

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

Product Name: OTT BOX+GPON

Trade Mark: N/A

Test Model: SD5BGD

FCC ID: 2AQLF-SD5BGX

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

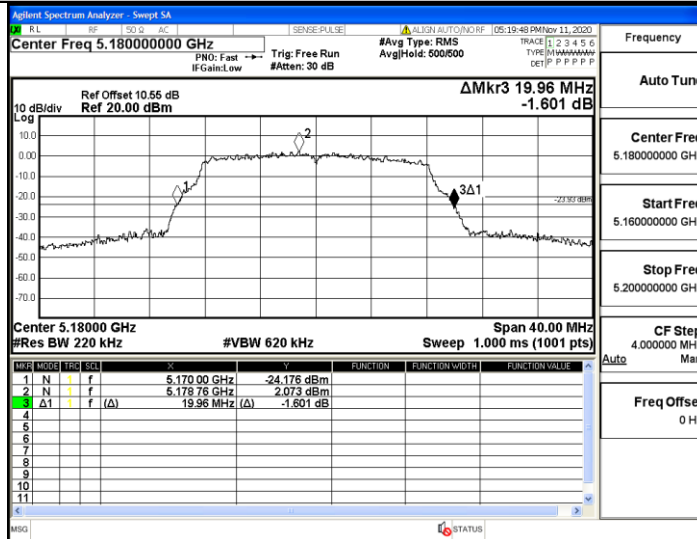
Appendix A: Emission Bandwidth

Test Result

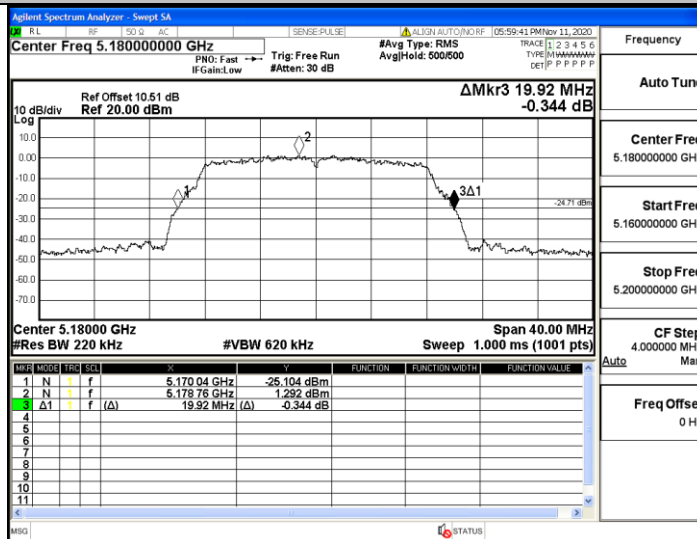
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.960	5170.000	5189.960	---	PASS
	Ant2	5180	19.920	5170.040	5189.960	---	PASS
	Ant1	5200	20.080	5190.080	5210.160	---	PASS
	Ant2	5200	20.240	5190.040	5210.280	---	PASS
	Ant1	5240	20.600	5229.920	5250.520	---	PASS
	Ant2	5240	20.320	5229.880	5250.200	---	PASS
11N20MIMO	Ant1	5180	20.240	5169.800	5190.040	---	PASS
	Ant2	5180	20.280	5169.880	5190.160	---	PASS
	Ant1	5200	20.160	5189.960	5210.120	---	PASS
	Ant2	5200	20.320	5189.880	5210.200	---	PASS
	Ant1	5240	20.360	5229.760	5250.120	---	PASS
	Ant2	5240	20.520	5229.720	5250.240	---	PASS
11N40MIMO	Ant1	5190	41.200	5169.280	5210.480	---	PASS
	Ant2	5190	40.960	5169.600	5210.560	---	PASS
	Ant1	5230	46.480	5209.600	5256.080	---	PASS
	Ant2	5230	40.480	5209.760	5250.240	---	PASS
11AC20MIMO	Ant1	5180	20.320	5169.800	5190.120	---	PASS
	Ant2	5180	20.320	5169.800	5190.120	---	PASS
	Ant1	5200	20.360	5189.880	5210.240	---	PASS
	Ant2	5200	20.480	5189.840	5210.320	---	PASS
	Ant1	5240	20.360	5229.920	5250.280	---	PASS
	Ant2	5240	20.640	5229.840	5250.480	---	PASS
11AC40MIMO	Ant1	5190	40.640	5169.680	5210.320	---	PASS
	Ant2	5190	41.600	5169.200	5210.800	---	PASS
	Ant1	5230	40.400	5209.920	5250.320	---	PASS
	Ant2	5230	41.040	5209.600	5250.640	---	PASS
11AC80MIMO	Ant1	5210	80.800	5169.680	5250.480	---	PASS
	Ant2	5210	81.600	5169.040	5250.640	---	PASS

Test Graphs

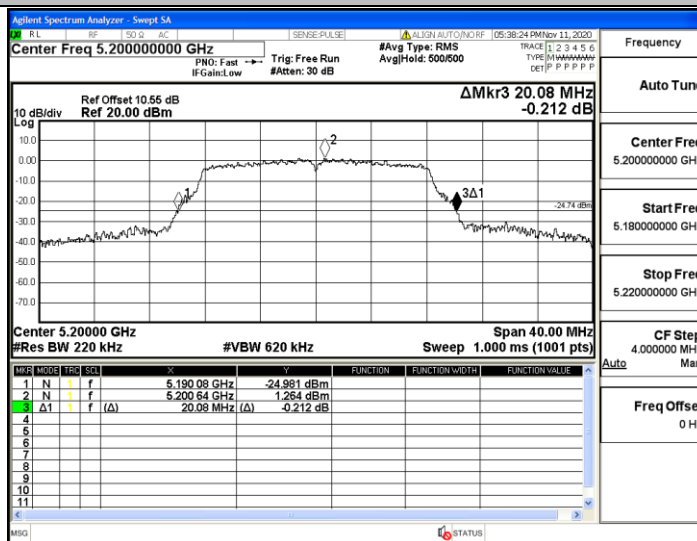
11A_Ant1_5180



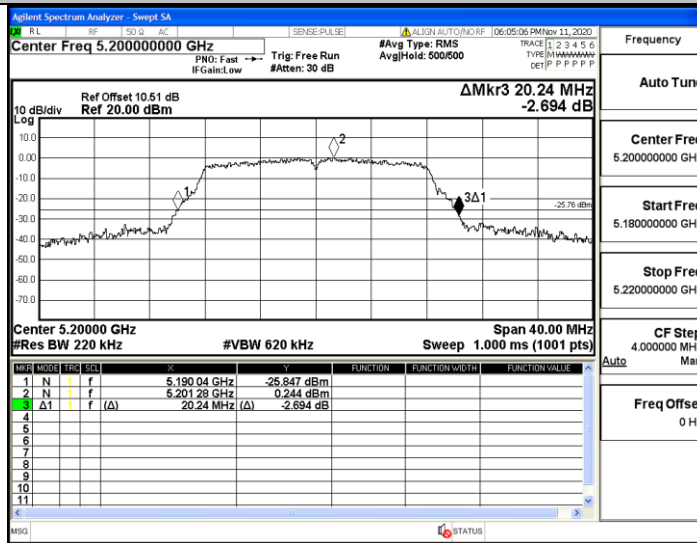
11A_Ant2_5180



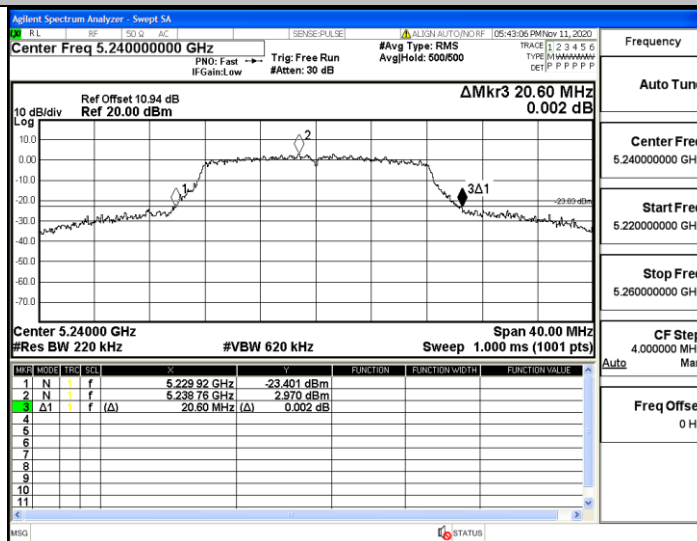
11A_Ant1_5200



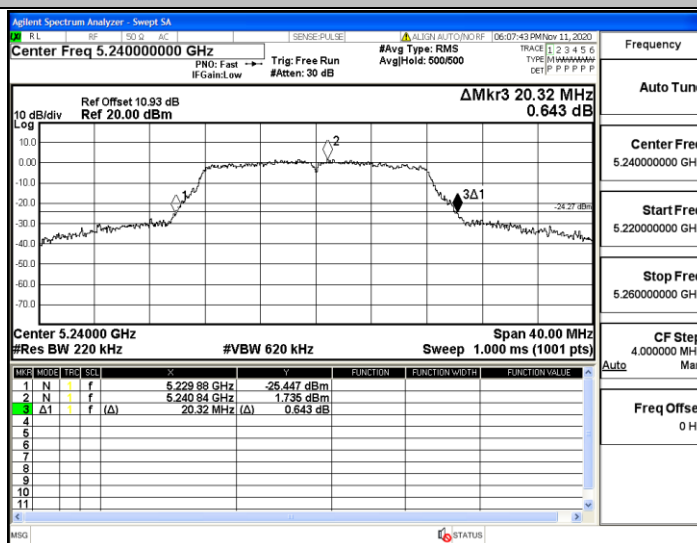
11A_Ant2_5200



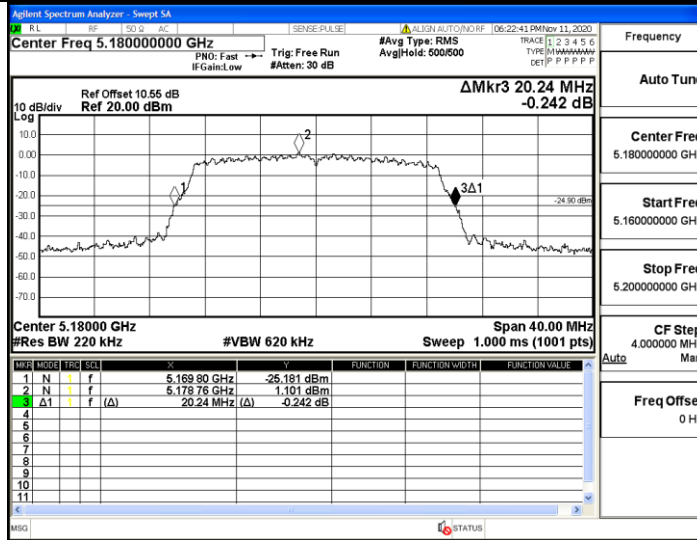
11A_Ant1_5240



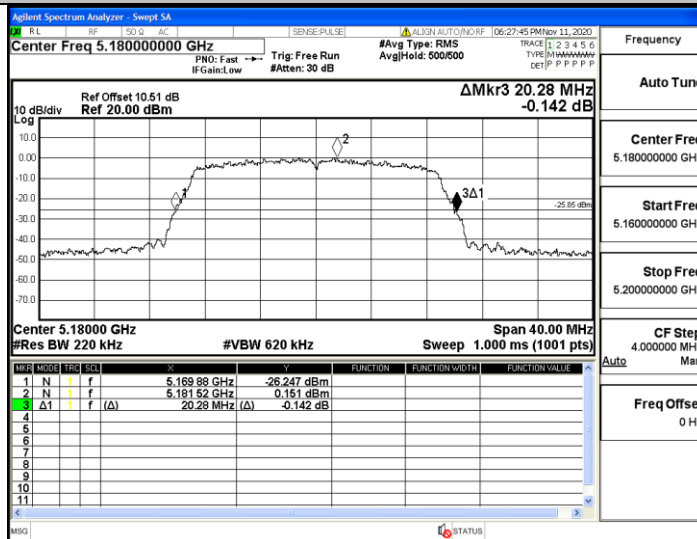
11A_Ant2_5240



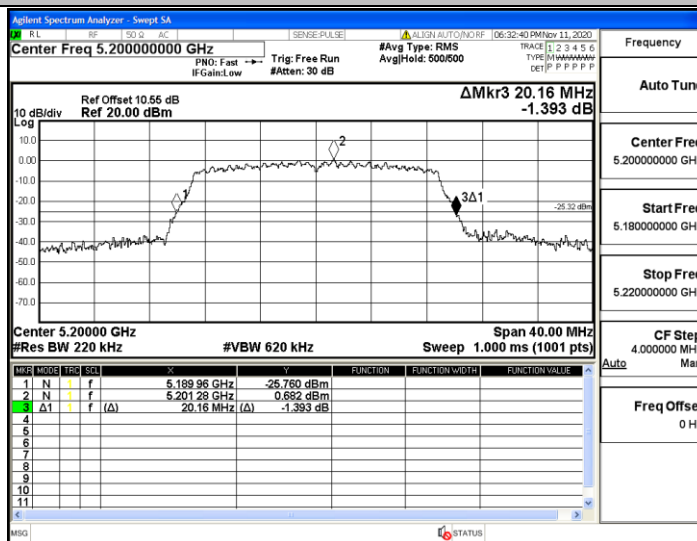
11N20MIMO_Ant1_5180



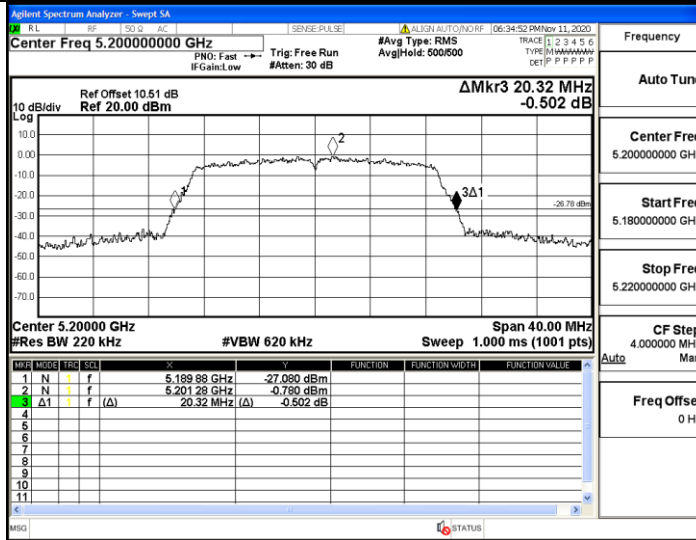
11N20MIMO_Ant2_5180



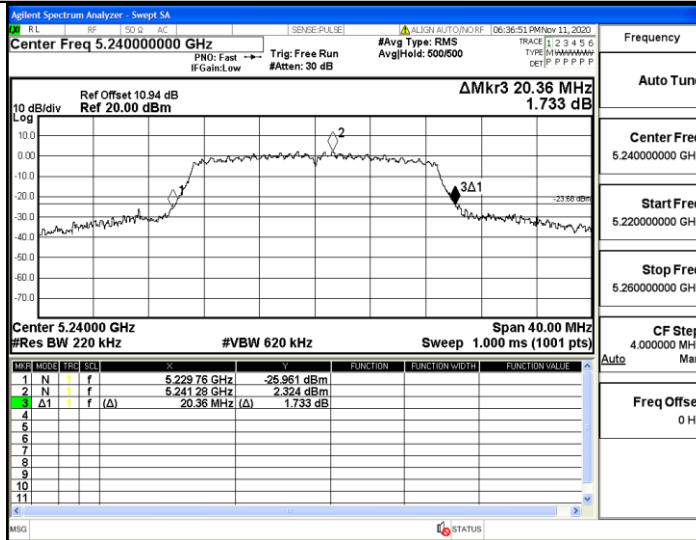
11N20MIMO_Ant1_5200



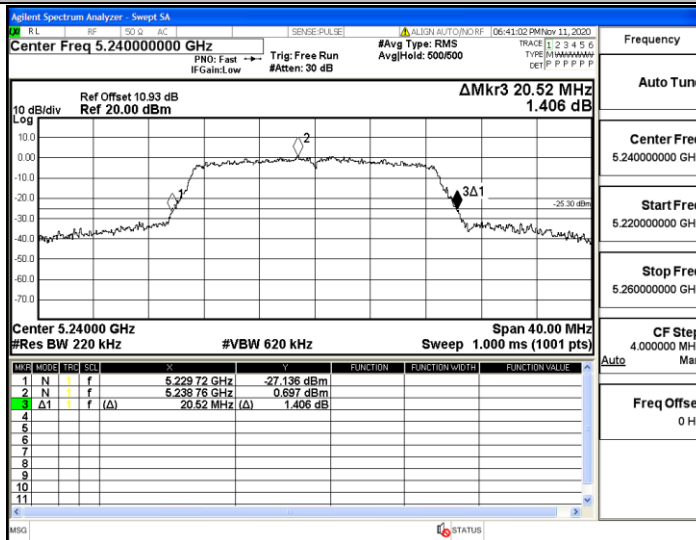
11N20MIMO_Ant2_5200



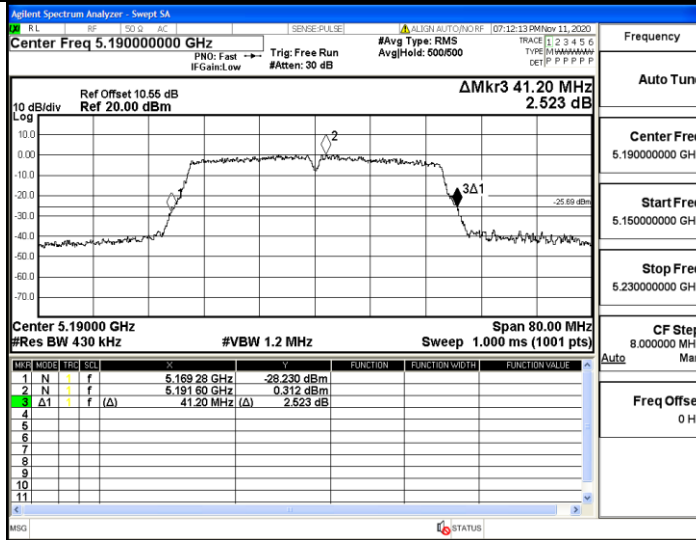
11N20MIMO_Ant1_5240



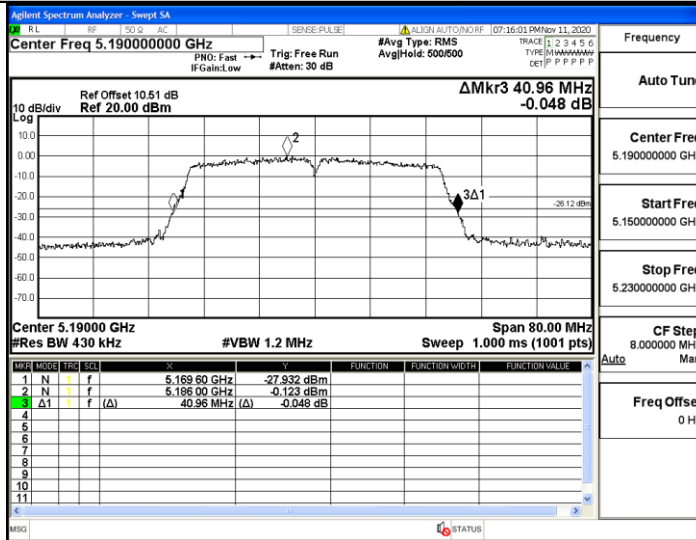
11N20MIMO_Ant2_5240



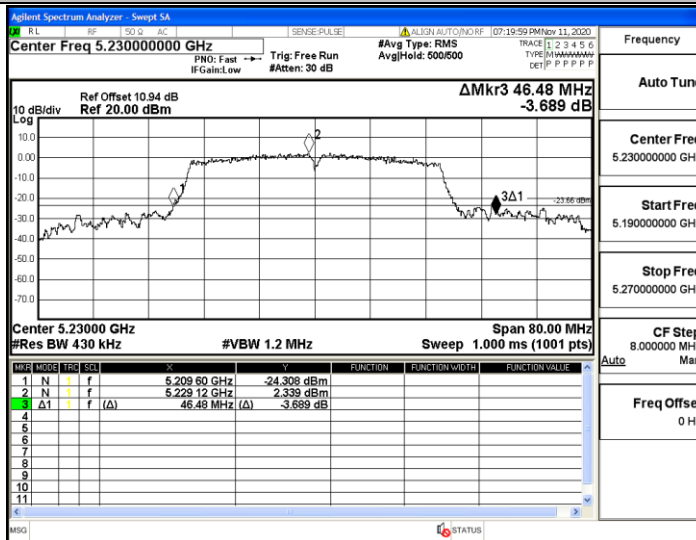
11N40MIMO_Ant1_5190



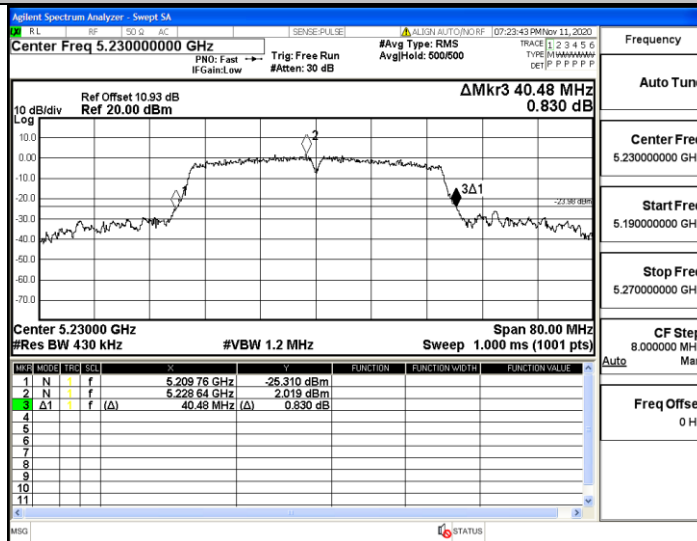
11N40MIMO_Ant2_5190



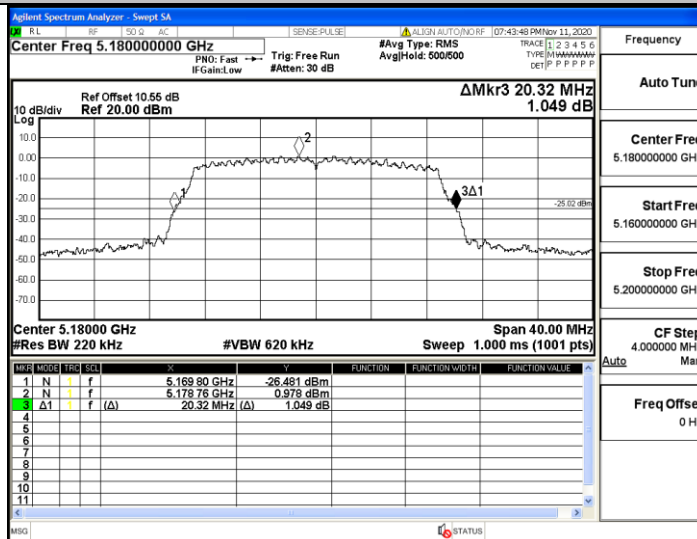
11N40MIMO_Ant1_5230



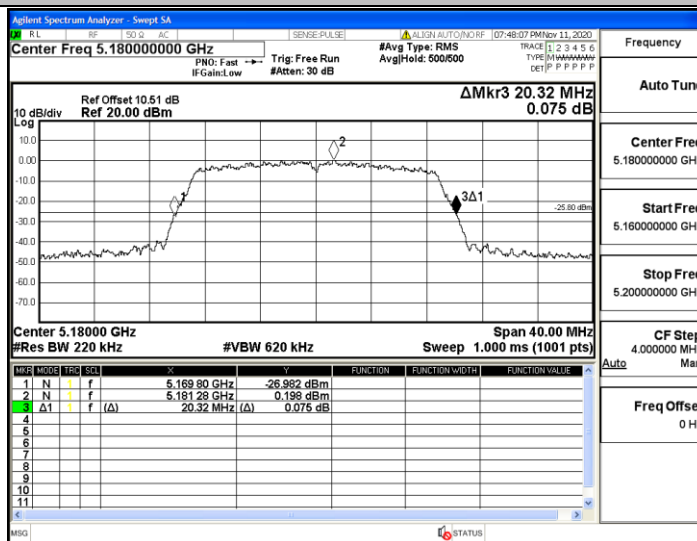
11N40MIMO_Ant2_5230



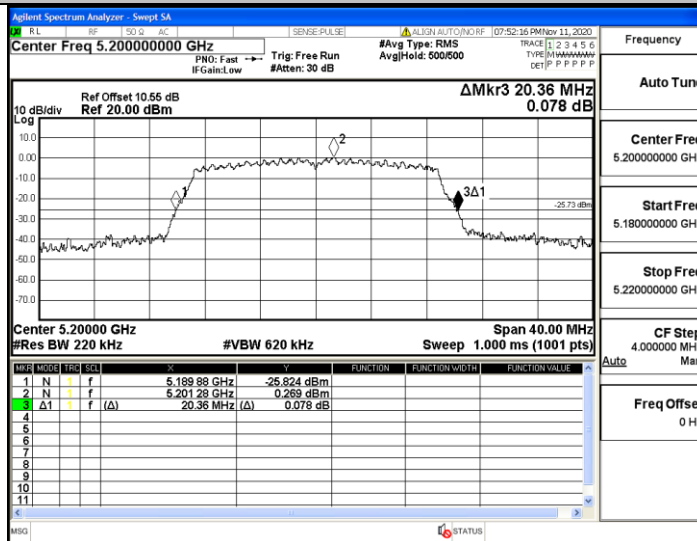
11AC20MIMO_Ant1_5180



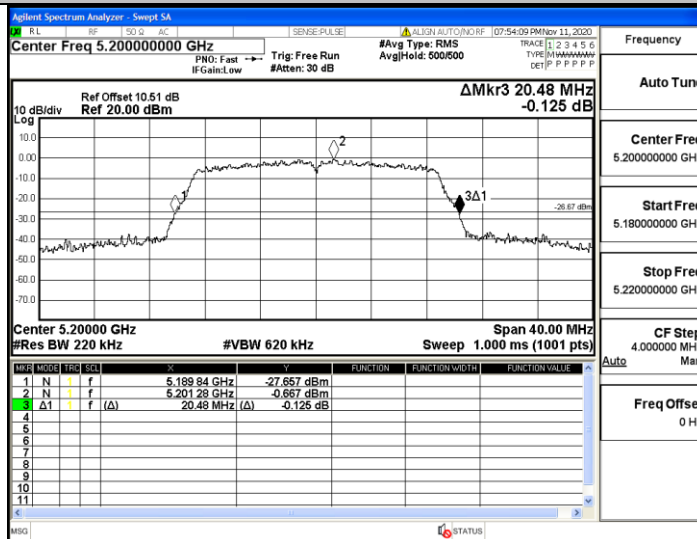
11AC20MIMO_Ant2_5180



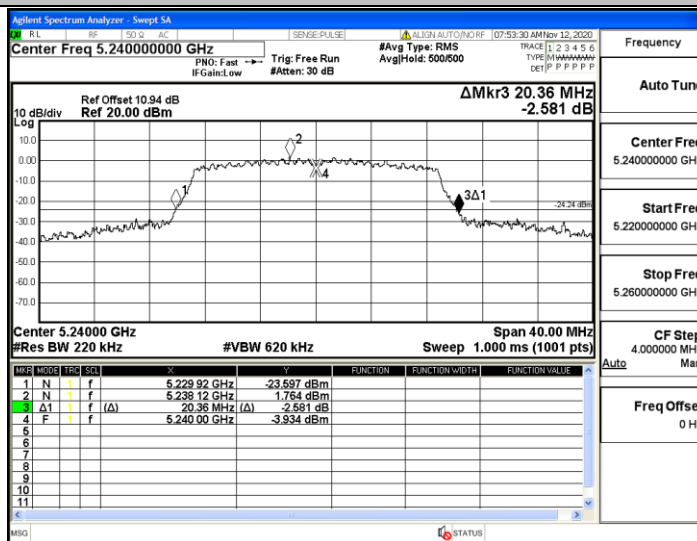
11AC20MIMO_Ant1_5200



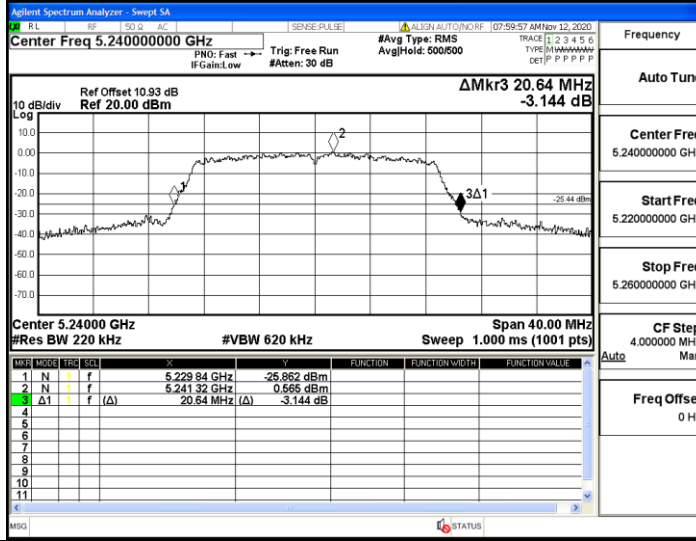
11AC20MIMO_Ant2_5200



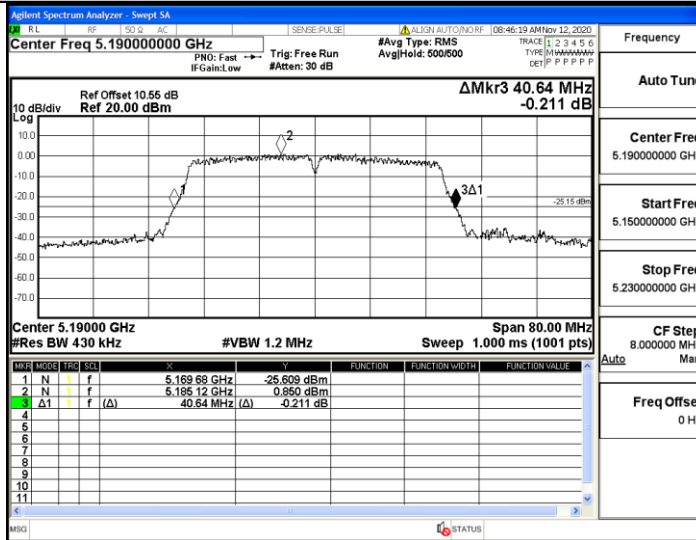
11AC20MIMO_Ant1_5240



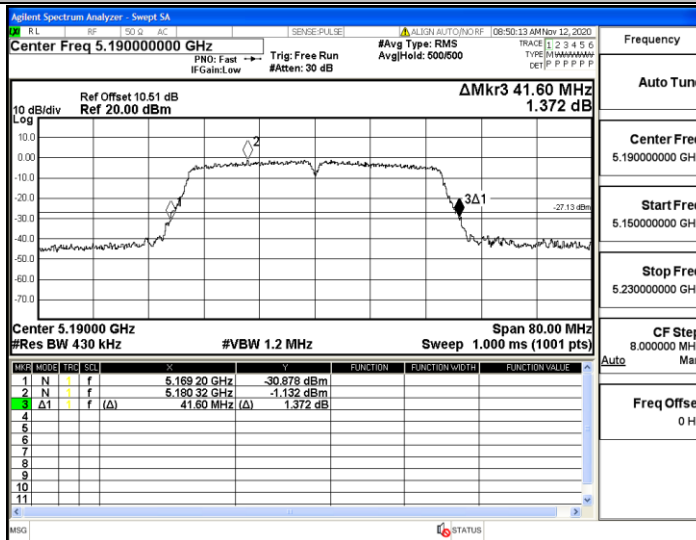
11AC20MIMO_Ant2_5240



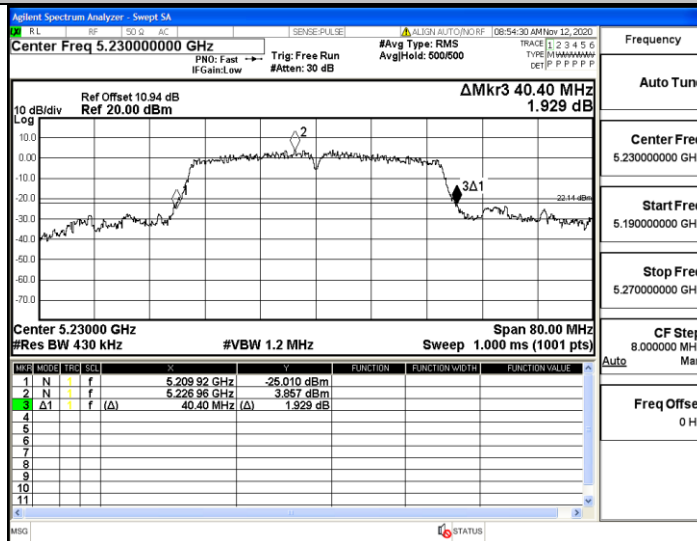
11AC40MIMO_Ant1_5190



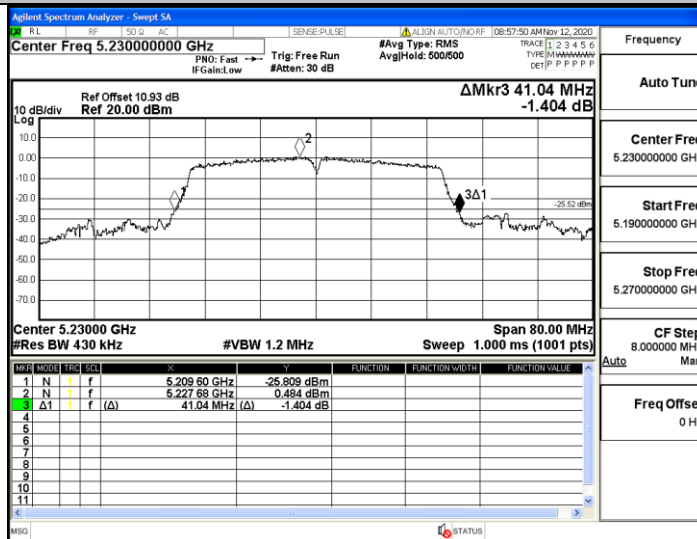
11AC40MIMO_Ant2_5190



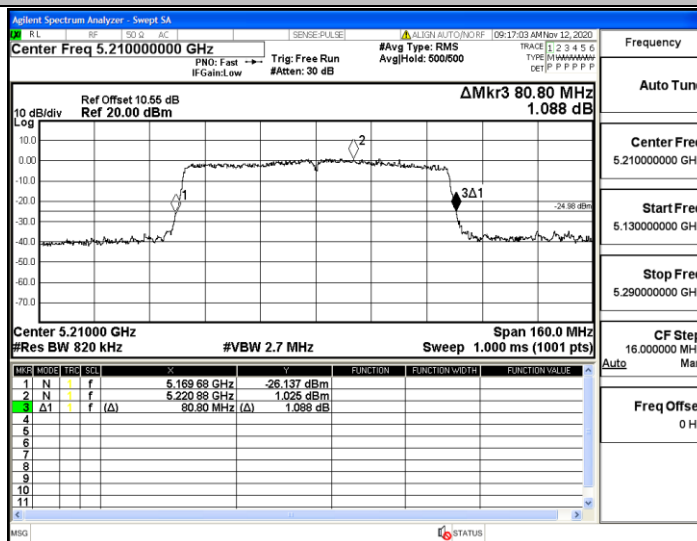
11AC40MIMO_Ant1_5230



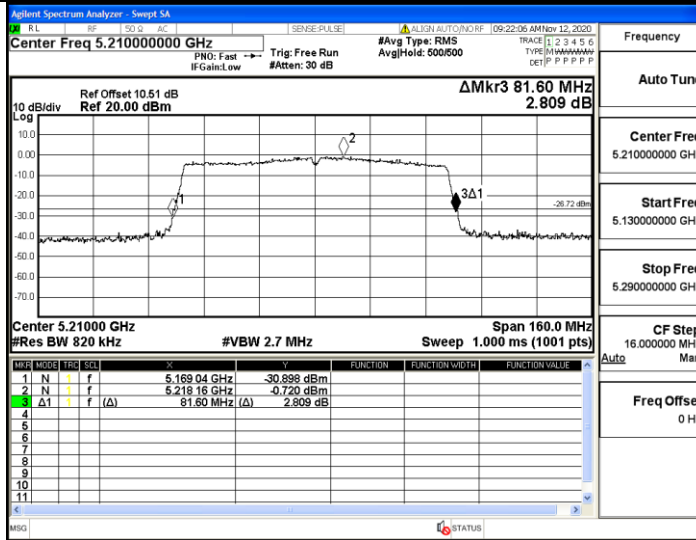
11AC40MIMO_Ant2_5230



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	11.04	<=30.00	PASS
	Ant2	5180	10.39	<=30.00	PASS
	Ant1	5200	10.45	<=30.00	PASS
	Ant2	5200	9.50	<=30.00	PASS
	Ant1	5240	12.13	<=30.00	PASS
	Ant2	5240	10.86	<=30.00	PASS
11N20MIMO	Ant1	5180	10.01	<=30.00	PASS
	Ant2	5180	9.29	<=30.00	PASS
	total	5180	12.7	<=29.19	PASS
	Ant1	5200	9.39	<=30.00	PASS
	Ant2	5200	8.35	<=30.00	PASS
	total	5200	11.9	<=29.19	PASS
	Ant1	5240	11.20	<=30.00	PASS
	Ant2	5240	9.82	<=30.00	PASS
total	5240	13.6	<=29.19	PASS	
11N40MIMO	Ant1	5190	9.69	<=30.00	PASS
	Ant2	5190	8.81	<=30.00	PASS
	total	5190	12.3	<=29.19	PASS
	Ant1	5230	11.54	<=30.00	PASS
	Ant2	5230	10.23	<=30.00	PASS
	total	5230	13.9	<=29.19	PASS
11AC20MIMO	Ant1	5180	9.94	<=30.00	PASS
	Ant2	5180	9.33	<=30.00	PASS
	total	5180	12.7	<=29.19	PASS
	Ant1	5200	9.32	<=30.00	PASS
	Ant2	5200	8.32	<=30.00	PASS
	total	5200	11.9	<=29.19	PASS
	Ant1	5240	10.42	<=30.00	PASS
	Ant2	5240	9.57	<=30.00	PASS
	total	5240	13.0	<=29.19	PASS
11AC40MIMO	Ant1	5190	9.71	<=30.00	PASS
	Ant2	5190	8.79	<=30.00	PASS
	total	5190	12.3	<=29.19	PASS
	Ant1	5230	11.58	<=30.00	PASS
	Ant2	5230	10.19	<=30.00	PASS
	total	5230	14.0	<=29.19	PASS
11AC80MIMO	Ant1	5210	9.76	<=30.00	PASS
	Ant2	5210	8.82	<=30.00	PASS
	total	5210	12.3	<=29.19	PASS

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

Appendix C: Maximum power spectral density

Test Result

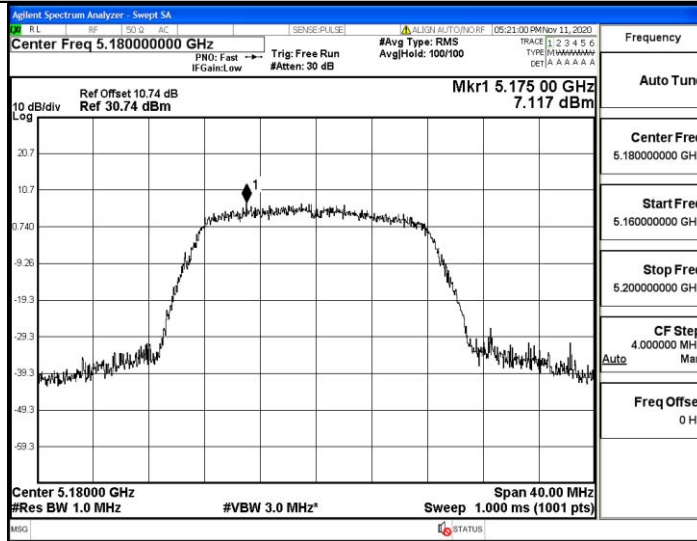
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant0	5180	4.9	<=17	PASS
	Ant1	5180	3.29	<=17	PASS
	Ant0	5200	3.25	<=17	PASS
	Ant1	5200	3.83	<=17	PASS
	Ant0	5240	3.13	<=17	PASS
	Ant1	5240	3.4	<=17	PASS
11N20MIMO	Ant0	5180	1.31	<=17	PASS
	Ant1	5180	0.87	<=17	PASS
	total	5180	4.11	<=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:

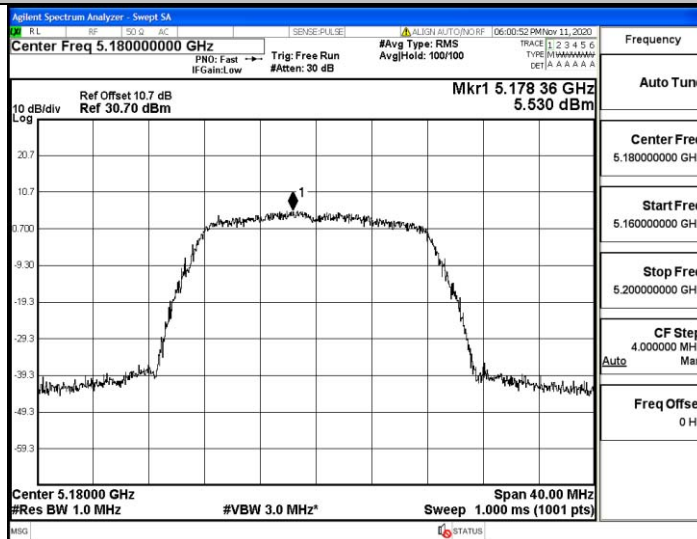
The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

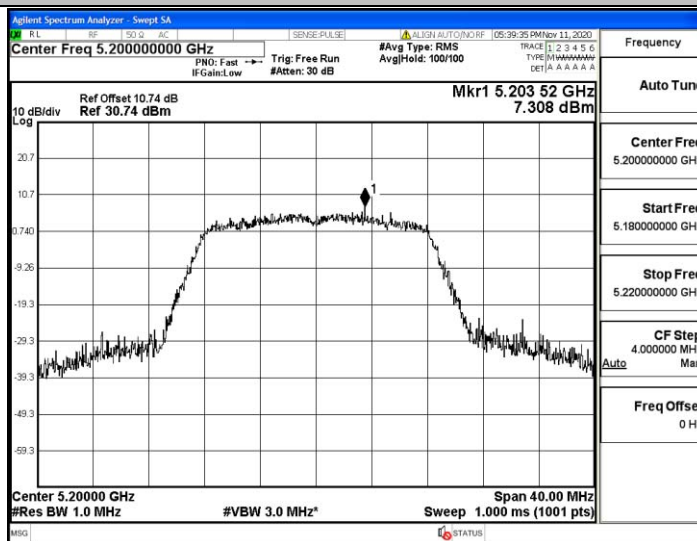
11A_Ant1_5180



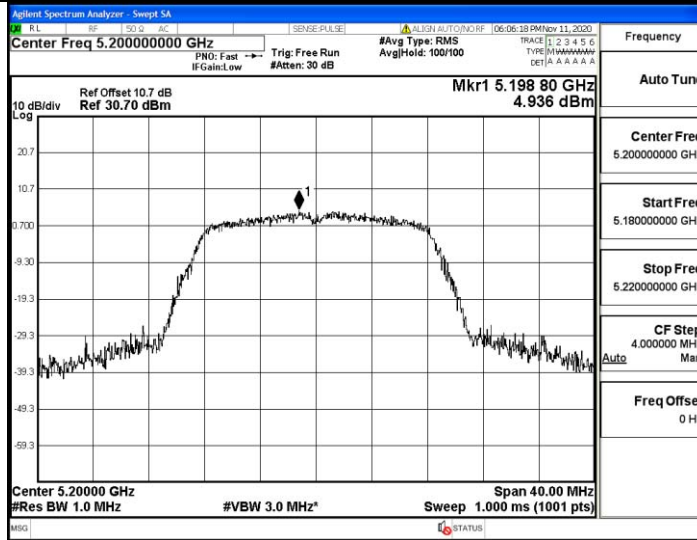
11A_Ant2_5180



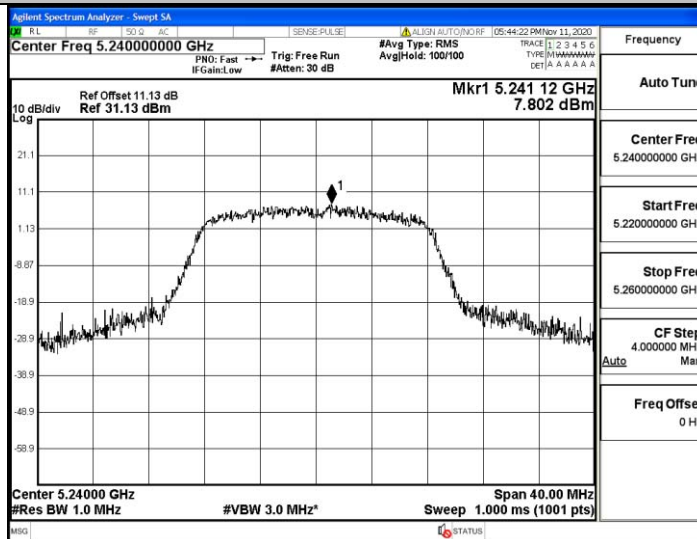
11A_Ant1_5200



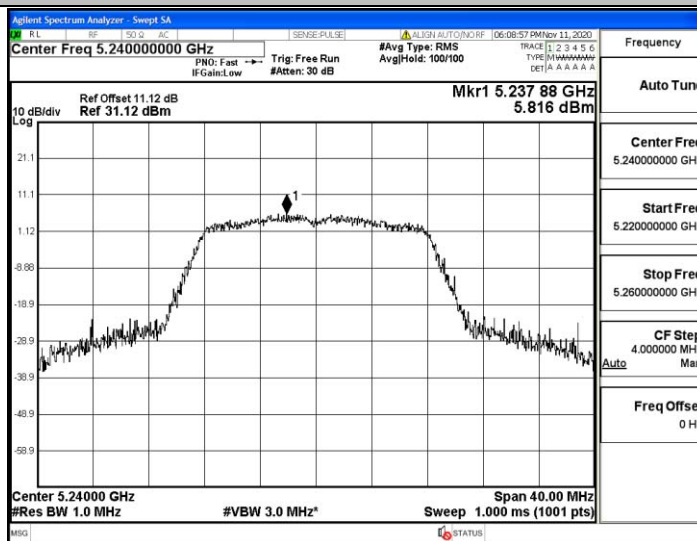
11A_Ant2_5200



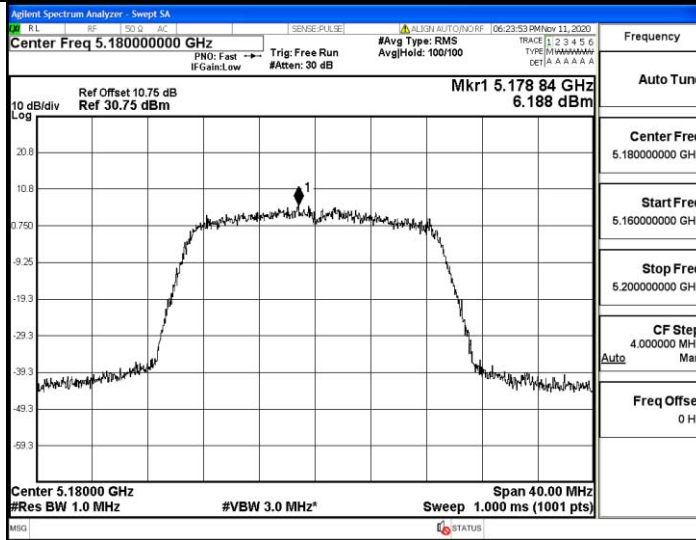
11A_Ant1_5240



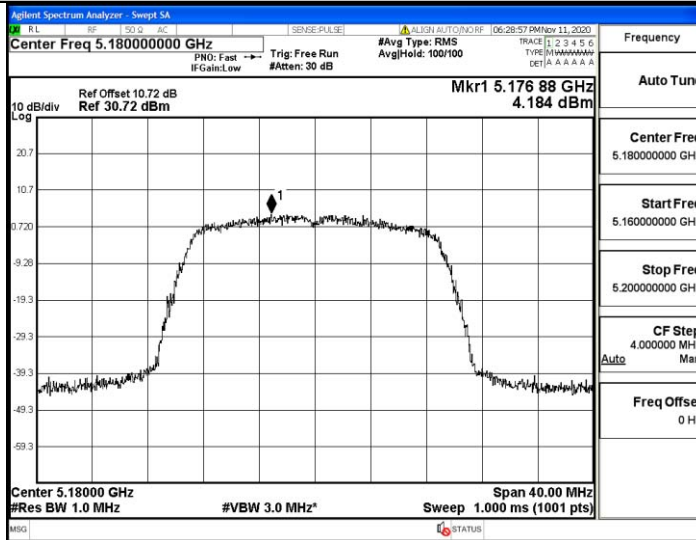
11A_Ant2_5240



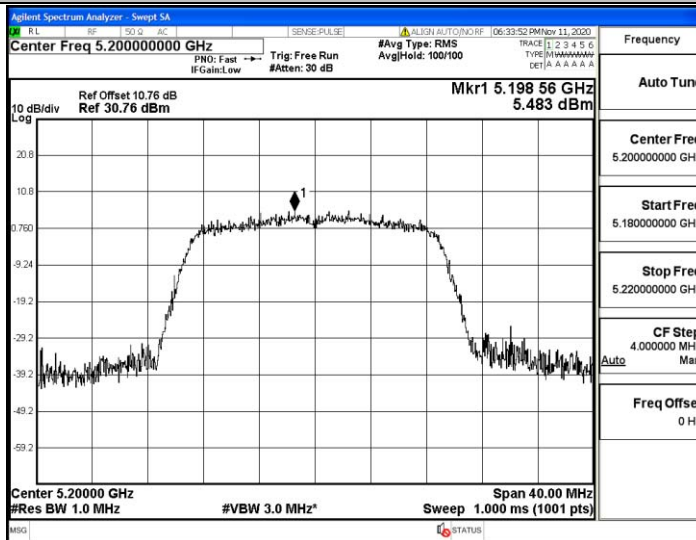
11N20MIMO_Ant1_5180



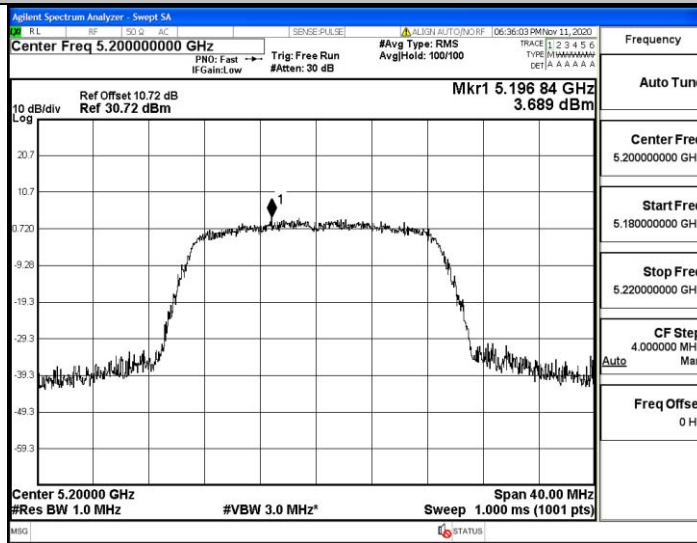
11N20MIMO_Ant2_5180



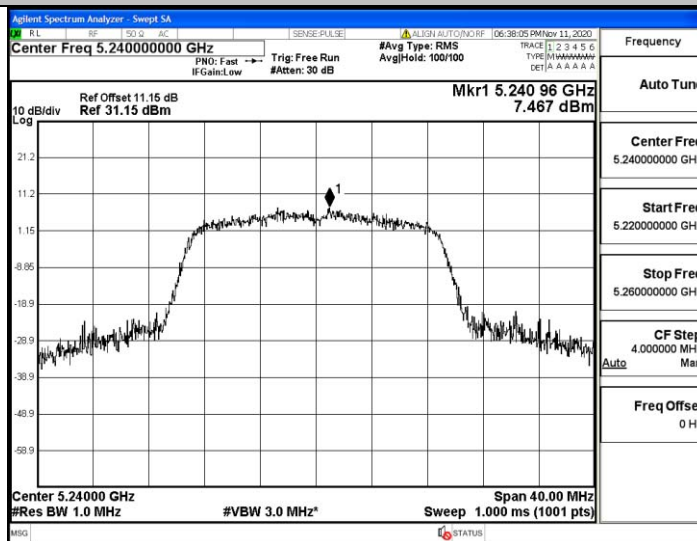
11N20MIMO_Ant1_5200



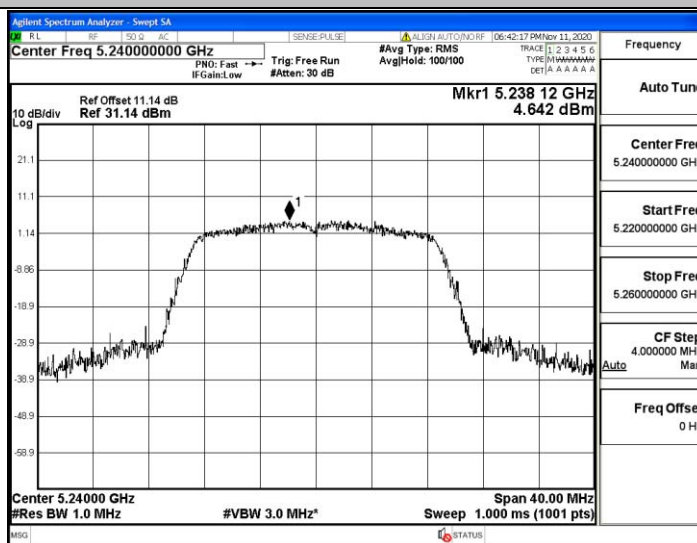
11N20MIMO_Ant2_5200



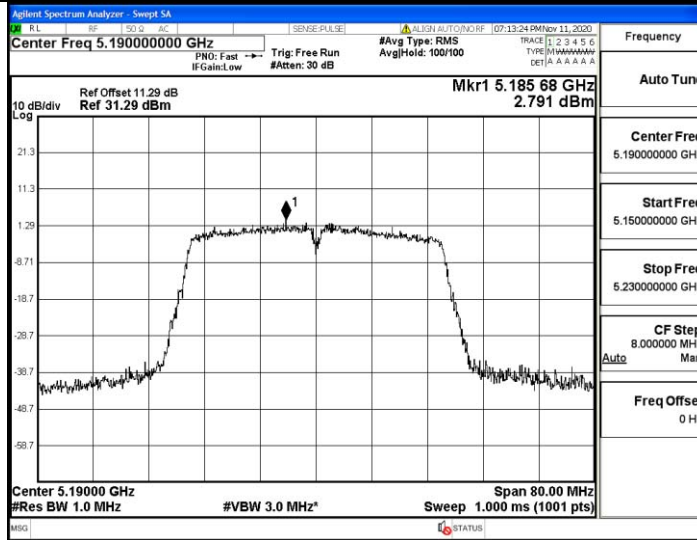
11N20MIMO_Ant1_5240



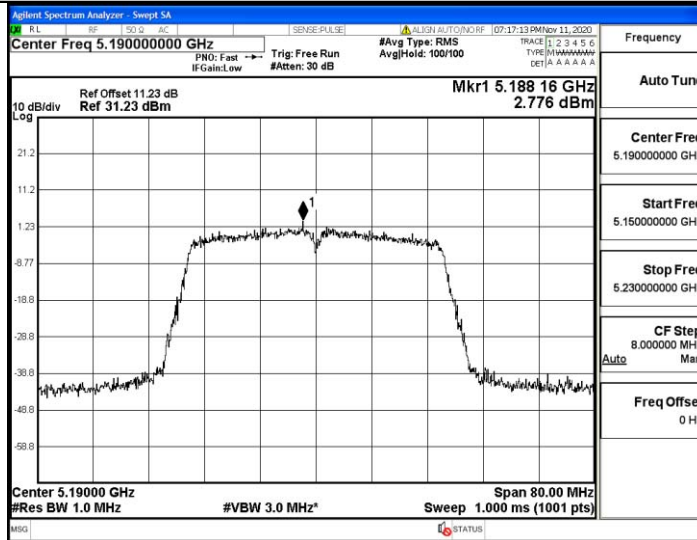
11N20MIMO_Ant2_5240



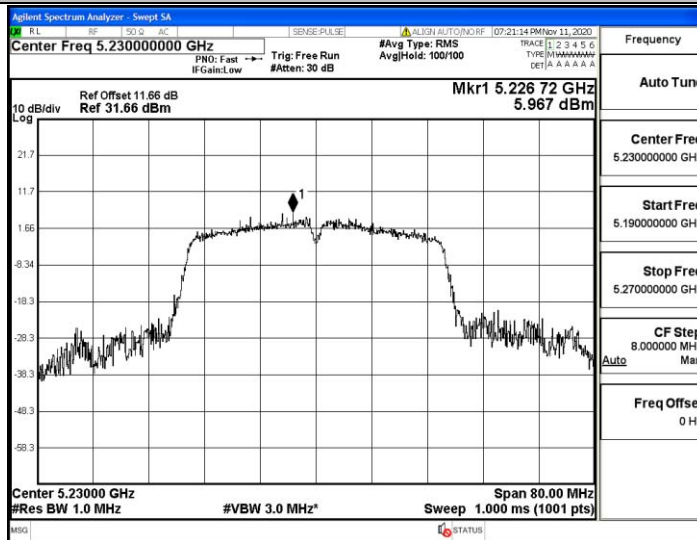
11N40MIMO_Ant1_5190



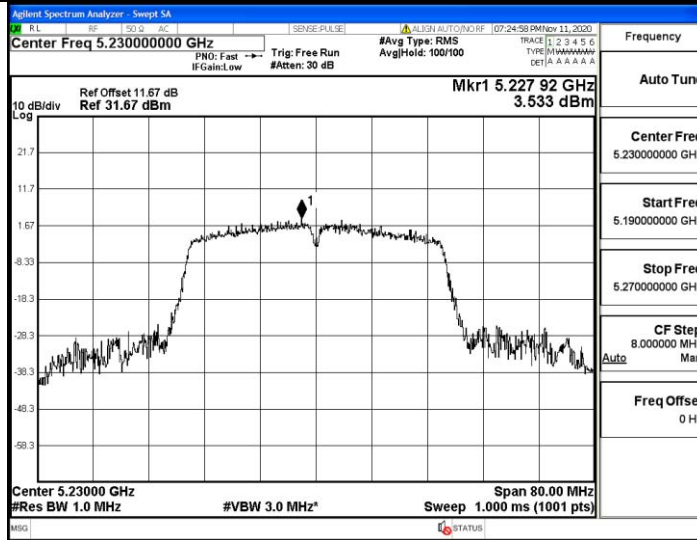
11N40MIMO_Ant2_5190



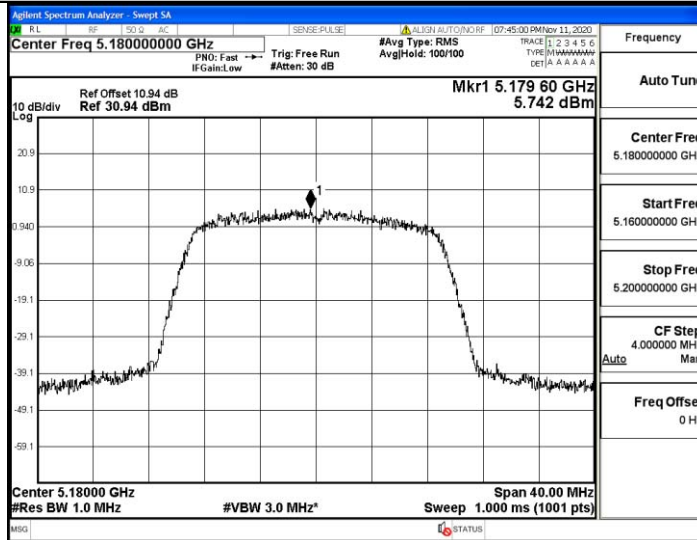
11N40MIMO_Ant1_5230



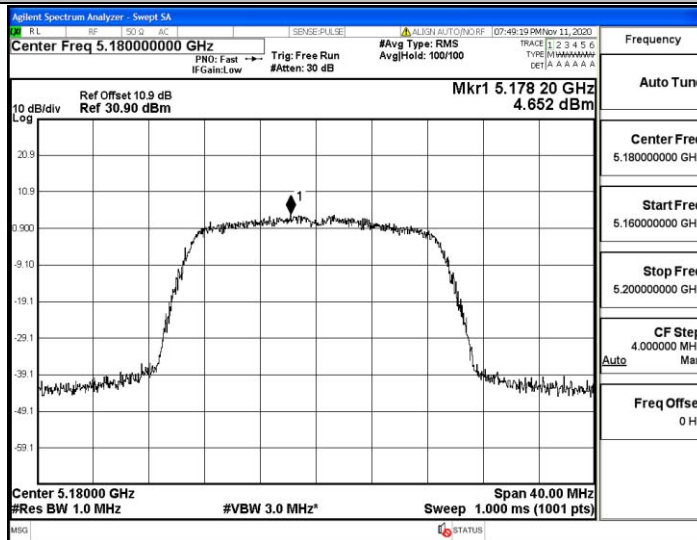
11N40MIMO_Ant2_5230



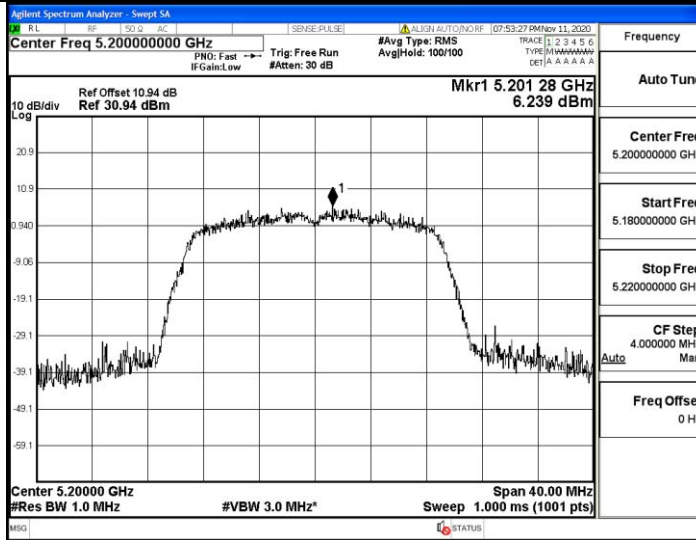
11AC20MIMO_Ant1_5180



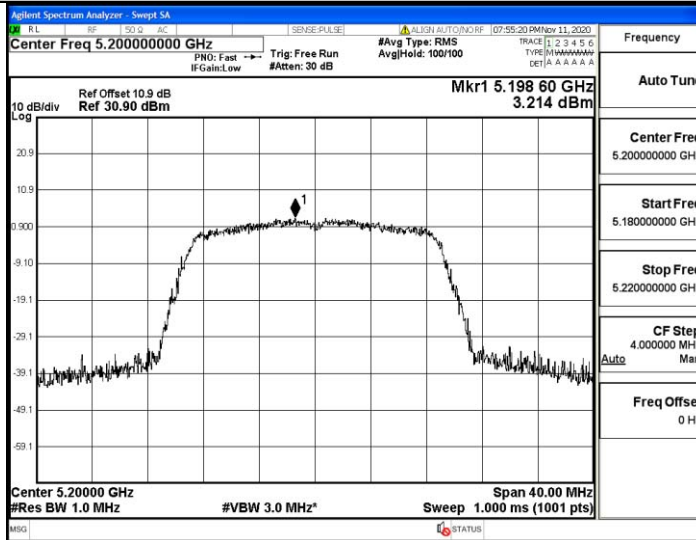
11AC20MIMO_Ant2_5180



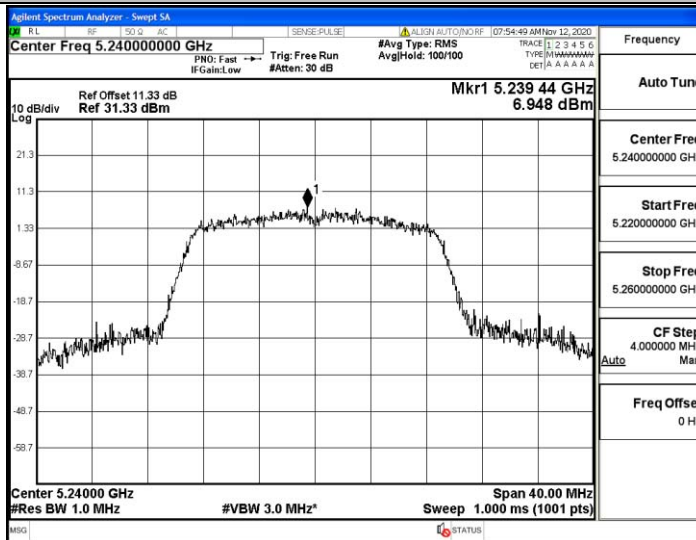
11AC20MIMO_Ant1_5200



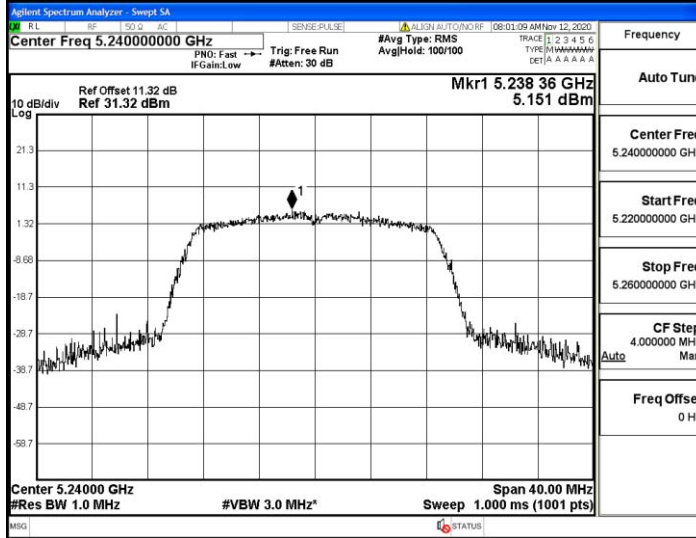
11AC20MIMO_Ant2_5200



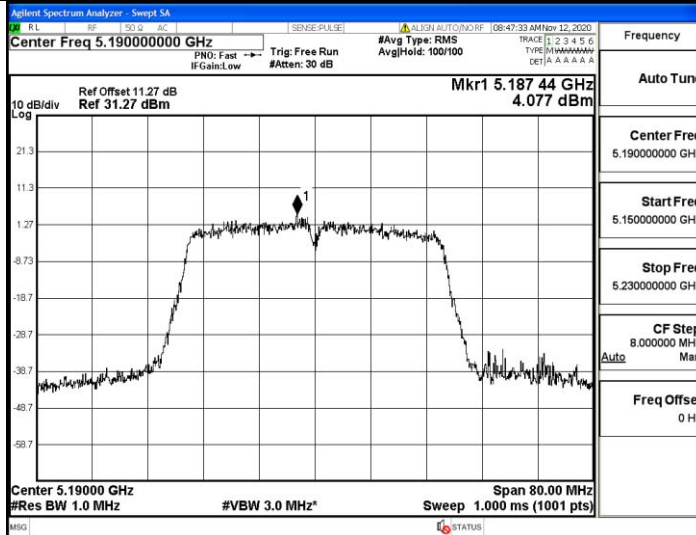
11AC20MIMO_Ant1_5240



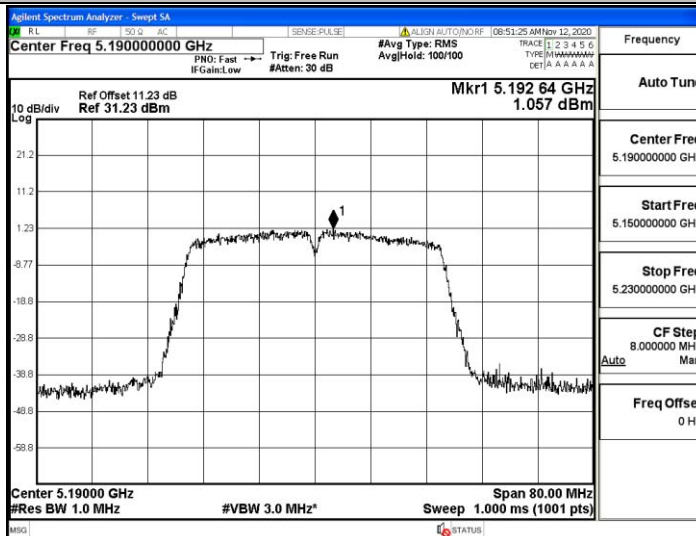
11AC20MIMO_Ant2_5240



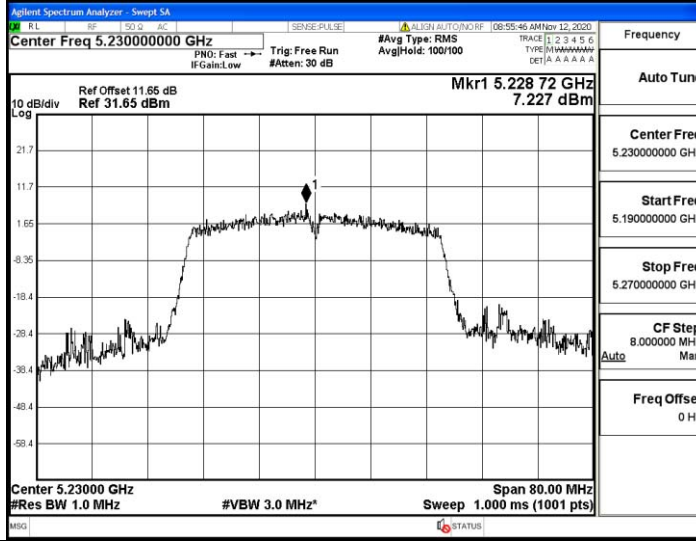
11AC40MIMO_Ant1_5190



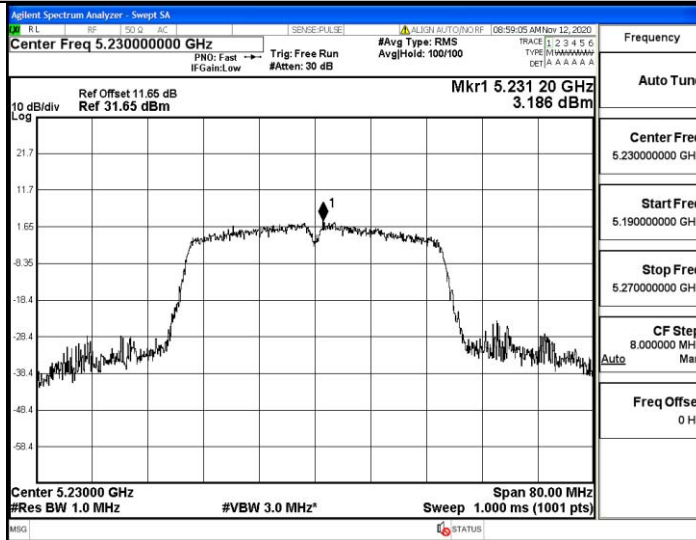
11AC40MIMO_Ant2_5190



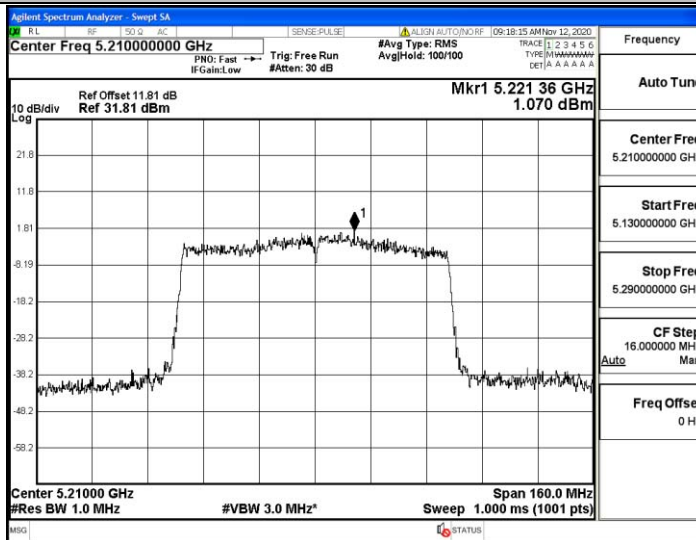
11AC40MIMO_Ant1_5230



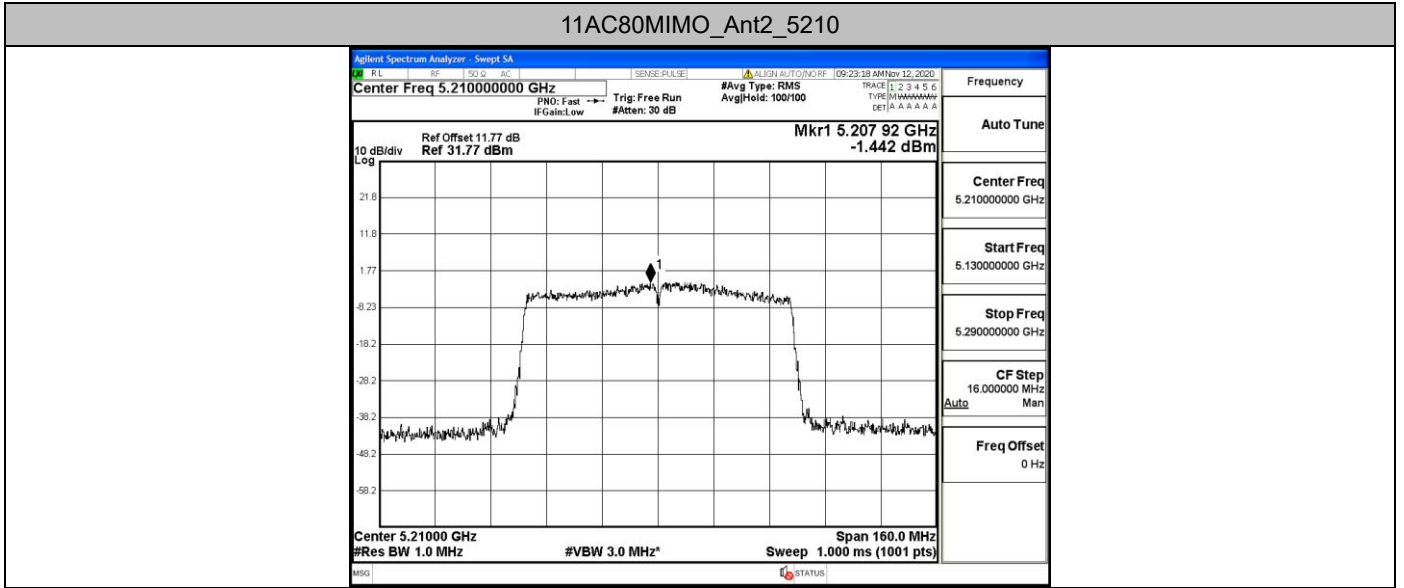
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



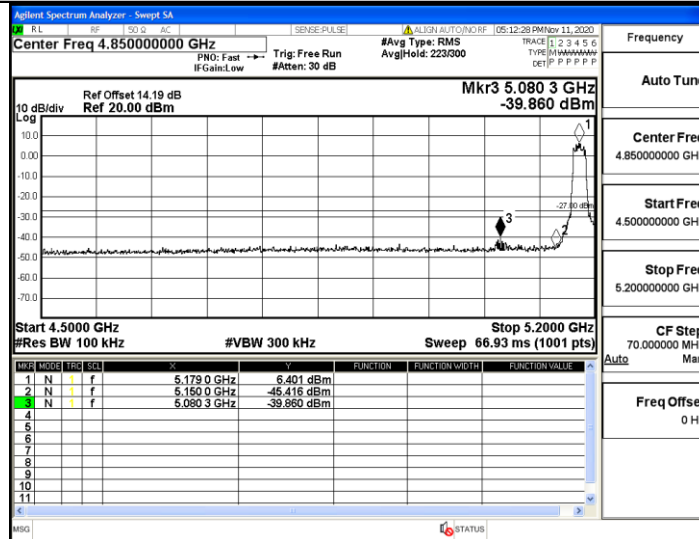
Appendix D: Band edge measurements

Test Result

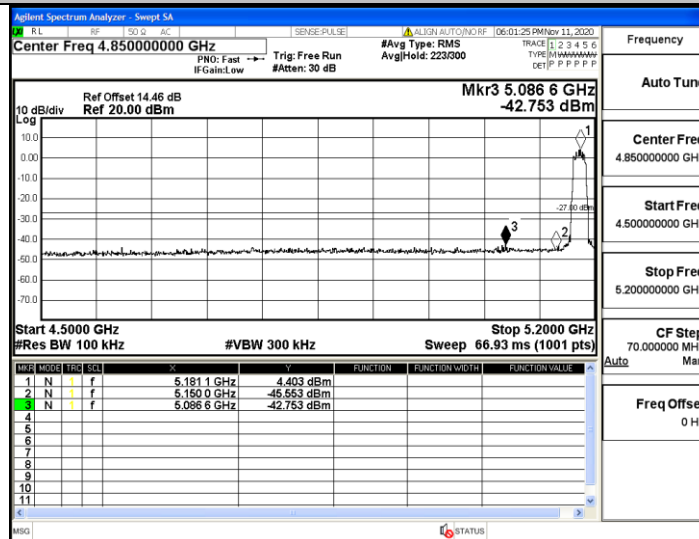
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-39.86	<=-27	PASS
	Ant2	Low	5180	-42.75	<=-27	PASS
	Ant1	High	5240	-43.27	<=-27	PASS
	Ant2	High	5240	-42.11	<=-27	PASS
11N20MIMO	Ant1	Low	5180	-42.78	<=-27	PASS
	Ant2	Low	5180	-43.3	<=-27	PASS
	Ant1	High	5240	-43.44	<=-27	PASS
	Ant2	High	5240	-43.22	<=-27	PASS
11N40MIMO	Ant1	Low	5190	-43.9	<=-27	PASS
	Ant2	Low	5190	-43.51	<=-27	PASS
	Ant1	High	5230	-43.34	<=-27	PASS
	Ant2	High	5230	-43.1	<=-27	PASS
11AC20MIMO	Ant1	Low	5180	-42.6	<=-27	PASS
	Ant2	Low	5180	-42.34	<=-27	PASS
	Ant1	High	5240	-43.36	<=-27	PASS
	Ant2	High	5240	-42.73	<=-27	PASS
11AC40MIMO	Ant1	Low	5190	-43.72	<=-27	PASS
	Ant2	Low	5190	-42.88	<=-27	PASS
	Ant1	High	5230	-43.77	<=-27	PASS
	Ant2	High	5230	-42.38	<=-27	PASS
11AC80MIMO	Ant1	Low	5210	-41.65	<=-27	PASS
	Ant2	Low	5210	-43.48	<=-27	PASS
	Ant1	High	5210	-44.29	<=-27	PASS
	Ant2	High	5210	-44.14	<=-27	PASS

Test Graphs

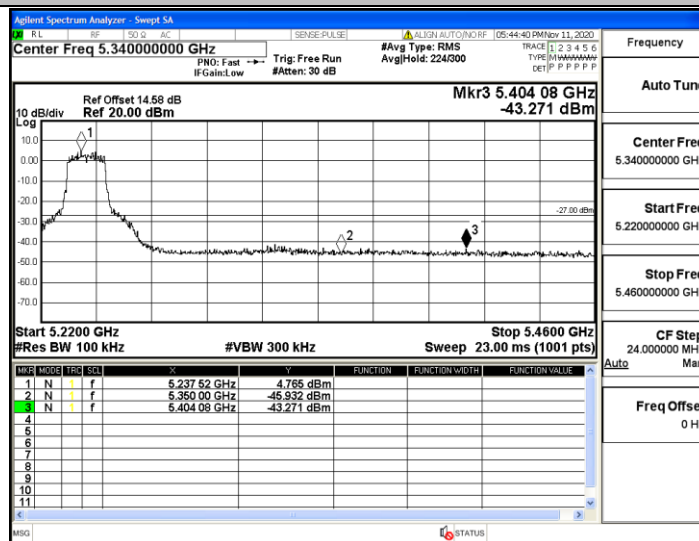
11A_Ant1_Low_5180



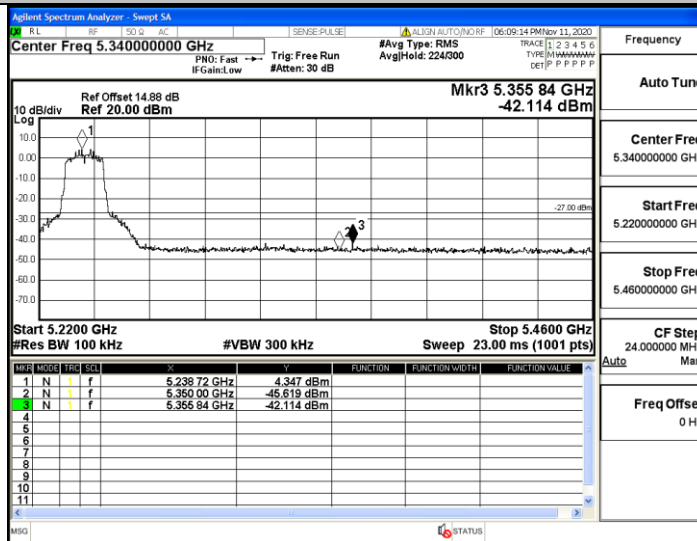
11A_Ant2_Low_5180



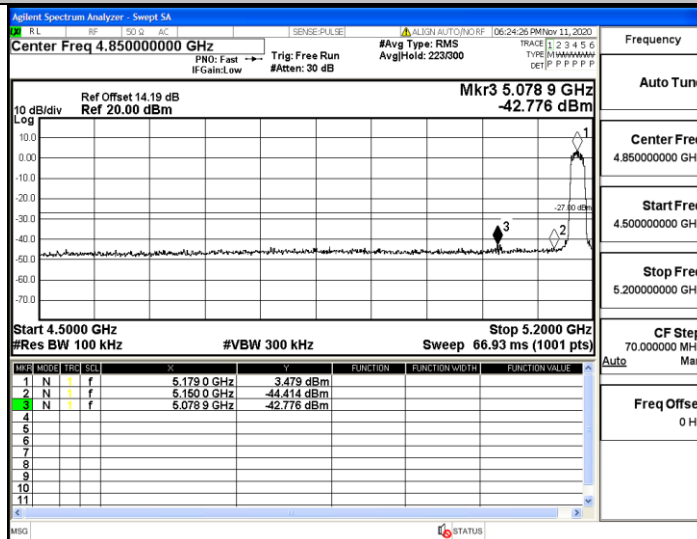
11A_Ant1_High_5240



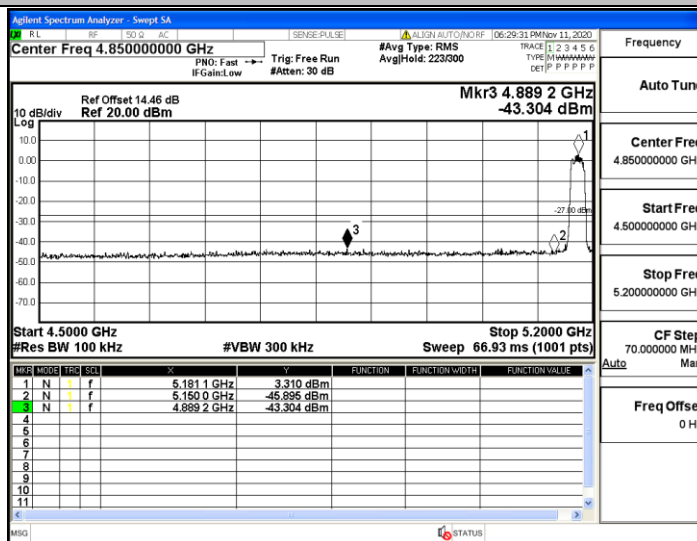
11A_Ant2_High_5240



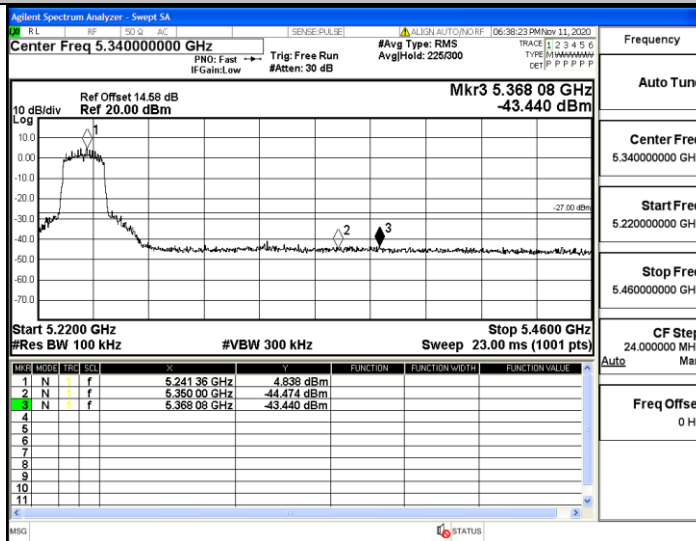
11N20MIMO_Ant1_Low_5180



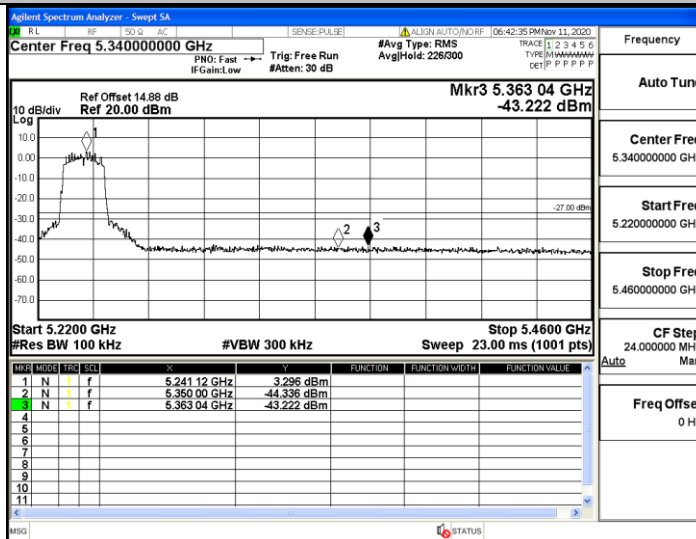
11N20MIMO_Ant2_Low_5180



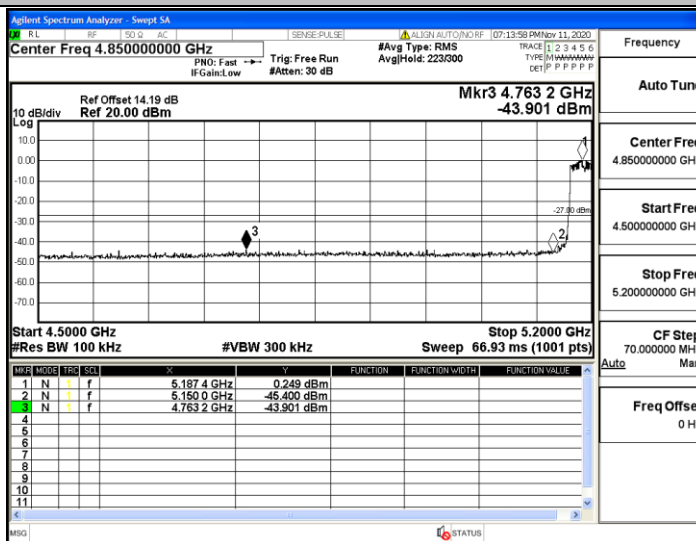
11N20MIMO_Ant1_High_5240



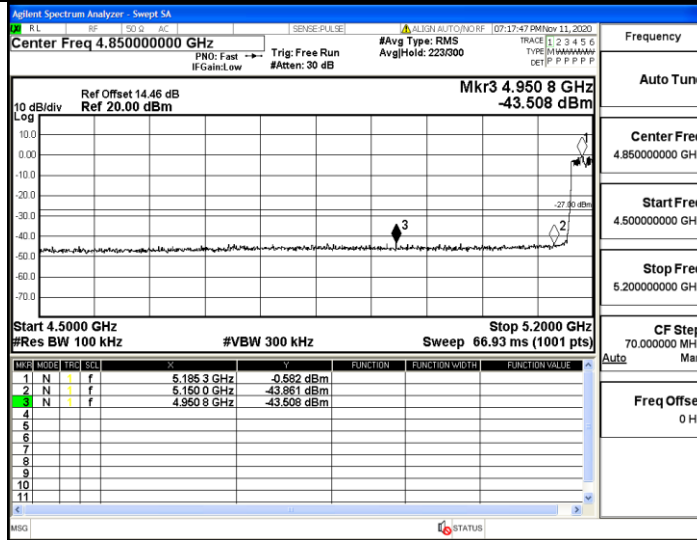
11N20MIMO_Ant2_High_5240



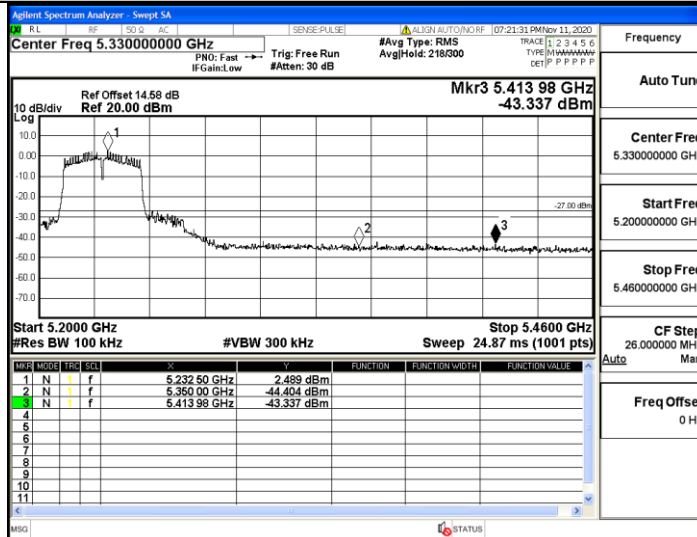
11N40MIMO_Ant1_Low_5190



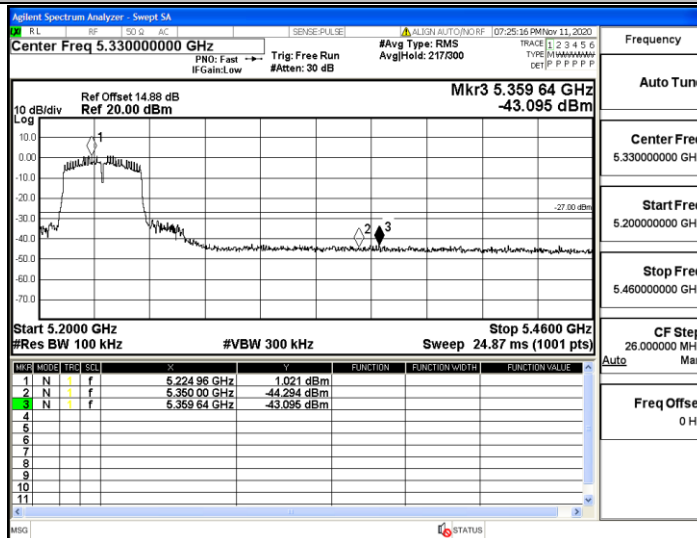
11N40MIMO_Ant2_Low_5190



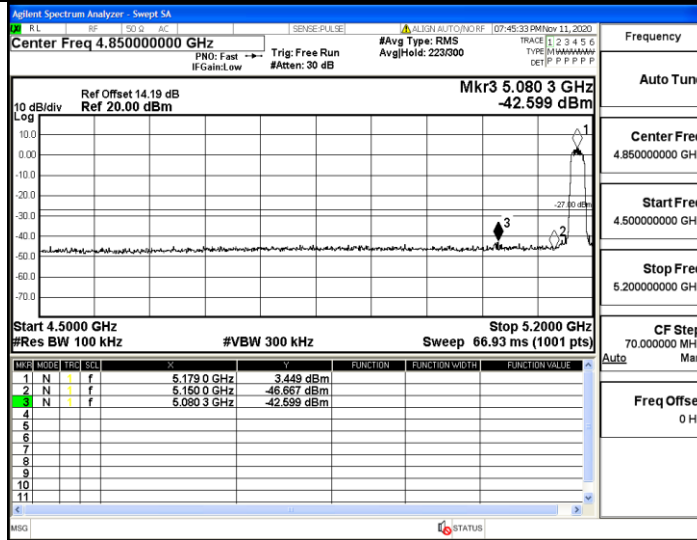
11N40MIMO_Ant1_High_5230



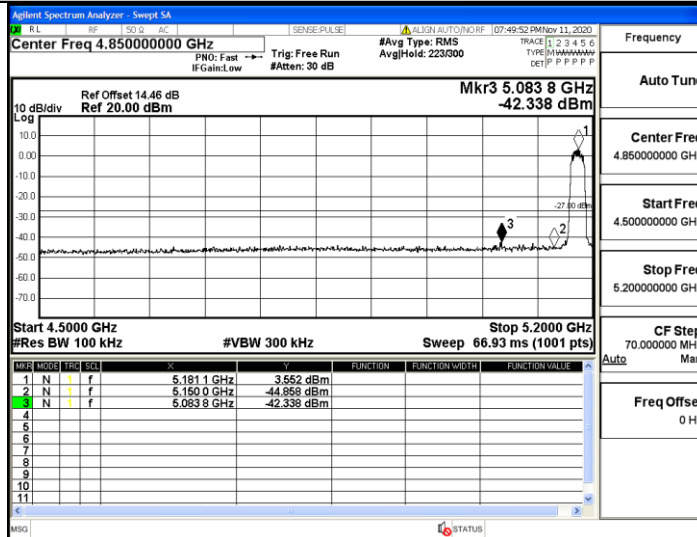
11N40MIMO_Ant2_High_5230



11AC20MIMO_Ant1_Low_5180



11AC20MIMO_Ant2_Low_5180



11AC20MIMO_Ant1_High_5240

