

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

Product Name: DRONE

Trade Mark: /

Test Model: F7GIM

FCC ID: 2A5GP-F7GIM

Environmental Conditions

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

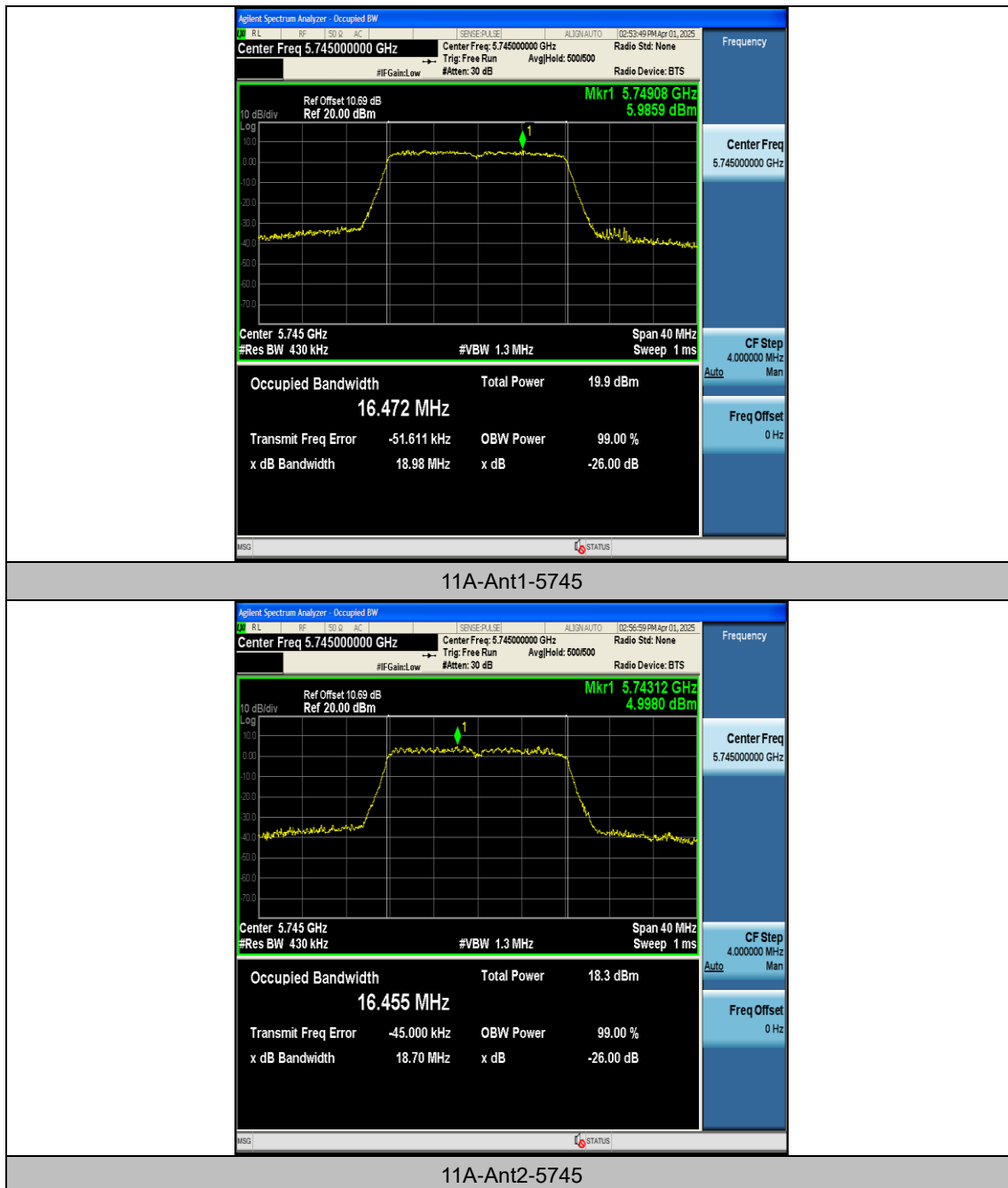
Appendix A2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.472	5736.7124	5753.1844	---	---
11A	Ant2	5745	16.455	5736.7275	5753.1825	---	---
11A	Ant1	5785	16.488	5776.7049	5793.1929	---	---
11A	Ant2	5785	16.427	5776.7392	5793.1662	---	---
11A	Ant1	5825	16.478	5816.7337	5833.2117	---	---
11A	Ant2	5825	16.439	5816.7637	5833.2027	---	---
11N20MIMO	Ant1	5745	17.636	5736.1462	5753.7822	---	---
11N20MIMO	Ant2	5745	17.642	5736.1345	5753.7765	---	---
11N20MIMO	Ant1	5785	17.596	5776.1509	5793.7469	---	---
11N20MIMO	Ant2	5785	17.589	5776.1613	5793.7503	---	---
11N20MIMO	Ant1	5825	17.591	5816.1848	5833.7758	---	---
11N20MIMO	Ant2	5825	17.599	5816.1885	5833.7875	---	---
11AC20MIMO	Ant1	5745	17.767	5736.0659	5753.8329	---	---
11AC20MIMO	Ant2	5745	17.752	5736.0684	5753.8204	---	---
11AC20MIMO	Ant1	5785	17.674	5776.1353	5793.8093	---	---
11AC20MIMO	Ant2	5785	17.674	5776.1323	5793.8063	---	---
11AC20MIMO	Ant1	5825	17.681	5816.1422	5833.8232	---	---
11AC20MIMO	Ant2	5825	17.685	5816.1485	5833.8335	---	---

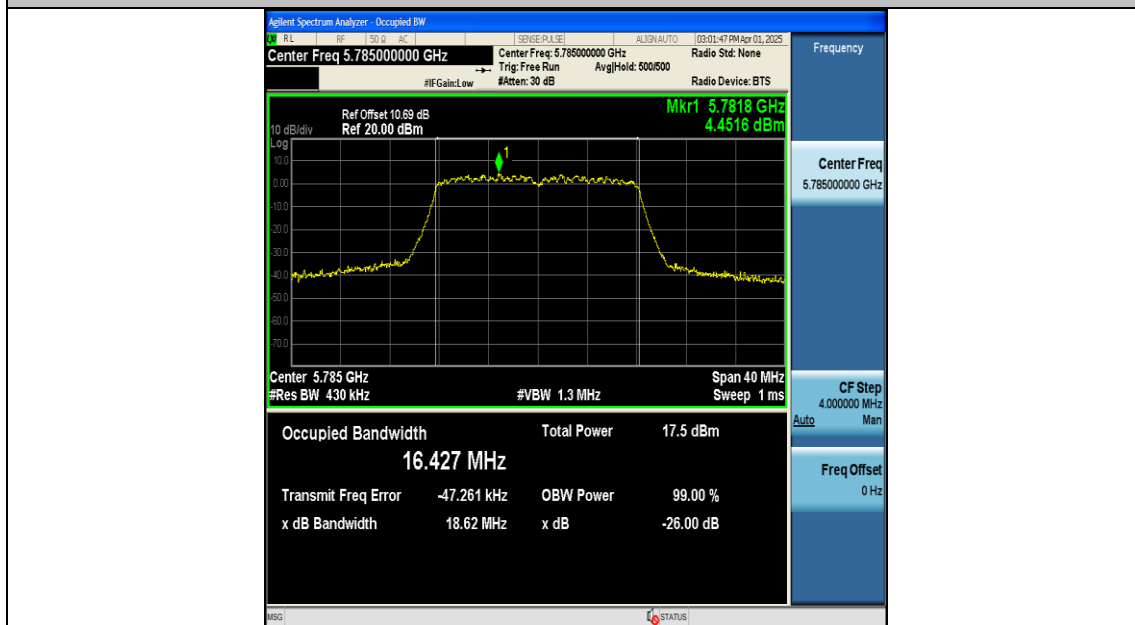
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

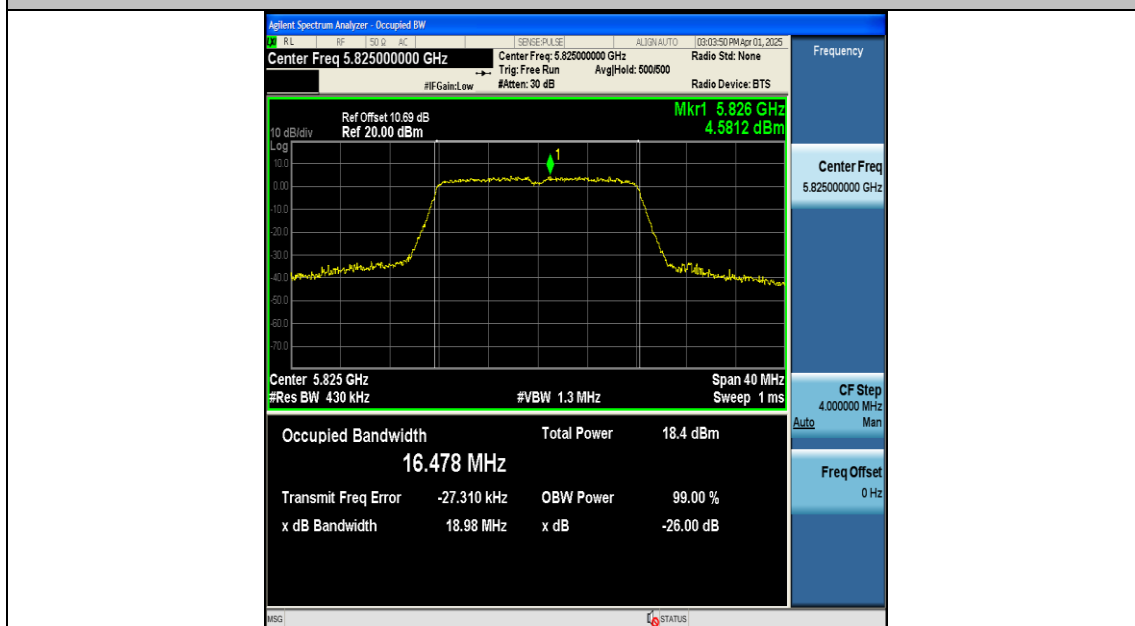




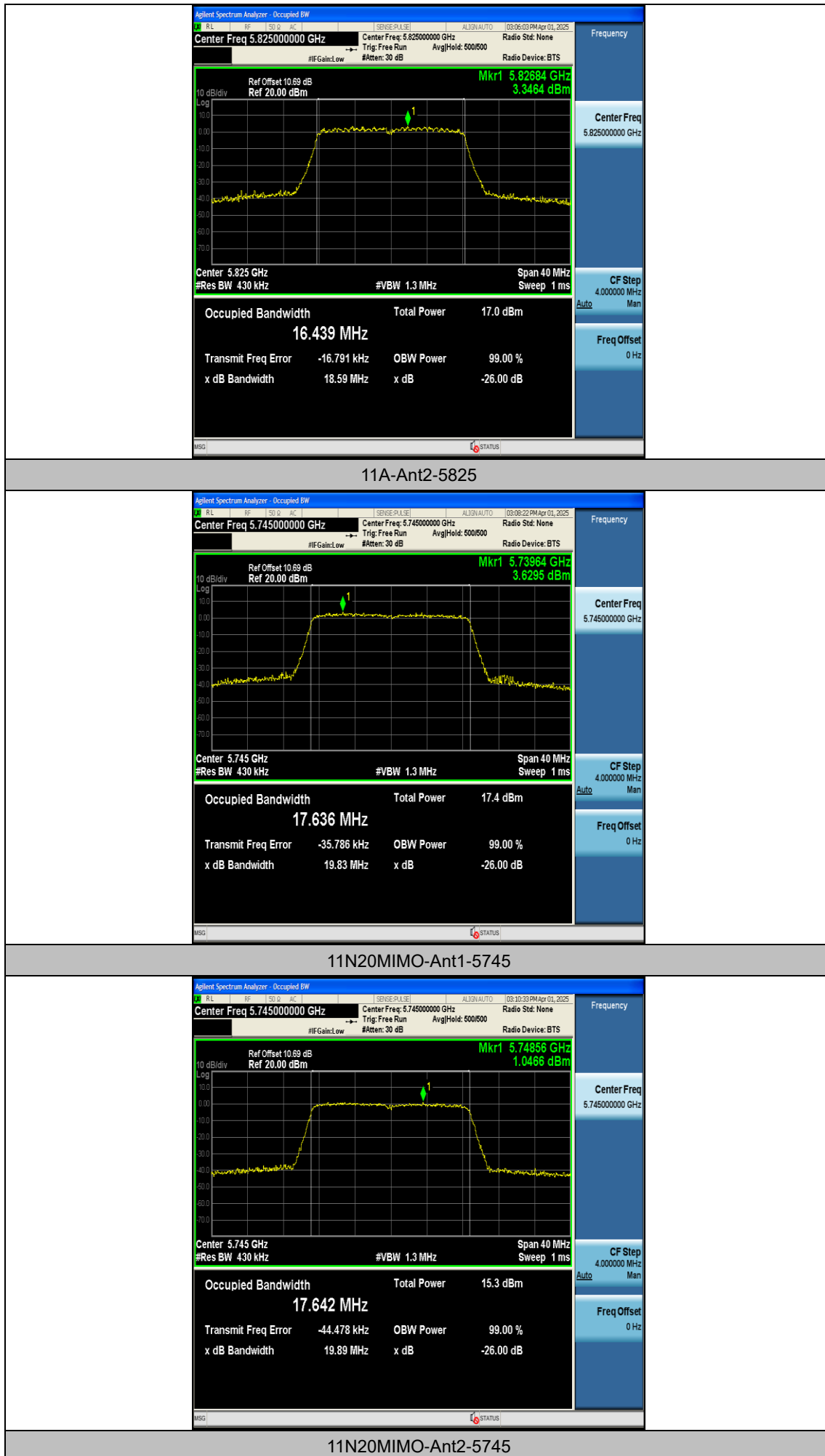
11A-Ant1-5785

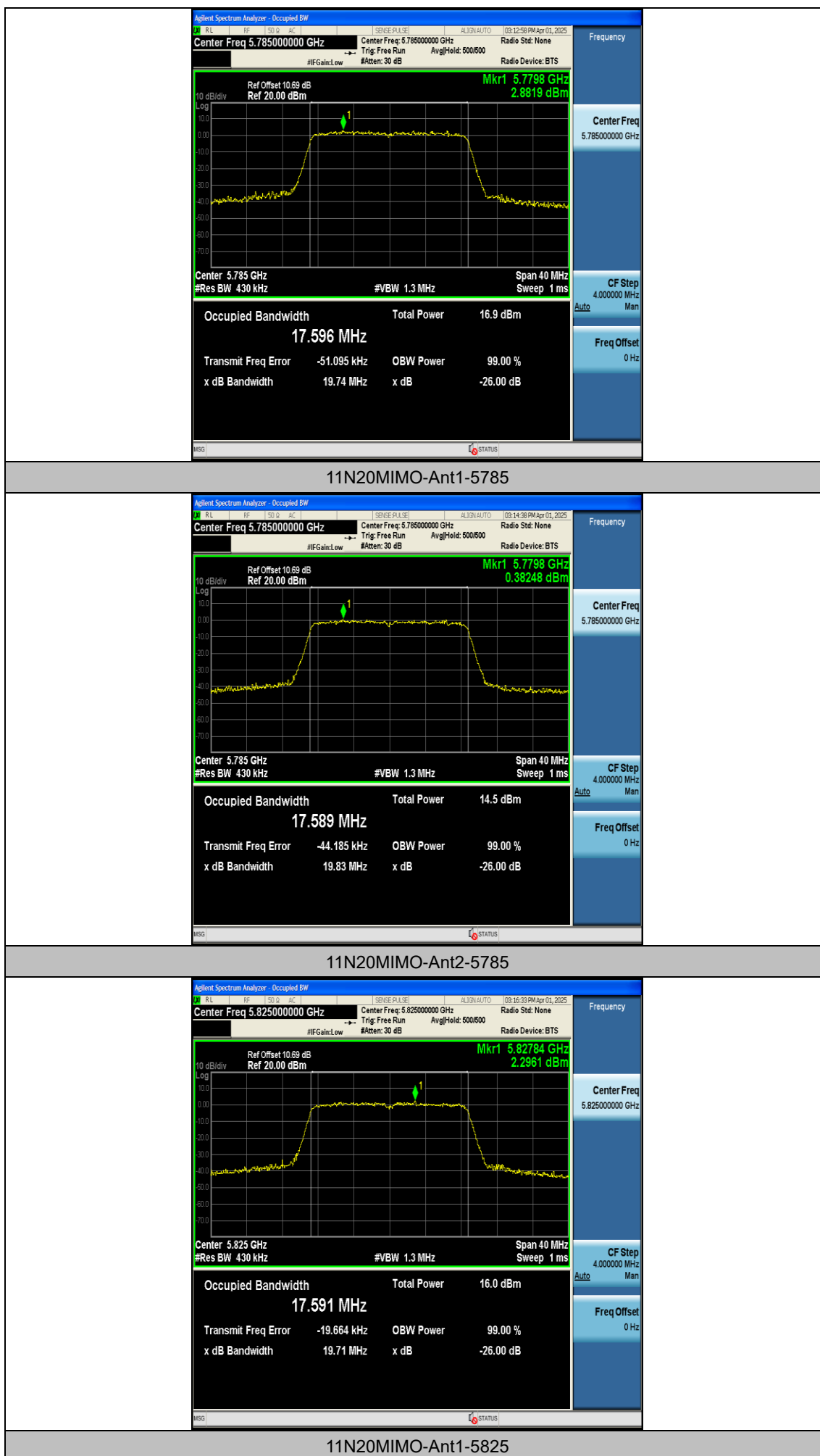


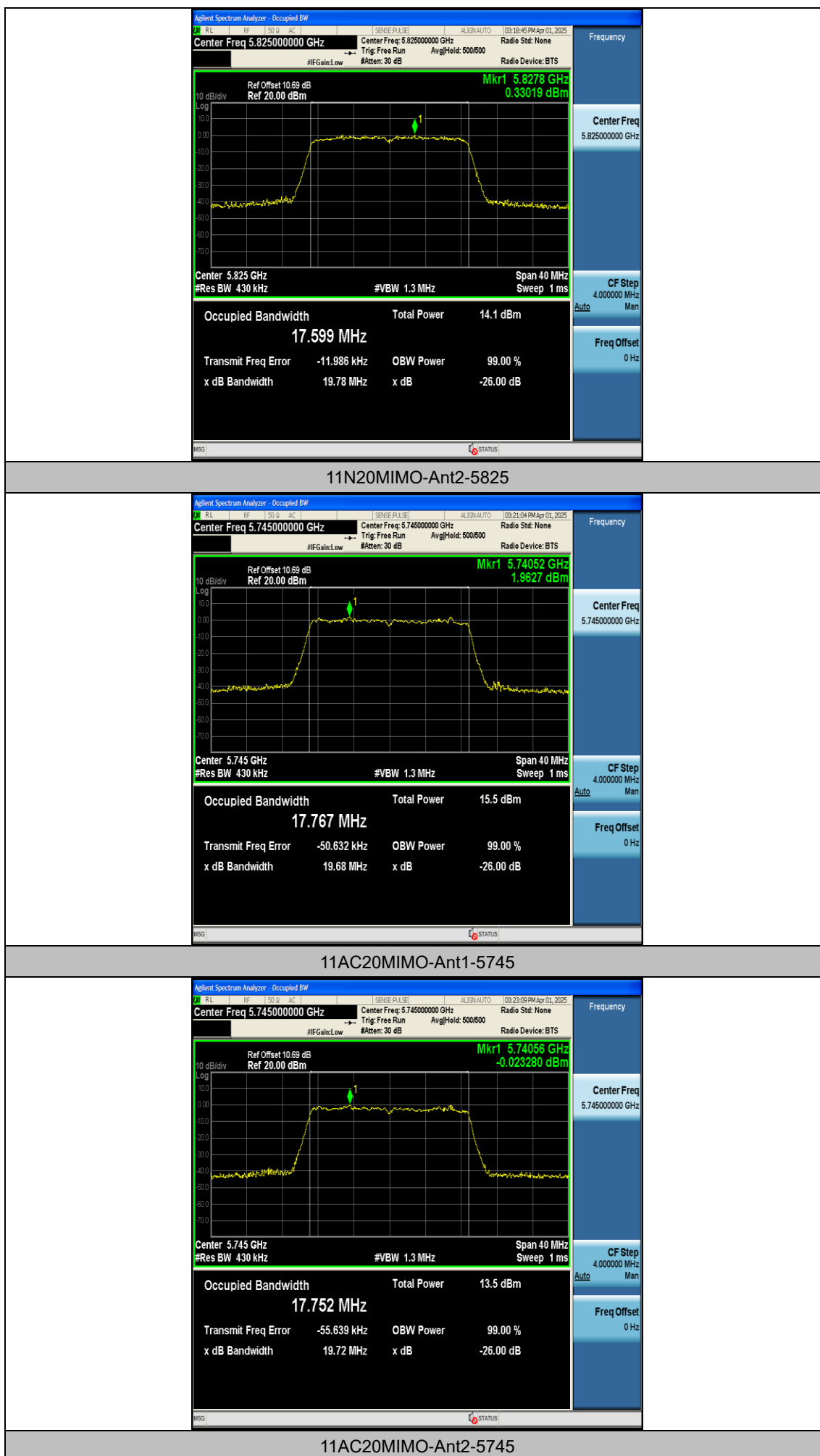
11A-Ant2-5785

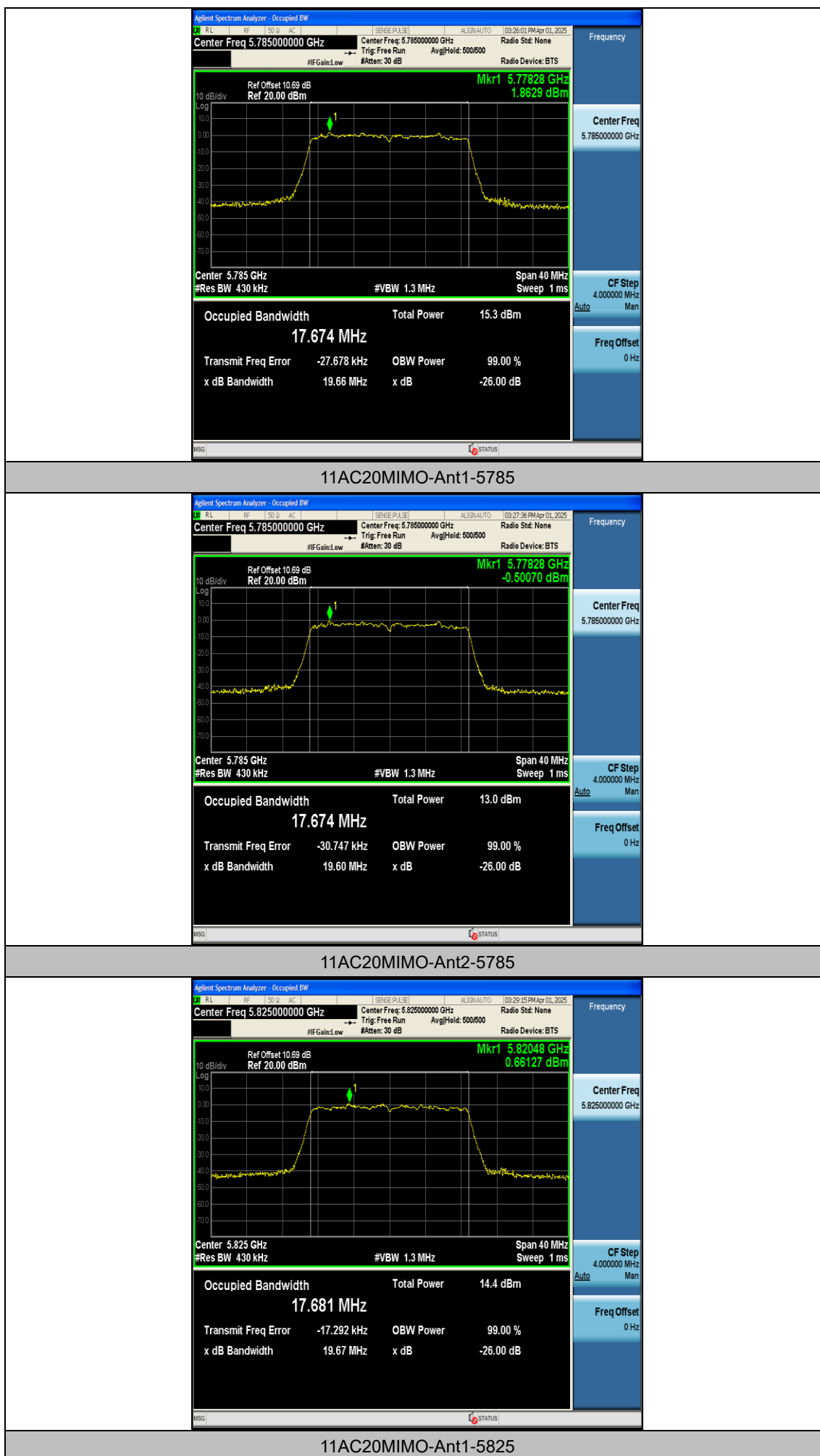


11A-Ant1-5825











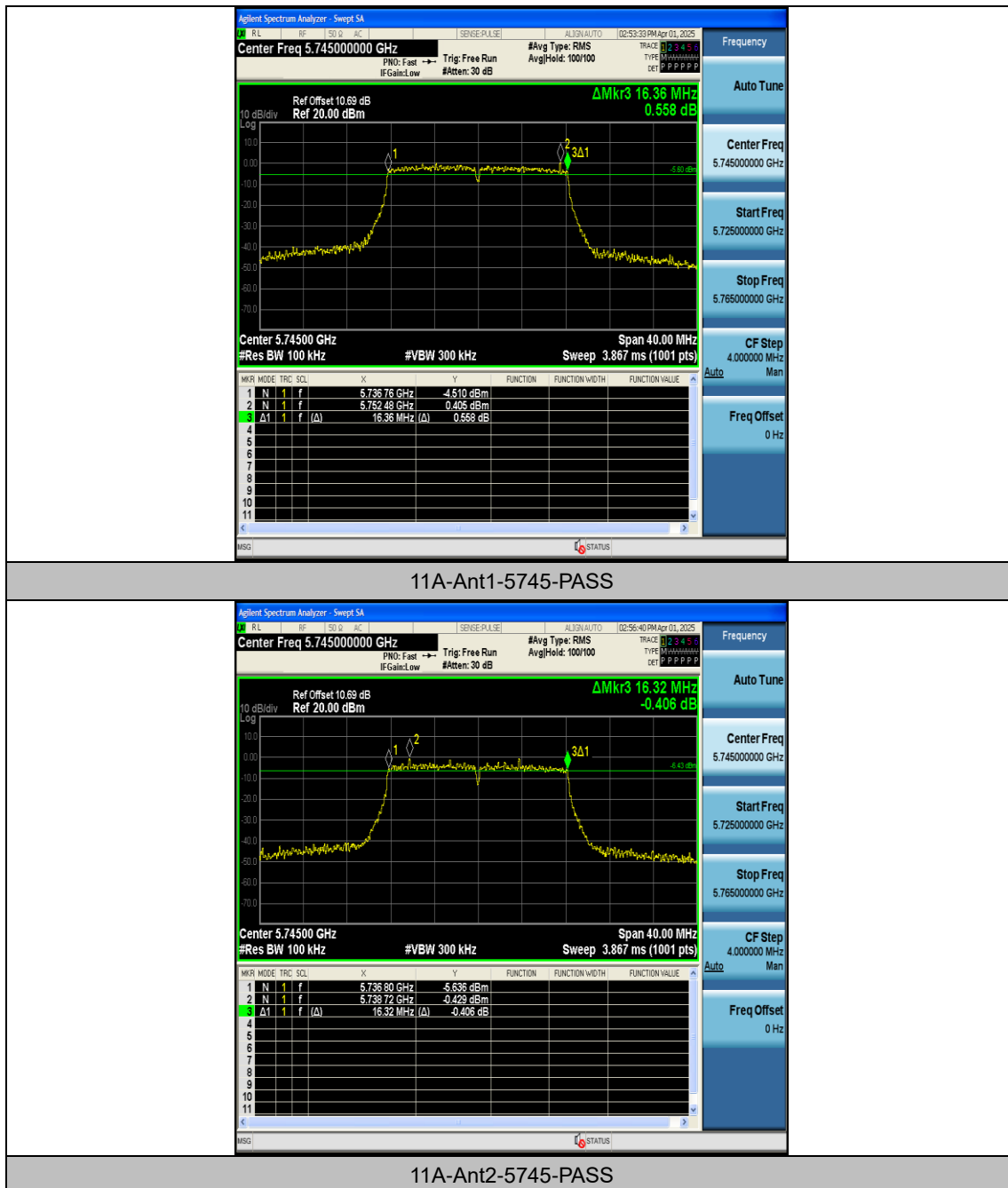
Appendix A: Min emission bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.360	5736.760	5753.120	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	16.320	5776.800	5793.120	0.5	PASS
11A	Ant1	5825	16.320	5816.800	5833.120	0.5	PASS
11A	Ant2	5825	16.280	5816.800	5833.080	0.5	PASS
11N20MIMO	Ant1	5745	17.560	5736.160	5753.720	0.5	PASS
11N20MIMO	Ant2	5745	17.320	5736.160	5753.480	0.5	PASS
11N20MIMO	Ant1	5785	17.160	5776.160	5793.320	0.5	PASS
11N20MIMO	Ant2	5785	17.200	5776.160	5793.360	0.5	PASS
11N20MIMO	Ant1	5825	17.520	5816.200	5833.720	0.5	PASS
11N20MIMO	Ant2	5825	17.600	5816.160	5833.760	0.5	PASS
11AC20MIMO	Ant1	5745	17.600	5736.160	5753.760	0.5	PASS
11AC20MIMO	Ant2	5745	17.600	5736.160	5753.760	0.5	PASS
11AC20MIMO	Ant1	5785	17.520	5776.200	5793.720	0.5	PASS
11AC20MIMO	Ant2	5785	17.520	5776.200	5793.720	0.5	PASS
11AC20MIMO	Ant1	5825	17.480	5816.240	5833.720	0.5	PASS
11AC20MIMO	Ant2	5825	17.240	5816.480	5833.720	0.5	PASS

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

Test Graphs





11A-Ant1-5785-PASS



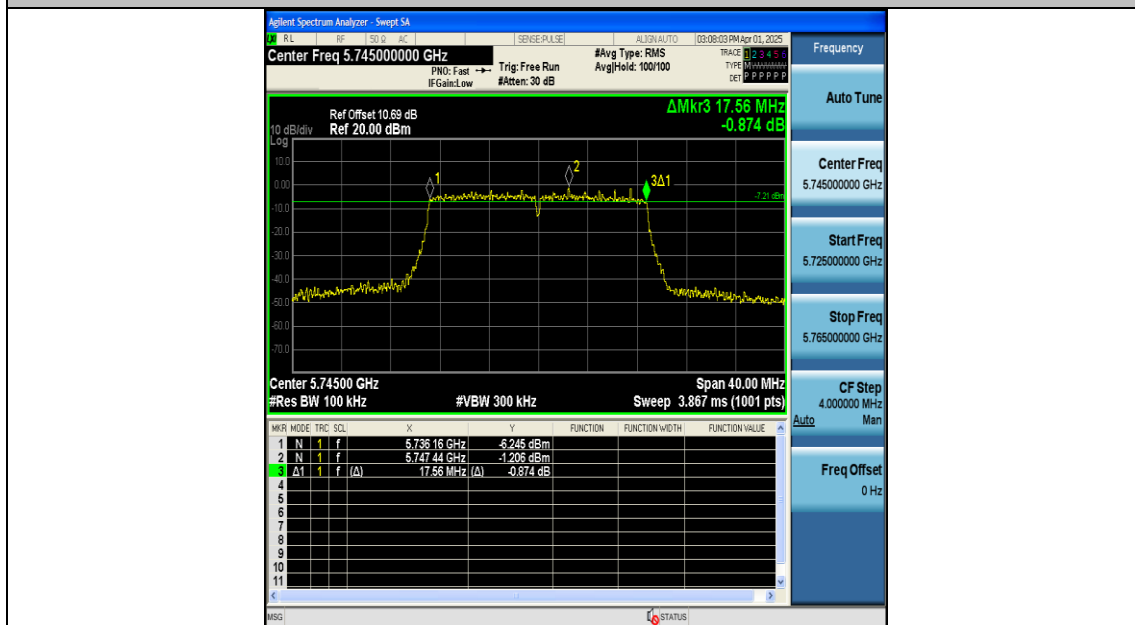
11A-Ant2-5785-PASS



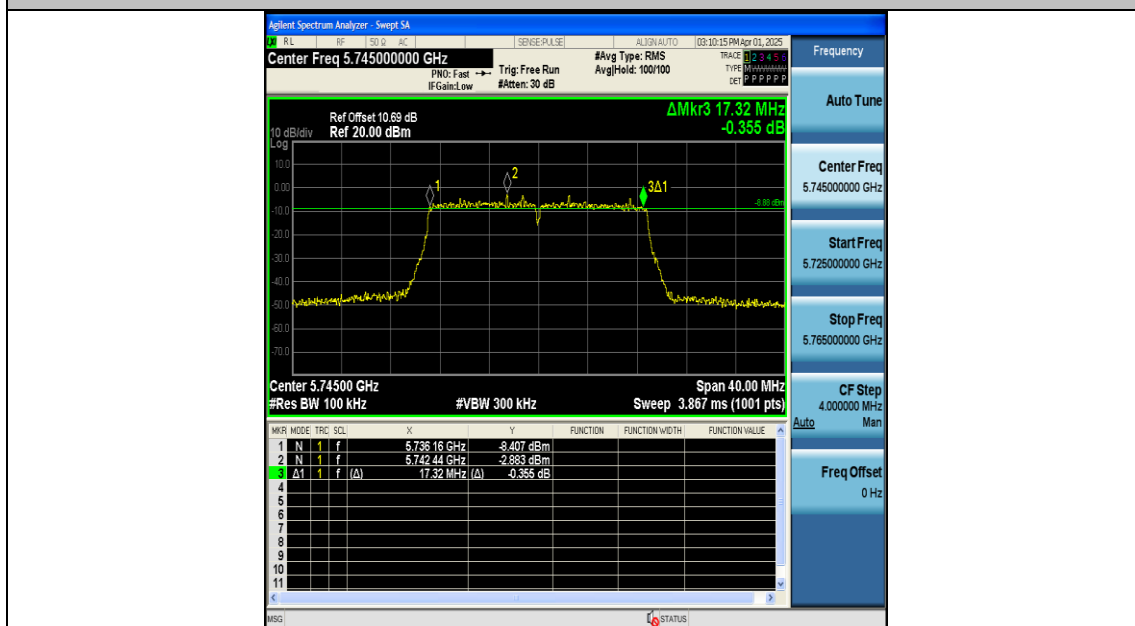
11A-Ant1-5825-PASS



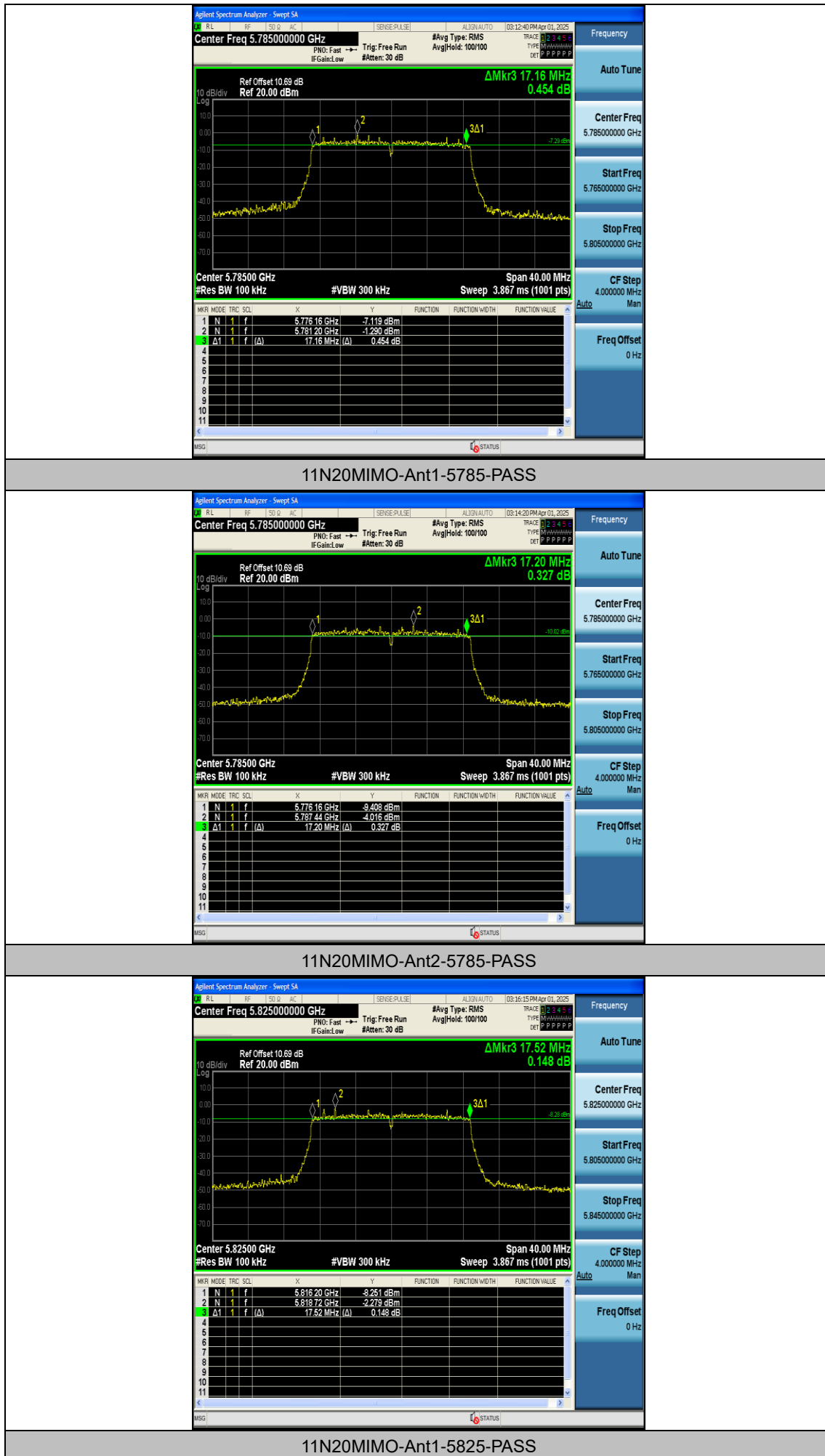
11A-Ant2-5825-PASS

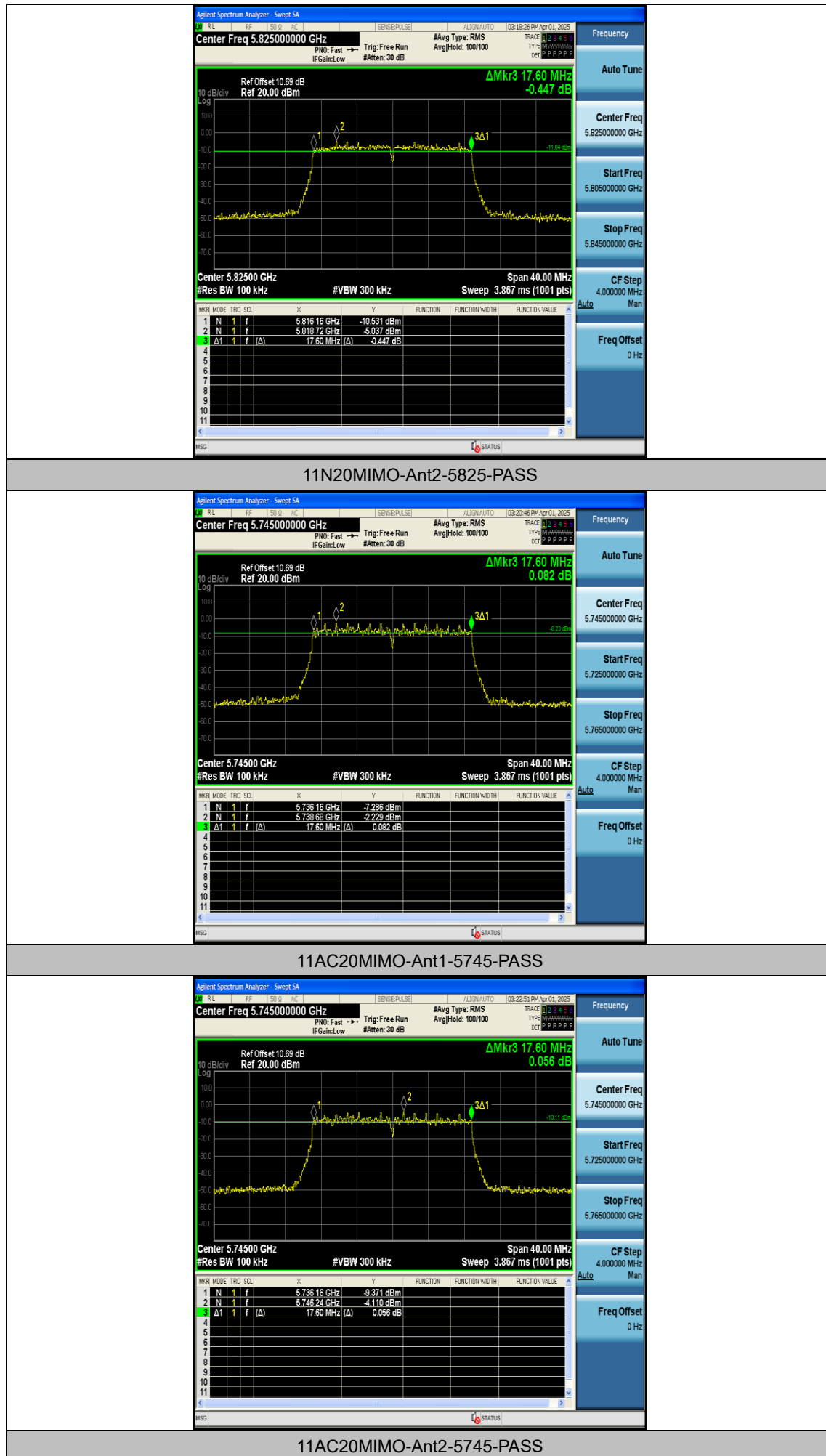


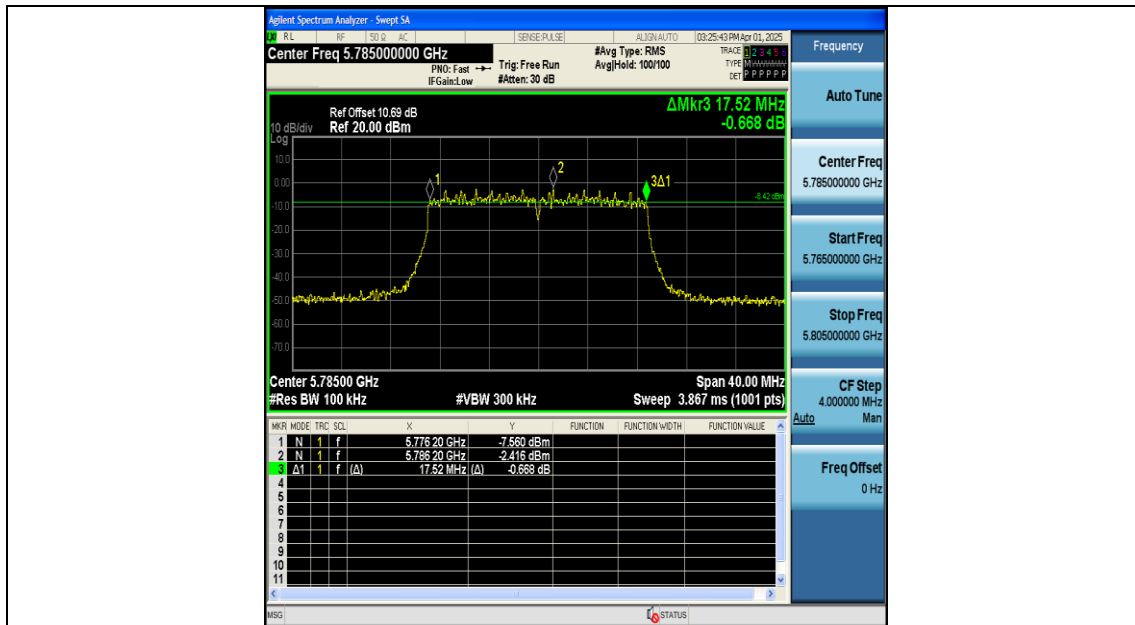
11N20MIMO-Ant1-5745-PASS



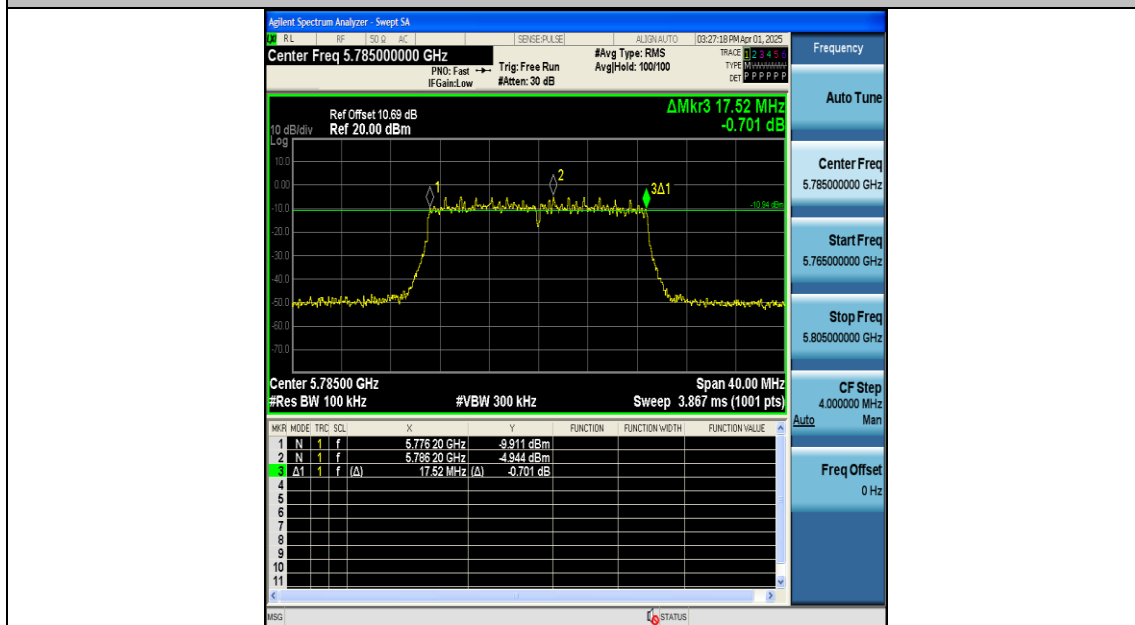
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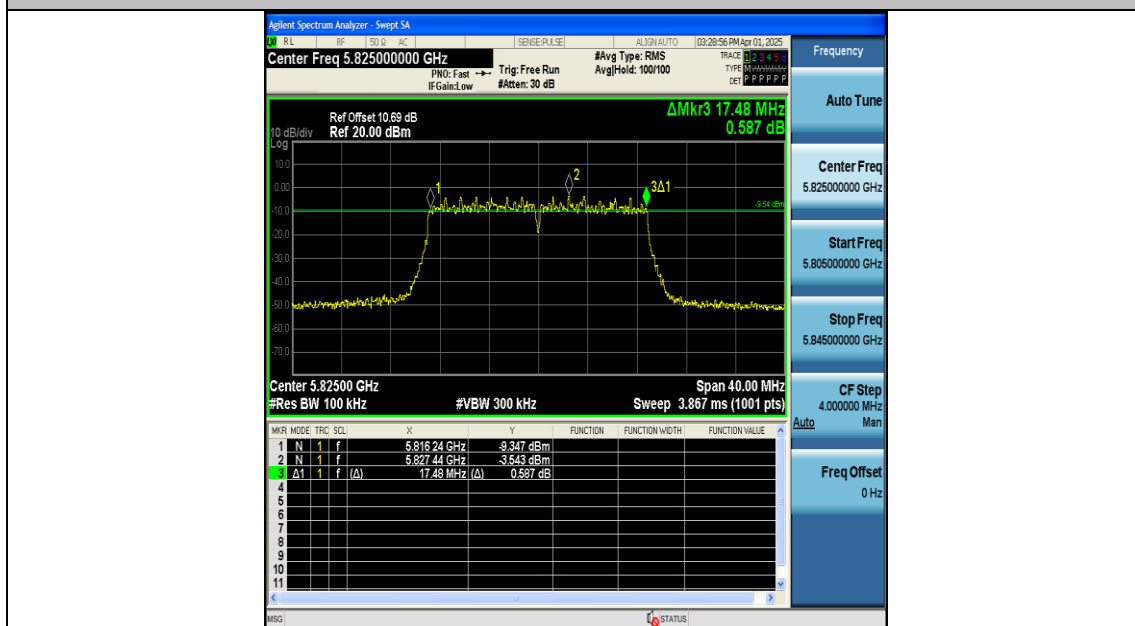




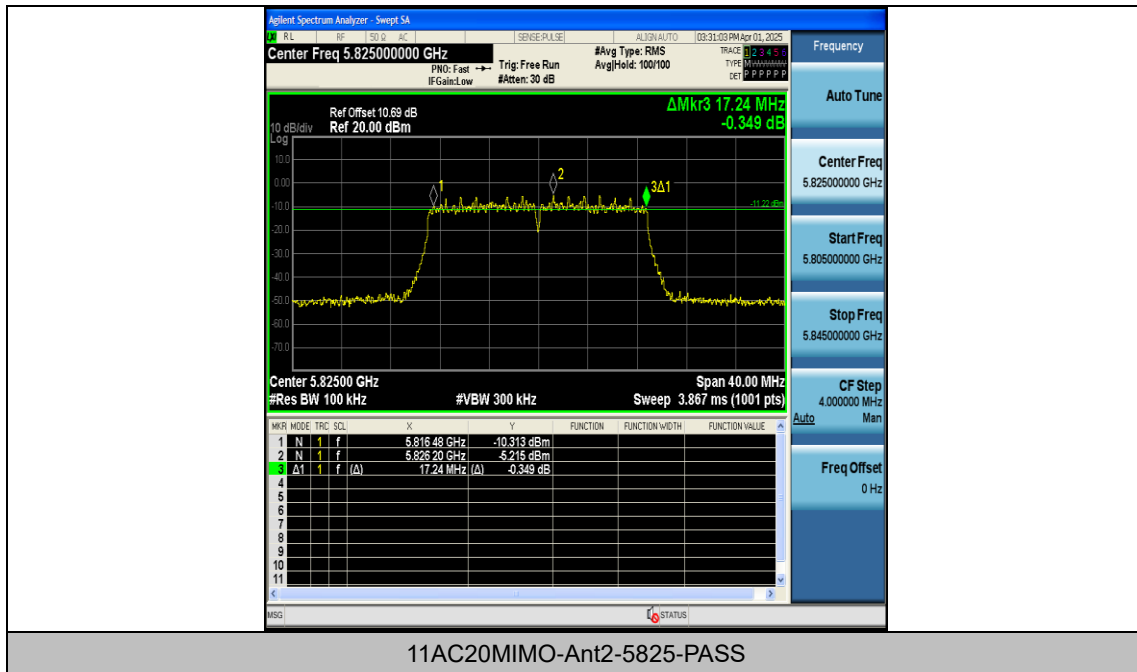
11AC20MIMO-Ant1-5785-PASS



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	13.08	≤30.00	PASS
11A	Ant2	5745	10.89	≤30.00	PASS
11A	Ant1	5785	12.77	≤30.00	PASS
11A	Ant2	5785	10.39	≤30.00	PASS
11A	Ant1	5825	11.75	≤30.00	PASS
11A	Ant2	5825	9.78	≤30.00	PASS
11N20MIMO	Ant1	5745	10.88	≤30.00	PASS
11N20MIMO	Ant2	5745	8.71	≤30.00	PASS
11N20MIMO	total	5745	12.94	≤30.00	PASS
11N20MIMO	Ant1	5785	10.40	≤30.00	PASS
11N20MIMO	Ant2	5785	8.06	≤30.00	PASS
11N20MIMO	total	5785	12.40	≤30.00	PASS
11N20MIMO	Ant1	5825	9.38	≤30.00	PASS
11N20MIMO	Ant2	5825	7.40	≤30.00	PASS
11N20MIMO	total	5825	11.51	≤30.00	PASS
11AC20MIMO	Ant1	5745	9.14	≤30.00	PASS
11AC20MIMO	Ant2	5745	7.48	≤30.00	PASS
11AC20MIMO	total	5745	11.40	≤30.00	PASS
11AC20MIMO	Ant1	5785	9.40	≤30.00	PASS
11AC20MIMO	Ant2	5785	6.85	≤30.00	PASS
11AC20MIMO	total	5785	11.32	≤30.00	PASS
11AC20MIMO	Ant1	5825	8.29	≤30.00	PASS
11AC20MIMO	Ant2	5825	6.50	≤30.00	PASS
11AC20MIMO	total	5825	10.50	≤30.00	PASS

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

Appendix C: Maximum power spectral density

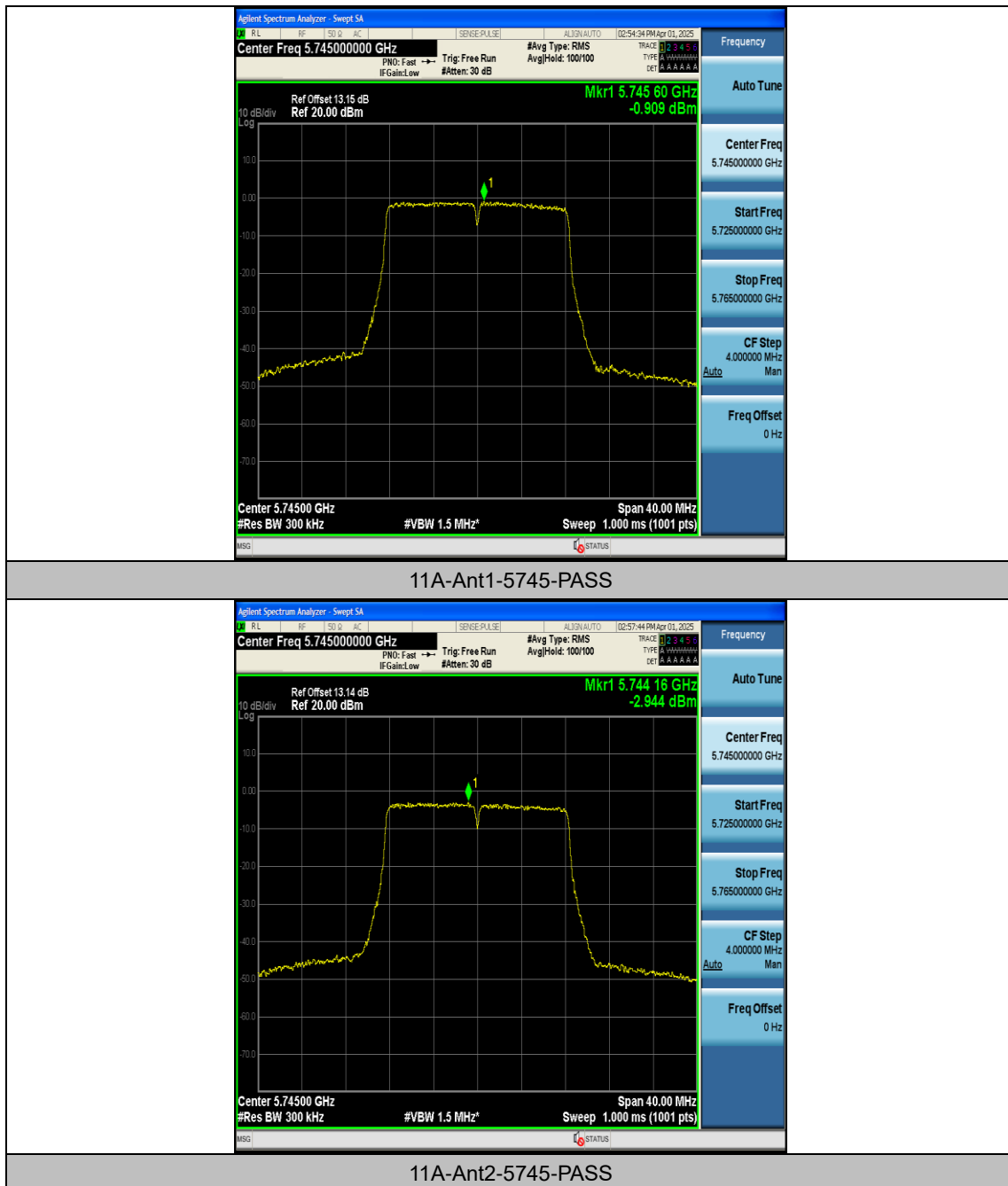
Test Result

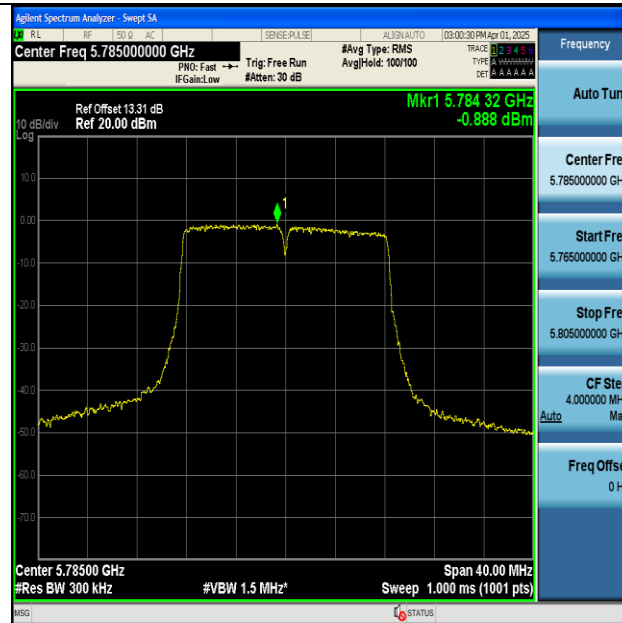
Frequency [MHz]	Test Mode	Antenna	Result [dBm/300 KHz]	Result [dBm/500 KHz]	DC Factor [dB]	RBW Factor [dB]	Limit [dBm/500 KHz]	Verdict
5745	11A	Ant1	-3.37	-0.91	0.24	2.22	≤30.00	PASS
5745	11A	Ant2	-5.39	-2.94	0.23	2.22	≤30.00	PASS
5785	11A	Ant1	-3.51	-0.89	0.40	2.22	≤30.00	PASS
5785	11A	Ant2	-6.30	-3.64	0.44	2.22	≤30.00	PASS
5825	11A	Ant1	-5.05	-2.51	0.32	2.22	≤30.00	PASS
5825	11A	Ant2	-6.78	-4.24	0.32	2.22	≤30.00	PASS
5745	11N20 MIMO	Ant1	-5.75	-3.10	0.43	2.22	≤30.00	PASS
5745	11N20 MIMO	Ant2	-8.14	-5.43	0.49	2.22	≤30.00	PASS
5745	11N20 MIMO	total	---	-1.10	---	---	≤30.00	PASS
5785	11N20 MIMO	Ant1	-6.46	-3.75	0.49	2.22	≤30.00	PASS
5785	11N20 MIMO	Ant2	-8.81	-6.12	0.47	2.22	≤30.00	PASS
5785	11N20 MIMO	total	---	-1.76	---	---	≤30.00	PASS
5825	11N20 MIMO	Ant1	-7.23	-4.73	0.28	2.22	≤30.00	PASS
5825	11N20 MIMO	Ant2	-9.13	-6.67	0.24	2.22	≤30.00	PASS
5825	11N20 MIMO	total	---	-2.58	---	---	≤30.00	PASS
5745	11AC2 0MIMO	Ant1	-9.37	-4.14	3.01	2.22	≤30.00	PASS
5745	11AC2 0MIMO	Ant2	-11.05	-5.41	3.42	2.22	≤30.00	PASS
5745	11AC2 0MIMO	total	---	-1.72	---	---	≤30.00	PASS
5785	11AC2 0MIMO	Ant1	-9.53	-3.79	3.52	2.22	≤30.00	PASS
5785	11AC2 0MIMO	Ant2	-11.94	-6.40	3.32	2.22	≤30.00	PASS
5785	11AC2 0MIMO	total	---	-1.89	---	---	≤30.00	PASS
5825	11AC2 0MIMO	Ant1	-9.69	-4.15	3.32	2.22	≤30.00	PASS
5825	11AC2 0MIMO	Ant2	-12.30	-6.56	3.52	2.22	≤30.00	PASS

5825	11AC2 0MIMO	total	---	-2.18	---	---	≤30.00	PASS
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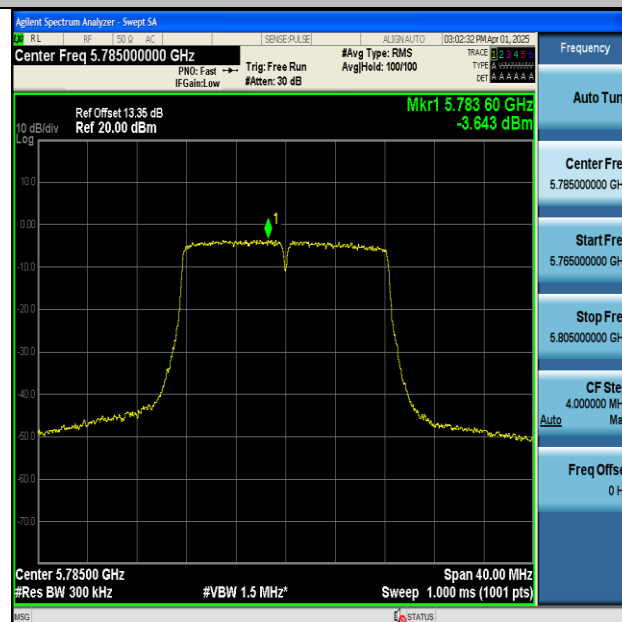
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB) + RB Factor(dB)

Test Graphs

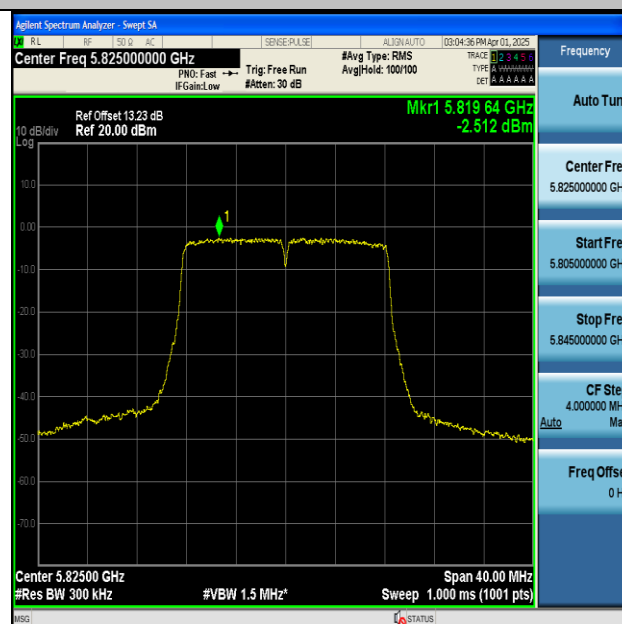




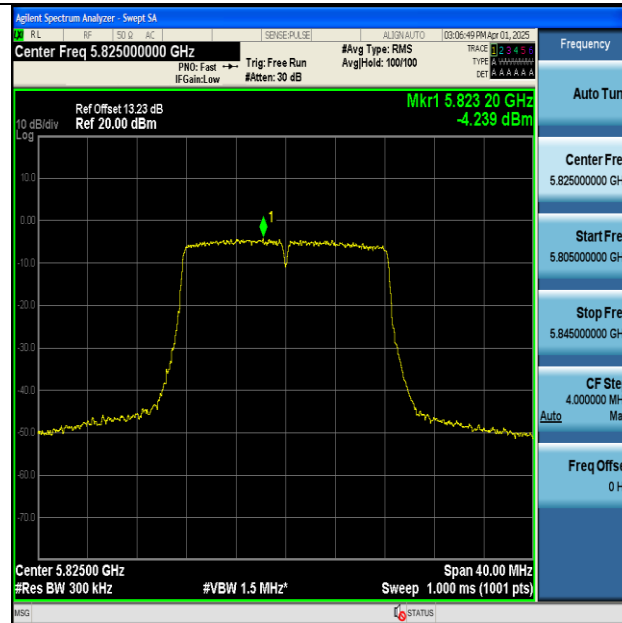
11A-Ant1-5785-PASS



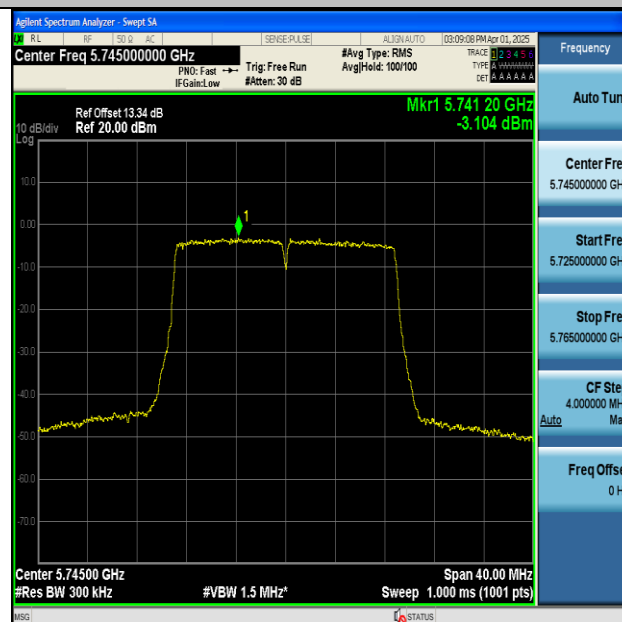
11A-Ant2-5785-PASS



11A-Ant1-5825-PASS



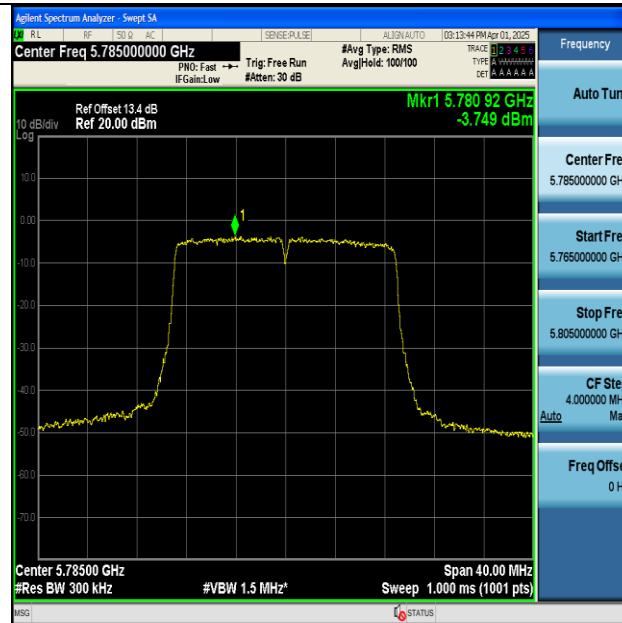
11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS



11N20MIMO-Ant2-5745-PASS



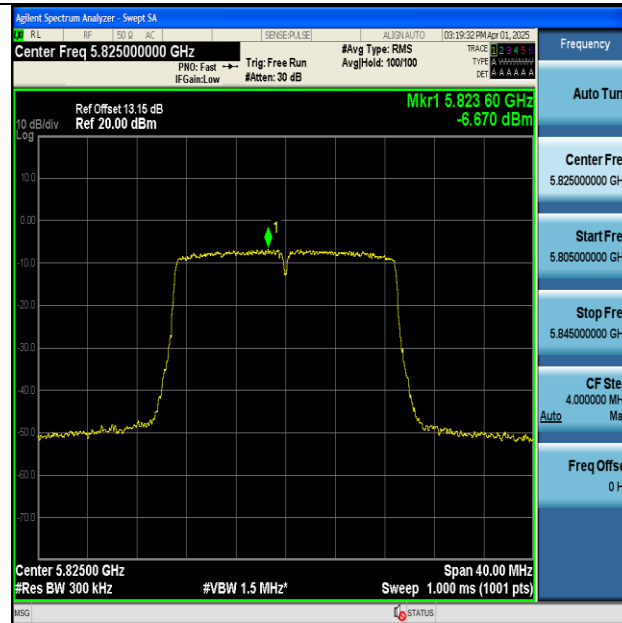
11N20MIMO-Ant1-5785-PASS



11N20MIMO-Ant2-5785-PASS



11N20MIMO-Ant1-5825-PASS



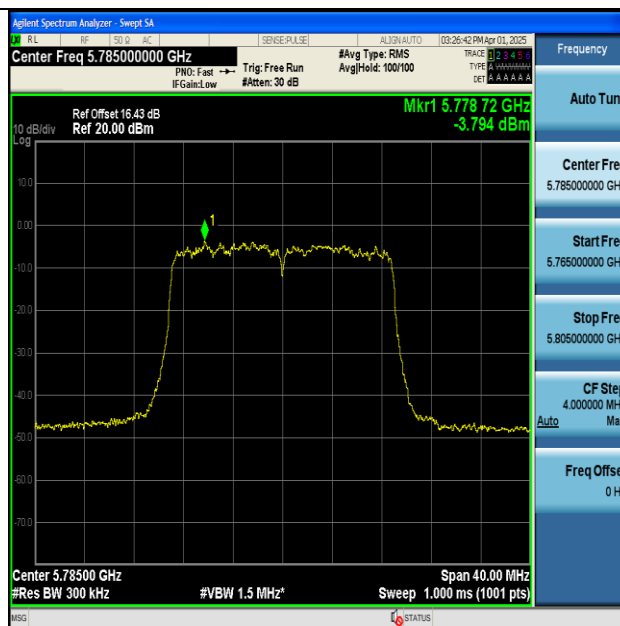
11N20MIMO-Ant2-5825-PASS



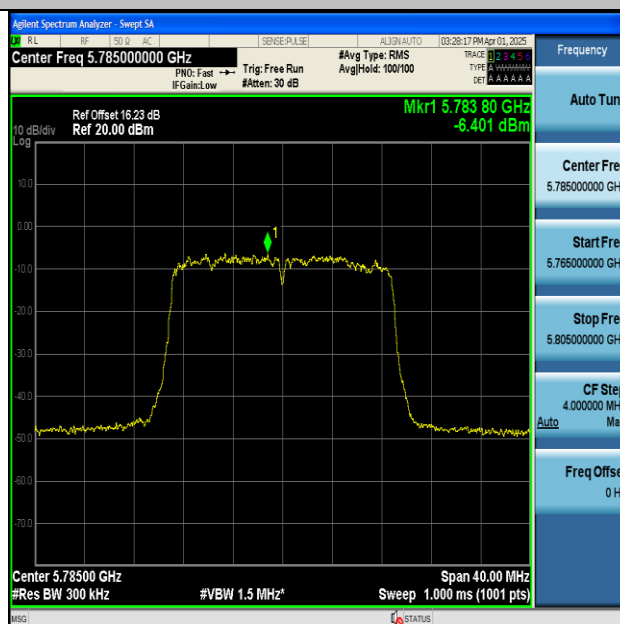
11AC20MIMO-Ant1-5745-PASS



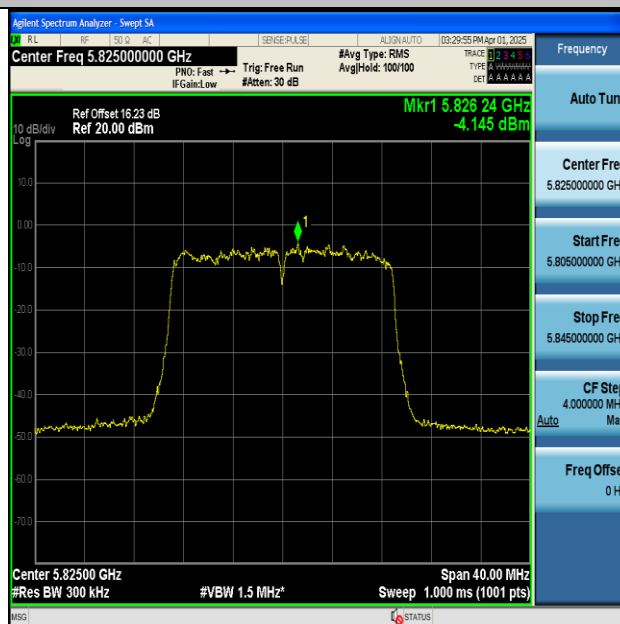
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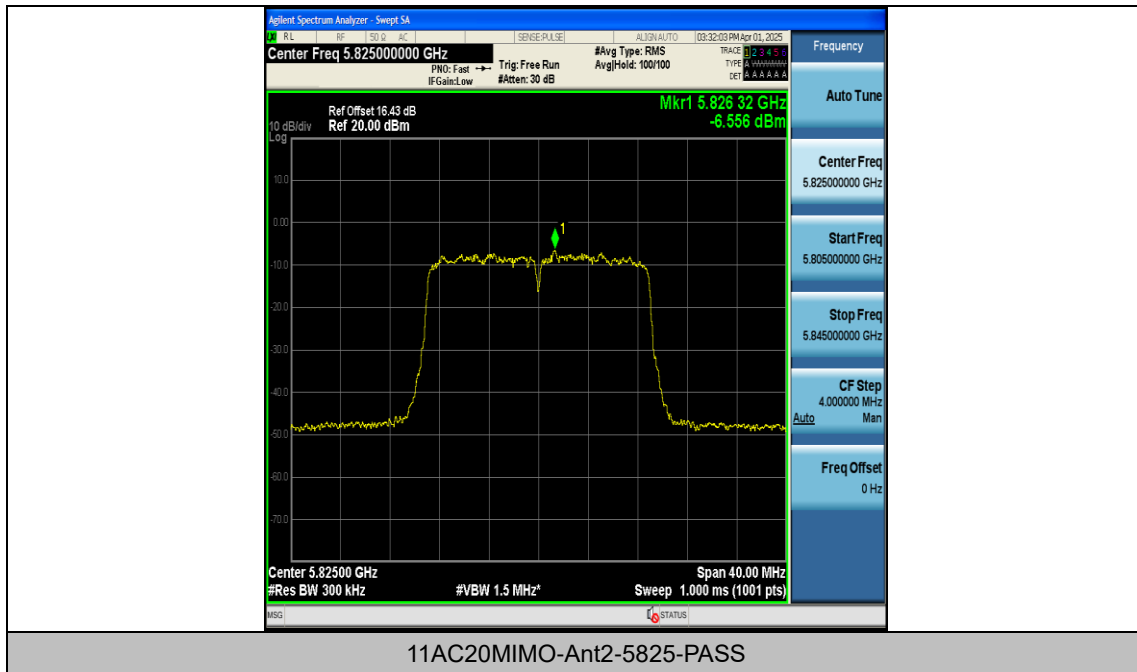
11AC20MIMO-Ant1-5785-PASS



11AC20MIMO-Ant2-5785-PASS



11AC20MIMO-Ant1-5825-PASS



Appendix D: Band edge measurements

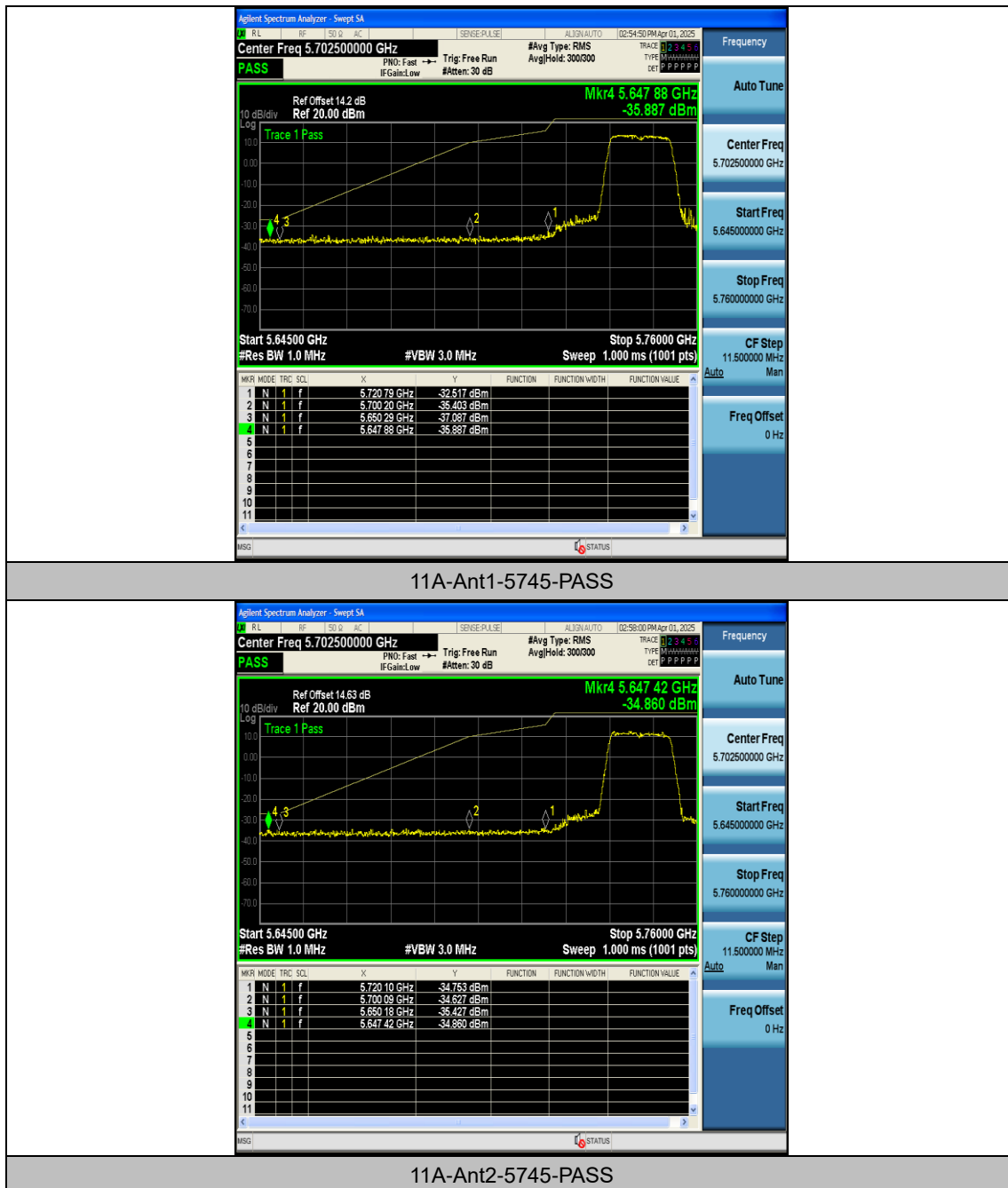
Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Freq. Range [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-32.52	≤17.39	PASS
11A	Ant1	Low	5745	5700~5720	-35.4	≤10.06	PASS
11A	Ant1	Low	5745	5650~5700	-37.09	≤-26.79	PASS
11A	Ant1	Low	5745	5760~5650	-35.89	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-34.75	≤15.82	PASS
11A	Ant2	Low	5745	5700~5720	-34.63	≤10.02	PASS
11A	Ant2	Low	5745	5650~5700	-35.43	≤-26.87	PASS
11A	Ant2	Low	5745	5760~5650	-34.86	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-36.2	≤15.73	PASS
11A	Ant1	High	5825	5855~5875	-35.51	≤10.06	PASS
11A	Ant1	High	5825	5875~5925	-35.61	≤-26.71	PASS
11A	Ant1	High	5825	5925~5935	-34.93	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-35.14	≤16.03	PASS
11A	Ant2	High	5825	5855~5875	-34.77	≤10.06	PASS
11A	Ant2	High	5825	5875~5925	-35.81	≤-26.81	PASS
11A	Ant2	High	5825	5925~5935	-33.94	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5720~5725	-35.01	≤16.87	PASS
11N20MI MO	Ant1	Low	5745	5700~5720	-34.93	≤11.25	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-36.04	≤-26.53	PASS
11N20MI MO	Ant1	Low	5745	5760~5650	-35.52	≤-27	PASS
11N20MI MO	Ant2	Low	5745	5720~5725	-34.97	≤16.60	PASS
11N20MI MO	Ant2	Low	5745	5700~5720	-35.85	≤10.15	PASS
11N20MI MO	Ant2	Low	5745	5650~5700	-35.83	≤-26.53	PASS
11N20MI MO	Ant2	Low	5745	5760~5650	-34.44	≤-27	PASS
11N20MI MO	Ant1	High	5825	5850~5855	-37.1	≤16.03	PASS
11N20MI MO	Ant1	High	5825	5855~5875	-35.63	≤10.44	PASS
11N20MI MO	Ant1	High	5825	5875~5925	-36.65	≤-26.91	PASS
11N20MI MO	Ant1	High	5825	5925~5935	-35.31	≤-27	PASS
11N20MI	Ant2	High	5825	5850~5855	-34.1	≤16.34	PASS

MO							
11N20MI MO	Ant2	High	5825	5855~5875	-35	≤10.63	PASS
11N20MI MO	Ant2	High	5825	5875~5925	-35.62	≤-26.51	PASS
11N20MI MO	Ant2	High	5825	5925~5935	-35	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5720~5725	-35.41	≤16.08	PASS
11AC20M IMO	Ant1	Low	5745	5700~5720	-35.32	≤10.12	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-35.57	≤-26.96	PASS
11AC20M IMO	Ant1	Low	5745	5760~5650	-35.94	≤-27	PASS
11AC20M IMO	Ant2	Low	5745	5720~5725	-35.28	≤15.82	PASS
11AC20M IMO	Ant2	Low	5745	5700~5720	-34.84	≤10.41	PASS
11AC20M IMO	Ant2	Low	5745	5650~5700	-36.19	≤-26.96	PASS
11AC20M IMO	Ant2	Low	5745	5760~5650	-35.67	≤-27	PASS
11AC20M IMO	Ant1	High	5825	5850~5855	-36.27	≤15.73	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-35.44	≤10.10	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-35.09	≤-26.21	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-34.98	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-35.91	≤16.65	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-35.17	≤10.06	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-35.33	≤-26.91	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-35.17	≤-27	PASS

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

Test Graphs





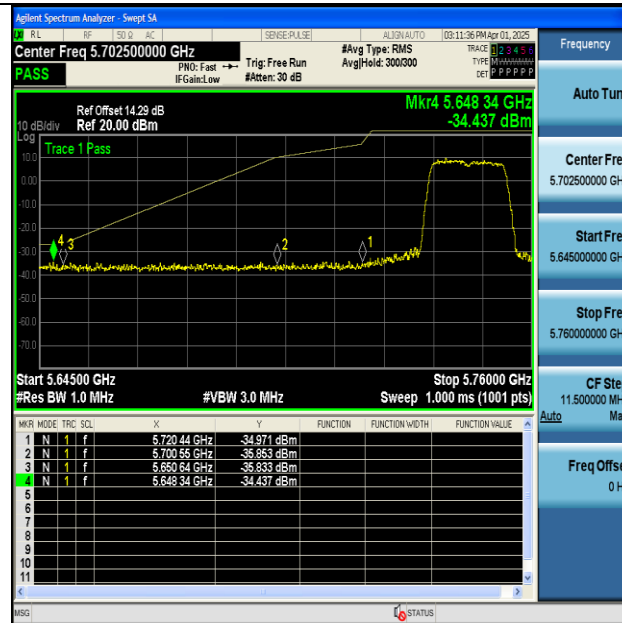
11A-Ant1-5825-PASS



11A-Ant2-5825-PASS



11N20MIMO-Ant1-5745-PASS



11N20MIMO-Ant2-5745-PASS



11N20MIMO-Ant1-5825-PASS



11N20MIMO-Ant2-5825-PASS