

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

Product Name: Motorcycle DVR Dash Camera

Trade Mark: HFK

Test Model: HM603

FCC ID: 2BFHY-HM603

Environmental Conditions

Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

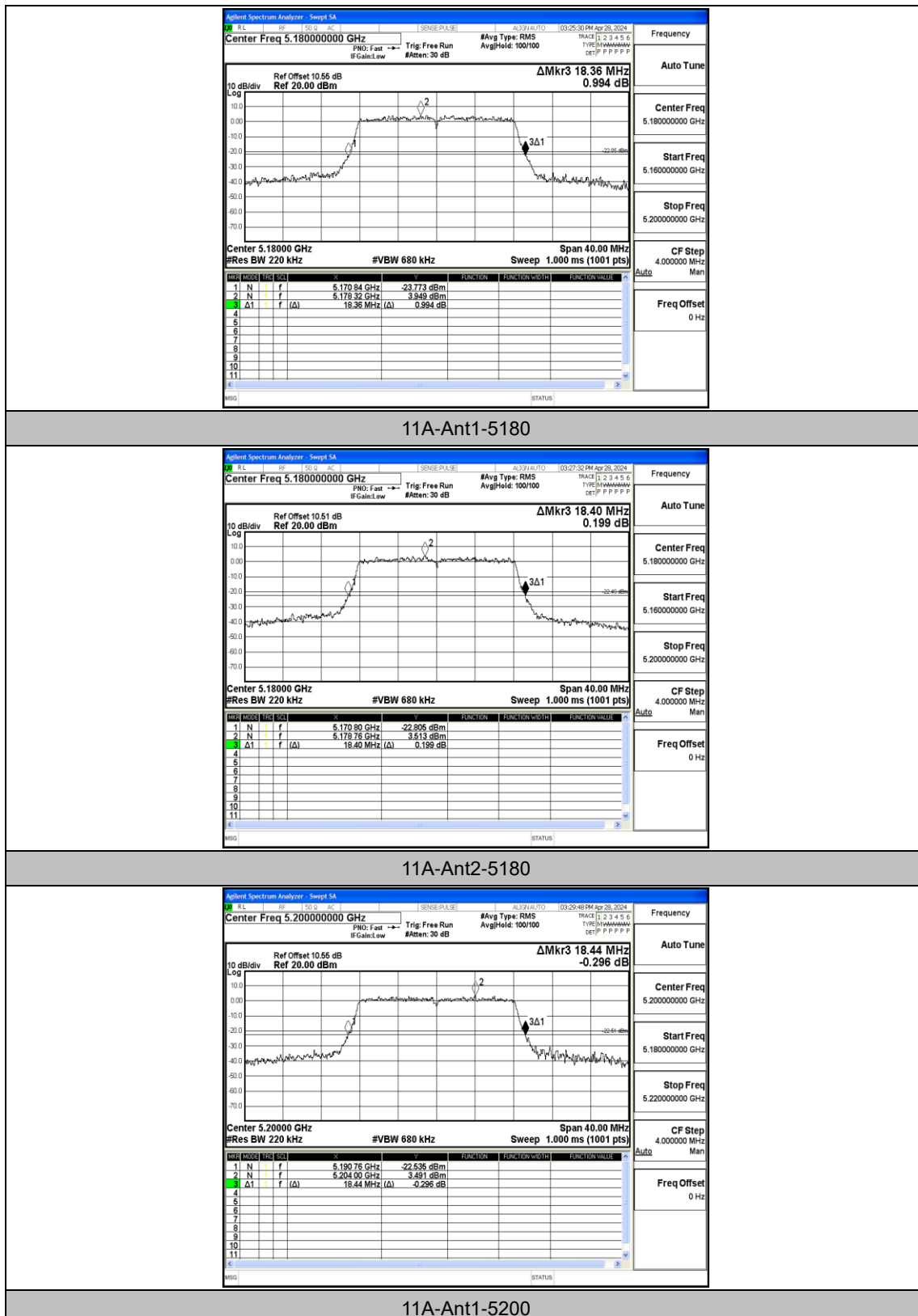
Appendix A1: Emission Bandwidth

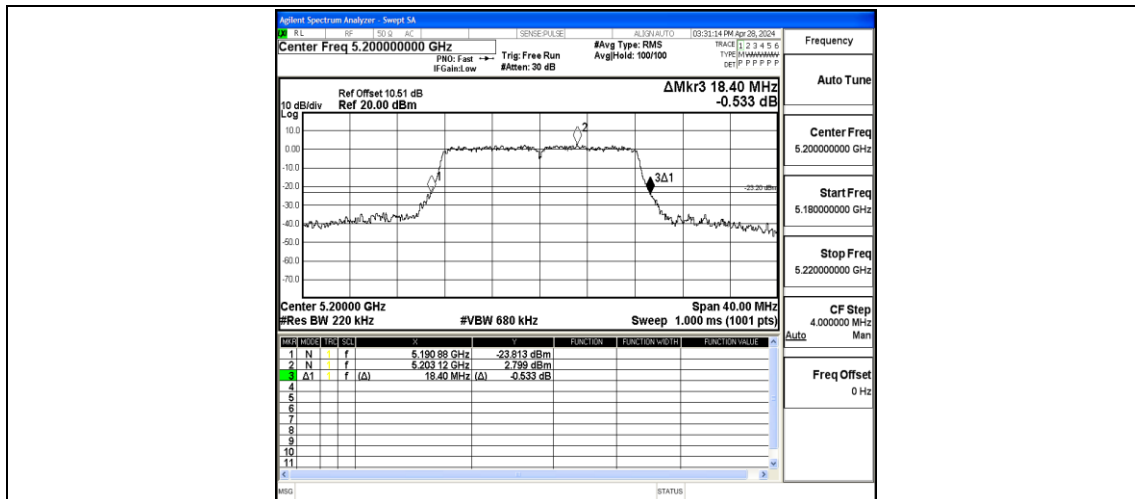
Test Result

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.360	5170.840	5189.200	---	---
11A	Ant2	5180	18.400	5170.800	5189.200	---	---
11A	Ant1	5200	18.440	5190.760	5209.200	---	---
11A	Ant2	5200	18.400	5190.880	5209.280	---	---
11A	Ant1	5240	18.520	5230.800	5249.320	---	---
11A	Ant2	5240	18.360	5230.800	5249.160	---	---
11N20MIMO	Ant1	5180	19.440	5170.280	5189.720	---	---
11N20MIMO	Ant2	5180	19.120	5170.440	5189.560	---	---
11N20MIMO	Ant1	5200	19.600	5190.240	5209.840	---	---
11N20MIMO	Ant2	5200	19.360	5190.320	5209.680	---	---
11N20MIMO	Ant1	5240	19.400	5230.280	5249.680	---	---
11N20MIMO	Ant2	5240	19.360	5230.360	5249.720	---	---
11N40MIMO	Ant1	5190	40.960	5169.360	5210.320	---	---
11N40MIMO	Ant2	5190	40.720	5169.520	5210.240	---	---
11N40MIMO	Ant1	5230	41.040	5209.600	5250.640	---	---
11N40MIMO	Ant2	5230	40.640	5209.680	5250.320	---	---
11AC20MIMO	Ant1	5180	19.280	5170.360	5189.640	---	---
11AC20MIMO	Ant2	5180	19.400	5170.320	5189.720	---	---
11AC20MIMO	Ant1	5200	19.200	5190.280	5209.480	---	---
11AC20MIMO	Ant2	5200	19.200	5190.320	5209.520	---	---
11AC20MIMO	Ant1	5240	19.200	5230.400	5249.600	---	---
11AC20MIMO	Ant2	5240	19.200	5230.400	5249.600	---	---
11AC40MIMO	Ant1	5190	40.560	5169.840	5210.400	---	---
11AC40MIMO	Ant2	5190	40.480	5169.840	5210.320	---	---

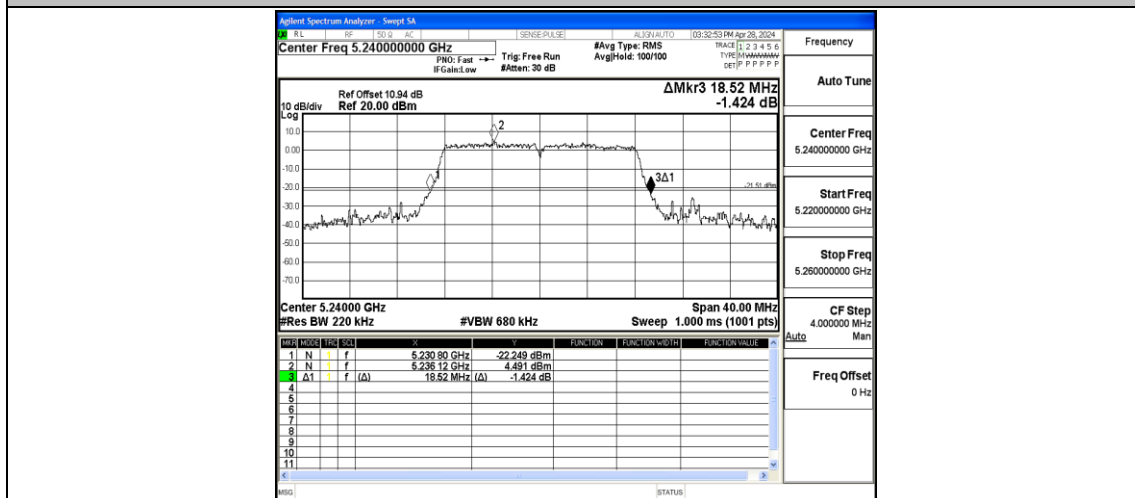
11AC40MIMO	Ant1	5230	40.320	5209.760	5250.080	---	---
11AC40MIMO	Ant2	5230	40.320	5209.840	5250.160	---	---
11AC80MIMO	Ant1	5210	80.960	5169.840	5250.800	---	---
11AC80MIMO	Ant2	5210	80.800	5169.840	5250.640	---	---

Test Graphs

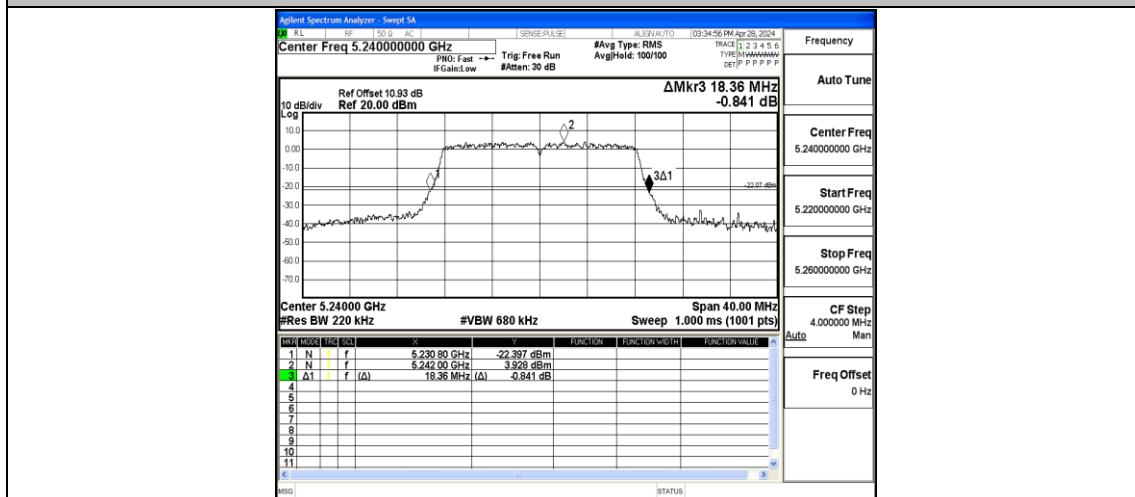




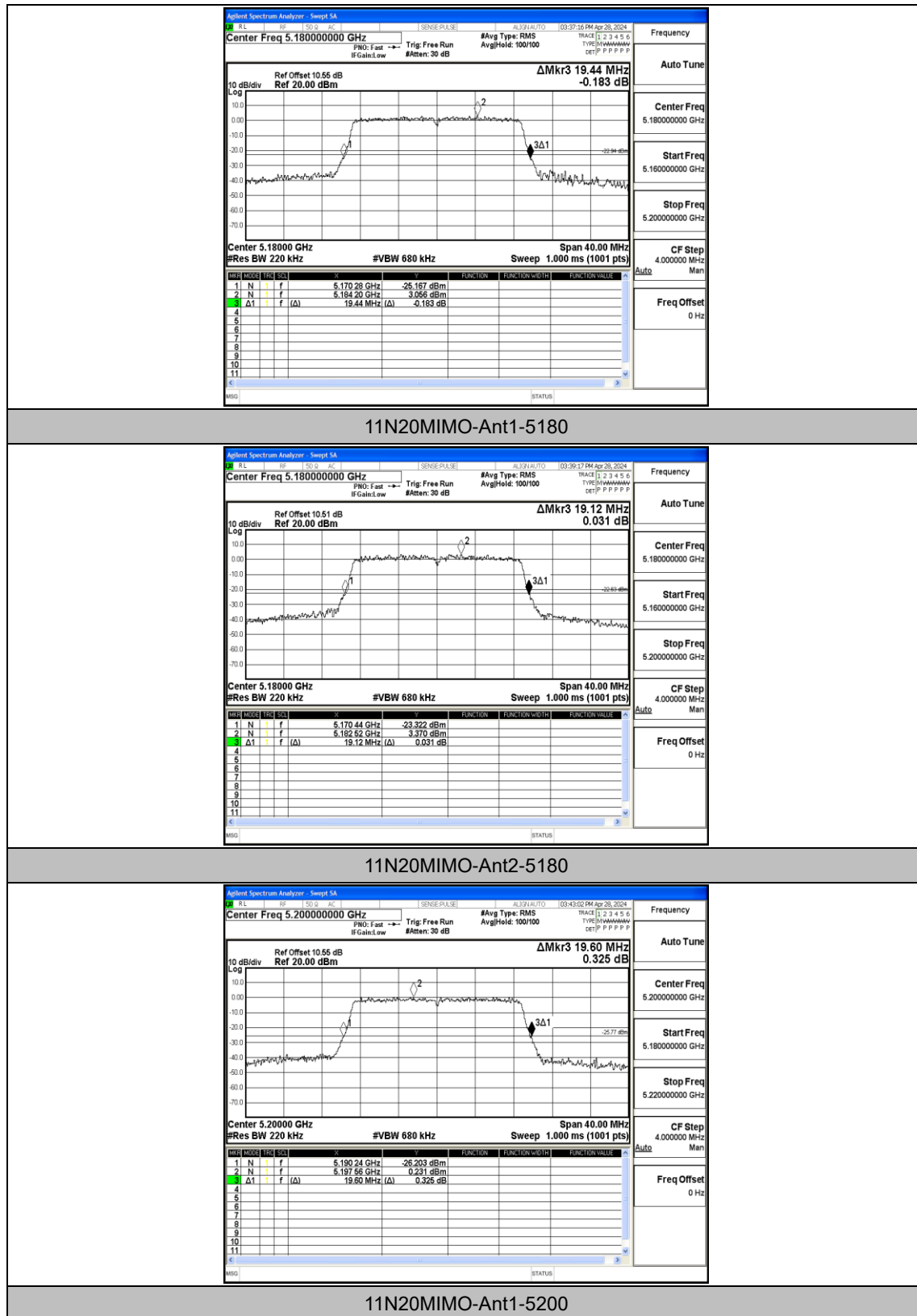
11A-Ant2-5200

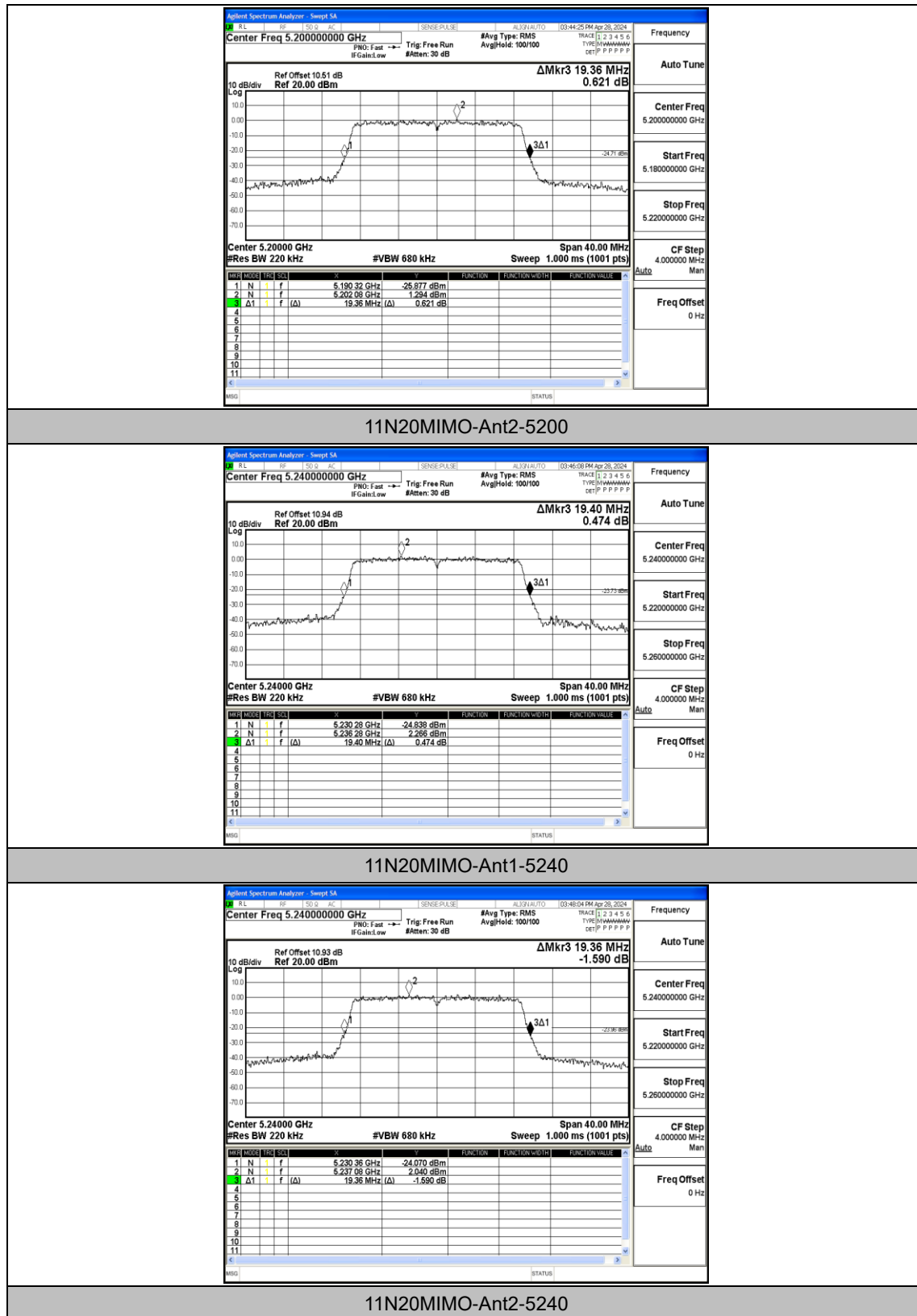


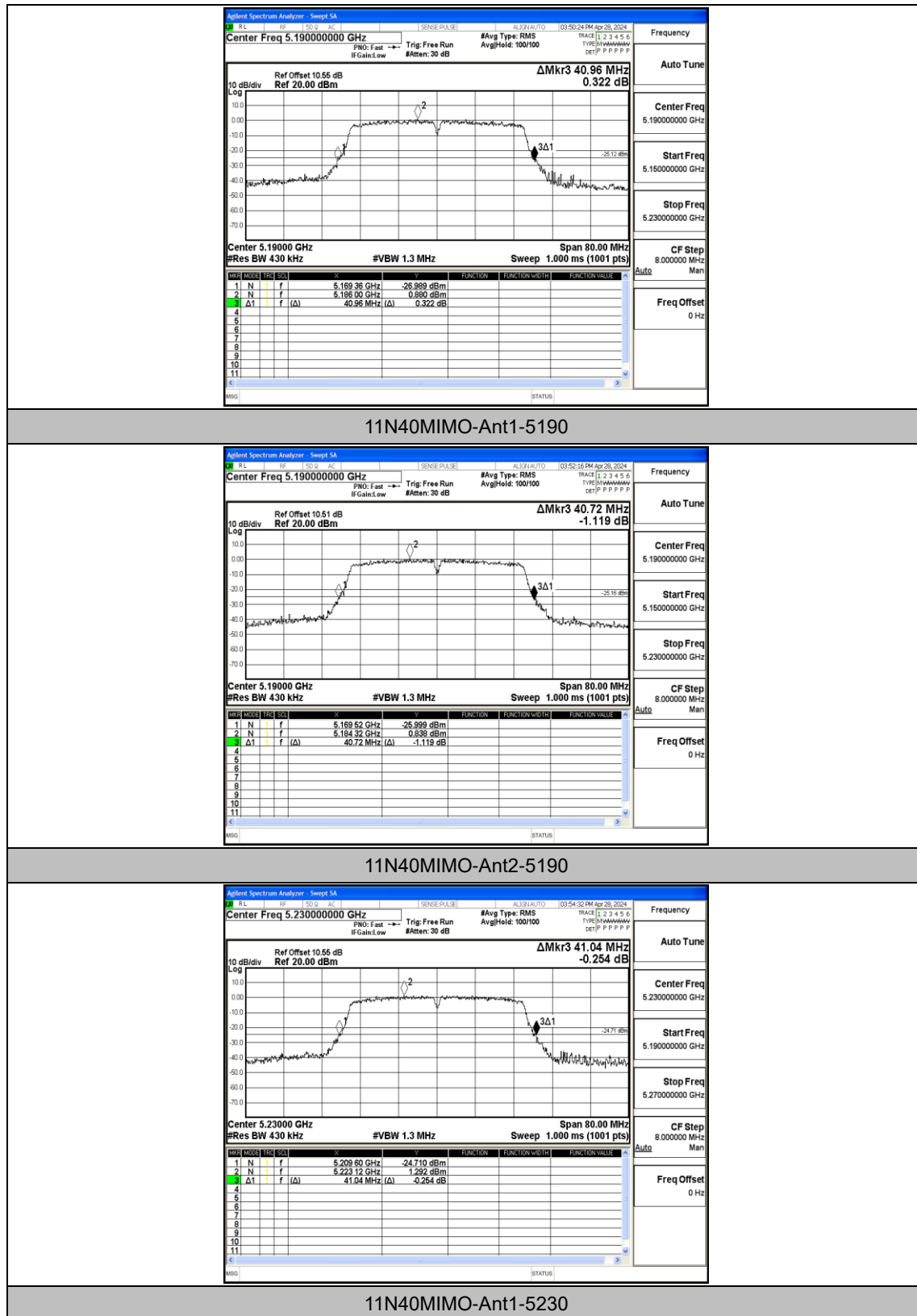
11A-Ant1-5240

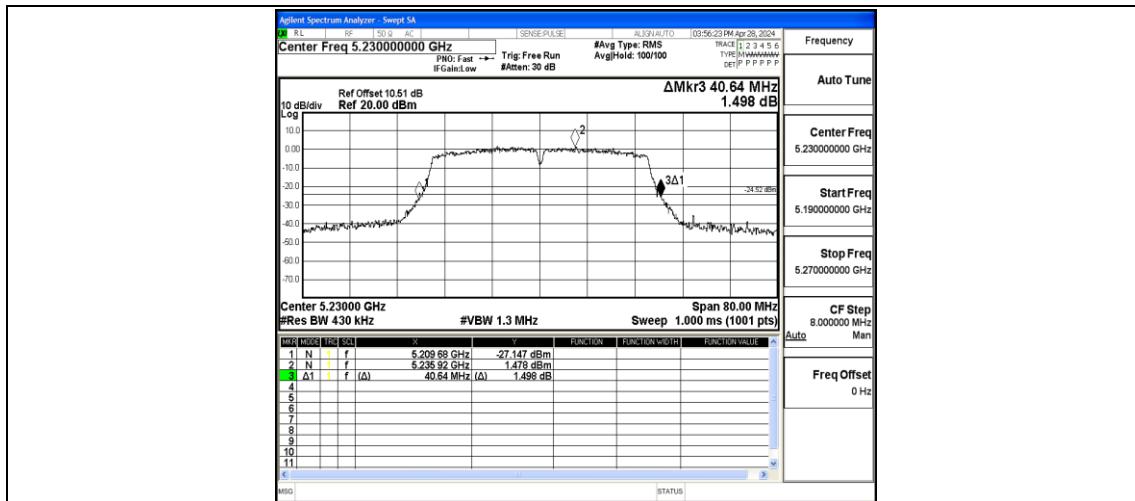


11A-Ant2-5240

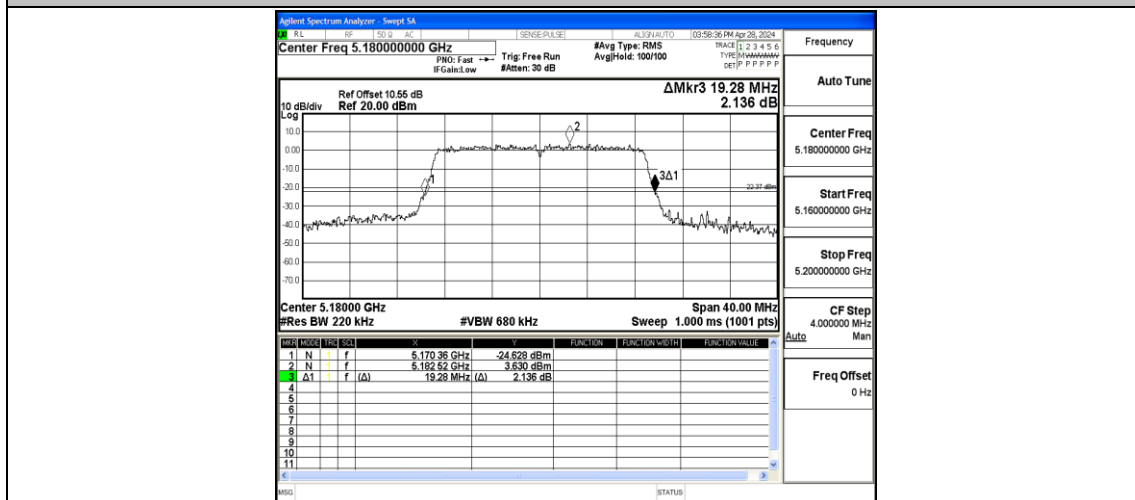




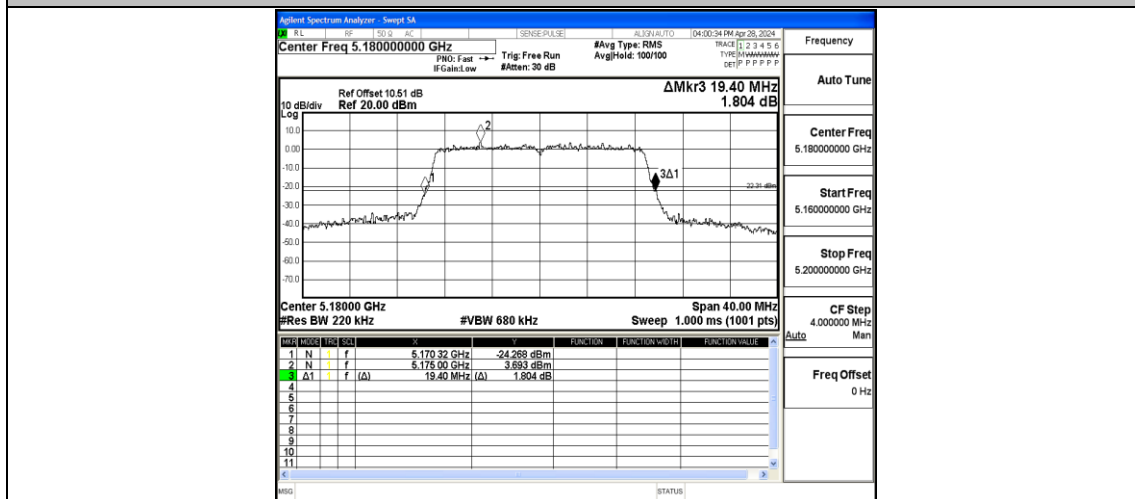




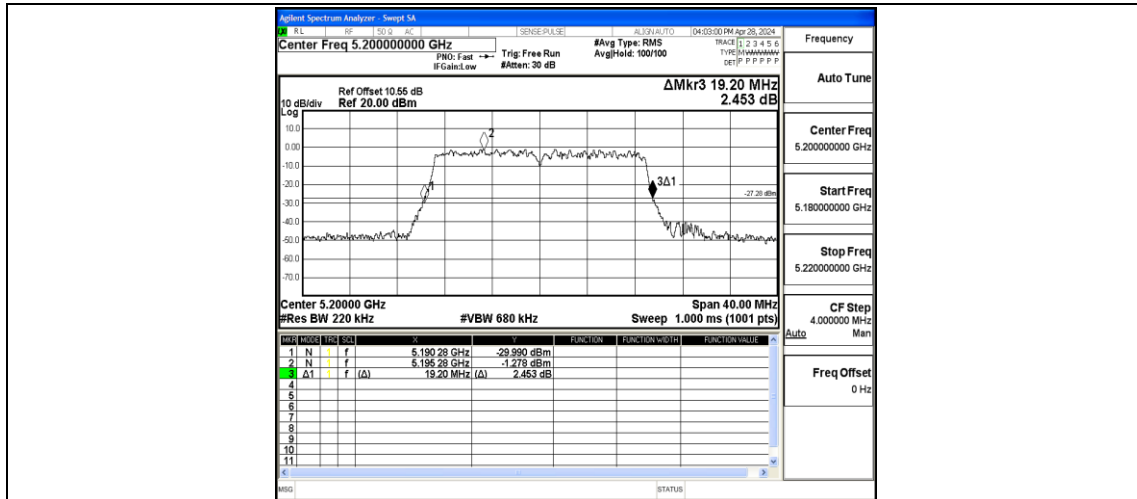
11N40MIMO-Ant2-5230



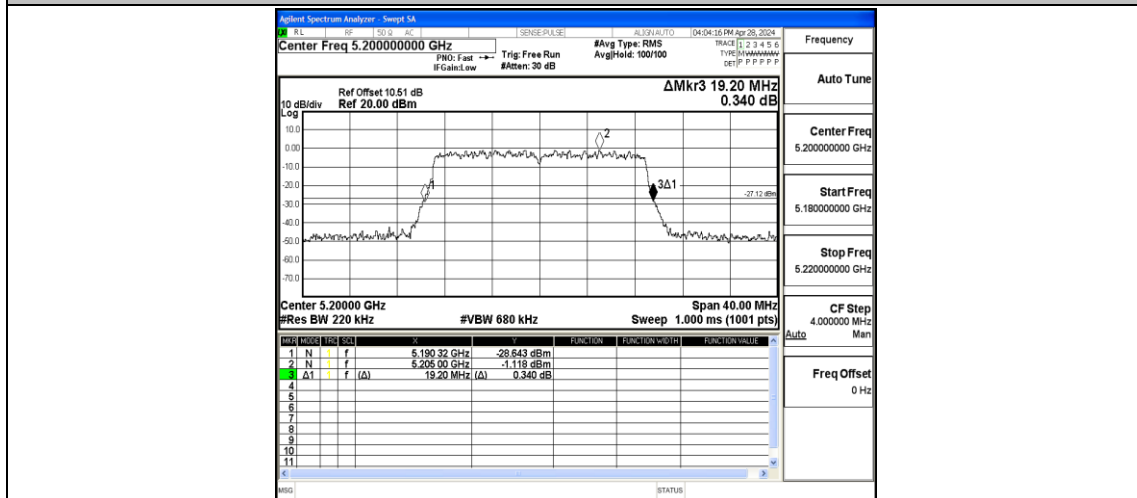
11AC20MIMO-Ant1-5180



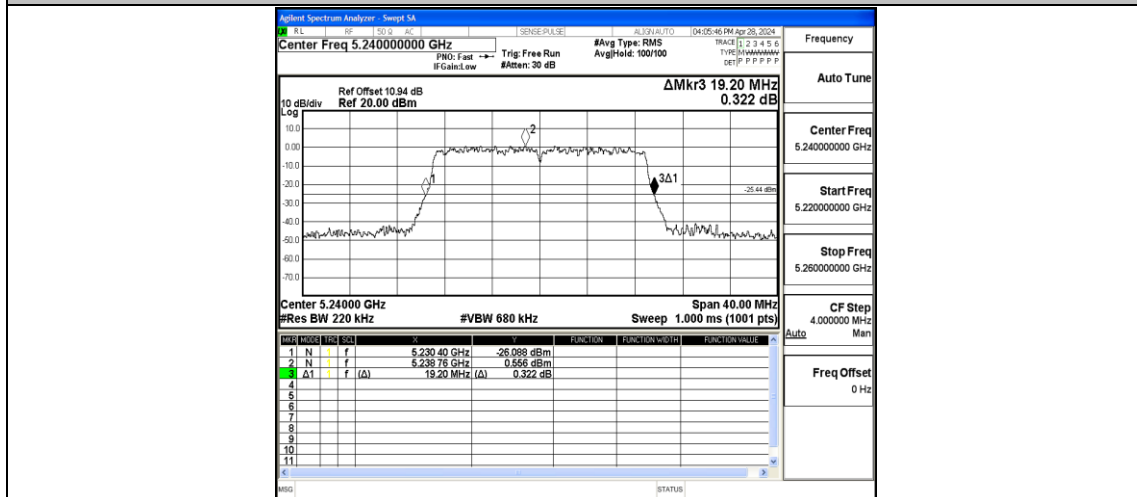
11AC20MIMO-Ant2-5180



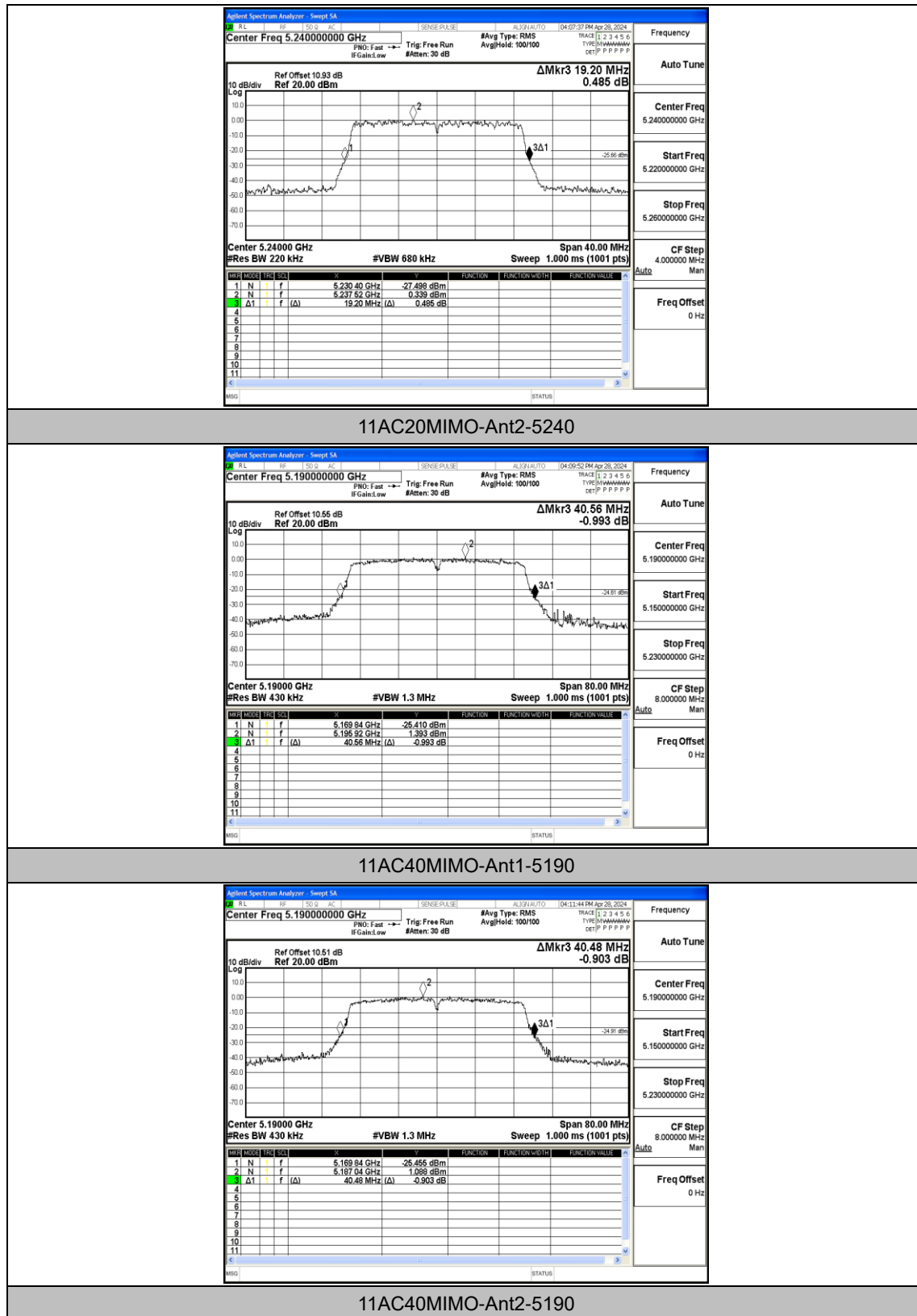
11AC20MIMO-Ant1-5200

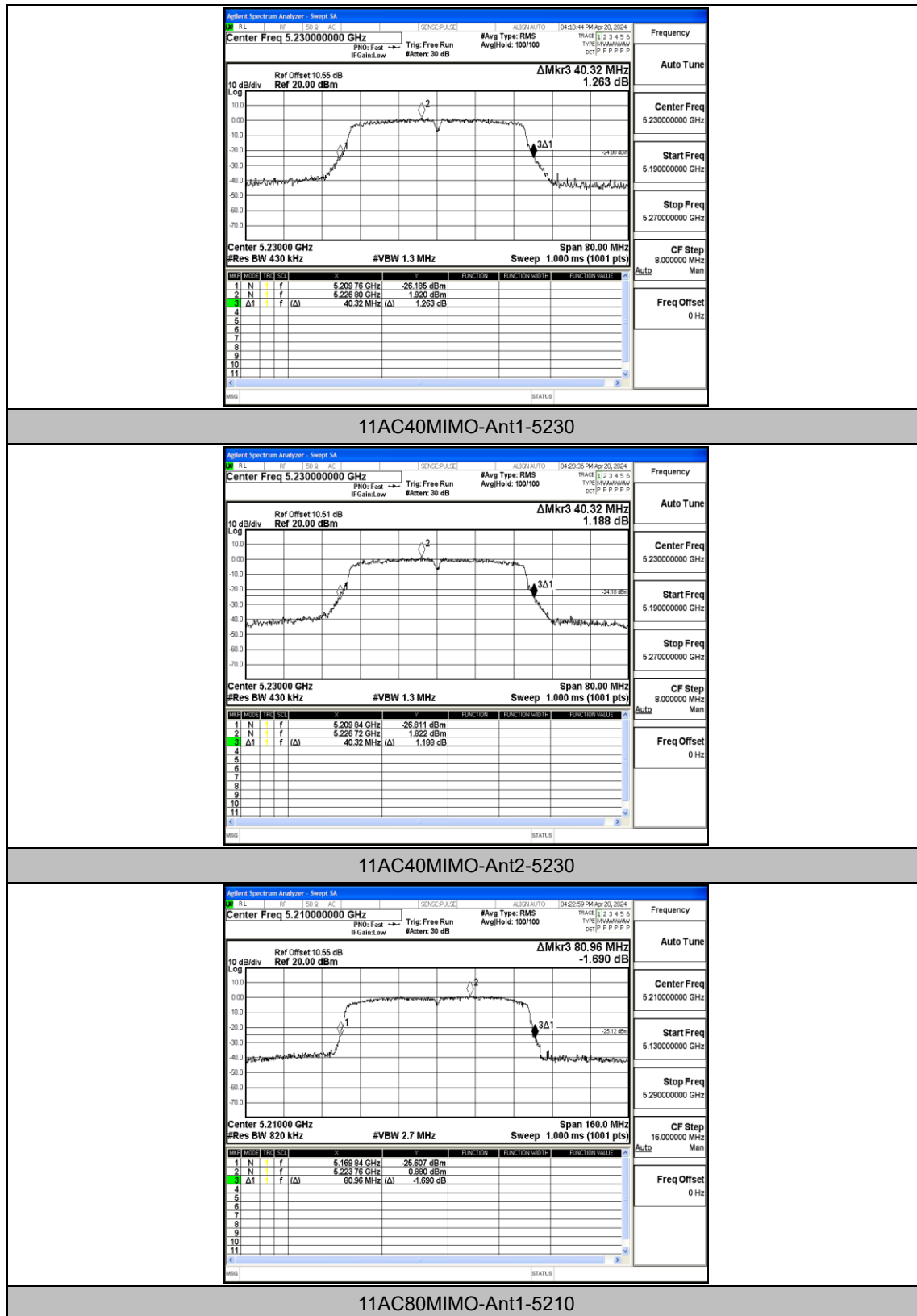


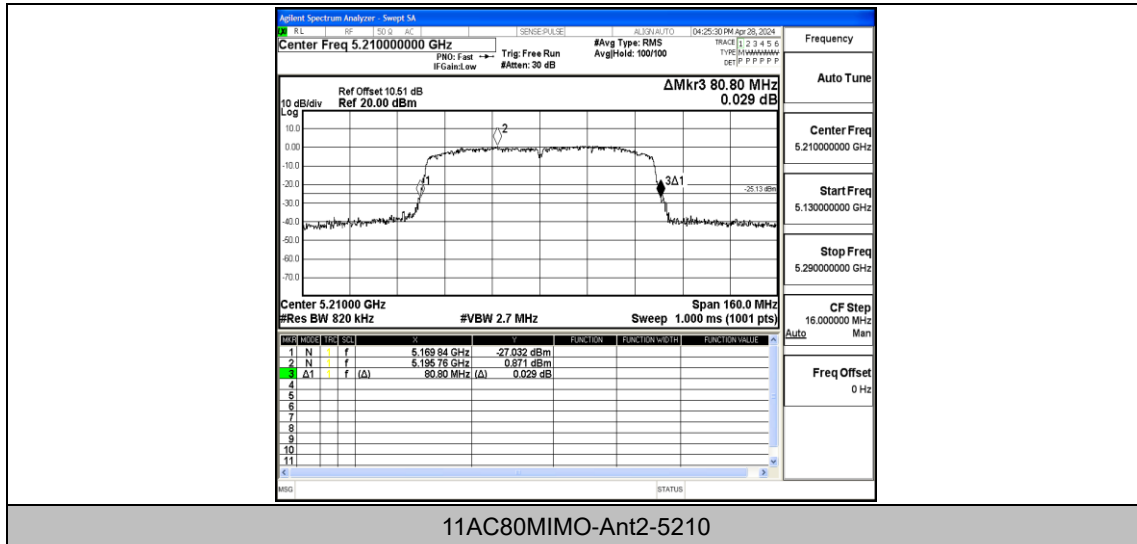
11AC20MIMO-Ant2-5200



11AC20MIMO-Ant1-5240





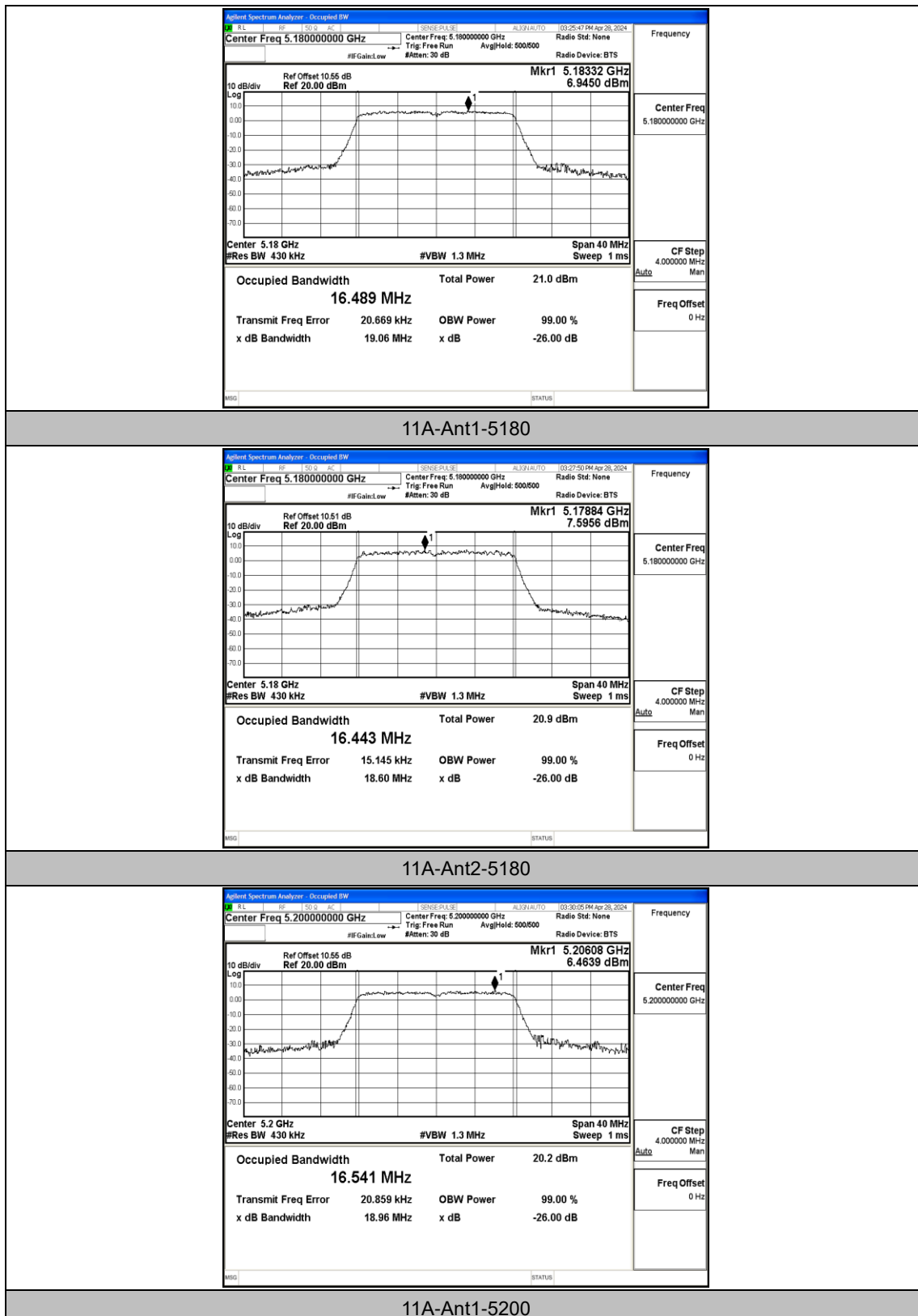


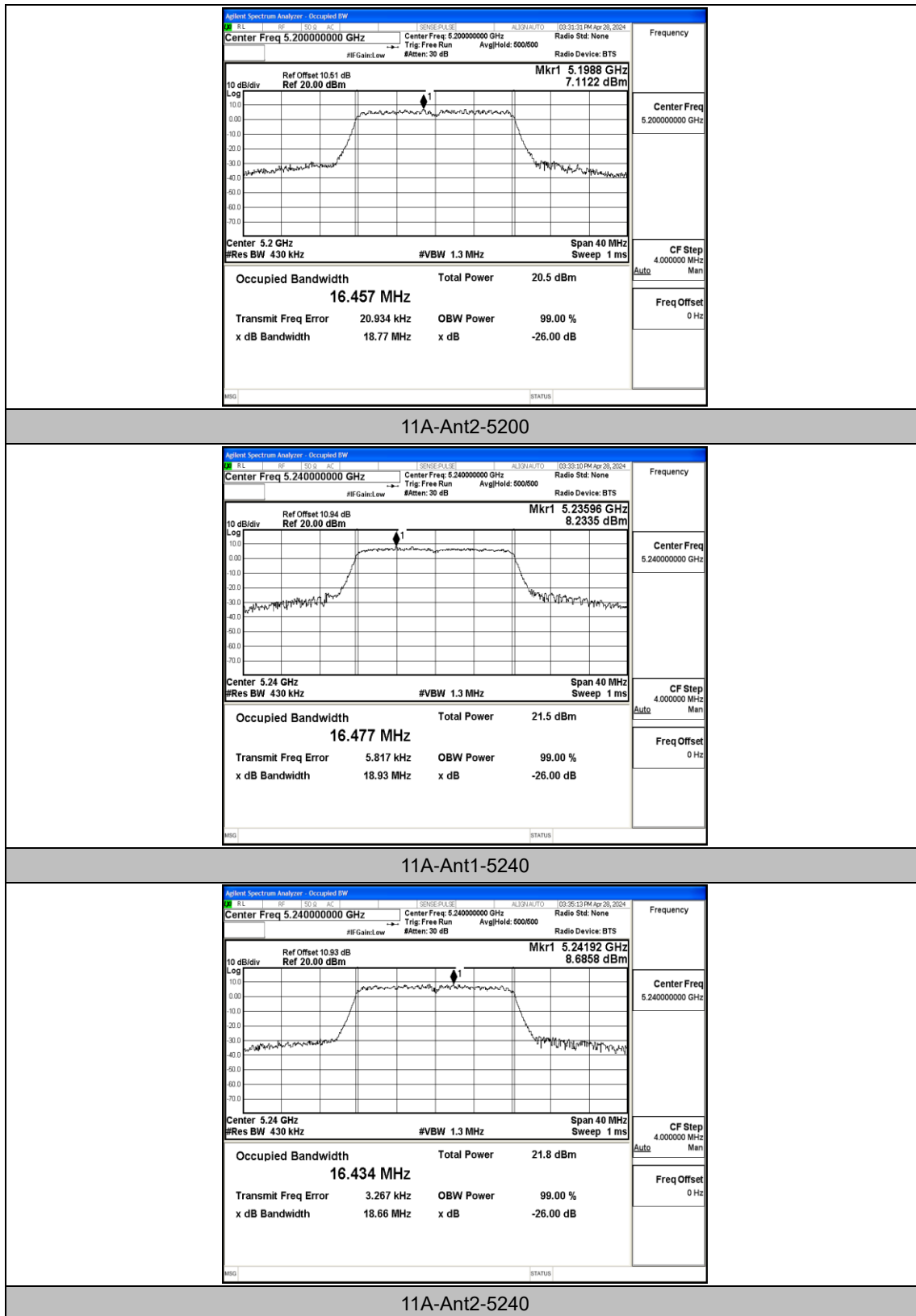
Appendix A2: Occupied channel bandwidth

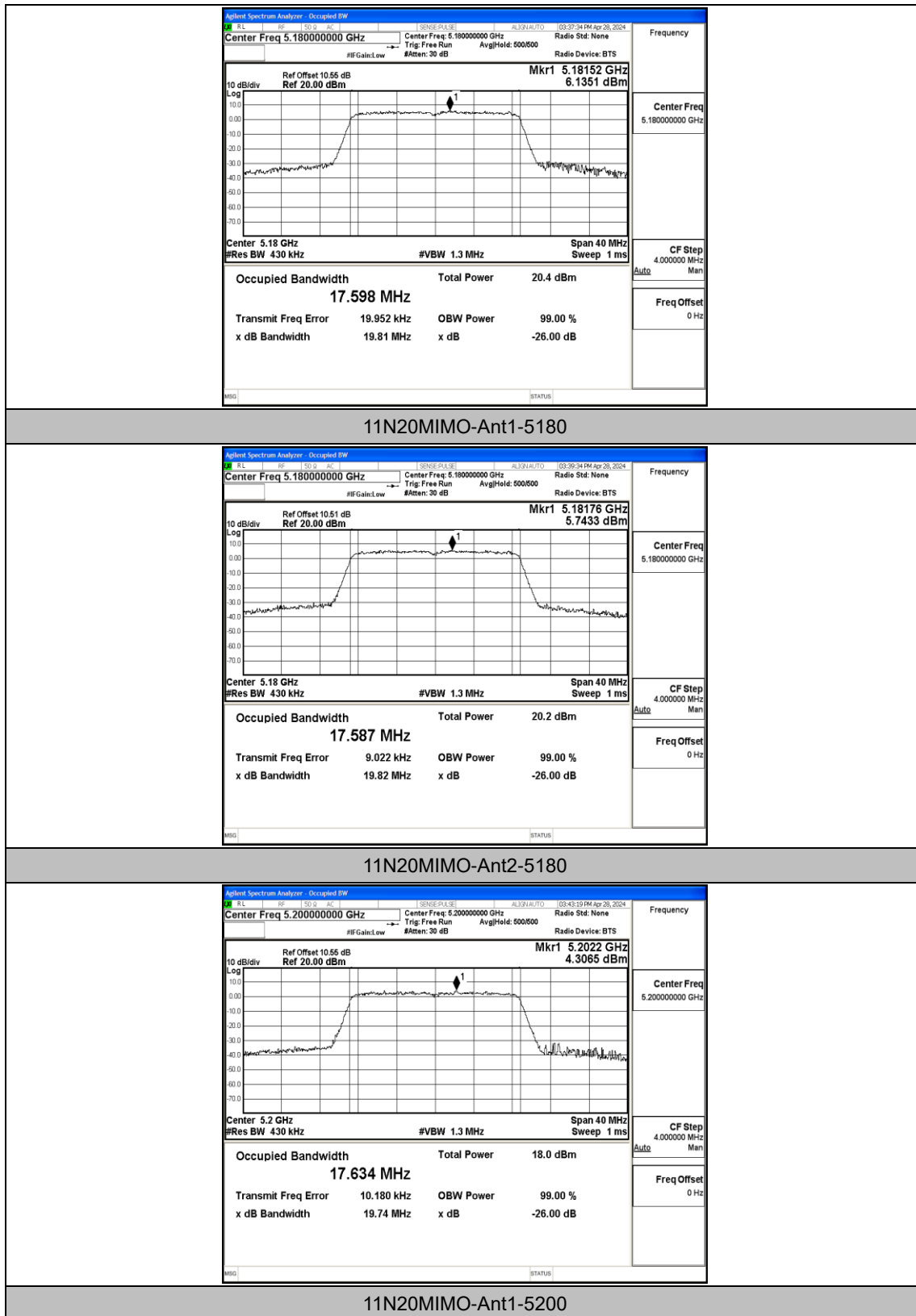
Test Result

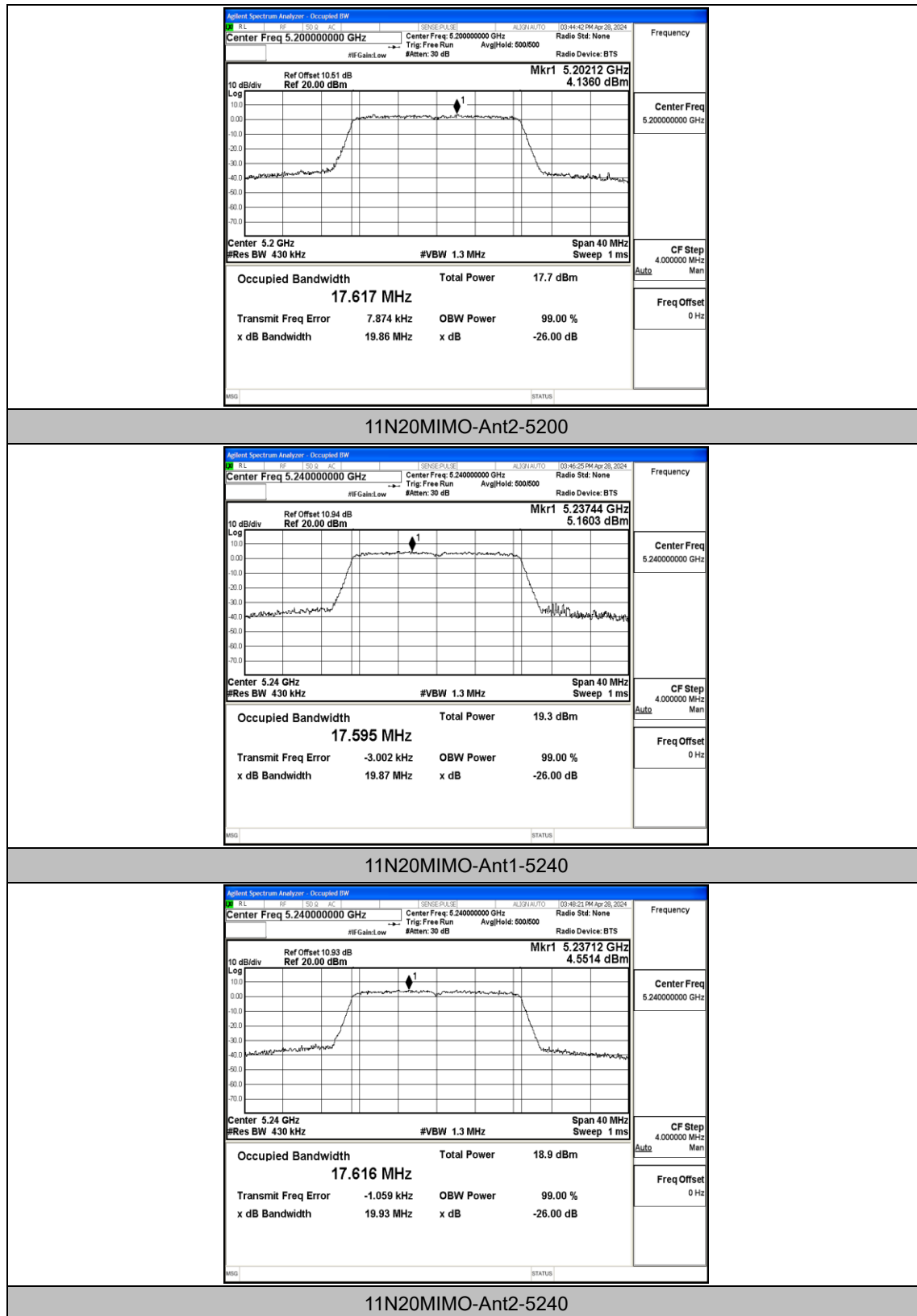
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.489	5171.7762	5188.2652	---	---
11A	Ant2	5180	16.443	5171.7936	5188.2366	---	---
11A	Ant1	5200	16.541	5191.7504	5208.2914	---	---
11A	Ant2	5200	16.457	5191.7924	5208.2494	---	---
11A	Ant1	5240	16.477	5231.7673	5248.2443	---	---
11A	Ant2	5240	16.434	5231.7863	5248.2203	---	---
11N20MIMO	Ant1	5180	17.598	5171.2210	5188.8190	---	---
11N20MIMO	Ant2	5180	17.587	5171.2155	5188.8025	---	---
11N20MIMO	Ant1	5200	17.634	5191.1932	5208.8272	---	---
11N20MIMO	Ant2	5200	17.617	5191.1994	5208.8164	---	---
11N20MIMO	Ant1	5240	17.595	5231.1995	5248.7945	---	---
11N20MIMO	Ant2	5240	17.616	5231.1909	5248.8069	---	---
11N40MIMO	Ant1	5190	36.233	5171.8891	5208.1221	---	---
11N40MIMO	Ant2	5190	36.385	5171.8658	5208.2508	---	---
11N40MIMO	Ant1	5230	36.142	5211.9751	5248.1171	---	---
11N40MIMO	Ant2	5230	36.240	5211.9743	5248.2143	---	---
11AC20MIMO	Ant1	5180	17.625	5171.2007	5188.8257	---	---
11AC20MIMO	Ant2	5180	17.612	5171.2020	5188.8140	---	---
11AC20MIMO	Ant1	5200	17.725	5191.1238	5208.8488	---	---
11AC20MIMO	Ant2	5200	17.717	5191.1352	5208.8522	---	---
11AC20MIMO	Ant1	5240	17.691	5231.1603	5248.8513	---	---
11AC20MIMO	Ant2	5240	17.697	5231.1558	5248.8528	---	---
11AC40MIMO	Ant1	5190	36.287	5171.9227	5208.2097	---	---
11AC40MIMO	Ant2	5190	36.248	5171.9452	5208.1932	---	---
11AC40MIMO	Ant1	5230	36.166	5212.0089	5248.1749	---	---
11AC40MIMO	Ant2	5230	36.149	5212.0045	5248.1535	---	---
11AC80MIMO	Ant1	5210	74.562	5172.9168	5247.4788	---	---
11AC80MIMO	Ant2	5210	74.480	5172.9801	5247.4601	---	---

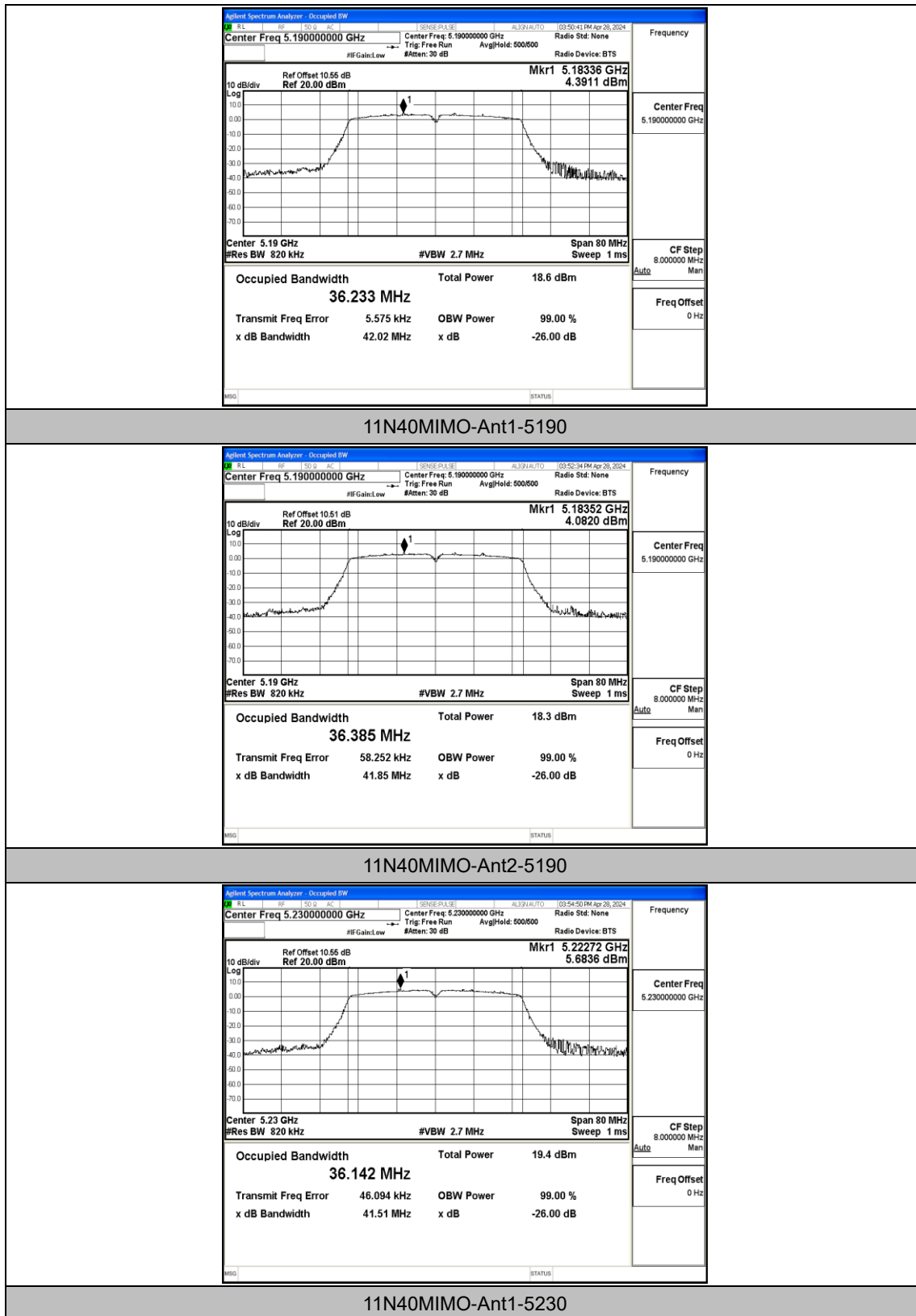
Test Graphs

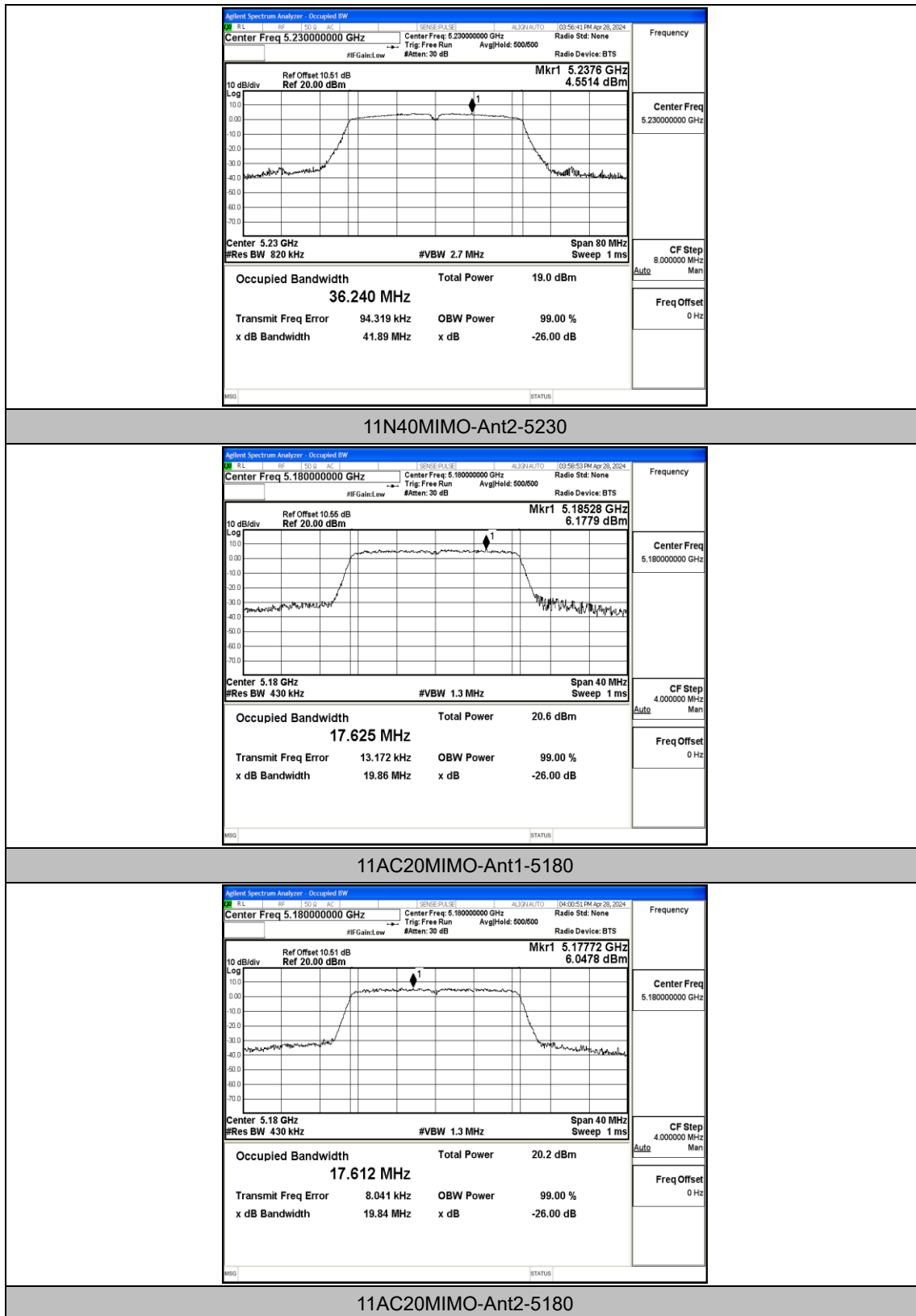


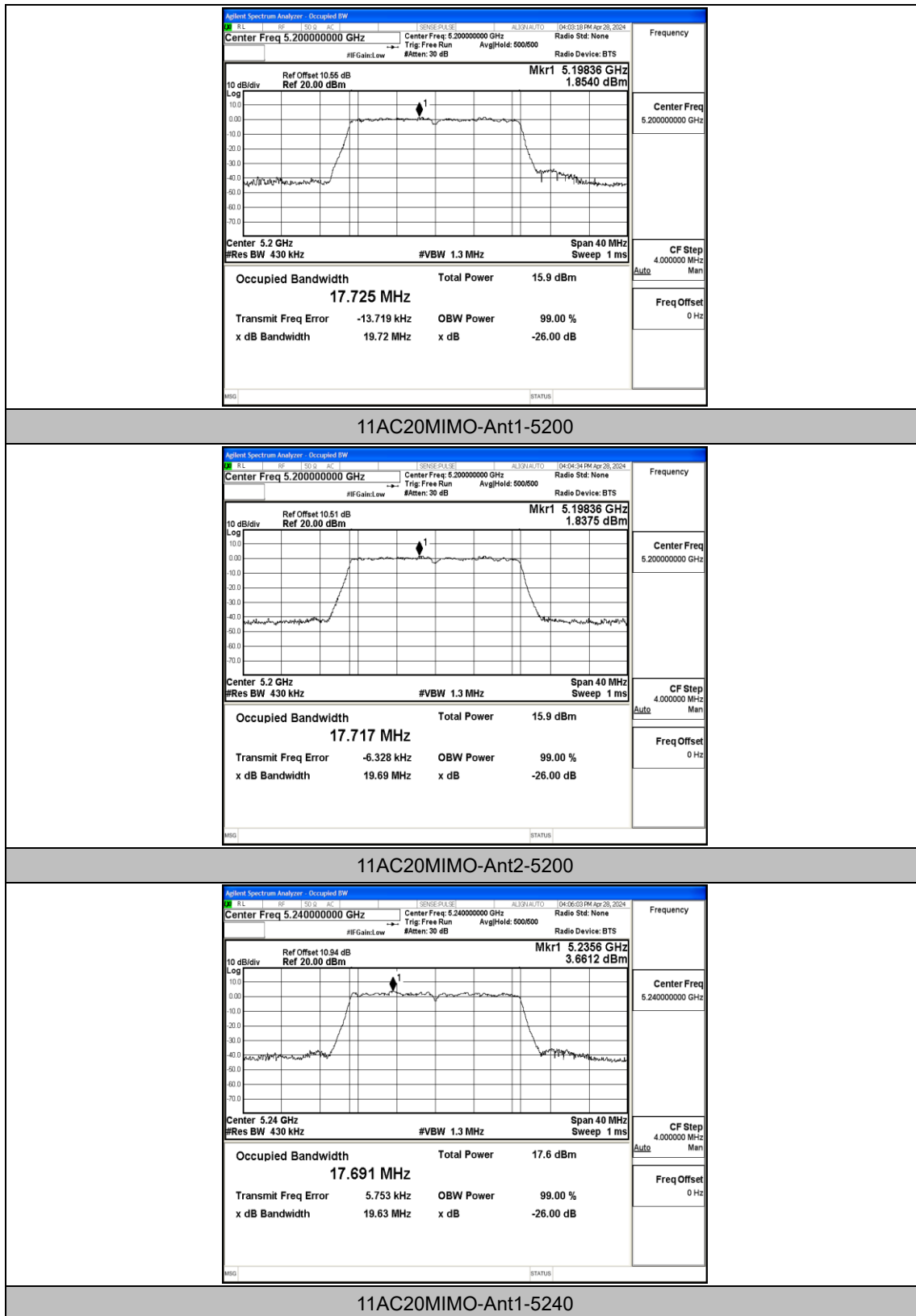


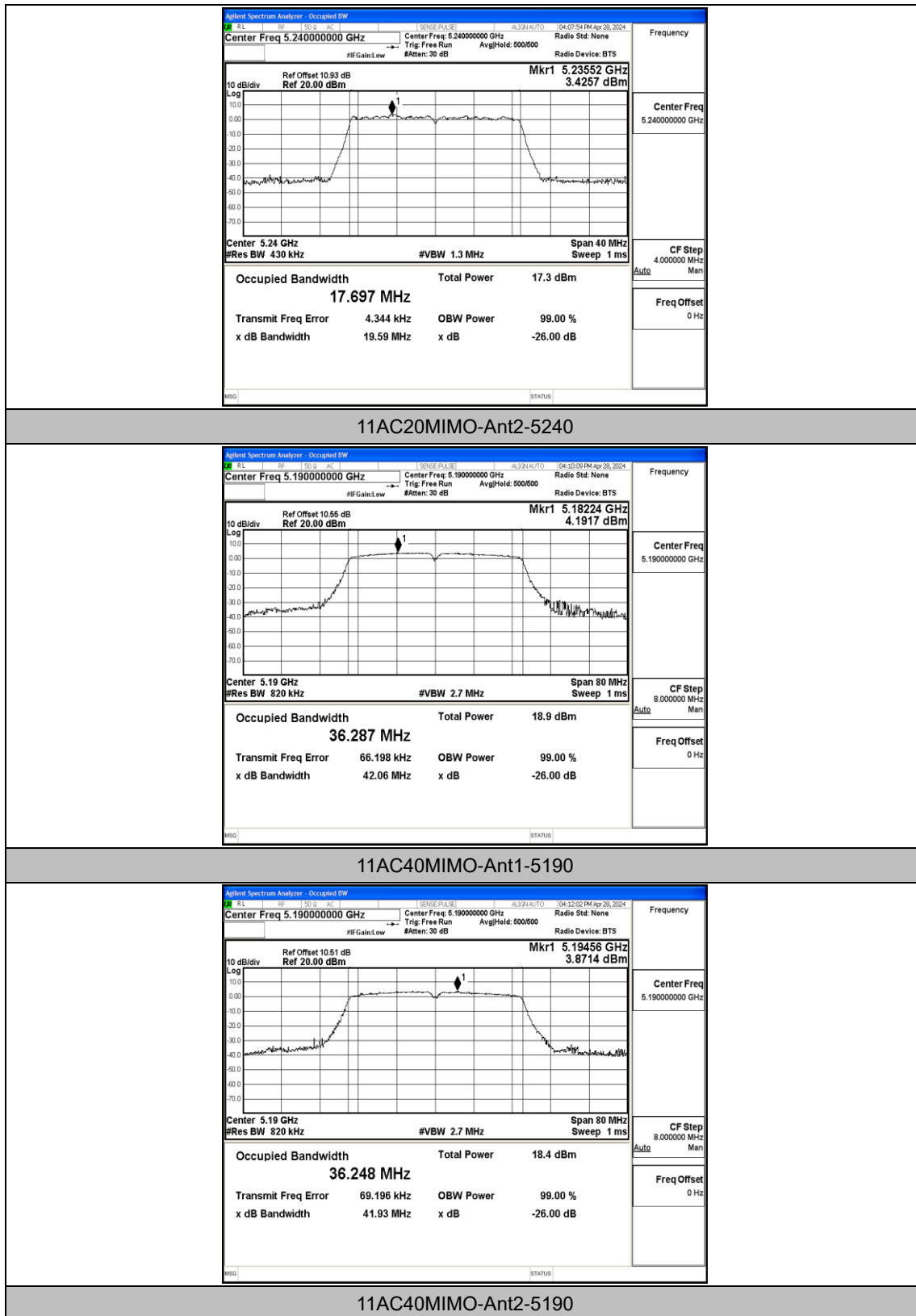


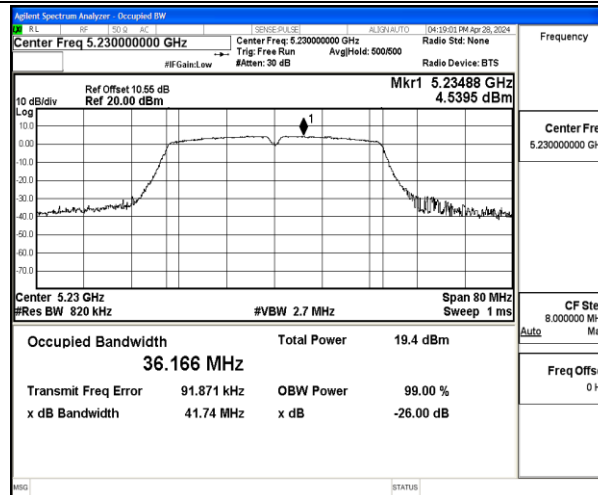




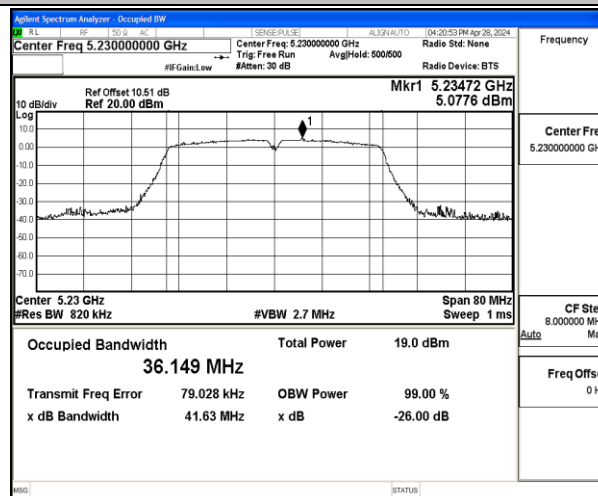




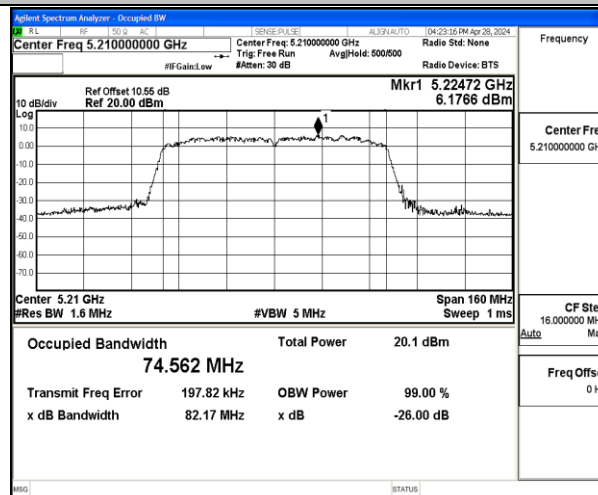




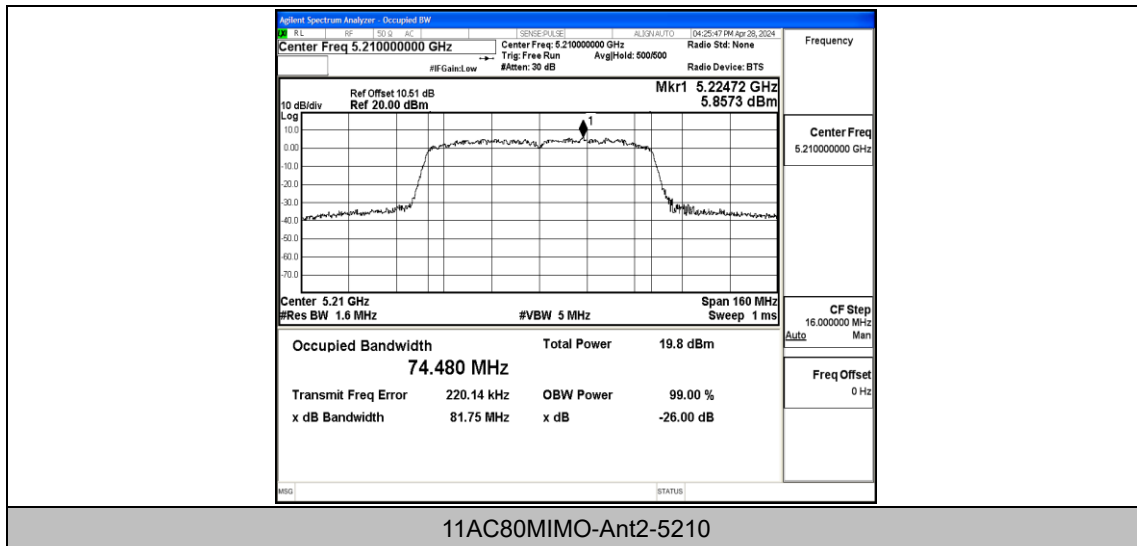
11AC40MIMO-Ant1-5230



11AC40MIMO-Ant2-5230



11AC80MIMO-Ant1-5210



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11A	Ant1	5180	14.37	≤23.98	PASS
11A	Ant2	5180	13.83	≤23.98	PASS
11A	Ant1	5200	13.69	≤23.98	PASS
11A	Ant2	5200	13.33	≤23.98	PASS
11A	Ant1	5240	14.89	≤23.98	PASS
11A	Ant2	5240	14.49	≤23.98	PASS
11N20MIMO	Ant1	5180	13.91	≤23.98	PASS
11N20MIMO	Ant2	5180	13.63	≤23.98	PASS
11N20MIMO	total	5180	16.78	≤23.98	PASS
11N20MIMO	Ant1	5200	11.42	≤23.98	PASS
11N20MIMO	Ant2	5200	11.08	≤23.98	PASS
11N20MIMO	total	5200	14.26	≤23.98	PASS
11N20MIMO	Ant1	5240	12.71	≤23.98	PASS
11N20MIMO	Ant2	5240	12.16	≤23.98	PASS
11N20MIMO	total	5240	15.45	≤23.98	PASS
11N40MIMO	Ant1	5190	11.40	≤23.98	PASS
11N40MIMO	Ant2	5190	10.68	≤23.98	PASS
11N40MIMO	total	5190	14.07	≤23.98	PASS
11N40MIMO	Ant1	5230	12.28	≤23.98	PASS
11N40MIMO	Ant2	5230	11.67	≤23.98	PASS
11N40MIMO	total	5230	15.00	≤23.98	PASS
11AC20MIMO	Ant1	5180	13.99	≤23.98	PASS
11AC20MIMO	Ant2	5180	13.51	≤23.98	PASS
11AC20MIMO	total	5180	16.77	≤23.98	PASS
11AC20MIMO	Ant1	5200	10.06	≤23.98	PASS
11AC20MIMO	Ant2	5200	9.70	≤23.98	PASS
11AC20MIMO	total	5200	12.89	≤23.98	PASS
11AC20MIMO	Ant1	5240	11.63	≤23.98	PASS
11AC20MIMO	Ant2	5240	11.39	≤23.98	PASS
11AC20MIMO	total	5240	14.52	≤23.98	PASS
11AC40MIMO	Ant1	5190	11.51	≤23.98	PASS
11AC40MIMO	Ant2	5190	10.91	≤23.98	PASS
11AC40MIMO	total	5190	14.23	≤23.98	PASS
11AC40MIMO	Ant1	5230	12.37	≤23.98	PASS
11AC40MIMO	Ant2	5230	11.74	≤23.98	PASS
11AC40MIMO	total	5230	15.08	≤23.98	PASS
11AC80MIMO	Ant1	5210	12.13	≤23.98	PASS
11AC80MIMO	Ant2	5210	11.46	≤23.98	PASS
11AC80MIMO	total	5210	14.82	≤23.98	PASS

Note: The Duty Cycle Factor is compensated in the result.

Appendix C: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.56	≤11.00	PASS
11A	Ant2	5180	3.16	≤11.00	PASS
11A	Ant1	5200	2.54	≤11.00	PASS
11A	Ant2	5200	2.33	≤11.00	PASS
11A	Ant1	5240	3.99	≤11.00	PASS
11A	Ant2	5240	3.53	≤11.00	PASS
11N20MIMO	Ant1	5180	2.68	≤11.00	PASS
11N20MIMO	Ant2	5180	2.29	≤11.00	PASS
11N20MIMO	total	5180	5.50	≤11.00	PASS
11N20MIMO	Ant1	5200	0.11	≤11.00	PASS
11N20MIMO	Ant2	5200	-0.57	≤11.00	PASS
11N20MIMO	total	5200	2.79	≤11.00	PASS
11N20MIMO	Ant1	5240	1.62	≤11.00	PASS
11N20MIMO	Ant2	5240	1.21	≤11.00	PASS
11N20MIMO	total	5240	4.43	≤11.00	PASS
11N40MIMO	Ant1	5190	-2.47	≤11.00	PASS
11N40MIMO	Ant2	5190	-3.07	≤11.00	PASS
11N40MIMO	total	5190	0.25	≤11.00	PASS
11N40MIMO	Ant1	5230	-1.43	≤11.00	PASS
11N40MIMO	Ant2	5230	-1.88	≤11.00	PASS
11N40MIMO	total	5230	1.36	≤11.00	PASS
11AC20MIMO	Ant1	5180	2.77	≤11.00	PASS
11AC20MIMO	Ant2	5180	2.25	≤11.00	PASS
11AC20MIMO	total	5180	5.53	≤11.00	PASS
11AC20MIMO	Ant1	5200	-0.67	≤11.00	PASS
11AC20MIMO	Ant2	5200	-1.25	≤11.00	PASS
11AC20MIMO	total	5200	2.06	≤11.00	PASS
11AC20MIMO	Ant1	5240	0.76	≤11.00	PASS
11AC20MIMO	Ant2	5240	0.46	≤11.00	PASS
11AC20MIMO	total	5240	3.62	≤11.00	PASS
11AC40MIMO	Ant1	5190	-2.13	≤11.00	PASS
11AC40MIMO	Ant2	5190	-2.79	≤11.00	PASS
11AC40MIMO	total	5190	0.56	≤11.00	PASS
11AC40MIMO	Ant1	5230	-1.20	≤11.00	PASS
11AC40MIMO	Ant2	5230	-1.95	≤11.00	PASS
11AC40MIMO	total	5230	1.45	≤11.00	PASS
11AC80MIMO	Ant1	5210	-4.72	≤11.00	PASS
11AC80MIMO	Ant2	5210	-5.00	≤11.00	PASS
11AC80MIMO	total	5210	-1.85	≤11.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the result.

Test Graphs

