

RF Test Data for RLAN(5.2G) (Conducted Measurement)

Product Name: Wifi Pineapple Pager

Trade Mark: /

Test Model: Mk1

FCC ID: 2A52Y-MK1

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 A1: Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	27.240	5165.760	5193.000	---	---
11A	Ant2	5180	24.040	5167.920	5191.960	---	---
11A	Ant1	5200	23.440	5187.920	5211.360	---	---
11A	Ant2	5200	22.680	5188.720	5211.400	---	---
11A	Ant1	5240	19.680	5230.200	5249.880	---	---
11A	Ant2	5240	19.640	5230.240	5249.880	---	---
11N20MIMO	Ant1	5180	22.680	5168.920	5191.600	---	---
11N20MIMO	Ant2	5180	24.240	5167.800	5192.040	---	---
11N20MIMO	Ant1	5200	22.600	5188.880	5211.480	---	---
11N20MIMO	Ant2	5200	23.520	5188.400	5211.920	---	---
11N20MIMO	Ant1	5240	20.200	5230.000	5250.200	---	---
11N20MIMO	Ant2	5240	19.960	5230.120	5250.080	---	---
11N40MIMO	Ant1	5190	40.240	5169.920	5210.160	---	---
11N40MIMO	Ant2	5190	40.560	5170.000	5210.560	---	---
11N40MIMO	Ant1	5230	39.600	5210.160	5249.760	---	---
11N40MIMO	Ant2	5230	39.840	5210.240	5250.080	---	---
11AC20MIMO	Ant1	5180	25.080	5168.280	5193.360	---	---
11AC20MIMO	Ant2	5180	27.240	5166.120	5193.360	---	---
11AC20MIMO	Ant1	5200	24.640	5187.600	5212.240	---	---
11AC20MIMO	Ant2	5200	24.720	5187.760	5212.480	---	---
11AC20MIMO	Ant1	5240	19.960	5230.160	5250.120	---	---
11AC20MIMO	Ant2	5240	19.920	5230.120	5250.040	---	---

11AC40MIMO	Ant1	5190	40.560	5169.920	5210.480	---	---
11AC40MIMO	Ant2	5190	39.840	5170.240	5210.080	---	---
11AC40MIMO	Ant1	5230	41.040	5209.680	5250.720	---	---
11AC40MIMO	Ant2	5230	40.080	5210.160	5250.240	---	---
11AC80MIMO	Ant1	5210	80.480	5169.840	5250.320	---	---
11AC80MIMO	Ant2	5210	79.040	5170.800	5249.840	---	---
11AX20MIMO	Ant1	5180	32.600	5165.600	5198.200	---	---
11AX20MIMO	Ant2	5180	27.080	5169.000	5196.080	---	---
11AX20MIMO	Ant1	5200	24.040	5188.080	5212.120	---	---
11AX20MIMO	Ant2	5200	22.920	5189.280	5212.200	---	---
11AX20MIMO	Ant1	5240	19.920	5230.080	5250.000	---	---
11AX20MIMO	Ant2	5240	19.920	5230.080	5250.000	---	---
11AX40MIMO	Ant1	5190	39.760	5170.240	5210.000	---	---
11AX40MIMO	Ant2	5190	39.680	5170.240	5209.920	---	---
11AX40MIMO	Ant2	5230	39.680	5210.160	5249.840	---	---
11AX40MIMO	Ant1	5230	39.520	5210.400	5249.920	---	---
11AX80MIMO	Ant1	5210	80.480	5169.840	5250.320	---	---
11AX80MIMO	Ant2	5210	80.160	5170.000	5250.160	---	---

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

Test Graphs





11A-Ant1-5200



11A-Ant2-5200



11A-Ant1-5240



11A-Ant2-5240



11N20MIMO-Ant1-5180



11N20MIMO-Ant2-5180



11N20MIMO-Ant1-5200



11N20MIMO-Ant2-5200



11N20MIMO-Ant1-5240



11N20MIMO-Ant2-5240



11N40MIMO-Ant1-5190



11N40MIMO-Ant2-5190



11N40MIMO-Ant1-5230



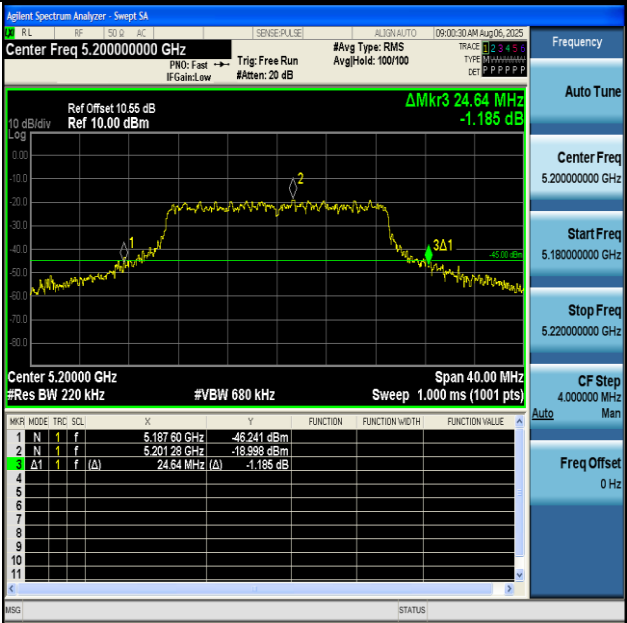
11N40MIMO-Ant2-5230



11AC20MIMO-Ant1-5180



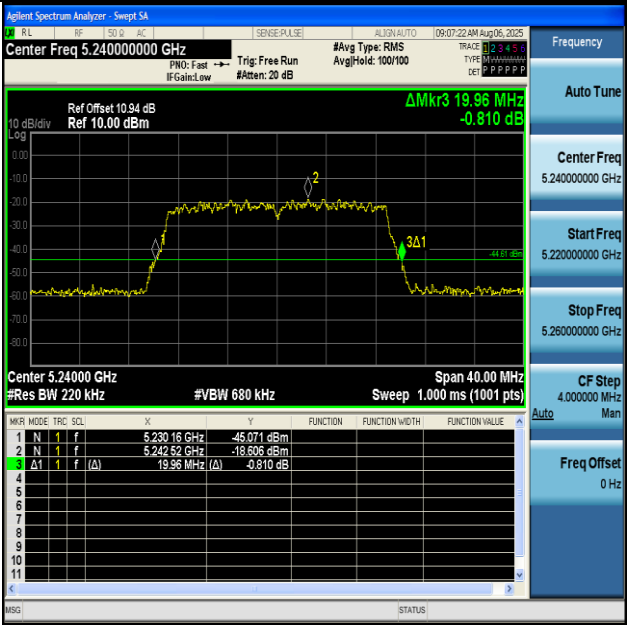
11AC20MIMO-Ant2-5180



11AC20MIMO-Ant1-5200



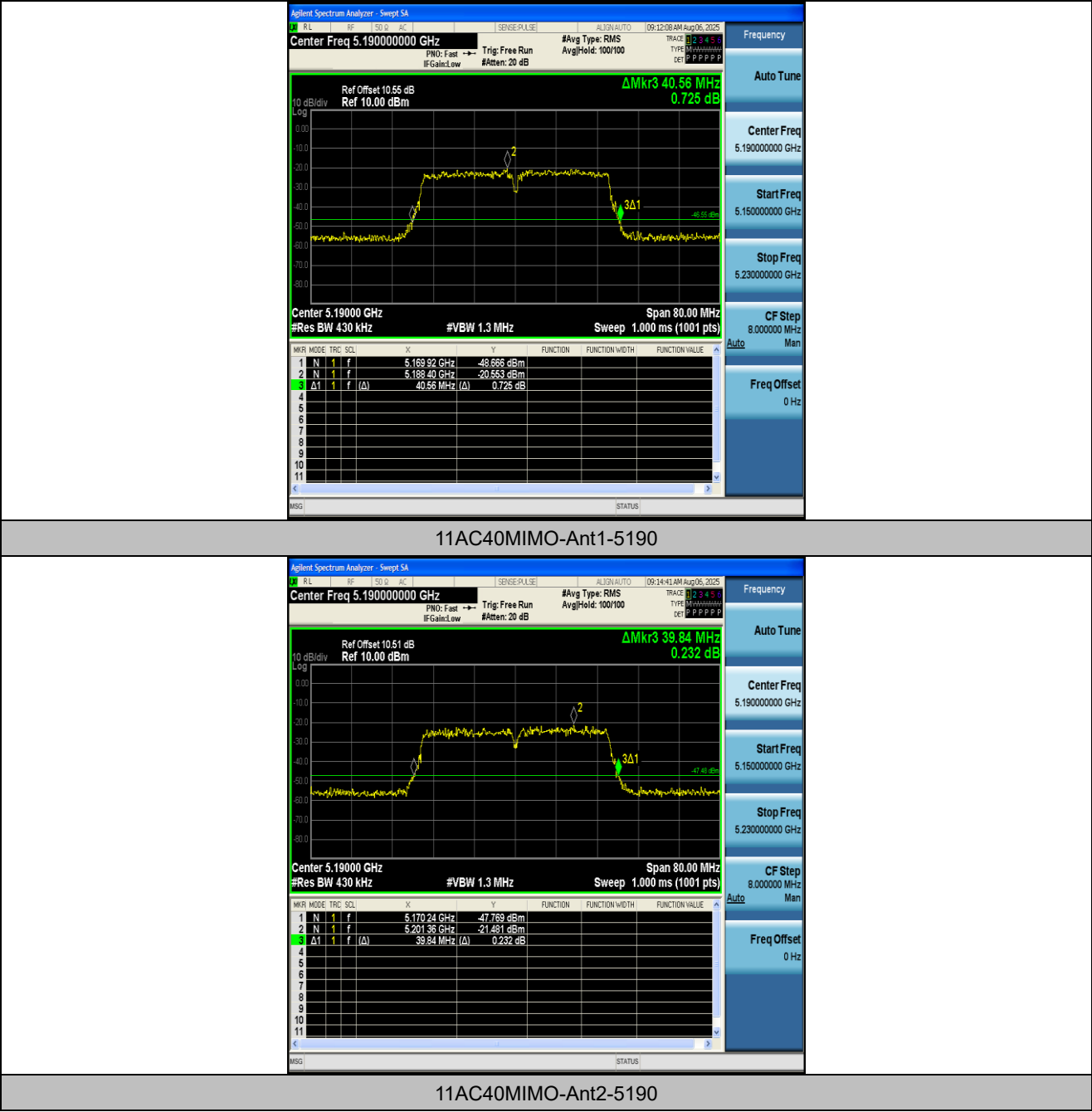
11AC20MIMO-Ant2-5200



11AC20MIMO-Ant1-5240



11AC20MIMO-Ant2-5240

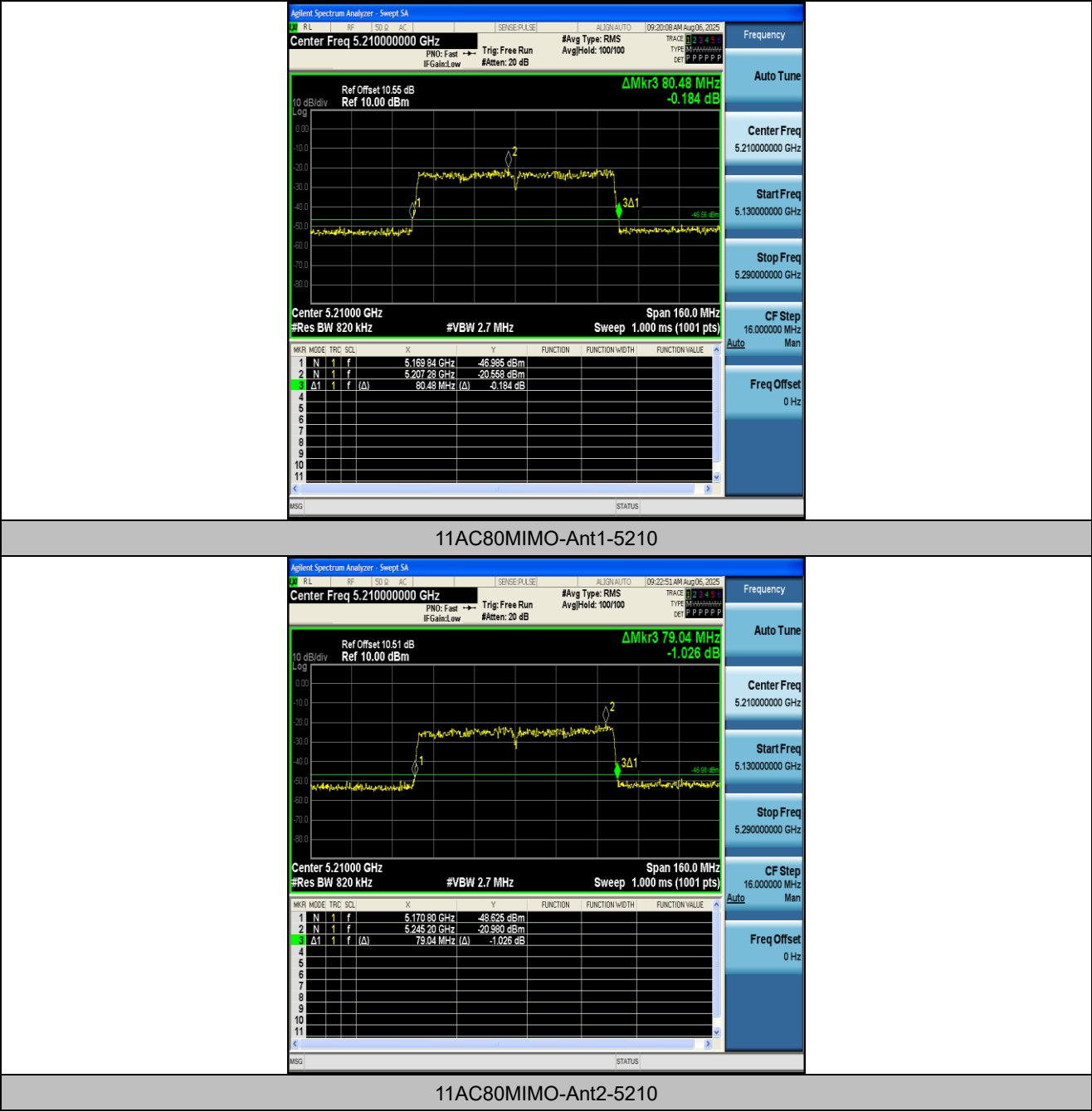


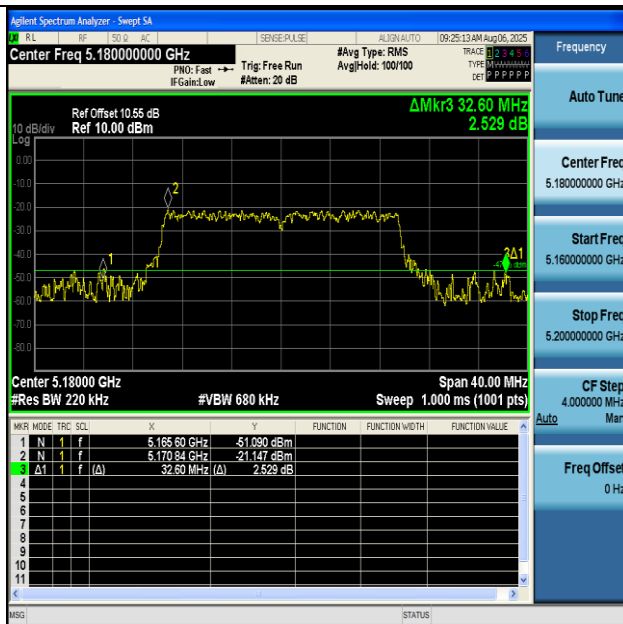


11AC40MIMO-Ant1-5230

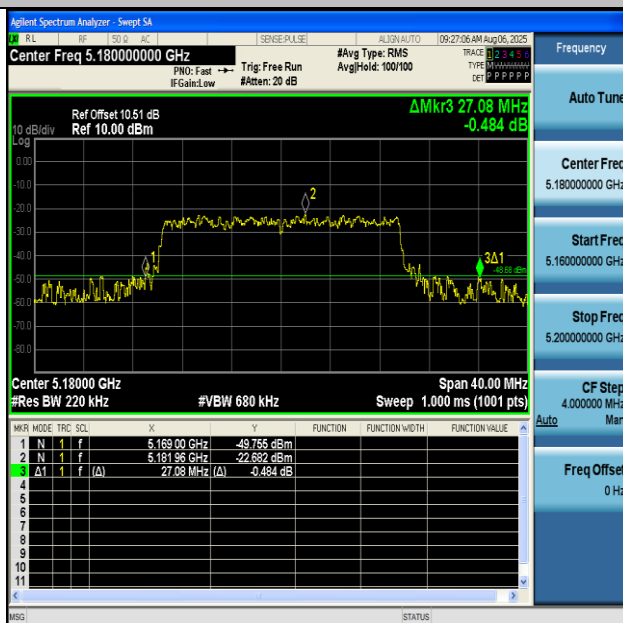


11AC40MIMO-Ant2-5230





11AX20MIMO-Ant1-5180



11AX20MIMO-Ant2-5180



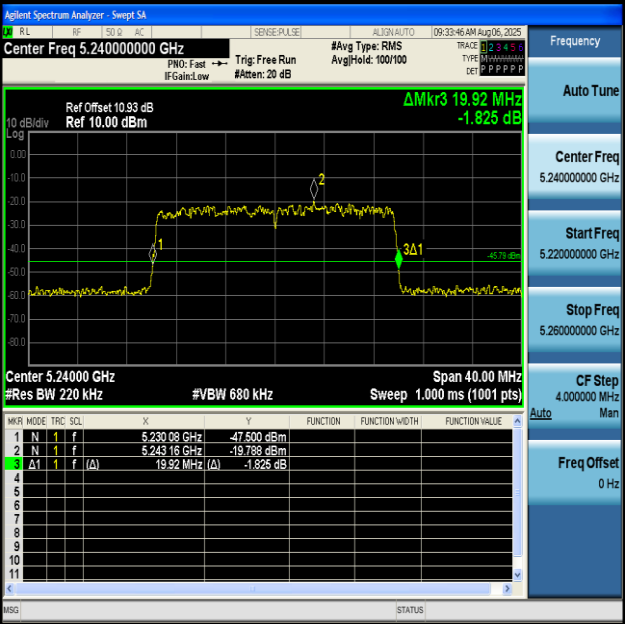
11AX20MIMO-Ant1-5200



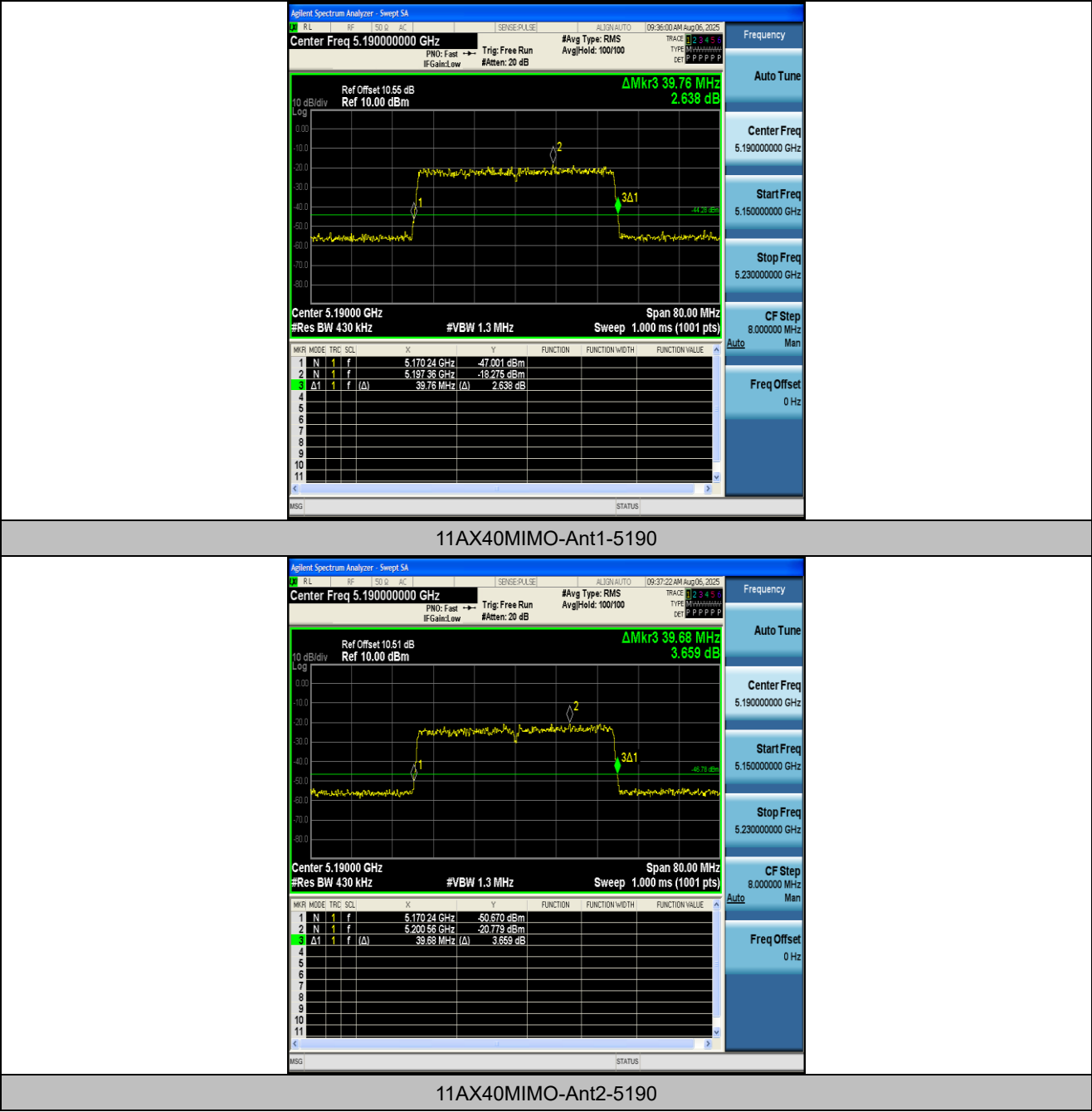
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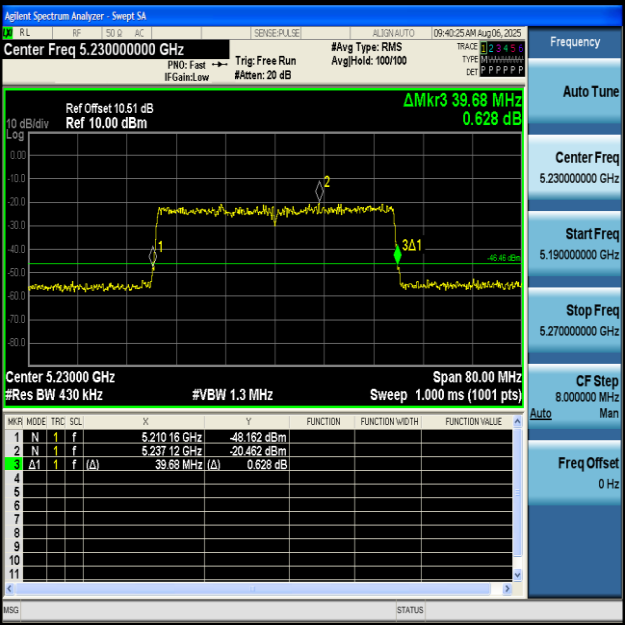


11AX20MIMO-Ant1-5240

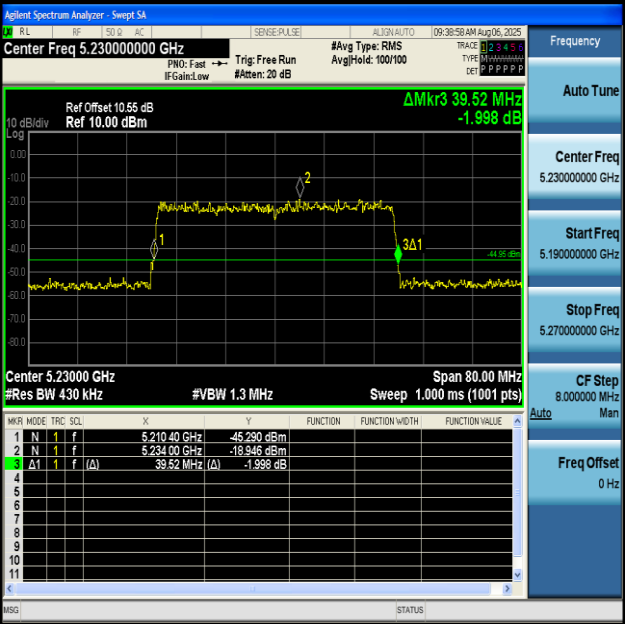


11AX20MIMO-Ant2-5240

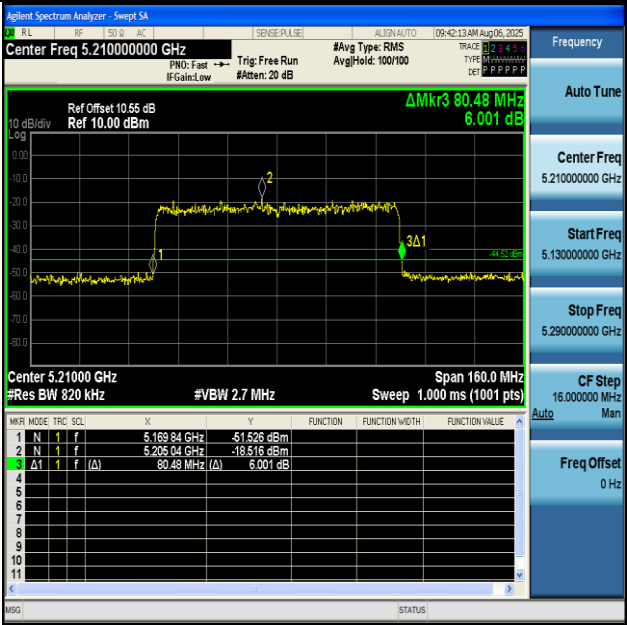




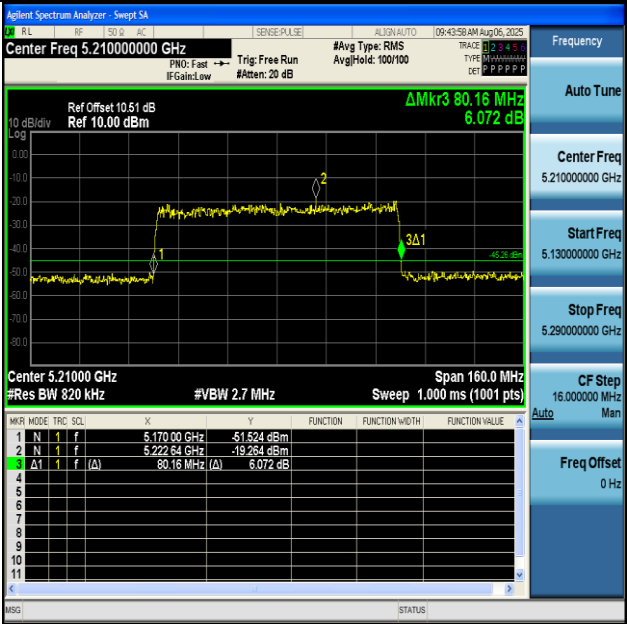
11AX40MIMO-Ant2-5230



11AX40MIMO-Ant1-5230



11AX80MIMO-Ant1-5210



11AX80MIMO-Ant2-5210

Appendix A2: Occupied channel bandwidth

Test Result

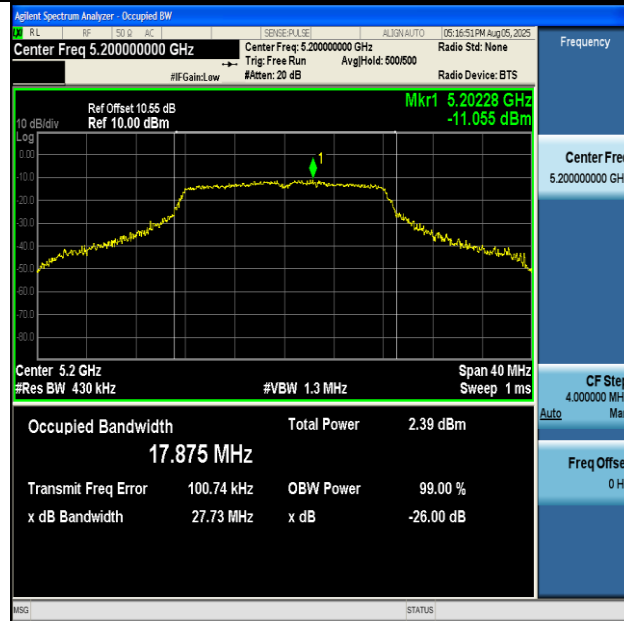
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	18.317	5170.7839	5189.1009	---	---
11A	Ant2	5180	17.650	5171.2088	5188.8588	---	---
11A	Ant1	5200	17.875	5191.1632	5209.0382	---	---
11A	Ant2	5200	17.326	5191.4554	5208.7814	---	---
11A	Ant1	5240	16.843	5231.6436	5248.4866	---	---
11A	Ant2	5240	16.658	5231.7391	5248.3971	---	---
11N20MIMO	Ant1	5180	18.554	5170.7231	5189.2771	---	---
11N20MIMO	Ant2	5180	18.545	5170.8031	5189.3481	---	---
11N20MIMO	Ant1	5200	18.292	5190.8903	5209.1823	---	---
11N20MIMO	Ant2	5200	18.324	5190.9561	5209.2801	---	---
11N20MIMO	Ant1	5240	17.771	5231.1852	5248.9562	---	---
11N20MIMO	Ant2	5240	17.782	5231.1673	5248.9493	---	---
11N40MIMO	Ant1	5190	36.087	5172.0661	5208.1531	---	---
11N40MIMO	Ant2	5190	36.055	5172.1261	5208.1811	---	---
11N40MIMO	Ant1	5230	36.030	5212.1052	5248.1352	---	---
11N40MIMO	Ant2	5230	36.096	5212.0578	5248.1538	---	---
11AC20MIMO	Ant1	5180	18.717	5170.6002	5189.3172	---	---
11AC20MIMO	Ant2	5180	18.715	5170.7153	5189.4303	---	---
11AC20MIMO	Ant1	5200	18.480	5190.8531	5209.3331	---	---
11AC20MIMO	Ant2	5200	18.430	5190.8817	5209.3117	---	---
11AC20MIMO	Ant1	5240	17.875	5231.1150	5248.9900	---	---
11AC20MIMO	Ant2	5240	17.861	5231.1531	5249.0141	---	---
11AC40MIMO	Ant1	5190	36.596	5171.8032	5208.3992	---	---
11AC40MIMO	Ant2	5190	36.417	5171.9386	5208.3556	---	---
11AC40MIMO	Ant1	5230	36.656	5211.7690	5248.4250	---	---
11AC40MIMO	Ant2	5230	36.542	5211.8918	5248.4338	---	---
11AC80MIMO	Ant1	5210	76.510	5172.0552	5248.5652	---	---
11AC80MIMO	Ant2	5210	76.400	5172.0958	5248.4958	---	---
11AX20MIMO	Ant1	5180	19.379	5170.3110	5189.6900	---	---
11AX20MIMO	Ant2	5180	19.330	5170.3774	5189.7074	---	---
11AX20MIMO	Ant1	5200	19.228	5190.4059	5209.6339	---	---
11AX20MIMO	Ant2	5200	19.224	5190.4238	5209.6478	---	---
11AX20MIMO	Ant1	5240	19.030	5230.5281	5249.5581	---	---
11AX20MIMO	Ant2	5240	18.987	5230.5588	5249.5458	---	---
11AX40MIMO	Ant1	5190	37.989	5171.0941	5209.0831	---	---
11AX40MIMO	Ant2	5190	38.002	5171.1047	5209.1067	---	---
11AX40MIMO	Ant1	5230	38.085	5211.0571	5249.1421	---	---

11AX40MIMO	Ant2	5230	38.046	5211.0887	5249.1347	---	---
11AX80MIMO	Ant1	5210	77.839	5171.2478	5249.0868	---	---
11AX80MIMO	Ant2	5210	77.736	5171.4868	5249.2228	---	---

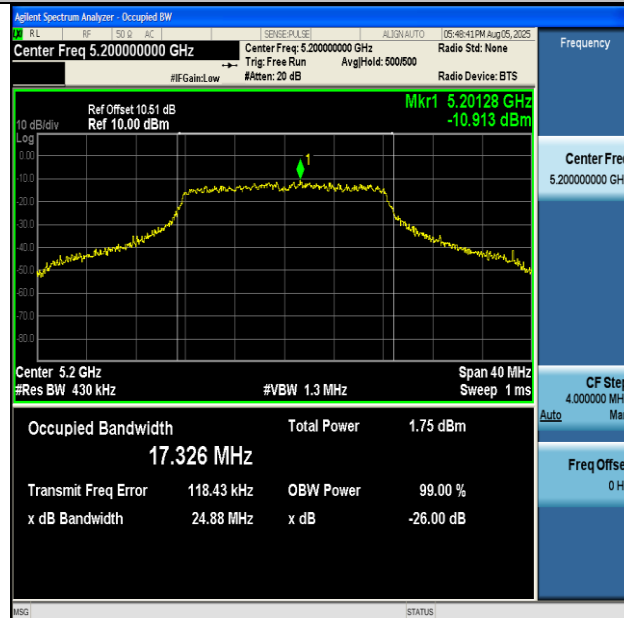
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

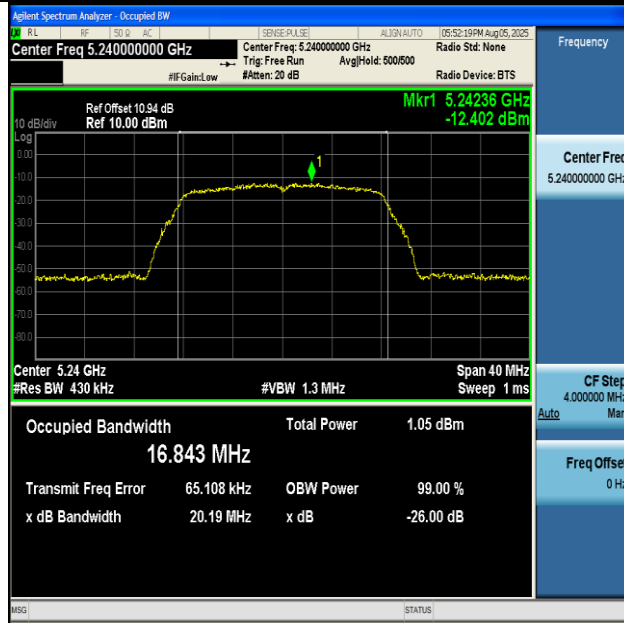




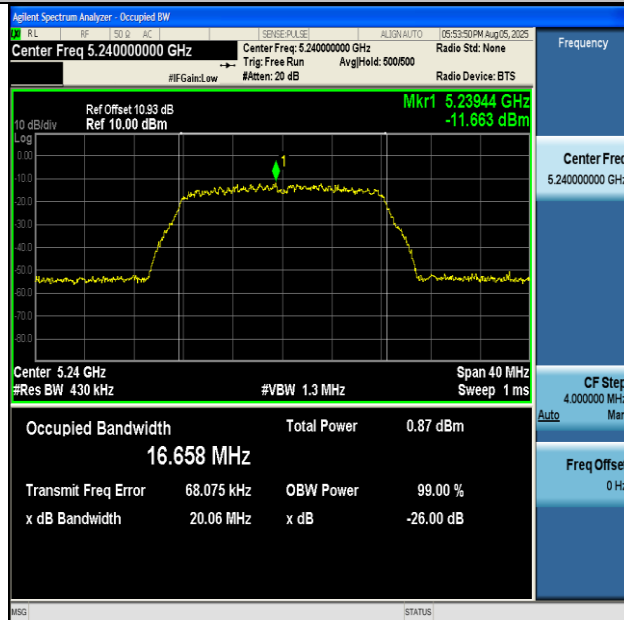
11A-Ant1-5200



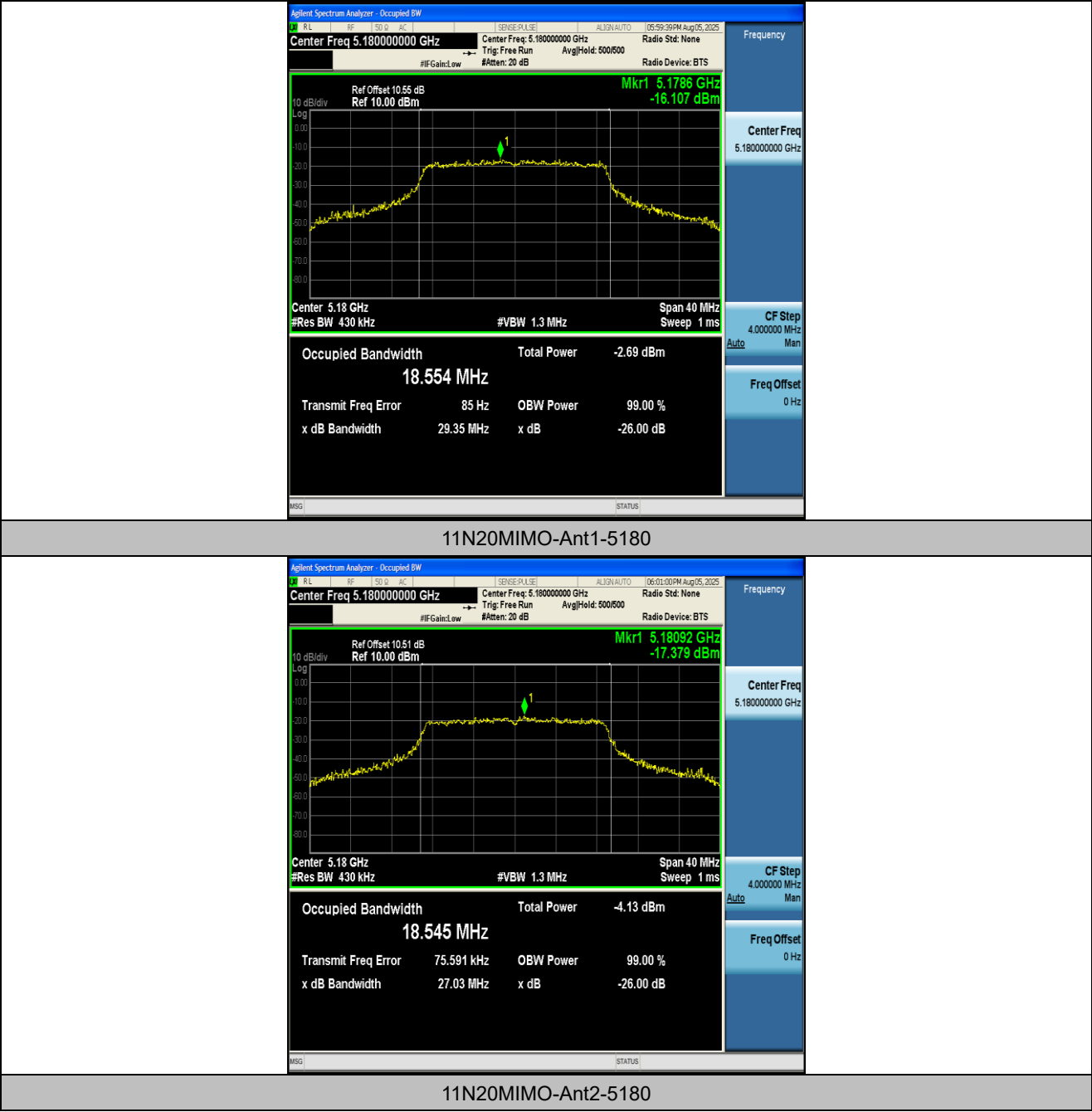
11A-Ant2-5200

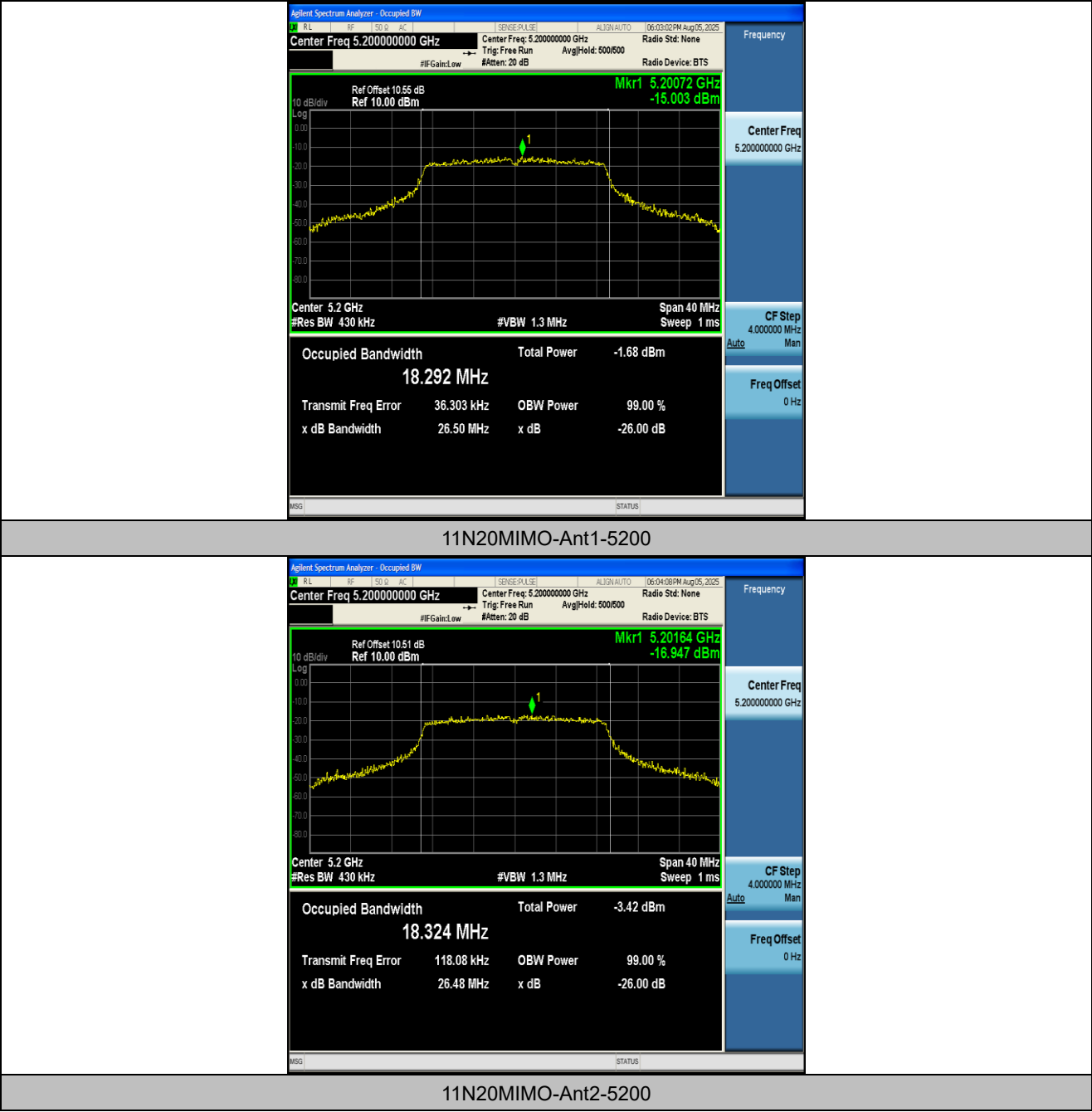


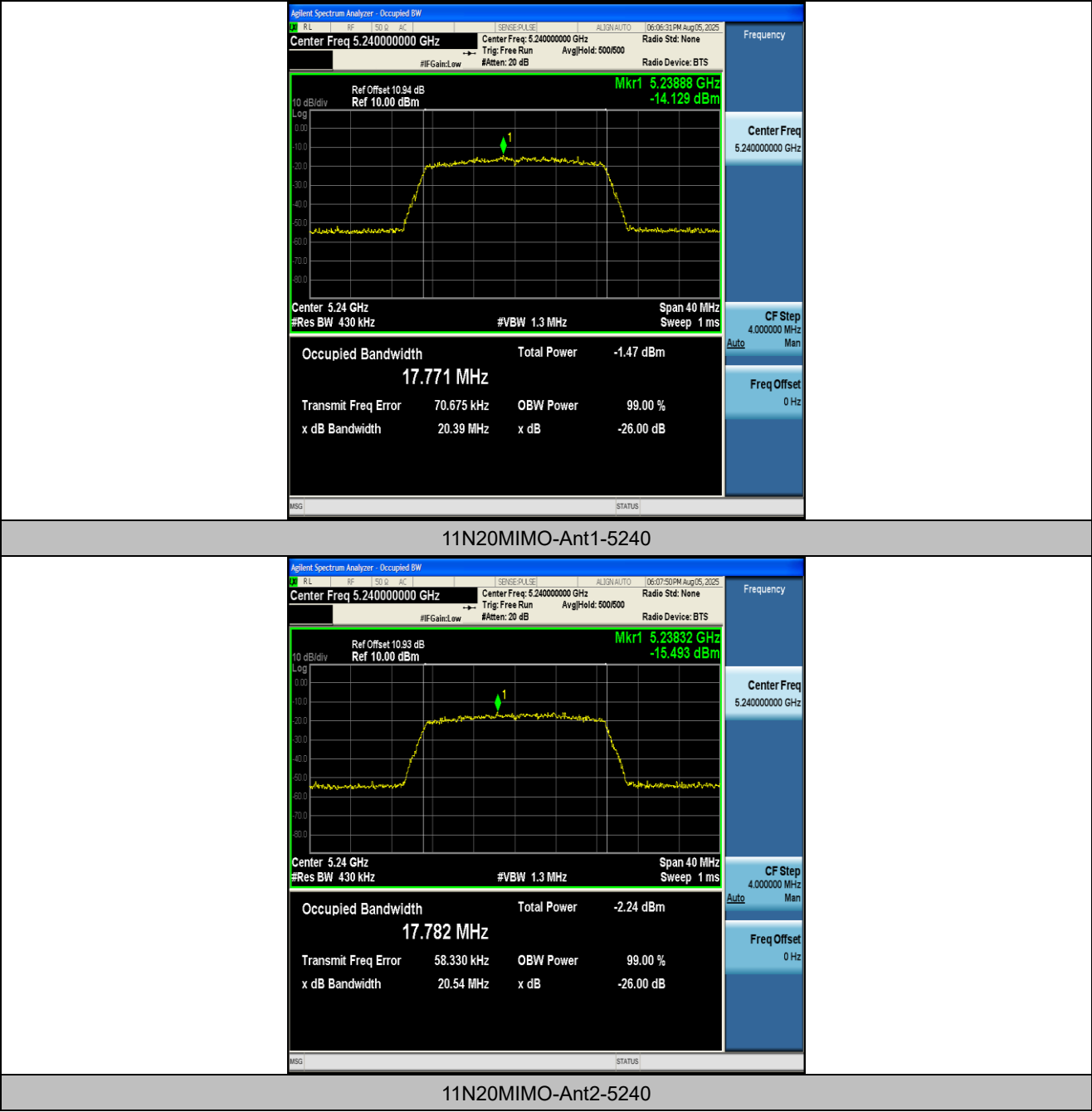
11A-Ant1-5240

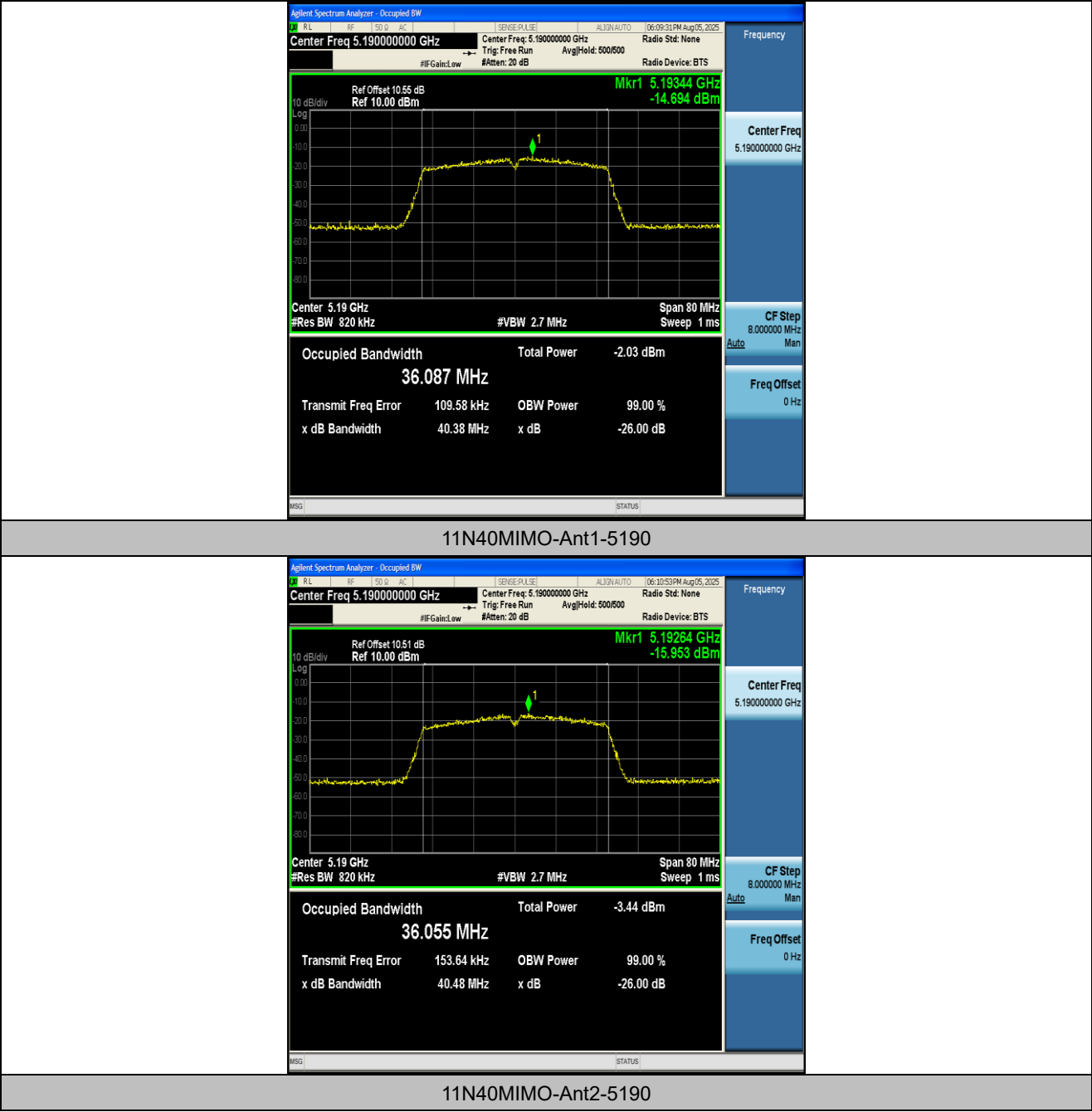


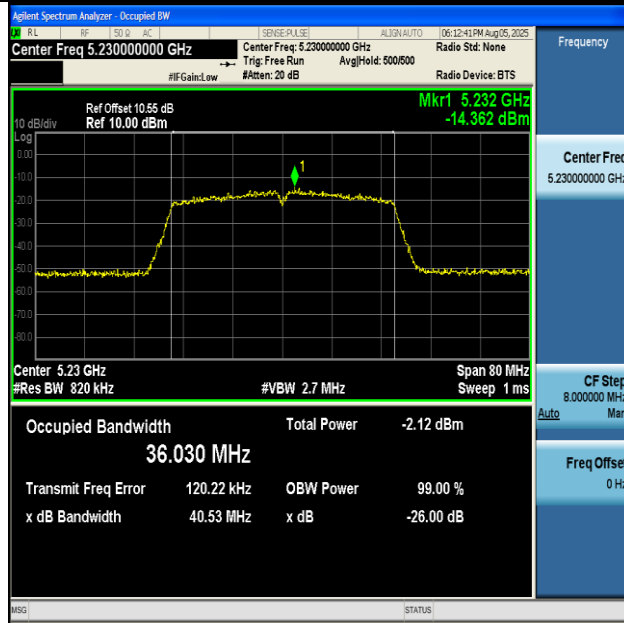
11A-Ant2-5240



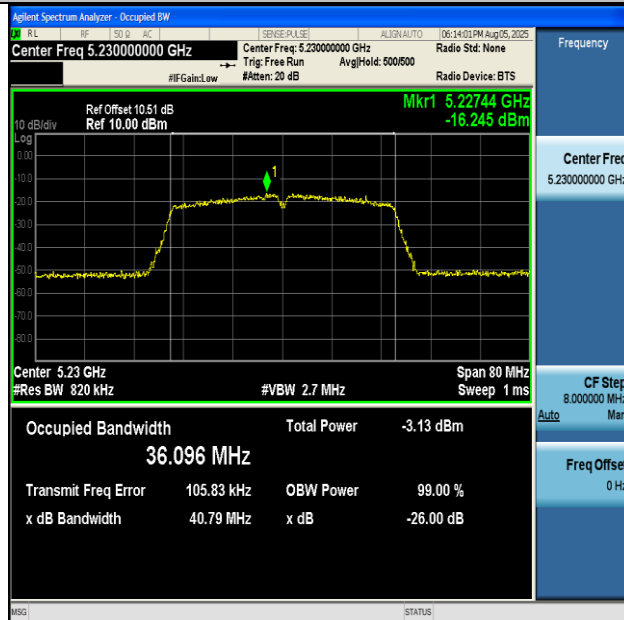




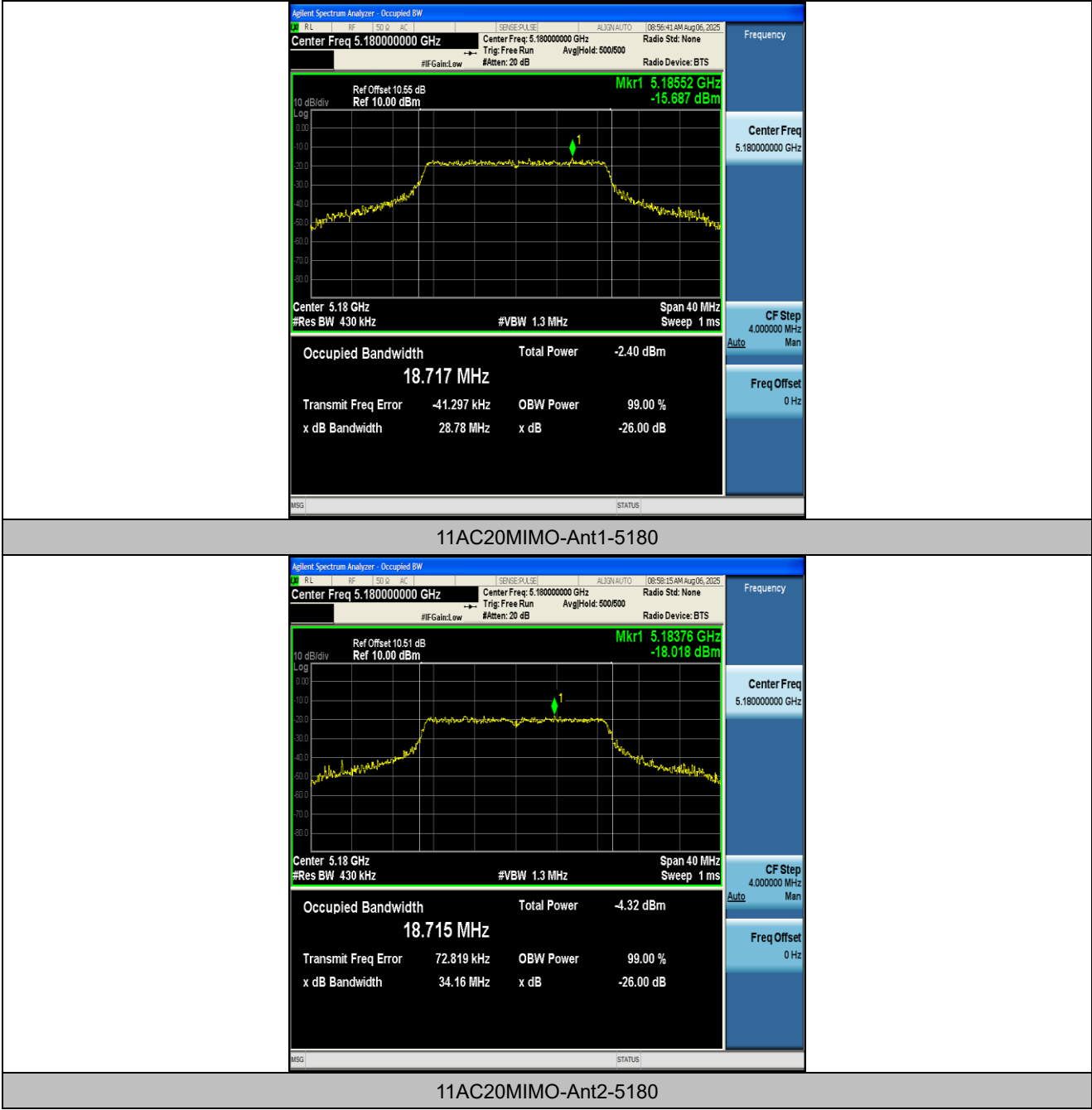




11N40MIMO-Ant1-5230



11N40MIMO-Ant2-5230

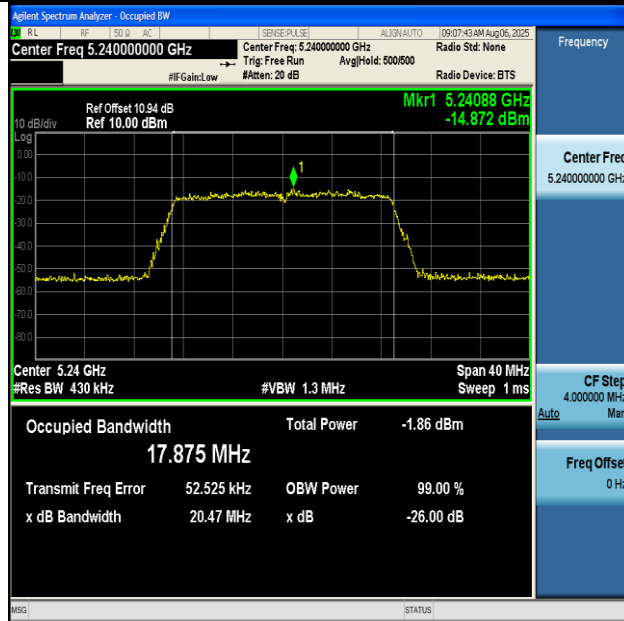




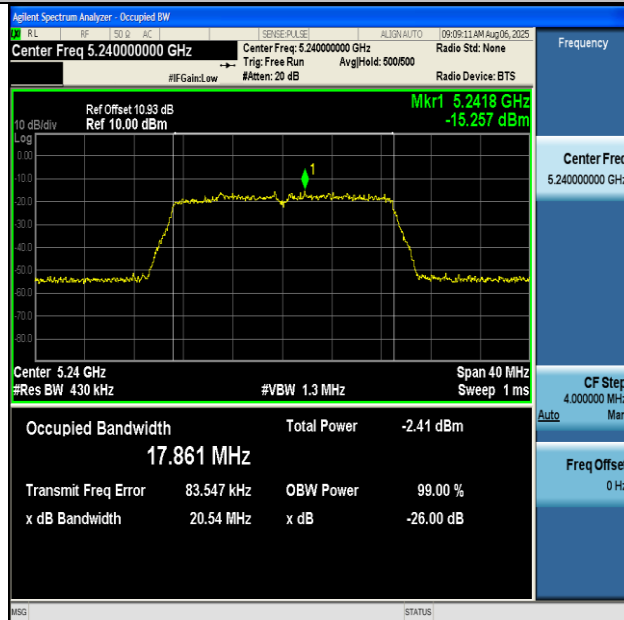
11AC20MIMO-Ant1-5200



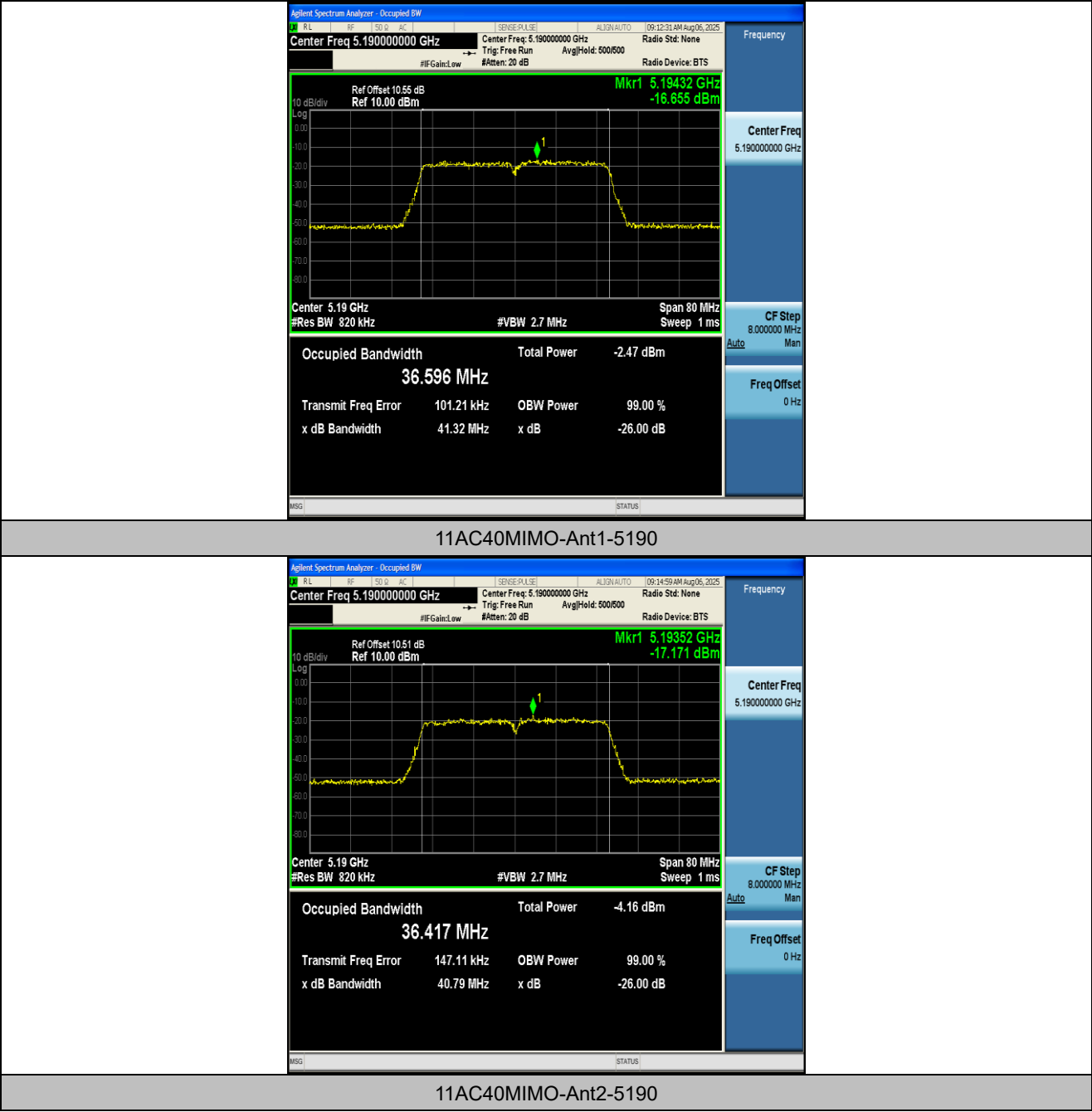
11AC20MIMO-Ant2-5200

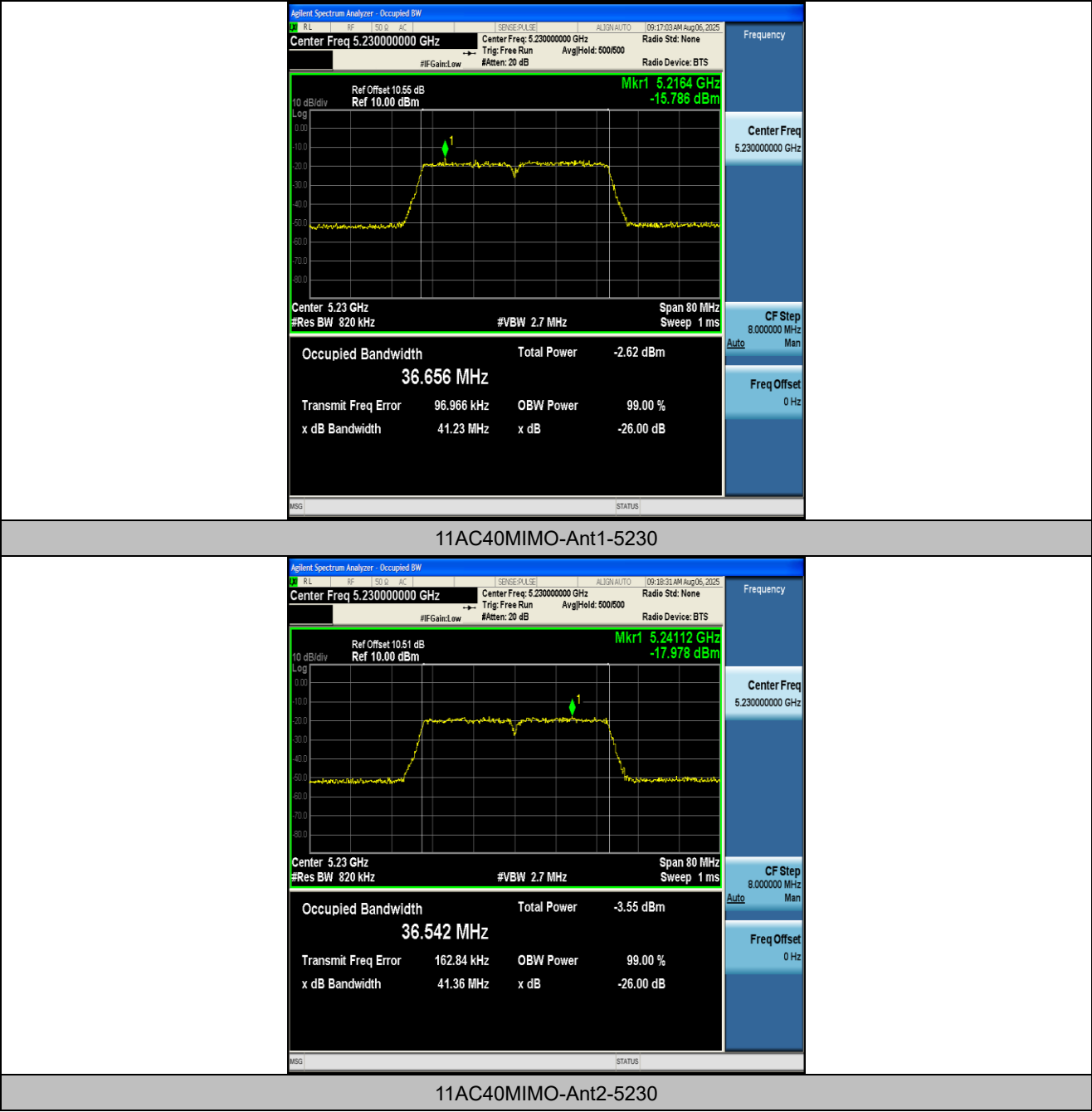


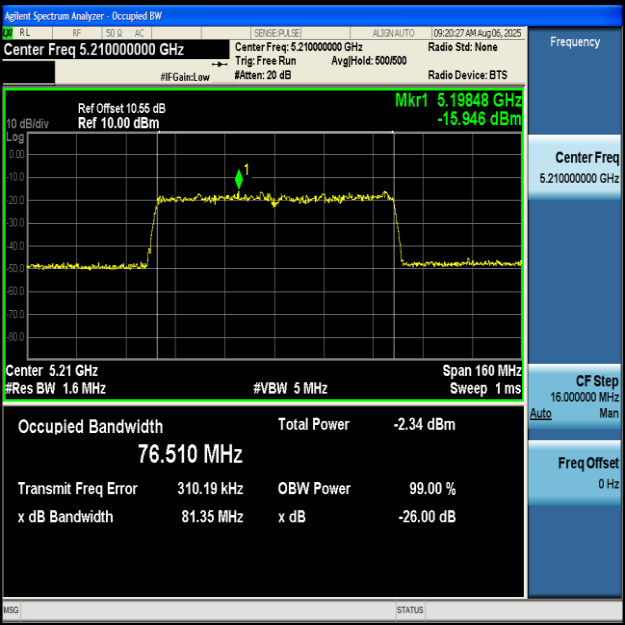
11AC20MIMO-Ant1-5240



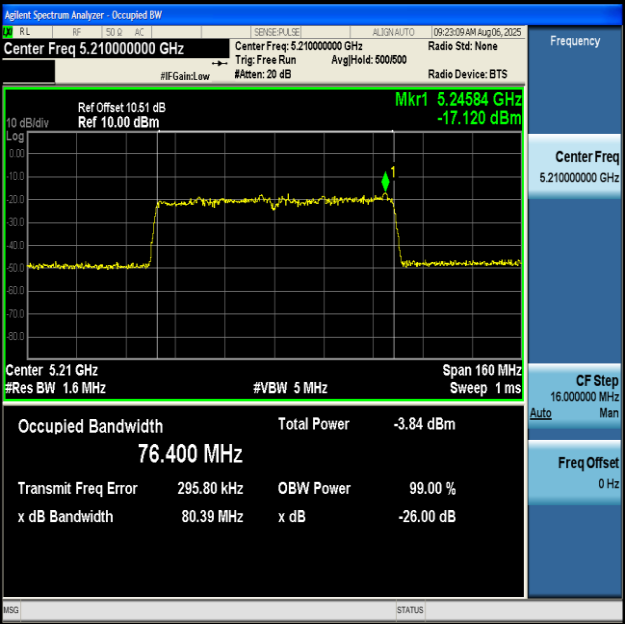
11AC20MIMO-Ant2-5240



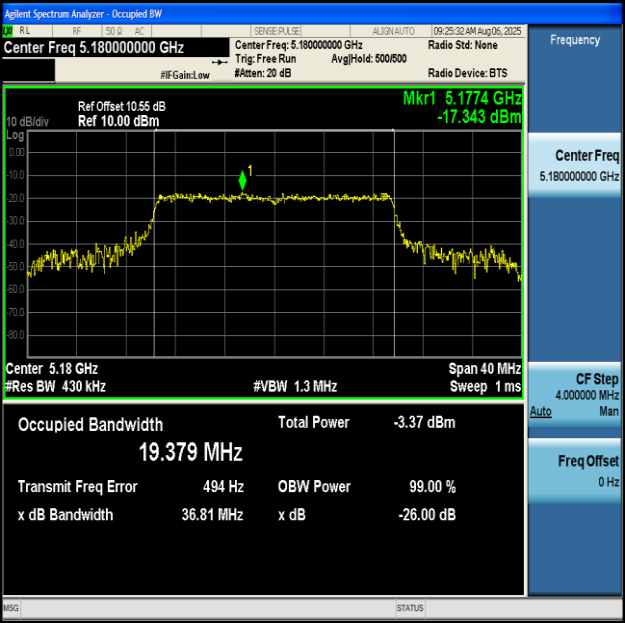




11AC80MIMO-Ant1-5210



11AC80MIMO-Ant2-5210



11AX20MIMO-Ant1-5180



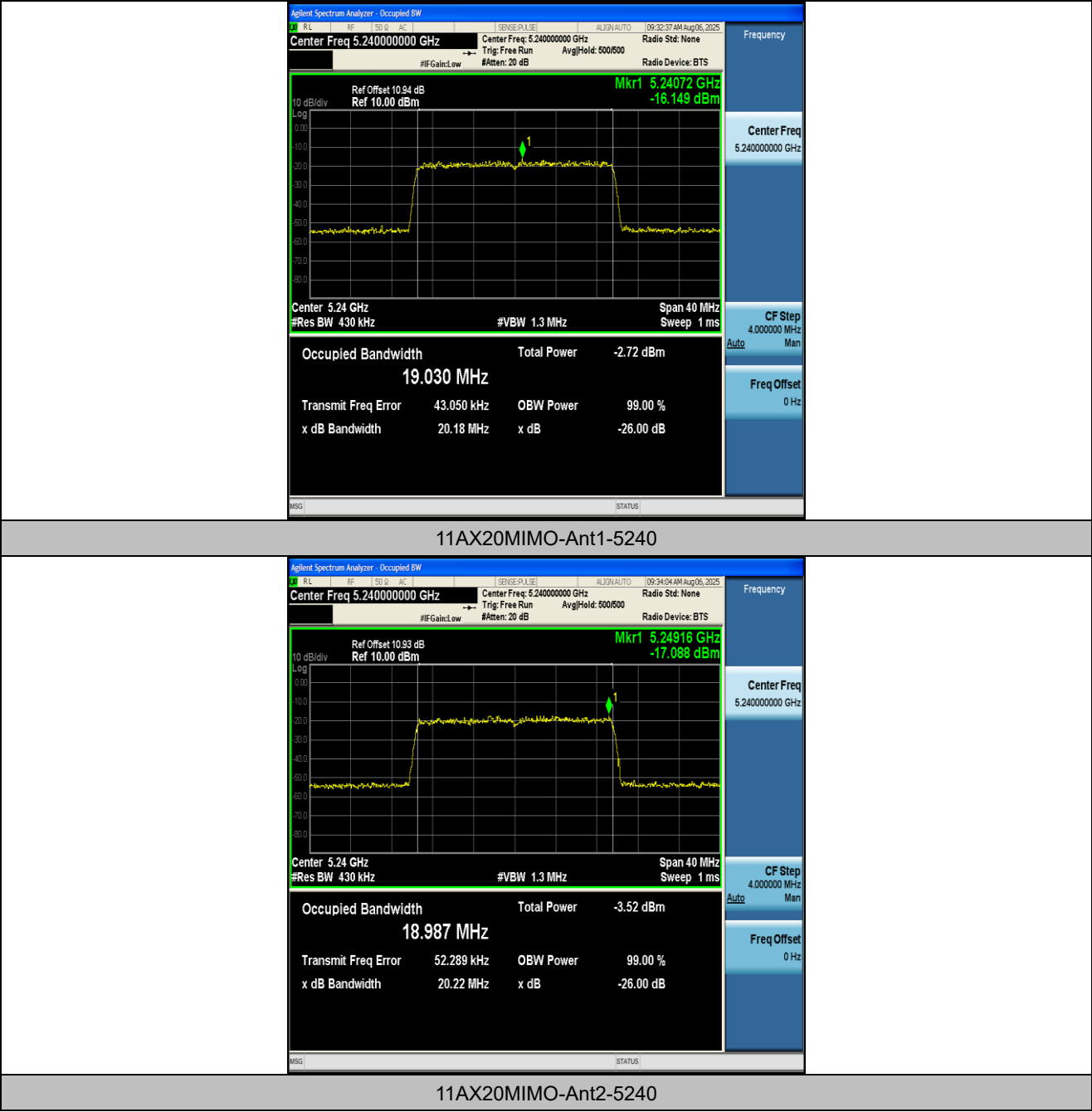
11AX20MIMO-Ant2-5180

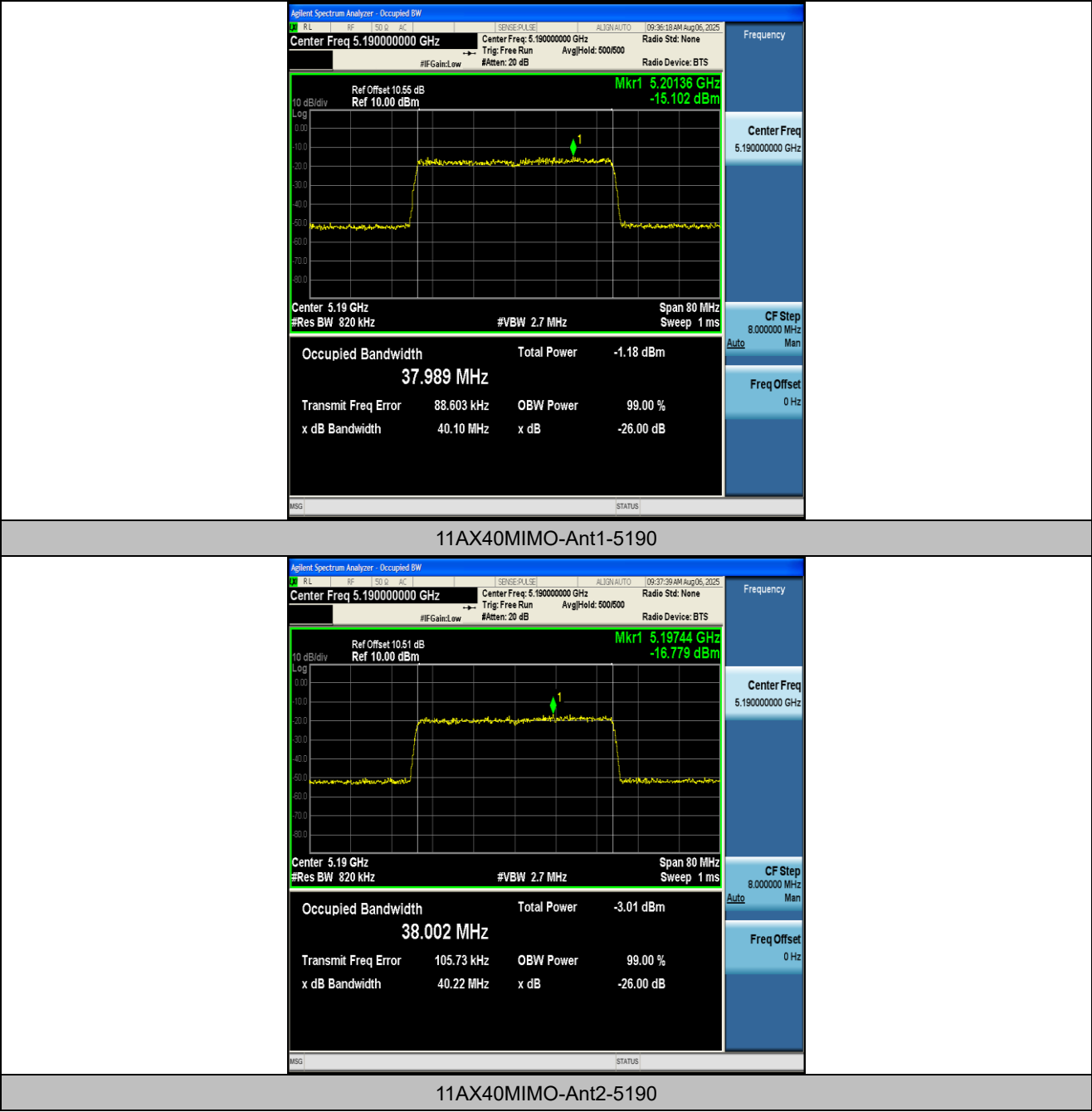


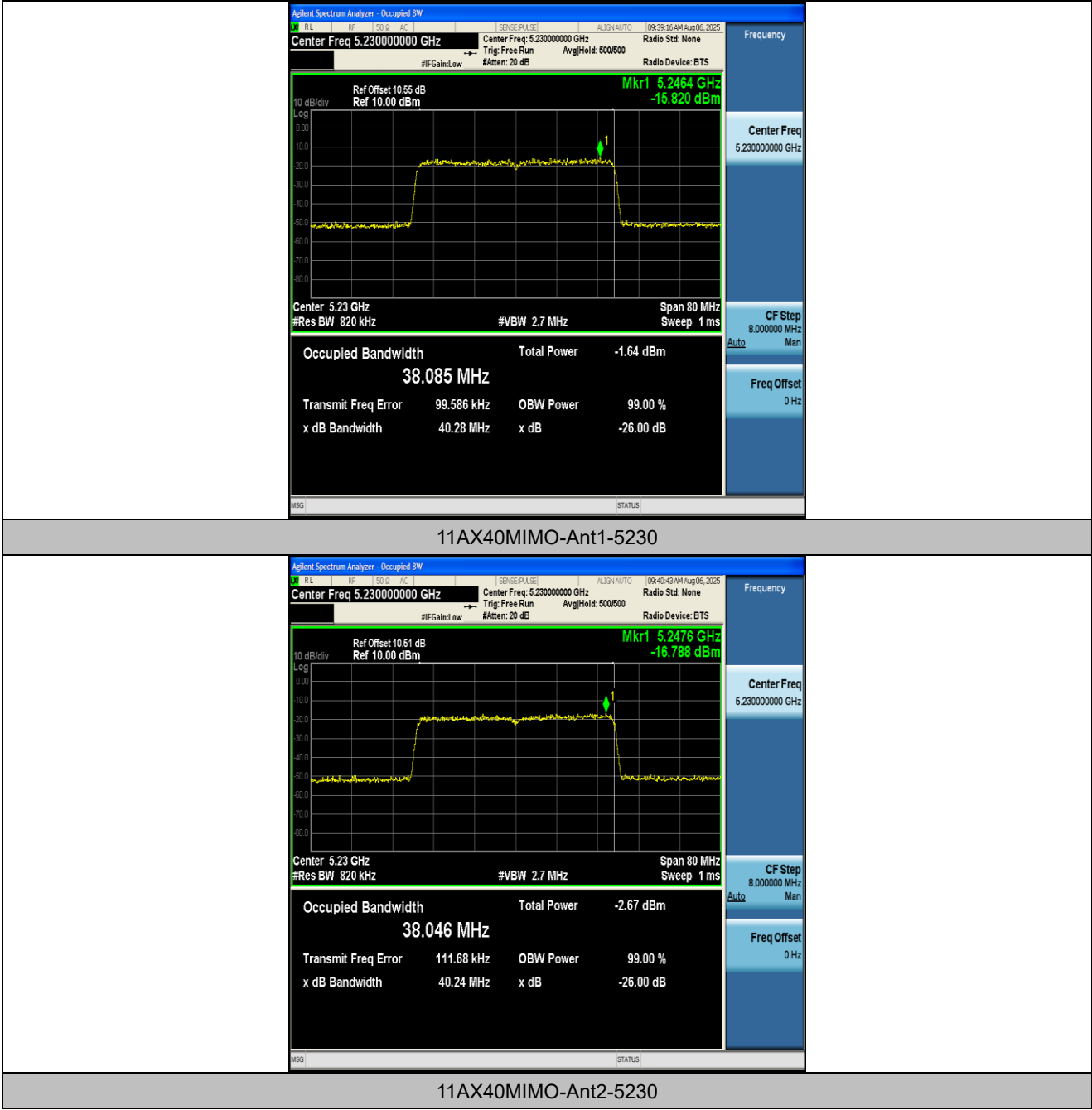
11AX20MIMO-Ant1-5200

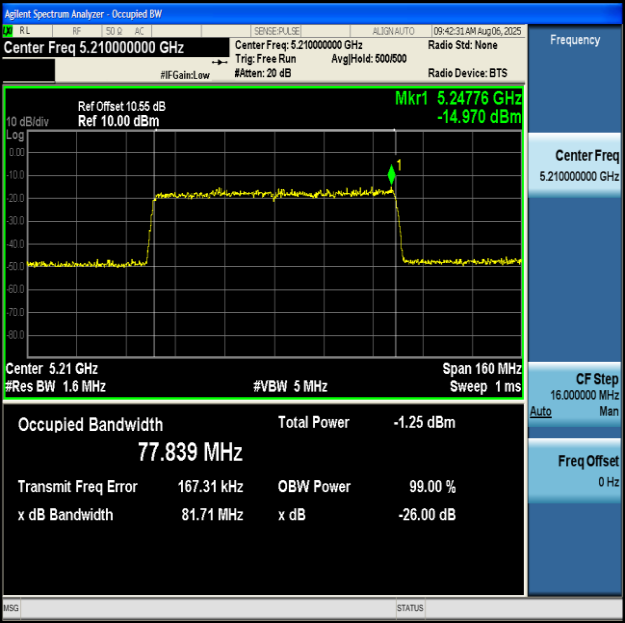


11AX20MIMO-Ant2-5200

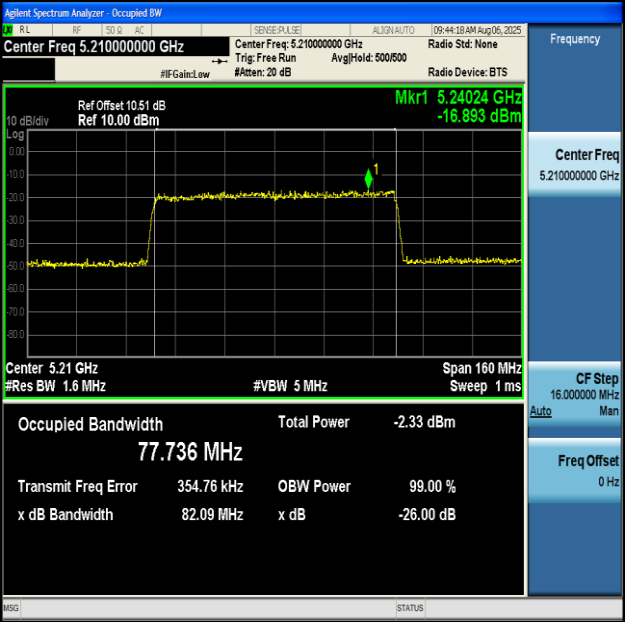








11AX80MIMO-Ant1-5210



11AX80MIMO-Ant2-5210

Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5180	-4.80	≤23.98	PASS
11A	Ant2	5180	-6.27	≤23.98	PASS
11A	Ant1	5200	-4.31	≤23.98	PASS
11A	Ant2	5200	-5.67	≤23.98	PASS
11A	Ant1	5240	-5.60	≤23.98	PASS
11A	Ant2	5240	-6.42	≤23.98	PASS
11N20MIMO	Ant1	5180	-9.42	≤23.98	PASS
11N20MIMO	Ant2	5180	-11.14	≤23.98	PASS
11N20MIMO	total	5180	-7.19	≤23.98	PASS
11N20MIMO	Ant1	5200	-8.50	≤23.98	PASS
11N20MIMO	Ant2	5200	-10.29	≤23.98	PASS
11N20MIMO	total	5200	-6.29	≤23.98	PASS
11N20MIMO	Ant1	5240	-8.21	≤23.98	PASS
11N20MIMO	Ant2	5240	-9.04	≤23.98	PASS
11N20MIMO	total	5240	-5.59	≤23.98	PASS
11N40MIMO	Ant1	5190	-9.56	≤23.98	PASS
11N40MIMO	Ant2	5190	-11.14	≤23.98	PASS
11N40MIMO	total	5190	-7.27	≤23.98	PASS
11N40MIMO	Ant1	5230	-9.29	≤23.98	PASS
11N40MIMO	Ant2	5230	-10.13	≤23.98	PASS
11N40MIMO	total	5230	-6.68	≤23.98	PASS
11AC20MIMO	Ant2	5180	-11.08	≤23.98	PASS
11AC20MIMO	total	5180	-6.96	≤23.98	PASS
11AC20MIMO	Ant1	5180	-9.09	≤23.98	PASS
11AC20MIMO	Ant1	5200	-8.45	≤23.98	PASS
11AC20MIMO	Ant2	5200	-10.00	≤23.98	PASS
11AC20MIMO	total	5200	-6.15	≤23.98	PASS
11AC20MIMO	Ant1	5240	-8.57	≤23.98	PASS
11AC20MIMO	Ant2	5240	-8.80	≤23.98	PASS
11AC20MIMO	total	5240	-5.67	≤23.98	PASS
11AC40MIMO	Ant1	5190	-9.46	≤23.98	PASS
11AC40MIMO	Ant2	5190	-11.31	≤23.98	PASS
11AC40MIMO	total	5190	-7.28	≤23.98	PASS
11AC40MIMO	Ant1	5230	-9.68	≤23.98	PASS
11AC40MIMO	Ant2	5230	-10.06	≤23.98	PASS
11AC40MIMO	total	5230	-6.86	≤23.98	PASS
11AC80MIMO	Ant1	5210	-9.99	≤23.98	PASS

11AC80MIMO	Ant2	5210	-11.65	≤23.98	PASS
11AC80MIMO	total	5210	-7.73	≤23.98	PASS
11AX20MIMO	Ant1	5180	-10.84	≤23.98	PASS
11AX20MIMO	Ant2	5180	-12.15	≤23.98	PASS
11AX20MIMO	total	5180	-8.44	≤23.98	PASS
11AX20MIMO	Ant1	5200	-10.18	≤23.98	PASS
11AX20MIMO	Ant2	5200	-11.54	≤23.98	PASS
11AX20MIMO	total	5200	-7.80	≤23.98	PASS
11AX20MIMO	Ant2	5240	-10.60	≤23.98	PASS
11AX20MIMO	total	5240	-7.42	≤23.98	PASS
11AX20MIMO	Ant1	5240	-10.27	≤23.98	PASS
11AX40MIMO	Ant1	5190	-8.46	≤23.98	PASS
11AX40MIMO	Ant2	5190	-10.62	≤23.98	PASS
11AX40MIMO	total	5190	-6.40	≤23.98	PASS
11AX40MIMO	Ant1	5230	-9.26	≤23.98	PASS
11AX40MIMO	Ant2	5230	-9.94	≤23.98	PASS
11AX40MIMO	total	5230	-6.58	≤23.98	PASS
11AX80MIMO	Ant1	5210	-8.96	≤23.98	PASS
11AX80MIMO	Ant2	5210	-10.74	≤23.98	PASS
11AX80MIMO	total	5210	-6.75	≤23.98	PASS

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

Appendix C: Maximum power spectral density

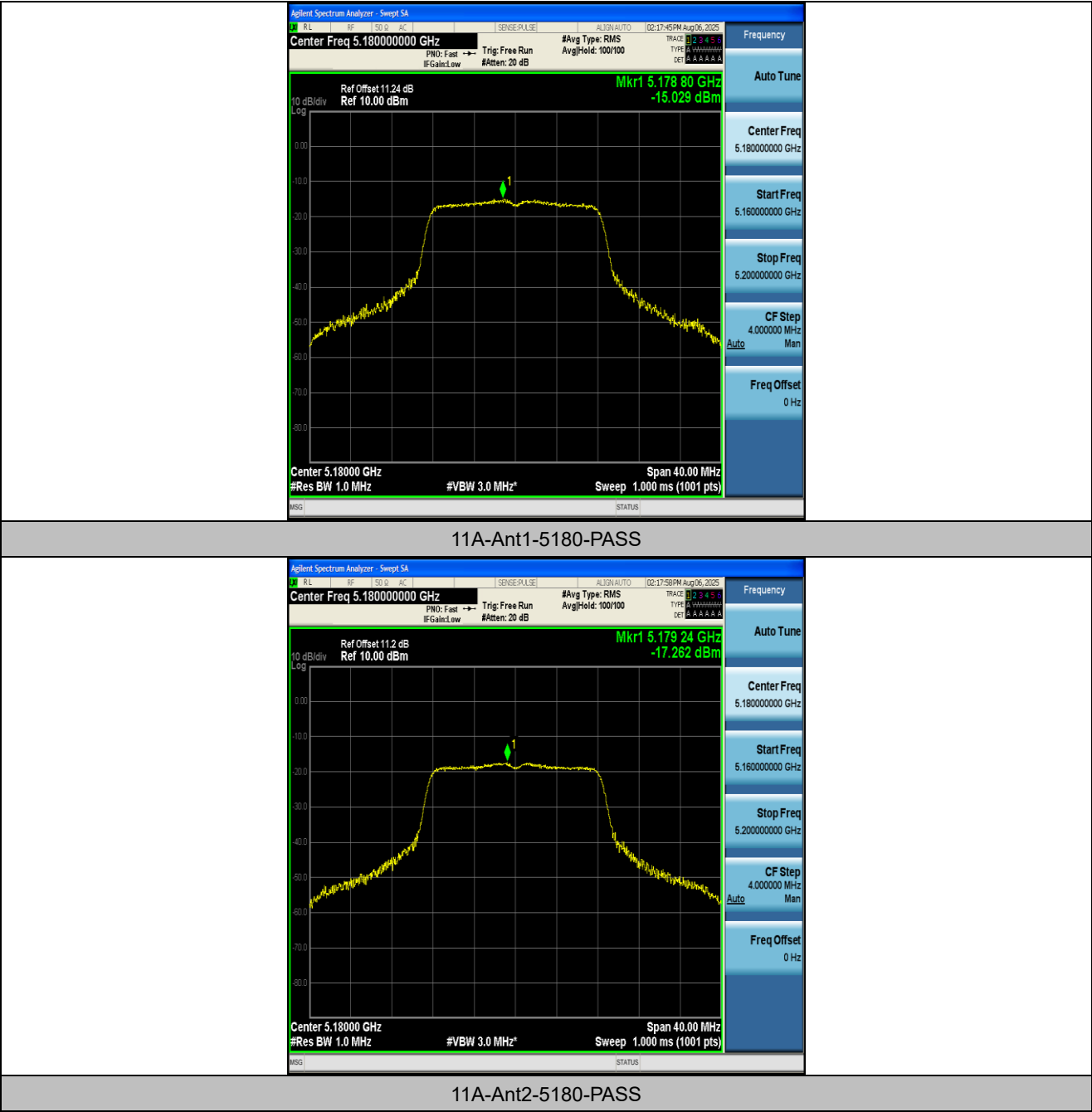
Test Result

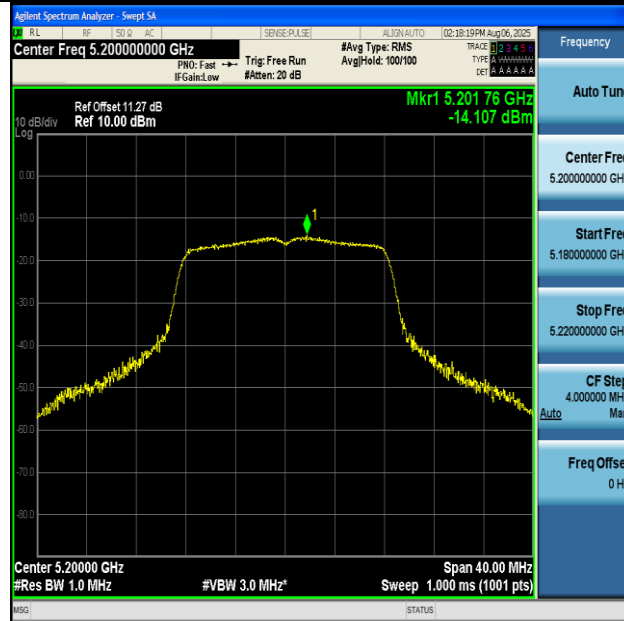
Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	-15.03	≤11.00	PASS
11A	Ant2	5180	-17.26	≤11.00	PASS
11A	Ant1	5200	-14.11	≤11.00	PASS
11A	Ant2	5200	-15.82	≤11.00	PASS
11A	Ant1	5240	-13.89	≤11.00	PASS
11A	Ant2	5240	-14.72	≤11.00	PASS
11N20MIMO	Ant1	5180	-21.83	≤11.00	PASS
11N20MIMO	Ant2	5180	-23.18	≤11.00	PASS
11N20MIMO	total	5180	-19.44	≤11.00	PASS
11N20MIMO	Ant1	5200	-20.18	≤11.00	PASS
11N20MIMO	Ant2	5200	-22.37	≤11.00	PASS
11N20MIMO	total	5200	-18.13	≤11.00	PASS
11N20MIMO	Ant1	5240	-20.38	≤11.00	PASS
11N20MIMO	Ant2	5240	-21.67	≤11.00	PASS
11N20MIMO	total	5240	-17.97	≤11.00	PASS
11N40MIMO	Ant1	5190	-24.21	≤11.00	PASS
11N40MIMO	Ant2	5190	-26.07	≤11.00	PASS
11N40MIMO	total	5190	-22.03	≤11.00	PASS
11N40MIMO	Ant1	5230	-22.85	≤11.00	PASS
11N40MIMO	Ant2	5230	-23.34	≤11.00	PASS
11N40MIMO	total	5230	-20.08	≤11.00	PASS
11AC20MIMO	Ant1	5180	-20.18	≤11.00	PASS
11AC20MIMO	Ant2	5180	-21.92	≤11.00	PASS
11AC20MIMO	total	5180	-17.95	≤11.00	PASS
11AC20MIMO	Ant1	5200	-18.89	≤11.00	PASS
11AC20MIMO	Ant2	5200	-20.04	≤11.00	PASS
11AC20MIMO	total	5200	-16.42	≤11.00	PASS
11AC20MIMO	Ant1	5240	-18.71	≤11.00	PASS
11AC20MIMO	Ant2	5240	-18.46	≤11.00	PASS
11AC20MIMO	total	5240	-15.57	≤11.00	PASS
11AC40MIMO	Ant1	5190	-22.59	≤11.00	PASS
11AC40MIMO	Ant2	5190	-24.18	≤11.00	PASS
11AC40MIMO	total	5190	-20.30	≤11.00	PASS
11AC40MIMO	Ant1	5230	-23.74	≤11.00	PASS
11AC40MIMO	Ant2	5230	-22.56	≤11.00	PASS
11AC40MIMO	total	5230	-20.10	≤11.00	PASS
11AC80MIMO	Ant1	5210	-26.38	≤11.00	PASS

11AC80MIMO	Ant2	5210	-27.98	≤11.00	PASS
11AC80MIMO	total	5210	-24.10	≤11.00	PASS
11AX20MIMO	Ant1	5180	-24.15	≤11.00	PASS
11AX20MIMO	Ant2	5180	-24.54	≤11.00	PASS
11AX20MIMO	total	5180	-21.33	≤11.00	PASS
11AX20MIMO	Ant1	5200	-22.96	≤11.00	PASS
11AX20MIMO	Ant2	5200	-24.34	≤11.00	PASS
11AX20MIMO	total	5200	-20.59	≤11.00	PASS
11AX20MIMO	Ant2	5240	-23.49	≤11.00	PASS
11AX20MIMO	total	5240	-20.09	≤11.00	PASS
11AX20MIMO	Ant1	5240	-22.74	≤11.00	PASS
11AX40MIMO	Ant1	5190	-24.03	≤11.00	PASS
11AX40MIMO	Ant2	5190	-25.58	≤11.00	PASS
11AX40MIMO	total	5190	-21.73	≤11.00	PASS
11AX40MIMO	Ant1	5230	-23.81	≤11.00	PASS
11AX40MIMO	Ant2	5230	-25.00	≤11.00	PASS
11AX40MIMO	total	5230	-21.35	≤11.00	PASS
11AX80MIMO	Ant1	5210	-27.72	≤11.00	PASS
11AX80MIMO	Ant2	5210	-28.75	≤11.00	PASS
11AX80MIMO	total	5210	-25.19	≤11.00	PASS

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

Test Graphs





11A-Ant1-5200-PASS



11A-Ant2-5200-PASS