

RF Test Data for RLAN(5.8G) (Conducted Measurement)**Product Name: 4K Set top box****Trade Mark: eSTREAM4K****Test Model: IPA1114HDW-02****FCC ID: 2AOVU-SN6BBAXS****IC: 25669-IPA1114HDWS****Environmental Conditions**

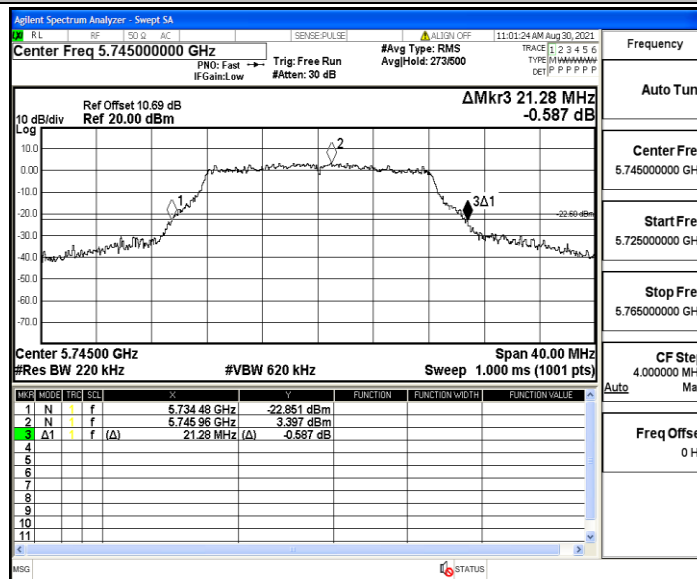
Temperature:	24.3℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A1: Occupied channel bandwidth**Test Result**

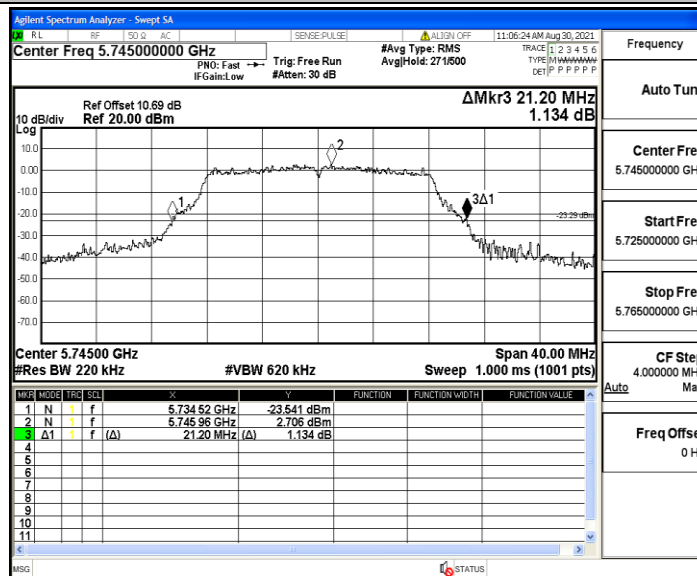
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	21.280	5734.480	5755.760	---	PASS
	Ant2	5745	21.200	5734.520	5755.720	---	PASS
	Ant1	5785	21.280	5774.480	5795.760	---	PASS
	Ant2	5785	21.240	5774.520	5795.760	---	PASS
	Ant1	5825	21.280	5814.560	5835.840	---	PASS
	Ant2	5825	21.280	5814.560	5835.840	---	PASS
11N20MIMO	Ant1	5745	21.480	5734.320	5755.800	---	PASS
	Ant2	5745	21.240	5734.400	5755.640	---	PASS
	Ant1	5785	21.440	5774.480	5795.920	---	PASS
	Ant2	5785	21.400	5774.480	5795.880	---	PASS
	Ant1	5825	21.400	5814.360	5835.760	---	PASS
	Ant2	5825	21.240	5814.520	5835.760	---	PASS
11N40MIMO	Ant1	5755	40.080	5735.240	5775.320	---	PASS
	Ant2	5755	40.160	5735.080	5775.240	---	PASS
	Ant1	5795	39.840	5775.240	5815.080	---	PASS
	Ant2	5795	39.280	5775.480	5814.760	---	PASS
11AC20MIMO	Ant1	5745	21.400	5734.280	5755.680	---	PASS
	Ant2	5745	21.360	5734.360	5755.720	---	PASS
	Ant1	5785	21.320	5774.400	5795.720	---	PASS
	Ant2	5785	21.440	5774.400	5795.840	---	PASS
	Ant1	5825	21.360	5814.320	5835.680	---	PASS
	Ant2	5825	21.440	5814.400	5835.840	---	PASS
11AC40MIMO	Ant1	5755	40.400	5734.760	5775.160	---	PASS
	Ant2	5755	39.840	5735.160	5775.000	---	PASS
	Ant1	5795	40.160	5774.920	5815.080	---	PASS
	Ant2	5795	40.080	5775.080	5815.160	---	PASS
11AC80MIMO	Ant1	5775	81.120	5735.000	5816.120	---	PASS
	Ant2	5775	81.440	5734.680	5816.120	---	PASS

Test Graphs

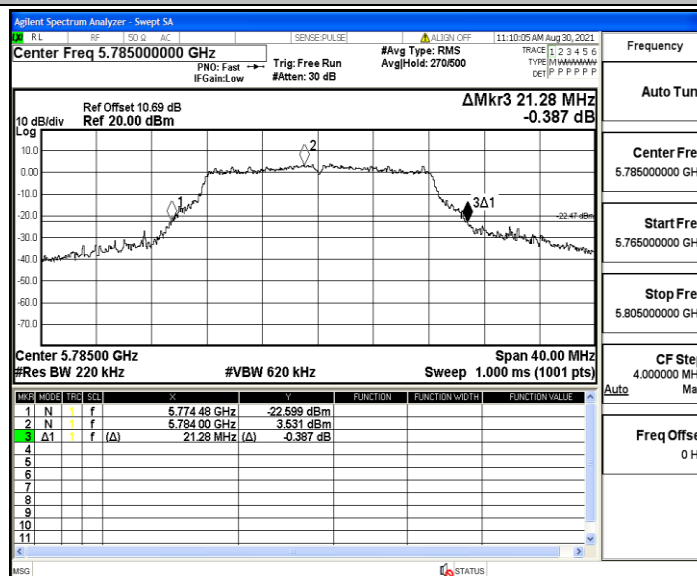
11A_Ant1_5745



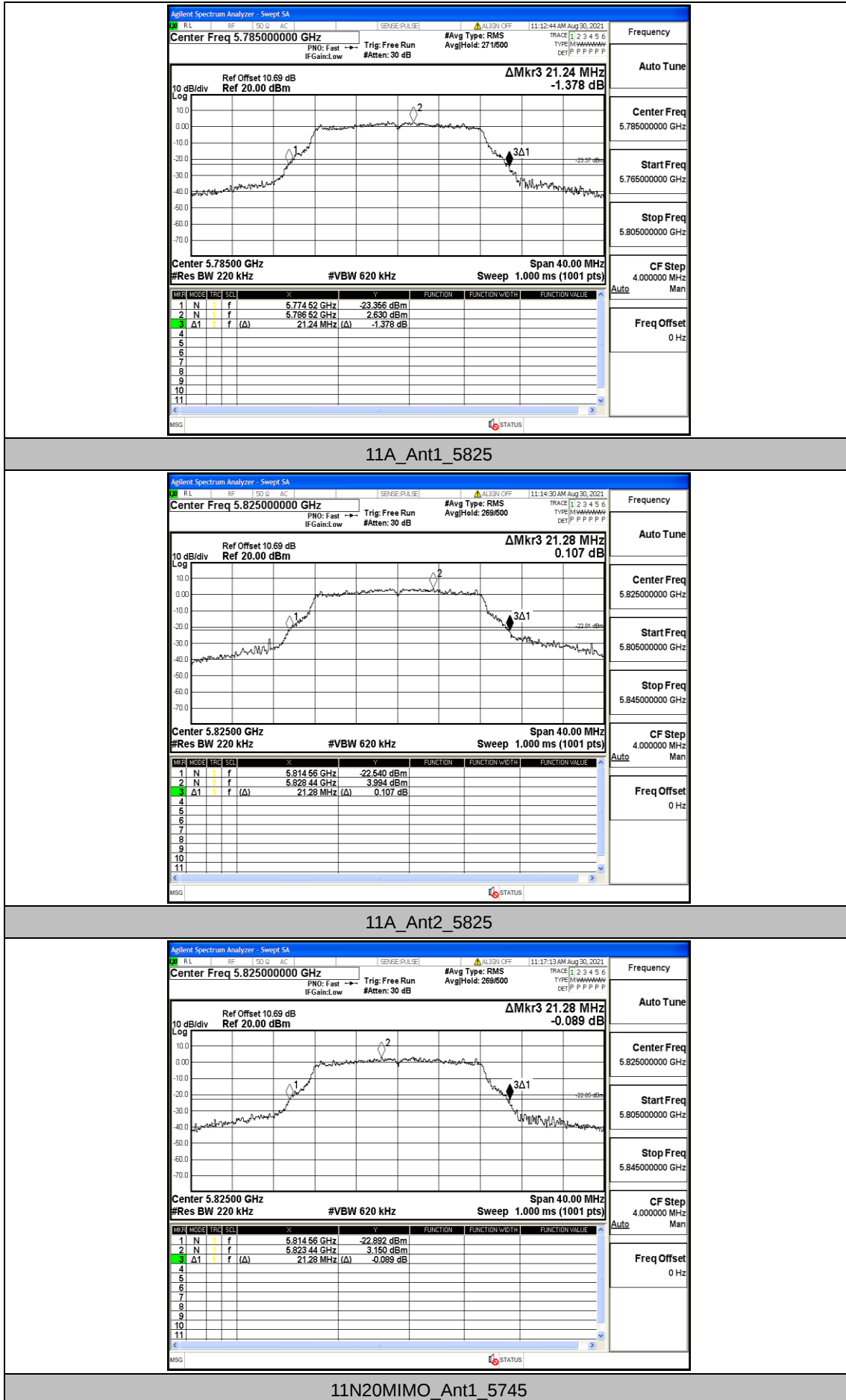
11A_Ant2_5745

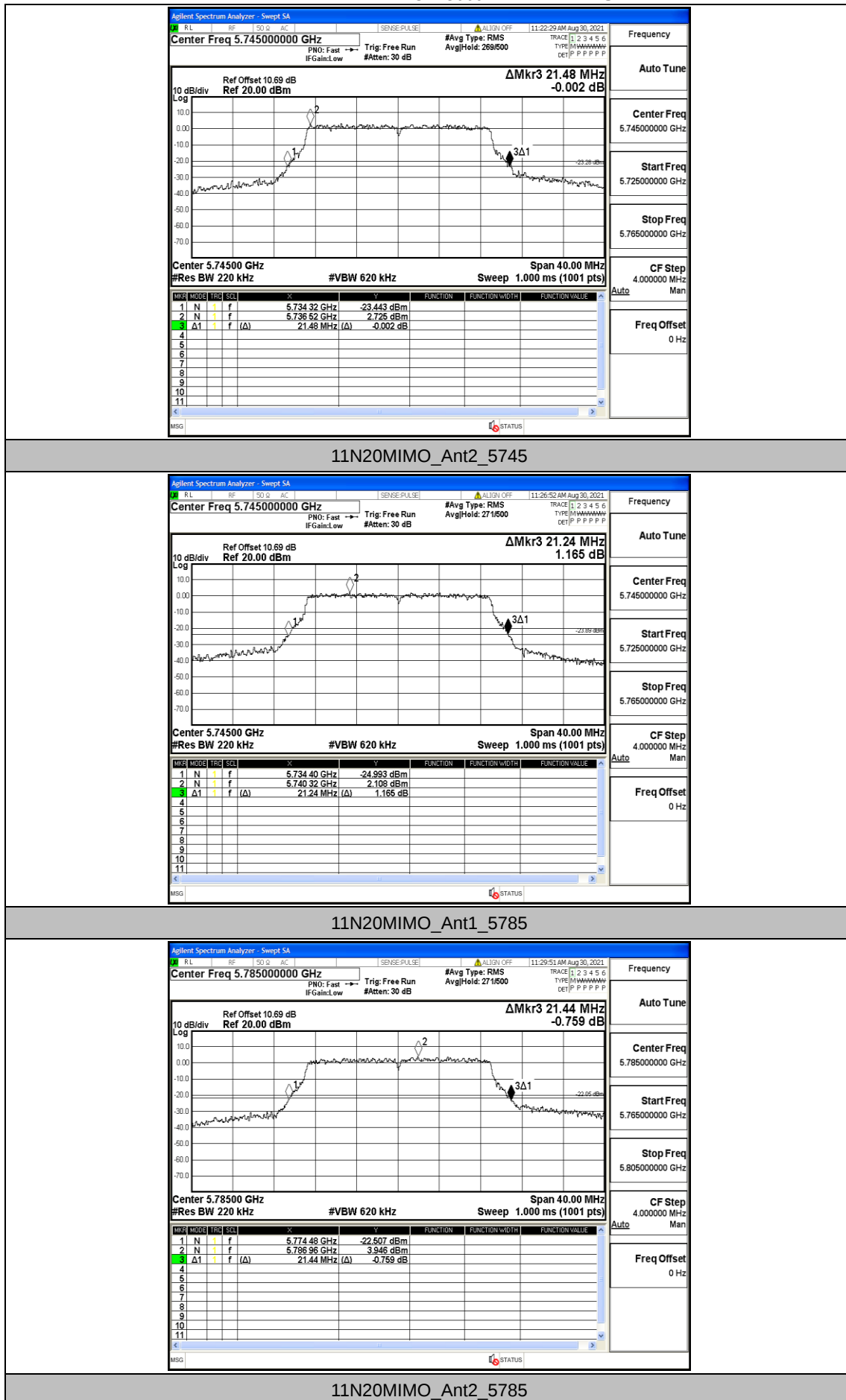


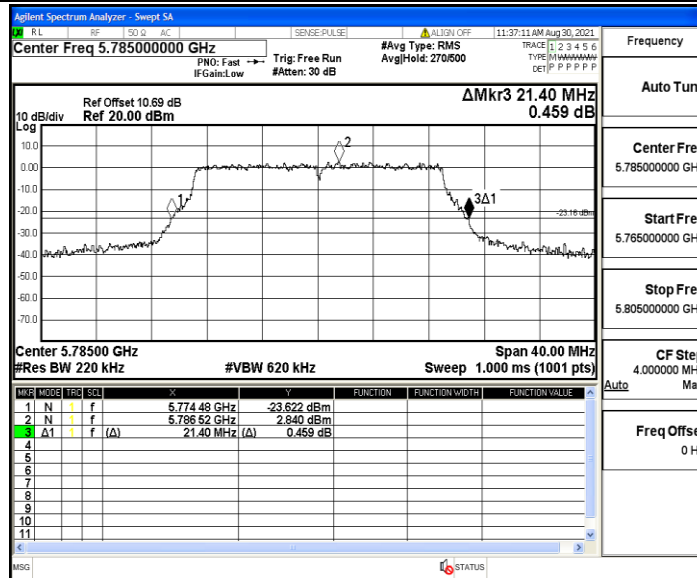
11A_Ant1_5785



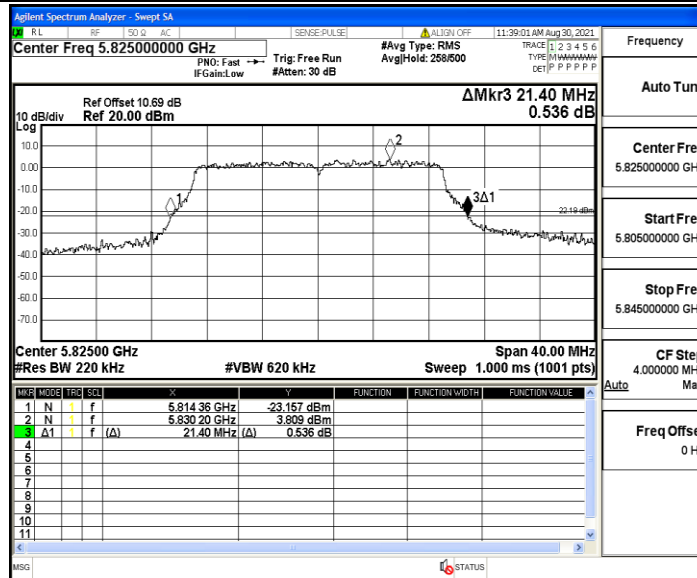
11A_Ant2_5785



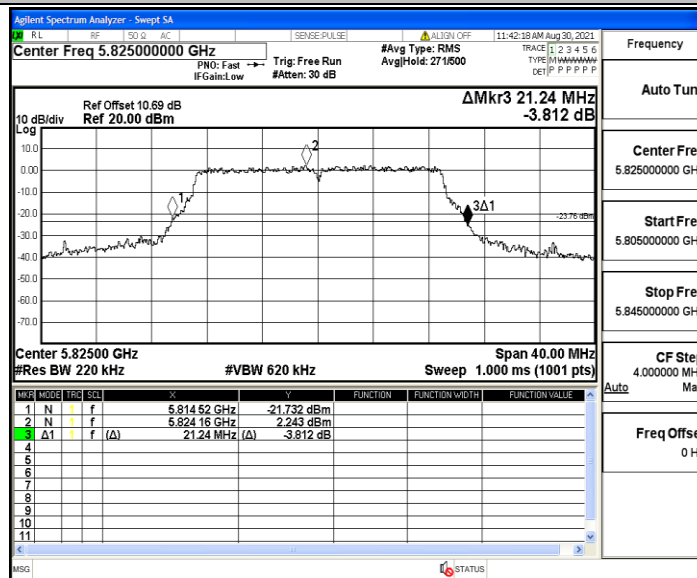




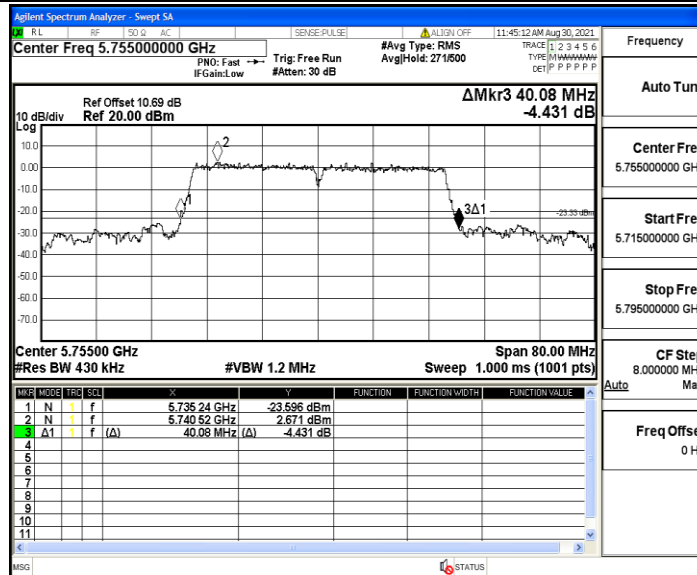
11N20MIMO_Ant1_5825



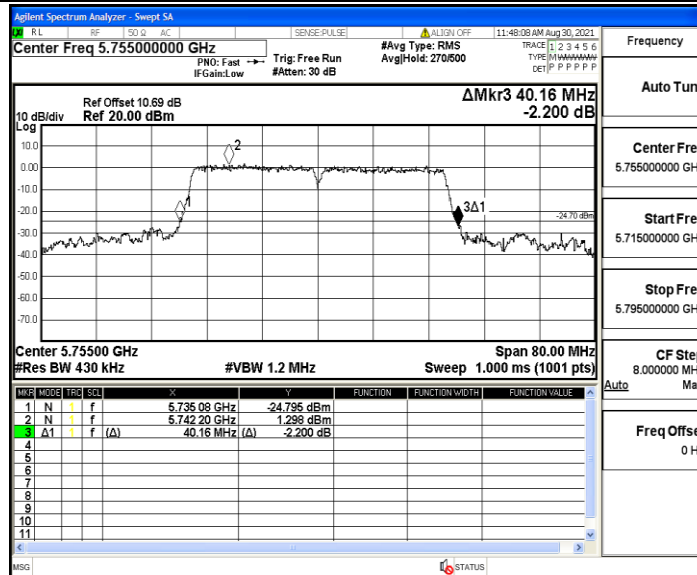
11N20MIMO_Ant2_5825



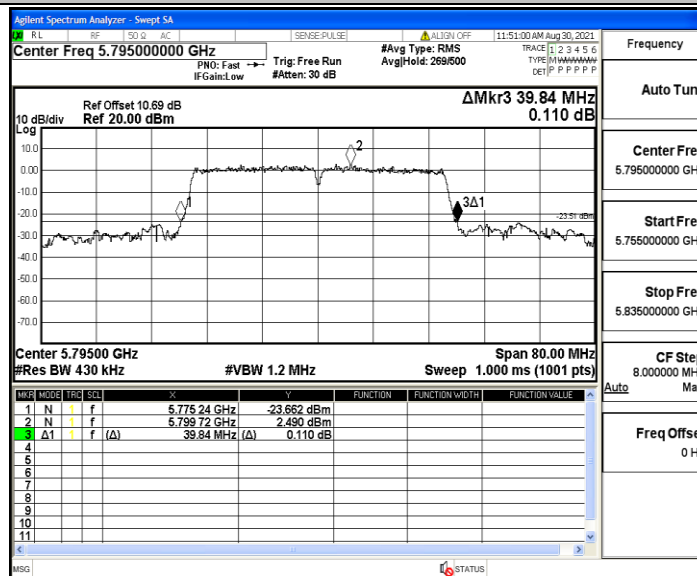
11N40MIMO_Ant1_5755



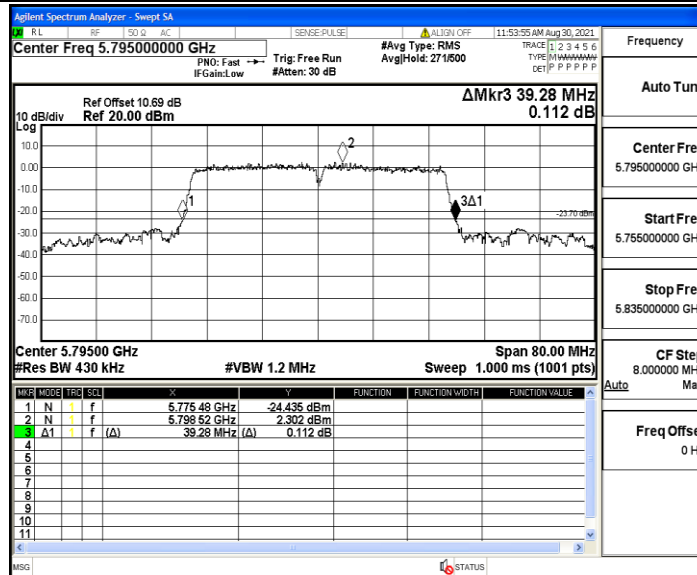
11N40MIMO_Ant2_5755



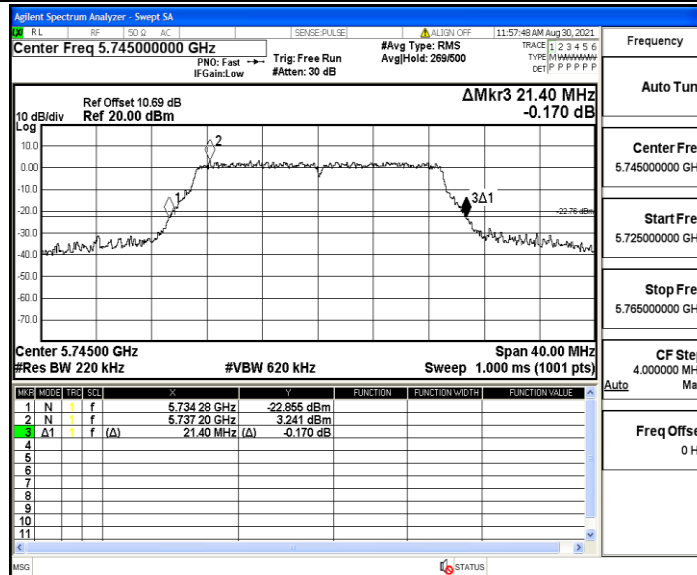
11N40MIMO_Ant1_5795



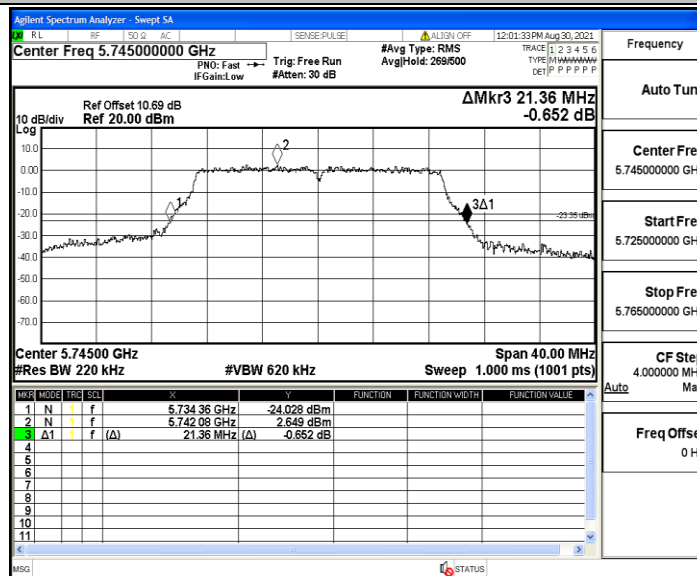
11N40MIMO_Ant2_5795



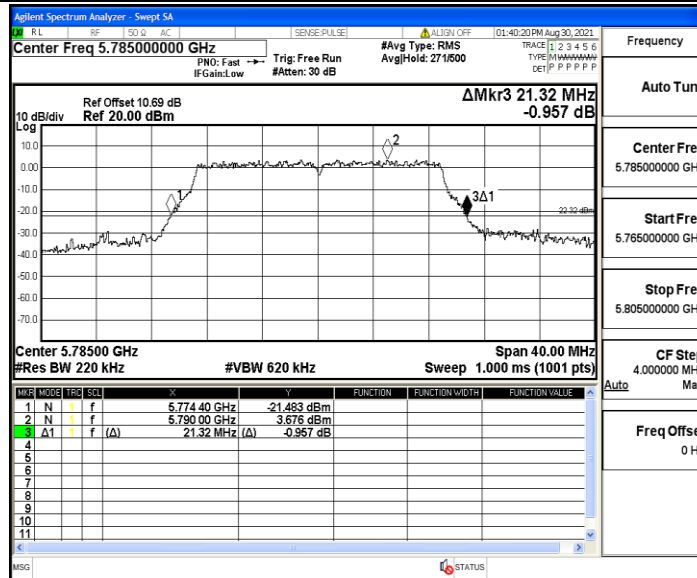
1AC20MIMO_Ant1_5745



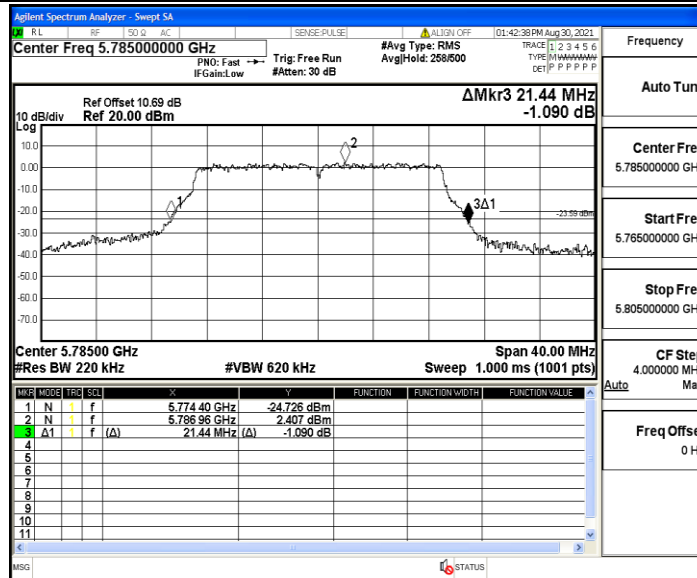
1AC20MIMO_Ant2_5745



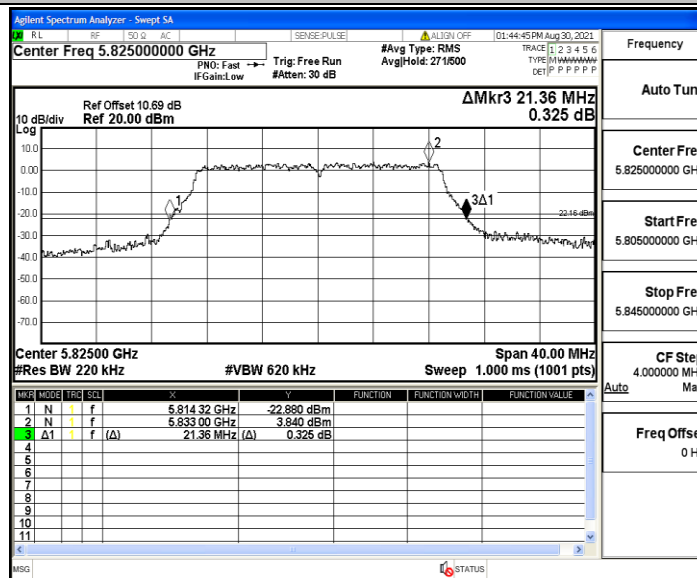
1AC20MIMO_Ant1_5785



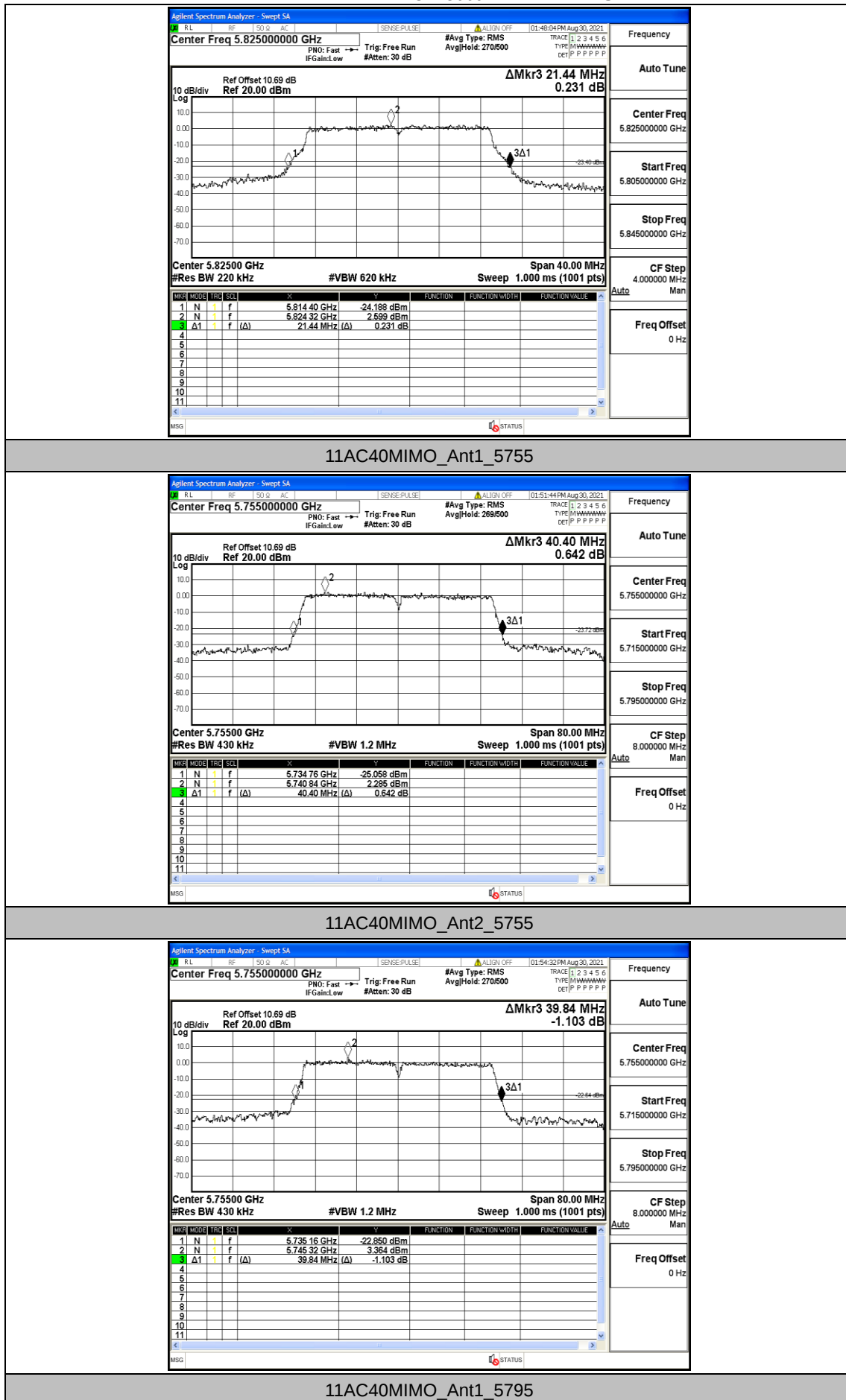
1AC20MIMO_Ant2_5785

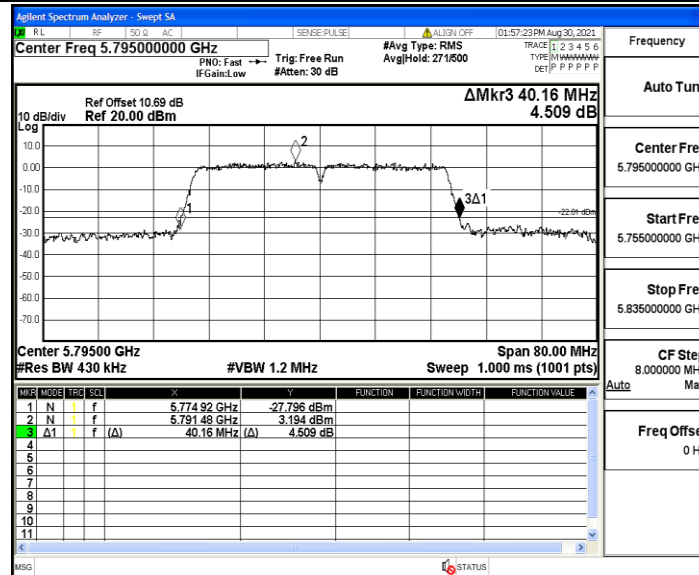


1AC20MIMO_Ant1_5825

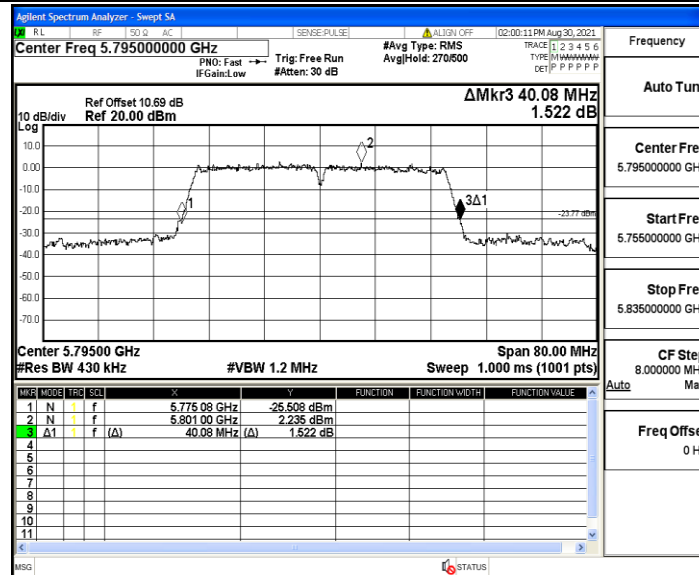


1AC20MIMO_Ant2_5825

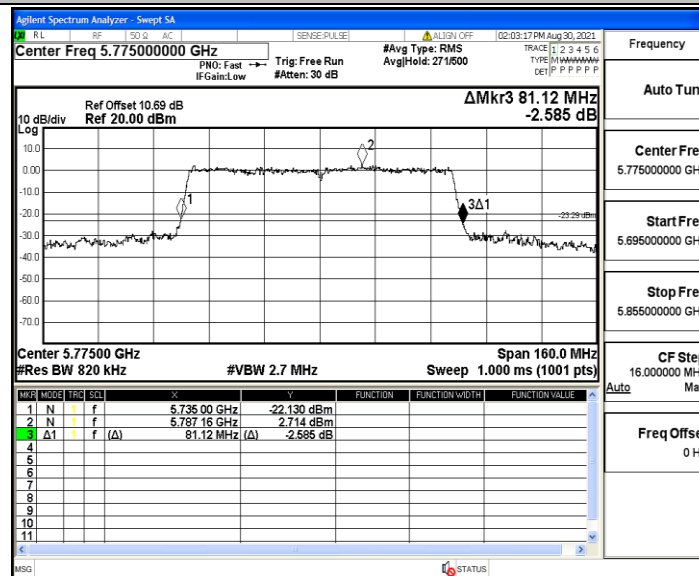




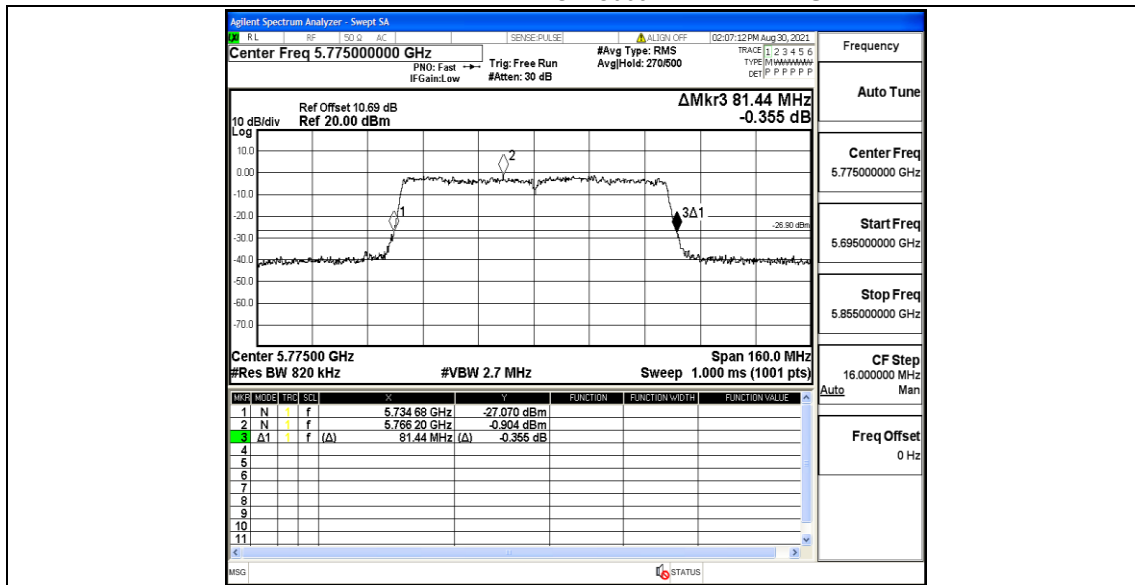
11AC40MIMO_Ant2_5795



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775



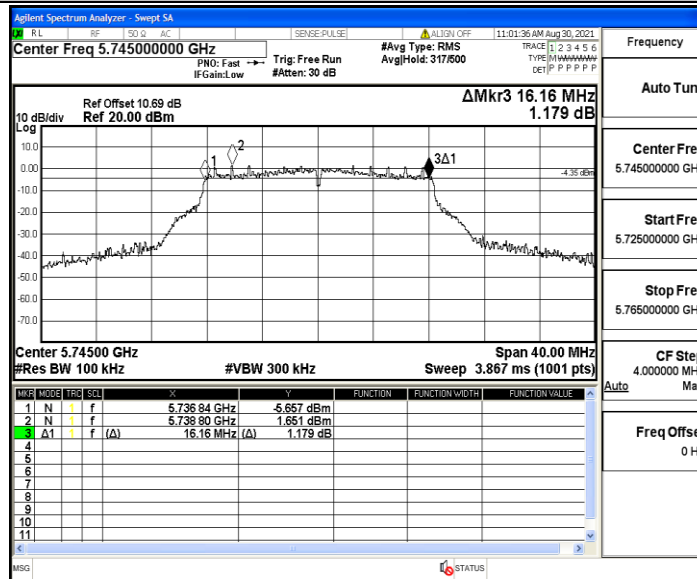
Appendix A2: Min emission bandwidth

Test Result

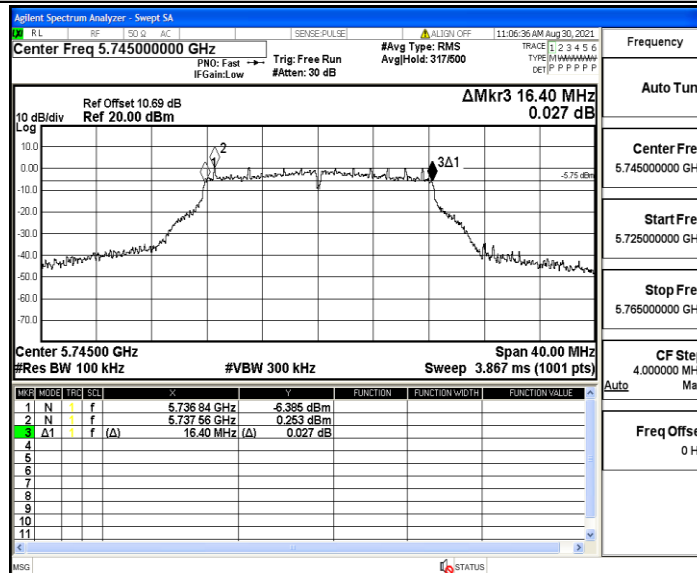
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.160	5736.840	5753.000	0.5	PASS
	Ant2	5745	16.400	5736.840	5753.240	0.5	PASS
	Ant1	5785	15.960	5777.280	5793.240	0.5	PASS
	Ant2	5785	16.360	5776.880	5793.240	0.5	PASS
	Ant1	5825	16.160	5817.120	5833.280	0.5	PASS
	Ant2	5825	16.120	5817.120	5833.240	0.5	PASS
11N20MIMO	Ant1	5745	17.800	5736.160	5753.960	0.5	PASS
	Ant2	5745	17.760	5736.160	5753.920	0.5	PASS
	Ant1	5785	17.720	5776.200	5793.920	0.5	PASS
	Ant2	5785	17.800	5776.160	5793.960	0.5	PASS
	Ant1	5825	17.720	5816.200	5833.920	0.5	PASS
	Ant2	5825	17.760	5816.200	5833.960	0.5	PASS
11N40MIMO	Ant1	5755	36.560	5736.760	5773.320	0.5	PASS
	Ant2	5755	36.560	5736.760	5773.320	0.5	PASS
	Ant1	5795	36.480	5776.840	5813.320	0.5	PASS
	Ant2	5795	36.560	5776.760	5813.320	0.5	PASS
11AC20MIMO	Ant1	5745	17.760	5736.160	5753.920	0.5	PASS
	Ant2	5745	17.800	5736.160	5753.960	0.5	PASS
	Ant1	5785	17.720	5776.200	5793.920	0.5	PASS
	Ant2	5785	17.800	5776.160	5793.960	0.5	PASS
	Ant1	5825	17.720	5816.240	5833.960	0.5	PASS
	Ant2	5825	17.760	5816.200	5833.960	0.5	PASS
11AC40MIMO	Ant1	5755	36.560	5736.760	5773.320	0.5	PASS
	Ant2	5755	36.560	5736.760	5773.320	0.5	PASS
	Ant1	5795	36.400	5776.920	5813.320	0.5	PASS
	Ant2	5795	36.640	5776.760	5813.400	0.5	PASS
11AC80MIMO	Ant1	5775	76.480	5736.760	5813.240	0.5	PASS
	Ant2	5775	76.640	5736.760	5813.400	0.5	PASS

Test Graphs

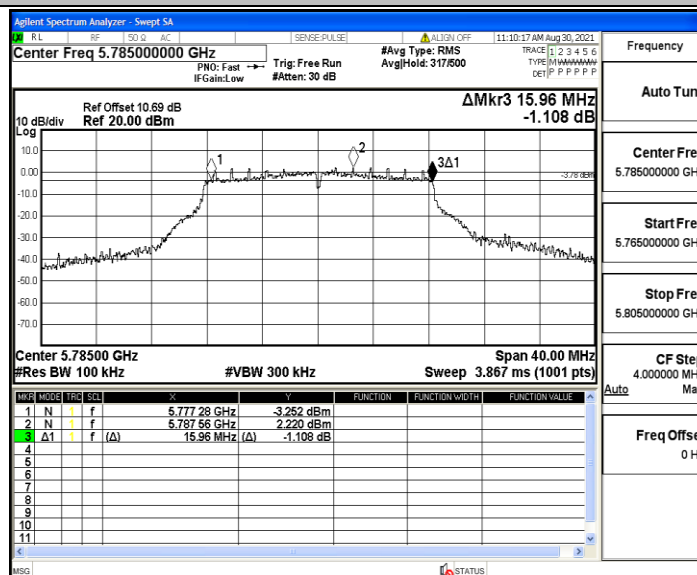
11A_Ant1_5745



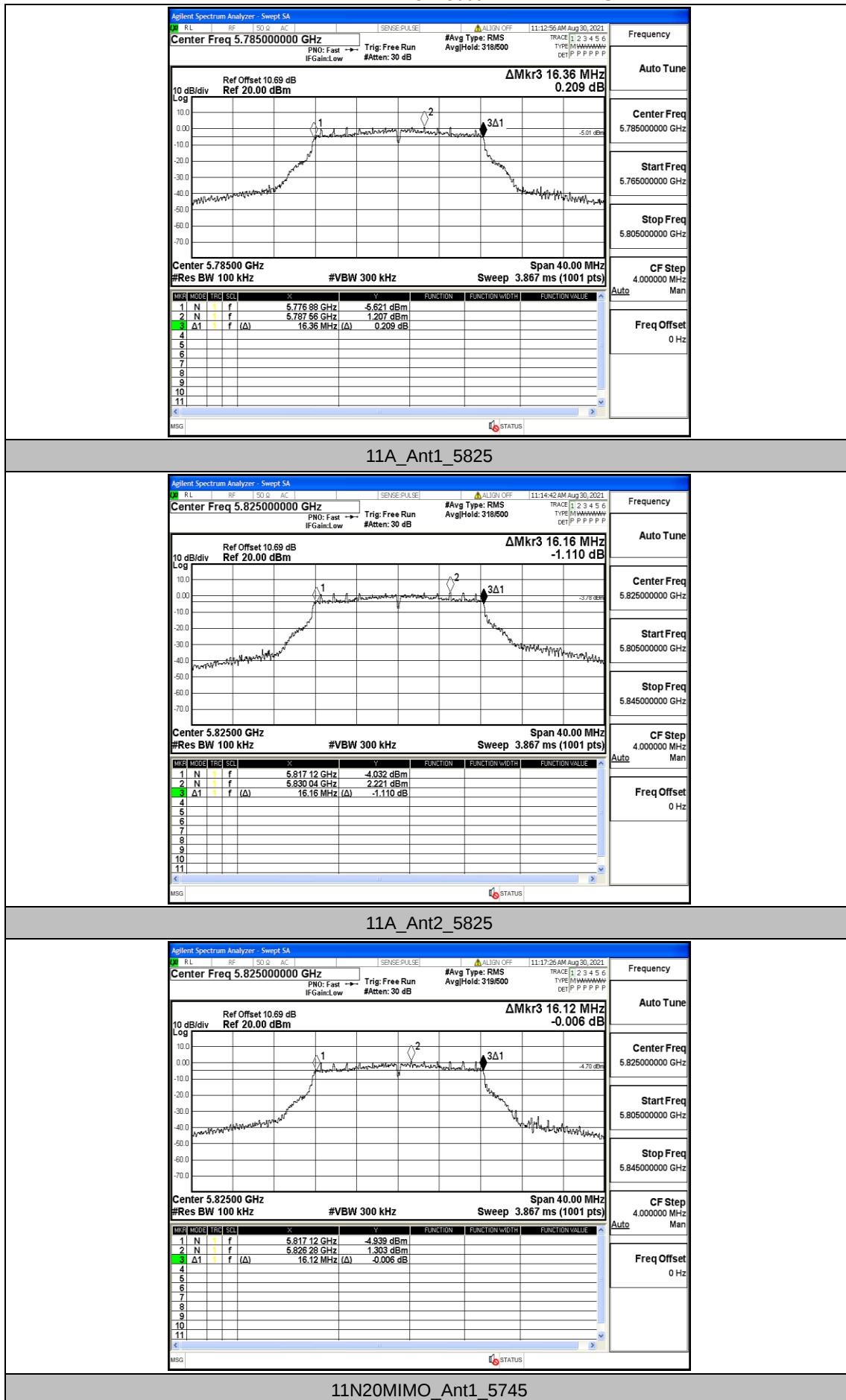
11A_Ant2_5745

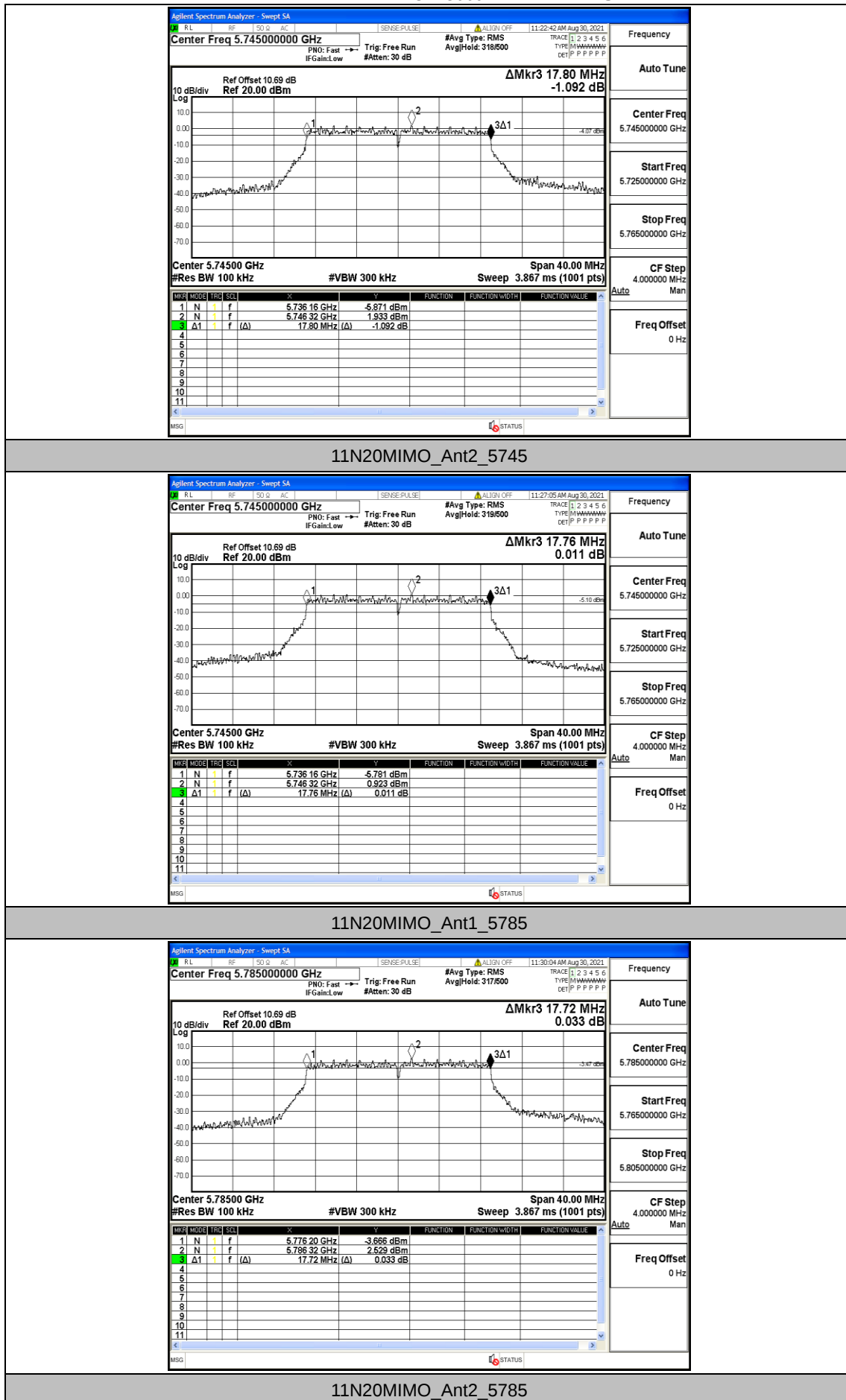


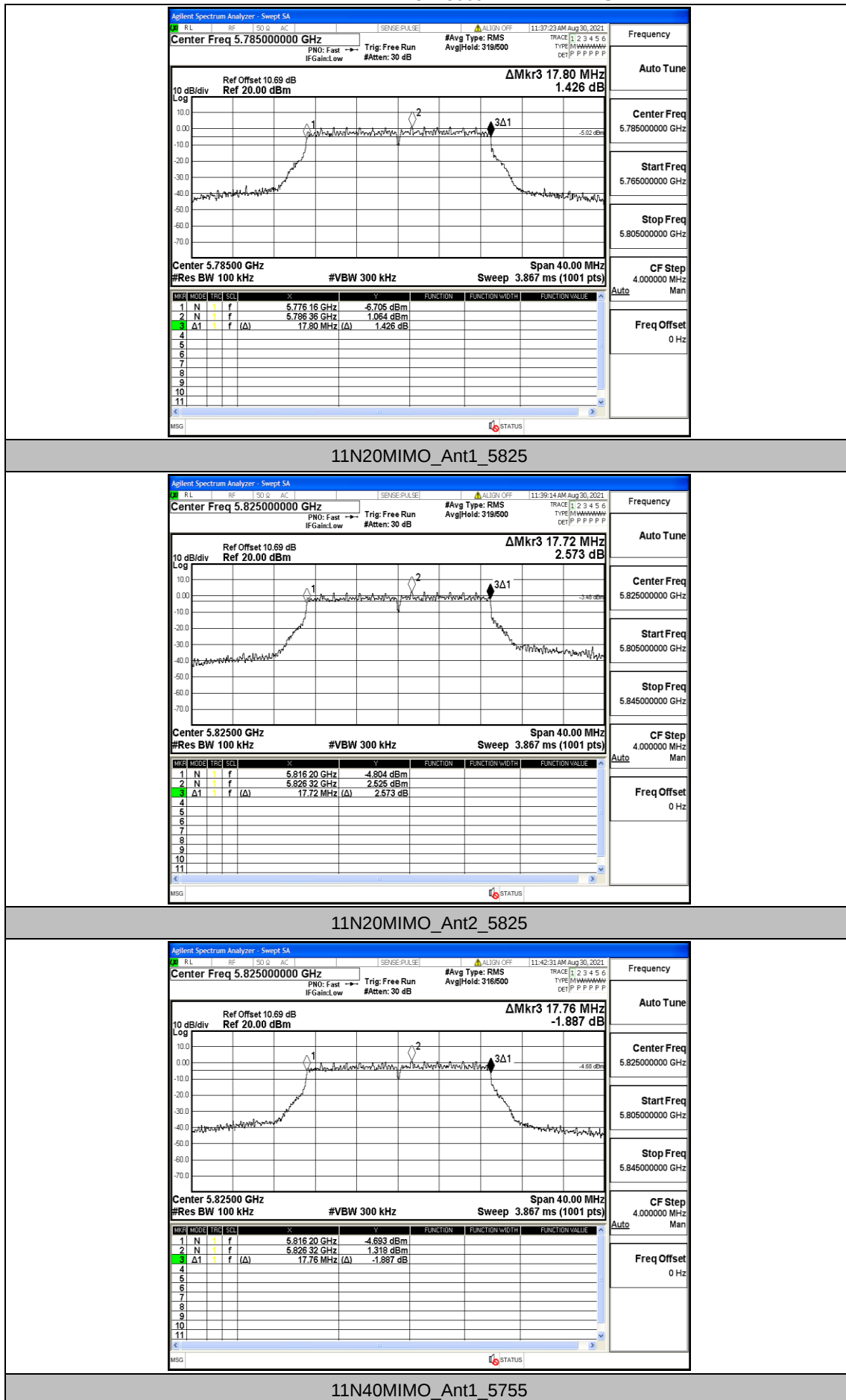
11A_Ant1_5785

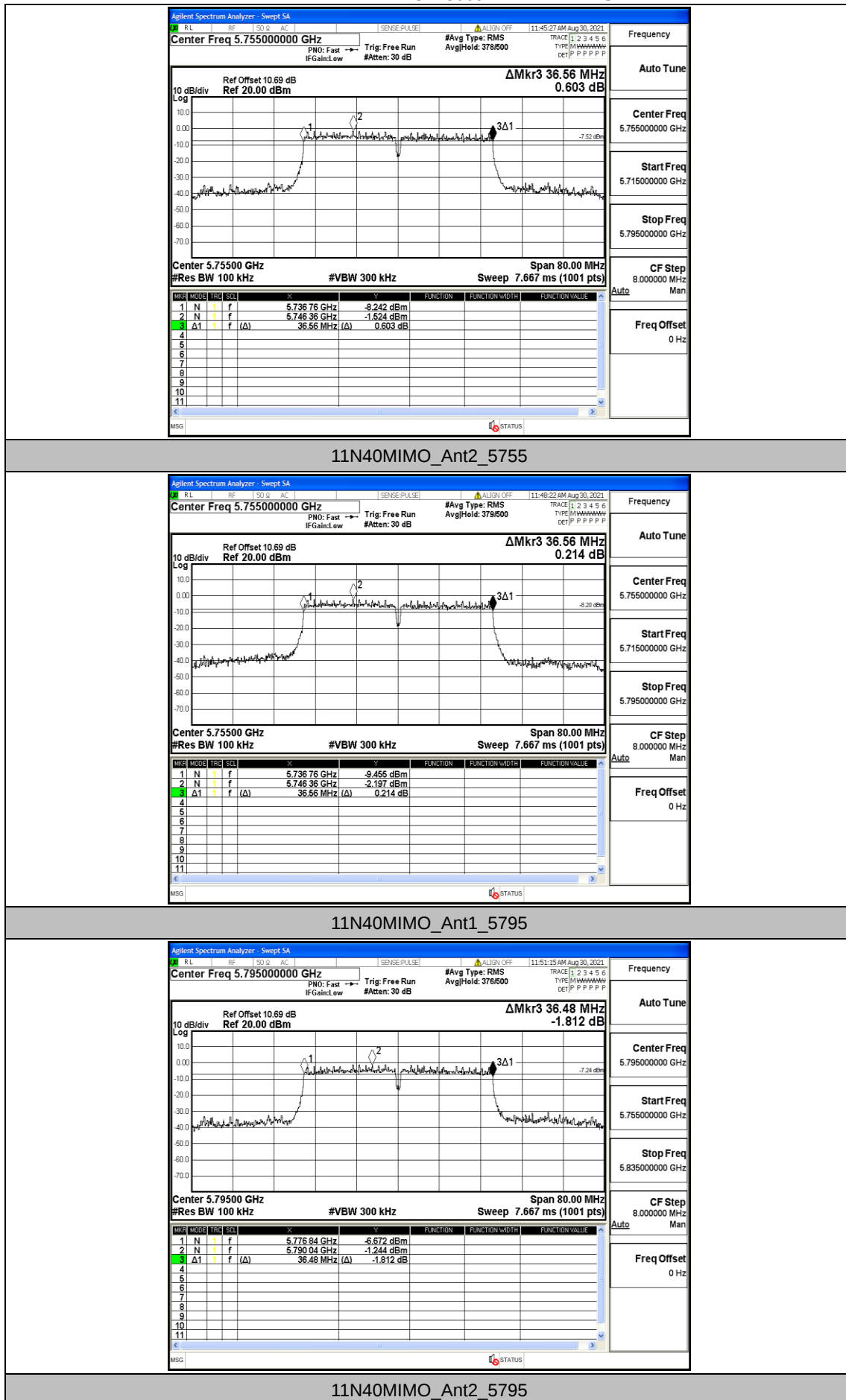


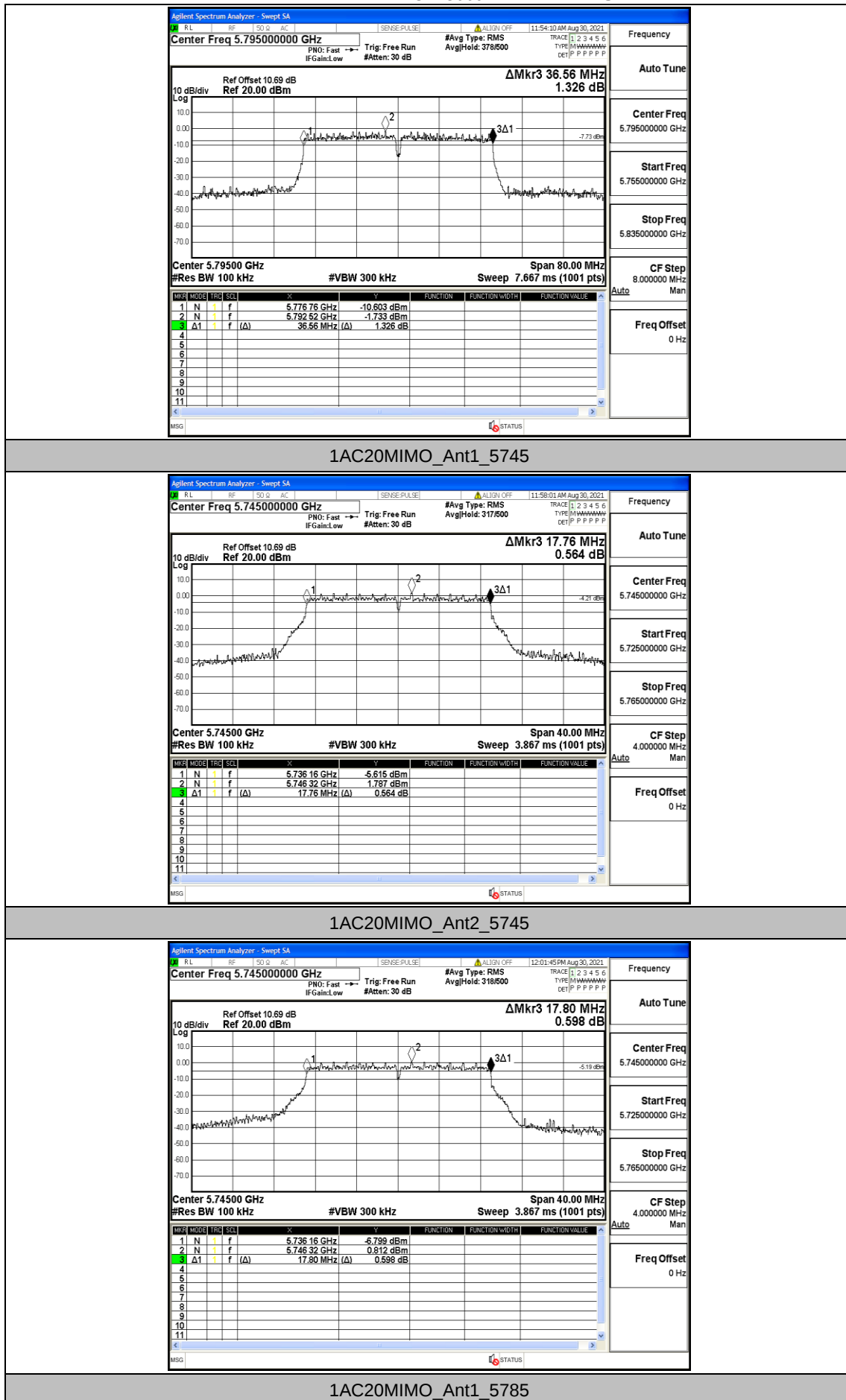
11A_Ant2_5785

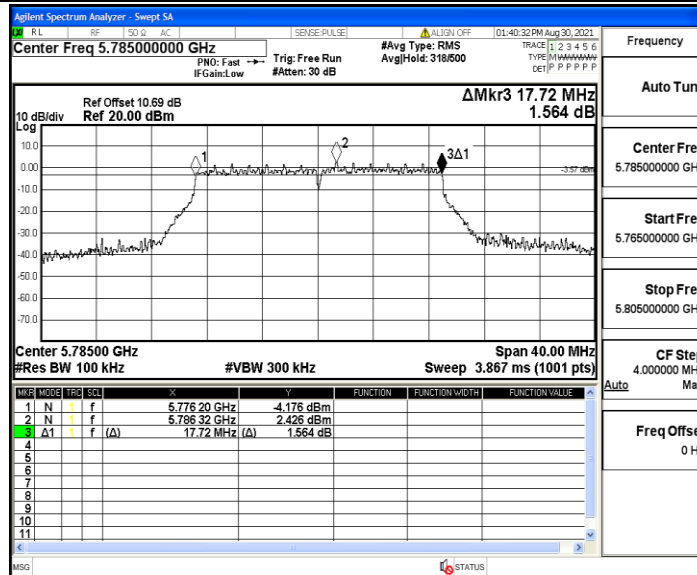




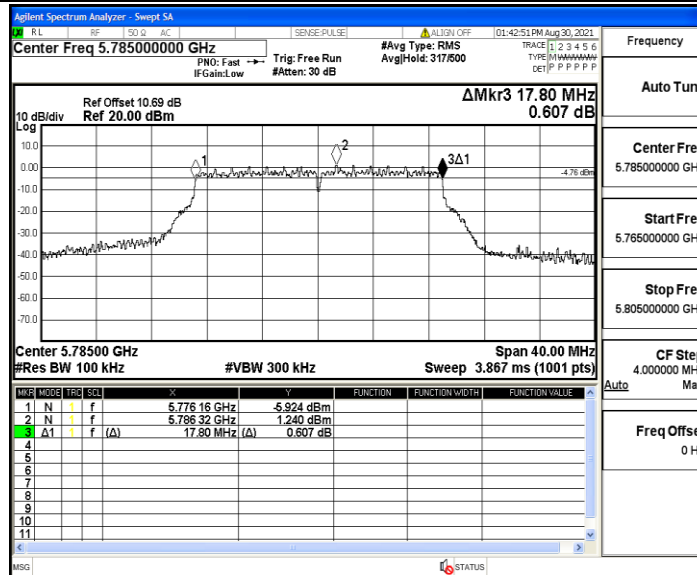




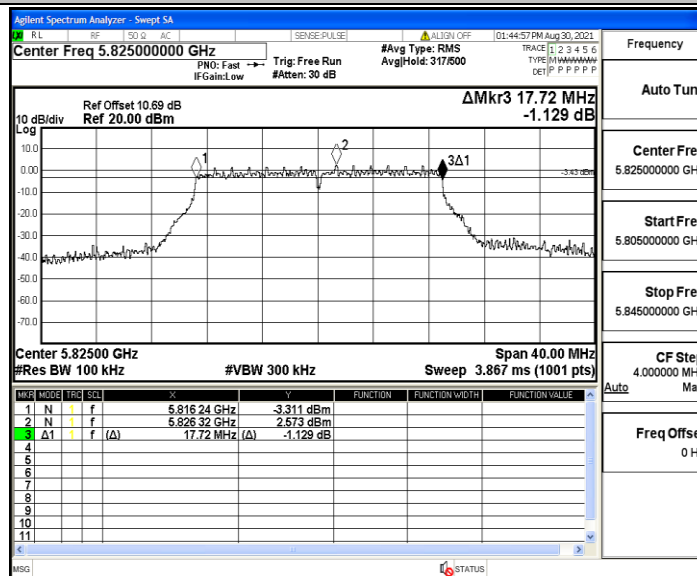




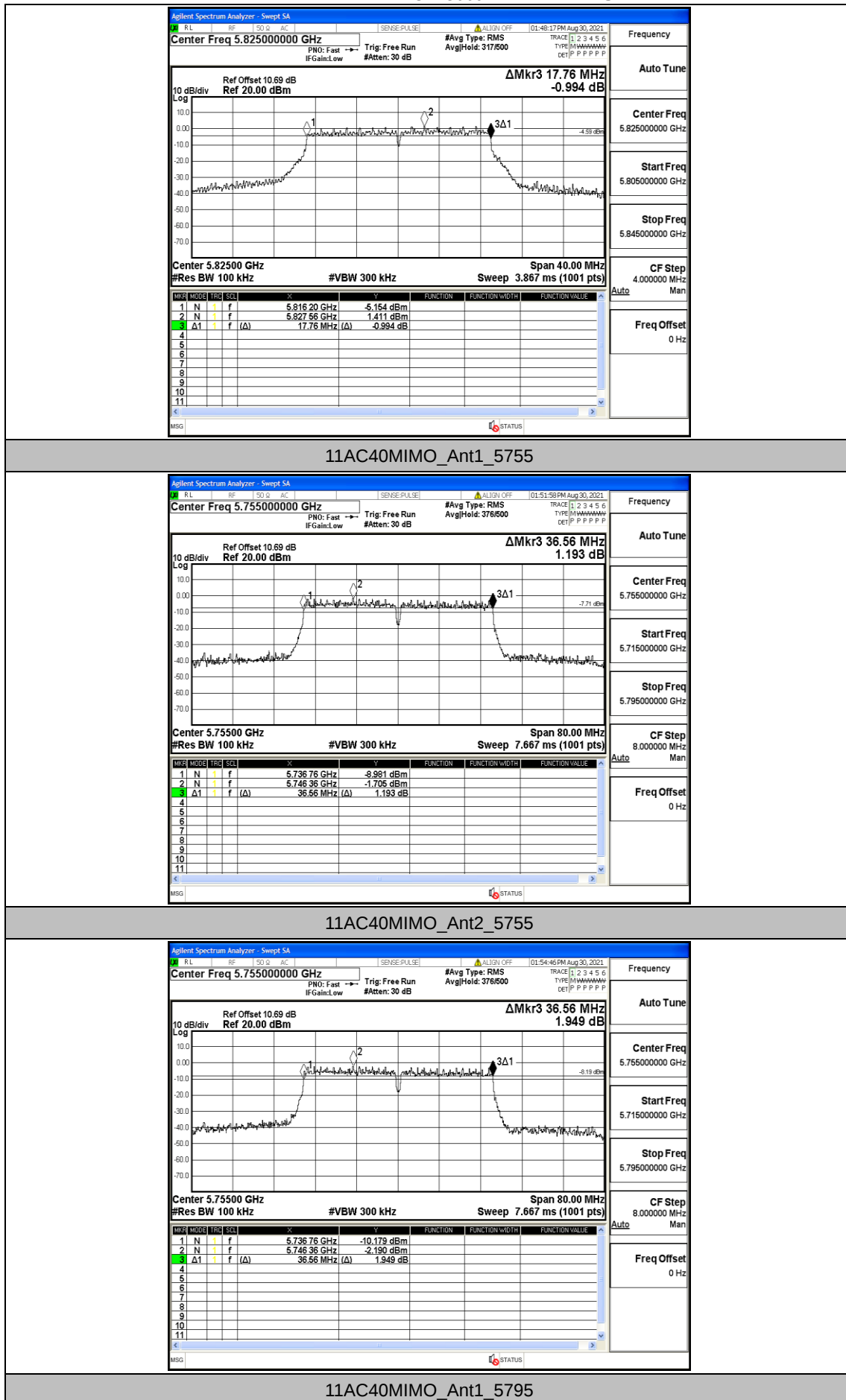
1AC20MIMO_Ant2_5785

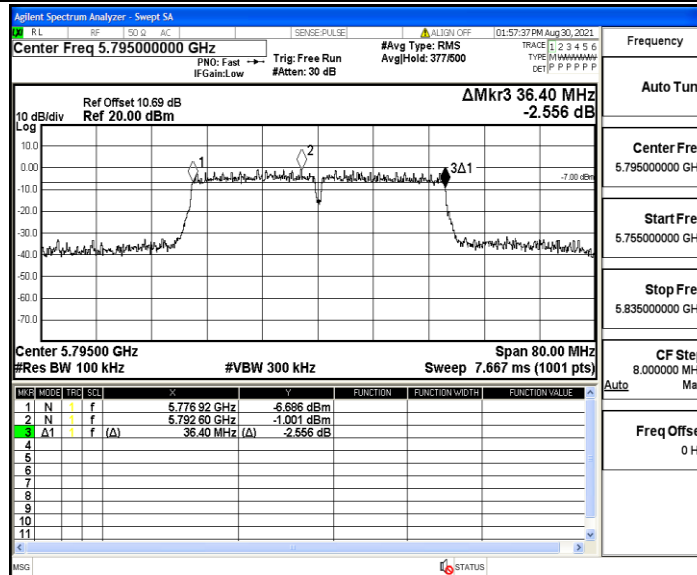


1AC20MIMO_Ant1_5825

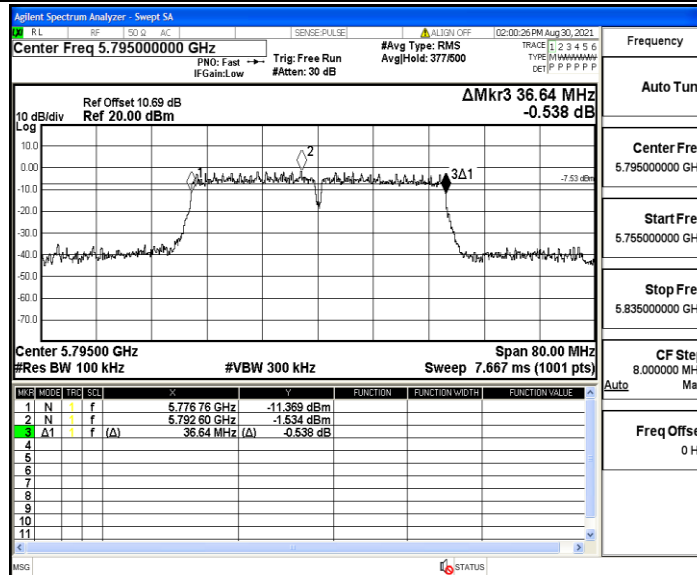


1AC20MIMO_Ant2_5825

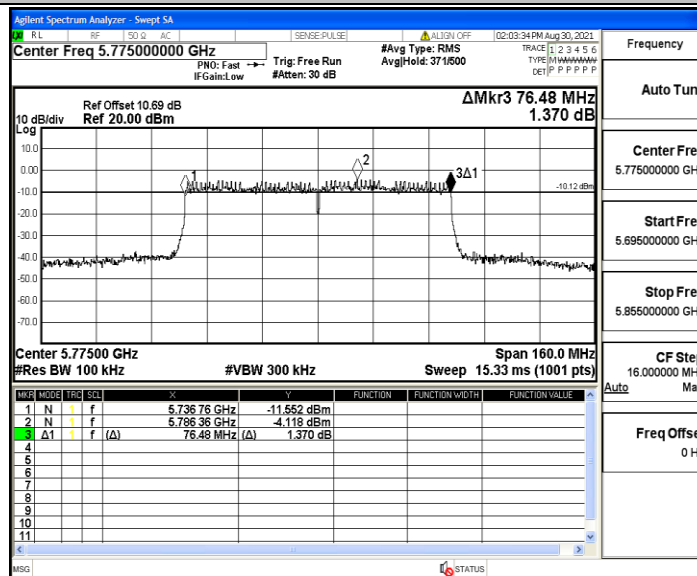




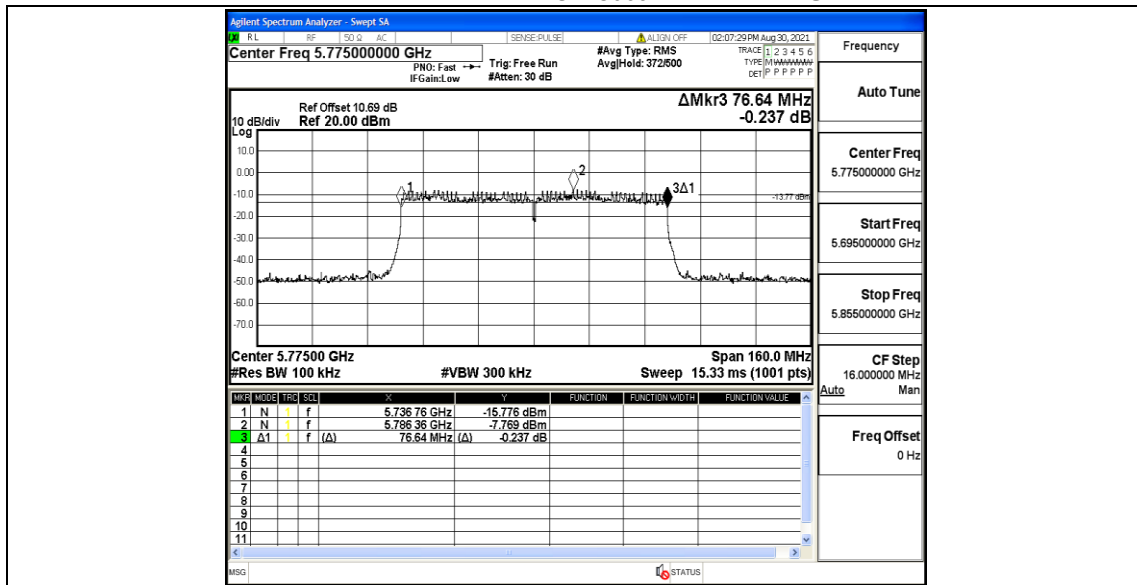
11AC40MIMO_Ant2_5795



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775



Appendix B: Maximum conducted output power**Test Result**

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	13.04	≤30	PASS
	Ant2	5745	12.09	≤30	PASS
	Ant1	5785	13.55	≤30	PASS
	Ant2	5785	12.55	≤30	PASS
	Ant1	5825	13.84	≤30	PASS
	Ant2	5825	12.50	≤30	PASS
11N20MIMO	Ant1	5745	13.04	≤30	PASS
	Ant2	5745	12.23	≤30	PASS
	total	5745	15.7	≤28.19	PASS
	Ant1	5785	13.59	≤30	PASS
	Ant2	5785	12.54	≤30	PASS
	total	5785	16.1	≤28.19	PASS
	Ant1	5825	13.94	≤30	PASS
	Ant2	5825	12.51	≤30	PASS
	total	5825	16.3	≤28.19	PASS
11N40MIMO	Ant1	5755	12.51	≤30	PASS
	Ant2	5755	11.91	≤30	PASS
	total	5755	15.2	≤28.19	PASS
	Ant1	5795	13.06	≤30	PASS
	Ant2	5795	12.39	≤30	PASS
	total	5795	15.7	≤28.19	PASS
11AC20MIMO	Ant1	5745	13.27	≤30	PASS
	Ant2	5745	12.19	≤30	PASS
	total	5745	15.8	≤28.19	PASS
	Ant1	5785	13.53	≤30	PASS
	Ant2	5785	12.55	≤30	PASS
	total	5785	16.1	≤28.19	PASS
	Ant1	5825	13.72	≤30	PASS
	Ant2	5825	12.59	≤30	PASS
	total	5825	16.2	≤28.19	PASS
11AC40MIMO	Ant1	5755	12.27	≤30	PASS
	Ant2	5755	11.90	≤30	PASS
	total	5755	15.1	≤28.19	PASS
	Ant1	5795	13.00	≤30	PASS
	Ant2	5795	12.22	≤30	PASS
	total	5795	15.6	≤28.19	PASS
11AC80MIMO	Ant1	5775	12.80	≤30	PASS
	Ant2	5775	9.25	≤30	PASS
	total	5775	14.4	≤28.19	PASS

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

Appendix C: Maximum power spectral density**Test Result**

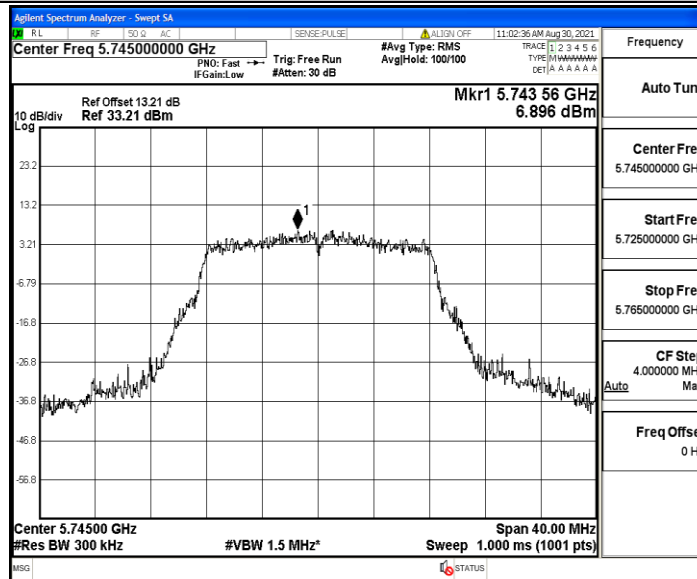
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	6.9	≤30	PASS
	Ant2	5745	5.58	≤30	PASS
	Ant1	5785	6.7	≤30	PASS
	Ant2	5785	6.04	≤30	PASS
	Ant1	5825	7.84	≤30	PASS
	Ant2	5825	5.74	≤30	PASS
11N20MIMO	Ant1	5745	7.28	≤30	PASS
	Ant2	5745	7.14	≤30	PASS
	total	5745	10.22	≤28.19	PASS
	Ant1	5785	8.76	≤30	PASS
	Ant2	5785	7.54	≤30	PASS
	total	5785	11.20	≤28.19	PASS
	Ant1	5825	9.53	≤30	PASS
	Ant2	5825	7.03	≤30	PASS
	total	5825	11.47	≤28.19	PASS
11N40MIMO	Ant1	5755	5.01	≤30	PASS
	Ant2	5755	4.67	≤30	PASS
	total	5755	7.85	≤28.19	PASS
	Ant1	5795	6.53	≤30	PASS
	Ant2	5795	5.2	≤30	PASS
	total	5795	8.93	≤28.19	PASS
11AC20MIMO	Ant1	5745	7.2	≤30	PASS
	Ant2	5745	6.17	≤30	PASS
	total	5745	9.73	≤28.19	PASS
	Ant1	5785	8.36	≤30	PASS
	Ant2	5785	5.95	≤30	PASS
	total	5785	10.33	≤28.19	PASS
	Ant1	5825	7.53	≤30	PASS
	Ant2	5825	6.07	≤30	PASS
	total	5825	9.87	≤28.19	PASS
11AC40MIMO	Ant1	5755	4.89	≤30	PASS
	Ant2	5755	6.25	≤30	PASS
	total	5755	8.63	≤28.19	PASS
	Ant1	5795	5.81	≤30	PASS
	Ant2	5795	5.3	≤30	PASS
	total	5795	8.57	≤28.19	PASS
11AC80MIMO	Ant1	5775	2.64	≤30	PASS
	Ant2	5775	-0.93	≤30	PASS
	total	5775	4.22	≤28.19	PASS

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

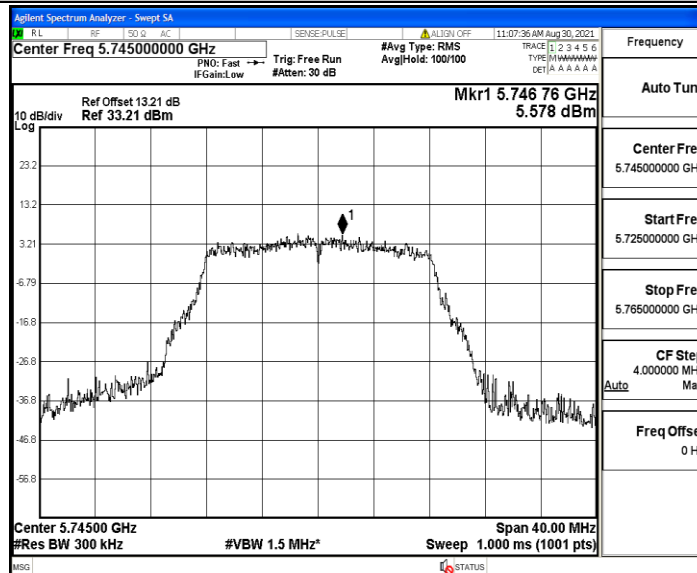
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

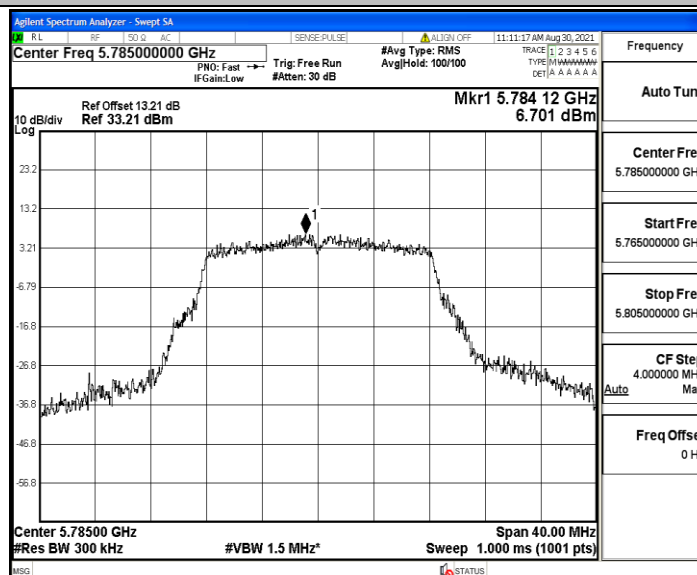
11A_Ant1_5745



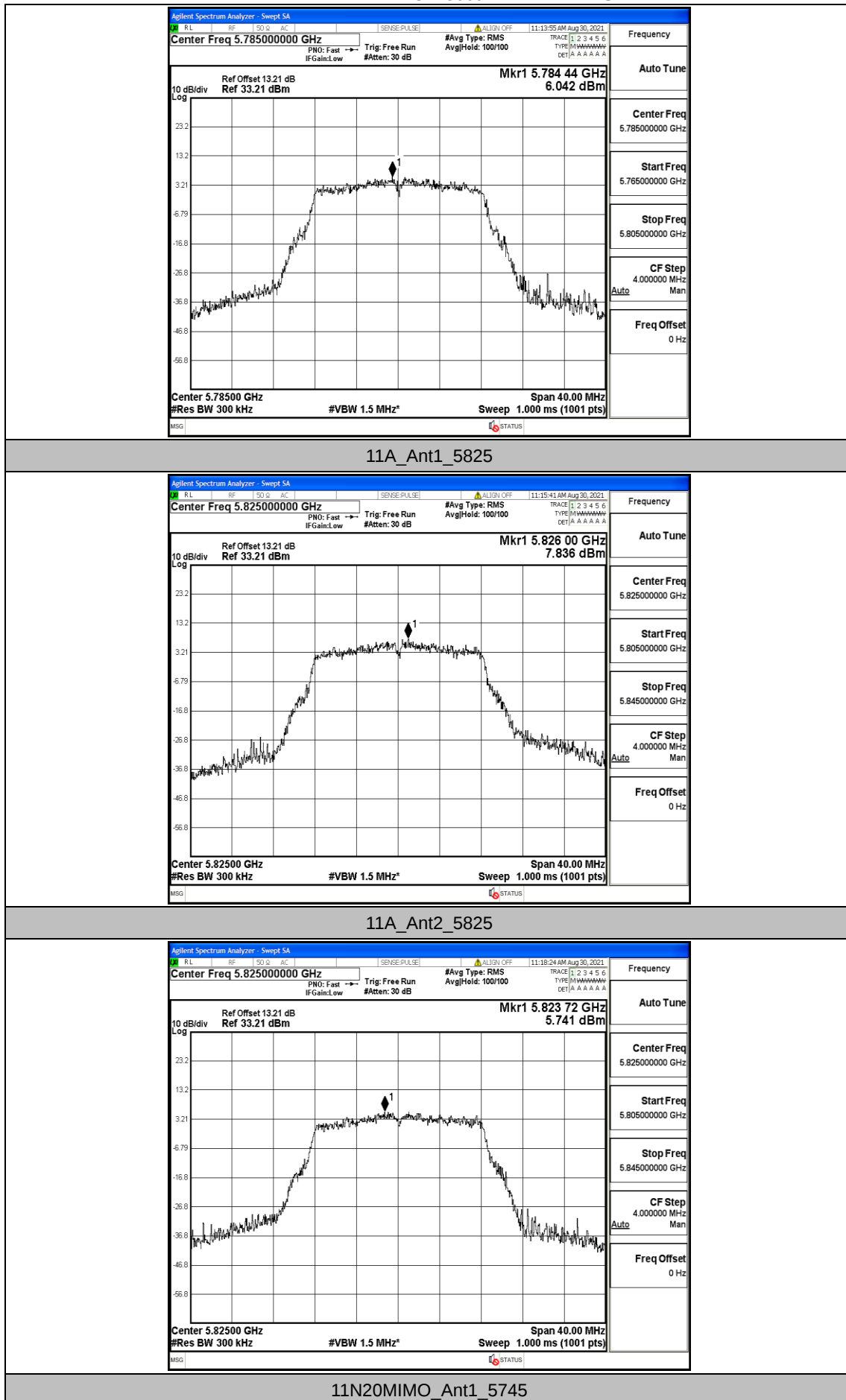
11A_Ant2_5745

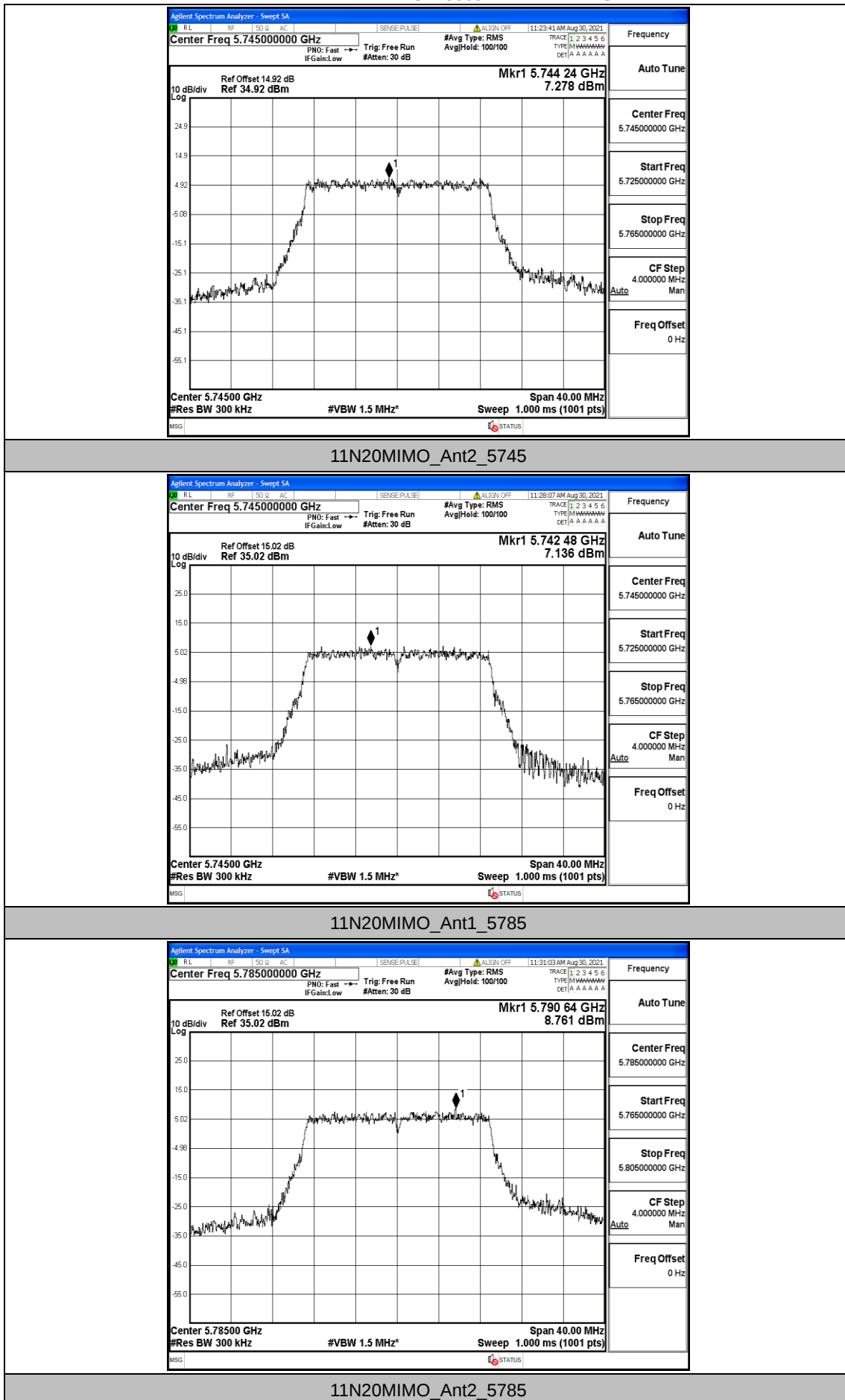


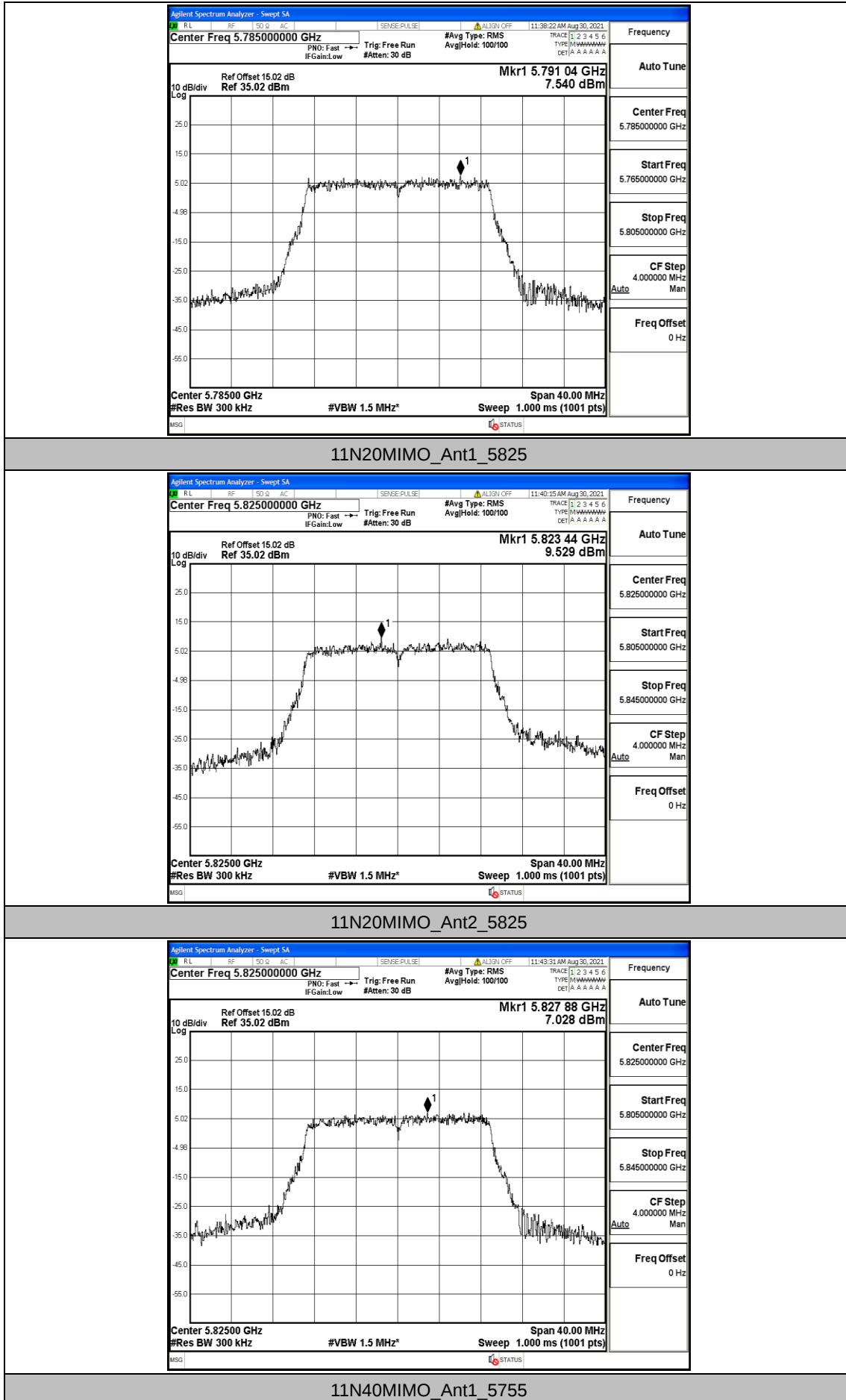
11A_Ant1_5785

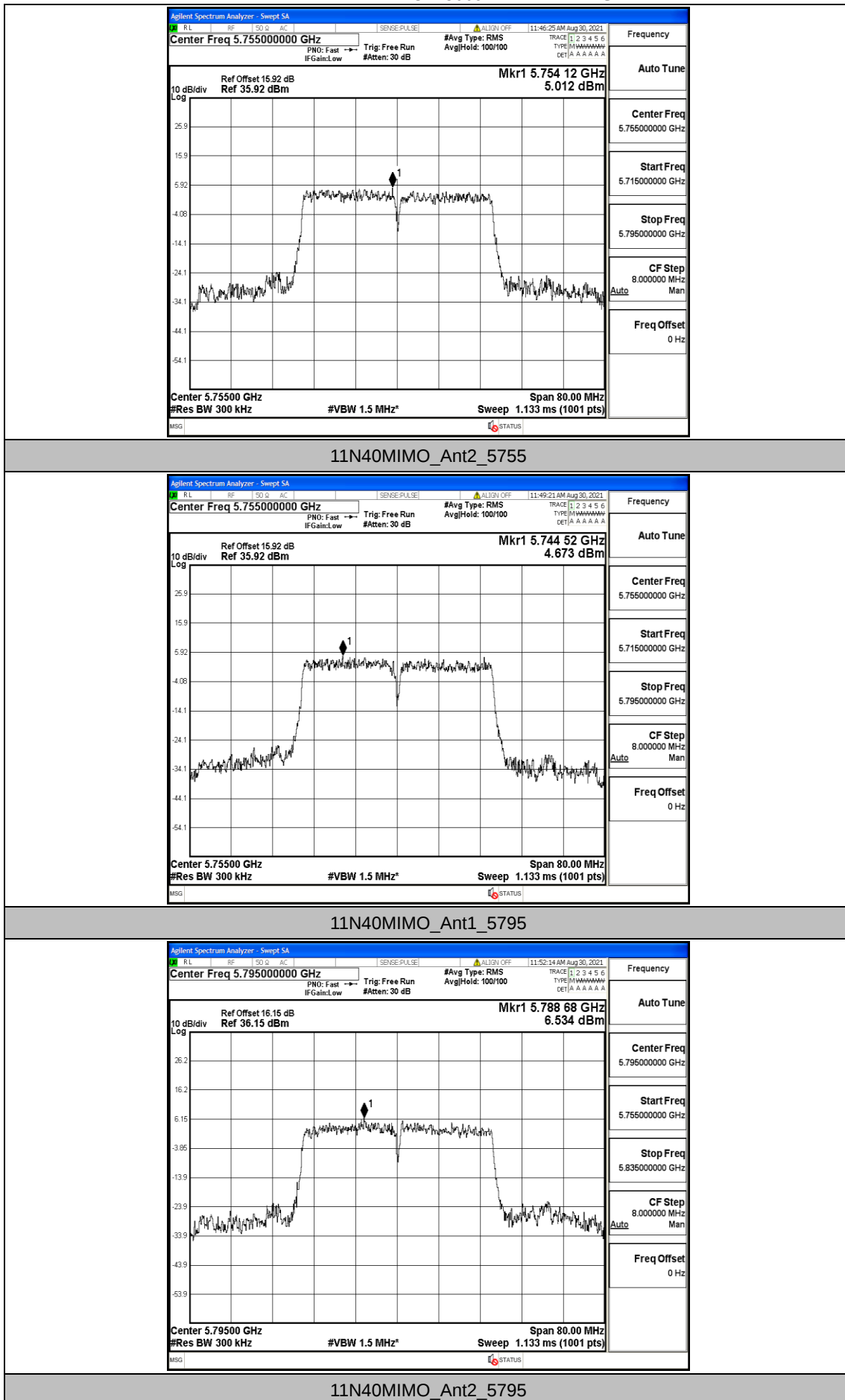


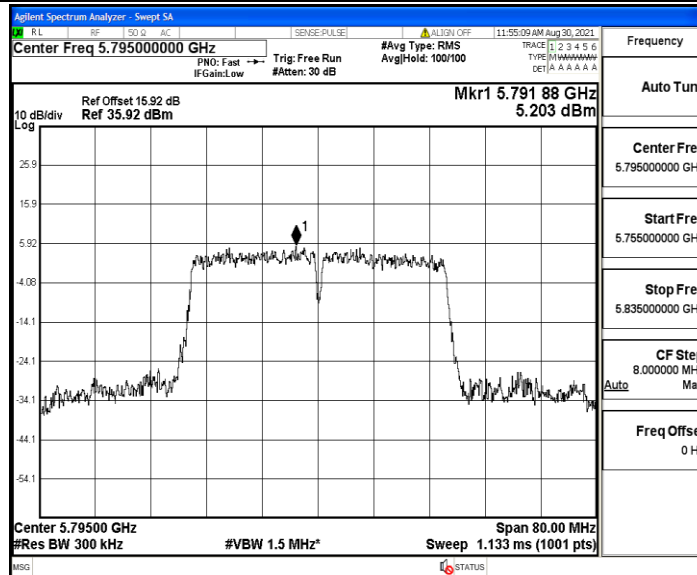
11A_Ant2_5785



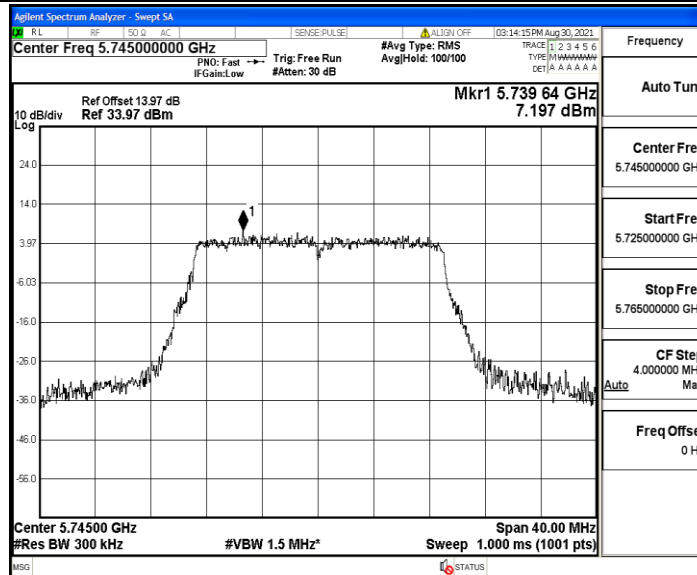




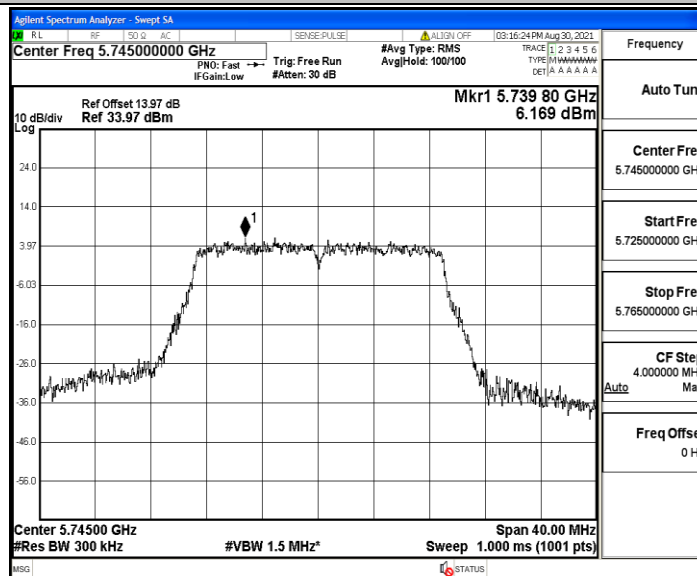




1AC20MIMO_Ant1_5745



1AC20MIMO_Ant2_5745



1AC20MIMO_Ant1_5785