

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

Product Name: DRONE

Trade Mark: /

Test Model: V11 Air

FCC ID: 2BBLM-V11AIRYK

Environmental Conditions

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

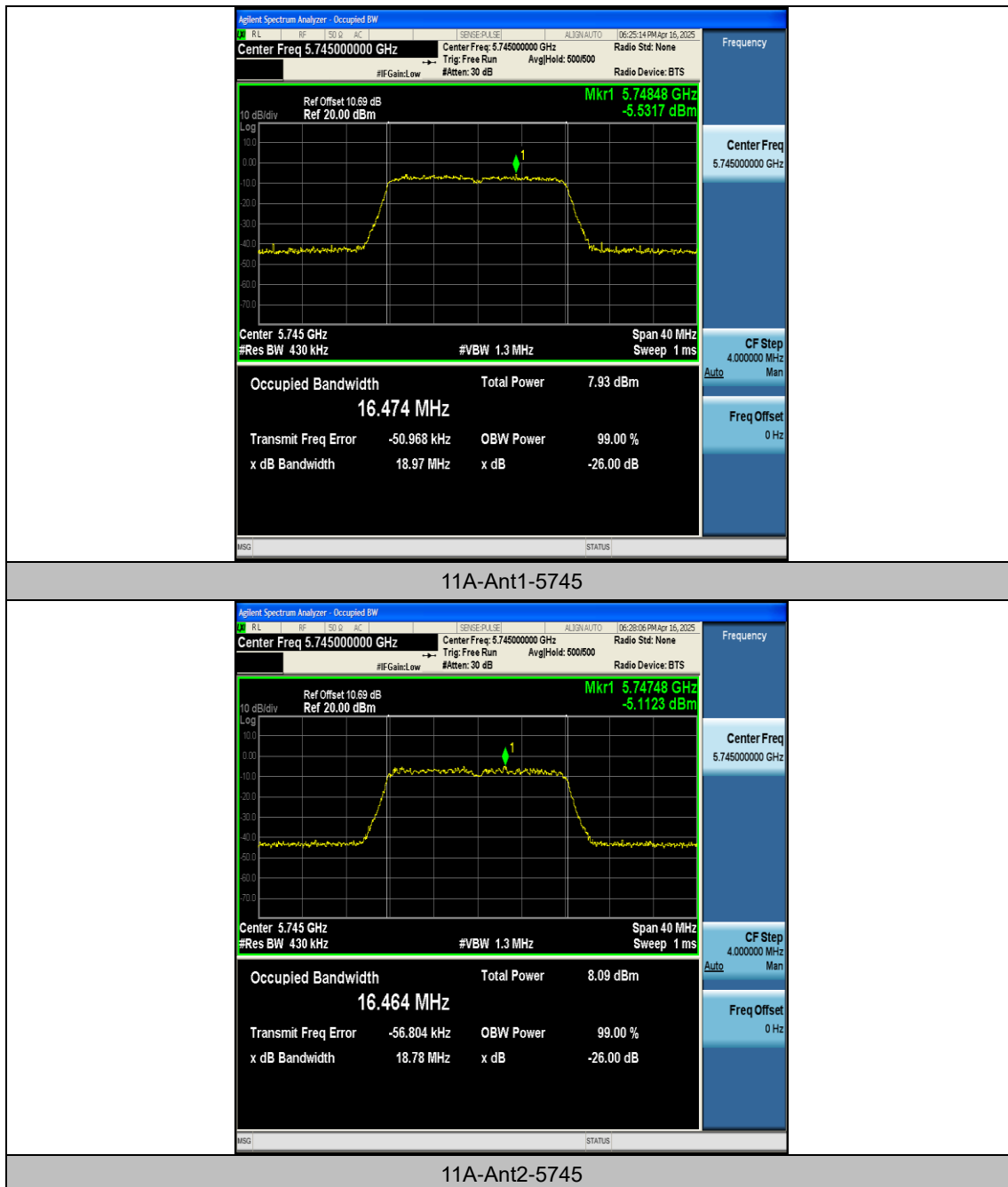
Appendix A2: Occupied channel bandwidth

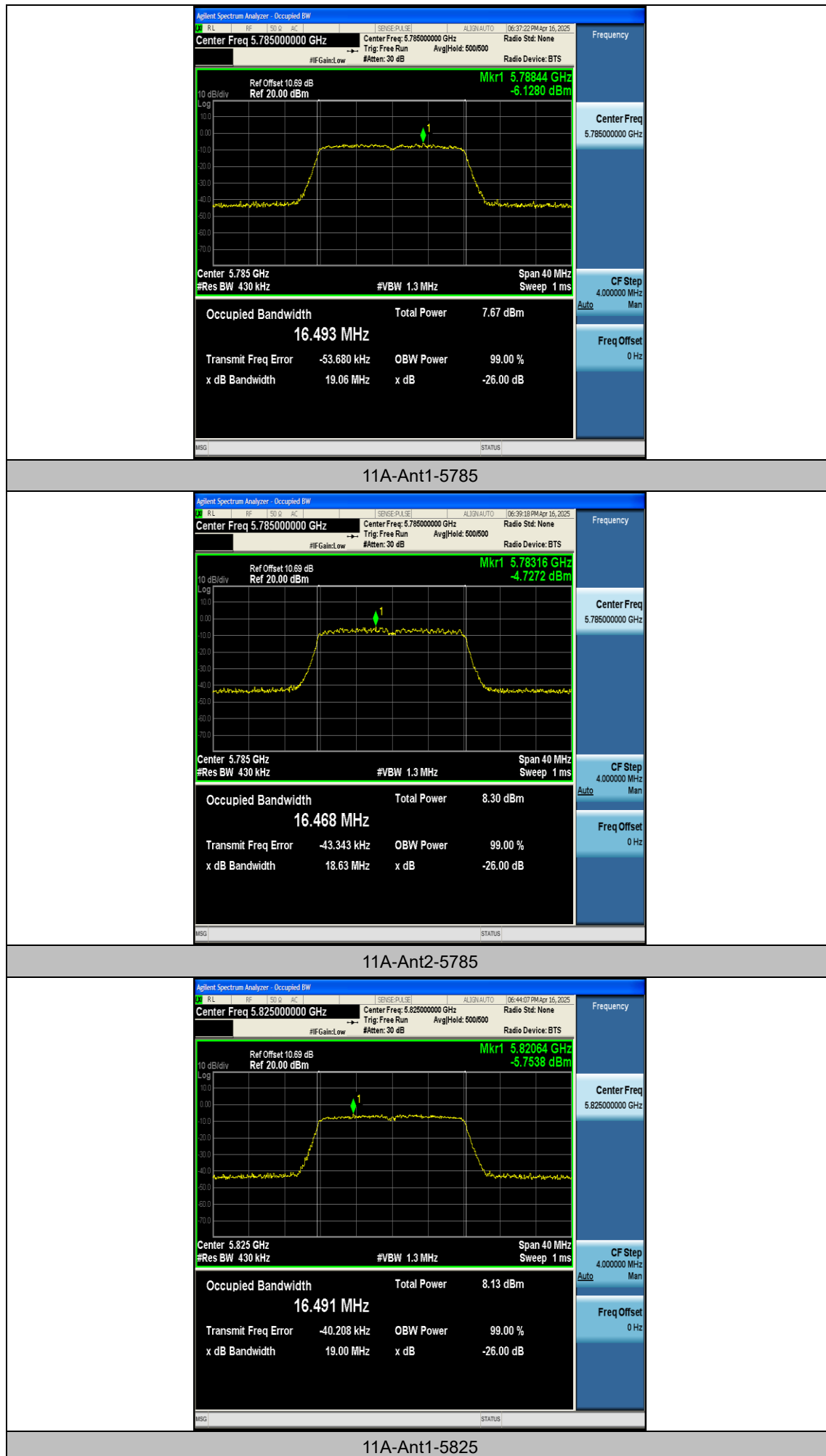
Test Result

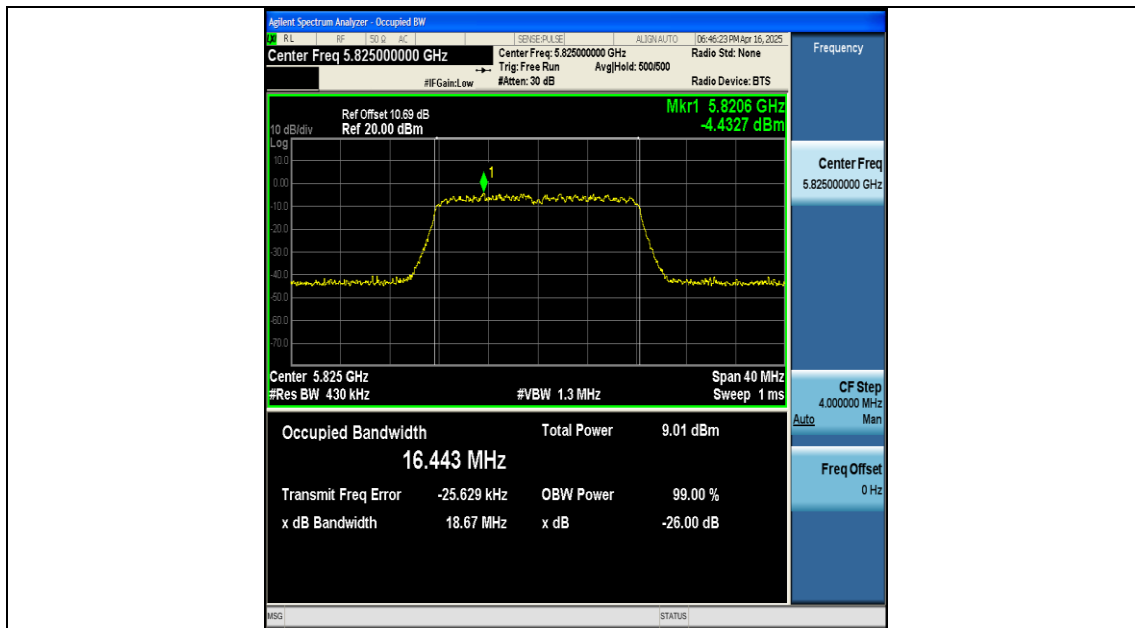
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.474	5736.7120	5753.1860	---	---
11A	Ant2	5745	16.464	5736.7112	5753.1752	---	---
11A	Ant1	5785	16.493	5776.6998	5793.1928	---	---
11A	Ant2	5785	16.468	5776.7227	5793.1907	---	---
11A	Ant1	5825	16.491	5816.7143	5833.2053	---	---
11A	Ant2	5825	16.443	5816.7529	5833.1959	---	---
11N20MIMO	Ant1	5745	17.661	5736.1037	5753.7647	---	---
11N20MIMO	Ant2	5745	17.643	5736.1174	5753.7604	---	---
11N20MIMO	Ant1	5785	17.661	5776.1203	5793.7813	---	---
11N20MIMO	Ant2	5785	17.641	5776.1350	5793.7760	---	---
11N20MIMO	Ant1	5825	17.622	5816.1587	5833.7807	---	---
11N20MIMO	Ant2	5825	17.613	5816.1614	5833.7744	---	---
11AC20MIMO	Ant1	5745	17.646	5736.1077	5753.7537	---	---
11AC20MIMO	Ant2	5745	17.652	5736.1066	5753.7586	---	---
11AC20MIMO	Ant1	5785	17.630	5776.1229	5793.7529	---	---
11AC20MIMO	Ant2	5785	17.635	5776.1266	5793.7616	---	---
11AC20MIMO	Ant1	5825	17.642	5816.1410	5833.7830	---	---
11AC20MIMO	Ant2	5825	17.638	5816.1447	5833.7827	---	---

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

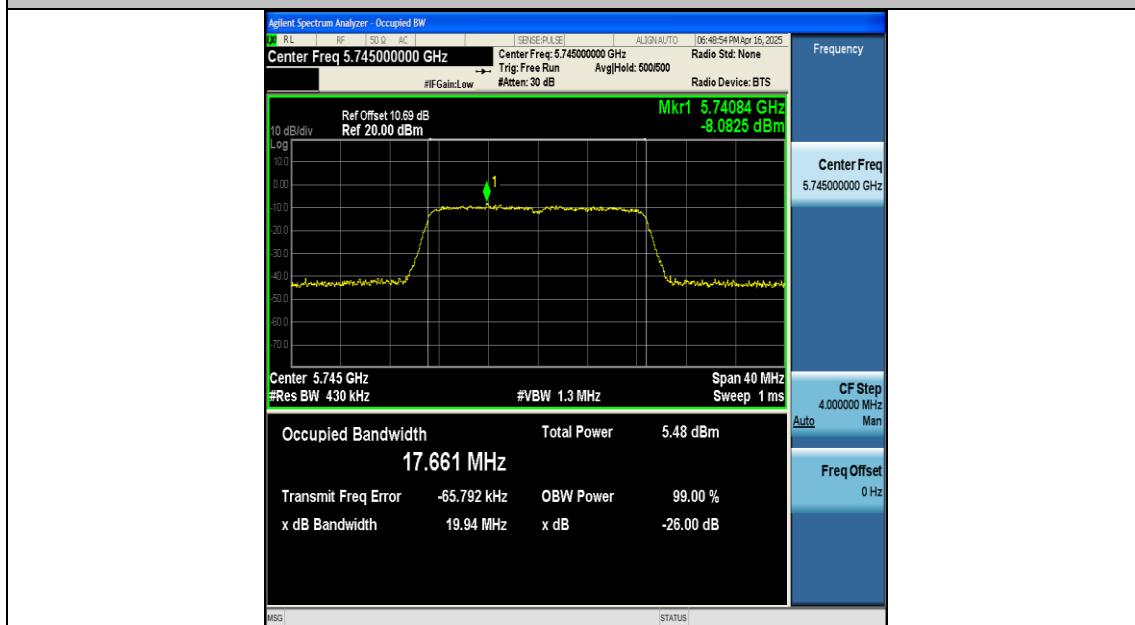
Test Graphs



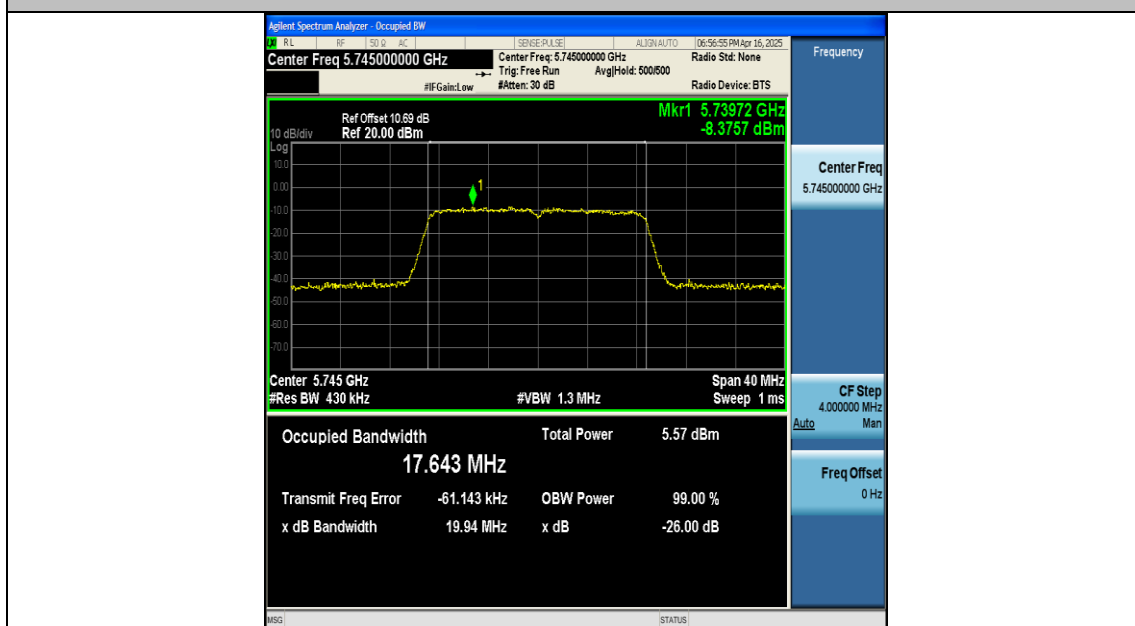




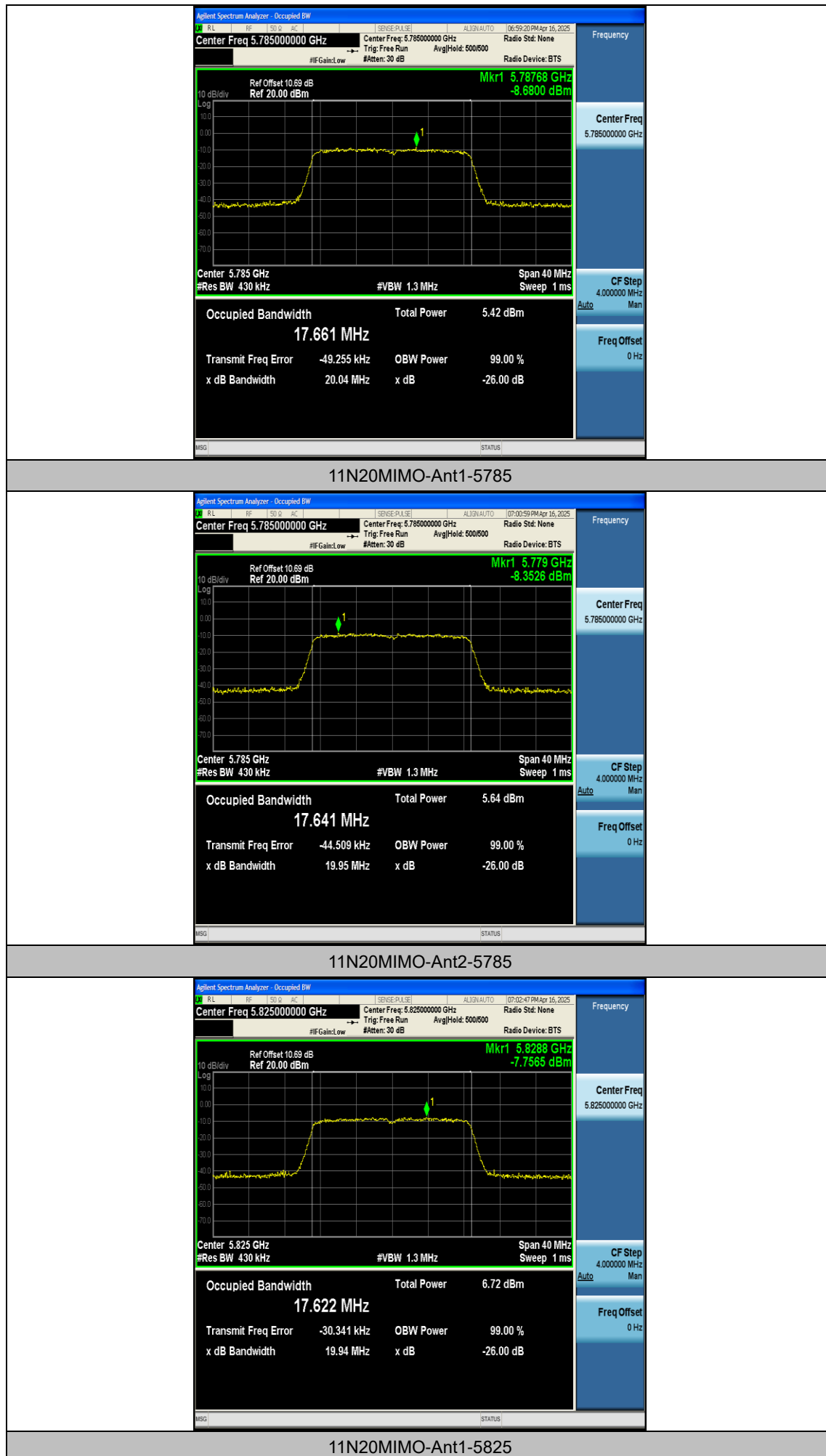
11A-Ant2-5825

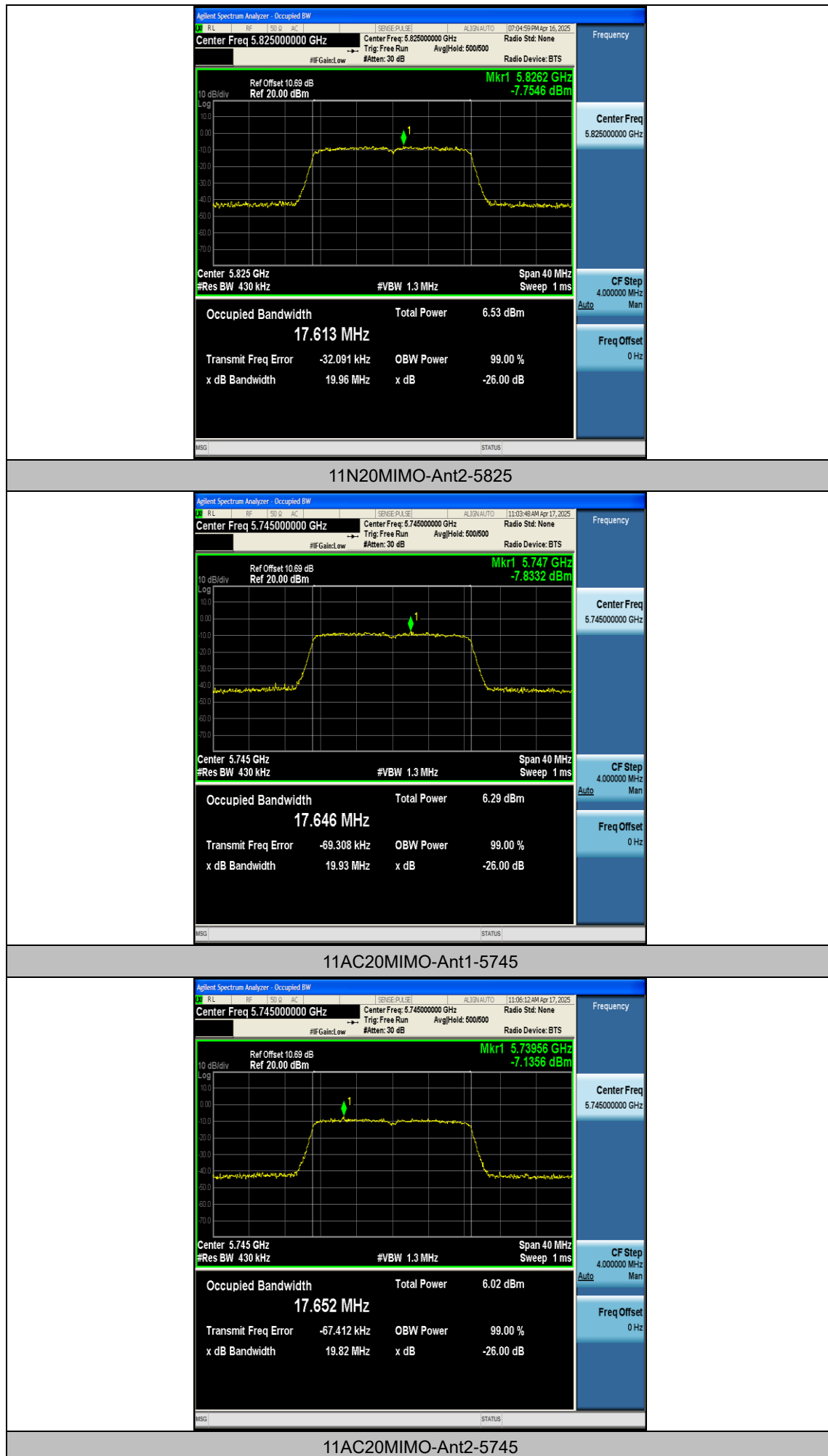


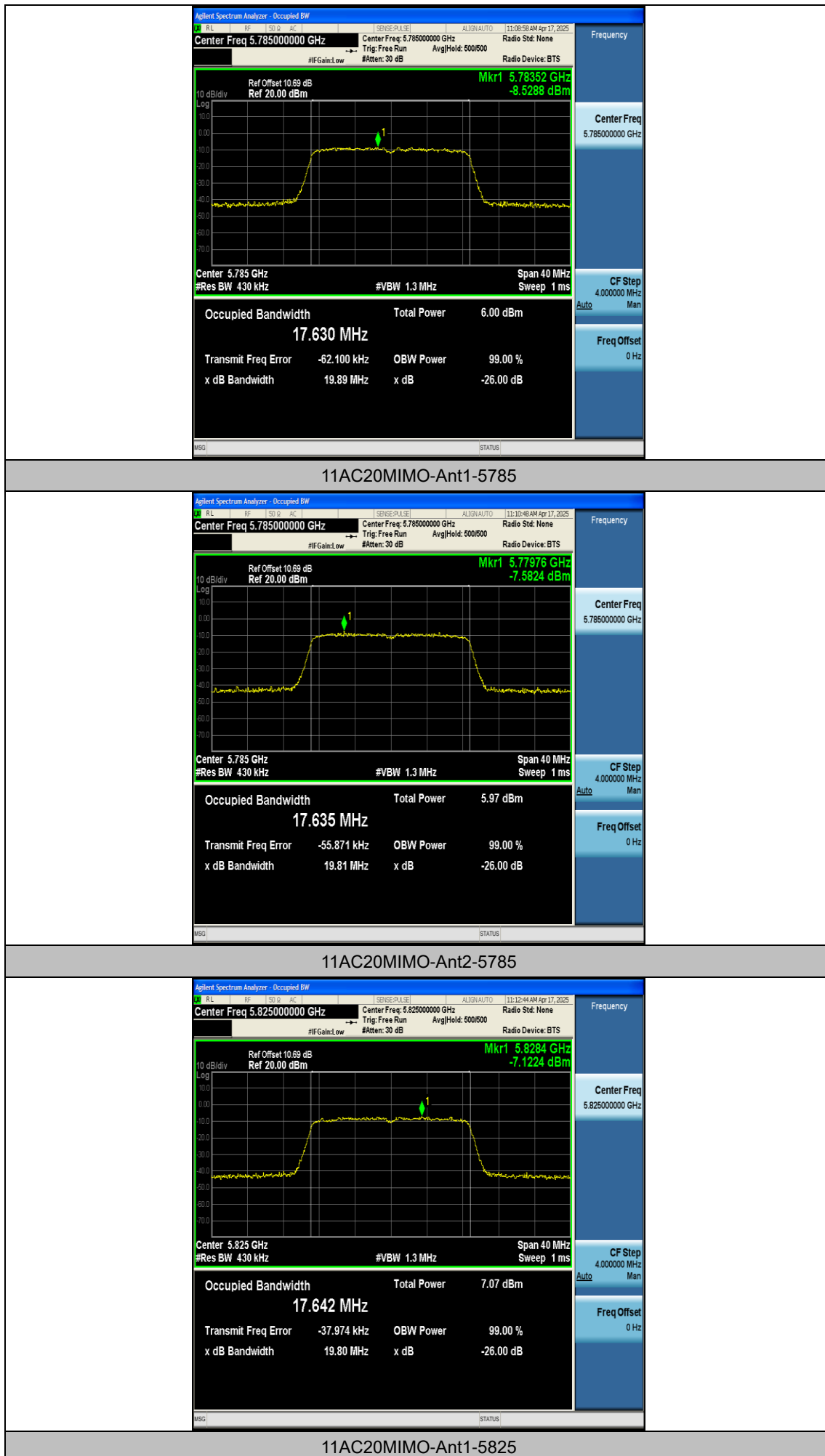
11N20MIMO-Ant1-5745



11N20MIMO-Ant2-5745









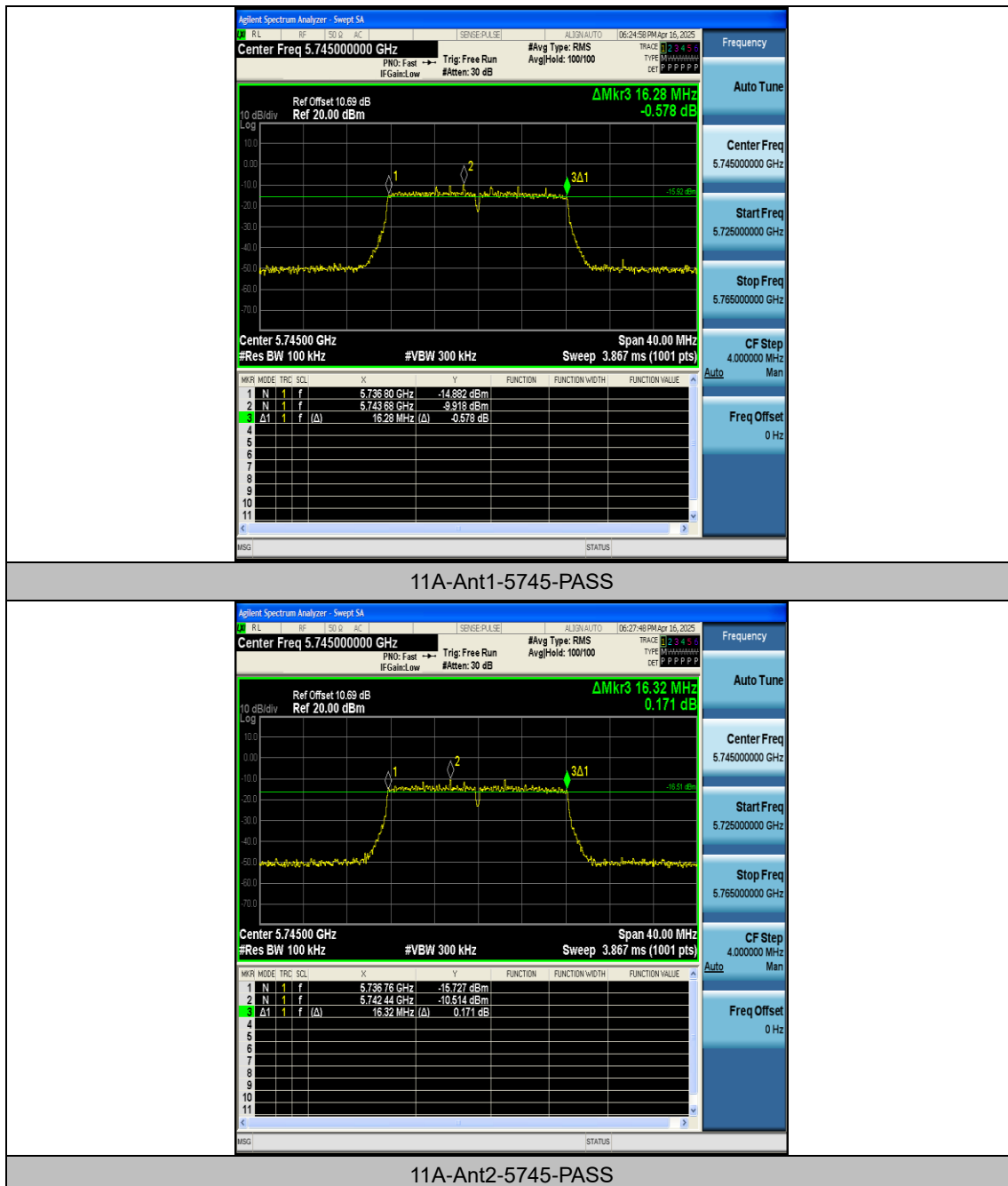
Appendix A: Min emission bandwidth

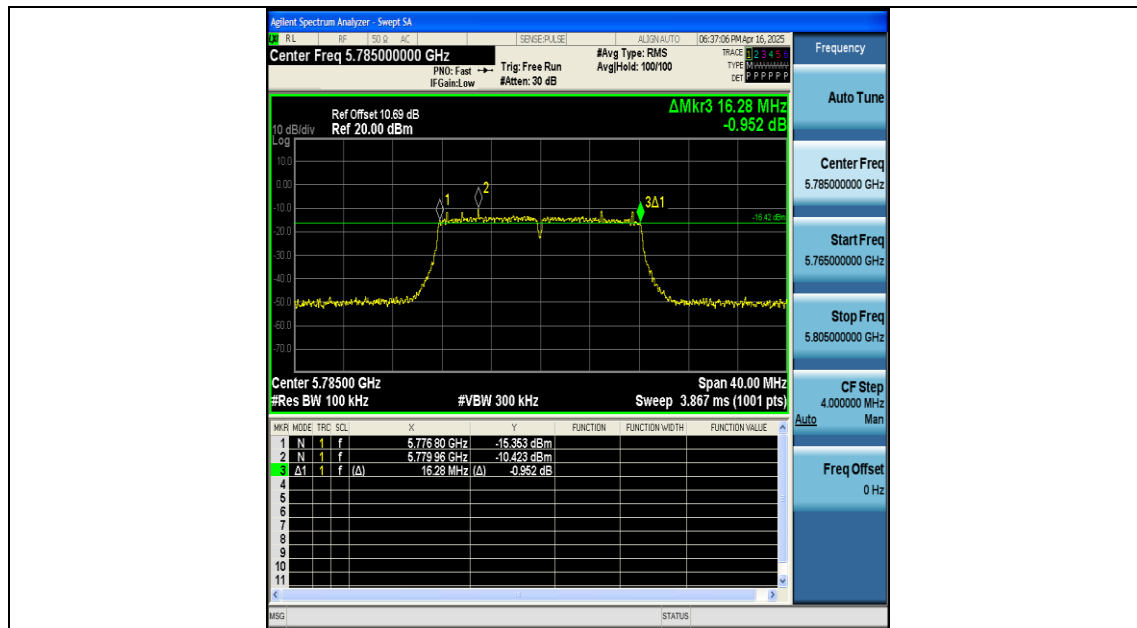
Test Result

Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.280	5736.800	5753.080	0.5	PASS
11A	Ant2	5745	16.320	5736.760	5753.080	0.5	PASS
11A	Ant1	5785	16.280	5776.800	5793.080	0.5	PASS
11A	Ant2	5785	16.280	5776.800	5793.080	0.5	PASS
11A	Ant1	5825	16.280	5816.800	5833.080	0.5	PASS
11A	Ant2	5825	16.280	5816.800	5833.080	0.5	PASS
11N20MIMO	Ant1	5745	17.160	5736.160	5753.320	0.5	PASS
11N20MIMO	Ant2	5745	17.520	5736.160	5753.680	0.5	PASS
11N20MIMO	Ant1	5785	17.200	5776.160	5793.360	0.5	PASS
11N20MIMO	Ant2	5785	17.560	5776.160	5793.720	0.5	PASS
11N20MIMO	Ant1	5825	17.280	5816.400	5833.680	0.5	PASS
11N20MIMO	Ant2	5825	17.520	5816.160	5833.680	0.5	PASS
11AC20MIMO	Ant1	5745	17.280	5736.160	5753.440	0.5	PASS
11AC20MIMO	Ant2	5745	17.360	5736.120	5753.480	0.5	PASS
11AC20MIMO	Ant1	5785	17.520	5776.160	5793.680	0.5	PASS
11AC20MIMO	Ant2	5785	17.160	5776.160	5793.320	0.5	PASS
11AC20MIMO	Ant1	5825	17.560	5816.160	5833.720	0.5	PASS
11AC20MIMO	Ant2	5825	17.280	5816.400	5833.680	0.5	PASS

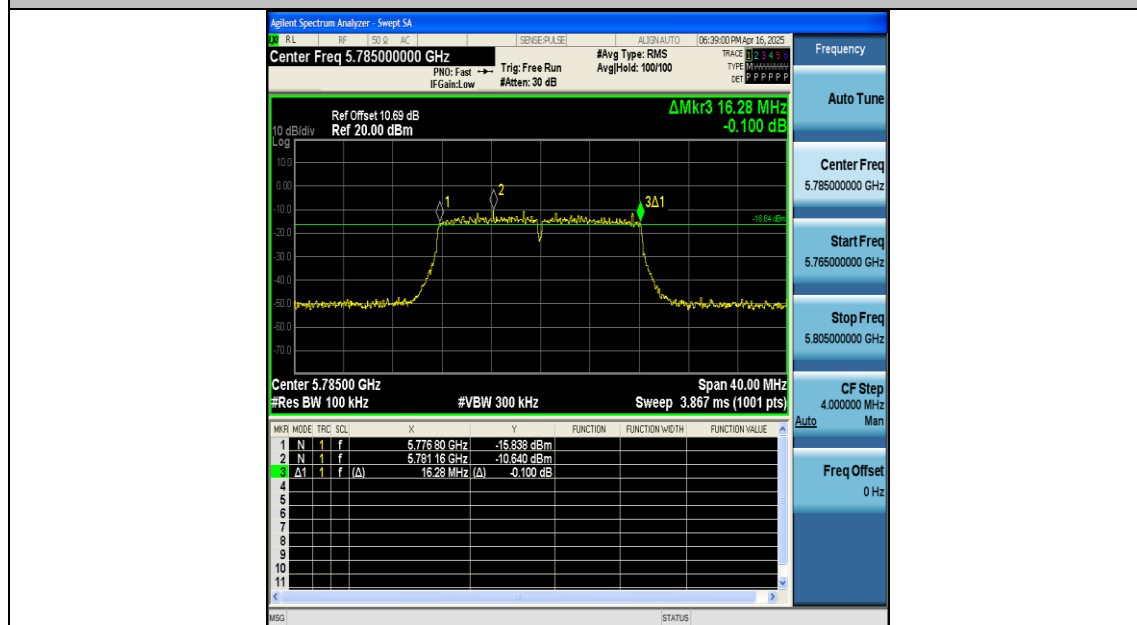
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

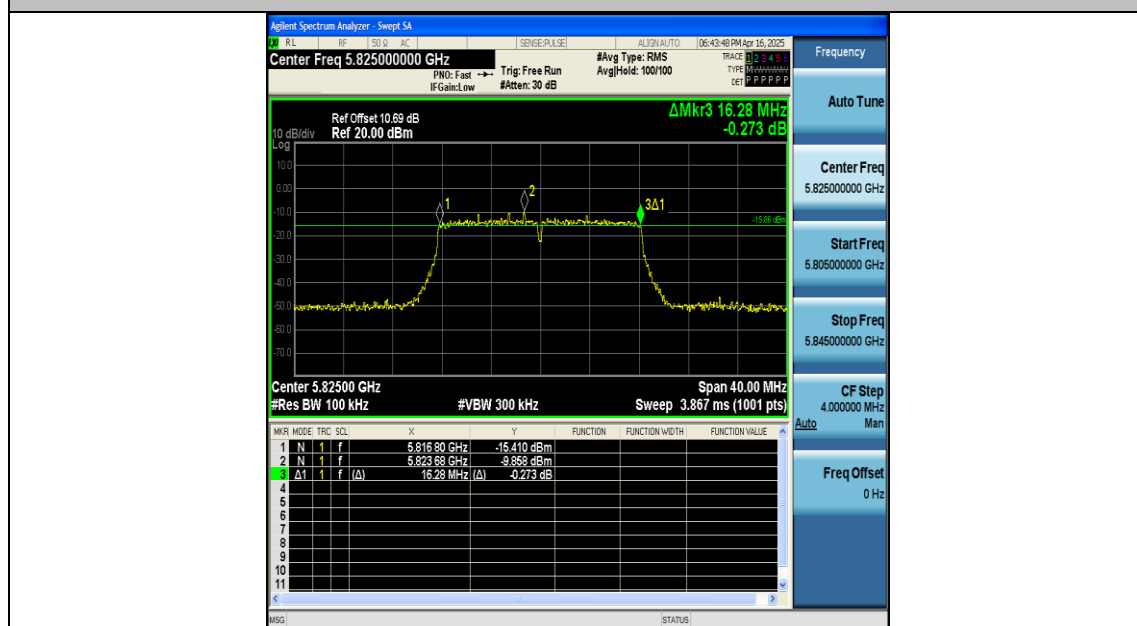




11A-Ant1-5785-PASS



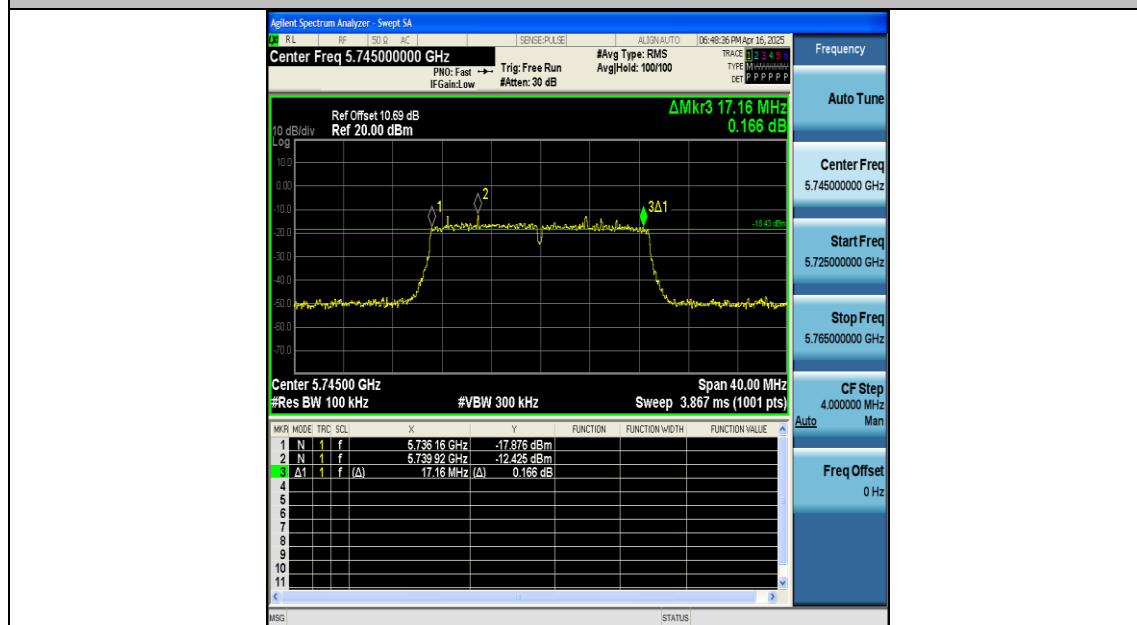
11A-Ant2-5785-PASS



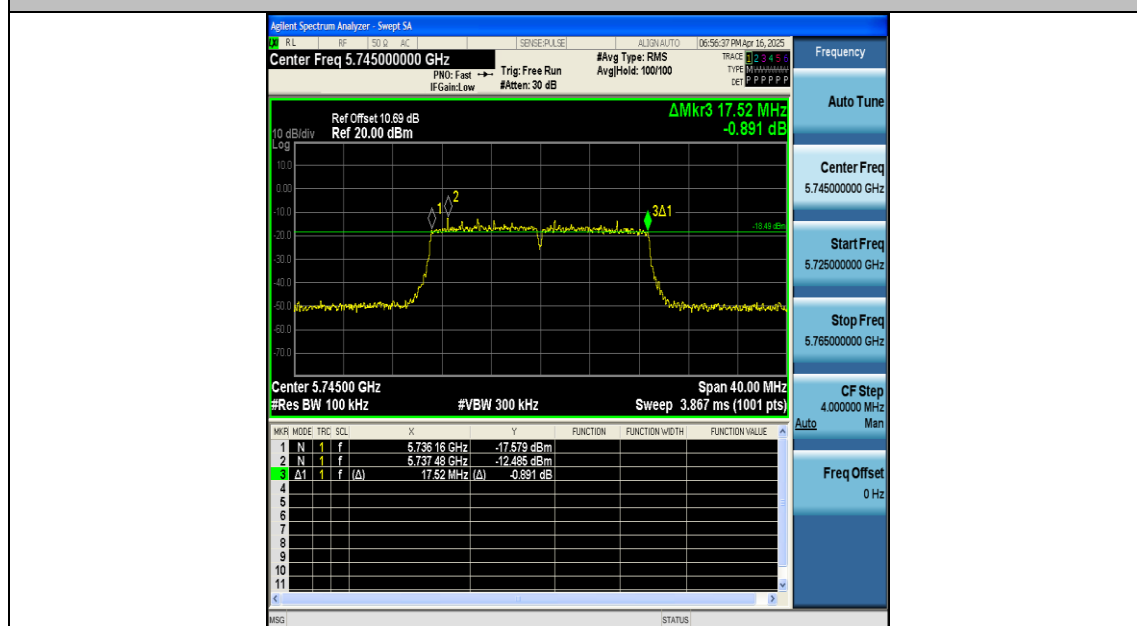
11A-Ant1-5825-PASS



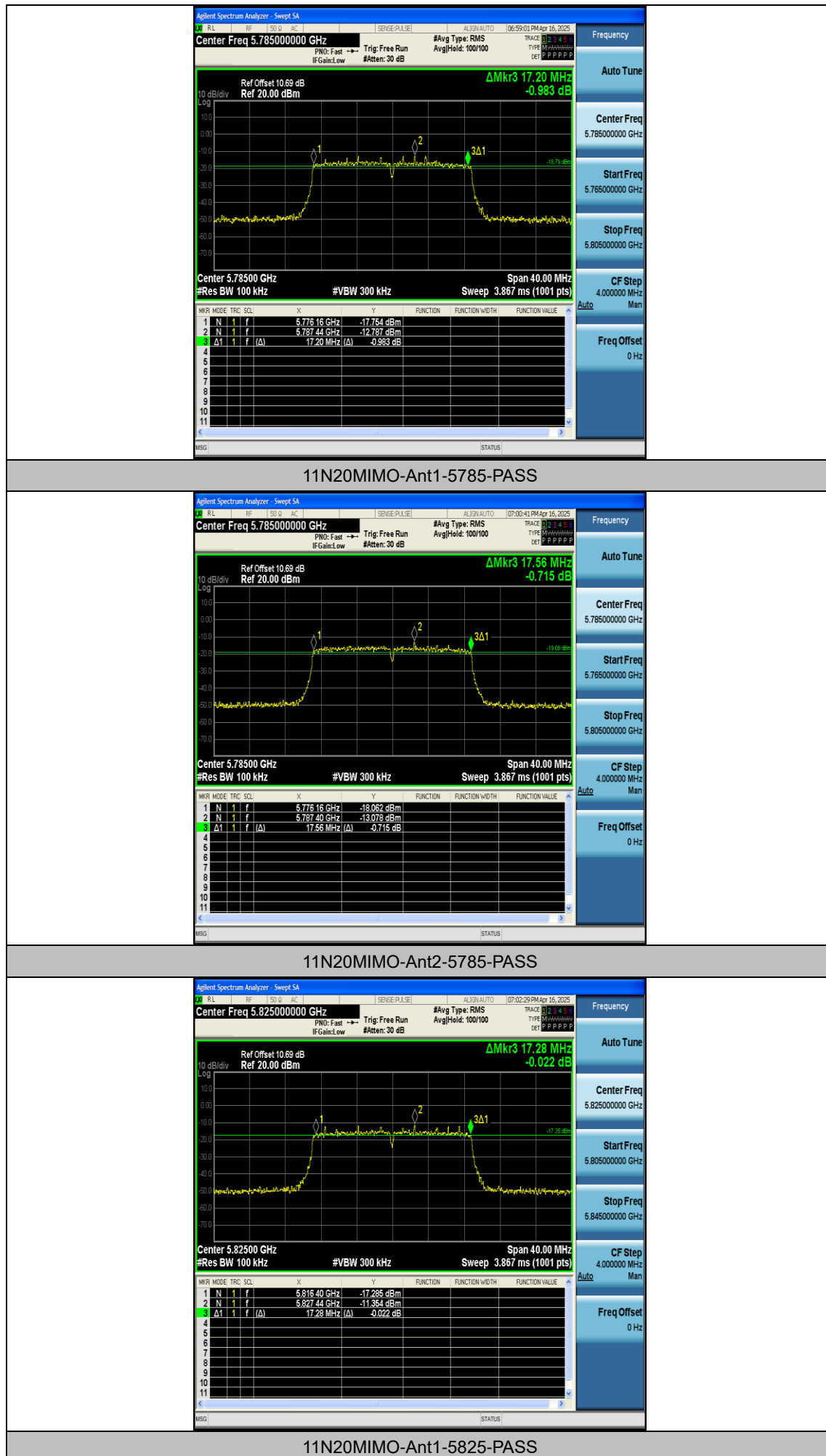
11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS

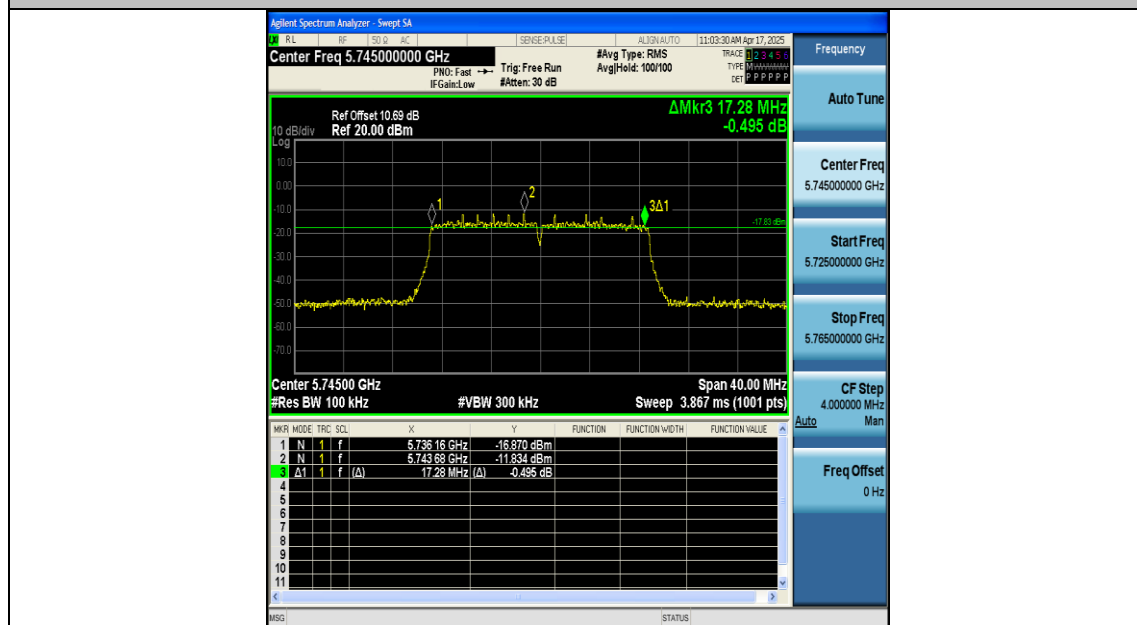


11N20MIMO-Ant2-5745-PASS

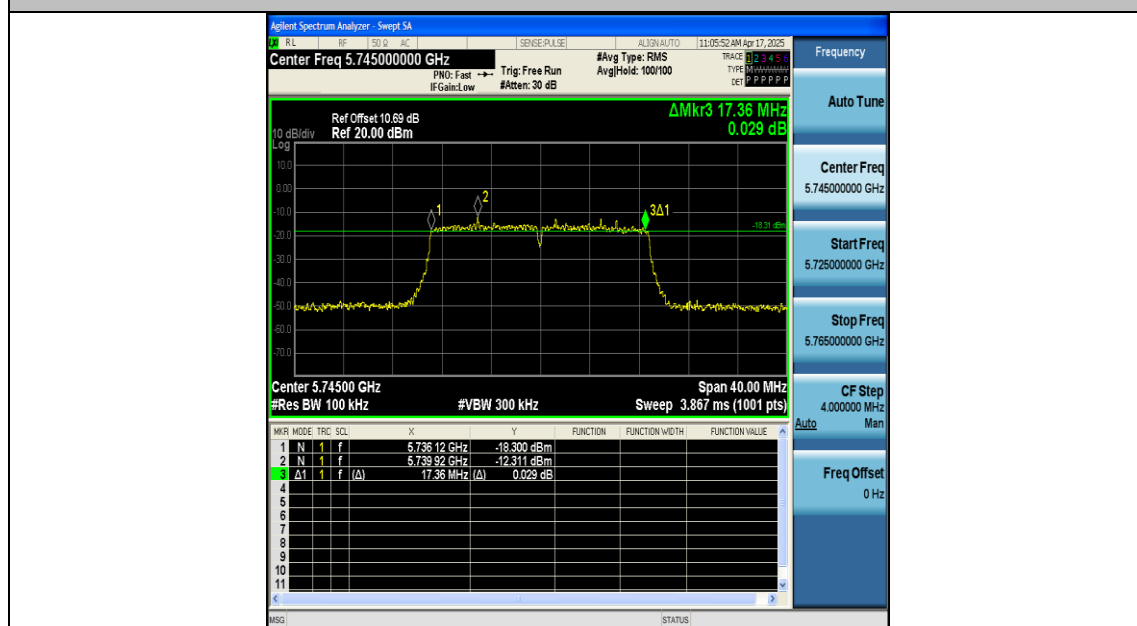




11N20MIMO-Ant2-5825-PASS



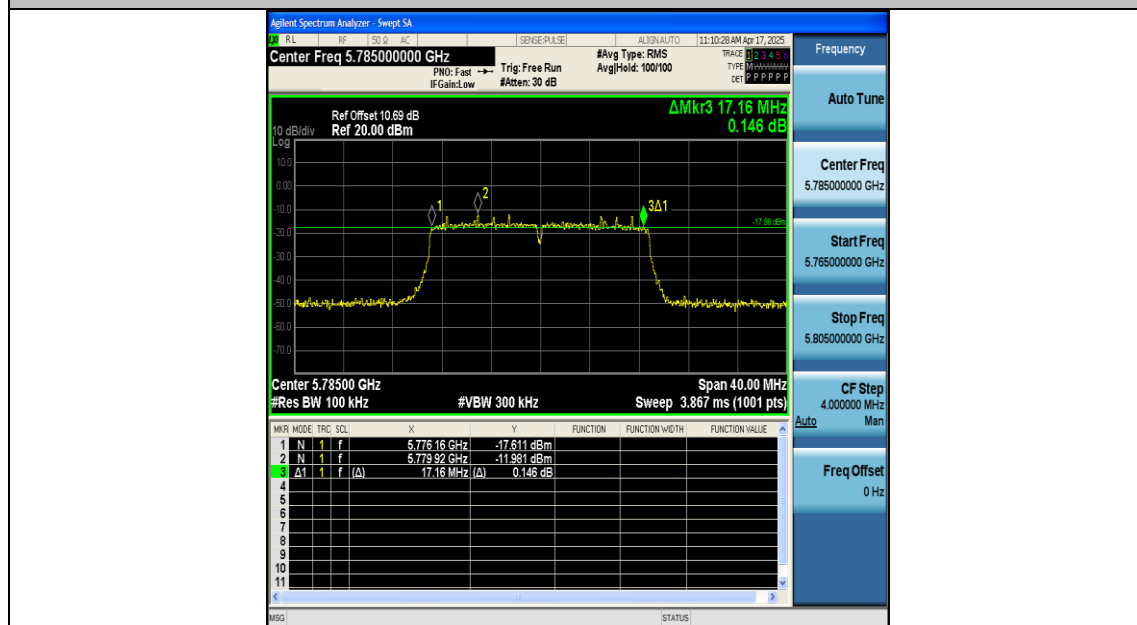
11AC20MIMO-Ant1-5745-PASS



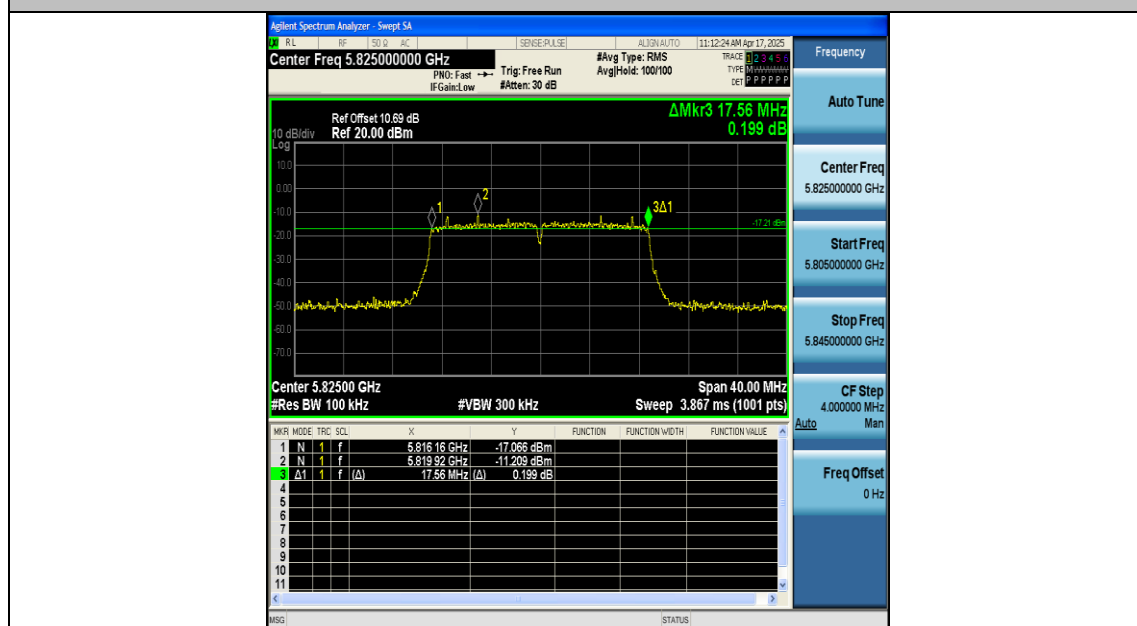
11AC20MIMO-Ant2-5745-PASS



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	1.46	≤30.00	PASS
11A	Ant2	5745	1.20	≤30.00	PASS
11A	Ant1	5785	1.05	≤30.00	PASS
11A	Ant2	5785	1.05	≤30.00	PASS
11A	Ant1	5825	1.63	≤30.00	PASS
11A	Ant2	5825	1.87	≤30.00	PASS
11N20MIMO	Ant1	5745	-0.96	≤30.00	PASS
11N20MIMO	Ant2	5745	-1.01	≤30.00	PASS
11N20MIMO	total	5745	2.03	≤30.00	PASS
11N20MIMO	Ant1	5785	-1.03	≤30.00	PASS
11N20MIMO	Ant2	5785	-0.80	≤30.00	PASS
11N20MIMO	total	5785	2.10	≤30.00	PASS
11N20MIMO	Ant1	5825	0.11	≤30.00	PASS
11N20MIMO	Ant2	5825	0.08	≤30.00	PASS
11N20MIMO	total	5825	3.11	≤30.00	PASS
11AC20MIMO	Ant1	5745	-0.36	≤30.00	PASS
11AC20MIMO	Ant2	5745	-0.54	≤30.00	PASS
11AC20MIMO	total	5745	2.56	≤30.00	PASS
11AC20MIMO	Ant1	5785	-0.79	≤30.00	PASS
11AC20MIMO	Ant2	5785	-0.67	≤30.00	PASS
11AC20MIMO	total	5785	2.28	≤30.00	PASS
11AC20MIMO	Ant1	5825	0.61	≤30.00	PASS
11AC20MIMO	Ant2	5825	0.11	≤30.00	PASS
11AC20MIMO	total	5825	3.38	≤30.00	PASS

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

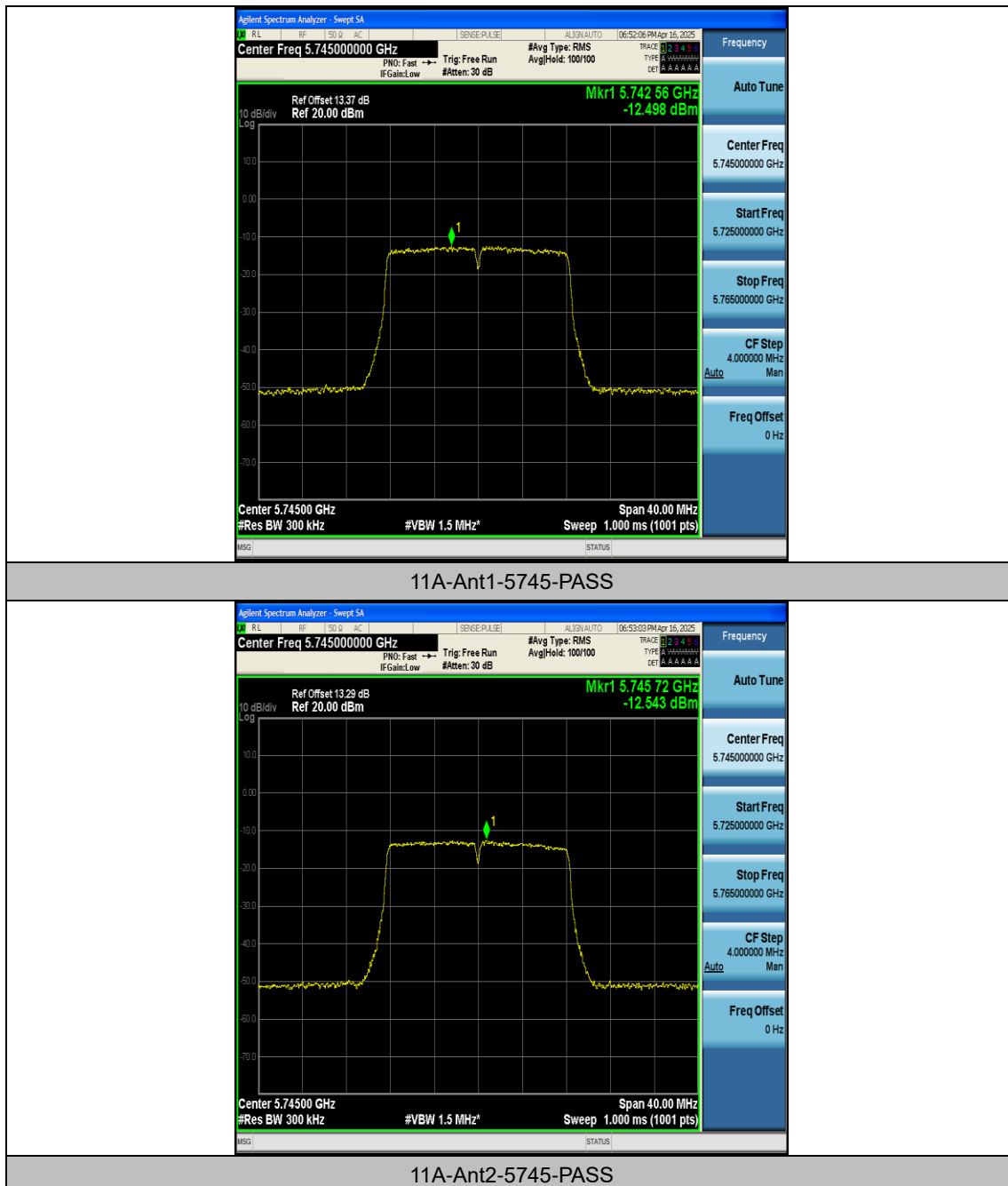
Appendix C: Maximum power spectral density

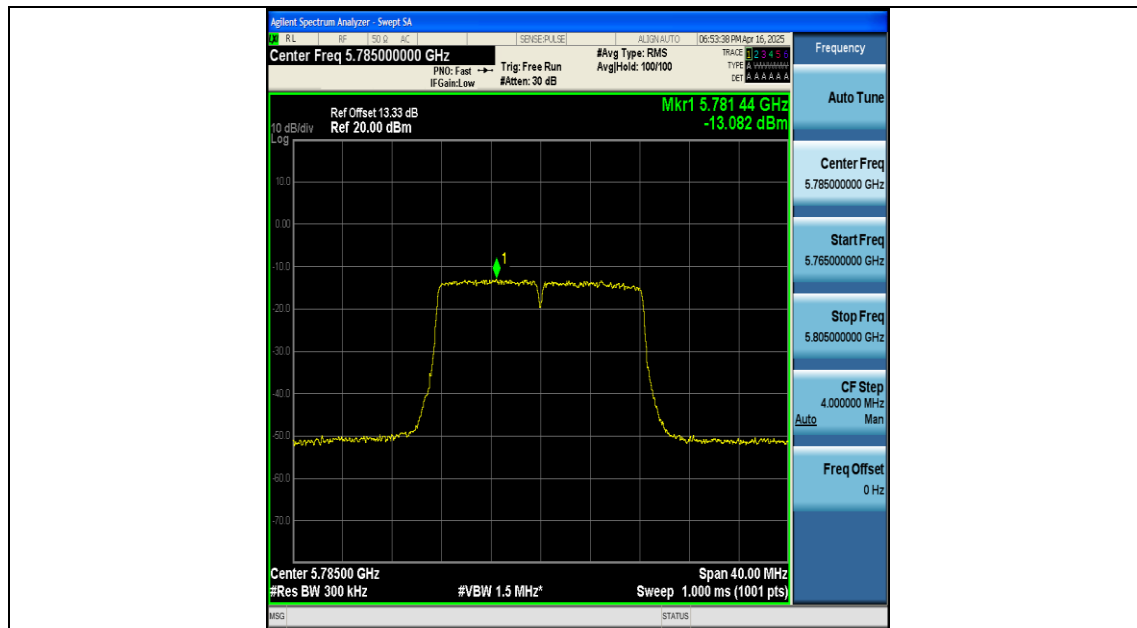
Test Result

Frequency [MHz]	Test Mode	Antenna	Result [dBm/500KHz]	DC Factor [dB]	RBW Factor [dB]	Limit [dBm/500KHz]	Verdict
5745	11A	Ant1	-12.50	0.46	2.22	≤30.00	PASS
5745	11A	Ant2	-12.54	0.38	2.22	≤30.00	PASS
5785	11A	Ant1	-13.08	0.42	2.22	≤30.00	PASS
5785	11A	Ant2	-12.72	0.29	2.22	≤30.00	PASS
5825	11A	Ant1	-12.24	0.36	2.22	≤30.00	PASS
5825	11A	Ant2	-12.28	0.30	2.22	≤30.00	PASS
5745	11N20MIMO	Ant1	-14.85	0.47	2.22	≤30.00	PASS
5745	11N20MIMO	Ant2	-15.16	0.35	2.22	≤30.00	PASS
5745	11N20MIMO	total	-11.99	---	---	≤29.60	PASS
5785	11N20MIMO	Ant1	-14.99	0.49	2.22	≤30.00	PASS
5785	11N20MIMO	Ant2	-15.02	0.49	2.22	≤30.00	PASS
5785	11N20MIMO	total	-11.99	---	---	≤29.60	PASS
5825	11N20MIMO	Ant1	-13.73	0.49	2.22	≤30.00	PASS
5825	11N20MIMO	Ant2	-13.99	0.49	2.22	≤30.00	PASS
5825	11N20MIMO	total	-10.85	---	---	≤29.60	PASS
5745	11AC20MIMO	Ant1	-14.70	0.47	2.22	≤30.00	PASS
5745	11AC20MIMO	Ant2	-14.79	0.51	2.22	≤30.00	PASS
5745	11AC20MIMO	total	-11.73	---	---	≤29.60	PASS
5785	11AC20MIMO	Ant1	-14.90	0.32	2.22	≤30.00	PASS
5785	11AC20MIMO	Ant2	-14.66	0.45	2.22	≤30.00	PASS
5785	11AC20MIMO	total	-11.77	---	---	≤29.60	PASS
5825	11AC20MIMO	Ant1	-13.65	0.53	2.22	≤30.00	PASS
5825	11AC20MIMO	Ant2	-13.93	0.45	2.22	≤30.00	PASS
5825	11AC20MIMO	total	-10.78	---	---	≤29.60	PASS

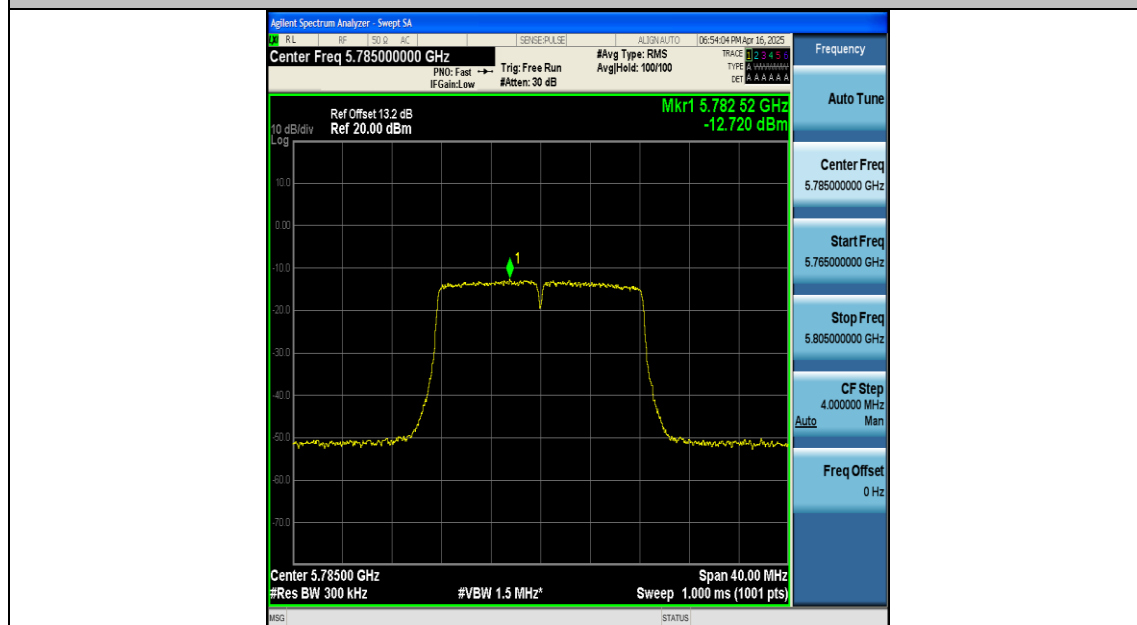
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

Test Graphs

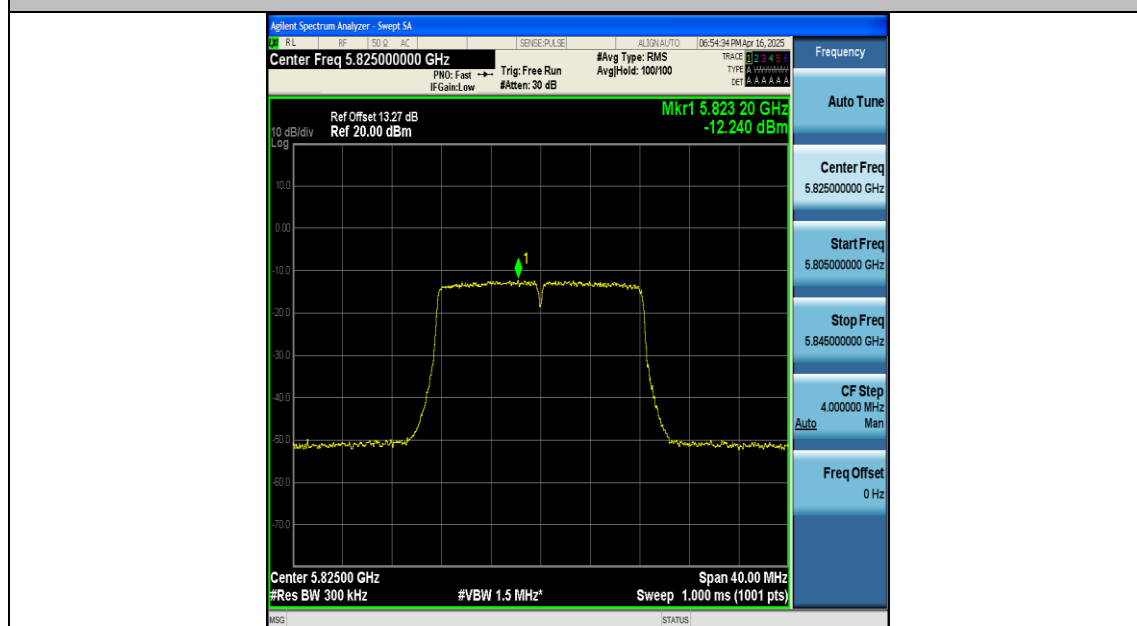




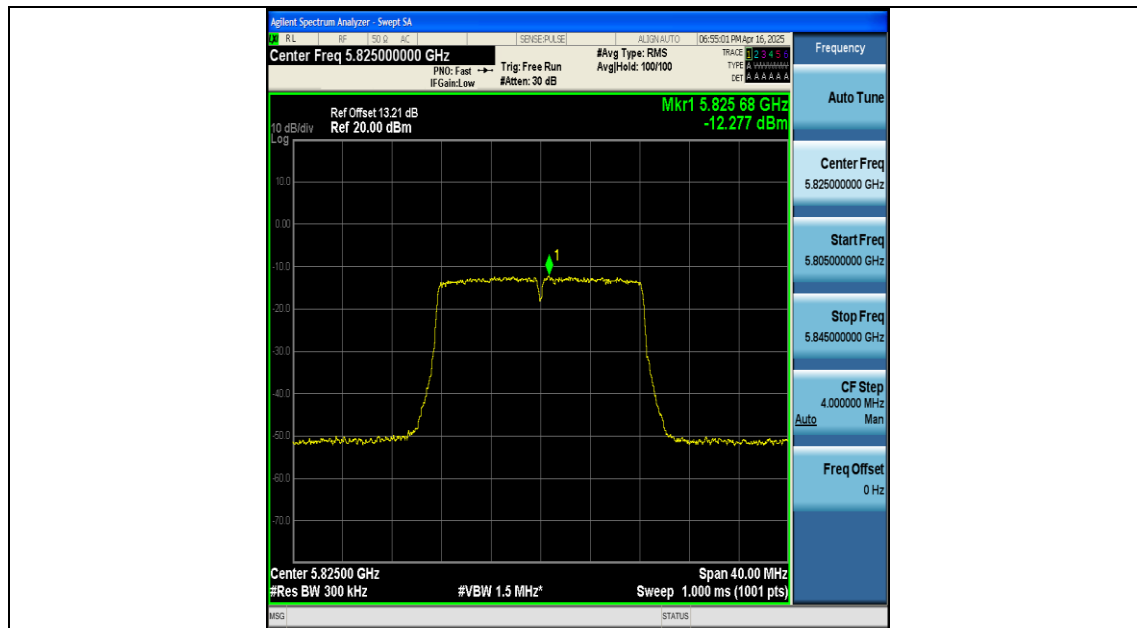
11A-Ant1-5785-PASS



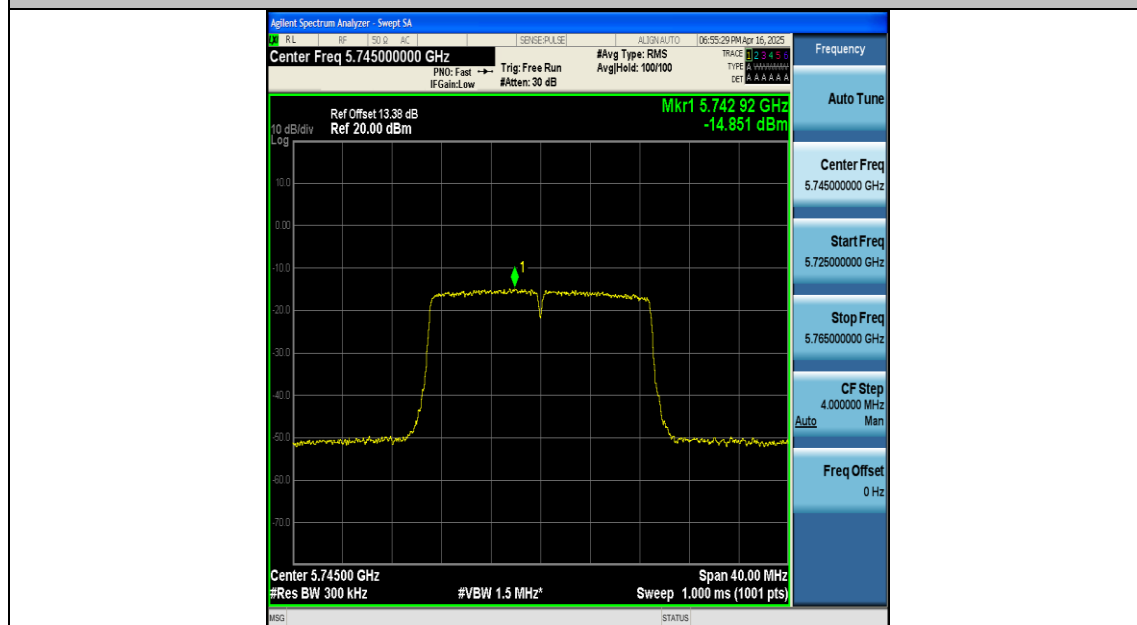
11A-Ant2-5785-PASS



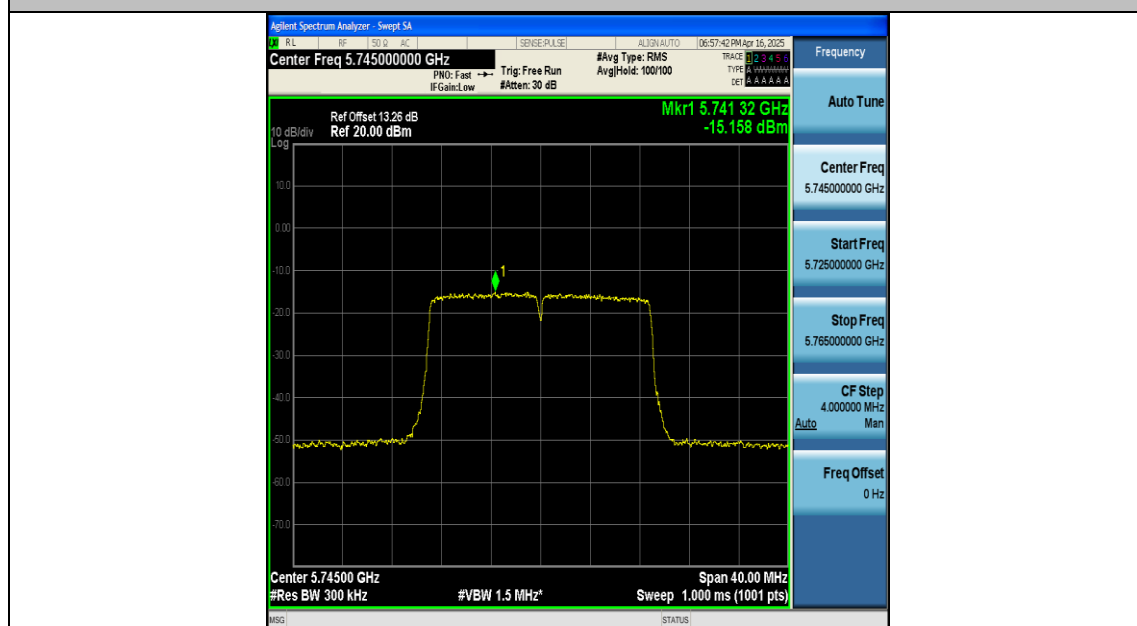
11A-Ant1-5825-PASS



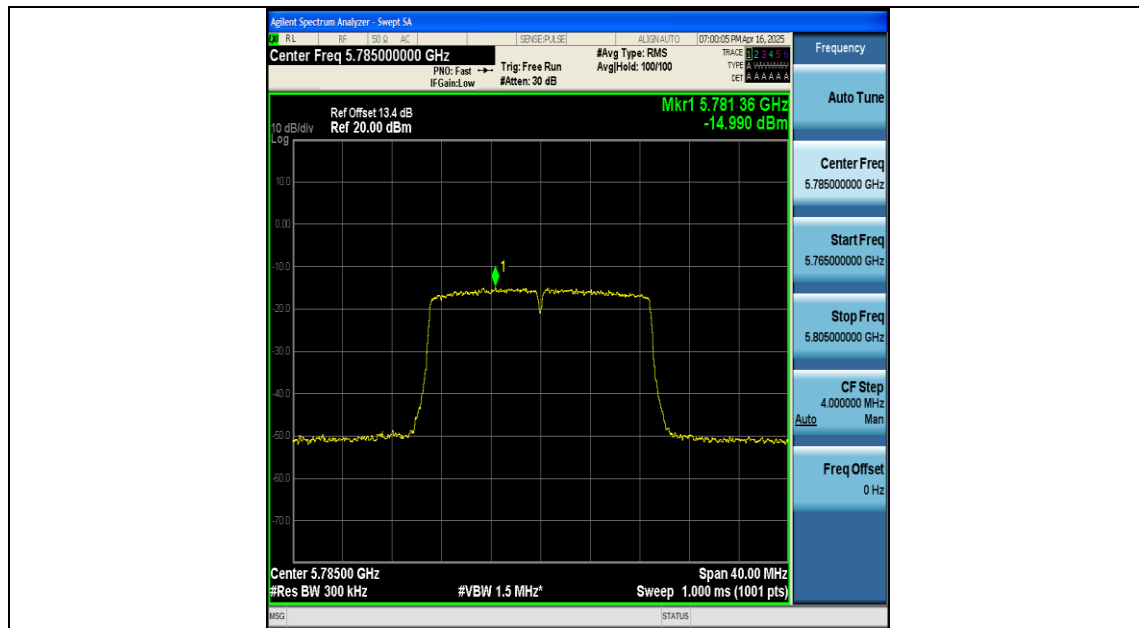
11A-Ant2-5825-PASS



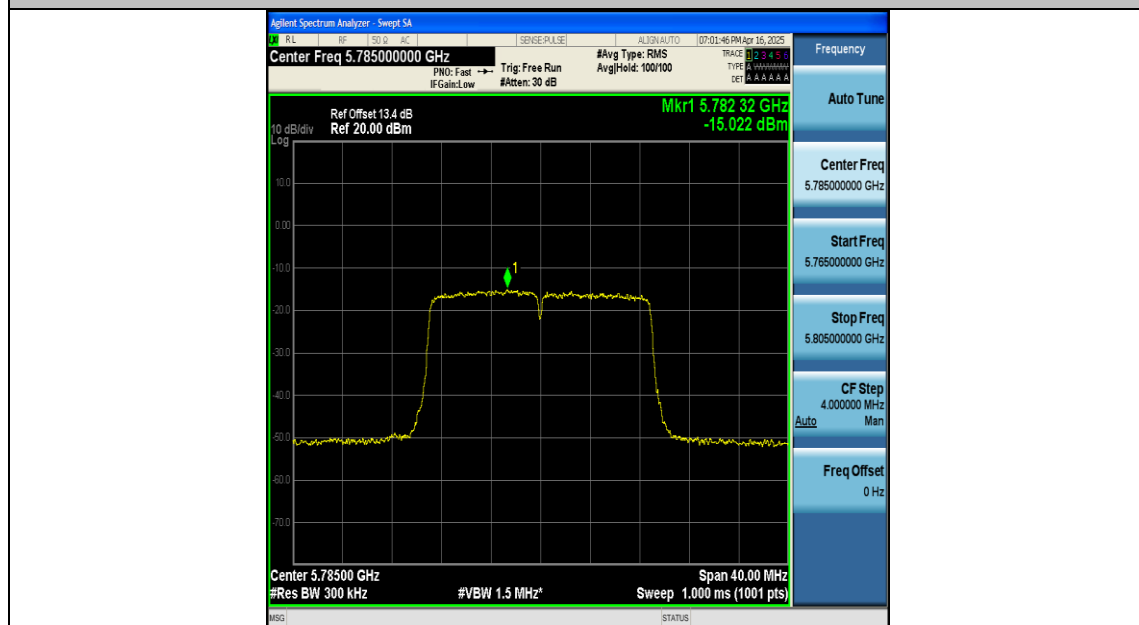
11N20MIMO-Ant1-5745-PASS



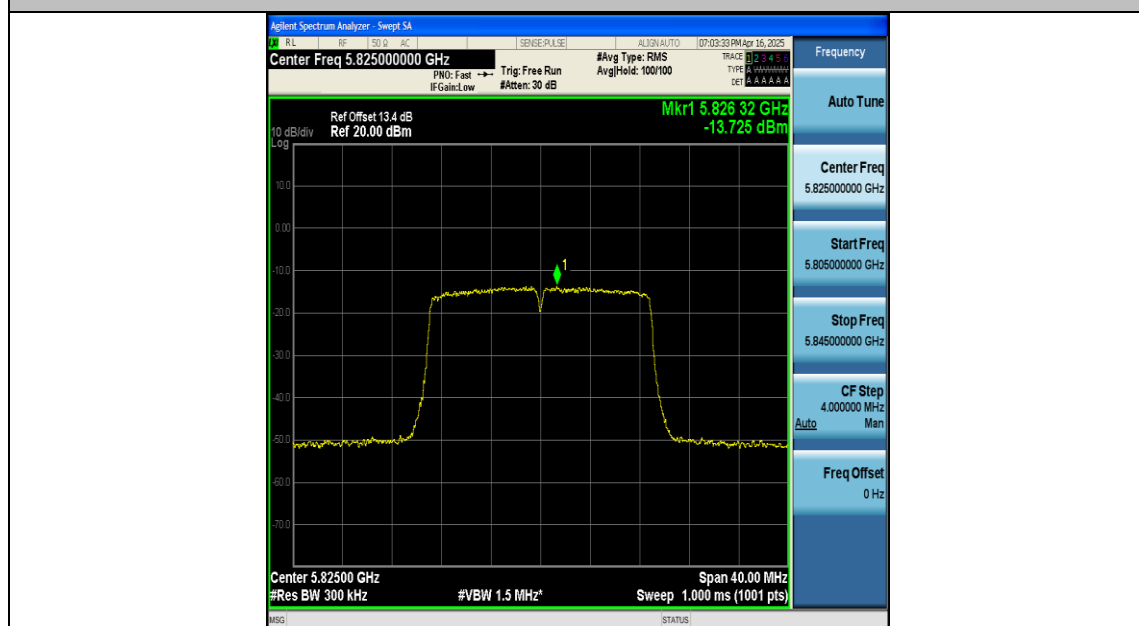
11N20MIMO-Ant2-5745-PASS



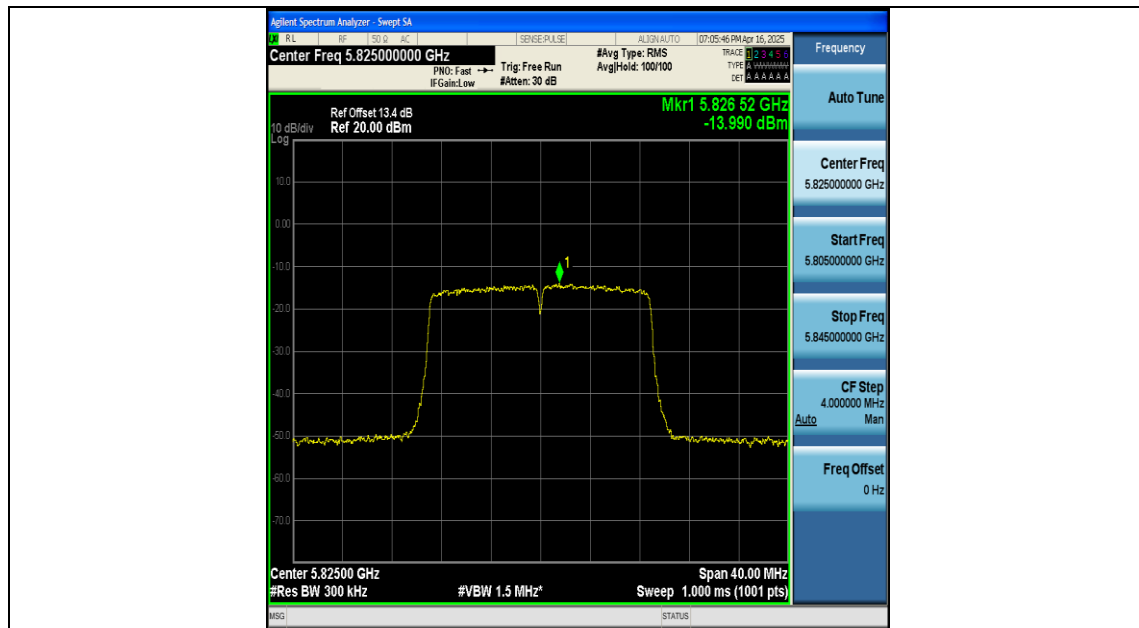
11N20MIMO-Ant1-5785-PASS



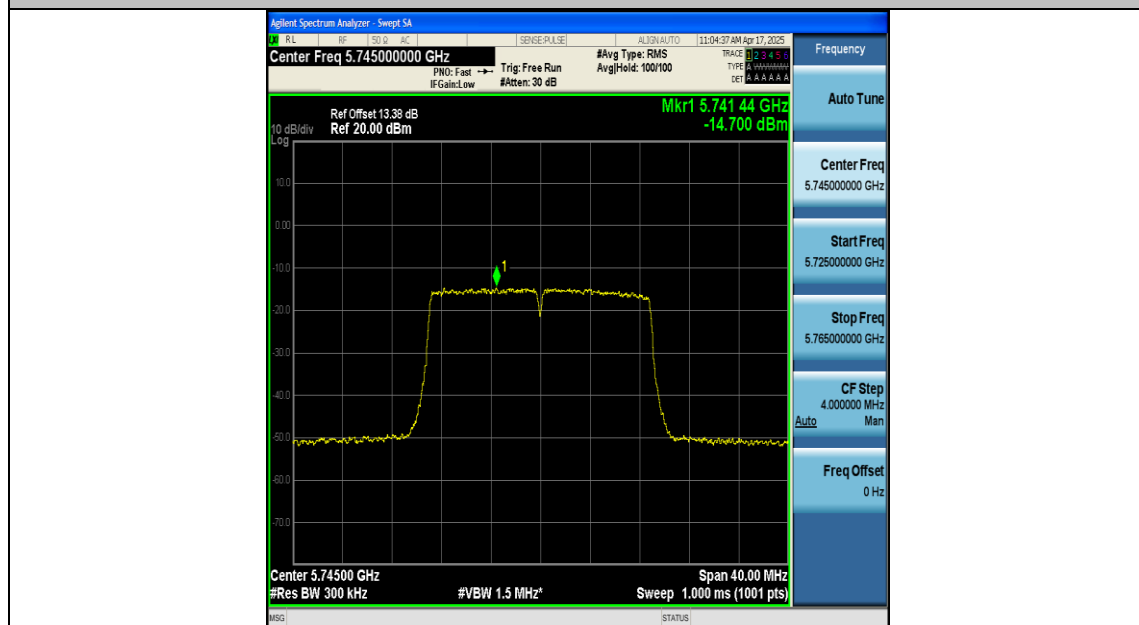
11N20MIMO-Ant2-5785-PASS



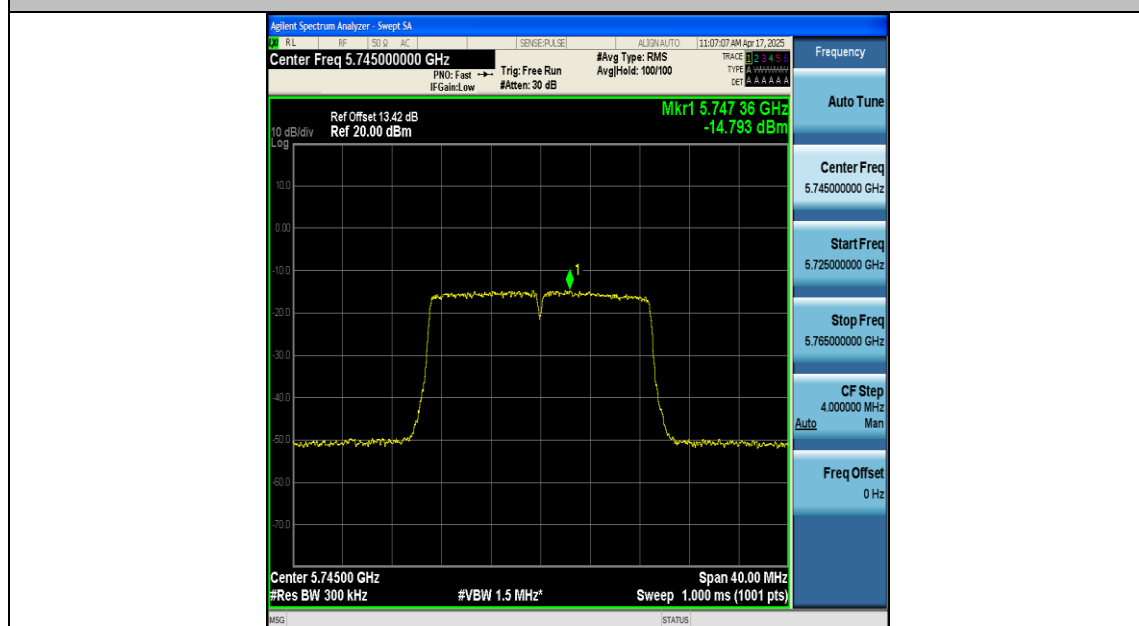
11N20MIMO-Ant1-5825-PASS



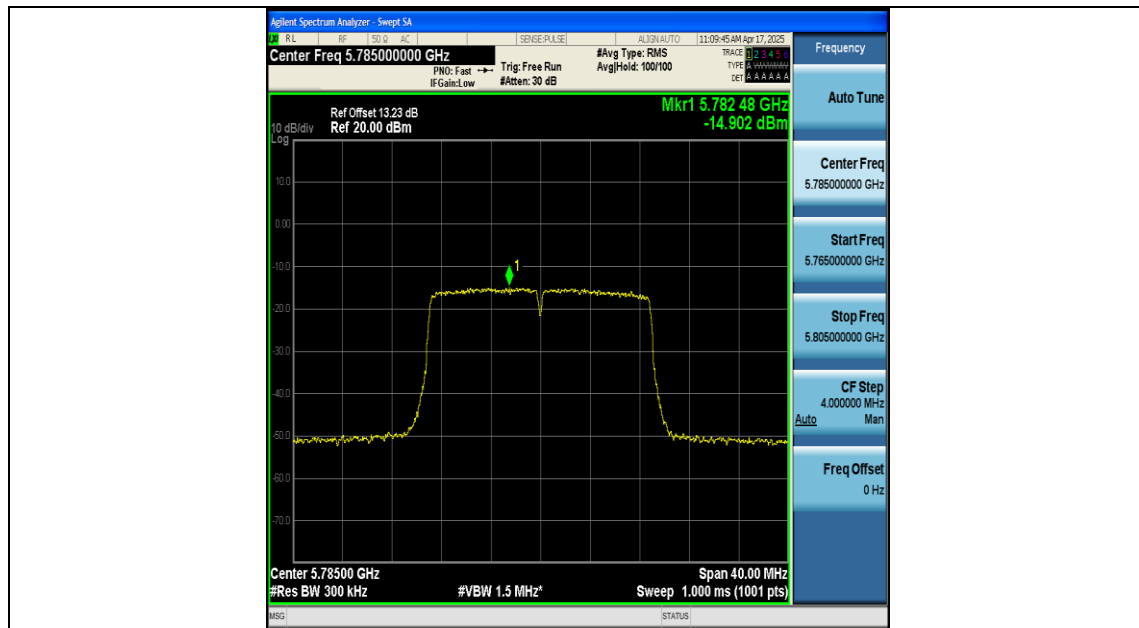
11N20MIMO-Ant2-5825-PASS



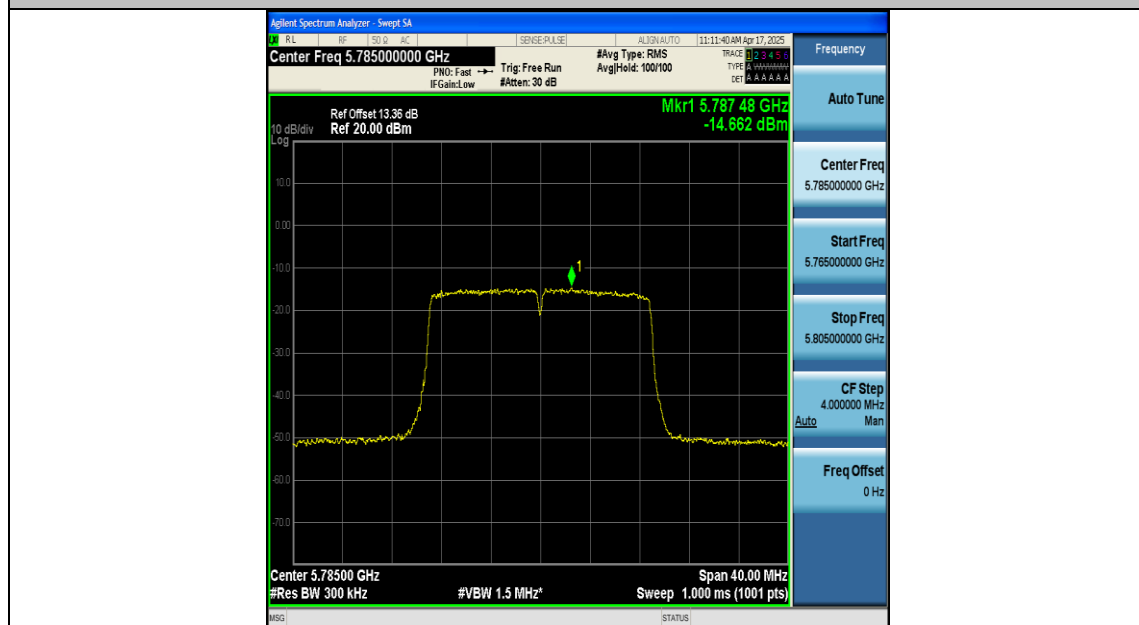
11AC20MIMO-Ant1-5745-PASS



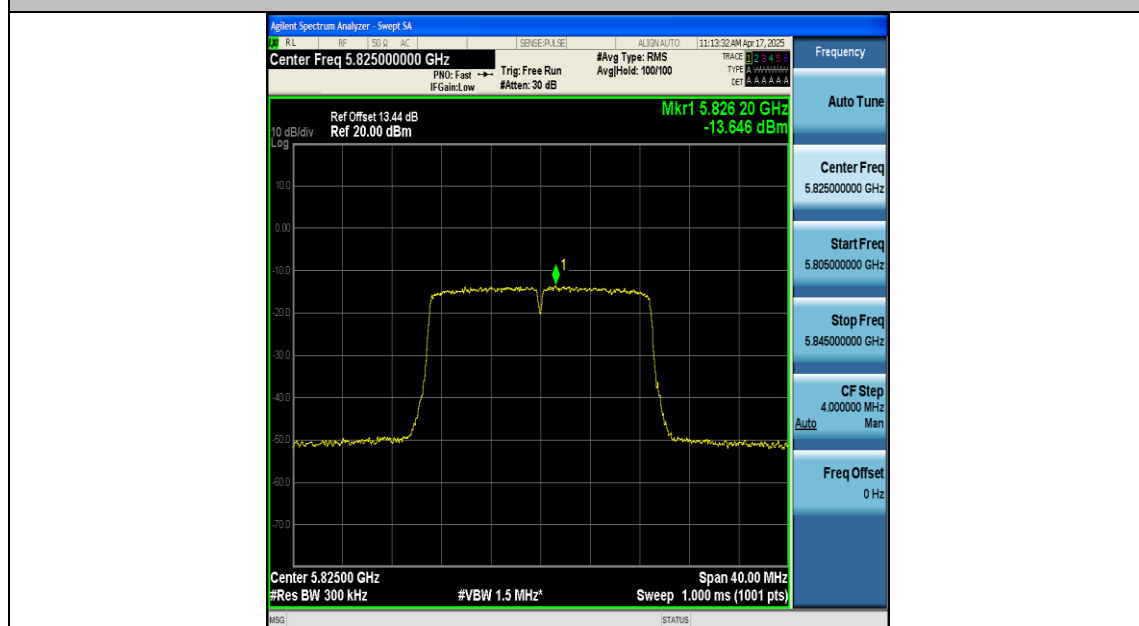
11AC20MIMO-Ant2-5745-PASS



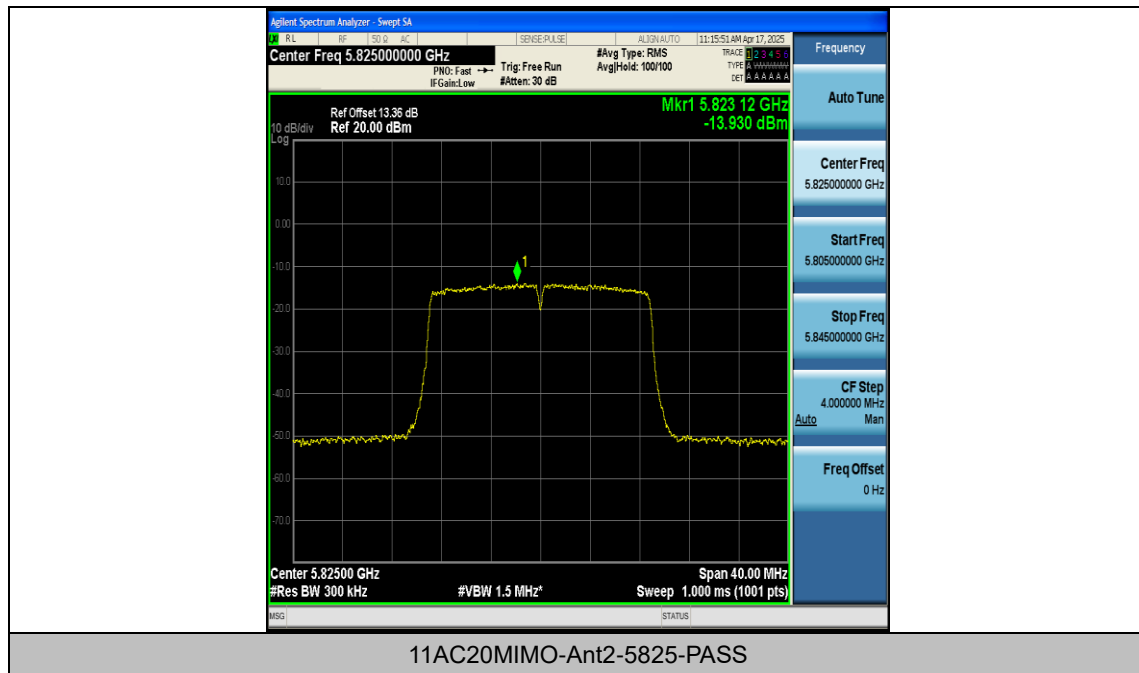
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix D: Band edge measurements

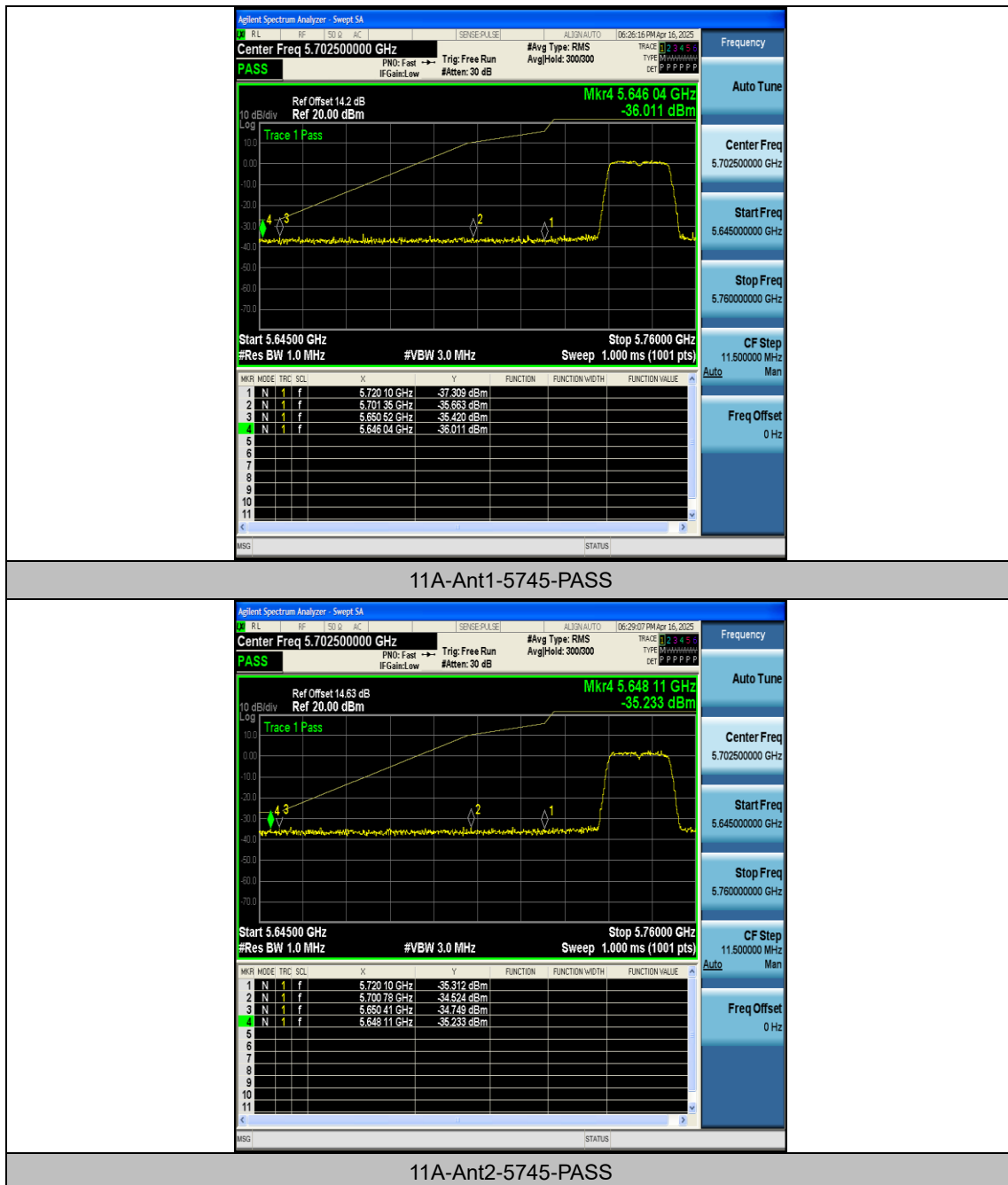
Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Freq. Range [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-37.31	≤15.82	PASS
11A	Ant1	Low	5745	5700~5720	-35.66	≤10.38	PASS
11A	Ant1	Low	5745	5650~5700	-35.42	≤-26.62	PASS
11A	Ant1	Low	5745	5760~5650	-36.01	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-35.31	≤15.82	PASS
11A	Ant2	Low	5745	5700~5720	-34.52	≤10.22	PASS
11A	Ant2	Low	5745	5650~5700	-34.75	≤-26.70	PASS
11A	Ant2	Low	5745	5760~5650	-35.23	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-36.63	≤15.73	PASS
11A	Ant1	High	5825	5855~5875	-34.69	≤10.32	PASS
11A	Ant1	High	5825	5875~5925	-35.11	≤-26.71	PASS
11A	Ant1	High	5825	5925~5935	-35.12	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-35.89	≤15.73	PASS
11A	Ant2	High	5825	5855~5875	-34.49	≤10.25	PASS
11A	Ant2	High	5825	5875~5925	-35.25	≤-26.31	PASS
11A	Ant2	High	5825	5925~5935	-33.05	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5720~5725	-34.82	≤17.13	PASS
11N20MI MO	Ant1	Low	5745	5700~5720	-35.2	≤10.25	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-36.79	≤-26.87	PASS
11N20MI MO	Ant1	Low	5745	5760~5650	-36.74	≤-27	PASS
11N20MI MO	Ant2	Low	5745	5720~5725	-37.02	≤16.08	PASS
11N20MI MO	Ant2	Low	5745	5700~5720	-35.05	≤10.25	PASS
11N20MI MO	Ant2	Low	5745	5650~5700	-35.55	≤-26.96	PASS
11N20MI MO	Ant2	Low	5745	5760~5650	-35.43	≤-27	PASS
11N20MI MO	Ant1	High	5825	5850~5855	-34.91	≤15.73	PASS
11N20MI MO	Ant1	High	5825	5855~5875	-34.74	≤10.06	PASS
11N20MI MO	Ant1	High	5825	5875~5925	-36.34	≤-26.91	PASS
11N20MI MO	Ant1	High	5825	5925~5935	-35.01	≤-27	PASS
11N20MI	Ant2	High	5825	5850~5855	-36.73	≤15.73	PASS

MO							
11N20MI MO	Ant2	High	5825	5855~5875	-35.09	≤10.44	PASS
11N20MI MO	Ant2	High	5825	5875~5925	-34.69	≤-26.81	PASS
11N20MI MO	Ant2	High	5825	5925~5935	-35.42	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5720~5725	-36.17	≤16.87	PASS
11AC20M IMO	Ant1	Low	5745	5700~5720	-34.48	≤10.83	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-36.09	≤-26.02	PASS
11AC20M IMO	Ant1	Low	5745	5760~5650	-35.81	≤-27	PASS
11AC20M IMO	Ant2	Low	5745	5720~5725	-36.6	≤15.82	PASS
11AC20M IMO	Ant2	Low	5745	5700~5720	-36.3	≤10.06	PASS
11AC20M IMO	Ant2	Low	5745	5650~5700	-35.72	≤-26.70	PASS
11AC20M IMO	Ant2	Low	5745	5760~5650	-35.87	≤-27	PASS
11AC20M IMO	Ant1	High	5825	5850~5855	-35.35	≤16.34	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-34.92	≤10.25	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-36.31	≤-26.51	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-35.35	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-34.53	≤16.03	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-35.66	≤10.21	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-36.52	≤-26.81	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-35.11	≤-27	PASS

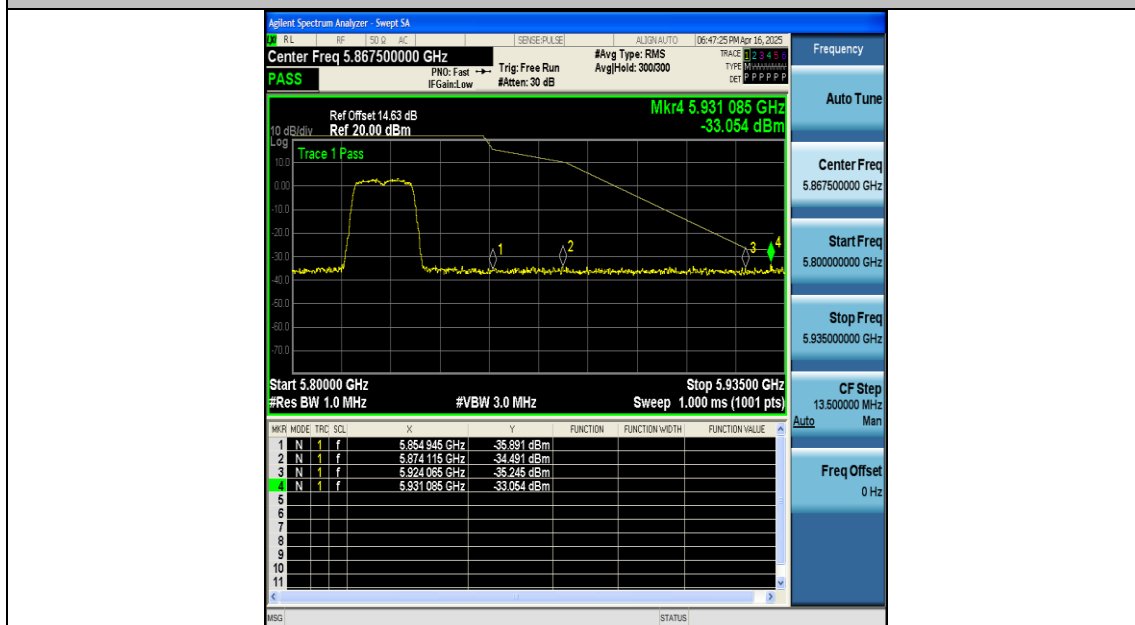
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





11A-Ant1-5825-PASS



11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS