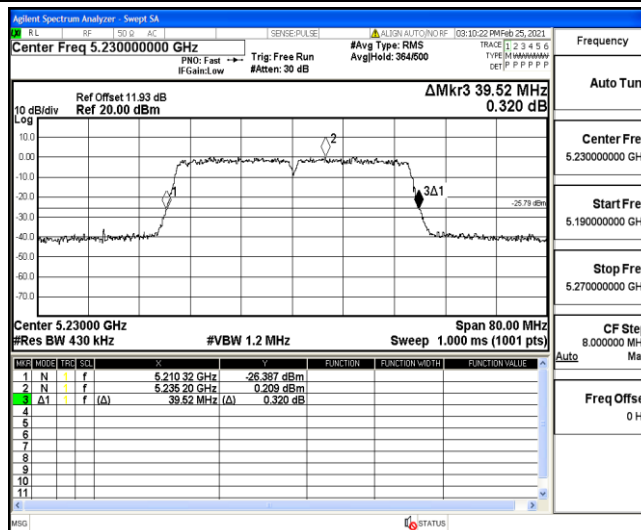
11AC40MIMO_Ant2_5190



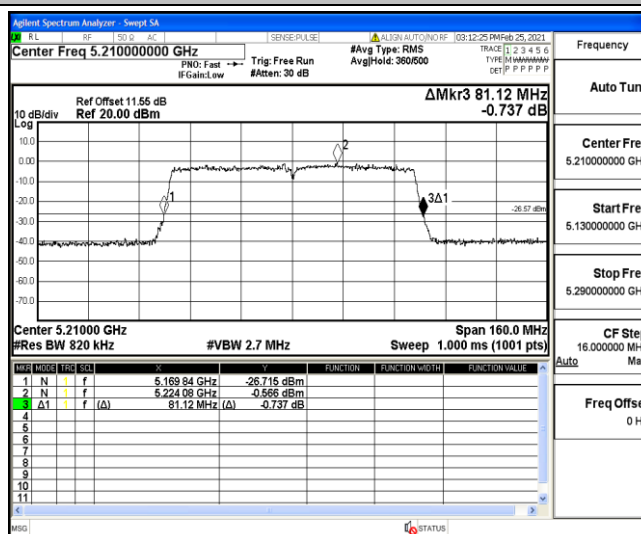
11AC40MIMO_Ant1_5230



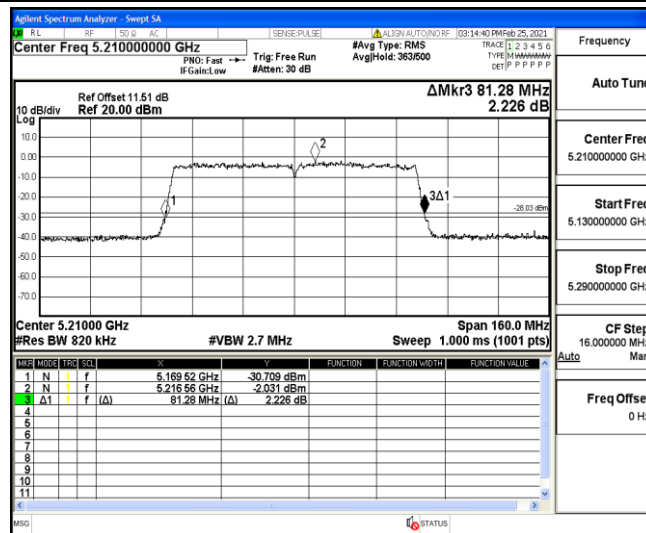
11AC40MIMO_Ant2_5230



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	9.23	<=30.00	PASS
	Ant2	5180	8.14	<=30.00	PASS
	Ant1	5200	8.33	<=30.00	PASS
	Ant2	5200	7.17	<=30.00	PASS
	Ant1	5240	9.11	<=30.00	PASS
	Ant2	5240	8.20	<=30.00	PASS
11N20MIMO	Ant1	5180	9.28	<=30.00	PASS
	Ant2	5180	7.99	<=30.00	PASS
	total	5180	11.7	<=29.68	PASS
	Ant1	5200	8.58	<=30.00	PASS
	Ant2	5200	7.24	<=30.00	PASS
	total	5200	11.0	<=29.68	PASS
	Ant1	5240	9.14	<=30.00	PASS
	Ant2	5240	8.24	<=30.00	PASS
	total	5240	11.7	<=29.68	PASS
11N40MIMO	Ant1	5190	9.62	<=30.00	PASS
	Ant2	5190	7.52	<=30.00	PASS
	total	5190	11.7	<=29.68	PASS
	Ant1	5230	10.00	<=30.00	PASS
	Ant2	5230	9.07	<=30.00	PASS
	total	5230	12.6	<=29.68	PASS
11AC20MIMO	Ant1	5180	9.40	<=30.00	PASS
	Ant2	5180	7.94	<=30.00	PASS
	total	5180	11.7	<=29.68	PASS
	Ant1	5200	8.57	<=30.00	PASS
	Ant2	5200	7.20	<=30.00	PASS
	total	5200	10.9	<=29.68	PASS
	Ant1	5240	9.08	<=30.00	PASS
	Ant2	5240	8.27	<=30.00	PASS
	total	5240	11.7	<=29.68	PASS
11AC40MIMO	Ant1	5190	10.11	<=30.00	PASS
	Ant2	5190	8.80	<=30.00	PASS
	total	5190	12.5	<=29.68	PASS
	Ant1	5230	10.43	<=30.00	PASS
	Ant2	5230	9.90	<=30.00	PASS
	total	5230	13.2	<=29.68	PASS
11AC80MIMO	Ant1	5210	8.87	<=30.00	PASS
	Ant2	5210	7.81	<=30.00	PASS
	total	5210	11.4	<=29.68	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Appendix C: Maximum power spectral density

Test Result

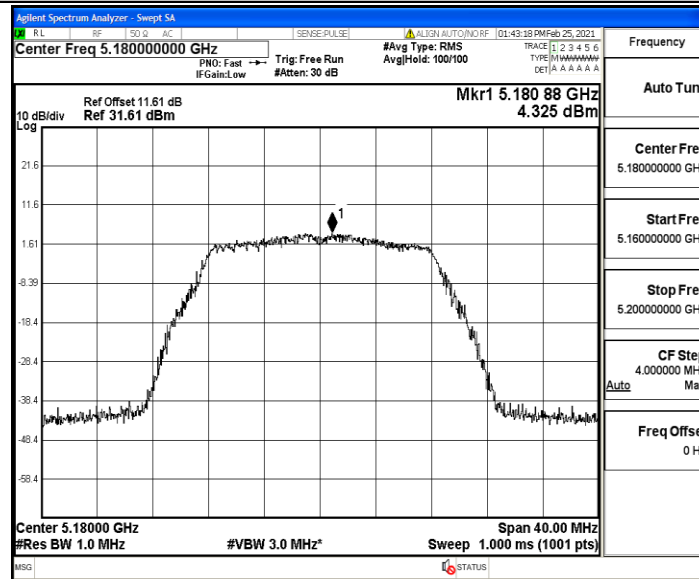
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant0	5180	4.33	<=11	PASS
	Ant1	5180	4.24	<=11	PASS
	Ant0	5200	2.12	<=11	PASS
	Ant1	5200	2.05	<=11	PASS
	Ant0	5240	4.33	<=11	PASS
	Ant1	5240	2.35	<=11	PASS
11N20MIMO	Ant0	5180	4.37	<=11	PASS
	Ant1	5180	2.91	<=11	PASS
	total	5180	6.71	<=10.68	PASS
	Ant0	5200	3.91	<=11	PASS
	Ant1	5200	2.96	<=11	PASS
	total	5200	6.47	<=10.68	PASS
	Ant0	5240	4.89	<=11	PASS
	Ant1	5240	3.96	<=11	PASS
	total	5240	7.46	<=10.68	PASS
11N40MIMO	Ant0	5190	3.72	<=11	PASS
	Ant1	5190	0.3	<=11	PASS
	total	5190	5.35	<=10.68	PASS
	Ant0	5230	2.63	<=11	PASS
	Ant1	5230	2.68	<=11	PASS
	total	5230	5.67	<=10.68	PASS
11AC20MIMO	Ant0	5180	4.63	<=11	PASS
	Ant1	5180	3.4	<=11	PASS
	total	5180	7.07	<=10.68	PASS
	Ant0	5200	3.84	<=11	PASS
	Ant1	5200	2.26	<=11	PASS
	total	5200	6.13	<=10.68	PASS
	Ant0	5240	4.54	<=11	PASS
	Ant1	5240	3.62	<=11	PASS
	total	5240	7.11	<=10.68	PASS
11AC40MIMO	Ant0	5190	3.67	<=11	PASS
	Ant1	5190	2.21	<=11	PASS
	total	5190	6.01	<=10.68	PASS
	Ant0	5230	4.28	<=11	PASS
	Ant1	5230	3.79	<=11	PASS
	total	5230	7.05	<=10.68	PASS
11AC80MIMO	Ant0	5210	-1.09	<=11	PASS
	Ant1	5210	-2.14	<=11	PASS
	total	5210	1.43	<=10.68	PASS

Note:

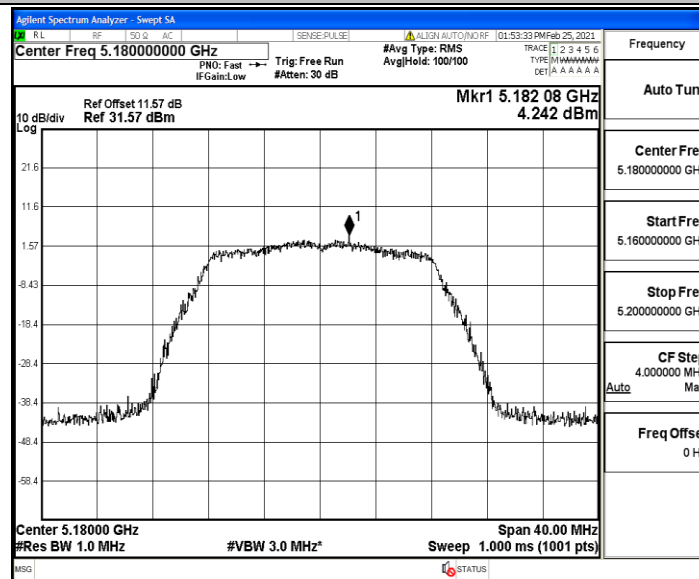
The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

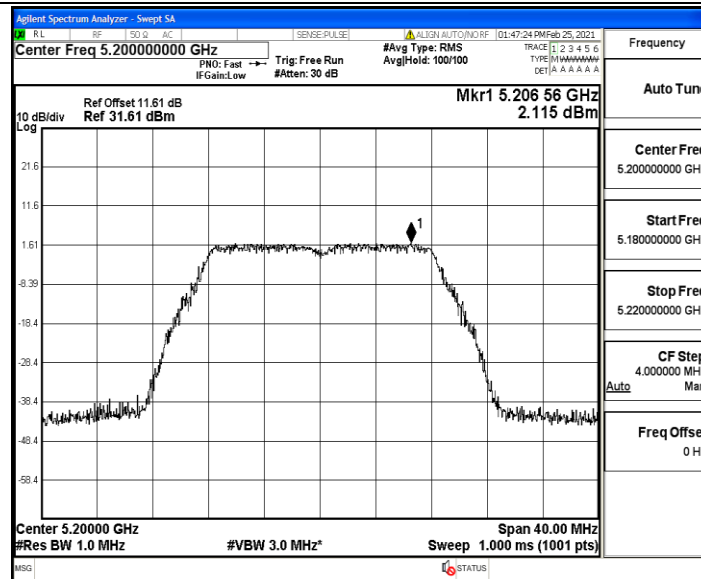
11A_Ant1_5180



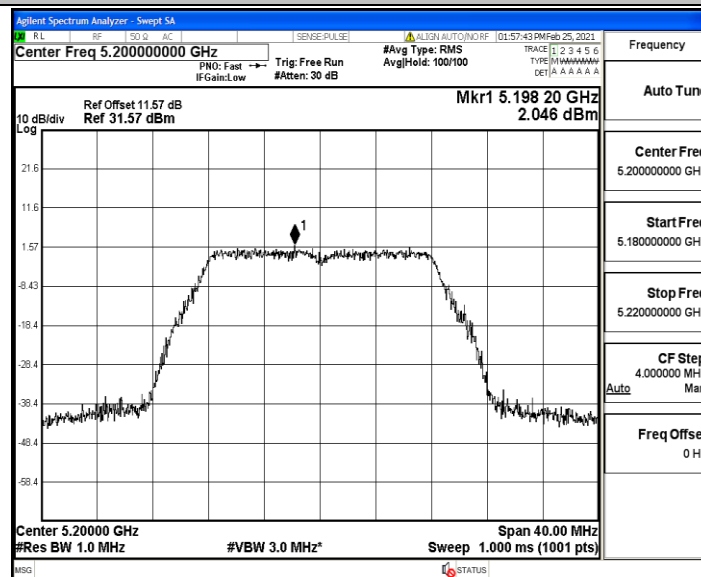
11A_Ant2_5180



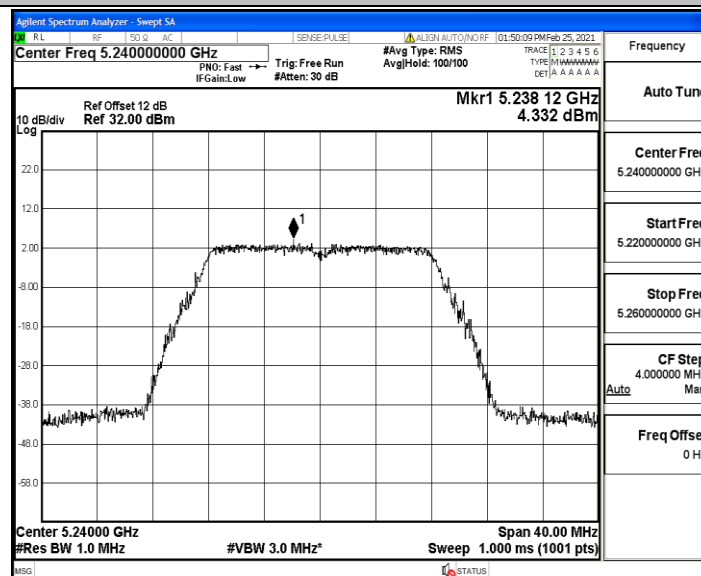
11A_Ant1_5200



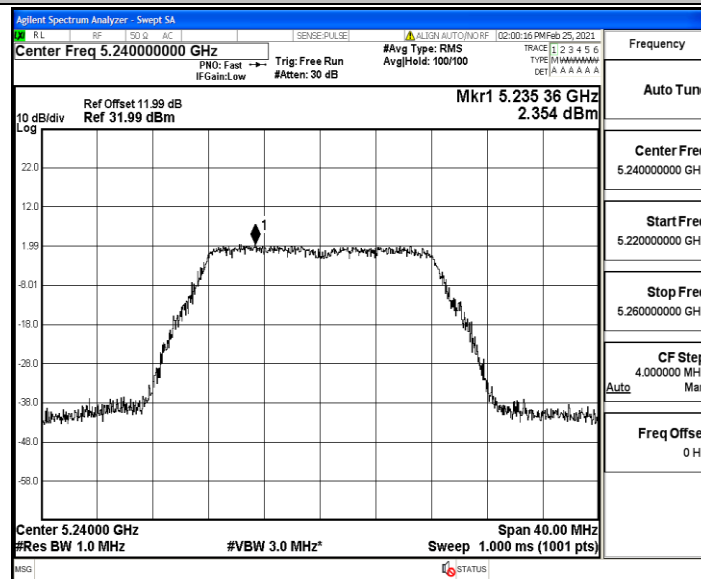
11A_Ant2_5200



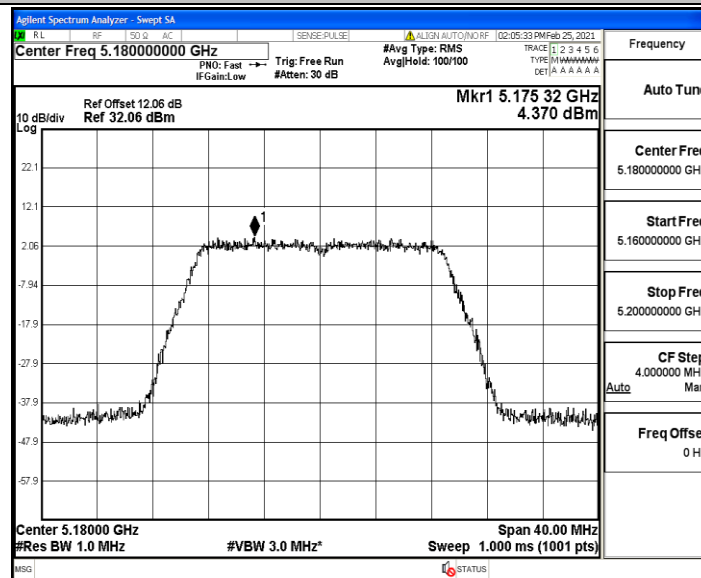
11A_Ant1_5240



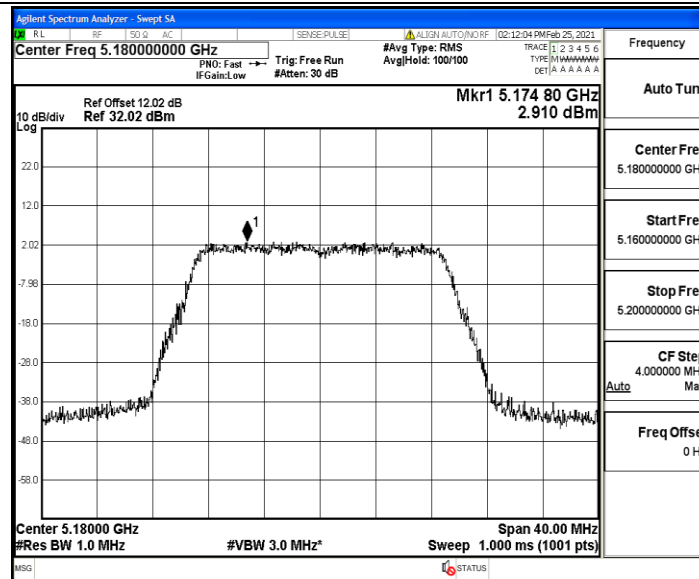
11A_Ant2_5240



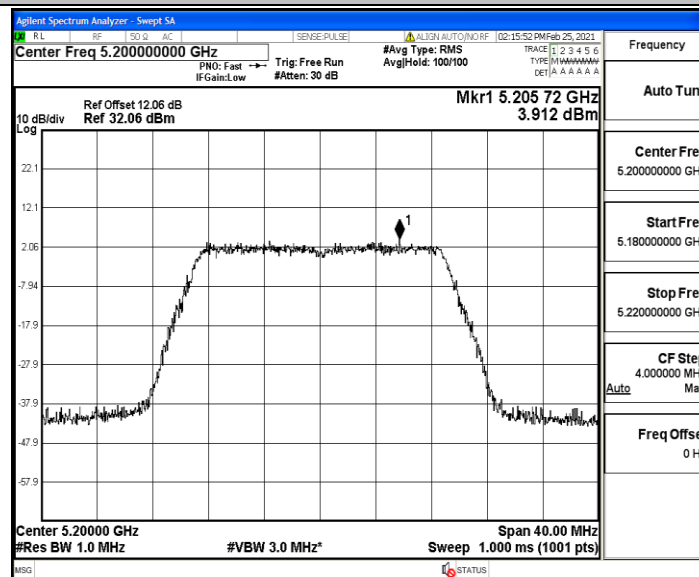
11N20MIMO_Ant1_5180



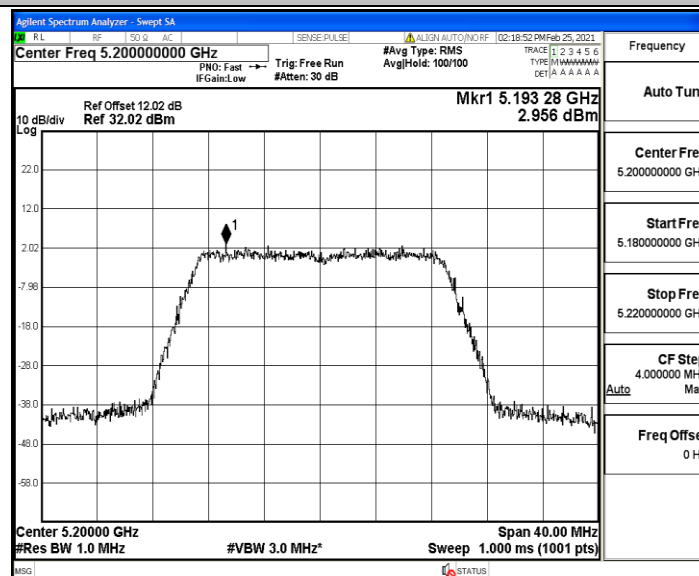
11N20MIMO_Ant2_5180



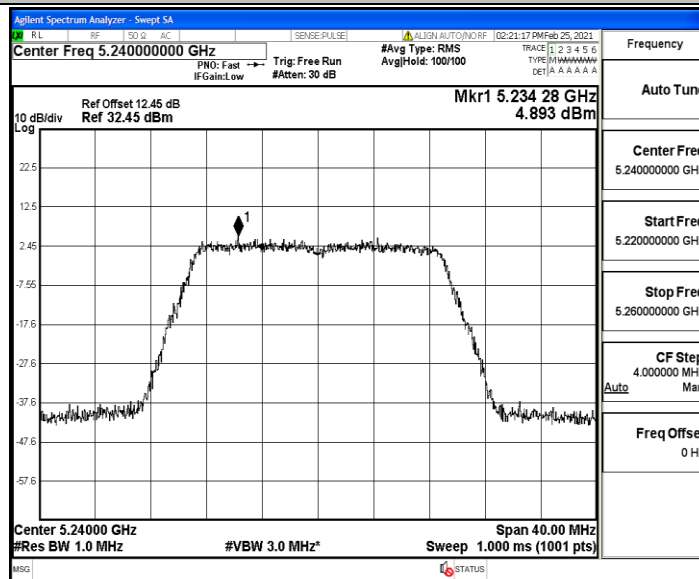
11N20MIMO_Ant1_5200



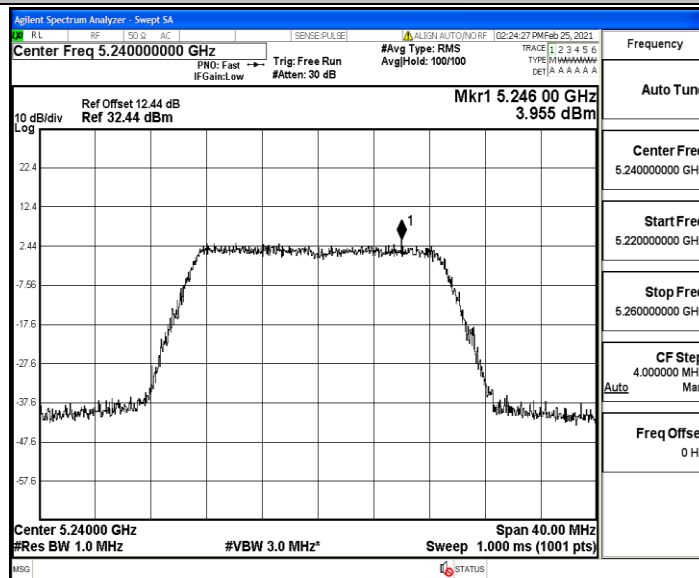
11N20MIMO_Ant2_5200



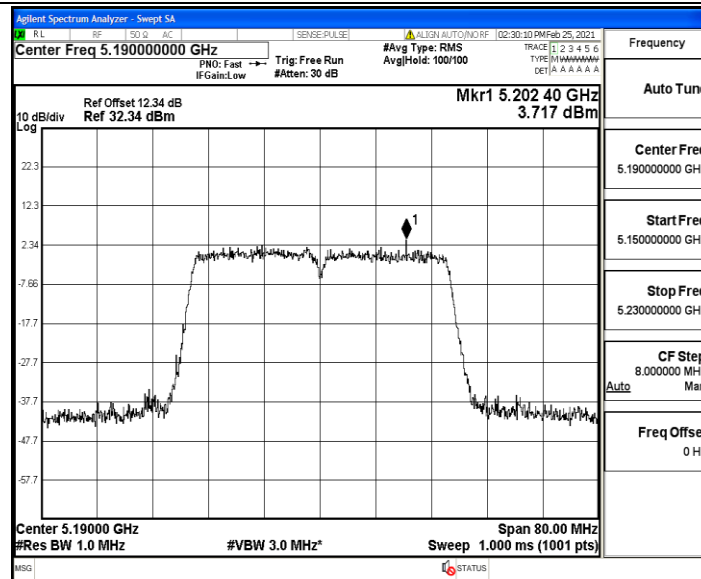
11N20MIMO_Ant1_5240



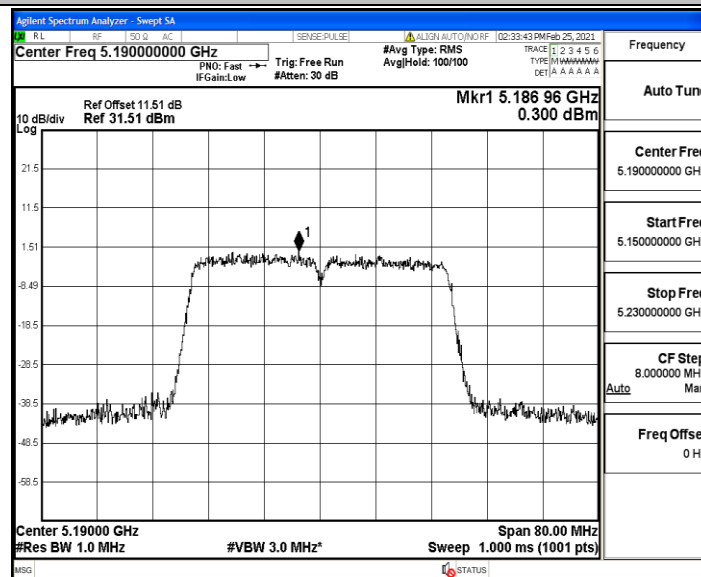
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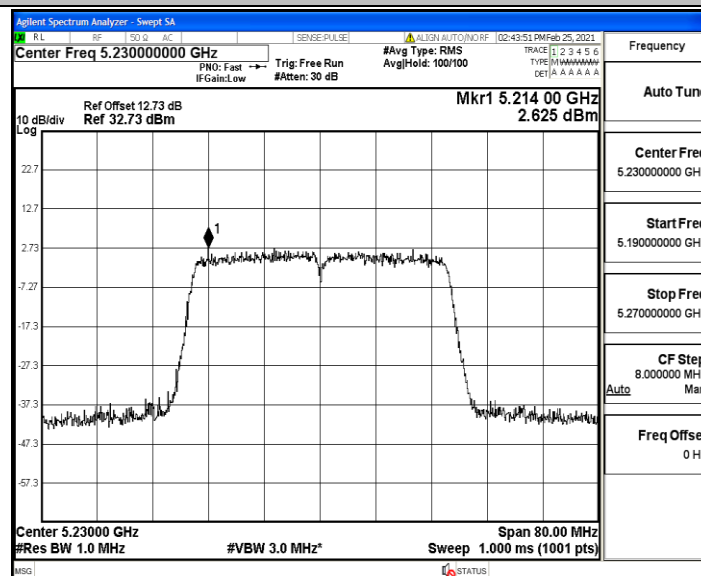
11N40MIMO_Ant1_5190



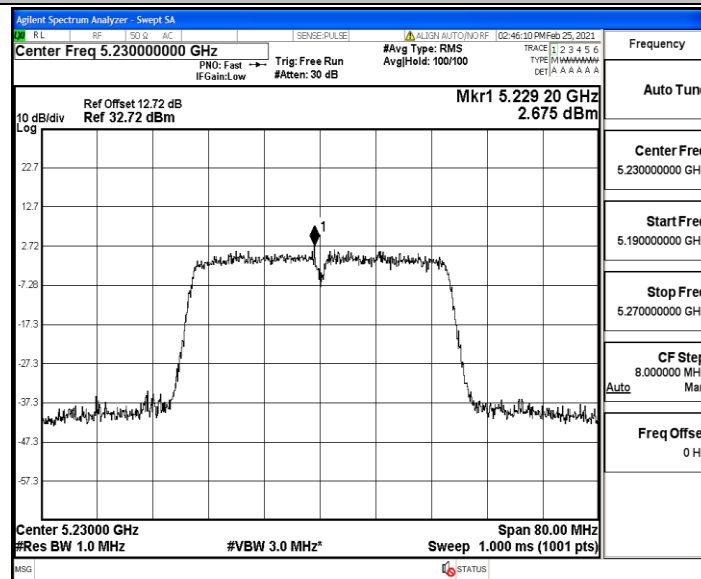
11N40MIMO_Ant2_5190



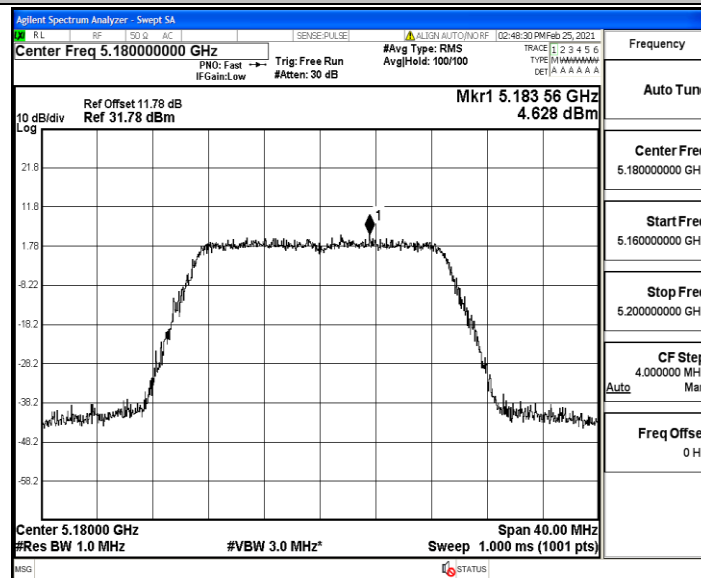
11N40MIMO_Ant1_5230



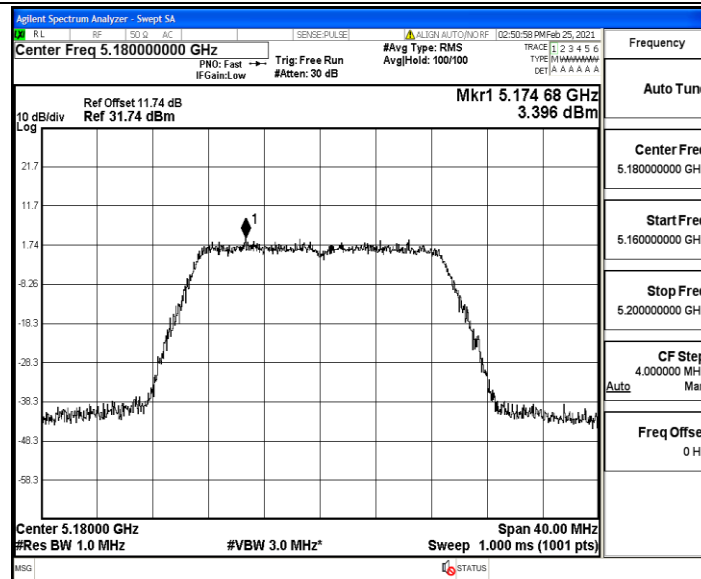
11N40MIMO_Ant2_5230



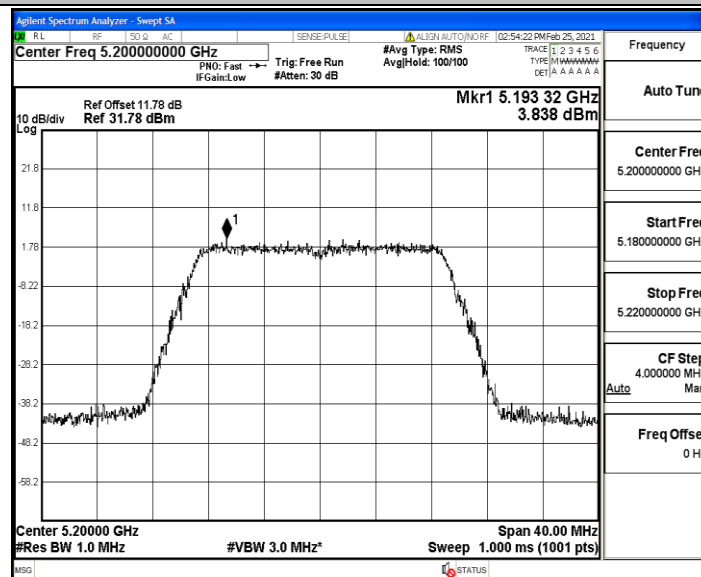
11AC20MIMO_Ant1_5180



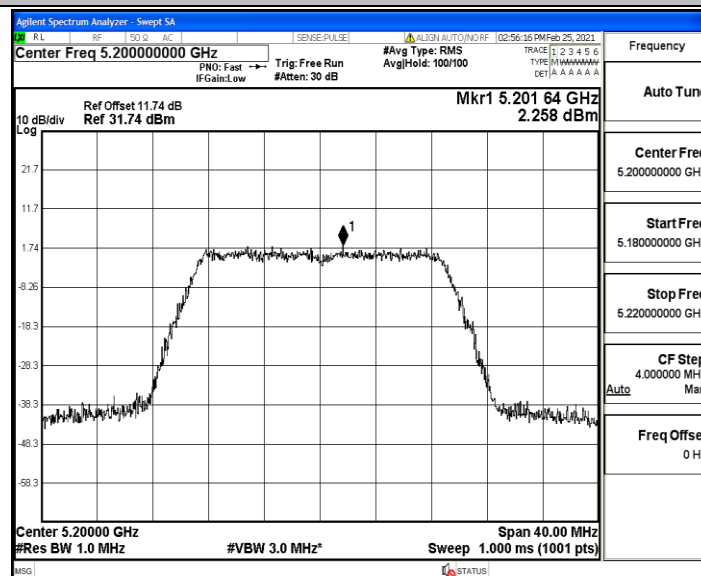
11AC20MIMO_Ant2_5180



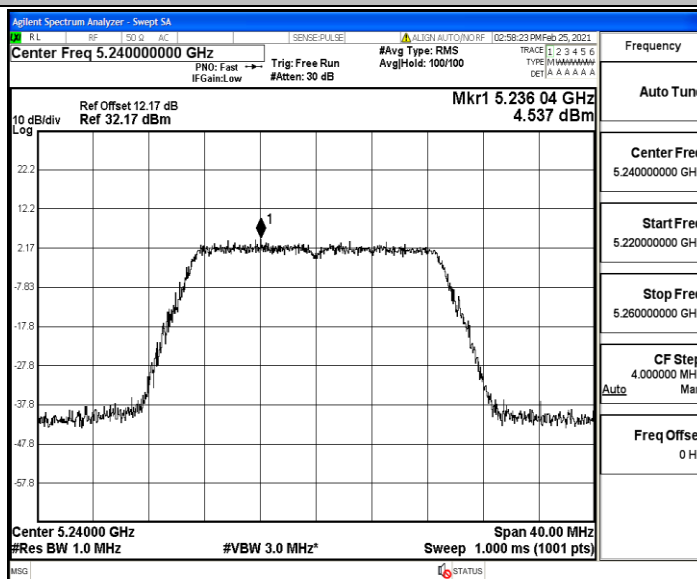
11AC20MIMO_Ant1_5200



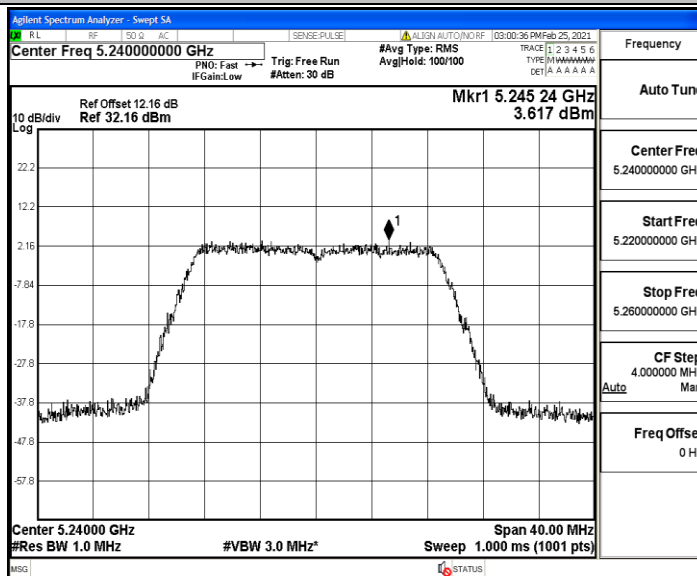
11AC20MIMO_Ant2_5200



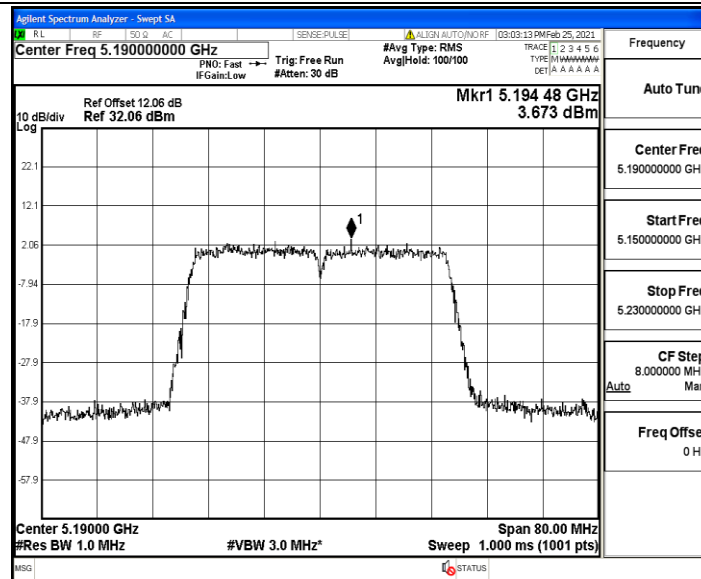
11AC20MIMO_Ant1_5240



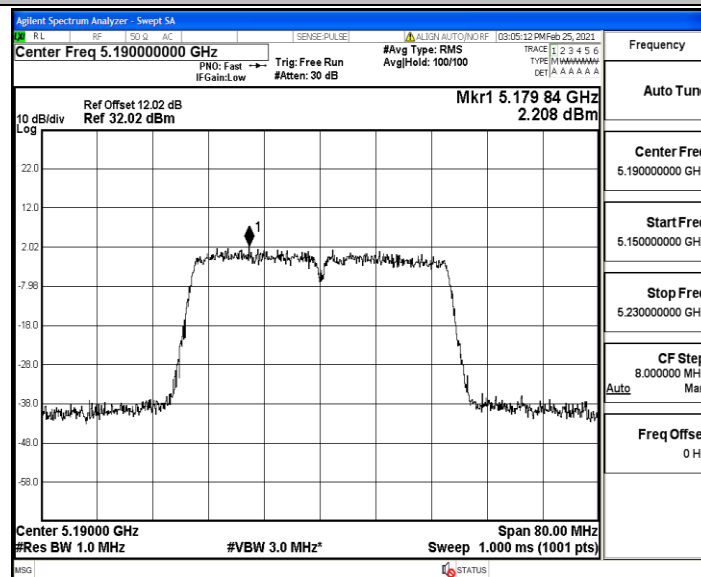
11AC20MIMO_Ant2_5240



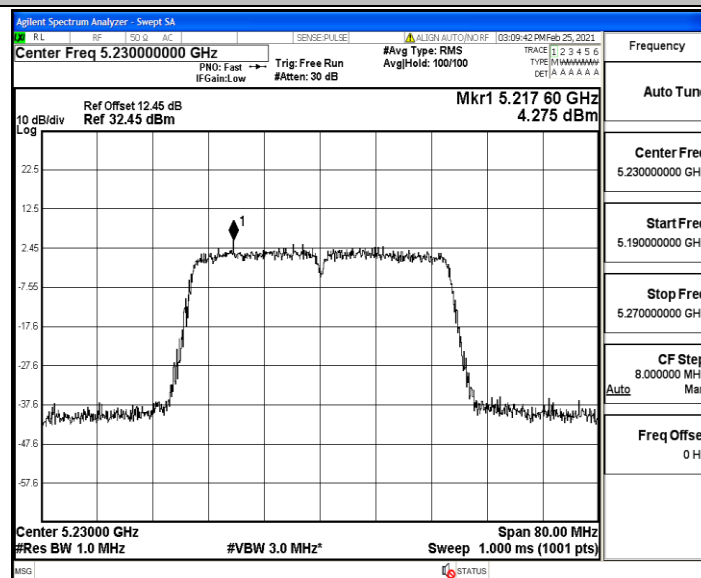
11AC40MIMO_Ant1_5190



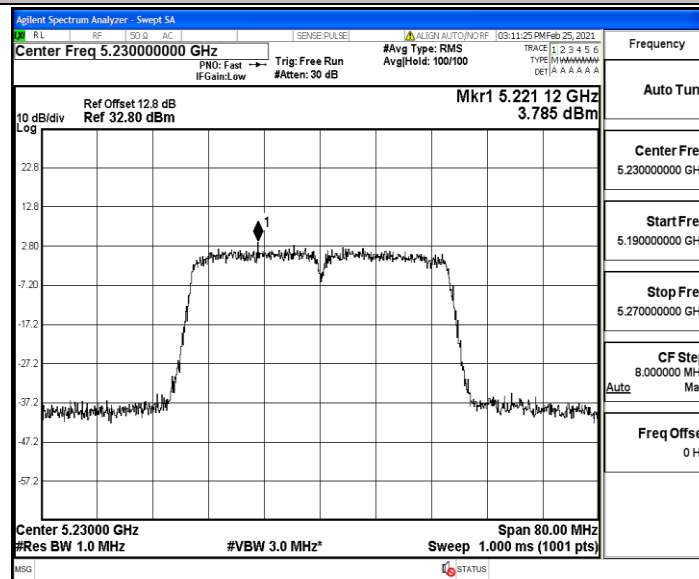
11AC40MIMO_Ant2_5190



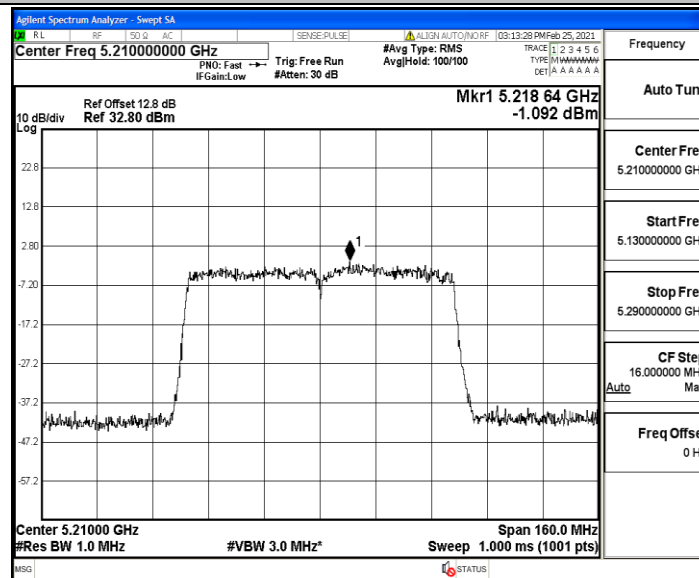
11AC40MIMO_Ant1_5230



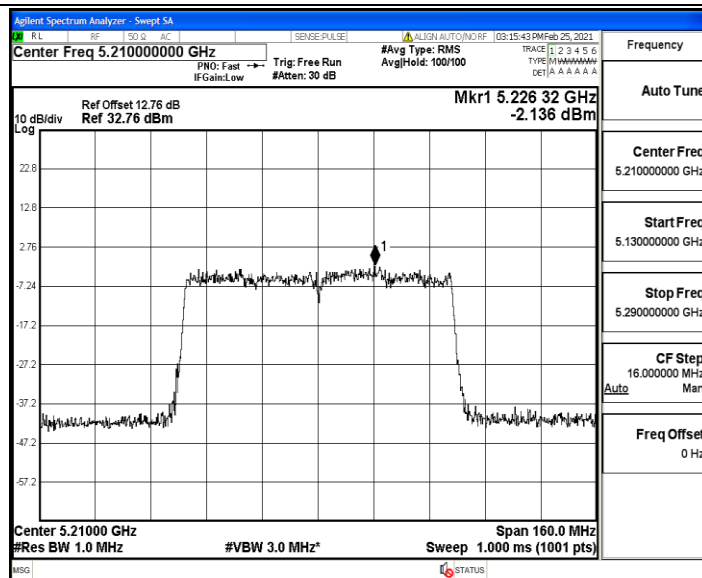
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



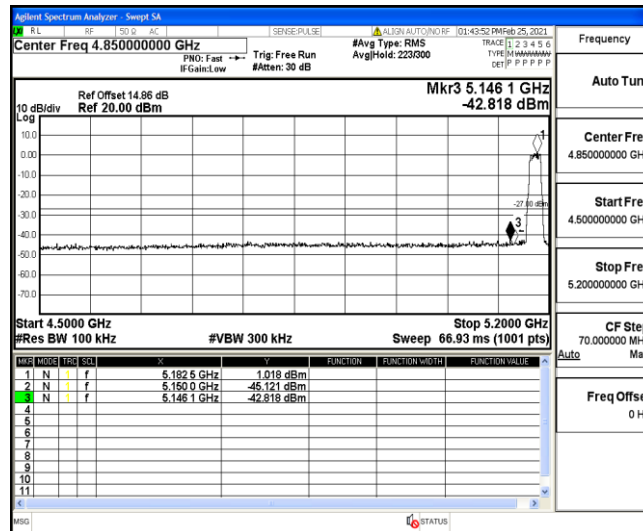
Appendix D: Band edge measurements

Test Result

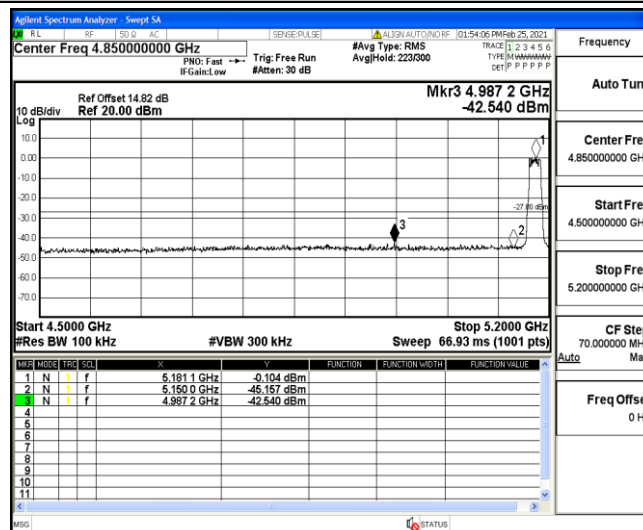
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-42.82	<=-27	PASS
	Ant2	Low	5180	-42.54	<=-27	PASS
	Ant1	High	5240	-42.62	<=-27	PASS
	Ant2	High	5240	-43.04	<=-27	PASS
11N20MIMO	Ant1	Low	5180	-42.72	<=-27	PASS
	Ant2	Low	5180	-43.1	<=-27	PASS
	Ant1	High	5240	-42.78	<=-27	PASS
	Ant2	High	5240	-42.74	<=-27	PASS
11N40MIMO	Ant1	Low	5190	-42.4	<=-27	PASS
	Ant2	Low	5190	-42.44	<=-27	PASS
	Ant1	High	5230	-42.55	<=-27	PASS
	Ant2	High	5230	-42.92	<=-27	PASS
11AC20MIMO	Ant1	Low	5180	-42.89	<=-27	PASS
	Ant2	Low	5180	-42.9	<=-27	PASS
	Ant1	High	5240	-42.79	<=-27	PASS
	Ant2	High	5240	-42.77	<=-27	PASS
11AC40MIMO	Ant1	Low	5190	-42.91	<=-27	PASS
	Ant2	Low	5190	-43.06	<=-27	PASS
	Ant1	High	5230	-42.89	<=-27	PASS
	Ant2	High	5230	-42.57	<=-27	PASS
11AC80MIMO	Ant1	Low	5210	-43.11	<=-27	PASS
	Ant2	Low	5210	-42.25	<=-27	PASS
	Ant1	High	5210	-42.35	<=-27	PASS
	Ant2	High	5210	-43.55	<=-27	PASS

Test Graphs

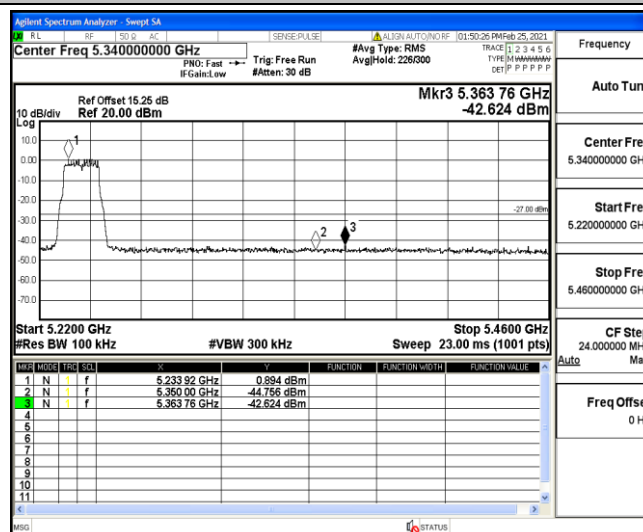
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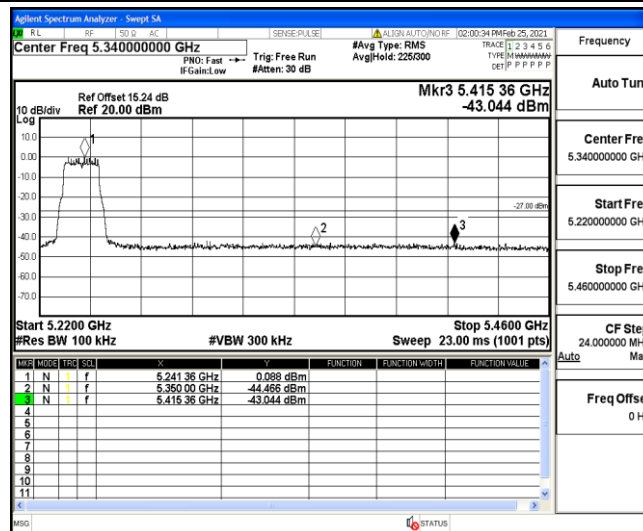
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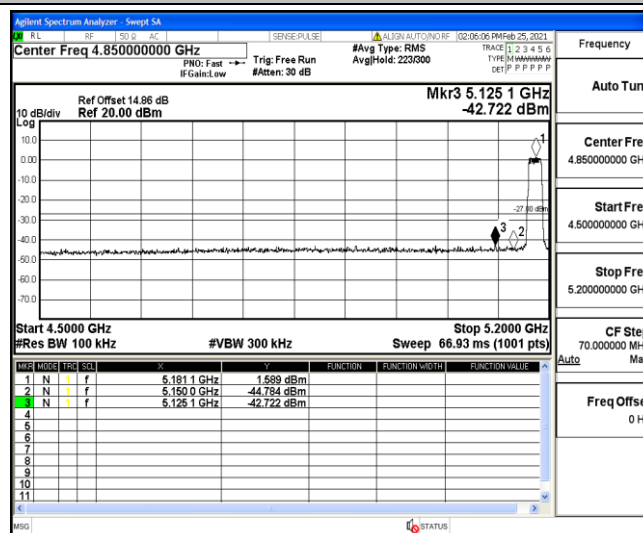
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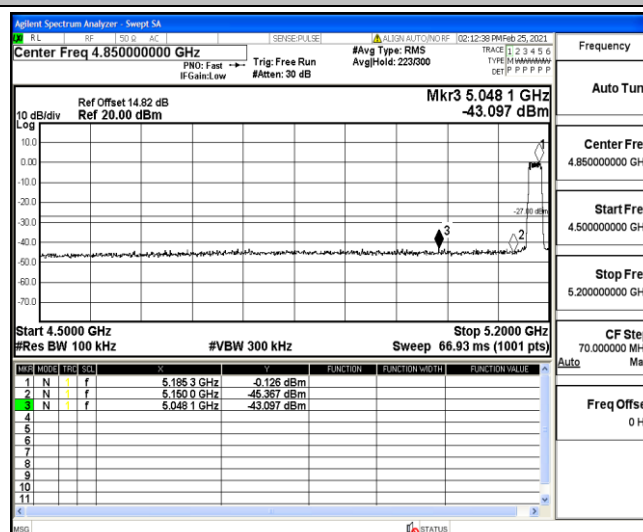
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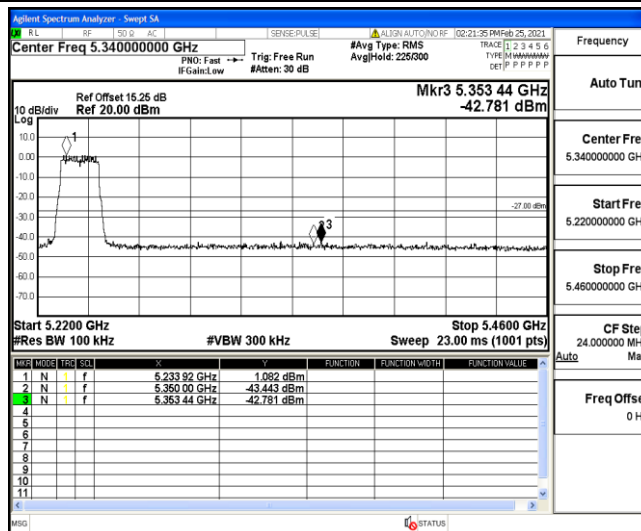
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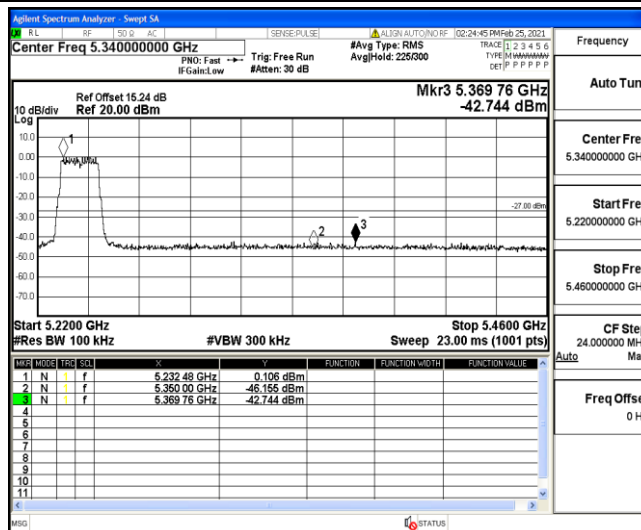
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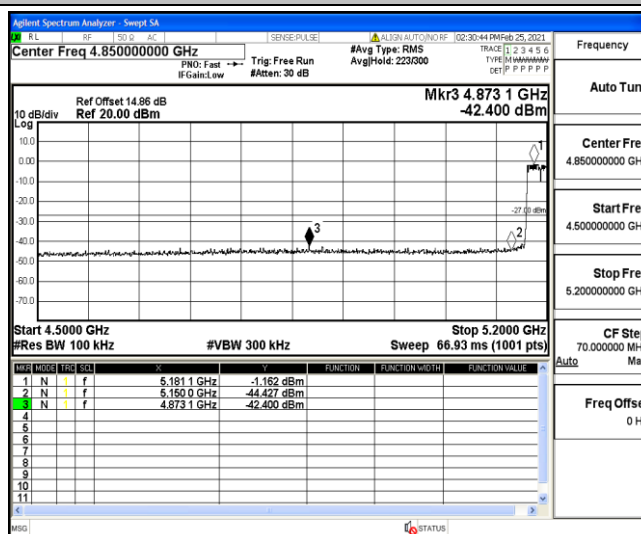
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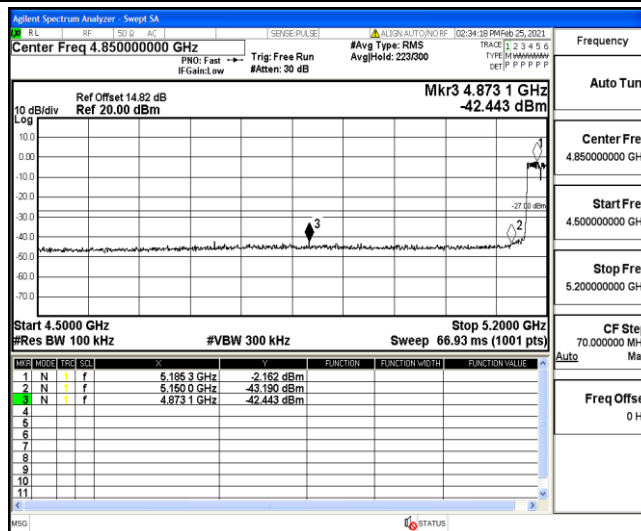
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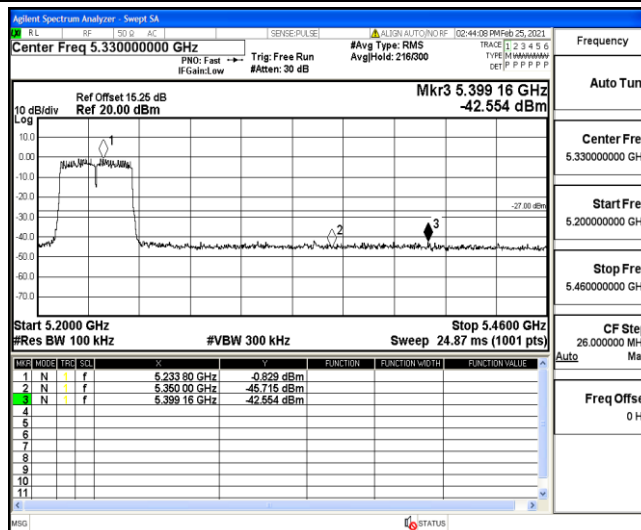
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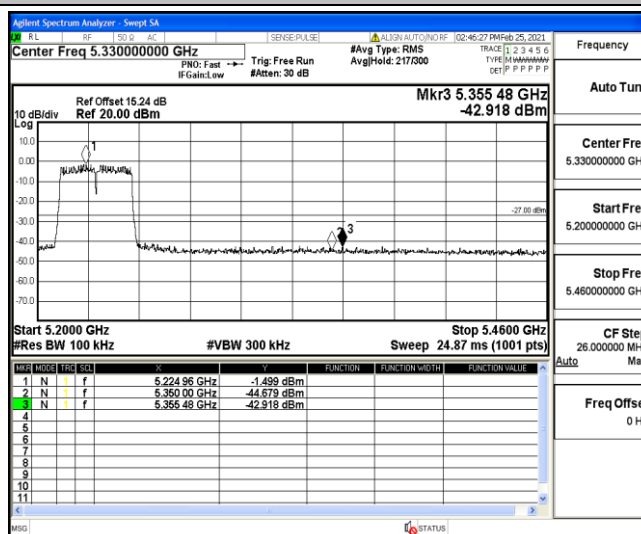
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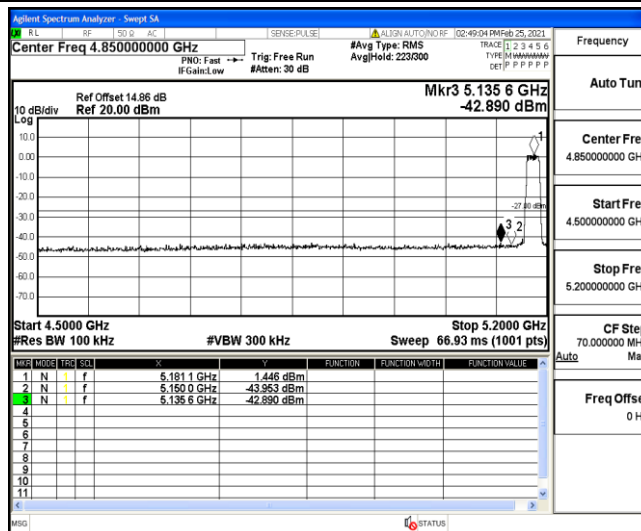
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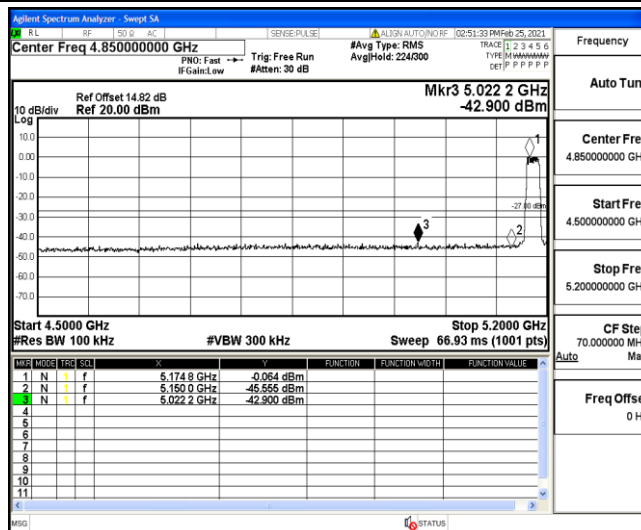
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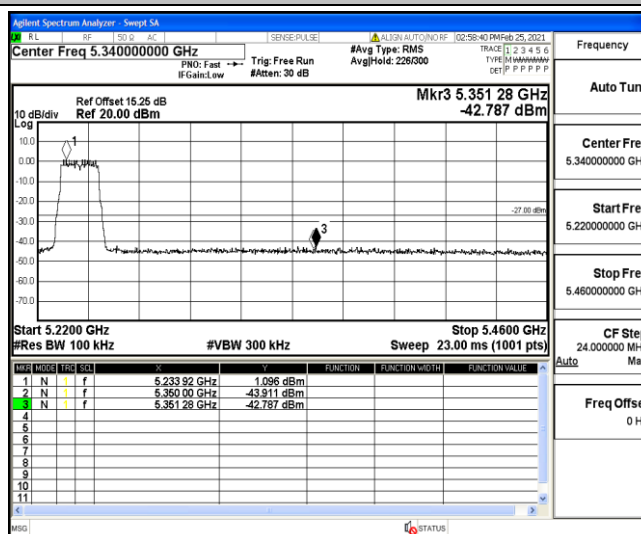
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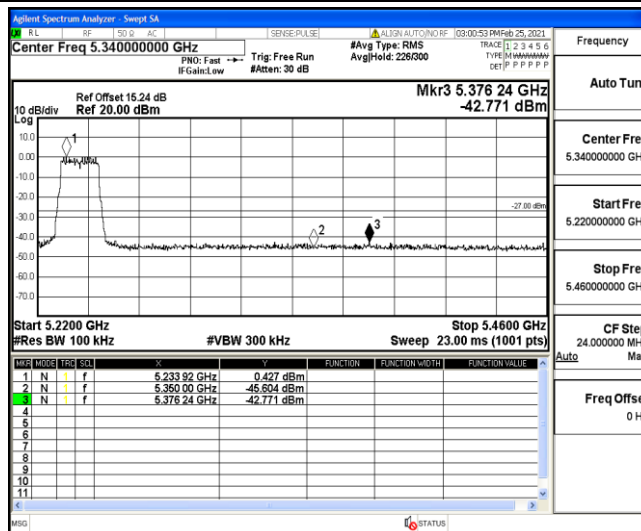
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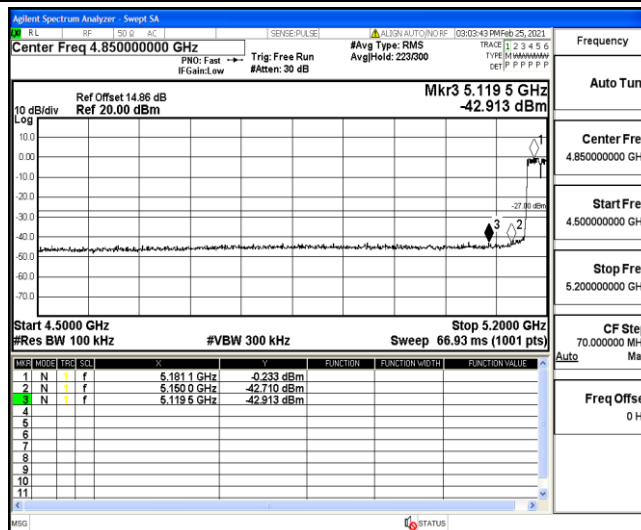
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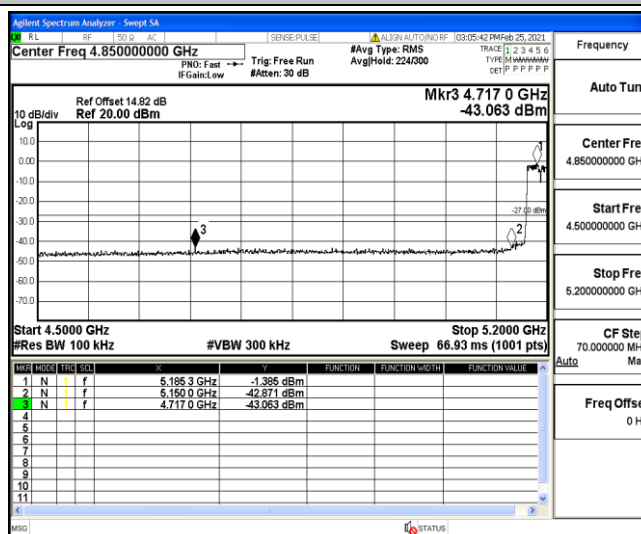
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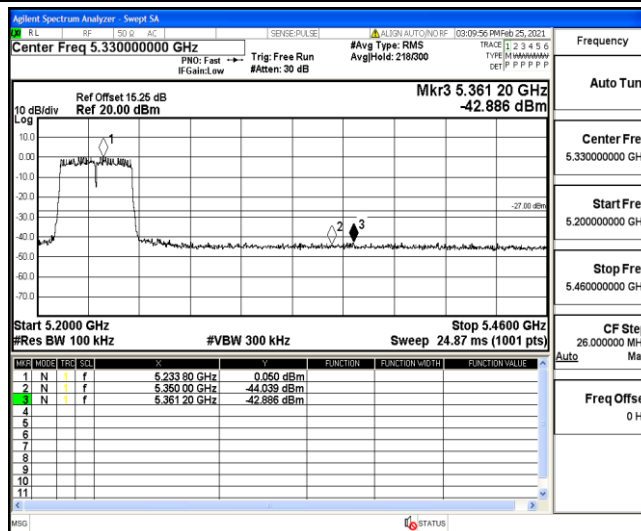
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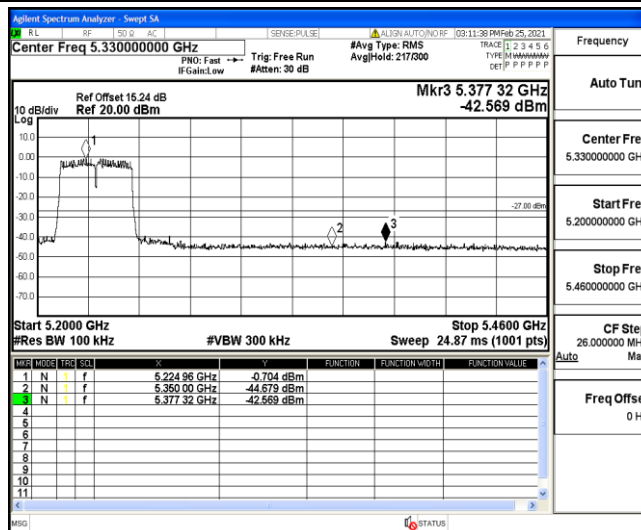
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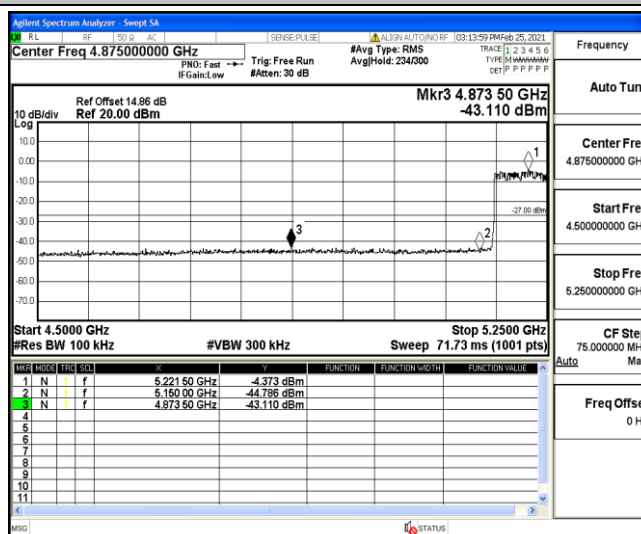
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11AC40MIMO_Ant2_High_5230



11AC80MIMO_Ant1_Low_5210



11AC80MIMO_Ant2_Low_5210