

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

Product Name: NucBox

Trade Mark: GMKtec

Test Model: M7

FCC ID: 2AXUD-M7

Environmental Conditions

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

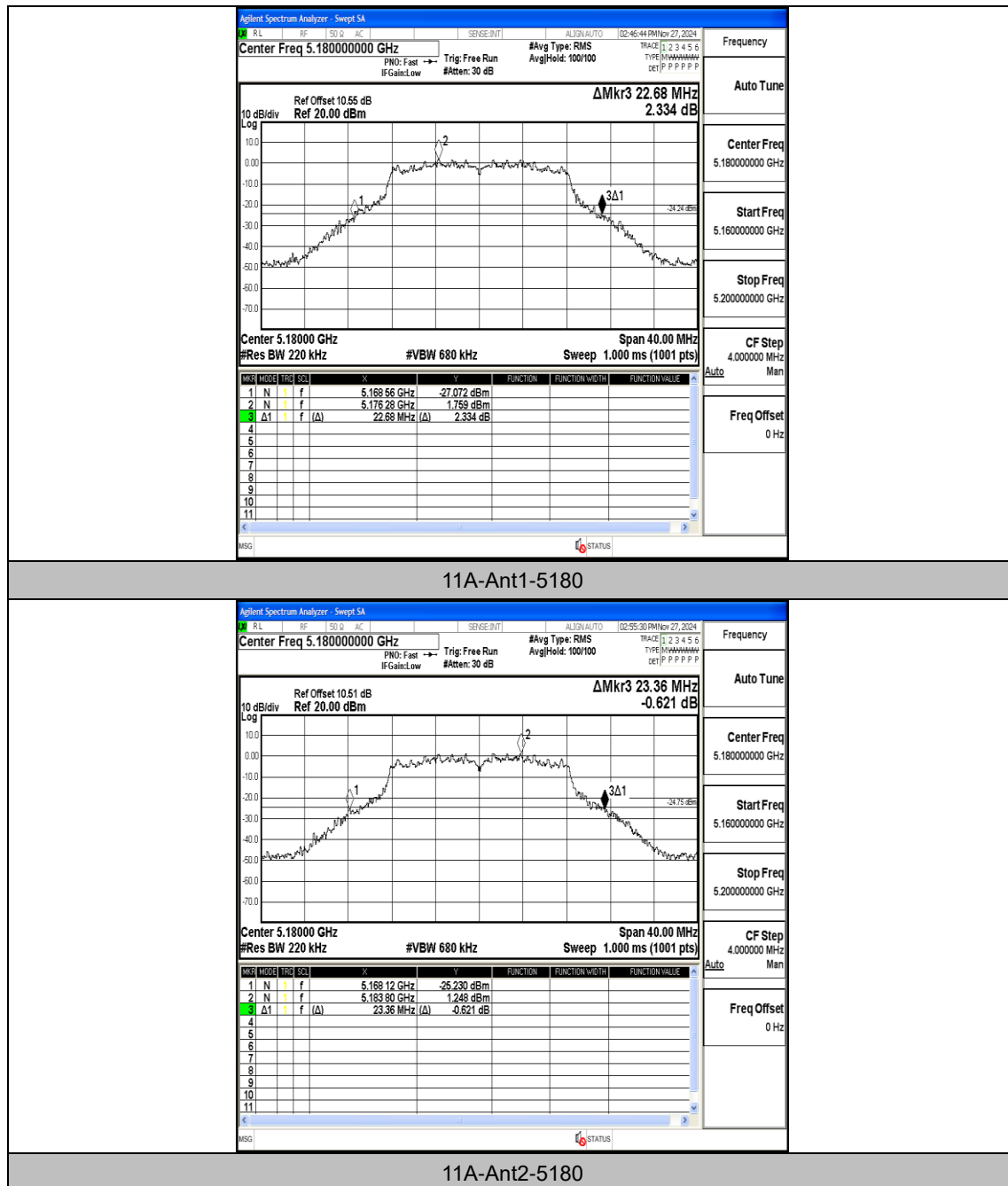
Appendix A1: Emission Bandwidth

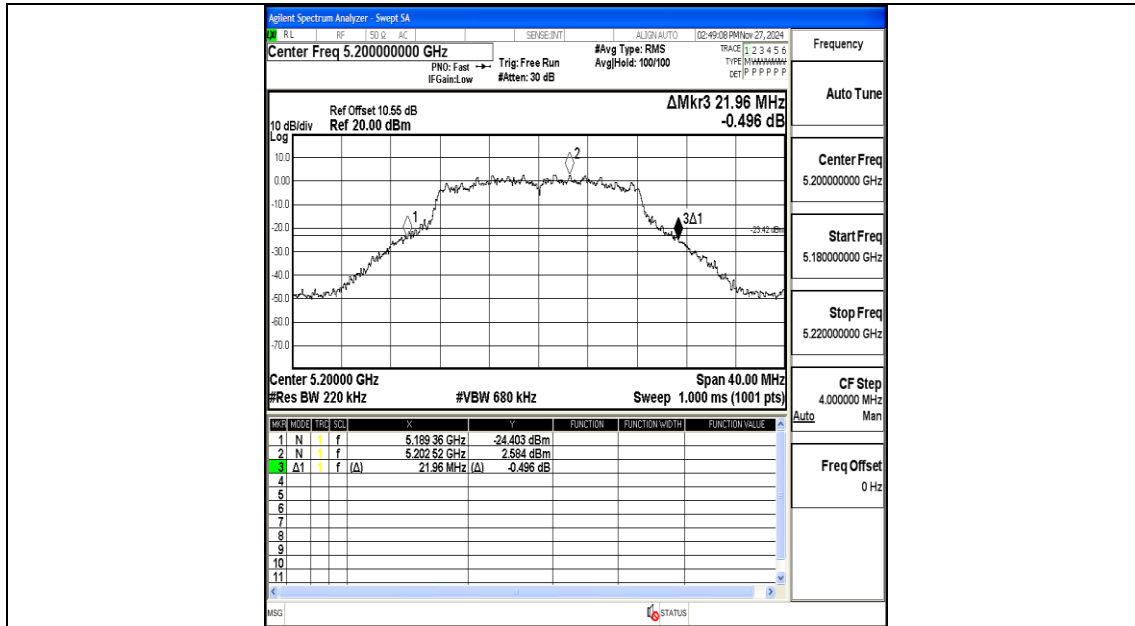
Test Result

Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	22.680	5168.560	5191.240	---	---
11A	Ant2	5180	23.360	5168.120	5191.480	---	---
11A	Ant1	5200	21.960	5189.360	5211.320	---	---
11A	Ant2	5200	22.120	5189.360	5211.480	---	---
11A	Ant1	5240	22.200	5228.960	5251.160	---	---
11A	Ant2	5240	21.880	5229.160	5251.040	---	---
11N20MIMO	Ant1	5180	22.600	5168.600	5191.200	---	---
11N20MIMO	Ant2	5180	23.280	5168.480	5191.760	---	---
11N20MIMO	Ant1	5200	22.320	5189.000	5211.320	---	---
11N20MIMO	Ant2	5200	22.800	5188.880	5211.680	---	---
11N20MIMO	Ant1	5240	22.320	5228.880	5251.200	---	---
11N20MIMO	Ant2	5240	22.760	5228.800	5251.560	---	---
11N40MIMO	Ant1	5190	42.080	5169.440	5211.520	---	---
11N40MIMO	Ant2	5190	42.080	5168.960	5211.040	---	---
11N40MIMO	Ant1	5230	42.960	5208.800	5251.760	---	---
11N40MIMO	Ant2	5230	42.160	5209.120	5251.280	---	---
11AC20MIMO	Ant1	5180	22.640	5168.360	5191.000	---	---
11AC20MIMO	Ant2	5180	22.960	5168.000	5190.960	---	---
11AC20MIMO	Ant1	5200	21.960	5188.960	5210.920	---	---
11AC20MIMO	Ant2	5200	21.520	5189.600	5211.120	---	---
11AC20MIMO	Ant1	5240	22.640	5229.000	5251.640	---	---
11AC20MIMO	Ant2	5240	22.280	5229.120	5251.400	---	---
11AC40MIMO	Ant1	5190	42.400	5168.800	5211.200	---	---
11AC40MIMO	Ant2	5190	40.800	5169.920	5210.720	---	---
11AC40MIMO	Ant1	5230	42.080	5209.040	5251.120	---	---

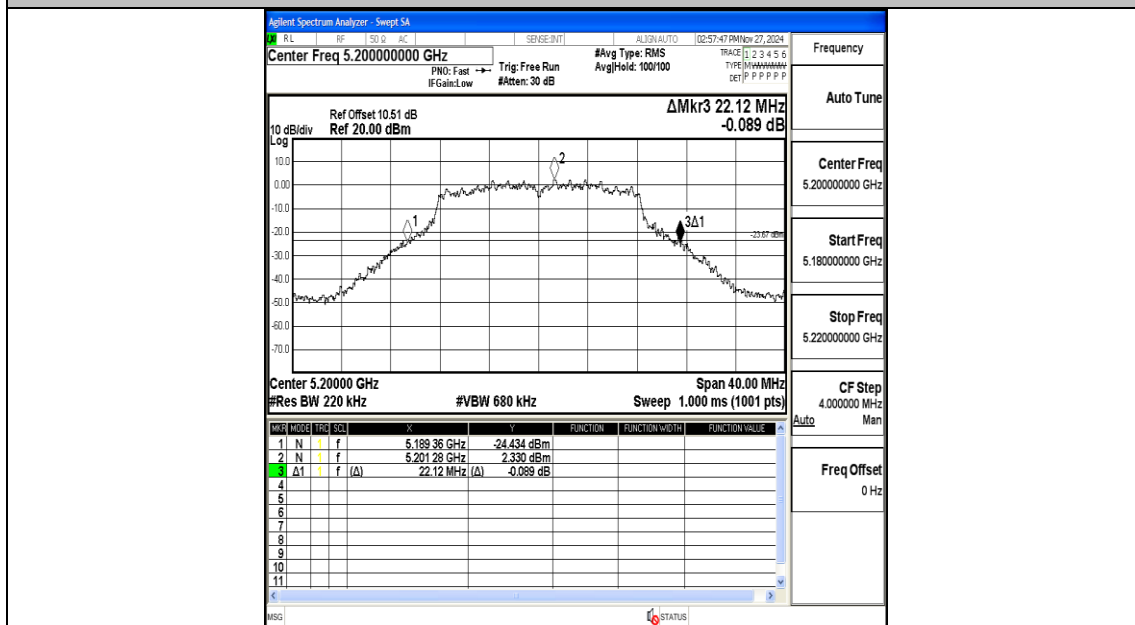
11AC40MIMO	Ant2	5230	41.120	5209.680	5250.800	---	---
11AC80MIMO	Ant1	5210	85.760	5167.280	5253.040	---	---
11AC80MIMO	Ant2	5210	86.560	5166.000	5252.560	---	---
11AX20MIMO	Ant1	5180	23.440	5168.600	5192.040	---	---
11AX20MIMO	Ant2	5180	22.280	5168.960	5191.240	---	---
11AX20MIMO	Ant1	5200	21.920	5188.960	5210.880	---	---
11AX20MIMO	Ant2	5200	22.960	5189.080	5212.040	---	---
11AX20MIMO	Ant1	5240	22.040	5229.120	5251.160	---	---
11AX20MIMO	Ant2	5240	23.440	5228.920	5252.360	---	---
11AX40MIMO	Ant1	5190	41.040	5169.360	5210.400	---	---
11AX40MIMO	Ant2	5190	41.360	5169.600	5210.960	---	---
11AX40MIMO	Ant1	5230	41.200	5209.200	5250.400	---	---
11AX40MIMO	Ant2	5230	41.600	5209.120	5250.720	---	---
11AX80MIMO	Ant1	5210	82.560	5168.880	5251.440	---	---
11AX80MIMO	Ant2	5210	83.360	5168.400	5251.760	---	---

Test Graphs

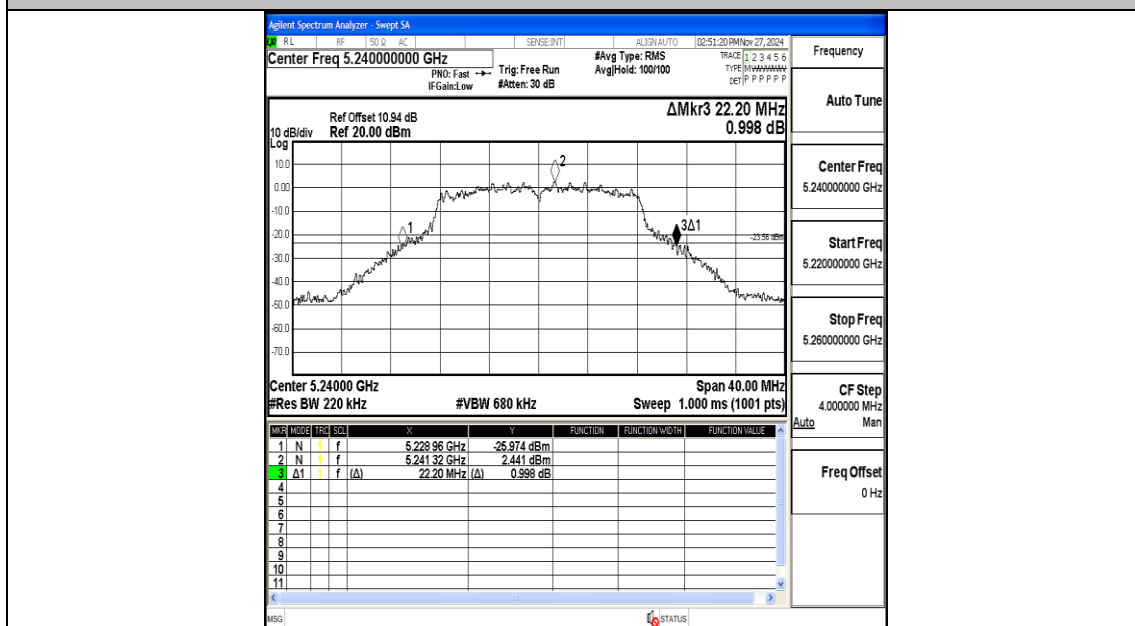




11A-Ant1-5200



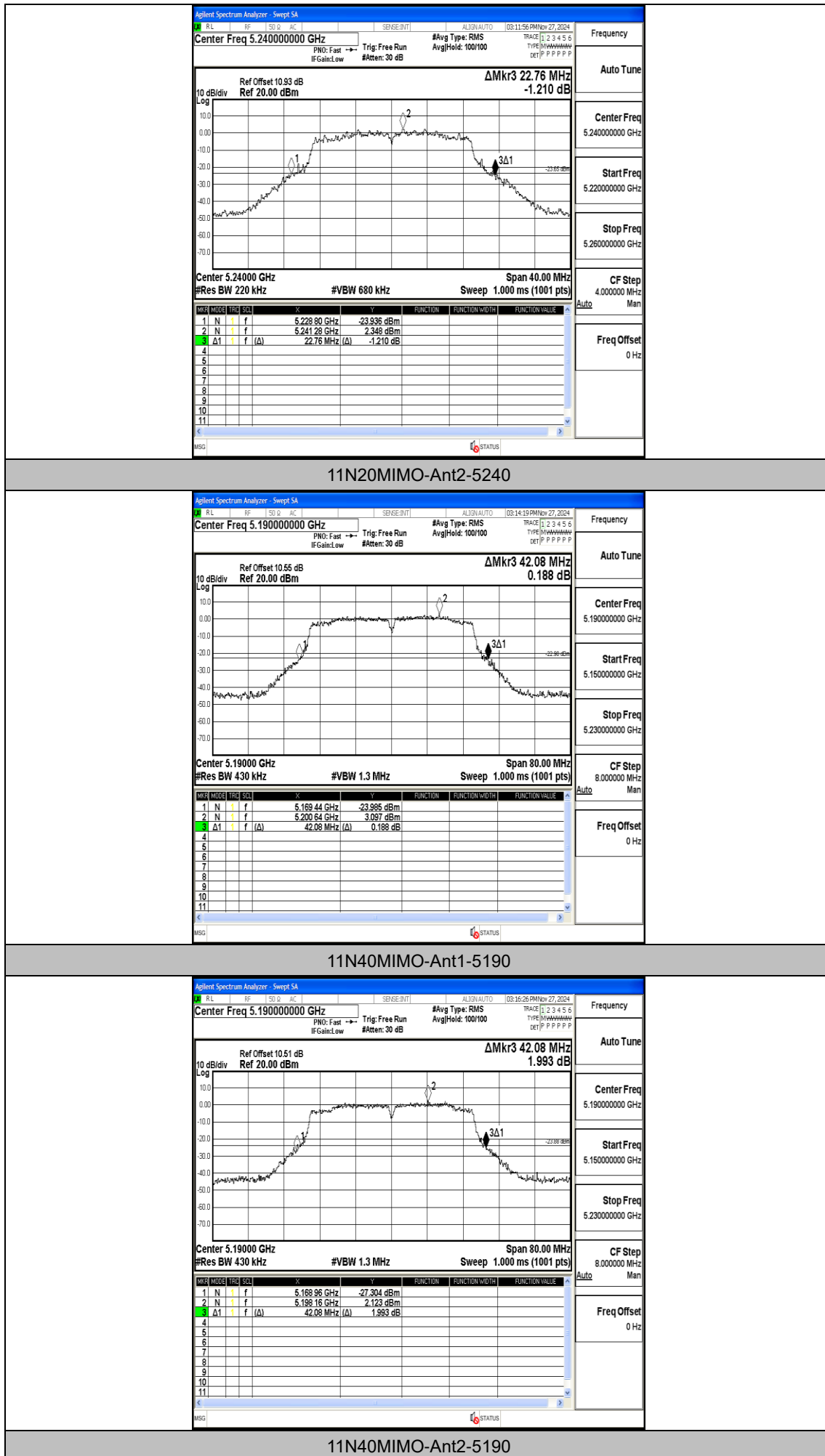
11A-Ant2-5200

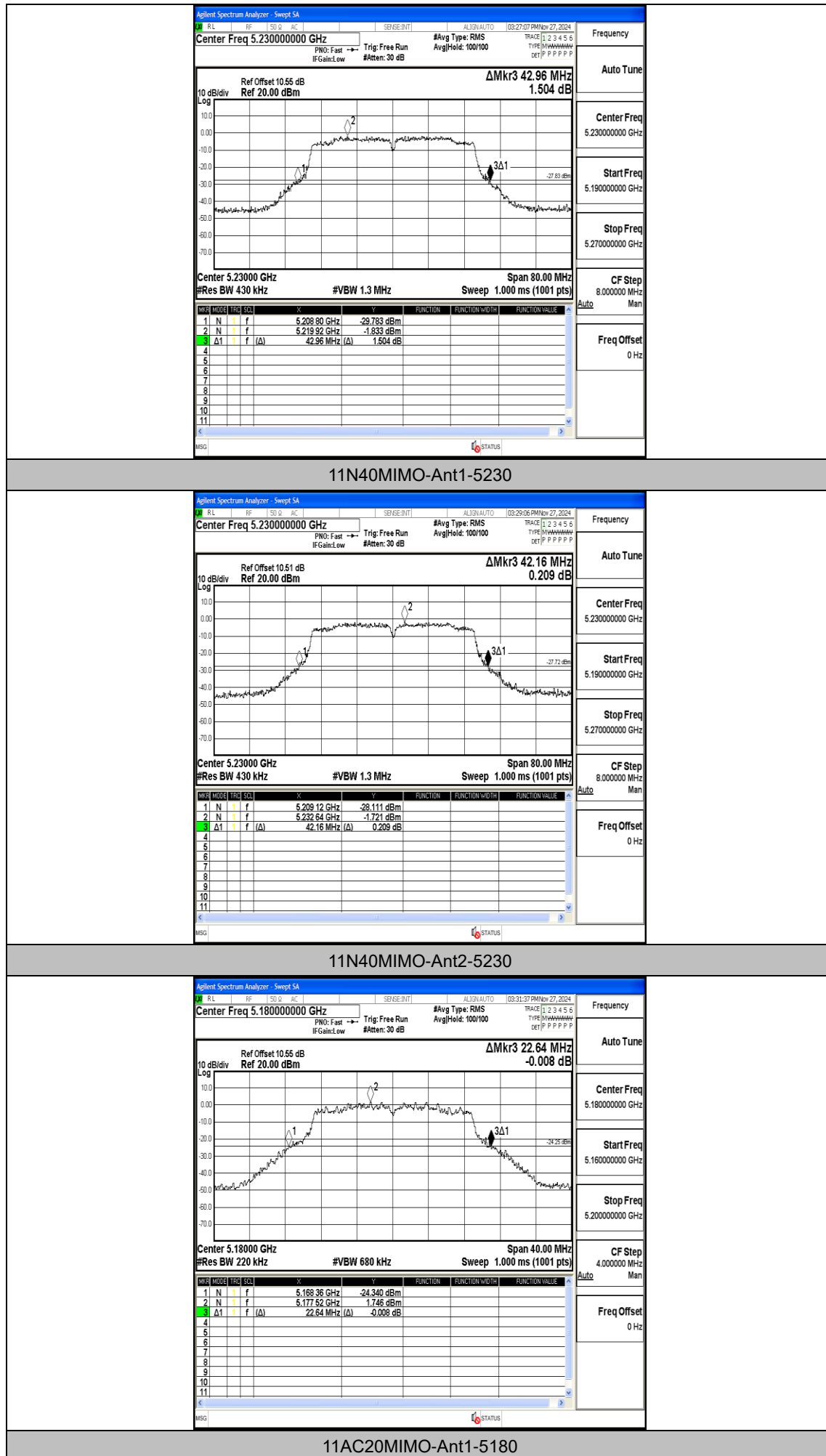


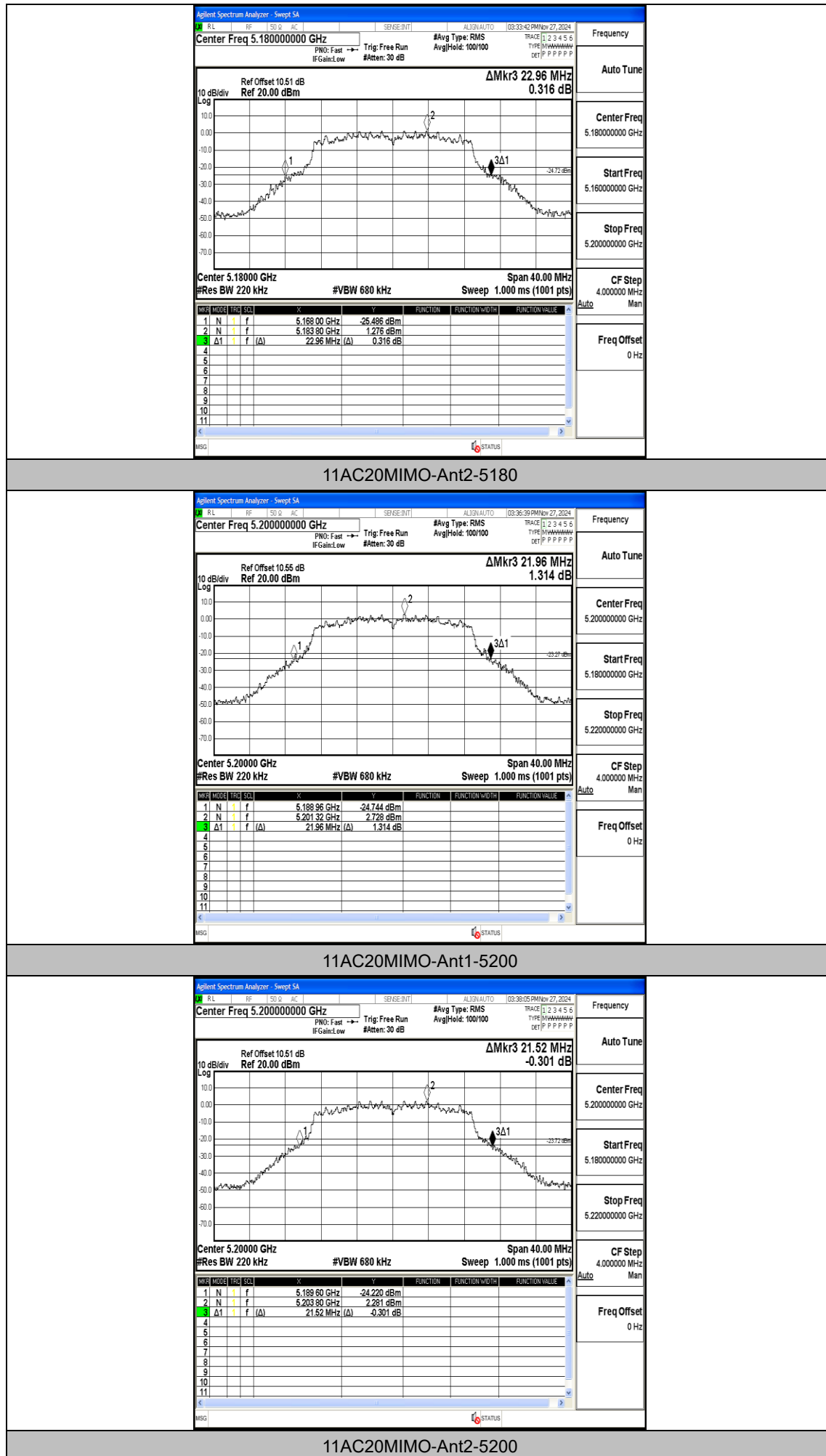
11A-Ant1-5240



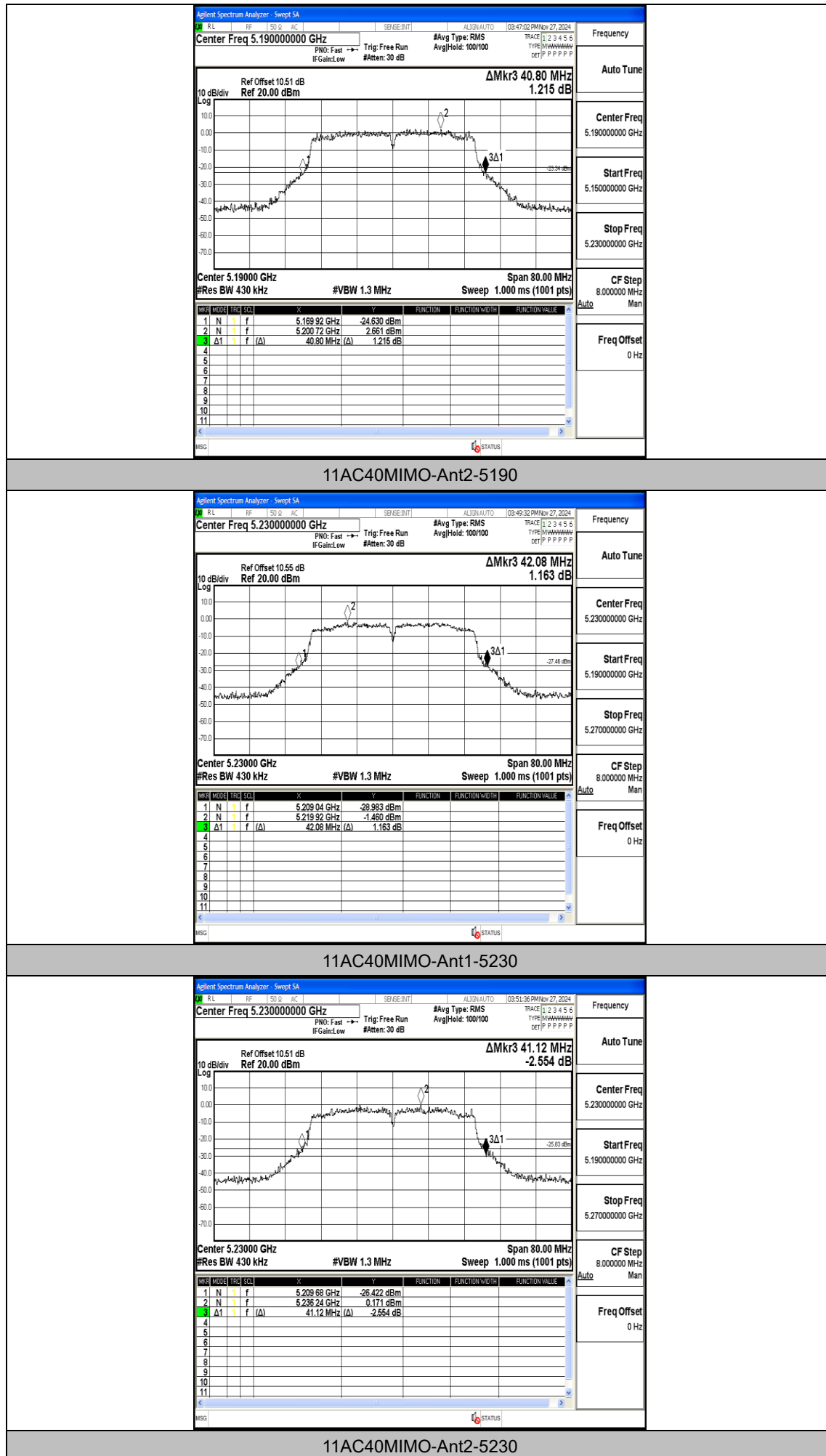








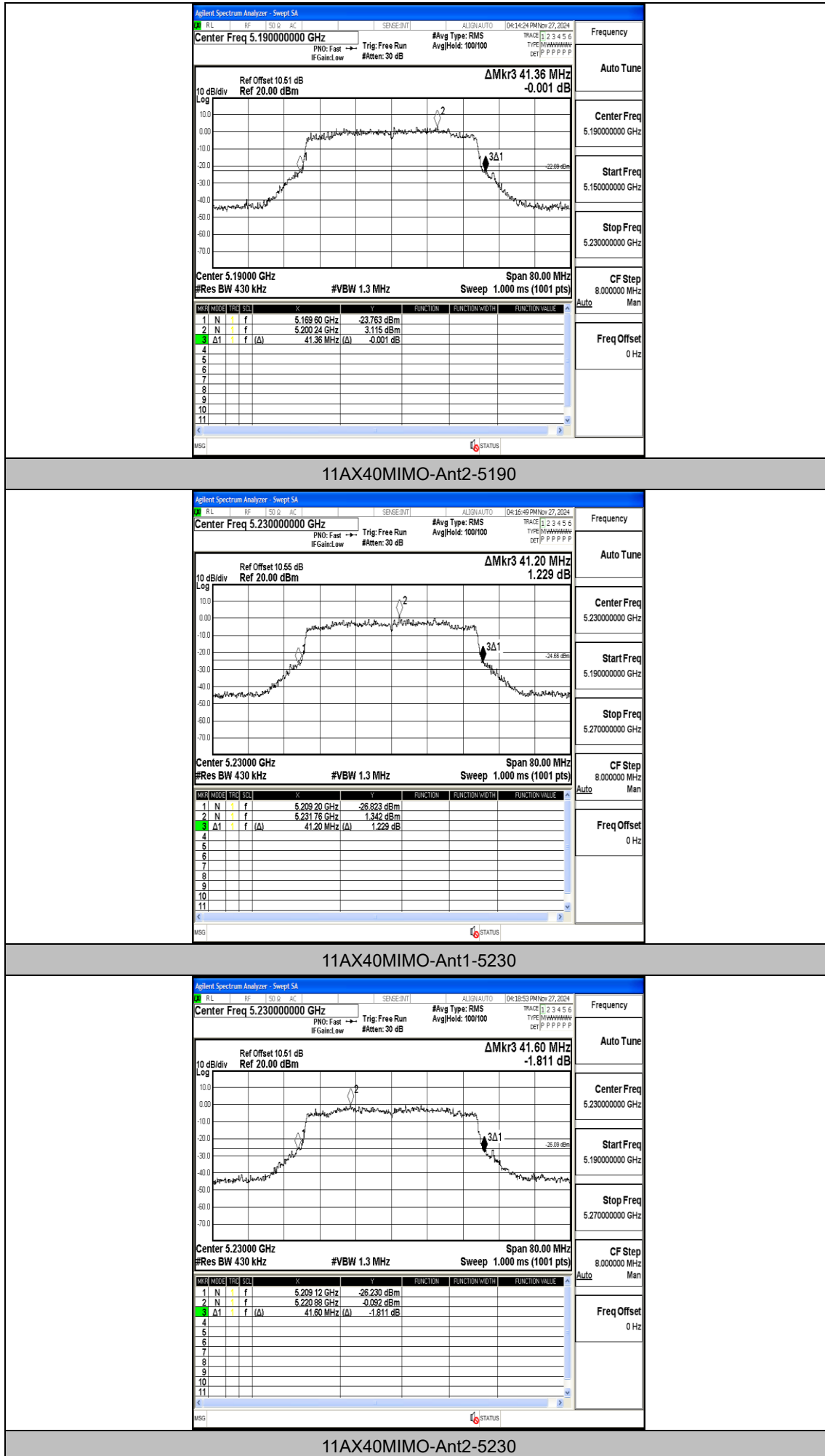


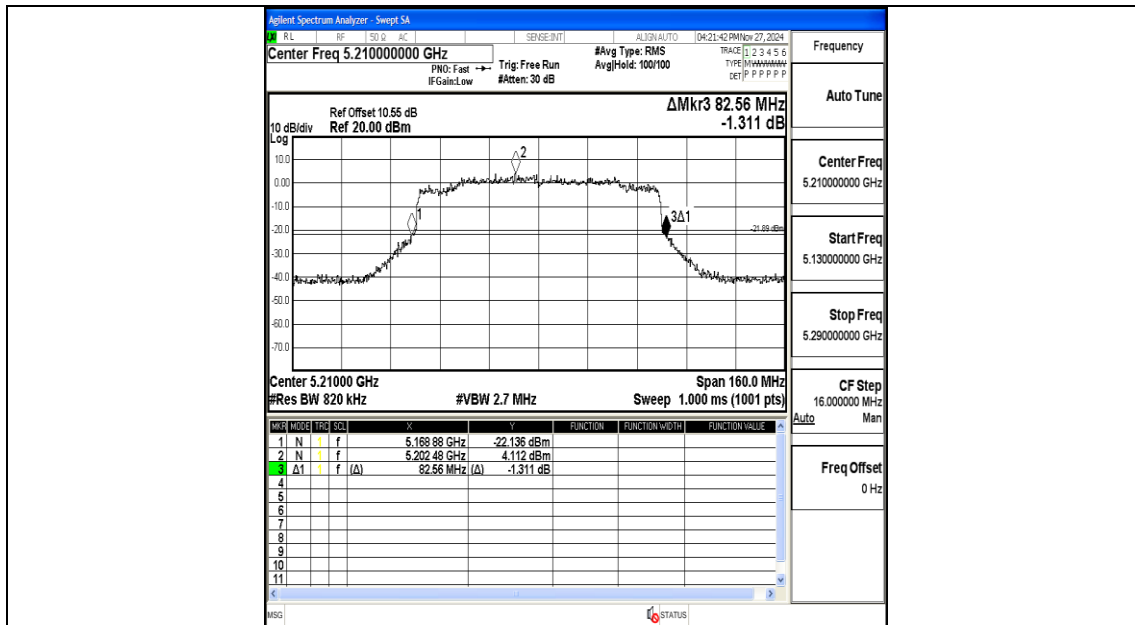




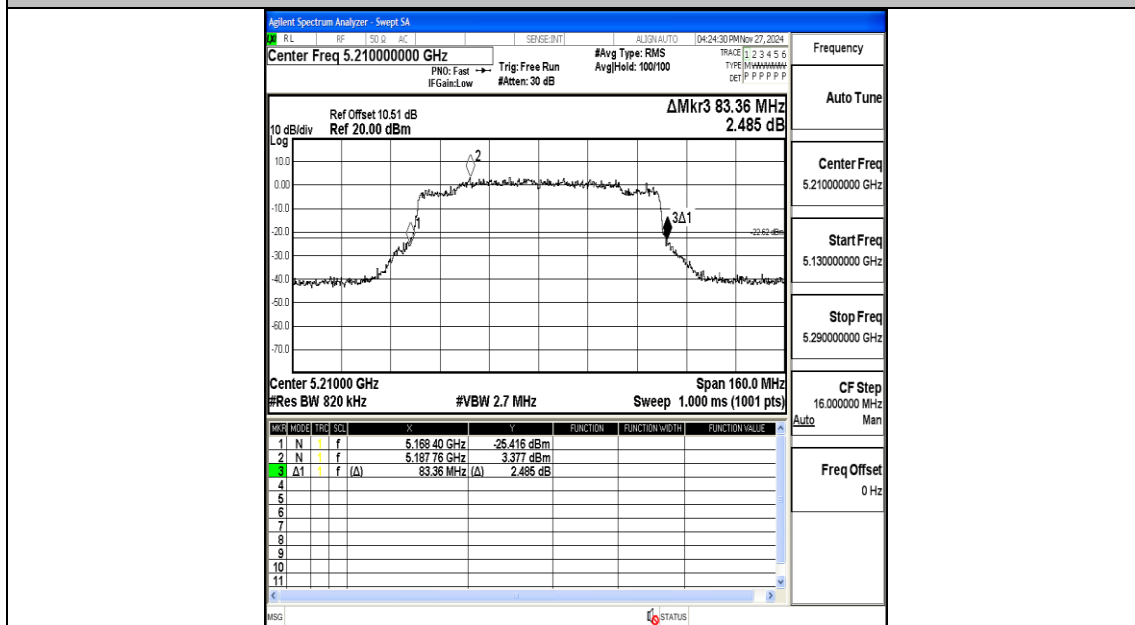








11AX80MIMO-Ant1-5210



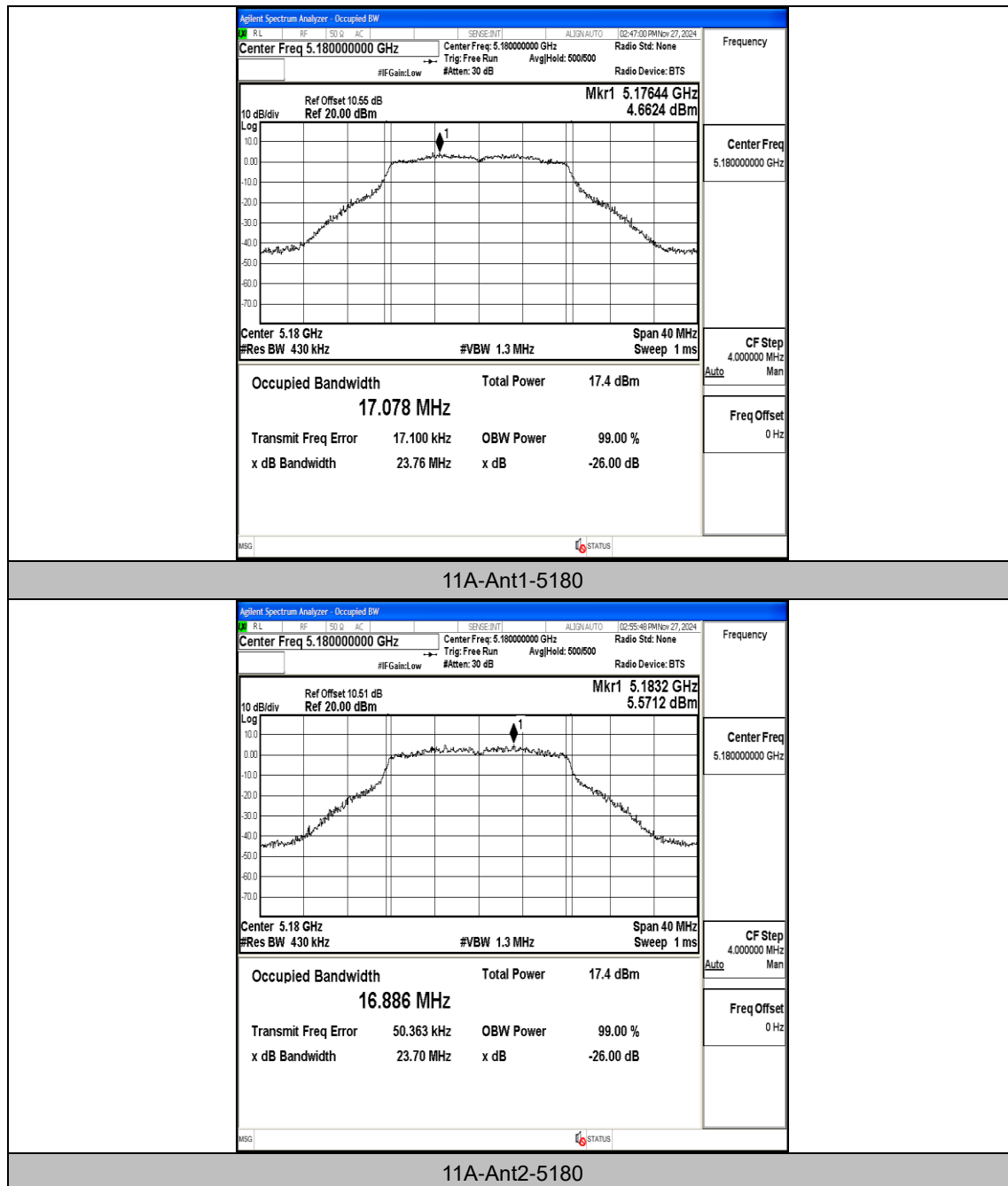
11AX80MIMO-Ant2-5210

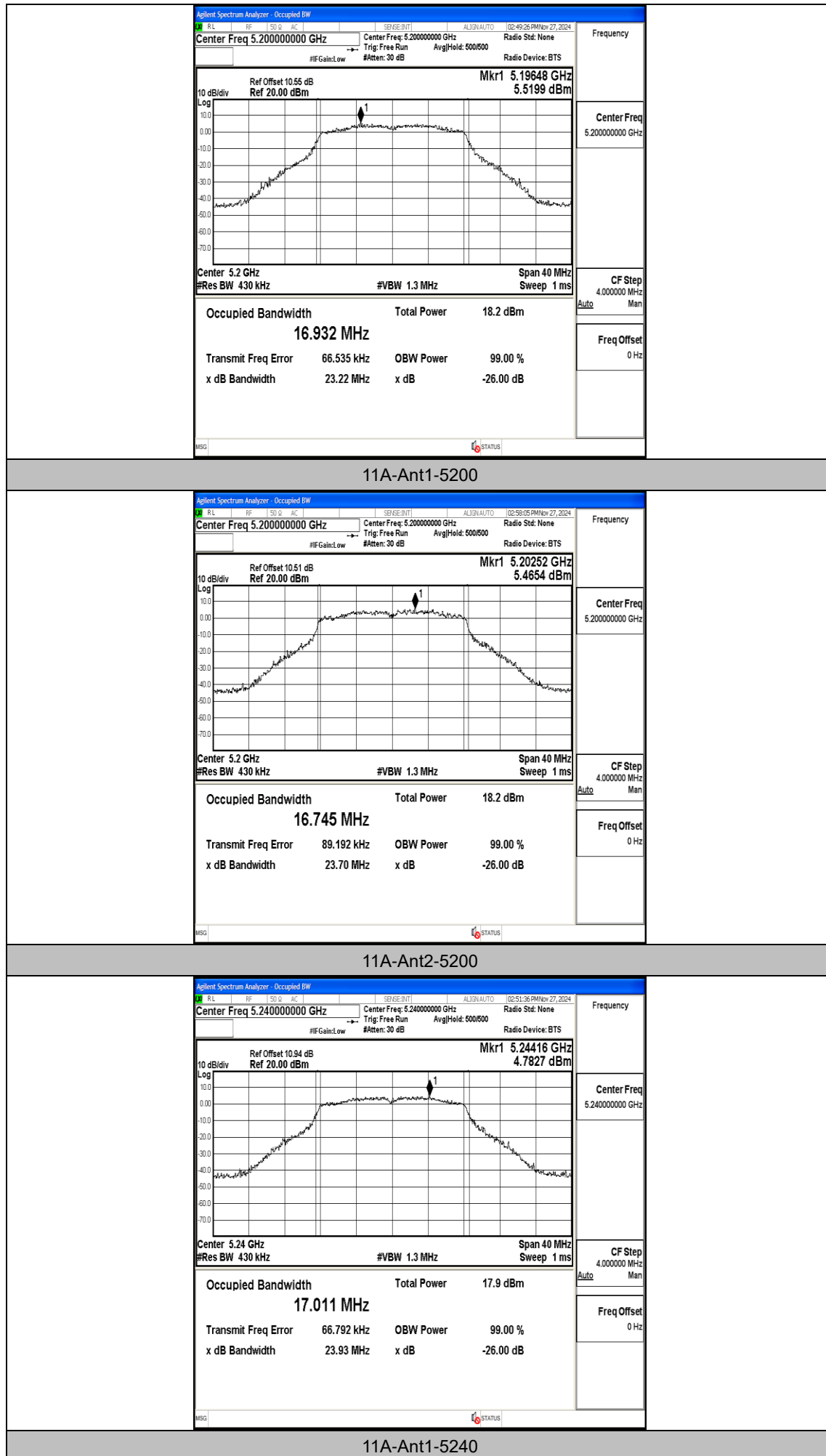
Appendix A2: Occupied channel bandwidth

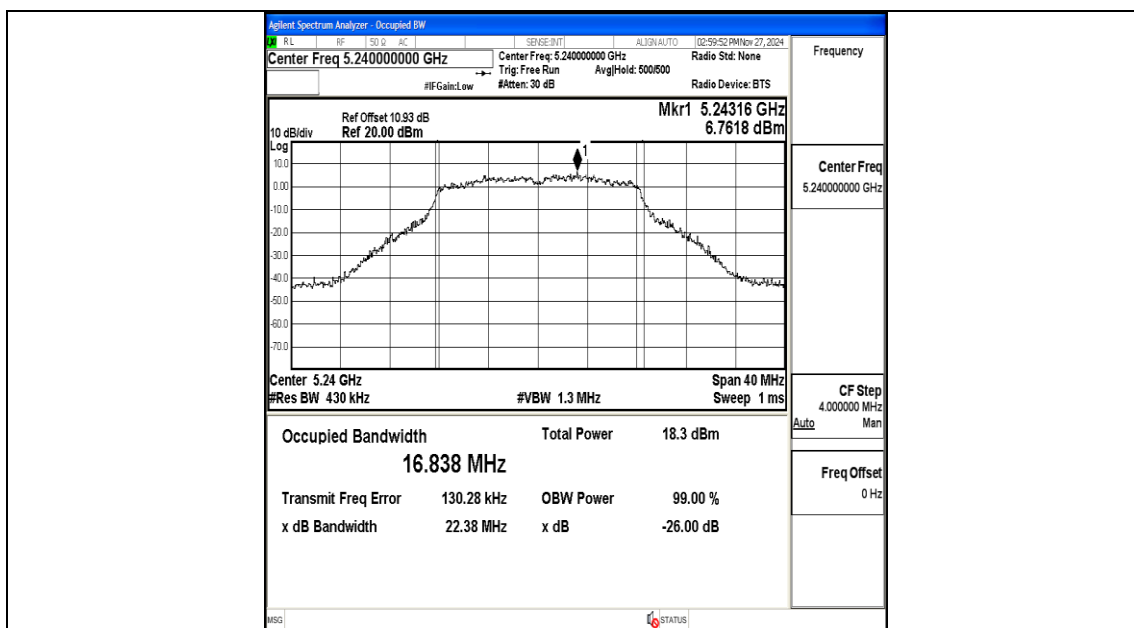
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	17.078	5171.4781	5188.5561	---	---
11A	Ant2	5180	16.886	5171.6074	5188.4934	---	---
11A	Ant1	5200	16.932	5191.6005	5208.5325	---	---
11A	Ant2	5200	16.745	5191.7167	5208.4617	---	---
11A	Ant1	5240	17.011	5231.5613	5248.5723	---	---
11A	Ant2	5240	16.838	5231.7113	5248.5493	---	---
11N20MIMO	Ant1	5180	18.130	5170.9157	5189.0457	---	---
11N20MIMO	Ant2	5180	18.123	5171.0150	5189.1380	---	---
11N20MIMO	Ant1	5200	17.941	5191.0770	5209.0180	---	---
11N20MIMO	Ant2	5200	17.939	5191.1162	5209.0552	---	---
11N20MIMO	Ant1	5240	17.996	5231.0797	5249.0757	---	---
11N20MIMO	Ant2	5240	18.025	5231.1023	5249.1273	---	---
11N40MIMO	Ant1	5190	36.279	5171.9746	5208.2536	---	---
11N40MIMO	Ant2	5190	36.149	5172.0635	5208.2125	---	---
11N40MIMO	Ant1	5230	36.298	5211.9631	5248.2611	---	---
11N40MIMO	Ant2	5230	36.321	5211.8962	5248.2172	---	---
11AC20MIMO	Ant1	5180	18.065	5170.9591	5189.0241	---	---
11AC20MIMO	Ant2	5180	17.879	5171.0888	5188.9678	---	---
11AC20MIMO	Ant1	5200	18.014	5191.0676	5209.0816	---	---
11AC20MIMO	Ant2	5200	17.781	5191.1802	5208.9612	---	---
11AC20MIMO	Ant1	5240	18.035	5231.0544	5249.0894	---	---
11AC20MIMO	Ant2	5240	17.884	5231.1636	5249.0476	---	---
11AC40MIMO	Ant1	5190	36.219	5172.0274	5208.2464	---	---
11AC40MIMO	Ant2	5190	36.146	5172.0735	5208.2195	---	---
11AC40MIMO	Ant1	5230	36.336	5211.9127	5248.2487	---	---
11AC40MIMO	Ant2	5230	36.123	5212.0431	5248.1661	---	---
11AC80MIMO	Ant1	5210	75.255	5172.6214	5247.8764	---	---
11AC80MIMO	Ant2	5210	75.087	5172.6711	5247.7581	---	---
11AX20MIMO	Ant1	5180	19.065	5170.4825	5189.5475	---	---
11AX20MIMO	Ant2	5180	19.035	5170.5250	5189.5600	---	---
11AX20MIMO	Ant1	5200	18.954	5190.5769	5209.5309	---	---
11AX20MIMO	Ant2	5200	18.938	5190.6089	5209.5469	---	---
11AX20MIMO	Ant1	5240	18.993	5230.5708	5249.5638	---	---
11AX20MIMO	Ant2	5240	19.015	5230.5740	5249.5890	---	---
11AX40MIMO	Ant1	5190	37.587	5171.2896	5208.8766	---	---
11AX40MIMO	Ant2	5190	37.581	5171.3189	5208.8999	---	---
11AX40MIMO	Ant1	5230	37.720	5211.2041	5248.9241	---	---
11AX40MIMO	Ant2	5230	37.754	5211.1730	5248.9270	---	---
11AX80MIMO	Ant1	5210	76.898	5171.7498	5248.6478	---	---
11AX80MIMO	Ant2	5210	76.694	5171.8288	5248.5228	---	---

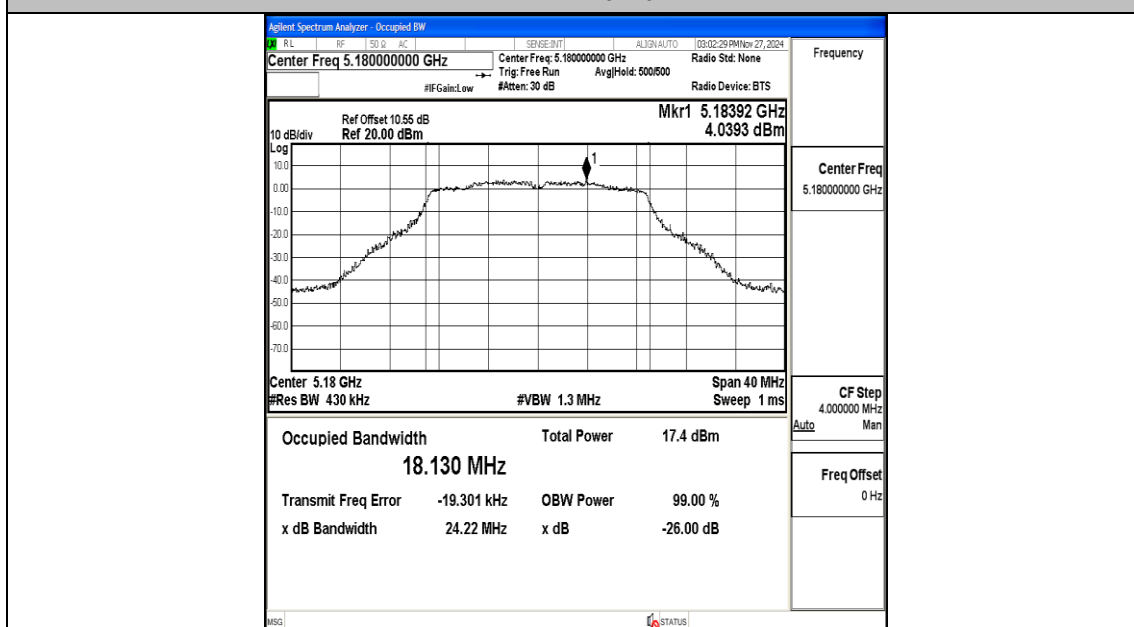
Test Graphs



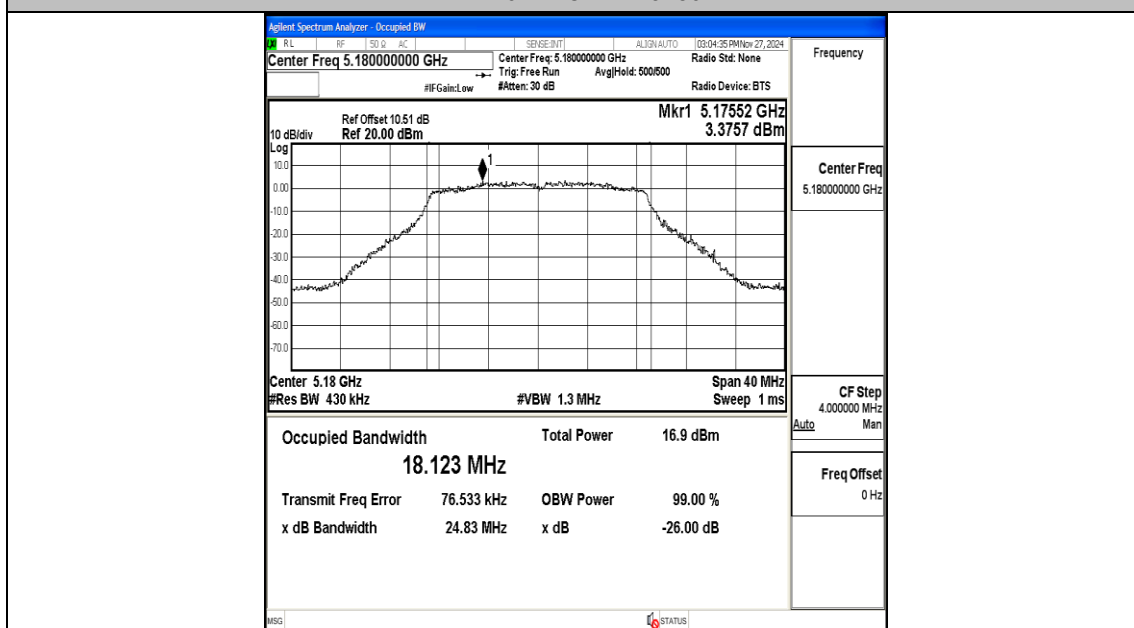




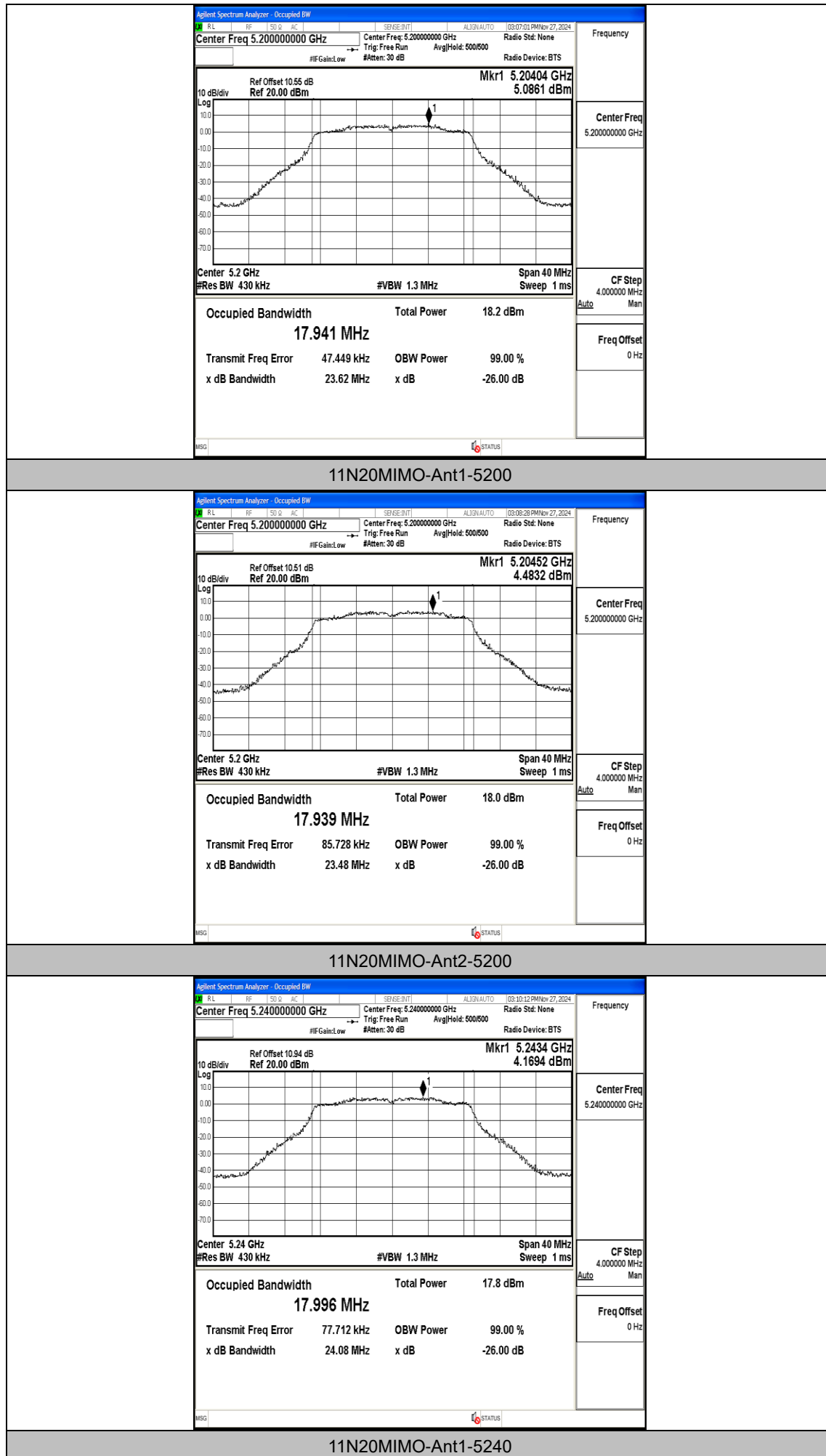
11A-Ant2-5240

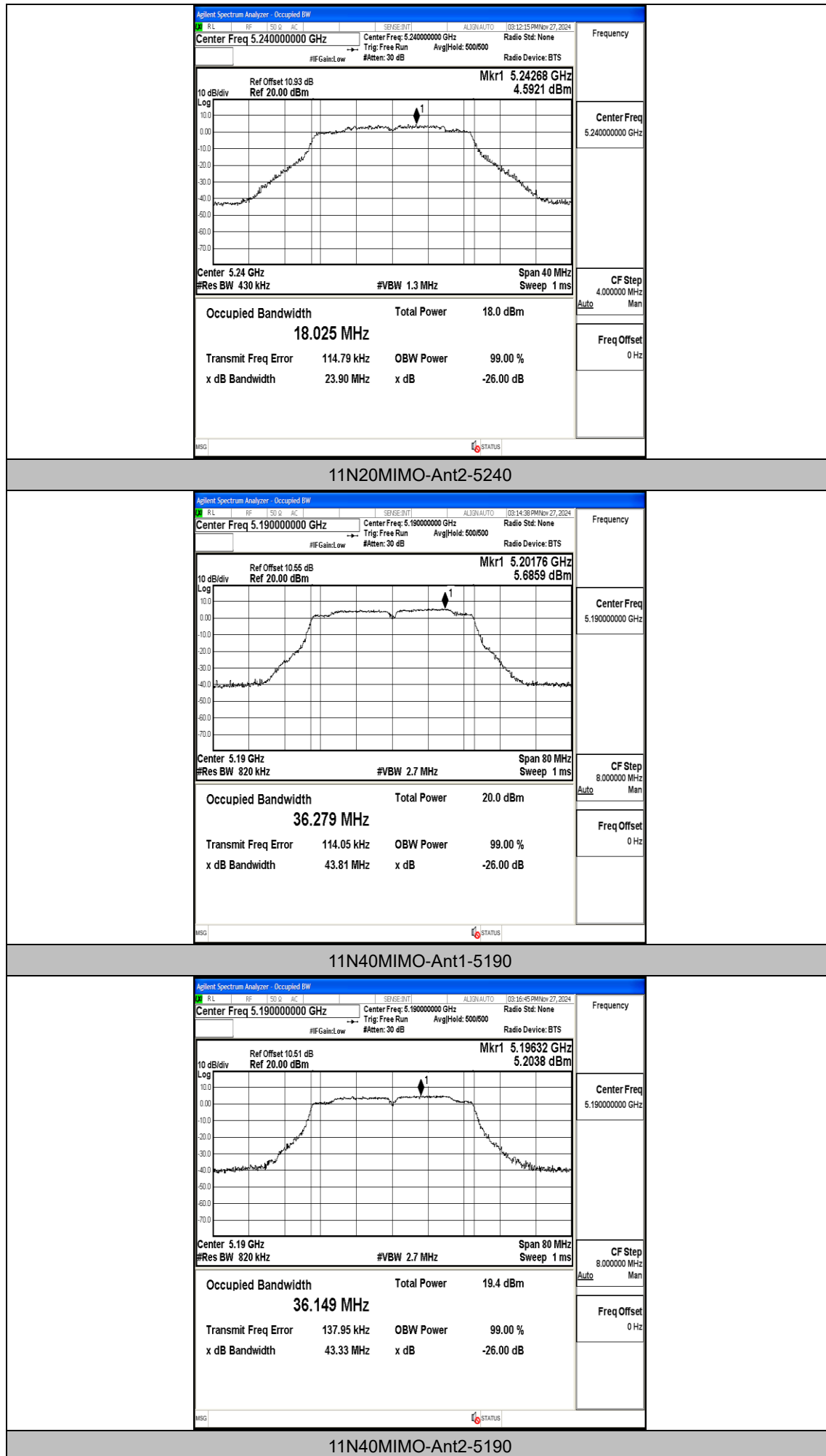


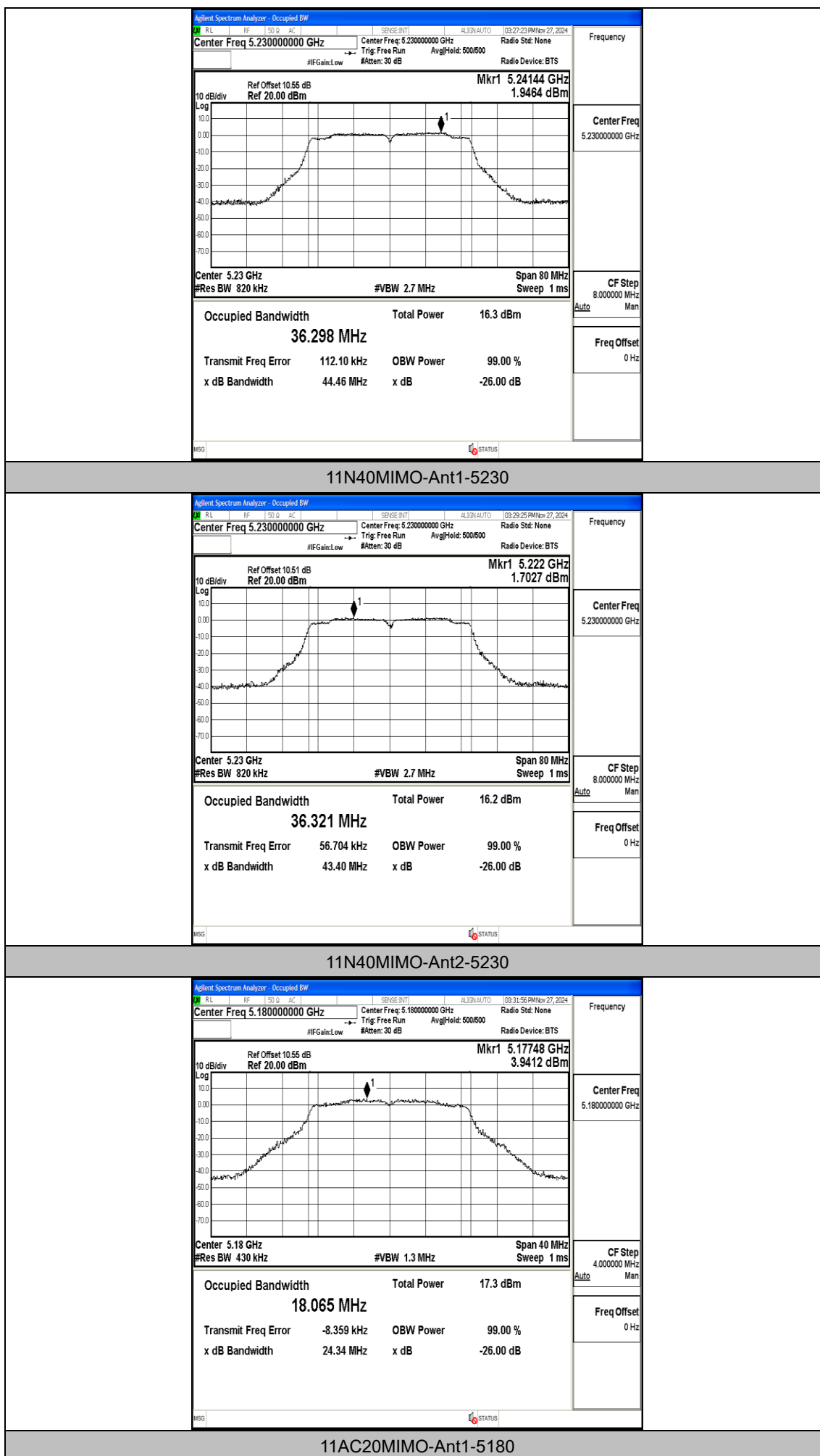
11N20MIMO-Ant1-5180

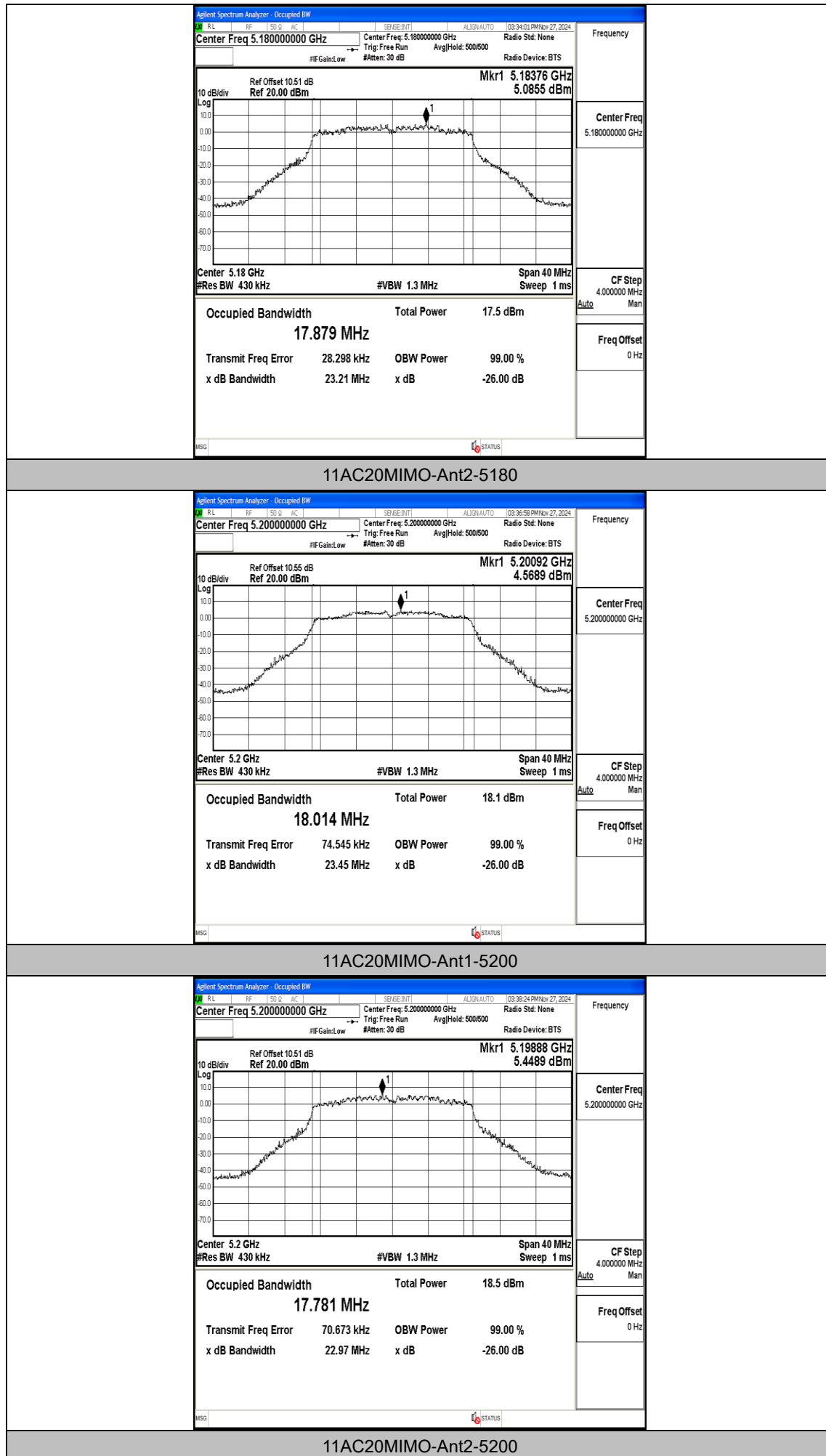


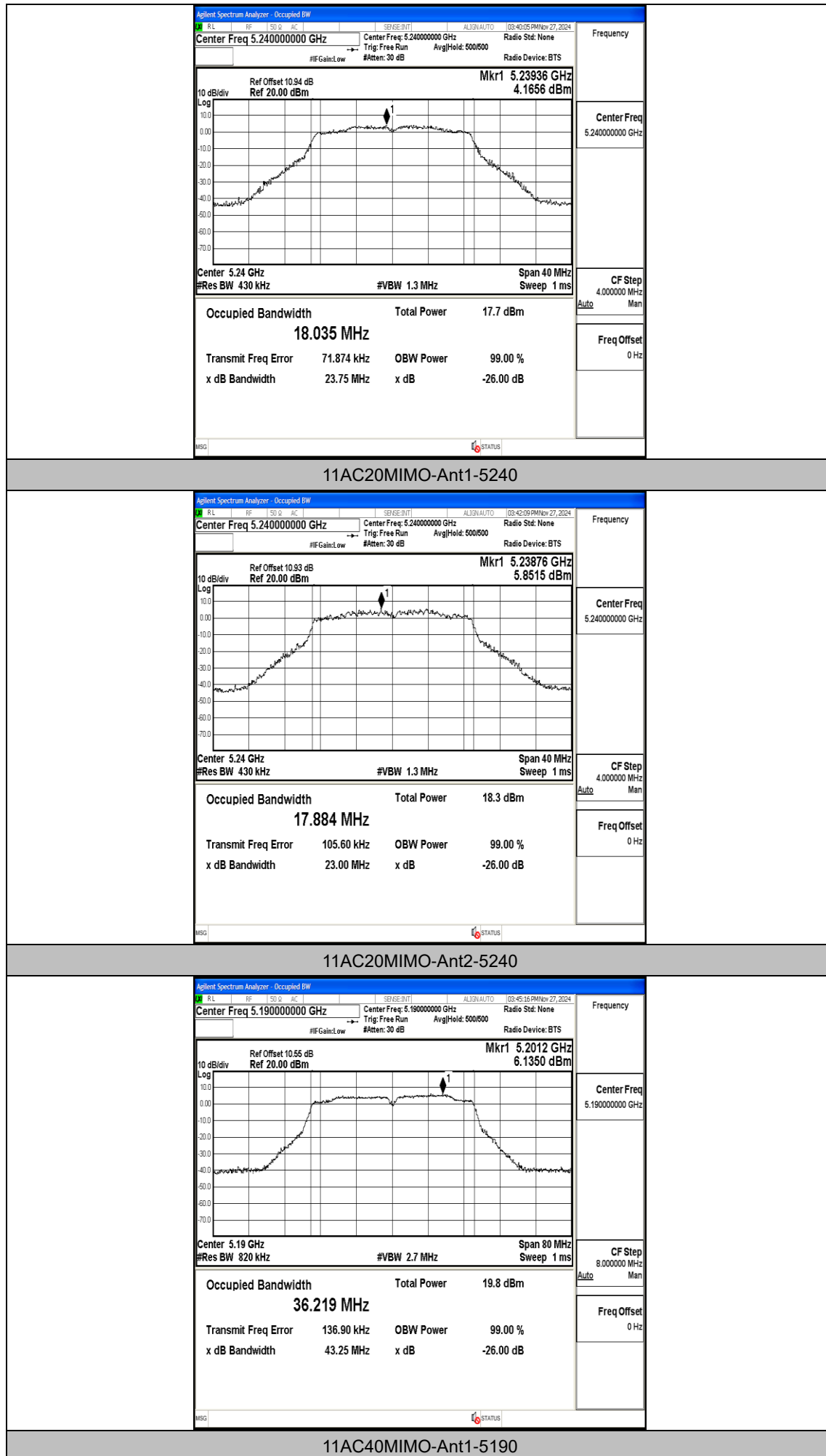
11N20MIMO-Ant2-5180

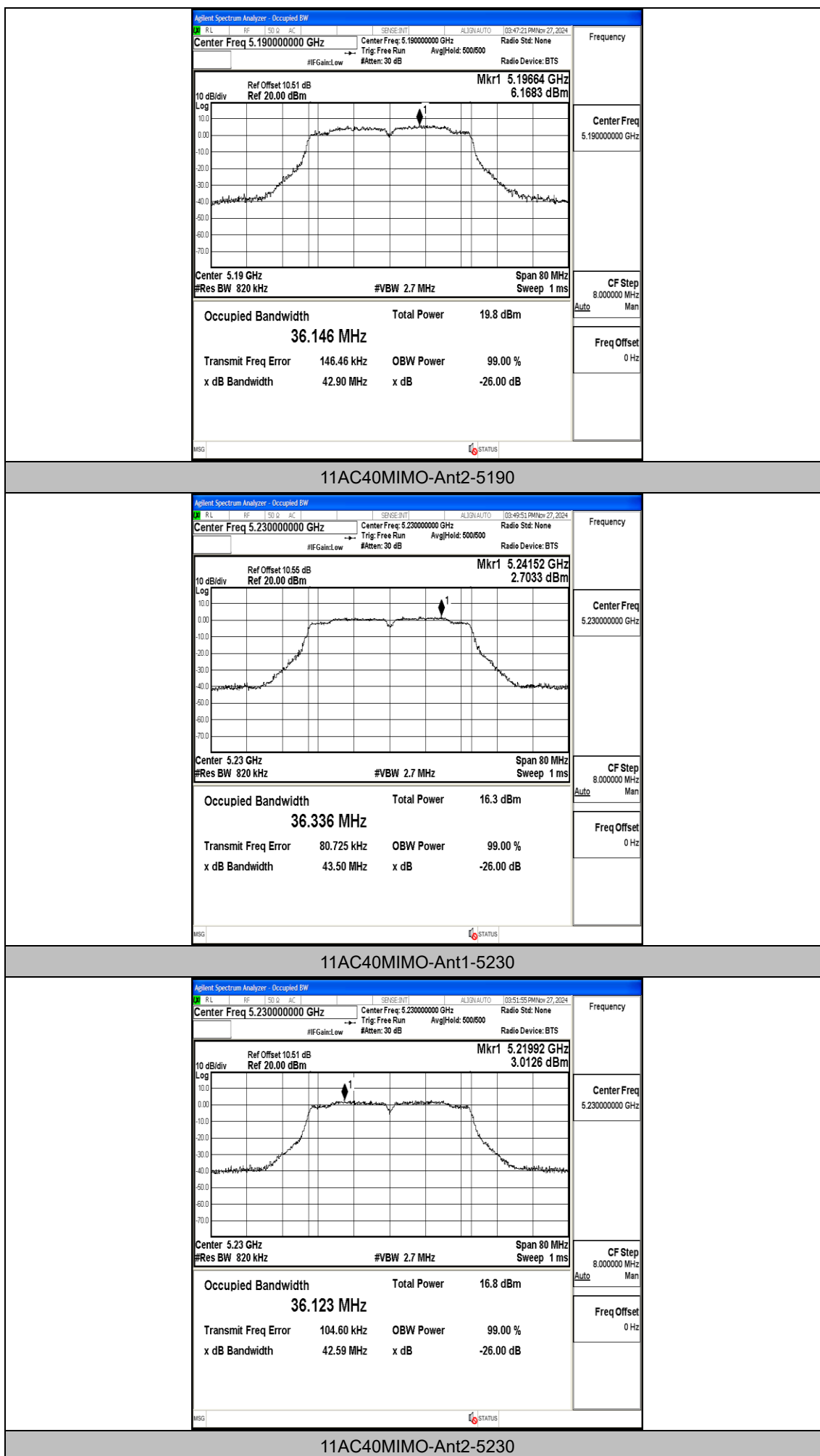


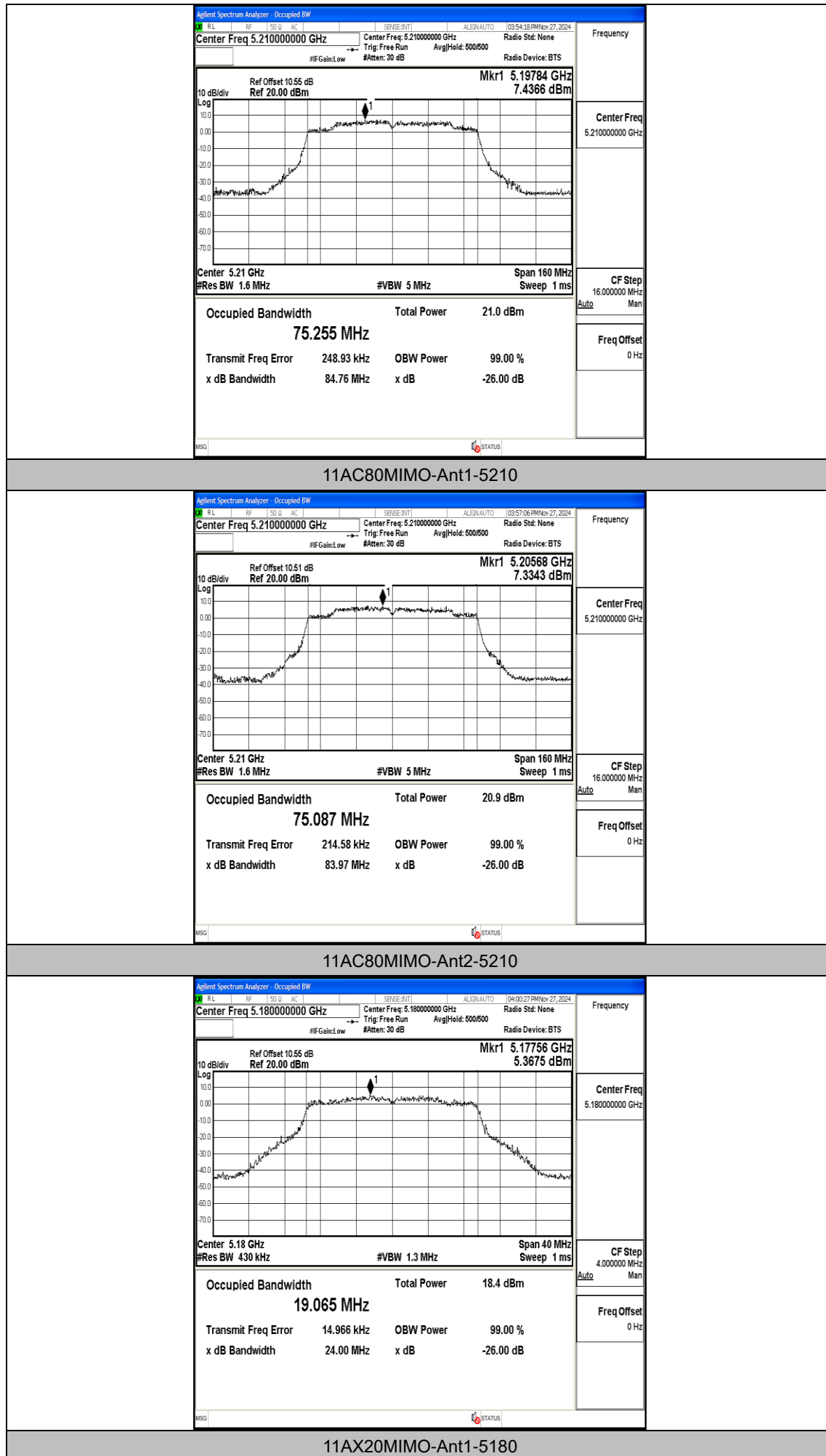


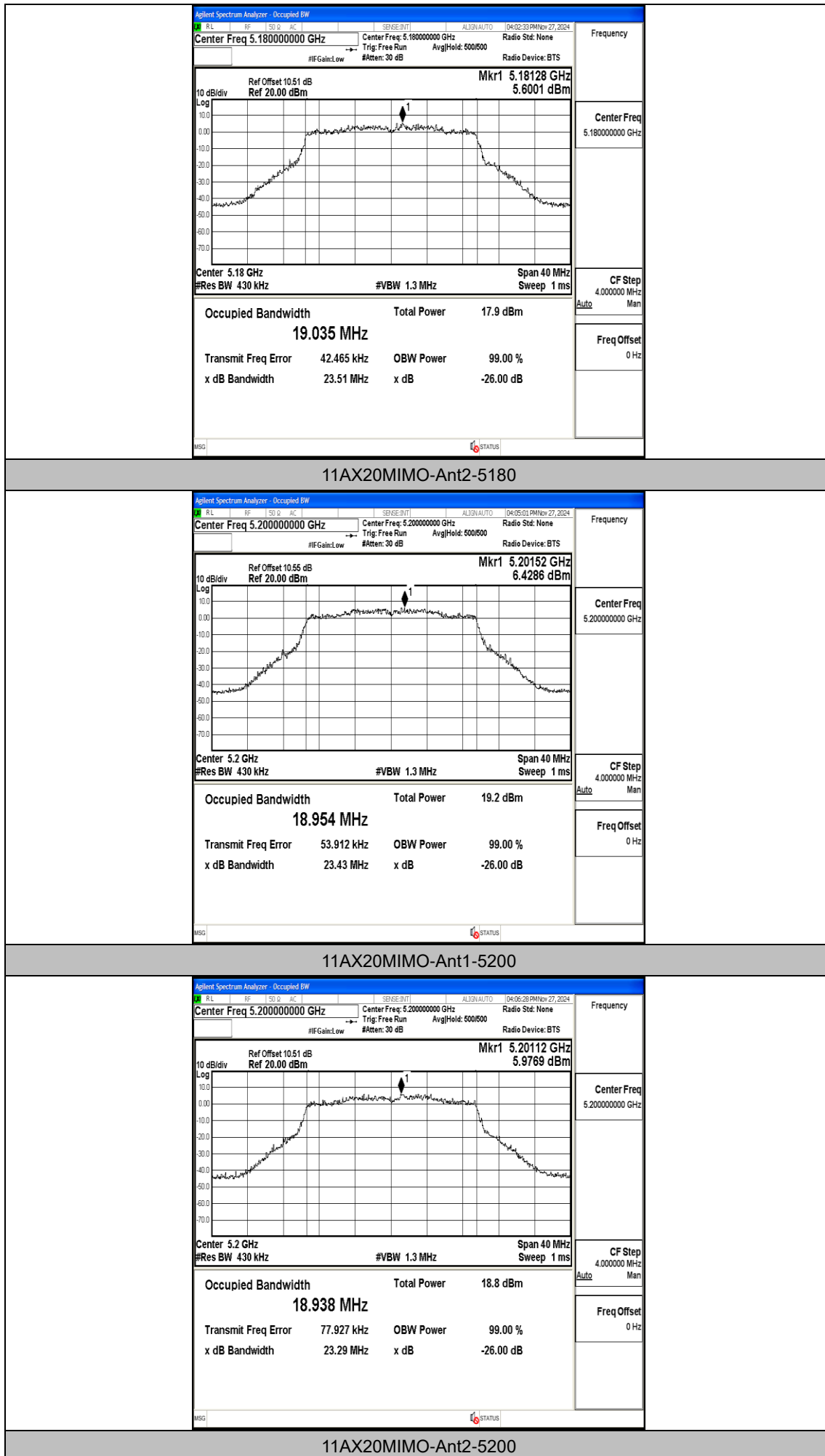


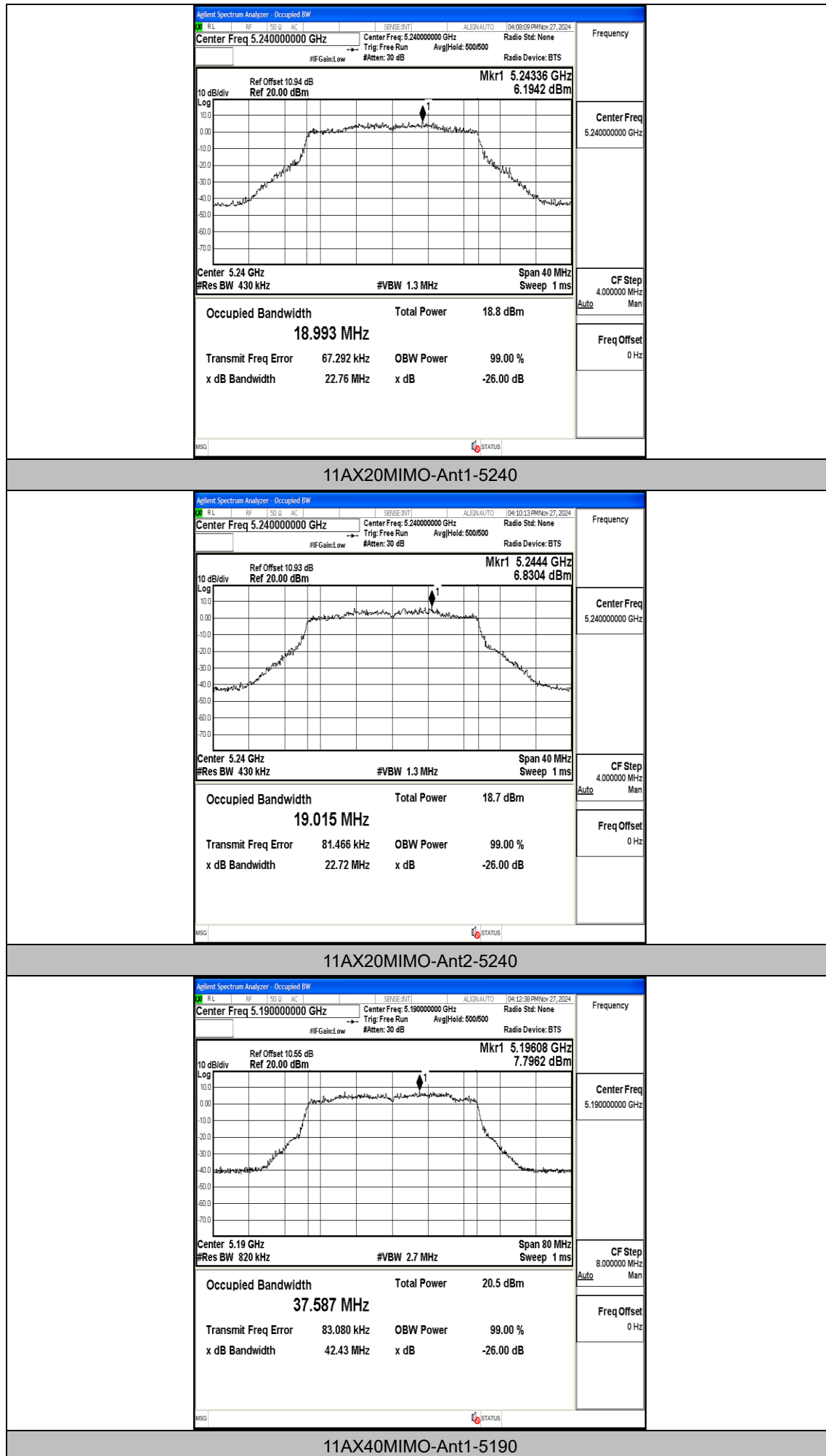


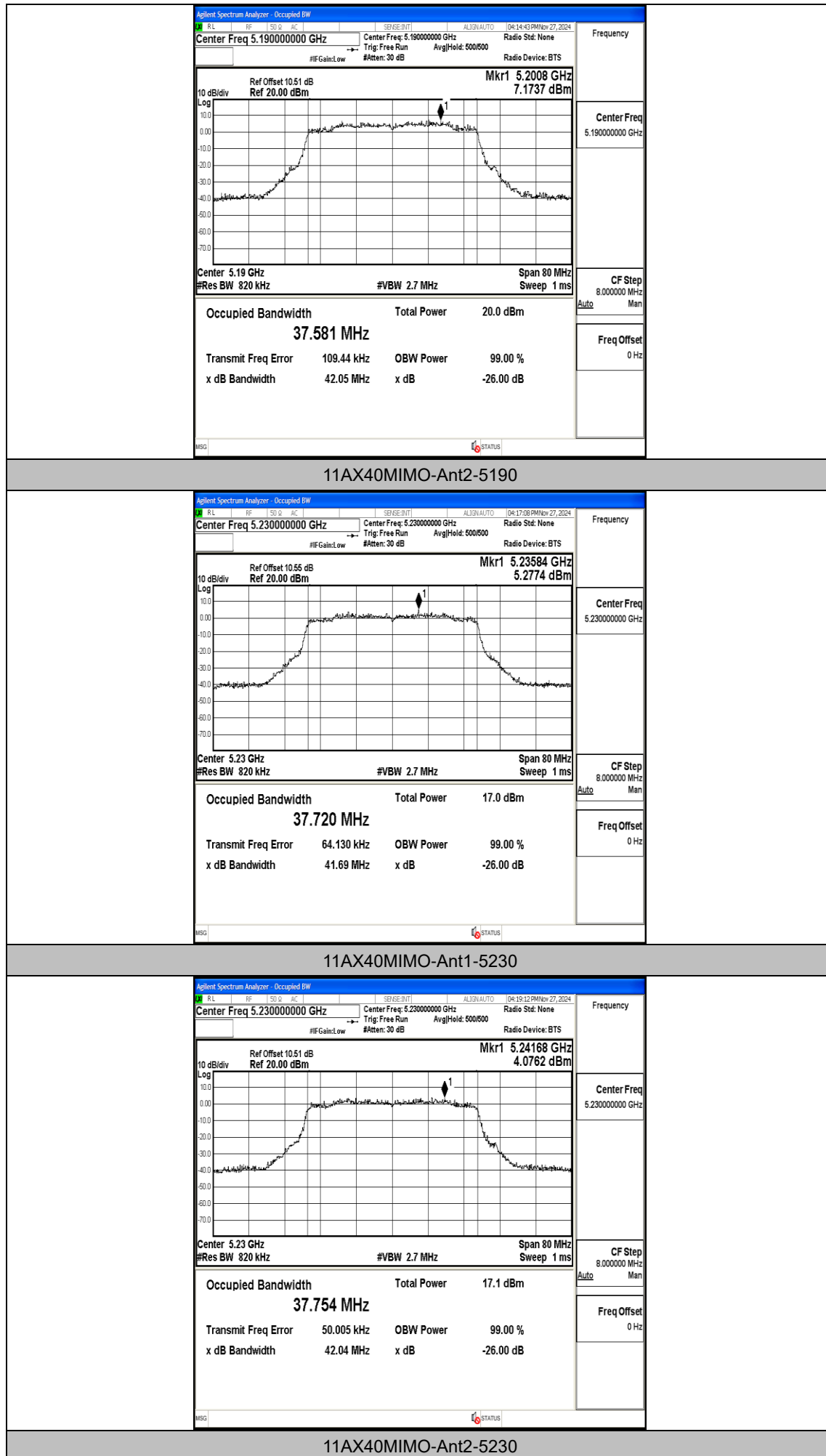


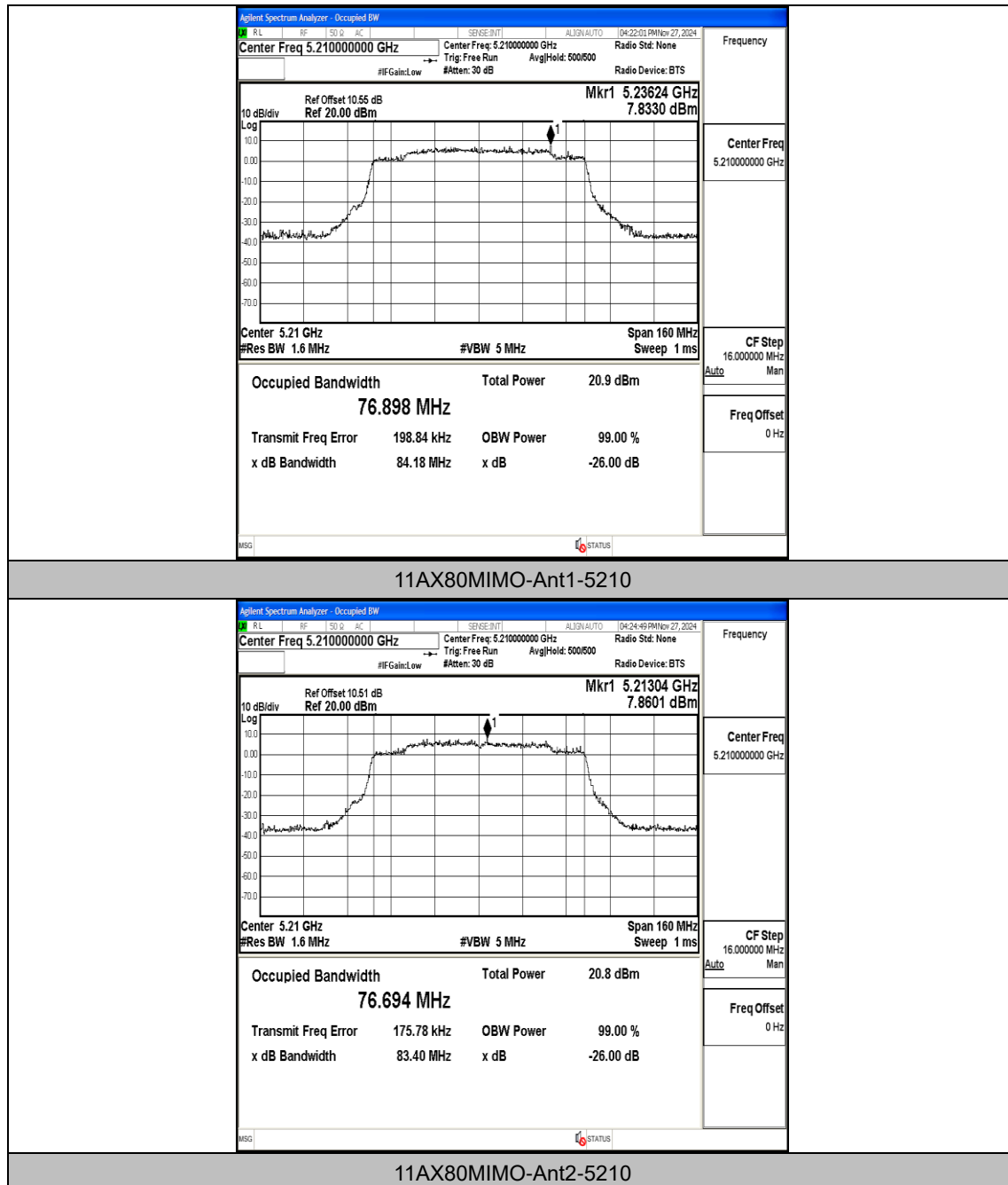












Appendix B: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency [MHz]	Conducted Power [dBm]	Conducted Limit [dBm]	Verdict
11A	Ant1	5180	10.41	≤23.98	PASS
11A	Ant2	5180	9.96	≤23.98	PASS
11A	Ant1	5200	11.41	≤23.98	PASS
11A	Ant2	5200	10.97	≤23.98	PASS
11A	Ant1	5240	11.09	≤23.98	PASS
11A	Ant2	5240	11.14	≤23.98	PASS
11N20MIMO	Ant1	5180	10.55	≤23.98	PASS
11N20MIMO	Ant2	5180	9.91	≤23.98	PASS
11N20MIMO	total	5180	13.25	≤23.98	PASS
11N20MIMO	Ant1	5200	11.28	≤23.98	PASS
11N20MIMO	Ant2	5200	10.89	≤23.98	PASS
11N20MIMO	total	5200	14.10	≤23.98	PASS
11N20MIMO	Ant1	5240	11.00	≤23.98	PASS
11N20MIMO	Ant2	5240	10.93	≤23.98	PASS
11N20MIMO	total	5240	13.98	≤23.98	PASS
11N40MIMO	Ant1	5190	12.37	≤23.98	PASS
11N40MIMO	Ant2	5190	11.79	≤23.98	PASS
11N40MIMO	total	5190	15.10	≤23.98	PASS
11N40MIMO	Ant1	5230	8.63	≤23.98	PASS
11N40MIMO	Ant2	5230	8.57	≤23.98	PASS
11N40MIMO	total	5230	11.61	≤23.98	PASS
11AC20MIMO	Ant1	5180	10.65	≤23.98	PASS
11AC20MIMO	Ant2	5180	10.09	≤23.98	PASS
11AC20MIMO	total	5180	13.39	≤23.98	PASS
11AC20MIMO	Ant1	5200	11.44	≤23.98	PASS
11AC20MIMO	Ant2	5200	11.08	≤23.98	PASS
11AC20MIMO	total	5200	14.27	≤23.98	PASS
11AC20MIMO	Ant1	5240	10.98	≤23.98	PASS
11AC20MIMO	Ant2	5240	11.06	≤23.98	PASS
11AC20MIMO	total	5240	14.03	≤23.98	PASS
11AC40MIMO	Ant1	5190	12.28	≤23.98	PASS
11AC40MIMO	Ant2	5190	11.71	≤23.98	PASS
11AC40MIMO	total	5190	15.01	≤23.98	PASS
11AC40MIMO	Ant1	5230	8.71	≤23.98	PASS
11AC40MIMO	Ant2	5230	8.56	≤23.98	PASS
11AC40MIMO	total	5230	11.65	≤23.98	PASS
11AC80MIMO	Ant1	5210	12.06	≤23.98	PASS
11AC80MIMO	Ant2	5210	11.96	≤23.98	PASS
11AC80MIMO	total	5210	15.02	≤23.98	PASS
11AX20MIMO	Ant1	5180	10.30	≤23.98	PASS

11AX20MIMO	Ant2	5180	9.74	≤23.98	PASS
11AX20MIMO	total	5180	13.04	≤23.98	PASS
11AX20MIMO	Ant1	5200	11.00	≤23.98	PASS
11AX20MIMO	Ant2	5200	10.45	≤23.98	PASS
11AX20MIMO	total	5200	13.74	≤23.98	PASS
11AX20MIMO	Ant1	5240	10.67	≤23.98	PASS
11AX20MIMO	Ant2	5240	10.47	≤23.98	PASS
11AX20MIMO	total	5240	13.58	≤23.98	PASS
11AX40MIMO	Ant1	5190	11.96	≤23.98	PASS
11AX40MIMO	Ant2	5190	11.35	≤23.98	PASS
11AX40MIMO	total	5190	14.68	≤23.98	PASS
11AX40MIMO	Ant1	5230	8.43	≤23.98	PASS
11AX40MIMO	Ant2	5230	8.32	≤23.98	PASS
11AX40MIMO	total	5230	11.39	≤23.98	PASS
11AX80MIMO	Ant1	5210	11.96	≤23.98	PASS
11AX80MIMO	Ant2	5210	11.75	≤23.98	PASS
11AX80MIMO	total	5210	14.87	≤23.98	PASS

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

Appendix C: Maximum power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	0.38	≤11.00	PASS
11A	Ant2	5180	-0.11	≤11.00	PASS
11A	Ant1	5200	1.54	≤11.00	PASS
11A	Ant2	5200	1.09	≤11.00	PASS
11A	Ant1	5240	1.17	≤11.00	PASS
11A	Ant2	5240	1.22	≤11.00	PASS
11N20MIMO	Ant1	5180	0.30	≤11.00	PASS
11N20MIMO	Ant2	5180	-0.32	≤11.00	PASS
11N20MIMO	total	5180	3.01	≤11.00	PASS
11N20MIMO	Ant1	5200	1.15	≤11.00	PASS
11N20MIMO	Ant2	5200	1.23	≤11.00	PASS
11N20MIMO	total	5200	4.20	≤11.00	PASS
11N20MIMO	Ant1	5240	0.92	≤11.00	PASS
11N20MIMO	Ant2	5240	0.80	≤11.00	PASS
11N20MIMO	total	5240	3.87	≤11.00	PASS
11N40MIMO	Ant1	5190	-1.01	≤11.00	PASS
11N40MIMO	Ant2	5190	-1.71	≤11.00	PASS
11N40MIMO	total	5190	1.66	≤11.00	PASS
11N40MIMO	Ant1	5230	-4.76	≤11.00	PASS
11N40MIMO	Ant2	5230	-5.04	≤11.00	PASS
11N40MIMO	total	5230	-1.89	≤11.00	PASS
11AC20MIMO	Ant1	5180	0.61	≤11.00	PASS
11AC20MIMO	Ant2	5180	-0.16	≤11.00	PASS
11AC20MIMO	total	5180	3.25	≤11.00	PASS
11AC20MIMO	Ant1	5200	1.22	≤11.00	PASS
11AC20MIMO	Ant2	5200	1.14	≤11.00	PASS
11AC20MIMO	total	5200	4.19	≤11.00	PASS
11AC20MIMO	Ant1	5240	0.78	≤11.00	PASS
11AC20MIMO	Ant2	5240	1.07	≤11.00	PASS
11AC20MIMO	total	5240	3.94	≤11.00	PASS
11AC40MIMO	Ant1	5190	-0.78	≤11.00	PASS
11AC40MIMO	Ant2	5190	-1.56	≤11.00	PASS
11AC40MIMO	total	5190	1.86	≤11.00	PASS
11AC40MIMO	Ant1	5230	-4.39	≤11.00	PASS
11AC40MIMO	Ant2	5230	-4.89	≤11.00	PASS
11AC40MIMO	total	5230	-1.62	≤11.00	PASS
11AC80MIMO	Ant1	5210	-4.06	≤11.00	PASS
11AC80MIMO	Ant2	5210	-4.08	≤11.00	PASS
11AC80MIMO	total	5210	-1.06	≤11.00	PASS
11AX20MIMO	Ant1	5180	-0.03	≤11.00	PASS
11AX20MIMO	Ant2	5180	-0.84	≤11.00	PASS

11AX20MIMO	total	5180	2.59	≤11.00	PASS
11AX20MIMO	Ant1	5200	0.69	≤11.00	PASS
11AX20MIMO	Ant2	5200	0.40	≤11.00	PASS
11AX20MIMO	total	5200	3.56	≤11.00	PASS
11AX20MIMO	Ant1	5240	0.42	≤11.00	PASS
11AX20MIMO	Ant2	5240	0.35	≤11.00	PASS
11AX20MIMO	total	5240	3.40	≤11.00	PASS
11AX40MIMO	Ant1	5190	-1.16	≤11.00	PASS
11AX40MIMO	Ant2	5190	-1.92	≤11.00	PASS
11AX40MIMO	total	5190	1.49	≤11.00	PASS
11AX40MIMO	Ant1	5230	-4.85	≤11.00	PASS
11AX40MIMO	Ant2	5230	-5.06	≤11.00	PASS
11AX40MIMO	total	5230	-1.94	≤11.00	PASS
11AX80MIMO	Ant1	5210	-4.38	≤11.00	PASS
11AX80MIMO	Ant2	5210	-4.35	≤11.00	PASS
11AX80MIMO	total	5210	-1.35	≤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.