

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

Product Name: DRONE

Trade Mark: /

Test Model: V11 Air

FCC ID: 2BBLM-V11AIR

Environmental Conditions

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

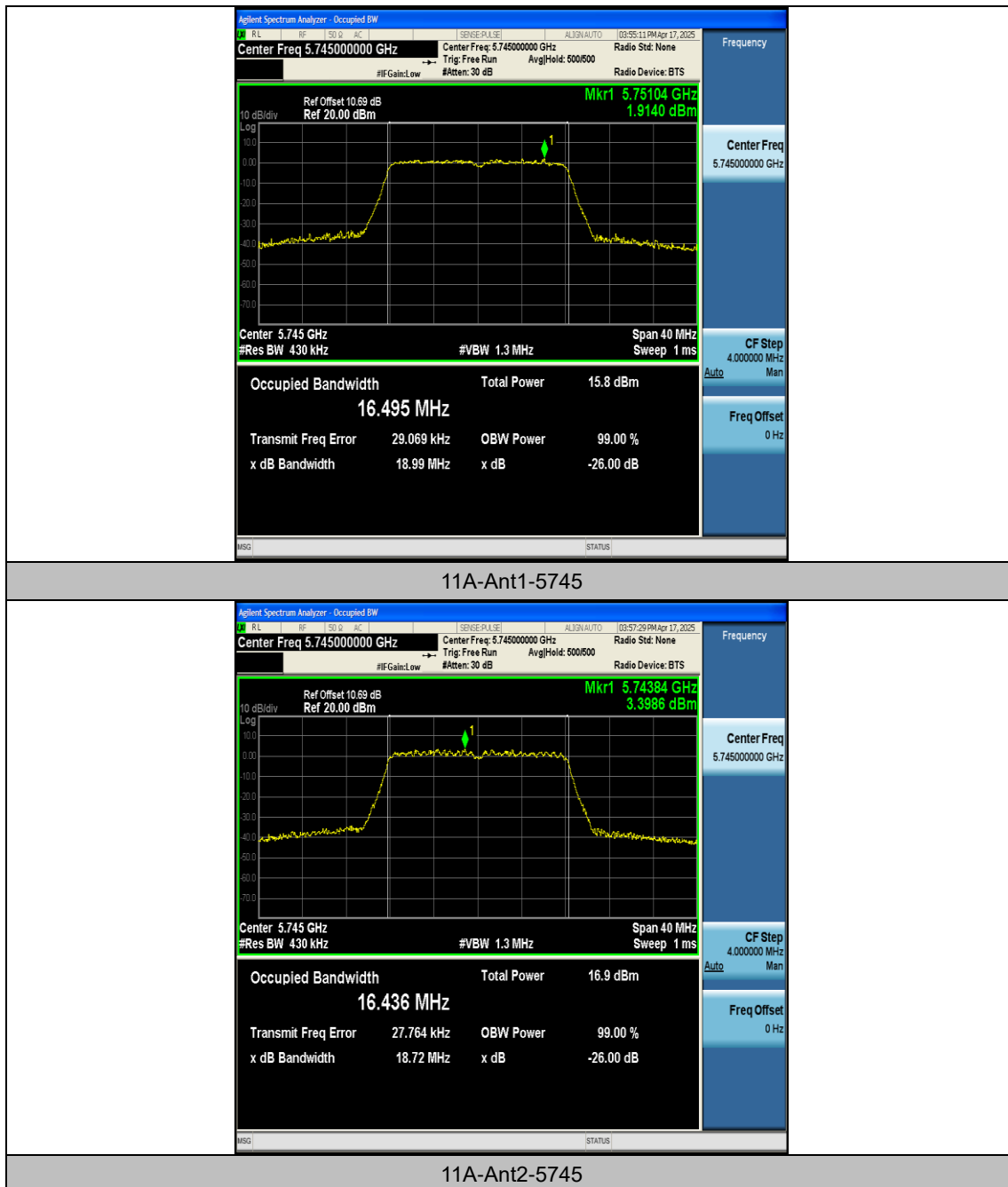
Appendix A2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.495	5736.7816	5753.2766	---	---
11A	Ant2	5745	16.436	5736.8098	5753.2458	---	---
11A	Ant1	5785	16.481	5776.7910	5793.2720	---	---
11A	Ant2	5785	16.434	5776.8003	5793.2343	---	---
11A	Ant1	5825	16.471	5816.8182	5833.2892	---	---
11A	Ant2	5825	16.436	5816.8344	5833.2704	---	---
11N20MIMO	Ant1	5745	17.649	5736.2039	5753.8529	---	---
11N20MIMO	Ant2	5745	17.649	5736.2032	5753.8522	---	---
11N20MIMO	Ant1	5785	17.628	5776.2059	5793.8339	---	---
11N20MIMO	Ant2	5785	17.607	5776.2231	5793.8301	---	---
11N20MIMO	Ant1	5825	17.618	5816.2358	5833.8538	---	---
11N20MIMO	Ant2	5825	17.593	5816.2500	5833.8430	---	---
11AC20MIMO	Ant1	5745	17.644	5736.2001	5753.8441	---	---
11AC20MIMO	Ant2	5745	17.638	5736.1993	5753.8373	---	---
11AC20MIMO	Ant1	5785	17.629	5776.1992	5793.8282	---	---
11AC20MIMO	Ant2	5785	17.628	5776.2042	5793.8322	---	---
11AC20MIMO	Ant1	5825	17.619	5816.2329	5833.8519	---	---
11AC20MIMO	Ant2	5825	17.616	5816.2403	5833.8563	---	---

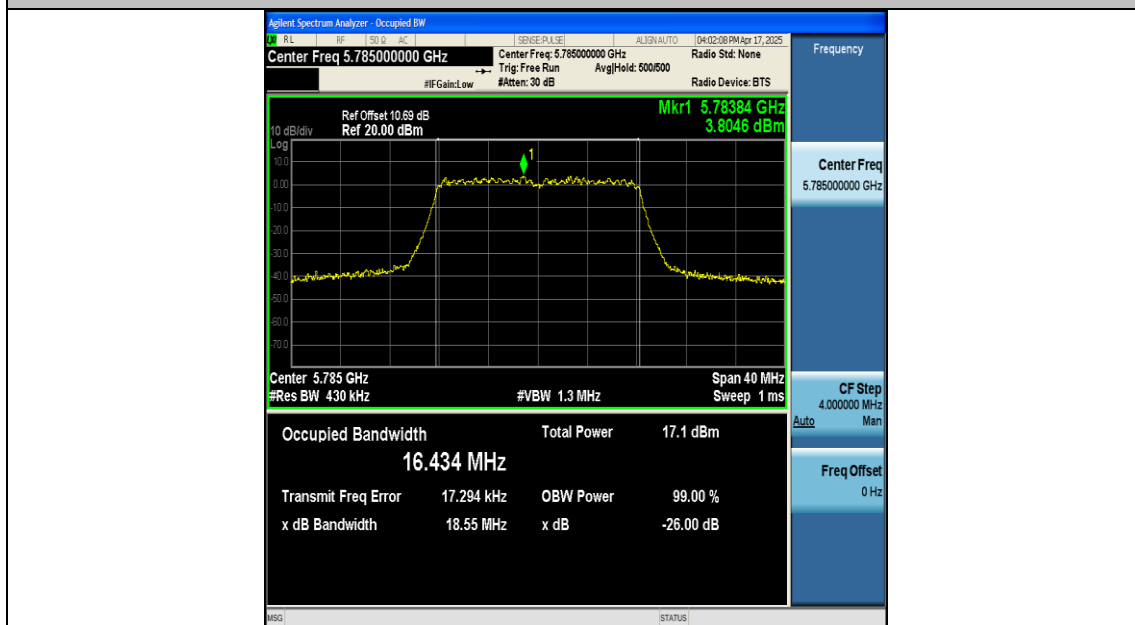
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

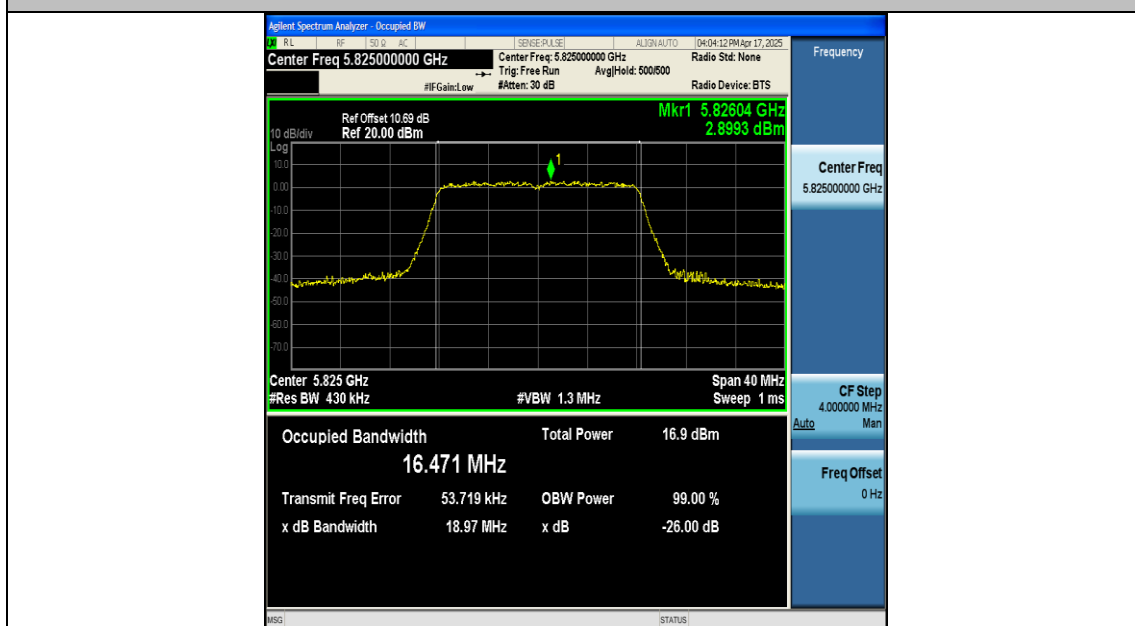




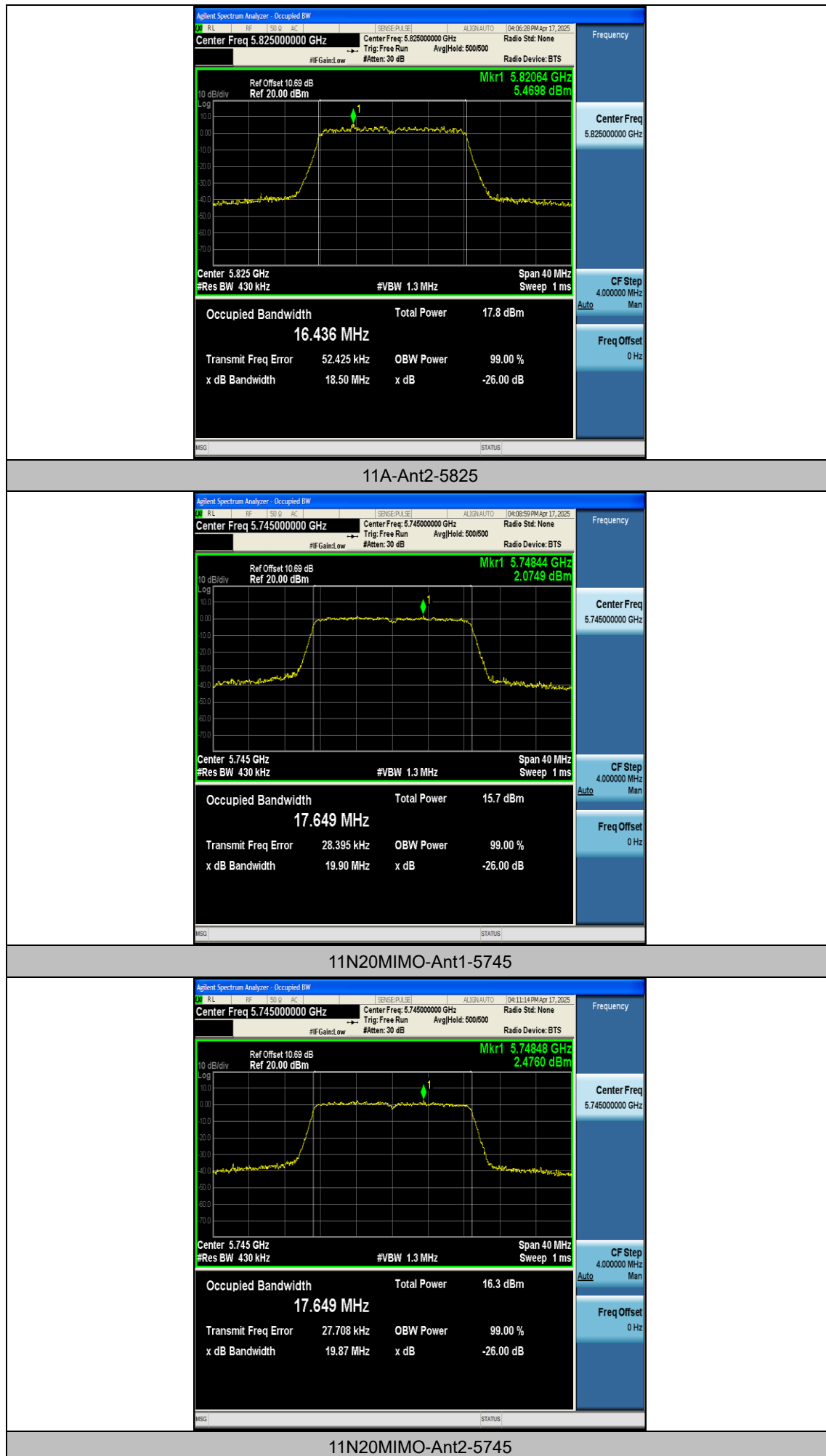
11A-Ant1-5785

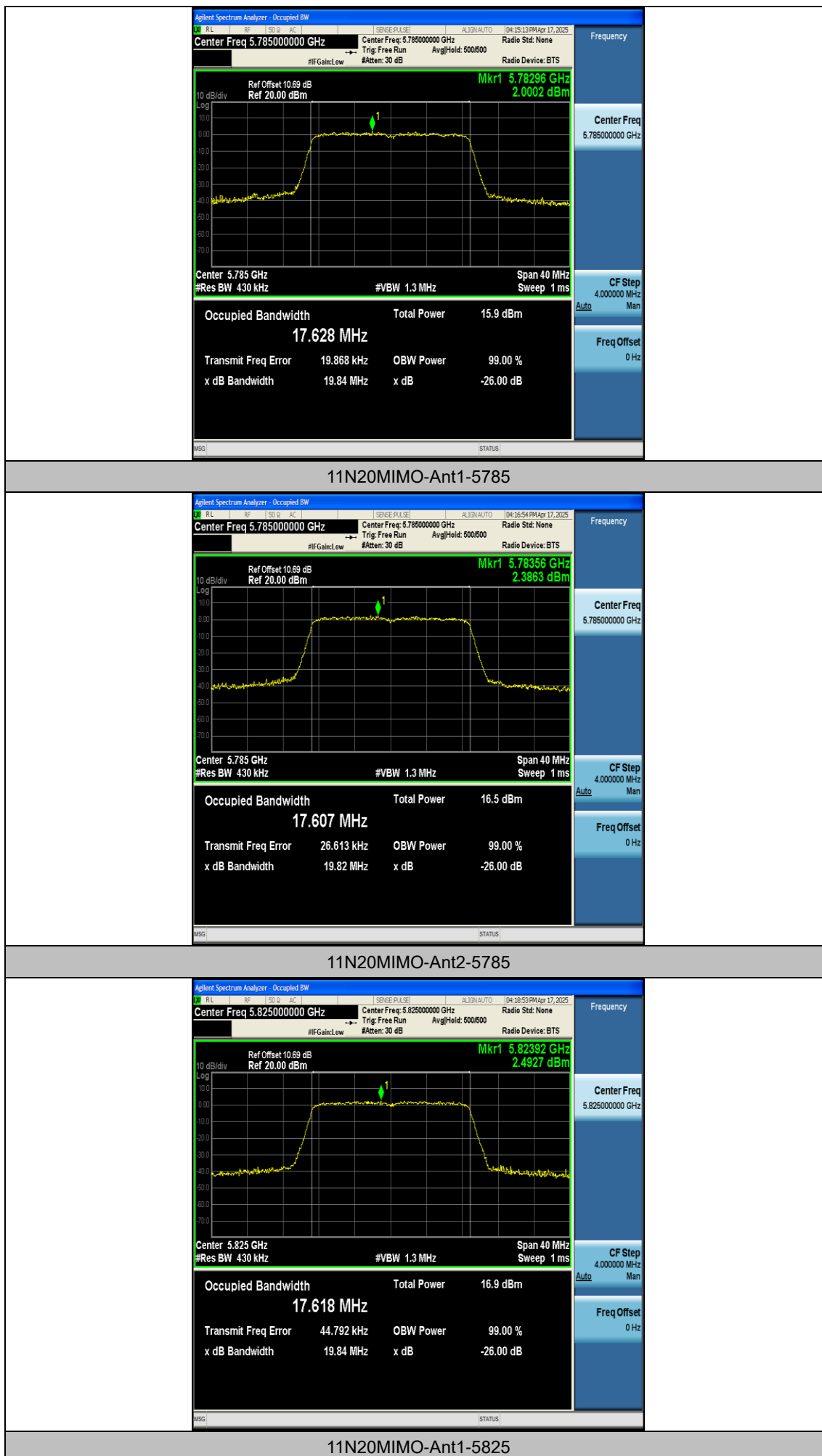


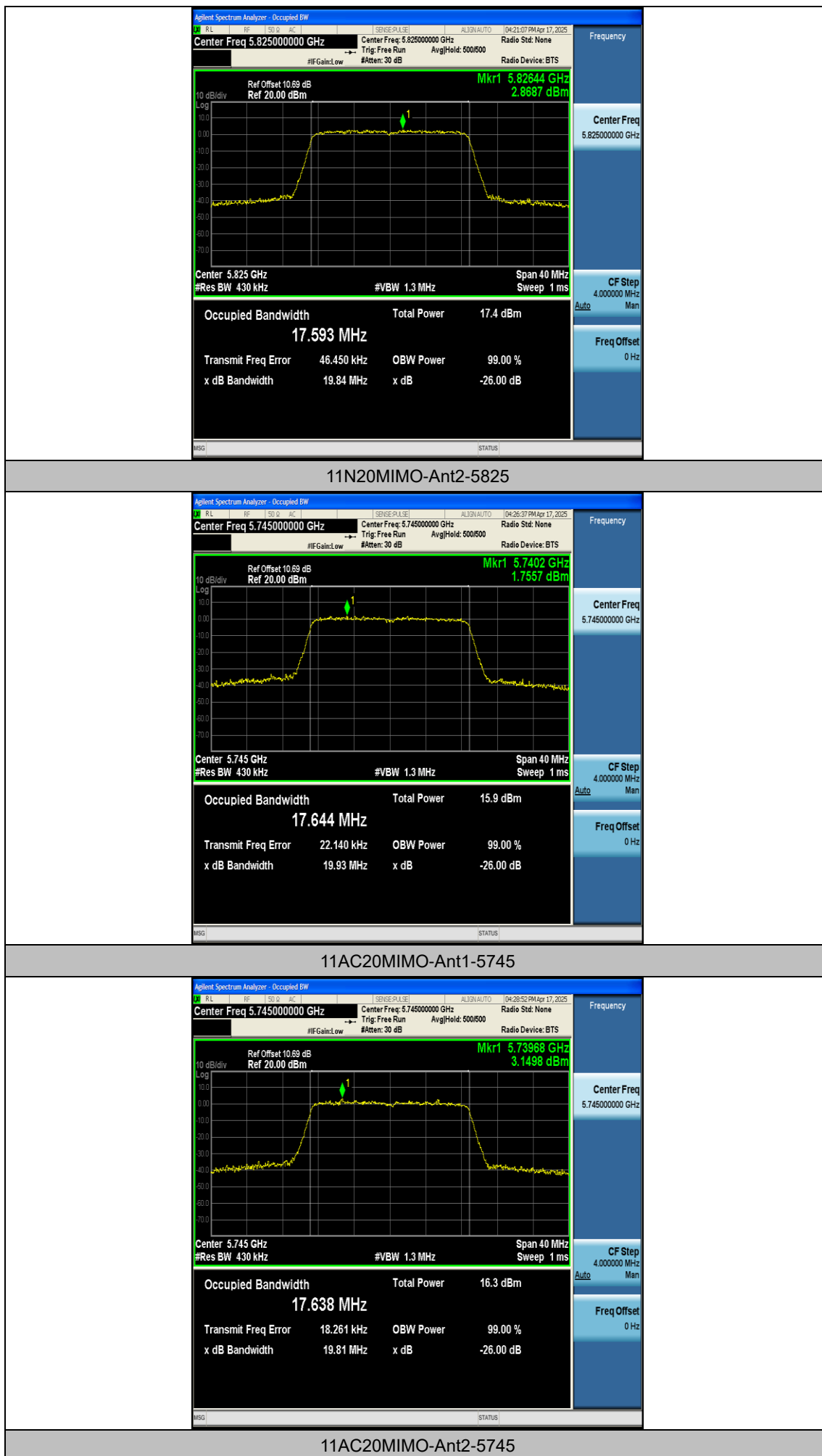
11A-Ant2-5785

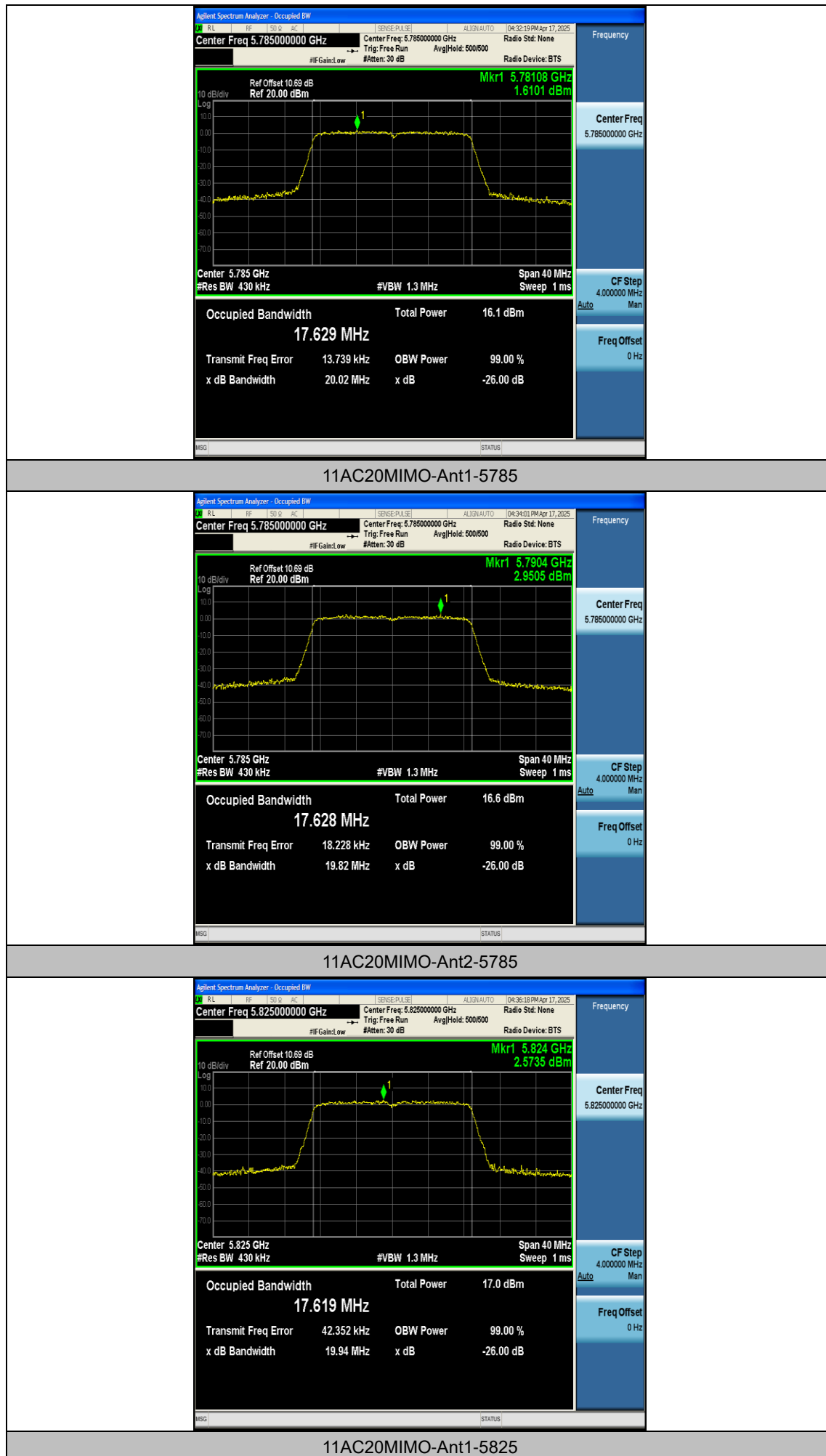


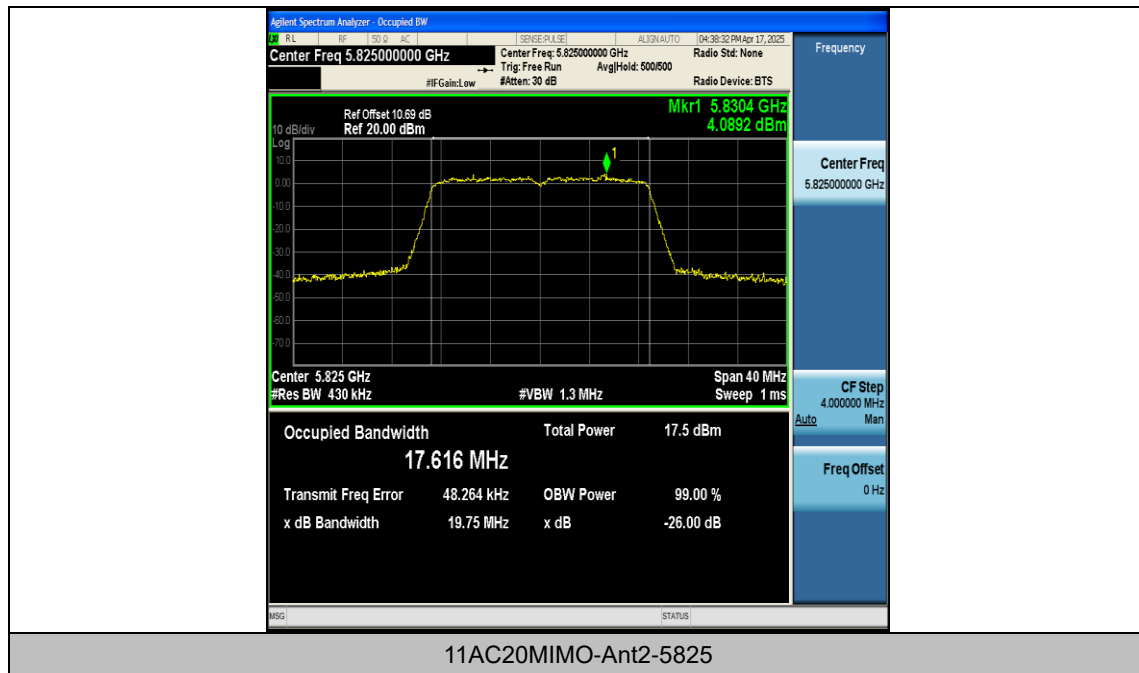
11A-Ant1-5825











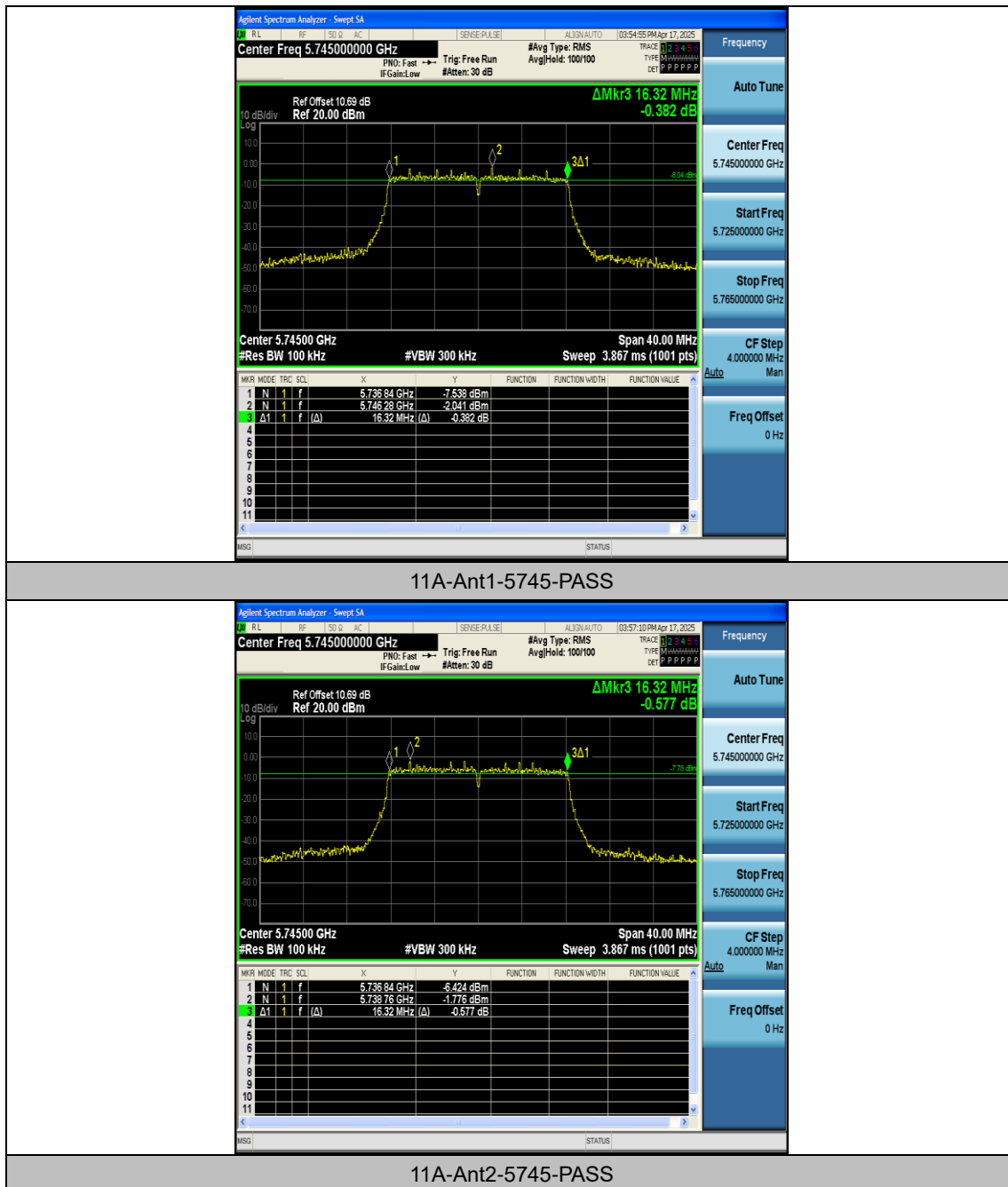
Appendix A: Min emission bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
11A	Ant2	5745	16.320	5736.840	5753.160	0.5	PASS
11A	Ant1	5785	16.320	5776.840	5793.160	0.5	PASS
11A	Ant2	5785	16.280	5776.880	5793.160	0.5	PASS
11A	Ant1	5825	16.320	5816.840	5833.160	0.5	PASS
11A	Ant2	5825	16.320	5816.840	5833.160	0.5	PASS
11N20MIMO	Ant1	5745	17.280	5736.240	5753.520	0.5	PASS
11N20MIMO	Ant2	5745	17.520	5736.240	5753.760	0.5	PASS
11N20MIMO	Ant1	5785	17.200	5776.240	5793.440	0.5	PASS
11N20MIMO	Ant2	5785	17.280	5776.240	5793.520	0.5	PASS
11N20MIMO	Ant1	5825	17.320	5816.480	5833.800	0.5	PASS
11N20MIMO	Ant2	5825	17.280	5816.480	5833.760	0.5	PASS
11AC20MIMO	Ant1	5745	17.520	5736.240	5753.760	0.5	PASS
11AC20MIMO	Ant2	5745	17.520	5736.240	5753.760	0.5	PASS
11AC20MIMO	Ant1	5785	17.200	5776.240	5793.440	0.5	PASS
11AC20MIMO	Ant2	5785	17.280	5776.240	5793.520	0.5	PASS
11AC20MIMO	Ant1	5825	17.560	5816.240	5833.800	0.5	PASS
11AC20MIMO	Ant2	5825	17.040	5816.400	5833.440	0.5	PASS

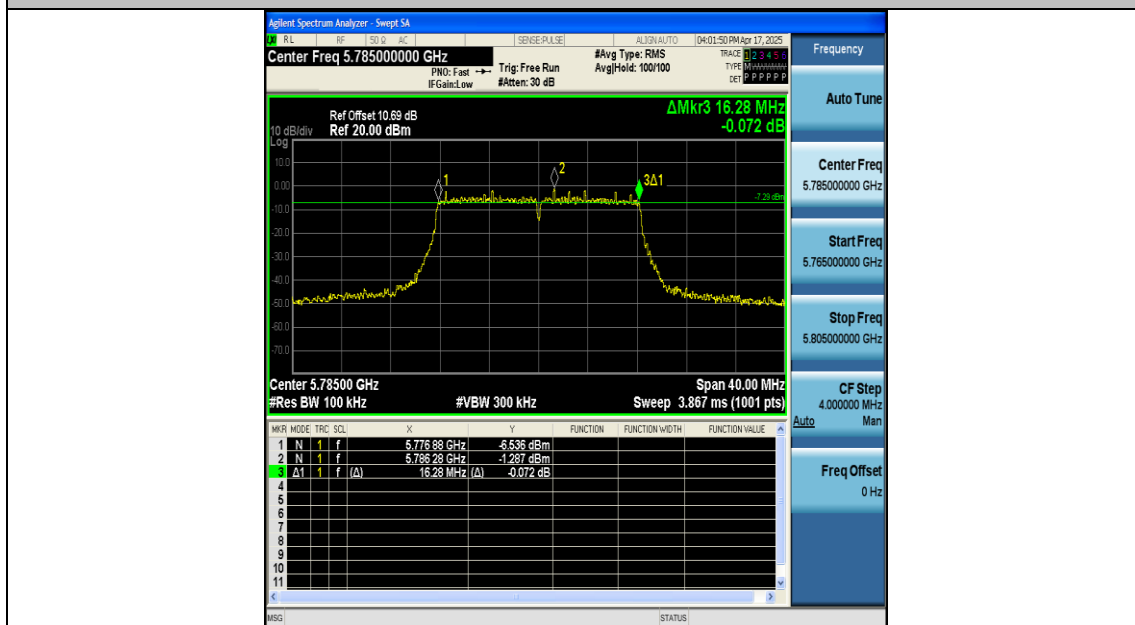
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

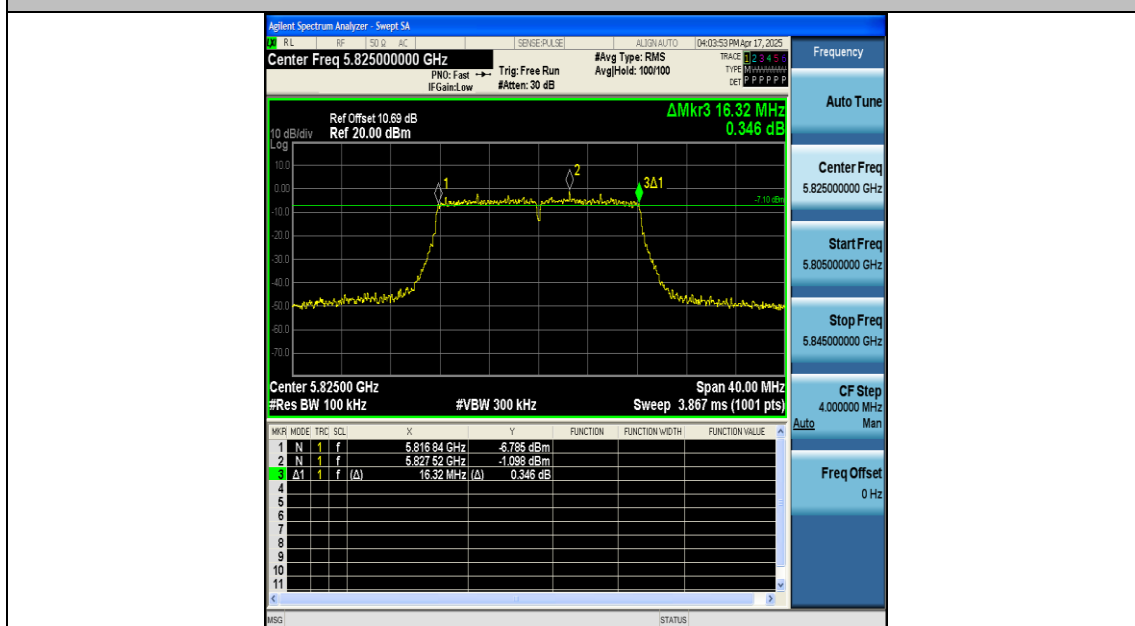




11A-Ant1-5785-PASS



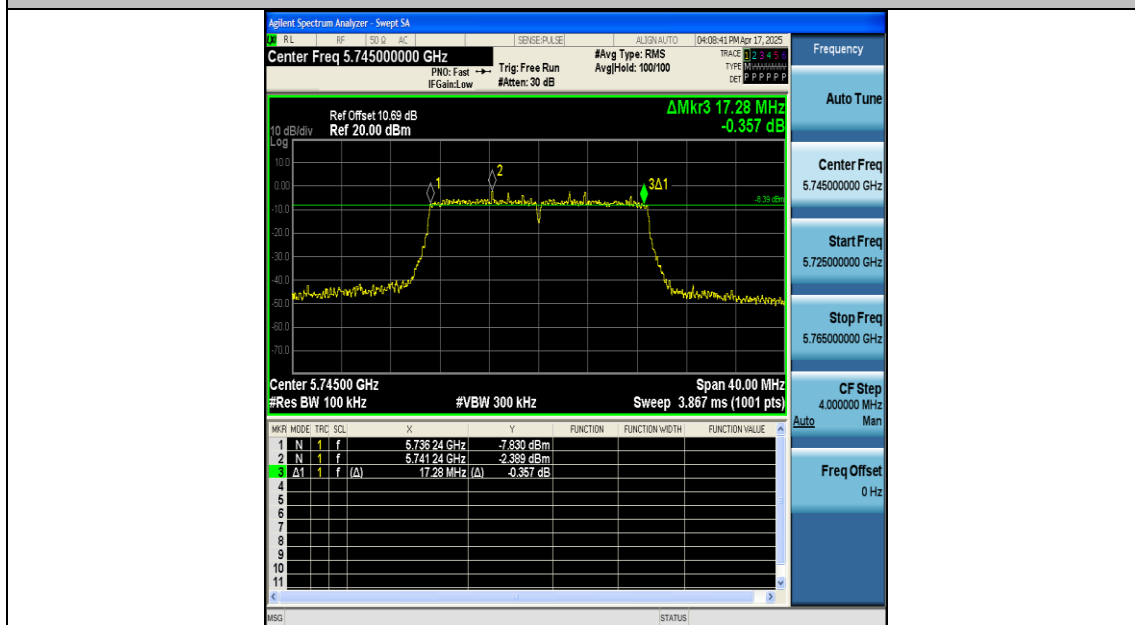
11A-Ant2-5785-PASS



11A-Ant1-5825-PASS



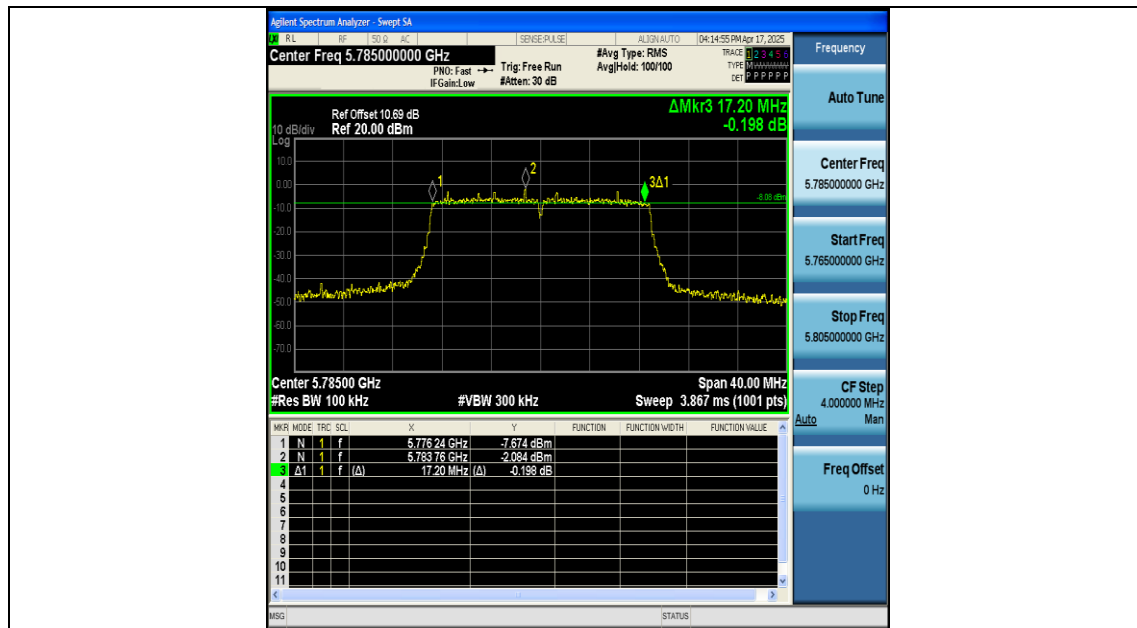
11A-Ant2-5825-PASS



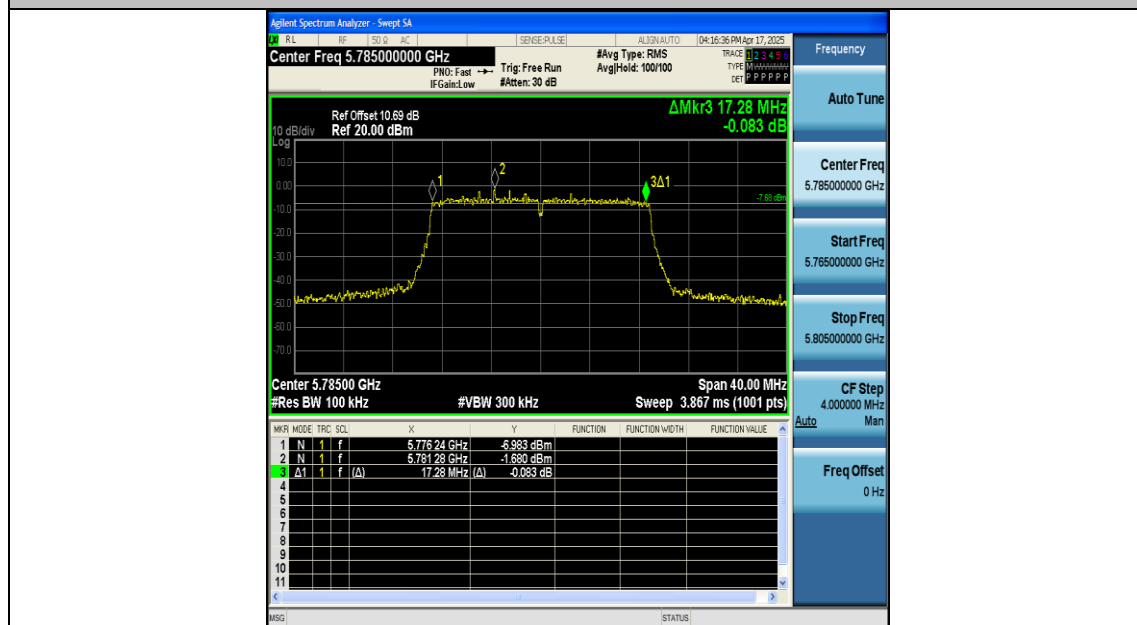
11N20MIMO-Ant1-5745-PASS



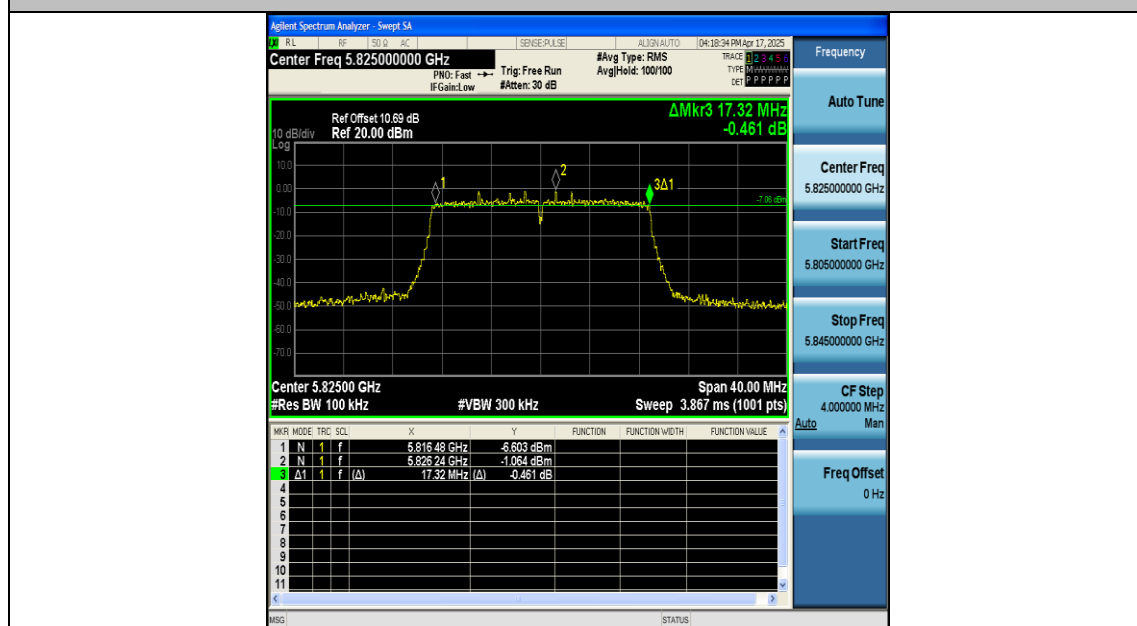
11N20MIMO-Ant2-5745-PASS



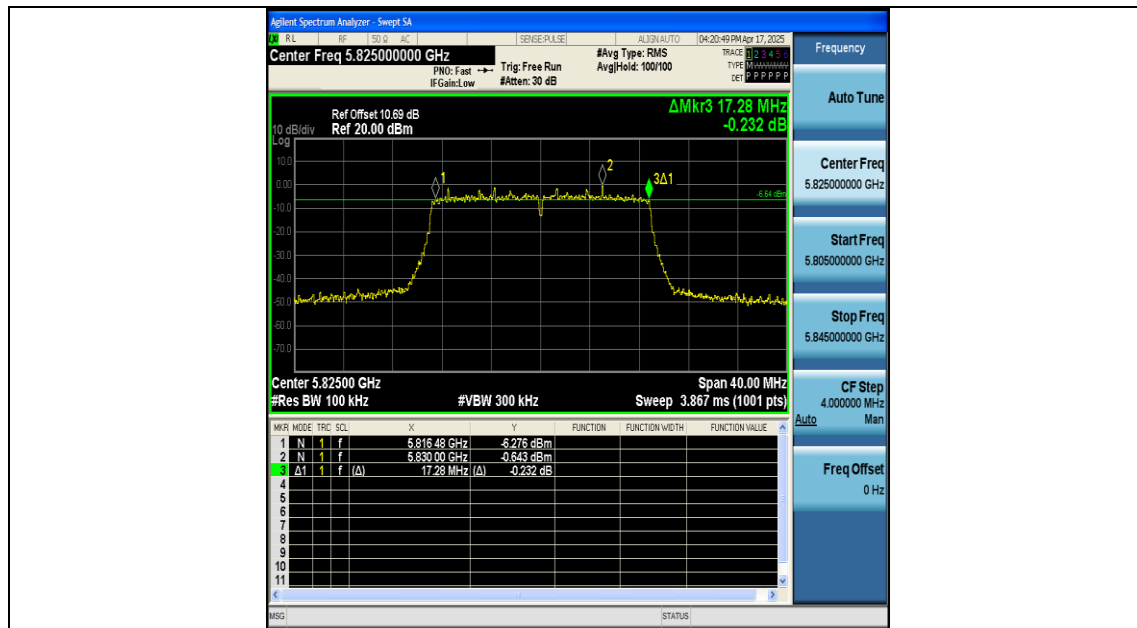
11N20MIMO-Ant1-5785-PASS



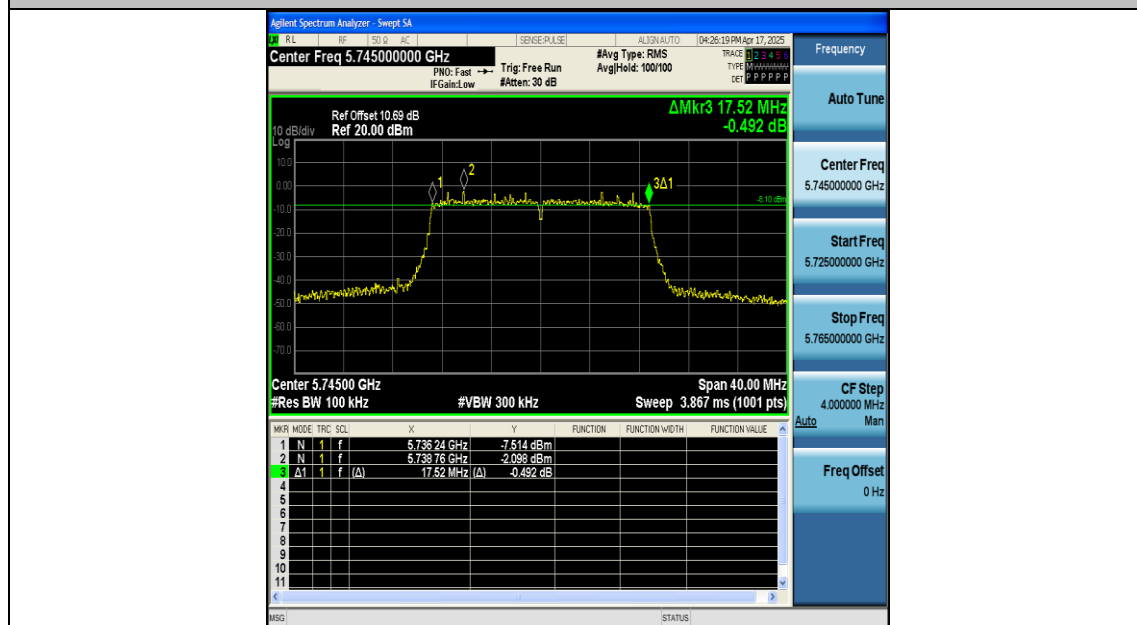
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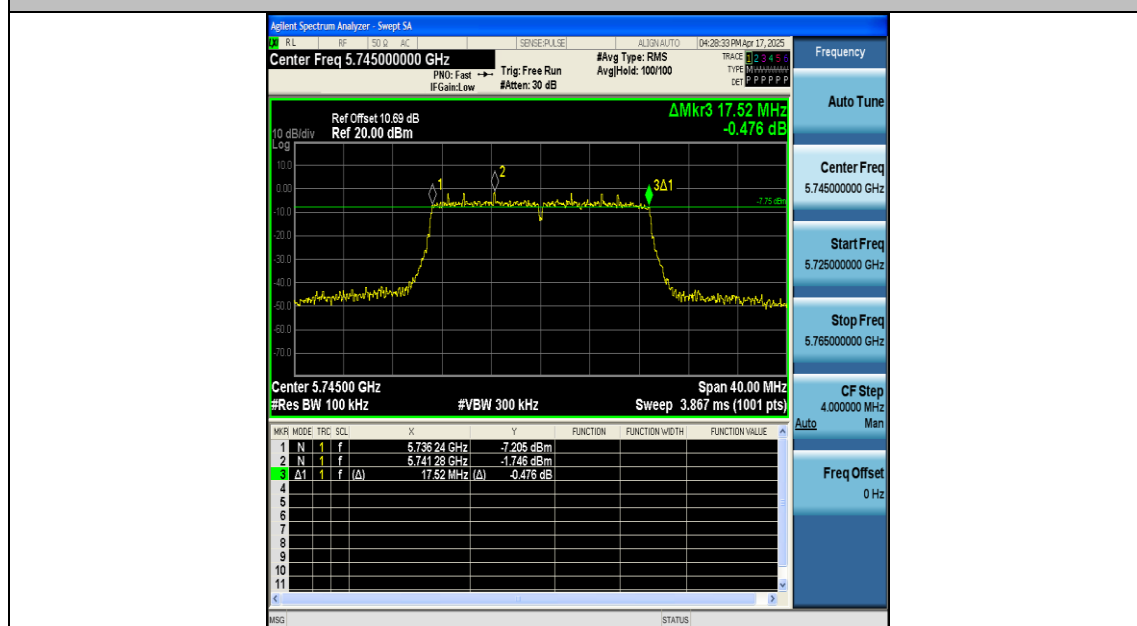
11N20MIMO-Ant1-5825-PASS



11N20MIMO-Ant2-5825-PASS



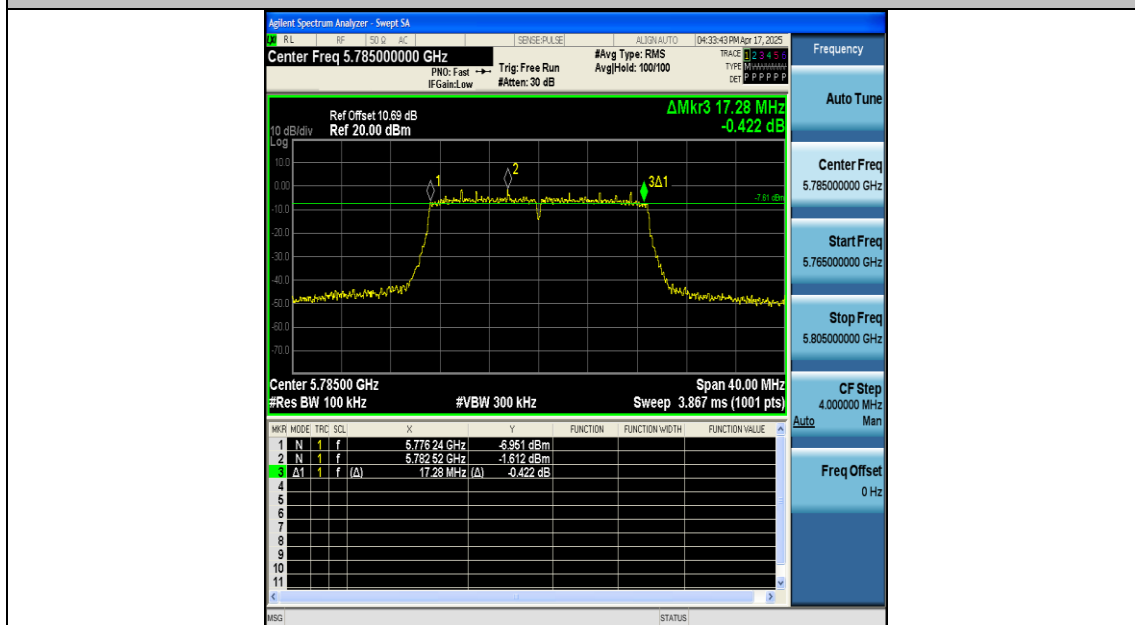
11AC20MIMO-Ant1-5745-PASS



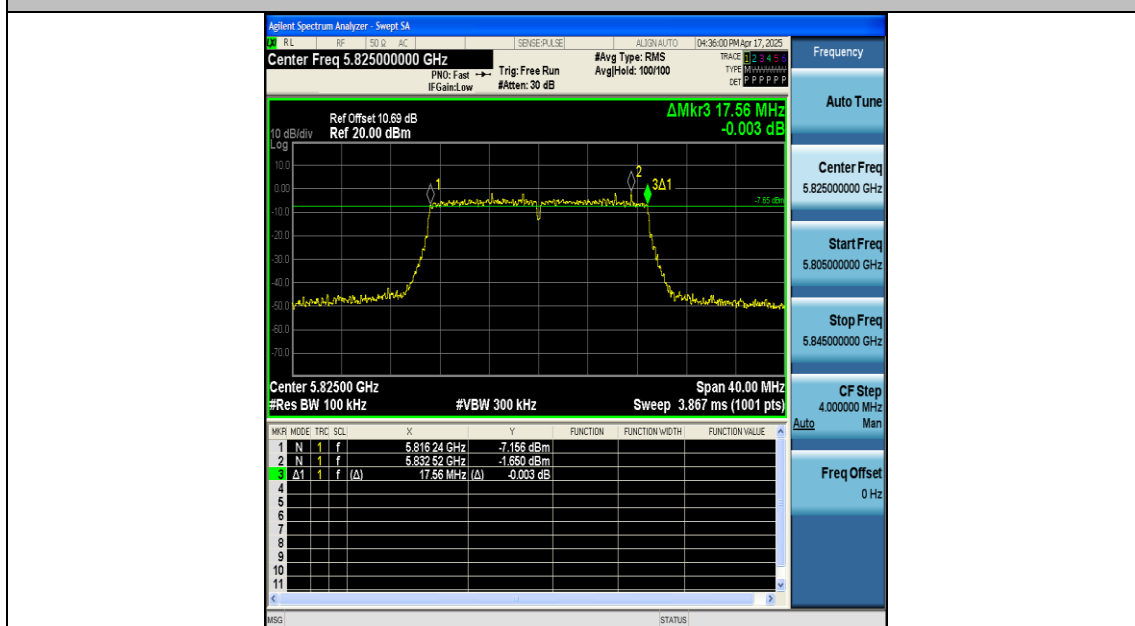
11AC20MIMO-Ant2-5745-PASS



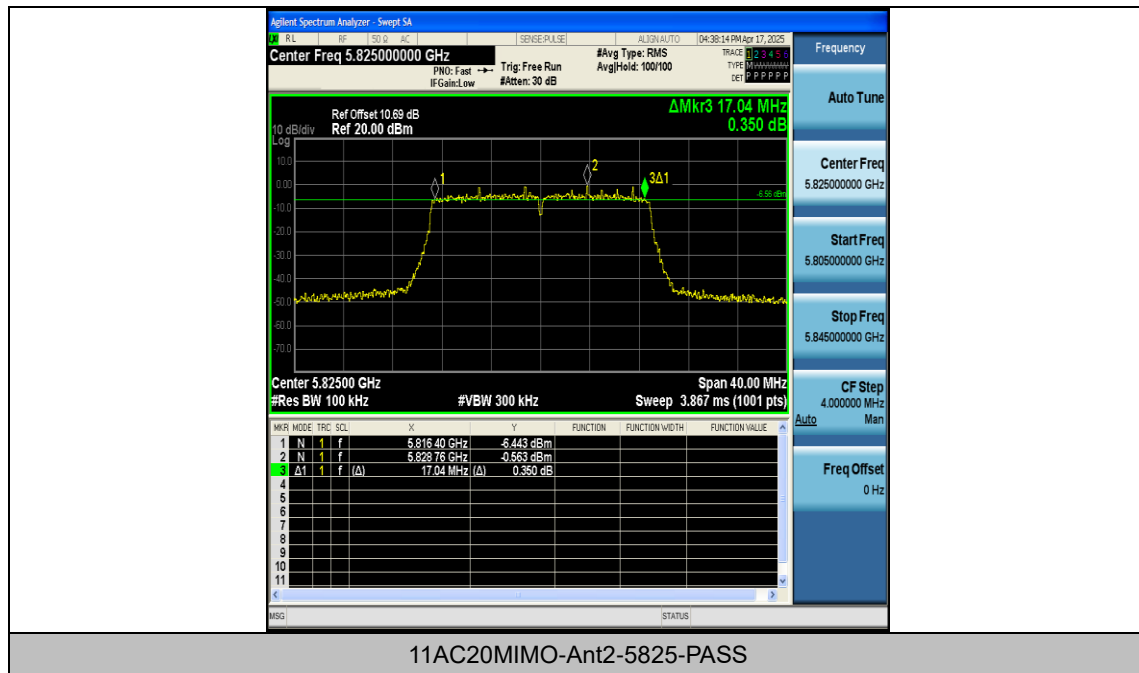
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5745	9.24	≤30.00	PASS
11A	Ant2	5745	9.83	≤30.00	PASS
11A	Ant1	5785	9.65	≤30.00	PASS
11A	Ant2	5785	10.36	≤30.00	PASS
11A	Ant1	5825	10.72	≤30.00	PASS
11A	Ant2	5825	10.99	≤30.00	PASS
11N20MIMO	Ant1	5745	9.07	≤30.00	PASS
11N20MIMO	Ant2	5745	9.94	≤30.00	PASS
11N20MIMO	total	5745	12.54	≤30.00	PASS
11N20MIMO	Ant1	5785	9.60	≤30.00	PASS
11N20MIMO	Ant2	5785	10.24	≤30.00	PASS
11N20MIMO	total	5785	12.94	≤30.00	PASS
11N20MIMO	Ant1	5825	10.60	≤30.00	PASS
11N20MIMO	Ant2	5825	10.92	≤30.00	PASS
11N20MIMO	total	5825	13.77	≤30.00	PASS
11AC20MIMO	Ant1	5745	9.31	≤30.00	PASS
11AC20MIMO	Ant2	5745	9.95	≤30.00	PASS
11AC20MIMO	total	5745	12.65	≤30.00	PASS
11AC20MIMO	Ant1	5785	9.45	≤30.00	PASS
11AC20MIMO	Ant2	5785	10.18	≤30.00	PASS
11AC20MIMO	total	5785	12.84	≤30.00	PASS
11AC20MIMO	Ant1	5825	10.56	≤30.00	PASS
11AC20MIMO	Ant2	5825	11.09	≤30.00	PASS
11AC20MIMO	total	5825	13.84	≤30.00	PASS

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

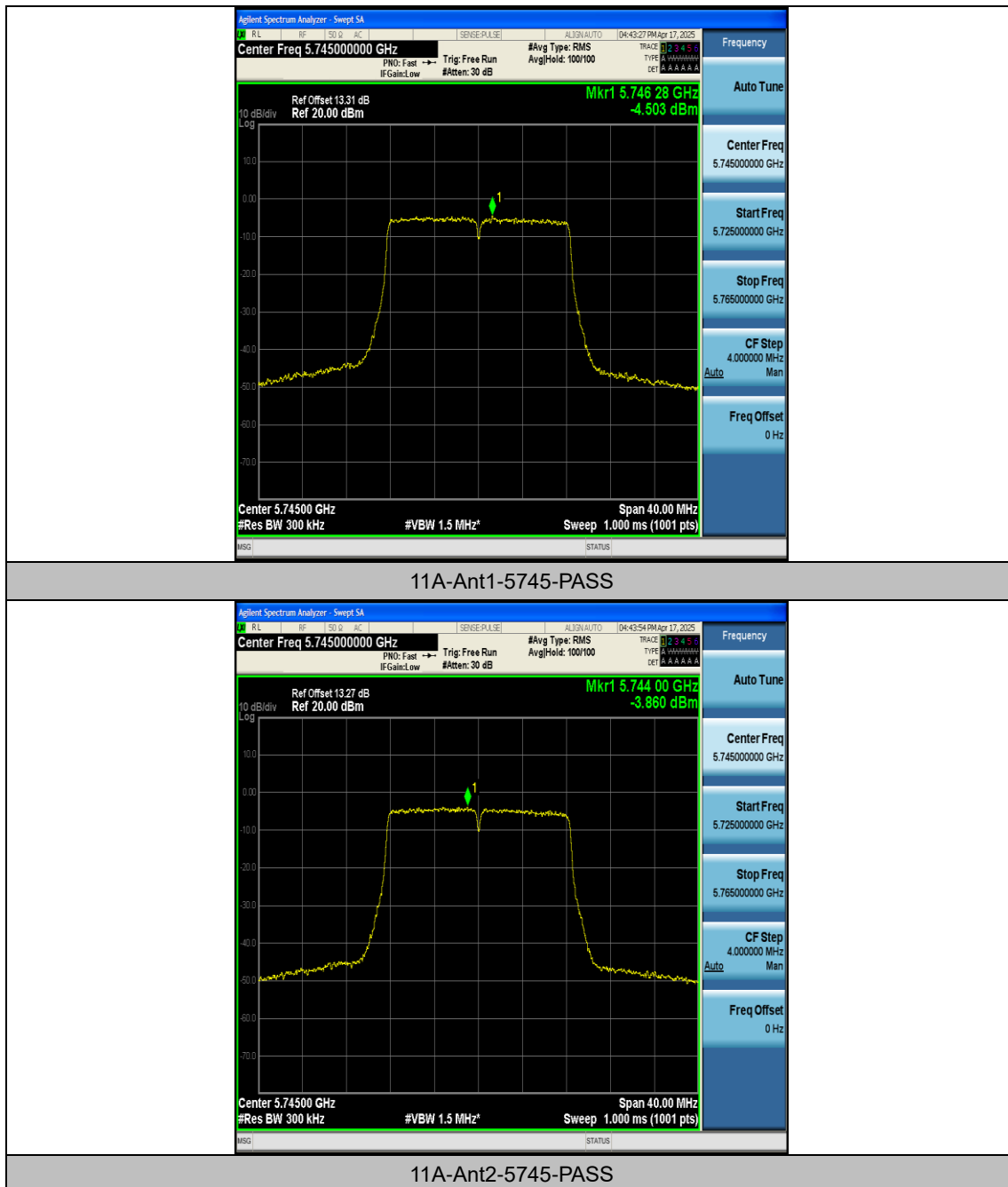
Appendix C: Maximum power spectral density

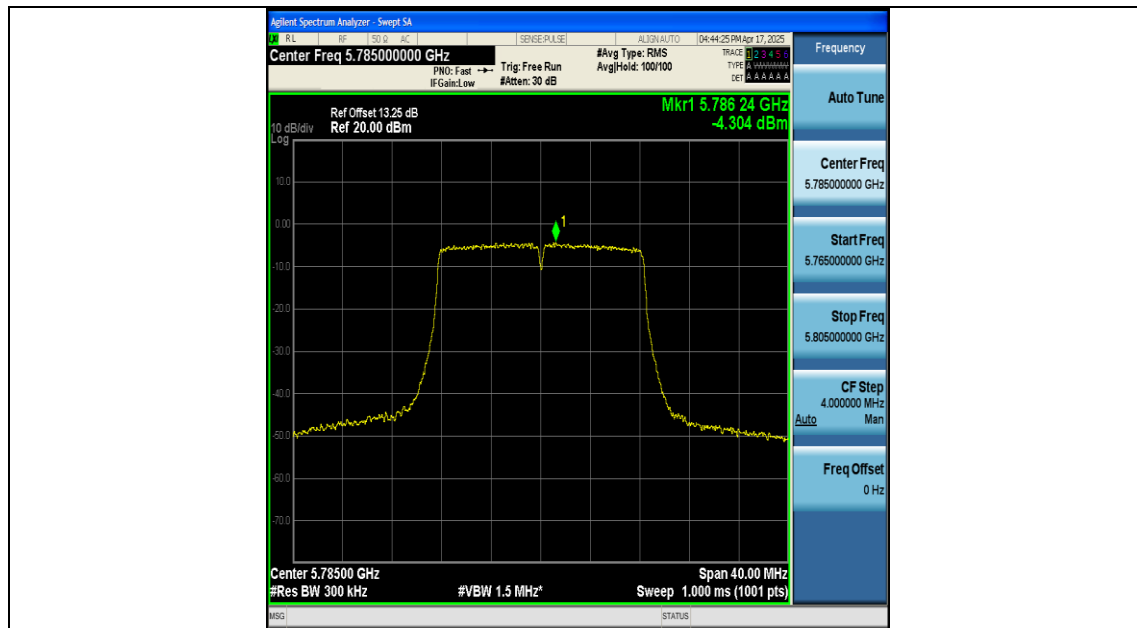
Test Result

Frequency [MHz]	Test Mode	Antenna	Result [dBm/500KHz]	DC Factor [dB]	RBW Factor [dB]	Limit [dBm/500KHz]	Verdict
5745	11A	Ant1	-4.50	0.40	2.22	≤30.00	PASS
5745	11A	Ant2	-3.86	0.36	2.22	≤30.00	PASS
5785	11A	Ant1	-4.30	0.34	2.22	≤30.00	PASS
5785	11A	Ant2	-3.49	0.46	2.22	≤30.00	PASS
5825	11A	Ant1	-3.22	0.46	2.22	≤30.00	PASS
5825	11A	Ant2	-2.74	0.23	2.22	≤30.00	PASS
5745	11N20MIMO	Ant1	-4.87	0.24	2.22	≤30.00	PASS
5745	11N20MIMO	Ant2	-4.65	0.47	2.22	≤30.00	PASS
5745	11N20MIMO	total	-1.75	---	---	≤28.63	PASS
5785	11N20MIMO	Ant1	-4.60	0.45	2.22	≤30.00	PASS
5785	11N20MIMO	Ant2	-3.91	0.49	2.22	≤30.00	PASS
5785	11N20MIMO	total	-1.23	---	---	≤28.63	PASS
5825	11N20MIMO	Ant1	-3.49	0.45	2.22	≤30.00	PASS
5825	11N20MIMO	Ant2	-3.53	0.31	2.22	≤30.00	PASS
5825	11N20MIMO	total	-0.50	---	---	≤28.63	PASS
5745	11AC20MIMO	Ant1	-5.06	0.41	2.22	≤30.00	PASS
5745	11AC20MIMO	Ant2	-4.07	0.49	2.22	≤30.00	PASS
5745	11AC20MIMO	total	-1.53	---	---	≤28.63	PASS
5785	11AC20MIMO	Ant1	-4.79	0.49	2.22	≤30.00	PASS
5785	11AC20MIMO	Ant2	-4.15	0.51	2.22	≤30.00	PASS
5785	11AC20MIMO	total	-1.45	---	---	≤28.63	PASS
5825	11AC20MIMO	Ant1	-3.80	0.51	2.22	≤30.00	PASS
5825	11AC20MIMO	Ant2	-3.04	0.51	2.22	≤30.00	PASS
5825	11AC20MIMO	total	-0.39	---	---	≤28.63	PASS

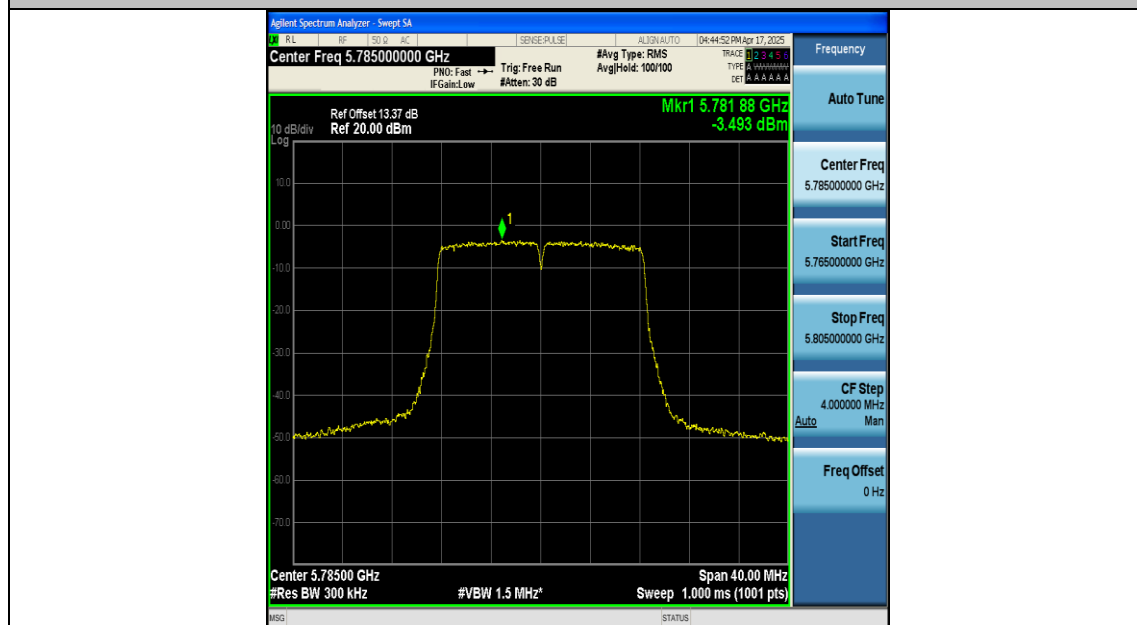
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

Test Graphs

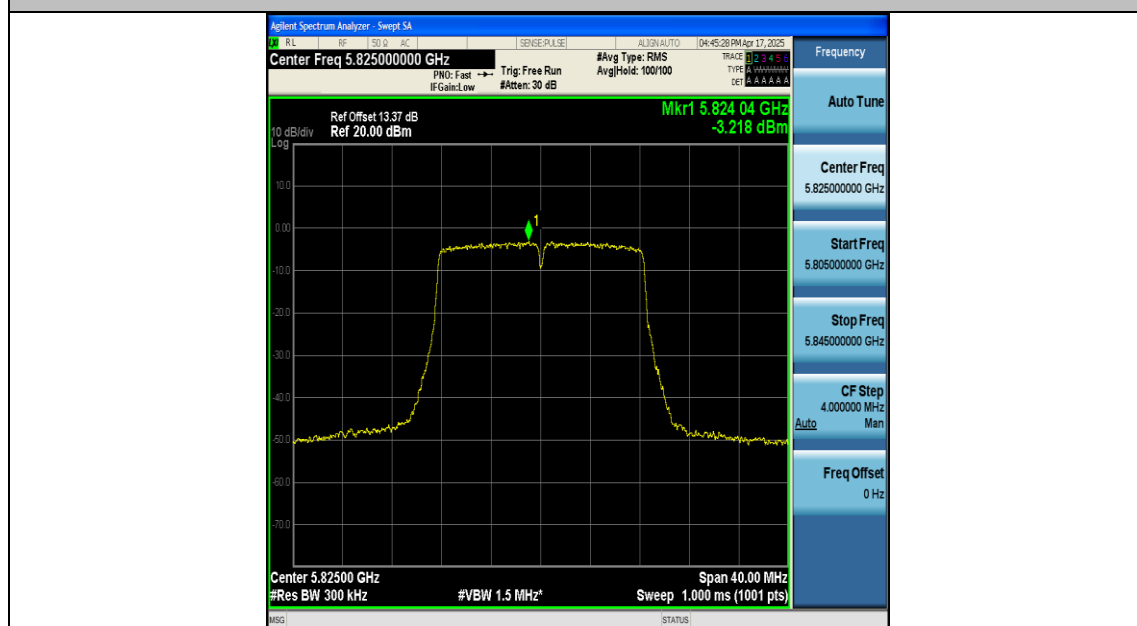




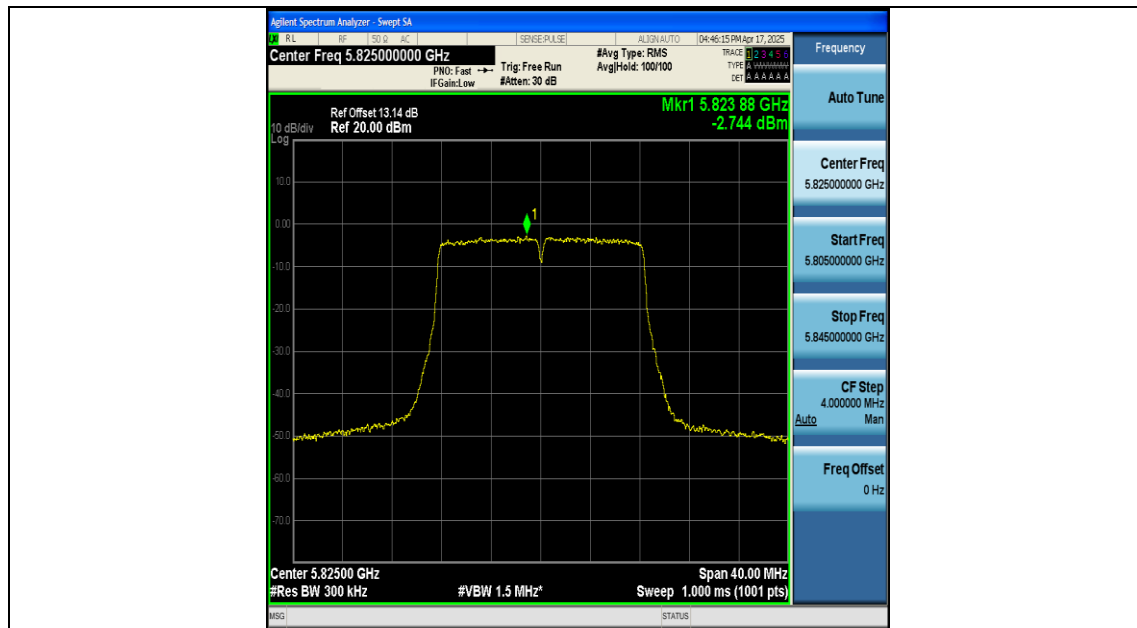
11A-Ant1-5785-PASS



11A-Ant2-5785-PASS



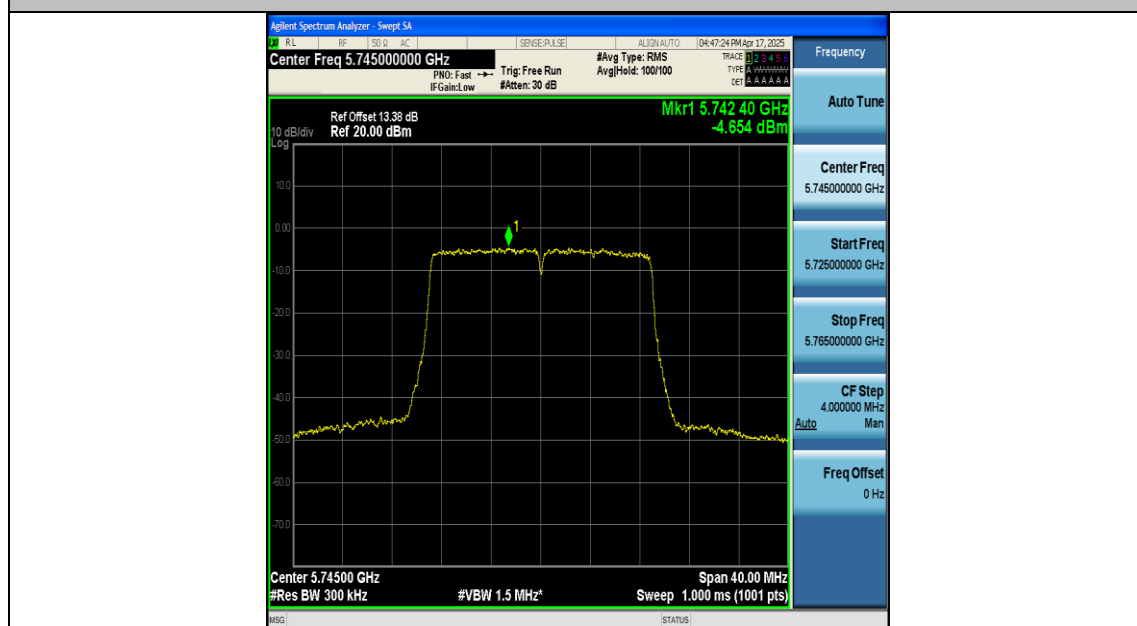
11A-Ant1-5825-PASS



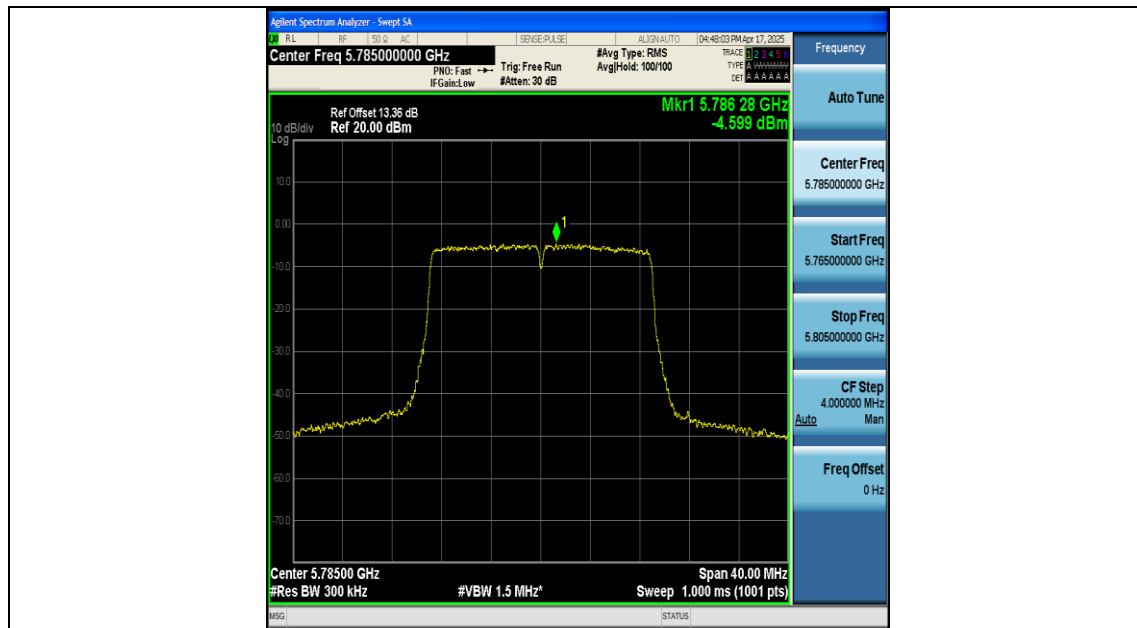
11A-Ant2-5825-PASS



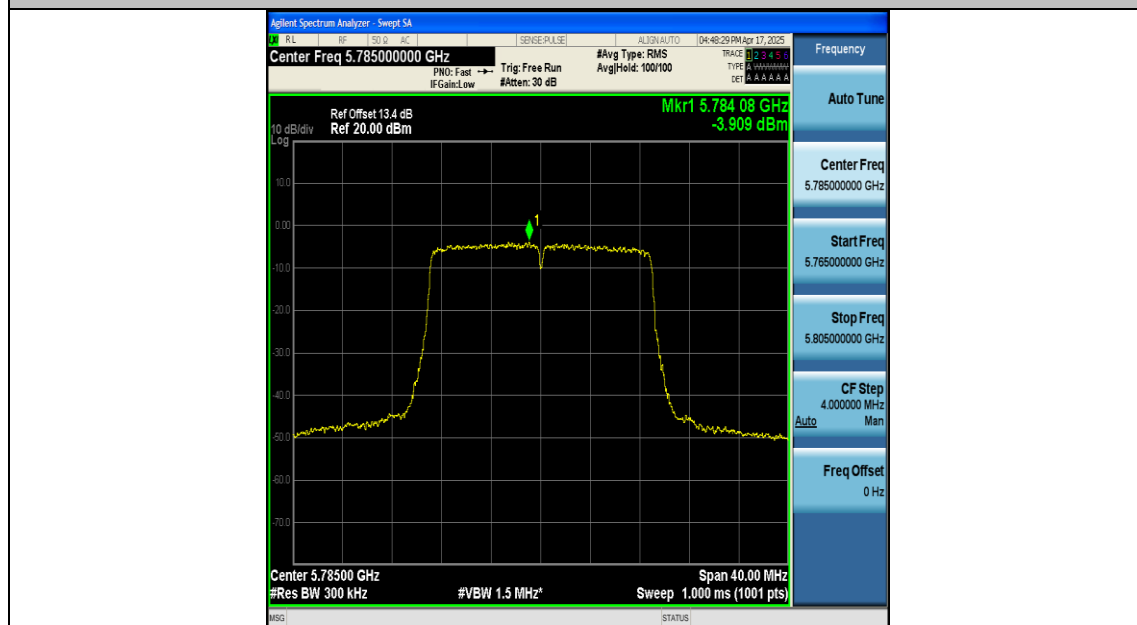
11N20MIMO-Ant1-5745-PASS



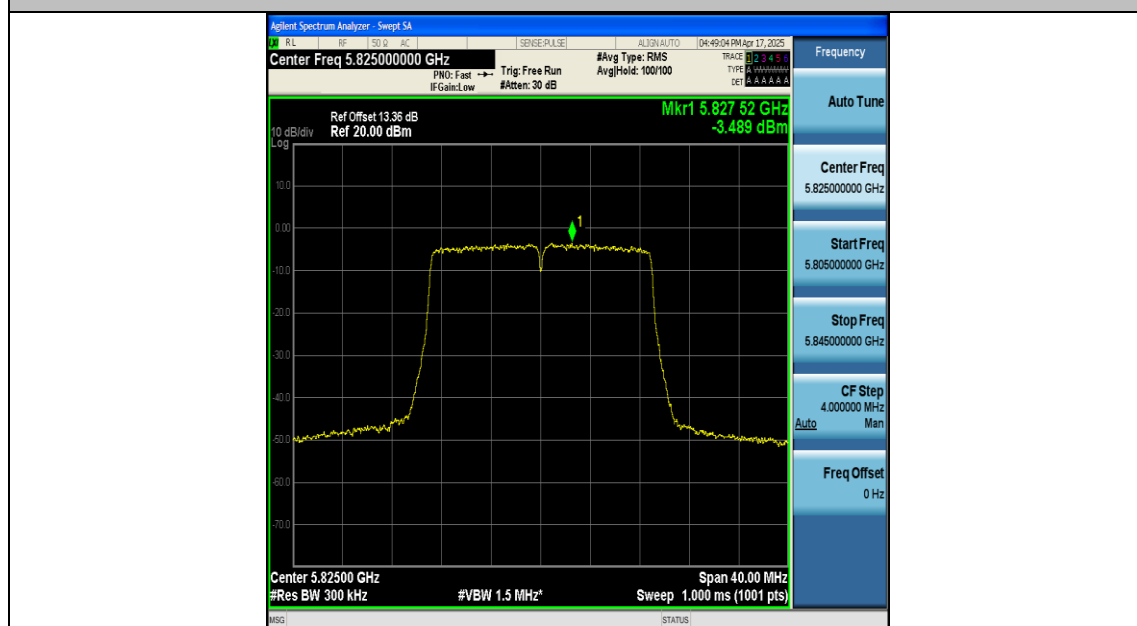
11N20MIMO-Ant2-5745-PASS



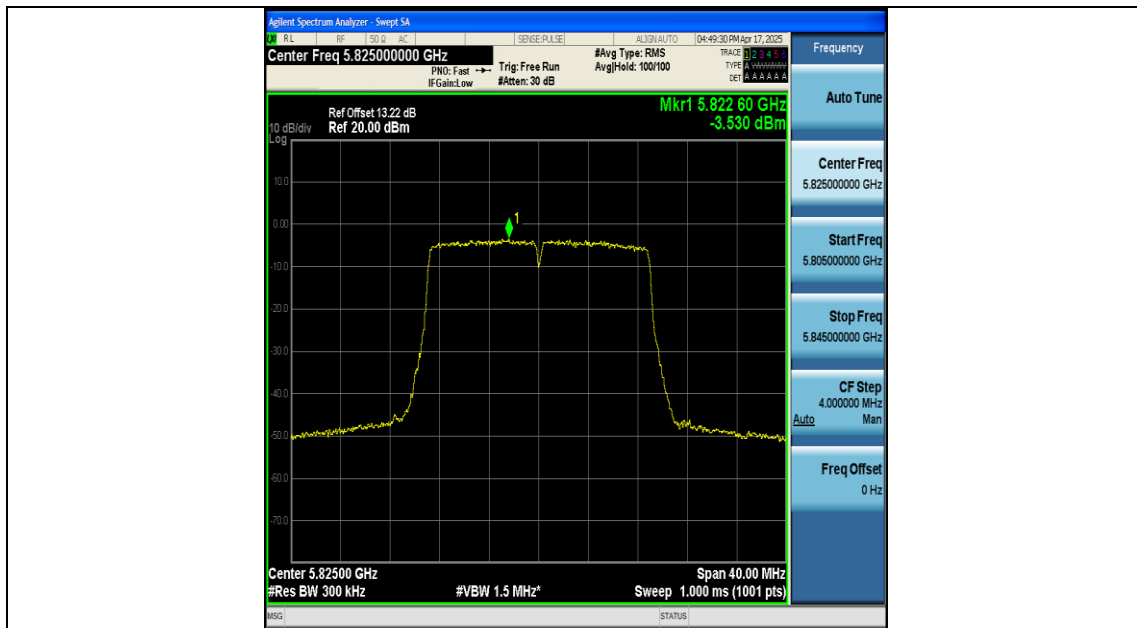
11N20MIMO-Ant1-5785-PASS



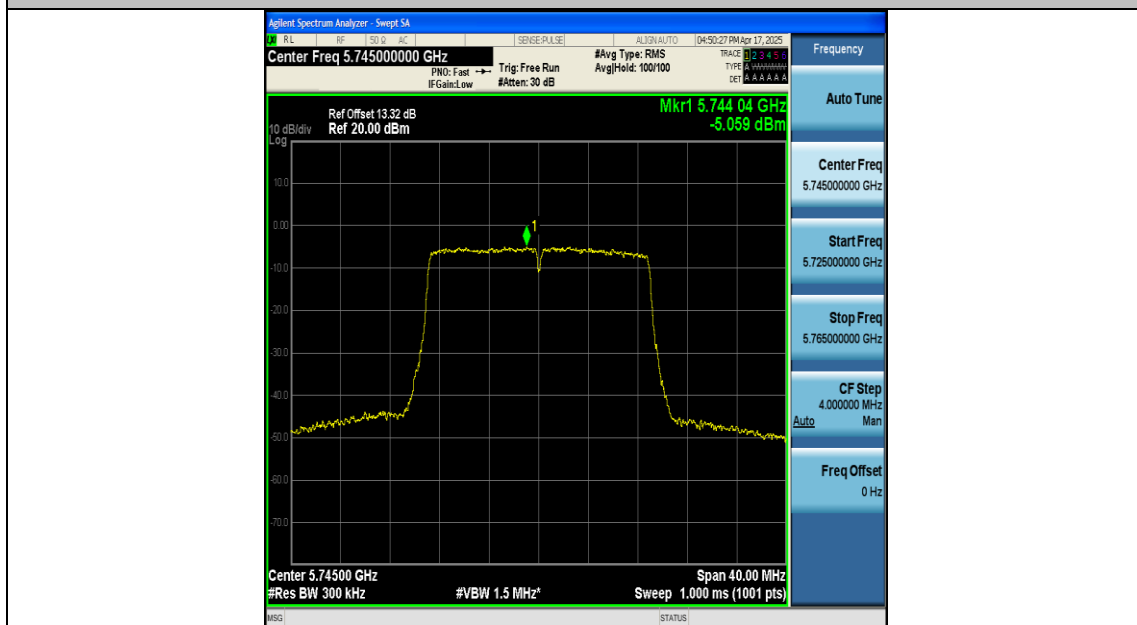
11N20MIMO-Ant2-5785-PASS



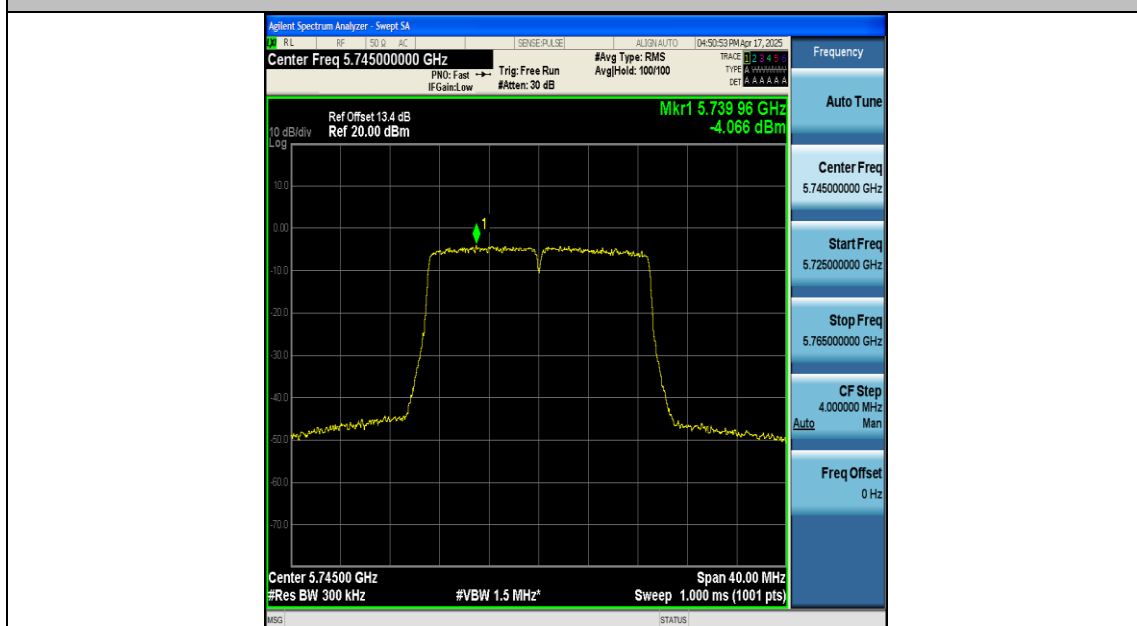
11N20MIMO-Ant1-5825-PASS



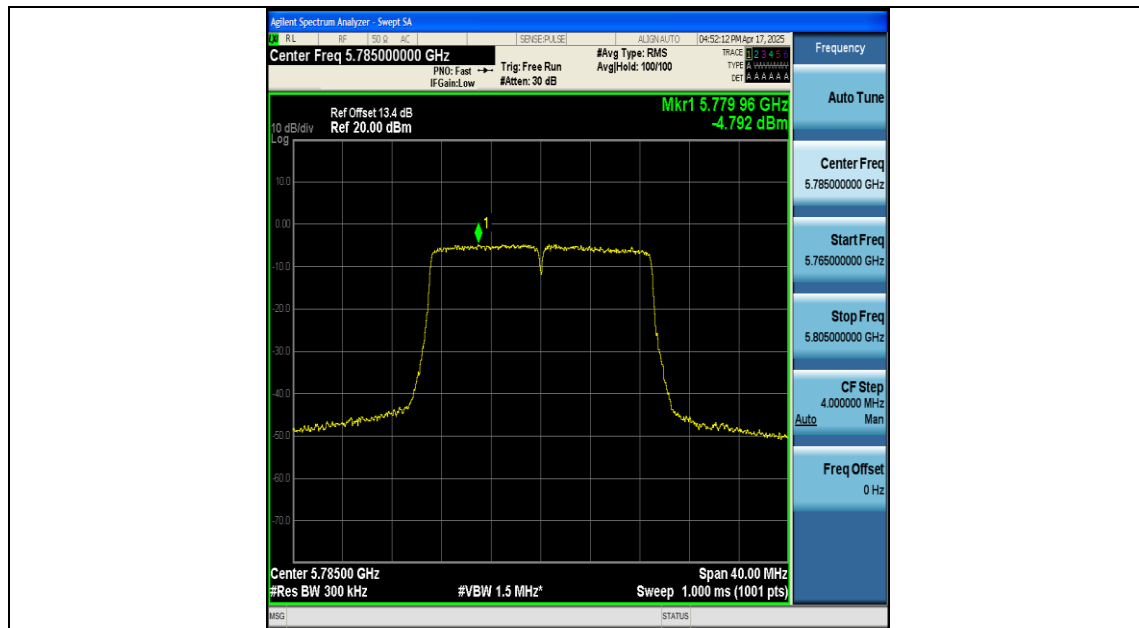
11N20MIMO-Ant2-5825-PASS



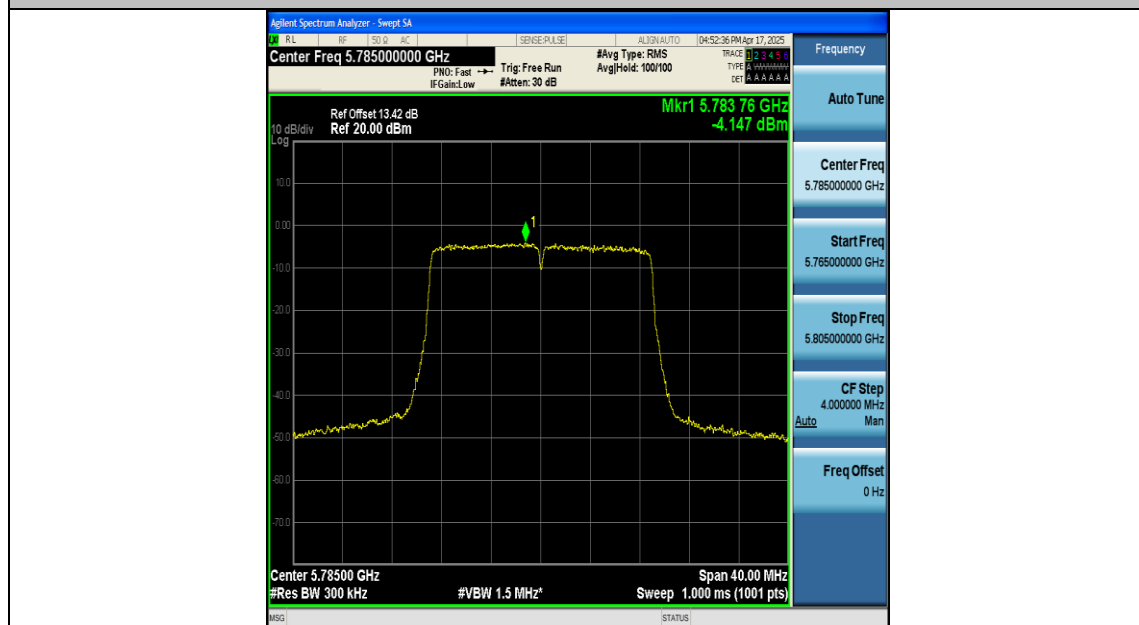
11AC20MIMO-Ant1-5745-PASS



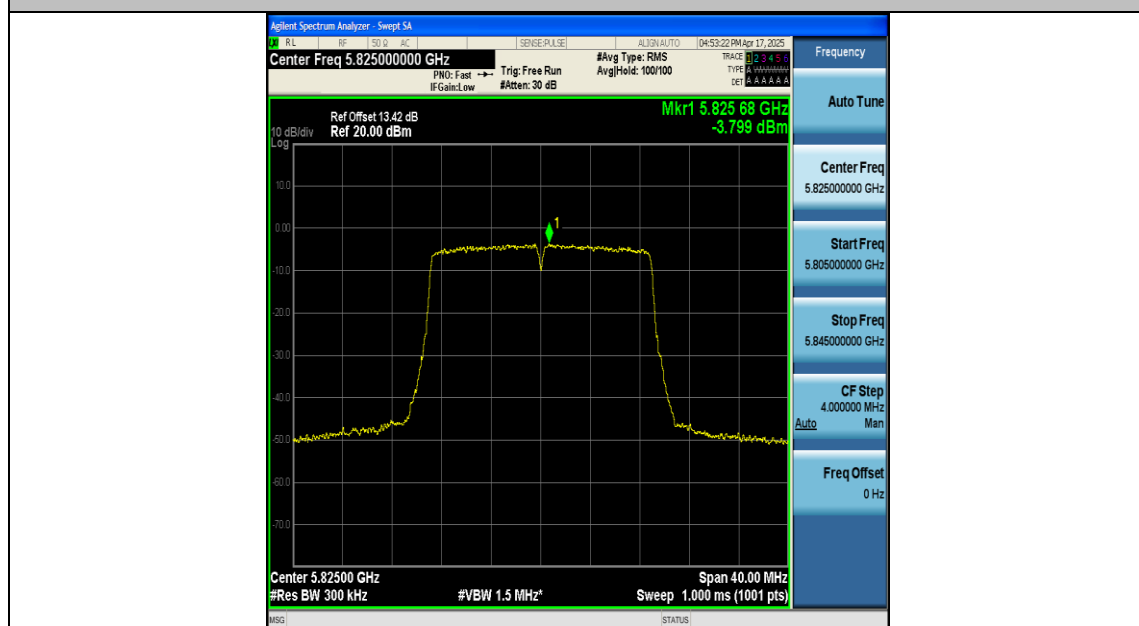
11AC20MIMO-Ant2-5745-PASS



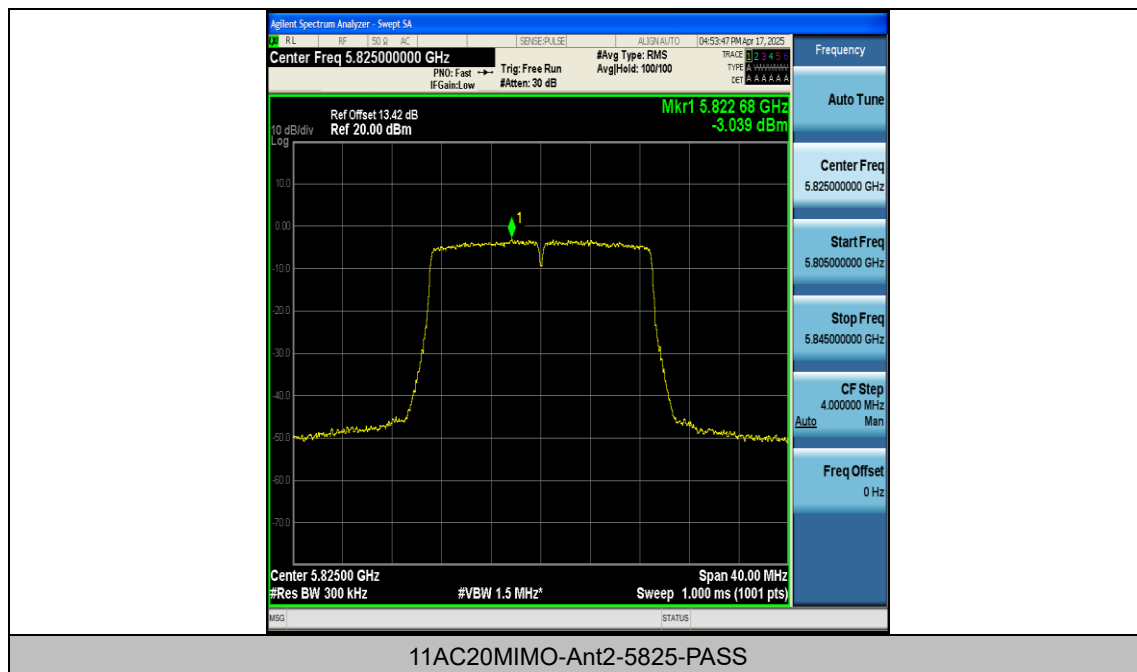
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix D: Band edge measurements

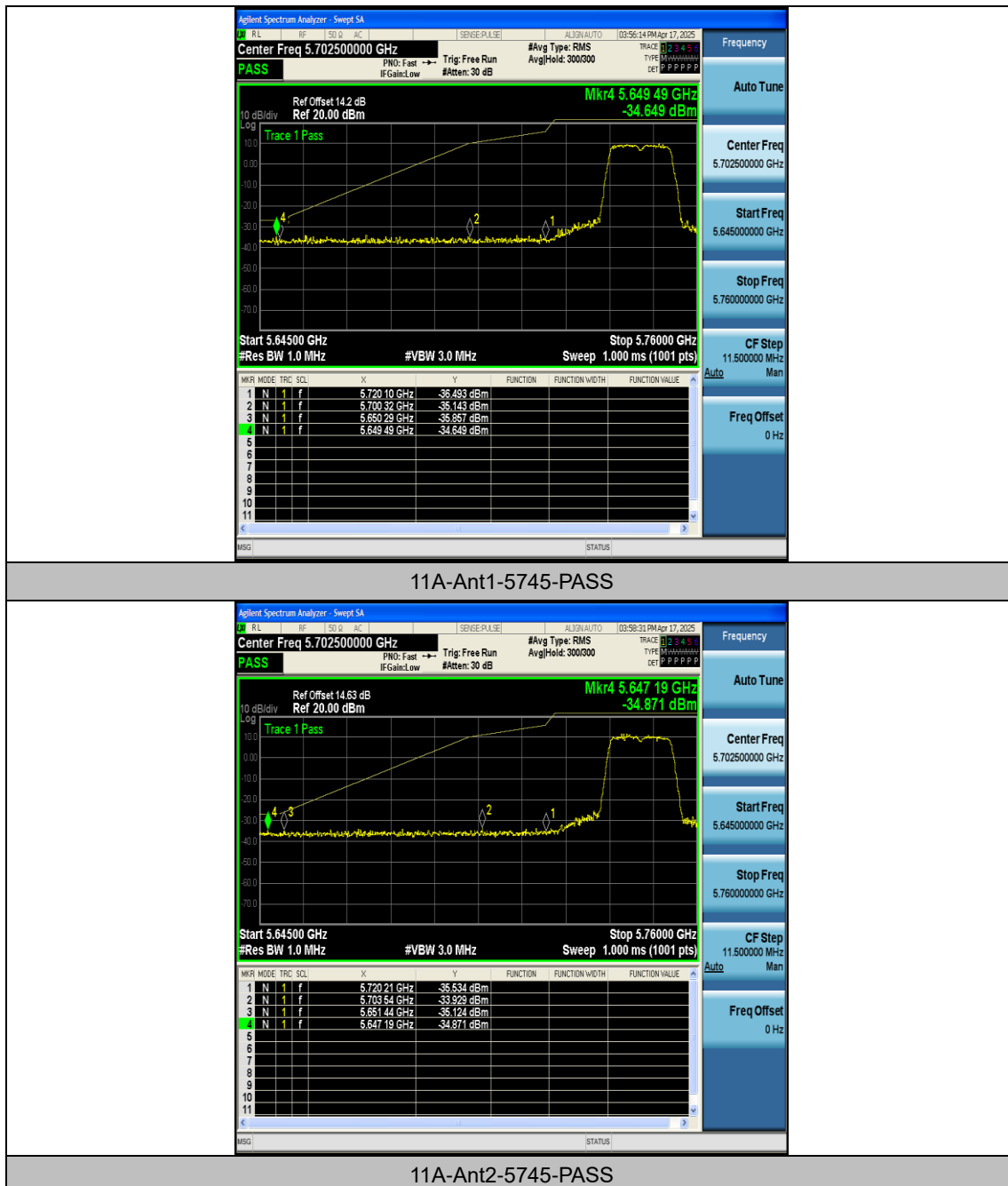
Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Freq. Range [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-36.49	≤15.82	PASS
11A	Ant1	Low	5745	5700~5720	-35.14	≤10.09	PASS
11A	Ant1	Low	5745	5650~5700	-35.86	≤-26.79	PASS
11A	Ant1	Low	5745	5760~5650	-34.65	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-35.53	≤16.08	PASS
11A	Ant2	Low	5745	5700~5720	-33.93	≤10.99	PASS
11A	Ant2	Low	5745	5650~5700	-35.12	≤-25.93	PASS
11A	Ant2	Low	5745	5760~5650	-34.87	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-36.9	≤16.03	PASS
11A	Ant1	High	5825	5855~5875	-34.17	≤10.40	PASS
11A	Ant1	High	5825	5875~5925	-36.19	≤-26.81	PASS
11A	Ant1	High	5825	5925~5935	-34.79	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-34.16	≤16.65	PASS
11A	Ant2	High	5825	5855~5875	-34.48	≤10.36	PASS
11A	Ant2	High	5825	5875~5925	-34.73	≤-26.91	PASS
11A	Ant2	High	5825	5925~5935	-34.67	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5720~5725	-35.57	≤16.60	PASS
11N20MI MO	Ant1	Low	5745	5700~5720	-35.44	≤10.38	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-36.27	≤-26.87	PASS
11N20MI MO	Ant1	Low	5745	5760~5650	-34.23	≤-27	PASS
11N20MI MO	Ant2	Low	5745	5720~5725	-34.87	≤16.34	PASS
11N20MI MO	Ant2	Low	5745	5700~5720	-34.13	≤11.25	PASS
11N20MI MO	Ant2	Low	5745	5650~5700	-35.28	≤-26.70	PASS
11N20MI MO	Ant2	Low	5745	5760~5650	-34.69	≤-27	PASS
11N20MI MO	Ant1	High	5825	5850~5855	-35.87	≤16.03	PASS
11N20MI MO	Ant1	High	5825	5855~5875	-35.56	≤10.13	PASS
11N20MI MO	Ant1	High	5825	5875~5925	-35.25	≤-26.21	PASS
11N20MI MO	Ant1	High	5825	5925~5935	-35.32	≤-27	PASS
11N20MI	Ant2	High	5825	5850~5855	-33.43	≤16.34	PASS

MO							
11N20MI MO	Ant2	High	5825	5855~5875	-34.11	≤10.21	PASS
11N20MI MO	Ant2	High	5825	5875~5925	-35.84	≤-26.91	PASS
11N20MI MO	Ant2	High	5825	5925~5935	-34.38	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5720~5725	-36.31	≤15.82	PASS
11AC20M IMO	Ant1	Low	5745	5700~5720	-35.68	≤10.15	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-36.06	≤-26.62	PASS
11AC20M IMO	Ant1	Low	5745	5760~5650	-34.92	≤-27	PASS
11AC20M IMO	Ant2	Low	5745	5720~5725	-34.3	≤16.08	PASS
11AC20M IMO	Ant2	Low	5745	5700~5720	-34.64	≤10.80	PASS
11AC20M IMO	Ant2	Low	5745	5650~5700	-35.65	≤-26.96	PASS
11AC20M IMO	Ant2	Low	5745	5760~5650	-34.92	≤-27	PASS
11AC20M IMO	Ant1	High	5825	5850~5855	-34.65	≤16.03	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-34.45	≤10.36	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-34.88	≤-26.11	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-34.67	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-35.44	≤15.73	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-32.84	≤10.85	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-35.55	≤-26.71	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-34.76	≤-27	PASS

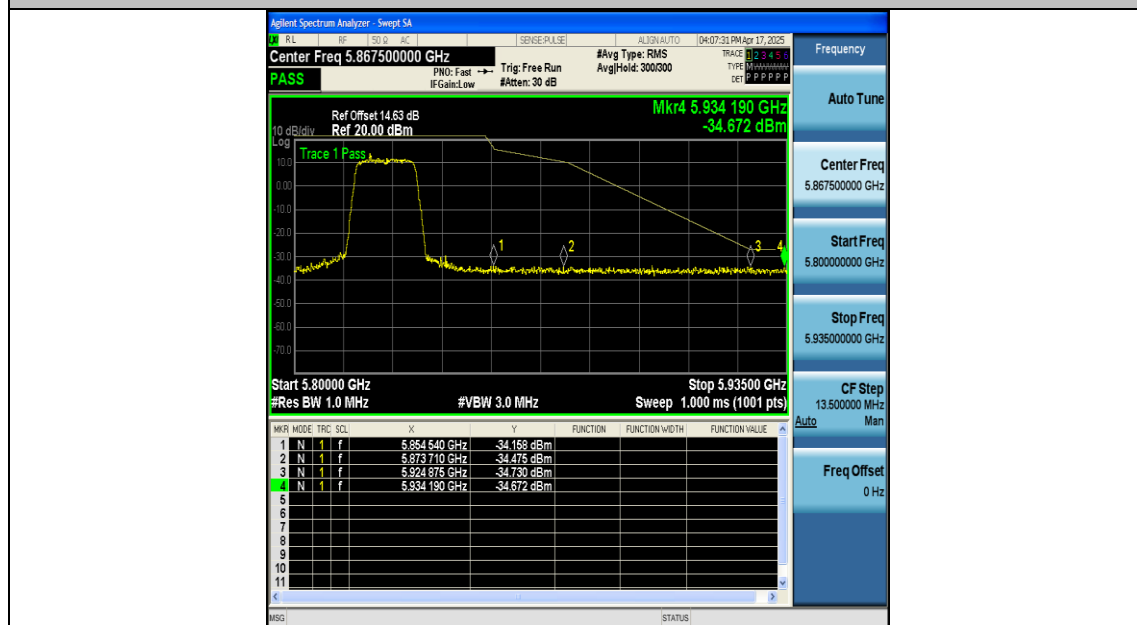
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

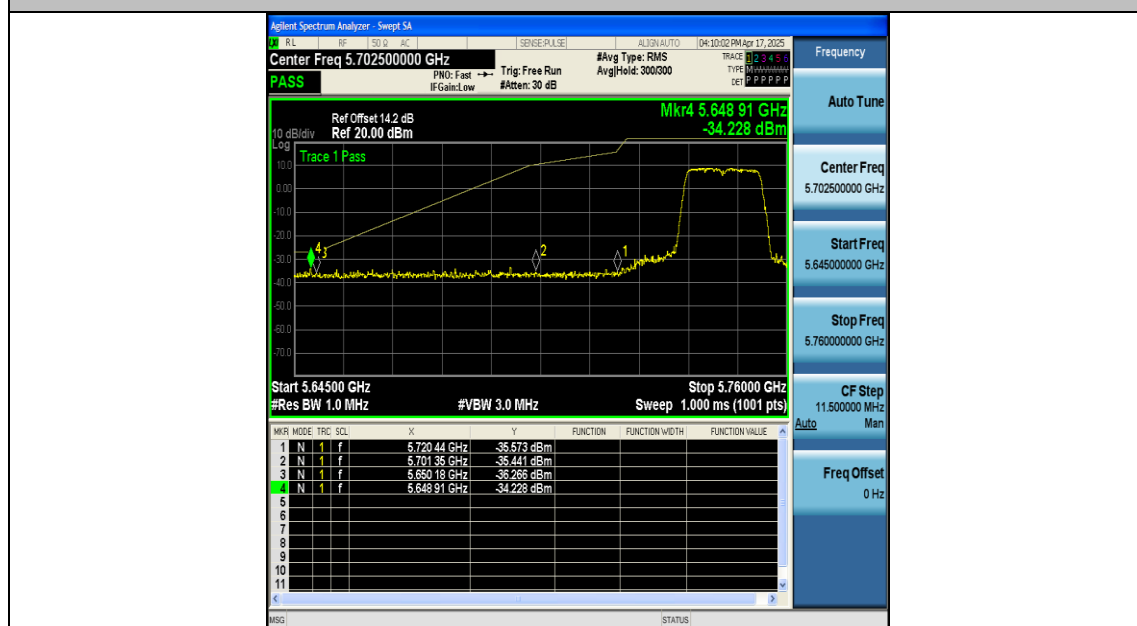




11A-Ant1-5825-PASS



11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS