

RF Test Data for RLAN(5. 8G) (Conducted Measurement)

Product Name: DRONE

Trade Mark: /

Test Model: F7GIM

FCC ID: 2A5GP-F7GIMYK

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

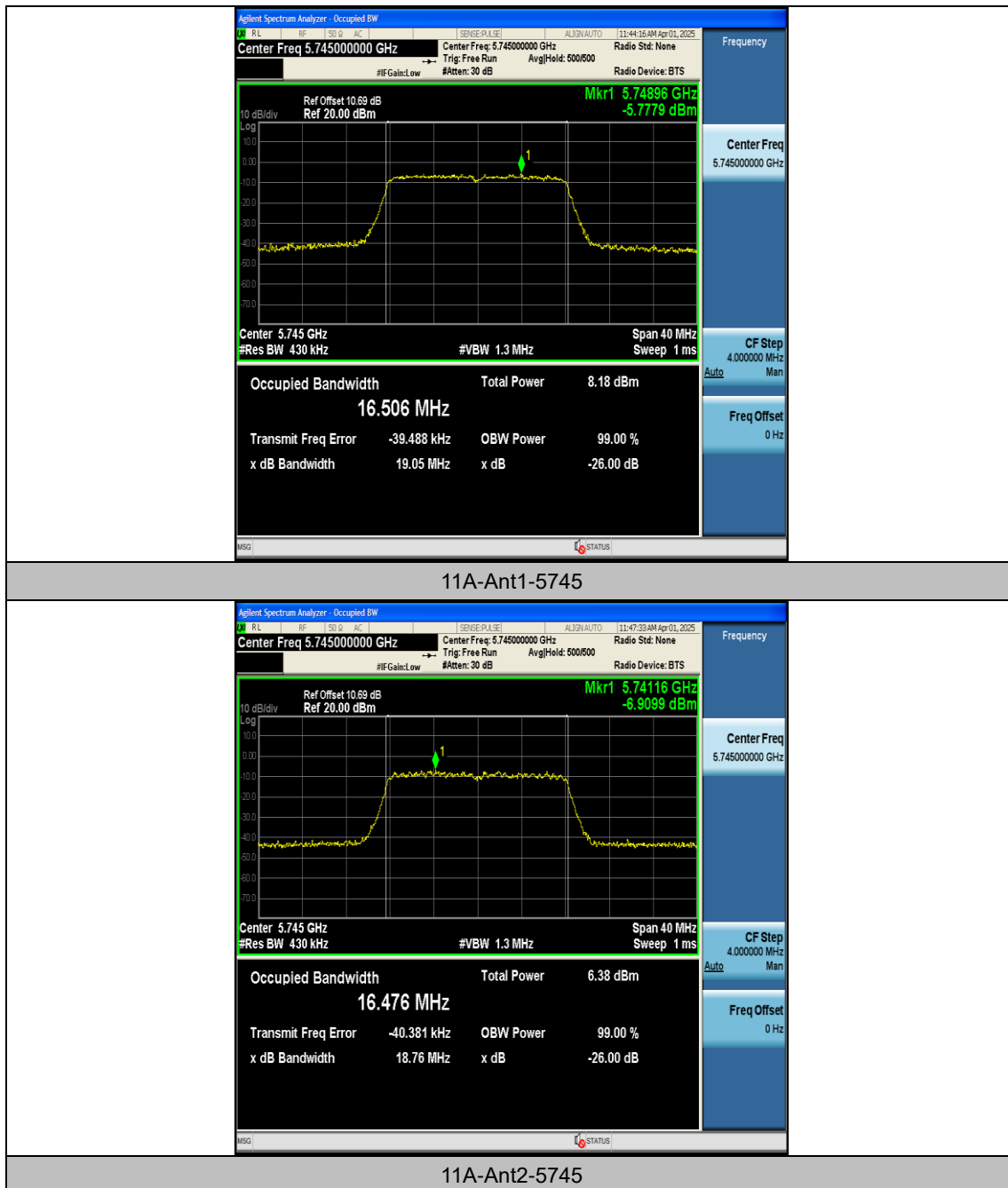
Appendix A2: Occupied channel bandwidth

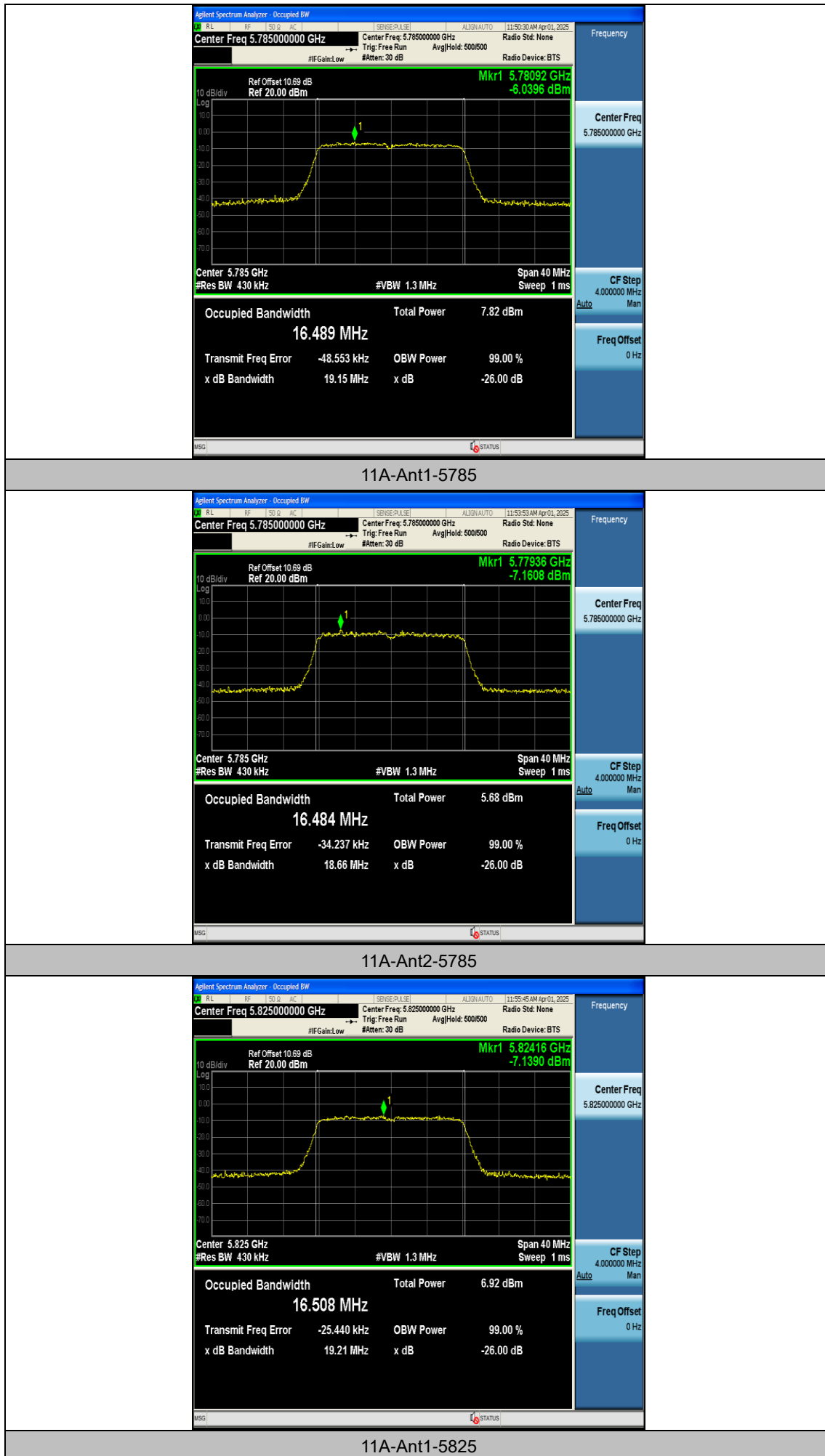
Test Result

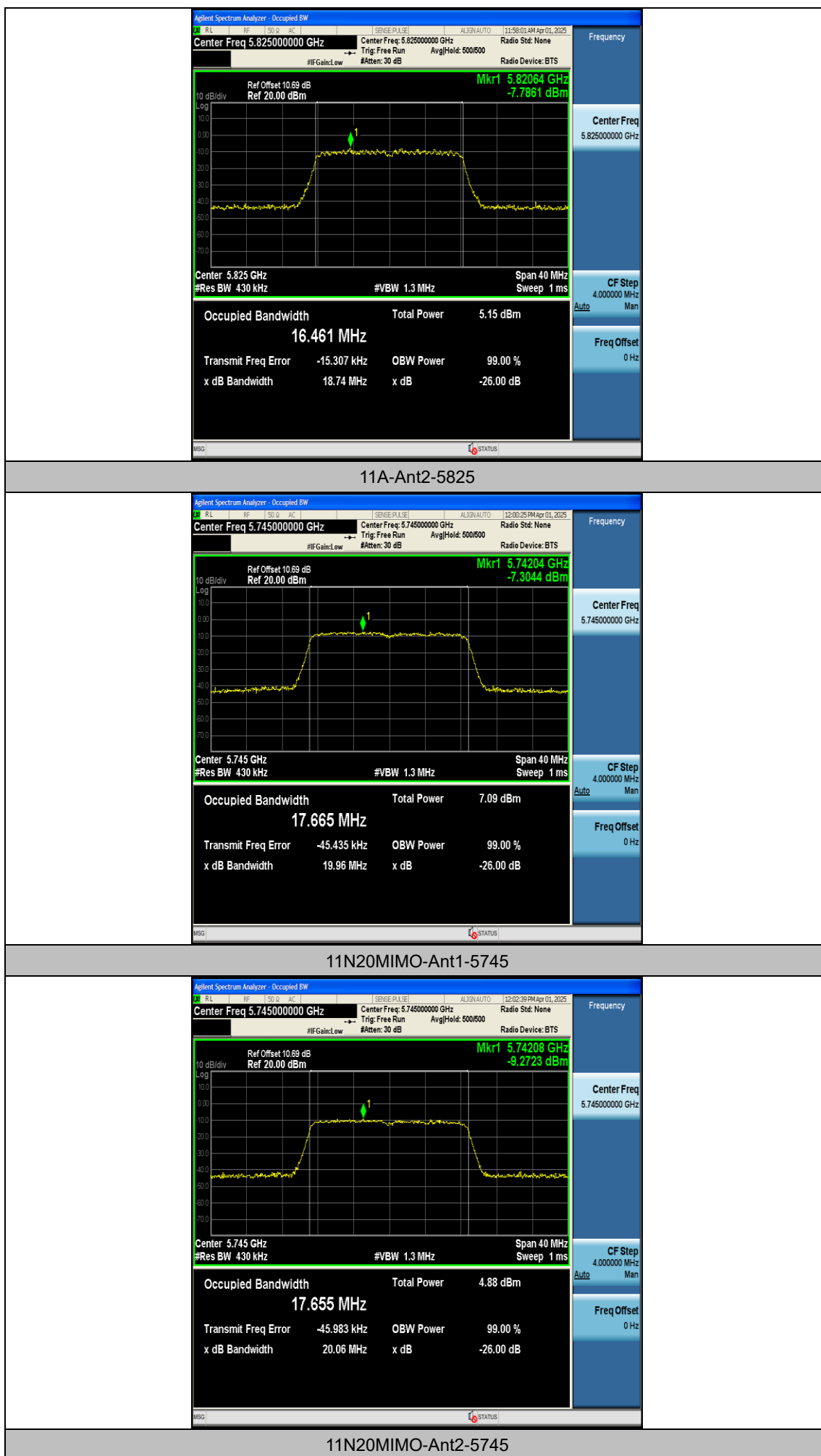
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.506	5736.7075	5753.2135	---	---
11A	Ant2	5745	16.476	5736.7216	5753.1976	---	---
11A	Ant1	5785	16.489	5776.7070	5793.1960	---	---
11A	Ant2	5785	16.484	5776.7238	5793.2078	---	---
11A	Ant1	5825	16.508	5816.7206	5833.2286	---	---
11A	Ant2	5825	16.461	5816.7542	5833.2152	---	---
11N20MIMO	Ant1	5745	17.665	5736.1221	5753.7871	---	---
11N20MIMO	Ant2	5745	17.655	5736.1265	5753.7815	---	---
11N20MIMO	Ant1	5785	17.650	5776.1293	5793.7793	---	---
11N20MIMO	Ant2	5785	17.654	5776.1207	5793.7747	---	---
11N20MIMO	Ant1	5825	17.620	5816.1540	5833.7740	---	---
11N20MIMO	Ant2	5825	17.630	5816.1563	5833.7863	---	---
11AC20MIMO	Ant1	5745	17.673	5736.1246	5753.7976	---	---
11AC20MIMO	Ant2	5745	17.692	5736.1183	5753.8103	---	---
11AC20MIMO	Ant1	5785	17.715	5776.0981	5793.8131	---	---
11AC20MIMO	Ant2	5785	17.728	5776.0914	5793.8194	---	---
11AC20MIMO	Ant1	5825	17.762	5816.0975	5833.8595	---	---
11AC20MIMO	Ant2	5825	17.773	5816.0895	5833.8625	---	---

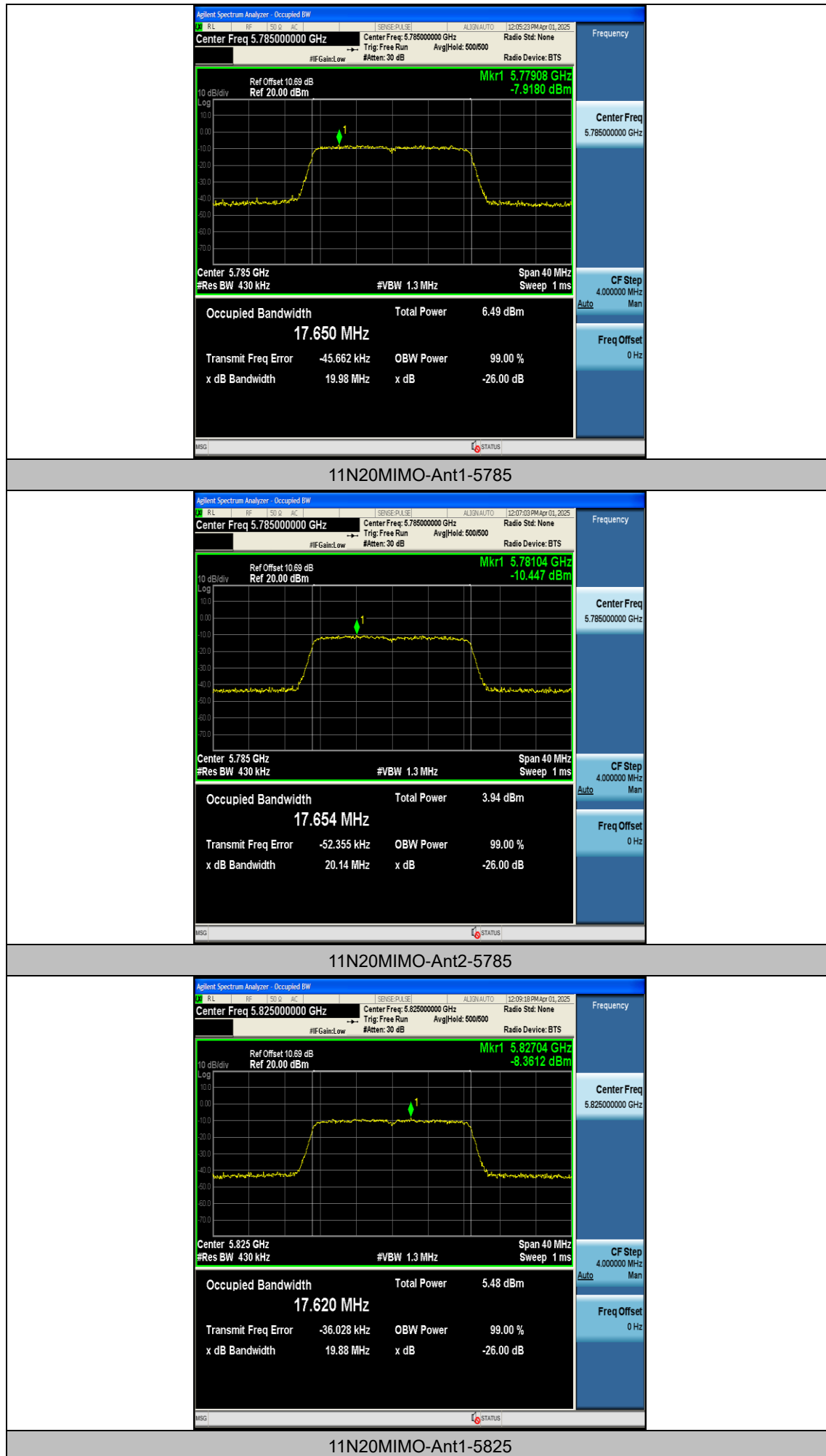
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

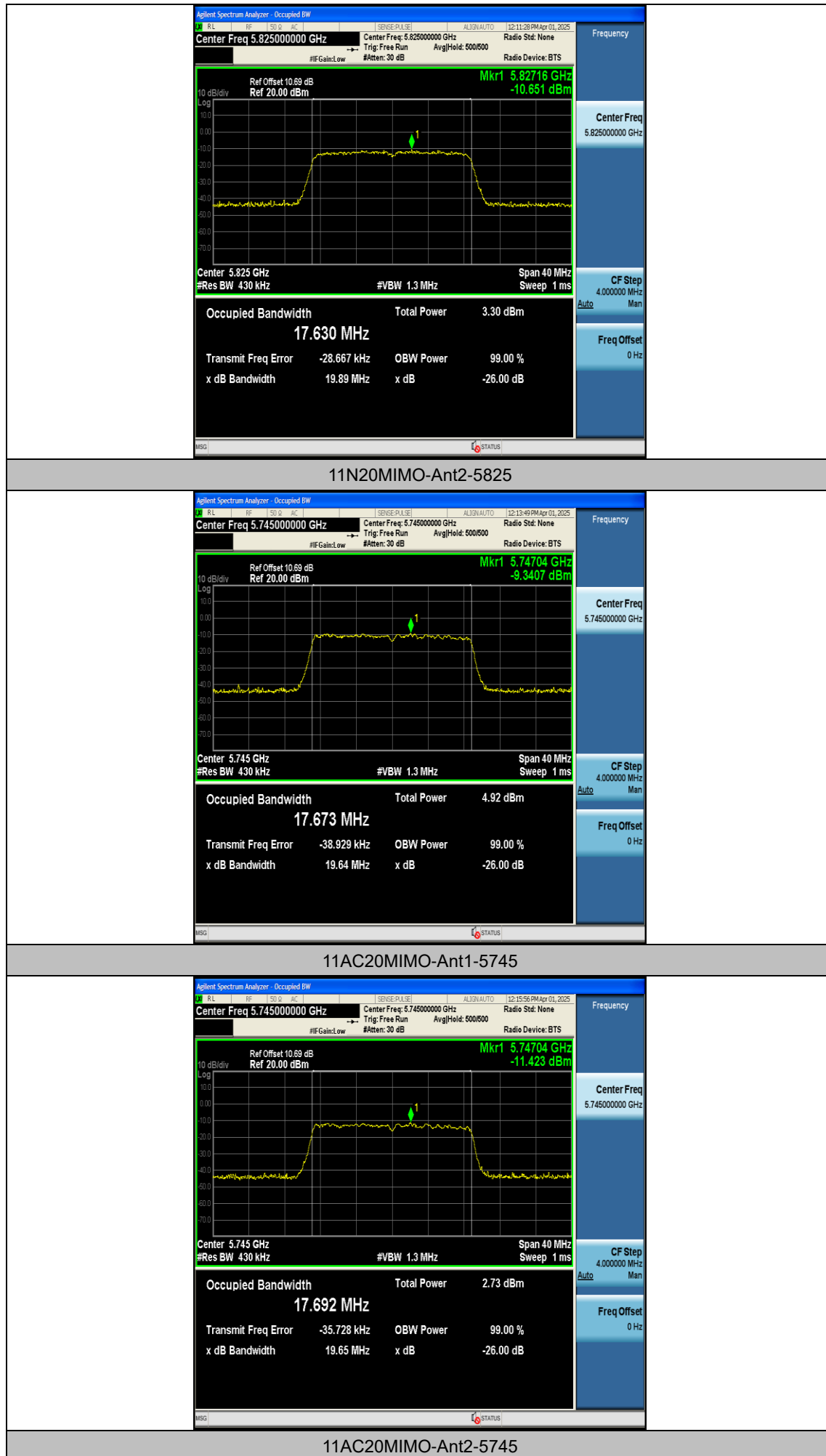
Test Graphs

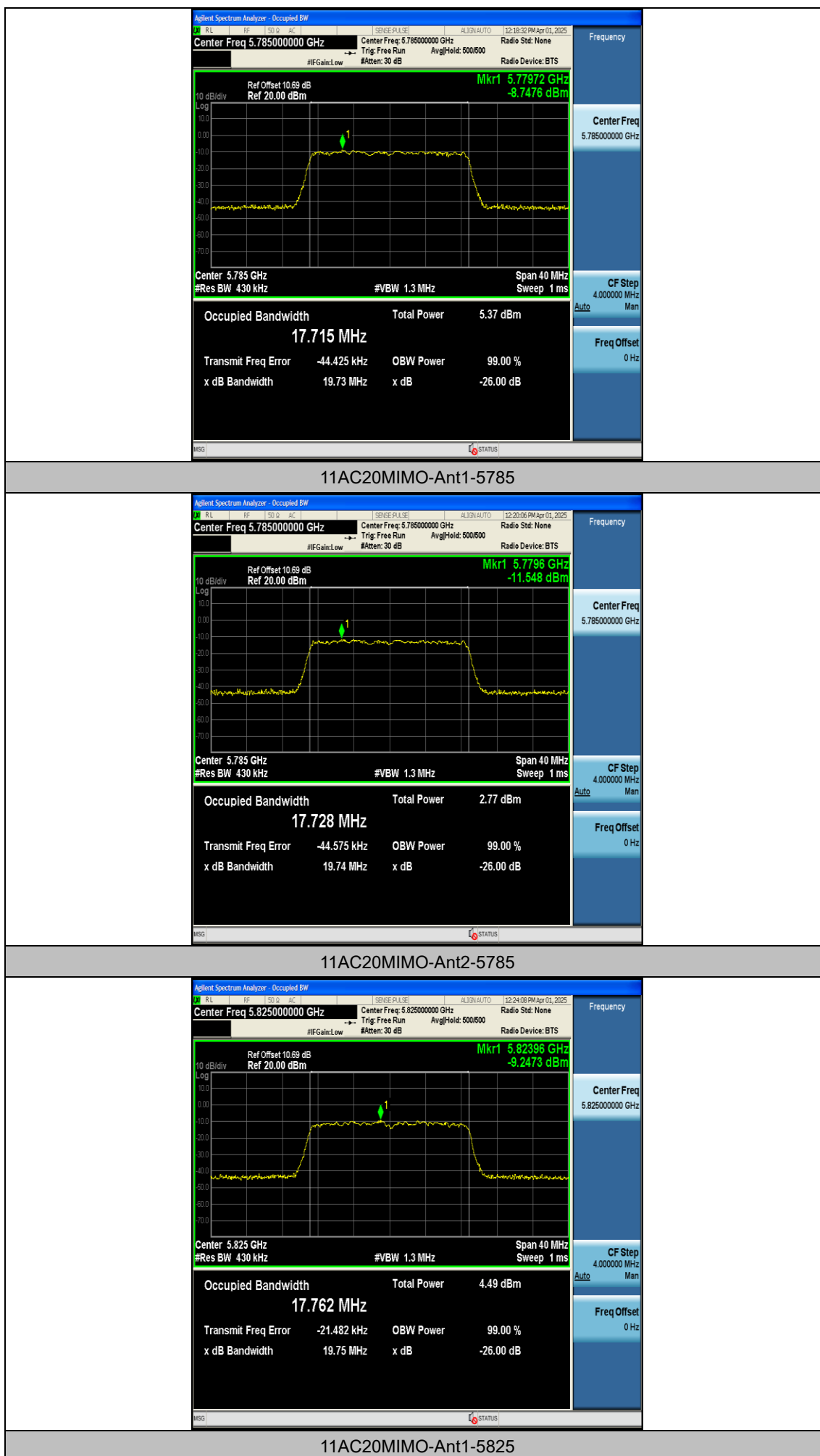














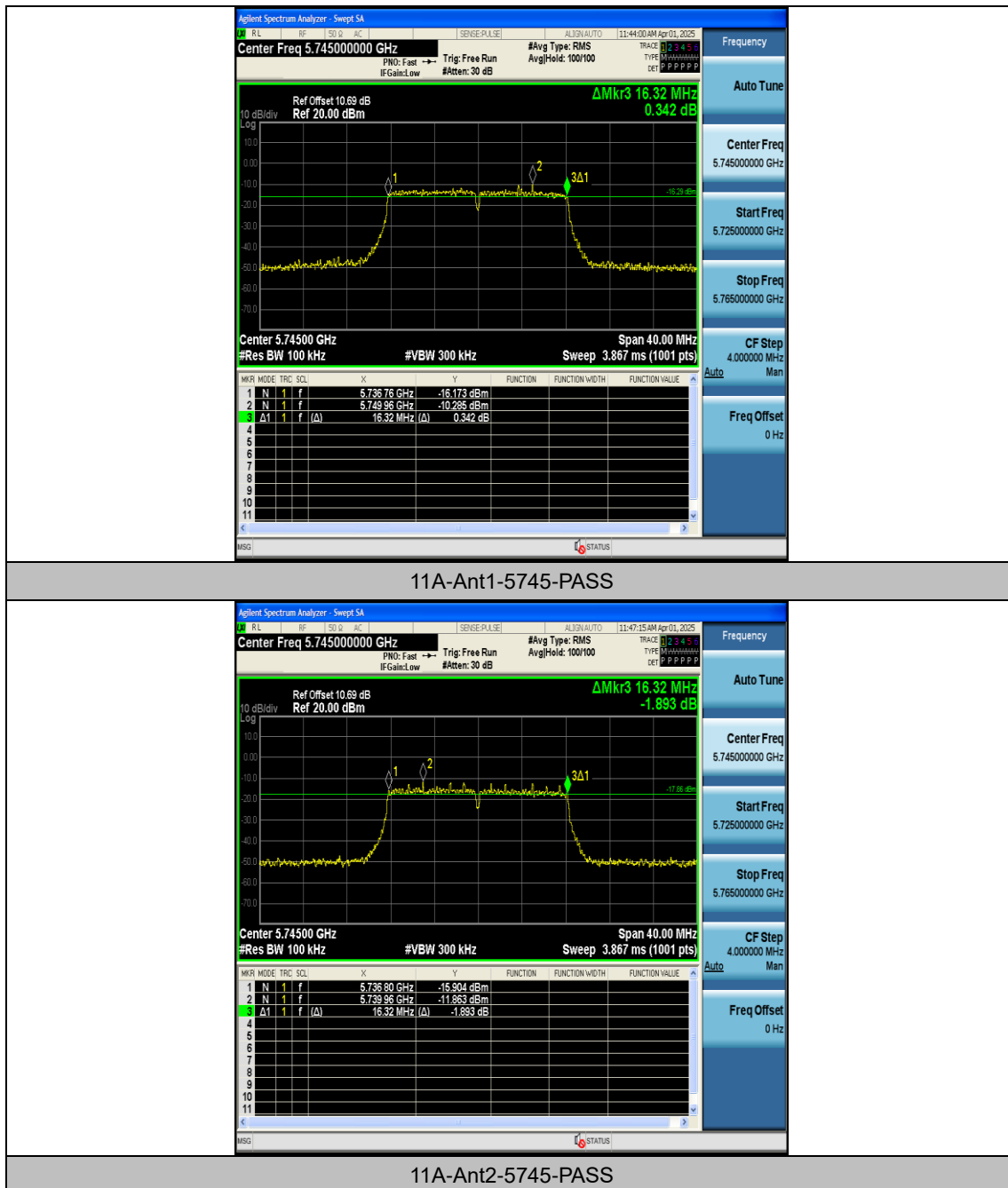
Appendix A: Min emission bandwidth

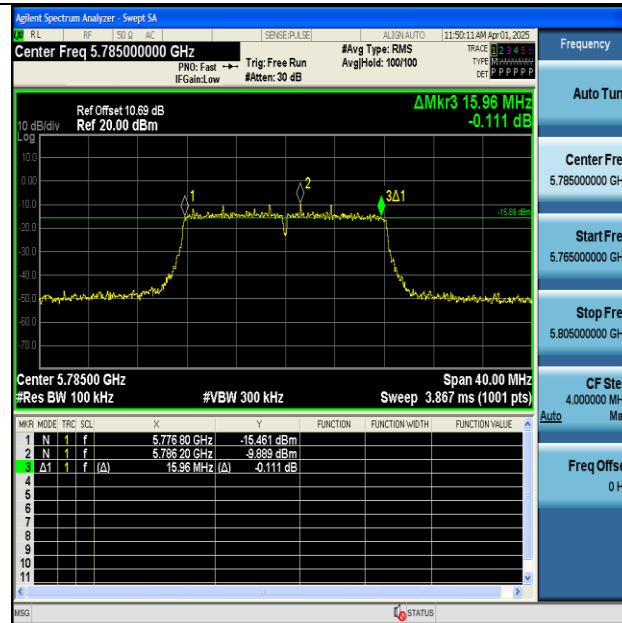
Test Result

Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.320	5736.760	5753.080	0.5	PASS
11A	Ant2	5745	16.320	5736.800	5753.120	0.5	PASS
11A	Ant1	5785	15.960	5776.800	5792.760	0.5	PASS
11A	Ant2	5785	16.400	5776.760	5793.160	0.5	PASS
11A	Ant1	5825	16.320	5816.800	5833.120	0.5	PASS
11A	Ant2	5825	16.320	5816.800	5833.120	0.5	PASS
11N20MIMO	Ant1	5745	17.280	5736.160	5753.440	0.5	PASS
11N20MIMO	Ant2	5745	17.160	5736.160	5753.320	0.5	PASS
11N20MIMO	Ant1	5785	17.160	5776.200	5793.360	0.5	PASS
11N20MIMO	Ant2	5785	17.160	5776.200	5793.360	0.5	PASS
11N20MIMO	Ant1	5825	17.160	5816.200	5833.360	0.5	PASS
11N20MIMO	Ant2	5825	17.160	5816.200	5833.360	0.5	PASS
11AC20MIMO	Ant1	5745	17.640	5736.120	5753.760	0.5	PASS
11AC20MIMO	Ant2	5745	17.600	5736.160	5753.760	0.5	PASS
11AC20MIMO	Ant1	5785	17.240	5776.480	5793.720	0.5	PASS
11AC20MIMO	Ant2	5785	17.600	5776.120	5793.720	0.5	PASS
11AC20MIMO	Ant1	5825	17.600	5816.120	5833.720	0.5	PASS
11AC20MIMO	Ant2	5825	17.320	5816.440	5833.760	0.5	PASS

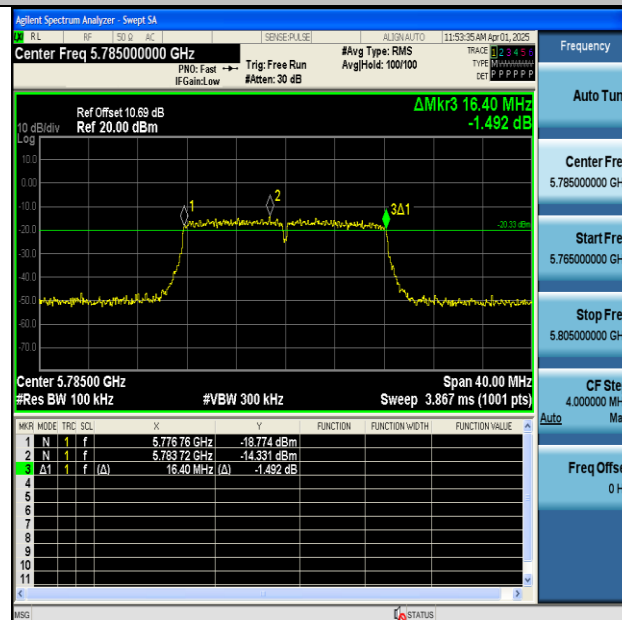
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





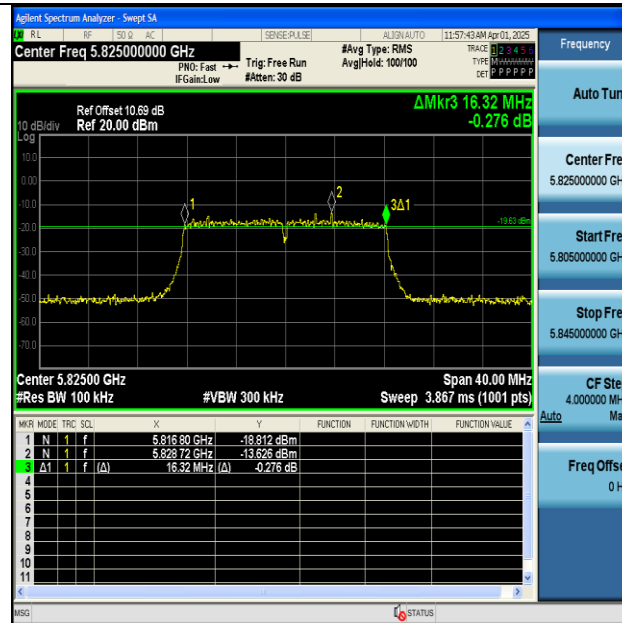
11A-Ant1-5785-PASS



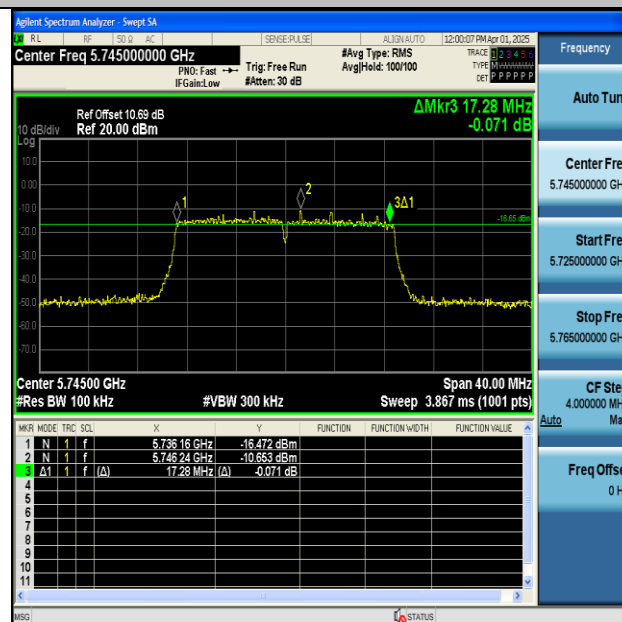
11A-Ant2-5785-PASS



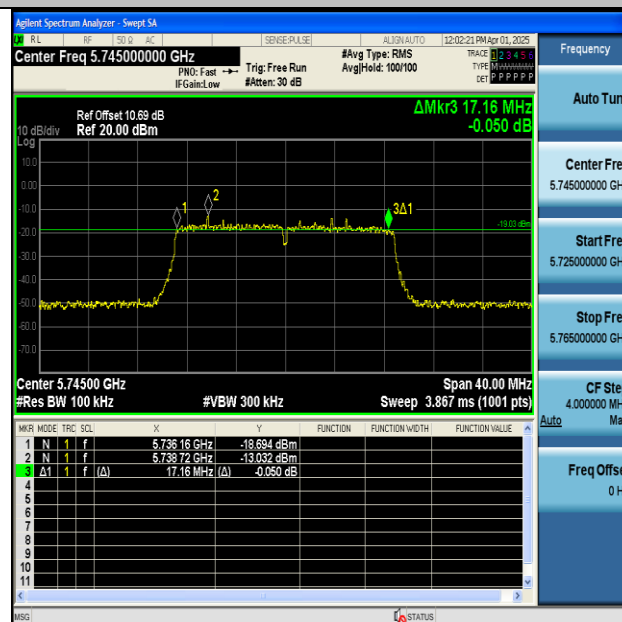
11A-Ant1-5825-PASS



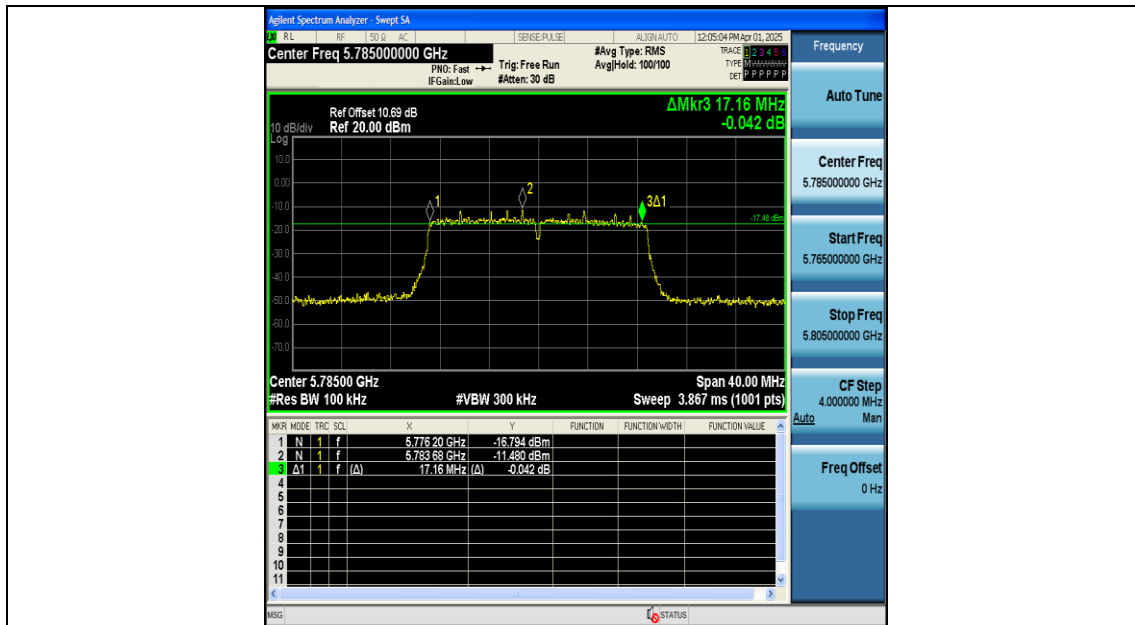
11A-Ant2-5825-PASS



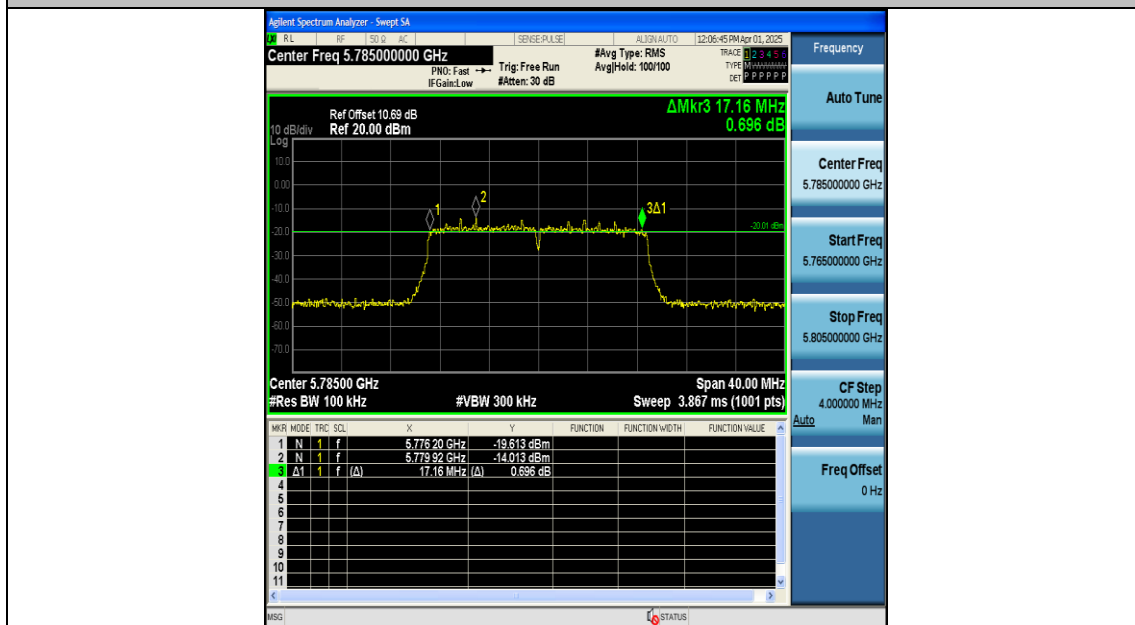
11N20MIMO-Ant1-5745-PASS



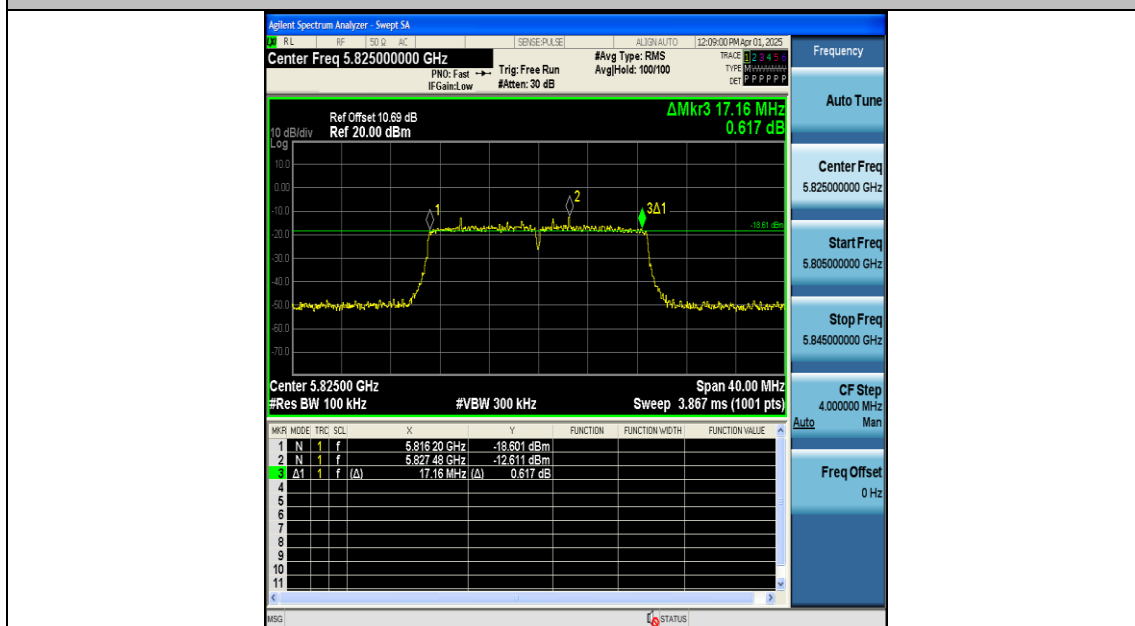
11N20MIMO-Ant2-5745-PASS



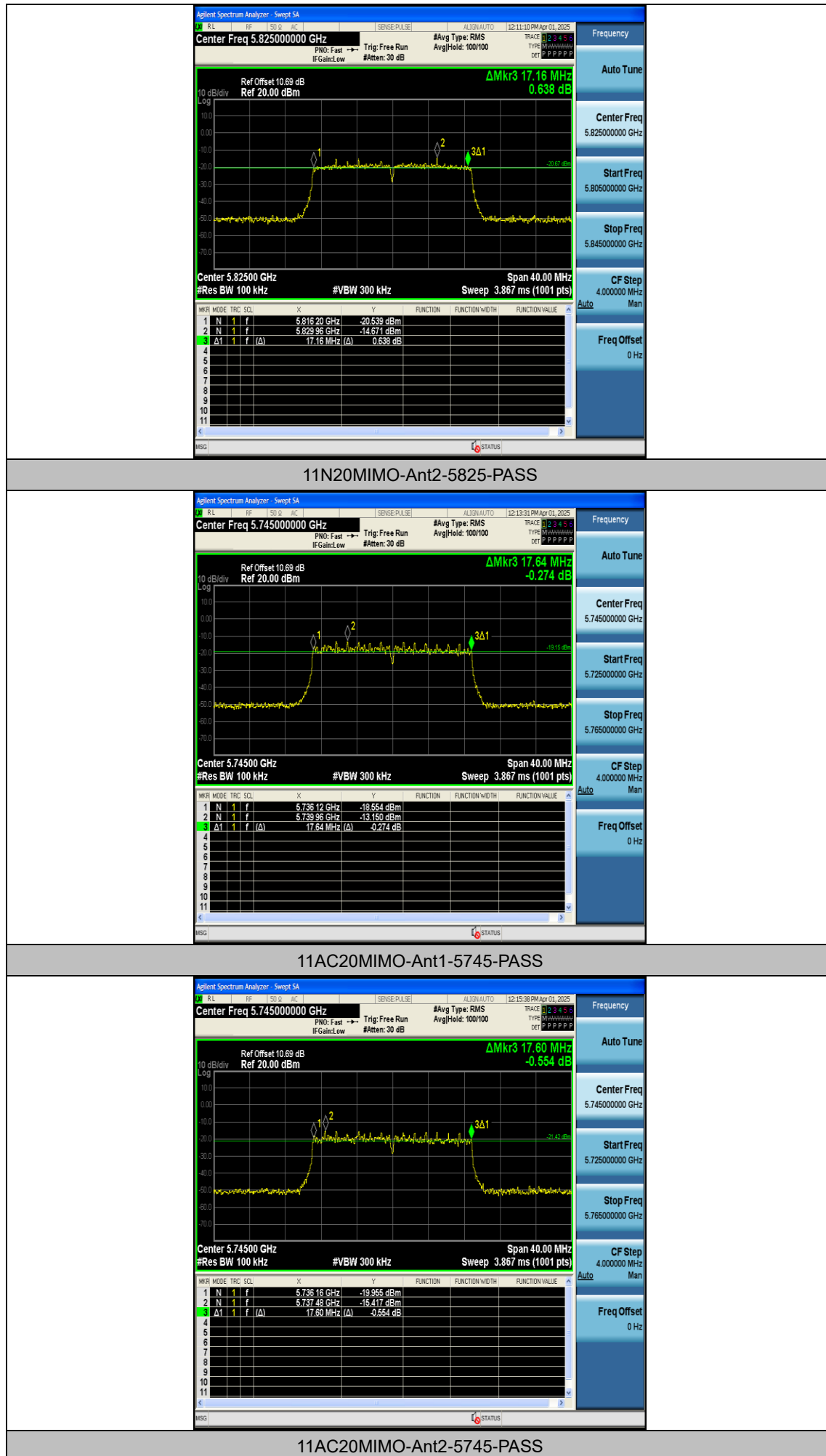
11N20MIMO-Ant1-5785-PASS

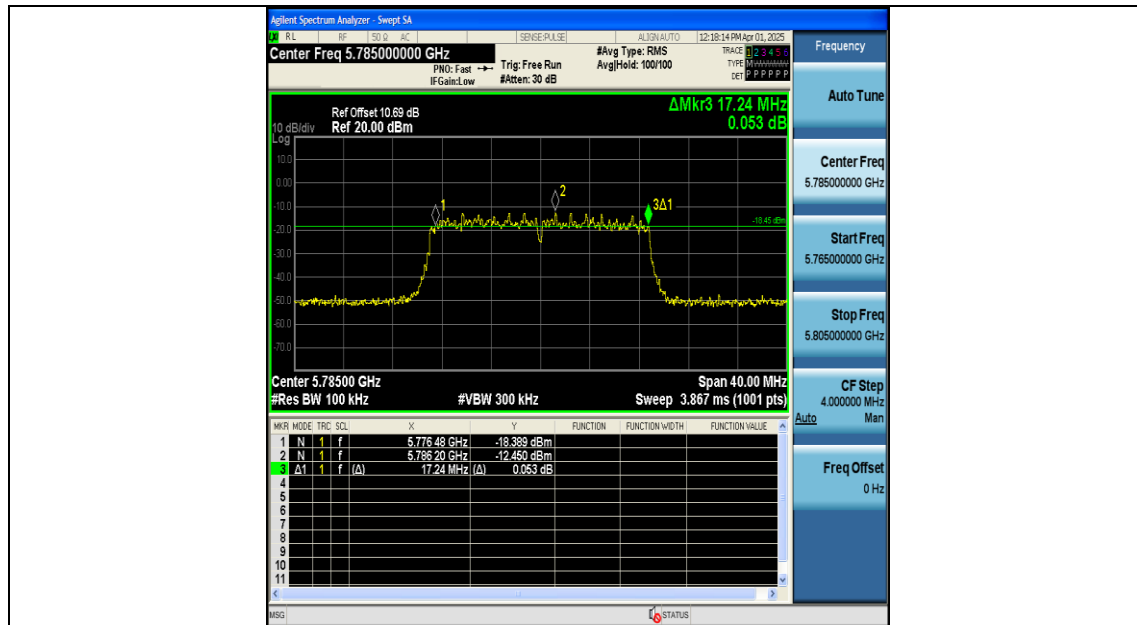


11N20MIMO-Ant2-5785-PASS

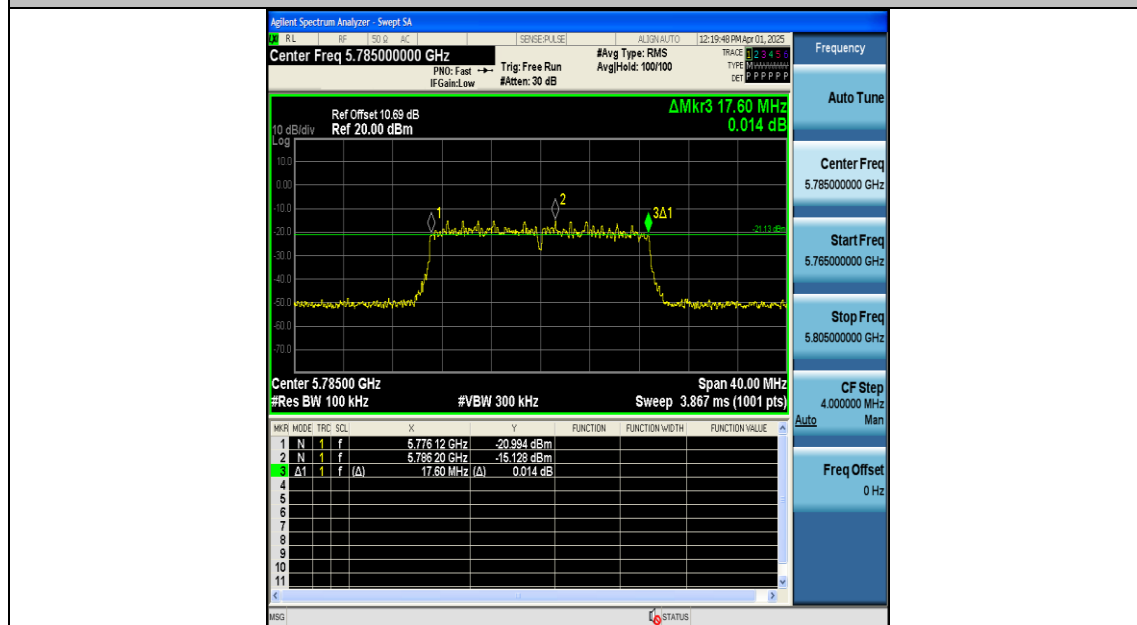


11N20MIMO-Ant1-5825-PASS

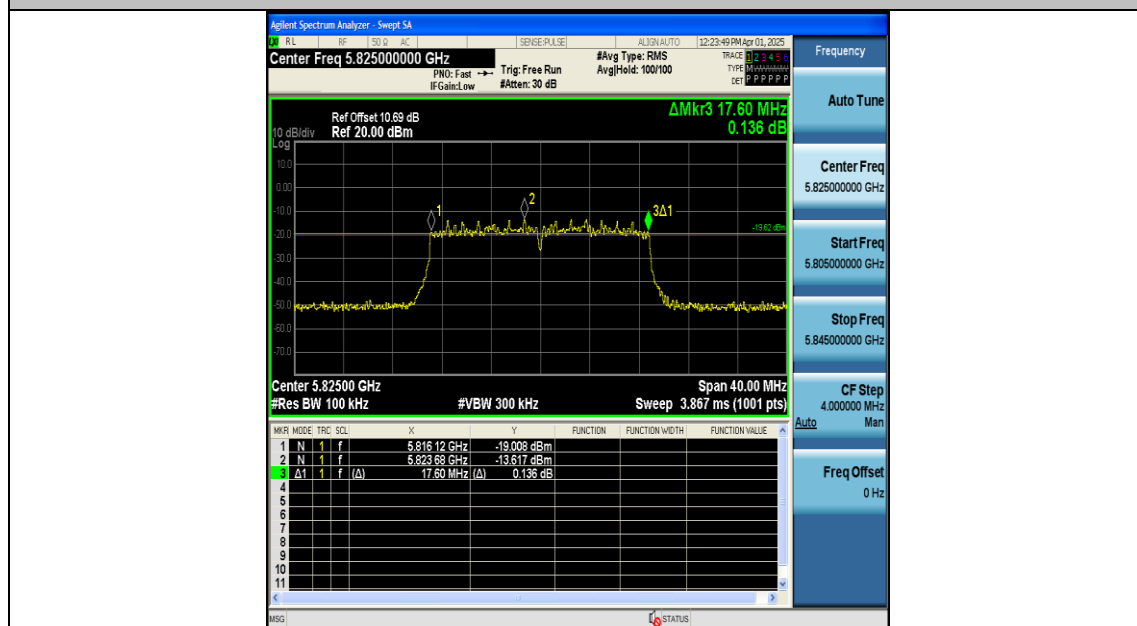




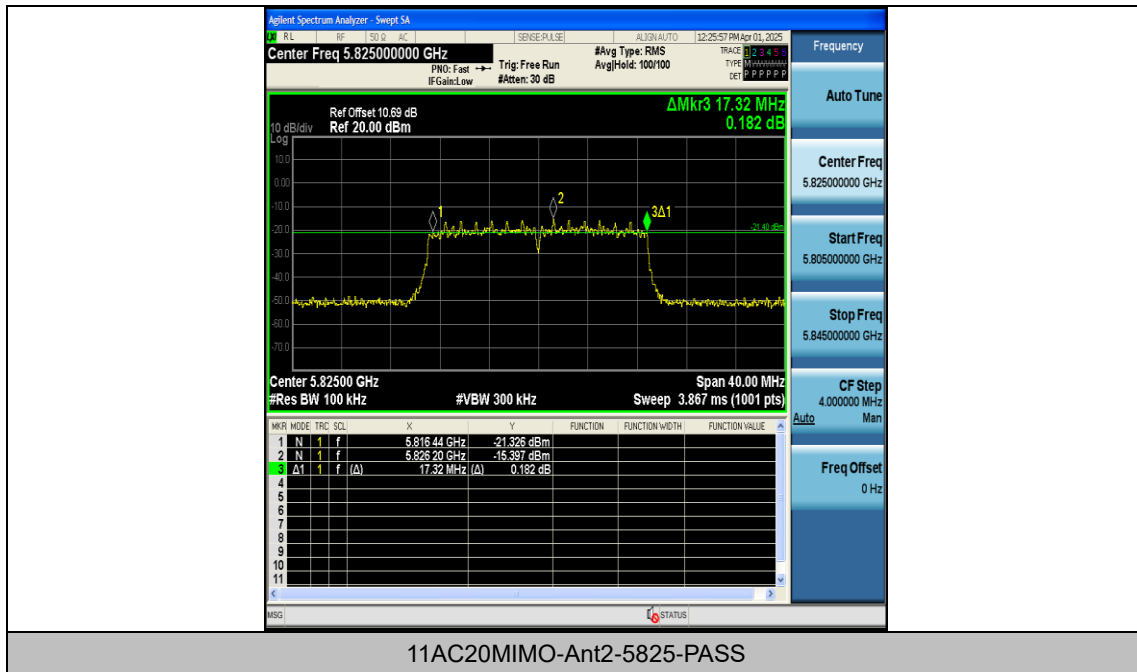
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5745	1.70	≤30.00	PASS
11A	Ant2	5745	-0.61	≤30.00	PASS
11A	Ant1	5785	1.28	≤30.00	PASS
11A	Ant2	5785	-1.37	≤30.00	PASS
11A	Ant1	5825	0.30	≤30.00	PASS
11A	Ant2	5825	-2.12	≤30.00	PASS
11N20MIMO	Ant1	5745	0.55	≤30.00	PASS
11N20MIMO	Ant2	5745	-1.70	≤30.00	PASS
11N20MIMO	total	5745	2.58	≤30.00	PASS
11N20MIMO	Ant1	5785	0.04	≤30.00	PASS
11N20MIMO	Ant2	5785	-2.52	≤30.00	PASS
11N20MIMO	total	5785	1.96	≤30.00	PASS
11N20MIMO	Ant1	5825	-0.94	≤30.00	PASS
11N20MIMO	Ant2	5825	-3.19	≤30.00	PASS
11N20MIMO	total	5825	1.09	≤30.00	PASS
11AC20MIMO	Ant1	5745	-1.22	≤30.00	PASS
11AC20MIMO	Ant2	5745	-4.02	≤30.00	PASS
11AC20MIMO	total	5745	0.61	≤30.00	PASS
11AC20MIMO	Ant1	5785	-0.72	≤30.00	PASS
11AC20MIMO	Ant2	5785	-3.18	≤30.00	PASS
11AC20MIMO	total	5785	1.23	≤30.00	PASS
11AC20MIMO	Ant1	5825	-1.45	≤30.00	PASS
11AC20MIMO	Ant2	5825	-4.11	≤30.00	PASS
11AC20MIMO	total	5825	0.43	≤30.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)

Appendix C: Maximum power spectral density

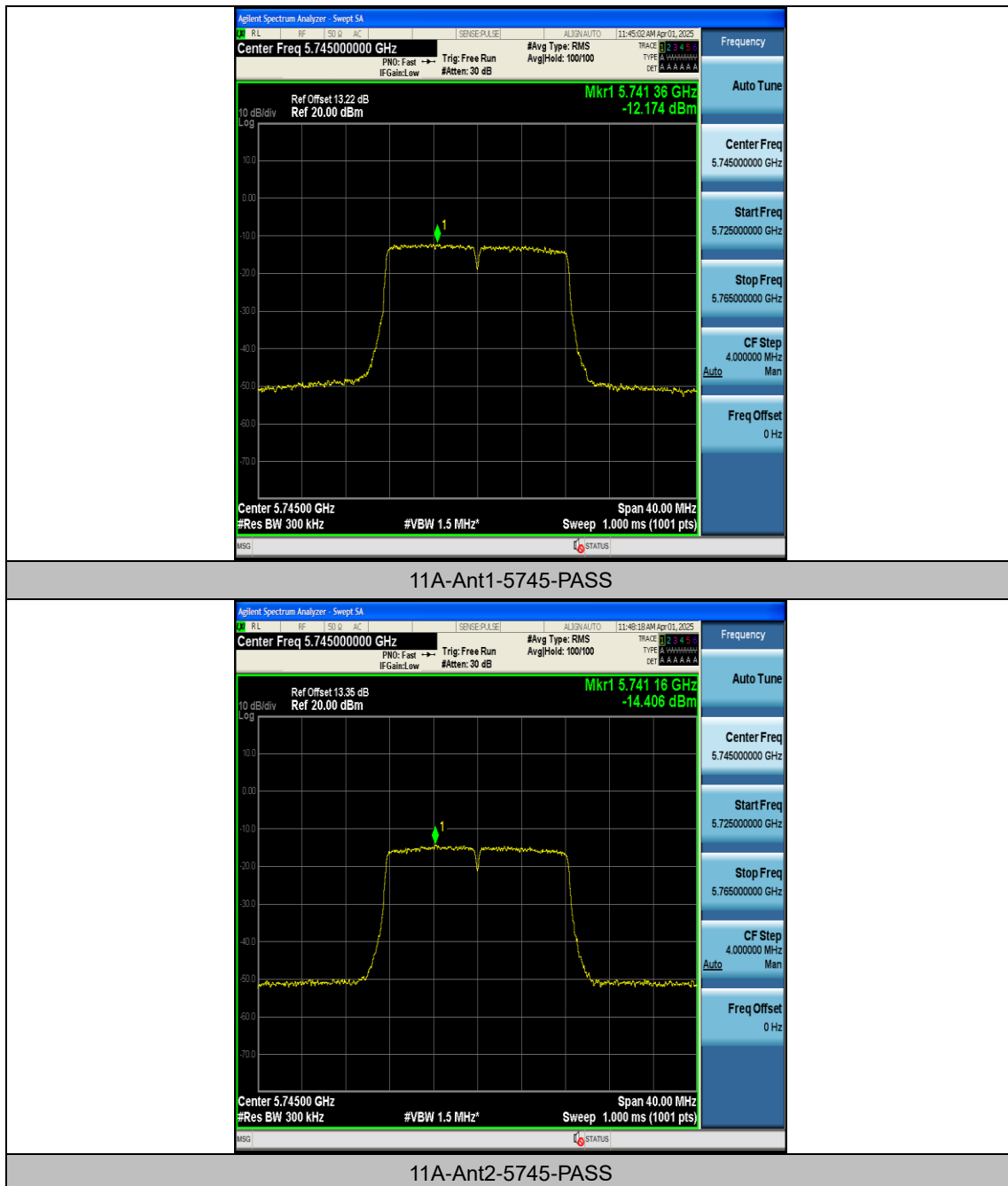
Test Result

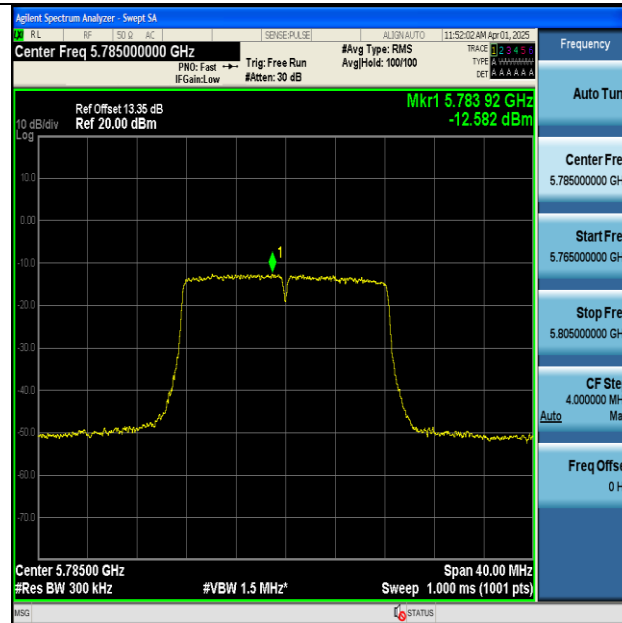
Frequency [MHz]	Test Mode	Antenna	Result [dBm/300 KHz]	Result [dBm/500 KHz]	DC Factor [dB]	RBW Factor [dB]	Limit [dBm/500 KHz]	Verdict
5745	11A	Ant1	-14.70	-12.17	0.31	2.22	≤30.00	PASS
5745	11A	Ant2	-17.07	-14.41	0.44	2.22	≤30.00	PASS
5785	11A	Ant1	-15.24	-12.58	0.44	2.22	≤30.00	PASS
5785	11A	Ant2	-17.54	-15.05	0.27	2.22	≤30.00	PASS
5825	11A	Ant1	-16.21	-13.63	0.36	2.22	≤30.00	PASS
5825	11A	Ant2	-18.51	-16.06	0.23	2.22	≤30.00	PASS
5745	11N20 MIMO	Ant1	-16.05	-13.42	0.41	2.22	≤30.00	PASS
5745	11N20 MIMO	Ant2	-18.20	-15.49	0.49	2.22	≤30.00	PASS
5745	11N20 MIMO	total	---	-11.32	---	---	≤30.00	PASS
5785	11N20 MIMO	Ant1	-16.47	-13.76	0.49	2.22	≤30.00	PASS
5785	11N20 MIMO	Ant2	-19.19	-16.48	0.49	2.22	≤30.00	PASS
5785	11N20 MIMO	total	---	-11.90	---	---	≤30.00	PASS
5825	11N20 MIMO	Ant1	-17.78	-15.07	0.49	2.22	≤30.00	PASS
5825	11N20 MIMO	Ant2	-20.10	-17.47	0.41	2.22	≤30.00	PASS
5825	11N20 MIMO	total	---	-13.10	---	---	≤30.00	PASS
5745	11AC2 0MIMO	Ant1	-19.98	-14.14	3.62	2.22	≤30.00	PASS
5745	11AC2 0MIMO	Ant2	-22.35	-17.12	3.01	2.22	≤30.00	PASS
5745	11AC2 0MIMO	total	---	-12.37	---	---	≤30.00	PASS
5785	11AC2 0MIMO	Ant1	-19.28	-13.64	3.42	2.22	≤30.00	PASS
5785	11AC2 0MIMO	Ant2	-21.44	-15.70	3.52	2.22	≤30.00	PASS
5785	11AC2 0MIMO	total	---	-11.54	---	---	≤30.00	PASS
5825	11AC2 0MIMO	Ant1	-20.45	-14.81	3.42	2.22	≤30.00	PASS
5825	11AC2 0MIMO	Ant2	-22.55	-17.21	3.12	2.22	≤30.00	PASS

5825	11AC2 0MIMO	total	---	-12.84	---	---	≤30.00	PASS
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Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

Test Graphs

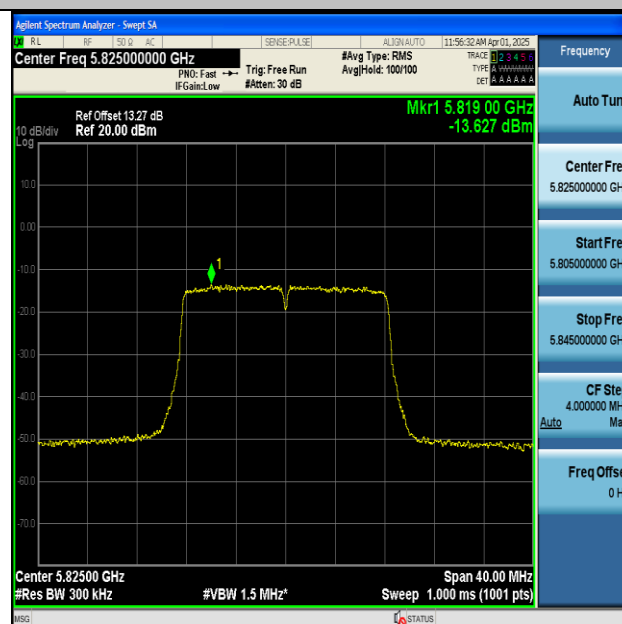




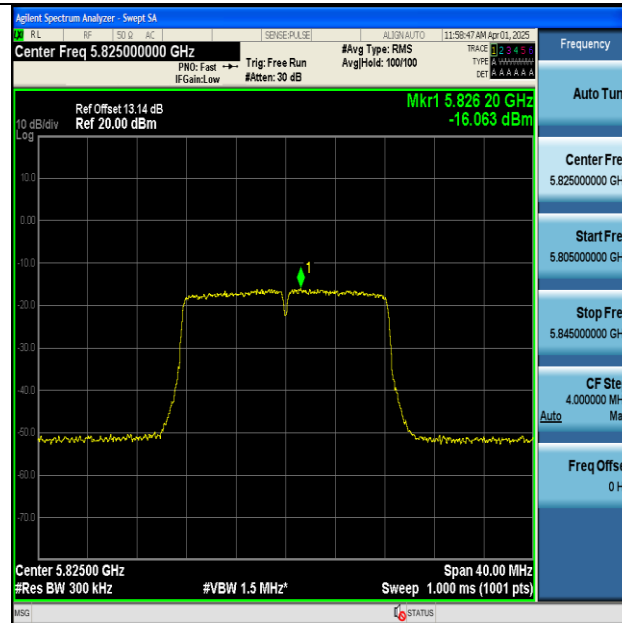
11A-Ant1-5785-PASS



11A-Ant2-5785-PASS



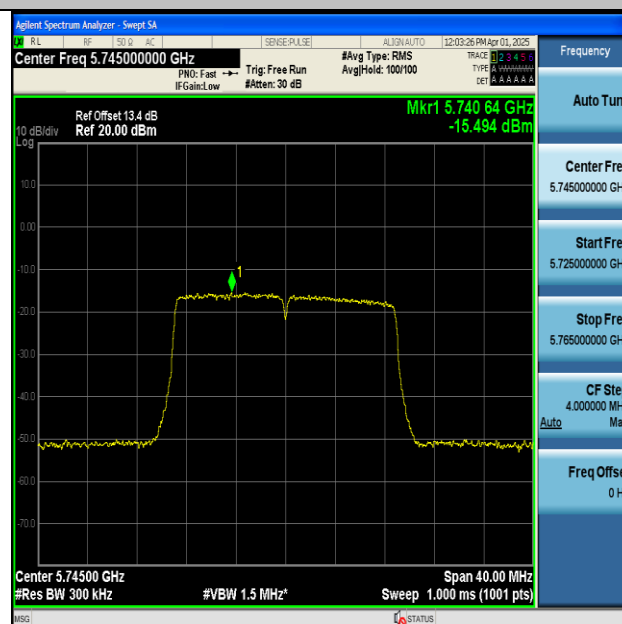
11A-Ant1-5825-PASS



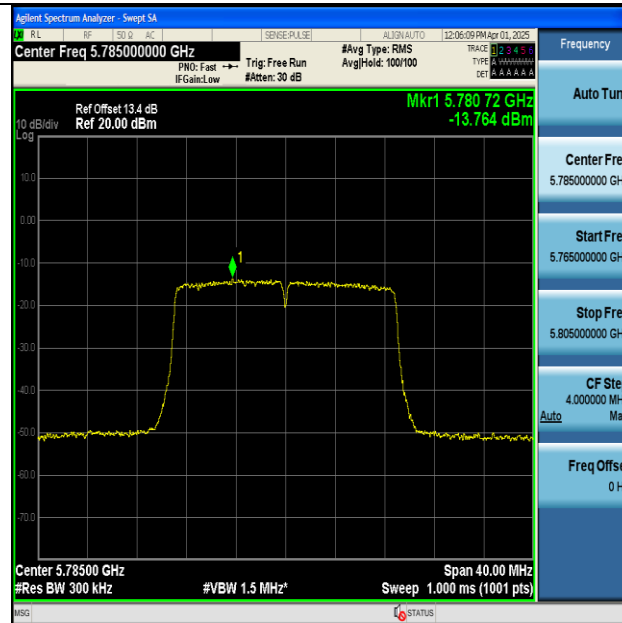
11A-Ant2-5825-PASS



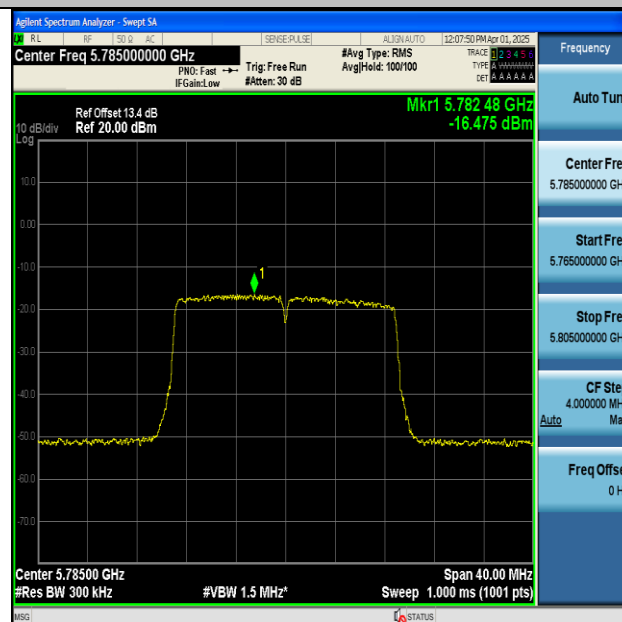
11N20MIMO-Ant1-5745-PASS



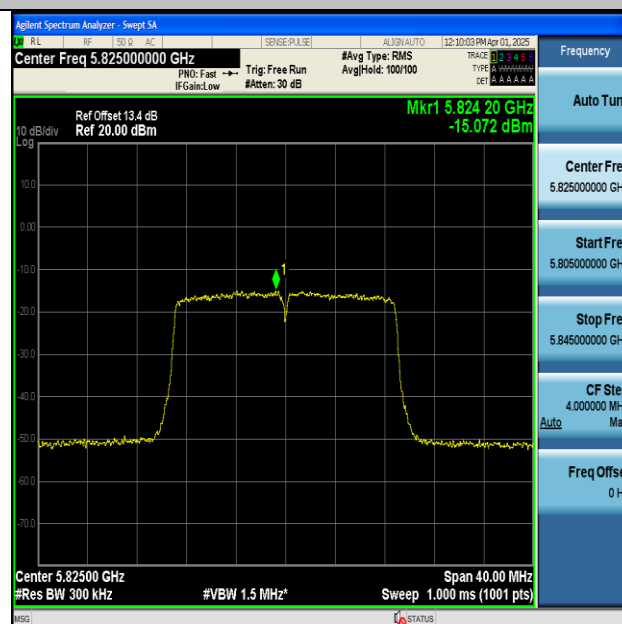
11N20MIMO-Ant2-5745-PASS



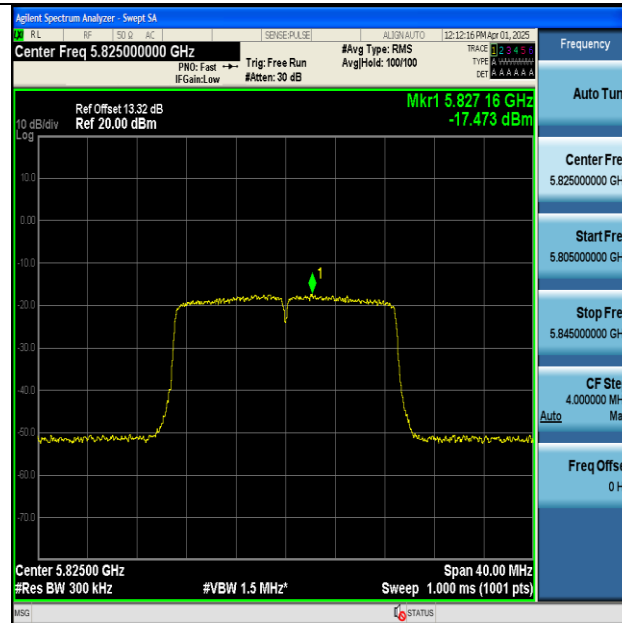
11N20MIMO-Ant1-5785-PASS



11N20MIMO-Ant2-5785-PASS



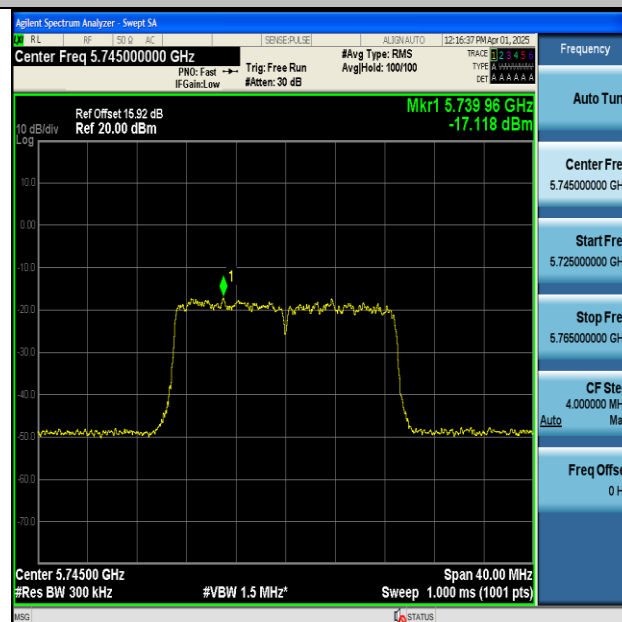
11N20MIMO-Ant1-5825-PASS



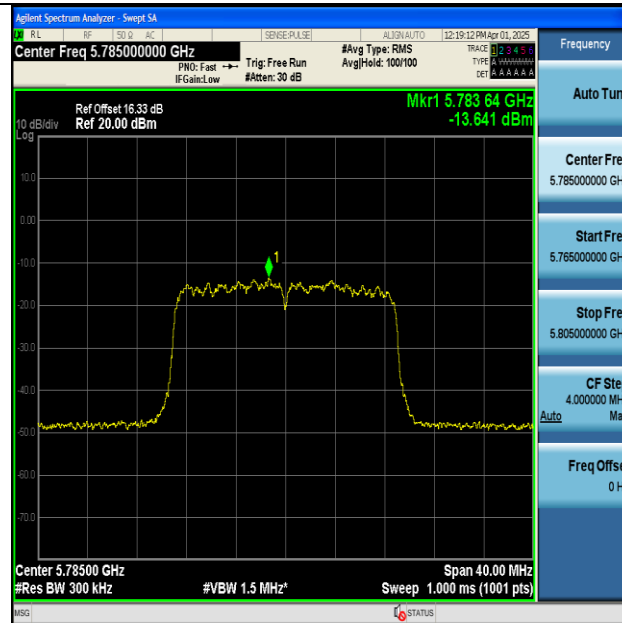
11N20MIMO-Ant2-5825-PASS



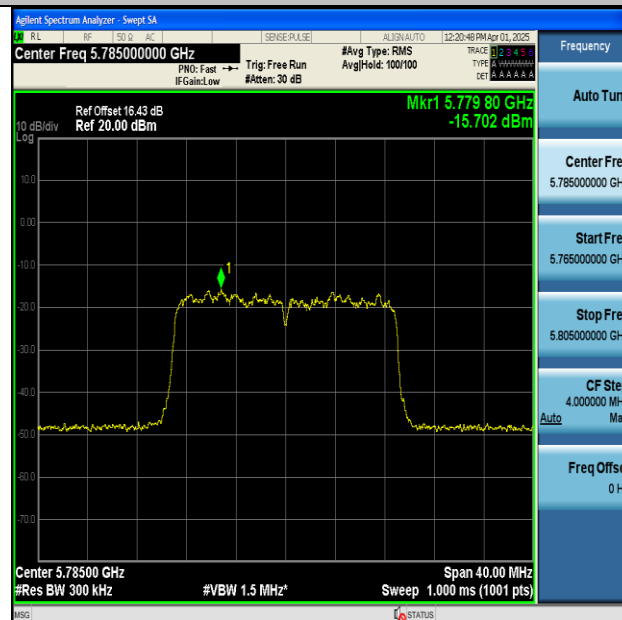
11AC20MIMO-Ant1-5745-PASS



11AC20MIMO-Ant2-5745-PASS



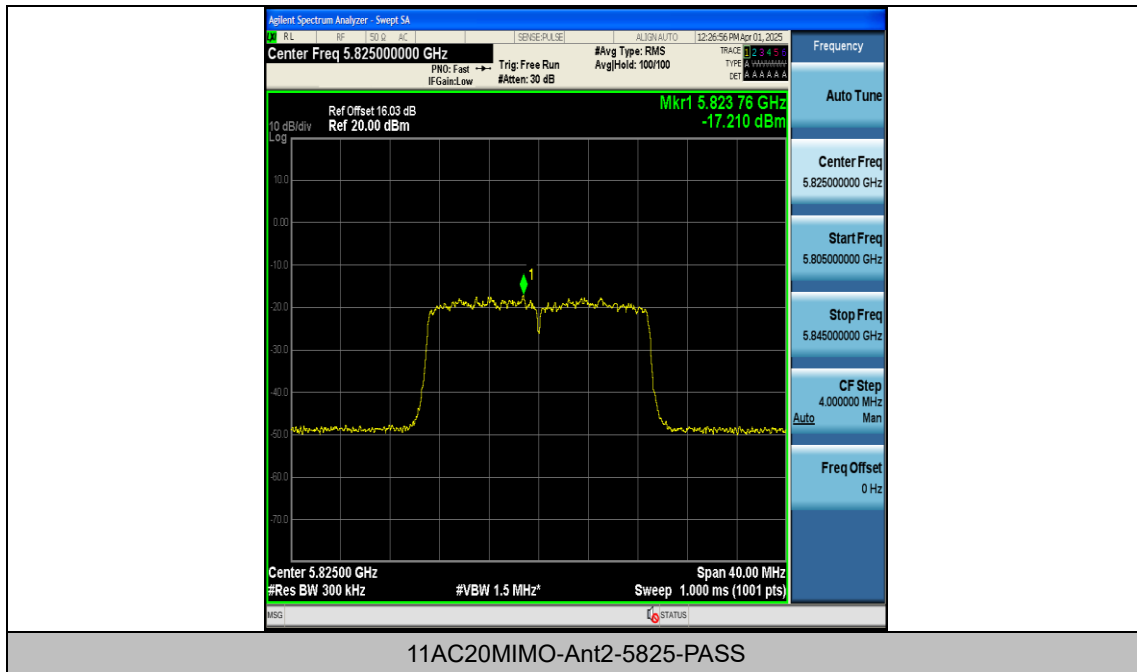
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix D: Band edge measurements

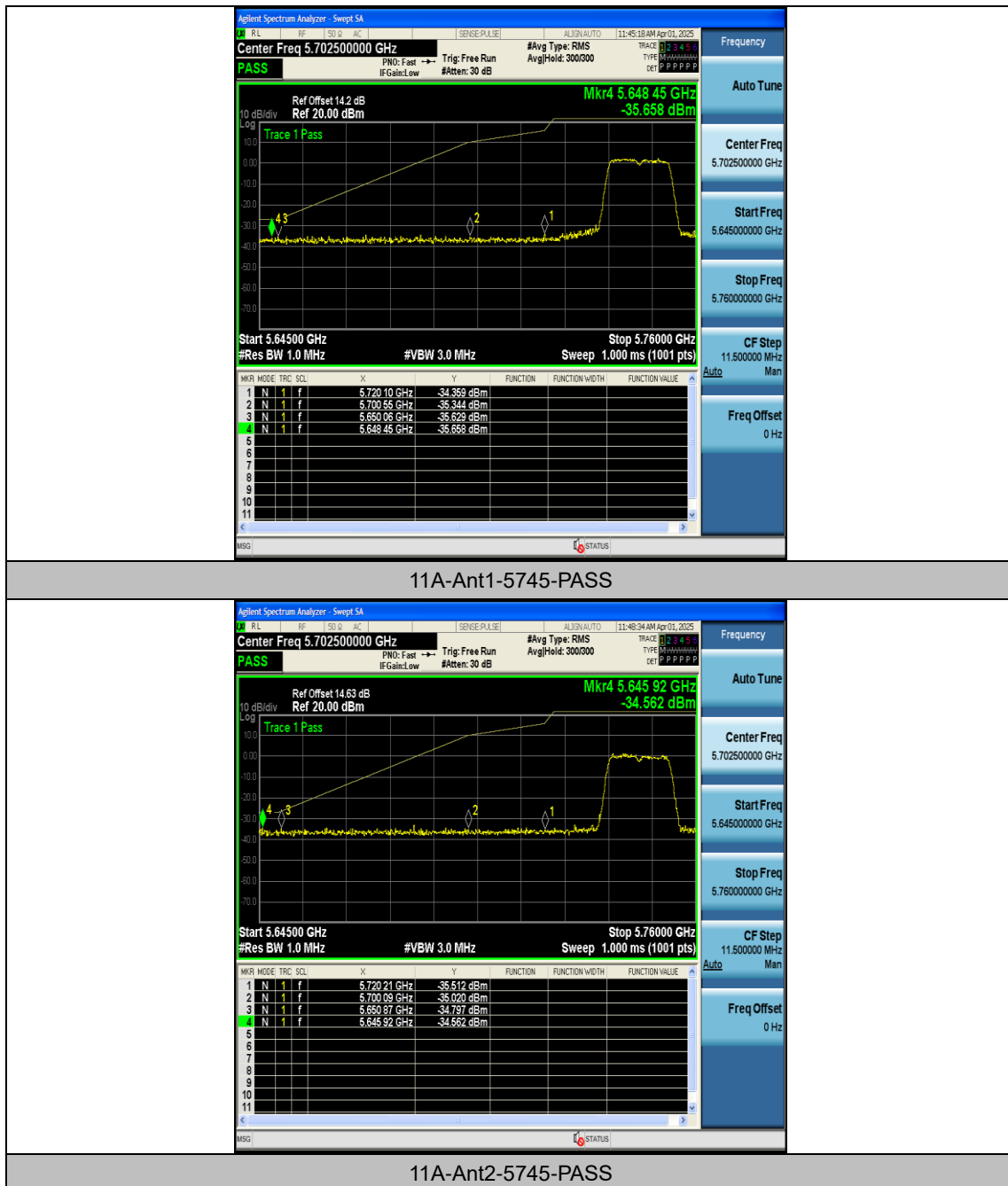
Test Result

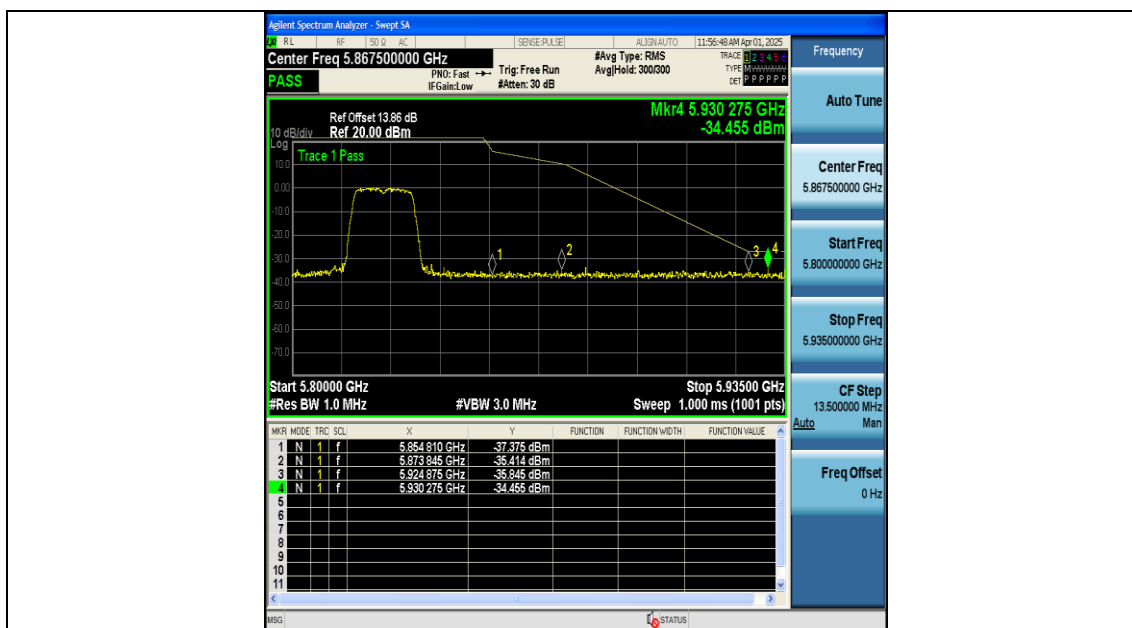
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Freq. Range [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-34.36	≤15.82	PASS
11A	Ant1	Low	5745	5700~5720	-35.34	≤10.15	PASS
11A	Ant1	Low	5745	5650~5700	-35.63	≤-26.96	PASS
11A	Ant1	Low	5745	5760~5650	-35.66	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-35.51	≤16.08	PASS
11A	Ant2	Low	5745	5700~5720	-35.02	≤10.02	PASS
11A	Ant2	Low	5745	5650~5700	-34.8	≤-26.36	PASS
11A	Ant2	Low	5745	5760~5650	-34.56	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-37.38	≤16.03	PASS
11A	Ant1	High	5825	5855~5875	-35.41	≤10.32	PASS
11A	Ant1	High	5825	5875~5925	-35.85	≤-26.91	PASS
11A	Ant1	High	5825	5925~5935	-34.46	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-35.98	≤16.34	PASS
11A	Ant2	High	5825	5855~5875	-34.71	≤10.74	PASS
11A	Ant2	High	5825	5875~5925	-35.57	≤-26.71	PASS
11A	Ant2	High	5825	5925~5935	-35.53	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5720~5725	-35.5	≤15.82	PASS
11N20MI MO	Ant1	Low	5745	5700~5720	-36.34	≤10.02	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-37.5	≤-26.62	PASS
11N20MI MO	Ant1	Low	5745	5760~5650	-36.07	≤-27	PASS
11N20MI MO	Ant2	Low	5745	5720~5725	-36.68	≤16.08	PASS
11N20MI MO	Ant2	Low	5745	5700~5720	-35.19	≤10.76	PASS
11N20MI MO	Ant2	Low	5745	5650~5700	-35.27	≤-26.19	PASS
11N20MI MO	Ant2	Low	5745	5760~5650	-35.4	≤-27	PASS
11N20MI MO	Ant1	High	5825	5850~5855	-36.03	≤16.65	PASS
11N20MI MO	Ant1	High	5825	5855~5875	-35.78	≤10.21	PASS
11N20MI MO	Ant1	High	5825	5875~5925	-35.79	≤-26.11	PASS
11N20MI MO	Ant1	High	5825	5925~5935	-35.24	≤-27	PASS
11N20MI	Ant2	High	5825	5850~5855	-35.51	≤15.73	PASS

MO							
11N20MI MO	Ant2	High	5825	5855~5875	-34.97	≤10.36	PASS
11N20MI MO	Ant2	High	5825	5875~5925	-35.19	≤-26.81	PASS
11N20MI MO	Ant2	High	5825	5925~5935	-35.04	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5720~5725	-35.66	≤17.13	PASS
11AC20M IMO	Ant1	Low	5745	5700~5720	-36.11	≤10.70	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-35.5	≤-26.45	PASS
11AC20M IMO	Ant1	Low	5745	5760~5650	-35.35	≤-27	PASS
11AC20M IMO	Ant2	Low	5745	5720~5725	-35.88	≤16.08	PASS
11AC20M IMO	Ant2	Low	5745	5700~5720	-35.65	≤10.06	PASS
11AC20M IMO	Ant2	Low	5745	5650~5700	-35.77	≤-26.96	PASS
11AC20M IMO	Ant2	Low	5745	5760~5650	-35.47	≤-27	PASS
11AC20M IMO	Ant1	High	5825	5850~5855	-36.49	≤16.03	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-35.13	≤10.70	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-36.41	≤-26.81	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-36.03	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-37.1	≤15.73	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-34.95	≤10.93	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-34.2	≤-26.91	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-35.34	≤-27	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





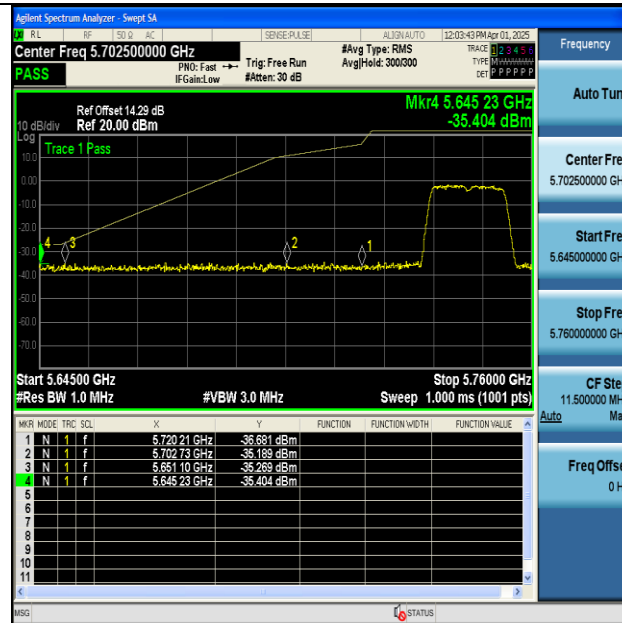
11A-Ant1-5825-PASS



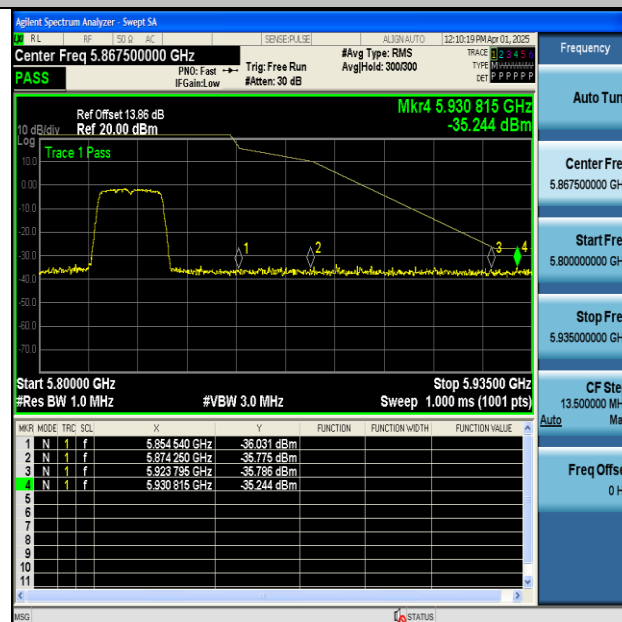
11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS



11N20MIMO-Ant2-5745-PASS



11N20MIMO-Ant1-5825-PASS



11N20MIMO-Ant2-5825-PASS