

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

Product Name: 4K Set Top Box

Trade Mark: N/A

Test Model: Dongle R 4K-SN8BKAJ

FCC ID: 2AOVU-SN8BKAX

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

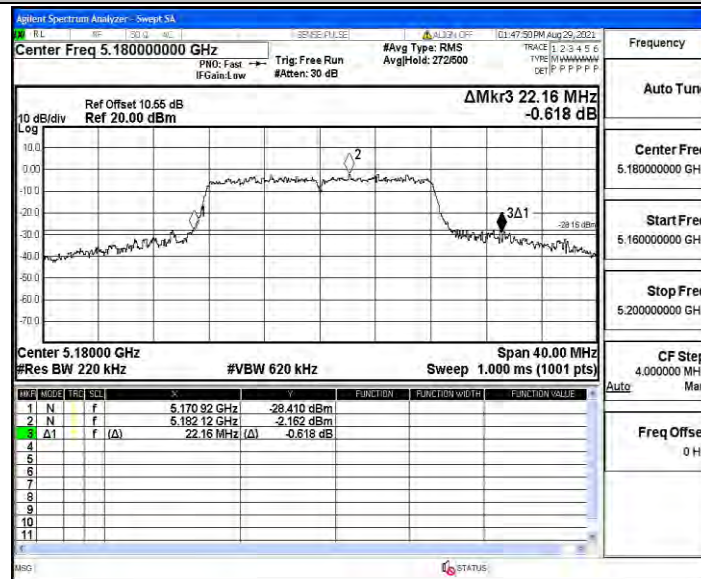
Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.160	5170.920	5193.080	---	PASS
	Ant2	5180	33.760	5163.880	5197.640	---	PASS
	Ant1	5200	18.400	5190.840	5209.240	---	PASS
	Ant2	5200	19.440	5190.560	5210.000	---	PASS
	Ant1	5240	18.400	5230.800	5249.200	---	PASS
	Ant2	5240	18.440	5230.680	5249.120	---	PASS
11N20MIMO	Ant1	5180	19.320	5170.360	5189.680	---	PASS
	Ant2	5180	33.520	5165.960	5199.480	---	PASS
	Ant1	5200	19.480	5190.280	5209.760	---	PASS
	Ant2	5200	19.440	5190.360	5209.800	---	PASS
	Ant1	5240	19.320	5230.400	5249.720	---	PASS
	Ant2	5240	19.400	5230.320	5249.720	---	PASS
11N40MIMO	Ant1	5190	41.200	5169.440	5210.640	---	PASS
	Ant2	5190	40.720	5169.920	5210.640	---	PASS
	Ant1	5230	40.720	5209.520	5250.240	---	PASS
	Ant2	5230	41.520	5209.360	5250.880	---	PASS
11AC20MIMO	Ant1	5180	19.600	5170.280	5189.880	---	PASS
	Ant2	5180	19.720	5170.440	5190.160	---	PASS
	Ant1	5200	19.280	5190.400	5209.680	---	PASS
	Ant2	5200	19.240	5190.440	5209.680	---	PASS
	Ant1	5240	19.160	5230.440	5249.600	---	PASS
	Ant2	5240	19.520	5230.240	5249.760	---	PASS
11AC40MIMO	Ant1	5190	41.120	5169.440	5210.560	---	PASS
	Ant2	5190	40.320	5170.160	5210.480	---	PASS

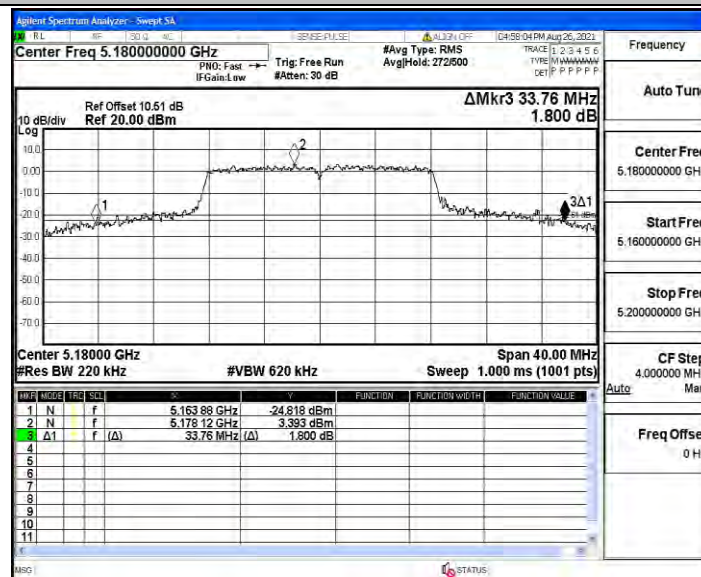
	Ant1	5230	40.560	5209.920	5250.480	---	PASS
	Ant2	5230	40.880	5209.600	5250.480	---	PASS
11AC80MIMO	Ant1	5210	80.160	5170.320	5250.480	---	PASS
	Ant2	5210	81.600	5170.160	5251.760	---	PASS

Test Graphs

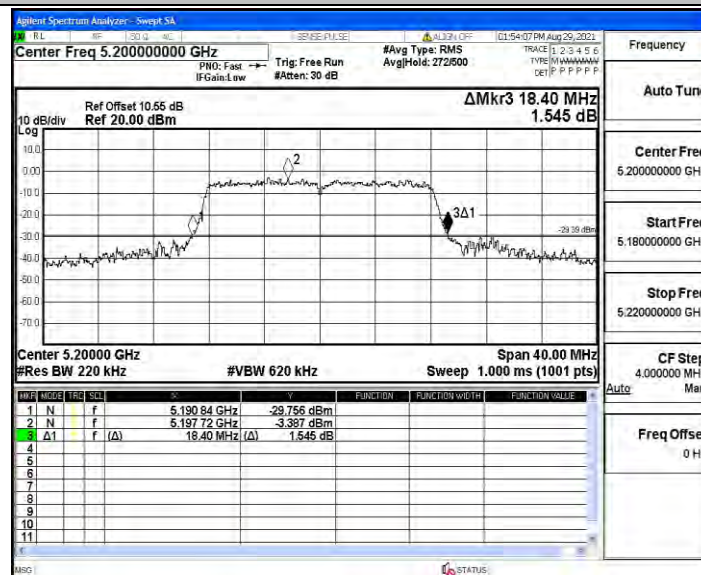
11A_Ant1_5180



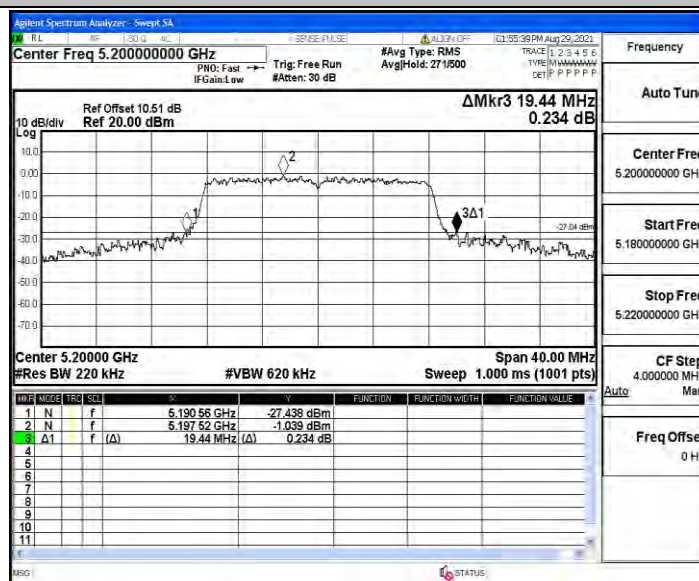
11A_Ant2_5180



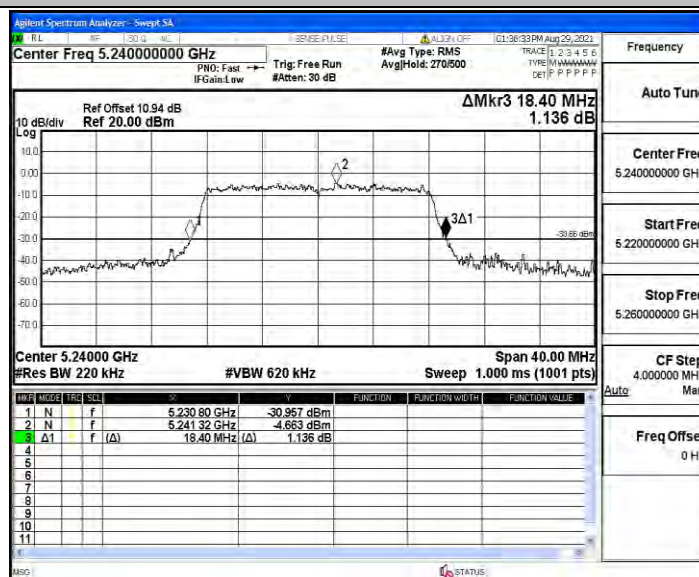
11A_Ant1_5200



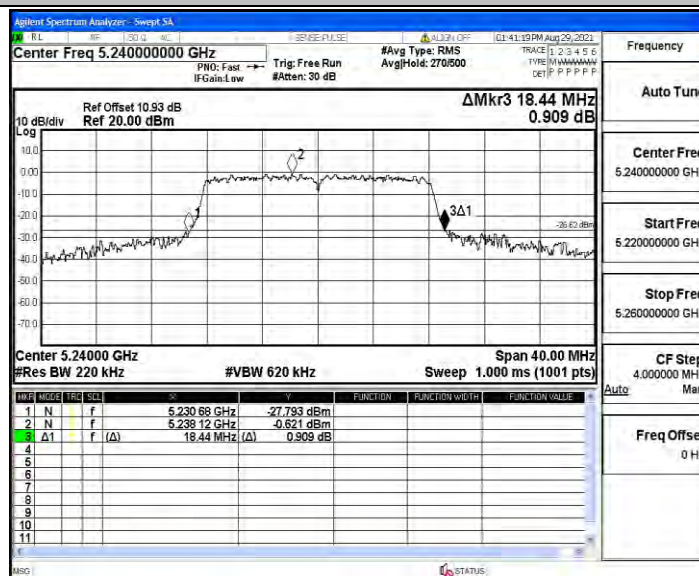
11A_Ant2_5200



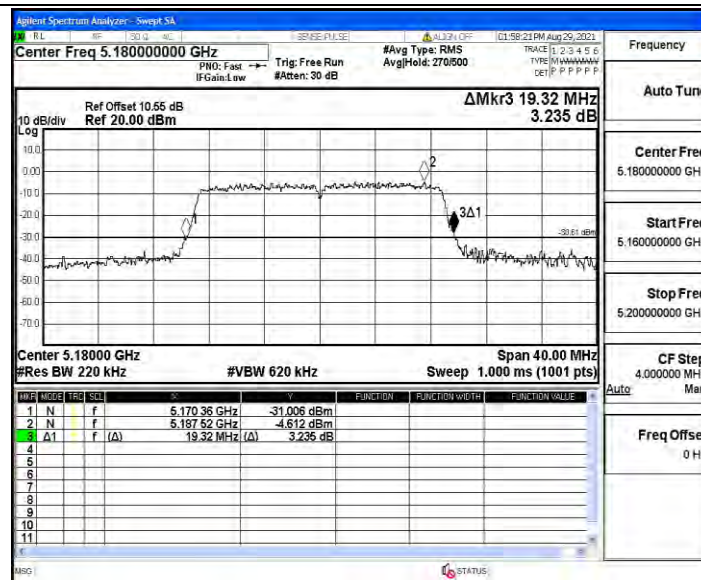
11A_Ant1_5240



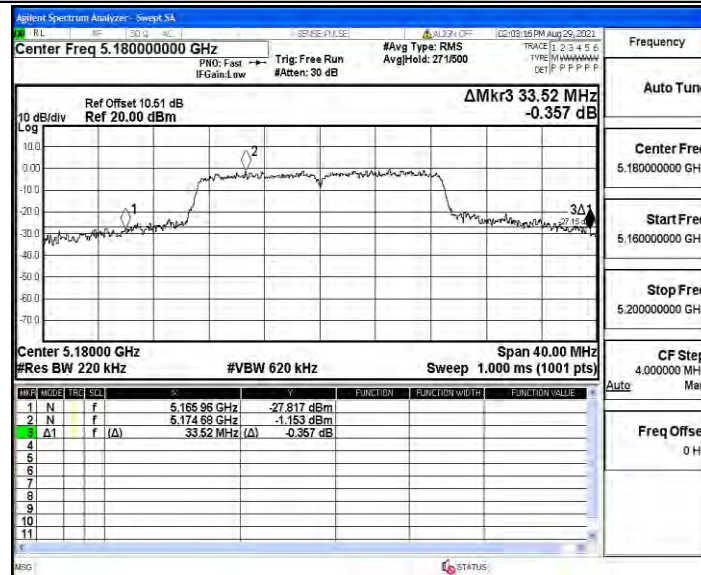
11A_Ant2_5240



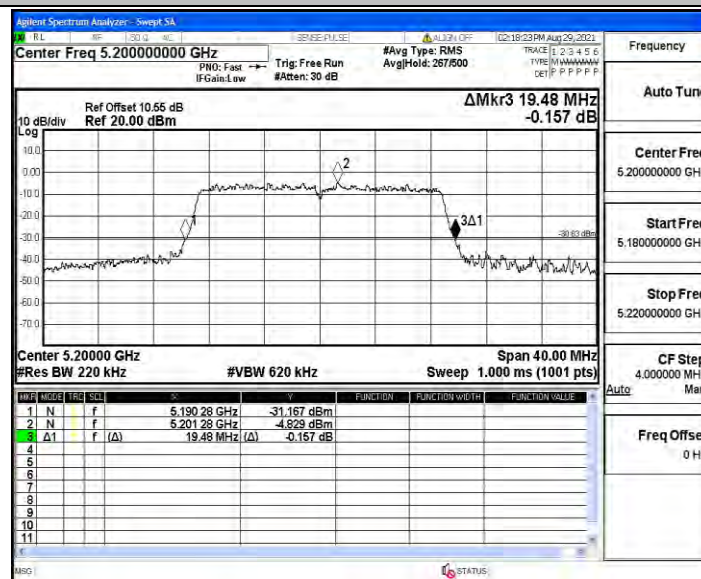
11N20MIMO_Ant1_5180



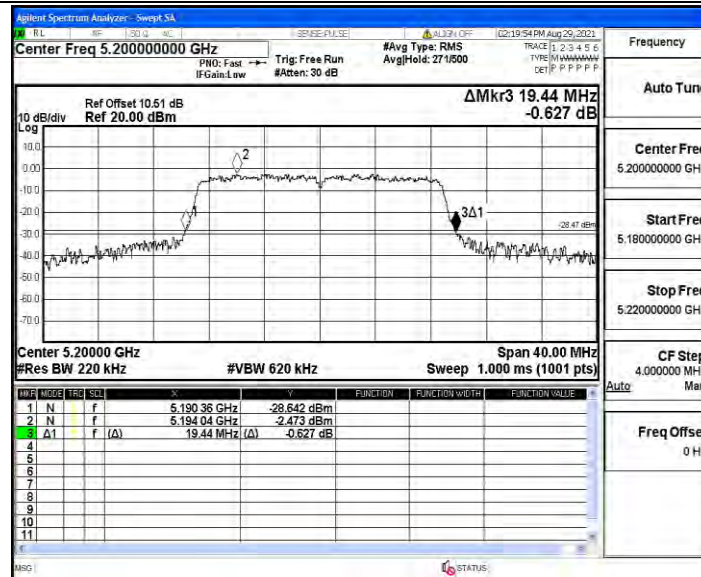
11N20MIMO_Ant2_5180



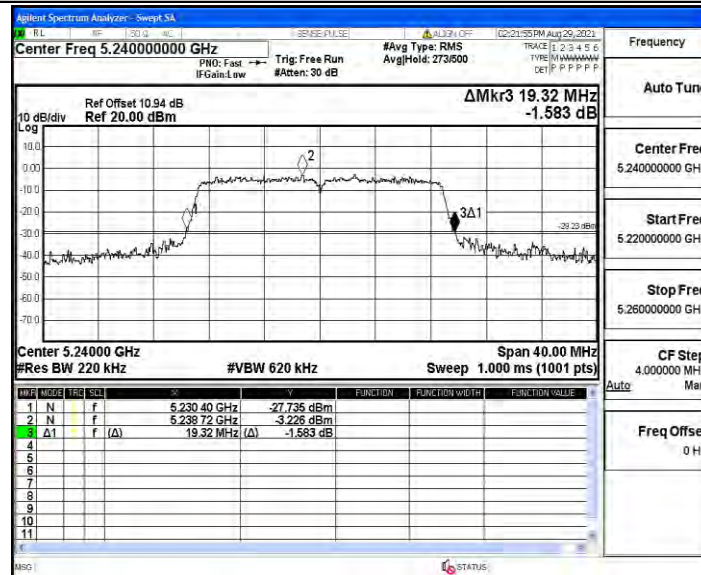
11N20MIMO_Ant1_5200



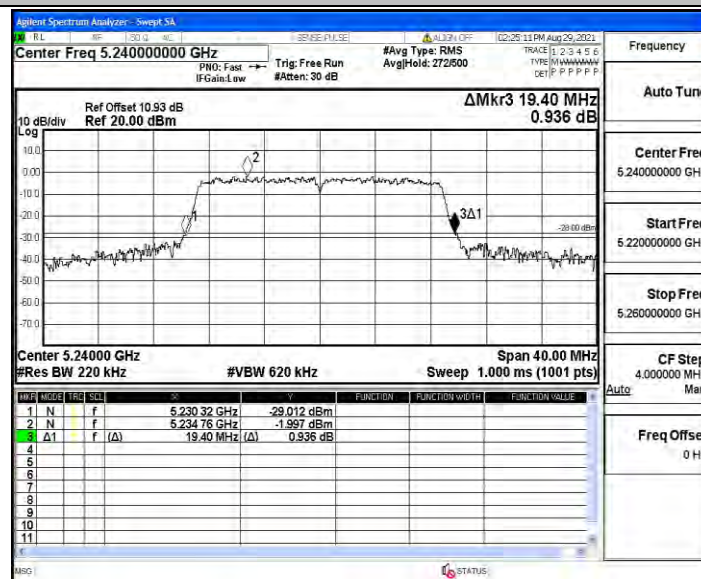
11N20MIMO_Ant2_5200



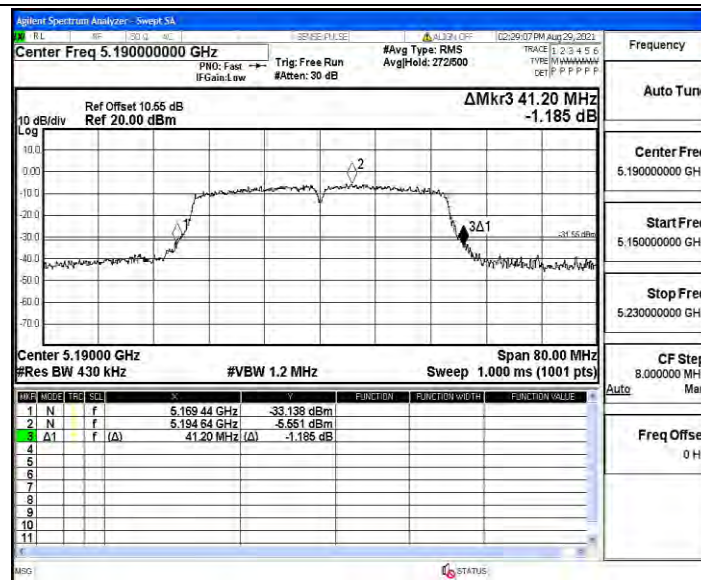
11N20MIMO_Ant1_5240



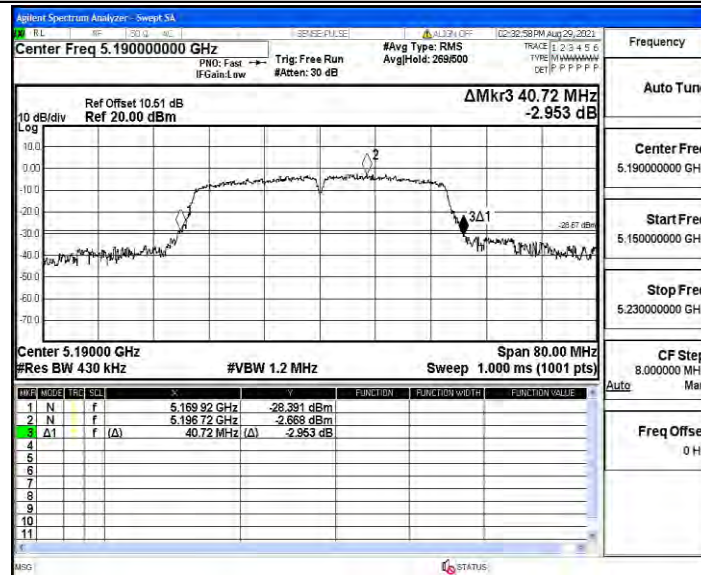
11N20MIMO_Ant2_5240



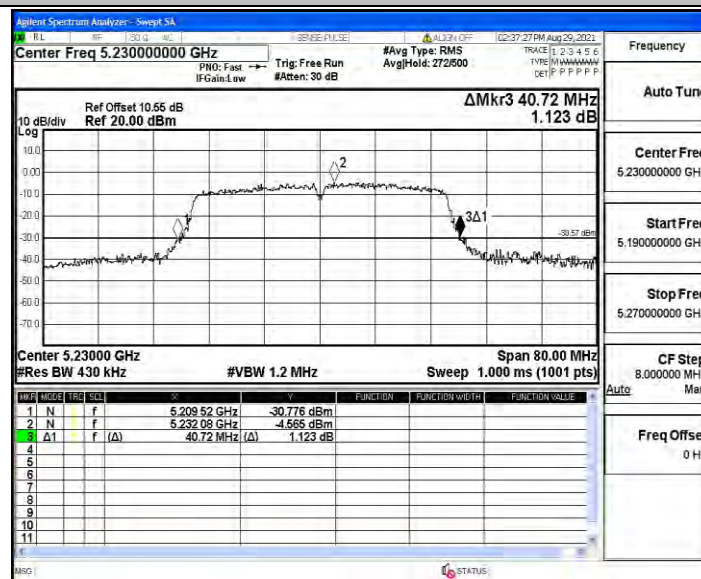
11N40MIMO_Ant1_5190



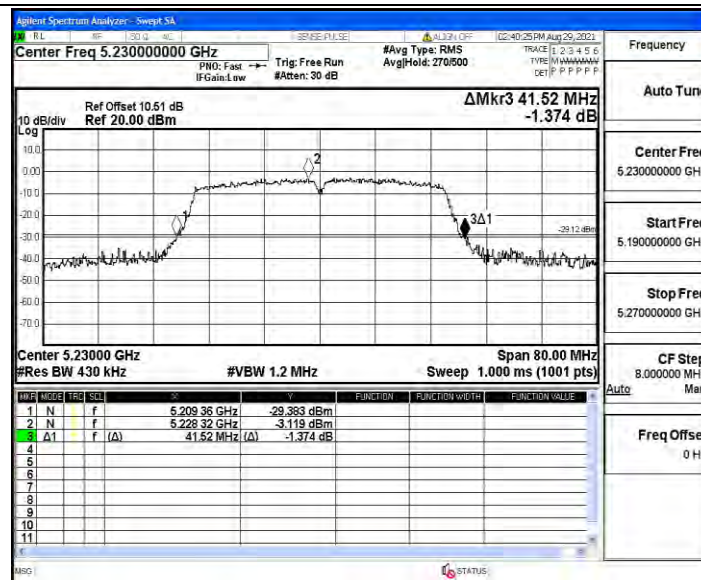
11N40MIMO_Ant2_5190



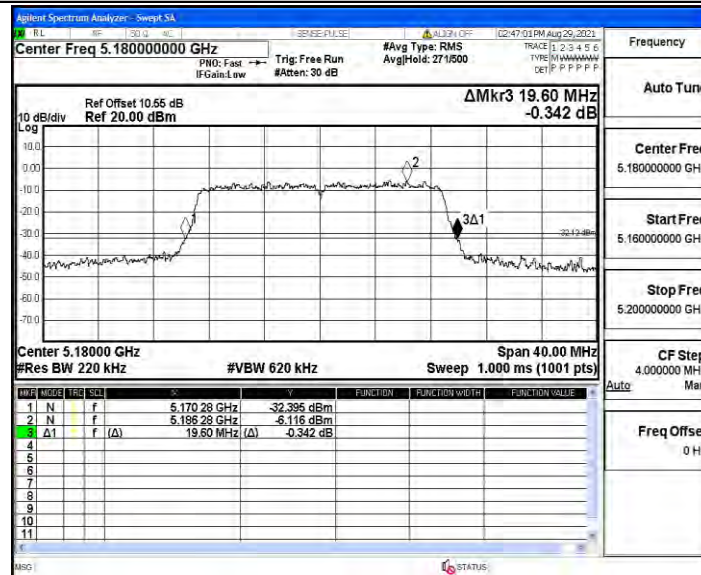
11N40MIMO_Ant1_5230



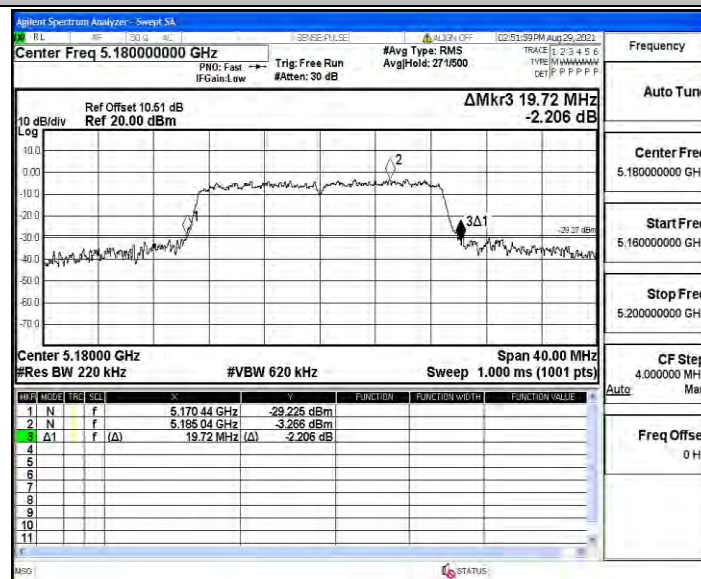
11N40MIMO_Ant2_5230



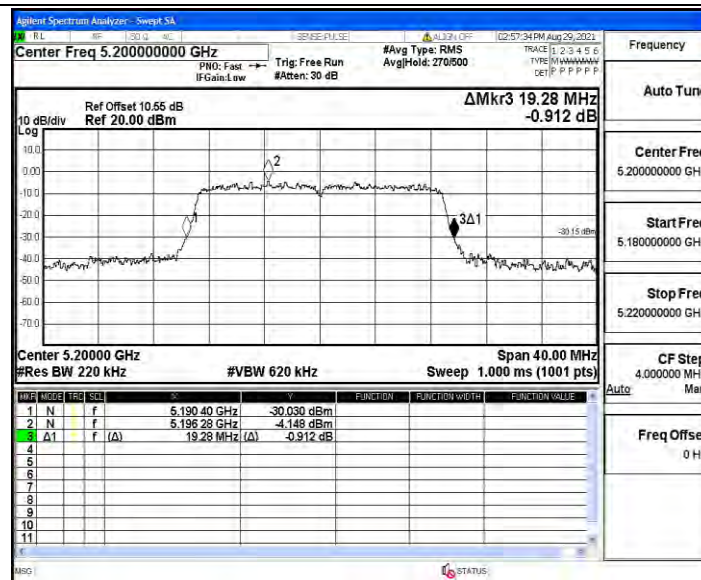
11AC20MIMO_Ant1_5180



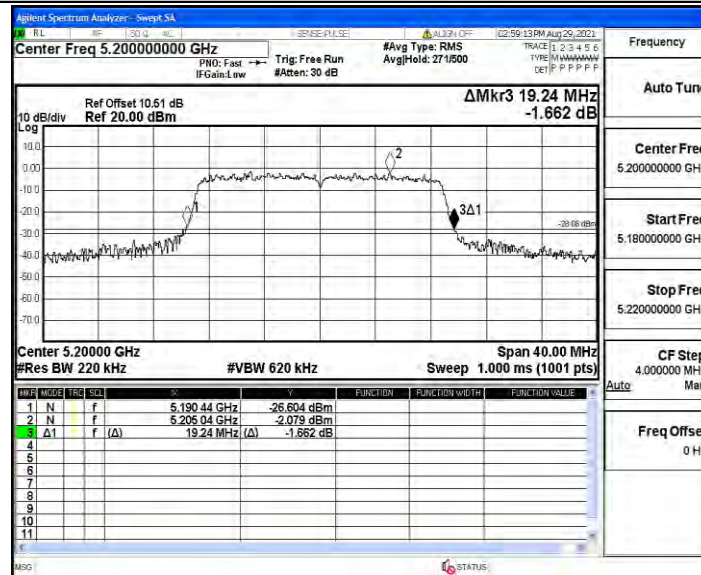
11AC20MIMO_Ant2_5180



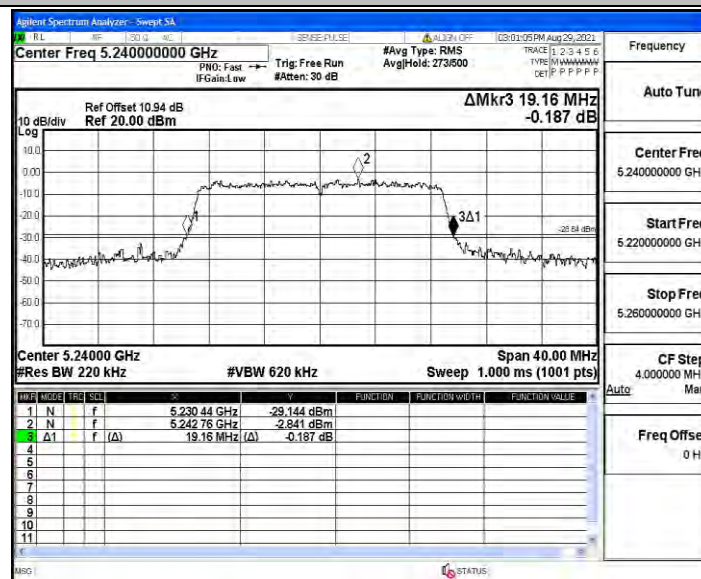
11AC20MIMO_Ant1_5200



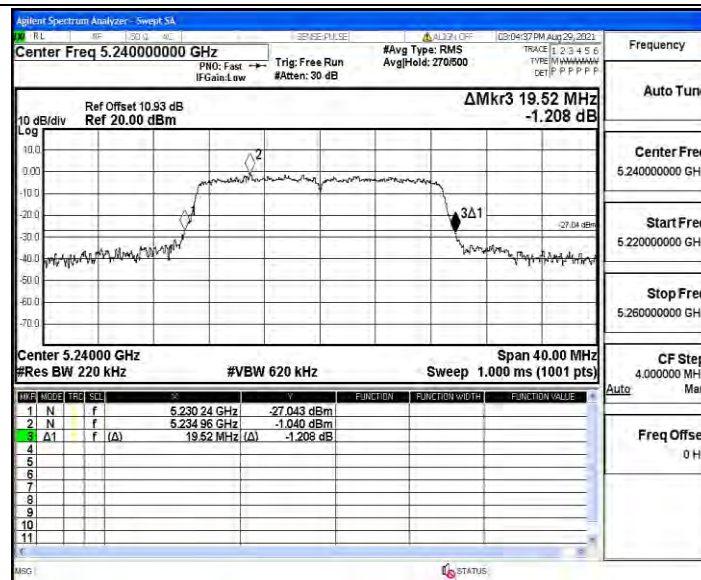
11AC20MIMO_Ant2_5200



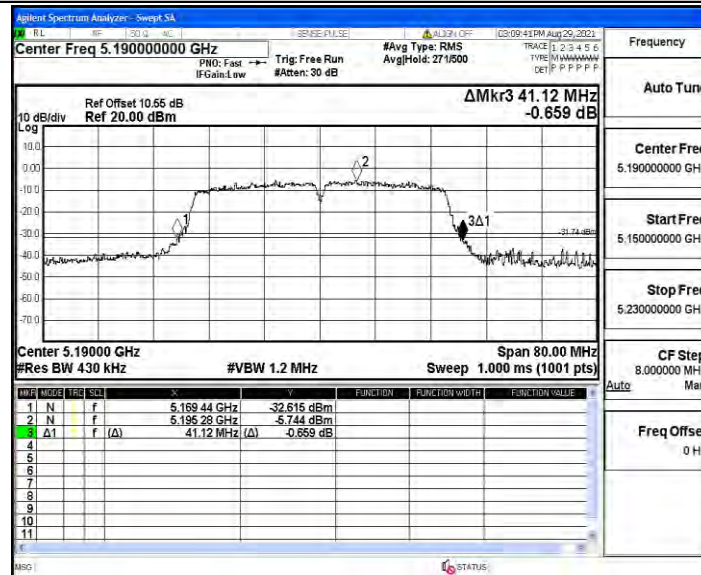
11AC20MIMO_Ant1_5240



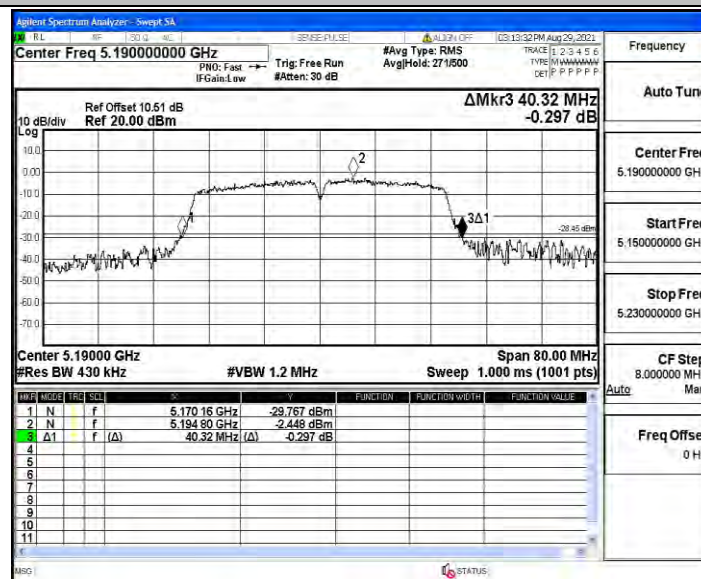
11AC20MIMO_Ant2_5240



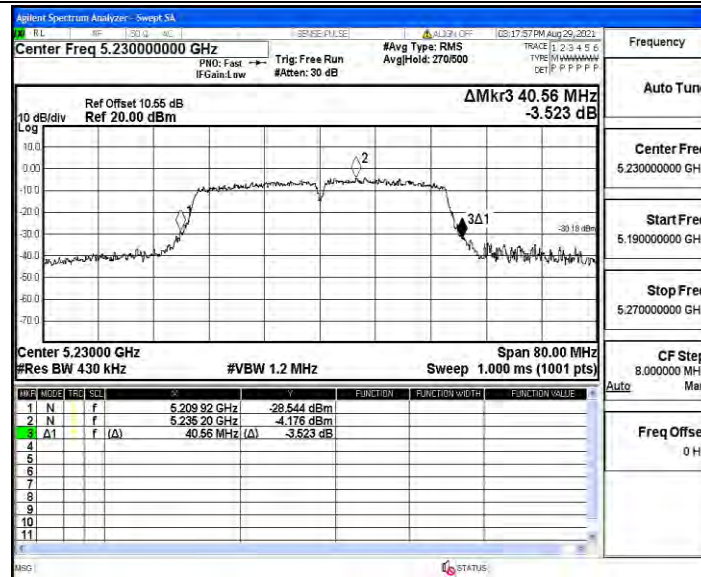
11AC40MIMO_Ant1_5190



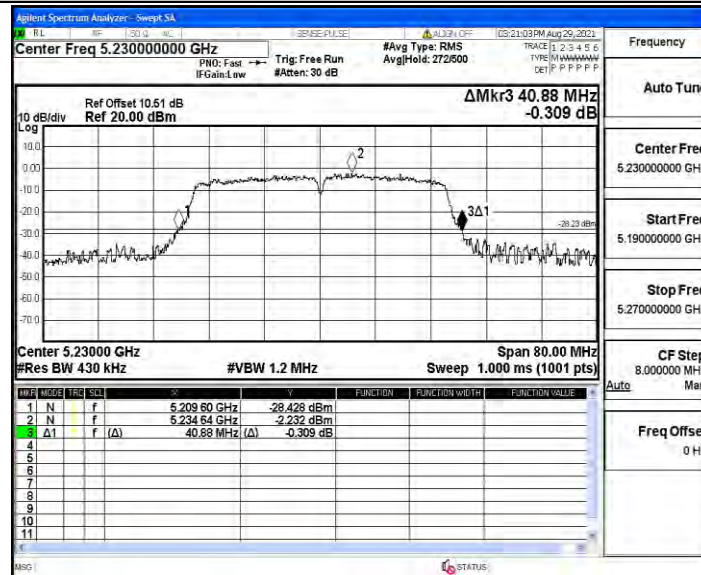
11AC40MIMO_Ant2_5190



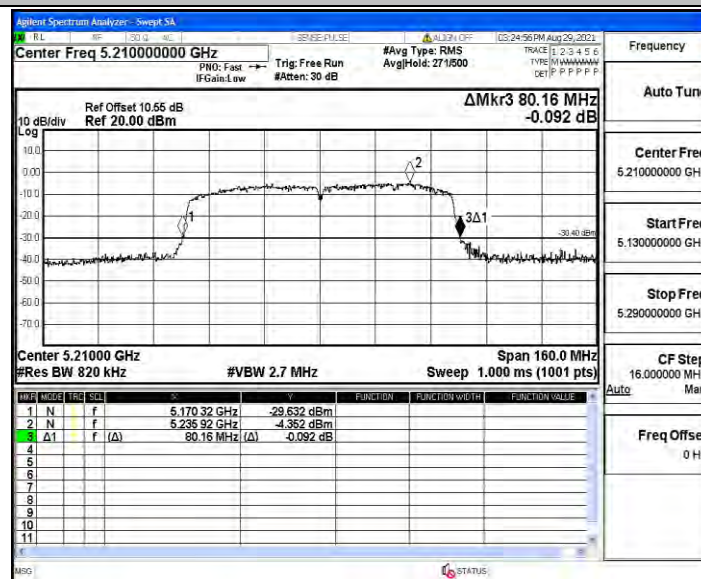
11AC40MIMO_Ant1_5230



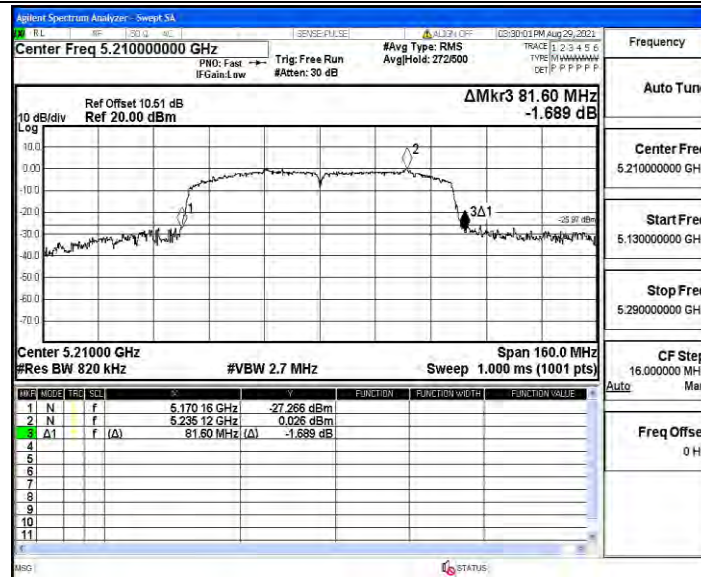
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



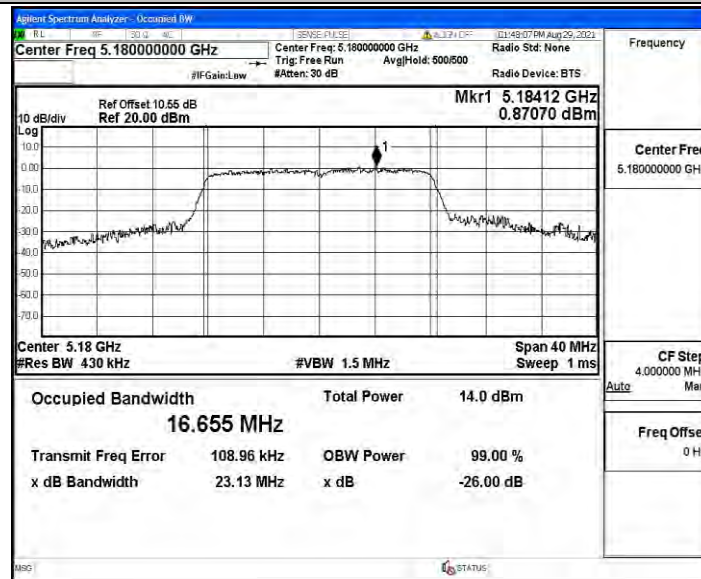
Appendix A2: Occupied channel bandwidth

Test Result

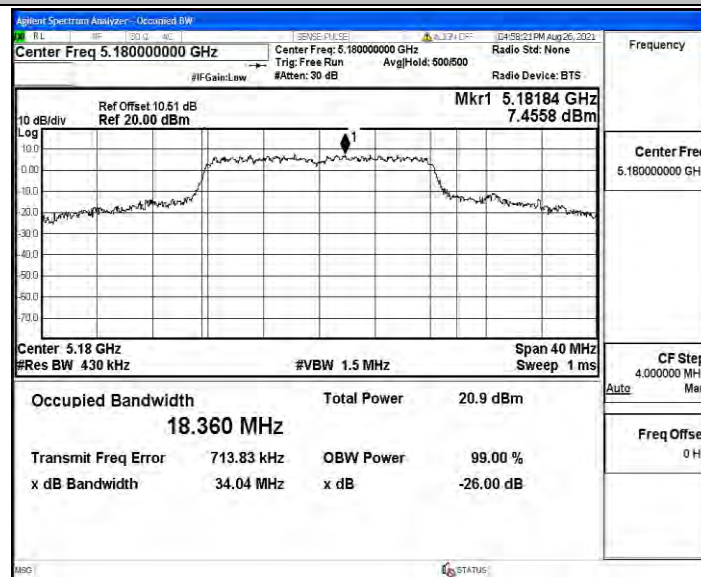
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.655	5171.781	5188.436	---	PASS
	Ant2	5180	18.360	5171.534	5189.894	---	PASS
	Ant1	5200	16.587	5191.744	5208.331	---	PASS
	Ant2	5200	16.526	5191.757	5208.283	---	PASS
	Ant1	5240	16.512	5231.770	5248.282	---	PASS
	Ant2	5240	16.501	5231.756	5248.257	---	PASS
11N20MIMO	Ant1	5180	17.670	5171.226	5188.896	---	PASS
	Ant2	5180	19.121	5171.064	5190.185	---	PASS
	Ant1	5200	17.674	5191.189	5208.863	---	PASS
	Ant2	5200	17.644	5191.194	5208.838	---	PASS
	Ant1	5240	17.684	5231.193	5248.877	---	PASS
	Ant2	5240	17.637	5231.193	5248.830	---	PASS
11N40MIMO	Ant1	5190	36.486	5171.923	5208.409	---	PASS
	Ant2	5190	36.275	5172.090	5208.365	---	PASS
	Ant1	5230	36.416	5211.993	5248.409	---	PASS
	Ant2	5230	36.371	5211.837	5248.208	---	PASS
11AC20MIMO	Ant1	5180	17.680	5171.218	5188.898	---	PASS
	Ant2	5180	17.727	5171.234	5188.961	---	PASS
	Ant1	5200	17.669	5191.186	5208.855	---	PASS
	Ant2	5200	17.641	5191.194	5208.835	---	PASS
	Ant1	5240	17.675	5231.195	5248.870	---	PASS
	Ant2	5240	17.638	5231.189	5248.827	---	PASS
11AC40MIMO	Ant1	5190	36.207	5172.038	5208.245	---	PASS
	Ant2	5190	36.154	5172.131	5208.285	---	PASS
	Ant1	5230	36.272	5212.057	5248.329	---	PASS
	Ant2	5230	36.275	5211.937	5248.212	---	PASS
11AC80MIMO	Ant1	5210	74.675	5173.219	5247.894	---	PASS
	Ant2	5210	74.621	5173.103	5247.724	---	PASS

Test Graphs

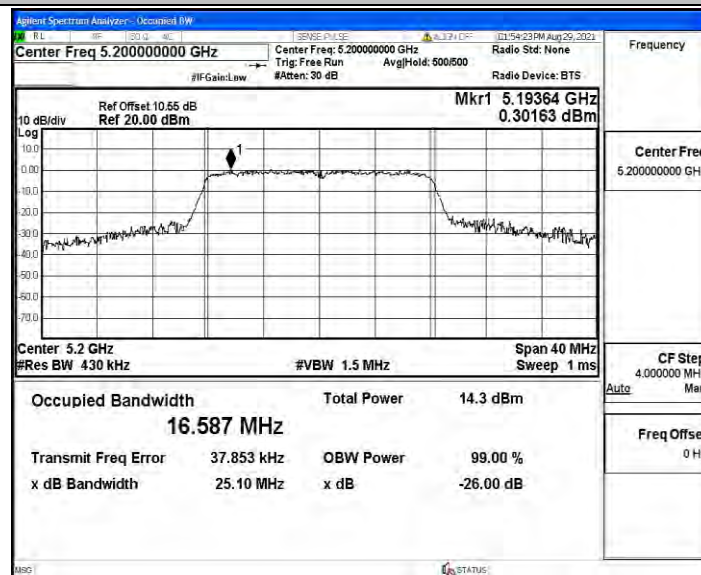
11A_Ant1_5180



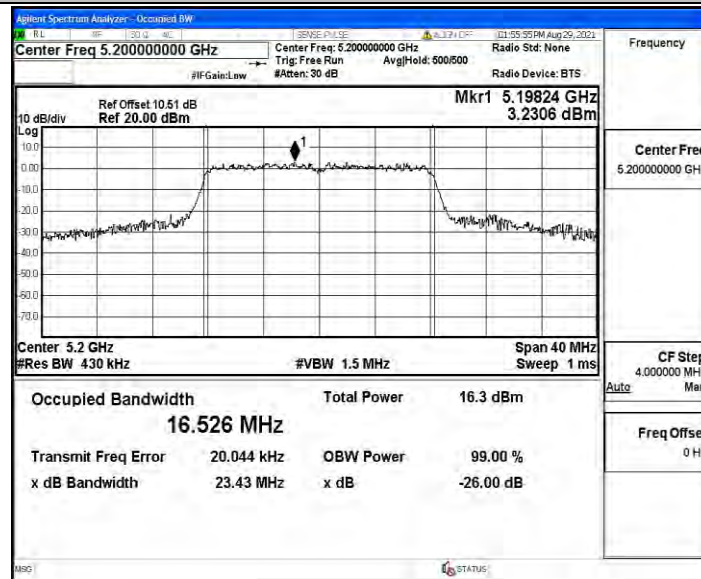
11A_Ant2_5180



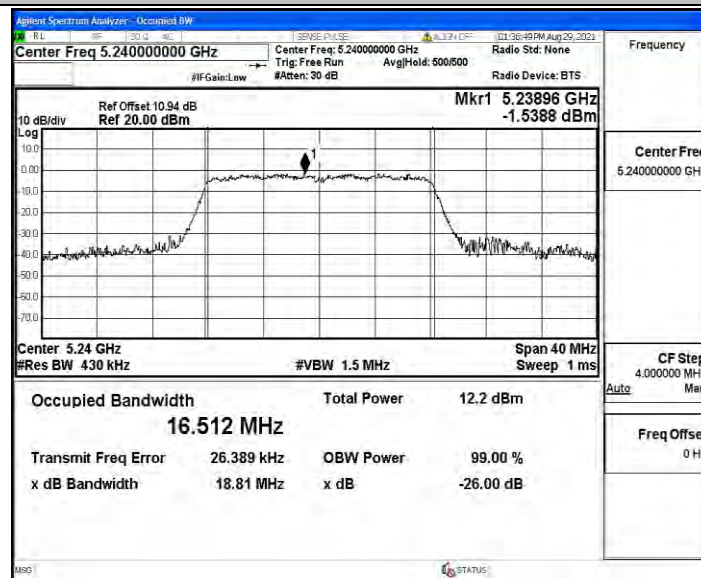
11A_Ant1_5200



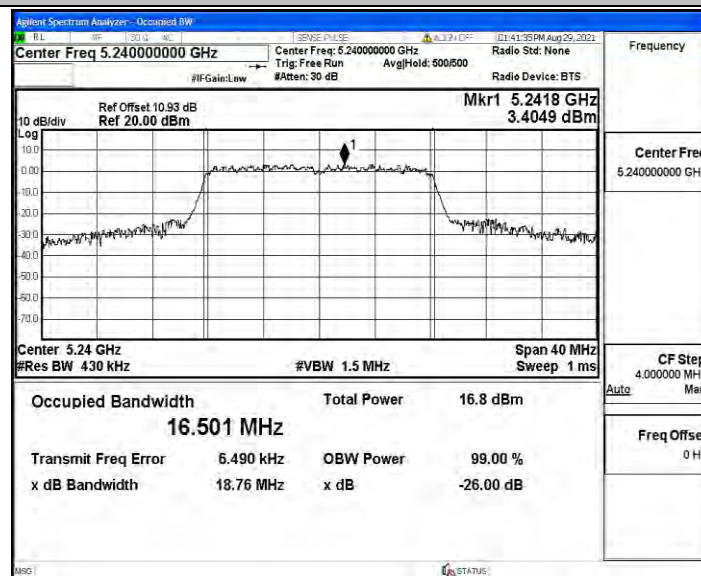
11A_Ant2_5200



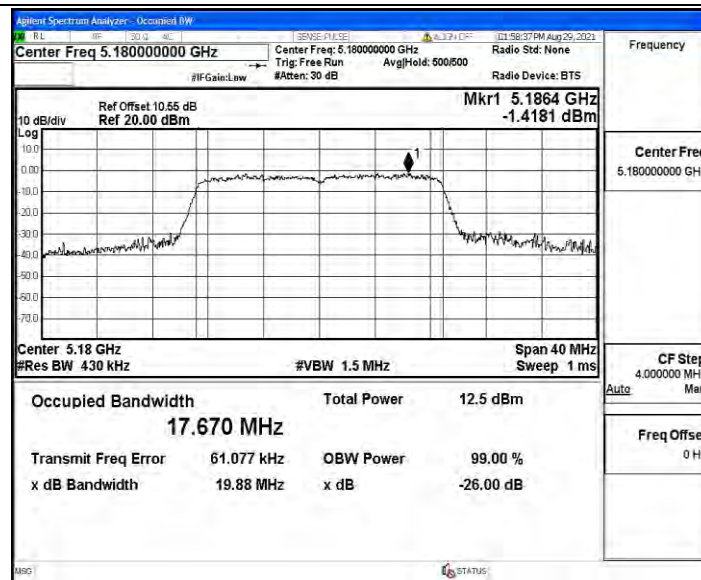
11A_Ant1_5240



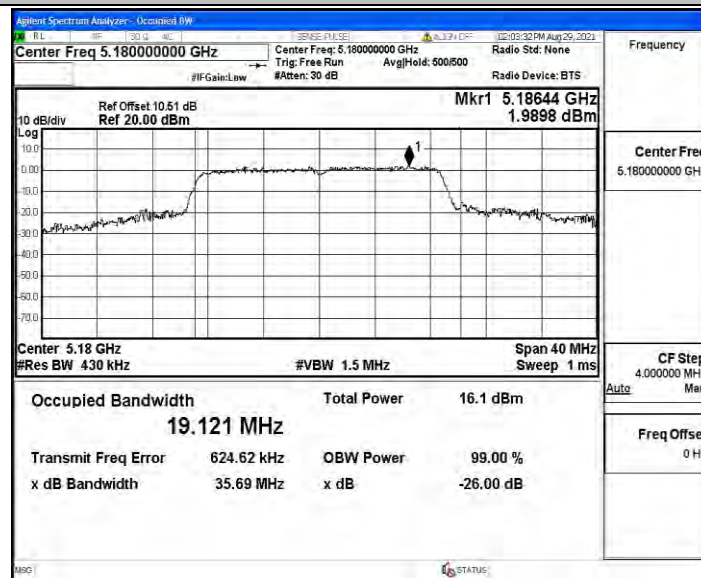
11A_Ant2_5240



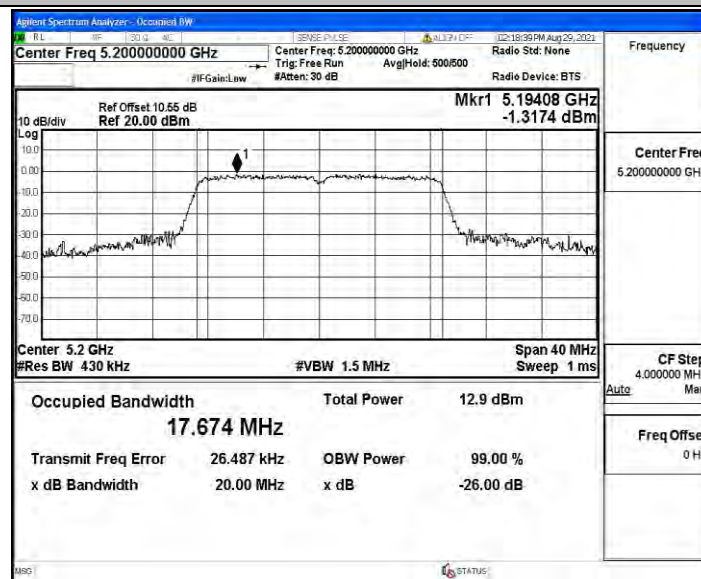
11N20MIMO_Ant1_5180



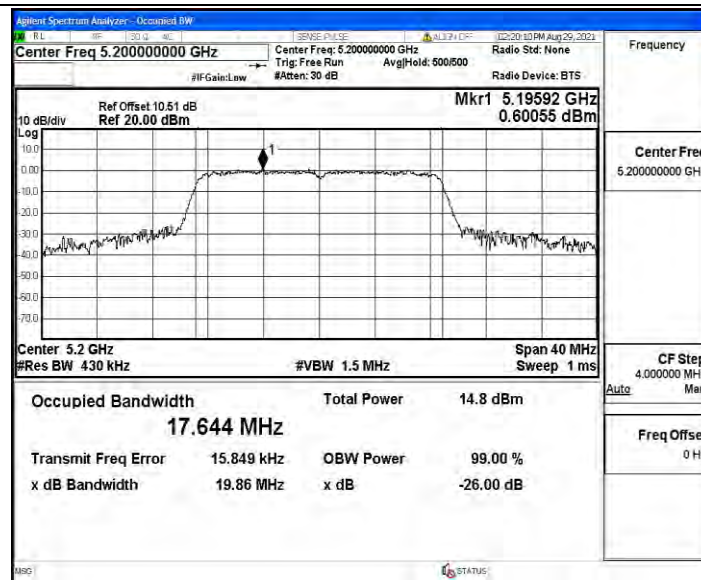
11N20MIMO_Ant2_5180



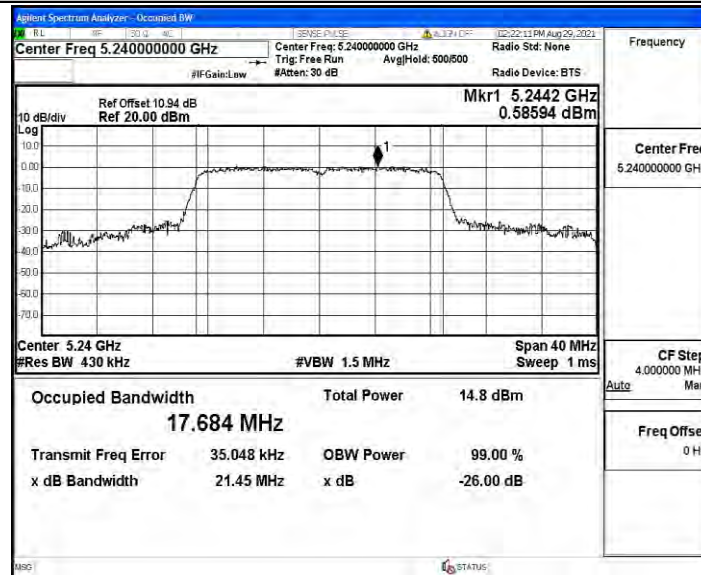
11N20MIMO_Ant1_5200



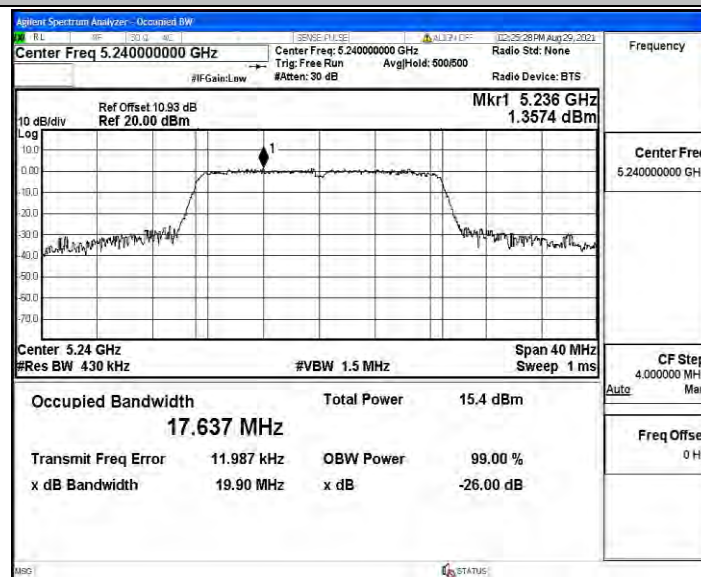
11N20MIMO_Ant2_5200



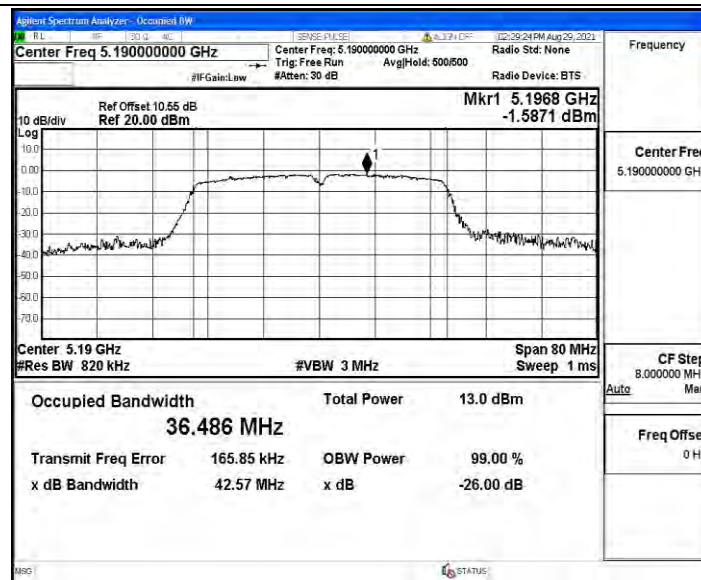
11N20MIMO_Ant1_5240



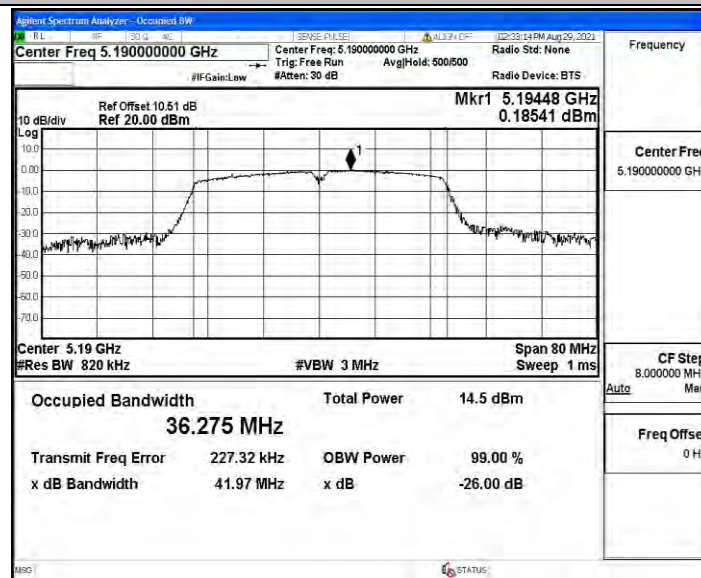
11N20MIMO_Ant2_5240



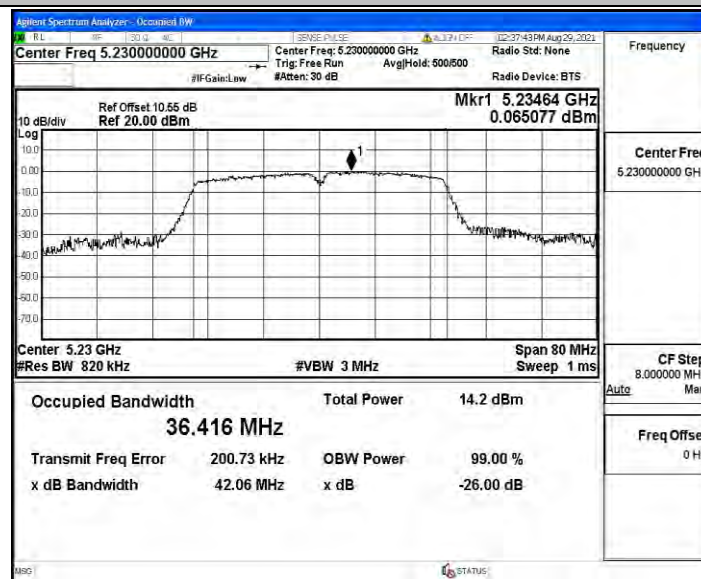
11N40MIMO_Ant1_5190



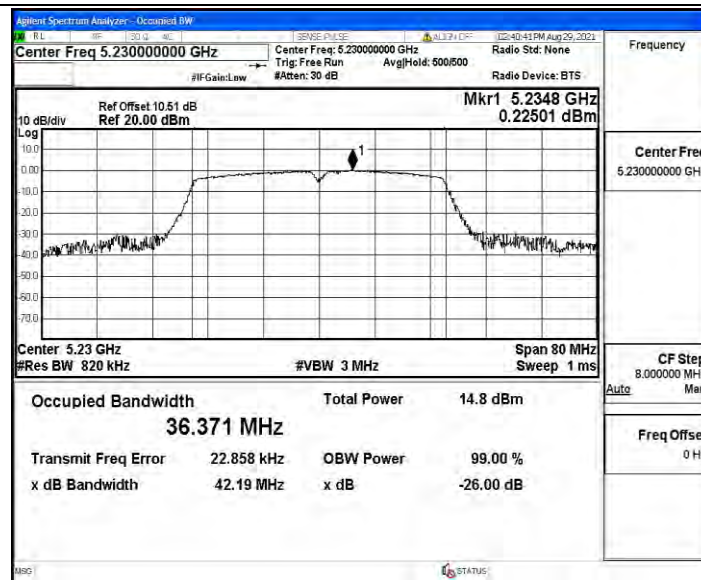
11N40MIMO_Ant2_5190



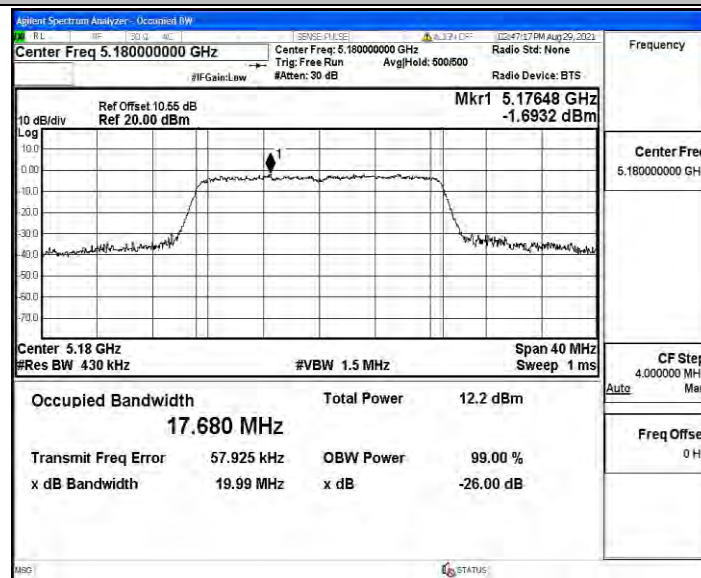
11N40MIMO_Ant1_5230



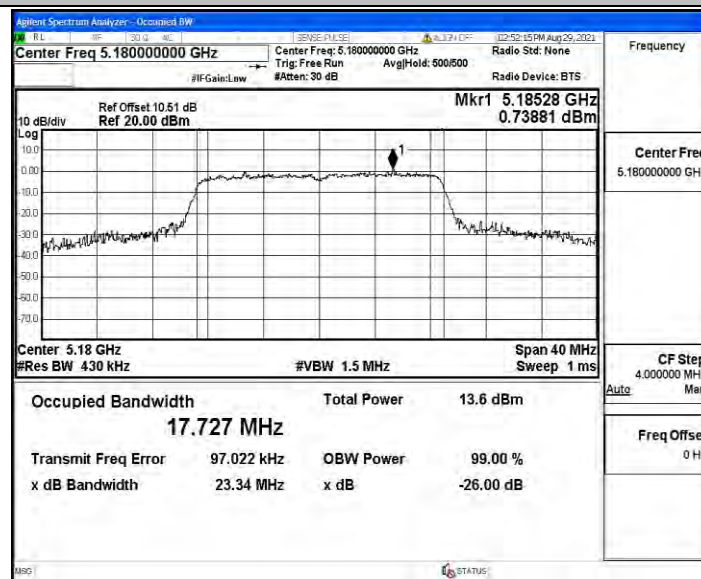
11N40MIMO_Ant2_5230



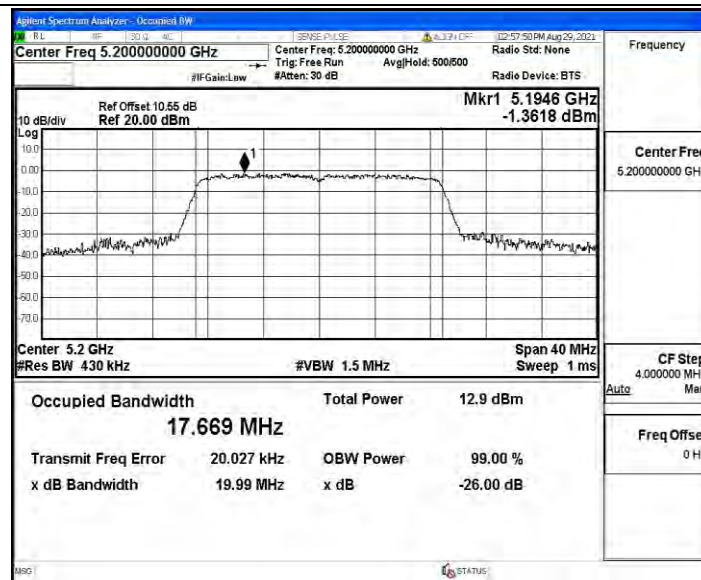
11AC20MIMO_Ant1_5180



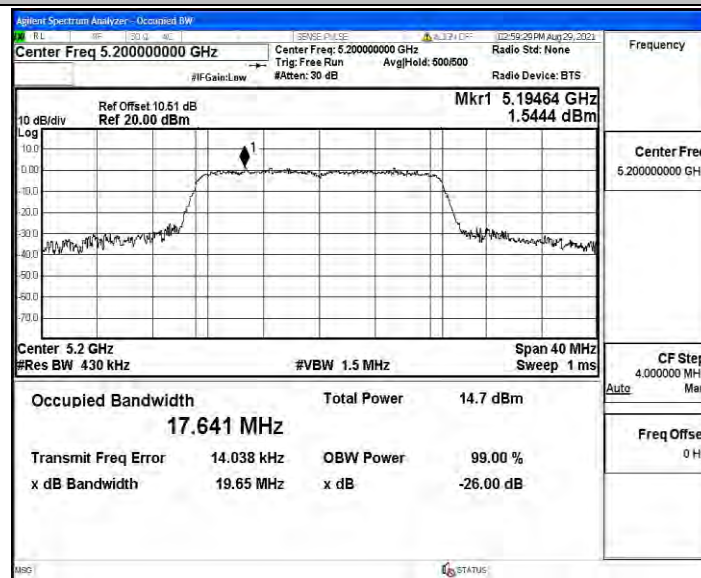
11AC20MIMO_Ant2_5180



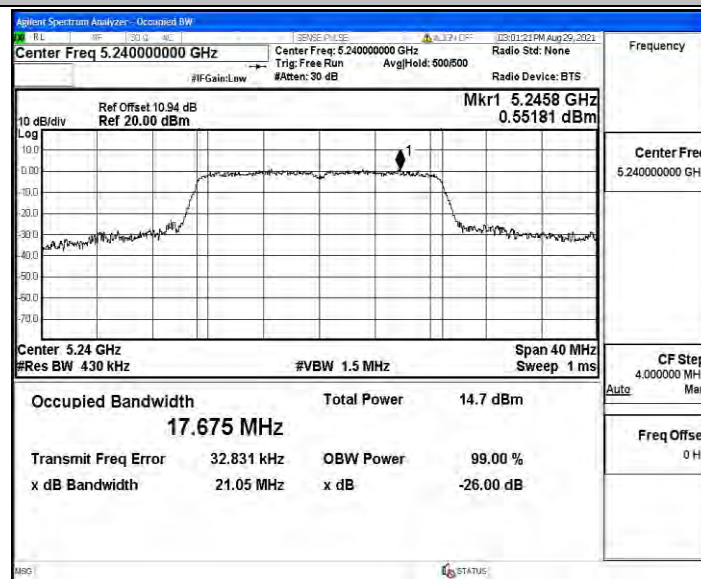
11AC20MIMO_Ant1_5200



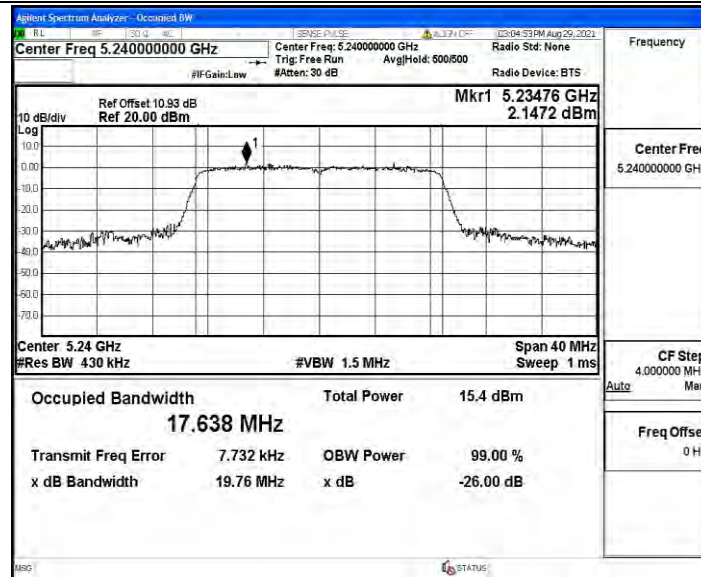
11AC20MIMO_Ant2_5200



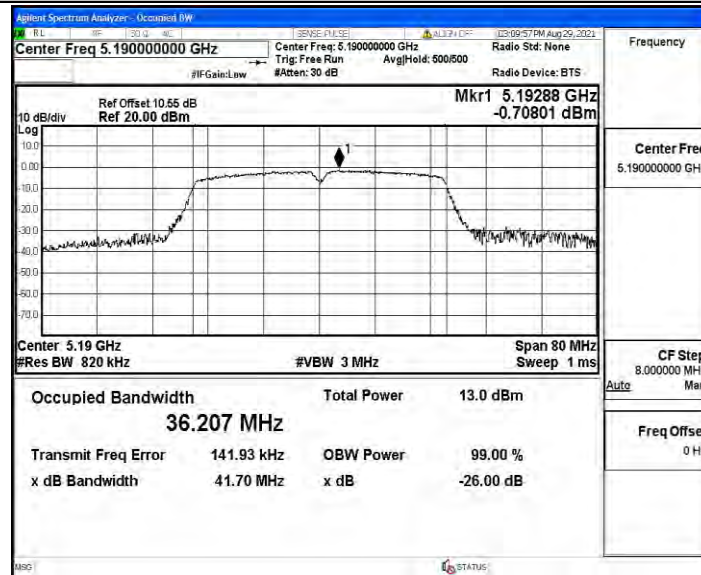
11AC20MIMO_Ant1_5240



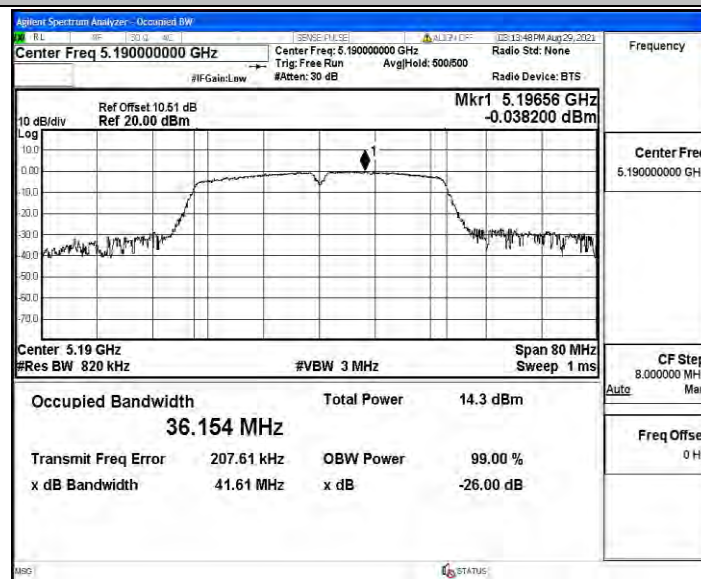
11AC20MIMO_Ant2_5240



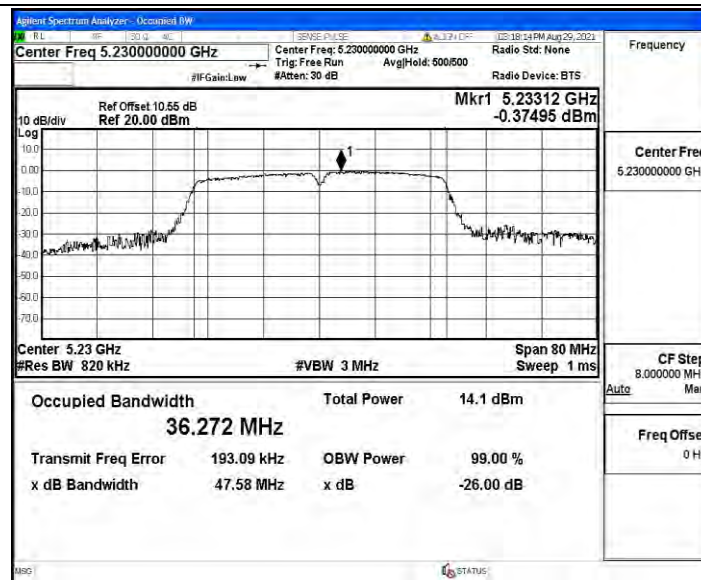
11AC40MIMO_Ant1_5190



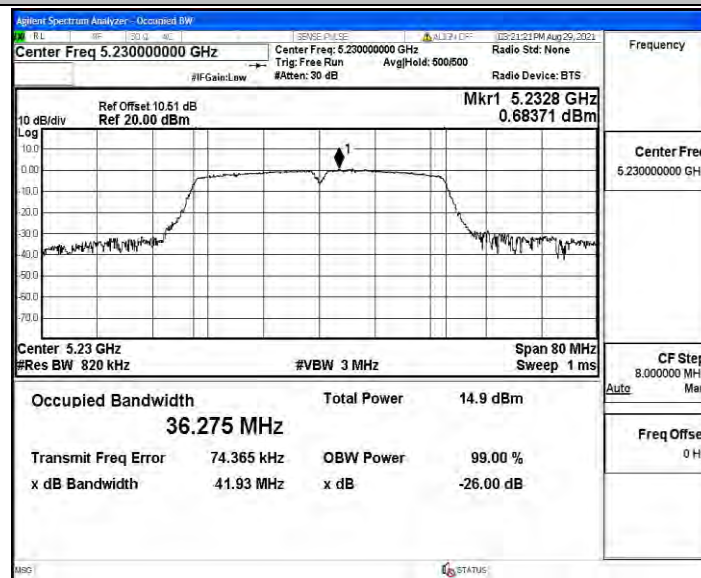
11AC40MIMO_Ant2_5190



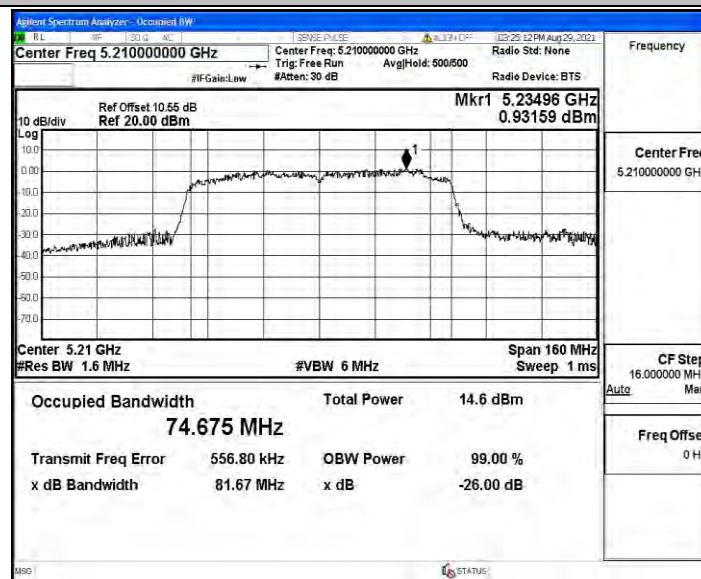
11AC40MIMO_Ant1_5230



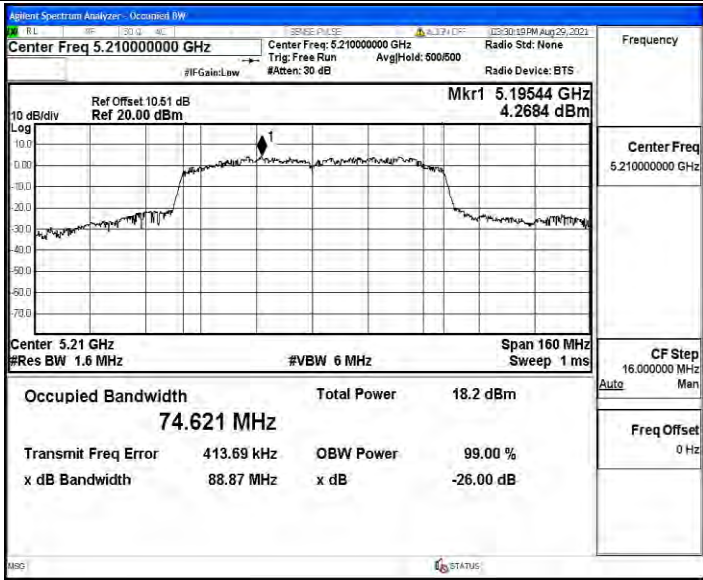
11AC40MIMO_Ant2_5230



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	6.97	≤23.98	PASS
	Ant2	5180	11.23	≤23.98	PASS
	Ant1	5200	7.83	≤23.98	PASS
	Ant2	5200	9.06	≤23.98	PASS
	Ant1	5240	8.65	≤23.98	PASS
	Ant2	5240	9.30	≤23.98	PASS
11N20MIMO	Ant1	5180	6.11	≤23.98	PASS
	Ant2	5180	6.62	≤23.98	PASS
	total	5180	9.4	≤23.43	PASS
	Ant1	5200	6.41	≤23.98	PASS
	Ant2	5200	8.21	≤23.98	PASS
	total	5200	10.4	≤23.43	PASS
	Ant1	5240	8.25	≤23.98	PASS
	Ant2	5240	8.49	≤23.98	PASS
	total	5240	11.4	≤23.43	PASS
11N40MIMO	Ant1	5190	6.23	≤23.98	PASS
	Ant2	5190	7.21	≤23.98	PASS
	total	5190	9.8	≤23.43	PASS
	Ant1	5230	6.78	≤23.98	PASS
	Ant2	5230	7.83	≤23.98	PASS
	total	5230	10.3	≤23.43	PASS
11AC20MIMO	Ant1	5180	5.94	≤23.98	PASS
	Ant2	5180	6.84	≤23.98	PASS
	total	5180	9.4	≤23.43	PASS
	Ant1	5200	6.66	≤23.98	PASS
	Ant2	5200	7.86	≤23.98	PASS
	total	5200	10.3	≤23.43	PASS
	Ant1	5240	8.10	≤23.98	PASS
	Ant2	5240	8.68	≤23.98	PASS
	total	5240	11.4	≤23.43	PASS
11AC40MIMO	Ant1	5190	5.98	≤23.98	PASS
	Ant2	5190	6.97	≤23.98	PASS
	total	5190	9.5	≤23.43	PASS
	Ant1	5230	7.03	≤23.98	PASS
	Ant2	5230	7.44	≤23.98	PASS
	total	5230	10.3	≤23.43	PASS
11AC80MIMO	Ant1	5210	5.88	≤23.98	PASS
	Ant2	5210	9.56	≤23.98	PASS
	total	5210	11.1	≤23.43	PASS

Note: The Duty Cycle Factor and RBW Factor is compensated in the result

Appendix C: Maximum power spectral density

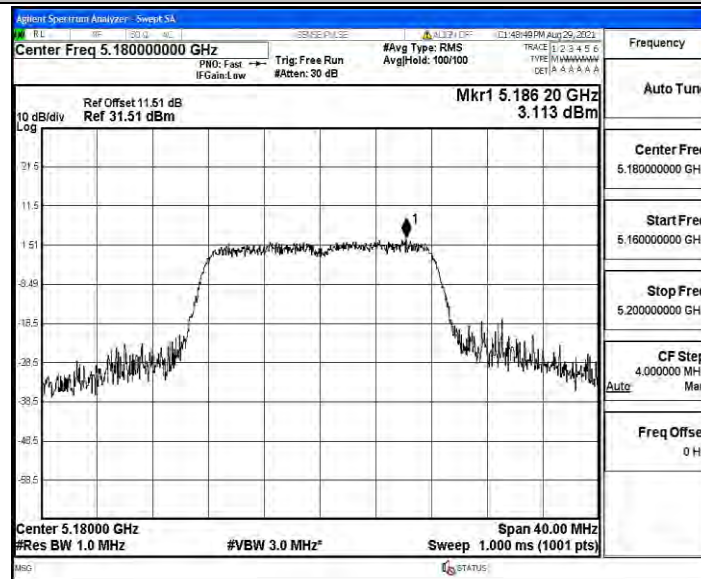
Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.11	≤11	PASS
	Ant2	5180	7.76	≤11	PASS
	Ant1	5200	3.46	≤11	PASS
	Ant2	5200	5.86	≤11	PASS
	Ant1	5240	4.55	≤11	PASS
	Ant2	5240	6.37	≤11	PASS
11N20MIMO	Ant1	5180	1.79	≤11	PASS
	Ant2	5180	2.06	≤11	PASS
	total	5180	4.94	≤10.45	PASS
	Ant1	5200	1.52	≤11	PASS
	Ant2	5200	3.45	≤11	PASS
	total	5200	5.60	≤10.45	PASS
	Ant1	5240	3.7	≤11	PASS
	Ant2	5240	4.11	≤11	PASS
	total	5240	6.92	≤10.45	PASS
11N40MIMO	Ant1	5190	-0.6	≤11	PASS
	Ant2	5190	0.87	≤11	PASS
	total	5190	3.21	≤10.45	PASS
	Ant1	5230	0.82	≤11	PASS
	Ant2	5230	1.27	≤11	PASS
	total	5230	4.06	≤10.45	PASS
11AC20MIMO	Ant1	5180	1	≤11	PASS
	Ant2	5180	2.66	≤11	PASS
	total	5180	4.92	≤10.45	PASS
	Ant1	5200	1.86	≤11	PASS
	Ant2	5200	3	≤11	PASS
	total	5200	5.48	≤10.45	PASS
	Ant1	5240	4.17	≤11	PASS
	Ant2	5240	4.54	≤11	PASS
	total	5240	7.37	≤10.45	PASS
11AC40MIMO	Ant1	5190	-0.41	≤11	PASS
	Ant2	5190	0.49	≤11	PASS
	total	5190	3.07	≤10.45	PASS
	Ant1	5230	0.82	≤11	PASS
	Ant2	5230	0.97	≤11	PASS
	total	5230	3.91	≤10.45	PASS
11AC80MIMO	Ant1	5210	-2.06	≤11	PASS
	Ant2	5210	1.86	≤11	PASS
	total	5210	3.34	≤10.45	PASS

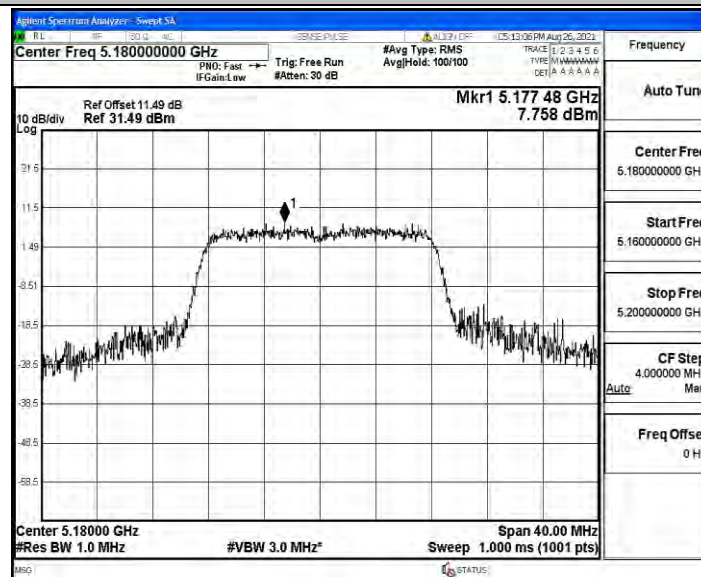
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

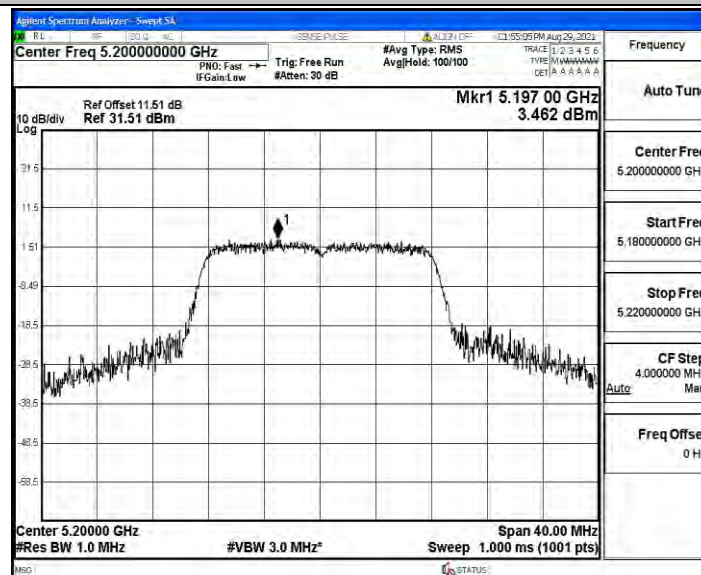
11A_Ant1_5180



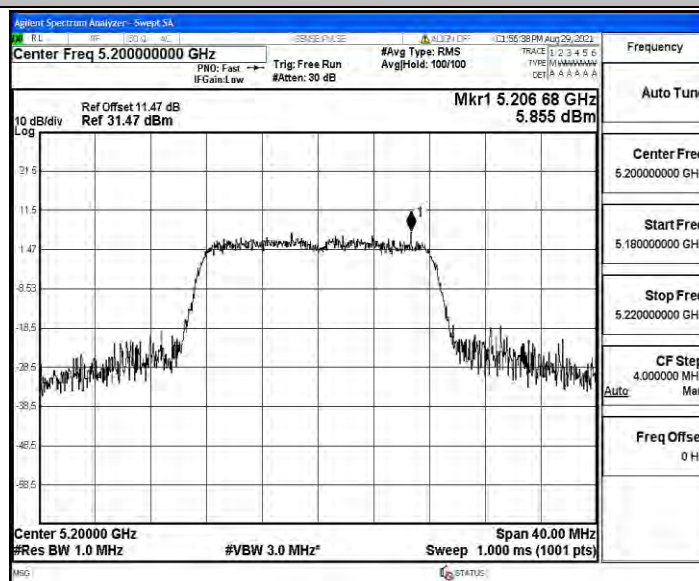
11A_Ant2_5180



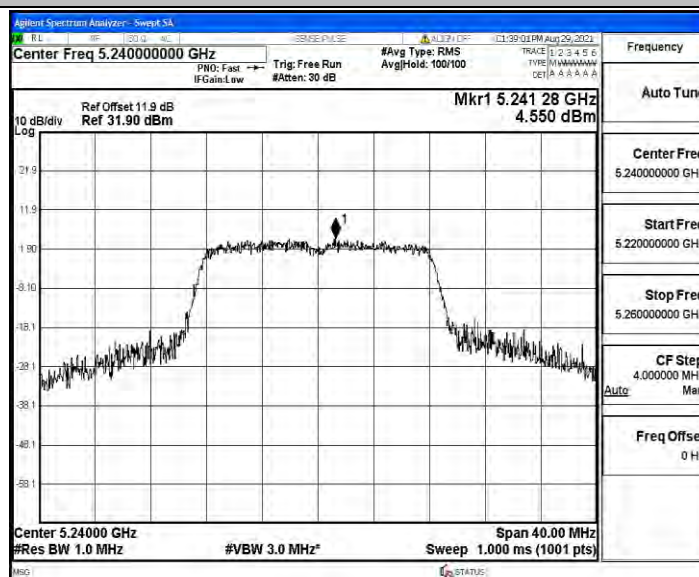
11A_Ant1_5200



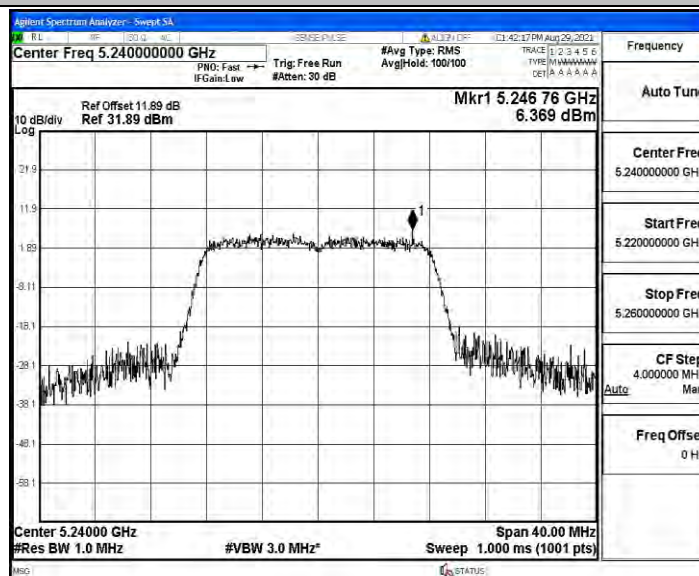
11A_Ant2_5200



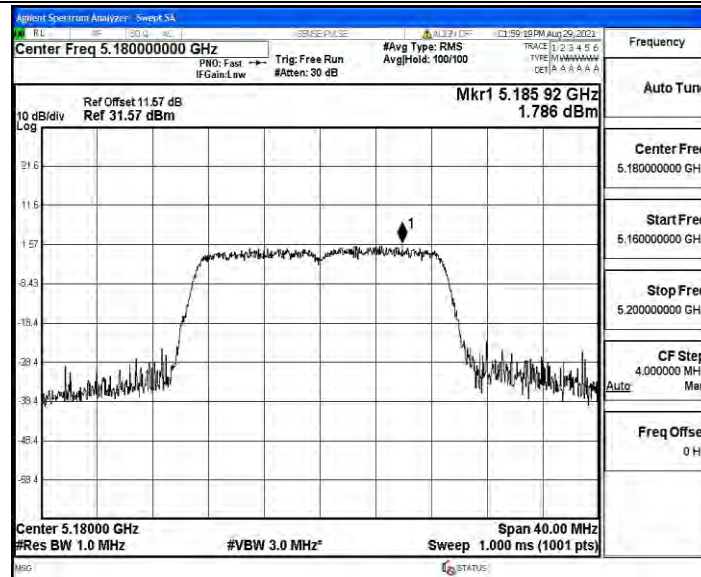
11A_Ant1_5240



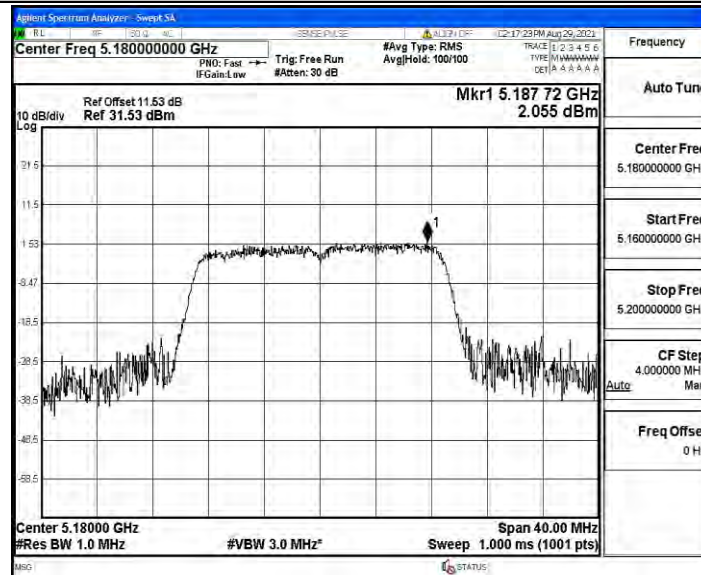
11A_Ant2_5240



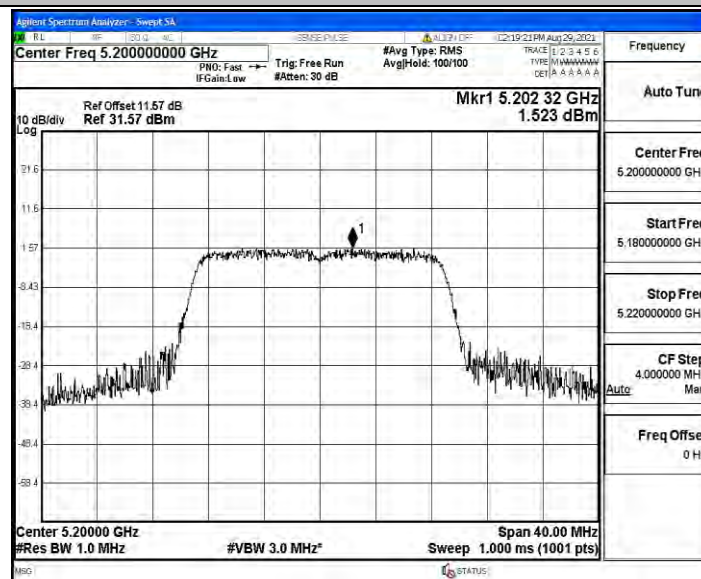
11N20MIMO_Ant1_5180



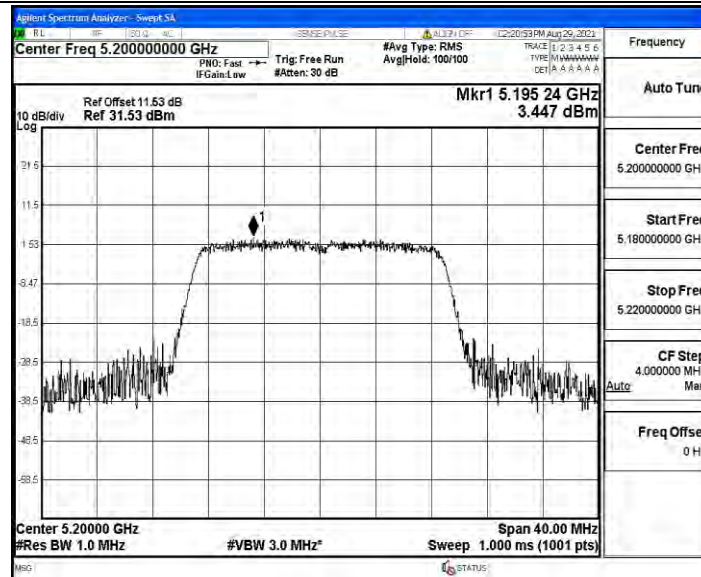
11N20MIMO_Ant2_5180



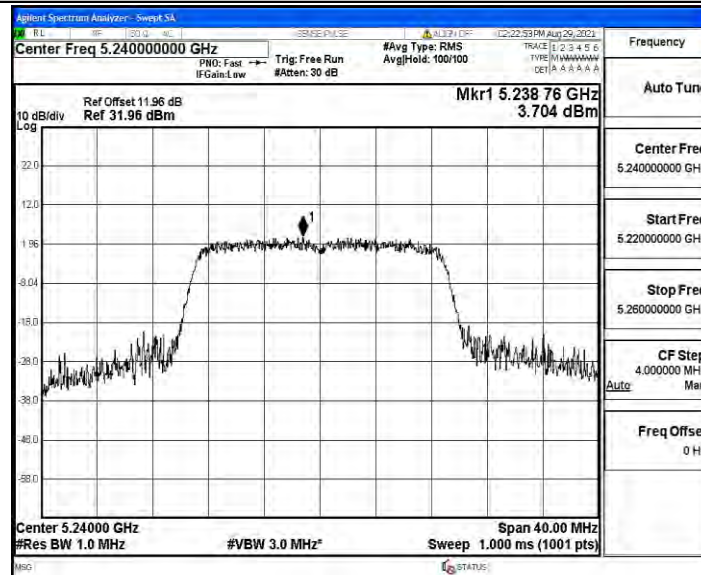
11N20MIMO_Ant1_5200



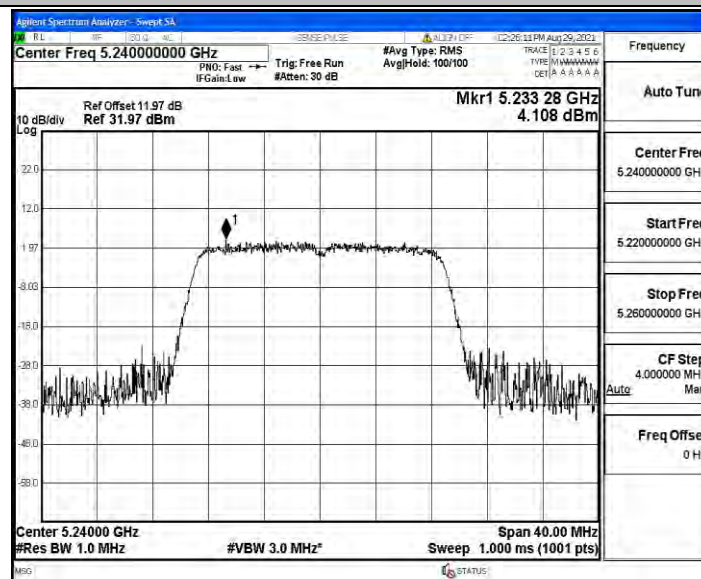
11N20MIMO_Ant2_5200



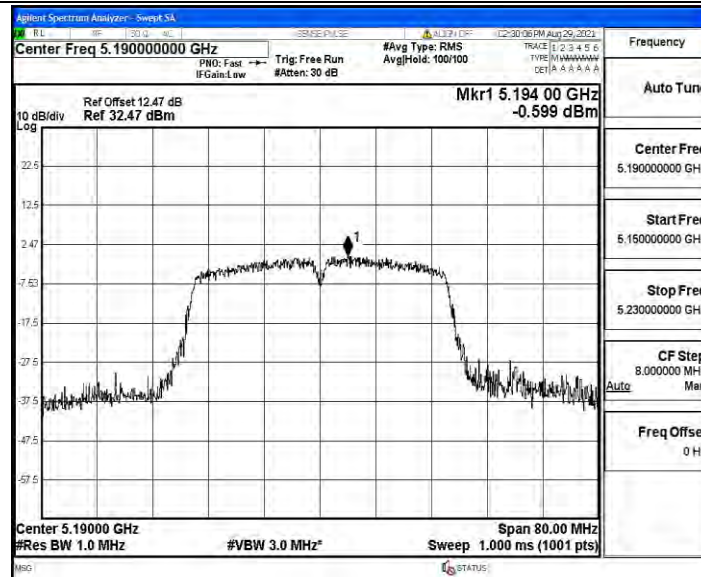
11N20MIMO_Ant1_5240



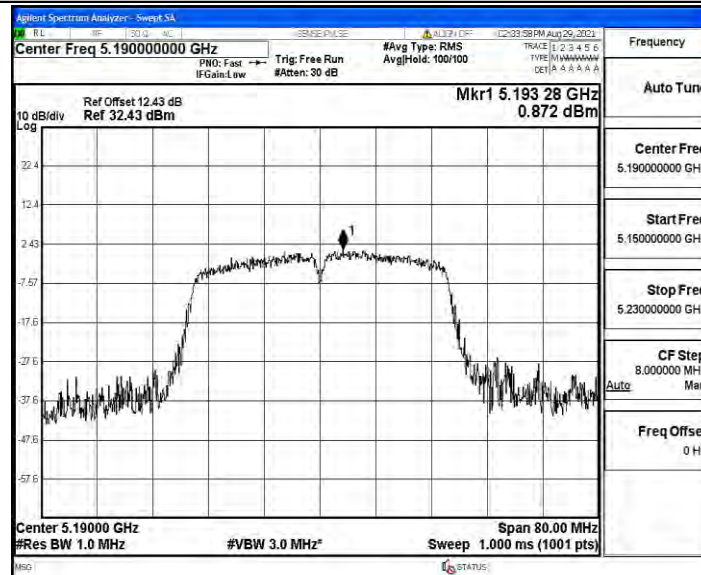
11N20MIMO_Ant2_5240



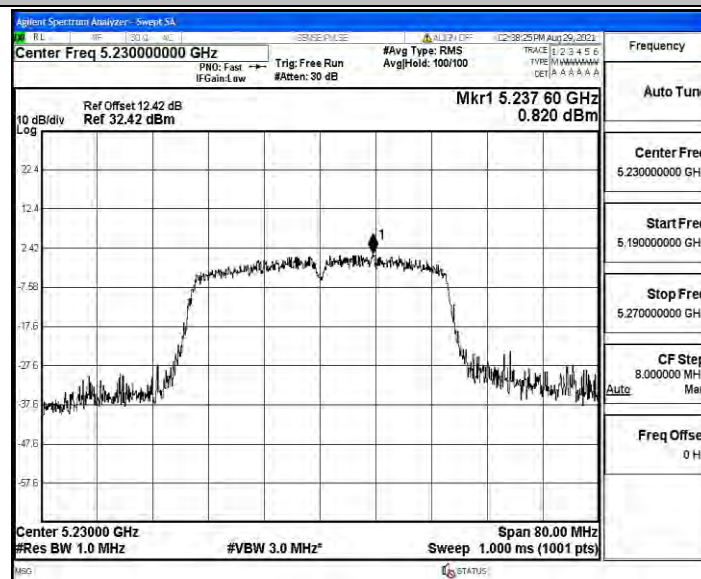
11N40MIMO_Ant1_5190



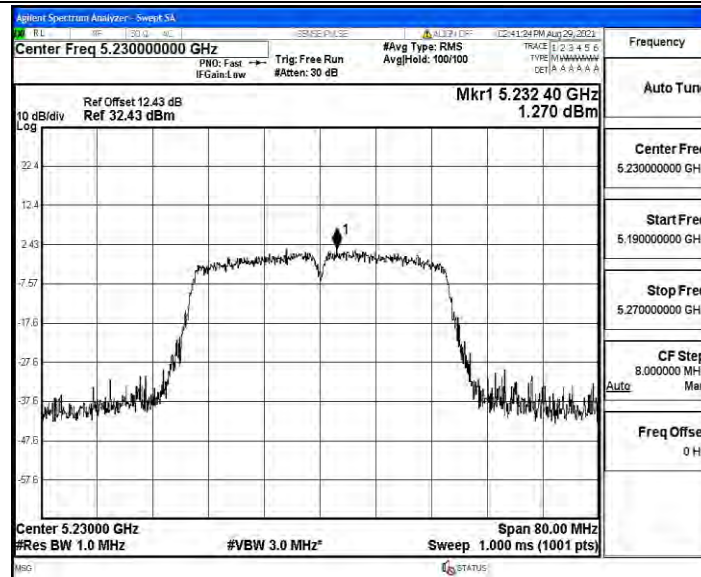
11N40MIMO_Ant2_5190



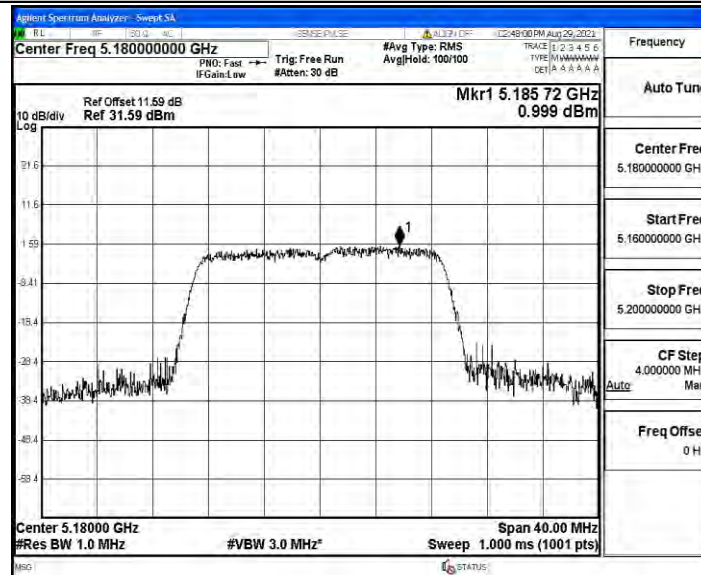
11N40MIMO_Ant1_5230



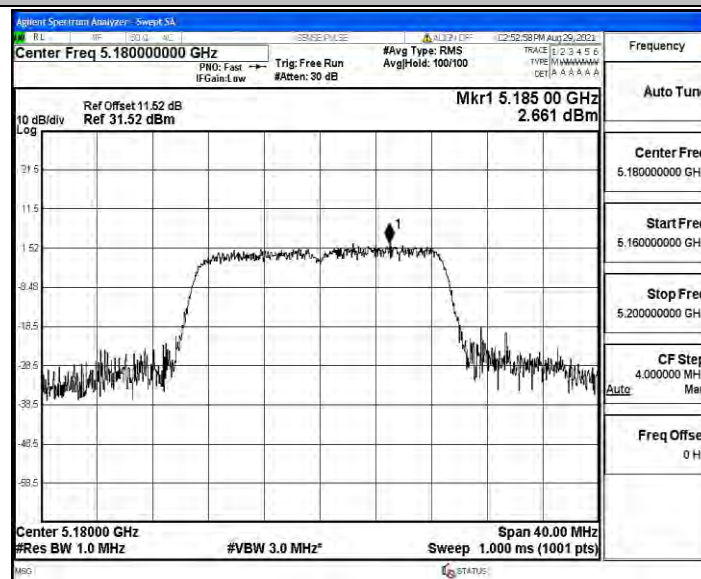
11N40MIMO_Ant2_5230



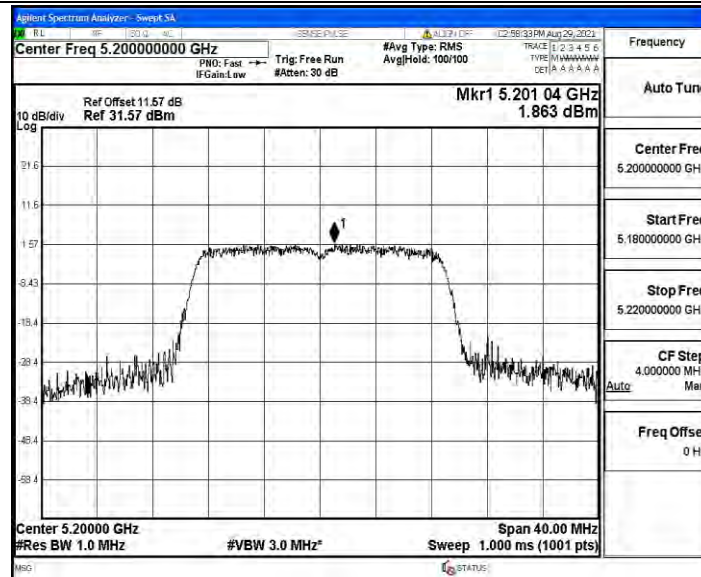
11AC20MIMO_Ant1_5180



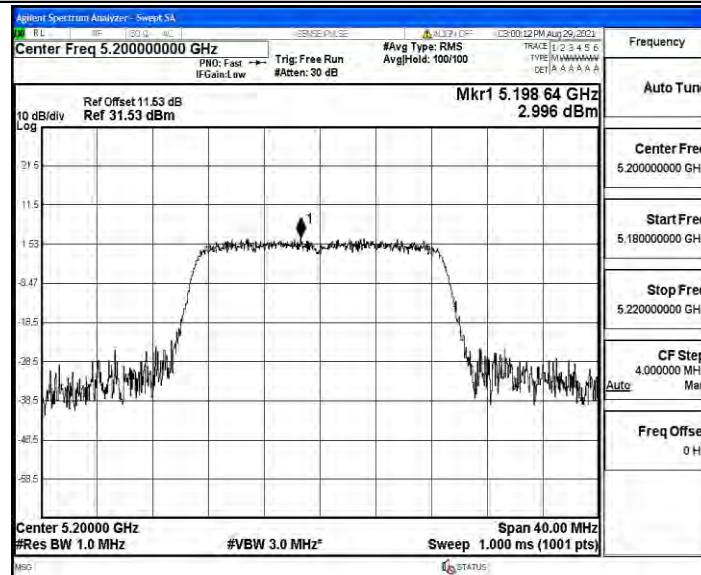
11AC20MIMO_Ant2_5180



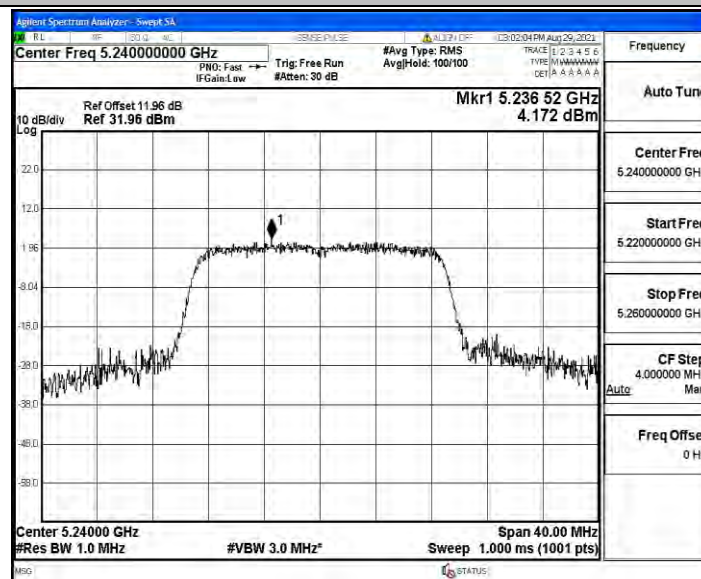
11AC20MIMO_Ant1_5200



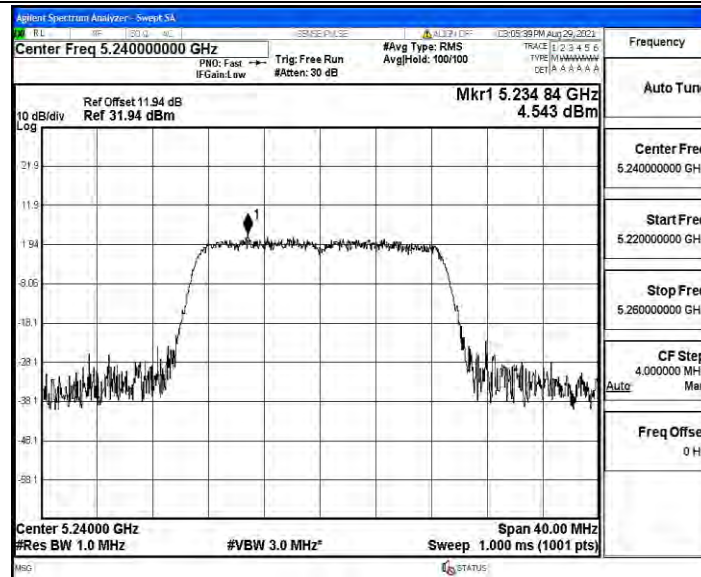
11AC20MIMO_Ant2_5200



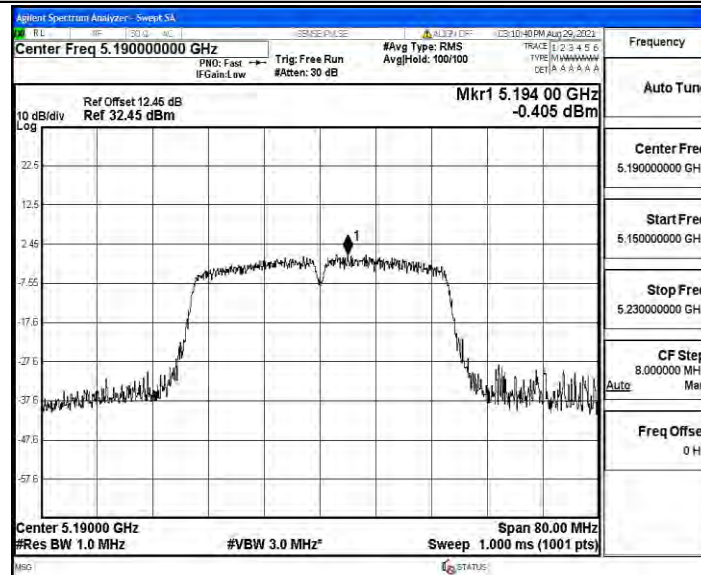
11AC20MIMO_Ant1_5240



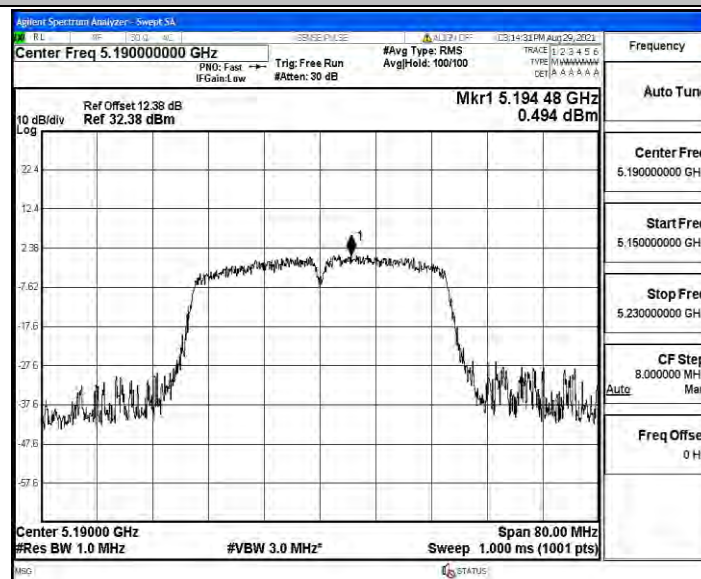
11AC20MIMO_Ant2_5240



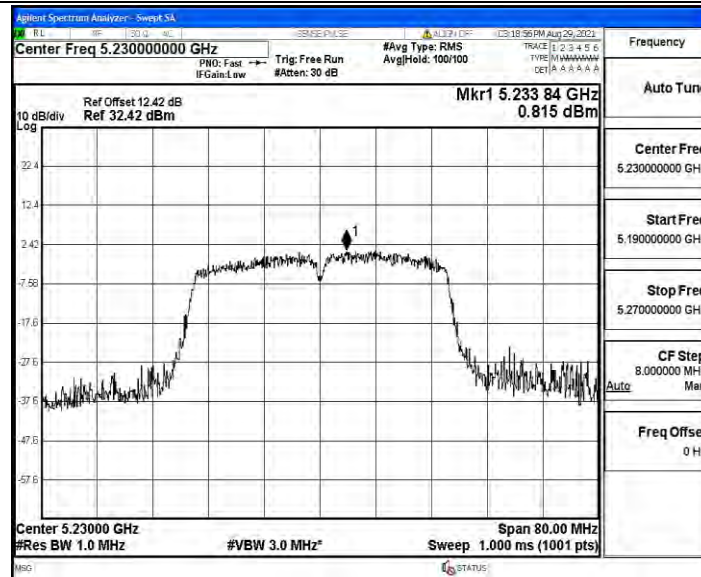
11AC40MIMO_Ant1_5190



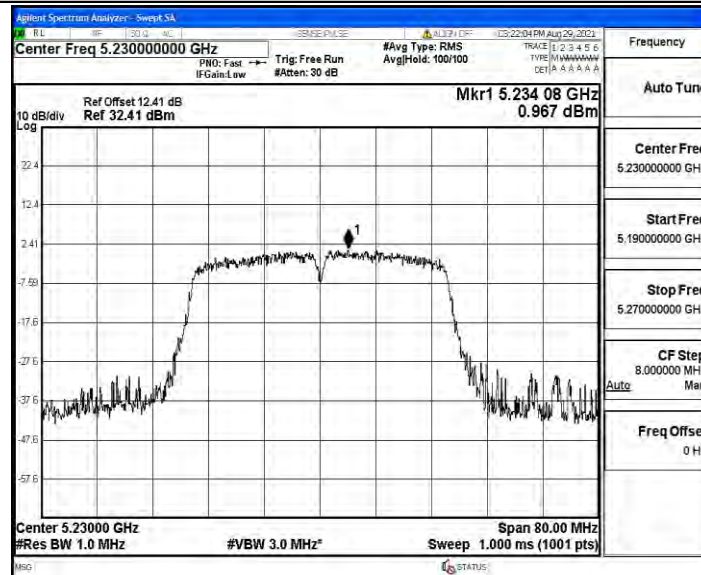
11AC40MIMO_Ant2_5190



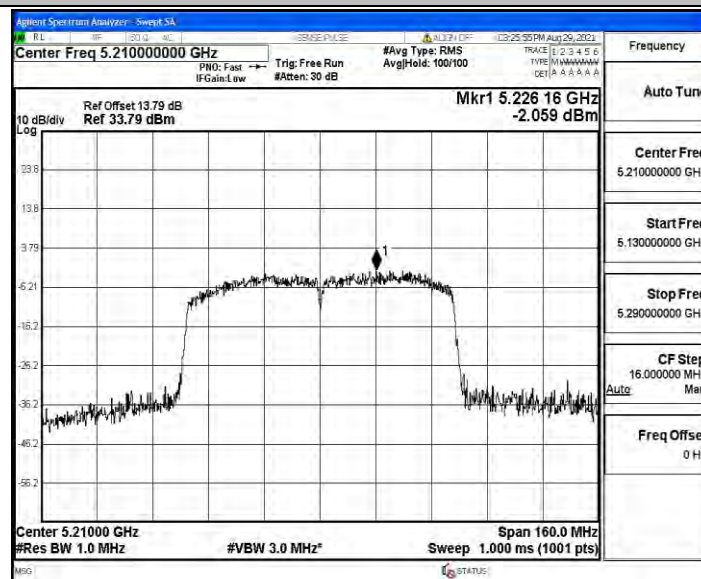
11AC40MIMO_Ant1_5230



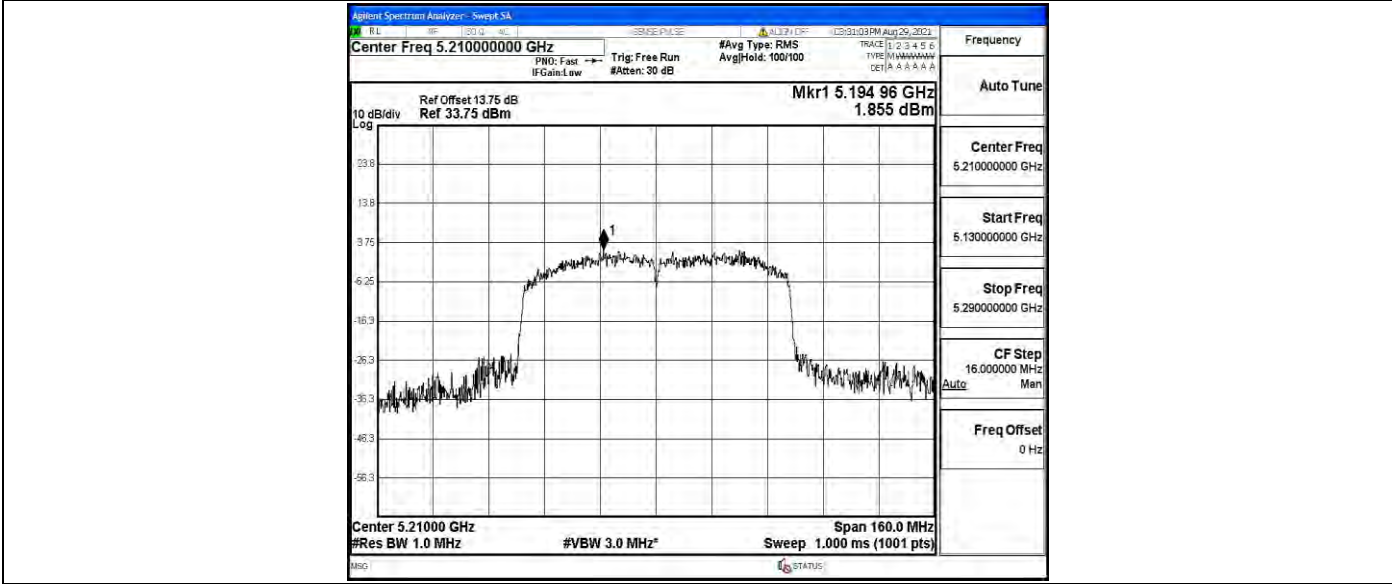
11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



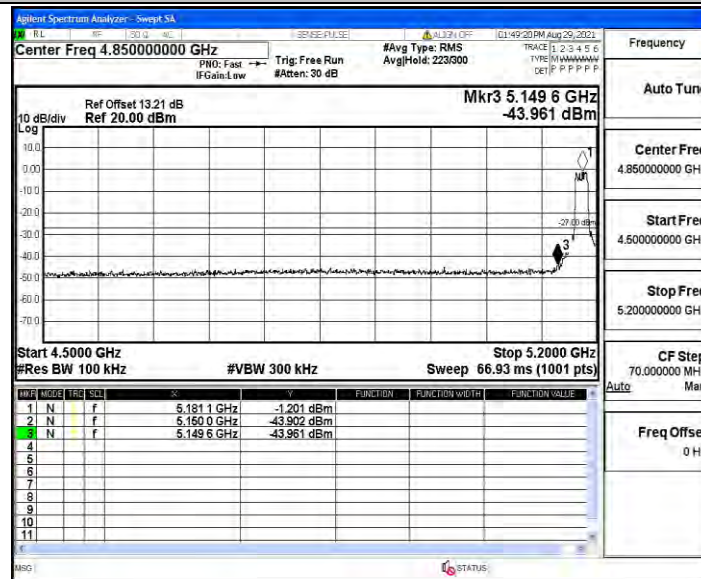
Appendix D: Band edge measurements

Test Result

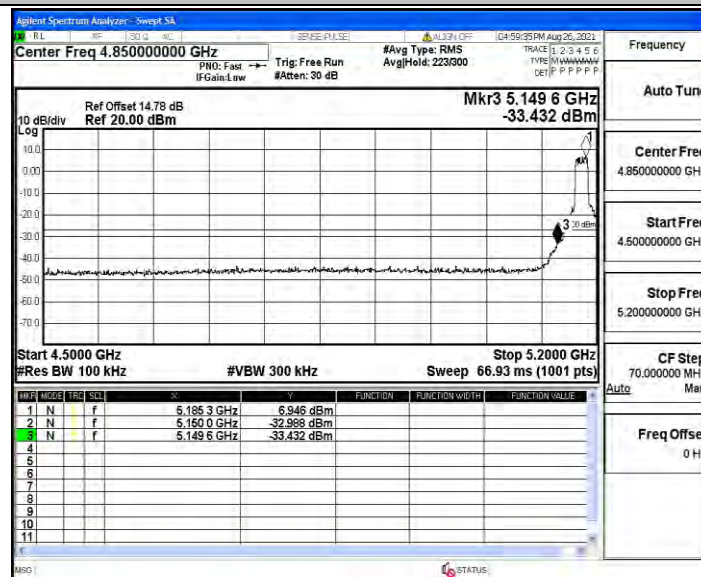
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-43.96	≤ -27	PASS
	Ant2	Low	5180	-34.43	≤ -27	PASS
	Ant1	High	5240	-44.15	≤ -27	PASS
	Ant2	High	5240	-42.59	≤ -27	PASS
11N20MIMO	Ant1	Low	5180	-45.21	≤ -27	PASS
	Ant2	Low	5180	-38.12	≤ -27	PASS
	Ant1	High	5240	-44.78	≤ -27	PASS
	Ant2	High	5240	-42.68	≤ -27	PASS
11N40MIMO	Ant1	Low	5190	-43.06	≤ -27	PASS
	Ant2	Low	5190	-43.27	≤ -27	PASS
	Ant1	High	5230	-45.23	≤ -27	PASS
	Ant2	High	5230	-43.39	≤ -27	PASS
11AC20MIMO	Ant1	Low	5180	-45.22	≤ -27	PASS
	Ant2	Low	5180	-42.89	≤ -27	PASS
	Ant1	High	5240	-44.02	≤ -27	PASS
	Ant2	High	5240	-43.3	≤ -27	PASS
11AC40MIMO	Ant1	Low	5190	-43.15	≤ -27	PASS
	Ant2	Low	5190	-41.88	≤ -27	PASS
	Ant1	High	5230	-45.32	≤ -27	PASS
	Ant2	High	5230	-43.37	≤ -27	PASS
11AC80MIMO	Ant1	Low	5210	-43.45	≤ -27	PASS
	Ant2	Low	5210	-37.46	≤ -27	PASS
	Ant1	High	5210	-44.77	≤ -27	PASS
	Ant2	High	5210	-41.84	≤ -27	PASS

Test Graphs

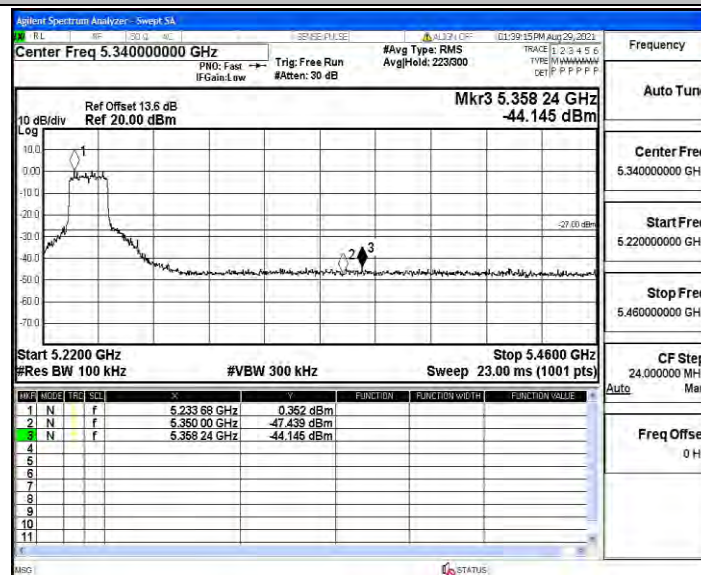
11A_Ant1_Low_5180



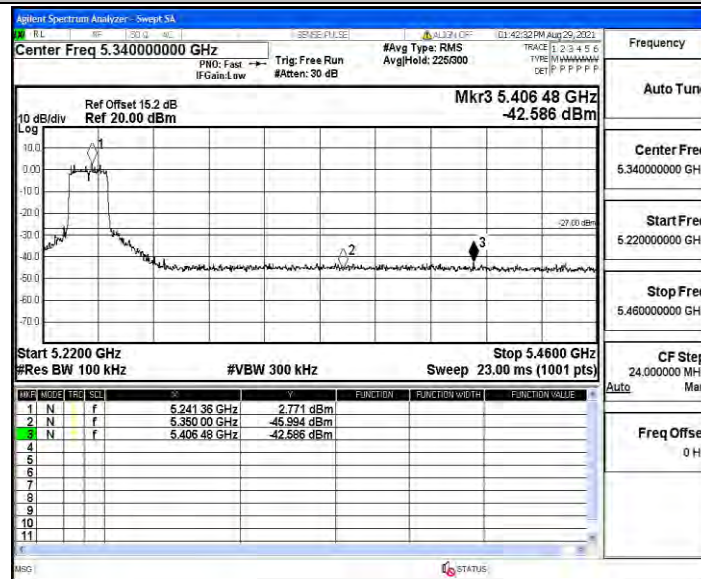
11A_Ant2_Low_5180



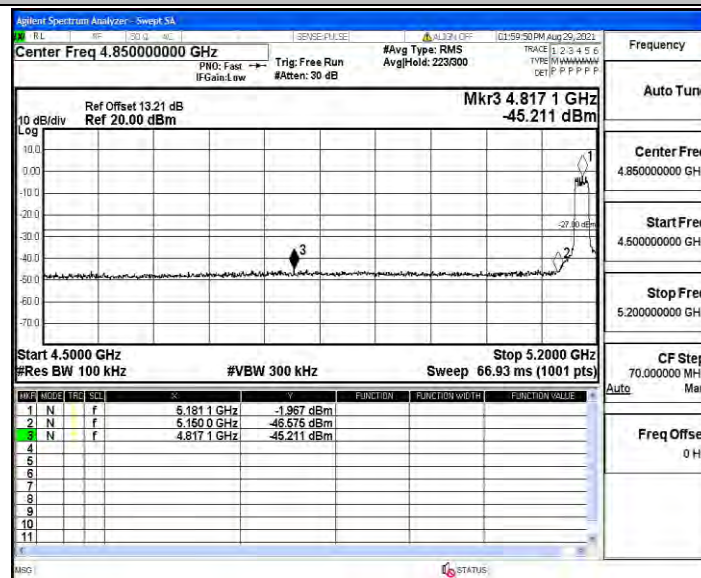
11A_Ant1_High_5240



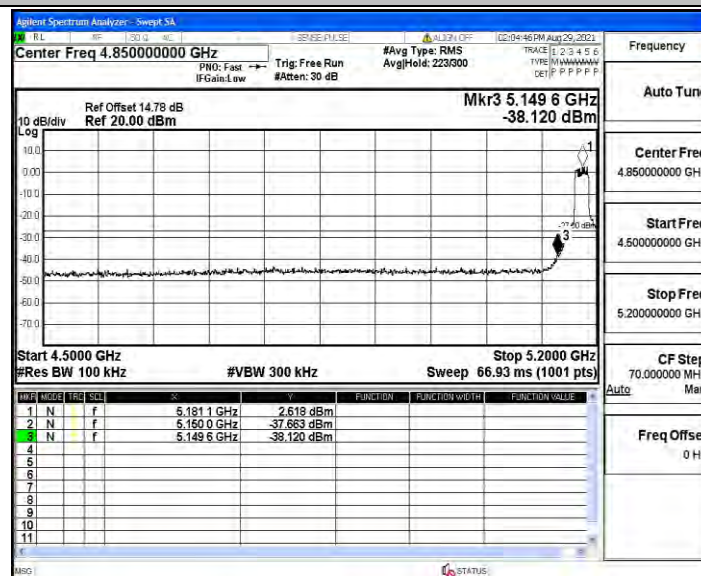
11A_Ant2_High_5240



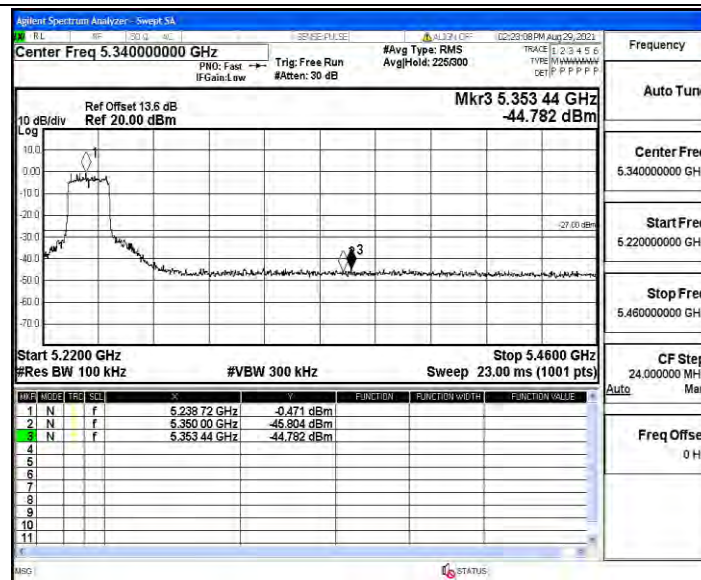
11N20MIMO_Ant1_Low_5180



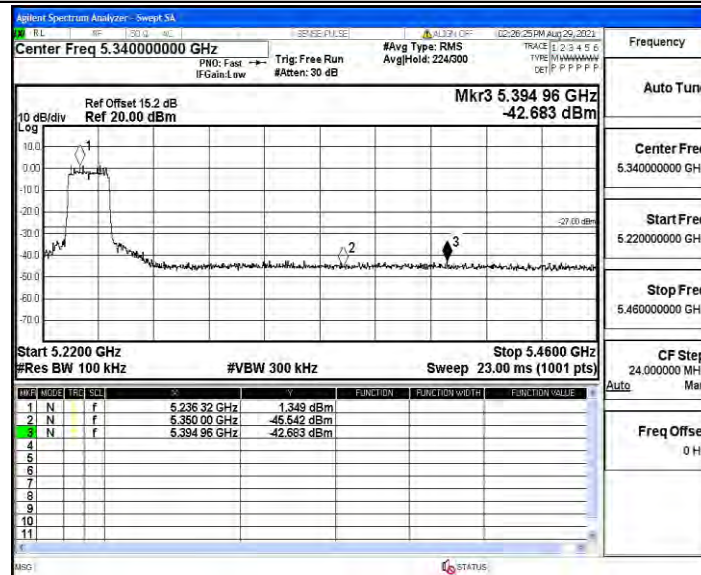
11N20MIMO_Ant2_Low_5180



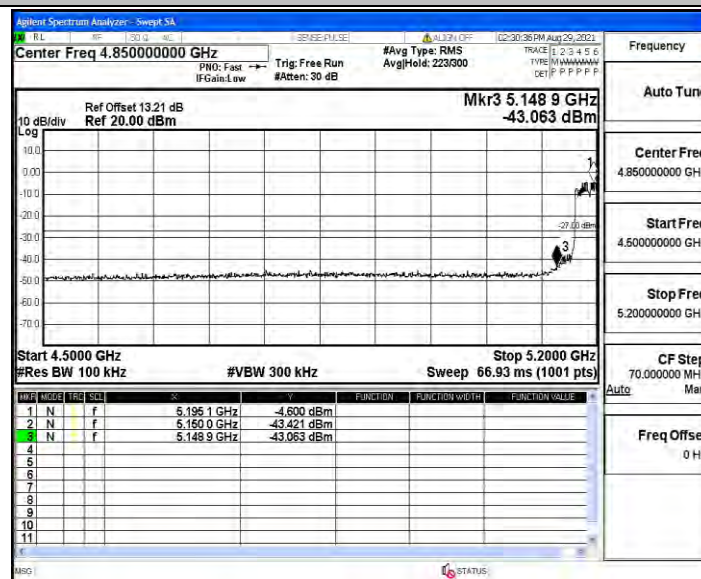
11N20MIMO_Ant1_High_5240



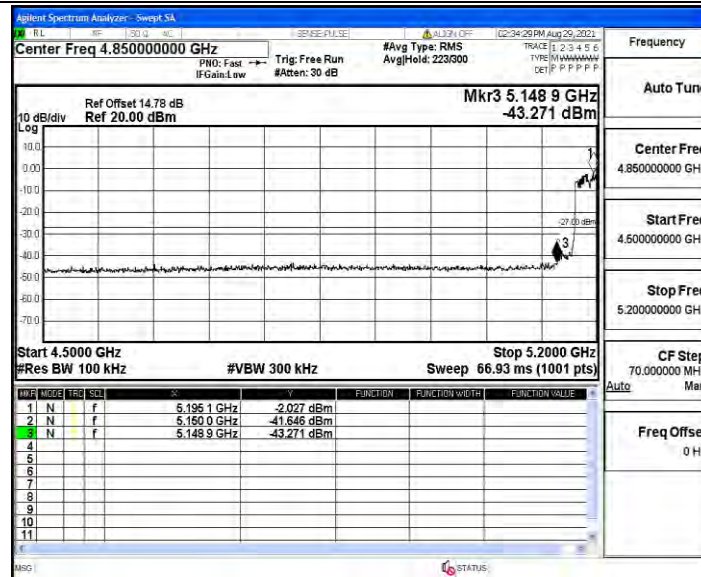
11N20MIMO_Ant2_High_5240



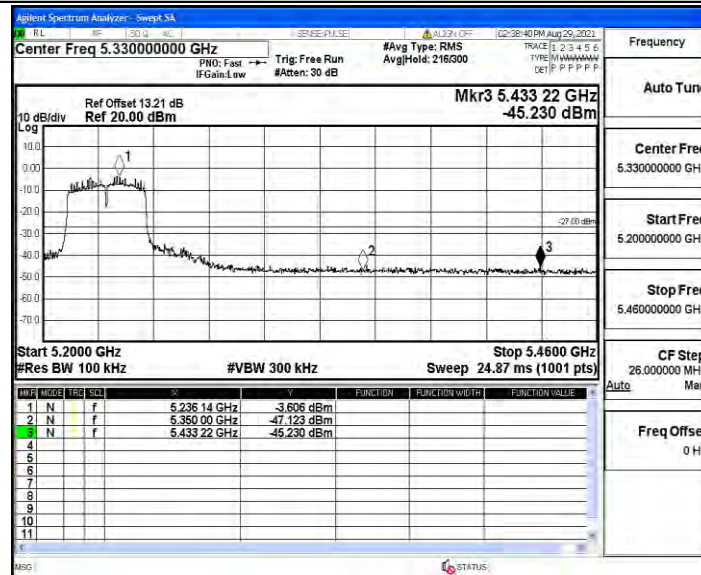
11N40MIMO_Ant1_Low_5190



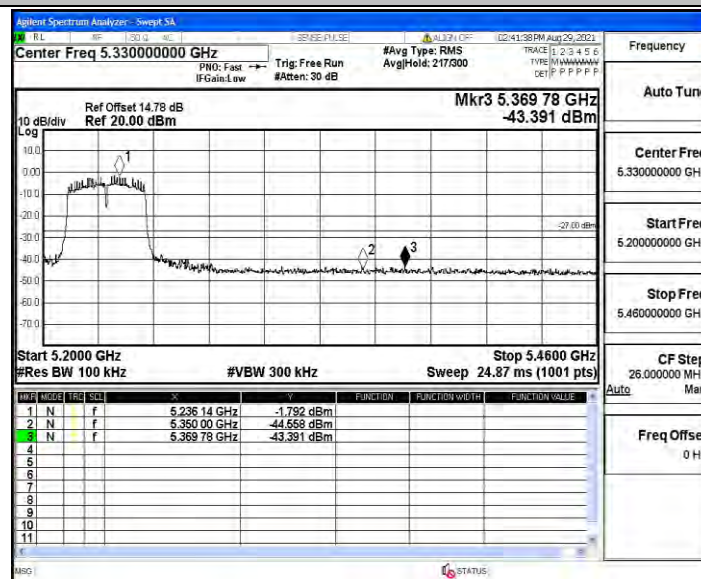
11N40MIMO_Ant2_Low_5190



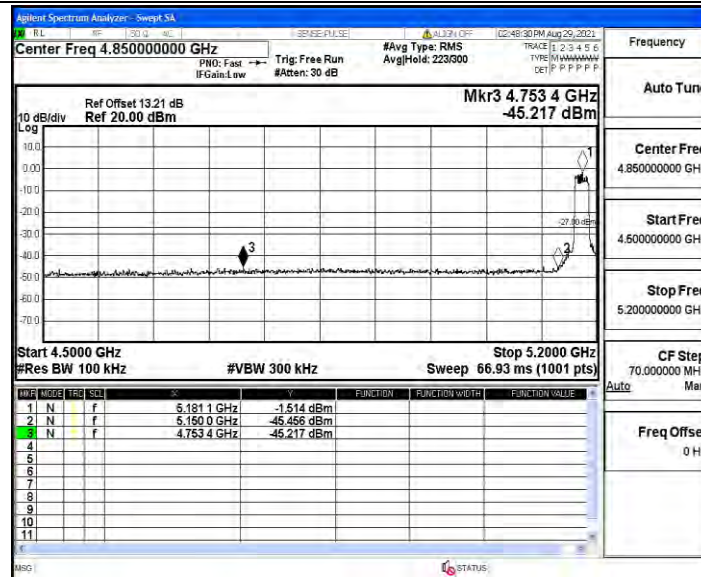
11N40MIMO_Ant1_High_5230



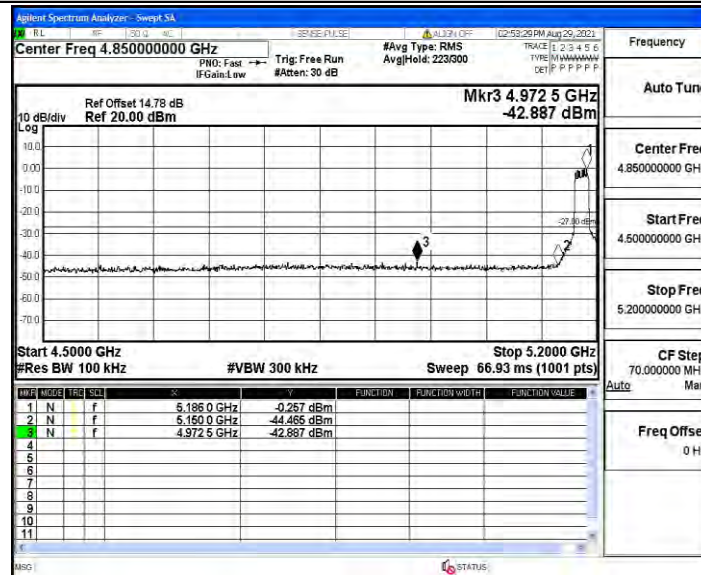
11N40MIMO_Ant2_High_5230



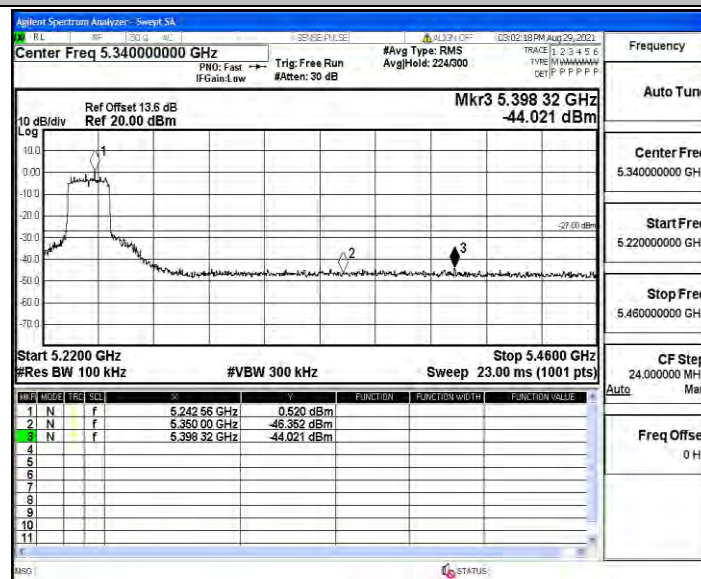
11AC20MIMO_Ant1_Low_5180



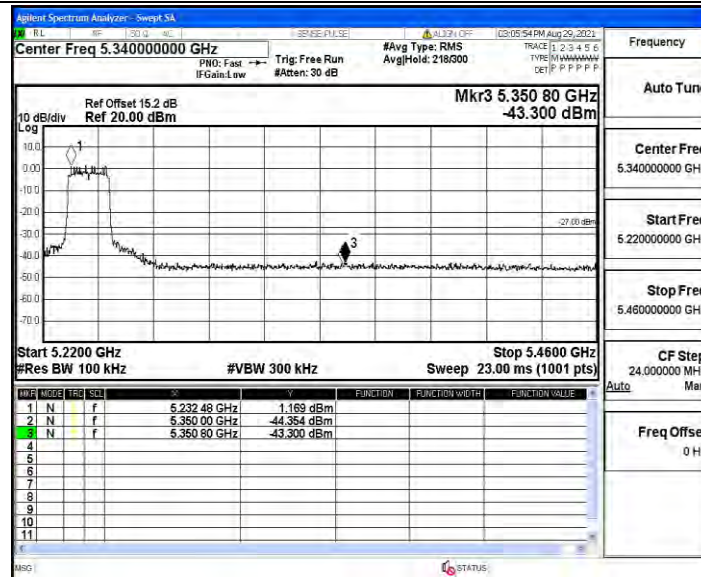
11AC20MIMO_Ant2_Low_5180



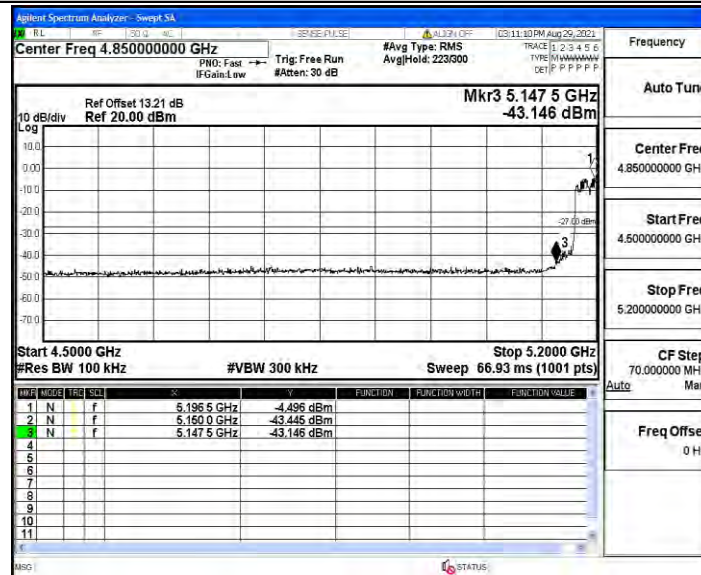
11AC20MIMO_Ant1_High_5240



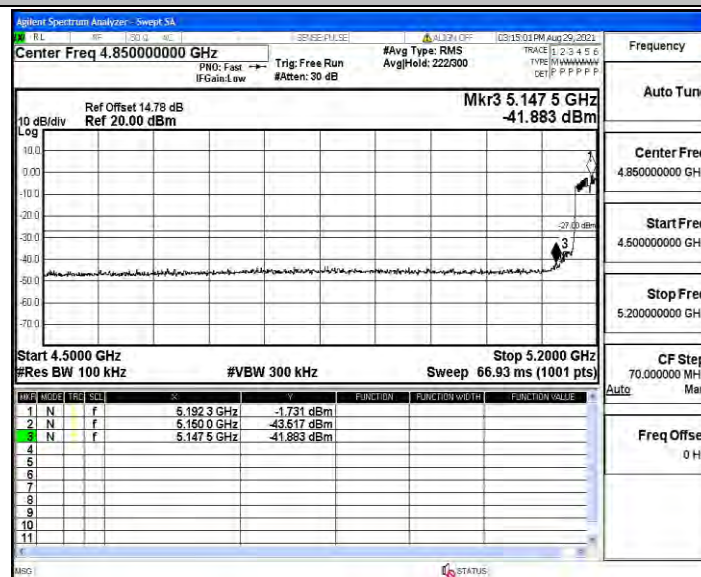
11AC20MIMO_Ant2_High_5240



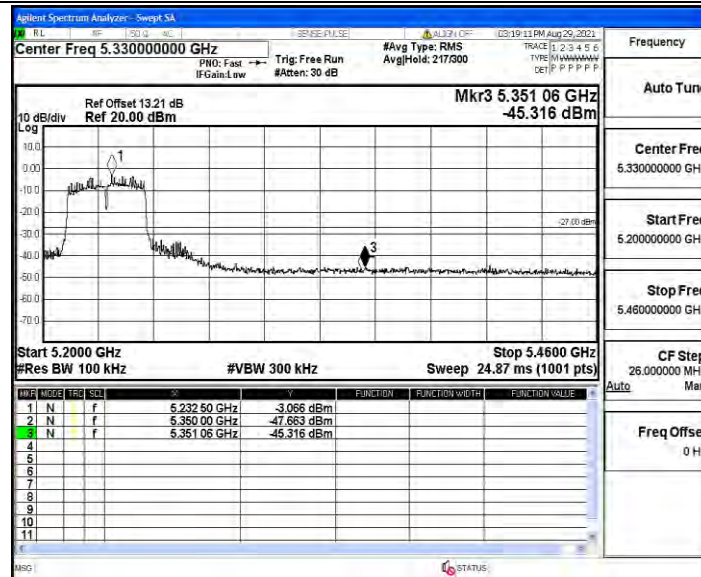
11AC40MIMO_Ant1_Low_5190



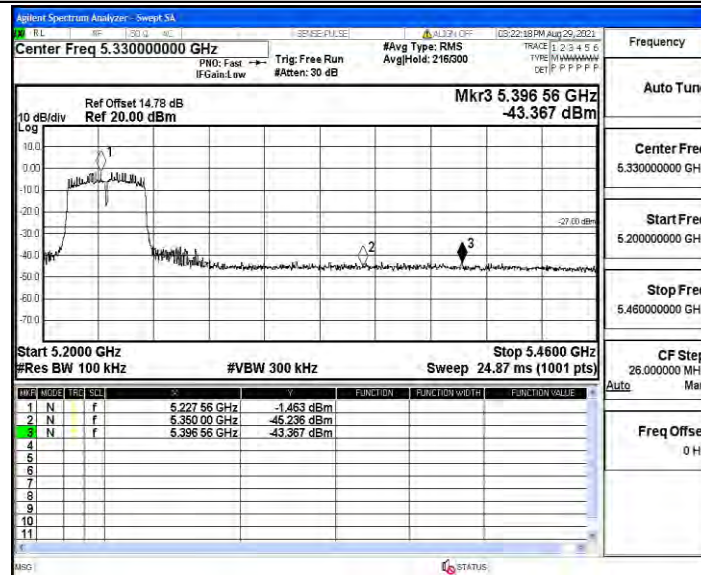
11AC40MIMO_Ant2_Low_5190



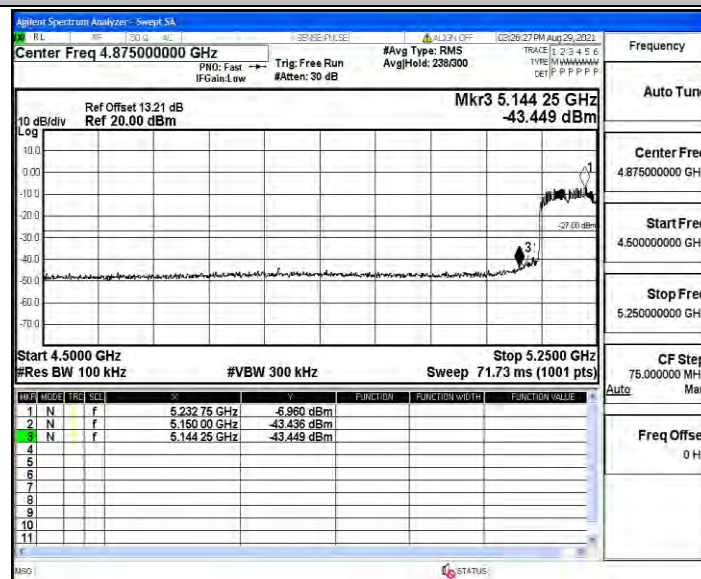
11AC40MIMO_Ant1_High_5230



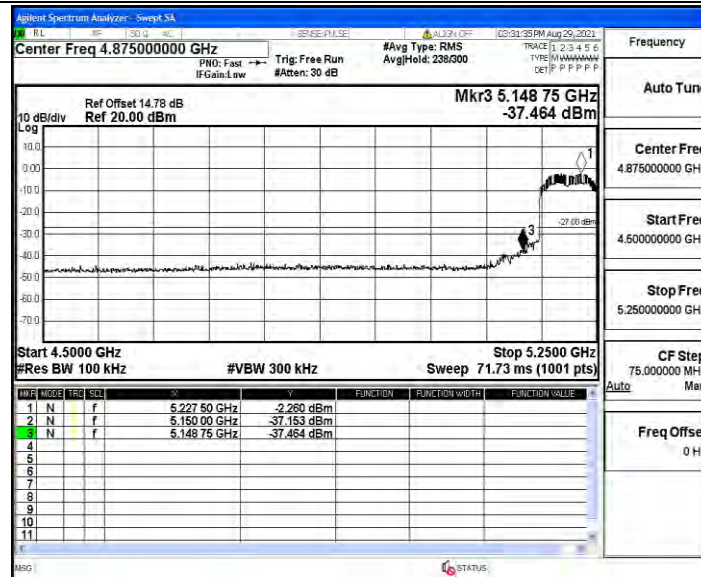
11AC40MIMO_Ant2_High_5230



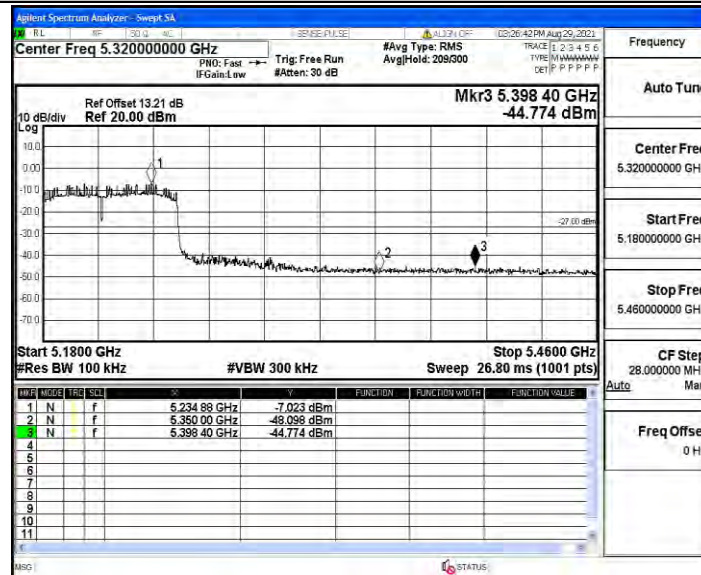
11AC80MIMO_Ant1_Low_5210



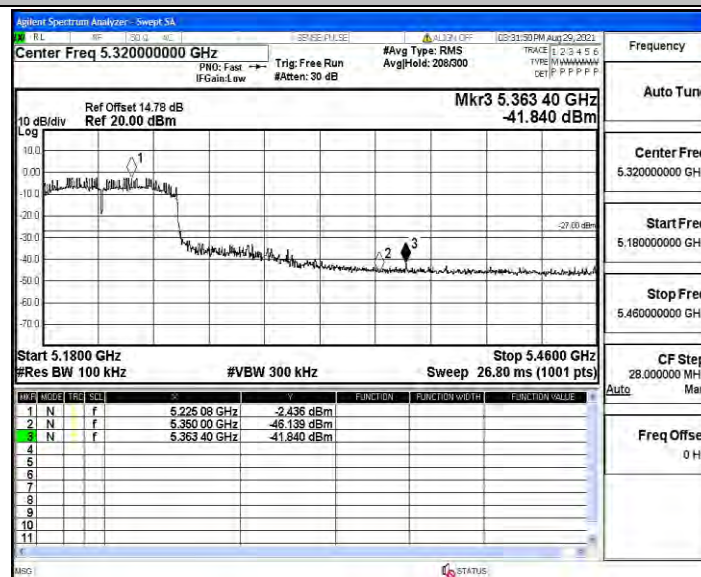
11AC80MIMO_Ant2_Low_5210



11AC80MIMO_Ant1_High_5210



11AC80MIMO_Ant2_High_5210



Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5179.933794	5150 – 5250	PASS
5180	20	108	5180.034764	5150 – 5250	PASS
5180	50	120	5179.922639	5150 – 5250	PASS
5180	40	120	5179.991158	5150 – 5250	PASS
5180	30	120	5180.056666	5150 – 5250	PASS
5180	20	120	5179.960097	5150 – 5250	PASS
5180	10	120	5179.975804	5150 – 5250	PASS
5180	0	120	5180.086493	5150 – 5250	PASS
5180	-10	120	5179.911562	5150 – 5250	PASS
5180	-20	120	5180.073654	5150 – 5250	PASS
5180	-30	120	5180.063178	5150 – 5250	PASS

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5180	20	132	5179.919919	5150 – 5250	PASS
5180	20	108	5180.014170	5150 – 5250	PASS
5180	50	120	5180.058306	5150 – 5250	PASS
5180	40	120	5180.012314	5150 – 5250	PASS
5180	30	120	5180.057829	5150 – 5250	PASS
5180	20	120	5180.090787	5150 – 5250	PASS
5180	10	120	5179.994867	5150 – 5250	PASS
5180	0	120	5180.098847	5150 – 5250	PASS
5180	-10	120	5179.979184	5150 – 5250	PASS
5180	-20	120	5180.027338	5150 – 5250	PASS
5180	-30	120	5179.949819	5150 – 5250	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.060641	5150 – 5250	PASS
5200	20	108	5200.035137	5150 – 5250	PASS
5200	50	120	5199.972633	5150 – 5250	PASS
5200	40	120	5199.911319	5150 – 5250	PASS
5200	30	120	5199.918513	5150 – 5250	PASS
5200	20	120	5199.978917	5150 – 5250	PASS
5200	10	120	5200.015262	5150 – 5250	PASS
5200	0	120	5199.963742	5150 – 5250	PASS
5200	-10	120	5200.071142	5150 – 5250	PASS
5200	-20	120	5200.082231	5150 – 5250	PASS
5200	-30	120	5200.099860	5150 – 5250	PASS

Ant2

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5200	20	132	5200.074194	5150 – 5250	PASS
5200	20	108	5199.987639	5150 – 5250	PASS
5200	50	120	5199.982097	5150 – 5250	PASS
5200	40	120	5200.077258	5150 – 5250	PASS
5200	30	120	5199.964677	5150 – 5250	PASS
5200	20	120	5199.943913	5150 – 5250	PASS
5200	10	120	5200.028468	5150 – 5250	PASS
5200	0	120	5199.912737	5150 – 5250	PASS
5200	-10	120	5199.995991	5150 – 5250	PASS
5200	-20	120	5199.993327	5150 – 5250	PASS
5200	-30	120	5200.046036	5150 – 5250	PASS

Ant1

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5240.022732	5150 – 5250	PASS
5240	20	108	5239.964156	5150 – 5250	PASS
5240	50	120	5240.082333	5150 – 5250	PASS
5240	40	120	5239.946071	5150 – 5250	PASS
5240	30	120	5240.092820	5150 – 5250	PASS
5240	20	120	5240.014486	5150 – 5250	PASS
5240	10	120	5240.000201	5150 – 5250	PASS
5240	0	120	5239.977889	5150 – 5250	PASS
5240	-10	120	5240.007423	5150 – 5250	PASS
5240	-20	120	5239.955567	5150 – 5250	PASS
5240	-30	120	5240.064609	5150 – 5250	PASS

Ant2

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5240	20	132	5239.906064	5150 – 5250	PASS
5240	20	108	5239.991042	5150 – 5250	PASS
5240	50	120	5239.989588	5150 – 5250	PASS
5240	40	120	5240.039084	5150 – 5250	PASS
5240	30	120	5240.029019	5150 – 5250	PASS
5240	20	120	5240.016392	5150 – 5250	PASS
5240	10	120	5240.042917	5150 – 5250	PASS
5240	0	120	5239.924005	5150 – 5250	PASS
5240	-10	120	5239.942962	5150 – 5250	PASS
5240	-20	120	5240.034710	5150 – 5250	PASS
5240	-30	120	5240.006729	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.056444	5150 – 5250	PASS
5190	20	108	5189.999343	5150 – 5250	PASS
5190	50	120	5190.076785	5150 – 5250	PASS
5190	40	120	5190.016439	5150 – 5250	PASS
5190	30	120	5190.062834	5150 – 5250	PASS
5190	20	120	5189.994280	5150 – 5250	PASS
5190	10	120	5189.974546	5150 – 5250	PASS
5190	0	120	5189.997000	5150 – 5250	PASS
5190	-10	120	5190.074152	5150 – 5250	PASS
5190	-20	120	5190.062185	5150 – 5250	PASS
5190	-30	120	5189.998736	5150 – 5250	PASS

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5190	20	132	5190.003770	5150 – 5250	PASS
5190	20	108	5189.967093	5150 – 5250	PASS
5190	50	120	5190.044476	5150 – 5250	PASS
5190	40	120	5190.012475	5150 – 5250	PASS
5190	30	120	5189.993567	5150 – 5250	PASS
5190	20	120	5189.962839	5150 – 5250	PASS
5190	10	120	5189.913915	5150 – 5250	PASS
5190	0	120	5189.989688	5150 – 5250	PASS
5190	-10	120	5189.910972	5150 – 5250	PASS
5190	-20	120	5190.019617	5150 – 5250	PASS
5190	-30	120	5189.969443	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5230.064289	5150 – 5250	PASS
5230	20	108	5230.065072	5150 – 5250	PASS
5230	50	120	5230.023506	5150 – 5250	PASS
5230	40	120	5229.993323	5150 – 5250	PASS
5230	30	120	5230.069278	5150 – 5250	PASS
5230	20	120	5229.915695	5150 – 5250	PASS
5230	10	120	5229.962425	5150 – 5250	PASS
5230	0	120	5230.091562	5150 – 5250	PASS
5230	-10	120	5230.026707	5150 – 5250	PASS
5230	-20	120	5230.077964	5150 – 5250	PASS
5230	-30	120	5230.035131	5150 – 5250	PASS

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5230	20	132	5229.962207	5150 – 5250	PASS
5230	20	108	5230.089597	5150 – 5250	PASS
5230	50	120	5229.902778	5150 – 5250	PASS
5230	40	120	5229.982438	5150 – 5250	PASS
5230	30	120	5230.085103	5150 – 5250	PASS
5230	20	120	5230.031299	5150 – 5250	PASS
5230	10	120	5229.987328	5150 – 5250	PASS
5230	0	120	5230.092539	5150 – 5250	PASS
5230	-10	120	5229.954955	5150 – 5250	PASS
5230	-20	120	5229.964745	5150 – 5250	PASS
5230	-30	120	5229.997467	5150 – 5250	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5210	20	132	5209.934038	5150 – 5250	PASS
5210	20	108	5210.016913	5150 – 5250	PASS
5210	50	120	5209.981122	5150 – 5250	PASS
5210	40	120	5209.951128	5150 – 5250	PASS
5210	30	120	5209.929880	5150 – 5250	PASS
5210	20	120	5210.096397	5150 – 5250	PASS
5210	10	120	5209.924584	5150 – 5250	PASS
5210	0	120	5209.971515	5150 – 5250	PASS
5210	-10	120	5209.945117	5150 – 5250	PASS
5210	-20	120	5209.954658	5150 – 5250	PASS
5210	-30	120	5209.968782	5150 – 5250	PASS

Ant2

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5210	20	132	5210.006902	5150 – 5250	PASS
5210	20	108	5210.073495	5150 – 5250	PASS
5210	50	120	5210.061564	5150 – 5250	PASS
5210	40	120	5210.046200	5150 – 5250	PASS
5210	30	120	5210.034533	5150 – 5250	PASS
5210	20	120	5210.044082	5150 – 5250	PASS
5210	10	120	5209.956873	5150 – 5250	PASS
5210	0	120	5209.995845	5150 – 5250	PASS
5210	-10	120	5210.013423	5150 – 5250	PASS
5210	-20	120	5209.951866	5150 – 5250	PASS
5210	-30	120	5210.037915	5150 – 5250	PASS

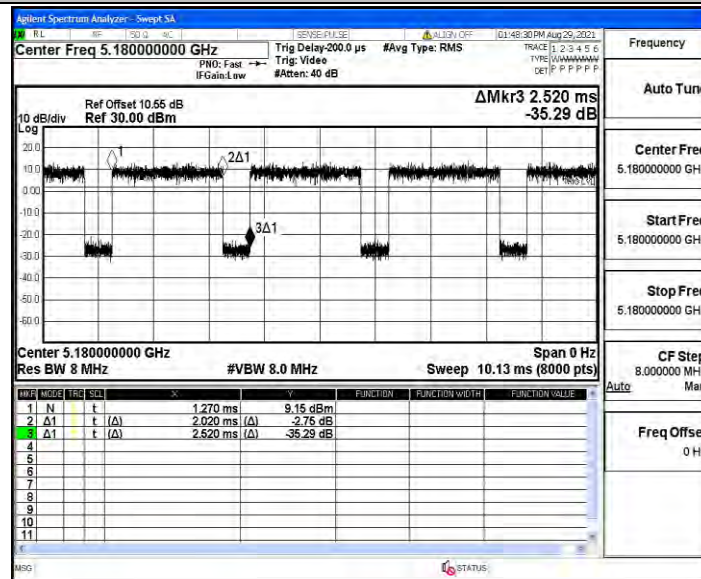
Appendix F: Duty Cycle

Test Result

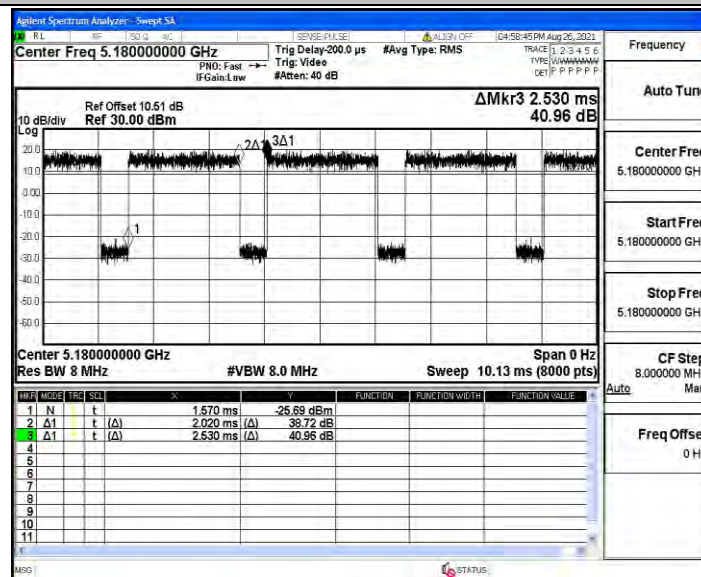
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B[kHz]
11A	Ant1	5180	2.02	2.52	80.16	0.4
	Ant2	5180	2.02	2.53	79.84	0.4
	Ant1	5200	2.03	2.53	80.24	0.4
	Ant2	5200	2.02	2.52	80.16	0.4
	Ant1	5240	2.02	2.52	80.16	0.4
	Ant2	5240	2.02	2.52	80.16	0.4
11N20MIMO	Ant1	5180	1.89	2.39	79.08	0.42
	Ant2	5180	1.89	2.39	79.08	0.42
	Ant1	5200	1.89	2.39	79.08	0.42
	Ant2	5200	1.89	2.39	79.08	0.42
	Ant1	5240	1.89	2.39	79.08	0.42
	Ant2	5240	1.88	2.39	78.66	0.42
11N40MIMO	Ant1	5190	0.92	1.43	64.34	0.7
	Ant2	5190	0.92	1.43	64.34	0.7
	Ant1	5230	0.93	1.43	65.03	0.7
	Ant2	5230	0.92	1.43	64.34	0.7
11AC20MIMO	Ant1	5180	1.89	2.40	78.75	0.42
	Ant2	5180	1.90	2.40	79.17	0.42
	Ant1	5200	1.89	2.39	79.08	0.42
	Ant2	5200	1.89	2.39	79.08	0.42
	Ant1	5240	1.89	2.39	79.08	0.42
	Ant2	5240	1.90	2.40	79.17	0.42
11AC40MIMO	Ant1	5190	0.93	1.44	64.58	0.69
	Ant2	5190	0.93	1.43	65.03	0.7
	Ant1	5230	0.93	1.43	65.03	0.7
	Ant2	5230	0.93	1.44	64.58	0.69
11AC80MIMO	Ant1	5210	0.45	0.95	47.37	1.05
	Ant2	5210	0.45	0.95	47.37	1.05

Test Graphs

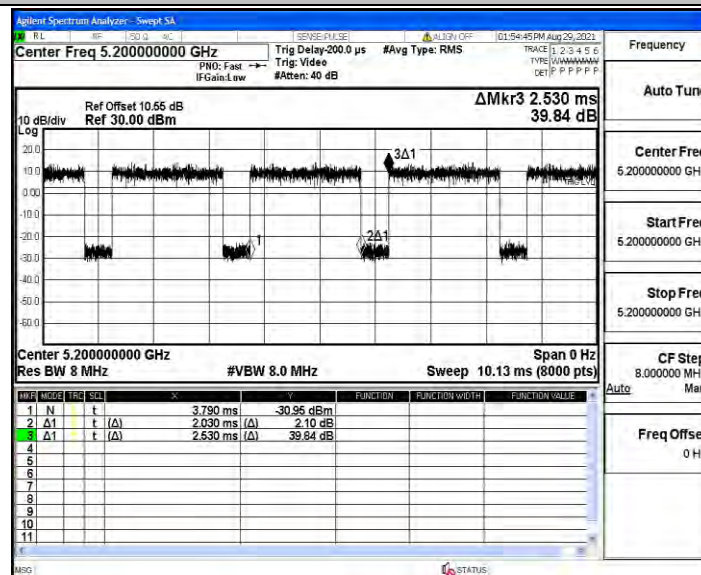
11A_Ant1_5180



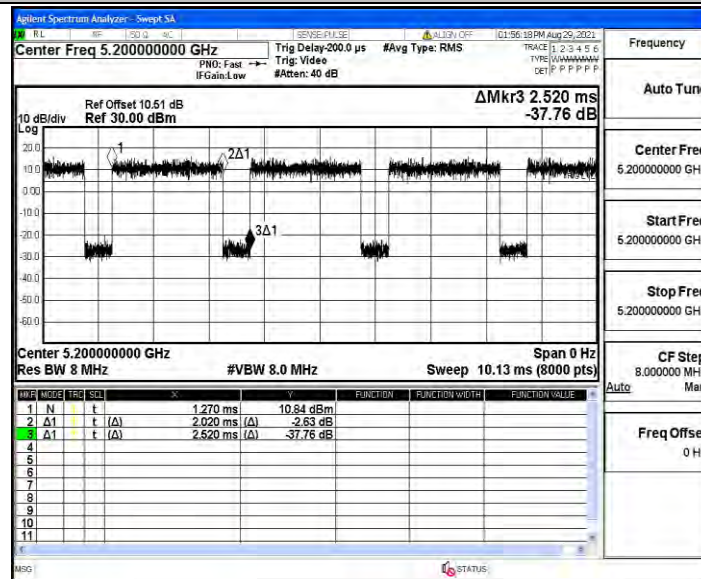
11A_Ant2_5180



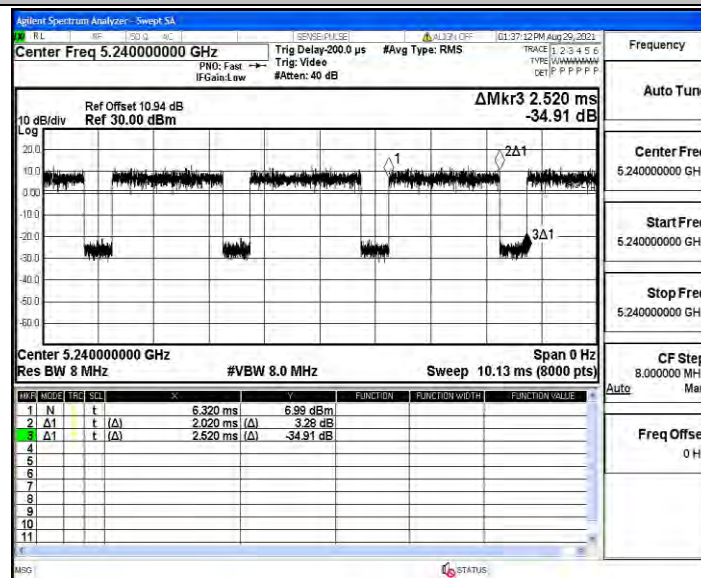
11A_Ant1_5200



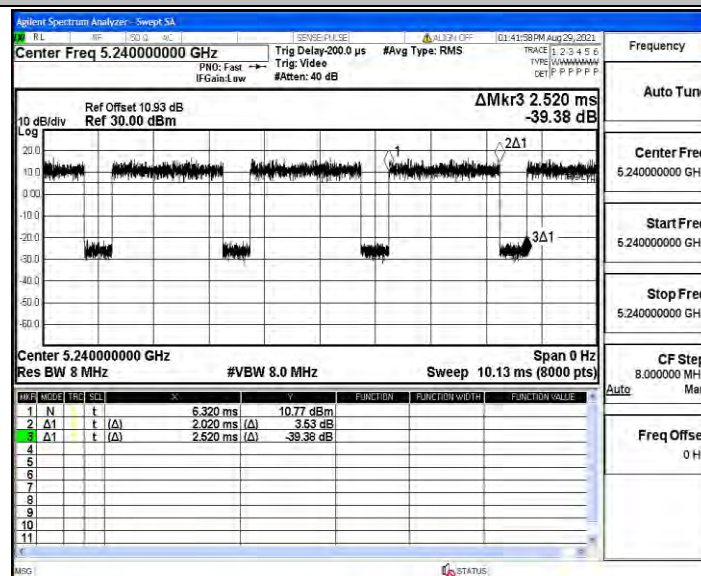
11A_Ant2_5200



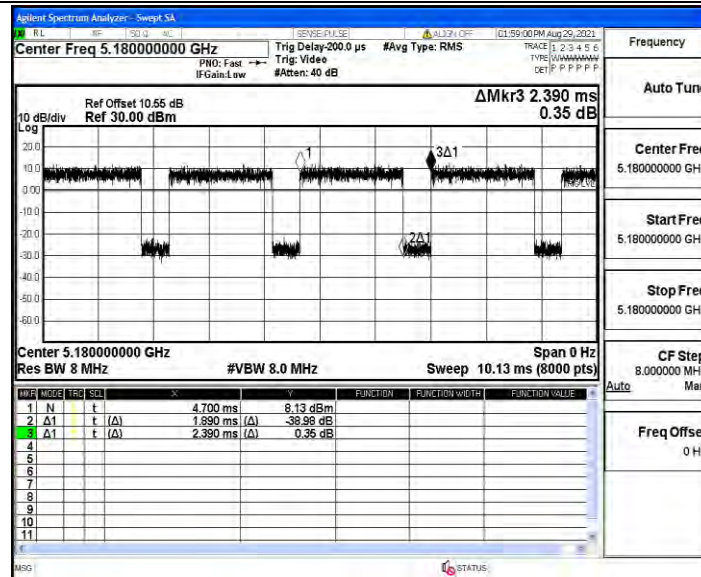
11A_Ant1_5240



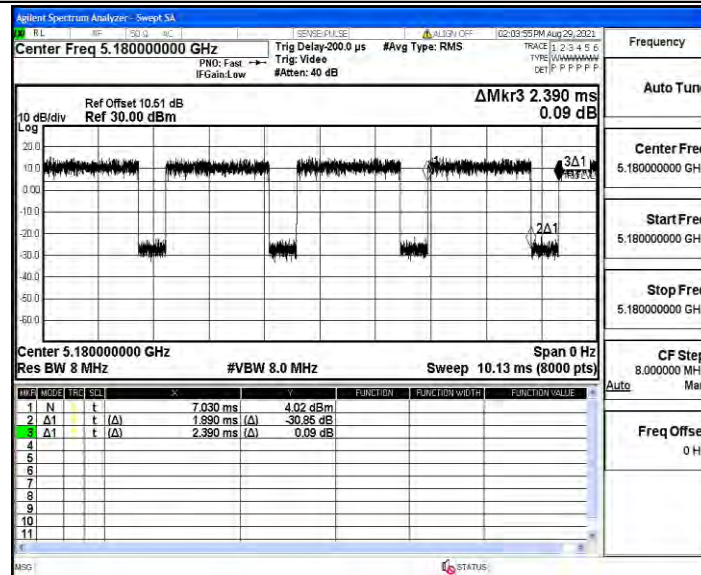
11A_Ant2_5240



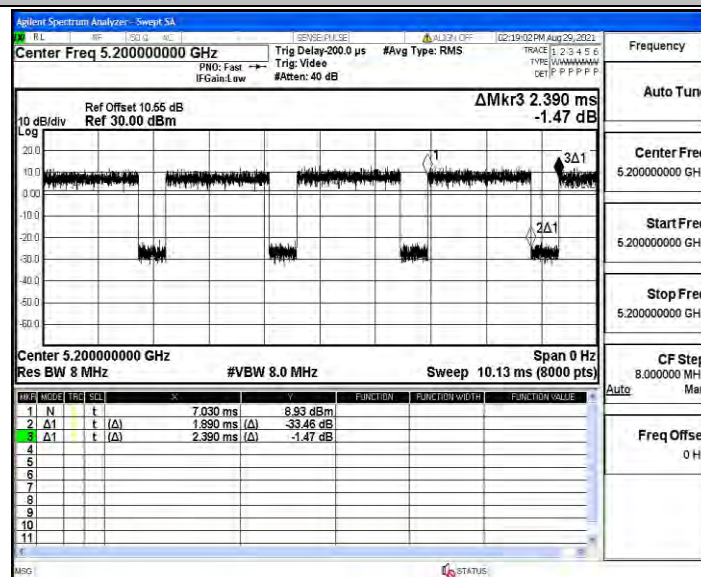
11N20MIMO_Ant1_5180



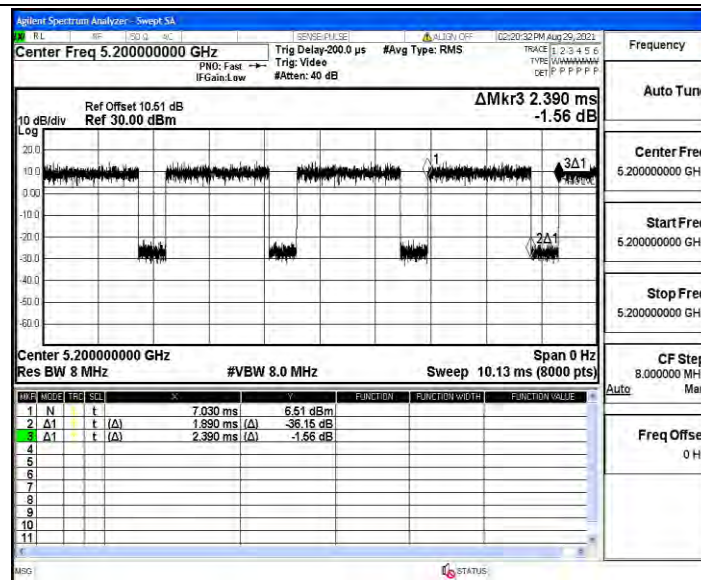
11N20MIMO_Ant2_5180



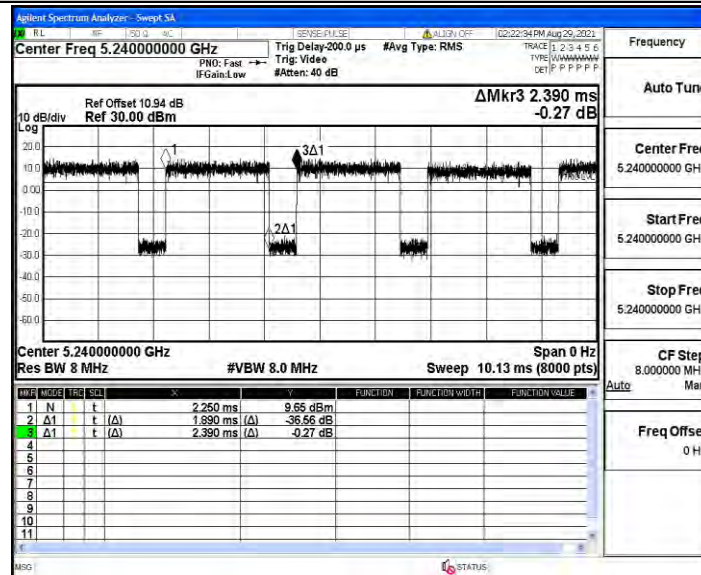
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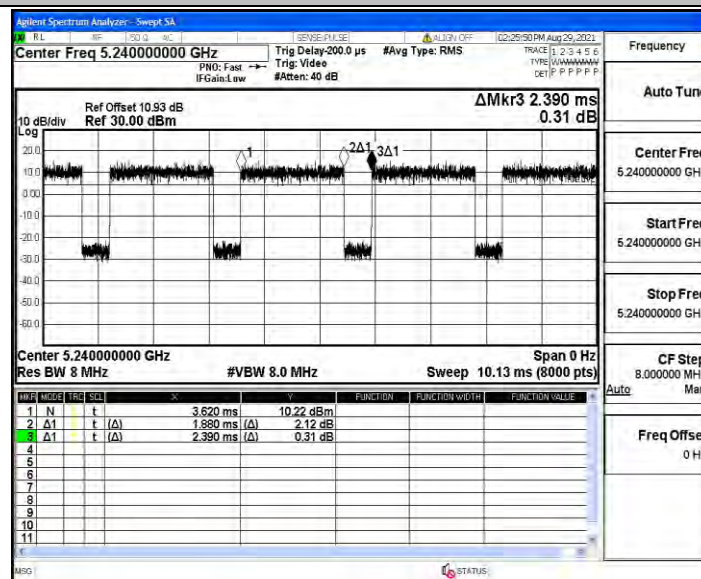
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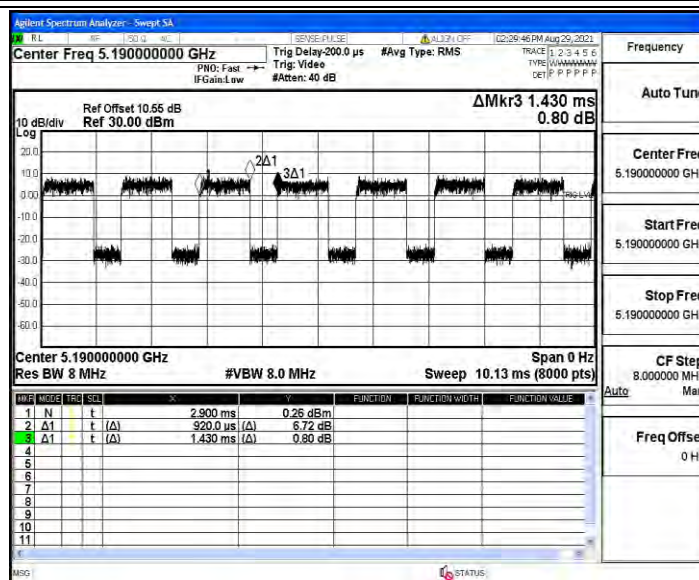
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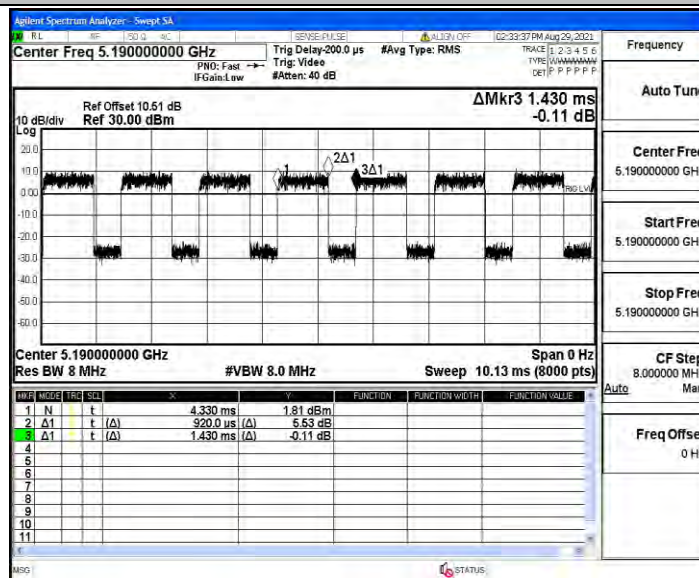
11N20MIMO_Ant2_5240



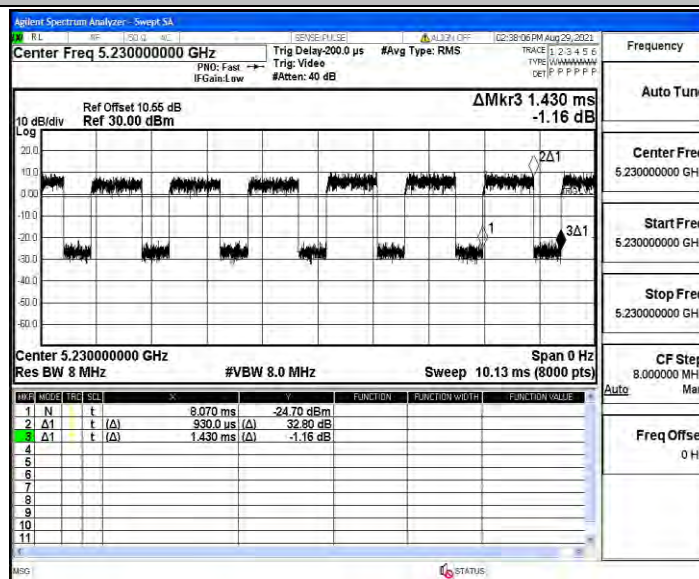
11N40MIMO_Ant1_5190



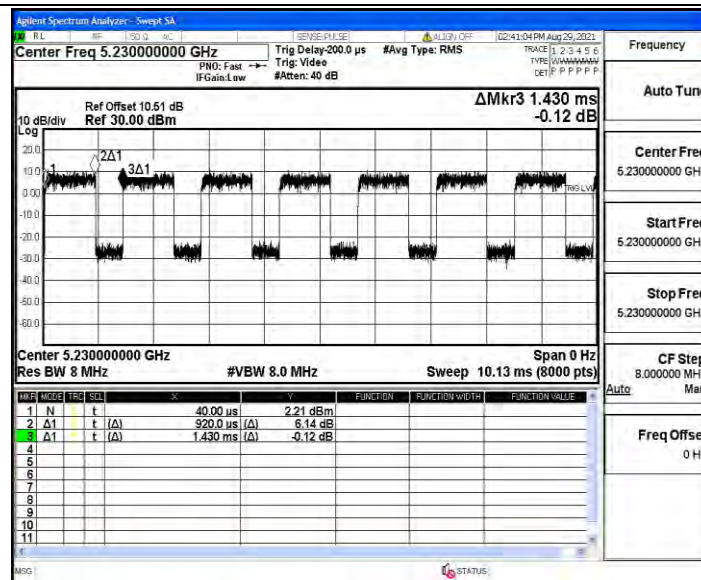
11N40MIMO Ant2 5190



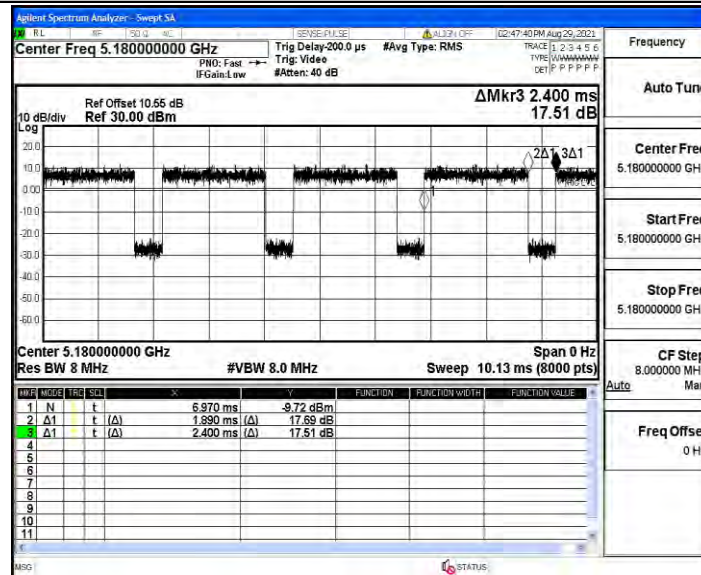
11N40MIMO_Ant1_5230



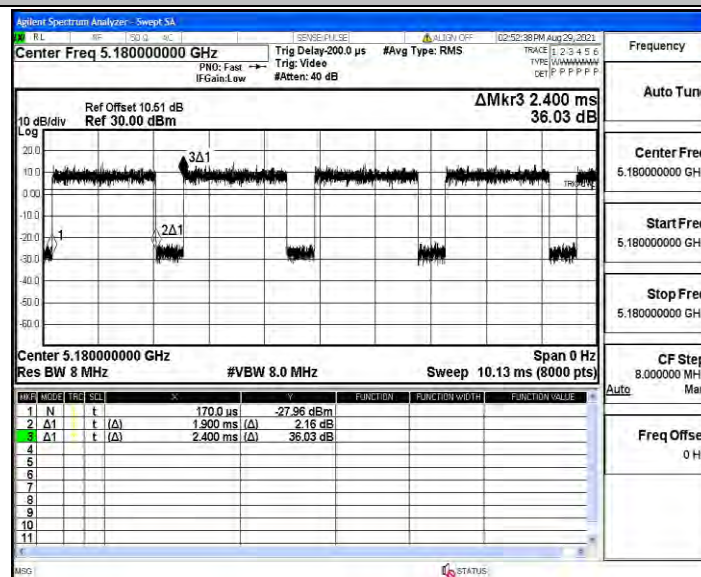
11N40MIMO Ant2 5230



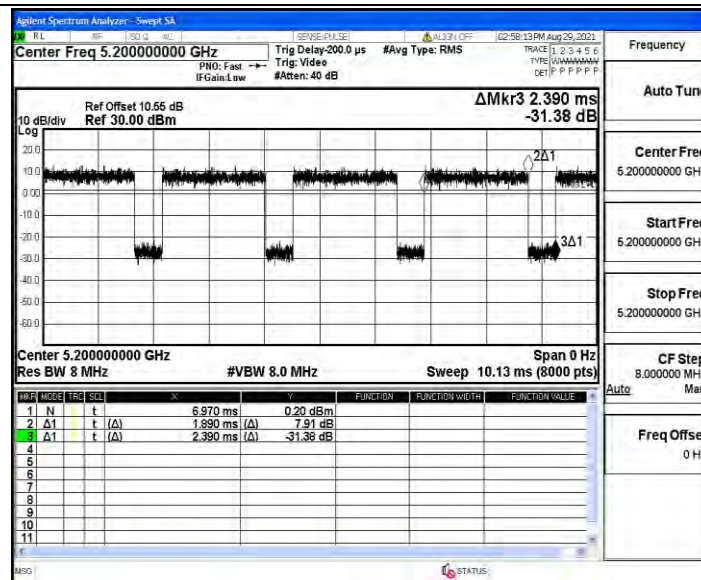
11AC20MIMO_Ant1_5180



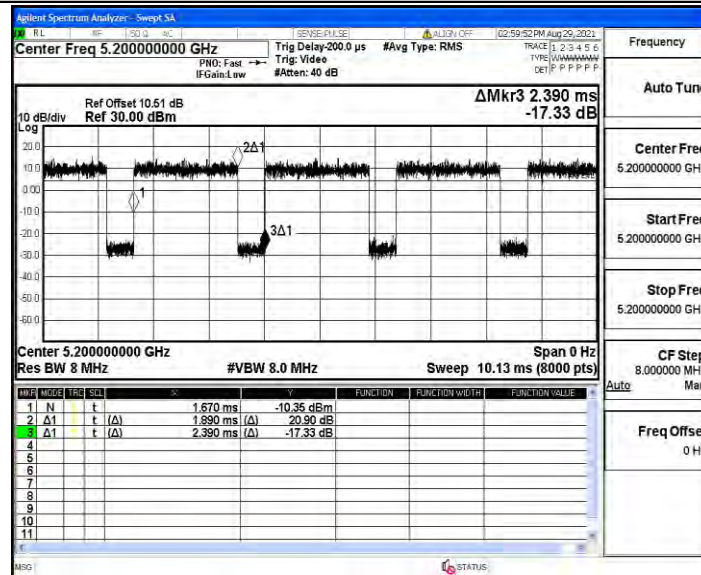
11AC20MIMO_Ant2_5180



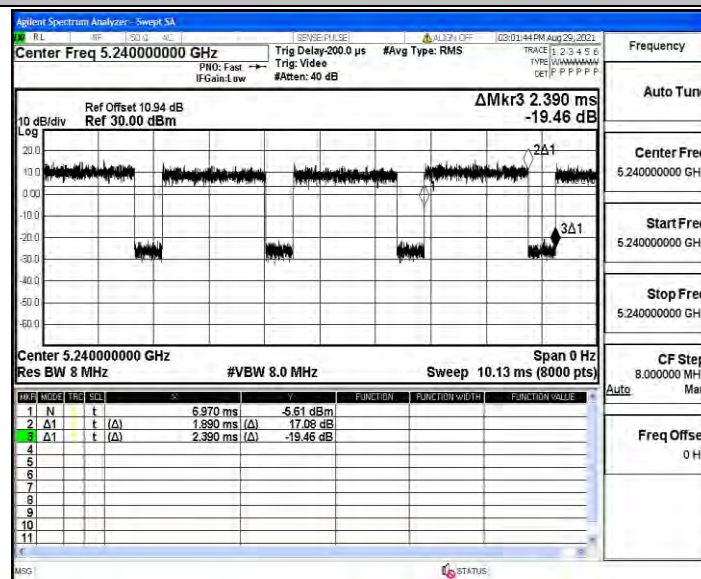
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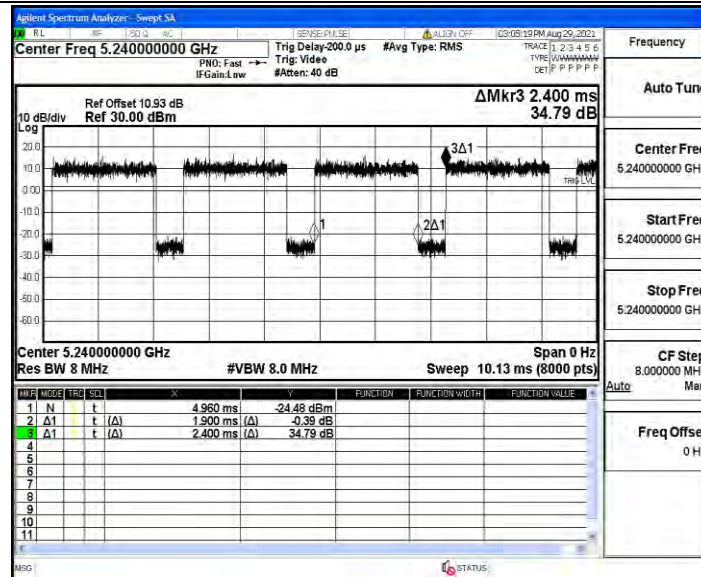
11AC20MIMO_Ant2_5200



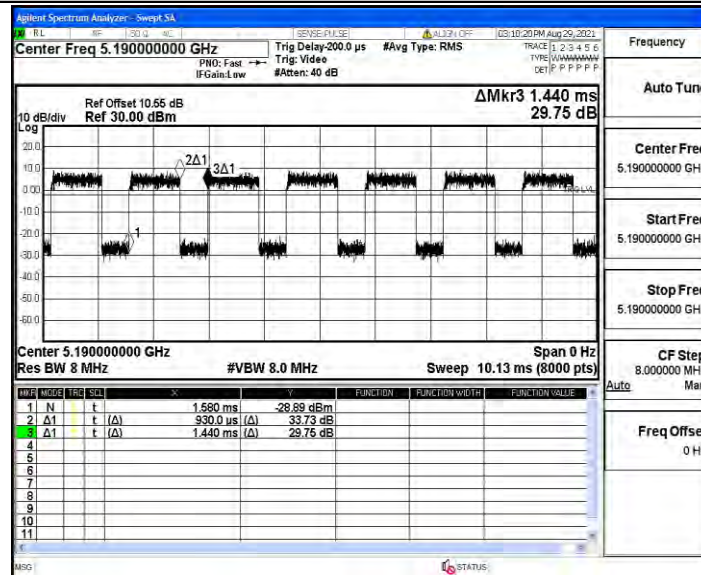
11AC20MIMO_Ant1_5240



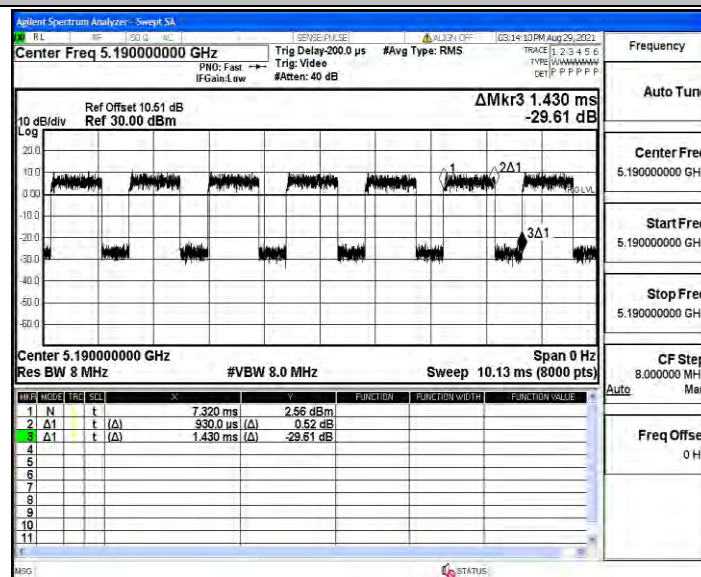
11AC20MIMO_Ant2_5240



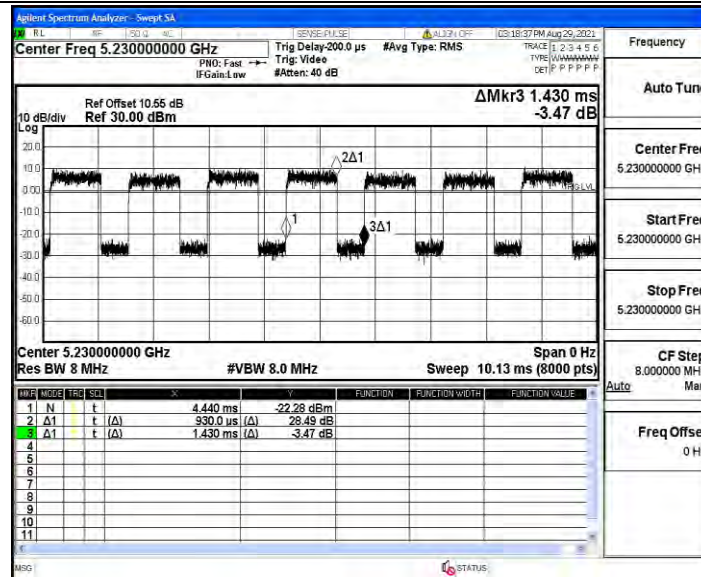
11AC40MIMO_Ant1_5190



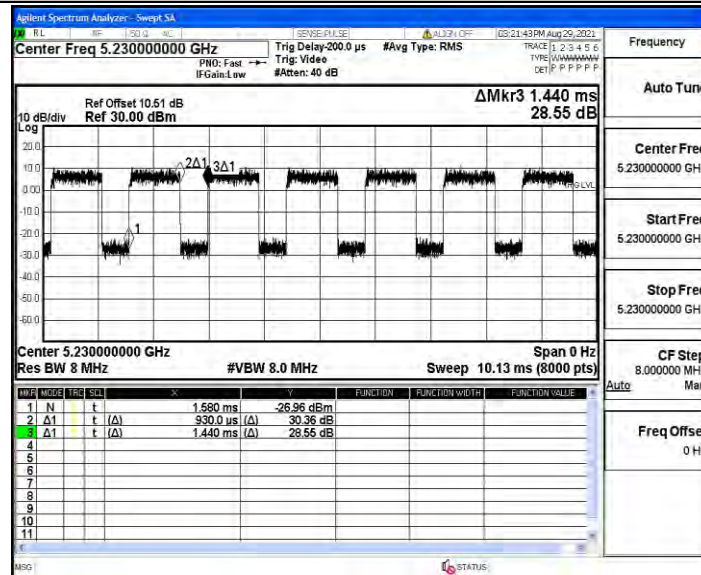
11AC40MIMO_Ant2_5190



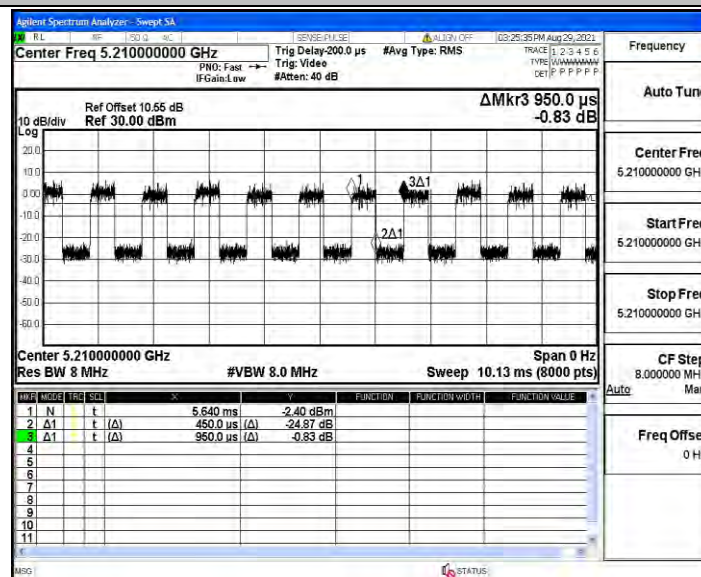
11AC40MIMO_Ant1_5230



11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210

