

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

Product Name: SKYBOXE 4G

Trade Mark: SKYBOXE

Test Model: SB4GTVLM940

FCC ID: 2AWJS-SB4GTVLM940

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	Ant0	5180	19.160	5170.240	5189.400	---	PASS
	Ant1	5180	19.080	5170.320	5189.400	---	PASS
	Ant0	5200	19.120	5190.360	5209.480	---	PASS
	Ant1	5200	19.280	5190.240	5209.520	---	PASS
	Ant0	5240	19.320	5230.240	5249.560	---	PASS
	Ant1	5240	19.280	5230.200	5249.480	---	PASS
11N20MIMO	Ant0	5180	19.960	5169.920	5189.880	---	PASS
	Ant1	5180	19.920	5170.040	5189.960	---	PASS
	Ant0	5200	20.040	5189.960	5210.000	---	PASS
	Ant1	5200	20.120	5189.960	5210.080	---	PASS
	Ant0	5240	19.880	5229.960	5249.840	---	PASS
	Ant1	5240	20.160	5229.880	5250.040	---	PASS
11N40MIMO	Ant0	5190	39.120	5170.560	5209.680	---	PASS
	Ant1	5190	39.680	5170.320	5210.000	---	PASS
	Ant0	5230	39.040	5210.720	5249.760	---	PASS
	Ant1	5230	39.600	5210.320	5249.920	---	PASS
11AC20MIMO	Ant0	5180	20.000	5169.920	5189.920	---	PASS
	Ant1	5180	20.080	5169.920	5190.000	---	PASS
	Ant0	5200	19.920	5190.040	5209.960	---	PASS
	Ant1	5200	20.120	5189.880	5210.000	---	PASS
	Ant0	5240	20.040	5229.960	5250.000	---	PASS
	Ant1	5240	20.160	5229.880	5250.040	---	PASS
11AC40MIMO	Ant0	5190	39.280	5170.480	5209.760	---	PASS

	Ant1	5190	39.600	5170.240	5209.840	---	PASS
	Ant0	5230	38.960	5210.720	5249.680	---	PASS
	Ant1	5230	39.280	5210.480	5249.760	---	PASS
11AC80MIMO	Ant0	5210	80.080	5167.920	5248.000	---	PASS
	Ant1	5210	80.600	5168.080	5248.680	---	PASS

Test Graphs

11A_Ant0_5180



11A_Ant1_5180



11A_Ant0_5200



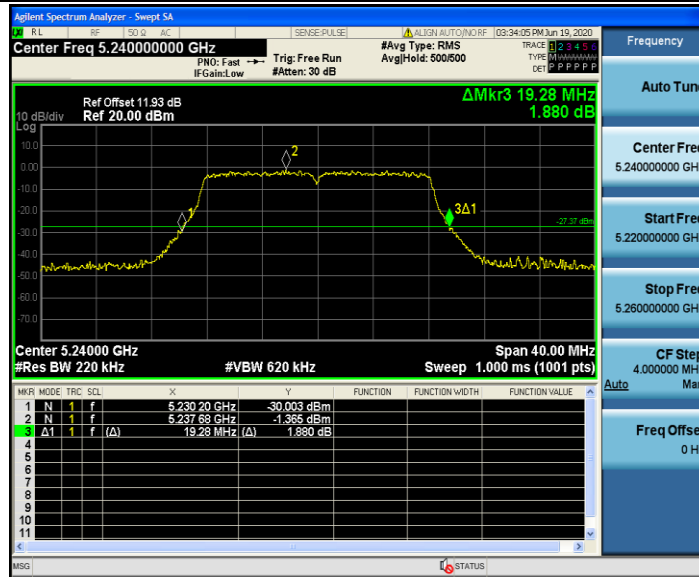
11A_Ant1_5200



11A_Ant0_5240



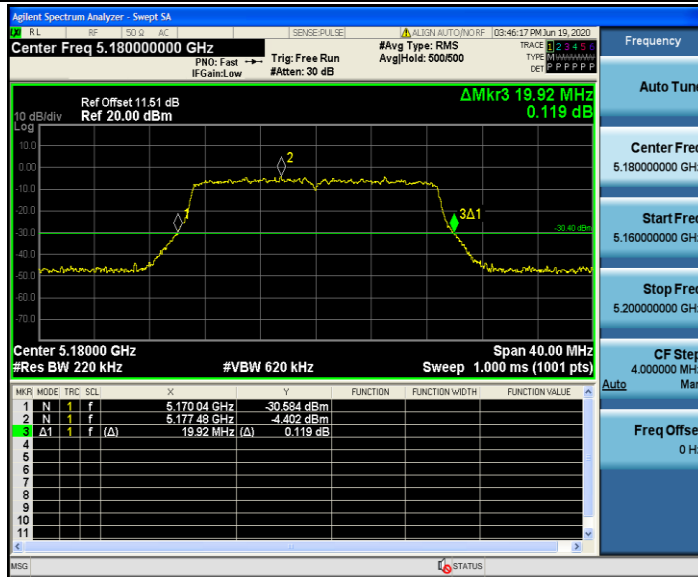
11A_Ant1_5240



11N20MIMO_Ant0_5180



11N20MIMO_Ant1_5180



11N20MIMO_Ant0_5200



11N20MIMO_Ant1_5200



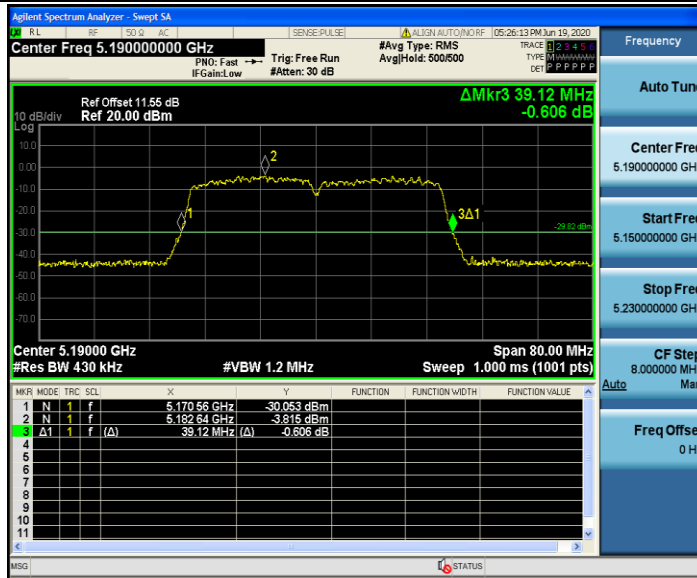
11N20MIMO_Ant0_5240



11N20MIMO_Ant1_5240



11N40MIMO_Ant0_5190



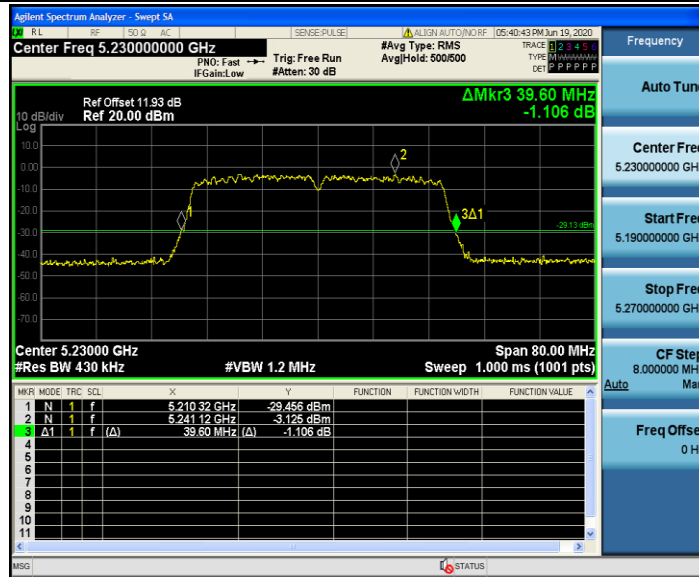
11N40MIMO_Ant1_5190



11N40MIMO_Ant0_5230



11N40MIMO_Ant1_5230



11AC20MIMO_Ant0_5180



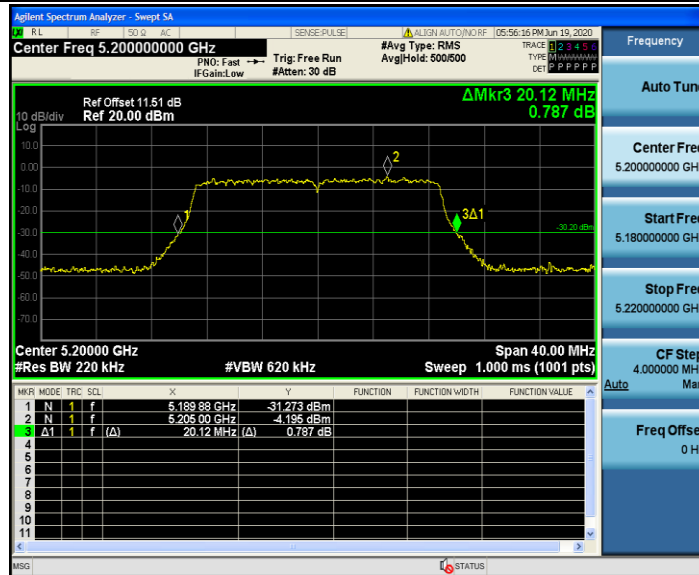
11AC20MIMO_Ant1_5180



11AC20MIMO_Ant0_5200



11AC20MIMO_Ant1_5200



11AC20MIMO_Ant0_5240



11AC20MIMO_Ant1_5240



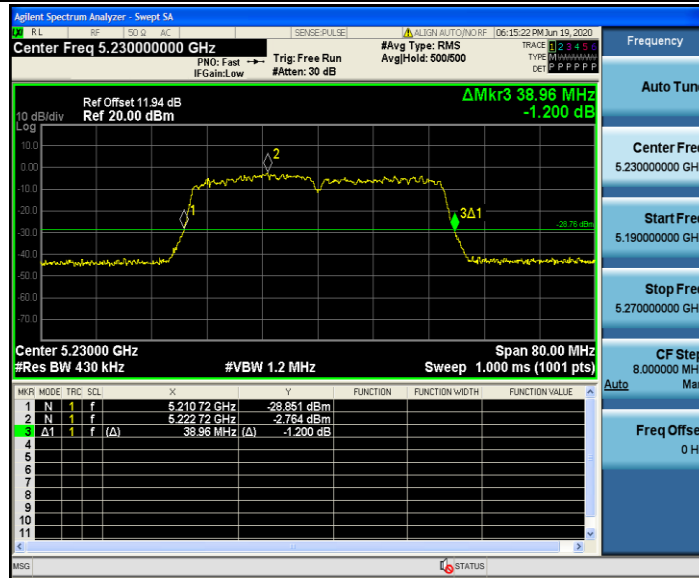
11AC40MIMO_Ant0_5190



11AC40MIMO_Ant1_5190



11AC40MIMO_Ant0_5230



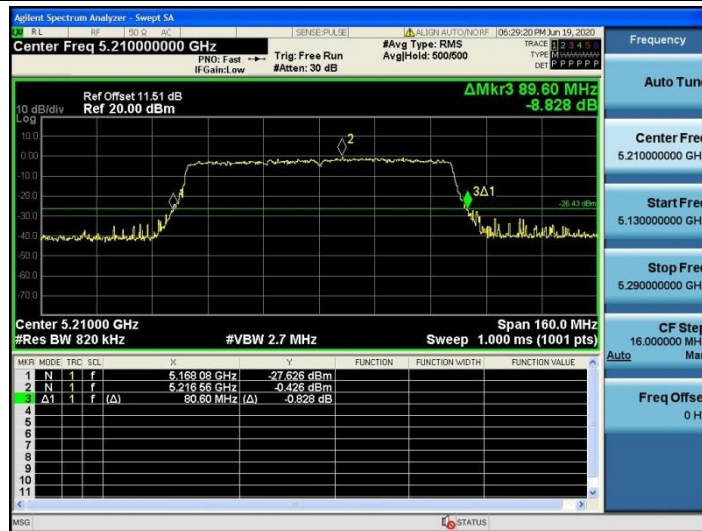
11AC40MIMO_Ant1_5230



11AC80MIMO_Ant0_5210



11AC80MIMO_Ant1_5210



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant0	5180	9.44	<=30	PASS
	Ant1	5180	8.68	<=30	PASS
	Ant0	5200	8.35	<=30	PASS
	Ant1	5200	8.72	<=30	PASS
	Ant0	5240	8.51	<=30	PASS
	Ant1	5240	8.80	<=30	PASS
11N20MIMO	Ant0	5180	6.18	<=30	PASS
	Ant1	5180	5.83	<=30	PASS
	total	5180	9.0	<=27.94	PASS
	Ant0	5200	5.88	<=30	PASS
	Ant1	5200	5.94	<=30	PASS
	total	5200	8.9	<=27.94	PASS
	Ant0	5240	6.14	<=30	PASS
	Ant1	5240	5.96	<=30	PASS
total	5240	9.1	<=27.94	PASS	
11N40MIMO	Ant0	5190	5.84	<=30	PASS
	Ant1	5190	5.35	<=30	PASS
	total	5190	8.6	<=27.94	PASS
	Ant0	5230	6.58	<=30	PASS
	Ant1	5230	6.95	<=30	PASS
	total	5230	9.8	<=27.94	PASS
11AC20MIMO	Ant0	5180	6.27	<=30	PASS
	Ant1	5180	5.79	<=30	PASS
	total	5180	9.0	<=27.94	PASS
	Ant0	5200	5.98	<=30	PASS
	Ant1	5200	5.99	<=30	PASS
	total	5200	9.0	<=27.94	PASS
	Ant0	5240	6.16	<=30	PASS
	Ant1	5240	5.96	<=30	PASS
total	5240	9.1	<=27.94	PASS	
11AC40MIMO	Ant0	5190	5.82	<=30	PASS
	Ant1	5190	5.39	<=30	PASS
	total	5190	8.6	<=27.94	PASS
	Ant0	5230	6.60	<=30	PASS
	Ant1	5230	6.93	<=30	PASS
	total	5230	9.8	<=27.94	PASS
11AC80MIMO	Ant0	5210	9.08	<=30	PASS
	Ant1	5210	9.13	<=30	PASS
	total	5210	12.1	<=27.94	PASS

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

Appendix C: Maximum power spectral density

Test Result

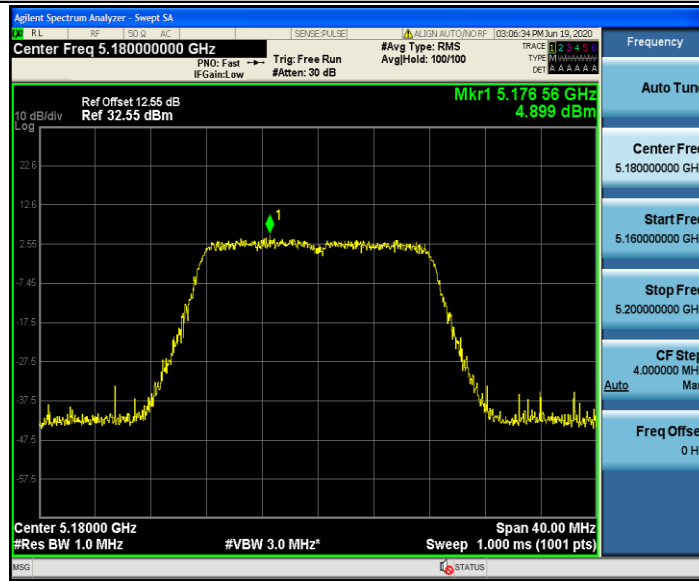
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant0	5180	4.9	<=17	PASS
	Ant1	5180	3.29	<=17	PASS
	Ant0	5200	3.25	<=17	PASS
	Ant1	5200	3.83	<=17	PASS
	Ant0	5240	3.13	<=17	PASS
	Ant1	5240	3.4	<=17	PASS
11N20MIMO	Ant0	5180	1.31	<=17	PASS
	Ant1	5180	0.87	<=17	PASS
	total	5180	4.11	<=14.94	PASS
	Ant0	5200	0.88	<=17	PASS
	Ant1	5200	1	<=17	PASS
	total	5200	3.95	<=14.94	PASS
	Ant0	5240	1.23	<=17	PASS
	Ant1	5240	1.55	<=17	PASS
	total	5240	4.40	<=14.94	PASS
11N40MIMO	Ant0	5190	-2.1	<=17	PASS
	Ant1	5190	-3.41	<=17	PASS
	total	5190	0.30	<=14.94	PASS
	Ant0	5230	-1.45	<=17	PASS
	Ant1	5230	-1.65	<=17	PASS
	total	5230	1.46	<=14.94	PASS
11AC20MIMO	Ant0	5180	1.36	<=17	PASS
	Ant1	5180	0.88	<=17	PASS
	total	5180	4.14	<=14.94	PASS
	Ant0	5200	0.77	<=17	PASS
	Ant1	5200	1.56	<=17	PASS
	total	5200	4.19	<=14.94	PASS
	Ant0	5240	1.07	<=17	PASS
	Ant1	5240	0.97	<=17	PASS
total	5240	4.03	<=14.94	PASS	
11AC40MIMO	Ant0	5190	-2.42	<=17	PASS
	Ant1	5190	-3.59	<=17	PASS
	total	5190	0.04	<=14.94	PASS
	Ant0	5230	-1.31	<=17	PASS
	Ant1	5230	-1.54	<=17	PASS
	total	5230	1.59	<=14.94	PASS
11AC80MIMO	Ant0	5210	-1.74	<=17	PASS
	Ant1	5210	-1.77	<=17	PASS
	total	5210	1.26	<=14.94	PASS

Note:

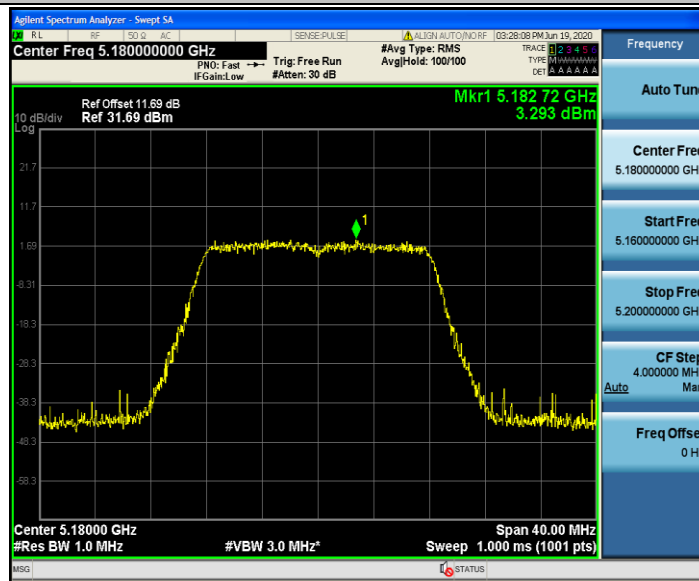
The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

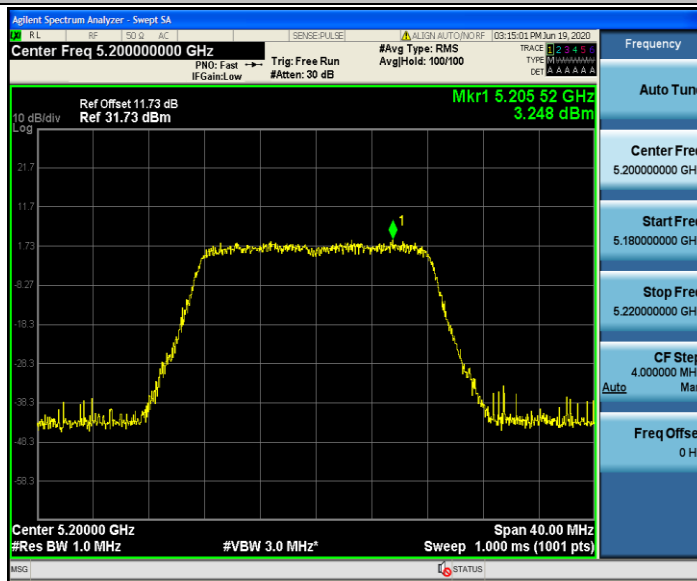
11A_Ant0_5180



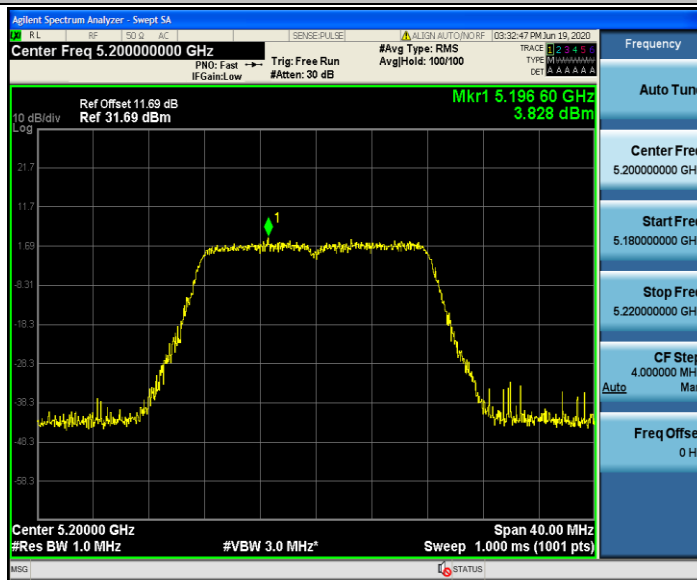
11A_Ant1_5180



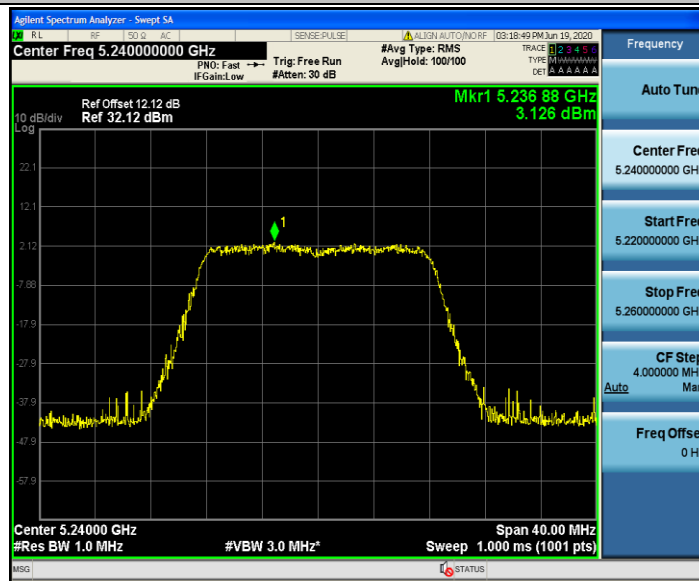
11A_Ant0_5200



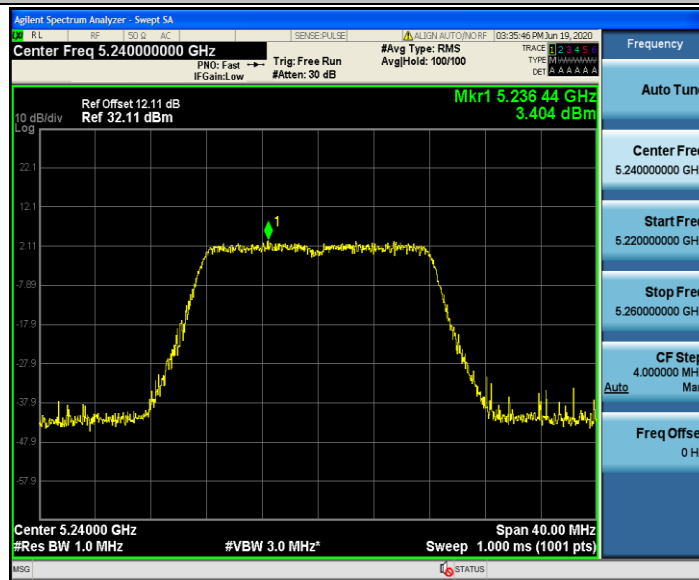
11A_Ant1_5200



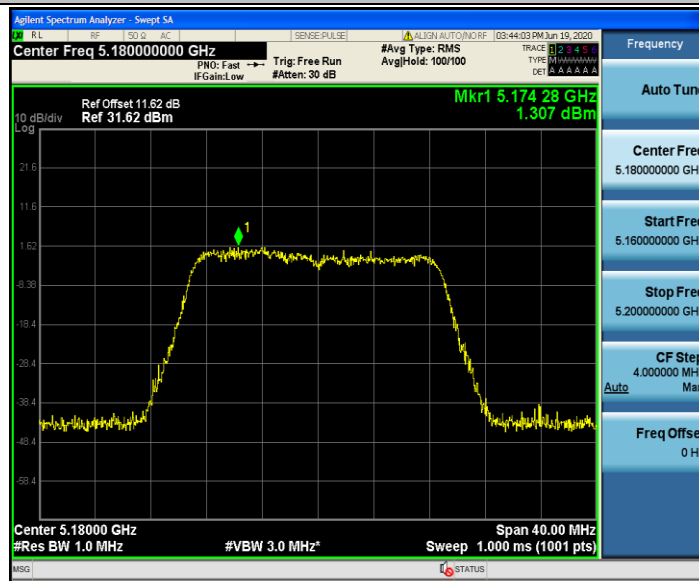
11A_Ant0_5240



11A_Ant1_5240



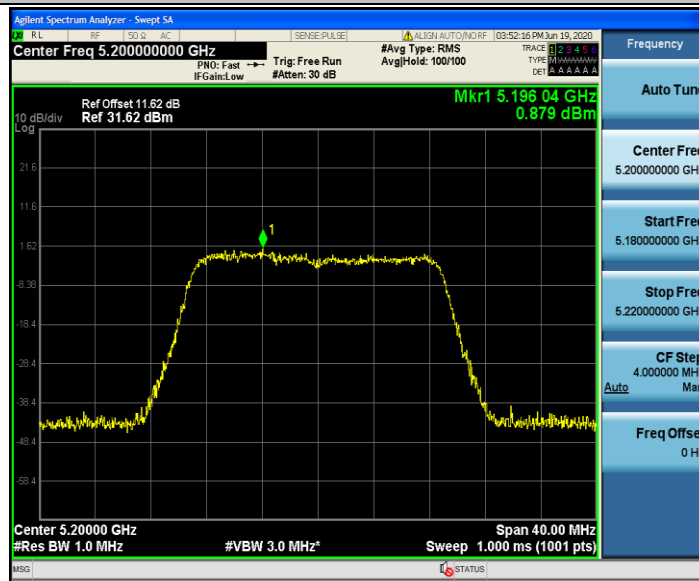
11N20MIMO_Ant0_5180



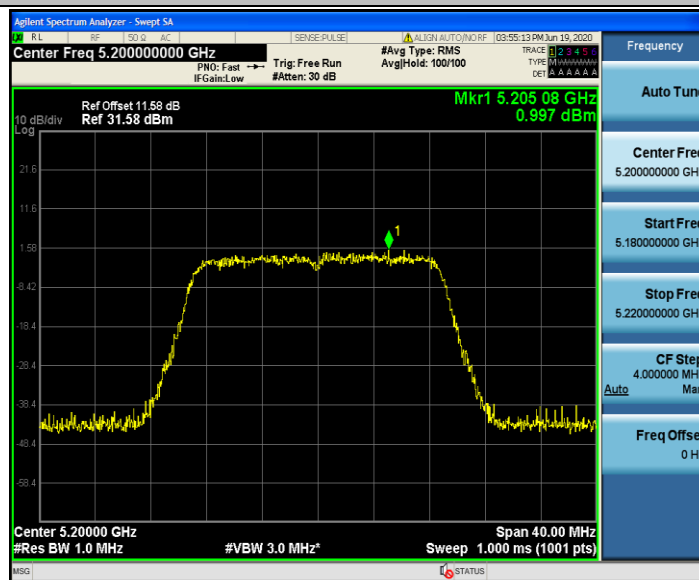
11N20MIMO_Ant1_5180



11N20MIMO_Ant0_5200



11N20MIMO_Ant1_5200



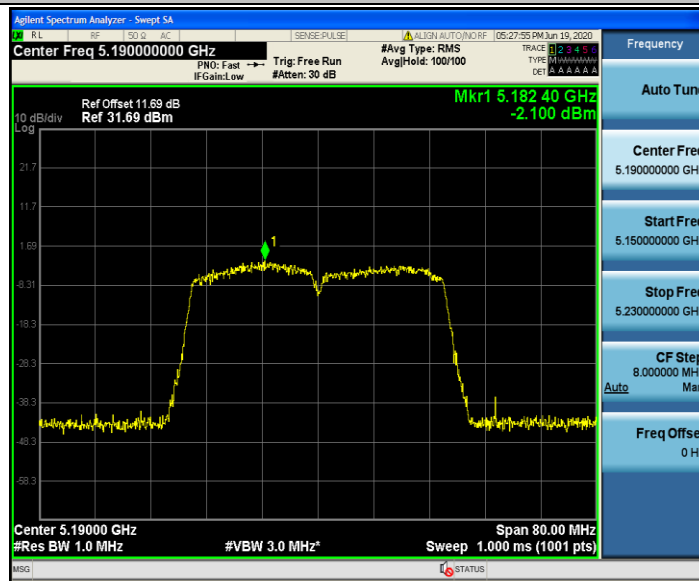
11N20MIMO_Ant0_5240



11N20MIMO_Ant1_5240



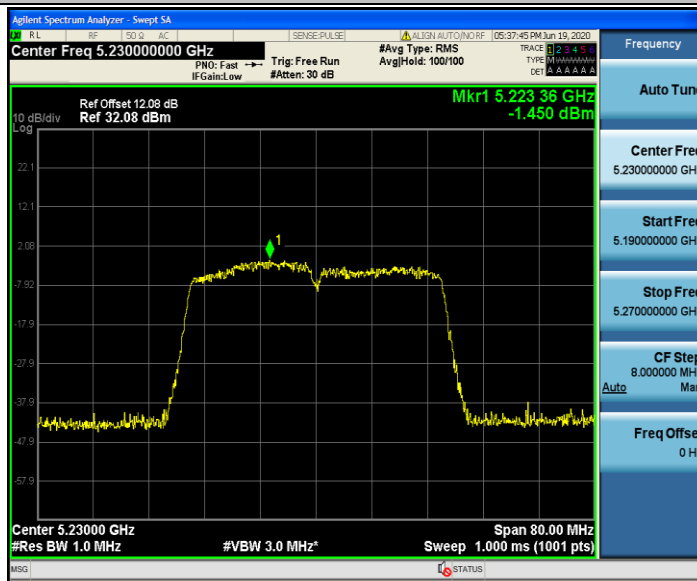
11N40MIMO_Ant0_5190



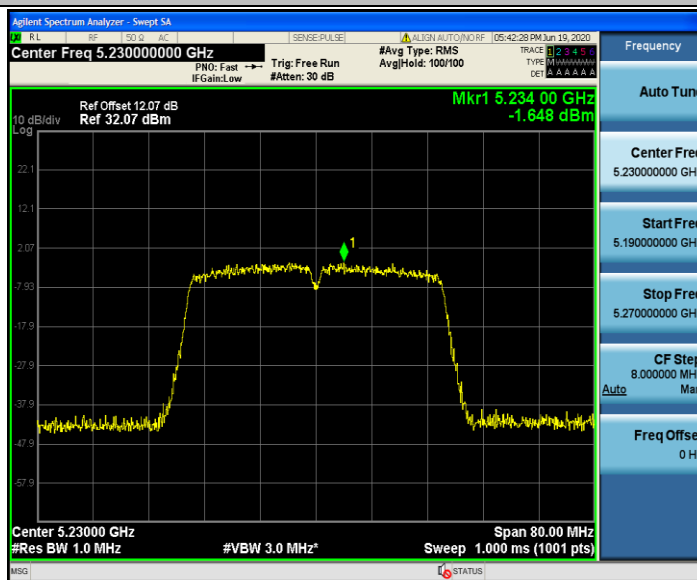
11N40MIMO_Ant1_5190



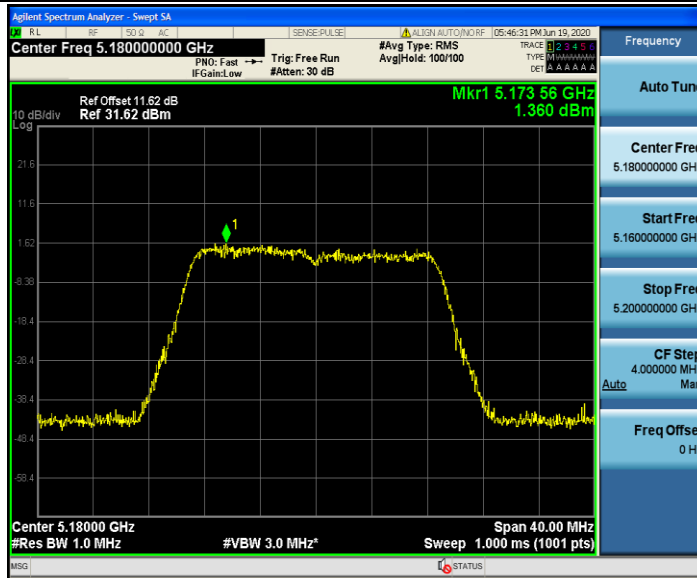
11N40MIMO_Ant0_5230



11N40MIMO_Ant1_5230



11AC20MIMO_Ant0_5180



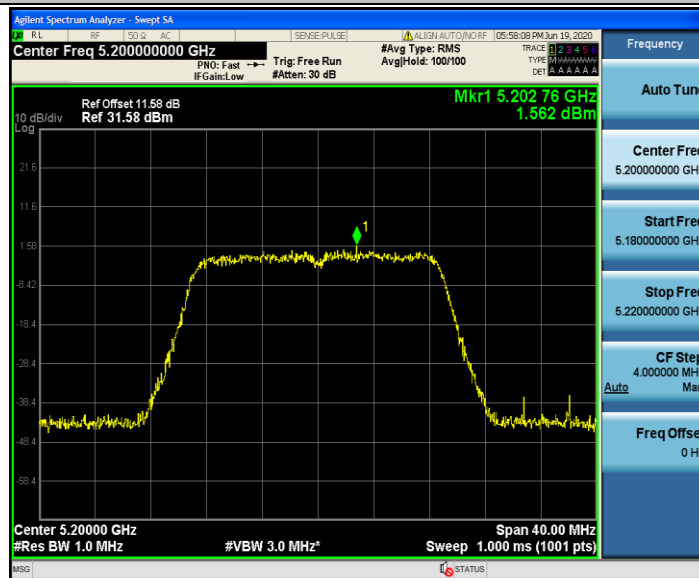
11AC20MIMO_Ant1_5180



11AC20MIMO_Ant0_5200



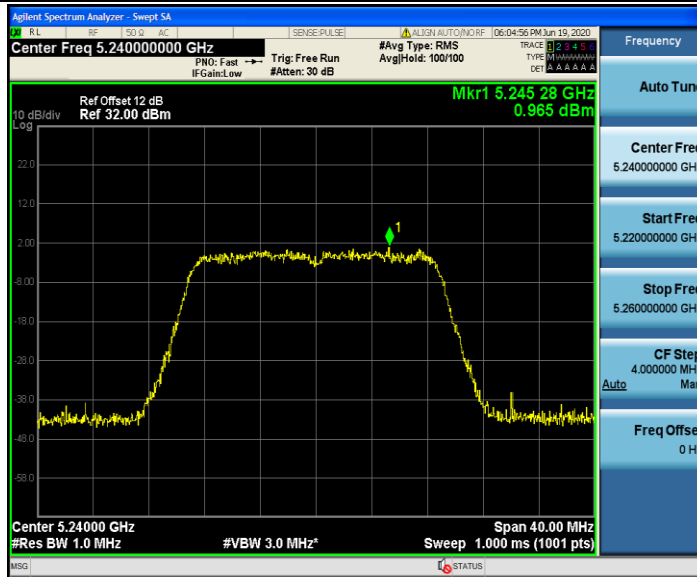
11AC20MIMO_Ant1_5200



11AC20MIMO_Ant0_5240



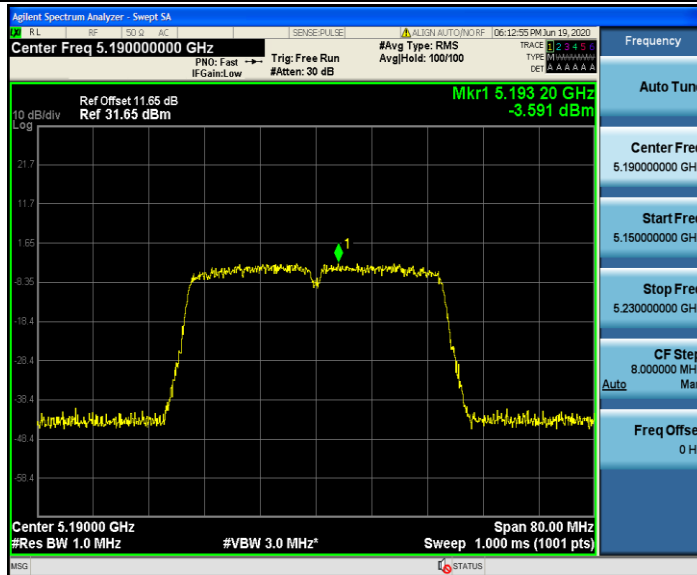
11AC20MIMO_Ant1_5240



11AC40MIMO_Ant0_5190



11AC40MIMO_Ant1_5190



11AC40MIMO_Ant0_5230



11AC40MIMO_Ant1_5230



11AC80MIMO_Ant0_5210



11AC80MIMO_Ant1_5210



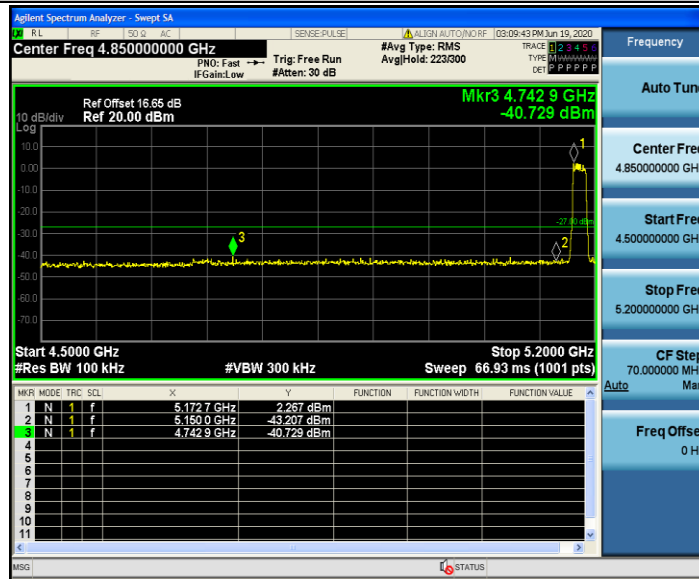
Appendix D: Band edge measurements

Test Result

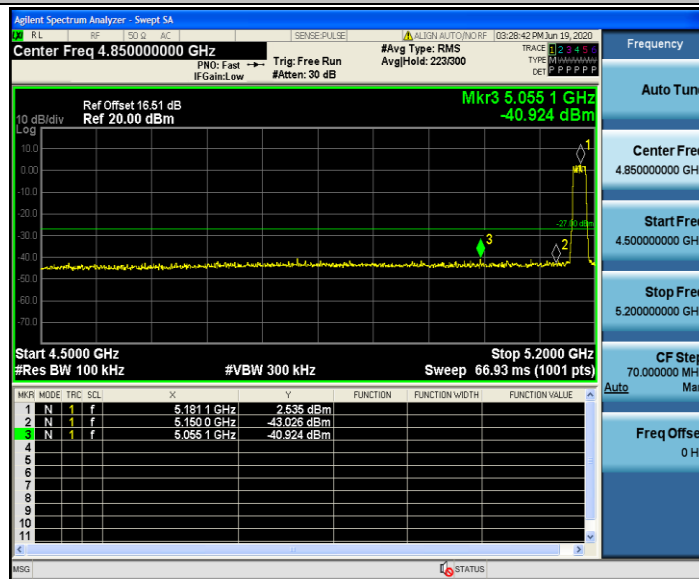
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant0	Low	5180	-40.73	<=-27	PASS
	Ant1	Low	5180	-40.92	<=-27	PASS
	Ant0	High	5240	-41.18	<=-27	PASS
	Ant1	High	5240	-41.26	<=-27	PASS
11N20MIMO	Ant0	Low	5180	-41.52	<=-27	PASS
	Ant1	Low	5180	-40.1	<=-27	PASS
	Ant0	High	5240	-40.99	<=-27	PASS
	Ant1	High	5240	-41.24	<=-27	PASS
11N40MIMO	Ant0	Low	5190	-41.47	<=-27	PASS
	Ant1	Low	5190	-41.08	<=-27	PASS
	Ant0	High	5230	-41.03	<=-27	PASS
	Ant1	High	5230	-40.86	<=-27	PASS
11AC20MIMO	Ant0	Low	5180	-41.48	<=-27	PASS
	Ant1	Low	5180	-41.38	<=-27	PASS
	Ant0	High	5240	-40.92	<=-27	PASS
	Ant1	High	5240	-41.39	<=-27	PASS
11AC40MIMO	Ant0	Low	5190	-41.48	<=-27	PASS
	Ant1	Low	5190	-41.22	<=-27	PASS
	Ant0	High	5230	-40.11	<=-27	PASS
	Ant1	High	5230	-41.17	<=-27	PASS
11AC80MIMO	Ant0	Low	5210	-41.22	<=-27	PASS
	Ant1	Low	5210	-41.25	<=-27	PASS
	Ant0	High	5210	-41.47	<=-27	PASS
	Ant1	High	5210	-42.16	<=-27	PASS

Test Graphs

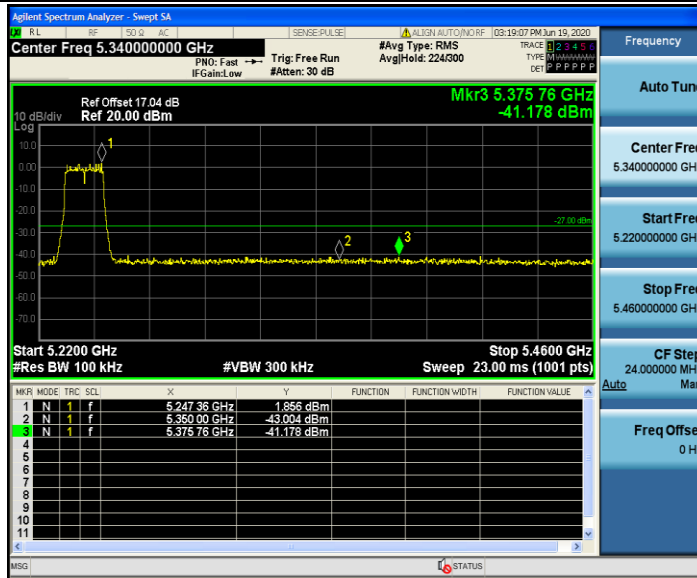
11A_Ant0_Low_5180



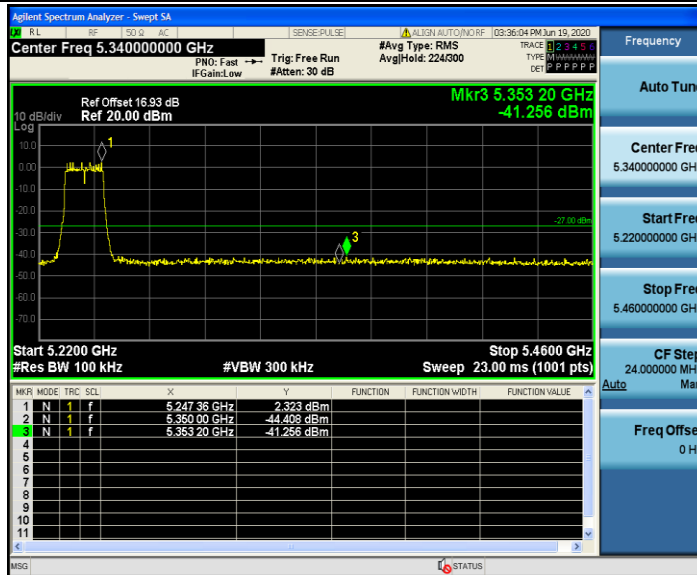
11A_Ant1_Low_5180



11A_Ant0_High_5240



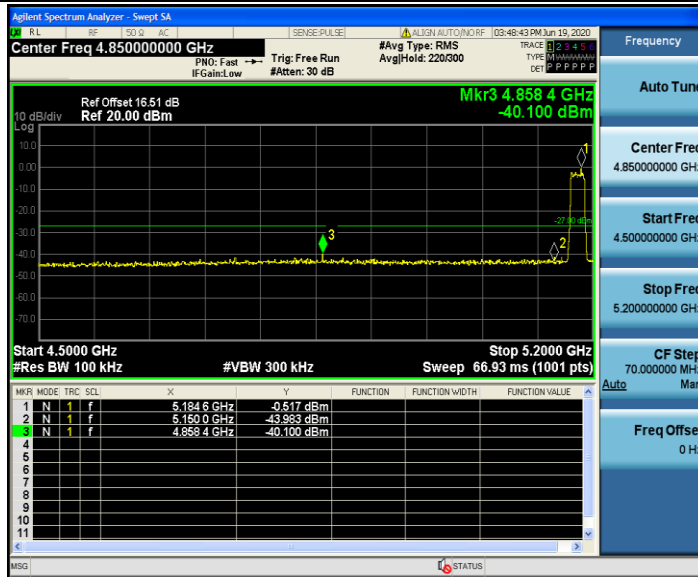
11A_Ant1_High_5240



11N20MIMO_Ant0_Low_5180



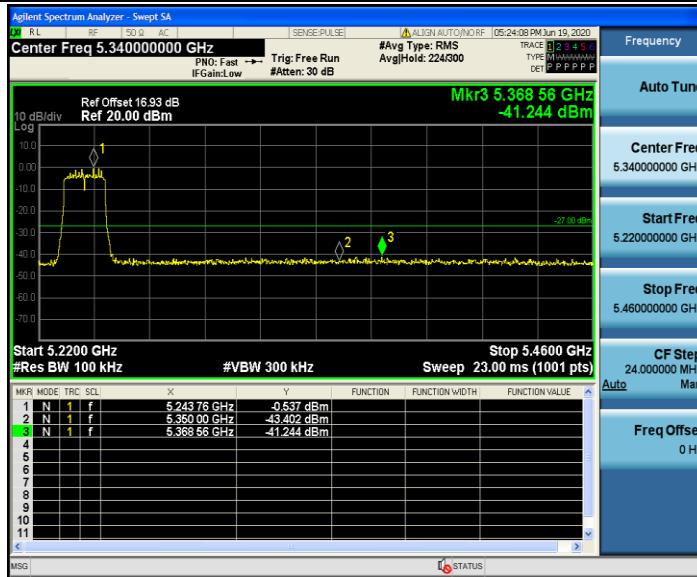
11N20MIMO_Ant1_Low_5180



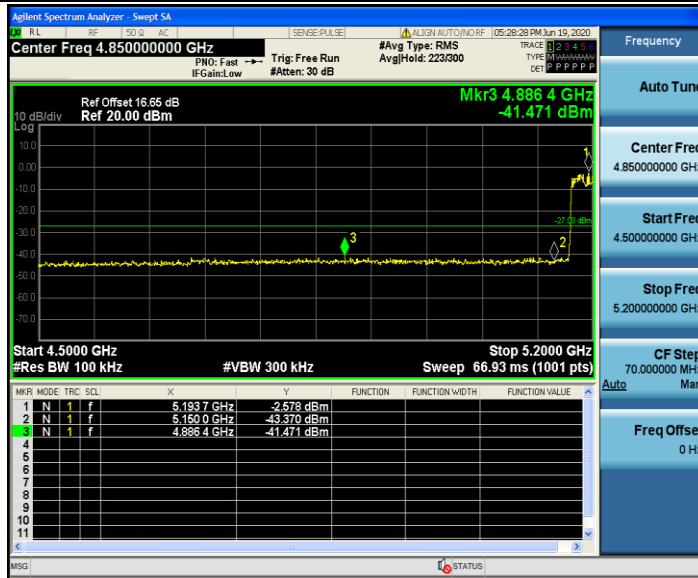
11N20MIMO_Ant0_High_5240



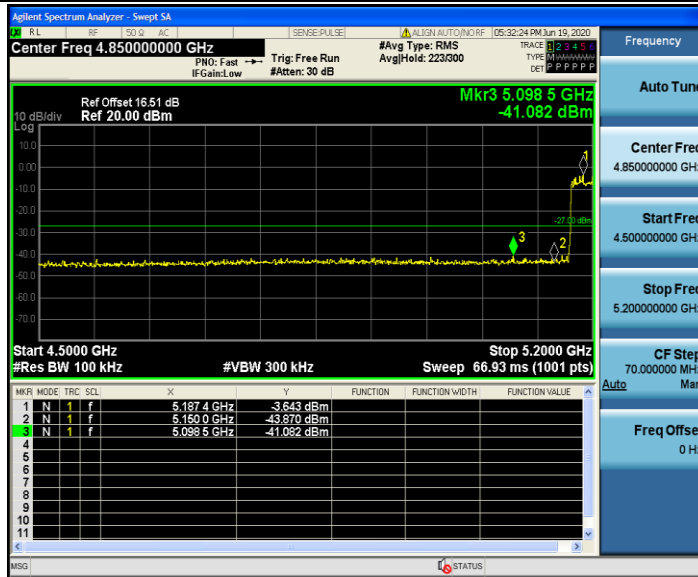
11N20MIMO_Ant1_High_5240



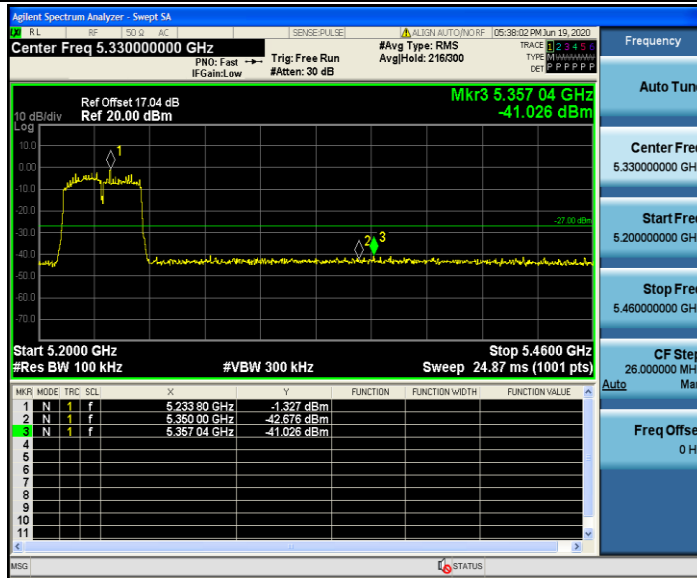
11N40MIMO_Ant0_Low_5190



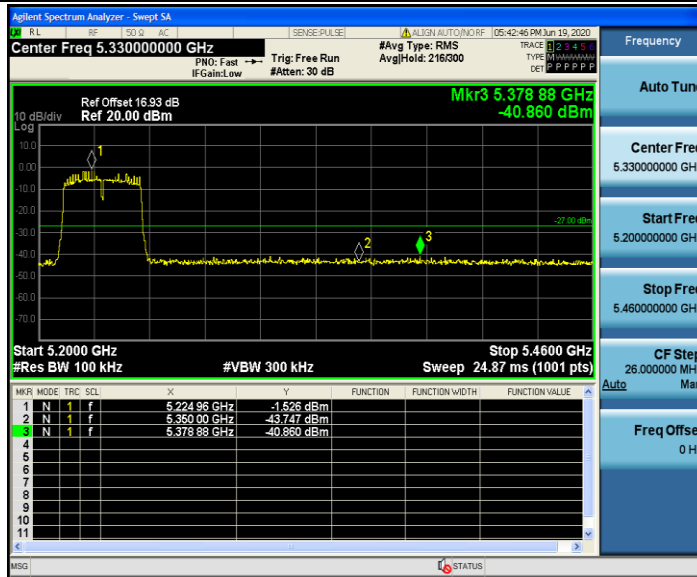
11N40MIMO_Ant1_Low_5190



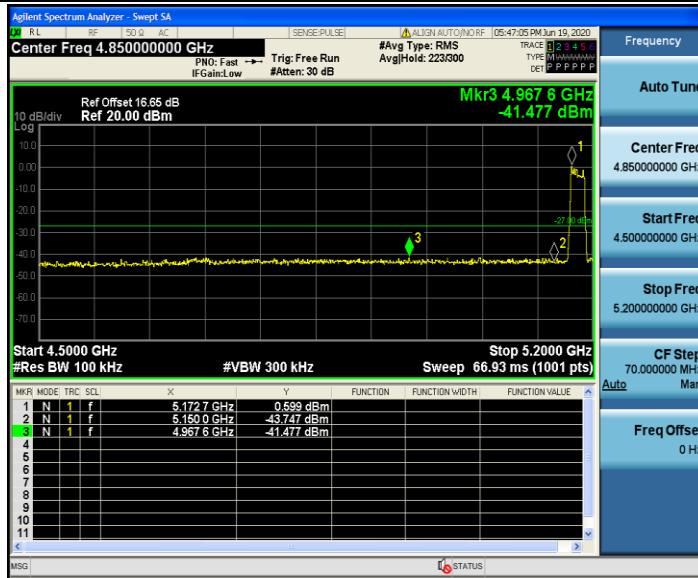
11N40MIMO_Ant0_High_5230



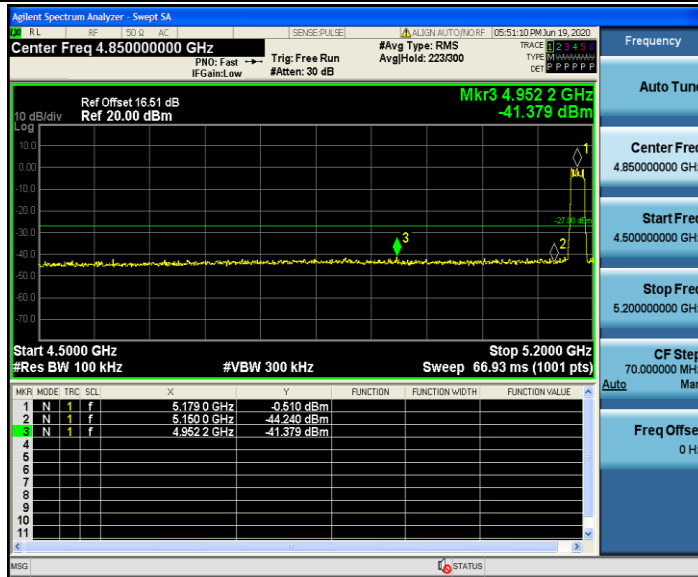
11N40MIMO_Ant1_High_5230



11AC20MIMO_Ant0_Low_5180



11AC20MIMO_Ant1_Low_5180



11AC20MIMO_Ant0_High_5240



11AC20MIMO_Ant1_High_5240

