

RF Test Data for RLAN(5.8G) (Conducted Measurement)

Product Name: Motorcycle DVR Dash Camera

Trade Mark: HFK

Test Model: HM502

FCC ID: 2BFHY-HM502

Environmental Conditions

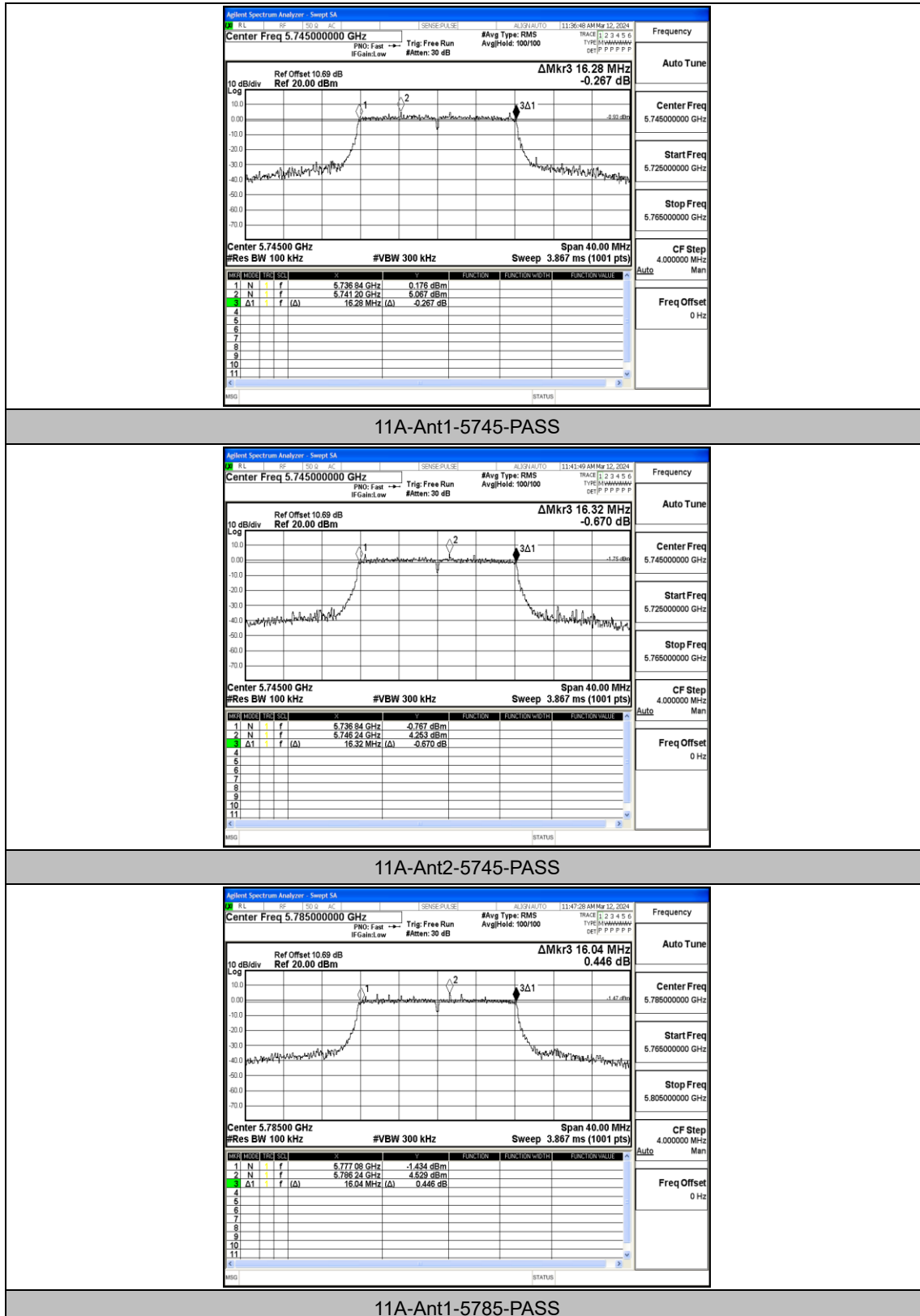
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

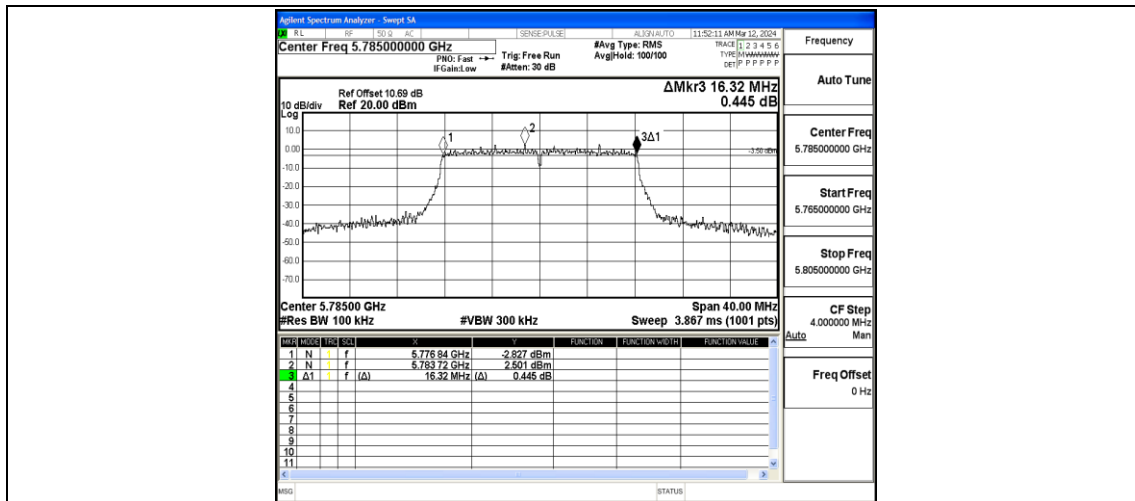
Appendix A: Min emission bandwidth

Test Result

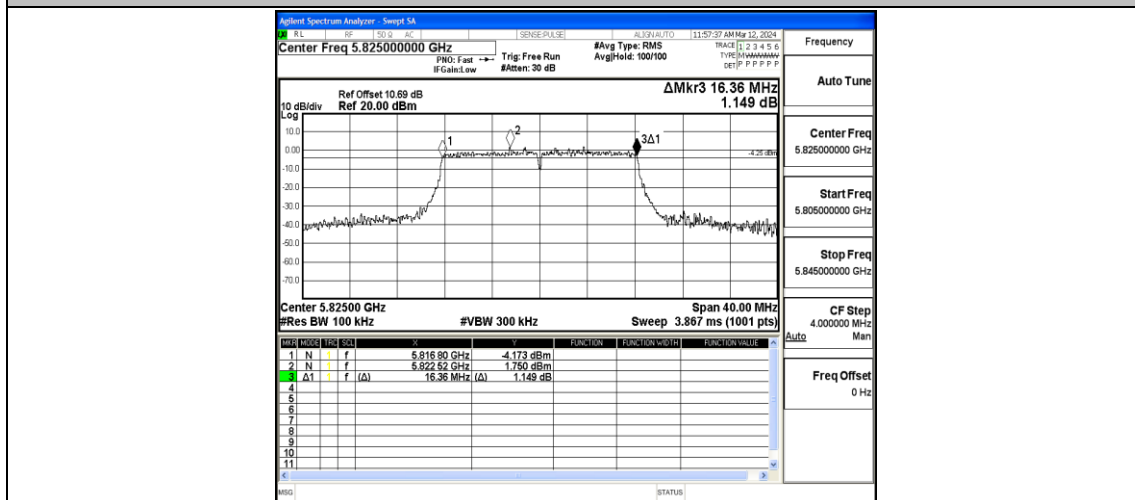
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.280	5736.840	5753.120	0.5	PASS
11A	Ant2	5745	16.320	5736.840	5753.160	0.5	PASS
11A	Ant1	5785	16.040	5777.080	5793.120	0.5	PASS
11A	Ant2	5785	16.320	5776.840	5793.160	0.5	PASS
11A	Ant1	5825	16.360	5816.800	5833.160	0.5	PASS
11A	Ant2	5825	16.280	5816.840	5833.120	0.5	PASS
11N20MIMO	Ant1	5745	16.880	5736.440	5753.320	0.5	PASS
11N20MIMO	Ant2	5745	16.920	5736.440	5753.360	0.5	PASS
11N20MIMO	Ant1	5785	17.560	5776.200	5793.760	0.5	PASS
11N20MIMO	Ant2	5785	17.560	5776.200	5793.760	0.5	PASS
11N20MIMO	Ant1	5825	17.280	5816.480	5833.760	0.5	PASS
11N20MIMO	Ant2	5825	17.160	5816.600	5833.760	0.5	PASS
11N40MIMO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
11N40MIMO	Ant2	5755	34.960	5737.560	5772.520	0.5	PASS
11N40MIMO	Ant1	5795	35.040	5777.480	5812.520	0.5	PASS
11N40MIMO	Ant2	5795	33.840	5777.480	5811.320	0.5	PASS
11AC20MIMO	Ant1	5745	17.600	5736.200	5753.800	0.5	PASS
11AC20MIMO	Ant2	5745	17.240	5736.200	5753.440	0.5	PASS
11AC20MIMO	Ant1	5785	17.640	5776.160	5793.800	0.5	PASS
11AC20MIMO	Ant2	5785	17.520	5776.280	5793.800	0.5	PASS
11AC20MIMO	Ant1	5825	17.600	5816.160	5833.760	0.5	PASS
11AC20MIMO	Ant2	5825	17.040	5816.720	5833.760	0.5	PASS
11AC40MIMO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
11AC40MIMO	Ant2	5755	35.120	5737.400	5772.520	0.5	PASS
11AC40MIMO	Ant1	5795	35.360	5777.160	5812.520	0.5	PASS
11AC40MIMO	Ant2	5795	35.360	5777.160	5812.520	0.5	PASS
11AC80MIMO	Ant1	5775	73.920	5737.400	5811.320	0.5	PASS
11AC80MIMO	Ant2	5775	72.640	5737.400	5810.040	0.5	PASS

Test Graphs

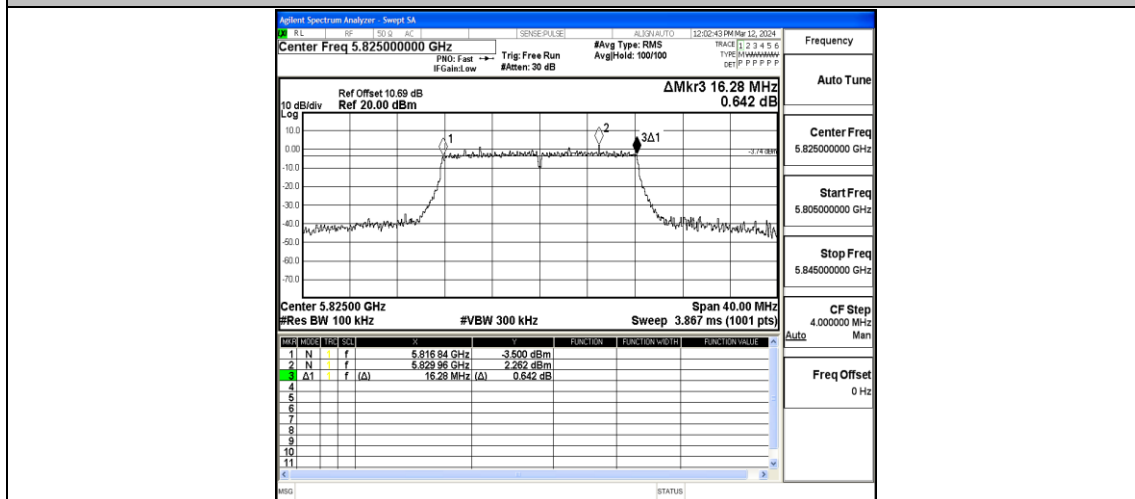




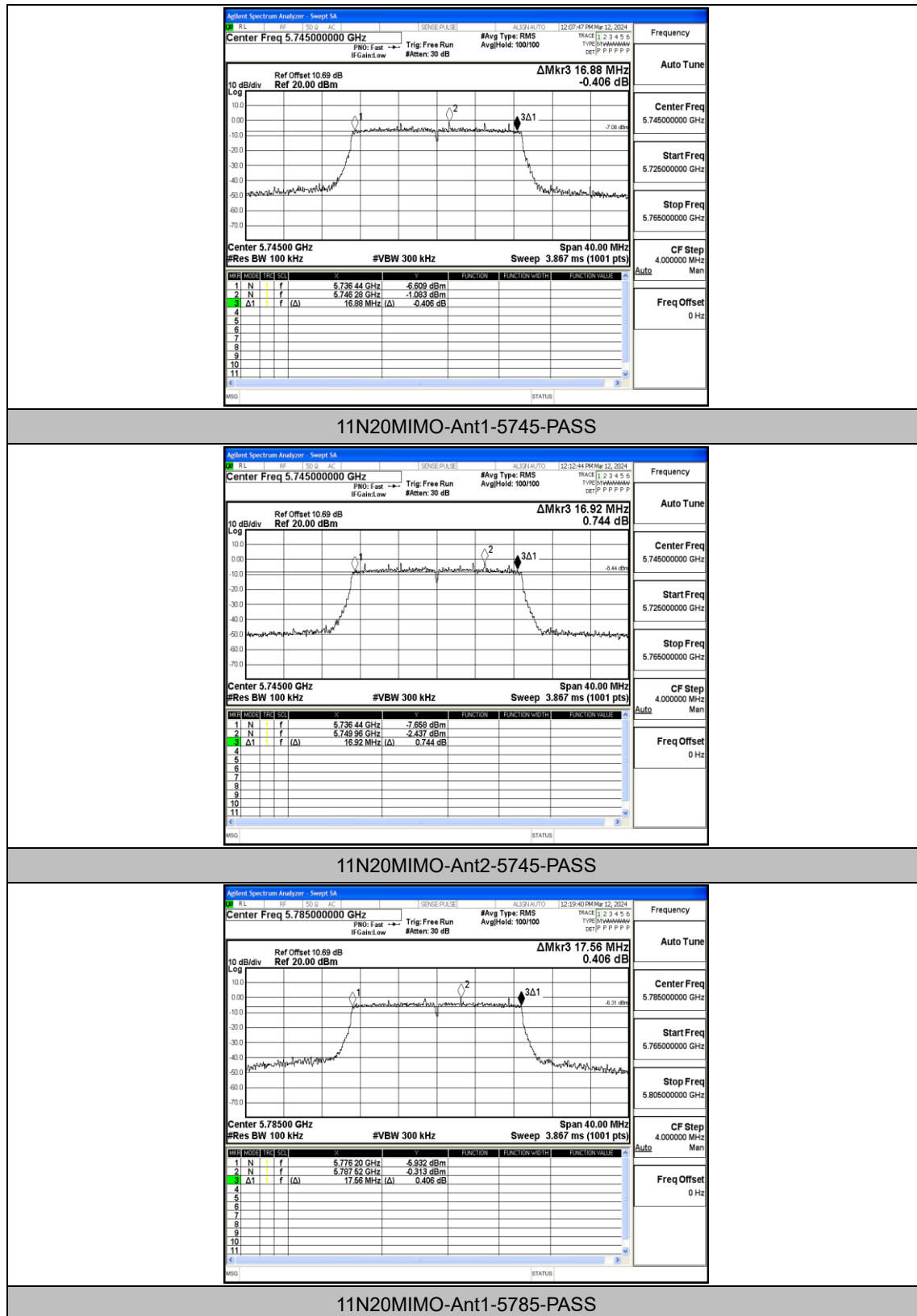
11A-Ant2-5785-PASS

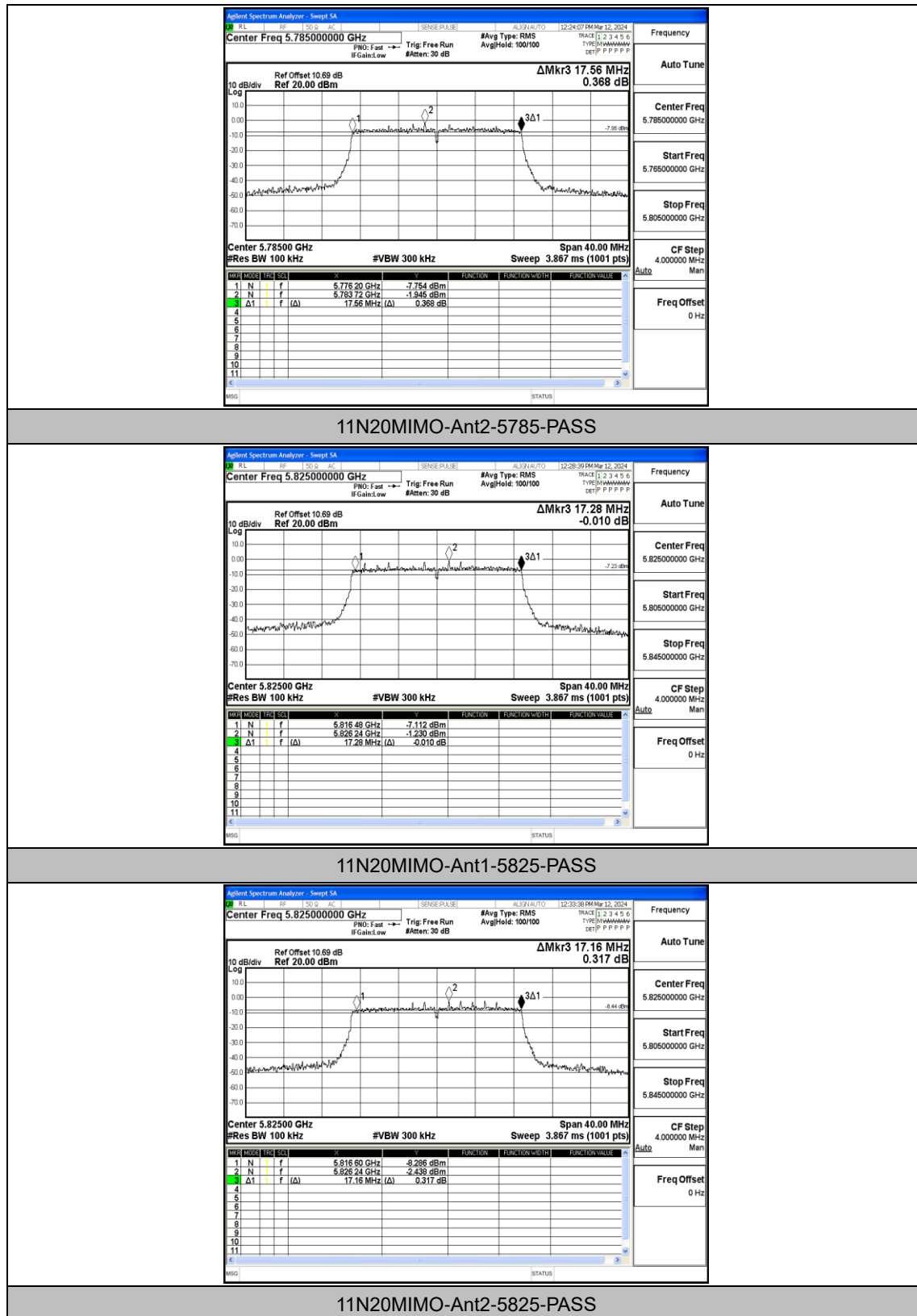


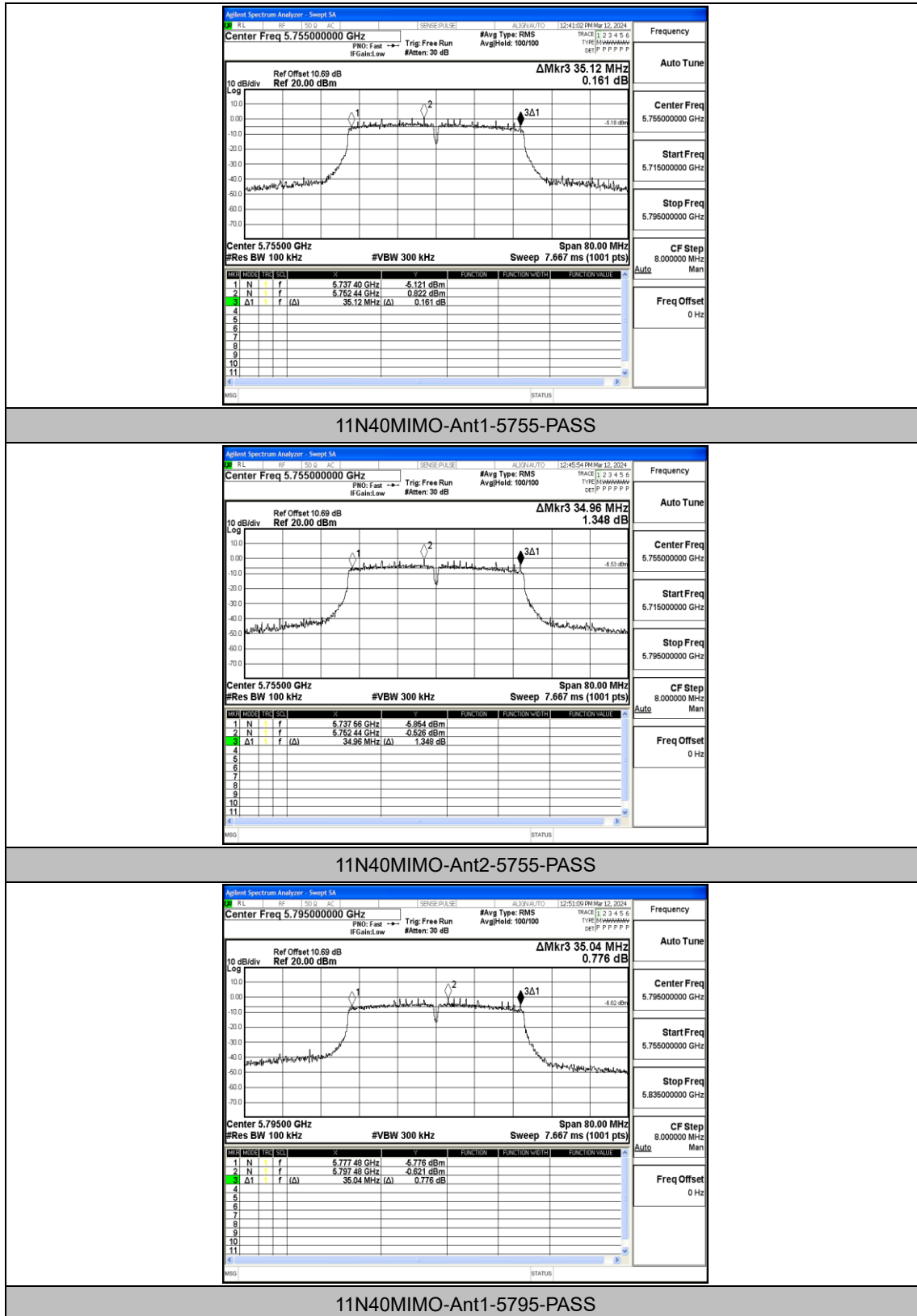
11A-Ant1-5825-PASS

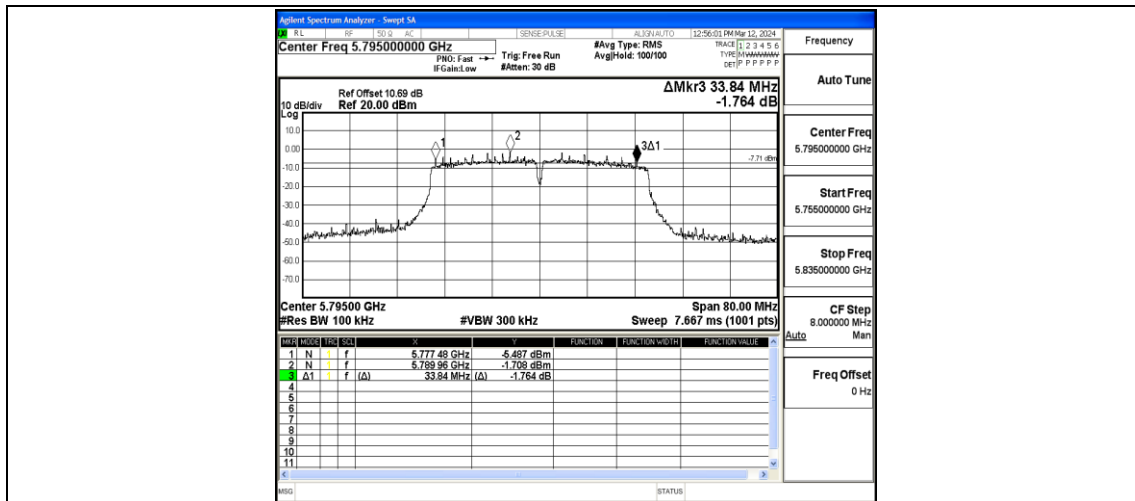


11A-Ant2-5825-PASS

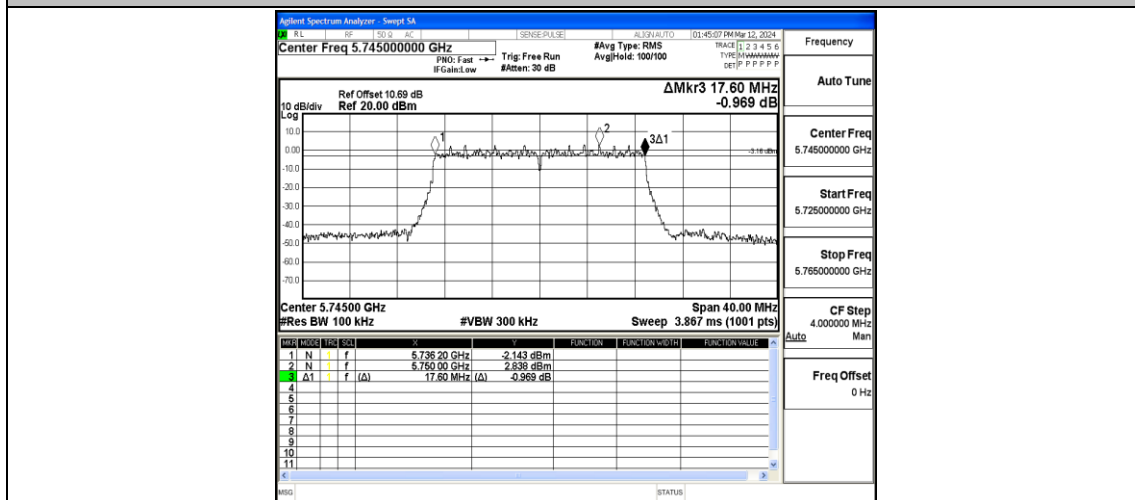




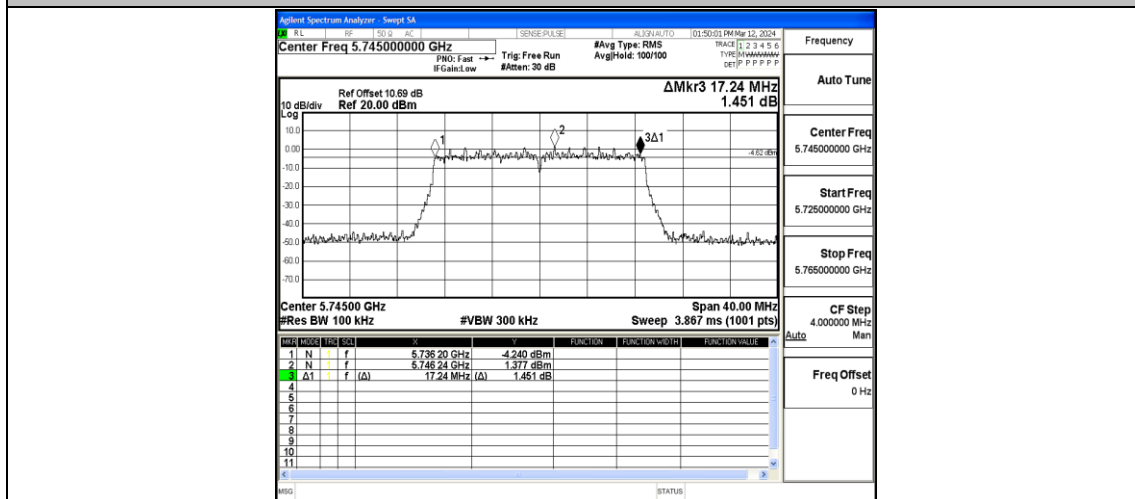




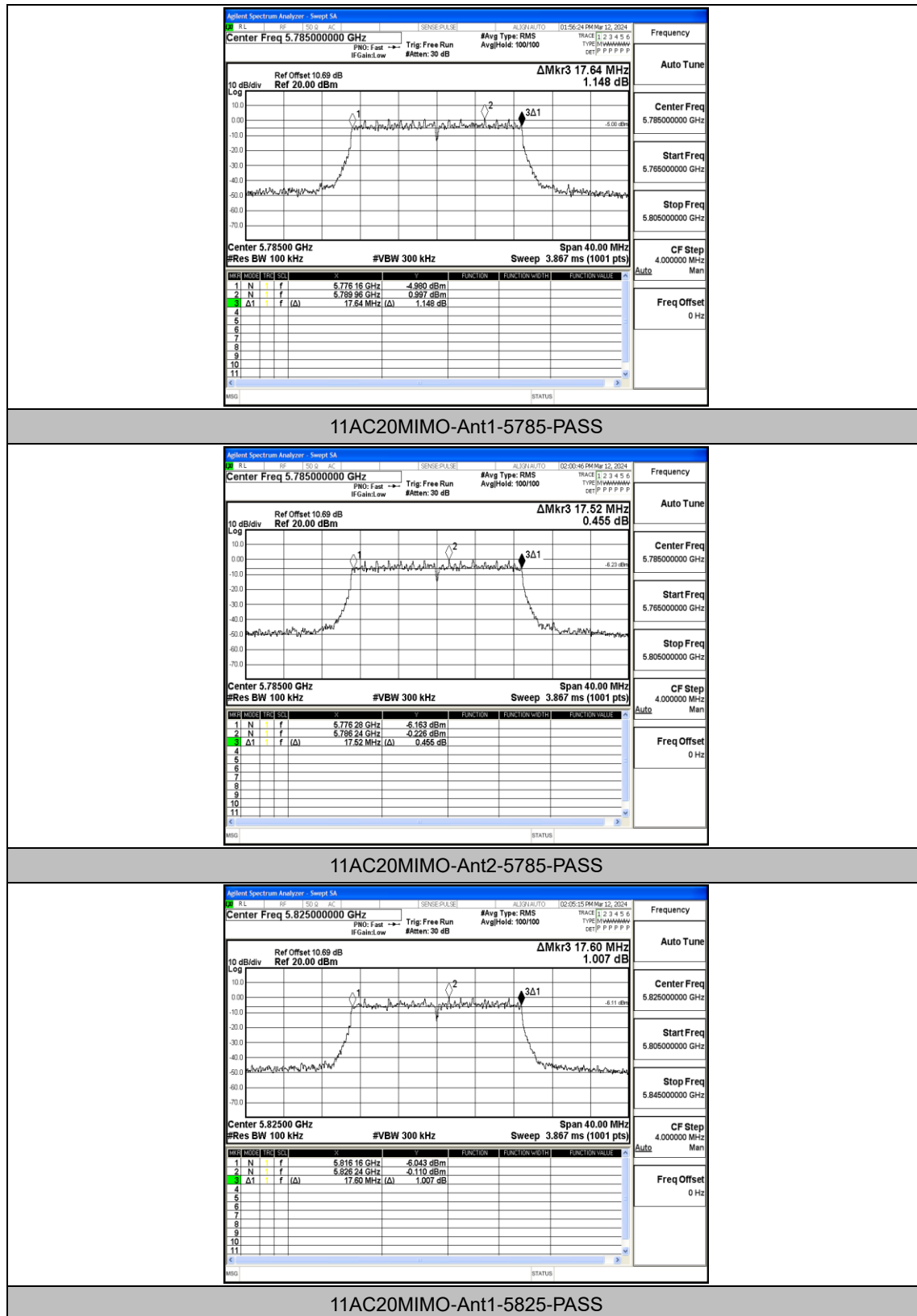
11N40MIMO-Ant2-5795-PASS

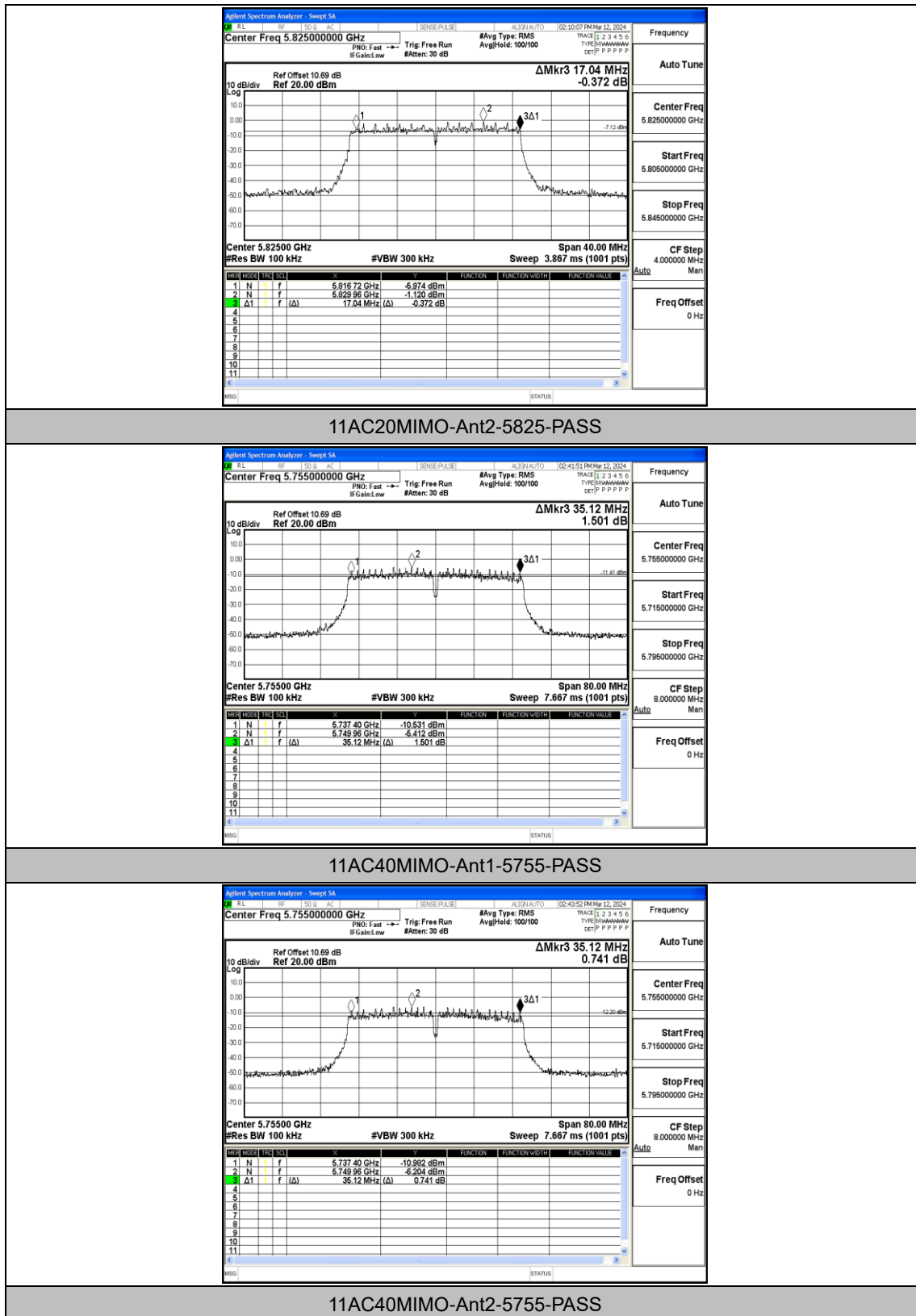


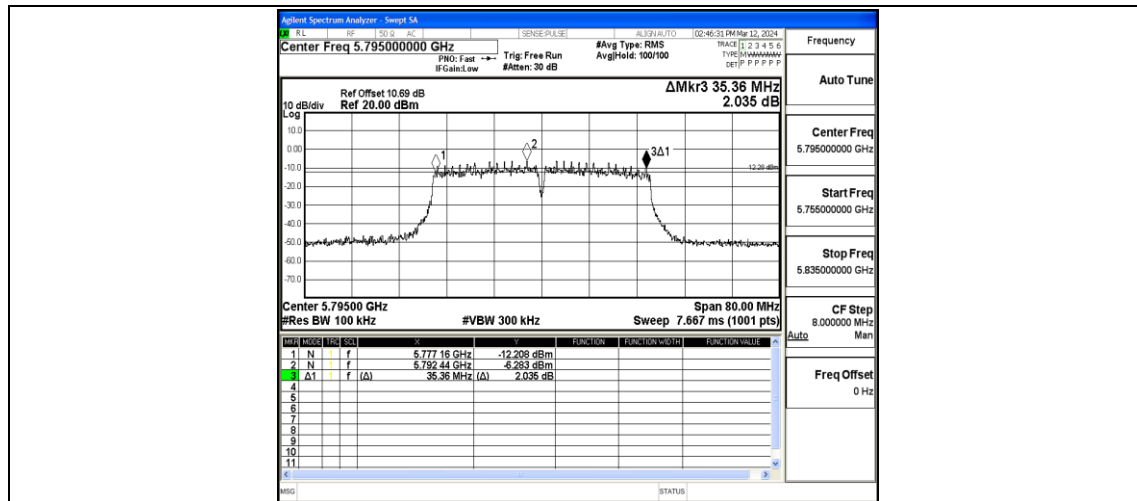
11AC20MIMO-Ant1-5745-PASS



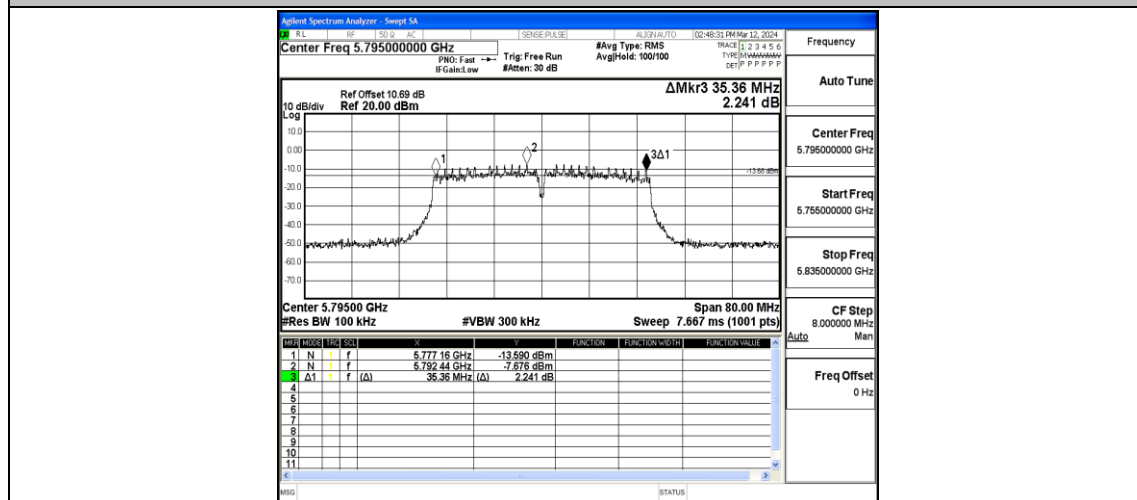
11AC20MIMO-Ant2-5745-PASS



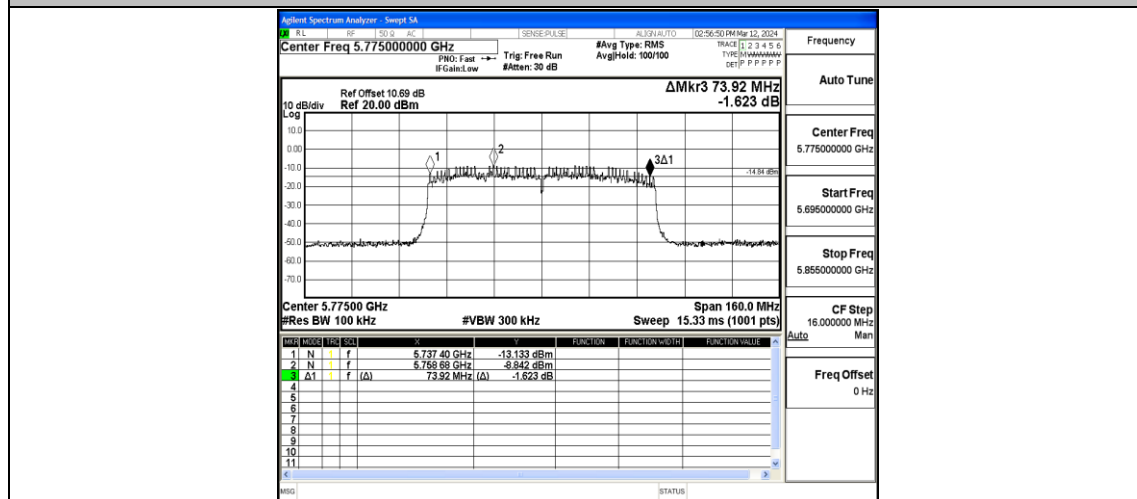




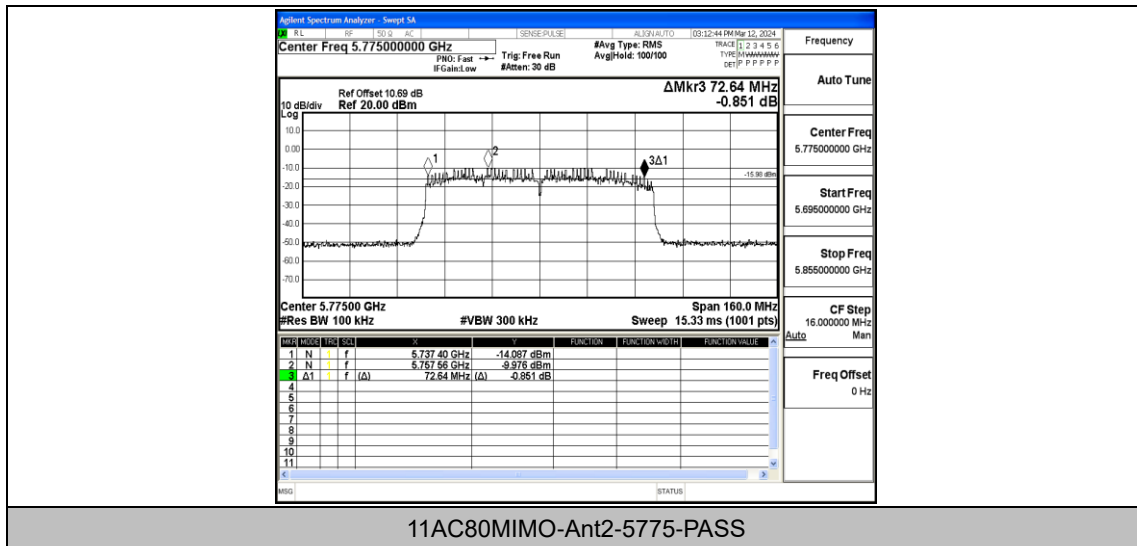
11AC40MIMO-Ant1-5795-PASS



11AC40MIMO-Ant2-5795-PASS



11AC80MIMO-Ant1-5775-PASS



Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	17.60	≤30.00	PASS
11A	Ant2	5745	15.96	≤30.00	PASS
11A	Ant1	5785	15.79	≤30.00	PASS
11A	Ant2	5785	14.50	≤30.00	PASS
11A	Ant1	5825	14.35	≤30.00	PASS
11A	Ant2	5825	13.38	≤30.00	PASS
11N20MIMO	Ant1	5745	9.93	≤30.00	PASS
11N20MIMO	Ant2	5745	8.84	≤30.00	PASS
11N20MIMO	total	5745	12.43	≤30.00	PASS
11N20MIMO	Ant1	5785	11.25	≤30.00	PASS
11N20MIMO	Ant2	5785	9.81	≤30.00	PASS
11N20MIMO	total	5785	13.60	≤30.00	PASS
11N20MIMO	Ant1	5825	9.87	≤30.00	PASS
11N20MIMO	Ant2	5825	8.74	≤30.00	PASS
11N20MIMO	total	5825	12.35	≤30.00	PASS
11N40MIMO	Ant1	5755	11.97	≤30.00	PASS
11N40MIMO	Ant2	5755	10.78	≤30.00	PASS
11N40MIMO	total	5755	14.43	≤30.00	PASS
11N40MIMO	Ant1	5795	10.94	≤30.00	PASS
11N40MIMO	Ant2	5795	9.33	≤30.00	PASS
11N40MIMO	total	5795	13.22	≤30.00	PASS
11AC20MIMO	Ant1	5745	10.97	≤30.00	PASS
11AC20MIMO	Ant2	5745	9.65	≤30.00	PASS
11AC20MIMO	total	5745	13.37	≤30.00	PASS
11AC20MIMO	Ant1	5785	9.88	≤30.00	PASS
11AC20MIMO	Ant2	5785	8.71	≤30.00	PASS
11AC20MIMO	total	5785	12.34	≤30.00	PASS
11AC20MIMO	Ant1	5825	8.65	≤30.00	PASS
11AC20MIMO	Ant2	5825	7.49	≤30.00	PASS
11AC20MIMO	total	5825	11.12	≤30.00	PASS
11AC40MIMO	Ant1	5755	8.37	≤30.00	PASS
11AC40MIMO	Ant2	5755	7.18	≤30.00	PASS
11AC40MIMO	total	5755	10.83	≤30.00	PASS
11AC40MIMO	Ant1	5795	9.83	≤30.00	PASS
11AC40MIMO	Ant2	5795	9.14	≤30.00	PASS
11AC40MIMO	total	5795	12.51	≤30.00	PASS
11AC80MIMO	Ant1	5775	9.22	≤30.00	PASS
11AC80MIMO	Ant2	5775	10.34	≤30.00	PASS
11AC80MIMO	total	5775	12.83	≤30.00	PASS

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

Appendix C: Maximum power spectral density

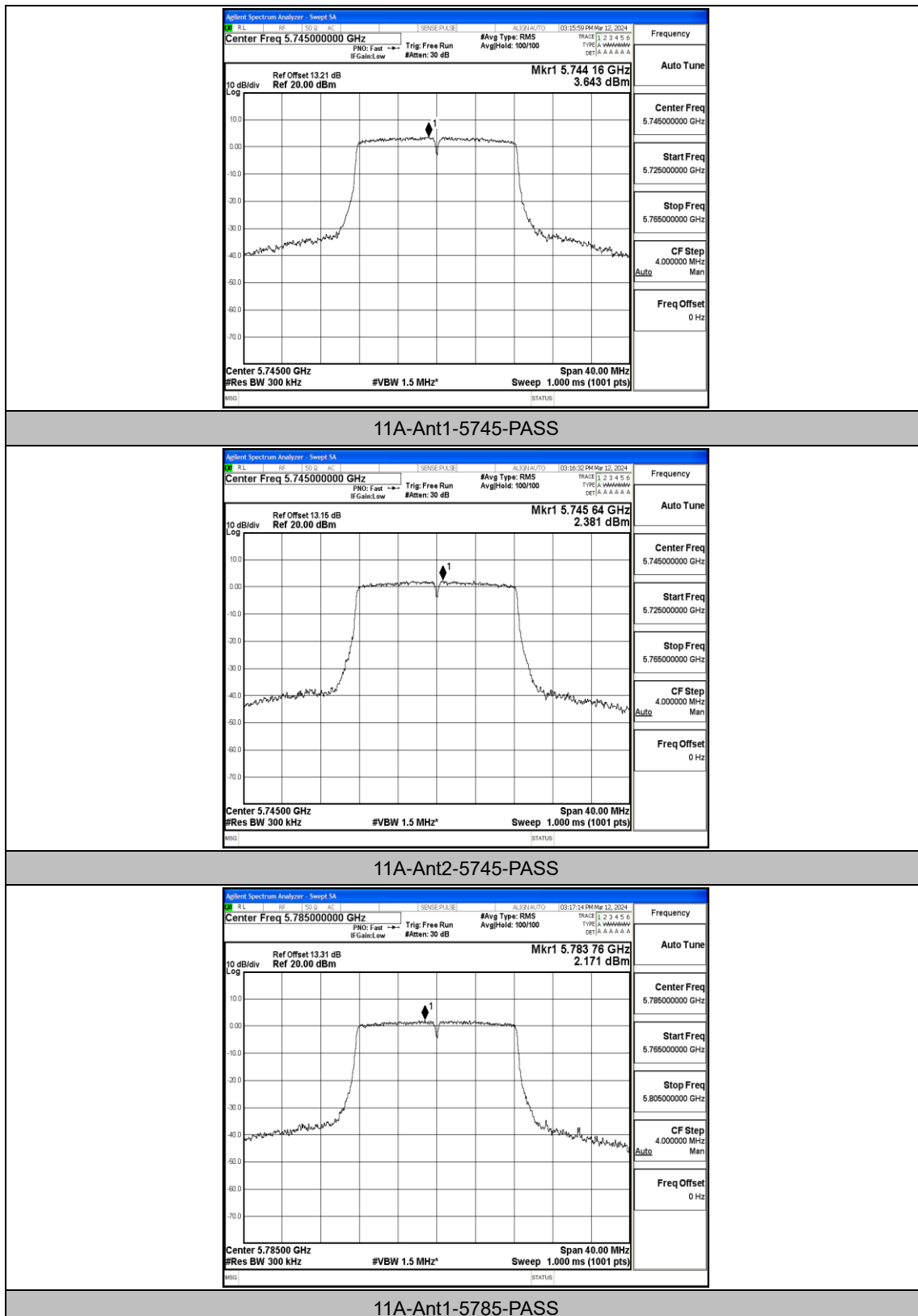
Test Result

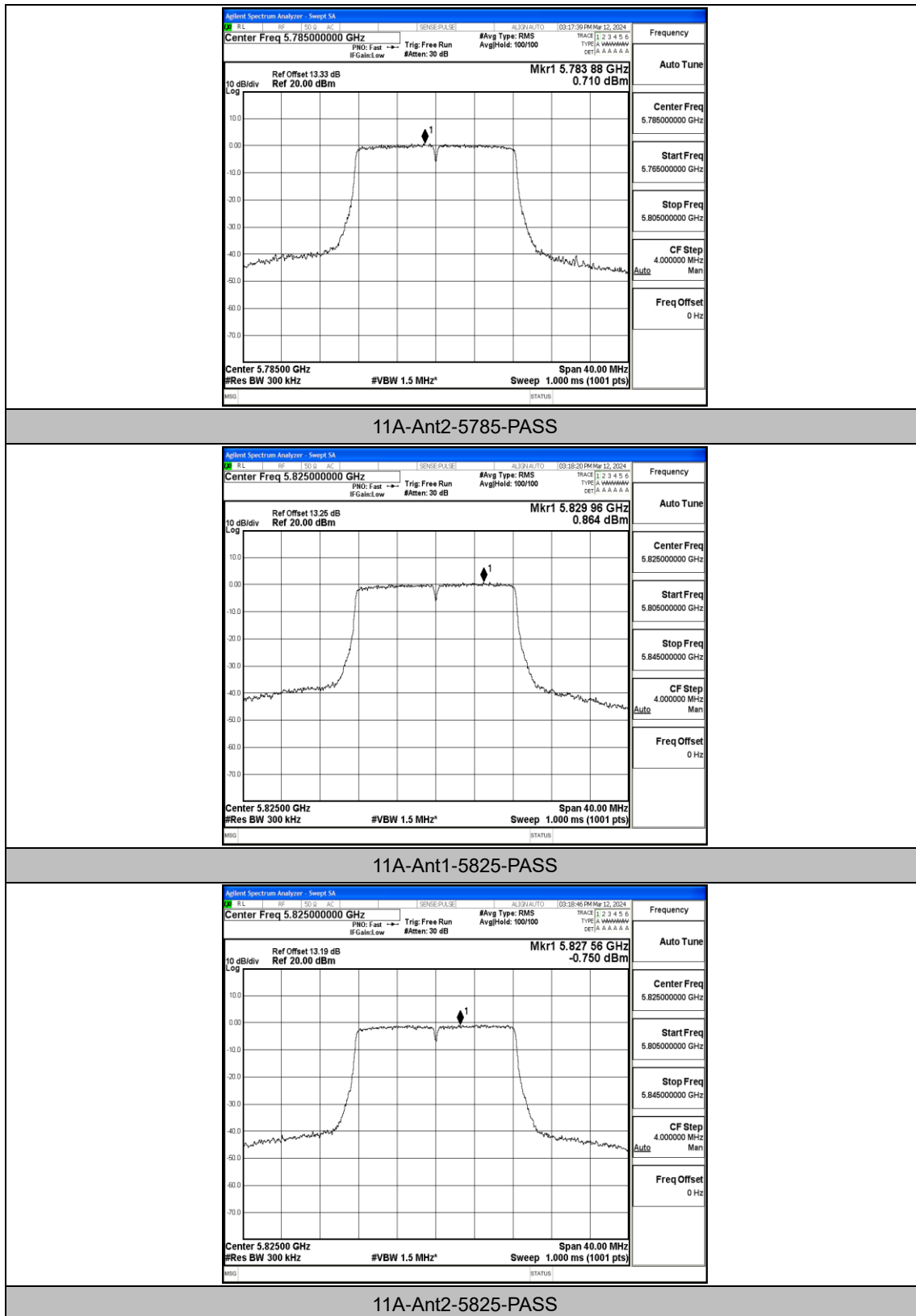
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	3.64	≤30.00	PASS
11A	Ant2	5745	2.38	≤30.00	PASS
11A	Ant1	5785	2.17	≤30.00	PASS
11A	Ant2	5785	0.71	≤30.00	PASS
11A	Ant1	5825	0.86	≤30.00	PASS
11A	Ant2	5825	-0.75	≤30.00	PASS
11N20MIMO	Ant2	5745	-4.89	≤30.00	PASS
11N20MIMO	total	5745	-1.46	≤30.00	PASS
11N20MIMO	Ant1	5745	-4.08	≤30.00	PASS
11N20MIMO	Ant1	5785	-2.85	≤30.00	PASS
11N20MIMO	Ant2	5785	-4.23	≤30.00	PASS
11N20MIMO	total	5785	-0.48	≤30.00	PASS
11N20MIMO	Ant1	5825	-4.00	≤30.00	PASS
11N20MIMO	Ant2	5825	-5.37	≤30.00	PASS
11N20MIMO	total	5825	-1.62	≤30.00	PASS
11N40MIMO	Ant1	5755	-4.42	≤30.00	PASS
11N40MIMO	Ant2	5755	-5.72	≤30.00	PASS
11N40MIMO	total	5755	-2.01	≤30.00	PASS
11N40MIMO	Ant1	5795	-5.65	≤30.00	PASS
11N40MIMO	Ant2	5795	-7.25	≤30.00	PASS
11N40MIMO	total	5795	-3.37	≤30.00	PASS
11AC20MIMO	Ant1	5745	-2.47	≤30.00	PASS
11AC20MIMO	Ant2	5745	-3.48	≤30.00	PASS
11AC20MIMO	total	5745	0.06	≤30.00	PASS
11AC20MIMO	Ant1	5785	-3.34	≤30.00	PASS
11AC20MIMO	Ant2	5785	-4.47	≤30.00	PASS
11AC20MIMO	total	5785	-0.86	≤30.00	PASS
11AC20MIMO	Ant1	5825	-4.03	≤30.00	PASS
11AC20MIMO	Ant2	5825	-4.92	≤30.00	PASS
11AC20MIMO	total	5825	-1.44	≤30.00	PASS
11AC40MIMO	Ant1	5755	-6.44	≤30.00	PASS
11AC40MIMO	Ant2	5755	-8.17	≤30.00	PASS
11AC40MIMO	total	5755	-4.21	≤30.00	PASS
11AC40MIMO	Ant1	5795	-5.45	≤30.00	PASS
11AC40MIMO	Ant2	5795	-6.43	≤30.00	PASS
11AC40MIMO	total	5795	-2.90	≤30.00	PASS
11AC80MIMO	Ant1	5775	-8.76	≤30.00	PASS
11AC80MIMO	Ant2	5775	-8.14	≤30.00	PASS
11AC80MIMO	total	5775	-5.43	≤30.00	PASS

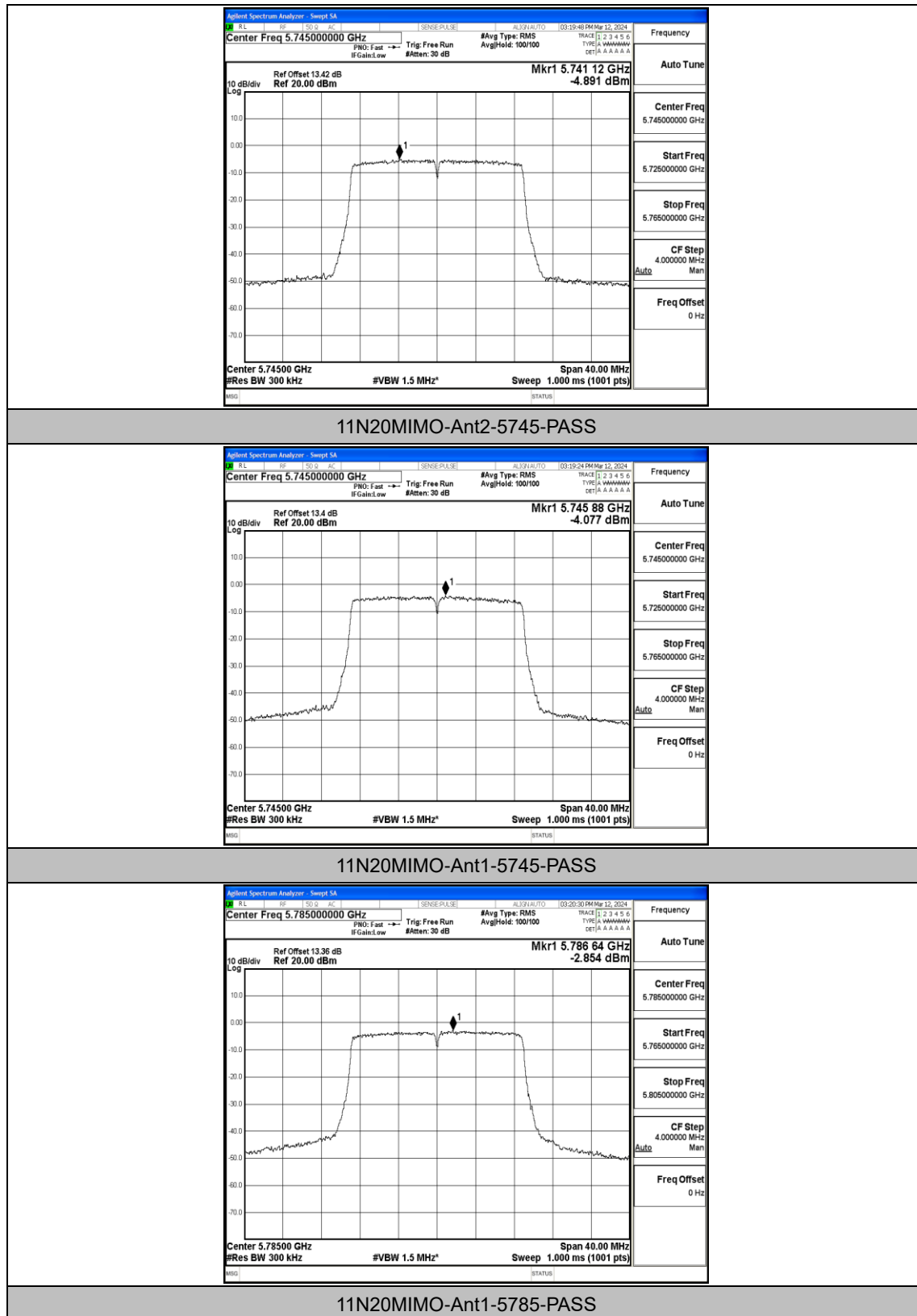
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

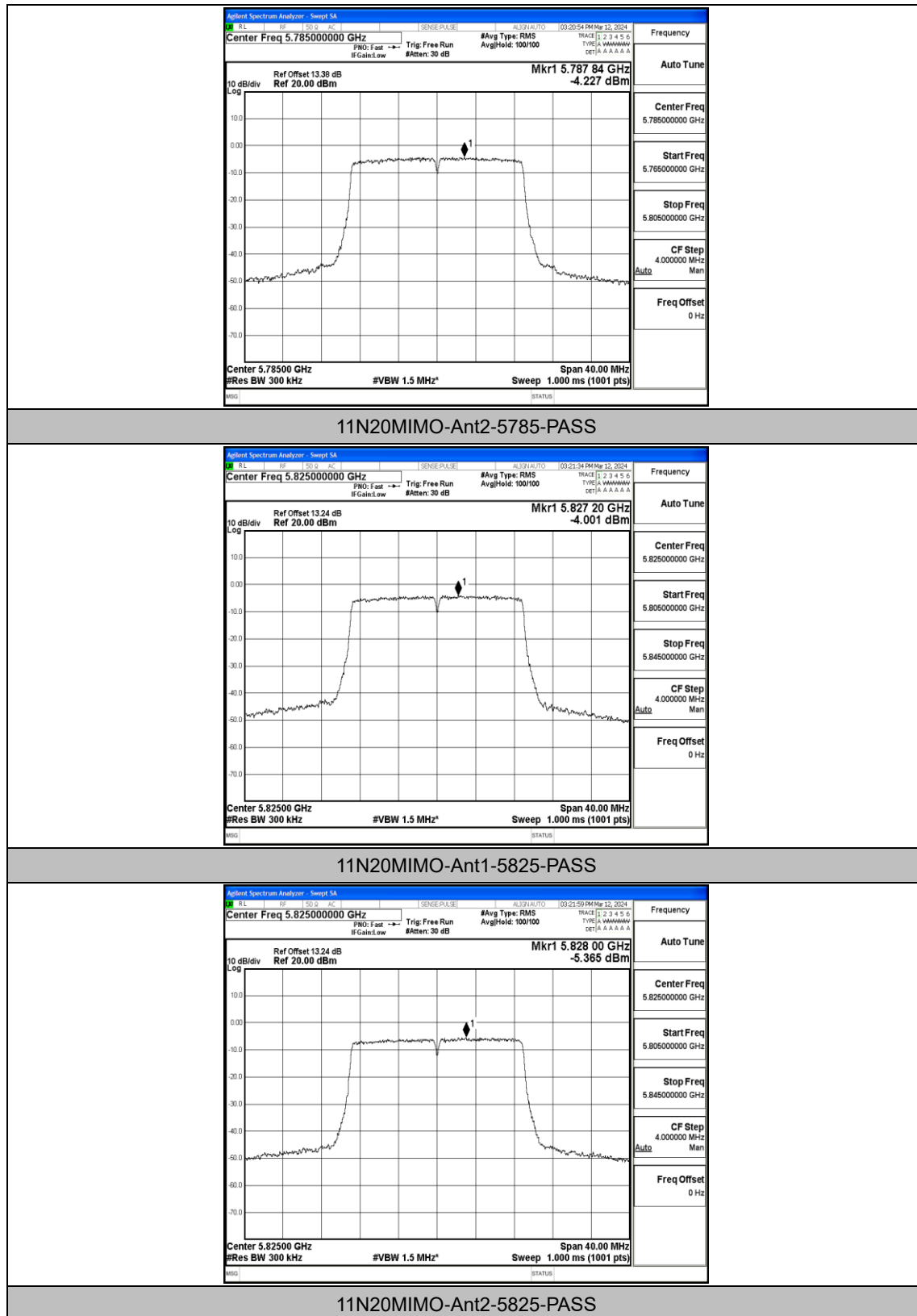
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

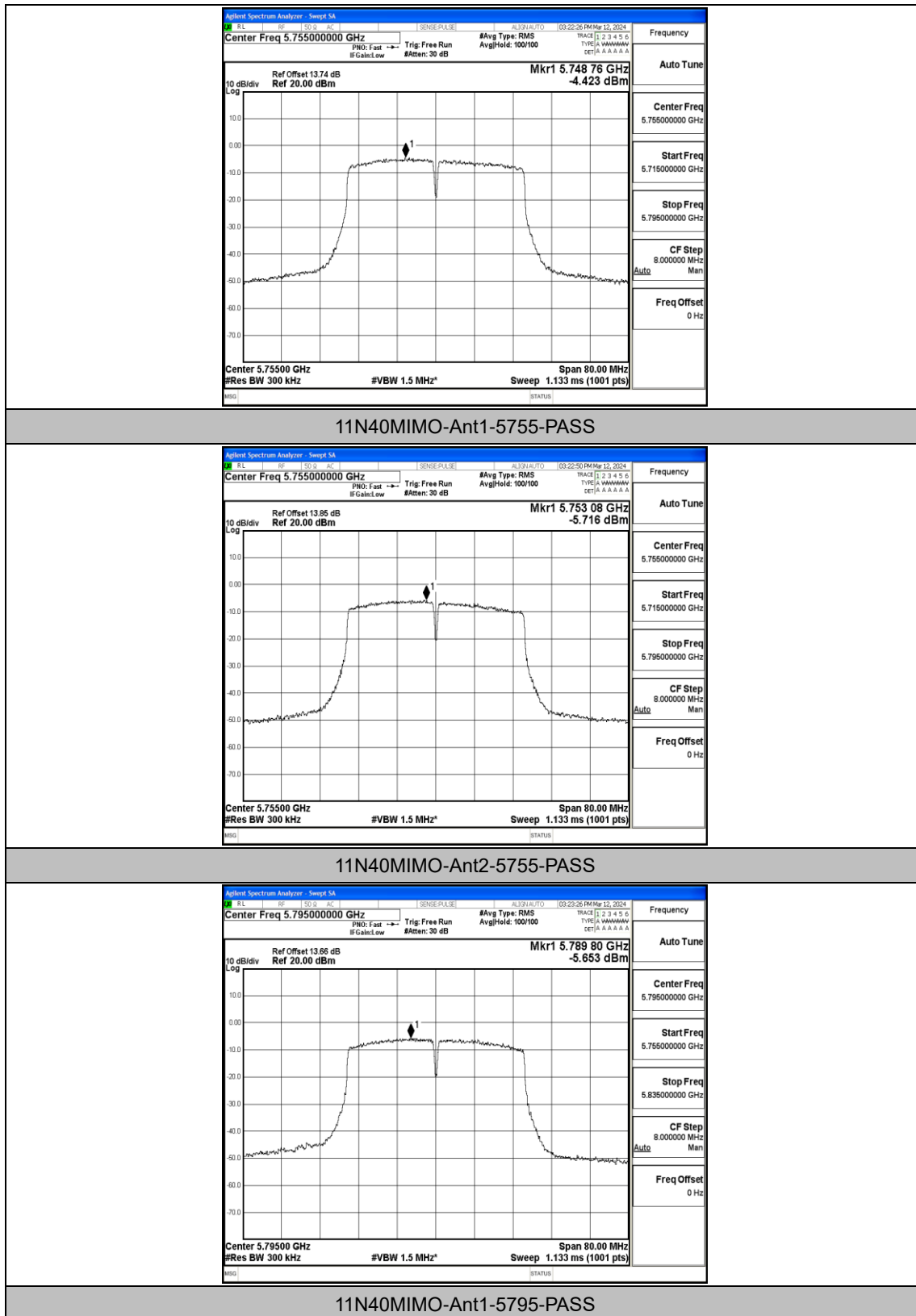
Test Graphs

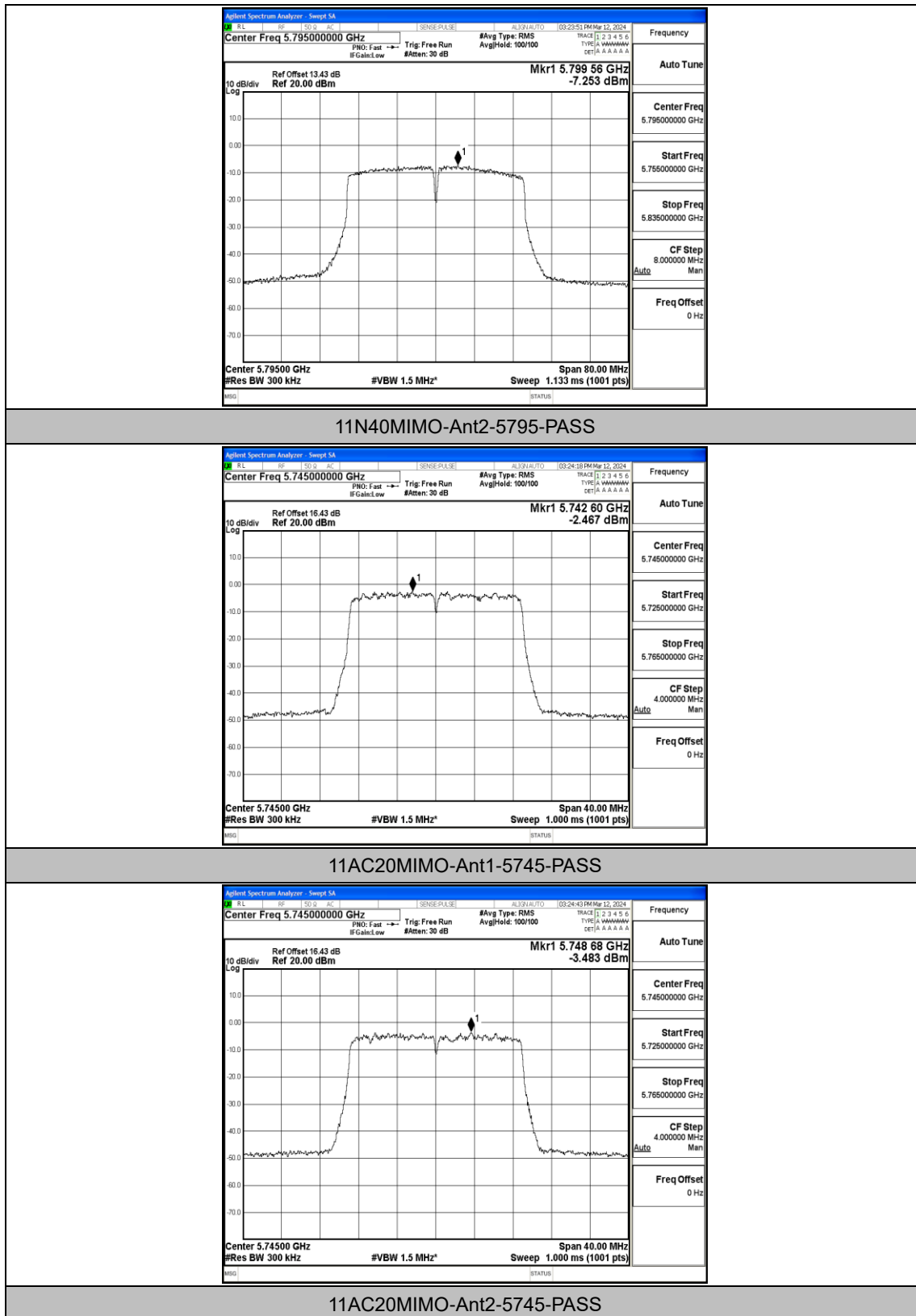


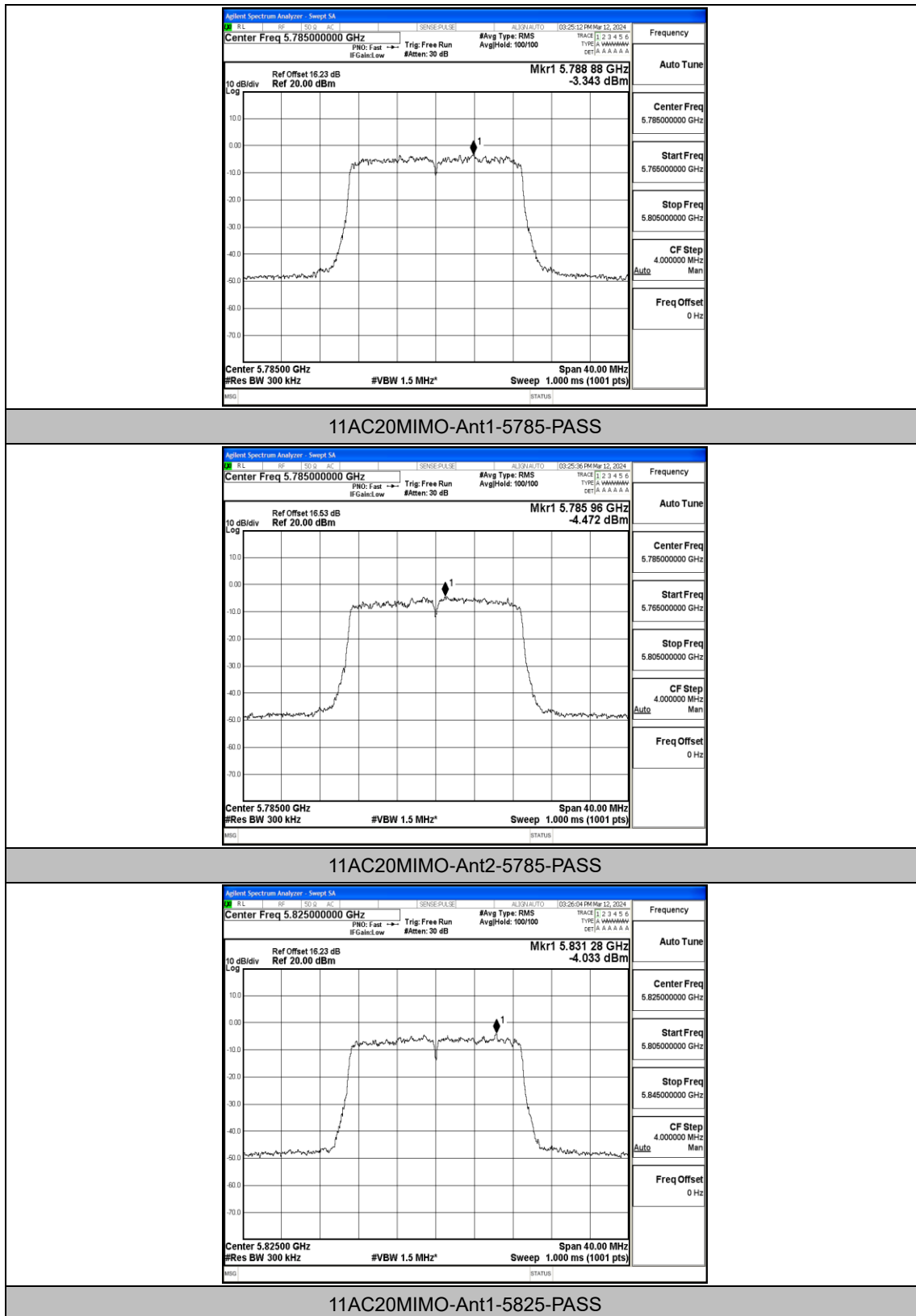


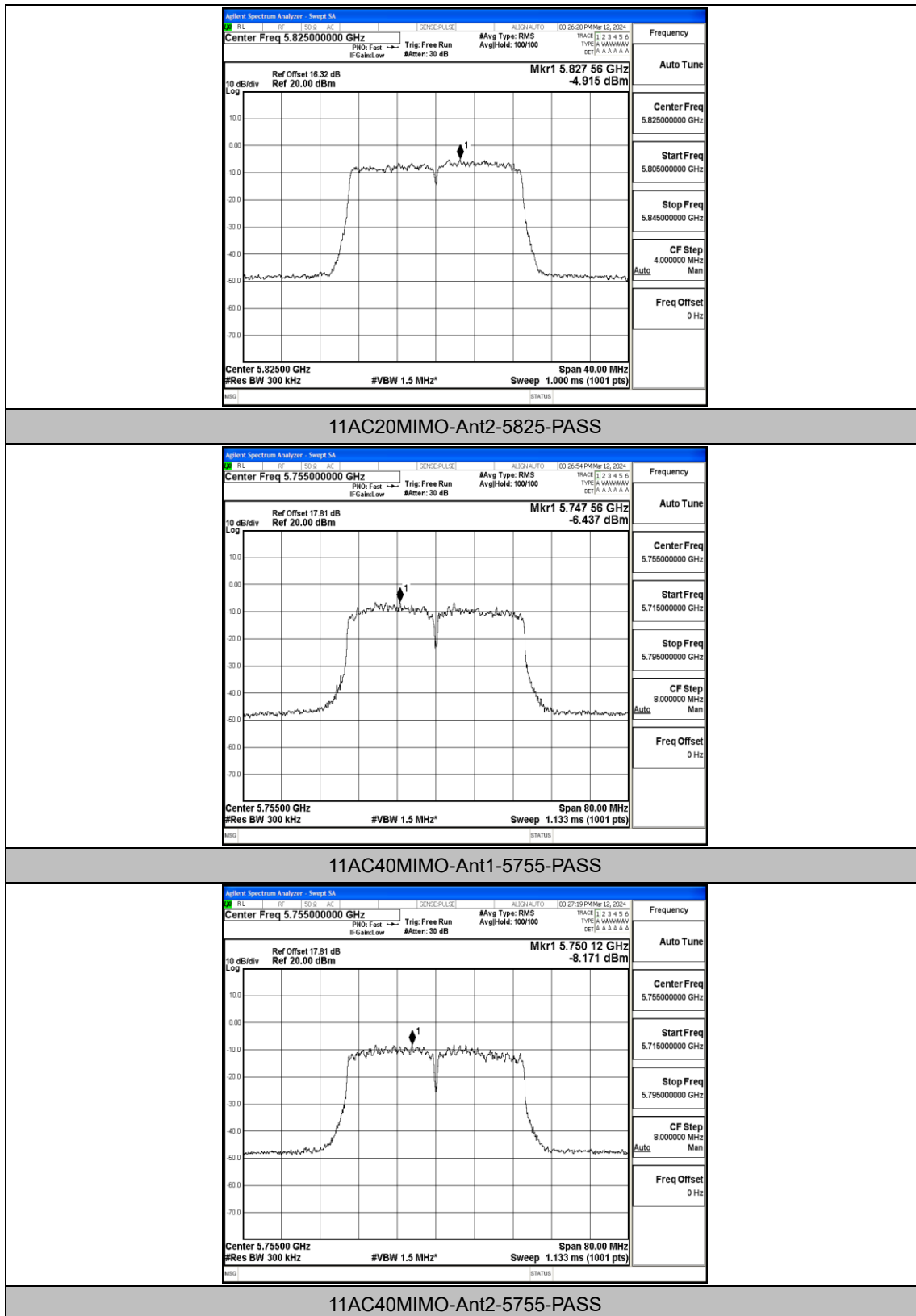


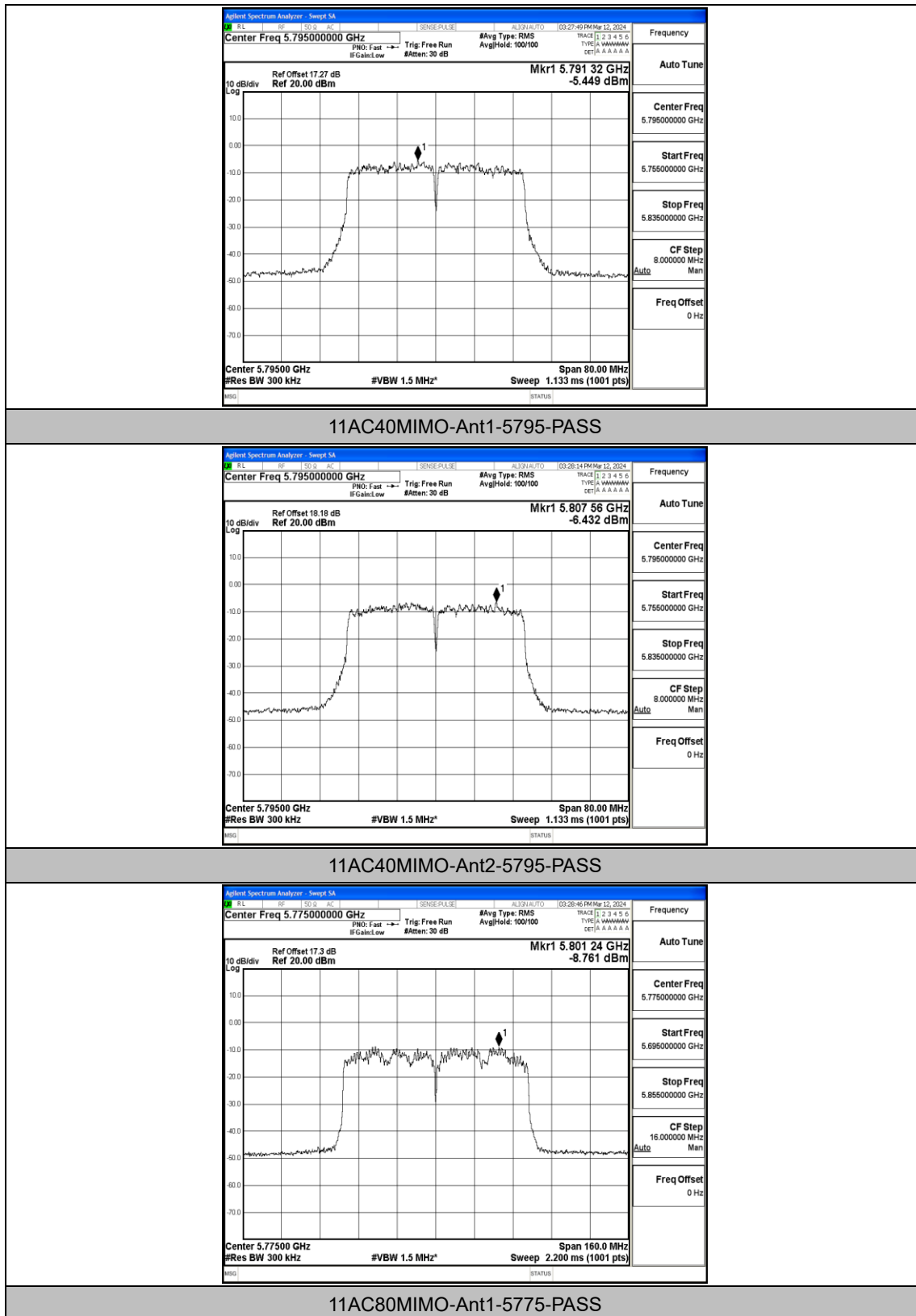


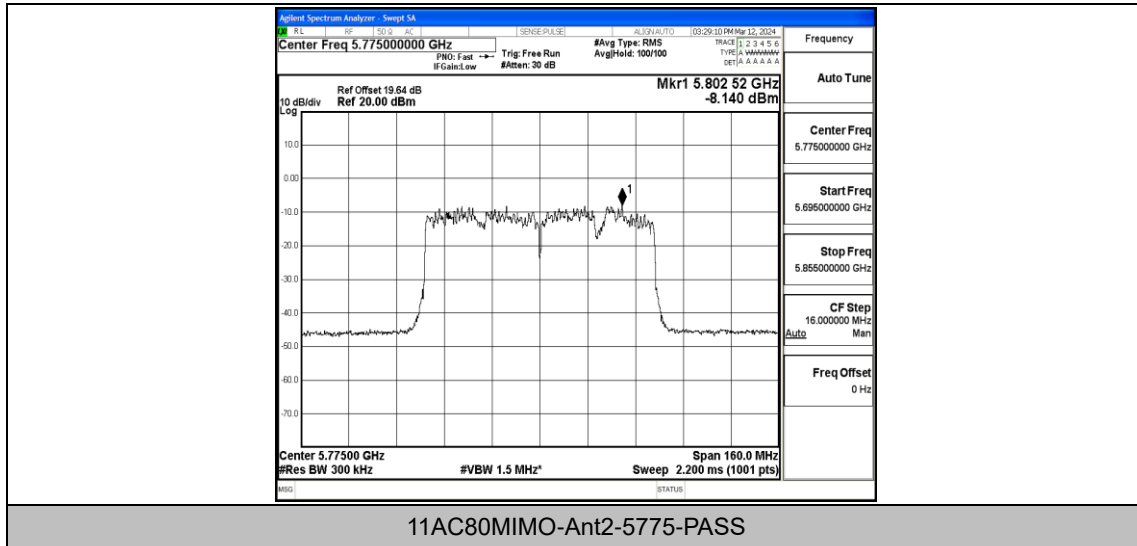












Appendix D: Band edge measurements

Test Result

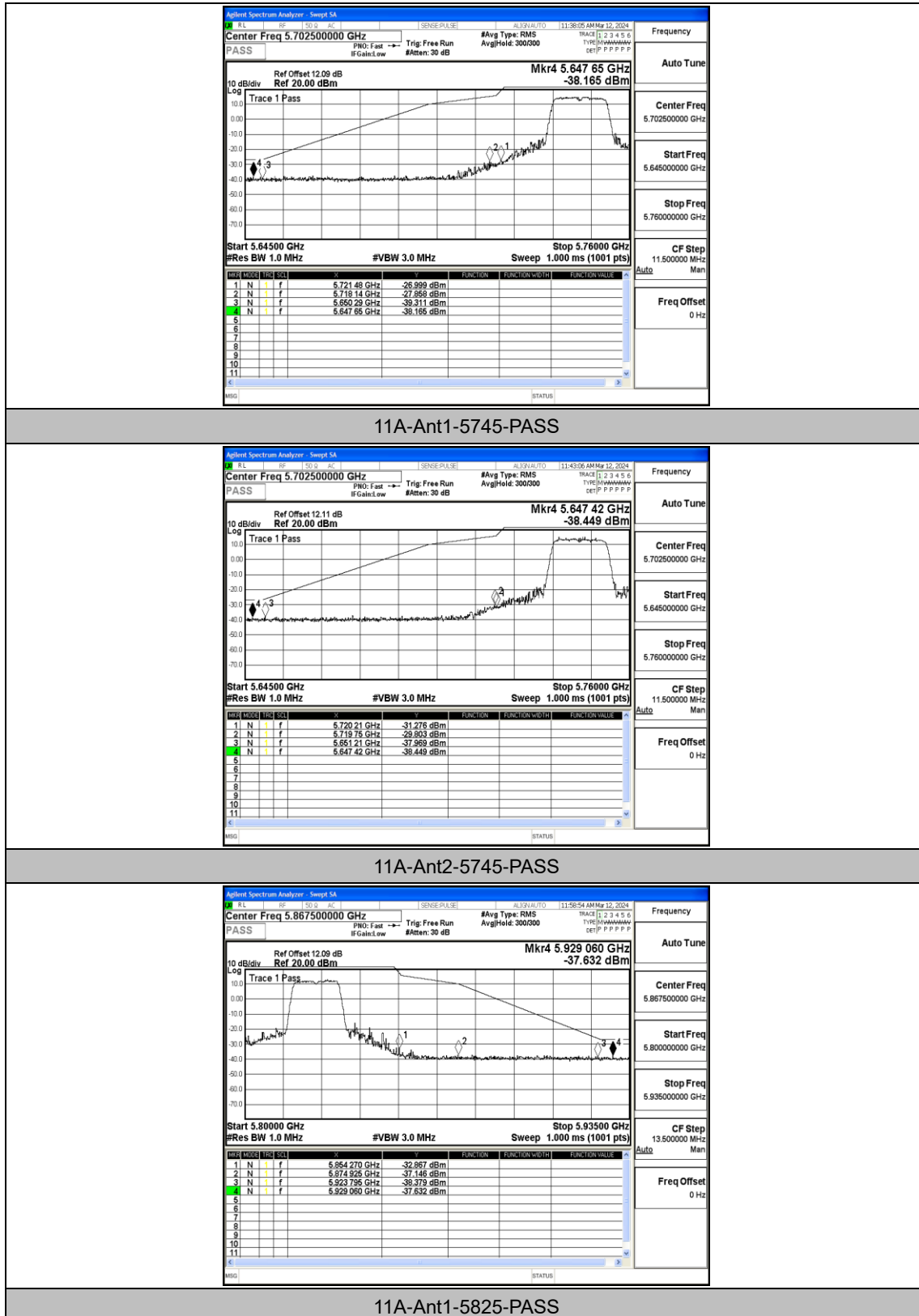
TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-27	≤18.96	PASS
11A	Ant1	Low	5745	5700~5720	-27.86	≤15.08	PASS
11A	Ant1	Low	5745	5650~5700	-39.31	≤-26.79	PASS
11A	Ant1	Low	5745	5760~5650	-38.17	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-31.28	≤16.08	PASS
11A	Ant2	Low	5745	5700~5720	-29.8	≤15.53	PASS
11A	Ant2	Low	5745	5650~5700	-37.97	≤-26.10	PASS
11A	Ant2	Low	5745	5760~5650	-38.45	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-32.87	≤17.26	PASS
11A	Ant1	High	5825	5855~5875	-37.15	≤10.02	PASS
11A	Ant1	High	5825	5875~5925	-38.38	≤-26.11	PASS
11A	Ant1	High	5825	5925~5935	-37.63	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-34.04	≤17.26	PASS
11A	Ant2	High	5825	5855~5875	-37.24	≤10.32	PASS
11A	Ant2	High	5825	5875~5925	-37.94	≤-26.51	PASS
11A	Ant2	High	5825	5925~5935	-37.53	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5720~5725	-38.39	≤16.08	PASS
11N20MI MO	Ant1	Low	5745	5700~5720	-38.9	≤10.12	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-40.03	≤-26.87	PASS
11N20MI MO	Ant1	Low	5745	5760~5650	-39.11	≤-27	PASS
11N20MI MO	Ant2	Low	5745	5720~5725	-39.68	≤16.08	PASS
11N20MI MO	Ant2	Low	5745	5700~5720	-38.32	≤10.44	PASS
11N20MI MO	Ant2	Low	5745	5650~5700	-39.39	≤-26.62	PASS
11N20MI MO	Ant2	Low	5745	5760~5650	-38.53	≤-27	PASS
11N20MI MO	Ant1	High	5825	5850~5855	-39.39	≤15.73	PASS
11N20MI MO	Ant1	High	5825	5855~5875	-37.84	≤10.66	PASS
11N20MI MO	Ant1	High	5825	5875~5925	-38.8	≤-26.81	PASS
11N20MI MO	Ant1	High	5825	5925~5935	-37.57	≤-27	PASS
11N20MI	Ant2	High	5825	5850~5855	-38.17	≤15.73	PASS

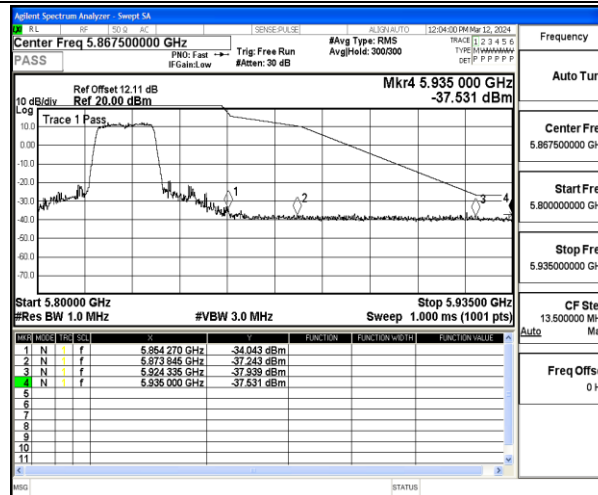
MO							
11N20MI MO	Ant2	High	5825	5855~5875	-38.1	≤10.47	PASS
11N20MI MO	Ant2	High	5825	5875~5925	-39.31	≤-26.91	PASS
11N20MI MO	Ant2	High	5825	5925~5935	-38.27	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5720~5725	-27.9	≤16.35	PASS
11N40MI MO	Ant1	Low	5755	5700~5720	-28.47	≤13.61	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-38.44	≤-26.70	PASS
11N40MI MO	Ant1	Low	5755	5780~5650	-37.62	≤-27	PASS
11N40MI MO	Ant2	Low	5755	5720~5725	-30.59	≤16.04	PASS
11N40MI MO	Ant2	Low	5755	5700~5720	-33.2	≤10.67	PASS
11N40MI MO	Ant2	Low	5755	5650~5700	-40.01	≤-26.90	PASS
11N40MI MO	Ant2	Low	5755	5780~5650	-38.64	≤-27	PASS
11N40MI MO	Ant1	High	5795	5850~5855	-38.41	≤15.66	PASS
11N40MI MO	Ant1	High	5795	5855~5875	-37.45	≤10.02	PASS
11N40MI MO	Ant1	High	5795	5875~5925	-37.48	≤-26.59	PASS
11N40MI MO	Ant1	High	5795	5925~5935	-37.29	≤-27	PASS
11N40MI MO	Ant2	High	5795	5850~5855	-38.02	≤15.66	PASS
11N40MI MO	Ant2	High	5795	5855~5875	-38.11	≤10.57	PASS
11N40MI MO	Ant2	High	5795	5875~5925	-37.93	≤-26.71	PASS
11N40MI MO	Ant2	High	5795	5925~5935	-37.9	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5720~5725	-35.97	≤16.08	PASS
11AC20M IMO	Ant1	Low	5745	5700~5720	-37.8	≤10.25	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-40.01	≤-26.96	PASS
11AC20M IMO	Ant1	Low	5745	5760~5650	-38.6	≤-27	PASS

11AC20M IMO	Ant2	Low	5745	5720~5725	-36.85	≤16.60	PASS
11AC20M IMO	Ant2	Low	5745	5700~5720	-37.96	≤10.57	PASS
11AC20M IMO	Ant2	Low	5745	5650~5700	-39.11	≤-26.87	PASS
11AC20M IMO	Ant2	Low	5745	5760~5650	-38.82	≤-27	PASS
11AC20M IMO	Ant1	High	5825	5850~5855	-37.41	≤17.26	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-37.22	≤10.85	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-37.84	≤-26.61	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-38.05	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-37.54	≤16.03	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-37.87	≤10.02	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-38.1	≤-26.71	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-37.82	≤-27	PASS
11AC40M IMO	Ant1	Low	5755	5720~5725	-39.35	≤15.74	PASS
11AC40M IMO	Ant1	Low	5755	5700~5720	-37.7	≤10.85	PASS
11AC40M IMO	Ant1	Low	5755	5650~5700	-38.89	≤-26.50	PASS
11AC40M IMO	Ant1	Low	5755	5780~5650	-38.64	≤-27	PASS
11AC40M IMO	Ant2	Low	5755	5720~5725	-36.44	≤17.89	PASS
11AC40M IMO	Ant2	Low	5755	5700~5720	-36.35	≤12.63	PASS
11AC40M IMO	Ant2	Low	5755	5650~5700	-38.82	≤-26.90	PASS
11AC40M IMO	Ant2	Low	5755	5780~5650	-39.3	≤-27	PASS
11AC40M IMO	Ant1	High	5795	5850~5855	-38.3	≤16.41	PASS
11AC40M IMO	Ant1	High	5795	5855~5875	-38.27	≤10.20	PASS
11AC40M IMO	Ant1	High	5795	5875~5925	-38.47	≤-26.83	PASS
11AC40M	Ant1	High	5795	5925~5935	-37.91	≤-27	PASS

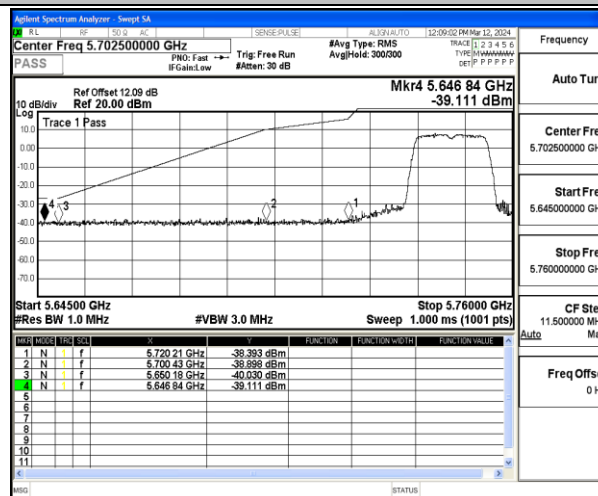
IMO							
11AC40M IMO	Ant2	High	5795	5850~5855	-38.37	≤16.03	PASS
11AC40M IMO	Ant2	High	5795	5855~5875	-37.17	≤10.20	PASS
11AC40M IMO	Ant2	High	5795	5875~5925	-37.86	≤-26.71	PASS
11AC40M IMO	Ant2	High	5795	5925~5935	-37.08	≤-27	PASS
11AC80M IMO	Ant1	Low	5775	5720~5725	-39.33	≤15.65	PASS
11AC80M IMO	Ant1	Low	5775	5700~5720	-37.88	≤11.01	PASS
11AC80M IMO	Ant1	Low	5775	5650~5700	-38.88	≤-26.69	PASS
11AC80M IMO	Ant1	Low	5775	5800~5650	-39.3	≤-27	PASS
11AC80M IMO	Ant1	High	5775	5850~5855	-39.13	≤15.84	PASS
11AC80M IMO	Ant1	High	5775	5855~5875	-38.38	≤10.04	PASS
11AC80M IMO	Ant1	High	5775	5875~5925	-38.33	≤-26.46	PASS
11AC80M IMO	Ant1	High	5775	5925~5935	-37.42	≤-27	PASS
11AC80M IMO	Ant2	Low	5775	5720~5725	-39.9	≤15.65	PASS
11AC80M IMO	Ant2	Low	5775	5700~5720	-38.51	≤10.44	PASS
11AC80M IMO	Ant2	Low	5775	5650~5700	-39.62	≤-26.46	PASS
11AC80M IMO	Ant2	Low	5775	5800~5650	-39.08	≤-27	PASS
11AC80M IMO	Ant2	High	5775	5850~5855	-39.06	≤15.84	PASS
11AC80M IMO	Ant2	High	5775	5855~5875	-37.77	≤10.04	PASS
11AC80M IMO	Ant2	High	5775	5875~5925	-38.03	≤-26.60	PASS
11AC80M IMO	Ant2	High	5775	5925~5935	-38.28	≤-27	PASS

Test Graphs

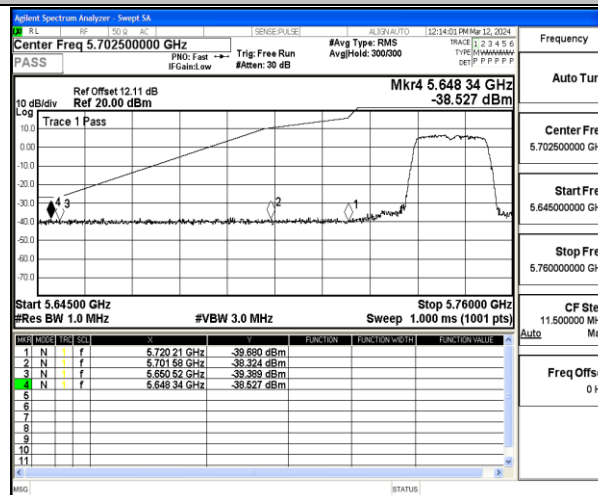




11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS



11N20MIMO-Ant2-5745-PASS

